中山醫學大學附設醫院

院內通用抗癌藥物處方

V.115.1

目錄

➢ 各癌症化療處方修訂時程說明

多專科團隊	癌症別	編修或檢視日期	最新版次	團隊會議修訂日期
頭頸癌團隊	口腔癌(含口咽及下咽)	115/04/22 V20.1 114/12/24 V20.0 113/12/18 V19.0 112/12/06 V18.0 111/12/28 V17.0 110/12/08 V16.0 109/12/02 V15.0 108/11/27 V14.0	第20.1版	115/04/22
	鼻咽癌	115/04/22 V18.1 114/12/10 V18.0 113/12/18 V17.0 112/11/22 V16.0 111/11/16 V15.0 110/11/24 V14.0 109/11/18 V13.0 108/12/25 V12.0	第18.1版	115/04/22
食道癌團隊	食道癌	115/04/09 V17.1 114/12/11 V17.0 113/12/12 V16.0 112/12/14 V15.0 111/12/08 V14.0 110/12/09 V13.0 110/01/10 V12.0 108/12/12 V11.0	第17.1版	115/04/09

多專科團隊	癌症別	編修或檢視日期	最新版次	團隊會議修訂日期
胃癌團隊	胃癌	115/04/10 V16.1 114/12/12 V16.0 113/12/13 V15.0 112/12/22 V14.0 111/12/23 V14.0 110/11/26 V13.0 109/12/11 V12.0 108/12/27 V11.0	第16.1版	115/04/10
胃癌團隊	胃腸道基質瘤及胃平滑肌惡性肉瘤癌	115/04/10 V11.0 114/12/26 V11.0 113/12/13 V10.0 112/12/22 V9.0 111/12/09 V9.0 110/11/26 V8.0 109/12/11 V7.0 108/12/27 V7.0	第11.0版	115/04/10
大腸直腸癌團隊	大腸癌	115/04/14 V19.1 114/12/09 V19.0 113/11/12 V18.0 112/12/22 V17.0 111/12/20 V16.0 110/11/16 V15.0 109/12/01 V14.0 108/11/19 V13.0	第19.1版	115/04/14

多專科團隊	癌症別	編修或檢視日期	最新版次	團隊會議修訂日期
	直腸癌	115/04/14 V19.1 114/12/09 V19.0 113/11/12 V18.0 112/12/26 V17.0 111/12/20 V16.0 110/11/16 V15.0 109/12/01 V14.0 108/11/19 V13.0	第19.1版	115/04/14
肝癌團隊	肝癌	115/04/15 V19.1 114/11/26 V19.0 113/11/20 V18.0 112/11/15 V17.0 111/12/07 V16.0 110/11/17 V15.0 109/12/16 V14.0 108/11/20 V13.0	第19.1版	115/04/15
胰臟癌團隊	胰臟癌	115/04/10 V7.1 114/12/26 V7.0 113/12/13 V6.0 112/11/24 V5.0 111/12/23 V4.0 110/12/24 V3.0 109/12/25 V3.0 108/12/27 V3.0	第7.1版	115/04/10

多專科團隊	癌症別	編修或檢視日期	最新版次	團隊會議修訂日期
肺癌團隊	肺癌	115/04/13 V20.1 114/11/17 V20.0 113/12/09 V19.0 112/12/18 V18.0 111/12/26 V17.0 110/12/06 V16.0 110/01/25 V15.0 108/12/23 V14.0	第20.1版	115/04/13
乳癌團隊	乳癌	115/04/14 V19.1 114/11/11 V19.0 114/02/28 V18.0 113/09/24 V17.0 112/11/14 V16.0 111/12/27 V15.0 110/12/14 V14.0 109/12/22 V13.0 108/12/31 V12.0	第19.1版	115/04/14
婦癌團隊	子宮頸癌	115/04/15 V21.1 114/11/19 V21.0 113/11/06 V20.0 112/12/26 V19.0 111/11/09 V18.0 110/11/10 V17.0 109/11/25 V16.0 108/11/20 V15.0	第21.1版	115/04/15

多專科團隊	癌症別	編修或檢視日期	最新版次	團隊會議修訂日期
	子宮體癌	115/04/15 V16.1 114/11/26 V16.0 113/12/04 V15.0 112/12/06 V14.0 111/11/23 V13.0 110/11/24 V12.0 109/11/04 V11.0 108/12/11 V10.0	第16.1版	115/04/15
	卵巢癌	115/04/15 V16.1 114/12/24 V16.0 113/10/08 V15.0 112/11/15 V14.0 111/12/28 V13.0 110/12/29 V12.0 109/12/09 V11.0 108/11/26 V10.0	第16.1版	115/04/15
攝護腺癌團隊	攝護腺癌	115/03/27 V17.1 114/12/12 V17.0 113/12/27 V16.0 112/12/08 V15.0 111/11/11 V14.0 110/11/05 V13.0 109/11/13 V12.0 108/11/15 V11.0	第17.1版	115/03/27

多專科團隊	癌症別	編修或檢視日期	最新版次	團隊會議修訂日期
泌尿道癌團隊	泌尿道系統癌	115/04/10 V18.1 114/12/19 V18.0 113/11/22 V17.0 112/11/17 V16.0 112/06/09 V15.0 111/12/09 V14.0 110/12/17 V13.0 109/11/27 V12.0 108/12/06 V11.0	第18.1版	115/04/10
皮膚癌團隊	皮膚癌	115/01/23 V7.0 114/01/17 V6.0 113/11/25 V5.0 112/11/23 V5.0 111/12/27 V5.0 110/01/11 V4.0 109/12/06 V3.0 108/01/18 V2.0 107/12/21 V1.0	第7.0版	115/01/23
甲狀腺癌團隊	甲狀腺癌	115/04/13 V9.1 114/11/17 V9.0 113/11/25 V8.0 112/11/27 V7.0 111/11/14 V6.0 110/12/27 V5.0 109/12/28 V4.0 108/12/09 V3.0	第9.1版	115/04/13

多專科團隊	癌症別	編修或檢視日期	最新版次	團隊會議修訂日期
淋巴癌團隊	淋巴癌 (Hodgkin Lymphoma)	115/04/17 V14.0 114/12/18 V14.0 113/12/26 V13.0 112/12/02 V12.0 111/12/22 V12.0 110/11/18 V12.0 110/01/27 V11.0 108/11/21 V10.0	第14版	115/04/17
	淋巴癌 (Diffuse Large B-cell)	115/04/17 V15.1 114/11/27 V15.0 113/11/07 V14.0 112/12/07 V13.0 111/12/22 V13.0 110/11/18 V12.0 109/12/17 V11.0 108/11/21 V10.0	第15.1版	115/04/17
	淋巴癌 (Follicular Lymphoma)	115/04/17 V14.0 114/12/18 V14.0 113/11/21 V13.0 112/12/21 V13.0 111/12/22 V12.0 110/11/18 V12.0 109/12/17 V11.0 108/11/21 V10.0	第14.0版	115/04/17

多專科團隊	癌症別	編修或檢視日期	最新版次	團隊會議修訂日期
兒童癌症團隊	非何杰金氏淋巴瘤	115/04/13 V3.0 114/10/20 V3.0 113/11/25 V2.0 112/11/27 V2.0 111/11/28 V2.0 110/11/25 V2.0 109/11/26 V2.0 108/07/24 V2.0	第3.0版	115/04/13
兒童癌症團隊	Acute Lymphoid Leukemia	115/04/13 V6.0 114/10/20 V6.0 113/11/25 V5.0 112/11/27 V5.0 111/11/28 V5.0 110/11/25 V4.0 109/11/26 V3.0 109/04/09 V3.0 108/07/24 V2.0	第6.0版	115/04/13

Updated in V.115.1 of CSMUH Chemotherapy Protocol include

Oral cancer

Maintenance therapy

Regimen UFT reference added *Lee HL, et al. Efficacy of Tegafur-Uracil Maintenance Therapy in Non-Metastatic Head and Neck Squamous Cell Carcinoma: A Meta-Analysis With Trial Sequential Analysis. World J Oncol. 2025;16(6):609-620.*

NPC

Neoadjuvant therapy

Regimen of Modified PFL reference added *A phase II study of outpatient chemotherapy with cisplatin, 5-fluorouracil, and leucovorin in nasopharyngeal carcinoma. K H Chi et al. Cancer. 1994.*

Maintenance therapy

Regimen UFT reference added *Twu CW, et al. Metronomic adjuvant chemotherapy improves treatment outcome in nasopharyngeal carcinoma patients with postradiation persistently detectable plasma Epstein-Barr virus deoxyribonucleic acid. Int J Radiat Oncol Biol Phys. 2014;89(1):21-29.*

Esophageal cancer

Postoperative adjuvant CCRT (for direct operation without CCRT) added

Regimen Paclitaxel + Carboplatin, according to reference *Ni, W., Yu, S., Xiao, Z., Zhou, Z., Chen, D., Feng, Q., Liang, J., Lv, J., Gao, S., Mao, Y., Xue, Q., Sun, K., Liu, X., Fang, D., Li, J., Wang, D., Zhao, J., & Gao, Y. (2021). Postoperative adjuvant therapy versus surgery alone for stage IIB–III esophageal squamous cell carcinoma: A phase III randomized controlled trial. The Oncologist, 26(12), e2151–e2160. And Chen, J., Pan, J., Liu, J., Li, J., Zhu, K., Zheng, X., Chen, M., Chen, M., & Liao, Z. (2013). Postoperative radiation therapy with or without concurrent chemotherapy for node-positive thoracic esophageal squamous cell carcinoma. International Journal of Radiation Oncology, Biology, Physics, 86(4), 671–677. https://doi.org/10.1016/j.ijrobp.2013.03.004.*

Regimen Fluorouracil and cisplatin, according to reference *Adelstein, D. J., Rice, T. W., Rybicki, L. A., Saxton, J. P., Videtic, G. M. M., Murthy, S. C., Mason, D. P., Rodriguez, C. P., & Ives, D. I. (2009). Mature results from a phase II trial of postoperative concurrent chemoradiotherapy for poor prognosis cancer of the esophagus and gastroesophageal junction. Journal of Thoracic Oncology, 4(10), 1264–1269. https://doi.org/10.1097/JTO.0b013e3181b9c8f2 and Zhang, W.-W., Zhu, Y.-J., Yang, H., Wang, Q.-X., Wang, X.-H., Xiao, W.-W., Li, Q.-Q., Liu, M.-Z., & Hu, Y.-H. (2015). Concurrent radiotherapy and weekly chemotherapy of 5-fluorouracil and platinum agents for postoperative locoregional*

recurrence of oesophageal squamous cell carcinoma. Scientific Reports, 5, 8071.

Regimen Cisplatin+ UFUR, according to reference *Iwase, H., Shimada, M., Nakamura, M., Nakarai, K., Iyo, T., Kaida, S., Indo, T., Kato, E., Horiuchi, Y., & Kusugami, K. (2003). Concurrent chemoradiotherapy for locally advanced and metastatic esophageal cancer: Long-term results of a phase II study of UFT/CDDP with radiotherapy. International Journal of Clinical Oncology, 8(5), 305–311.*

SQUAMOUS CELL CARCINOMA and Adenocarcinoma (FIRST-LINE THERAPY) added

Regimen Tislelizumab-jagr with (fluoropyrimidine or taxol) and (oxaliplatin or cisplatin), according to reference *Qiu MZ, Oh DY, Kato K, et al. RATIONALE-305,Investigators. Tislelizumab plus chemotherapy versus placebo plus chemotherapy as first line treatment for advanced gastric or gastro- oesophageal junction adenocarcinoma:RATIONALE-305 randomised, double blind, phase 3 trial. BMJ 2024;385:e078876. And Xu J, Kato K, Raymond E, et al. Tislelizumab plus chemotherapy versus placebo plus chemotherapy as first-line treatment for advanced or metastatic oesophageal squamous cell carcinoma (RATIONALE-306): a global, randomised, placebo-controlled, phase 3 study. Lancet Oncol 2023;24:483-495.*

SQUAMOUS CELL CARCINOMA(SECOND-LINE AND SUBSEQUENT THERAPY)

Regimen added Tislelizumab-jagr, according to reference *Ajani J, El Hajbi F, Cunningham D, et al. Tislelizumab versus chemotherapy as second-line treatment for European and North American patients with advanced or metastatic esophageal squamous cell carcinoma: a subgroup analysis of the randomized phase III RATIONALE-302 study.ESMO Open 2024;9:102202.Esophageal Squamous Cell Carcinoma (RATIONALE-302): A Randomized Phase III Study. J Clin Oncol 2022;40:3065-3076. And Shen L, Kato K, Kim SB, et al. Tislelizumab Versus Chemotherapy as Second-Line Treatment for Advanced or Metastatic Esophageal Squamous Cell Carcinoma (RATIONALE-302): A Randomized Phase III Study. J Clin Oncol 2022;40:3065-3076.*

Systemic Therapy for Unresectable Locally Advanced, Recurrent, or Metastatic Disease (where local therapy is not indicated) revised regimen to Dosage adjustment

SQUAMOUS CELL CARCINOMA(FIRST-LINE THERAPY)

Regimen Cisplatin + Fluorouracil (5-FU) + Nivolumab、Cisplatin + Fluorouracil (5-FU) + Pembrolizumab were all Fluorouracil (5-FU) revised dosage 750-1000 mg/m^2/day IV continuous infusion over 24 hours daily, D1-4

OTHER RECOMMENDED REGIMENS

Regimen Fluoropyrimidine revised dosage 750 – 1000 mg/m^2/day IV continuous infusion over 24 hours daily,D1-4.

ADENOCARCINOMA (FIRST-LINE THERAPY)

Regimen HER2 overexpression-positive Trastuzumab and pembrolizumab with fluoropyrimidine and oxaliplatin or fluoropyrimidine and

cisplatin、Cisplatin + Fluorouracil (5-FU) + Pembrolizumab were all Fluorouracil (5-FU) revised dosage 750-1000 mg/m^2/day IV continuous infusion over 24 hours daily, D1-4.

ADENOCARCINOMA (FIRST-LINE THERAPY)、OTHER RECOMMENDED REGIMENS

Regimen Fluoropyrimidine was revised Fluorouracil 750-1000 mg/m^2/day iv continuous infusion over 24 hours daily, D1-4.

- **Gastric cancer**

Perioperative systemic Therapy

Regimen FLOT + durvalumab (for PD-L1 CPS ≥1 or TAP ≥1%) added notes：

Bullet 1. For PD-L1 CPS ≥1 or TAP ≥1%b (category 1)

Bullet 2. For clinical node negative tumor

Bullet 3. For PD-L1 CPS <1 or TAP <1%b (category 2B)

Bullet 4. For diffuse type (category 2B)

Remark * Category 2B：Based upon lower-level evidence, there is NCCN consensus (≥50%, but <85% support of the Panel) that the intervention is appropriate.

Remark * In the MATTERHORN trial, diffuse type gastric or EGJ adenocarcinoma showed no event-free overall survival advantage when durvalumab was added to FLOT.

HER2 overexpression all deleted overexpression.

- **Colorectal cancer**

Adjuvant regimen corrected CAPEOX name and according to NCCN and FDA revised dosage 850-1000 mg/m^2(NCCN), 825mg/m^2(FDA).

Neaadjuvant and Systemic Chemotherapy for Locally advanced disease

Regimen corrected CAPEOX name and according to NCCN and FDA revised dosage 850-1000 mg/m^2(NCCN), 825mg/m^2(FDA)

Systemic Chemotherapy for Locally advance disease

Regimen added 2nd line Fruquintinib according to reference *Dasari A , et al. Fruquintinib versus placebo in patients with refractory metastatic colorectal cancer (FRESCO-2): an international, multicentre, randomised, double-blind, phase 3 study. Lancet 2023;402:41-53 and Li J, Qin S, et al. Effect of Fruquintinib vs Placebo on Overall Survival in Patients With Previously Treated Metastatic Colorectal Cancer: The FRESCO Randomized Clinical Trial. JAMA 2018;319:2486-2496.*

- **HCC**

Advanced/Metastasis regimen

Regimen Ipilimumab + Nivolumab, revised from second line to first line according to reference *Yau, T., Galle, P. R., Decaens, T., Sangro, B., Qin, S., da Fonseca, L. G., Karachiwala, H., Blanc, J.-F., Park, J.-W., Gane, E., Pinter, M., Peña, A. M., Ikeda, M., Tai, D., Santoro, A., Pizarro, G., Chiu, C.-F., Schenker, M., He, A., Chon, H. J., ... Kudo, M. (2025). Nivolumab plus Ipilimumab versus lenvatinib or sorafenib as first-linetreatment for unresectable hepatocellular carcinoma (CheckMate 9DW): An open-label, randomised, phase 3 trial. The Lancet. Advance online publication.*

- **Pancreatic cancer**

Adjuvant Chemotherapy

Regimen Gemcitabine + Tegafur/gimeracil/oteracil revised reference *Kao, Y. C., Tang, C. Y., Chen, M. H., Hung, Y. P., & Chiang, N. J. (2025). 379P Real-world comparison of TS-1, gemcitabine, and combination adjuvant chemotherapy in resected pancreatic cancer. Annals of Oncology, 36, S1903.*

Advanced/Metastastic regimen

Modified FOLFOX revised reference *Chari S, Leibson C, Rabe K, et al. Probability of Pancreatic Cancer Following Diabetes: A Population-Based Study. Gastroenterology 2005;129:504–511 and Huang Y, Cai X, Qiu M, et al. Prediabetes and the risk of cancer: a meta-analysis. Diabetologia 2014;57:2261–2269.*

- **Non-small cell Lung cancer**

Target therapy

Regimen for ERBB2(HER2) Mutation：Zongertinib added as a first-line therapy option for patients with advanced or metastatic NSCLC with ERBB2 (HER2) mutations.

Advanced or Metastatic disease regimen

PD-L1 ≥50% FIRST-LINE THERAPY (PS 0–2) Updated

Preferred Cemiplimab-rwlc followed by maintenance Cemiplimab (category 1), according to *Sezer A, et al. Cemiplimab monotherapy for first-line treatment of advanced non-small-cell lung cancer with PD-L1 of at least 50%: a multicentre, open-label, global, phase 3, randomised, controlled trial. Lancet 2021;397:592-604.*

(Carboplatin or Cisplatin)/Pemetrexed + Cemiplimab-rwlc followed by maintenance Cemiplimab ± Pemetrexed (category 1) and Other Recommended (Carboplatin or Cisplatin) + Paclitaxel + Cemiplimab-rwlc followed by maintenance Cemiplimab(category 1), according to reference *Gogishvili M, et al. Cemiplimab plus chemotherapy versus chemotherapy alone in non-small cell lung cancer: a randomized, controlled, double-blind phase 3 trial. Nat Med 2022;28:2374-2380.*

PD-L1 ≥1%–49% FIRST-LINE THERAPY (PS 0–2) Updated Preferred (Carboplatin or Cisplatin)/Pemetrexed + Cemiplimab-rwlc followed by maintenance Cemiplimab ± Pemetrexed (category 1)、(Carboplatin or Cisplatin) + Paclitaxel + Cemiplimab-rwlc followed by maintenance Cemiplimab(category 1), according to reference *Gogishvili M, et al. Cemiplimab plus chemotherapy versus chemotherapy alone in non-small cell lung cancer: a randomized, controlled, double-blind phase 3 trial. Nat Med 2022;28:2374-2380.*

- **Breast cancer**

Adjuvant therapy

Regimen Added TS-1 (S-1)(愛斯萬)+/- endocrine therapy for EBC according to reference *Toi M, Imoto S, Ishida T et al.Adjuvant S-1 plus endocrine therapy for oestrogen receptor-positive, HER2-negative, primary breast cancer: a multicentre, open-label, randomised, controlled, phase 3 trial.The Lancet Oncology, 22, 74-84* and for MBC according to reference *Takashima T, Mukai H, Hara F et al..Taxanes versus S-1 as the first-line chemotherapy for metastatic breast cancer (SELECT BC): an open-label, non-inferiority, randomised phase 3 trial.The Lancet Oncology, 2015; 17, 90-98.*

Regimen Added UFT according to reference *Oral Uracil and Tegafur Compared With Classic Cyclophosphamide, Methotrexate, Fluorouracil As Postoperative Chemotherapy in Patients With Node-Negative, High-Risk Breast Cancer: National Surgical Adjuvant Study for Breast Cancer 01 TrialToru Watanabe twatanab@oncoloplan.com, Muneaki Sano, Shigemitsu Takashima, Tomoki Kitaya, Yutaka Tokuda, Masataka Yoshimoto, Norio Kohno, Kazuhiko Nakagami, Hiroji Iwata, Kojiro Shimozuma, Hiroshi Sonoo, Hitoshi Tsuda, Goi Sakamoto, and Yasuo Ohashi.J Clin Oncol 27, 1368-1374(2009)Volume 27, Number 9*

Regimen added Ribocilcib (Kisqali) + Endocrine therapy, according to reference Ribociclib plus Endocrine Therapy in Early Breast Cancer. Dennis Slamon, M.D., Ph.D., Oleg Lipatov, M.D., Zbigniew Nowecki, M.D., Nicholas McAndrew, M.D., Bozena Kukielka-Budny, M.D., Daniil Stroyakovskiy, M.D., Ph.D., Denise A. Yardley, M.D, and Gabriel Hortobagyi, M.D Published March 20, 2024. N Engl J Med 2024;390:1080-1091.DOI: 10.1056/NEJMoa2305488.VOL. 390 NO. 12.

Advanced/Metastasis Chemotherapy

Regimen added Tucidinostat (Kepida) +endocrine therapy, according to reference *Tucidinostat plus exemestane for postmenopausal patients with advanced, hormone receptor-positive breast cancer (ACE): a randomised, double-blind, placebo-controlled, phase 3 trial, Lancet Oncol 2019; 20: 806–15.*

- **Cervical cancer**

CCRT

Regimen added Cisplatin + Pembrolizumab and Carboplatin+ pembrolizumab, according to reference *Lorusso, D., Xiang, Y., Hasegawa, K.,*

Scambia, G., Leiva, M., Ramos-Elias, P., et al. (2024). Pembrolizumab or placebo with chemoradiotherapy followed by pembrolizumab or placebo for newly diagnosed, high-risk, locally advanced cervical cancer (ENGOT-cx11/GOG-3047/KEYNOTE-A18): A randomised, double-blind, phase 3 clinical trial. Lancet, 403(10434), 1341–1350. https://doi.org/10.1016/S0140-6736(24)00317-9.

Due to not applicable All deleted reference *NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/ professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.*

- **Uterine carcinoma including Sarcoma**

Due to not applicable All deleted reference *NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/ professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.*

- **Ovary cancer**

Adjuvant therapy

Regimen added Oxaliplatin/capecitabine, according to reference *McGuire, W. P., Penson, R. T., Gore, M., et al. (2019). An international, phase III randomized trial in patients with mucinous epithelial ovarian cancer (mEOC/GOG 0241) with long-term follow-up: and experience of conducting a clinical trial in a rare gynecological tumor. Gynecologic Oncology, 153(3), 541–548. https://doi.org/10.1016/j.ygyno.2019.03.256(GOG-0241).*

Advanced/Metastasis regimen

Regimen added Mirvetuximab soravtansine, according to reference *Moore, K. N., Angelergues, A., Konecny, G. E., García, Y., Banerjee, S., Lorusso, D., et al. (2023). Mirvetuximab soravtansine in FRα-positive, platinum-resistant ovarian cancer. New England Journal of Medicine, 389(23), 2162–2174. https://doi.org/10.1056/NEJMoa2309169 (MIRASOL trial).*

- **Urinary tract cancer(including Bladder cancer、Renal pelvis、Ureter and Renal cell carcinoma)**

Advanced/Metastasis regimen

Regimen added Nivolumab + Gemcitabine + Cisplatin, according to reference *CheckMate 901 the 2023 European Society of Medical Oncology (ESMO) Annual Congress held in Madrid, Spain between October 20th and 24th, 2023.*

- **DLBCL**

Second line

Regimen added Pola-R-CHP, according to reference *Tilly H, Morschhauser F, Sehn LH, Friedberg JW, Trněný M, Sharman JP, Herbaux C, Burke JM, Matasar M, Rai S, Izutsu K, Mehta-Shah N, Oberic L, Chauchet A, Jurczak W, Song Y, Greil R, Mykhalska L, Bergua-Burgués JM, Cheung MC, Pinto A, Shin HJ, Hapgood G, Munhoz E, Abrisqueta P, Gau JP, Hirata J, Jiang Y, Yan M, Lee C, Flowers CR, Salles G. Polatuzumab Vedotin in Previously Untreated Diffuse Large B-Cell Lymphoma. N Engl J Med. 2022 Jan 27;386(4):351-363. Epub 2021 Dec 14.*

口腔癌

Neoadjuvant Chemotherapy

Modified TPF

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Docetaxel	20 mg/m^2	IV	drip 30 mins, d1, 8	Q2w x 3 cycles
Cisplatin	50 mg/m^2	IV	drip 1 hours, d1	
5-FU	400 mg/m^2/d	CIVI	d1	
5-FU	1200 mg/m^2/d	IV	drip 46-48 hours, d1	

Cisplatin, Fluorouracil, and docetaxel in unresectable head and neck cancer. N Engl J Med. 2007 Oct 25; 357(17): 1695-704.

健保給付：Docetaxel，頭頸癌：限局部晚期且無遠端轉移之頭頸部鱗狀細胞癌且無法手術切除者，與 Cisplatin 及 5 Fluorouracil 併用，作為放射治療前的引導治療，限使用 4 個療程。

Modified TP + UFUR

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Docetaxel	20 mg/m^2	IV	drip 30 mins, d1	Qw x 6 cycles
Cisplatin	30 mg/m^2	IV	drip 1 hours, d1	
UFUR	400 mg/m^2/d	PO	Daily	

Cisplatin, Fluorouracil, and docetaxel in unresectable head and neck cancer. N Engl J Med. 2007 Oct 25;357(17): 1695-704.

Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Pembrolizumab	200 mg	IV	drip 30 mins, Day 1of a 21-day	cycle for 2 cycle (up to 6 weeks) prior to surgery

Adjuvant treatment Following surgical resection, Pembrolizumab 200 mg ,IV infusion, on Day 1 of a 21-day cycle for 15 cycle (up to 45weeks) plus Investigator's choice of SOC treatment regimen consisting of radiotherapy,with or without Cisplatin 30 mg/m^2 weekly for up to 9weeks

KEYNOTE 689

Concurrent Chemoradiation

Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	30-35 mg/m^2	IV	drip 1 hours, d1	Qw	total > 200 mg/m^2

Beckmann GK et al. Hyperfractionated accelerated radiotherapy in combination with weekly Cisplatin for locally advanced head and neck cancer. Head Neck 2005;27:36.

Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	100 mg/m^2	IV	drip 1 hours, d1	Q3w	total > 200 mg/m^2

Beckmann GK et al. Hyperfractionated accelerated radiotherapy in combination with weekly Cisplatin for locally advanced head and neck cancer. Head Neck 2005;27:36.

Cetuximab weekly

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cetuximab	250 mg/m^2	IV	drip 2 hours, d1	QW	loading dose 400 mg/m^2

Bonner JA et al. Radiotherapy plus Cetuximab for squamous cell carcinoma of the head and neck. N Engl J Med 2006; 354:567.
健保給付：限無法接受局部治療之復發及或轉移性頭頸部鱗狀細胞癌，且未曾申報 Cetuximab 之病患使用。

Cetuximab Bi-weekly

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cetuximab	500 mg/m^2	IV	drip 2 hours, d1	Q2W	loading dose 400 mg/m^2

Bonner JA et al. Radiotherapy plus Cetuximab for squamous cell carcinoma of the head and neck. N Engl J Med 2006; 354:567.
健保給付：限無法接受局部治療之復發及或轉移性頭頸部鱗狀細胞癌，且未曾申報 Cetuximab 之病患使用。

Adjuvant Chemotherapy

Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	30-35 mg/m^2	IV	drip 1 hours, d1	Qw	total > 200 mg/m^2

Beckmann GK et al. Hyperfractionated accelerated radiotherapy in combination with weekly Cisplatin for locally advanced head and neck cancer. Head Neck 2005;27:36.

Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	100 mg/m^2	IV	drip 1 hours, d1	Q3w	total > 200 mg/m^2

Beckmann GK et al. Hyperfractionated accelerated radiotherapy in combination with weekly Cisplatin for locally advanced head and neck cancer. Head Neck 2005;27:36.

Maintenance Therapy

UFT

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Uracil-tegafur	400 mg/day	PO	7 days/week	every 28 days for 1 year

Yuzuru Nibe et al. Effectiveness of Concurrent Radiation Therapy with UFT or TS-1 for T2N0 Glottic Cancer in Japan. Anticancer Res 2007;27:3497.
Lee HL, et al. Efficacy of Tegafur-Uracil Maintenance Therapy in Non-Metastatic Head and Neck Squamous Cell Carcinoma: A Meta-Analysis With Trial Sequential Analysis. World J Oncol. 2025;16(6):609-620.
健保給付：頭頸部鱗狀上皮癌 (93/4/1、98/3/1、99/10/1)

TS-1

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
TS-1	80mg/m^2	PO	7 days/week, 4 wks on/2wk off or 2wks/1wk off	every 28 days for 1 year

Yuzuru Nibe et al. Effectiveness of Concurrent Radiation Therapy with UFT or TS-1 for T2N0 Glottic Cancer in Japan. Anticancer Res 2007;27:3497.

Recurrence/Metastasis Chemotherapy

EPF

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Cetuximab	250 mg/m^2	IV	drip 2 hours, d1	Q2W
Cisplatin	50 mg/m^2	IV	drip 1 hour, d1	
5-FU	400 mg/m^2/d	CIVI	d1	
5-FU	1200 mg/m^2/d	IV	drip 48hours, d1	

Cisplatin, Fluorouracil, and docetaxel in unresectable head and neck cancer. N Engl J Med. 2007 Oct 25;357(17):1695-704.

Pembrolizumab+PF

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Pembrolizumab	200mg fix or 100mg (self pay)	IV	drip 60 mis, d1	Q2W
Cisplatin	50 mg/m^2	IV	drip 1 hour, d1	
5-FU	400 mg/m^2/d	CIVI	bolus, d1	
5-FU	1200 mg/m^2/d	CIVI	drip 24 hours, d1	
Leucovorin	200 mg/m^2	combine 5-FU		

Burtness B, Harrington KJ, Greil R, et al: Pembrolizumab alone or with Chemotherapy versus Cetuximab with Chemotherapy for recurrent or metastatic squamous cell carcinoma of the head and neck (KEYNOTE-048): A randomised, open-label, phase 3 study. Lancet 394:1915-1928, 2019.

Pembrolizumab alone

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg fix	IVD	drip 60 mis, d1	Q3W	or 100 mg (self pay)

Burtness B, Harrington KJ, Greil R, et al: Pembrolizumab alone or with Chemotherapy versus Cetuximab with Chemotherapy for recurrent or metastatic squamous cell carcinoma of the head and neck (KEYNOTE-048): A randomised, open-label, phase 3 study. Lancet 394:1915-1928, 2019.

頭頸部鱗狀細胞癌(不含鼻咽癌)，第一線用藥(CPS greater over or equal to 20%)，第二線用藥(TPS greater over or equal to 50%)：
I.先前未曾接受全身性治療 且無法手術切除之復發性或 轉移性 第三期或第四期頭頸部鱗狀細胞癌成人患者。
II.先前已使用過 platinum 類化學治療失敗後，又有疾病惡化的復發 性或 轉移性第三期或第四期 頭頸部鱗狀細胞癌成人患者。
III.本類藥品與 Cetuximab 僅能擇一使用，且治療失敗時不可互換。

Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	200 mg fix	IVD	drip 60 mis, d1	Q2W	or 100 mg (self pay)

Ferris RL, Blumenschein GJr, Fayette J, et al. Nivolumab for Recurrent Squamous-Cell Carcinoma of the Head and Neck. N Engl J Med 2016;375:1856-67.

健保給付：頭頸部鱗狀細胞癌(不含鼻咽癌)，第二線用藥(TC greater over or equal to 10%)：I.先前已使用過 platinum 類化學治療失敗後，又有疾病惡化的復發 性或轉移性第三期或第四期 頭頸部鱗狀細胞癌成人患者。 II.本類藥品與 Cetuximab 僅能擇一使用，且治療失敗時不可互換。

MEMOCLUB

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Methotrexate	30 mg/m^2	IVD	drip 30 mins, d1	Q2W	-
Epirubicin	30 mg/m^2	IV	drip 1 hour, d1		
Mitomycin-C	4 mg/m^2	IV	drip 30 mins, d8		
Vincristin	1 mg/m^2	IV	drip 15 mins, d8		
Cisplatin	25 mg/m^2	IV	drip 1 hour, d8		
Leucovorin	120 mg/m^2	IV	d8		

5-Fluorouracil	1000 mg/m^2	IV	drip 30 mins, d8		
Bleomycin	10 mg/m^2	IV	drip 30 mins, d8		

Jin-Ching Lin et al. Experience of Cetuximab in the salvage treatment for recurrent/metastatic oral squamous cell carcinoma. 2012 ASCO Annual Meeting. Abstract e16006.

Methotrexate

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Methotrexate	30 mg/m^2	IV	drip 30 mins, d1	Qw	-

Forastiere AA et al. Randomized comparison of Cisplatin plus Fluorouracil and Carboplatin plus Fluorouracil versus methotrexate in advanced squamous-cell carcinoma of the head and neck. J Clin Oncol 1992; 10:1245

EPT

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cetuximab	250 mg/m^2	IV	drip 2 hours, d1	Qw	-
Cisplatin	30 mg/m^2	IV	drip 1 hour, d1		
Paclitaxel	60-80 mg/m^2	IV	drip 1 hour, d1		

Cisplatin, Fluorouracil, and docetaxel in unresectable head and neck cancer. N Engl J Med. 2007 Oct 25;357(17):1695-704.
健保給付：限無法接受局部治療之復發及或轉移性頭頸部鱗狀細胞癌，且未曾申報 Cetuximab 之病患使用。

PT

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	30 mg/m^2	IV	drip 1 hour, d1	Qw	-
Paclitaxel	60-80 mg/m^2	IV	drip 1 hour, d1		

Cisplatin, Fluorouracil, and docetaxel in unresectable head and neck cancer. N Engl J Med. 2007 Oct 25;357(17):1695-704.

鼻咽癌

Neoadjuvant Chemotherapy

Modified PF

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 1 hour, d1	Q2w x 3 cycles	-
5-FU	400 mg/m^2/d	CIVI	d1		
5-FU	1200 mg/m^2/d	CIVI	drip 46-48 hours		
Leucovorin	200 mg/m^2	IV	d1		

Huang T-C, Chen C-J, Ding Y-F and Kang Y-N(2022) Impact of induction chemotherapy with concurrent chemoradiotherapy on nasopharyngeal carcinoma: a meta-analysis of randomized controlled trials. Front. Oncol. 12:965719.

Gemcitabine+Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, d1,8	Q3w x 3-4 cycles	-
Cisplatin	50-75 mg/m^2/d	IV	drip 1 hour, d1		

N Engl J Med.2019 Sep 19;381(12):1124-1135. doi:10.1056/NEJMoa1905287.Epub2019May31.

Modified PFL at CSMUH

Drug Combination	Dosage	Diluent solution	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	NS 250 ml	IV	drip 1 hour, d1	Q2w	
5-FU	2000 - 3000 mg/m^2/d	NS 250 ml	CIVI	drip 46 hours, d1		
Leucovorin	200 mg/m^2	combine 5-FU	IV			

Forastiere AA et al. Randomized comparison of cisplatin plus fluorouracil and carboplatin plus fluorouracil versus methotrexate in advanced squamous-cell carcinoma of the head and neck. J Clin Oncol 1992; 10:1245.
A phase II study of outpatient chemotherapy with cisplatin, 5-fluorouracil, and leucovorin in nasopharyngeal carcinoma
K H Chi et al. Cancer. 1994.

Concurrent Chemoradiation

Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	30-35 mg/m^2	IV	drip 1 hour, d1	Qw	total > 200 mg/m^2

Beckmann GK et al. Hyperfractionated accelerated radioTherapy in combination with weekly Cisplatin for locally advanced head and neck cancer. Head Neck 2005;27:36.

Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	100 mg/m^2	IV	drip 3 hours, d1	Q3w	total > 200 mg/m^2

Beckmann GK et al. Hyperfractionated accelerated radioTherapy in combination with weekly Cisplatin for locally advanced head and neck cancer. Head Neck 2005;27:36.

Maintenance Chemotherapy

UFT

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Uracil-tegafur	400 mg/m^2	PO	7 days/week	every 28 days for 7year	-

Yuzuru Nibe et al. Effectiveness of Concurrent Radiation Therapy with UFT or TS-1 for T2N0 Glottic Cancer in Japan. Anticancer Res 2007;27:3497.
Twu CW, et al. Metronomic adjuvant chemotherapy improves treatment outcome in nasopharyngeal carcinoma patients with postradiation persistently detectable plasma Epstein-Barr virus deoxyribonucleic acid. Int J Radiat Oncol Biol Phys. 2014;89(1):21-29.

TS-1

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
TS-1	80mg/m^2	PO	7 days/week, 4 wks on/2wk off or 2wks/1wk off	every 28 days	for 1 year

Yuzuru Nibe et al. Effectiveness of Concurrent Radiation Therapy with UFT or TS-1 for T2N0 Glottic Cancer in Japan. Anticancer Res 2007;27:3497.

Recurrence/Metastasis Chemotherapy

PF

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 1 hour, d1	Q2w	
5-FU	400 mg/m^2/d	CIVI	d1		
5-FU	1200 mg/m^2/d	CIVI	drip 46 hours, d1		
Leucovorin	200 mg/m^2	IV	d1		

Clin Oncol.2021 Oct 10;39(29):3273-382.doi:10.1200/JCO.21.00396.Epub2021Aug 11.

Gemcitabine+Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, d1,8,15	Q4w x 3-4 cycles	-
Cisplatin	50-75 mg/m^2/d	IV	drip 1 hour, d1		

Clin Oncol.2021 Oct 10;39(29):3273-382.doi:10.1200/JCO.21.00396.Epub2021Aug 11.

MEMOCLUB

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Methotrexate	30 mg/m^2	IV	drip 30 mins, d1	Q2W	-
Epirubicin	30 mg/m^2	IV	drip 1 hours, d1		
Mitomycin-C	4 mg/m^2	IV	drip 30 mins, d8		
Vincristin	1 mg/m^2	IV	drip 15 mins, d8		
Cisplatin	25 mg/m^2	IV	drip 1 hours, d8		
Leucovorin	120 mg/m^2	IV	d8		
5-Fluorouracil	1000 mg/m^2	IV	drip 30 mins, d8		
Bleomycin	10 mg/m^2	IV	drip 30 mins, d8		

Jin-Ching Lin et al. Experience of Cetuximab in the salvage treatment for recurrent/metastatic oral squamous cell carcinoma. 2012 ASCO Annual Meeting. Abstract e16006

Methotrexate

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Methotrexate	30 mg/m^2	IV	drip 30 mins, d1	Qw	-

Forastiere AA et al. Randomized comparison of Cisplatin plus Fluorouracil and Carboplatinplus Fluorouracil versus methotrexate in advanced squamous-cell carcinoma of the head and neck. J Clin Oncol 1992; 10:1245.

PT

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	30 mg/m^2	IV	drip 1 hours, d1	Qw	-
Paclitaxel	60-80 mg/m^2	IV	drip 1 hours, d1		

Cisplatin, Fluorouracil, and docetaxel in unresectable head and neck cancer. N Engl J Med. 2007 Oct 25;357(17):1695-704.

食道癌

Neoadjuvant Chemoradiation

Preferred regimens

Paclitaxel + Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	50 mg/m^2	IV	drip 60 mins, D1	Weekly for 5 weeks	
Carboplatin	AUC 2	IV	drip 30 mins, D1		

van Hagen P, Hulshof MC, van Lanschot JJ, et al. Preoperative chemoradiotherapy for esophageal or junctional cancer. N Engl J Med 2012;366:2074-2084.

Fluorouracil and Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	60 - 80 mg/m^2	IV	drip 60 mins, D1	Cycled every 28 days for 2 cycles	
or Carboplatin	AUC 6		drip 30 mins, D1		
Fluorouracil	600-800 mg/m^2/day	IV	continuous infusion over 24 hours daily, D1-4		
or					
Cisplatin	30 - 40 mg/m^2	IV	drip 60 mins, D1	Cycled every 14 days for 3 cycles	
or Carboplatin	AUC 3		drip 30 mins, D1		
Fluorouracil(5-FU)	1200 -1600 mg/m^2	IV	drip 46-48 hours, D1-2		

Tepper J, Krasna MJ, Niedzwiecki D, et al. Phase III trial of trimodality Therapy with Cisplatin, Fluorouracil, radioTherapy, and surgery compared with surgery alone for esophageal cancer: CALGB 9781. J Clin Oncol 2008;26:1086-1092.

Cisplatin +UFUR

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	25 - 30 mg/m^2	IV	drip 60 mins, D1	Weekly for 5 weeks	不願 24-48 小時注射或不適合放置人工血管
UFUR	200-250 mg/m^2/day	PO	Bid, D1-5		

Iwase, H., Shimada, M., Nakamura, M., Nakarai, K., Iyo, T., Kaida, S., Indo, T., Kato, E., Horiuchi, Y., & Kusugami, K. (2003). Concurrent chemoradiotherapy for locally advanced and metastatic esophageal cancer: Long-term results of a phase II study of UFT/CDDP with radiotherapy. International Journal of Clinical Oncology, 8(5), 305–311.

Perioperative systemic Therapy (Esophagogastric Junction adenocarcinoma)

referred Regimens

FLOT

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Fluorouracil	2600 mg/m^2	IV	drip 46-48 hours, D1-2	Cycled every 14days for total 8 cycles	4 cycles preoperative and 4 cycles postoperative
Leucovorin	200 mg/m^2	IV	drip 46-48 hours, D1-2		
Oxaliplatin	85 mg/m^2	IV	drip 120 mins, D1		
Docetaxel	30 mg/m^2	IV	drip 60 mins, D1		

Al-Batran S-E, Homann N, Pauligk C, et al. Perioperative Chemotherapy with Fluorouracil plus Leucovorin, Oxaliplatin, and docetaxel versus Fluorouracil or Capecitabine plus Cisplatin and epirubicin for locally advanced, resectable gastric or gastrooesophageal junction adenocarcinoma (FLOG4): a randomised, phase 2/3 trial. Lancet 2019;393:1948-1957.

FLOT +Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Durvalumab	1500 mg	IV	drip 30 mins, D1	Cycled every 28days for total 4cycles	2cycles preoperative and 2cycles postoperative
Fluorouracil	2600 mg/m^2	IV	drip 46-48 hours,		

			D1-2,15-16		followed by Durvalumab 1500 mg IV on Day 1 every 4 weeks for 10 additional cycles
Leucovorin	200 mg/m^2	IV	drip 46-48 hours, D1-2,15-16		
Oxaliplatin	85 mg/m^2	IV	drip 120 mins, D1		
Docetaxel	30 mg/m^2	IV	drip 60 mins, D1		

Janjigian YY, Al-Batran SE, Wainberg ZA, etal. Perioperative Durvalumab in gastric and gastroesophageal junction cancer. N Engl J Med 2025;393:217-230.

Other Recommended Regimens

Fluorouracil+Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins, D1	Cycled every 14days for total 8 cycles	4 cycles preoperative and 4 cycles postoperative
Fluorouracil	2000 mg/m^2	IV	drip 46-48 hours, D1-2		

National Comprehensive Cancer Network. (2025). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Esophageal and Esophagogastric Junction Cancers (Version 4.2025).

Fluoropyrimidine and Oxaliplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Fluorouracil	1200 mg/m^2/day	IV	continuous infusion over 24 hours daily, D1 and 2	Cycled every 14days for total 8 cycles	4 cycles preoperative and 4 cycles postoperative
Fluorouracil	400 mg/m^2	IV push	D1		
Leucovorin	400 mg/m^2	IV	D1		

Oxaliplatin	85 mg/m^2	IV	drip 120 mins, D1		

Enzinger PC, Burtness BA, Niedzwiecki D, et al. CALGB 80403 (Alliance)/E1206: a randomized phase II study of three Chemotherapy regimens plus Cetuximab in metastatic esophageal and gastroesophageal junction cancers. J Clin Oncol 2016;34:2736-2742.

Fluoropyrimidine and Oxaliplatin (for Esophagogastric Junction adenocarcinoma)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Fluorouracil	2600 mg/m^2	IV	drip 46-48 hours, D1-2	Cycled every 14days for total 8 cycles	4 cycles preoperative and 4 cycles POstoperative
Leucovorin	200 mg/m^2	IV	drip 46-48 hours, D1-2		
Oxaliplatin	85 mg/m^2	IV	drip 120 mins, D1		

Al-Batran S-E, Hartmann JT, Probst S, et al. Phase III trial in metastatic gastroesophageal adenocarcinoma with Fluorouracil, Leucovorin plus either Oxaliplatin or Cisplatin: a study of the Arbeitsgemeinschaft Internistische Onkologie. J Clin Oncol 2008;26:1435-1442.

Neoadjuvant or Perioperative Immunotherapy

USEFUL IN CERTAIN CIRCUMSTANCES (MSI-H/dMMR tumors)

Nivolumab and Ipilimumab followed by Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg	IV	drip 30 mins, D1	every 2 weeks	(preoperative for at least 12 total weeks), followed by surgery and adjuvant Nivolumab 480 mg IV every 4 weeks for 9 cycles
Ipilimumab	1 mg/kg	IV	drip 30 mins, D1	every 6 weeks	

Andre T, Tougeron D, Piessen G, et al. Neoadjuvant Nivolumab Plus Ipilimumab and Adjuvant Nivolumab in Localized Deficient Mismatch Repair/Microsatellite Instability-High Gastric or Esophagogastric Junction Adenocarcinoma: The GERCOR NEONIPIGA Phase II Study. J Clin Oncol 2023;41:255-265.

Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins, D1	every 3 weeks for at least 12 total weeks	followed by surgery and adjuvant Pembrolizumab 200 mg IV every 3 weeks for 16 cycles

Ludford K, Ho WJ, Thomas JV, et al. Neoadjuvant Pembrolizumab in Localized Microsatellite Instability High/Deficient Mismatch Repair Solid Tumors. J Clin Oncol 2023;41:2181-2190.

Tremelimumab and Durvalumab (for neoadjuvant Therapy only)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tremelimumab	300 mg	IV	drip 30 mins, D1	For 12 weeks preoperatively for 1 cycle only	
Durvalumab	1500 mg	IV	drip 30 mins, D1, 29, and 57		

1.Kelly RJ, Lee J, Bang YJ, et al. Safety and Efficacy of Durvalumab and Tremelimumab Alone or in Combination in Patients with Advanced Gastric and Gastroesophageal Junction Adenocarcinoma. Clin Cancer Res 2020;26:846-854.
2.Pietrantonio F, Raimondi A, Lonardi S, et al. INFINITY: A multicentre, single-arm, multi-cohort, phase II trial of tremelimumab and Durvalumab as neoadjuvant treatment of patients with microsatellite instability-high (MSI) resectable gastric or gastroesophageal junction adenocarcinoma (GAC/ GEJAC). Journal of Clinical Oncology 2023;41:358- 358.

Definitive Concurrent Chemoradiation

Preferred Regimens

Paclitaxel + Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	50 mg/m^2	IV	drip 60 mins, D1	Weekly for 5 weeks	
Carboplatin	AUC 2	IV	drip 30 mins, D1		

van Hagen P, Hulshof MC, van Lanschot JJ, et al. Preoperative chemoradiotherapy for esophageal or junctional cancer. N Engl J Med 2012;366:2074-2084.

PF

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin/or Carboplatin(AUC 6)	60 - 80 mg/m^2	IV	drip 30-60 mins, D1	Cycled every 28 days for total 4 cycles	2 cycles with radiation followed by 2 cycles without radiation
Fluorouracil	600-800 mg/m^2 /day	IV	drip 96 hours, D1-4		
or					
Cisplatin/or Carboplatin (AUC3)	30 - 40 mg/m^2	IV	drip 30-60 mins, D1	Cycled every 14 days for 6-8 cycles	3-4 cycles with radiation followed by 3-4cycles without radiation
Fluorouracil ±Leucovorin(200mg)	1200 -1600 mg/m^2	IV	drip 46-48 hours, D1-2		

Minsky BD, Pajak TF, Ginsberg RJ, et al. INT 0123 (Radiation Therapy Oncology Group 94-05) phase III trial of combinedmodality Therapy for esophageal cancer: high-dose versus standard-dose radiation Therapy. J Clin Oncol 2002;20:1167-1174.

Cisplatin +UFUR

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	25 - 30 mg/m^2	IV	drip 60 mins, D1	Weekly for 5 weeks	不願 24-48 小時注射或不適合放置人工血管
UFUR	200-250 mg/m^2/day	PO	Bid, D1-5		

Iwase, H., Shimada, M., Nakamura, M., Nakarai, K., Iyo, T., Kaida, S., Indo, T., Kato, E., Horiuchi, Y., & Kusugami, K. (2003). Concurrent chemoradiotherapy for locally advanced and metastatic esophageal cancer: Long-term results of a phase II study of UFT/CDDP with radiotherapy. International Journal of Clinical Oncology, 8(5), 305–311.

Other Recommened Regimens

Paclitaxel +Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	60 mg/m^2	IV	drip 60 mins, D1,8,15,22	1cycle	

Cisplatin	75 mg/m^2	IV	drip 60 mins, D1		

Urba SG, Orringer MB, Ianettonni M, et al. Concurrent Cisplatin, Paclitaxel, and radiotherapy as preoperative treatment for patients with locoregional esophageal carcinoma. Cancer 2003;98:2177-2183.

Postoperative adjuvant CCRT (for direct operation without CCRT)

Paclitaxel + Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Paclitaxel	50 mg/m^2	IV	drip 60 mins, D1	Weekly for 5 weeks
Carboplatin	AUC 2	IV	drip 30 mins, D1	

Ni, W., Yu, S., Xiao, Z., Zhou, Z., Chen, D., Feng, Q., Liang, J., Lv, J., Gao, S., Mao, Y., Xue, Q., Sun, K., Liu, X., Fang, D., Li, J., Wang, D., Zhao, J., & Gao, Y. (2021). Postoperative adjuvant therapy versus surgery alone for stage IIB–III esophageal squamous cell carcinoma: A phase III randomized controlled trial. The Oncologist, 26(12), e2151–e2160.
Chen, J., Pan, J., Liu, J., Li, J., Zhu, K., Zheng, X., Chen, M., Chen, M., & Liao, Z. (2013). Postoperative radiation therapy with or without concurrent chemotherapy for node-positive thoracic esophageal squamous cell carcinoma. International Journal of Radiation Oncology, Biology, Physics, 86(4), 671–677. https://doi.org/10.1016/j.ijrobp.2013.03.004

Fluorouracil and Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Cisplatin/or carboplatin (AUC 6)	60 - 80 mg/m^2	IV	drip 60 mins, D1	Cycled every 28 days for 2 cycles
Fluorouracil (5-FU)	600 - 800 mg/m^2/day	IV	continuous infusion over 24 hours daily,D1-4	
or				
Cisplatin/or carboplatin (AUC 3)	30 - 40 mg/m^2	IV	drip 60 mins, D1	Cycled every 14 days for 3 cycles
Fluorouracil (5-FU)	1200 -1600 mg/m^2	IV	drip 46-48 hours, D1-2	

or				
Cisplatin	30 mg/m^2	IV	drip 60 mins, D1	Weekly for 5 weeks
Fluorouracil (5-FU)	800 mg/m^2	IV	continuous infusion over 24 hours daily,D1	

Adelstein, D. J., Rice, T. W., Rybicki, L. A., Saxton, J. P., Videtic, G. M. M., Murthy, S. C., Mason, D. P., Rodriguez, C. P., & Ives, D. I. (2009). Mature results from a phase II trial of postoperative concurrent chemoradiotherapy for poor prognosis cancer of the esophagus and gastroesophageal junction. Journal of Thoracic Oncology, 4(10), 1264–1269. https://doi.org/10.1097/JTO.0b013e3181b9c8f2

Zhang, W.-W., Zhu, Y.-J., Yang, H., Wang, Q.-X., Wang, X.-H., Xiao, W.-W., Li, Q.-Q., Liu, M.-Z., & Hu, Y.-H. (2015). Concurrent radiotherapy and weekly chemotherapy of 5-fluorouracil and platinum agents for postoperative locoregional recurrence of oesophageal squamous cell carcinoma. Scientific Reports, 5, 8071.

Cisplatin and UFUR

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	25 - 30 mg/m^2	IV	drip 60 mins, D1	Weekly for 5 weeks	不願 24-48 小時注射或不適合放置人工血管
UFUR	200-250 mg/m^2/day	PO	Bid,D1-5		

Iwase, H., Shimada, M., Nakamura, M., Nakarai, K., Iyo, T., Kaida, S., Indo, T., Kato, E., Horiuchi, Y., & Kusugami, K. (2003). Concurrent chemoradiotherapy for locally advanced and metastatic esophageal cancer: Long-term results of a phase II study of UFT/CDDP with radiotherapy. International Journal of Clinical Oncology, 8(5), 305–311.

Postoperative adjuvant Therapy

Preferred Regime

Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg or 自費 3mg/kg	IV	drip 30 mins, D1	every 14 days for 16 weeks	followed by Nivolumab 480 mg every 28 days， Maximum treatment duration of 1 year

Kelly R, Ajani J, Kuzdzal J, et al. Adjuvant Nivolumab in resected esophageal or gastroesophageal junction cancer following neoadjuvant Chemoradiation Therapy: first results of the CheckMate 577 study. [abstract]. Presented at the Oral Presentation presented at the ESMO 2020 Annual Meeting; September 19-21, 2020; Virtual Meeting.

Other Recommended Regimens

for patient can't afford adjuvant ICI，may consider complete Chemotherapy course(2-4 cycle)

Advanced/Metastasis Therapy

Squamous Cell Carcinoma(First-Line Therapy)

Preferred Regimens

Cisplatin + Fluorouracil (5-FU)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin/or Carboplatin(AUC 6)	80 mg/m^2	IV	drip 60 mins, D1	every 28 days	
Fluorouracil	750 – 1000 mg/m^2 /day	IV	drip 96 hours, D1-4		

Lorenzen S, Schuster T, Porschen R, et al. Cetuximab plus Cisplatin-5-Fluorouracil versus Cisplatin-5-Fluorouracil alone in first-line metastatic squamous cell carcinoma of the esophagus: a randomized phase II study of the Arbeitsgemeinschaft Internistische Onkologie. Ann Oncol 2009;20:1667-1673.

PFL

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin/or Carboplatin (AUC2)	40 - 50 mg/m^2	IV	drip 60 mins, D1	every 14 days	
Leucovorin	200 mg/m^2	IV	drip 46-48 hours, D1-2		
Fluorouracil	1600-2000 mg/m^2	IV	drip 46-48 hours, D1-2		

Hung TC et al. Weekly 24-hour infusional 5-Fluorouracil as initial treatment for advanced gastric cancer with acute disseminsated intravascular coagulation. Anticancer Res 2008;28:1293

Cisplatin + Fluorouracil (5-FU) + Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin/or Carboplatin (AUC 6)	80 mg/m^2	IV	drip 60 mins, D1	every 28days	
Fluorouracil	750 – 1000 mg/m^2 /day	IV	continuous infusion over 24 hours daily,D1-4		
Nivolumab	240 mg	IV	drip 30 mins, D1	every 14 days	per study maximum of 2 years

Doki Y, Ajani JA, Kato K, et al. Nivolumab combination Therapy in advanced esophageal squamous-cell carcinoma. N Engl J Med 2022;386:449-462.

Cisplatin +Capecitabine + Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	80 mg/m^2	IV	drip 60 mins, D1	every 21days	
Capecitabine	850-1000 mg	PO	Bid, D1-14		
Nivolumab	360 mg	IV	drip 30 mins, D1		per study maximum of 2 years

Kang YK, Kang WK, Shin DB, et al. Capecitabine/ Cisplatin versus 5-Fluorouracil/Cisplatin as first-line Therapy in patients with advanced gastric cancer: a randomised phase III noninferiority trial. Ann Oncol 2009;20:666-673.

Cisplatin + Fluorouracil (5-FU) +Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	80 mg/m^2	IV	drip 60 mins, D1	every 21days for 6 cycles	
Fluorouracil	750 – 1000 mg/m^2 /day	IV	continuous infusion over 24 hours daily on Days 1–4		

Pembrolizumab	200 mg	IV	drip 30 mins, D1	every 21 days	up to 2 years

Sun JM, Shen L, Shah MA, et al. Pembrolizumab plus Chemotherapy versus Chemotherapy alone for first-line treatment of advanced oesophageal cancer (KEYNOTE-590): a randomised, placebo-controlled, phase 3 study. Lancet 2021;398:759-771.

Cisplatin +Capecitabine +Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	80 mg/m^2	IV	drip 60 mins, D1	every 21days for 6cycles	total of 18weeks
Capecitabine	850-1000 mg	PO	Bid, D1-14		
Pembrolizumab	200 mg	IV	drip 30 mins, D1	every 21 days	up to 2 years

Rha SY, Oh DY, Yanez P, et al. Pembrolizumab plus Chemotherapy versus placebo plus Chemotherapy for HER2-negative advanced gastric cancer (KEYNOTE-859): a multicentre, randomised, double- blind, phase 3 trial. Lancet Oncol 2023;24:1181- 1195.

Nivolumab+Ipilimumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	3 mg/kg	IV	drip 30 mins, D1	every 2 weeks	per study, maximum of 2 years
Ipilimumab	1 mg/kg	IV	drip 30 mins, D1	every 6 weeks	

Doki Y, Ajani JA, Kato K, et al. Nivolumab Combination Therapy in Advanced Esophageal Squamous-Cell Carcinoma.N Engl J Med 2022;386:449-462.

Tislelizumab-jsgr with (fluoropyrimidine or taxol) and (oxaliplatin or cisplatin)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Tislelizumab	200mg	IV	drip 60 mins, then 30 mins, D1	every 21 days
+				
Oxaliplatin	85 mg/m^2	IV	drip 120 mins, D1	Cycled every 14 days For 12cycles
Leucovorin	200 mg/m^2	IV	continuous infusion over 24 hours on D1	
Fluorouracil	1200 mg/m2/day	IV	continuous infusion over 24 hours on D1-D2	

or				
Capecitabine	850-1000 mg/m^2	PO	BID, On D 1–14	Cycled every 21 days
Oxaliplatin	130 mg/m^2	IV	drip 120 mins, on Day 1 (per study maximum of 6 doses)	
or				
Cisplatin	60-80 mg/m^2	IV	drip 60 mins, D1	Cycled every 21 days for 6 cycles
Fluorouracil	750 – 1000 mg/m^2/day	IV	continuous infusion over 24 hours on Day 1-4	
or				
Cisplatin	60-80 mg/m^2	IV	drip 60 mins, D1 (per study maximum of 6 doses)	Cycled every 21 days
Capecitabine	850-1000 mg/m^2	PO	BID, On D 1–14	
or				
Oxaliplatin	130 mg/m^2	IV	drip 120 mins, on Day 1 (per study maximum of 6 doses)	Cycled every 21 days
Paclitaxel	175 mg/m^2	IV	drip 180 mins, on D1	
or				
Cisplatin	60-80 mg/m^2	IV	drip 60mins,D1 (per study maximum of 6 doses)	Cycled every 21 days
Paclitaxel	175 mg/m^2	IV	drip 180 mins, on D1	

1.Qiu MZ, Oh DY, Kato K, et al. RATIONALE-305,Investigators. Tislelizumab plus chemotherapy versus placebo plus chemotherapy as first line treatment for advanced gastric or gastro- oesophageal junction adenocarcinoma:RATIONALE-305 randomised, double blind, phase 3 trial. BMJ 2024;385:e078876.
2.Xu J, Kato K, Raymond E, et al. Tislelizumab plus chemotherapy versus placebo plus chemotherapy as first-line treatment for advanced or metastatic oesophageal squamous cell carcinoma (RATIONALE-306): a global, randomised, placebo-controlled, phase 3 study. Lancet Oncol 2023;24:483-495.

Adenocarcinoma(First-Line Therapy)
HER2 overexpression-Positive

Trastuzumab with Chemotherapy (Fluoropyrimidine and Oxaliplatin)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Trastuzumab	8 mg/kg IV loading dose on Day 1 of cycle 1, then 6 mg/kg	IV	drip 90 mins, then 60 mins, day 1	every 21 days	HER2 overexpression-positive
or					
Trastuzumab	6 mg/kg IV loading dose on Day 1 of cycle 1, then 4 mg/kg	IV	drip 90 mins, then 60 mins, day 1	every 14 days	
+					
Oxaliplatin	85 mg/m^2	IV	on Day 1	Cycled every 14 days	
Leucovorin	200 mg/m^2	IV	continuous infusion over 24 hours on Day 1		
Fluorouracil	2600 mg/m^2	IV	continuous infusion over 24 hours on Day 1		
or					
Capecitabine	850-1000 mg/m^2	PO	BID, on D 1–14	Cycled every 21 days	
Oxaliplatin	130 mg/m^2	IV	drip 120 mins, on Day 1		
or					
Capecitabine	625 mg/m^2	PO	BID on D 1–14	Cycled every 21 days	
Oxaliplatin	85 mg/m^2	IV	drip 120mins, on Day 1		

Bang YJ, Van Cutsem E, Feyereislova A, et al. Trastuzumab in combination with Chemotherapy versus Chemotherapy alone for treatment of HER2- positive advanced gastric or gastro-oesophageal junction cancer (ToGA): a phase 3, open-label, randomised controlled trial. Lancet 2010;376:687- 697.
1 Al-Batran S-E, Hartmann JT, Probst S, et al. Phase III trial in metastatic gastroesophageal adenocarcinoma with Fluorouracil, Leucovorin plus either Oxaliplatin or Cisplatin: a study of the Arbeitsgemeinschaft Internistische Onkologie. J Clin Oncol 2008;26:1435-1442.
2 Enzinger PC, Burtness BA, Niedzwiecki D, et al. CALGB 80403 (Alliance)/E1206: a randomized phase II study of three Chemotherapy regimens plus Cetuximab in metastatic esophageal and gastroesophageal junction cancers. J Clin Oncol 2016;34:2736-2742.
3 Kim GM, Jeung HC, Rha SY, et al. A randomized phase II trial of S-1-Oxaliplatin versus Capecitabine- Oxaliplatin in advanced gastric cancer. Eur J Cancer 2012;48:518-526.
4 Macdonald JS, Smalley SR, Benedetti J, et al. ChemoradioTherapy after surgery compared with surgery alone for adenocarcinoma of the stomach or gastroesophageal junction. N Engl J Med 2001;345:725-730.

Trastuzumab with Chemotherapy(Fluoropyrimidine and Cisplatin)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Trastuzumab	8 mg/kg IV loading dose on Day 1 of cycle 1, then 6 mg/kg	IV	drip 90 mins, then 60 mins, day 1	every 21 days	HER2 overexpression -positive
or					
Trastuzumab	6 mg/kg IV loading dose on Day 1 of cycle 1, then 4 mg/kg	IV	drip 90 mins, then 60 mins, day 1	every 14 days	
+					
Cisplatin	75-100 mg/m^2	IV	drip 60mins, on Day 1	Cycled every 28 days	
Fluorouracil	750–1000 mg/m^2/day	IV	continuous infusion over 24 hours daily, on Days 1–4		
or					
Cisplatin	50 mg/m^2	IV	drip 60mins on Day 1	Cycled every 14 days	
Leucovorin	200 mg/m^2	IV	IV continuous infusion over 24 hours daily, on Day 1		

Fluorouracil	2600 mg/m^2	IV	IV continuous infusion over 24 hours daily, on Day 1		
or					
Cisplatin	80 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 21 days	
Capecitabine	850–1000 mg/m^2	PO	BID, on D1–14		

Bang YJ, Van Cutsem E, Feyereislova A, et al. Trastuzumab in combination with Chemotherapy versus Chemotherapy alone for treatment of HER2- positive advanced gastric or gastro-oesophageal junction cancer (ToGA): a phase 3, open-label, randomised controlled trial. Lancet 2010;376:687- 697.
1.Lorenzen S, Schuster T, Porschen R, et al. Cetuximab plus Cisplatin-5-Fluorouracil versus Cisplatin-5-Fluorouracil alone in first-line metastatic squamous cell carcinoma of the esophagus: a randomized phase II study of the Arbeitsgemeinschaft Internistische Onkologie. Ann Oncol 2009;20:1667-1673.
2.Al-Batran S-E, Hartmann JT, Probst S, et al. Phase III trial in metastatic gastroesophageal adenocarcinoma with Fluorouracil, Leucovorin plus either Oxaliplatin or Cisplatin: a study of the Arbeitsgemeinschaft Internistische Onkologie. J Clin Oncol 2008;26:1435-1442.
3.Bouche O, Raoul JL, Bonnetain F, et al. Randomized multicenter phase II trial of a biweekly regimen of Fluorouracil and Leucovorin (LV5FU2), LV5FU2 plus Cisplatin, or LV5FU2 plus Irinotecan in patients with previously untreated metastatic gastric cancer: a Federation Francophone de Cancerologie Digestive Group Study-FFCD 9803. J Clin Oncol 2004;22:4319-4328.
4.Kang YK, Kang WK, Shin DB, et al. Capecitabine/Cisplatin versus 5-Fluorouracil/Cisplatin as first-line Therapy in patients with advanced gastric cancer: a randomised phase III noninferiority trial. Ann Oncol2009;20:666-673.

Trastuzumab and Pembrolizumab with Fluoropyrimidine and Oxaliplatin or Fluoropyrimidine and Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Trastuzumab	8 mg/kg loading dose on Day 1 of cycle 1, then 6 mg/kg	IV	drip 90 mins, then 60 mins, day 1	every 21 days	HER2 overexpression-positive
Pembrolizumab	200 mg	IV	drip 30 mins on Day 1	Cycled every 3 weeks	
+					
Capecitabine	850–1000 mg/m^2	PO	BID,D1–14	Cycled every 21 days	
Oxaliplatin	130 mg/m^2	IV	drip 120 mins, on Day 1		
or					

Cisplatin	80 mg/m^2	IV	drip 60 mins D1	Cycled every 21 days	
Fluorouracil	750-1000 mg/m^2/day	IV	continuous infusion over 24 hours daily on Days 1–4		
or					
Cisplatin	80 mg/m^2	IV	drip 60 mins D1	Cycled every 21 days	
Capecitabine	850–1000 mg/m^2	PO	Bid, D1–14		

1. Janjigian YY, Kawazoe A, Bai Y, et al. Pembrolizumab plus trastuzumab and Chemotherapy for HER2-Positive gastric or gastro-oesophageal junction adenocarcinoma: interim analyses from the phase 3 KEYNOTE-811 randomised placebo-controlled trial. Lancet 2023;402:2197-2208.
2. Bang YJ, Van Cutsem E, Feyereislova A, et al. Trastuzumab in combination with Chemotherapy versus Chemotherapy alone for treatment of HER2- Positive advanced gastric or gastro-oesophageal junction cancer (ToGA): a phase 3, open-label, randomised controlled trial. Lancet 2010;376:687- 697.
3. Janjigian YY, Kawazoe A, Yanez P, et al. The KEYNOTE-811 trial of dual PD-1 and HER2 blockade in HER2-POsitive gastric cancer. Nature 2021;600:727-730.
1.Kim GM, Jeung HC, Rha SY, et al. A randomizedphase II trial of S-1-Oxaliplatin versus Capecitabine- Oxaliplatin in advanced gastric cancer. Eur J Cancer 2012;48:518-526.
2.Janjigian YY, Kawazoe A, Yanez P, et al. TheKEYNOTE-811 trial of dual PD-1 and HER2 blockade in HER2-POsitive gastric cancer. Nature 2021;600:727-730.
3.Kang YK, Kang WK, Shin DB, et al. Capecitabine/ Cisplatin versus 5-Fluorouracil/Cisplatin as first-line Therapy in patients with advanced gastric cancer: a randomised phase III noninferiority trial. Ann Oncol 2009;20:666-673.

Fluoropyrimidine (Fluorouracil or Capecitabine), Oxaliplatin, and Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Oxaliplatin	130 mg/m^2	IV	drip 120 mins, D1	every 21days	-
Capecitabine	850-1000 mg	PO	Bid, D1-14		
Nivolumab	360 mg	IV	drip 30 mins, D1		per study maximum of 2 years

1Janjigian YY, Shitara K, Moehler M, et al. First-line Nivolumab plus Chemotherapy versus Chemotherapy alone for advanced gastric, gastro-oesophageal junction, and oesophageal adenocarcinoma (CheckMate 649): a randomised, open-label, phase 3 trial. Lancet 2021;398:27-40.
2 Doki Y, Ajani JA, Kato K, et al. Nivolumab combination Therapy in advanced esophageal squamous-cell carcinoma. N Engl J Med 2022;386:449-462.

Fluoropyrimidine (Fluorouracil or Capecitabine), Oxaliplatin, and Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Oxaliplatin	85 mg/m^2	IV	drip 120 mins, D1	every 14days	
Leucovorin	400 mg	IV	continuous infusion over 24 hours daily on Days 1		
Fluorouracil	400 mg	IV push	D1		
Fluorouracil	1200 mg/m^2/day	IV	continuous infusion over 24 hours daily on Days 1 and 2		
Nivolumab	240 mg	IV	drip 30 mins, D1		per study maximum of 2 years

1Janjigian YY, Shitara K, Moehler M, et al. First-line Nivolumab plus Chemotherapy versus Chemotherapy alone for advanced gastric, gastro-oesophageal junction, and oesophageal adenocarcinoma (CheckMate 649): a randomised, open-label, phase 3 trial. Lancet 2021;398:27-40.
2 Doki Y, Ajani JA, Kato K, et al. Nivolumab combination Therapy in advanced esophageal squamous-cell carcinoma. N Engl J Med 2022;386:449-462.

Oxaliplatin + Fluorouracil (5-FU) +Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Oxaliplatin	85 mg/m^2	IV	drip 120 mins, D1	Cycled every 14 days for up to 9 cycles (total 18 weeks)	
Leucovorin	400 mg	IV	continuous infusion over 24 hours daily on Days 1		
Fluorouraci	400 mg	IV push	D1		
Fluorouraci	1200 mg/m^2/day	IV	continuous infusion over 24 hours daily on Days 1 and 2		
Pembrolizumab	200 mg	IV	drip 30 mins, D1	every 21 days	up to 2 years

Rha SY, Oh DY, Yanez P, et al. Pembrolizumab plus Chemotherapy versus placebo plus Chemotherapy for HER2-negative advanced gastric cancer (KEYNOTE-859): a multicentre, randomised, double- blind, phase 3 trial. Lancet Oncol 2023;24:1181- 1195.

Oxaliplatin + Capecitabine +Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Oxaliplatin	130 mg/m^2	IV	drip 120 mins, D1	every 21days for 6cycles	total of 18weeks
Capecitabine	850-1000 mg	PO	Bid, D1-14		
Pembrolizumab	200 mg	IV	drip 30 mins, D1	every 21 days	up to 2 years

Rha SY, Oh DY, Yanez P, et al. Pembrolizumab plus Chemotherapy versus placebo plus Chemotherapy for HER2-negative advanced gastric cancer (KEYNOTE-859): a multicentre, randomised, double- blind, phase 3 trial. Lancet Oncol 2023;24:1181- 1195.

Cisplatin + Fluorouracil (5-FU) +Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	80 mg/m^2	IV	drip 60 mins, D1	every 21days for 6cycles	
Fluorouracil	750 – 1000 mg/m^2 /day	IV	continuous infusion over 24 hours daily on Days 1–4		
Pembrolizumab	200 mg	IV	drip 30 mins, D1	every 21 days	up to 2 years

Sun JM, Shen L, Shah MA, et al. Pembrolizumab plus Chemotherapy versus Chemotherapy alone for first-line treatment of advanced oesophageal cancer (KEYNOTE-590): a randomised, placebo-controlled, phase 3 study. Lancet 2021;398:759-771.

Cisplatin +Capecitabine +Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	80 mg/m^2	IV	drip 60 mins, D1	every 21days for 6cycles	total of 18weeks
Capecitabine	850-1000mg	PO	Bid, D1-14		
Pembrolizumab	200 mg	IV	drip 30 mins, D1	every 21 days	up to 2 years

Rha SY, Oh DY, Yanez P, et al. Pembrolizumab plus Chemotherapy versus placebo plus Chemotherapy for HER2-negative advanced gastric cancer (KEYNOTE-859): a multicentre, randomised, double- blind, phase 3 trial. Lancet Oncol 2023;24:1181- 1195.

Tislelizumab-jsgr with (fluoropyrimidine or taxol) and (oxaliplatin or cisplatin)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Tislelizumab	200mg	IV	drip 60 mins, then 30 mins, D1	every 21 days
+				
Oxaliplatin	85 mg/m2	IV	drip 120mins, D1	Cycled every 14 days For 12cycles
Leucovorin	200 mg/m2	IV	continuous infusion over 24 hours on D1	
Fluorouracil	1200 mg/m2/day	IV	continuous infusion over 24 hours on D1-D2	
or				
Capecitabine	850-1000 mg/m2	PO	BID, On D 1–14	Cycled every 21 days
Oxaliplatin	130 mg/m2	IV	drip 120 mins, on Day 1 (per study maximum of 6 doses)	
or				
Cisplatin	60-80 mg/m2	IV	drip 60 mins, D1	Cycled every 21 days for 6 cycles
Fluorouracil	750 – 1000 mg/m2/day	IV	continuous infusion over 24 hours on Day 1-4	
or				
Cisplatin	60-80 mg/m2	IV	drip 60mins, D1 (per study maximum of 6 doses)	Cycled every 21 days
Capecitabine	850-1000 mg/m2	PO	BID, On D 1–14	

1.Qiu MZ, Oh DY, Kato K, et al. RATIONALE-305,Investigators. Tislelizumab plus chemotherapy versus placebo plus chemotherapy as first line treatment for advanced gastric or gastro- oesophageal junction adenocarcinoma:RATIONALE-305 randomised, double blind, phase 3 trial. BMJ 2024;385:e078876.
2.Xu J, Kato K, Raymond E, et al. Tislelizumab plus chemotherapy versus placebo plus chemotherapy as first-line treatment for advanced or metastatic oesophageal squamous cell carcinoma (RATIONALE-306): a global, randomised, placebo-controlled, phase 3 study. Lancet Oncol 2023;24:483-495.

HER2 Overexpression Negative, CLDN18.2 Positive(Adenocarcinoma)

Fluoropyrimidine (Fluorouracil or Capecitabine), Oxaliplatin, and zolbetuximab-clzb

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Zolbetuximab-clzb	800 mg/m^2 first-dose only, subsequent doses 400 mg/m^2	IV	drip 30-60 mins, D1	Cycled every 14 days	
Oxaliplatin	85 mg/m^2	IV	drip 120 mins, on D 1		per study maximum of 12 doses
Leucovorin	400 mg	IV	D1		
Fluorouraci	400 mg	IV push	continuous infusion over 24 hours daily on Days 1		
Fluorouraci	1200 mg/m^2/day	IV	continuous infusion over 24 hours daily on Days 1 and 2		
or					
Zolbetuximab-clzb	800 mg/m^2 IV first-dose only, subsequent doses 600 mg/m^2	IV	drip 30-60 mins, D1	Cycled every 21 days	
Oxaliplatin	130 mg/m^2	IV	drip 120 mins, on Day 1		per study maximum of 8 doses
Capecitabine	850–1000 mg/m^2	PO	BID on Days 1–14		

1. Shitara K, Lordick F, Bang YJ, et al. Zolbetuximab plus mFOLFOX6 in patients with CLDN18.2- POsitive, HER2-negative, untreated, locally advanced unresectable or metastatic gastric or gastro-oesophageal junction adenocarcinoma (SPOTLIGHT): a multicentre, randomised, double- blind, phase 3 trial. Lancet 2023;401:1655-1668.
2. Shah MA, Shitara K, Ajani JA, et al. Zolbetuximab plus CAPOX in CLDN18.2-POsitive gastric or gastroesophageal junction adenocarcinoma: the randomized, phase 3 GLOW trial. Nat Med 2023;29:2133-2141.

MSI-H/dMMR tumors (independent of PD-L1 status)(SQUAMOUS CELL CARCINOMA and ADENOCARCINOMA)

Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins, D1	Cycled every 21 days	MSI-H/dMMR tumors (independent of PD-L1 status) (up to 2 years)
or					
Pembrolizumab	400 mg	IV	drip 30 mins, D1	Cycled every 6weeks	MSI-H/dMMR tumors (independent of PD-L1 status) (up to 2 years)

1.Kojima T, Shah MA, Muro K, et al. Randomized Phase III KEYNOTE-181 Study of Pembrolizumab Versus Chemotherapy in Advanced Esophageal Cancer. J Clin Oncol 2020;38:4138-4148.

2. Lala M, Li TR, de Alwis DP, et al. A six-weekly dosing schedule for Pembrolizumab in patients with cancer based on evaluation using modelling and simulation. Eur J Cancer 2020;131:68-75.

Nivolumab and Ipilimumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg	IV	drip 30 mins, D1	every 2 weeks	MSI-H/dMMR tumors (independent of PD-L1 status) For 16 weeks, followed by Nivolumab 240 mg IV every 2 weeks or Nivolumab 480 mg IV every 4 weeks (maximum of 2 years)
Ipilimumab	1 mg/kg	IV	drip 30 mins, D1	every 6 weeks	

Janjigian YY, Shitara K, Moehler M, et al. First-line Nivolumab plus Chemotherapy versus Chemotherapy alone for advanced gastric, gastro-oesophageal junction, and oesophageal

adenocarcinoma (CheckMate 649): a randomised, open-label, phase 3 trial. Lancet 2021;398:27-40.

Fluoropyrimidine (Fluorouracil or Capecitabine), Oxaliplatin, and Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	360 mg	IV	drip 30 mins on Day 1 (per study maximum of 2 years)	Cycled every 21 days	MSI-H/dMMR tumors (independent of PD-L1 status)
Capecitabine	850–1000 mg/m^2	PO	BID.on D 1–14		
Oxaliplatin	130 mg/m^2	IV	drip 120 mins on Day 1		
or					
Nivolumab	240 mg	IV	drip 30 mins on Day 1	Cycled every 14 days	per study maximum of 2 years
Oxaliplatin	85 mg/m^2	IV	drip 120 mins on Day 1		
Leucovorin	400 mg	IV	continuous infusion over 24 hours daily on Days 1		
Fluorouracil	400 mg	IV push	D1		
Fluorouracil	1200 mg/m^2/day	IV	continuous infusion over 24 hours daily on Days 1 and 2		

Janjigian YY, Shitara K, Moehler M, et al. First-line Nivolumab plus Chemotherapy versus Chemotherapy alone for advanced gastric, gastro-oesophageal junction, and oesophageal adenocarcinoma (CheckMate 649): a randomised, open-label, phase 3 trial. Lancet 2021;398:27-40.

Fluoropyrimidine, Oxaliplatin, and Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins, D1	Cycled every 21 days for up to 6 cycles	MSI-H/dMMR
Capecitabine	850–1000 mg/m^2	PO	BID, D1–14		

Oxaliplatin	130 mg/m^2	IV	drip 90-120 mins, on Day 1	(total 18 weeks)	tumors (independent of PD-L1 status)
or					
Pembrolizumab	200 mg	IV	drip 30mins, every 21 days for up to 2 years	Cycled every 14 days for up to 9 cycles (total 18 weeks)	
Oxaliplatin	85 mg/m^2	IV	drip 120 mins on Day 1		
Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1 and 2		

Rha SY, Oh DY, Yanez P, et al. Pembrolizumab plus Chemotherapy versus placebo plus Chemotherapy for HER2-negative advanced gastric cancer (KEYNOTE-859): a multicentre, randomised, double- blind, phase 3 trial. Lancet Oncol 2023;24:1181- 1195.

FIRST-LINE THERAPY–OTHER RECOMMENDED REGIMENS(SQUAMOUS CELL CARCINOMA and ADENOCARCINOMA)

Fluorouracil and Irinotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	180 mg/m^2	IV	drip 60 mins D1	Cycled every 14 days	
Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2/days	IV	IV continuous infusion over 24 hours daily on Days 1 and 2		

Guimbaud R, Louvet C, Ries P, et al. Prospective, randomized, multicenter, phase III study of Fluorouracil, Leucovorin, and Irinotecan versus epirubicin, Cisplatin, and Capecitabine in advanced gastric adenocarcinoma: a French Intergroup (Federation Francophone de Cancerologie Digestive, Federation Nationale des Centres de Lutte Contre le Cancer, and Groupe Cooperateur Multidisciplinaire en Oncologie) study. J Clin Oncol 2014;32:3520-3526.

Paclitaxel with or without Carboplatin or Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 21 days	
Carboplatin	AUC 5	IV	drip 30 mins on Day 1		
or					
Paclitaxel	60-80 mg/m^2	IV	drip 60 mins on D1,8,15	Cycled every 28 days	
Cisplatin	70-80 mg/m^2	IV	drip 60 mins on Day 1		
or					
Paclitaxel	135–200 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 21 days	
Cisplatin	75 mg/m^2	IV	drip 60 mins on Day 1		
or					
Paclitaxel	90 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 14 days	
Cisplatin	50 mg/m^2	IV	drip 60 mins on Day 1		
or					
Paclitaxel	135-250 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 21 days	
or					
Paclitaxel	60-80 mg/m^2	IV	drip 60 mins on D1,8,15	Cycled every 28 days	

1. Gadgeel SM, Shields AF, Heilbrun LK, et al. Phase II study of Paclitaxel and Carboplatin in patients with advanced gastric cancer. Am J Clin Oncol 2003;26:37-41.
2. Ilson DH, Forastiere A, Arquette M, et al. A phase II trial of Paclitaxel and Cisplatin in patients with advanced carcinoma of the esophagus. Cancer J 2000;6:316-323.
3. Petrasch S, Welt A, Reinacher A, et al. Chemotherapy with Cisplatin and Paclitaxel in patients with locally advanced, recurrent or metastatic oesophageal cancer. Br J Cancer 1998;78:511-514.
4. Ajani JA, Ilson DH, Daugherty K, et al. Activity of taxol in patients with squamous cell carcinoma and adenocarcinoma of the esophagus. J Natl Cancer Inst 1994;86:1086-1091.
5. Hironaka S, Ueda S, Yasui H, et al. Randomized,open-label, phase III study comparing Irinotecan with Paclitaxel in patients with advanced gastric cancer without severe peritoneal metastasis after failure of prior combination Chemotherapy using Fluoropyrimidine plus platinum: WJOG 4007 trial. J Clin Oncol 2013;31:4438-4444.

Docetaxel with or without Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	70-85 mg/m^2	IV	Drip 30 mins D1	every 21 days	
Cisplatin	70–75 mg/m^2	IV	drip 60 mins D1		
or					
Docetaxel	30 - 35 mg/m^2	IV	drip 30 mins D1、8	every 21 days	
or					
Docetaxel	22 - 25 mg/m^2	IV	drip 30 mins D1、8、15	every 28 days	
or					
Docetaxel	60-75 mg/m^2	IV	drip 30 mins D1	every 21 days	

1.Ajani JA, Fodor MB, Tjulandin SA, et al. Phase II multi-institutional randomized trial of docetaxel plus Cisplatin with or without Fluorouracil in patients with untreated, advanced gastric, or gastroesophageal adenocarcinoma. J Clin Oncol 2005;23:5660-5667.
2.Kim JY, Do YR, Park KU, et al. A multi-center phase II study of docetaxel plus Cisplatin as first-line Therapy in patients with metastatic squamous cell esophageal cancer. Cancer Chemother Pharmacol 2010;66:31-36.

Fluoropyrimidine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Leucovorin	400 mg/m^2	IV	D1	Cycled every 14 days	
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2/days	IV	IV continuous infusion over 24 hours daily on Days 1 and 2		
or					
Capecitabine	850–1000 mg/m^2	PO	BID, on D 1–14	Cycled every 21 days	

or					
Fluorouracil	750 – 1000 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1-4	Cycled every 28 days	

1. Bouche O, Raoul JL, Bonnetain F, et al. Randomized multicenter phase II trial of a biweekly regimen of Fluorouracil and Leucovorin (LV5FU2), LV5FU2 plus Cisplatin, or LV5FU2 plus Irinotecan in patients with previously untreated metastatic gastric cancer: a Federation Francophone de Cancerologie Digestive Group Study-FFCD 9803. J Clin Oncol 2004;22:4319-4328.
2. Ohtsu A, Shimada Y, Shirao K, et al. Randomized phase III trial of Fluorouracil alone versus Fluorouracil plus Cisplatin versus uracil and tegafur plus mitomycin in patients with unresectable, advanced gastric cancer: The Japan Clinical Oncology Group Study (JCOG9205). J Clin Oncol 2003;21:54-59.
3. Hong YS, Song SY, Lee SI, et al. A phase II trial of Capecitabine in previously untreated patients with advanced and/or metastatic gastric cancer. Ann Oncol 2004;15:1344-1347.

Docetaxel, Cisplatin or Oxaliplatin, and Fluorouracil

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	40 mg/m^2	IV	drip 30 mins on Day 1	Cycled every 14 days	
Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV	on Day 1		
Fluorouracil	1000 mg/m^2/day	IV	IV continuous infusion over 24 hours daily on Days 1 and 2		
Cisplatin	40 mg/m^2	IV	drip 60 mins on Day 3		
or					
Docetaxel	50 mg/m^2	IV	drip 30 mins on Day 1	Cycled every 14 days	
Oxaliplatin	85 mg/m^2	IV	drip 120 mins on Day 1		
Fluorouracil	1200 mg/m^2/day	IV	IV continuous infusion over 24 hours daily on Days 1 and 2		

1. Shah MA, Janjigian YY, Stoller R, et al. Randomized multicenter phase II study of modified docetaxel, Cisplatin, and Fluorouracil (DCF) versus DCF plus growth factor support in patients with metastatic gastric adenocarcinoma: a study of the US Gastric Cancer Consortium. J Clin Oncol 2015;33:3874-3879.
2. Blum Murphy MA, Qiao W, Mewada N, et al. A phase I/II study of docetaxel, Oxaliplatin, and Fluorouracil (D-FOX) Chemotherapy in patients with untreated locally unresectable or metastatic adenocarcinoma of the stomach and gastroesophageal junction. Am J Clin Oncol 2018;41:321-325.

S-1 (TS-1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tegafur/Potassium oxonate/gimeracil	40 mg	PO	Bid	4 weeks on, 2 weeks off (or 2 weeks on, 1 weeks off), for 1 year	BSA < 1.25
or					
Tegafur/Potassium oxonate/gimeracil	50 mg	PO	Bid		BSA 1.25 - 1.5
or					
Tegafur/Potassium oxonate/gimeracil	60 mg	PO	Bid		BSA ≧1.5

Sakuramoto S, et al. Adjuvant Chemotherapy for gastric cancer with S-1, an oral Fluoropyrimidine. N Engl J Med. 2007;357:1810. S-1 Monotherapy as Second- or Third-Line Chemotherapy for Unresectable and Recurrent Esophageal Squamous Cell Carcinoma Akutsu Y. · Kono T. · Uesato M. · Hoshino I. · Narushima K. · Hanaoka T. · Tochigi T. · Semba Y. · Qin W. · Matsubara H. Department of Frontier Surgery, Graduate School of Medicine, Chiba University, Chiba, Japan

SECOND-LINE AND SUBSEQUENT THERAPY(SQUAMOUS CELL CARCINOMA)

PREFERRED REGIMENS

Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg/m^2	IV	drip 30 mins D1	every 14 days	for second-line Therapy for esophageal SCC
or					
Nivolumab	480 mg	IV	drip 30 mins D1	every 28 days	

Kato K, Cho BC, Takahashi M, et al. Nivolumab versus Chemotherapy in patients with advanced oesophageal squamous cell carcinoma refractory or intolerant to previous Chemotherapy(ATTRACTION-3): a multicentre, randomised, open- label, phase 3 trial. Lancet Oncol 2019;20:1506- 1517.

Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg/m^2	IV	drip 30 mins D1	every 21days	(for second-line Therapy for esophageal SCC with PD-L1 expression levels by CPS of >=10
or					
Pembrolizumab	400 mg	IV	drip 30 mins D1	every 6 weeks	

1.Kojima T, Shah MA, Muro K, et al. Randomized Phase III KEYNOTE-181 Study of Pembrolizumab Versus Chemotherapy in Advanced Esophageal Cancer. J Clin Oncol 2020;38:4138-4148.
2. Lala M, Li TR, de Alwis DP, et al. A six-weekly dosing schedule for Pembrolizumab in patients with cancer based on evaluation using modelling and simulation. Eur J Cancer 2020;131:68-75.

Taxane

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxe	75-100 mg/m^2	IV	drip 30 mins D1	every 21days	
or					
Paclitaxel	135-250 mg/m^2	IV	drip 60 mins D1	every 21days	
or					
Paclitaxel	80 mg/m^2	IV	drip 60 mins D1	weekly	
or					
Paclitaxel	80 mg/m^2	IV	drip 60 mins D1,8,15	every 28days	

1Albertsson M, Johansson B, Friesland S, et al. Phase II studies on docetaxel alone every third week, or weekly in combination with gemcitabine in patients with primary locally advanced, metastatic, or recurrent esophageal cancer. Med Oncol 2007;24:407-412.
2 Ford ER, Marshall A, Bridgewater JA, et al. Docetaxel versus active symptom control for refractory oesophagogastric adenocarcinoma (COUGAR-02): an open-label, phase 3 randomised controlled trial. Lancet Oncol 2014;15:78-86.
3 Ajani JA, Ilson DH, Daugherty K, et al. Activity of taxol in patients with squamous cell carcinoma and adenocarcinoma of the esophagus. J Natl Cancer Inst 1994;86:1086-1091.
4 Ilson DH, Wadleigh RG, Leichman LP, Kelsen DP. Paclitaxel given by a weekly 1-h infusion in advanced esophageal cancer. Ann Oncol 2007;18:898-902.
5 Hironaka S, Ueda S, Yasui H, et al. Randomized,open-label, phase III study comparing Irinotecan with Paclitaxel in patients with advanced gastric cancer without severe peritoneal metastasis after failure of prior combination Chemotherapy using Fluoropyrimidine plus platinum: WJOG 4007 trial J Clin Oncol 2013;31:4438-4444.

Irinotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	150-180 mg/m^2	IV	drip 60 mins D1	every 14days	
or					
Irinotecan	125 mg/m^2	IV	drip 60 mins D1,8	every 21days	
or					
Irinotecan	250-350 mg/m^2	IV	drip 60 mins D1	every 21days	

1.Hironaka S, Ueda S, Yasui H, et al. Randomized,open-label, phase III study comparing Irinotecan with Paclitaxel in patients with advanced gastric cancer without severe peritoneal metastasis after failure of prior combination Chemotherapy using Fluoropyrimidine plus platinum: WJOG 4007 trial J Clin Oncol 2013;31:4438-4444.
2. Sym SJ, Hong J, Park J, et al. A randomized phase II study of biweekly Irinotecan monotherapy or a combination of Irinotecan plus 5-Fluorouracil/ Leucovorin (mFOLFIRI) in patients with metastatic gastric adenocarcinoma refractory to or progressive after first-line Chemotherapy. Cancer Chemother Pharmacol 2013;71:481-488.
3 Fuchs CS, Moore MR, Harker G, et al. Phase III comparison of two Irinotecan dosing regimens in second-line Therapy of metastatic colorectal cancer. J Clin Oncol 2003;21:807-814.
4.Thuss-Patience PC, Kretzschmar A, Bichev D, etal. Survival advantage for Irinotecan versus best supPOrtive care as second-line Chemotherapy in gastric cancer--a randomised phase III study of the Arbeitsgemeinschaft Internistische Onkologie (AIO). Eur J Cancer 2011;47:2306-2314.

Fluorouracil and Irinotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	180 mg/m^2	IV	drip 60 mins D1	Cycled every 14 days	
Leucovorin	400 mg/m^2	IV	D1		
Fluorouracil	400 mg/m^2	IV Push	D1		
Fluorouracil	1200 mg/m^2/days	IV	IV continuous infusion over 24 hours daily on Days 1 and 2		

Sym SJ, Hong J, Park J, et al. A randomized phase II study of biweekly Irinotecan monotherapy or a combination of Irinotecan plus 5-Fluorouracil/ Leucovorin (mFOLFIRI) in patients with metastatic gastric adenocarcinoma refractory to or progressive after first-line Chemotherapy. Cancer Chemother Pharmacol 2013;71:481-488.

Tislelizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Tislelizumab	200mg	IV	drip 60 mins, then 30 mins, D1	every 21 days

1.Ajani J, El Hajbi F, Cunningham D, et al. Tislelizumab versus chemotherapy as second- line treatment for European and North American patients with advanced or metastatic esophageal squamous cell carcinoma: a subgroup analysis of the randomized phase III RATIONALE-302 study.ESMO Open 2024;9:102202.Esophageal Squamous Cell Carcinoma (RATIONALE-302): A Randomized Phase III Study. J Clin Oncol 2022;40:3065-3076.
2.Shen L, Kato K, Kim SB, et al. Tislelizumab Versus Chemotherapy as Second-Line Treatment for Advanced or Metastatic Esophageal Squamous Cell Carcinoma (RATIONALE-302): A Randomized Phase III Study. J Clin Oncol 2022;40:3065-3076.

OTHER RECOMMENDED REGIMENS

Irinotecan and Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	65 mg/m^2	IV	drip 60 mins D1,8	Cycled every 21 days	
Cisplatin	25-30 mg/m^2	IV	drip 60 mins D1,8		

1.Enzinger PC, Burtness BA, Niedzwiecki D, et al. CALGB 80403 (Alliance)/E1206: a randomized phase II study of three Chemotherapy regimens plus Cetuximab in metastatic esophageal and gastroesophageal junction cancers. J Clin Oncol 2016;34:2736-2742.
2.Ilson DH. Phase II trial of weekly Irinotecan/Cisplatin in advanced esophageal cancer. Oncology (Williston Park) 2004;18:22-25.

Docetaxel and Irinotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	50 mg/m^2	IV	drip 60 mins D1,8	Cycled every 21 days	
Docetaxel	35 mg/m^2	IV	drip 30 mins D1,8		

Burtness B, Gibson M, Egleston B, et al. Phase II trial of docetaxel-Irinotecan combination in advanced esophageal cancer. Ann Oncol 2009;20:1242-1248.

SECOND-LINE AND SUBSEQUENT THERAPY(ADENOCARCINOMA)
PREFERRED REGIMENS

Ramucirumab and Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	80 mg/m^2	IV	drip 60 mins D1,8,15	Cycled every 28 days	
Ramucirumab	8 mg/kg	IV	drip 60 mins D1,15		

Wilke H, Muro K, Van Cutsem E, et al. Ramucirumab plus Paclitaxel versus placebo plus Paclitaxel in patients with previously treated advanced gastric or gastro-oesophageal junction adenocarcinoma (RAINBOW): a double- blind, randomised phase 3 trial. Lancet Oncol 2014;15:1224-1235.

Fam-trastuzumab deruxtecan-nxki

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Trastuzumab	6.4 mg/kg	IV	drip 90 mins D1	every 21 days	for HER2 overexpression-Positive adenocarcinoma

Shitara K, Bang YJ, Iwasa S, et al. Trastuzumab Deruxtecan in Previously Treated HER2-POsitive Gastric Cancer. N Engl J Med 2020;382:2419-2430

Taxane

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxe	75-100 mg/m^2	IV	drip 60 mins D1	every 21days	
or					
Paclitaxel	135-250 mg/m^2	IV	drip 60 mins D1	every 21days	
or					
Paclitaxel	80 mg/m^2	IV	drip 60 mins D1	weekly	

or					
Paclitaxel	80 mg/m^2	IV	drip 60 mins D1,8,15	every 28days	

1Albertsson M, Johansson B, Friesland S, et al. Phase II studies on docetaxel alone every third week, or weekly in combination with gemcitabine in patients with primary locally advanced, metastatic, or recurrent esophageal cancer. Med Oncol 2007;24:407-412.
2 Ford ER, Marshall A, Bridgewater JA, et al. Docetaxel versus active symptom control for refractory oesophagogastric adenocarcinoma (COUGAR-02): an open-label, phase 3 randomised controlled trial. Lancet Oncol 2014;15:78-86.
3 Ajani JA, Ilson DH, Daugherty K, et al. Activity of taxol in patients with squamous cell carcinoma and adenocarcinoma of the esophagus. J Natl Cancer Inst 1994;86:1086-1091.
4 Ilson DH, Wadleigh RG, Leichman LP, Kelsen DP. Paclitaxel given by a weekly 1-h infusion in advanced esophageal cancer. Ann Oncol 2007;18:898-902.
5 Hironaka S, Ueda S, Yasui H, et al. Randomized,open-label, phase III study comparing Irinotecan with Paclitaxel in patients with advanced gastric cancer without severe peritoneal metastasis after failure of prior combination Chemotherapy using Fluoropyrimidine plus platinum: WJOG 4007 trial J Clin Oncol 2013;31:4438-4444.

Irinotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	150-180 mg/m^2	IV	drip 60 mins D1	every 14 days	
or					
Irinotecan	125 mg/m^2	IV	drip 60 mins D1,8	every 21 days	
or					
Irinotecan	250-350 mg/m^2	IV	drip 60 mins D1	every 21 days	

1.Hironaka S, Ueda S, Yasui H, et al. Randomized,open-label, phase III study comparing Irinotecan with Paclitaxel in patients with advanced gastric cancer without severe peritoneal metastasis after failure of prior combination Chemotherapy using Fluoropyrimidine plus platinum: WJOG 4007 trial J Clin Oncol 2013;31:4438-4444.
2. Sym SJ, Hong J, Park J, et al. A randomized phase II study of biweekly Irinotecan monotherapy or a combination of Irinotecan plus 5-Fluorouracil/ Leucovorin (mFOLFIRI) in patients with metastatic gastric adenocarcinoma refractory to or progressive after first-line Chemotherapy. Cancer Chemother Pharmacol 2013;71:481-488.
3 Fuchs CS, Moore MR, Harker G, et al. Phase III comparison of two Irinotecan dosing regimens in second-line Therapy of metastatic colorectal cancer. J Clin Oncol 2003;21:807-814.
4.Thuss-Patience PC, Kretzschmar A, Bichev D, etal. Survival advantage for Irinotecan versus best supPOrtive care as second-line Chemotherapy in gastric cancer--a randomised phase III study of the Arbeitsgemeinschaft Internistische Onkologie (AIO). Eur J Cancer 2011;47:2306-2314.

Fluorouracil and Irinotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	180 mg/m^2	IV	drip 60 mins D1	Cycled every 14 days	
Leucovorin	400 mg/m^2	IV	D1		
Fluorouracil	400 mg/m^2	IV Push	D1		
Fluorouracil	1200 mg/m^2/days	IV	IV continuous infusion over 24 hours daily on Days 1 and 2		

Sym SJ, Hong J, Park J, et al. A randomized phase II study of biweekly Irinotecan monotherapy or a combination of Irinotecan plus 5-Fluorouracil/ Leucovorin (mFOLFIRI) in patients with metastatic gastric adenocarcinoma refractory to or progressive after first-line Chemotherapy. Cancer Chemother Pharmacol 2013;71:481-488.

Trifluridine and tipiracl

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Trifluridine and tipiracil	35 mg/m^2 up to a maximum dose of 80 mg per dose	PO	Bid, on Days 1–5 and 8–12	Cycled every 28 days	for third-line or subsequent Therapy for EGJ adenocarcinoma

Shitara K, Doi T, Dvorkin M, et al. Trifluridine/tipiracil versus placebo in patients with heavily pretreated metastatic gastric cancer (TAGS): a randomised, double-blind, placebo-controlled, phase 3 trial. Lancet Oncol 2018;19:1437-1448.

OTHER RECOMMENDED REGIMENS

Ramucirumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ramucirumab	8 mg/kg	IV	drip 60 mins D1	Cycled every 14 days	

Fuchs CS, Tomasek J, Yong CJ, et al. Ramucirumab monotherapy for previously treated advanced gastric or gastro-oesophageal junction adenocarcinoma (REGARD): an international, randomised, multicentre, placebo-controlled, phase 3 trial. Lancet 2014;383:31-39.

Irinotecan and Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	65 mg/m^2	IV	drip 60 mins D1,8	Cycled every 21 days	
Cisplatin	25-30 mg/m^2	IV	drip 60 mins D1,8		

1.Enzinger PC, Burtness BA, Niedzwiecki D, et al. CALGB 80403 (Alliance)/E1206: a randomized phase II study of three Chemotherapy regimens plus Cetuximab in metastatic esophageal and gastroesophageal junction cancers. J Clin Oncol 2016;34:2736-2742.
2.Ilson DH. Phase II trial of weekly Irinotecan/Cisplatin in advanced esophageal cancer. Oncology (Williston Park) 2004;18:22-25.

Fluorouracil and Irinotecan + Ramucirumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ramucirumab	8 mg/kg	IV	drip 60 mins D1	Cycled every 14 days	only for adenocarcinoma
Irinotecan	180 mg/m^2	IV	drip 90 mins D1		
Leucovorin	400 mg/m^2	IV	D1		
Fluorouracil	400 mg/m^2	IV Push	D1		
Fluorouracil	1200 mg/m^2/days	IV	IV continuous infusion over 24 hours daily on Days 1 and 2		

Tabernero J, Yoshino T, Cohn AL, et al. Ramucirumab versus placebo in combination with second-line FOLFIRI in patients with metastatic colorectal carcinoma that progressed

during or after first-line Therapy with Bevacizumab, Oxaliplatin, and a Fluoropyrimidine (RAISE): a randomised, double-blind, multicentre, phase 3 study. Lancet Oncol 2015;16:499-508.

Irinotecan + Ramucirumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ramucirumab	8 mg/kg	IV	drip 60 mins D1	Cycled every 14 days	only for adenocarcinoma
Irinotecan	180 mg/m^2	IV	drip 90 mins D1		

Sakai D, Boku N, Kodera Y, et al. An intergroup phase III trial of Ramucirumab plus Irinotecan in third or more line beyond progression after Ramucirumab for advanced gastric cancer (RINDBeRG trial). J Clin Oncol 2018;36:TPS4138.

Docetaxel and Irinotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	50 mg/m^2	IV	drip 90 mins D1,8	Cycled every 21 days	
Docetaxel	35 mg/m^2	IV	drip 60 mins D1,8		

Burtness B, Gibson M, Egleston B, et al. Phase II trial of docetaxel-Irinotecan combination in advanced esophageal cancer. Ann Oncol 2009;20:1242-1248.

Target Therapy

For NTRK gene fusion-Positive tumors(SQUAMOUS CELL CARCINOMA and ADENOCARCINOMA)

Entrectinib

藥名(學名)	Entrectinib 600 mg PO once daily

Doebele RC, Drilon A, Paz-Ares L, et al. Entrectinib in patients with advanced or metastatic NTRK fusion- POsitive solid tumours: integrated analysis of three phase 1-2 trials. Lancet Oncol 2020;21:271-282.

Larotrectinib

藥名(學名)	Larotrectinib 100 mg PO twice daily

Drilon A, Laetsch TW, Kummar S, et al. Efficacy of larotrectinib in TRK fusion-positive cancers in adults and children. N Engl J Med 2018;378:731-739.

Repotrectinib

藥名(學名)	**Repotrectinib** **160 mg PO Daily Days 1–14 of cycle 1** **160 mg PO BID Days 15–28 of cycle 1** **160 mg PO BID Days 1-28 of cycle 2 and beyond** **Cycled every 28 days**

Solomon BJ, Drilon A, Lin JJ, et al. 1372P Repotrectinib in patients (pts) with NTRK fusion- positive (NTRK+) advanced solid tumors, including NSCLC: Update from the phase I/II TRIDENT-1 trial. Annals of Oncology 2023;34:S787-S788.

For BRAF V600E-mutated tumors

Dabrafenib and Trametinib

藥名	**Dabrafenib 150 mg PO twice daily** **Trametinib 2 mg PO daily**

Salama AKS, Li S, Macrae ER, et al. Dabrafenib and Trametinib in patients with tumors with BRAF(V600E) mutations: Results of the NCI-MATCH trial subprotocol H. J Clin Oncol 2020;38:3895-3904.

For RET gene fusion-Positive tumors

Selpercatinib

藥名	**Selpercatinib** **Patients >=50 kg: 160 mg PO twice daily** **Patients < 50 kg: 120 mg PO twice daily**

Salama AKS, Li S, Macrae ER, et al. Dabrafenib and Trametinib in patients with tumors with BRAF(V600E) mutations: Results of the NCI-MATCH trial subprotocol H. J Clin Oncol 2020;38:3895-3904.

胃癌

Perioperative systemic Therapy

Fluorouracil, Leucovorin, Oxaliplatin, and docetaxel (FLOT)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Fluorouracil	2600 mg/m^2	IV	continuous infusion over 24 hours on Day 1	Cycled every 14 days	4 cycles preoperative and 4 cycles postoperative
Leucovorin	200 mg/m^2	IV	continuous infusion over 24 hours on Day 1		
Oxaliplatin	85 mg/m^2	IV	drip 90-120 mins, on Day 1		
Docetaxel	50 mg/m^2	IV	drip 60 mins, on Day 1		

Al-Batran S-E, Homann N, Pauligk C, et al. Perioperative Chemotherapy with Fluorouracil plus Leucovorin, Oxaliplatin, and docetaxel versus Fluorouracil or Capecitabine plus Cisplatin and epirubicin for locally advanced, resectable gastric or gastro-oesophageal junction adenocarcinoma (FLOT4): a randomised, phase 2/3 trial. Lancet 2019;393:1948-1957.

FLOT + Durvalumab (for PD-L1 CPS ≥1 or TAP ≥1%)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Durvalumab	1500 mg	IV	drip 30 mins, on Day 1	Cycled every 28 days (2 cycles preoperative and 2 cycles postoperative, 4 cycles total) followed by Durvalumab 1500 mg IV on Day 1 every 4 weeks for 10	1. For PD-L1 CPS ≥1 or TAP ≥1%b (category 1) 2. For clinical node negative tumor 3. For PD-L1 CPS <1 or TAP <1%b (category 2B)
Fluorouracil	2600 mg/m^2	IV	continuous infusion over 24 hours on Day 1 and 15		
Leucovorin	200 mg/m^2	IV	continuous infusion over 24 hours on Day 1 and 15		
Oxaliplatin	85 mg/m^2	IV	drip 90-120 mins, on Day 1 and 15		

Docetaxel	50 mg/m^2	IV	drip 60 mins, on Day 1 and 15	additional cycles	4. For diffuse type (category 2B)

Janjigian YY, Al-Batran SE, Wainberg ZA, etal. Perioperative Durvalumab in gastric and gastroesophageal junction cancer. N Engl J Med 2025;393:217-230.

* Category 2B :Based upon lower-level evidence, there is NCCN consensus (≥50%, but <85% support of the Panel) that the intervention is appropriate.
* In the MATTERHORN trial, diffuse type gastric or EGJ adenocarcinoma showed no event-free overall survival advantage when durvalumab was added to FLOT

Fluoropyrimidine and Oxaliplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Oxaliplatin	85 mg/m^2	IV	drip 120 mins on Day1	Cycled every 14 days	4 cycles preoperative and 4 cycles postoperative
Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2	IV	continuous infusion over 24 hours daily on Days 1		
or					
Oxaliplatin	85 mg/m^2	IV	drip 120 mins on Day 1	Cycled every 14 days	
Leucovorin	200 mg/m^2	IV	continuous infusion over 24 hours on Day 1		
Fluorouracil	2600 mg/m^2	IV	continuous infusion over 24 hours on Day 1		
or					
Capecitabine	850-1000 mg/m^2	PO	BID on Days 1–14	Cycled every 21 days	
Oxaliplatin	130 mg/m^2	IV	drip 120 mins, on Day 1		
or					
Capecitabine	850-1000 mg/m^2	PO	BID on Days 1–14	Cycled every 21	

Oxaliplatin	65 mg/m^2	IV	drip 90-120 mins, on Day 1 and 8	days	

1. Al-Batran S-E, Hartmann JT, Probst S, et al. Phase III trial in metastatic gastroesophageal adenocarcinoma with Fluorouracil, Leucovorin plus either Oxaliplatin or Cisplatin: a study of the Arbeitsgemeinschaft Internistische Onkologie. J Clin Oncol 2008;26:1435-1442.
2. Kim GM, Jeung HC, Rha SY, et al. A randomized phase II trial of S-1-Oxaliplatin versus Capecitabine- Oxaliplatin in advanced gastric cancer. Eur J Cancer 2012;48:518-526.

Neoadjuvant or perioperative Immunotherapy regimens (MSI-H/dMMR tumors)

Nivolumab and Ipilimumab followed by Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg	IV	drip 30 mins, on Day 1	every 2 weeks	Ipilimumab(preoperative for at least 12 total weeks), followed by surgery and adjuvant Nivolumab 480 mg IV every 4 weeks for 9 cycles
Ipilimumab	1 mg/kg	IV	drip 30 mins, on Day 1	every 6 weeks	

Andre T, Tougeron D, Piessen G, et al. Neoadjuvant Nivolumab plus Ipilimumab and adjuvant Nivolumab in localized deficient mismatch repair/microsatellite instability-high gastric or esophagogastric junction adenocarcinoma: The GERCOR NEONIPIGA phase II study. J Clin Oncol 2023;41:255-265.

Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins, on Day 1	every 3 weeks for at least 12 total weeks	followed by surgery and adjuvant Pembrolizumab 200 mg IV every 3 weeks x 16 cycles

Ludford K, Ho WJ, Thomas JV, et al. Neoadjuvant Pembrolizumab in localized microsatellite instability high/deficient mismatch repair solid tumors. J Clin Oncol 2023;41:2181-2190.
Liu L, Woo Y, D'Apuzzo M, et al. Immunotherapy- based neoadjuvant treatment of advanced microsatellite instability-high gastric cancer: A case series. J Natl Compr Canc Netw 2022;20:857-865.

Tremelimumab and Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tremelimumab	300 mg	IV	on Day 1	once	for neoadjuvant Therapy only
Durvalumab	1500 mg	IV	on Days 1, 29, and 57 for 12 weeks preoperatively for 1 cycle only	every 4 weeks x 3	

1.Kelly RJ, Lee J, Bang YJ, et al. Safety and efficacy of Durvalumab and tremelimumab alone or in combination in patients with advanced gastric and gastroesophageal junction adenocarcinoma. Clin Cancer Res 2020;26:846-854.
2.Pietrantonio F, Raimondi A, Lonardi S, et al. INFINITY: A multicentre, single-arm, multi-cohort, phase II trial of tremelimumab and Durvalumab as neoadjuvant treatment of patients with microsatellite instability-high (MSI) resectable gastric or gastroesophageal junction adenocarcinoma (GAC/ GEJAC). Journal of Clinical Oncology 2023;41:358- 358.

Adjuvant Chemotherapy regimens

TS-1

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tegafur/Potassium oxonate/gimeracil	BSA < 1.25 40mg BSA 1.25 - 1.5 50mg BSA ≧1.5 60mg	PO	bid	4 weeks on/2 weeks off (or 2 weeks on/1 weeks off), 1 year	

Sakuramoto S, et al. Adjuvant Chemotherapy for gastric cancer with S-1, an oral Fluoropyrimidine. N Engl J Med. 2007;357:1810.

Modified FOLFOX

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Oxaliplatin	85 mg/m^2	IV	drip 120 mins, on Day 1	Q2w x 6–12 cycles	
Leucovorin	200 mg/m^2	IV	46 hours on Day 1		
5-FU	2600 mg/m^2	IV	46 hours on Day 1		

Al-Batran S-E, Hartmann JT, Probst S, et al. Phase III trial in metastatic gastroesophageal adenocarcinoma with Fluorouracil, Leucovorin plus either Oxaliplatin or Cisplatin: a study of the Arbeitsgemeinschaft Internistische Onkologie. J Clin Oncol 2008;26:1435-1442.

Fluorouracil and Oxaliplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Oxaliplatin	85 mg/m^2	IV	drip 120 mins on Day 1	Cycled every 14 days	
Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2	IV	continuous infusion over 24 hours daily on Days 1		
or					
Oxaliplatin	85 mg/m^2	IV	drip 120 mins on Day 1	Cycled every 14 days	
Leucovorin	200 mg/m^2	IV	on Day 1		
Fluorouracil	2600 mg/m^2	IV	continuous infusion over 24 hours on Day 1		

1. Enzinger PC, Burtness BA, Niedzwiecki D, et al. CALGB 80403 (Alliance)/E1206: a randomized phase II study of three Chemotherapy regimens plus Cetuximab in metastatic esophageal and gastroesophageal junction cancers. J Clin Oncol 2016;34:2736-2742.
2. Al-Batran S-E, Hartmann JT, Probst S, et al. Phase III trial in metastatic gastroesophageal adenocarcinoma with Fluorouracil, Leucovorin plus either Oxaliplatin or Cisplatin: a study of the Arbeitsgemeinschaft Internistische Onkologie. J Clin Oncol 2008;26:1435-1442.

CAPOX

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Capecitabine	850-1000 mg/m^2	PO	BID on Days 1–14	Cycled every 21 days for 8 cycles	for patients who have undergone primary D2 lymph node dissection
Oxaliplatin	130 mg/m^2	IV	drip 120 mins, on Day 1		
or					
Capecitabine	850-1000 mg/m^2	PO	BID on Days 1–14	Cycled every 21 days for 8 cycles	
Oxaliplatin	65 mg/m^2	IV	drip 90-120 mins, on Day 1 and 8		

1.Noh SH, Park SR, Yang HK, et al. Adjuvant Capecitabine plus Oxaliplatin for gastric cancer after D2 gastrectomy (CLASSIC): 5-year follow-up of an open-label, randomised phase 3 trial. Lancet Oncol 2014;15:1389-1396.
2.Kang YK, Kang WK, Shin DB, et al. Capecitabine/Cisplatin versus 5-Fluorouracil/Cisplatin as first-line Therapy in patients with advanced gastric cancer: a randomised phase III noninferiority trial. Ann Oncol 2009;20:666-673.

TS-1+Oxaliplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tegafur/Potassium oxonate/gimeracil	BSA < 1.25 40mg BSA 1.25 - 1.5 50mg BSA ≧1.5 60mg	PO	bid	4 weeks on/2 weeks off (or 2 weeks on/1 weeks off)	
Oxaliplatin	100 mg/m^2	IV	drip 2hrs, on day 1	Cycled every 21 days for 8 cycles	

Namikawa, T., Maeda, H., Kitagawa, H., Oba, K., Tsuji, A., Yoshikawa, T., ... & Hanazaki, K. (2018). Treatment using Oxaliplatin and S-1 adjuvant Chemotherapy for pathological stage III gastric cancer: a multicenter phase II study (TOSA trial) protocol. BMC cancer, 18(1), 186.

Postoperative Chemoradiation

Fluorouracil

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
2 cycles before and 4 cycles after Chemoradiation. For cycles after Chemoradiation, begin Chemotherapy 1 month after Chemoradiation.					
Leucovorin	400 mg/m^2	IV	on Day 1	Cycled every 14 days	
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1		
With radiation					
Fluorouracil	200–250 mg/m^2	IV	continuous infusion over 24 hours daily on Days 1–5	Weekly for 5 weeks	

Leong T, Joon DL, Willis D, et al. Adjuvant Chemoradiation for gastric cancer using epirubicin, Cisplatin, and 5-Fluorouracil before and after three-dimensional conformal radiotherapy with concurrent infusional 5-Fluorouracil: a multicenter study of the Trans-Tasman Radiation Oncology Group. Int J Radiat Oncol Biol Phys 2011;79:690-695.

Capecitabine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
1 cycle before and 2 cycles after Chemoradiation. For cycles after Chemoradiation, begin Chemotherapy 1 month after Chemoradiation.					
Capecitabine	750–1000 mg/m^2	PO	BID on Days 1–14	Cycled every 21 days	
With radiation					
Capecitabine	625–825 mg/m^2	PO	BID on Days 1–5	Weekly for 5 weeks	

Jansen EP, Boot H, Saunders MP, et al. A phase I-II study of Postoperative Capecitabine-based chemoradioTherapy in gastric cancer. Int J Radiat Oncol Biol Phys 2007;69:1424-1428.

Lee HS, Choi Y, Hur WJ, et al. Pilot study of Postoperative adjuvant Chemoradiation for advanced gastric cancer: adjuvant 5-FU/Cisplatin and Chemoradiation with Capecitabine. World J Gastroenterol 2006;12:603-607.

Chemoradiation for unresectable disease

Fluorouracil and Oxaliplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Oxaliplatin	85 mg/m^2	IV	drip 120 mins on Day 1	Cycled every 14 days for 3 cycles with radiation followed by 3 cycles without radiation	
Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	800 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1 and 2		

Conroy T, Galais MP, Raoul JL, et al. Definitive chemoradiotherapy with FOLFOX versus Fluorouracil and Cisplatin in patients with oesophageal cancer (PRODIGE5/ACCORD17): final results of a randomised, phase 2/3 trial. Lancet Oncol 2014;15:305-314.
Javle MM, Yang G, Nwogu CE, et al. Capecitabine, Oxaliplatin and radiotherapy: a phase IB neoadjuvant study for esophageal cancer with gene expression analysis. Cancer Invest 2009;27:193-200.

Fluorouracil and Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75–100 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 28 days for 2 cycles with radiation followed by 2 cycles without radiation	
Fluorouracil	750–1000 mg/m^2	IV	continuous infusion over 24 hours daily on Days 1–4		

Minsky BD, Pajak TF, Ginsberg RJ, et al. INT 0123 (Radiation Therapy Oncology Group 94-05) phase III trial of combined-modality Therapy for esophageal cancer: high-dose versus standard-dose radiation Therapy. J Clin Oncol 2002;20:1167-1174.

Capecitabine and Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	30 mg/m^2	IV	drip 60 mins on Day 1	Weekly for 5 weeks	
Capecitabine	800 mg/m^2	PO	BID on Days 1–5		

Lee SS, Kim SB, Park SI, et al. Capecitabine and Cisplatin Chemotherapy (XP) alone or sequentially combined chemoradiotherapy containing XP regimen in patients with three different settings of stage IV esophageal cancer. Jpn J Clin Oncol 2007;37:829-835.

Paclitaxel and Fluoropyrimidine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	45–50 mg/m^2	IV	drip 60 mins on Day 1 weekly	Weekly for 5 weeks	
Fluorouracil	300 mg/m^2	IV	continuous infusion daily on Days 1–5		
or					
Paclitaxel	45–50 mg/m^2	IV	drip 60 mins on Day 1	Weekly for 5 weeks	
Capecitabine	625–825 mg/m^2	PO	BID on Days 1–5		

Ajani JA, Winter K, Okawara GS, et al. Phase II trial of preoperative Chemoradiation in patients with localized gastric adenocarcinoma (RTOG 9904): quality of combined modality Therapy and pathologic response. J Clin Oncol 2006;24:3953-3958.

Advanced/Metastasis Therapy

說明:

1.Infusional Fluorouracil can be replaced with Capecitabine or UFUR(Tegafur/Uracil)

2.UFUR 每日 300-600mg，分 2-3 次服用，服用三週休一週。

3.Systemic Therapy regimen and dosing schedules 是根據已發表的文獻與臨床實務經驗加以推論而來。

HER2 Positive

Trastuzumab with Chemotherapy(Fluoropyrimidine and Oxaliplatin)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Trastuzumab	8 mg/kg IV loading dose on Day 1 of cycle 1, then 6 mg/kg	IV	drip 90 mins, then 60 mins, day 1	every 21 days	
or					
Trastuzumab	6 mg/kg IV loading dose on Day 1 of cycle 1, then 4 mg/kg	IV	drip 90 mins, then 60 mins, day 1	every 14 days	
+					
Oxaliplatin	85 mg/m^2	IV	drip 120mins on Day 1	Cycled every 14 days	
Leucovorin	200 mg/m^2	IV	continuous infusion over 24 hours on Day 1		
Fluorouracil	2600 mg/m^2	IV	continuous infusion over 24 hours on Day 1		
or					
Capecitabine	850-1000 mg/m^2	PO	BID on Days 1–14	Cycled every 21 days	
Oxaliplatin	130 mg/m^2	IV	drip 120 mins, on Day 1		

or					
Capecitabine	850-1000 mg/m^2	PO	BID on Days 1–14	Cycled every 21 days	
Oxaliplatin	65 mg/m^2	IV	drip 90-120 mins, on Day 1 and 8		
or					
Capecitabine	625 mg/m^2	PO	BID on Days 1–14	Cycled every 21 days	
Oxaliplatin	85 mg/m^2	IV	drip 120 mins on Day 1		

Bang YJ, Van Cutsem E, Feyereislova A, et al. Trastuzumab in combination with Chemotherapy versus Chemotherapy alone for treatment of HER2- positive advanced gastric or gastro-oesophageal junction cancer (ToGA): a phase 3, open-label, randomised controlled trial. Lancet 2010;376:687- 697.
1.Al-Batran S-E, Hartmann JT, Probst S, et al. Phase III trial in metastatic gastroesophageal adenocarcinoma with Fluorouracil, Leucovorin plus either Oxaliplatin or Cisplatin: a study of the Arbeitsgemeinschaft Internistische Onkologie. J Clin Oncol 2008;26:1435-1442.
2.Kim GM, Jeung HC, Rha SY, et al. A randomized phase II trial of S-1-Oxaliplatin versus Capecitabine- Oxaliplatin in advanced gastric cancer. Eur J Cancer 2012;48:518-526.
3.Hall PS, Swinson D, Waters JS, et al. Optimizing Chemotherapy for frail and elderly patients (pts) with advanced gastroesophageal cancer (aGOAC): the GO2 phase III trial. J Clin Oncol 2019;37:4006.

Trastuzumab with Chemotherapy(Fluoropyrimidine and Cisplatin)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Trastuzumab	8 mg/kg IV loading dose on Day 1 of cycle 1, then 6 mg/kg	IV	drip 90 mins, then 60 mins, day 1	every 21 days	
or					
Trastuzumab	6 mg/kg IV loading dose on Day 1 of cycle 1, then 4 mg/kg	IV	drip 90 mins, then 60 mins, day 1	every 14 days	
+					
Cisplatin	75–100 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 28 days	

Fluorouracil	750–1000 mg/m^2	IV	continuous infusion over 24 hours daily on Days 1–4		
or					
Cisplatin	50 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 14 days	
Leucovorin	200 mg/m^2	IV	IV continuous infusion over 24 hours daily on Day 1		
Fluorouracil	2600 mg/m^2	IV	IV continuous infusion over 24 hours daily on Day 1		
or					
Cisplatin	80 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 21 days	
Capecitabine	850–1000 mg/m^2	PO	BID on Days 1–14		

Bang YJ, Van Cutsem E, Feyereislova A, et al. Trastuzumab in combination with Chemotherapy versus Chemotherapy alone for treatment of HER2- positive advanced gastric or gastro-oesophageal junction cancer (ToGA): a phase 3, open-label, randomised controlled trial. Lancet 2010;376:687- 697.
1.Lorenzen S, Schuster T, Porschen R, et al. Cetuximab plus Cisplatin-5-Fluorouracil versus Cisplatin-5-Fluorouracil alone in first-line metastatic squamous cell carcinoma of the esophagus: a randomized phase II study of the Arbeitsgemeinschaft Internistische Onkologie. Ann Oncol 2009;20:1667-1673.
2.Al-Batran S-E, Hartmann JT, Probst S, et al. Phase III trial in metastatic gastroesophageal adenocarcinoma with Fluorouracil, Leucovorin plus either Oxaliplatin or Cisplatin: a study of the Arbeitsgemeinschaft Internistische Onkologie. J Clin Oncol 2008;26:1435-1442.
3.Bouche O, Raoul JL, Bonnetain F, et al. Randomized multicenter phase II trial of a biweekly regimen of Fluorouracil and Leucovorin (LV5FU2), LV5FU2 plus Cisplatin, or LV5FU2 plus Irinotecan in patients with previously untreated metastatic gastric cancer: a Federation Francophone de Cancerologie Digestive Group Study-FFCD 9803. J Clin Oncol 2004;22:4319-4328.
4.Kang YK, Kang WK, Shin DB, et al. Capecitabine/Cisplatin versus 5-Fluorouracil/Cisplatin as first-line Therapy in patients with advanced gastric cancer: a randomised phase III noninferiority trial. Ann Oncol 2009;20:666-673.

Trastuzumab and Pembrolizumab with Fluoropyrimidine and Oxaliplatin or Fluoropyrimidine and Cisplatin (for PD-L1 CPS ≥1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Trastuzumab	8 mg/kg loading dose on Day 1 of cycle 1, then 6 mg/kg	IV	drip 90 mins, then 60 mins, day 1	every 21 days	
Pembrolizumab	200 mg	IV	drip 30 mins on Day 1	Cycled every 3 weeks	

+					
Capecitabine	850–1000 mg/m^2	PO	BID Days 1–14	Cycled every 21 days	
Oxaliplatin	130 mg/m^2	IV	drip 120 mins, on Day 1		
or					
Capecitabine	850-1000 mg/m^2	PO	BID on Days 1–14	Cycled every 21 days	
Oxaliplatin	65 mg/m^2	IV	drip 90-120 mins, on Day 1 and 8		
or					
Cisplatin	80 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 21 days	
Capecitabine	850–1000 mg/m^2	PO	BID on Days 1–14		

1. Janjigian YY, Kawazoe A, Bai Y, et al. Pembrolizumab plus trastuzumab and Chemotherapy for HER2-POsitive gastric or gastro-oesophageal junction adenocarcinoma: interim analyses from the phase 3 KEYNOTE-811 randomised placebo-controlled trial. Lancet 2023;402:2197-2208.
2. Bang YJ, Van Cutsem E, Feyereislova A, et al. Trastuzumab in combination with Chemotherapy versus Chemotherapy alone for treatment of HER2- positive advanced gastric or gastro-oesophageal junction cancer (ToGA): a phase 3, open-label, randomised controlled trial. Lancet 2010;376:687- 697.
3. Janjigian YY, Kawazoe A, Yanez P, et al. The KEYNOTE-811 trial of dual PD-1 and HER2 blockade in HER2-POsitive gastric cancer. Nature 2021;600:727-730.
1.Kim GM, Jeung HC, Rha SY, et al. A randomized phase II trial of S-1-Oxaliplatin versus Capecitabine- Oxaliplatin in advanced gastric cancer. Eur J Cancer 2012;48:518-526.
2.Kang YK, Kang WK, Shin DB, et al. Capecitabine/Cisplatin versus 5-Fluorouracil/Cisplatin as first-line Therapy in patients with advanced gastric cancer: a randomised phase III noninferiority trial. Ann Oncol 2009;20:666-673.

HER2 negative

Fluoropyrimidine(Fluorouracil or Capecitabine), Oxaliplatin, and Nibolumab for PD-L1 CPS ≥1(category 1 for PD-L1 CPS ≥5)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg	IV	Drip 60 mins On Day 1 (per study maximum of 2years)	Cycled every 14 days	
Oxaliplatin	85 mg/m^2	IV	Drip 120 mins, on Day 1		

Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1		
or					
Nivolumab	360 mg	IV	drip 60 mins On Day 1 (per study maximum of 2years)	Cycled every 21 days	
Capecitabine	850–1000 mg/m^2	PO	BID on Days 1–14		
Oxaliplatin	130 mg/m^2 or 65 mg/m^2	IV	drip 90-120 mins on Day 1 or on Day 1 and 8		

Janjigian YY, Shitara K, Moehler M, et al. First-line nivolumab plus chemotherapy versus chemotherapy alone for advanced gastric, gastro-oesophageal junction, and oesophageal adenocarcinoma (CheckMate 649): a randomised, open-label, phase 3 trial. Lancet 2021;398:27-40.

Fluoropyrimidine, Oxaliplatin, and Pembrolizumab for PD-L1 CPS ≥1(category 1 for PD-L1 CPS ≥5)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins every 21 days for up to 2 years	Cycled every 21 days for up to 6 cycles (total 18 weeks)	
Capecitabine	850–1000 mg/m^2	PO	BID on Days 1–14		
Oxaliplatin	130 mg/m^2 or 65 mg/m^2	IV	drip 90-120 mins, on Day 1 or on Day 1 and 8		
or					
Pembrolizumab	200 mg	IV	drip 30 mins every 21 days for up to 2 years	Cycled every 14 days for up to 9 cycles (total 18 weeks)	
Oxaliplatin	85 mg/m^2	IV	drip 120 mins on Day 1		

Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1		

Rha SY, Oh DY, Yanez P, et al. Pembrolizumab plus Chemotherapy versus placebo plus Chemotherapy for HER2-negative advanced gastric cancer (KEYNOTE-859): a multicentre, randomised, double- blind, phase 3 trial. Lancet Oncol 2023;24:1181- 1195.

Fluoropyrimidine (Fluorouracil or Capecitabine), Cisplatin, and Pembrolizumab for PD-L1 CPS ≥1 (category 1 for PD-L1 CPS ≥5)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins every 21 days for up to 2 years	Cycled every 21 days for up to 6 cycles	
Cisplatin	80 mg/m^2	IV	drip 60 mins on Day 1		
Fluorouracil	800 mg/m^2	IV	continuous infusion over 24 hours daily on Days 1–5		
or					
Pembrolizumab	200 mg	IV	every 21 days for up to 2 years	Cycled every 21 days for up to 6 cycles (total of 18 weeks)	
Cisplatin	80 mg/m^2	IV	drip 60 mins on Day 1		
Capecitabine	850–1000 mg/m^2	PO	BID on Days 1–14		

Rha SY, Oh DY, Yanez P, et al. Pembrolizumab plus Chemotherapy versus placebo plus Chemotherapy for HER2-negative advanced gastric cancer (KEYNOTE-859): a multicentre, randomised, double- blind, phase 3 trial. Lancet Oncol 2023;24:1181- 1195.

HER2 Negative, CLDN18.2 Positive

Fluoropyrimidine (Fluorouracil or Capecitabine), Oxaliplatin, and zolbetuximab-clzb

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Zolbetuximab-clzb	800 mg/m^2 first-dose only, subsequent doses 400 mg/m^2	IV	drip 30-60 mins on Day 1	Cycled every 14 days	
Oxaliplatin	85 mg/m^2	IV	on Day 1 (per study maximum of 12 doses)		
Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1		
or					
Zolbetuximab-clzb	800 mg/m^2 IV first-dose only, subsequent doses 600 mg/m^2	IV	drip 30-60 mins on Day 1	Cycled every 21 days	
Oxaliplatin	130 mg/m^2	IV	on Day 1(per study maximum of 8 doses)		
Capecitabine	850–1000 mg/m^2 BID	PO	on Days 1–14		
or					
Zolbetuximab-clzb	800 mg/m^2 IV first-dose only, subsequent doses 600 mg/m^2	IV	drip 30-60 mins on Day 1	Cycled every 21 days	
Oxaliplatin	65mg/m^2	IV	drip 90-120 mins, on Day 1 and 8		

Capecitabine	850–1000 mg/m^2	PO	BID on Days 1–14		

1. Shitara K, Lordick F, Bang YJ, et al. Zolbetuximab plus mFOLFOX6 in patients with CLDN18.2- positive, HER2-negative, untreated, locally advanced unresectable or metastatic gastric or gastro-oesophageal junction adenocarcinoma (SPOTLIGHT): a multicentre, randomised, double- blind, phase 3 trial. Lancet 2023;401:1655-1668.
2. Shah MA, Shitara K, Ajani JA, et al. Zolbetuximab plus CAPOX in CLDN18.2-POsitive gastric or gastroesophageal junction adenocarcinoma: the randomized, phase 3 GLOW trial. Nat Med 2023;29:2133-2141.

MSI-H/dMMR tumors (independent of PD-L1 status)

Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins on Day 1	Cycled every 21 days (up to 2 years)	

Fuchs CS, Doi T, Jang RW, et al. Safety and efficacy of Pembrolizumab monotherapy in patients with previously treated advanced gastric and gastroesophageal junction cancer: Phase 2 clinical KEYNOTE-059 trial. JAMA Oncol 2018;4:e180013.

Nivolumab and Ipilimumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg	IV	30-60mins	every 2 weeks	For 16 weeks, followed by Nivolumab 240 mg IV every 2 weeks or Nivolumab 480 mg IV every 4 weeks (maximum of 2 years)
Ipilimumab	1 mg/kg	IV	30-60mins	every 6 weeks	

Janjigian YY, Shitara K, Moehler M, et al. First-line Nivolumab plus Chemotherapy versus Chemotherapy alone for advanced gastric, gastro-oesophageal junction, and oesophageal adenocarcinoma (CheckMate 649): a randomised, open-label, phase 3 trial. Lancet 2021;398:27-40.

Fluoropyrimidine (Fluorouracil or Capecitabine), Oxaliplatin, and Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	360 mg	IV	drip 30 mins on Day 1 (per study maximum of 2 years)	Cycled every 21 days	

Capecitabine	850–1000 mg/m^2	PO	BID on Days 1–14		
Oxaliplatin	130 mg/m^2	IV	drip 120 mins on Day 1		
or					
Nivolumab	240 mg	IV	drip 30 mins on Day 1 (per study maximum of 2 years)	Cycled every 14 days	
Oxaliplatin	85 mg/m^2	IV	drip 120 mins on Day 1		
Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1		

Janjigian YY, Shitara K, Moehler M, et al. First-line Nivolumab plus Chemotherapy versus Chemotherapy alone for advanced gastric, gastro-oesophageal junction, and oesophageal adenocarcinoma (CheckMate 649): a randomised, open-label, phase 3 trial. Lancet 2021;398:27-40.

Fluoropyrimidine, Oxaliplatin, and Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins every 21 days for up to 2 years	Cycled every 21 days for up to 6 cycles (total 18 weeks)	MSI-H/dMMR tumors (independent of PD-L1 status)
Capecitabine	850–1000 mg/m^2	PO	BID on Days 1–14		
Oxaliplatin	130 mg/m^2 or 65mg/m^2	IV	drip 90-120 mins, on Day 1 or on Day 1 and 8		
or					
Pembrolizumab	200 mg	IV	drip 30 mins every 21 days for up to 2 years	Cycled every 14 days for up to 9 cycles (total 18 weeks)	
Oxaliplatin	85 mg/m^2	IV	drip 120 mins on Day 1		

Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1		

Rha SY, Oh DY, Yanez P, et al. Pembrolizumab plus Chemotherapy versus placebo plus Chemotherapy for HER2-negative advanced gastric cancer (KEYNOTE-859): a multicentre, randomised, double- blind, phase 3 trial. Lancet Oncol 2023;24:1181- 1195.

Fluorouracil and Irinotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	180 mg/m^2	IV	drip 90 mins on Day 1	Cycled every 14 days	
Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1		

Guimbaud R, Louvet C, Ries P, et al. Prospective, randomized, multicenter, phase III study of Fluorouracil, Leucovorin, and Irinotecan versus epirubicin, Cisplatin, and Capecitabine in advanced gastric adenocarcinoma: a French Intergroup (Federation Francophone de Cancerologie Digestive, Federation Nationale des Centres de Lutte Contre le Cancer, and Groupe Cooperateur Multidisciplinaire en Oncologie) study. J Clin Oncol 2014;32:3520-3526.

Paclitaxel with or without Carboplatin or Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 21 days	
Carboplatin	AUC 5	IV	drip 60 mins on Day 1		
or					
Paclitaxel	135–200 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 21 days	
Cisplatin	75 mg/m^2	IV	drip 60 mins on Day 1		

or					
Paclitaxel	90 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 14 days	
Cisplatin	50 mg/m^2	IV	drip 60 mins on Day 1		
or					
Paclitaxel	200 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 21 days	
or					
Paclitaxel	80 mg/m^2	IV	drip 60 mins on Days 1, 8, and 15	Cycled every 28 days	

1. Gadgeel SM, Shields AF, Heilbrun LK, et al. Phase II study of Paclitaxel and Carboplatin in patients with advanced gastric cancer. Am J Clin Oncol 2003;26:37-41.
2. Ilson DH, Forastiere A, Arquette M, et al. A phase II trial of Paclitaxel and Cisplatin in patients with advanced carcinoma of the esophagus. Cancer J 2000;6:316-323.
3. Petrasch S, Welt A, Reinacher A, et al. Chemotherapy with Cisplatin and Paclitaxel in patients with locally advanced, recurrent or metastatic oesophageal cancer. Br J Cancer 1998;78:511-514.
4. Ajani JA, Ilson DH, Daugherty K, et al. Activity of taxol in patients with squamous cell carcinoma and adenocarcinoma of the esophagus. J Natl Cancer Inst 1994;86:1086-1091.
5. Hironaka S, Ueda S, Yasui H, et al. Randomized,open-label, phase III study comparing Irinotecan with Paclitaxel in patients with advanced gastric cancer without severe peritoneal metastasis after failure of prior combination Chemotherapy using Fluoropyrimidine plus platinum: WJOG 4007 trial. J Clin Oncol 2013;31:4438-4444.

Docetaxel with or without Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	60-72 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 21 days	
Cisplatin	70–75 mg/m^2	IV	drip 60 mins on Day 1		
or					
Docetaxel	60-75 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 21 days	

Guimbaud R, Louvet C, Ries P, et al. Prospective, randomized, multicenter, phase III study of Fluorouracil, Leucovorin, and Irinotecan versus epirubicin, Cisplatin, and Capecitabine in advanced gastric adenocarcinoma: a French Intergroup (Federation Francophone de Cancerologie Digestive, Federation Nationale des Centres de Lutte Contre le Cancer, and Groupe Cooperateur Multidisciplinaire en Oncologie) study. J Clin Oncol 2014;32:3520-3526.

Fluoropyrimidine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Leucovorin	400 mg/m^2	IV	on Day 1	Cycled every 14 days	
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1		
or					
Capecitabine	850–1000 mg/m^2	PO	BID on Days 1–14	Cycled every 21 days	

1. Bouche O, Raoul JL, Bonnetain F, et al. Randomized multicenter phase II trial of a biweekly regimen of Fluorouracil and Leucovorin (LV5FU2), LV5FU2 plus Cisplatin, or LV5FU2 plus Irinotecan in patients with previously untreated metastatic gastric cancer: a Federation Francophone de Cancerologie Digestive Group Study-FFCD 9803. J Clin Oncol 2004;22:4319-4328.
2. Ohtsu A, Shimada Y, Shirao K, et al. Randomized phase III trial of Fluorouracil alone versus Fluorouracil plus Cisplatin versus uracil and tegafur plus mitomycin in patients with unresectable, advanced gastric cancer: The Japan Clinical Oncology Group Study (JCOG9205). J Clin Oncol 2003;21:54-59.
3. Hong YS, Song SY, Lee SI, et al. A phase II trial of Capecitabine in previously untreated patients with advanced and/or metastatic gastric cancer. Ann Oncol 2004;15:1344-1347.

Docetaxel, Cisplatin or Oxaliplatin, and Fluorouracil

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	40 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 14 days	
Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV	on Day 1		
Fluorouracil	1000 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1		
Cisplatin	40 mg/m^2	IV	drip 60mins on Day 3		
or					

Docetaxel	50 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 14 days	
Oxaliplatin	85 mg/m^2	IV	drip 120 mins on Day 1		
Fluorouracil	1200 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1		

1. Shah MA, Janjigian YY, Stoller R, et al. Randomized multicenter phase II study of modified docetaxel, Cisplatin, and Fluorouracil (DCF) versus DCF plus growth factor support in patients with metastatic gastric adenocarcinoma: a study of the US Gastric Cancer Consortium. J Clin Oncol 2015;33:3874-3879.
2. Blum Murphy MA, Qiao W, Mewada N, et al. A phase I/II study of docetaxel, Oxaliplatin, and Fluorouracil (D-FOX) Chemotherapy in patients with untreated locally unresectable or metastatic adenocarcinoma of the stomach and gastroesophageal junction. Am J Clin Oncol 2018;41:321-325.

Second-line and subsequent Therapy

Ramucirumab and Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ramucirumab	8 mg/kg	IV	drip 60 mins on Days 1 and 15	Cycled every 28 days	
Paclitaxel	80 mg/m^2	IV	drip 60 mins on Days 1, 8, and 15		

Wilke H, Muro K, Van Cutsem E, et al. Ramucirumab plus Paclitaxel versus placebo plus Paclitaxel in patients with previously treated advanced gastric or gastro-oesophageal junction adenocarcinoma (RAINBOW): a double- blind, randomised phase 3 trial. Lancet Oncol 2014;15:1224-1235.

Fam-trastuzumab deruxtecan-nxki

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Fam-trastuzumab deruxtecan-nxki	6.4 mg/kg	IV	drip 90 mins on Day 1	cycled every 21 days	

Shitara K, Bang YJ, Iwasa S, et al. Trastuzumab deruxtecan in previously treated HER2-POsitive gastric cancer. N Engl J Med 2020;382:2419-2430.

Taxane

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	60-75 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 21 days	
or					
Paclitaxel	135–175 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 21 days	
or					
Paclitaxel	80 mg/m^2	IV	drip 60 mins on Days 1, 8, and 15	Cycled every 28 days	

1. Ford ER, Marshall A, Bridgewater JA, et al. Docetaxel versus active symptom control for refractory oesophagogastric adenocarcinoma (COUGAR-02): an open-label, phase 3 randomised controlled trial. Lancet Oncol 2014;15:78-86.
2.Albertsson M, Johansson B, Friesland S, et al. Phase II studies on docetaxel alone every third week, or weekly in combination with gemcitabine in patients with primary locally advanced, metastatic, or recurrent esophageal cancer. Med Oncol 2007;24:407-412.
3. Ajani JA, Ilson DH, Daugherty K, et al. Activity of taxol in patients with squamous cell carcinoma and adenocarcinoma of the esophagus. J Natl Cancer Inst 1994;86:1086-1091.
4. Hironaka S, Ueda S, Yasui H, et al. Randomized, open-label, phase III study comparing Irinotecan with Paclitaxel in patients with advanced gastric cancer without severe peritoneal metastasis after failure of prior combination Chemotherapy using Fluoropyrimidine plus platinum: WJOG 4007 trial. J Clin Oncol 2013;31:4438-4444.

Irinotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	150–180 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 14 days	
or					
Irinotecan	125 mg/m^2	IV	drip 60 mins on Days 1 and 8	Cycled every 21 days	
or					
Irinotecan	250–350 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 21 days	

1. Hironaka S, Ueda S, Yasui H, et al. Randomized, open-label, phase III study comparing Irinotecan with Paclitaxel in patients with advanced gastric cancer without severe peritoneal metastasis after failure of prior combination Chemotherapy using Fluoropyrimidine plus platinum: WJOG 4007 trial. J Clin Oncol 2013;31:4438-4444.
2.Sym SJ, Hong J, Park J, et al. A randomized phase II study of biweekly Irinotecan monotherapy or a combination of Irinotecan plus 5-Fluorouracil/ Leucovorin (mFOLFIRI) in patients with metastatic gastric adenocarcinoma refractory to or progressive after first-line Chemotherapy. Cancer Chemother Pharmacol 2013;71:481-488.
3. Fuchs CS, Moore MR, Harker G, et al. Phase III comparison of two Irinotecan dosing regimens in second-line Therapy of metastatic colorectal cancer. J Clin Oncol 2003;21:807-

814.
4. Thuss-Patience PC, Kretzschmar A, Bichev D, et al. Survival advantage for Irinotecan versus best supportive care as second-line Chemotherapy in gastric cancer--a randomised phase III study of the Arbeitsgemeinschaft Internistische Onkologie (AIO). Eur J Cancer 2011;47:2306-2314.

Fluorouracil and Irinotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	180 mg/m^2	IV	drip 60 mins on Day 1	Cycled every 14 days	
Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1		

Guimbaud R, Louvet C, Ries P, et al. Prospective, randomized, multicenter, phase III study of Fluorouracil, Leucovorin, and Irinotecan versus epirubicin, Cisplatin, and Capecitabine in advanced gastric adenocarcinoma: a French Intergroup (Federation Francophone de Cancerologie Digestive, Federation Nationale des Centres de Lutte Contre le Cancer, and Groupe Cooperateur Multidisciplinaire en Oncologie) study. J Clin Oncol 2014;32:3520-3526.

Ramucirumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ramucirumab	8 mg/kg	IV	drip 60 mins on Day 1	Cycled every 14 days	

Fuchs CS, Tomasek J, Yong CJ, et al. Ramucirumab monotherapy for previously treated advanced gastric or gastro-oesophageal junction adenocarcinoma (REGARD): an international, randomised, multicentre, placebo-controlled, phase 3 trial. Lancet 2014;383:31-39.

Irinotecan and Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	65 mg/m^2	IV	drip 90 mins on Days 1 and 8	Cycled every 21 days	
Cisplatin	25–30 mg/m^2	IV	drip 60 mins on Days 1 and 8		

1.Enzinger PC, Burtness BA, Niedzwiecki D, et al. CALGB 80403 (Alliance)/E1206: a randomized phase II study of three Chemotherapy regimens plus Cetuximab in metastatic esophageal and gastroesophageal junction cancers. J Clin Oncol 2016;34:2736-2742.
2.Ilson DH. Phase II trial of weekly Irinotecan/Cisplatin in advanced esophageal cancer. Oncology (Williston Park 2004;18:22-25.

Fluorouracil and Irinotecan + Ramucirumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ramucirumab	8 mg/kg	IV	drip 60 mins on Day 1	Cycled every 14 days	
Irinotecan	180 mg/m^2	IV	drip 60 mins on Days 1		
Leucovorin	400 mg/m^2	IV	on Day 1		
Fluorouracil	400 mg/m^2	IV Push	on Day 1		
Fluorouracil	1200 mg/m^2	IV	IV continuous infusion over 24 hours daily on Days 1		

Tabernero J, Yoshino T, Cohn AL, et al. Ramucirumab versus placebo in combination with second-line FOLFIRI in patients with metastatic colorectal carcinoma that progressed during or after first-line Therapy with Bevacizumab, Oxaliplatin, and a Fluoropyrimidine (RAISE): a randomised, double-blind, multicentre, phase 3 study. Lancet Oncol 2015;16:499-508.

Irinotecan and Ramucirumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	150 mg/m^2	IV	drip 60 mins on Days 1	Cycled every 14 days	
Ramucirumab	8 mg/kg	IV	drip 60 mins on Day 1		

Sakai D, Boku N, Kodera Y, et al. An intergroup phase III trial of Ramucirumab plus Irinotecan in third or more line beyond progression after Ramucirumab for advanced gastric cancer (RINDBeRG trial). J Clin Oncol 2018;36:TPS4138.

Docetaxel and Irinotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	30 mg/m^2	IV	drip 60 mins on Days 1 and 8	Cycled every 21 days	
Irinotecan	50 mg/m^2	IV	drip 60 mins on Days 1 and 8		

Burtness B, Gibson M, Egleston B, et al. Phase II trial of docetaxel-Irinotecan combination in advanced esophageal cancer. Ann Oncol 2009;20:1242-1248.

TS-1+Docetaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
TS-1	40mg- 60mg bid	PO	on Day1-10, every 14 days	every 2 weeks	
Docetaxel	40 mg/m^2	IV	drip 60 mins on Day 1		

Yoshida, K., Kodera, Y., Kochi, M., Ichikawa, W., Kakeji, Y., Sano, T., ... & Kaji, M. (2019). Addition of Docetaxel to Oral Fluoropyrimidine Improves Efficacy in Patients With Stage III Gastric Cancer: Interim Analysis of JACCRO GC-07, a Randomized Controlled Trial. Journal of Clinical Oncology, 37(15), 1296-1304.

Pembrolizumab(for MSI-H/dMMR tumors or TMB-H [≥10 mutations/megabase] tumors)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins on Day 1	Cycled every 21 days	for MSI-H/dMMR tumors or TMB-H [≥10 mutations/ megabase] tumors)

Fuchs CS, Doi T, Jang RW, et al. Safety and efficacy of Pembrolizumab monotherapy in patients with previously treated advanced gastric and gastroesophageal junction cancer: Phase 2 clinical KEYNOTE-059 trial. JAMA Oncol 2018;4:e180013.

Dabrafenib and Trametinib

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dabrafenib	150 mg	PO	BID	twice daily	for BRAF V600E-mutated tumors
Trametinib	2 mg	PO	QD	daily	

Shin, J. E., An, H. J., Park, H. S., Kim, H., & Shim, B. Y. (2022). Efficacy of dabrafenib/Trametinib in pancreatic ductal adenocarcinoma with BRAF NVTAP deletion: A case report. Frontiers in Oncology, 12, 976450.

Third-line Therapy

Trifluridine and tipiracil

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Trifluridine and tipiracil	35 mg/m^2 up to a maximum dose of 80 mg per dose (based on the trifluridine Component)	PO	BID on Days 1–5 and 8–12	Repeat every 28 days	

Shitara K, Doi T, Dvorkin M, et al. Trifluridine/tipiracil versus placebo in patients with heavily pretreated metastatic gastric cancer (TAGS): a randomised, double-blind, placebo-controlled, phase 3 trial. Lancet Oncol 2018;19:1437-1448.

Target Therapy

For NTRK gene fusion-Positive tumors

Entrectinib

藥名(學名)	Entrectinib 600 mg PO once daily

Doebele RC, Drilon A, Paz-Ares L, et al. Entrectinib in patients with advanced or metastatic NTRK fusion- Positive solid tumours: integrated analysis of three phase 1-2 trials. Lancet Oncol 2020;21:271-282.

Larotrectinib

藥名(學名)	Larotrectinib 100 mg PO twice daily

Drilon A, Laetsch TW, Kummar S, et al. Efficacy of larotrectinib in TRK fusion-Positive cancers in adults and children. N Engl J Med 2018;378:731-739.

Repotrectinib

藥名(學名)	**Repotrectinib** 160 mg PO Daily Days 1–14 of cycle 1 160 mg PO BID Days 15–28 of cycle 1 160 mg PO BID Days 1-28 of cycle 2 and beyond Cycled every 28 days

Solomon BJ, Drilon A, Lin JJ, et al. 1372P Repotrectinib in patients (pts) with NTRK fusion- Positive (NTRK+) advanced solid tumors, including NSCLC: Update from the phase I/II TRIDENT-1 trial. Annals of Oncology 2023;34:S787-S788.

For BRAF V600E-mutated tumors

Dabrafenib and Trametinib

藥名	**Dabrafenib and Trametinib** Dabrafenib 150 mg PO twice daily Trametinib 2 mg PO daily68

Salama AKS, Li S, Macrae ER, et al. Dabrafenib and Trametinib in patients with tumors with BRAF(V600E) mutations: Results of the NCI-MATCH trial subprotocol H. J Clin Oncol 2020;38:3895-3904.

For RET gene fusion-POsitive tumors

Selpercatinib

藥名(學名)	**Selpercatinib** Patients≥50 kg: 160 mg PO twice daily Patients<50 kg: 120 mg PO twice daily

Subbiah V, Wolf J, Konda B, et al. Tumour-agnostic efficacy and safety of selpercatinib in patients with RET fusion-Positive solid tumours other than lung or thyroid tumours (LIBRETTO-001): a phase 1/2, open-label, basket trial. Lancet Oncol 2022;23:1261-1273.

胃腸道基質瘤及胃平滑肌、惡性肉瘤癌

Neoadjuvant regimens and first-line Therapy

First-line Therapy

Imatinib

藥名(學名)	Imatinib 100-400 mg/tab PO daily

1.Demetri GD, von Mehren M, Blanke CD, et al. Efficacy and safety of imatinib mesylate in advanced gastrointestinal stromal tumors. N EngI J Med 2002;347:472-480.
2.Verweij J, Casali PG, Zalcberg J, et al. Progression-free survival in gastrointestinal stromal tumours with high-dose imatinib: randomized trial. Lancet 2004;364:1127-1134.

Avapritinib

藥名(學名)	Avapritinib 300 mg/tab PO daily

1.Jones RL, Serrano C, von Mehren M, et al. Avapritinib in unresectable or metastatic PDGFRA D842V-mutant gastrointestinal stromal tumours: Long- term efficacy and safety data from the NAVIGATOR phase I trial. Eur J Cancer 2021;145:132-142.
2.Heinrich MC, Jones RL, von Mehren M, et al. Avapritinib in advanced PDGFRA D842V-mutant gastrointestinal stromal tumour (NAVIGATOR): a multicentre, open-label, phase 1 trial. Lancet Oncol 2020;21:935-946.
3.Heinrich M, Jones RL, von Mehren M, et al. Clinical response to avapritinib by RECIST and Choi Criteria in ≥4th line and PDGFRA exon 18 gastrointestinal stromal tumors (GIST). Connective Tissue Oncology Society Annual Meeting, Tokyo, Japan, November 15, 2019.

Second-line Therapy

Sunitinib

藥名(學名)	Sunitinib(Sutent) 50 mg/tab PO daily

Demetri GD, van Oosterom AT, Garrett CR, et al. Efficacy and safety of sunitinib in patients with advanced gastrointestinal stromal tumour after failure of imatinib: a randomised controlled trial. Lancet 2006;368:1329-1338.

Third-line Therapy

Regorafenib

藥名(學名)	**Regorafenib(Stivarga) 40-160 mg PO daily**

Demetri GD, Reichardt P, Kang YK, et al. Efficacy and safety of regorafenib for advanced gastrointestinal stromal tumours after failure of imatinib and sunitinib (GRID): an international, multicentre, randomised, placebo-controlled, phase 3 trial. Lancet 2013;381:295-302.

大腸直腸癌

Neoadjuvant Chemotherapy for Rectal Cancer +/- Radiotherapy (TNT)

Capecitabine

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Capecitabine	1250 mg/m^2	PO bid	D1-D14	Q3Ws x 2-3 Cycles

**** recommending to test patients for genetic variants of DPYD prior to initiating Capecitabine unless immediate treatment is necessary.**

Krishnan S et al. Phase II study of Capecitabine (Xeloda) and concurrent boost radioTherapy in patients with locally advanced rectal cancer. Int J Radiat Oncol Bio Phy 2006; 66:762.

Uracil-tegafur (UFT)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Uracil-Tegafur	300-600 mg/m^2*	PO in 2-3 divided doses	D1-28	Q4W x3 Cycle

C. H. Hsieh et al. Adjuvant CCRT for locally advanced rectal cancer: Uracil-tegafur? Or intravenous Fluorouracil? J Clin Oncol 2006 ASCO Annual Meeting Proceedings; 24: 13584

mFOLFOX6

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Oxaliplatin	85 mg/m^2	IV drip 120 mins	D1	Q2W x 6 cycles
Leucovorin	400 mg/m^2	IV		
5FU	400 mg/m^2	IV Bolus		
5FU	2400 mg/m^2	IV for 46-48 hrs	D1-2	

mFOLFOX6 (no bolus)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Oxaliplatin	85 mg/m^2	IV drip 120 mins	D1	Q2W x 6 cycles
5-FU	2400 -2600 mg/m^2	IV for 46-48 hrs		
Leucovorin	400 mg/m^2	IV		

1. *Morton D, et al. FOxTROT Collaborative Group. Preoperative Chemotherapy for Operable Colon Cancer: Mature Results of an International Randomized Controlled Trial. J Clin Oncol. 2023 Mar 10;41(8):1541-1552.*
2. *van den Berg K, van Hellemond IEG, Willems JMWE, Burger JWA, Rutten HJT, Creemers GJ. Neoadjuvant Chemotherapy in locally advanced colon cancer: A systematic review with proportional meta-analysis. Eur J Surg Oncol. 2025 Mar;51(3):109560.*
3. *Peng C, et al. Omission of 5-Fluorouracil Bolus From Multidrug Regimens for Advanced Gastrointestinal Cancers: A Multicenter Cohort Study, Journal of the National Comprehensive Cancer Network (JNCCN), Vol. 22, Issue 8, Oct 2024*

CAPEOX

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Capecitabine	850-1000 mg/m2(NCCN), 825mg/m2(FDA)	PO bid	D1-14	Q3W x3 cycles
Oxaliplatin	130 mg/m^2	IV drip 120mins	D1	

1. *Andre T, Boni C, Mounedji-Boudiaf L, et al. Oxaliplatin, Fluorouracil, and Leucovorin as adjuvant treatment for colon cancer. N Engl J Med 2004;350:2343-2351.*
2. *Cheeseman SL, Joel SP, Chester JD, et al. A 'modified de Gramont' regimen of Fluorouracil, alone and with Oxaliplatin, for advanced colorectal cancer. Br J Cancer*
3. *2002;87:393-399Liu F, Tong T, Huang D, et al CapeOX perioperative Chemotherapy versus Postoperative Chemotherapy for locally advanced resectable colon cancer: protocol for a two-period randomised controlled phase III trial BMJ Open 2019;9:e017637*

TEGAFOX

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Oxaliplatin	85 mg/m^2	IV drip 120mins	D1	Q2W x 6-8 cycles
Leucovorin	90 mg/m^2	PO divided to 2-3 dose	D1-14	
Uracil-Tegafur	300 mg/m^2			

Chun-Kai Liao et al. Tegafur–Uracil/Leucovorin Plus Oxaliplatin (TEGAFOX) as Consolidation Regimen after Short-Course RadioTherapy Is Effective for Locally Advanced Rectal Cancer. J. Clin. Med. 2022, 11, 2920.

Neoadjuvant Chemotherapy for Locally Advanced Colon Disease

mFOLFOX6

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Oxaliplatin	85 mg/m^2	IV drip 120mins	D1	Q2W x 6 cycles
Leucovorin	400 mg/m^2	IV		
5FU	400 mg/m^2	IV Bolus		
5FU	2400 mg/m^2	IV over 46-48 hrs	D1-2	

mFOLFOX6 (no bolus)[3]

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Oxaliplatin	85 mg/m^2	IV drip 120 mins	D1	Q2W x 6 cycles
Leucovorin	400 mg/m^2	IV		
5-FU	2400 -2600 mg/m^2	IV over 46-48 hrs		

1. *Morton D,et al. FOxTROT Collaborative Group. Preoperative Chemotherapy for Operable Colon Cancer: Mature Results of an International Randomized Controlled Trial. J Clin Oncol. 2023 Mar 10;41(8):1541-1552.*
2. *van den Berg K, et al. Neoadjuvant Chemotherapy in locally advanced colon cancer: A systematic review with proportional meta-analysis. Eur J Surg Oncol. 2025 Mar;51(3):109560.*
3. *Peng C, et al. Omission of 5-Fluorouracil Bolus From Multidrug Regimens for Advanced Gastrointestinal Cancers: A Multicenter Cohort Study, Journal of the National Comprehensive Cancer Network (JNCCN), Vol. 22, Issue 8, Oct 2024*

CAPEOX

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Capecitabine	850-1000 mg/m2(NCCN), 825mg/m2(FDA)	PO bid	D1-14	Q3W x4 cycles
Oxaliplatin	130 mg/m^2	IV drip 120 mins	d1	

1. *Andre T, Boni C et al. Oxaliplatin, Fluorouracil, and Leucovorin as adjuvant treatment for colon cancer. N Engl J Med 2004;350:2343-2351.*
2. *Cheeseman SL et al. A 'modified de Gramont' regimen of Fluorouracil, alone and with Oxaliplatin, for advanced colorectal cancer. Br J Cancer 2002;87:393-399*
3. *Liu F et al. CapeOX perioperative Chemotherapy versus Postoperative Chemotherapy for locally advanced resectable colon cancer: protocol for a two-period randomised controlled phase III trial BMJ Open 2019;9:e017637*

Adjuvant Chemotherapy for Colorectal Cancer

Uracil-Tegafur (UFUR)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Uracil-Tegafur	300-600 mg/m^2*	PO in 2-3 divided doses	D1-28	Q4W x 12-24 cycles (依健保局給付規定)

1. *Sulkes A, et al. Uracil-ftorafur: an oral Fluoropyrimidine active in colorectal cancer. J Clin Oncol. Oct 1998;16(10):3461-3475.*
2. *Hochster HS et al. Phase II study of uracil-tegafur with Leucovorin in elderly (> 75 years old) patients with colorectal cancer: ECOG 1299. J Clin Oncol 2007; 25:5397.*
3. *Hsu TC, et al. Uracil-Tegafur and Leucovorin is an Effective Alternative Adjuvant Chemotherapy for the Patients with Colorectal Cancer—Extend Period of Treatment Might Prolong Patient's Survival. J Gastro Hepato. 2024; V10(7): 1-6*
4. *Sadahiro, S. et al. Randomized phase III trial of treatment duration for oral uracil and tegafur plus Leucovorin as adjuvant Chemotherapy for patients with stage IIB/III colon cancer: final results of JFMC33-0502. Annals of Oncology, Volume 26, Issue 11, 2274 – 2280, 2015*

Capecitabine

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Capecitabine	1250 mg/m^2/day	PO	bid D1-D14	Q3Ws x8 cycles

1. *Twelves C, et al. Capecitabine as adjuvant treatment for stage III colon cancer. N Engl J Med 2005;352:2696-2704*

mFOLFOX6

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Oxaliplatin	85 mg/m^2	IV drip 120 mins	D1	Q2W x 12 cycles
Leucovorin	400 mg/m^2	IV		
5FU	400 mg/m^2	IV Bolus		
5FU	2400 mg/m^2	IV over 46-48 hours	D1-2	

1. *de Gramont A, et al. Oxaliplatin/5FU/LV in adjuvant colon cancer: updated efficacy results of the MOSAIC trial, including survival, with a medium follow-up of six years. 2007 ASCO annual meeting. Abstract 4007*
2. *Tournigand, C et al. FOLFIRI followed by FOLFOX6 or the reverse sequence in advanced colorectal cancer: A randomized GERCOR study. J Clin Oncol 2004; 22:229.*

mFOLFOX6 (no bolus)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Oxaliplatin	85 mg/m^2	IV drip 120 mins	D1	Q2W x 12 cycles
Leucovorin	400 mg/m^2	IV		
5-FU	2400 -2600 mg/m^2	IV over 46-48 hrs		

1. *Areepium N, et al. The Impact of Omitting 5-FU Bolus From mFOLFOX6 Chemotherapy Regimen on Hematological Adverse Events Among Patients With Metastatic Colorectal Cancer, World J Oncol. 2023;14(5):392-400*
2. *Peng C, et al. Omission of 5-Fluorouracil Bolus From Multidrug Regimens for Advanced Gastrointestinal Cancers: A Multicenter Cohort Study, Journal of the National Comprehensive Cancer Network (JNCCN), Vol. 22, Issue 8, Oct 2024*

CAPEOX

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Capecitabine	850-1000 mg/m2(NCCN), 825 mg/m2(FDA)	PO bid	D1-14	Q3W x 8 cycles
Oxaliplatin	130 mg/m^2	IV drip 120 mins	D1	

Schmoll HJ et al. Phase III trial of Capecitabine plus Oxaliplatin as adjuvant Therapy for stage III colon cancer: a planned safety analysis in 1,864 patients. J Clin Oncol. 2007 Jan 1;25(1):102-9.

TEGAFOX

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Oxaliplatin	85 mg/m^2	IV drip 120mins	D1	Q2W x 12 cycles
Uracil-Tegafur	300 mg/m^2	PO divided to 2-3 doses	D1-14	
Leucovorin	45-90 mg /m^2			

1. *Kosugi, C. et al. et al. Randomized phase II study of tegafur–uracil/Leucovorin versus tegafur–uracil/Leucovorin plus Oxaliplatin after curative resection of high-risk stage II/III colorectal cancer (SOAC-1101 trial). Int J Colorectal Dis 36, 1739–1749 (2021).*

Systemic Chemotherapy for Advanced or Metastasis Disease

1st line

FOLFIRI[1,2]

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Irenotecan	180 mg/m^2	IV drip 90 mins	D1	Q2W
Leucovorin	400 mg/m^2	IV		
5-FU	Bolus 400 mg/m^2	IV Bolus		
5-FU	2400 mg/m^2	IV over 46-48 hours	D1-2	

FOLFIRI (no bolus)[3]

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Irinotecan	180 mg/m^2	IV drip 90 mins	D1	Q2W
Leucovorin	400 mg/m^2	IV	D1	
5-FU	2400-2600 mg/m^2	IV over 46-48 hrs	D1-2	

1. *Andre T, et al. CPT-11 (Irinotecan) addition to bimonthly, high-dose Leucovorin and bolus and continuous-infusion 5-Fluorouracil (FOLFIRI) for pretreated metastatic colorectal cancer. Eur J Cancer 1999;35:1343-1347.*
2. *Fuchs CS, et al. Randomized, controlled trial of Irinotecan plus infusional, bolus, or oral Fluoropyrimidines in first-line treatment of metastatic colorectal cancer: results from the BICC-C Study. J Clin Oncol 2007;25:4779-4786.*
3. *Peng C, et al. Omission of 5-Fluorouracil Bolus From Multidrug Regimens for Advanced Gastrointestinal Cancers: A Multicenter Cohort Study, Journal of the National Comprehensive Cancer Network (JNCCN), Vol. 22, Issue 8, Oct 2024*

mFOLFOX6[1,2]

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Oxaliplatin	85 mg/m^2	IV drip 120 mins	D1	Q2W
Leucovorin	400 mg/m^2	IV	D1	
5FU	400 mg/m^2	IV Bolus	D1	
5FU	2400 mg/m^2	IV over 46-48 hrs	D1-2	

mFOLFOX6 (no bolus)[3]

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Oxaliplatin	85 mg/m^2	IV drip 120 mins	D1	Q2W
Leucovorin	400 mg/m^2	IV		
5-FU	2400 -2600 mg/m^2	IV over 46-48 hrs		

1. *deGramont A, Figer A, Seymour M, et al. Leucovorin and Fluorouracil With or Without Oxaliplatin as First-Line Treatment in Advanced Colorectal Cancer. J Clon Oncol 2000;18:2938-2947*
2. *Fuchs CS et al. Randomized, controlled trial of Irinotecan plus infusional, bolus, or oral fluoropymidines in first-line treatment of metastatic colorectal cancer: results from the BICC-C study. J Clin Oncol 2007; 25:4779.*
3. *Peng C, et al. Omission of 5-Fluorouracil Bolus From Multidrug Regimens for Advanced Gastrointestinal Cancers: A Multicenter Cohort Study, Journal of the National Comprehensive Cancer Network (JNCCN), Vol. 22, Issue 8, Oct 2024*

CAPEOX

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Capecitabine	850-1000 mg/m2(NCCN), 825mg/m2(FDA)	PO bid	D1-14	Q3W
Oxaliplatin	130 mg/m^2	IV drip 120 mins	D1	

Saltz LB, Clarke S, Diaz-Rubio E, et al. Bevacizumab in combination with Oxaliplatin- based Chemotherapy as first-line Therapy in metastatic colorectal cancer: a randomized phase III study. J Clin Oncol 2008;26:2013-2019.

Modified FOLFIRINOX

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Oxaliplatin	85 mg/m^2	IV drip 120 mins	D1	Q2W
Irinotecan	150 mg/m^2	IV 30-90 mins	D1	
Leucovorin	400 mg/m^2	IV	D1	
5-FU	2400 mg/m^2	IV for 46-48 hours	D1-2	

1. *Cremolini C, et al. FOLFOXIRI plus Bevacizumab versus FOLFIRI plus Bevacizumab as first-line treatment of patients with metastatic colorectal cancer: updated overall survival and molecular subgroup analyses of the open-label, phase 3 TRIBE study. Lancet Oncol. 2015 Oct;16(13):1306-15.*
2. *Conroy T, et al. Neoadjuvant Chemotherapy with FOLFIRINOX and preoperative chemoradiotherapy for patients with locally advanced rectal cancer (UNICANCER-PRODIGE 23): a multicentre, randomised, open-label, phase 3 trial. Lancet Oncol 2021;22:702-715*
3. *Bennouna J, , et al. Rationale and design of the IROCAS study: multicenter, international, randomized phase 3 trial comparing adjuvant modified (m) FOLFIRINOX to mFOLFOX6 in patients with high-risk stage III (pT4 and/or N2) colon cancer-A UNICANCER GI-PRODIGE Trial. Clin Colorectal Cancer 2019;18:e69-e73.*

FOLFIRI + Bevacizumab

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Bevacizumab	5 mg/kg	IV drip 90 mins	D1	Q2W
FOLFIRI				

FOLFIRI plus Bevacizumab as first-line treatment for patients with metastatic colorectal cancer (FIRE-3): a randomized, open-label, phase 3 trial. Lancet Oncol 2014;15:1065-1075.

FOLFOX + Bevacizumab

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Bevacizumab	5 mg/kg	IV drip 90 mins	D1	Q2W
FOLFOX				

Emmanouilides C, Sfakiotaki G, Androulakis N, et al. Front-line Bevacizumab in combination with Oxaliplatin, Leucovorin and 5-Fluorouracil (FOLFOX) in patients withmetastatic colorectal cancer: a multicenter phase II study. BMC Cancer 2007;7:91.

CAPEOX + Bevacizumab

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Bevacizumab	7.5 mg/kg	IV drip 90 mins	D1	Q3W
CAPEOX				Q3W

Saltz LB, Clarke S, Diaz-Rubio E, et al. Bevacizumab in combination with Oxaliplatin- based Chemotherapy as first-line Therapy in metastatic colorectal cancer: a randomized phase III study. J Clin Oncol 2008;26:2013-2019.

FOLFIRINOX + Bevacizumab

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Bevacizumab	5 mg/kg	IV drip 90 mins	D1	Q2W
FOLFIRINOX				

Cremolini C, Loupakis F, Antoniotti C, et al. FOLFOXIRI plus Bevacizumab versus FOLFIRI plus Bevacizumab as first-line treatment of patients with metastatic colorectal cancer: updated overall survival and molecular subgroup analyses of the open-label, phase 3 TRIBE study. Lancet Oncol 2015;16:1306- 1315.

FOLFIRI + Cetuximab (*KRAS/NRAS/BRAF WT* and *left side tumors* only)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Cetuximab	First dose: 400 mg/m^2 Subsequent doses: 500 mg/m^2	IV over 2 hours	D1	Q2W

FOLFIRI		

Cunningham D, Humblet Y, Siena S, et al. Cetuximab monotherapy and Cetuximab plus Irinotecan in Irinotecan-refractory metastatic colorectal cancer. N Engl J Med 2004;351:337-345.

FOLFOX + Cetuximab (*KRAS/NRAS/BRAF WT* and *left side tumors* only)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Cetuximab	First dose: 400 mg/m^2 Subsequent doses: 500 mg/m^2	IV over 2 hours	D1	Q2W
FOLFOX				

Venook AP, Niedzwiecki D, Lenz HJ, et al. Effect of first-line Chemotherapy combined with Cetuximab or Bevacizumab on overall survival in patients with KRAS wild- type advanced or metastatic colorectal cancer: A randomized clinical trial. JAMA 2017;317:2392-2401.

CAPEOX + Cetuximab (*KRAS/NRAS/BRAF* WT and *left side tumors* only)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Cetuximab	First dose: 400 mg/m^2 Subsequent doses: 500 mg/m^2	IV over 2 hours	D1	Q2W
CAPEOX				Q3W

1. *Iwamoto S, Maeda H, Hazama S, et al. Efficacy of CapeOX plus Cetuximab treatment as a first-line Therapy for patients with extended RAS/BRAF/PIK3CA wild-type advanced or metastatic colorectal cancer. J Cancer 2018;9:4092-4098*
2. *Bridgewater JA, Pugh SA, Maishman T, et al. Systemic Chemotherapy with or without Cetuximab in patients with resectable colorectal liver metastasis (New EPOC): long-term results of a multicentre, randomised, controlled, phase 3 trial. Lancet Oncol 2020;21:398-411.*

FOLFIRI +Panitumumab (*KRAS/NRAS/BRAF WT* and *left side tumors* only)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Panitumumab	6 mg/kg	IV over 60 mins	D1	Q2W
FOLFIRI				

Peeters M, Price TJ, Cervantes A, et al. Randomized phase III study of Panitumumab with Fluorouracil, Leucovorin, and Irinotecan (FOLFIRI) compared with FOLFIRI alone as second-line treatment in patients with metastatic colorectal cancer. J Clin Oncol 2010;28:4706-4713.

FOLFOX + Panitumumab (*KRAS/NRAS/BRAF WT* and *left side tumors* only)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Panitumumab	6 mg/kg	IV over 60 mins	D1	Q2W
FOLFOX				

Douillard JY, Siena S, Cassidy J, et al. Randomized, phase III trial of Panitumumab with infusional Fluorouracil, Leucovorin, and Oxaliplatin (FOLFOX4) versus FOLFOX4 alone as first-line treatment in patients with previously untreated metastatic colorectal cancer: the PRIME study. J Clin Oncol 2010;28:4697-4705.

CAPEOX + Panitumumab (*KRAS/NRAS/BRAF* WT and *left side tumors* only)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Panitumumab	6 mg/kg	IV over 60 mins	D1	Q2W
CAPEOX				

1. *Iwamoto S, Maeda H, Hazama S, et al. Efficacy of CapeOX plus Cetuximab treatment as a first-line Therapy for patients with extended RAS/BRAF/PIK3CA wild-type advanced or metastatic colorectal cancer. J Cancer 2018;9:4092-4098*
2. *Bridgewater JA, Pugh SA, Maishman T, et al. Systemic Chemotherapy with or without Cetuximab in patients with resectable colorectal liver metastasis (New EPOC): long-term results of a multicentre, randomised, controlled, phase 3 trial. Lancet Oncol 2020;21:398-411.*

2nd line

Capecitabine

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Capecitabine	850-1250 mg/m^2	PO bid	D1-14	Q3W

Van Cutsem, E et al. Oral Capecitabine compared with intravenous Fluorouracil plus Leucovorin in patients with metastatic colorectal cancer: Results of a large phase III study. J Clin Oncol 2001; 19:4097.

Capecitabine + Bevacizumab

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Capecitabine	850-1250 mg/m^2	PO bid	D1-14	Q3W
Bevacizumab	7.5 mg/kg	IV over 90 mins	D1	

Cunningham D, Lang I, Marcuello E, et al. Bevacizumab plus Capecitabine versus Capecitabine alone in elderly patients with previously untreated metastatic colorectal cancer (AVEX): an open-label, randomised phase 3 trial. Lancet Oncol 2013;14:1077-1085.

Irinotecan

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Irinotecan	180 mg/m^2	IV over 30-90 mins	D1	Q2W

Cunningham D, Pyrhonen S, James R, et al. Randomised trial of Irinotecan plus supportive care versus supportive care alone after Fluorouracil failure for patients with metastatic colorectal cancer. The Lancet 1998;352:1413-1418.

Irinotecan+ Bevacizumab

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Irinotecan	180 mg/m^2	IV over 30-90 mins	D1	Q2W
Bevacizumab	5 mg/kg	IV drip 90 mins		

Yildiz R, Buyukberber S, Uner A, et al. Bevacizumab plusIrinotecan-based Therapy in metastatic colorectal cancer patients previously treated with Oxaliplatin-based regimens. Cancer Invest 2010;28:33-37.

Irinotecan+ Cetuximab or Panitumumab (*KRAS/NRAS/BRAF* WT only)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Irinotecan	180 mg/m2 IV	IV over 30-90 mins	D1	Q2W
Cetuximab	First dose: 400 mg/m^2 Subsequent doses: 500 mg/m2	IV over 2 hours	D1	Q2W

or				
Panitumumab	6 mg/kg	IV over 60 mins	D1	

1. *Martín-Martorell P, Roselló S, Rodríguez-Braun E, et al. Biweekly Cetuximab and Irinotecan in advanced colorectal cancer patients progressing after at least one previous line of Chemotherapy: results of a phase II single institution trial. Br J Cancer 2008;99:455-458.*
2. *Peeters M, Price TJ, Cervantes A, et al. Randomized phase III study of Panitumumab with Fluorouracil, Leucovorin, and Irinotecan (FOLFIRI) compared with FOLFIRI alone as second-line treatment in patients with metastatic colorectal cancer. J Clin Oncol 2010;28:4706-4713.*
3. *Andre T, Blons H, Mabro M, et al. Panitumumab combined with Irinotecan for patients with KRAS wild-type metastatic colorectal cancer refractory to standard Chemotherapy: a GERCOR efficacy, tolerance, and translational molecular study. Ann Oncol 2013;24:412-419.*

FOLFIRI+ Ramucirumab

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Ramucirumab	8 mg/kg	IV over 60 mins	D1	Q2W
FOLFIRI				

Tabernero J, Yoshino T, Cohn AL, et al. Ramucirumab versus placebo in combination with second-line FOLFIRI in patients with metastatic colorectal carcinoma that progressed during or after first-line Therapy with Bevacizumab, Oxaliplatin, and a Fluoropyrimidine (RAISE): a randomized, double-blind, multicentre, phase 3 study. Lancet Oncol 2015;16:499-508.

Irinotecan+ Ramucirumab

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Irinotecan	180 mg/m^2	IV drip 90 mins	D1	Q2W
Ramucirumab	8 mg/kg	IV over 60 mins		

Tabernero J, Yoshino T, Cohn AL, et al. Ramucirumab versus placebo in combination with second-line FOLFIRI in patients with metastatic colorectal carcinoma that progressed during or after first-line Therapy with Bevacizumab, Oxaliplatin, and a Fluoropyrimidine (RAISE): a randomized, double-blind, multicentre, phase 3 study. Lancet Oncol 2015;16:499-508.

Cetuximab (*KRAS/NRAS/BRAF WT only*)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Cetuximab	500 mg/m^2	IV over 2 hours	D1	Q2W

Martín-Martorell P, Roselló S, Rodríguez-Braun E, et al. Biweekly Cetuximab and Irinotecan in advanced colorectal cancer patients progressing after at least one previous line of Chemotherapy: results of a phase II single institution trial. Br J Cancer 2008;99:455-458.

Panitumumab (*KRAS/NRAS/BRAF WT only*)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Panitumumab	6 mg/kg	IV over 60 mins	D1	Q2W

Van Cutsem E, Peeters M, Siena S, et al. Open-label phase III trial of Panitumumab plus best supportive care compared with best supportive care alone in patients with Chemotherapy-refractory metastatic colorectal cancer. J Clin Oncol 2007;25:1658-1664.

Regorafenib ± FOLFIRI or FOLFOX

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Regorafenib	160 mg	PO daily	D1-21	Q4W
FOLFIRI or FOLFOX[2,3]				Q2W

1. *Grothey A, Van Cutsem E, Sobrero A, et al. Regorafenib monotherapy for previously treated metastatic colorectal cancer (CORRECT): an international, multicentre, randomised, placebo-controlled, phase 3 trial. Lancet 2013;381:303- 312.*
2. *Schultheis B, Folprecht G, Kuhlmann J, Ehrenberg R, Hacker UT, Köhne CH, Kornacker M, Boix O, Lettieri J, Krauss J, Fischer R, Hamann S, Strumberg D, Mross KB. Regorafenib in combination with FOLFOX or FOLFIRI as first- or second-line treatment of colorectal cancer: results of a multicenter, phase Ib study. Ann Oncol. 2013 Jun;24(6)*
3. *Sanoff HK, Goldberg RM, Ivanova A, O'Reilly S, Kasbari SS, Kim RD, McDermott R, Moore DT, Zamboni W, Grogan W, Cohn AL, Bekaii-Saab TS, Leonard G, Ryan T, Olowokure OO, Fernando NH, McCaffrey J, El-Rayes BF, Horgan AM, Sherrill GB, Yacoub GH, O'Neil BH. Multicenter, randomized, double-blind phase 2 trial of FOLFIRI with regorafenib or placebo as second-line Therapy for metastatic colorectal cancer. Cancer. 2018 Aug 1;124(15):3118-3126.*

Encorafenib + Cetuximab or Panitumumab ± FOLFIRI or FOLFOX (*BRAF V600E* mutation Positive)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Encorafenib	300 mg	PO	D1	Q2W
Cetuximab	First dose: 400 mg/m2 Subsequent doses: 500 mg/m2	IV over 2 hours	D1	Q2W
or				

Panitumumab	6 mg/kg	IV over 60 mins	D1	
FOLFIRI or FOLFOX[2,3]				Q2W

1. *Van Cutsem E, Huijberts S, Grothey A, et al. Binimetinib, encorafenib, and Cetuximab triplet Therapy for patients with BRAF V600E-mutant metastatic colorectal cancer: Safety lead-in results from the phase III BEACON Colorectal Cancer Study. J Clin Oncol 2019;37:1460- 1469.*
2. *Kopetz S, Grothey A, Yaeger R, et al. Encorafenib, Binimetinib, and Cetuximab in BRAF V600E-Mutated Colorectal Cancer. N Engl J Med. 2019;381:1632-1643.*
3. *Kopetz S, Grothey A, Van Cutsem E, et al. Quality of life with encorafenib plus Cetuximab with or without Binimetinib treatment in patients with BRAF V600E-mutant metastatic colorectal cancer: patient-reported outcomes from BEACON CRC. ESMO Open 2022;7:100477.*
4. *515MO Encorafenib + Cetuximab (EC) + FOLFIRI for BRAF V600E-mutant metastatic colorectal cancer (mCRC): Updated results from the BREAKWATER safety lead-in (SLI) Tabernero, J. et al.Annals of Oncology, Volume 35, S435 - S436*
5. *Kopetz S, Yoshino T, Cutsem EV, et al. Encorafenib, Cetuximab and Chemotherapy in BRAF-mutant colorectal cancer: a randomized phase 3 trial. Nat Med 2025.*

Sotorasib + Cetuximab or Panitumumab ± FOLFIRI or FOLFOX (*KRAS G12C* mutation Positive)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Sotorasib	960 mg	PO	D1	Q2W
Cetuximab	First dose: 400 mg/m^2 Subsequent doses: 500 mg/m^2	IV over 2 hours	D1	Q2W
or				
Panitumumab	6 mg/kg	IV over 60 mins	D1	
+/- FOLFIRI[2] or FOLFOX			D1	Q2W

6. *Kuboki Y, Yaeger R, Fakih MG, et al. Sotorasib in combination with Panitumumab in refractory KRAS G12C-mutated colorectal cancer: Safety and efficacy for phase Ib full expansion cohort. Ann Oncol 2022;33:S136-S196.*
7. *David S. Hong et al. Sotorasib (Soto) plus Panitumumab (Pmab) and FOLFIRI for previously treated KRAS G12C-mutated metastatic colorectal cancer (mCRC): CodeBreaK 101 phase 1b safety and efficacy.. J Clin Oncol 41, 3513-3513(2023).*

Fruquintinib

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Fruquintinib	5 mg	PO	D1~21	Q4W

Dasari A , et al. Fruquintinib versus placebo in patients with refractory metastatic colorectal cancer (FRESCO-2): an international, multicentre, randomised, double-blind, phase 3 study. Lancet 2023;402:41-53.

Li J, Qin S, et al. Effect of Fruquintinib vs Placebo on Overall Survival in Patients With Previously Treated Metastatic Colorectal Cancer: The FRESCO Randomized Clinical Trial. JAMA 2018;319:2486-2496.

Trifluridine + tipiracil (Lonsurf, TAS-102) ± Bevacizumab

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Trifluridine + tipiracil	35 mg/m^2 -80 mg/m^2	PO twice daily	D1-5 D8-12	Q4W
Bevacizumab	5 mg/kg	IV over 60 mins	drip 90mins D1	Q2W

1. *Mayer RJ, et al. Randomized Trial of TAS-102 for Refractory Metastatic Colorectal Cancer (RECOURSE). N Engl J Med 2015;372:1909-19.*
2. *Rais T, et al. Innovations in colorectal cancer treatment: trifluridine and tipiracil with Bevacizumab for improved outcomes - a review. Front Oncol. 2024 Jul 12;14:1296765*

Trastuzumab + Pertuzumab (*HER2-amplified and RAS and BRAF WT*)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Trastuzumab	First dose: 8 mg/kg Subsequent doses: 6 mg/kg	IV over 90 mins	drip 90mins D1	Q3W
Pertuzumab	First dose: 840 mg Subsequent doses: 420 mg			

Meric-Bernstam F, Hurwitz H, Raghav KPS, et al. Pertuzumab plus trastuzumab for HER2-amplified metastatic colorectal cancer (MyPathway): an updated report from a multicentre, open-label, phase 2a, multiple basket study. Lancet Oncol 2019;20:518-530.

Trastuzumab+ Lapatinib (*HER2-amplified and RAS* WT)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Trastuzumab	First dose: 8 mg/kg Subsequent doses: 6 mg/kg	IV over 90 mins	drip 60mins D1	Q3W
Lapatinib	1000 mg	PO	Daily	

Sartore-Bianchi A, Trusolino L, Martino C, et al. Dual-targeted Therapy with trastuzumab and Lapatinib in treatment-refractory, KRAS codon 12/13 wild-type, HER2-POsitive metastatic colorectal cancer (HERACLES): a proof-of-concept, multicentre, open-label, phase 2 trial. Lancet Oncol 2016;17:738-746.

Maintenance Chemotherapy

Uracil-Tegafur (UFUR)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Uracil-Tegafur	300-600 mg/m^2*	PO in 2-3 divided doses	D1-28	Q4W

*依照 UFUR 仿單用法

Koizumi W, Boku N, Yamaguchi K, Miyata Y, Sawaki A, Kato T, Toh Y, Hyodo I, Nishina T, Furuhata T, Miyashita K, Okada Y. Phase II study of S-1 plus Leucovorin in patients with metastatic colorectal cancer. Ann Oncol. 2010 Apr;21(4):766-771

Capecitabine

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Capecitabine	500-625 mg/m^2 or 1000-1500mg	PO bid	D1-28	Q4W

1. *Romiti A, Onesti CE, Roberto M, Barucca V, Tomao S, D'Antonio C, Durante V, Milano A, Falcone R, Di Rocco R, Righini R, Marchetti P. Continuous, low-dose Capecitabine for patients with recurrent colorectal cancer. Med Oncol. 2015 Mar;32(3):54*
2. *He Y, Liu P, Zhang Y, Deng X, Meng W, Wei M, Yang T, Wang Z, Qiu M. Low-dose Capecitabine adjuvant Chemotherapy in elderly stage II/III colorectal cancer patients (LC-ACEC): study protocol for a randomized controlled trial. Trials. 2015 May 29;16:238*
3. *Shi M, Ma T, Xi W, Jiang J, Wu J, Zhou C, Yang C, Zhu Z, Zhang J. A study of Capecitabine metronomic Chemotherapy is non-inferior to conventional Chemotherapy as maintenance strategy in responders after induction Therapy in metastatic colorectal cancer. Trials. 2020 Mar 6;21(1):249.*
4. *Wu J, Dong Y, Zhu W, Meng J, Zhang H, Fang C, Lin L. Capecitabine metronomic Chemotherapy for metastatic colorectal cancer patients reaching NED: A protocol for a prospective, randomized, controlled trial. PLoS One. 2025 Apr 21;20(4)*

Immunotherapy

Pembrolizumab (*dMMR/MSI-H or POLE/POLD1 mutation with ultra-hypermutated phenotype [eg, TMB high]*)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Pembrolizumab	2 mg/kg	IV over 30 mins	drip 30mins D1	Q3W
	200 mg			Q3W
	400 mg			Q6W

Le DT, et al. PD-1 blockade in tumors with mismatch-repair deficiency. N Engl J Med 2015;372:2509-2520.

Nivolumab (*dMMR/MSI-H or POLE/POLD1 mutation with ultra-hypermutated phenotype [eg, TMB high]*)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Nivolumab	3 mg/kg	IV over 30 mins	drip 30mins D1	Q2W
	240 mg			Q2W
	480 mg			Q4W

Overman MJ, et al. Nivolumab in patients with metastatic DNA mismatch repair deficient/microsatellite instability-high colorectal cancer (CheckMate 142): results of an open-label, multicentre, phase 2 study. Lancet Oncol 2017;18:1182-1191.

Nivolumab + Ipilimumab (*dMMR/MSI-H or POLE/POLD1 mutation with ultra-hypermutated phenotype [eg, TMB high]*)

Regimen	Dosage	Route of administration	Times	Frequency/Duration
Nivolumab	3 mg/kg	IV over 30 mins	drip 30mins D1	Q3W x4
Ipilimumab	1 mg/kg			

Followed by

Nivolumab	3 mg/kg	IV over 30 mins	drip 30mins D1	Q2W
	240 mg			Q2W
	480 mg			Q4W

Overman MJ, et al. Durable clinical benefit with Nivolumab plus Ipilimumab in DNA mismatch repair–deficient/microsatellite instability–high metastatic colorectal cancer. J Clin Oncol 2018;36:773-779.

肝癌

Advanced/Metastasis regimens

First line

Atezolizumab+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Atezolizumab	1200 mg	IV	over 60 mins	every 3 weeks	
Bevacizumab	15 mg/kg	IV	over 60 mins	every 3 weeks	

Llovet, J. M., Ricci, S., Mazzaferro, V., Hilgard, P., Gane, E., Blanc, J.-F., et al. (2008). Sorafenib in advanced hepatocellular carcinoma. The New England Journal of Medicine, 359(4), 378–390.

健保給付：(1)未曾接受全身性療法且無法切除或是轉移肝細胞癌病人，且肝功能為 Child-Pugh A。

Tremelimumab+ (Durvalumab)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tremelimumab(Imjudo)	300 mg	IV	over 60 mins	every 4 weeks	(僅第一次療程)
Durvalumab(Imfinzi)	1500 mg	IV	over 60 mins		

Llovet, J. M., et al. (2021). Hepatocellular carcinoma. Nature Reviews Disease Primers, 7, 6. IMJUDO (tremelimumab-actl) [Prescribing information]. (2022). U.S. Food and Drug Adminsistration. IMFINZI (Durvalumab) [Prescribing information]. (2022). U.S. Food and Drug Adminsistration.

(1)未曾接受全身性療法且無法切除或是轉移肝細胞癌病人，肝功能為 Child-Pugh A。

Ipilimumab + Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ipilimumab (Yervoy)	1-3 mg/kg	IV	over 60 mins	every 3 weeks	Ipilimumab (Yervoy) 每隔 3 週給藥一次，總共投予 4 劑。
Nivolumab (OPDIVO)	1-3 mg/kg	IV	over 60 mins		

Yau, T., Galle, P. R., Decaens, T., Sangro, B., Qin, S., da Fonseca, L. G., Karachiwala, H., Blanc, J.-F., Park, J.-W., Gane, E., Pinter, M., Peña, A. M., Ikeda, M., Tai, D., Santoro, A., Pizarro, G., Chiu, C.-F., Schenker, M., He, A., Chon, H. J., … Kudo, M. (2025). Nivolumab plus Ipilimumab versus lenvatinib or sorafenib as first-linetreatment for unresectable

hepatocellular carcinoma (CheckMate 9DW): An open-label, randomised, phase 3 trial. The Lancet. Advance online publication.

Second line

Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab (OPDIVO)	1- 3 mg/kg	IV	over 60 mins	every 2weeks	

Yau, T., Galle, P. R., Decaens, T., Sangro, B., Qin, S., da Fonseca, L. G., Karachiwala, H., Blanc, J.-F., Park, J.-W., Gane, E., Pinter, M., Peña, A. M., Ikeda, M., Tai, D., Santoro, A., Pizarro, G., Chiu, C.-F., Schenker, M., He, A., Chon, H. J., … Kudo, M. (2025). Nivolumab plus Ipilimumab versus lenvatinib or sorafenib as first-linetreatment for unresectable hepatocellular carcinoma (CheckMate 9DW): An open-label, randomised, phase 3 trial. The Lancet. Advance online publication.

Ramucirumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ramucirumab(Cyramza)	8 mg/kg	IV	over 30 mins	every 3weeks	

Zhu, A. X., Kang, Y. K., Yen, C. J., Finn, R. S., Galle, P. R., Llovet, J. M., et al. (2019). Ramucirumab after sorafenib in patients with advanced hepatocellular carcinoma and increased alpha-fetoprotein concentrations (REACH-2): A randomised, double-blind, placebo-controlled, phase 3 trial. The Lancet Oncology, 20(2), 282–296.

Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab(Keytruda)	2 mg/kg	IV	over 60 mins	every 3weeks	

Zhu AX, et al.Pembrolizumab in patients with advanced hepatocellular carcinoma previously treated with sorafenib (KEYNOTE-224).Lancet Oncology. 2018;19(7):940–952.

TKI

First line

Regimen	Sorafenib
藥名(學名)	Sorafenib(Nexavar) (200mg/tab) 400- 800mg /day PO QD

Llovet JM, Ricci S, Mazzaferro V, et al. Sorafenib in advanced hepatocellular carcinoma. N Engl J Med 2008;359:378-390.Cheng AL, Kang YK, Chen Z, et al. Efficacy and safety of sorafenib in patients in the Asia-Pacific region with advanced hepatocellular carcinoma: a phase III randomised, double-blind, placebo-controlled trial. Lancet Oncol 2009;10:25-34.

健保給付：(1)轉移性或無法手術切除且不適合局部治療或局部治療失敗之晚期肝細胞癌，並符合下列條件之一：
A.肝外轉移（遠端轉移或肝外淋巴結侵犯）的 Child-Pugh A class 患者。
B.大血管侵犯（腫瘤侵犯主門靜脈或侵犯左/右靜脈第一分支）的 Child-Pugh A class 患者。
C.經導管動脈化學藥物栓塞治療（T.A.C.E.）失敗之晚期肝細胞癌的 Child-Pugh A class 患者，需提供患者於 12 個月內>=3 次局部治療之記錄。
(2)需經事前審查核准後使用，初次申請之療程以 3 個月為限，之後每 2 個月評估一次。送審時需檢送影像資料，無疾病惡化方可繼續使用。

Regimen	Lenvatinib
藥名(學名)	Lenvatinib(Lenvima)(4 mg/cap) 8-12mg/day PO QD(備註:依病患腎功能調整劑量)

Kudo, M., Finn, R. S., Qin, S., Han, K. H., Ikeda, K., Piscaglia, F., et al. (2018). Lenvatinib versus sorafenib in first-line treatment of unresectable hepatocellular carcinoma: A randomised phase 3 non-inferiority trial. The Lancet, 391(10126), 1163–1173.

健保給付：(1) 轉移性或無法手術切除且不適合局部治療或局部治療失敗之 Child-Pugh A 晚期肝細胞癌成人患者。
(2) 需經事前審查核准後使用，初次申請之療程以 3 個月為限，之後每 2 個月評估一次。送審時需檢送影像資料，無疾病惡化方可繼續使用。
(3) Lenvatinib 與 sorafenib 僅得擇一使用，不得互換；且 lenvatinib 治療失敗後， 不得申請使用 Stivarga 或 Opdivo。(109/1/1)

Second line

Regimen	Regorafenib
藥名	Regorafenib(Stivarga) (40mg/tab) 40-160mg /day PO QD

Bruix, J., Qin, S., Merle, P., Granito, A., Huang, Y.-H., Bodoky, G., Pracht, M., Yokosuka, O., Rosmorduc, O., Breder, V., Gerolami, R., Masi, G., Ross, P. J., Song, T., Bronowicki, J.-P., Ollivier-Hourmand, I., Kudo, M., Cheng, A. L., Llovet, J. M., … Han, G. (2017). Regorafenib for patients with hepatocellular carcinoma who progressed on sorafenib treatment (RESORCE): A randomised, double blind, placebo controlled, phase 3 trial. The Lancet, 389(10064), 56–66. https://doi.org/10.1016/S0140-6736(16)32453-9

健保給付：(1)適用於曾接受 sorafenib 治療失敗後之轉移性或無法手術切除且不適合局部治療或局部治療失敗之 Child-Pugh A c lass 晚期肝細胞癌成人患者。
(2)需經事前審查核准後使用，初次申請之療程以 3 個月為限，之後每 2 個月評估一次。送審時需檢送影像資料，無疾病惡化方可繼續使用。

Regimen	Cabozantinib
藥名	Cabozantinib (Cabometyx) (40mg/tab) 60mg /day PO QD

Abou Alfa, G. K., Meyer, T., Cheng, A. L., Rimassa, L., Sen, S., Milwee, S.,El Khoueiry, A. B. (2022). Safety and efficacy of cabozantinib for patients with advanced hepatocellular carcinoma who advanced to Child Pugh B liver function at study week 8: A retrospective analysis of the CELESTIAL randomized controlled trial. BMC Cancer, 22, 377

胰臟癌

Neoadjuvant Therapy (Resectable/Borderline Resectable Disease)

modified FOLFIRINOX

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Oxaliplatin	85 mg/m^2	IV	drip 2hours, on Day 1	every 2 weeks x 6-12cycles(If clinical condition is indicated)	
Leucovorin	400 mg/m^2	IV	drip 2hours, on Day 1		
Irinotecan	150-180 mg/m^2	IV	drip 90 mins, on Day 1		
Fluorouracil	2400 mg/m^2	IV	drip 46 hours infusion		

Cecchini, M., Salem, R. R., Robert, M., Czerniak, S., Blaha, O., Zelterman, D., ... & Lacy, J. (2024). Perioperative modified FOLFIRINOX for resectable pancreatic cancer: a nonrandomized clinical trial. JAMA oncology, 10(8), 1027-1035.

Fluorouracil (5-FU) + Leucovorin + Irinotecan + Oxaliplatin (FOLFIRINOX)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Oxaliplatin	85 mg/m^2	IV	drip 2 hours, on Day 1	every 2 weeks	
Leucovorin	400 mg/m^2	IV	drip 2 hours, on Day 1		
Irinotecan	180 mg/m^2	IV	drip 90 mins, on Day 1		
Fluorouracil	400 mg/m^2	IV	bolus, on Day 1		
Fluorouracil	2400 mg/m^2	IV	over 46 hours infusion		

Conroy, T., Desseigne, F., Ychou, M., Bouché, O., Guimbaud, R., Bécouarn, Y., ... & Ducreux, M. (2011). FOLFIRINOX versus gemcitabine for metastatic pancreatic cancer. New England journal of medicine, 364(19), 1817-1825.

Gemcitabine + Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1000 mg/m^2	IV	drip 30 mins on Day1, Day 15	every 4 weeks x 2-6 cycles	
Cisplatin	50 mg/m^2	IV	drip 60 mins on Day1, Day15		

Volker Heinemann et al. Randomized Phase III Trial of Gemcitabine Plus Cisplatin Compared With Gemcitabine Alone in Advanced Pancreatic Cancer. J Clin Oncol 24:3946-3952; 2006.

Gemcitabine + Albumins-bound Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nab-Paclitaxel	125 mg/m^2	IV	drip 45 mins on Days 1, 8, and 15	every 4 weeks	
Gemcitabine	1000 mg/m^2	IV	drip 30 mins on Days 1, 8, and 15		

Von Hoff, D. D., Ervin, T., Arena, F. P., Chiorean, E. G., Infante, J., Moore, M., ... & Renschler, M. F. (2013). Increased survival in pancreatic cancer with nab-Paclitaxel plus gemcitabine. New England journal of medicine, 369(18), 1691-1703.

TS-1 + Gemcitabine + Oxaliplatin + Leucovorin(SLOG)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
TS-1	35 mg/m^2 (Max daily dose 120 mg)	PO	BID Day 1-7	every 2 weeks	
Folinic acid	20 mg/m^2	PO	BID Day 1-7		
Gemcitabine	800 mg/m^2	IV	drip 30 mins Day 1		
Oxaliplatin	85 mg/m^2	IV	drip 120 mins Day 1		

Chiang, N. J., Tsai, K. K., Hsiao, C. F., Yang, S. H., Hsiao, H. H., Shen, W. C., ... & Chen, L. T. (2020). A multicenter, phase I/II trial of biweekly S-1, Leucovorin, Oxaliplatin and gemcitabine in metastatic pancreatic adenocarcinoma–TCOG T1211 study. European Journal of Cancer, 124, 123-130.

Adjuvant Chemotherapy regimins

Tegafur/gimeracil/oteracil 複方製劑

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
TS-1	BSA≧1.5m^2: 120mg /day BSA1.25-1.5m^2: 100mg/day BSA<1.25m^2 : 80mg/day	PO	Day 1-28	every 42 days	
or					
TS-1	BSA≧1.5m^2: 120mg /day BSA1.25-1.5m^2: 100mg/day BSA<1.25m^2 : 80mg/day	PO	Day 1-14	every 21 days	

Ueno, H., Ioka, T., Ikeda, M., Ohkawa, S., Yanagimoto, H., Boku, N., ... & Tanaka, M. (2013). Randomized phase III study of gemcitabine plus S-1, S-1 alone, or gemcitabine alone in patients with locally advanced and metastatic pancreatic cancer in Japan and Taiwan: GEST study. Journal of Clinical Oncology, 31(13), 1640-1648.

Capecitabine

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Capecitabine	850 mg/m^2	PO	BID on Days 1–21	every 4weeks	

Kim, H. S., Yi, S. Y., Jun, H. J., Lee, J., Park, S. H., Lee, J. K., ... & Park, J. O. (2010). Definitive Chemoradiation Therapy with Capecitabine in locally advanced pancreatic cancer. Anti-cancer drugs, 21(1), 107-112.

Gemcitabine

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1000 mg/m^2	IV	drip 30 mins D1, 8, 15, days	Q28days x6cycles	

1.Helmut Oettle et al. Adjuvant Chemotherapy With Gemcitabine vs Observation in Patients Undergoing Curative-Intent Resection of Pancreatic Cancer. (JAMA. 2007; 297:267-277).
2.H Ueno et al. A randomised phase III trial comparing gemcitabine with surgery-only in patients with resected pancreatic cancer: Japanese Study Group of Adjuvant Therapy for Pancreatic Cancer.(British Journal of Cancer 2009, 101, 908 – 915) .

modified FOLFIRINOX

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Oxaliplatin	85 mg/m^2	IV	drip 2 hours, on Day 1	every 2 weeks x 6-12cycles(If clinical condition is indicated)	
Leucovorin	400 mg/m^2	IV	drip 2 hours, on Day 1		
Irinotecan	150-180 mg/m^2	IV	drip 90 mins, on Day 1		
Fluorouracil	2400 mg/m^2	IV	drip 46 hours infusion		

Cecchini, M., Salem, R. R., Robert, M., Czerniak, S., Blaha, O., Zelterman, D., ... & Lacy, J. (2024). Perioperative modified FOLFIRINOX for resectable pancreatic cancer: a nonrandomized clinical trial. JAMA oncology, 10(8), 1027-1035.

Gemcitabine + Tegafur/gimeracil/oteracil 複方製劑

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, on Day 1, 8	every 21days x 3-6cycles	
S-1	BSA≧1.5m^2: 100 mg /day BSA1.25-1.5m^2: 80 mg/day BSA<1.25m^2 : 60 mg/day	PO	Day 1-14		

Kao, Y. C., Tang, C. Y., Chen, M. H., Hung, Y. P., & Chiang, N. J. (2025). 379P Real-world comparison of TS-1, gemcitabine, and combination adjuvant chemotherapy in resected pancreatic cancer. Annals of Oncology, 36, S1903.

Gemcitabine + Capecitabine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Gemcitabine	1000 mg/m^2	IV	drip 30 mins Day 1, 8, 15 days	every 4 weeks x 6cycles
Capecitabine	1,660 mg/m^2 was given in two divided doses per day	PO	Day 1-21	

1.Neoptolemos, J. P., Palmer, D. H., Ghaneh, P., Psarelli, E. E., Valle, J. W., Halloran, C. M., ... & Büchler, M. W. (2017). Comparison of adjuvant gemcitabine and Capecitabine with gemcitabine monoTherapy in patients with resected pancreatic cancer (ESPAC-4): a multicentre, open-label, randomised, phase 3 trial. The Lancet, 389(10073), 1011-1024.

2.Cunningham D, Chau I, Stocken DD, et al. Phase III randomized comparison of gemcitabine versus gemcitabine plus Capecitabine in patients with advanced pancreatic cancer. J Clin Oncol 2009;27:5513-5518.

Concurrent Chemoradiation Regiemns

Capecitabine

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Capecitabine	625–825 mg/m^2	PO	BID on Days 1–5	With radiation	adjuvant gemcitabine treatment advised

Kim, H. S., Yi, S. Y., Jun, H. J., Lee, J., Park, S. H., Lee, J. K., ... & Park, J. O. (2010). Definitive Chemoradiation Therapy with Capecitabine in locally advanced pancreatic cancer. Anti-cancer drugs, 21(1), 107-112.

Gemcitabine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	300 mg/m^2	IV	drip 30 mins weekly	With radiation	HRQL data supPOrt the use of Capecitabine-over gemcitabine-based Chemoradiation.

Hurt CN, Mukherjee S, Bridgewater J, et al. Health-related quality of life in SCALOP, a randomized phase 2 trial comparing Chemoradiation Therapy regimens in locally advanced pancreatic cancer. Int J Radiat Oncol Biol Phys 2015;93:810-818.

TS1

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
TS1	40 mg/m^2	PO	BID from day 1 to 14 and from day 22 to 35	With radiation	

Kim, H.M., Bang, S., Park, J.Y. et al. Phase II trial of S-1 and concurrent radiotherapy in patients with locally advanced pancreatic cancer. Cancer Chemother Pharmacol 63, 535–541 (2009).

Advanced/Metastasis regimens

modified FOLFIRINOX

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Oxaliplatin	85 mg/m^2	IV	drip 2 hours, on Day 1	every 2 weeks	
Leucovorin	400 mg/m^2	IV	drip 2 hours, on Day 1		
Irinotecan	150-180 mg/m^2	IV	drip 60 mins, on Day 1		
Fluorouracil	2400 mg/m^2	IV	drip 46 hours infusion		

Cecchini, M., Salem, R. R., Robert, M., Czerniak, S., Blaha, O., Zelterman, D., ... & Lacy, J. (2024). Perioperative modified FOLFIRINOX for resectable pancreatic cancer: a nonrandomized clinical trial. JAMA oncology, 10(8), 1027-1035.

Fluorouracil (5-FU) + Leucovorin + Irinotecan + Oxaliplatin (FOLFIRINOX)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Oxaliplatin	85 mg/m^2	IV	drip 2 hours, on Day 1	every 2 weeks	
Leucovorin	400 mg/m^2	IV	drip 2 hours, on Day 1		
Irinotecan	180 mg/m^2	IV	drip 60 mins, on Day 1		
Fluorouracil	400 mg/m^2	IV	bolus, on Day 1		
Fluorouracil	2400 mg/m^2	IV	over 46 hours infusion		

Conroy, T., Desseigne, F., Ychou, M., Bouché, O., Guimbaud, R., Bécouarn, Y., ... & Ducreux, M. (2011). FOLFIRINOX versus gemcitabine for metastatic pancreatic cancer. New England journal of medicine, 364(19), 1817-1825.

Gemcitabine + albumins-bound Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
nab-Paclitaxel	125 mg/m^2	IV	drip 45 mins on days 1, 8, and 15	every 4 weeks	

Gemcitabine	1000 mg/m^2	IV	drip 30 mins on days 1, 8, and 15		

Von Hoff, D. D., Ervin, T., Arena, F. P., Chiorean, E. G., Infante, J., Moore, M., ... & Renschler, M. F. (2013). Increased survival in pancreatic cancer with nab-Paclitaxel plus gemcitabine. New England journal of medicine, 369(18), 1691-1703.

Gemcitabine + albumins-bound Paclitaxel+TS-1+Leucovorin(GASL)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
nab-Paclitaxel	125 mg/m^2	IV	drip 45 mins on day 1	every 2 weeks Until progression	
Gemcitabine	800 mg/m^2	IV	drip 30 mins on day 1		
Leucovorin	30 mg	PO	BID day 1-7		
TS-1	60-100 mg/day	PO	day 1-7		

Su, Y. Y., Bai, L. Y., Huang, C. J., Chiu, C. F., Wang, H. T., Du, J. S., ... & Chen, L. T. (2024). 1528P TCOG T5221 trial: A phase II randomized study of gemcitabine and nab-Paclitaxel in combination with S-1/LV (GASL) or Oxaliplatin (GAP) as first-line treatment for metastatic pancreatic cancer. Annals of Oncology, 35, S932-S933.

Gemcitabine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1000 mg/m^2	IV	drip 30 mins D1, 8, 15, days	every 4 weeks	

1.Helmut Oettle et al. Adjuvant Chemotherapy With Gemcitabine vs Observation in Patients Undergoing Curative-Intent Resection of Pancreatic Cancer. (JAMA. 2007; 297:267-277).
2.H Ueno et al. A randomised phase III trial comparing gemcitabine with surgery-only in patients with resected pancreatic cancer: Japanese Study Group of Adjuvant Therapy for Pancreatic Cancer.(British Journal of Cancer 2009, 101, 908 – 915) .

Gemcitabine + Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1000 mg/m^2	IV	drip 30 mins on Day1, day 15	every 4 weeks	
Cisplatin	50 mg/m^2	IV	drip 60 mins on Day1, day15		

Volker Heinemann et al. Randomized Phase III Trial of Gemcitabine Plus Cisplatin Compared With Gemcitabine Alone in Advanced Pancreatic Cancer. J Clin Oncol 24:3946-3952; 2006.

TS-1 + Gemcitabine + Oxaliplatin + Leucovorin(SLOG)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
TS-1	35 mg/m^2 (Max daily dose 120mg)	PO	BID Day 1-7	every 2 weeks	
Folinic acid	20 mg/m^2	PO	BID Day 1-7		
Gemcitabine	800 mg/m^2	IV	drip 30 mins Day 1		
Oxaliplatin	85 mg/m^2	IV	drip 120 mins Day 1		

Chiang, N. J., Tsai, K. K., Hsiao, C. F., Yang, S. H., Hsiao, H. H., Shen, W. C., ... & Chen, L. T. (2020). A multicenter, phase I/II trial of biweekly S-1, Leucovorin, Oxaliplatin and gemcitabine in metastatic pancreatic adenocarcinoma–TCOG T1211 study. European Journal of Cancer, 124, 123-130.

Tegafur/gimeracil/oteracil 複方製劑

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
TS-1	BSA≧1.5m^2: 120 mg /day BSA1.25-1.5m^2: 100 mg/day BSA<1.25m^2: 80 mg/day	PO	Day 1-28	every 42 days	
or					
TS-1	BSA≧1.5m^2: 120 mg /day BSA1.25-1.5m^2 100 mg/day BSA<1.25m^2 : 80 mg/day	PO	Day 1-14	every 21 days	

1.Ueno, H., Ioka, T., Ikeda, M., Ohkawa, S., Yanagimoto, H., Boku, N., ... & Tanaka, M. (2013). 2.Randomized phase III study of gemcitabine plus S-1, S-1 alone, or gemcitabine alone in patients with locally advanced and metastatic pancreatic cancer in Japan and Taiwan: GEST study. Journal of Clinical Oncology, 31(13), 1640-1648.

Gemcitabine + Tegafur/gimeracil/oteracil 複方製劑

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, on day1,8	every 21days	
S-1	BSA≧1.5m^2: 100 mg /day BSA1.25-1.5m^2: 80 mg/day BSA<1.25m^2 : 60 mg/day	PO	day1-14		

1.Ueno, H., Ioka, T., Ikeda, M., Ohkawa, S., Yanagimoto, H., Boku, N., ... & Tanaka, M. (2013). 2.Randomized phase III study of gemcitabine plus S-1, S-1 alone, or gemcitabine alone in patients with locally advanced and metastatic pancreatic cancer in Japan and Taiwan: GEST study. Journal of Clinical Oncology, 31(13), 1640-1648.

Gemcitabine+Oxaliplatin+Fluorouracil+Leucovorin(GOLF)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	800 mg/m^2	IV	fixed-dose rate (10 mg/m2/mins) infusion	Q2W/4-6cycles	
Oxaliplatin	85 mg/m^2	IV	2 hours infusion		
Fluorouracil	3000 mg/m^2	IV	48 hours infusion		
Leucovorin	150 mg/m^2	IV	48 hours infusion		

"Ch'ang, HJ., Huang, CL., Wang, HP. et al. Phase II study of biweekly gemcitabine followed by Oxaliplatin and simplified 48-h infusion of 5-Fluorouracil/Leucovorin (GOFL) in advanced pancreatic cancer. Cancer Chemother Pharmacol 64, 1173–1179 (2009).

Liposomal Irinotecan(Onivyde)+ Leucovorin+Fluorouracil

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Onivyde	60-80 mg/m^2	IV	drip 90 mins, on day 1	Q2W/cycles until progression	
Leucovorin	400 mg/m^2	IV	drip 30 mins, on day 1		
Fluorouracil	2400 mg/m^2	IV	46 hours infusion		

Wang-Gillam, A., Li, C. P., Bodoky, G., Dean, A., Shan, Y. S., Jameson, G., ... & Wong, M. (2016). Nanoliposomal Irinotecan with Fluorouracil and folinic acid in metastatic pancreatic cancer after previous gemcitabine-based Therapy (NAPOLI-1): a global, randomised, open-label, phase 3 trial. The Lancet, 387(10018), 545-557.

健保給付：1.與 5-FU 及 Leucovorin 合併使用於曾接受過 gemcitabine 治療後復發或惡化之轉移性胰腺癌。(107/8/1)、2.與 Oxaliplatin、5-FU 和 Leucovorin 併用，作為轉移性胰腺癌成人病人第一線治療。(114/12/1) 、3.需經事前審查核准後使用。

Liposomal Irinotecan+ Fluorouracil + Leucovorin + Oxaliplatin (NALIRIFOX)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Liposomal Irinotecan	50 mg/m^2	IV	drip 90 mins, on day 1	Q2W/Until progression	
Fluorouracil	2400 mg/m^2	IV	drip 46 hours infusion		
Leucovorin	400 mg/m^2	IV	drip 2 hours, on day 1		
Oxaliplatin	60 mg/m^2	IV	drip 2 hours, on day 1		

NALIRIFOX versus nab-Paclitaxel and gemcitabine in treatment-naive patients with metastatic pancreatic ductal adenocarcinoma (NAPOLI 3): a randomised, open-label, phase 3 trial ；Published online September 11, 2023 https://doi.org/10.1016/S0140-6736(23)01366-1.

健保給付：1.與 5-FU 及 Leucovorin 合併使用於曾接受過 gemcitabine 治療後復發或惡化之轉移性胰腺癌。(107/8/1) 、2.與 Oxaliplatin、5-FU 和 Leucovorin 併用，作為轉移性胰腺癌成人病人第一線治療。(114/12/1) 、3.需經事前審查核准後使用。

Gemcitabine+Fluorouracil+Leucovorin(GFL)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	800 mg/m^2	IV	drip 30 mins, on day 1	weekly for 3 of every 4 weeks	
Fluorouracil	2000 mg/m^2	IV	24 hours, infusion		
Leucovorin	300 mg/m^2	IV	infusion with Fluorouracil		

Marantz, A., Jovtis, S., Almira, E., Balbiani, L., Castilla, J. L., Fein, L., ... & Lastiri, F. (2001, June). Phase II study of gemcitabine, 5-Fluorouracil, and Leucovorin in patients with pancreatic cancer. In Seminsars in oncology (Vol. 28, pp. 44-49). WB Saunders.

Modified FOLFOX

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Oxaliplatin	85 mg/m^2	IV	drip 120 mins, on Day 1	Q2w x 6–12 cycles	

Leucovorin	200 mg/m^2	IV	46 hours infusion		
5-FU	2600 mg/m^2	IV	46 hours infusion		

Chari S, Leibson C, Rabe K, et al. Probability of Pancreatic Cancer Following Diabetes: A Population-Based Study. Gastroenterology 2005;129:504–511.
Huang Y, Cai X, Qiu M, et al. Prediabetes and the risk of cancer: a meta-analysis. Diabetologia 2014;57:2261–2269.

5-FU + Leucovorin + Irinotecan (FOLFIRI)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	180 mg/m^2	IV	drip 90mins on day 1	Q2W/cycle Until progression	
Leucovorin	400 mg/m^2	IV	drip 2hours, on day 1		
5-FU	400 mg/m^2	IV	bolus		
5-FU	2400 mg/m^2	IV	46 hours infusion		

Cindy Neuzillet et al., FOLFIRI regimen in metastatic pancreatic adenocarcinoma resistant to gemcitabine and platinum-salts. WJG;2012 September 7；18(33): 4533-4541.

Immunotherapy

Pembrolizumab (if MSI-H, dMMR, or TMB-H [≥10 mut/Mb])

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins	every 3 weeks	
or					
Pembrolizumab	400 mg	IV	drip 30mins	every 6 weeks	

Storandt, M. H., Tran, N., Martin, N., & Jatoi, A. (2023). Pembrolizumab near the end of life in patients with metastatic pancreatic cancer: a multi-site consecutive series to examinse survival and patient treatment burden. Cancer Immunology, Immunotherapy, 72(7), 2515-2520.

Target Therapy

If NTRK gene fusion- Positive

Regimen	Entrectinib
藥名(學名)	Entrectinib body surface area [BSA]>1.5 m2: 600 mg orally once daily BSA 1.11 to 1.5 m2: 500 mg orally once daily BSA 0.91 to 1.1 m2: 400 mg orally once daily

Doebele, R. C., Drilon, A., Paz-Ares, L., Siena, S., Shaw, A. T., Farago, A. F., ... & Demetri, G. D. (2020). Entrectinib in patients with advanced or metastatic NTRK fusion-positive solid tumours: integrated analysis of three phase 1–2 trials. The lancet oncology, 21(2), 271-282.

Regimen	Larotrectinib
藥名(學名)	Larotrectinib BSA > 1.0 m2:100 mg，每天兩次 BSA < 1.0 m2:100 mg/m2，每天兩次 搭配或不搭配食物皆可，直至疾病惡化或直至出現不可接受的毒性。

O'reilly, E. M., & Hechtman, J. F. (2019). Tumour response to TRK inhibition in a patient with pancreatic adenocarcinoma harbouring an NTRK gene fusion. Annals of Oncology, 30, viii36-viii40.

If RET gene fusion- Positive

Regimen	Selpercatinib
藥名(學名)	Selpercatinib <50kg,120 mg orally twice daily, about every 12 hours >50kg,160 mg orally twice daily, about every 12 hours

Raez, L. E., Kang, H., Ohe, Y., Khanal, M., Han, Y., Szymczak, S., ... & Gilligan, A. M. (2024). Patient-reported outcomes with selpercatinib treatment in patients with RET-driven cancers in the phase I/II LIBRETTO-001 trial. ESMO open, 9(5), 103444.

Patients who have response or stable disease after 4–6 months of Chemotherapy may undergo a Chemotherapy holiday or maintenance Therapy.

If previous platinum-based Chemotherapy:

Regimen	**Olaparib**
藥名(學名)	Olaparib 300mg BID 建議劑量為 300mg，每日口服兩次，隨餐或空腹服用，每日總劑量 600mg

Ahn, E. R., Rothe, M., Mangat, P. K., Garrett-Mayer, E., Calfa, C. J., Alva, A. S., ... & Schilsky, R. L. (2024). Olaparib in patients with pancreatic cancer with BRCA1/2 mutations: Results from the targeted agent and profiling utilization registry study. JCO Precision Oncology, 8, e2300240.

非小細胞肺癌

Neoadjuvant Chemotherapy with Immunotherapy

- **Nivolumab + Platinum-Based Doublet**

Nivolumab + Carboplatin + Paclitaxel (any histology)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	360 mg	IV	drip 30 mins, day 1	every 21 days for 4 cycles	any histology
Carboplatin	AUC 4.5-6	IV	drip 1 hours, day 1		
Paclitaxel	180 mg/m²	IV	drip 1 hours, day 1		
健保給付	Nivolumab(TC ≧50%)： 鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

1.Cascone T, Awad M, Spicer J, et al. Perioperative Nivolumab in resectable lung cancer. N Engl J Med 2024;390:1756-1769.
2.Cascone T, Awad MM, Spicer J, et al. Perioperative Nivolumab vs placebo in patients with resectable NSCLC: Updated survival and biomarker analyses from CheckMate 77T [abstract]. J Clin Oncol 2025;43(Suppl):Abstract LBA8010.

Nivolumab + Cisplatin + Docetaxel (any histology)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	360 mg	IV	drip 30 mins, day 1	every 21 days for 4 cycles	any histology
Cisplatin	50-75 mg/m²	IV	drip 1 hours, day 1		
Docetaxel	60 mg/m²	IV	drip 1 hours, day 1		

健保給付	Nivolumab(TC ≧50%)： 鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。

Fossella F, Pereira JR, von Pawel J, et al. Randomized, multinational, phase III study of docetaxel plus platinum combinations versus vinorelbine plus cisplatin for advanced non-small-cell lung cancer: the TAX 326 study group. J Clin Oncol 2003;21:3016-3024.

Nivolumab + Cisplatin (or Carboplatin)+Pemetrexed (nonsquamous)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	360 mg	IV	drip 30 mins, day 1	every 21 days for 4 cycles	non-squamous
Cisplatin	50-75 mg/m²	IV	drip 6 hours, day 1		
Pemetrexed	500 mg/m²	IV	drip 30 mins, day 1		
or					
Carboplatin	AUC 4.5-6	IV	drip 1 hours, day 1		
健保給付	Nivolumab(TC ≧50%)： 鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

1.Cascone T, Awad M, Spicer J, et al. Perioperative Nivolumab in resectable lung cancer. N Engl J Med 2024;390:1756-1769.
2.Cascone T, Awad MM, Spicer J, et al. Perioperative Nivolumab vs placebo in patients with resectable NSCLC: Updated survival and biomarker analyses from CheckMate 77T [abstract]. J Clin Oncol 2025;43(Suppl):Abstract LBA8010.

Nivolumab + Cisplatin or Carboplatin +Gemcitabine (squamous)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	360 mg	IV	drip 30 mins, day 1	every 21 days for 4 cycles	squamous histology
Cisplatin	50- 75 mg/m	IV	drip 6 hours, day 1		

Gemcitabine	1000 mg/m²	IV	IV drip 30 mins, 1 and 8 and 15		
or					
Carboplatin	AUC 4.5-6	IV	drip 1 hours, day 1		
健保給付	Nivolumab(TC ≧50%)： 鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

1.Cascone T, Awad M, Spicer J, et al. Perioperative Nivolumab in resectable lung cancer. N Engl J Med 2024;390:1756-1769.
2.Cascone T, Awad MM, Spicer J, et al. Perioperative Nivolumab vs placebo in patients with resectable NSCLC: Updated survival and biomarker analyses from CheckMate 77T [abstract]. J Clin Oncol 2025;43(Suppl):Abstract LBA8010.

Nivolumab + Cisplatin+ Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	360 mg	IV	drip 30 mins, day 1	every 21 days for 4 cycles	any histology
Cisplatin	50- 75 mg/m	IV	drip 6 hours, day 1		
Paclitaxel	180 mg/m²	IV	drip 1 hours, day 1		
健保給付	Nivolumab(TC ≧50%)： 鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

1.Cascone T, Awad M, Spicer J, et al. Perioperative Nivolumab in resectable lung cancer. N Engl J Med 2024;390:1756-1769.
2.Cascone T, Awad MM, Spicer J, et al. Perioperative Nivolumab vs placebo in patients with resectable NSCLC: Updated survival and biomarker analyses from CheckMate 77T [abstract]. J Clin Oncol 2025;43(Suppl):Abstract LBA8010.

- **Pembrolizumab + Cisplatin-based Chemotherapy**

Pembrolizumab + Cisplatin + Pemetrexed (nonsquamous)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins, day 1	every 21 days for 4 cycles	
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1		
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
健保給付	I. 轉移性鱗狀非小細胞肺癌第一線用藥：限 Pembrolizumab 與 Carboplatin 及 Paclitaxel 併用至多使用 4 個療程，接續單用 Pembrolizumab 治療。 II. 轉移性非鱗狀非小細胞肺癌第一線：限 Pembrolizumab 與 Pemetrexed(限使用 Pexeda、Apeta 或 Pemetrexed Sandoz)及含鉑類化學療法併用，或限 atezolizumab 與 Bevacizumab(限使用 Alymsys、Avastin、Abevmy、Vegzelma 或 Mvasi)及 Carboplatin、Paclitaxel 併用，做為轉移性且不具有 EGFR/ALK/ROS-1 腫瘤基因異常的非鱗狀非小細胞肺癌第一線治療。 II. 非小細胞肺癌第一線用藥：轉移性非小細胞肺癌成人病人，非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型。 III. 鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 IV. 肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

Wakelee H, Liberman M, Kato T, et al. Perioperative Pembrolizumab for early-stage non-small-cell lung cancer. N Engl J Med 2023;389:491-503.

Pembrolizumab + Cisplatin +Gemcitabine(squamous)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins, day 1	every 21 days for 4 cycles	
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1		
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, days 1 and 8		

健保給付	I. 轉移性鱗狀非小細胞肺癌第一線用藥：限 Pembrolizumab 與 Carboplatin 及 Paclitaxel 併用至多使用 4 個療程，接續單用 Pembrolizumab 治療。 II. 轉移性非鱗狀非小細胞肺癌第一線：限 Pembrolizumab 與 Pemetrexed(限使用 Pexeda、Apeta 或 Pemetrexed Sandoz)及含鉑類化學療法併用，或限 atezolizumab 與 Bevacizumab(限使用 Alymsys、Avastin、Abevmy、Vegzelma 或 Mvasi)及 Carboplatin、Paclitaxel 併用，做為轉移性且不具有 EGFR/ALK/ROS-1 腫瘤基因異常的非鱗狀非小細胞肺癌第一線治療。 II. 非小細胞肺癌第一線用藥：轉移性非小細胞肺癌成人病人，非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型。 III. 鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 IV. 肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。

Wakelee H, Liberman M, Kato T, et al. Perioperative Pembrolizumab for early-stage non-small-cell lung cancer. N Engl J Med 2023;389:491-503.

- **Durvalumab + Platinum-based Chemotherapy**

Durvalumab + Cisplatin + Pemetrexed(nonsquamous)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Durvalumab	1500 mg	IV	drip 30-60 mins, day 1	every 21 days for 4 cycles	non-squamous
Cisplatin	50-75 mg/m²	IV	drip 6 hours, day 1		
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化無 PD)，且至多使用 12 個月。				

Heymach JV, HarPOle D, Mitsudomi T, et al. Perioperative Durvalumab for resectable non-small-cell lung cancer. N Engl J Med 2023;389:1672-1684.

Durvalumab + Carboplatin + Pemetrexed(nonsquamous)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Durvalumab	1500 mg	IV	drip 30-60 mins, day 1	every 21 days for 4	non-squamous

Carboplatin	AUC 4.5- 6	IV	drip 1 hours, day 1	cycles	
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)，且至多使用 12 個月。				

Heymach JV, Harpole D, Mitsudomi T, et al. Perioperative Durvalumab for resectable non-small-cell lung cancer. N Engl J Med 2023;389:1672-1684.

Durvalumab + Cisplatin + Gemcitabine(1000)(squamous)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Durvalumab	1500 mg	IV	drip 30-60 mins, day 1	every 21 days for 4 cycles	squamous histology
Cisplatin	50-75 mg/m²	IV	drip 6 hours, day 1		
Gemcitabine	1000 mg/m²	IV	drip 30 mins, day 1,8		
健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)，且至多使用 12 個月。				

Heymach JV, Harpole D, Mitsudomi T, et al. Perioperative Durvalumab for resectable non-small-cell lung cancer. N Engl J Med 2023;389:1672-1684.

Durvalumab + Carboplatin +Gemcitabine(1000)(squamous)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Durvalumab	1500 mg	IV	drip 30-60 mins, day 1	every 21 days for 4 cycles	squamous histology
Carboplatin	AUC 4.5- 6	IV	drip 1 hours, day 1		
Gemcitabine	1000 mg/m²	IV	drip 30 mins, day 1,8		

健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)，且至多使用 12 個月。

Heymach JV, Harpole D, Mitsudomi T, et al. Perioperative Durvalumab for resectable non-small-cell lung cancer. N Engl J Med 2023;389:1672-1684.

Durvalumab + Carboplatin + Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Durvalumab	1500 mg	IV	drip 30-60 mins, day 1	every 21 days for 4 cycles	any histology
Carboplatin	AUC 4.5- 6	IV	drip 1 hours, day 1		
Paclitaxel	180 mg/m²	IV	drip 1 hours, day 1		
or					
Paclitaxel	90 mg/m²	IV	drip 1 hours, day 1,15		
or					
Paclitaxel	60 mg/m²	IV	drip 1 hours, day 1,8,15		
健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)，且至多使用 12 個月。				

Heymach JV, Harpole D, Mitsudomi T, et al. Perioperative Durvalumab for resectable non-small-cell lung cancer. N Engl J Med 2023;389:1672-1684.

Durvalumab + Cisplatin+ Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Durvalumab	1500 mg	IV	drip 30-60 mins, day 1	every 21 days for 4 cycles	any histology
Cisplatin	50-75 mg/m²	IV	drip 6 hours, day 1		
Paclitaxel	180 mg/m²	IV	drip 1 hour, day 1		

or					
Paclitaxel	90 mg/m²	IV	drip 1 hours, day 1,15		
or					
Paclitaxel	60 mg/m²	IV	drip 1 hours, day 1,8,15		
健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)，且至多使用 12 個月。				

Heymach JV, Harpole D, Mitsudomi T, et al. Perioperative Durvalumab for resectable non-small-cell lung cancer. N Engl J Med 2023;389:1672-1684.

Neoadjuvant Chemotherapy

Preferred (non-squamous)

Cisplatin+Pemetrexed

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, days 1	every 21 days for 4 cycles	
Pemetrexed	500 mg/m^2	IV	drip 15 mins, days 1		
健保給付	1.限用於(1) 與 Cisplatin 併用於惡性肋膜間質細胞瘤。 2.以含鉑之化學療法治療或 70 歲以上接受過第一線化學治療，但仍失敗之局部晚期或轉 移性非小細胞肺癌病患顯著鱗狀細胞組織型除外之單一藥物治療。 3.與含鉑類之化學療法併用，作為治療局部晚期或轉移性非小細胞肺癌 顯著鱗狀細胞組織型除外 之第一線化療用藥，且限用於 ECOG 為 0~1 之病患。 4.Pemetrexed(限使用 Pexeda 、 Apeta 或 Pemetrexed Sandoz) 與 Pembrolizumab 與含鉑類之化學療法併用於轉移性，不具有 EGFR/ALK/ROS 1 腫瘤基因異常的非鱗狀非小細胞肺癌的第 一線治療，患者需符合免疫檢查點抑制劑之藥品給付規定。 5.與 amivantamab 及 Carboplatin 併用於罹患帶有表皮生長因子受體 (EGFR) exon 20 插入突變之局部晚期或轉移性非小細胞肺癌的成人病人，作為第一線治療。				

Kreuter M, Vansteenkiste J, Fishcer JR, et al. Randomized phase 2 trial on refinement of early-stage NSCLC adjuvant Chemotherapy with Cisplatin and Pemetrexed versus Cisplatin and vinorelbine: the TREAT study. Ann Oncol 2013;24:986-992.

Preferred (squamous)

Cisplatin+Gemcitabine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, days 1	every 21 days for 4 cycles	
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, days 1 and 8		

Vokes EE, Herndon II JE, Green MR, et al: Randomi zed Phase II Study of Cisplatin With Gemcitabine or Paclitaxel or Vinorelbine as Induction Chemotherapy Followed by Concomitant Chemoradiotherapy for Stage IIIB Non–Small-Cell Lung Cancer: Cancer and Leukemia Group B Study 9431 J Clin Oncol 2002; 20:4191-4198

Cisplatin+Docetaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, days 1	every 21 days for 4 cycles	
Docetaxel	60 mg/m^2	IV	drip 1 hour, days 1		

Fossella F, Pereira JR, von Pawel J, et al. Randomized, multinational, phase III study of docetaxel plus platinum combinations versus vinorelbine plus Cisplatin for advanced non-small-cell lung cancer: the TAX 326 study group. J Clin Oncol 2003;21:3016-3024.

Other Recommended

Cisplatin+Vinorelbine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, days 1	every 28 days for 4 cycles	
Vinorelbine	60-80 mg/ m^2	PO	days 1, 8, 15, and 22		

1.Winton T, Livingston R, Johnson D, et al. Vinorelbine plus Cisplatin vs. observation in resected non-small-lung cancer. N Engl J Med 2005;352:2589-2597.
2.Arriagada R, Bergman B, Dunant A, et al. The International Adjuvant Lung Cancer Trial Collaborative Group. Cisplatin-based adjuvant Chemotherapy in patients with completely resected non-small cell lung cancer. N Engl J Med 2004;350:351-360.
3.Douillard JY, Rosell R, De Lena M, et al. Adjuvant vinorelbine plus Cisplatin versus observation in patients with completely resected stage IB-IIIA non-small-cell lung cancer (Adjuvant Navelbine International Trialist Association [ANITA]): a randomised controlled trial. Lancet Oncol 2006;7:719-727.

Cisplatin+ Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50- 75 mg/m^2	IV	drip 6 hours, day 1	every 21 days for 4 cycles	
Paclitaxel	60 mg/m^2	IV	drip 1 hours, day 1, day 8 , day 15		

Strauss GM, Herndon III JE, Maddaus MA, et al. Adjuvant Paclitaxel plus Carboplatin compared with observation in stage IB non-small cell lung cancer: CALGB 9633 with the Cancer and Leukemia Group B, Radiation Therapy Oncology Group, and North Central Cancer Treatment Group Study Groups. J Clin Oncol 2008;26:5043- 5051.

Cisplatin+ Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50- 75 mg/m^2	IV	drip 6 hours, day 1	every 21 days for 4 cycles	
Paclitaxel	90 mg/m^2	IV	drip 1 hours,day 1, day 15		

Strauss GM, Herndon III JE, Maddaus MA, et al. Adjuvant Paclitaxel plus Carboplatin compared with observation in stage IB non-small cell lung cancer: CALGB 9633 with the Cancer and Leukemia Group B, Radiation Therapy Oncology Group, and North Central Cancer Treatment Group Study Groups. J Clin Oncol 2008;26:5043- 5051.

Cisplatin+ Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50- 75 mg/m^2	IV	drip 6 hours, day 1	every 21 days for 4 cycles	
Paclitaxel	180 mg/m^2	IV	drip 1 hours, day 1		

Strauss GM, Herndon III JE, Maddaus MA, et al. Adjuvant Paclitaxel plus Carboplatin compared with observation in stage IB non-small cell lung cancer: CALGB 9633 with the Cancer and Leukemia Group B, Radiation Therapy Oncology Group, and North Central Cancer Treatment Group Study Groups. J Clin Oncol 2008;26:5043- 5051.

Useful in Certain Circumstances

• Chemotherapy Regimens for Patients with Comorbidities or Patients Not Able to Tolerate Cisplatin

Carboplatin+Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, day 1	every 21 days for 4 cycles	
Paclitaxel	60 mg/m^2	IV	drip 1 hours, day 1, day 8 , day 15		
or					
Paclitaxel	90 mg/m^2	IV	drip 1 hours, day 1, day 15	every 21 days for 4 cycles	
or					
Paclitaxel	180 mg/m^2	IV	drip 1 hours, day 1	every 21 days for 4 cycles	

Strauss GM, Herndon III JE, Maddaus MA, et al. Adjuvant Paclitaxel plus Carboplatin compared with observation in stage IB non-small cell lung cancer: CALGB 9633 with the Cancer and Leukemia Group B, Radiation Therapy Oncology Group, and North Central Cancer Treatment Group Study Groups. J Clin Oncol 2008;26:5043- 5051.

Carboplatin+Gemcitabine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, day 1	every 21 days for 4 cycles	
Gemcitabine	1000 mg/m^2	IV	drip 1 hours, days 1 and 8		

Usami N, Yokoi K, Hasegawa Y, et al. Phase II study of Carboplatin and gemcitabine as adjuvant Chemotherapy in patients with completely resected non-small cell lung cancer: a report from the Central Japan Lung Study Group, CJLSG 0503 trial. Int J Clin Oncol 2010;15:583-587.

Carboplatin+Pemetrexed

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, day 1	every 21 days for 4 cycles	for non-squamous
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		

Ref.	

Zhang L, Ou W, Liu Q, et al. Pemetrexed plus Carboplatin as adjuvant Chemotherapy in patients with curative resected non-squamous non-small cell lung cancer. Thorac Cancer 2014;5:50-56.

**All Chemotherapy regimens listed above can be used for sequential Chemotherapy/RT.

Adjuvant Therapy

- 輔助化學治療藥物給予時，應依各藥物特性，配合病人狀況，例如：BSA、WBC 及特定之血液檢查值等，調整適當藥物劑量。

Cisplatin + Pemetrexed(Preferred non-squamous)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		

Kreuter M, Vansteenkiste J, Fishcer JR, et al. Randomized phase 2 trial on refinement of early-stage NSCLC adjuvant Chemotherapy with Cisplatin and Pemetrexed versus Cisplatin and vinorelbine: the TREAT study. Ann Oncol 2013;24:986-992.

Cisplatin + Gemcitabine(Preferred squamous)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, Day 1 or 15	every 21 days for 4 cycles	(adjusted by Ccr)
Gemcitabine	1000 mg/m^2	IV	drip 6 hours, Day 1 or 15		

Pérol M, Chouaid C, Pérol D, et al. Randomized, phase III study of gemcitabine or erlotinib maintenance Therapy versus observation, with predefined second-line treatment, after Cisplatin-gemcitabine induction Chemotherapy in advanced non-small-cell lung cancer. J Clin Oncol 2012;30:3516-3524.

Cisplatin+Docetaxel(squamous)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, days 1 or 8	Every 3 weeks for 4 cycles	(adjusted by Ccr)
Docetaxel	25-35 mg/m^2	IV	drip 1 hours, days 1, 8		

Fossella F, Pereira JR, von Pawel J, et al. Randomized, multinational, phase III study of docetaxel plus platinum combinations versus vinorelbine plus Cisplatin for advanced non-small-cell lung cancer: the TAX 326 study group. J Clin Oncol 2003;21:3016-3024.

Cisplatin+Docetaxel(60)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Docetaxel	60 mg/m^2	IV	drip 60 mins, day 1		

Fossella F, Pereira JR, von Pawel J, et al. Randomized, multinational, phase III study of docetaxel plus platinum combinations versus vinorelbine plus Cisplatin for advanced non-small-cell lung cancer: the TAX 326 study group. J Clin Oncol 2003;21:3016-3024.

Other Recommended

Cisplatin+Vinorelbine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, days 1	Every 3 weeks for 4 cycles	(adjusted by Ccr)
Vinorelbine	60-80 mg/m^2	PO	Day 1 or 8,(15)		

Douillard JY, Rosell R, De Lena M, et al. (2006). Adjuvant vinorelbine plus Cisplatin versus observation in patients with completely resected stage IB-IIIA non-small-cell lung cancer (Adjuvant Navelbine International Trialist Association [ANITA]): a randomised controlled trial. Lancet Oncol ,7,719-727.

Carboplatin+Vinorelbine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, Day 1 or 8,(15)	Every 3 weeks for 4	(if Ccr <60ml/mins or

				cycles	Cisplatin not suitable)
Vinorelbine	60-80 mg/m^2	PO	drip 1 hours, Day 1 or 8,(15)		

Douillard JY, Rosell R, De Lena M, et al. (2006). Adjuvant vinorelbine plus Cisplatin versus observation in patients with completely resected stage IB-IIIA non-small-cell lung cancer (Adjuvant Navelbine International Trialist Association [ANITA]): a randomised controlled trial. Lancet Oncol ,7,719-727.

Cisplatin +Etoposide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, days 1	every 3 weeks for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Etoposide	80-100 mg/m^2	IV	drip 1hour, Day 1-3		

Fossella F, Pereira JR, von Pawel J, et al. Randomized, multinational, phase III study of docetaxel plus platinum combinations versus vinorelbine plus Cisplatin for advanced non-small-cell lung cancer: the TAX 326 study group. J Clin Oncol 2003;21:3016-3024.

Carboplatin + Paclitaxel(60)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, Day 1 or 15	Every 3 weeks for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Paclitaxel	60 mg/m^2	IV	drip 1 hours, Day 1, 8, 15		

Strauss GM, Herndon III JE, Maddaus MA, et al. Adjuvant Paclitaxel plus Carboplatin compared with observation in stage IB non-small cell lung cancer: CALGB 9633 with the Cancer and Leukemia Group B, Radiation Therapy Oncology Group, and North Central Cancer Treatment Group Study Groups. J Clin Oncol 2008;26:5043- 5051.

Carboplatin + Paclitaxel(90)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, Day 1 or 15	Every 3 weeks for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Paclitaxel	90 mg/m^2	IV	drip 1 hours, D1,15		

Strauss GM, Herndon III JE, Maddaus MA, et al. Adjuvant Paclitaxel plus Carboplatin compared with observation in stage IB non-small cell lung cancer: CALGB 9633 with the

Cancer and Leukemia Group B, Radiation Therapy Oncology Group, and North Central Cancer Treatment Group Study Groups. J Clin Oncol 2008;26:5043- 5051.

Carboplatin + Paclitaxel(180)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, Day 1 or 15	Every 3 weeks for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Paclitaxel	180 mg/m^2	IV	drip 1 hours, D1		

Strauss GM, Herndon III JE, Maddaus MA, et al. Adjuvant Paclitaxel plus Carboplatin compared with observation in stage IB non-small cell lung cancer: CALGB 9633 with the Cancer and Leukemia Group B, Radiation Therapy Oncology Group, and North Central Cancer Treatment Group Study Groups. J Clin Oncol 2008;26:5043- 5051.

Carboplatin + Gemcitabine(squamous)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	IV drip 1 hours, Day 1 or 15	every 21 days for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Gemcitabine	1000 mg/m^2	IV	IV drip 30 mins, Day 1, 8		

1.Vokes EE, Herndon II JE, Green MR, et al: Randomi zed Phase II Study of Cisplatin With Gemcitabine or Paclitaxel or Vinorelbine as Induction Chemotherapy Followed by Concomitant ChemoradioTherapy for Stage IIIB Non–Small-Cell Lung Cancer: Cancer and Leukemia Group B Study 9431 J Clin Oncol 2002; 20:4191-4198
2.Usami N, Yokoi K, Hasegawa Y, et al. Phase II study of Carboplatin and gemcitabine as adjuvant Chemotherapy in patients with completely resected non-small cell lung cancer: a report from the Central Japan Lung Study Group, CJLSG 0503 trial. Int J Clin Oncol 2010;15:583-587.

Carboplatin + Pemetrexed(non-squamous)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, day 1	every 21 days for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		

Zhang L, Ou W, Liu Q, et al. Pemetrexed plus Carboplatin as adjuvant Chemotherapy in patients with curative resected non-squamous non-small cell lung cancer. Thorac Cancer 2014;5:50-56.

Cisplatin + Paclitaxel(60)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days for 4 cycles	(adjusted by Ccr)
Paclitaxel	60 mg/m^2	IV	drip 30 mins, Day 1, 8, 15		

Strauss GM, Herndon III JE, Maddaus MA, et al. Adjuvant Paclitaxel plus Carboplatin compared with observation in stage IB non-small cell lung cancer: CALGB 9633 with the Cancer and Leukemia Group B, Radiation Therapy Oncology Group, and North Central Cancer Treatment Group Study Groups. J Clin Oncol 2008;26:5043- 5051.

Cisplatin + Paclitaxel(90)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days for 4 cycles	(adjusted by Ccr)
Paclitaxel	60 mg/m^2	IV	drip 30 mins, Day 1, 8, 15		

Strauss GM, Herndon III JE, Maddaus MA, et al. Adjuvant Paclitaxel plus Carboplatin compared with observation in stage IB non-small cell lung cancer: CALGB 9633 with the Cancer and Leukemia Group B, Radiation Therapy Oncology Group, and North Central Cancer Treatment Group Study Groups. J Clin Oncol 2008;26:5043- 5051.

Cisplatin + Paclitaxel(180)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days for 4 cycles	(adjusted by Ccr)
Paclitaxel	180 mg/m^2	IV	drip 1 hours, Day 1		

Strauss GM, Herndon III JE, Maddaus MA, et al. Adjuvant Paclitaxel plus Carboplatin compared with observation in stage IB non-small cell lung cancer: CALGB 9633 with the Cancer and Leukemia Group B, Radiation Therapy Oncology Group, and North Central Cancer Treatment Group Study Groups. J Clin Oncol 2008;26:5043- 5051.

UFUR

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
UFUR	300-600 mg	PO	BID	for 2years	only for Adenocarcinoma (T2 and tumor greater than or equal to 3cm)

健保給付	用於病理分期為 T2 且腫瘤 greater than or equal to3cm 之肺腺癌病人，作為手術後輔助治療，使用期限以二年為限。

Kato, H., et al., A randomized trial of adjuvant Chemotherapy with uracil–tegafur for adenocarcinoma of the lung. New England Journal of Medicine, 2004. 350(17): p. 1713-1721.

Concurrent Chemoradiation Regimens

Preferred (nonsquamous)

Carboplatin + Pemetrexed

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 6 hours, day 1	every 21 days for 4 cycles; concurrent thoracic RT	
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		

Choy H, Gerber DE, Bradley JD, et al. Concurrent Pemetrexed and radiation Therapy in the treatment of patients with inoperable stage III non-small cell lung cancer: a systematic review of completed and ongoing studies. Lung Cancer 2015;87:232-240.

Cisplatin + Pemetrexed

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days for 3 cycles; concurrent thoracic RT	± additional 4 cycles of Pemetrexed 500 mg/m2
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		

Choy H, Gerber DE, Bradley JD, et al. Concurrent Pemetrexed and radiation Therapy in the treatment of patients with inoperable stage III non-small cell lung cancer: a systematic review of completed and ongoing studies. Lung Cancer 2015;87:232-240.

Paclitaxel + Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	45–50 mg/m^2	IV	drip 1 hour, weekly	every 21 days for 4	± additional 2 cycles

Carboplatin	AUC 2	IV	drip 1 hour, weekly	cycles; concurrent thoracic RT	every 21 days of Paclitaxel 200 mg/m^2 and Carboplatin AUC 6

Belani CP, Choy H, Bonomi P, et al. Combined chemoradioTherapy regimens of Paclitaxel and Carboplatin for locally advanced non-small- cell lung cancer: a randomized phase II locally advanced multi-modality protocol. J Clin Oncol 2005;23(25):5883-5891.

Cisplatin + Etoposide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 6hour,days 1, 8, 29, and 36	every 21 days for 4 cycles; concurrent thoracic RT	
Etoposide	50 mg/m^2	IV	drip 1hour, days 1–5 and 29–33		

Albain KS, Crowley JJ, Turrisis AT III, et al. (2002). Concurrent Cisplatin, Etoposide, and chest radioTherapy in pathologic stage IIIB non-small-cell lung cancer: a Southwest Oncology Group phase II study, SWOG 9019. J Clin Oncol ,20, 3454-3460.

Consolidation Therapy

Consolidation Immunotherapy for Patients with Unresectable Stage II/III NSCLC,

PS 0–1, and No Disease Progression After Definitive Concurrent Chemoradiation

Durvalumab

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Durvalumab	10 mg/kg	IV	drip 30-60 mins, day 1	every 2 weeks for up to 12 months	1.patients with a body weight of over 30 kg) 2.category 1 for stage III; category 2A for stage II

Antonia SJ, Villegas A, Daniel D, et al. Overall survival with Durvalumab after Chemoradiotherapy in stage III NSCLC. N Engl J Med 2018;379:2342-2530

Durvalumab

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Durvalumab	1500 mg	IV	drip 30-60 mins, day 1	every 4 weeks for up to 12 months	1.patients with a body weight of over 30 kg) 2.category 1 for stage III; category 2A for stage II

Antonia SJ, Villegas A, Daniel D, et al. Overall survival with Durvalumab after Chemoradiotherapy in stage III NSCLC. N Engl J Med 2018;379:2342-2530

Osimertinib

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Osimertinib	80 mg	PO	QD	every 28 days for 3 years	

Lu S, Kato T, Dong X, et al. Osimertinib after Chemoradiotherapy in stage III EGFR-mutated NSCLC. N Engl J Med 2024;391:585-597.

Advanced/Metastasis Therapy

Immunotherapy

Principles of biomarker-directed Therapy for advanced or metastatic disease

PD-L1 greater than or equal to 50% FIRST-LINE THERAPY (PS 0–2) Preferred

Pembrolizumab 200mg IV Q3W followed by maintenance Pembrolizumab(category 1)

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Pembrolizumab

健保給付	I.轉移性鱗狀非小細胞肺癌第一線用藥：限 Pembrolizumab 與 Carboplatin 及 Paclitaxel 併用至多使用 4 個療程，接續單用 Pembrolizumab 治療。 II.轉移性非鱗狀非小細胞肺癌第一線：限 Pembrolizumab 與 Pemetrexed(限使用 Pexeda、Apeta 或 Pemetrexed Sandoz)及含鉑類化學療法併用，或限 atezolizumab 與 Bevacizumab(限使用 Alymsys、Avastin、Abevmy、Vegzelma 或 Mvasi)及 Carboplatin、Paclitaxel 併用，做為轉移性且不具有 EGFR/ALK/ROS-1 腫瘤基因異常的非鱗狀非小細胞肺癌第一線治療。 III.非小細胞肺癌第一線用藥：轉移性非小細胞肺癌成人病人，非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型。 IV.鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 V.肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。

1.Reck M, et al. Pembrolizumab versus Chemotherapy for PD L1 POsitive non small cell lung cancer. N Engl J Med 2016;375:1823-1833.
2.Mok TSK, et al. Pembrolizumab versus Chemotherapy for previously untreated, PD-L1-expressing, locally advanced or metastatic non-small-cell lung cancer (Keynote-042): a randomized open-label, controlled, phase 3 trial. Lancet 2019;393:1819-1830.

Carboplatin+ Pemetrexed + Pembrolizumab followed by maintenance Pemetrexed + Pembrolizumab, then Pemetrexed (category 1)(for Adenocarcinoma, Large Cell, NSCLC NOS)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	followed by maintenance Pemetrexed+Pembrolizumab, then Pemetrexed
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Pembrolizumab	200 mg	IV	drip 30 mins, day 1		

健保給付	I. 轉移性鱗狀非小細胞肺癌第一線用藥：限 Pembrolizumab 與 Carboplatin 及 Paclitaxel 併用至多使用 4 個療程，接續單用 Pembrolizumab 治療。 II. 轉移性非鱗狀非小細胞肺癌第一線：限 Pembrolizumab 與 Pemetrexed(限使用 Pexeda、Apeta 或 Pemetrexed Sandoz)及含鉑類化學療法併用，或限 atezolizumab 與 Bevacizumab(限使用 Alymsys、Avastin、Abevmy、Vegzelma 或 Mvasi)及 Carboplatin、Paclitaxel 併用，做為轉移性且不具有 EGFR/ALK/ROS-1 腫瘤基因異常的非鱗狀非小細胞肺癌第一線治療。 III. 非小細胞肺癌第一線用藥：轉移性非小細胞肺癌成人病人，非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型。 IV. 鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 V. 肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。

1.Gandhi L, et al. Pembrolizumab plus Chemotherapy in metastatic non-small-cell lung cancer. N Engl J Med 2018;378:2078-2092.
2.Langer CJ, et al. Carboplatin and Pemetrexed with or without Pembrolizumab for advanced, non squamous non small cell lung cancer: a randomised, phase 2 cohort of the open label KEYNOTE 021 study. Lancet Oncol 2016;17:1497-1508.

Cisplatin + Pemetrexed + Pembrolizumab followed by maintenance Pemetrexed + Pembrolizumab, then Pemetrexed (category 1)(for Adenocarcinoma, Large Cell, NSCLC NOS)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days	followed by maintenance Pemetrexed + Pembrolizumab, then Pemetrexed
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Pembrolizumab	200 mg	IV	drip 30 mins, day 1		

健保給付	I.轉移性鱗狀非小細胞肺癌第一線用藥：限 Pembrolizumab 與 Carboplatin 及 Paclitaxel 併用至多使用 4 個療程，接續單用 Pembrolizumab 治療。 II.轉移性非鱗狀非小細胞肺癌第一線：限 Pembrolizumab 與 Pemetrexed(限使用 Pexeda、Apeta 或 Pemetrexed Sandoz)及含鉑類化學療法併用，或限 atezolizumab 與 Bevacizumab(限使用 Alymsys、Avastin、Abevmy、Vegzelma 或 Mvasi)及 Carboplatin、Paclitaxel 併用，做為轉移性且不具有 EGFR/ALK/ROS-1 腫瘤基因異常的非鱗狀非小細胞肺癌第一線治療。 III.非小細胞肺癌第一線用藥：轉移性非小細胞肺癌成人病人，非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型。 IV.鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 VI.肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。

1.Gandhi L, et al. Pembrolizumab plus Chemotherapy in metastatic non-small-cell lung cancer. N Engl J Med 2018;378:2078-2092.
2.Langer CJ, et al. Carboplatin and Pemetrexed with or without Pembrolizumab for advanced, non squamous non small cell lung cancer: a randomised, phase 2 cohort of the open label KEYNOTE 021 study. Lancet Oncol 2016;17:1497-1508.

Carboplatin + Paclitaxel+Pembrolizumab followed by maintenance Pembrolizumab (category 1)
(for Squamous Cell Carcinoma)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	followed by maintenance Pembrolizumab
Paclitaxel	180 mg/m^2	IV	drip 1 hour, day 1		
Pembrolizumab	200 mg	IV	drip 30 mins, day 1		
健保給付	I.轉移性鱗狀非小細胞肺癌第一線用藥：限 Pembrolizumab 與 Carboplatin 及 Paclitaxel 併用至多使用 4 個療程，接續單用 Pembrolizumab 治療。 II.轉移性非鱗狀非小細胞肺癌第一線：限 Pembrolizumab 與 Pemetrexed(限使用 Pexeda、Apeta 或 Pemetrexed Sandoz)及含鉑類化學療法併用，或限 atezolizumab 與 Bevacizumab(限使用 Alymsys、Avastin、Abevmy、Vegzelma 或 Mvasi)及 Carboplatin、Paclitaxel 併用，做為轉移性且不具有 EGFR/ALK/ROS-1 腫瘤基因異常的非鱗狀非小細胞肺癌第一線治療。 III.非小細胞肺癌第一線用藥：轉移性非小細胞肺癌成人病人，非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型。 IV.鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫				

	瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 V.肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。

Paz-Ares L, et al. Pembrolizumab plus Chemotherapy for squamous non-small-cell lung cancer. N Engl J Med 2018;379:2040-2051.

Carboplatin + Albumins-bound Paclitaxel +Pembrolizumab followed by maintenance Pembrolizumab (category 1)
(for Squamous Cell Carcinoma)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	followed by maintenance Pembrolizumab
Albumins-bound Paclitaxel	100 mg/m^2	IV	drip 30 mins, day 1,8,15		
Pembrolizumab	200 mg	IV	drip 30 mins, day 1		
健保給付	I.轉移性鱗狀非小細胞肺癌第一線用藥：限 Pembrolizumab 與 Carboplatin 及 Paclitaxel 併用至多使用 4 個療程，接續單用 Pembrolizumab 治療。 II.轉移性非鱗狀非小細胞肺癌第一線：限 Pembrolizumab 與 Pemetrexed(限使用 Pexeda、Apeta 或 Pemetrexed Sandoz)及含鉑類化學療法併用，或限 atezolizumab 與 Bevacizumab(限使用 Alymsys、Avastin、Abevmy、Vegzelma 或 Mvasi)及 Carboplatin、Paclitaxel 併用，做為轉移性且不具有 EGFR/ALK/ROS-1 腫瘤基因異常的非鱗狀非小細胞肺癌第一線治療。 III.非小細胞肺癌第一線用藥：轉移性非小細胞肺癌成人病人，非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型。 IV.鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 V.肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

Paz-Ares L, et al. Pembrolizumab plus Chemotherapy for squamous non-small-cell lung cancer. N Engl J Med 2018;379:2040-2051.

Atezolizumab followed by maintenance Atezolizumab (category 1)(for Any hitology)

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Atezolizumab	1200 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Atezolizumab

Herbst RS, et al. Atezolizumab for first-line treatment of PD-L1-selected patients with NSCLC. N Engl J Med 2020;383:1328-1339.

Cemiplimab-rwlc followed by maintenance Cemiplimab-rwlc (category 1)

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cemiplimab-rwlc	350 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Cemiplimab-rwlc
健保給付	非小細胞肺癌第一線用藥(鱗狀、非鱗狀非小細胞肺癌第一線用藥(單用))：轉移性非小細胞肺癌成人病人，非鱗狀癌者需為 EGFR/ALK/ROS-1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型。				

Sezer A, et al. Cemiplimab monotherapy for first-line treatment of advanced non-small-cell lung cancer with PD-L1 of at least 50%: a multicentre, open-label, global, phase 3, randomised, controlled trial. Lancet 2021;397:592-604.

Carboplatin+ Pemetrexed + Cemiplimab-rwlc followed by maintenance Pemetrexed + Cemiplimab-rwlc(category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	followed by maintenance Pemetrexed + Cemiplimab-rwlc
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Cemiplimab-rwlc	350 mg	IV	drip 30 mins, day 1		

Gogishvili M, et al. Cemiplimab plus chemotherapy versus chemotherapy alone in non-small cell lung cancer: a randomized, controlled, double-blind phase 3 trial. Nat Med 2022;28:2374-2380.

Cisplatin + Pemetrexed + Cemiplimab-rwlc followed by maintenance Pemetrexed + Cemiplimab-rwlc

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	60-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days	followed by maintenance Pemetrexed + Cemiplimab-rwlc
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Cemiplimab-rwlc	350 mg	IV	drip 30 mins, day 1		

Gogishvili M, et al. Cemiplimab plus chemotherapy versus chemotherapy alone in non-small cell lung cancer: a randomized, controlled, double-blind phase 3 trial. Nat Med 2022;28:2374-2380.

Other Recommended

Carboplatin + Paclitaxel + Bevacizumab + Atezolizumab followed by maintenance Bevacizumab ± Atezolizumab (category 1)(for Adenocarcinoma, Large Cell, NSCLC NOS)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	followed by maintenance Bevacizumab ±Atezolizumab
Paclitaxel	180 mg/m^2	IV	drip 1 hour, day 1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins, day 1		
Atezolizumab	1200 mg	IV	drip 30 mins, day 1		

Socinski M, et al. Atezolizumab for first-line treatment of metastatic nonsquamous NSCLC. N Engl J Med 2018;378:2288-2301.

Carboplatin + Albumins-bound Paclitaxel + Atezolizumab followed by maintenance Atezolizumab (for Adenocarcinoma, Large Cell, NSCLC NOS)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	followed by maintenance Atezolizumab
Albumins-bound Paclitaxel	100 mg/m^2	IV	drip 1 hour, day 1,8,15		
Atezolizumab	1200 mg	IV	drip 30 mins, day 1		
健保給付	I.轉移性非鱗狀非小細胞肺癌第一線：限 Pembrolizumab 與 Pemetrexed(限使用 Pexeda、Apeta 或 Pemetrexed Sandoz)及含鉑類化學療法併用，或限 atezolizumab 與 Bevacizumab(限使用 Alymsys、Avastin、Abevmy、Vegzelma 或 Mvasi)及 Carboplatin、Paclitaxel 併用，做為轉移性且不具有 EGFR/ALK/ROS-1 腫瘤基因異常的非鱗狀非小細胞肺癌第一線治療。 II.鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 III.肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

West H, et al. Atezolizumab in combination with Carboplatin plus nab-Paclitaxel Chemotherapy compared with Chemotherapy alone as first-line treatment for metastatic non-squamous non-small-cell lung cancer (IMPOwer130): a multicentre, randomised, open-label, phase 3 trial. Lancet Oncol 2019;20:924-937.

Nivolumab + Ipilimumab + Pemetrexed + Carboplatin followed by maintenance Ipilimumab+Nivolumab(category 1) (for Adenocarcinoma, Large Cell, NSCLC NOS)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	360 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Ipilimumab+Nivolumab
Ipilimumab	50 mg	IV	drip 30 mins, day 1		
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1		

Paz-Ares L, et al. First-line Nivolumab plus Ipilimumab combined with two cycles of Chemotherapy in patients with non-small-cell lung cancer (CheckMate 9LA): an international, randomised, open-label, phase 3 trial. Lancet Oncol 2021;22;198-211.

Nivolumab + Ipilimumab + Pemetrexed + Cisplatin followed by maintenance Ipilimumab+Nivolumab (category 1) (for Adenocarcinoma, Large Cell, NSCLC NOS)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	360 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Ipilimumab+Nivolumab
Ipilimumab	50 mg	IV	drip 30 mins, day 1		
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1		

Paz-Ares L, et al. First-line Nivolumab plus Ipilimumab combined with two cycles of Chemotherapy in patients with non-small-cell lung cancer (CheckMate 9LA): an international, randomised, open-label, phase 3 trial. Lancet Oncol 2021;22;198-211.

Tremelimumab-actl + Durvalumab + Carboplatin + Albumins-bound Paclitaxel(category 2B)
(for Adenocarcinoma, Large Cell, NSCLC NOS)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1	every 21 days	
Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1		
Albumins-bound Paclitaxel	100 mg/m^2	IV	drip 1 hour, day 1,8,15		
健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)PD)，且至多使用 12 個月。				

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with Chemotherapy as first-line Therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Tremelimumab-actl + Durvalumab + (Carboplatin or Cisplatin) + Pemetrexed(category 2B)
(for Adenocarcinoma, Large Cell, NSCLC NOS)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1	every 21 days	
Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1		
or					
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1		
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		

健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)，且至多使用 12 個月。

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with Chemotherapy as first-line Therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Nivolumab + Ipilimumab + Paclitaxel + Carboplatin followed by maintenance Ipilimumab + Nivolumab (category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Ipilimumab+Nivolumab
Ipilimumab	1 mg/kg	IV	drip 30 mins, day 1		
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1		
Paclitaxel	180 mg/m^2	IV	drip 1 hour, day 1		

Paz-Ares L, et al. First-line Nivolumab plus Ipilimumab combined with two cycles of Chemotherapy in patients with non-small-cell lung cancer (CheckMate 9LA): an international, randomised, open-label, phase 3 trial. Lancet Oncol 2021;22;198-211.

Tremelimumab-actl + Durvalumab + Carboplatin + albumins-bound Paclitaxel followed by maintenance Durvalumab (category 2B) for Squamous Cell Carcinoma

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Durvalumab
Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1		
Albumins-bound Paclitaxel	100 mg/m^2	IV	drip 1 hour, day 1,8,15		

健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)，且至多使用 12 個月。

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with Chemotherapy as first-line Therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Tremelimumab-actl + Durvalumab + Carboplatin + Gemcitabine followed by Maintenance Durvalumab (category 2B) for Squamous Cell Carcinoma

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1	every 21 days	
Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1		
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, day 1		
健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)，且至多使用 12 個月。				

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with Chemotherapy as first-line Therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Tremelimumab-actl + Durvalumab + Cisplatin + Gemcitabine followed by Maintenance Durvalumab (category 2B)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1	every 21 days	
Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1		

Gemcitabine	1000 mg/m^2	IV	drip 30 mins, day 1		
健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)PD)，且至多使用 12 個月。				

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with Chemotherapy as first-line Therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Carboplatin+ Paclitaxel + Cemiplimab-rwlc followed by maintenance Pemetrexed + Cemiplimab-rwlc(category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	followed by maintenance Pemetrexed + Cemiplimab-rwlc
Paclitaxel	180 mg/m^2	IV	drip 1 hour, day 1		
Cemiplimab-rwlc	350 mg	IV	drip 30 mins, day 1		

Gogishvili M, et al. Cemiplimab plus chemotherapy versus chemotherapy alone in non-small cell lung cancer: a randomized, controlled, double-blind phase 3 trial. Nat Med 2022;28:2374-2380.

Cisplatin + Paclitaxel + Cemiplimab-rwlc followed by maintenance Pemetrexed + Cemiplimab-rwlc

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	60-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days	followed by maintenance Pemetrexed + Cemiplimab-rwlc
Paclitaxel	180 mg/m^2	IV	drip 1 hour, day 1		
Cemiplimab-rwlc	350 mg	IV	drip 30 mins, day 1		

Gogishvili M, et al. Cemiplimab plus chemotherapy versus chemotherapy alone in non-small cell lung cancer: a randomized, controlled, double-blind phase 3 trial. Nat Med 2022;28:2374-2380.

Useful in Certain Circumstances

Nivolumab + Ipilimumab followed by maintenance Ipilimumab + Nivolumab (category 1)(for Any histology)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Ipilimumab+Nivolumab
Ipilimumab	1 mg/kg	IV	drip 30 mins, day 1		

Hellmann MD, et al. Nivolumab plus Ipilimumab in advanced non-small-cell lung cancer. N Engl J Med 2019;381:2020-2031.

PD-L1 ≥1%–49% FIRST-LINE THERAPY (PS 0–2)Preferred

Carboplatin + Pemetrexed + Pembrolizumab followed by maintenance Pemetrexed + Pembrolizumab then Pemetrexed (category 1)Adenocarcinoma, Large Cell, NSCLC NOS

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	followed by maintenance Pemetrexed+Pembrolizumab, then Pemetrexed
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Pembrolizumab	200 mg	IV	drip 30 mins, day 1		
健保給付	I.轉移性鱗狀非小細胞肺癌第一線用藥：限 Pembrolizumab 與 Carboplatin 及 Paclitaxel 併用至多使用 4 個療程，接續單用 Pembrolizumab 治療。 II.轉移性非鱗狀非小細胞肺癌第一線：限 Pembrolizumab 與 Pemetrexed(限使用 Pexeda、Apeta 或 Pemetrexed Sandoz)及含鉑類化學療法併用，或限 atezolizumab 與 Bevacizumab(限使用 Alymsys、Avastin、Abevmy、Vegzelma 或 Mvasi)及 Carboplatin、Paclitaxel 併用，做為轉移性且不具有 EGFR/ALK/ROS-1 腫瘤基因異常的非鱗狀非小細胞肺癌第一線治療。 III.非小細胞肺癌第一線用藥：轉移性非小細胞肺癌成人病人，非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型。 IV.鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 V.肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

1.Gandhi L, et al. Pembrolizumab plus Chemotherapy in metastatic non-small-cell lung cancer. N Engl J Med 2018;378:2078-2092.

2.Langer CJ, et al. Carboplatin and Pemetrexed with or without Pembrolizumab for advanced, non squamous non small cell lung cancer: a randomised, phase 2 cohort of the open label KEYNOTE 021 study. Lancet Oncol 2016;17:1497-1508.

Cisplatin + Pemetrexed + Pembrolizumab followed by maintenance Pemetrexed + Pembrolizumab then Pemetrexed (category 1)(Adenocarcinoma, Large Cell, NSCLC NOS

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days	followed by maintenance Pemetrexed+Pembrolizumab, then Pemetrexed
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Pembrolizumab	200 mg	IV	drip 30 mins, day 1		
健保給付	I. 轉移性鱗狀非小細胞肺癌第一線用藥：限 Pembrolizumab 與 Carboplatin 及 Paclitaxel 併用至多使用 4 個療程，接續單用 Pembrolizumab 治療。 II. 轉移性非鱗狀非小細胞肺癌第一線：限 Pembrolizumab 與 Pemetrexed(限使用 Pexeda、Apeta 或 Pemetrexed Sandoz)及含鉑類化學療法併用，或限 atezolizumab 與 Bevacizumab(限使用 Alymsys、Avastin、Abevmy、Vegzelma 或 Mvasi)及 Carboplatin、Paclitaxel 併用，做為轉移性且不具有 EGFR/ALK/ROS-1 腫瘤基因異常的非鱗狀非小細胞肺癌第一線治療。 II. 非小細胞肺癌第一線用藥：轉移性非小細胞肺癌成人病人，非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型。 III. 鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 V. 肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

1.Gandhi L, et al. Pembrolizumab plus Chemotherapy in metastatic non-small-cell lung cancer. N Engl J Med 2018;378:2078-2092.
2.Langer CJ, et al. Carboplatin and Pemetrexed with or without Pembrolizumab for advanced, non squamous non small cell lung cancer: a randomised, phase 2 cohort of the open label KEYNOTE 021 study. Lancet Oncol 2016;17:1497-1508.

Carboplatin + Paclitaxel + Pembrolizumab followed by maintenance Pembrolizumab (category 1)(Squamous Cell Carcinoma)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	followed by maintenance

Paclitaxel	180 mg/m^2	IV	drip 1 hour, day 1		Pembrolizumab
Pembrolizumab	200 mg	IV	drip 30 mins, day 1		
健保給付	I.轉移性鱗狀非小細胞肺癌第一線用藥：限 Pembrolizumab 與 Carboplatin 及 Paclitaxel 併用至多使用 4 個療程，接續單用 Pembrolizumab 治療。 II.轉移性非鱗狀非小細胞肺癌第一線：限 Pembrolizumab 與 Pemetrexed(限使用 Pexeda、Apeta 或 Pemetrexed Sandoz)及含鉑類化學療法併用，或限 atezolizumab 與 Bevacizumab(限使用 Alymsys、Avastin、Abevmy、Vegzelma 或 Mvasi)及 Carboplatin、Paclitaxel 併用，做為轉移性且不具有 EGFR/ALK/ROS-1 腫瘤基因異常的非鱗狀非小細胞肺癌第一線治療。 III.非小細胞肺癌第一線用藥：轉移性非小細胞肺癌成人病人，非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型。 IV.鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 VI.肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

Paz-Ares L, et al. Pembrolizumab plus Chemotherapy for squamous non-small-cell lung cancer. N Engl J Med 2018;379:2040-2051.

Carboplatin + Albumins-bound Paclitaxel +Pembrolizumab followed by maintenance Pembrolizumab (category 1)(for Squamous Cell Carcinoma)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	followed by maintenance Pembrolizumab
Albumins-bound Paclitaxel	100 mg/m^2	IV	drip 1 hour, day 1		
Pembrolizumab	200 mg	IV	drip 30 mins, day 1		

健保給付	I.轉移性鱗狀非小細胞肺癌第一線用藥：限 Pembrolizumab 與 Carboplatin 及 Paclitaxel 併用至多使用 4 個療程，接續單用 Pembrolizumab 治療。 II.轉移性非鱗狀非小細胞肺癌第一線：限 Pembrolizumab 與 Pemetrexed(限使用 Pexeda、Apeta 或 Pemetrexed Sandoz)及含鉑類化學療法併用，或限 atezolizumab 與 Bevacizumab(限使用 Alymsys、Avastin、Abevmy、Vegzelma 或 Mvasi)及 Carboplatin、Paclitaxel 併用，做為轉移性且不具有 EGFR/ALK/ROS-1 腫瘤基因異常的非鱗狀非小細胞肺癌第一線治療。 III.非小細胞肺癌第一線用藥：轉移性非小細胞肺癌成人病人，非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型。 IV.鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 V.肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。

Paz-Ares L, et al. Pembrolizumab plus Chemotherapy for squamous non-small-cell lung cancer. N Engl J Med 2018;379:2040-2051.

Carboplatin+ Pemetrexed + Cemiplimab-rwlc followed by maintenance Pemetrexed + Cemiplimab-rwlc(category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	followed by maintenance Pemetrexed +Cemiplimab-rwlc
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Cemiplimab-rwlc	350 mg	IV	drip 30 mins, day 1		

Gogishvili M, et al. Cemiplimab plus chemotherapy versus chemotherapy alone in non-small cell lung cancer: a randomized, controlled, double-blind phase 3 trial. Nat Med 2022;28:2374-2380.

Cisplatin + Pemetrexed + Cemiplimab-rwlc followed by maintenance Pemetrexed + Cemiplimab-rwlc

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	60-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days	followed by maintenance Pemetrexed
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		

Cemiplimab-rwlc	350 mg	IV	drip 30 mins, day 1		+Cemiplimab-rwlc

Gogishvili M, et al. Cemiplimab plus chemotherapy versus chemotherapy alone in non-small cell lung cancer: a randomized, controlled, double-blind phase 3 trial. Nat Med 2022;28:2374-2380.

Other Recommended

Carboplatin + Paclitaxel + Bevacizumab+ Atezolizumab followed by maintenance Bevacizumab ± Atezolizumab (category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Bevacizumab ± Atezolizumab
Paclitaxel	180 mg/m^2	IV	drip 30 mins, day 1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins, day 1		
Atezolizumab	1200 mg	IV	drip 30 mins, day 1		

Socinski M, et al. Atezolizumab for first-line treatment of metastatic nonsquamous NSCLC. N Engl J Med 2018;378:2288-2301.

Carboplatin + Albumins-bound Paclitaxel + Atezolizumab followed by maintenance Atezolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	followed by maintenance Atezolizumab
Albumins-bound Paclitaxel	100 mg/m^2	IV	drip 1 hour, day 1		
Atezolizumab	1200 mg	IV	drip 30 mins, day 1		

West H, et al. Atezolizumab in combination with Carboplatin plus nab-Paclitaxel Chemotherapy compared with Chemotherapy alone as first-line treatment for metastatic non-squamous non-small-cell lung cancer (IMPOwer130): a multicentre, randomised, open-label, phase 3 trial. Lancet Oncol 2019;20:924-937.

Nivolumab + Ipilimumab + Pemetrexed + Carboplatin followed by maintenance Ipilimumab + Nivolumab (category 1)for Adenocarcinoma, Large Cell, NSCLC NOS

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes

Nivolumab	240mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Ipilimumab+Nivolumab
Ipilimumab	1mg/kg	IV	drip 30 mins, day 1		
Pemetrexed	500mg/m^2	IV	drip 15 mins, day 1		
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1		
健保給付	Nivolumab(TC greater than or equal to 50%)： I.鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 II.肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

Paz-Ares L, et al. First-line Nivolumab plus Ipilimumab combined with two cycles of Chemotherapy in patients with non-small-cell lung cancer (CheckMate 9LA): an international, randomised, open-label, phase 3 trial. Lancet Oncol 2021;22;198-211.

Nivolumab + Ipilimumab + Pemetrexed + Cisplatin followed by maintenance Ipilimumab + Nivolumab(category 1)
for Adenocarcinoma, Large Cell, NSCLC NOS

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Ipilimumab+Nivolumab
Ipilimumab	1 mg/kg	IV	drip 30 mins, day 1		
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1		
健保給付	Nivolumab(TC greater than or equal to 50%)： I.鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 II.肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

Paz-Ares L, et al. First-line Nivolumab plus Ipilimumab combined with two cycles of Chemotherapy in patients with non-small-cell lung cancer (CheckMate 9LA): an international, randomised, open-label, phase 3 trial. Lancet Oncol 2021;22;198-211.

Nivolumab + Ipilimumab followed by maintenance Ipilimumab + Nivolumab (category 1) for Adenocarcinoma, Large Cell, NSCLC NOS

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Ipilimumab+Nivolumab
Ipilimumab	1mg/kg	IV	drip 30 mins, day 1		
健保給付	Nivolumab(TC greater than or equal to 50%)： I.鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 II.肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

Hellmann MD, et al. Nivolumab plus Ipilimumab in advanced non-small-cell lung cancer. N Engl J Med 2019;381:2020-2031.

Tremelimumab-actl + Durvalumab + Carboplatin + Albumins-bound Paclitaxel followed by maintenance Durvalumab (category 1)for Adenocarcinoma, Large Cell, NSCLC NOS

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Durvalumab
Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1		
Albumins-bound Paclitaxel	100 mg/m^2	IV	drip 1 hour, day 1		
健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)，且至多使用 12 個月。				

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with Chemotherapy as first-line Therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Tremelimumab-actl + Durvalumab + Carboplatin + Pemetrexed followed by maintenance Durvalumab ± Pemetrexed (category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Durvalumab±Pemetrexed
Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1		
健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)，且至多使用 12 個月。				

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with Chemotherapy as first-line Therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Tremelimumab-actl + Durvalumab + Cisplatin + Pemetrexed followed by maintenance Durvalumab ± Pemetrexed (category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Durvalumab±Pemetrexed
Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Cisplatin	50-75 mg/m^2	IV	drip 6 hour, day 1		
健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)，且至多使用 12 個月。				

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with Chemotherapy as first-line Therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Nivolumab +Ipilimumab + Paclitaxel + Carboplatin followed by maintenance Ipilimumab + Nivolumab (category 1)
(for Squamous Cell Carcinoma)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Ipilimumab+Nivolumab
Ipilimumab	1 mg/kg	IV	drip 30 mins, day 1		
Paclitaxel	180 mg/m^2	IV	drip 60 mins, day 1		
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1		
健保給付	Nivolumab(TC greater than or equal to 50%)： I.鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 II.肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

Paz-Ares L, et al. First-line Nivolumab plus Ipilimumab combined with two cycles of Chemotherapy in patients with non-small-cell lung cancer (CheckMate 9LA): an international, randomised, open-label, phase 3 trial. Lancet Oncol 2021;22;198-211.

Tremelimumab-actl + Durvalumab + Carboplatin +Gemcitabine followed by maintenance Durvalumab
(for Squamous Cell Carcinoma)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Durvalumab±Pemetrexed
Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, day 1		
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1		

健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)PD)，且至多使用 12 個月。

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with chemotherapy as first-line therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Tremelimumab-actl + Durvalumab + Cisplatin +Gemcitabine followed by maintenance Durvalumab (for Squamous Cell Carcinoma)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Durvalumab±Pemetrexed
Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, day 1		
Cisplatin	50-75 mg/m^2	IV	drip 6 hour, day 1		
健保給付	鞏固治療：限 Durvalumab 用於第三期局部晚期、無法手術切除且腫瘤表現 PD L1 greater than or equal to 1% 之非小細胞肺癌成人病人 非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型，病人須於接受根治性同步放射治療合併至少 2 個週期含鉑化療後無惡化 無 PD)PD)，且至多使用 12 個月。				

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with chemotherapy as first-line therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Carboplatin+ Paclitaxel + Cemiplimab-rwlc followed by maintenance Pemetrexed + Cemiplimab-rwlc(category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	followed by maintenance Pemetrexed
Paclitaxel	180 mg/m^2	IV	drip 1 hour, day 1		

Cemiplimab-rwlc	350 mg	IV	drip 30 mins, day 1		+Cemiplimab-rwlc
健保給付	I. 轉移性鱗狀非小細胞肺癌第一線用藥：限 Pembrolizumab 與 Carboplatin 及 Paclitaxel 併用至多使用 4 個療程，接續單用 Pembrolizumab 治療。 II. 轉移性非鱗狀非小細胞肺癌第一線：限 Pembrolizumab 與 Pemetrexed(限使用 Pexeda、Apeta 或 Pemetrexed Sandoz)及含鉑類化學療法併用，或限 atezolizumab 與 Bevacizumab(限使用 Alymsys、Avastin、Abevmy、Vegzelma 或 Mvasi)及 Carboplatin、Paclitaxel 併用，做為轉移性且不具有 EGFR/ALK/ROS-1 腫瘤基因異常的非鱗狀非小細胞肺癌第一線治療。 III. 非小細胞肺癌第一線用藥：轉移性非小細胞肺癌成人病人，非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型。 IV. 鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 V. 肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。				

Sezer A, et al. Cemiplimab monotherapy for first-line treatment of advanced non-small-cell lung cancer with PD-L1 of at least 50%: a multicentre, open-label, global, phase 3, randomised, controlled trial. Lancet 2021;397:592-604.

Cisplatin + Paclitaxel + Cemiplimab-rwlc followed by maintenance Pemetrexed + Cemiplimab-rwlc

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	60-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days	followed by maintenance Pemetrexed +Cemiplimab-rwlc
Paclitaxel	180 mg/m^2	IV	drip 1 hour, day 1		
Cemiplimab-rwlc	350 mg	IV	drip 30 mins, day 1		

健保給付	I.轉移性鱗狀非小細胞肺癌第一線用藥：限 Pembrolizumab 與 Carboplatin 及 Paclitaxel 併用至多使用 4 個療程，接續單用 Pembrolizumab 治療。 II.轉移性非鱗狀非小細胞肺癌第一線：限 Pembrolizumab 與 Pemetrexed(限使用 Pexeda、Apeta 或 Pemetrexed Sandoz)及含鉑類化學療法併用，或限 atezolizumab 與 Bevacizumab(限使用 Alymsys、Avastin、Abevmy、Vegzelma 或 Mvasi)及 Carboplatin、Paclitaxel 併用，做為轉移性且不具有 EGFR/ALK/ROS-1 腫瘤基因異常的非鱗狀非小細胞肺癌第一線治療。 III.非小細胞肺癌第一線用藥：轉移性非小細胞肺癌成人病人，非鱗狀癌者需為 EGFR/ALK/ROS 1 腫瘤基因原生型、鱗狀癌者需為 EGFR/ALK 腫瘤基因原生型。 IV.鱗狀非小細胞肺癌第二線用藥：先前已使用過 platinum 類化學治療失敗後，又有疾病惡化，且 EGFR/ALK 腫瘤基因為原生型之晚期鱗狀非小細胞肺癌成人病人。 VI.肺腺癌第三線用藥：先前已使用過 platinum 類及 docetaxel/Paclitaxel 類二線(含)以上化學治療均失敗，又有疾病惡化，且 EGFR/ALK/ROS-1 腫瘤基因為原生型之晚期非小細胞肺腺癌成人病人。

Sezer A, et al. Cemiplimab monotherapy for first-line treatment of advanced non-small-cell lung cancer with PD-L1 of at least 50%: a multicentre, open-label, global, phase 3, randomised, controlled trial. Lancet 2021;397:592-604.

Useful in Certain Circumstances

Pembrolizumab followed by maintenance Pembrolizumab (category 2B) for Any histology

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins, day 1	every 21 days	followed by maintenance Pembrolizumab

1.Reck M, et al. Pembrolizumab versus Chemotherapy for PD L1 POsitive non small cell lung cancer. N Engl J Med 2016;375:1823-1833.
2 Mok TSK, et al. Pembrolizumab versus Chemotherapy for previously untreated, PD-L1-expressing, locally advanced or metastatic non-small-cell lung cancer (Keynote-042): a randomized open-label, controlled, phase 3 trial. Lancet 2019;393:1819-1830.

NO contraindications to PD-1 or PD-L1 inhibitors AND NO EGFR exon 19 deletion or L858R; ALK, RET, or ROS1 rearrangements

Preferred

Carboplatin/Pemetrexed + Pembrolizumab (category 1) Adenocarcinoma, Large Cell, NSCLC NOS

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 30 mins, day 1 or 8	every 21 days	
Pemetrexed	500 mg/m^2	IV	drip 30 mins, day 1		
Pembrolizumab	200 mg	IV	drip 30 mins, day 1		

1.Langer CJ, et al. Carboplatin and Pemetrexed with or without Pembrolizumab for advanced, non- squamous non-small-cell lung cancer: a randomised, phase 2 cohort of the open-label KEYNOTE-021 study. Lancet Oncol 2016;17:1497-1508.
2.Gandhi L, et al. Pembrolizumab plus Chemotherapy in metastatic non-small-cell lung cancer. N Engl J Med 2018;378:2078-2092.

Cisplatin/Pemetrexed + Pembrolizumab (category 1) Adenocarcinoma, Large Cell, NSCLC NOS

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days	
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Pembrolizumab	200 mg	IV	drip 30 mins, day 1		

Gandhi L, et al. Pembrolizumab plus Chemotherapy in metastatic non-small-cell lung cancer. N Engl J Med 2018;378:2078-2092.

Carboplatin/Paclitaxel + Pembrolizumab (category 1)Squamous Cell Carcinoma

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	
Paclitaxel	180 mg/m^2	IV	drip 1 hour, day 1		
Pembrolizumab	200 mg	IV	drip 30 mins, day 1		

Paz-Ares L, et al. Pembrolizumab plus Chemotherapy for squamous non-small-cell lung cancer. N Engl J Med 2018;379:2040-2051.

Albumins-bound Paclitaxel/Carboplatin + Pembrolizumab (category 1)Squamous Cell Carcinoma

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	
Albumins-bound Paclitaxel	100 mg/m^2	IV	drip 30 mins, day 1,8,15		
Pembrolizumab	200 mg	IV	drip 30 mins, day 1		

Paz-Ares L, et al. Pembrolizumab plus Chemotherapy for squamous non-small-cell lung cancer. N Engl J Med 2018;379:2040-2051.

Other Recommended

Carboplatin/Paclitaxel + Atezolizumab + Bevacizumab (category 1) for Adenocarcinoma

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	
Paclitaxel	180 mg/m^2	IV	drip 1 hour, day 1		
Atezolizumab	1200 mg	IV	drip 30 mins, day 1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins, day 1		

Socinski M, et al. Atezolizumab for first-line treatment of metastatic nonsquamous NSCLC. N Engl J Med 2018;378:2288-2301.

Albumins-bound Paclitaxel/Carboplatin + Atezolizumab for Adenocarcinoma

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Albumins-bound Paclitaxel	100 mg/m^2	IV	drip 1 hour, day 1,8,15	every 21 days	
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1		
Atezolizumab	1200 mg	IV	drip 30 mins, day 1		

West H, et al. Atezolizumab in combination with Carboplatin plus nab-Paclitaxel Chemotherapy compared with Chemotherapy alone as first-line treatment for metastatic non-

squamous non-small-cell lung cancer (IMPOwer130): a multicentre, randomised, open-label, phase 3 trial. Lancet Oncol 2019;20:924-937.

Ipilimumab+ Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg	IV	drip 30 mins, day 1	every 21 days	
Ipilimumab	1 mg/kg	IV	drip 30 mins, day 1		

Hellmann MD, et al. Nivolumab plus Ipilimumab in advanced non-small-cell lung cancer. N Engl J Med 2019;381:2020- 2031.

Carboplatin/Pemetrexed + Ipilimumab + Nivolumab (category 1)for Adenocarcinoma

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1 or 8	every 21 days	
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Nivolumab	240 mg	IV	drip 30 mins, day 1		
Ipilimumab	1 mg/kg	IV	drip 30 mins, day 1		

Paz-Ares L, et al. First-line Nivolumab plus Ipilimumab combined with two cycles of Chemotherapy in patients with non-small-cell lung cancer (CheckMate 9LA): an international, randomised, open-label, phase 3 trial. Lancet Oncol 2021;22:198-211.

Cisplatin/Pemetrexed + Ipilimumab + Nivolumab (category 1)for Adenocarcinoma

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days	
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Nivolumab	240 mg	IV	drip 30 mins, day 1		
Ipilimumab	1 mg/kg	IV	drip 30 mins, day 1		

Paz-Ares L, et al. First-line Nivolumab plus Ipilimumab combined with two cycles of Chemotherapy in patients with non-small-cell lung cancer (CheckMate 9LA): an international, randomised, open-label, phase 3 trial. Lancet Oncol 2021;22:198-211.

Albumins-bound Paclitaxel/Carboplatin+ Durvalumab+ Tremelimumab-actl (category 1)for Adenocarcinoma

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Albumins-bound Paclitaxel	100 mg/m^2	IV	drip 30 mins, day 1,8,15	every 21 days	
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1 or 8		
Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1		

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with Chemotherapy as first-line Therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Carboplatin/Pemetrexed+ Durvalumab+ Tremelimumab-actl (category 1)for Adenocarcinoma

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1 or 8	every 21 days	
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		
Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1		

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with Chemotherapy as first-line Therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Cisplatin/Pemetrexed+ Durvalumab+ Tremelimumab-actl (category 1)for Adenocarcinoma

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days	
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		

Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1		

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with Chemotherapy as first-line Therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Carboplatin/Paclitaxel + Ipilimumab + Nivolumab (category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	
Paclitaxel	180 mg/m^2	IV	drip 1 hour, day 1		
Nivolumab	240 mg	IV	drip 30 mins, day 1		
Ipilimumab	1 g/kg	IV	drip 30 mins, day 1		

Paz-Ares L, et al. First-line Nivolumab plus Ipilimumab combined with two cycles of Chemotherapy in patients with non-small-cell lung cancer (CheckMate 9LA): an international, randomised, open-label, phase 3 trial. Lancet Oncol 2021;22:198-211.

Carboplatin/Gemcitabine+ Durvalumab+ Tremelimumab-actl(category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days	
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, day 1		
Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1		

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with Chemotherapy as first-line Therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Cisplatin/Gemcitabine+ Durvalumab+ Tremelimumab-actl(category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days	
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, day 1		
Durvalumab	1500 mg	IV	drip 30 mins, day 1		
Tremelimumab-actl	75 mg	IV	drip 30 mins, day 1		

Johnson ML, et al. Durvalumab with or without tremelimumab in combination with Chemotherapy as first-line Therapy for metastatic non-small-cell lung cancer: the phase III POSEIDON study. J Clin Oncol 2023;41:1213-1227.

Other Regimens

Cisplatin + Gemcitabine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days	(adjusted by Ccr)
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, day 1, 8		

1.Ohe Y, et al. Randomized phase III study of Cisplatin plus Irinotecan versus Carboplatin plus Paclitaxel, Cisplatin plus gemcitabine, and Cisplatin plus vinorelbine for advanced non- small-cell lung cancer: Four-Arm Cooperative Study in Japan. Ann Oncol 2007;18:317-323.
2.Scagliotti GV, et al. Phase III study comparing Cisplatin plus gemcitabine with Cisplatin plus Pemetrexed in Chemotherapy- naive patients with advanced-stage NSCLC. J Clin Oncol 2008;26:3543-3551.

Carboplatin + Gemcitabine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, day 1 or 15	every 21 days	(if Ccr <60ml/mins or Cisplatin not suitable)
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, day 1, 8		

Danson S, Middleton MR, O'Byrne KJ, et al. Phase III trial of gemcitabine and Carboplatin versus mitomycin, ifosfamide, and Cisplatin or mitomycin, vinblastine, and Cisplatin in patients with advanced nonsmall cell lung carcinoma. Cancer 2003;98(3):542-553.

Cisplatin + Paclitaxel(60)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours day 1	every 21 days for 4 cycles	(adjusted by Ccr)
Paclitaxel	60 mg/m^2	IV	drip 1 hours, Day 1, 8, 15		

Schiller JH, et al. Comparison of four Chemotherapy regimens for advanced non-small cell lung cancer. N Engl J Med 2002;346:92-98.

Cisplatin + Paclitaxel(90)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours day 1	every 21 days for 4 cycles	(adjusted by Ccr)
Paclitaxel	90 mg/m^2	IV	drip 1 hours, Day 1, 15		

Schiller JH, et al. Comparison of four Chemotherapy regimens for advanced non-small cell lung cancer. N Engl J Med 2002;346:92-98.

Cisplatin + Paclitaxel(180)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 21 days for 4 cycles	(adjusted by Ccr)
Paclitaxel	180 mg/m^2	IV	drip 1 hours, Day 1		

Schiller JH, et al. Comparison of four Chemotherapy regimens for advanced non-small cell lung cancer. N Engl J Med 2002;346:92-98.

Carboplatin + Paclitaxel(60)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, day 1 or 15	Every 3 weeks for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Paclitaxel	60 mg/m^2	IV	drip 1 hours, day 1, 8, 15		

Strauss GM, Herndon III JE, Maddaus MA, et al. Adjuvant Paclitaxel plus Carboplatin compared with observation in stage IB non-small cell lung cancer: CALGB 9633 with the Cancer and Leukemia Group B, Radiation Therapy Oncology Group, and North Central Cancer Treatment Group Study Groups. J Clin Oncol 2008;26:5043- 5051.

Carboplatin + Paclitaxel(90)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, day 1 or 15	Every 3 weeks for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Paclitaxel	90 mg/m^2	IV	drip 1 hours, day 1,15		

Strauss GM, Herndon III JE, Maddaus MA, et al. Adjuvant Paclitaxel plus Carboplatin compared with observation in stage IB non-small cell lung cancer: CALGB 9633 with the Cancer and Leukemia Group B, Radiation Therapy Oncology Group, and North Central Cancer Treatment Group Study Groups. J Clin Oncol 2008;26:5043- 5051.

Carboplatin + Paclitaxel(180)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, day 1 or 15	Every 3 weeks for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Paclitaxel	180 mg/m^2	IV	drip 1 hours, day 1		

Strauss GM, Herndon III JE, Maddaus MA, et al. Adjuvant Paclitaxel plus Carboplatin compared with observation in stage IB non-small cell lung cancer: CALGB 9633 with the Cancer and Leukemia Group B, Radiation Therapy Oncology Group, and North Central Cancer Treatment Group Study Groups. J Clin Oncol 2008;26:5043- 5051.

Cisplatin+Vinorelbine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, days 1 and 8	Every 3 weeks for 4 cycles	(adjusted by Ccr)
Vinorelbine	60-80 mg/m^2	PO	Day 1 or 8, 15		

Douillard JY, Rosell R, De Lena M, et al. (2006). Adjuvant vinorelbine plus Cisplatin versus observation in patients with completely resected stage IB-IIIA non-small-cell lung cancer (Adjuvant Navelbine International Trialist Association [ANITA]): a randomised controlled trial. Lancet Oncol ,7,719-727.

Carboplatin+Vinorelbine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 6 hours, Day 1 or 8,(15)	Every 3 weeks for 4	(if Ccr <60ml/mins or

				cycles	Cisplatin not suitable)
Vinorelbine	60-80 mg/m^2	PO	Day 1 or 8,(15)		

Douillard JY, Rosell R, De Lena M, et al. (2006). Adjuvant vinorelbine plus Cisplatin versus observation in patients with completely resected stage IB-IIIA non-small-cell lung cancer (Adjuvant Navelbine International Trialist Association [ANITA]): a randomised controlled trial. Lancet Oncol ,7,719-727.

Cisplatin+Docetaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, days 1 and 8	Every 3 weeks for 4 cycles	(adjusted by Ccr)
Docetaxel	25-35 mg/m^2	IV	drip 1 hour, days 1, 8		

Fossella F, et al. Randomized, multinational, phase III study of docetaxel plus platinum combinations versus vinorelbine plus Cisplatin for advanced non-small-cell lung cancer: the TAX 326 study group. J Clin Oncol 2003;21:3016-3024.

Carboplatin +Docetaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, days 1 and 8	every 21 days for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Docetaxel	25-35 mg/m^2	IV	drip 1 hour, Day 1		

Fossella F, et al. Randomized, multinational, phase III study of docetaxel plus platinum combinations versus vinorelbine plus Cisplatin for advanced non-small-cell lung cancer: the TAX 326 study group. J Clin Oncol 2003;21:3016-3024.

Carboplatin+Docetaxel(60)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, days 1 and 8	every 21 days for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Docetaxel	60 mg/m^2	IV	drip 1 hour, day 1		

Fossella F, et al. Randomized, multinational, phase III study of docetaxel plus platinum combinations versus vinorelbine plus Cisplatin for advanced non-small-cell lung cancer: the TAX 326 study group. J Clin Oncol 2003;21:3016-3024.

Cisplatin + Pemetrexed(non-squamous)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hour, day 1	every 21 days for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		

Kreuter M, Vansteenkiste J, Fishcer JR, et al. Randomized phase 2 trial on refinement of early-stage NSCLC adjuvant Chemotherapy with Cisplatin and Pemetrexed versus Cisplatin and vinorelbine: the TREAT study. Ann Oncol 2013;24:986-992.

Carboplatin + Pemetrexed
(non-squamous，ADENOCARCINOMA, LARGE CELL, NSCLC NOS(PS 2) Preferred)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, day 1	every 21 days for 4 cycles	(if Ccr <60ml/mins or Cisplatin not suitable)
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1		

Zhang L, Ou W, Liu Q, et al. Pemetrexed plus Carboplatin as adjuvant Chemotherapy in patients with curative resected non-squamous non-small cell lung cancer. Thorac Cancer 2014;5:50-56.

Cisplatin+Etoposide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, day 1	every 28 days for 4 cycles	
Etoposide	100 mg/m^2	IV	drip 1 hours, days 1–3		

1.Klastersky J, et al. A randomized study comparing Cisplatin or Carboplatin with Etoposide in patients with advanced non- small cell lung cancer: European Organization for Research and Treatment of Cancer Protocol 07861. J Clin Oncol 1990;8:1556-1562.
2.Frasci G, et al. Carboplatin-oral Etoposide personalized dosing in elderly non-small cell lung cancer patients. GrupPO Oncologico Cooperativo Sud-Italia. Eur J Cancer 1998;34:1710-1714.

Carboplatin +Etoposide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hour, Day 1 or 15	every 28 days for 4 cycles	
Etoposide	100 mg/m^2	IV	drip 1 hour, days 1–3		

1.Klastersky J, et al. A randomized study comparing Cisplatin or Carboplatin with Etoposide in patients with advanced non- small cell lung cancer: European Organization for Research and Treatment of Cancer Protocol 07861. J Clin Oncol 1990;8:1556-1562.
2.Frasci G, et al. Carboplatin-oral Etoposide personalized dosing in elderly non-small cell lung cancer patients. GrupPO Oncologico Cooperativo Sud-Italia. Eur J Cancer 1998;34:1710-1714.

TS-1

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
TS-1	80 mg~120 mg	PO	QD	Day 1~28	(adjusted by BSA) 休息 14 天 or Day1~14, 休息 7 天。
健保給付	非小細胞肺癌 (1)曾使用含鉑之化學藥物治療失敗的局部晚期或轉移性之非小細胞肺癌。 (2)不得與標靶治療、其他化療或免疫檢查點抑制劑併用。				

H Nokihara 1, S Lu 2, T S K Mok ,et al. Randomized controlled trial of S-1 versus docetaxel in patients with non-small-cell lung cancer previously treated with platinum-based Chemotherapy (East Asia S-1 Trial in Lung Cancer). Ann Oncol . 2017 Nov 1;28(11):2698-2706. doi: 10.1093/annonc/mdx419.

Systemic Therapy for advanced or metastatic disease-Subsequent

Other Recommended (no previous immuno-oncology [IO] or previous IO)

Weekly Docetaxel

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	25-35 mg/m^2	IV	drip 1 hour, Day 1,8	every 21 days	

Zhou, J.-N., et al., Weekly Paclitaxel/Docetaxel combined with a paltinum in the treatment of advanced non-samll cell lung cancer: a study on efficacy, safety and pre-medication. Asian Pac J Cancer Prev, 2009. 10(6): p. l147-1150.

Docetaxel

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	60 mg/m^2	IV	drip 1 hour, day 1	every 21 days	

Fidias, P.M., et al., Phase III study of immediate compared with delayed docetaxel after front-line Therapy with gemcitabine plus Carboplatin in advanced non–small-cell lung cancer. Journal of Clinical Oncology, 2009. 27(4): p. 591-598.

Pemetrexed

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pemetrexed	500 mg/m^2	IV	drip 15 mins, days 1	every 21 days	

Hanna, N., et al., Randomized phase III trial of Pemetrexed versus docetaxel in patients with non–small-cell lung cancer previously treated with Chemotherapy. Journal of Clinical Oncology, 2004. 22(9): p. 1589-1597.

Gemcitabine

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, days 1 and 8	every 21 days	

1.Pérol, M., et al., Randomized, phase III study of gemcitabine or erlotinib maintenance Therapy versus observation, with predefined second-line treatment, after Cisplatin-gemcitabine induction Chemotherapy in advanced non–small-cell lung cancer. Journal of Clinical Oncology, 2012. 30(28): p. 3516-3524.
2.Sederholm, C., et al., Phase III trial of gemcitabine plus Carboplatin versus single-agent gemcitabine in the treatment of locally advanced or metastatic non–small-cell lung cancer: The Swedish Lung Cancer Study Group. Journal of Clinical Oncology, 2005. 23(33): p. 8380-8388.
3.Zatloukal, P., et al., Gemcitabine in locally advanced and metastatic non-small cell lung cancer: the Central European phase II study. Lung Cancer, 1998. 22(3): p. 243-250.

Docetaxel + Ramucirumab

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	60 mg/m^2	IV	drip 15 mins, day 1	every 21 days	
Ramucirumab	8 mg/kg	IV	drip 60 mins, days 1		

13Edward B.G., et al.,Ramucirumab plus docetaxel versus placebo plus docetaxel for second-line treatment of stage IV non-small-cell lung cancer after disease progression on platinum-based Therapy (REVEL): a multicentre, double-blind, randomised phase 3 trial. Lancet 2014. 384:665–73.
2.Nakagawa K, Garon EB, Seto T, et al. Ramucirumab plus erlotinib inpatients with untreated, EGFR-mutated, advanced non-small-cell lung cancer (RELAY): a randomised, double-blind, placebo-controlled, phase 3trial. Lancet Oncol 2019;20:1655-1669.

Albumins-bound Paclitaxel

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Albumins-bound Paclitaxel	100 mg/m^2	IV	drip 30 mins, day 1,8,15	every 21 days	

1.Green MR, et al. Abraxane, a novel Cremophor-free, albumins-bound particle form of Paclitaxel for the treatment of advanced non-small-cell lung cancer. Ann Oncol 2006;17:1263-1268.
2.Rizvi N, et al. Phase I/II trial of weekly intravenous 130- nm albumins-bound Paclitaxel as initial Chemotherapy in patients with stage IV non-small-cell lung cancer. J Clin Oncol 2008;26:639-643.

Systemic Therapy for advanced or metastatic disease-Subsequent

Nivolumab (category 1) for SUBSEQUENT

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	360 mg	IV	drip 30 mins, day 1	every 21 days	

M.D. Hellmann, et.al., A.Nivolumab plus Ipilimumab in Lung Cancer with a High Tumor Mutational Burden. New England Journal of Medicine, 2018. April 16: p. 1-12.

Pembrolizumab (category 1) for SUBSEQUENT

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins, day 1	every 21 days	

Herbst, R.S., et al., Pembrolizumab versus docetaxel for previously treated, PD-L1-POsitive, advanced non-small-cell lung cancer (KEYNOTE-010): a randomised controlled trial. The Lancet, 2015.

Atezolizumab (category 1) for SUBSEQUENT

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Atezolizumab	1200 mg	IV	drip 30 mins, day 1	every 21 days	
Ref.					

Socinski M, Jotte R, Cappuzzo F, et al. Atezolizumab for first-line treatment of metastatic nonsquamous NSCLC. N Engl J Med 2018;378:2288-2301.

Target Therapy

EGFR Exon 19 Deletion or Exon 21 L858R

First-line Therapy

Afatinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Afatinib	20~40 mg	PO	QD	every 28 days till PD	
健保給付	限單獨使用於： (1)具有 EGFR-TK 基因突變之局部晚期或轉移性(即第IIIB、IIIC 期或第IV期)之肺腺癌病患之第一線治療，需檢附 EGFR 基因檢測結果報告，且需符合全民健康保險藥品給付規定之通則十二。 (2)先前已使用過第一線含鉑化學治療，但仍惡化的局部晚期或轉移性之鱗狀組織非小細胞肺癌之第二線治療。				

Yang JC, et al. Afatinib versus Cisplatin based Chemotherapy for EGFR mutation POsitive lung adenocarcinoma (LUX Lung 3 and LUX Lung 6): analysis of overall survival data from two randomised, phase 3 trials. Lancet Oncol 2015;16:141-151

Erlotinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Erlotinib	100 mg/150 mg	PO	QD	every 28 days till PD	
健保給付	限單獨使用於 (1)適用於具有 EGFR TK 突變之局部侵犯性或轉移性即第IIIB、IIIC 或第 IV 期之肺腺癌病患之第一線治療，需檢附 EGFR 基因檢測結果報告，且需符合全民健康保險藥品給付規定之通則十二。 (2)已接受 4 個週期 platinum 類第一線化學療法後，腫瘤範圍穩定(stable disease 不含 partial resPOnse 或 complete resPOnse)之局部晚期或轉移性肺腺癌的維持療法。 (3)先前已使用過 platinum 類第一線化學治療，或 70 歲以上接受過第一線化學治療，但仍局部惡化或轉移之腺性非小細胞肺 癌之第二線用藥。 (4)先前已使用過 platinum 類及 docetaxel 或 Paclitaxel 化學治療後，但仍局部惡化或轉移之非小細胞肺癌之第三線用藥。 2.Erlotinib 與 Bevacizumab(除 Zirabev 以外併用，作為無法手術切除的轉移性（第 IV 期）且帶有表皮生長因子受體(EGFR)Exon 21 L858R 活性化突變之腦轉移非鱗狀非小細胞肺癌病患的第一線治療。				

Rosell R, et al. Erlotinib versus standard Chemotherapy as first line treatment for European patients with advanced EGFR mutation POsitive non small cell lung cancer (EURTAC): a multicentre, open label, randomised phase 3 trial. Lancet Oncol 2012;13:239-246.

Dacomitinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dacomitinib	15~45 mg	PO	QD	every 28 days till PD	
健保給付	限單獨使用具有 EGFR TK Exon 19 Del 或 Exon 21 L858R 點突變，且無腦轉移(non CNS) 之局部侵犯性或轉移性 即第IIIB、IIIC 或第 IV 期之肺腺癌病患之第一線治療。				

Wu Y-L, et al. Dacomitinib versus gefitinib as first-line treatment for patients with EGFR-mutation-POsitive non-small-cell lung cancer (ARCHER 1050): a randomized, open-label, phase 3 trial. Lancet Oncol 2017;18:1454-1466.

Gefitinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gefitinib	250 mg	PO	QD	every 28 days till PD	
健保給付	限單獨使用於 (1)具有 EGFR TK 基因突變之局部侵犯性或轉移性即第IIIB、IIIC 或第 IV 期之肺腺癌病患之第一線治療，需檢附 EGFR 基因檢測結果報告，且需符合全民健康保險藥品給付規定之通則十二。 (2)先前已使用過第一線含鉑化學治療，或 70 歲以上接受過第一線化學治療，但仍局部惡化或轉移之肺腺癌。				

1.Mok TS, et al. Gefitinib or Carboplatin Paclitaxel in pulmonary adenocarcinoma. N Engl J Med 2009;361:947-957.
2.Douillard JY, et al. First line gefitinib in Caucasian EGFR mutation POsitive NSCLC patients: a phase IV, open label, single arm study. Br J Cancer 2014;110:55-62.

Osimertinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Osimertinib	80 ~160 mg	PO	QD	every 28 days till PD	
健保給付	限單獨使用於： (1)具有 EGFR Exon 19 Del 或 Exon 21 L858R 基因突變之局部侵犯性或轉移性（即為 IIIB、IIIC 期或第 IV 期）肺腺癌病患之第一線治療。 (2)先前已使用過 EGFR 標靶藥物 gefitinib、erlotinib、afatinib 或 dacomitinib 治療失敗，且具有 EGFR T790M 基因突變之局部侵犯性或轉移性之非小細胞肺癌之第二線治療。				

Soria JC, et al. Osimertinib in untreated EGFR-mutated advanced non-small-cell lung cancer. N Engl J Med 2018;378:113-125.

Osimertinib + Pemetrexed + Platinum

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Osimertinib	80 mg	PO	QD	every 28 days till PD	
Cisplatin/Carboplatin	50-75 mg/m^2 or AUC 4.5-6	IV	drip 1 hours, Day 1 or 15	every 21 days	
Pemetrexed	500 mg/m^2	IV	drip 15 mins, days 1	every 21 days	
健保給付	限單獨使用於： (1)具有 EGFR Exon 19 Del 或 Exon 21 L858R 基因突變之局部侵犯性或轉移性（即為 IIIB、IIIC 期或第 IV 期）肺腺癌病患之第一線治療。 (2)先前已使用過 EGFR 標靶藥物 gefitinib、erlotinib、afatinib 或 dacomitinib 治療失敗，且具有 EGFR T790M 基因突變之局部侵犯性或轉移性之非小細胞肺癌之第二線治療。				

Planchard D, et al. Osimertinib with or without Chemotherapy in EGFR-mutated advanced NSCLC. N Engl J Med 2023;389:1935-1948.

Erlotinib + Ramucirumab

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Erlotinib	100 mg/150 mg	PO	QD	every 28 days till PD	
Ramucirumab	8 mg/kg	IV	drip 60 mins, days 1	every 21 days	
健保給付	限單獨使用於 (1)適用於具有 EGFR TK 突變之局部侵犯性或轉移性 即第 IIIB 、 IIIC 或第 期 之肺腺癌病患 之第一線治療，需檢附 EGFR 基因檢測結果報告，且需符合全民健康保險藥品給付規定之通則十二。 (2)已接受 4 個週期 platinum 類第一線化學療法後，腫瘤範圍穩定 (stable disease 不含 partial resPOnse 或 complete resPOnse) 之局部晚期或轉移性肺腺癌的維持療法。 (3)先前已使用過 platinum 類第一線化學治療，或 70 歲以上接受過第一線化學治療，但仍局部惡化或轉移之腺性非小細胞肺 癌之第二線用藥。 (4)先前已使用過 platinum 類及 docetaxel 或 Paclitaxel 化學治療後，但仍局部惡化或轉移之非小細胞肺癌之第三線用藥。 2.Erlotinib 與 Bevacizumab(除 Zirabev 以外 併用，作為無法手術切除的轉移性（第 IV 期）且帶有表皮生長因子受體 (EGFR) Exon 21 L858R 活性化突變之腦轉移非鱗狀非小細胞肺癌病患的第一線治療。				

Nakagawa K, et al. Ramucirumab plus erlotinib in patients with untreated, EGFR-mutated, advanced non-small-cell lung cancer (RELAY): a randomised, double-blind, placebo-controlled, phase 3 trial. Lancet Oncol 2019;20:1655-1669.

Erlotinib+ Bevacizumab

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Erlotinib	100 mg/150 mg	PO	QD	every 28 days till PD	
Bevacizumab	7.5 mg	IV	drip 90 mins, days 1	every 21 days	
健保給付	Erlotinib 與 Bevacizumab(除 Zirabev 以外 併用，作為無法手術切除的轉移性（第 IV 期）且帶有表皮生長因子受體 (EGFR) Exon 21 L858R 活性化突變之腦轉移非鱗狀非小細胞肺癌病患的第一線治療。				

Nakagawa K, et al. Ramucirumab plus erlotinib in patients with untreated, EGFR-mutated, advanced non-small-cell lung cancer (RELAY): a randomised, double-blind, placebo-controlled, phase 3 trial. Lancet Oncol 2019;20:1655-1669.

Amivantamab-vmjw

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Amivantamab-vmjw	1050 mg	IV	drip over 4-6 hours	every 28 days	weekly at a dose of 1050 mg (or 1400 mg in patients with a body weight of 80 kg) for the first 4 weeks (cycle 1), with the first infusion split over a period of 2 days (with 350 mg given on cycle 1 day 1, and the remainder given on cycle 1 day 2).
Lazertinib	240 mg	PO	QD		
健保給付	與 Carboplatin 及 Pemetrexed 併用，適用於罹患帶有表皮生長因子受體(EGFR) exon 20 插入突變之局部晚期或轉移性非小細胞肺癌的成人病人，作為第一線治療。				

Cho BC, et al. Amivantamab plus lazertinib in previously untreated EGFR-mutated advanced NSCLC. N Engl J Med 2024;391:1486-1498.

Subsequent Therapy

Osimertinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Osimertinib	80 mg	PO	QD	every 28 days till PD	
健保給付	限單獨使用於： (1)具有 EGFR Exon 19Del 或 Exon 21 L858R 基因突變之局部侵犯性或轉移性（即為 IIIB、IIIC 期或第 IV 期）肺腺癌病患之第一線治療。 (2)先前已使用過 EGFR 標靶藥物 gefitinib、erlotinib、afatinib 或 dacomitinib 治療失敗，且具有 EGFR T790M 基因突變之局部侵犯性或轉移性之非小細胞肺癌之第二線治療。				

Mok TS, et al. Osimertinib or platinum Pemetrexed in EGFR T790M POsitive lung cancer. N Engl J Med 2017;376:629-640.

Amivantamab-vmjw+ Carboplatin + Pemetrexed(nonsquamous)

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Amivantamab-vmjw	1050 mg	IV	drip over 4-6 hours	every 28 days	weekly at a dose of 1050 mg (or 1400 mg in patients with a body weight of 80 kg) for the first 4 weeks (cycle 1), with the first infusion split over a period of 2 days (with 350 mg given on cycle 1 day 1, and the remainder given on cycle 1 day 2).
Carboplatin	AUC 4.5	IV	drip 1 hours, Day 1 or 15	every 21 days	(if Ccr <60ml/mins or Cisplatin not suitable)
Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1	every 21 days	

健保給付	與 Carboplatin 及 Pemetrexed 併用，適用於罹患帶有表皮生長因子受體(EGFR) exon 20 插入突變之局部晚期或轉移性非小細胞肺癌的成人病人，作為第一線治療。

Passaro A, et al. Amivantamab plus Chemotherapy with and without lazertinib in EGFR-mutant advanced NSCLC after disease progression on osimertinib: primary results from the phase III MARIPOSA-2 study. Ann Oncol 2023;S0923-7534:04281- 04283.

Datopotamab deruxtecan-dlnk(nonsquamous)

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Datopotamab deruxtecan-dlnk	6 mg/kg	IV	drip over 90 minsutes	every 21 days	up to a maximum of 540 mg for patients greater than or equal to 90 kg
健保給付	尚未健保給付				

Ahn M-J, et al. A POoled analysis of datoPOtamab deruxtecan in patients with EGFR–mutated NSCLC. J Thorac Oncol 2025.

EGFR Exon 20 Insertion Mutation

First-line Therapy

Amivantamab-vmjw+ Carboplatin+Pemetrexed(nonsquamous)

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Amivantamab-vmjw	1050 mg	IV	drip over 4-6 hours	every 28 days	weekly at a dose of 1050 mg (or 1400 mg in patients with a body weight of 80 kg) for the first 4 weeks (cycle 1), with the first infusion split over a period of 2 days (with 350 mg given on cycle 1 day 1, and the remainder given on cycle 1 day 2).
Carboplatin	AUC 4.5	IV	drip 1 hours, Day 1 or 15	every 21 days	(if Ccr <60ml/mins or Cisplatin not suitable)

Pemetrexed	500 mg/m^2	IV	drip 15 mins, day 1	every 21 days	
健保給付	與 Carboplatin 及 Pemetrexed 併用，適用於罹患帶有表皮生長因子受體(EGFR) exon 20 插入突變之局部晚期或轉移性非小細胞肺癌的成人病人，作為第一線治療。				

Zhou C, et al. Amivantamab plus Chemotherapy in NSCLC with EGFR Exon 20 insertions. N Engl J Med 2023;389:2039-2051

Subsequent Therapy

Amivantamab-vmjw

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Amivantamab-vmjw	1050 mg	IV	drip over 4-6 hours	every 28 days	weekly at a dose of 1050 mg (or 1400 mg in patients with a body weight of 80 kg) for the first 4 weeks (cycle 1), with the first infusion split over a period of 2 days (with 350 mg given on cycle 1 day 1, and the remainder given on cycle 1 day 2).
健保給付	與 Carboplatin 及 Pemetrexed 併用，適用於罹患帶有表皮生長因子受體(EGFR) exon 20 插入突變之局部晚期或轉移性非小細胞肺癌的成人病人，作為第一線治療。				

Park K, et al. Amivantamab in EGFR exon 20 insertion-mutated non-small cell lung cancer progressing on platinum Chemotherapy: initial results from the CHRYSALIS phase I study. J Clin Oncol 2021;39:3391-3402.

Sunvozertinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Sunvozertinib	200 mg/300 mg	PO	QD	every 28 days	
健保給付	尚未健保給付				

Yang, J C-H, et al. A multinational pivotal study of sunvozertinib in platinum pretreated non-small cell lung cancer with EGFR exon 20 insertion mutations: Primary analysis of WU-KONG1 study [abstract]. J Clin Oncol 2024;42(Suppl):Abstract 8513.

EGFR S768I, L861Q, and/or G719X

First-line Therapy

Afatinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Afatinib	30 mg/40 mg	PO	QD	every 28 days	
健保給付	限單獨使用於： (1)具有 EGFR-TK 基因突變之局部晚期或轉移性(即第IIIB、IIIC 期或第IV期)之肺腺癌病患之第一線治療，需檢附 EGFR 基因檢測結果報告，且需符合全民健康保險藥品給付規定之通則十二。 (2)先前已使用過第一線含鉑化學治療，但仍惡化的局部晚期或轉移性之鱗狀組織非小細胞肺癌之第二線治療。				

1.Yang JC, et al. Afatinib versus Cisplatin based Chemotherapy for EGFR mutation POsitive lung adenocarcinoma (LUX Lung 3 and LUX Lung 6): analysis of overall survival data from two randomised, phase 3 trials. Lancet Oncol 2015;16:141-151.

2.Yang JC, et al. Clinical activity of afatinib in patients with advanced non-small-cell lung cancer harbouring uncommon EGFR mutations: a combined POst-hoc analysis of LUX-Lung 2, LUX-Lung 3, and LUX-Lung 6. Lancet Oncol 2015;16:830-838.

Erlotinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Erlotinib	100 mg/150 mg	PO	QD	every 28 days	
健保給付	限單獨使用於 (1)適用於具有 EGFR TK 突變之局部侵犯性或轉移性 即第IIIB、IIIC 或第 IV 期之肺腺癌病患 之第一線治療，需檢附 EGFR 基因檢測結果報告，且需符合全民健康保險藥品給付規定之通則十二。 (2)已接受 4 個週期 platinum 類第一線化學療法後，腫瘤範圍穩定(stable disease 不含 partial resPOnse 或 complete resPOnse)之局部晚期或轉移性肺腺癌的維持療法。 (3)先前已使用過 platinum 類第一線化學治療，或 70 歲以上接受過第一線化學治療，但仍局部惡化或轉移之腺性非小細胞肺 癌之第二線用藥。 (4)先前已使用過 platinum 類及 docetaxel 或 Paclitaxel 化學治療後，但仍局部惡化或轉移之非小細胞肺癌之第三線用藥。 2.Erlotinib 與 Bevacizumab(除 Zirabev 以外併用，作為無法手術切除的轉移性（第 IV 期）且帶有表皮生長因子受體(EGFR)Exon 21 L858R 活性化突變之腦轉移非鱗狀非小細胞肺癌病患的第一線治療。				

Rosell R, et al. Erlotinib versus standard Chemotherapy as first line treatment for European patients with advanced EGFR mutation POsitive non small cell lung cancer (EURTAC): a multicentre, open label, randomised phase 3 trial. Lancet Oncol 2012;13:239-246.

Dacomitinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dacomitinib	15-45mg	PO	QD	every 28 days	
健保給付	限單獨使用具有 EGFR TK Exon 19 Del 或 Exon 21 L858R 點突變，且無腦轉移(non CNS)之局部侵犯性或轉移性即第IIIB、IIIC 或第 IV 期之肺腺癌病患之第一線治療。				

Wu Y-L, et al. Dacomitinib versus gefitinib as first-line treatment for patients with EGFR-mutation-POsitive non-small-cell lung cancer (ARCHER 1050): a randomized, open-label, phase 3 trial. Lancet Oncol 2017;18:1454-1466.

Gefitinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gefitinib	250 mg	PO	QD	every 28 days	
健保給付	限單獨使用於 (1)具有 EGFR TK 基因突變之局部侵犯性或轉移性即第IIIB、IIIC 或第 IV 期之肺腺癌病患之第一線治療，需檢附 EGFR 基因檢測結果報告，且需符合全民健康保險藥品給付規定之通則十二。 (2)先前已使用過第一線含鉑化學治療，或 70 歲以上接受過第一線化學治療，但仍局部惡化或轉移之肺腺癌。				

1.Mok TS, et al. Gefitinib or Carboplatin Paclitaxel in pulmonary adenocarcinoma. N Engl J Med 2009;361:947-957.
2.Douillard JY, et al. First line gefitinib in Caucasian EGFR mutation positive NSCLC patients: a phase IV, open label, single arm study. Br J Cancer 2014;110:55-62.

Osimertinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Osimertinib	80 mg	PO	QD	every 28 days	
健保給付	限單獨使用於： (1)具有 EGFR Exon 19 Del 或 Exon 21 L858R 基因突變之局部侵犯性或轉移性（即為 IIIB、IIIC 期或第 IV 期）肺腺癌病患之第一線治療。 (2)先前已使用過 EGFR 標靶藥物 gefitinib、erlotinib、afatinib 或 dacomitinib 治療失敗，且具有 EGFR T790M 基因突變之局部侵犯性或轉移性之非小細胞肺癌之第二線治療。				

1.Soria JC, et al. Osimertinib in untreated EGFR-mutated advanced non-small-cell lung cancer. N Engl J Med 2018;378:113-125.

2.Cho JH, et al. Osimertinib for patients with non-small-cell lung cancer harboring uncommon EGFR mutations: a multicenter, open-label, phase II trial (KCSG- LU15-09). J Clin Oncol 2020;38:488-495.

Subsequent Therapy

Osimertinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Osimertinib	80 mg	PO	QD	every 28 days	
健保給付	限單獨使用於： (1)具有 EGFR Exon 19 Del 或 Exon 21 L858R 基因突變之局部侵犯性或轉移性（即為 IIIB、IIIC 期或第 IV 期）肺腺癌病患之第一線治療。 (2)先前已使用過 EGFR 標靶藥物 gefitinib、erlotinib、afatinib 或 dacomitinib 治療失敗，且具有 EGFR T790M 基因突變之局部侵犯性或轉移性之非小細胞肺癌之第二線治療。				

Mok TS, et al. Osimertinib or platinum Pemetrexed in EGFR T790M positive lung cancer. N Engl J Med 2017;376:629-640.

KRAS G12C Mutation

Subsequent Therapy

Sotorasib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Sotorasib	120 mg 8#	PO	QD	every 28 days	
健保給付	尚未健保給付				

Skoulidis F, et al. Sotorasib for lung cancers with KRAS p.G12C mutation. N Engl J Med 2021;384:2371-2381.

Adagrasib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/ Duration	Notes
Adagrasib	200 mg 3#	PO	QD	every 28 days	
健保給付	尚未健保給付				

Janne PA, et al. Adagrasib in non-small-cell lung cancer harboring a KRAS G12C mutation. N Engl J Med 2022;387:120-131.

ALK Gene Fusion

First-line Therapy

Alectinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Alectinib	600 mg	PO	BID	every 28 days	
健保給付	適用於 ALK 陽性之晚期非小細胞肺癌第一線治療。				

1.Peters S, et al. Alectinib versus crizotinib in untreated ALK-positive non-small-cell lung cancer. N Engl J Med 2017;377:829-838.
2.Hida T, et al. Alectinib versus crizotinib in patients with ALK-positive non-small-cell lung cancer (J-ALEX): an open-label, randomised phase 3 trial. Lancet 2017;390:29- 39.

Brigatinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Brigatinib	180 mg	PO	QD	every 28 days	
健保給付	1.適用於 ALK 陽性的晚期非小細胞肺癌第一線治療。 2.適用於在 crizotinib 治療中惡化之 ALK 陽性的晚期非小細胞肺癌患者。				

Camidge DR, et al. Brigatinib versus crizotinib in ALK-positive non-small-cell lung cancer. N Engl J Med 2018;379:2027-2039.

Ceritinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ceritinib	450 mg	PO	QD	every 28 days	
健保給付	適用於 ALK 陽性之晚期非小細胞肺癌第一線治療。				

Soria JC, et al. First line ceritinib versus platinum based Chemotherapy in advanced ALK rearranged non small cell lung cancer (ASCEND 4): a randomised, open label, phase 3 study. Lancet 2017;389:917-929.

Crizotinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Crizotinib	250 mg	PO	BID	every 28 days	
健保給付	1.適用於 ALK 陽性之晚期非小細胞肺癌第一線治療，且於 113 年 9 月 1 日前經審核同意用藥，後續評估符合續用申請條件者。 2.單獨使用於 ROS-1 陽性之晚期非小細胞肺癌患者。				

1.Peters S, et al. Alectinib versus crizotinib in untreated ALK-positive non-small-cell lung cancer. N Engl J Med 2017;377:829-838.
2.Solomon BJ, et al. First line crizotinib versus Chemotherapy in ALK positive lung cancer. N Engl J Med 2014;371:2167-2177

Ensartinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ensartinib	225 mg	PO	QD	every 28 days	
健保給付	尚未健保給付				

Horn L, et al. Ensartinib vs crizotinib for patients with anaplastic lymphoma kinase-positive nonsmall cell lung cancer. JAMA Oncol 2021;7:1617-1625.

Lorlatinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Lorlatinib	100 mg	PO	QD	every 28 days	

健保給付	1.適用於 ALK 陽性的晚期非小細胞肺癌第一線治療。 2.適用於在 ceritinib、alectinib 或 brigatinib 治療中惡化之 ALK 陽性的晚期非小細胞肺癌患者。

Shaw AT, et al. First-line lorlatinib or crizotinib in advanced ALK-positive lung cancer. N Engl J Med 2020;383;2018-2029.

Subsequent Therapy

Alectinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Alectinib	600 mg	PO	BID	every 28 days	
健保給付	1.適用於 ALK 陽性之晚期非小細胞肺癌第一線治療。				

1Ou SI, et al. Alectinib in crizotinib refractory ALK rearranged non small cell lung cancer: a phase II global study. J Clin Oncol 2016;34:661-668.
2. Shaw AT, et al. Alectinib in ALK positive, crizotinib resistant, non small cell lung cancer: a single group, multicentre, phase 2 trial. Lancet Oncol 2016;17:234-242.

Brigatinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Brigatinib	180 mg	PO	QD	every 28 days	
健保給付	1.適用於 ALK 陽性的晚期非小細胞肺癌第一線治療。 2.適用於在 crizotinib 治療中惡化之 ALK 陽性的晚期非小細胞肺癌患者。				

Kim DW, et al. Brigatinib in patients with crizotinib refractory anaplastic lymphoma kinase positive non small cell lung cancer: a randomized, multicenter phase II trial. J Clin Oncol 2017;35:2490-2498.

Ceritinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ceritinib	450 mg	PO	QD	every 28 days	
健保給付	適用於 ALK 陽性之晚期非小細胞肺癌第一線治療。				

Shaw AT, et al. Ceritinib versus Chemotherapy in patients with ALK-rearranged non-small-cell lung cancer previously given Chemotherapy and crizotinib (ASCEND-5): a randomised, controlled, open-label, phase 3 trial. Lancet Oncol 2017;18:874-886.

Ensartinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ensartinib	225 mg	PO	QD	every 28 days	
健保給付	尚未健保給付				

Horn L, et al. Ensartinib (X-396) in ALK-positive non–small cell lung cancer: results from a first-in-human phase I/II, multicenter study. Clin Cancer Res 2018;24:2771- 2779.

Lorlatinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Lorlatinib	100 mg	PO	QD	every 28 days	
健保給付	1.適用於 ALK 陽性的晚期非小細胞肺癌第一線治療。 2.適用於在 ceritinib、alectinib 或 brigatinib 治療中惡化之 ALK 陽性的晚期非小細胞肺癌患者。				

Solomon BJ, et al. Lorlatinib in patients with ALK-positive non-small-cell lung cancer: results from a global phase 2 study. Lancet Oncol 2018;19:1654-1667.

ROS1 Gene Fusion

First-line Therapy

Crizotinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Crizotinib	250 mg	PO	BID	every 28 days	
健保給付	1.適用於 ALK 陽性之晚期非小細胞肺癌第一線治療，且於 113 年 9 月 1 日前經審核同意用藥，後續評估符合續用申請條件者。 2.單獨使用於 ROS 1 陽性之晚期非小細胞肺癌患者。				

Shaw AT, et al. Crizotinib in ROS1-rearranged non-small-cell lung cancer. N Engl J Med 2014;371:1963-1971.

Entrectinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Entrectinib	600 mg	PO	QD	every 28 days	
健保給付	單獨使用於 ROS 1 陽性之局部晚期或轉移性非小細胞肺癌的成人病人。				

Drilon A, et al. Entrectinib in ROS1 fusion-positive non-small-cell lung cancer: integrated analysis of three phase 1-2 trials. Lancet Oncol 2020;21:261-270.

Repotrectinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Repotrectinib	160 mg	PO	QD	every 28 days	
健保給付	尚未健保給付				

Drilon A, et al. Repotrectinib in ROS1 fusion-positive non-small-cell lung cancer. N Engl J Med 2024;390:118-131.

Taletrectinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Taletrectinib	600 mg	PO	QD	every 28 days	
健保給付	尚未健保給付				

Perol M, et al. Taletrectinib in ROS1+ non–small cell lung cancer: TRUST. J Clin Oncol 2025;43:1920-1929

Subsequent Therapy

Lorlatinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Lorlatinib	100 mg	PO	QD	every 28 days	
健保給付	1.適用於 ALK 陽性的晚期非小細胞肺癌第一線治療。 2.適用於在 ceritinib、alectinib 或 brigatinib 治療中惡化之 ALK 陽性的晚期非小細胞肺癌患者。				

ShawT, et al. Lorlatinib in advanced ROS1-POsitive non-small-cell lung cancer: a multicentre, open-label, single-arm, phase 1-2 trial. Lancet Oncol 2019;20:1691-1701

Entrectinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Entrectinib	600 mg	PO	QD	every 28 days	
健保給付	單獨使用於 ROS 1 陽性之局部晚期或轉移性非小細胞肺癌的成人病人。				

Drilon A, et al. Entrectinib in ROS1 fusion-positive non-small-cell lung cancer: integrated analysis of three phase 1-2 trials. Lancet Oncol 2020;21:261-270.

Repotrectinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Repotrectinib	160 mg	PO	BID	every 28 days	
健保給付	尚未健保給付				

Drilon A, et al. Repotrectinib in ROS1 fusion-positive non-small-cell lung cancer. N Engl J Med 2024;390:118-131.

Taletrectinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Taletrectinib	600 mg	PO	QD	every 28 days	
健保給付	尚未健保給付				

Perol M, et al. Taletrectinib in ROS1+ non–small cell lung cancer: TRUST. J Clin Oncol 2025;43:1920-1929.

BRAF V600E Mutation

First-line Therapy

Dabrafenib + Trametinib

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dabrafenib	150 mg	PO	BID	every 28 days	
Trametinib	2 mg	PO	QD	every 28 days	

健保給付	作為先前已接受過第一線含鉑化學治療，但仍惡化的轉移性第 IV 期非小細胞肺癌成人病人第二線治療，使用本品無效後則不再給付該適應症相關之免疫檢查點 PD1、PDL1 抑制劑。

Planchard D, et al. Dabrafenib plus Trametinib in patients with previously untreated BRAF(V600E)-mutant metastatic non-small-cell lung cancer: an open-label, phase 2 trial. Lancet Oncol 2017;18:1307-1316.

Encorafenib + Binimetinib

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Encorafenib	450 mg	PO	QD	every 28 days	
Binimetinib	45 mg	PO	BID	every 28 days	
健保給付	尚未健保給付				

Riely GJ, Smit EF, Ahn M-J, et al. Phase II, open-label study of encorafenib plus Binimetinib in patients with BRAF V600-mutant metastatic non-small-cell lung cancer. J Clin Oncol 2022;41:3700-3711.

Dabrafenib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dabrafenib	150 mg	PO	BID	every 28 days	
健保給付	作為先前已接受過第一線含鉑化學治療，但仍惡化的轉移性第 IV 期非小細胞肺癌成人病人第二線治療，使用本品無效後則不再給付該適應症相關之免疫檢查點 PD1、PDL1 抑制劑。				

Planchard D, et al. Phase 2 study of dabrafenib plus Trametinib in patients with BRAF V600E-mutant metastatic NSCLC: updated 5-year survival rates and genomic analysis. J Thorac Oncol 2022;17:103-115.

Vemurafenib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Vemurafenib	960 mg	PO	BID	every 28 days	
健保給付	尚未健保給付				

J. Mazieres, C. Cropet ,L. Montané, et.al. Vemurafenib in non-small-cell lung cancer patients with BRAFV600 and BRAFnonV600 mutations. Annals of Oncology. Volume 31, Issue 2, February 2020, Pages 289-294.

Subsequent Therapy

Dabrafenib + Trametinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dabrafenib	150 mg	PO	BID	every 28 days	
Trametinib	2 mg	PO	QD	every 28 days	
健保給付	作為先前已接受過第一線含鉑化學治療，但仍惡化的轉移性第 IV 期非小細胞肺癌成人病人第二線治療，使用本品無效後則不再給付該適應症相關之免疫檢查點 PD1、PDL1 抑制劑。				

1.Planchard D, et al. Phase 2 study of dabrafenib plus Trametinib in patients with BRAF V600E-mutant metastatic NSCLC: updated 5-year survival rates and genomic analysis. J Thorac Oncol 2022;17:103-115.
2.Planchard D, et al. Dabrafenib plus Trametinib in patients with previously treated BRAF(V600E) mutant metastatic non small cell lung cancer: an open label, multicentre phase 2 trial. Lancet Oncol 2016;17:984-993.

Encorafenib/Binimetinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Encorafenib	450 mg	PO	QD	every 28 days	
Binimetinib	45 mg	PO	BID	every 28 days	
健保給付	尚未健保給付				

Riely GJ, Smit EF, Ahn M-J, et al. Phase II, open-label study of encorafenib plus Binimetinib in patients with BRAF V600-mutant metastatic non-small-cell lung cancer. J Clin Oncol 2022;41:3700-3711.

NTRK1/2/3 Gene Fusion

First-line/Subsequent Therapy

Larotrectinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Larotrectinib	100 mg	PO	BID	every 28 days	
健保給付	尚未健保給付				

Drilon A, et al. Efficacy of larotrectinib in TRK fusion-POsitive cancers in adults and children. N Engl J Med 2018;378:731-739.

Entrectinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Entrectinib	600 mg	PO	QD	every 28 days	
健保給付	1.單獨使用於 ROS 1 陽性之局部晚期或轉移性非小細胞肺癌的成人病人。				

Doebele RC, et al. Entrectinib in patients with advanced or metastatic NTRK fusion- positive solid tumours: integrated analysis of three phase 1-2 trials. Lancet Oncol 2020;21:271-282.

Repotrectinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Repotrectinib	160 mg	PO	QD	every 28 days	
健保給付	尚未健保給付				

Solomon BJ, Drilon A, Lin JJ, et al. Repotrectinib in patients with NTRK fusion- positive advanced solid tumors, including non-small cell lung cancer: update from the phase 1/2 TRIDENT-1 trial. Ann Oncol. 2023;34:S787-S788.

MET Exon 14 Skipping Mutation

First-line Therapy/Subsequent Therapy

Capmatinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Capmatinib	400 mg	PO	BID	every 28 days	
健保給付	尚未健保給付				

Wolf J, et al; GEOMETRY mono-1 Investigators. Capmatinib in MET exon 14-mutated or MET-amplified non-small-cell lung cancer. N Engl J Med 2020;383:944-957.

Crizotinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Crizotinib	250 mg	PO	BID	every 28 days	
健保給付	1.適用於 ALK 陽性之晚期非小細胞肺癌第一線治療，且於 113 年 9 月 1 日前經審核同意用藥，後續評估符合續用申請條件者。 2.單獨使用於 ROS 1 陽性之晚期非小細胞肺癌患者。				

Drilon A, et al. Antitumor activity of crizotinib in lung cancers harboring a MET exon 14 alteration. Nat Med 2020;26:47-51.

Tepotinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tepotinib	500 mg	PO	QD	every 28 days	
健保給付	適用於治療轉移性非小細胞肺癌的成人病人，其腫瘤帶有導致間質上皮轉化因子外顯子 14 跳讀式突變(MET exon 14 skipping)				

Paik PK, et al. Tepotinib in non-small-cell lung cancer with MET Exon 14 skipping mutations. N Engl J Med 2020;383:931-943.

RET Rearrangement

First-line Therapy

Selpercatinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Selpercatinib	160 mg	PO	BID	every 28 days	
健保給付	尚未健保給付				

Zhou C, et al. First-line selpercatinib or Chemotherapy and Pembrolizumab in RET fusion-Positive NSCLC. N Engl J Med 2023;389:1839-1850.

Pralsetinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pralsetinib	400 mg	PO	QD	every 28 days	
健保給付	尚未健保給付				

Gainor JF, et al. Pralsetinib for RET fusion-positive non-small cell lung cancer (ARROW): a multi-cohort, open-label, phase 1/2 study. Lancet Oncol 2021;22:959- 969.

Subsequent Therapy

Cabozantinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cabozantinib	60 mg	PO	QD	every 28 days	
健保給付	尚未健保給付				

1.Drilon A, et al. Response to cabozantinib in patients with RET fusion-POsitive lung adenocarcinomas. Cancer Discov 2013;3:630-635.
2.Drilon A, et al. Cabozantinib in patients with advanced RET-rearranged non-small- cell lung cancer: an open-label, single-centre, phase 2, single-arm trial. Lancet Oncol 2016;17:1653-1660.

ERBB2 (HER2) Mutation

Subsequent Therapy

Fam-trastuzumab deruxtecan-nxki

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Fam-trastuzumab deruxtecan-nxki	6.4 mg/kg	IV	drip 90 mins, day 1	every 21 days	
健保給付	尚未健保給付				

Li BT, et al. Trastuzumab deruxtecan in HER2-mutant non-small-cell lung cancer. N Engl J Med 2022;386:241-251.

Ado-trastuzumab emtansine

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ado-trastuzumab emtansine	3.6 mg/kg	IV	drip 90 mins, day 1	every 21 days	
健保給付	尚未健保給付				

Li BT, et al. Ado-trastuzumab emtansine in patients with HER2 mutant lung cancers: Results from a phase II basket trial. J Clin Oncol 2018;36:2532-2537.

Zongertinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Zongertinib	120 mg/240 mg	PO	QD	every 28 days	
健保給付	尚未健保給付				

Heymach JV, et al. Zongertinib in previously treated HER2-mutant non–small-cell lung cancer. N Engl J Med 2025;392:2321-2333.

HER2-Positive IHC 3+

Subsequent Therapy

Fam-trastuzumab deruxtecan-nxki

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Fam-trastuzumab deruxtecan-nxki	6.4 mg/kg	IV	drip 90 mins, day 1	every 21 days	*請勿使用氯化鈉溶液
健保給付	尚未健保給付				

Smit EF, et al. Trastuzumab deruxtecan in patients with metastatic non-small cell lung cancer (DESTINY-Lung01): primary results of the HER2-overexpressing cohorts from a single-arm, phase 2 trial. Lancet Oncol 2024;25:439-454.

NRG1 Gene Fusion

Subsequent Therapy

Zenocutuzumab-zbco

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Zenocutuzumab-zbco	750 mg	IV	drip over 4 hours, day 1	every 14 days	*Evaluate left ventricular ejection fraction (LVEF)
健保給付	尚未健保給付				

Schram AM, et al. Efficacy of zenocutuzumab in NRG1 fusion-positive cancer. N Engl J Med 2025;392:566-576.

c-Met/MET (≥50% IHC 3+and EGFR wild-type)

Subsequent Therapy

Telisotuzumab vedotin-tllv

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Telisotuzumab vedotin-tllv	1.9 mg/kg	IV	drip over 30 mins, day 1	every 14 days	(nonsquamous) *for up to a maximum of 190 mg *only 0.9% Sodium Chloride
健保給付	尚未健保給付				

Camidge DR, et al. Telisotuzumab vedotin monotherapy in patients with previously treated c-Met protein-overexpressing advanced nonsquamous EGFR-wildtype non- small cell lung cancer in the phase II LUMINSOSITY Trial. J Clin Oncol 2024;42:3000- 3011.

小細胞肺癌

Adjuvant Therapy

- 輔助化學治療藥物給予時，應依各藥物特性，配合病人狀況，例如：BSA、WBC 及特定之血液檢查值等，調整適當藥物劑量。
- 實際劑量施打劑量若因肝腎功能不佳有調整，需註記於病歷上。

Limited stage (maximum of 4-6 cycles)

Preferred

Cisplatin+Etoposide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, Day 1	every 21 days for 4-6 cycles	(adjusted by Ccr)
Etoposide	100 mg/m^2	IV	drip 30 mins, Days 1, 2, 3		

1.Faivre-Finn C, Snee M, Ashcroft L, et al. Concurrent once-daily versus twice-daily chemoradiotherapy in patients with limited stage small-cell lung cancer (CONVERT): an open-label, phase 3, randomised, superiority trial. Lancet Oncol 2017;18:1116-1125.
2.Turrisi AT 3rd, Kim K, Blum R, et al. Twice-daily compared with once-daily thoracic radiotherapy in limited small-cell lung cancer treated concurrently with Cisplatin and Etoposide. N Engl J Med 1999;340:265-271

Carboplatin+Etoposide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, Day 1 or 15	every 21 days for 4 cycles	(adjusted by Ccr)
Etoposide	100 mg/m^2	IV	drip 30 mins, Days 1, 2, 3		

Skarlos DV, Samantas E, Briassoulis E, et al. Randomized comparison of early versus late hyperfractionated thoracic irradiation concurrently with Chemotherapy in limited disease small-cell lung cancer: a randomized phase II study of the Hellenic Cooperative Oncology Group (HeCOG). Ann Oncol 2001;12:1231-1238.

Consolidation Therapy

Durvalumab (category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Durvalumab	1500 mg	IV	drip 30-60 mins, day 1	every 4 weeks for up to 12 months	1.patients with a body weight of over 30 kg) 2.category 1 for stage III; category 2A for stage II

Cheng Y, Spigel D, Cho BC, et al. Durvalumab after Chemoradiotherapy in Limited-Stage Small-Cell Lung Cancer. N Engl J Med 2024;39;1313-1327.

Other Recommended

Cisplatin(25)+Etoposide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	25 mg/m^2	IV	drip 6 hours, Day 1, 2, 3	every 21 days for 4-6 cycles	(adjusted by Ccr)
Etoposide	100 mg/m^2	IV	drip 30 mins, Days 1, 2, 3		

Faivre-Finn C, Snee M, Ashcroft L, et al. Concurrent once-daily versus twice-daily chemoradiotherapy in patients with limited stage small-cell lung cancer (CONVERT): an open-label, phase 3, randomised, superiority trial. Lancet Oncol 2017;18:1116-1125.

Advanced/Metastasis Therapy with Immunotherapy

Extensive stage (maximum of 4-6 cycles)

Preferred

Carboplatin+Etoposide+Atezolizumab followed by maintenance Atezolizumab(category 1 for all)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, Day 1	every 21 days for 4 cycles	followed by maintenance Atezolizumab 1200 mg
Etoposide	100 mg/m^2	IV	drip 30 mins, Days 1, 2, 3		

Atezolizumab	1200 mg	IV	drip 30 mins, Days 1		Day 1, every 21 Days (category 1 for all)

Horn L, Mansfield A, Szczęsna A, et al. First-line atezolizumab plus Chemotherapy in extensive stage small-cell lung cancer. N Engl J Med 2018;379:2220-2229.

Carboplatin+Etoposide+Atezolizumab followed by maintenance Atezolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, Day 1	every 28 days for 4 cycles	followed by maintenance Atezolizumab 1680 mg Day 1, every 28 Days
Etoposide	100 mg/m^2	IV	drip 30 mins, Days 1, 2, 3		
Atezolizumab	1200 mg	IV	drip 30 mins, Day 1		

Horn L, Mansfield A, Szczęsna A, et al. First-line atezolizumab plus chemotherapy in extensive stage small-cell lung cancer. N Engl J Med 2018;379:2220-2229.

Carboplatin+Etoposide+Atezolizumab followed by maintenance Lurbinectedin and Atezolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, Day 1	every 21 days for 4 cycles	followed by maintenance Lurbinectedin 3.2 mg/m2 and Atezolizumab 1200 mg Day 1, every 21 Days
Etoposide	100 mg/m^2	IV	drip 30 mins, Days 1, 2, 3		
Atezolizumab	1200 mg	IV	drip 30 mins, Day 1		
Lurbinectedin	3.2 mg/m^2	IV	drip over 60 minsutes, Day 1		

Paz-Ares L, Borghaei H, Liu SV, et al. Efficacy and safety of first-line maintenance Therapy with lurbinectedin plus atezolizumab in extensive-stage small-cell lung cancer (IMforte): a randomised, multicentre, open-label, phase 3 trial. Lancet 2025;405:2129- 2143.

Carboplatin + Etoposide + Durvalumab followed by maintenance Durvalumab(category 1 for all)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, Day 1	every 28 days for 4 cycles	followed by maintenance Durvalumab 1500 mg
Etoposide	80-100 mg/m^2	IV	drip 30 mins, Days 1, 2, 3		

Durvalumab	1500 mg	IV	drip 30 mins, Day 1		Day 1 every 28 Days (category 1 for all)

Goldman JW, Dvorkin M, Chen Y, et al. Durvalumab, with or without tremelimumab, plus platinum-Etoposide versus platinum-Etoposide alone in first-line treatment of extensive stage small-cell lung cancer (CASPIAN): updated results from a randomised, controlled, open-label, phase 3 trial. Lancet Oncol 2021;22:51-65.

Cisplatin+ Etoposide + Durvalumab 1500 mg followed by maintenance Durvalumab(category 1 for all)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, Day 1	every 28 days for 4 cycles	followed by maintenance Durvalumab
Etoposide	80-100 mg/m^2	IV	drip 30 mins, Days 1, 2, 3		
Durvalumab	1500 mg	IV	drip 30 mins, Days 1, 2, 3		

Goldman JW, Dvorkin M, Chen Y, et al. Durvalumab, with or without tremelimumab, plus platinum-Etoposide versus platinum-Etoposide alone in first-line treatment of extensive stage small-cell lung cancer (CASPIAN): updated results from a randomised, controlled, open-label, phase 3 trial. Lancet Oncol 2021;22:51-65.

Other Recommended

Carboplatin + Etoposide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, Day 1	every 21 days	(adjusted by Ccr)
Etoposide	100 mg/m^2	IV	drip 30 mins, Days 1, 2, 3		

Okamoto H, Watanabe K, Nishiwaki Y, et al. Phase II study of area under the plasma- concentration-versus-time curve-based Carboplatin plus standard-dose intravenous Etoposide in elderly patients with small cell lung cancer. J Clin Oncol 1999;17:3540-3545.

Cisplatin + Etoposide(100)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, Day 1	every 21 days	(adjusted by Ccr)
Etoposide	100 mg/m^2	IV	drip 30 mins, Days 1, 2, 3		

Spigel DR, Townley PM, Waterhouse DM, et al. Randomized phase II study of Bevacizumab in combination with Chemotherapy in previously untreated extensive stage small-cell lung cancer: results from the SALUTE trial. J Clin Oncol 2011;29:2215-2222.

Cisplatin + Etoposide(80)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50-75 mg/m^2	IV	drip 6 hours, Day 1	every 21 days	(adjusted by Ccr)
Etoposide	80 mg/m^2	IV	drip 30 mins, Days 1, 2, 3		

Niell HB, Herndon JE 2nd, Miller AA, et al. Randomized phase III Intergroup trial of Etoposide and Cisplatin with or without Paclitaxel and granulocyte-colony stimulating factor in patients with extensive stage small-cell lung cancer: Cancer and Leukemia Group B trial 9732. J Clin Oncol 2005;23:3752-3759.

Cisplatin(25) + Etoposide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	25 mg/m^2	IV	drip 6 hours, Day 1, 2, 3	every 21 days	(adjusted by Ccr)
Etoposide	100 mg/m^2	IV	drip 30 mins, Days 1, 2, 3		
Ref.					

Evans WK, Shepherd FA, Feld R, et al. VP-16 and Cisplatin as first-line Therapy for small- cell lung cancer. J Clin Oncol 1985;3:1471-1477.

Useful in Certain Circumstances

Carboplatin + Irinotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 4.5-6	IV	drip 1 hours, Day 1	every 21 days	(adjusted by Ccr)
Irinotecan	50 mg/m^2	IV	drip 90 mins, Days 1, 8, 15		

Schmittel A, Fischer von Weikersthal L, Sebastian M, et al. A randomized phase II trial of Irinotecan plus Carboplatin versus Etoposide plus Carboplatin treatment in patients with extended disease small-cell lung cancer. Ann Oncol 2006;17:663-667.

Cisplatin(60) + Irinotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	60 mg/m^2	IV	drip 6 hours, Day 1	every 21 days	(adjusted by Ccr)
Irinotecan	50 mg/m^2	IV	drip 90 mins, Days 1, 8, 15		

Noda K, Nishiwaki Y, Kawahara M, et al. Irinotecan plus Cisplatin compared with Etoposide plus Cisplatin for extensive small-cell lung cancer. N Engl J Med 2002;346:85- 91.

SCLC SUBSEQUENT SYSTEMIC THERAPY (PS 0–2)

Preferred

Tarlatamab-dlle(category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Tarlatamab-dlle	*	IV	drip 8 hours, Day 1	every 28 days	step-up dose of 1 mg on day 1 of cycle 1, followed by 10 mg on days 8 and 15 of cycle 1 and then 10 mg every 2 weeks thereafter in 28-day cycles.

Ahn MJ, Cho BC, Felip E, et al. Tarlatamab for patients with previously treated small-cell lung cancer. N Engl J Med 2023;389:2063-2075.

Irinotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Irinotecan	50 mg/m^2	IV	drip 90 mins, Days 1, 8, 15	every 21 days for 4-6 cycles	

1.Edelman MJ, Dvorkin M, Laktionov K, et al. Randomized phase 3 study of the anti-disialoganglioside antibody dinutuximab and Irinotecan vs Irinotecan or Topotecan for second-line treatment of small cell lung cancer. Lung Cancer 2022;166:135-142.
2.Masuda N, Fukuoka M, Kusunoki Y, et al. CPT-11: a new derivative of camptothecin for the treatment of refractory or relapsed small-cell lung cancer. J Clin Oncol 1992;10:1225-1229.

Lurbinectedin (if not previously used)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Lurbinectedin	3.2 mg/m^2	IV	drip over 60 mins, Days 1	every 21 days	

1.Trigo J, Subbiah V, Besse B, et al. Lurbinectedin as second-line treatment for patients with small-cell lung cancer: a single-arm, open-label, phase 2 basket trial. Lancet Oncol 2020;21:645-654.
2.Subbiah V, Paz-Ares L, Besse B, et al. Antitumor activity of lurbinectedin in second-line small cell lung cancer patients who are candidates for re-challenge with the first-line treatment. Lung Cancer 2020;150:90-96.

If prolonged disease free time, re-treatment with platinum-based doublet with or without Immunotherapy

Other Recommended

CAV (Cyclophosphamide/Doxorubicin/Vincristine)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cyclophosphamide	1000 mg/m^2	IV	drip 1 hour, Days 1	every 21 days	
Doxorubicin	45 mg/m^2	IV	drip 1 hour, Days 1		
Vincristine	2 mg	IV	drip 10 mins, Days 1		

von Pawel J, Schiller JH, Shepherd FA, et al. Topotecan versus cyclophosphamide, Doxorubicin, and vincristine for the treatment of recurrent small-cell lung cancer. J Clin Oncol 1999;17:658-667.

Docetaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	100 mg/m^2	IV	drip 1 hour, day 1	every 21 days	
Ref.					

Smyth JF, Smith IE, Sessa C, et al. Activity of docetaxel (Taxotere) in small cell lung cancer. The Early Clinical Trials Group of the EORTC. Eur J Cancer 1994;30A:1058-1060.

Gemcitabine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1000 mg/m^2	IV	drip 30 mins, days 1 and 8	every 21 days	

1.Masters GA, Declerck L, Blanke C, et al. Phase II trial of gemcitabine in refractory or relapsed small-cell lung cancer: Eastern Cooperative Oncology Group Trial 1597. J Clin Oncol 2003;21:1550-1555.
2.Van der Lee I, Smit EF, van Putten JW, et al. Single-agent gemcitabine in patients with resistant small-cell lung cancer. Ann Oncol 2001;12:557-561.
3.Hoang T, Kim K, Jaslowski A, et al. Phase II study of second-line gemcitabine in sensitive or refractory small cell lung cancer. Lung Cancer 2003;42:97-102.

Nivolumab (if not previously treated with an ICI)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	3 mg/kg	IV	drip 30 mins, day 1	every 14 days	

1.Antonia SJ, López-Martin JA, Bendell J, et al. Nivolumab alone and Nivolumab plus Ipilimumab in recurrent small-cell lung cancer (Checkmate 032): a multicentre, open-label phase 1/2 trial. Lancet Oncol 2016;17:883-895.
2.Ready NE, Ott PA, Hellmann MD, et al. Nivolumab monoTherapy and Nivolumab plus Ipilimumab in recurrent small cell lung cancer: results from the CheckMate 032 randomized cohort. J Thorac Oncol 2020;15:426-435.

Pembrolizumab (if not previously treated with an ICI)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins, day 1	every 21 days	

1.Chung HC, Piha-Paul SA, Lopez-Martin J, et al. Pembrolizumab After Two or More Lines of Previous Therapy in Patients With Recurrent or Metastatic SCLC: Results From the KEYNOTE-028 and KEYNOTE-158 Studies. J Thorac Oncol 2020;15:618-627.
2.Ott PA, Elez E, Hiret S, et al. Pembrolizumab in patients with extensive stage small-cell lung cancer: results from the phase Ib KEYNOTE-028 study. J Clin Oncol 2017;35:3823-3829.

Oral Etoposide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Etoposide	50 mg/m^2	PO	Days 1-21	every 28 days	

1.Einhorn LH, Pennington K, McClean J. Phase II trial of daily oral VP-16 in refractory small cell lung cancer: a Hoosier Oncology Group study. Semins Oncol 1990;17:32-35.
2.Johnson DH, Greco FA, Strupp J, et al. Prolonged adminsistration of oral Etoposide in patients with relapsed or refractory small-cell lung cancer: a phase II trial. J Clin Oncol

1990;8:1613-1617.

Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 1 hours, day 1	every 21 days	

1.Smit EF, Fokkema E, Biesma B, et al. A phase II study of Paclitaxel in heavily pretreated patients with small-cell lung cancer. Br J Cancer 1998;77:347-351.
2.Yamamoto N, Tsurutani J, Yoshimura N, et al. Phase II study of weekly Paclitaxel for relapsed and refractory small cell lung cancer. Anticancer Res 2006;26:777-781.

Temozolomide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Temozolomide	75 mg/m^2	IV	drip 6 hours, Day 1	every 21 days	(adjusted by Ccr)

1.Pietanza MC, Kadota K, Huberman K, et al. Phase II trial of temozolomide with relapsed sensitive or refractory small cell lung cancer, with assessment of methylguanine-DNA methyltransferase as a Potential biomarker. Clin Cancer Res 2012;18:1138-1145.
2.Zauderer MG, Drilon A, Kadota K, et al. Trial of a 5-day dosing regimen of temozolomide in patients with relapsed small cell lung cancers with assessment of methylguanine-DNA methyltransferase. Lung Cancer 2014;86:237-240.

其它藥物如 Ifosfamide、Paclitaxyl、Docetaxel、Gemcitabine，亦可建議使用。

若病人接受過 Platinum、Etoposide 及另一線化學治療後，可考慮使用免疫治療。

乳癌

Neoadjuvant/Adjuvant Chemotherapy regimens

(AC) Doxorubicin+Cyclophosphamide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	60 mg/m^2	IV	drip 60 mins, day1	Q3w x 4 cycles or Q2W x 4 cycles	with GCSF support
Cyclophosphamide	600 mg/m^2	IV	drip 60 mins, day1		

1.Muss HB et al. Standard Chemotherapy (CMF or AC) versus Capecitabine in early-stage breast cancer(BC) patients agec 65 or older: results of CALGB/CTSU 49907. 2008 ASCO annual meeting. Abstract 507 .
2.Fisher, B et al. Treatment of axillary lymph node-negative, estrogen receptor-negative breast cancer: updated findings from National Surgical Adjuvant Breast and Bowel Project clinical trials. J Natl Cancer Inst 2004; 96:1823 .

(EC) Epirubicin+Cyclophosphamide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Epirubicin	75 - 100 mg/m^2	IV	drip 60 mins, day1	Q3w x 4 cycles or Q2W x 4-6 cycles	with GCSF support
Cyclophosphamide	600 mg/m^2	IV	drip 30 mins, days 1		

Piccart MJ et al. Phase III trial comparing two dose levels of epirubicin combined with cyclophosphamide with cyclophosphamide, methotrexate, and Fluorouracil in node-positive breast cancer. . J Clin Oncol 2001; 19:3103.

LC(Liposomal Doxorubicin-optional)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Liposmal Doxorubicin	35- 50 mg/m^2	IV	drip 60 mins, day1	Q3w x 4 cycles or Q4w x 4 cycles	
Cyclophosphamide	600 mg/m^2	IV	drip 30 mins, days 1		

Pegylated Liposomal Doxorubicin as Adjuvant Therapy for Stage I-III Operable Breast Cancer.Lu YC, Ou-Yang FU, Hsieh CM, Chang KJ, Chen DR, Tu CW, Wang HC, Hou MF.In Vivo. 2016 Mar-Apr;30(2):159-63.

健保給付：Doxorubicin hydrochloride liposome injection(如 Lipo-Dox、Caelyx)：用於單一治療有心臟疾病風險考量之轉移性乳癌患者。(93/11/1)

TC(Docetaxel +Cyclophosphamide)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	60 - 100 mg/m^2	IV	drip 60 mins, day1	Q3w x 4-6 cycles or Q2W x 4-6 cycles	
Cyclophosphamide	600 mg/m^2	IV	drip 30 mins, days 1		

Jones SE et al. Phase III trial comparing Doxorubicin plus cyclophosphamide with docetaxel plus cyclophosphamide as adjuvant Therapy for operable breast cancer. J Clin Oncol 2006; 24:5381.

健保給付：Docetaxel 1.局部晚期或轉移性乳癌。2.與 anthracycline 合併使用於腋下淋巴結轉移之早期乳癌之術後輔助性化學治療。(99/6/1)3.早期乳癌手術後，經診斷為三陰性反應且無淋巴轉移的病人，得作為與 cyclophosphamide 併用 Doxorubicin 的化學輔助療法 4.除以上條件，其餘皆自費。

Docetaxel+ Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	60 - 75 mg/m^2	IV	drip 120 mins, day1	Q3w x 4-6 cycles or Q2W x 4-6 cycles	with GCSF support
Cisplatin	60 - 75 mg/m^2	IV	drip 120 mins, day1		

A randomized phase II trial of platinum salts in basal-like breast cancer patients in the neoadjuvant setting. Results from the GEICAM/2006-03, multicenter study. (Abstract in PubMed)Breast Cancer Res Treat (2012) 136:487–493

CMF PO (Cyclophosphamide +MTX+Fluorouracil)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cyclophosphamide	100 mg/m^2	PO	day1-14	Q4w x 6 cycles	
Methotrexate	40 mg/m^2	IV	drip 30 mins, days 1 &8		
5- FU	600 mg/m^2	IV	drip 30 mins, days 1 &8		

Muss HB et al. Standard Chemotherapy (CMF or AC) versus Capecitabine in early-stage breast cancer (BC) patients agec 65 or older: results of CALGB/CTSU 49907. 2008 ASCO annual meeting. Abstract 507.

CMF IV (Cyclophosphamide +MTX+Fluorouracil)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cyclophosphamide	600 mg/m^2	IV	day1-14	Q4w x 6 cycles	
Methotrexate	40 mg/m^2	IV	drip 30 mins, days 1 &8		
5- FU	600 mg/m^2	IV	drip 30 mins, days 1 &8		

Weiss RB et al. Adjuvant Chemotherapy after conservative surgery plus irradiation versus modified radical mastectomy. Analysis of drug dosing and toxicity. Am J Med 1987; 83:455.

AC/EC→Paclitaxel Qw (or Paclitaxel→AC/EC)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	80 mg/m^2	IV	60 mins, day1	Qw x 12 cycles	

Sparano JA et al. Weekly Paclitaxel in the adjuvant treatment of breast cancer. N Eng J Med 2008; 358:1663.
健保給付：Paclitaxel 腋下淋巴轉移之乳癌且動情素受體為陰性之患者，Paclitaxel 可作為接續含 Doxorubicin 在內之輔助化學治療。

AC/EC→Docetaxel Q3w (or Docetaxel→AC/EC)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	60-100 mg/m^2	IV	60 mins, day1	Q3w x 4 cycles	

Sparano JA et al. Weekly Paclitaxel in the adjuvant treatment of breast cancer. N Eng J Med 2008; 358:1663.
健保給付：Docetaxel 1.局部晚期或轉移性乳癌。2.與 anthracycline 合併使用於腋下淋巴結轉移之早期乳癌之術後輔助性化學治療。(99/6/1)3.早期乳癌手術後，經診斷為三陰性反應且無淋巴轉移的病人，得作為與 cyclophosphamide 併用 Doxorubicin 的化學輔助療法 4.除以上條件，其餘皆自費。

TAC(Docetaxel+Doxorubicin+Cyclophosphamide)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	50-75 mg/m^2	IV	60 mins, day1	Q3w x 6 cycles	
Doxorubicin	50-60 mg/m^2	IV	60 mins, day1		

Cyclophosphamide	500 mg/m^2	IV	30 mins, day1		

Martin M et al. Adjuvant docetaxel for node-positive breast cancer. N Eng J Med 2005; 352:2302 .

TEC (Docetaxel+Epirubicin+Cyclophosphamide)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	50-75 mg/m^2	IV	120 mins, day1	Q3w x 6 cycles	
Epirubicin	75-100 mg/m^2	IV	30 mins, day1		
Cyclophosphamide	500 mg/m^2	IV	60 mins, day1		

Piedbois et al. Dose-dense adjuvant Chemotherapy in node-positive breast cancer: docetaxel followed by epirubicin/cyclophosphamide (T/EC), or the reverse sequence (EC/T), every 2 weeks, versus docetaxel, epirubicin and cyclophosphamide (TEC) every 3 weeks. AERO B03 randomized phase II study. Ann Oncol. 2007; 18: 52.

Docetaxel+ Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	60-75 mg/m^2	IV	60 mins, day1	Cycled every 21 days for 4-6 cycles	
Carboplatin	AUC 6	IV	60 mins, day1		

von Minsckwitz G, Schneeweiss A, Loibl S, et al. Neoadjuvant Carboplatin in patients with triple-negative and HER2-positive earlybreast cancer (GeparSixto; GBG 66): a randomised phase 2 trial Lancet Oncol 2014;15:747-756.

Paclitaxel(Weekly) + Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	80 mg/m^2	IV	60 mins,day 1 8 15	Cycled every 21 days for 4 cycles	
Carboplatin	AUC 6 (q3w)	IV	60 mins, day1		

Loibl S, O'Shaughnessy J, Untch M, et al. Addition of the PARP inhibitor veliparib plus Carboplatin or Carboplatin alone to standard neoadjuvant Chemotherapy in triple-negative breast cancer (BrighTNess): a randomised, phase 3 trial. Lancet Oncol 2018;19(4):497-509.

Paclitaxel(Weekly) + Carboplatin(Weekly)(wPCb)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	80 mg/m^2	IV	60 mins, day 1 8 15	Cycled every 28 days for 6 cycles	
Carboplatin	AUC 2 (q1w)	IV	60 mins, day1,8,15		

Loibl S, O'Shaughnessy J, Untch M, et al. Addition of the PARP inhibitor veliparib plus Carboplatin or Carboplatin alone to standard neoadjuvant Chemotherapy in triple-negative breast cancer (BrighTNess): a randomised, phase 3 trial. Lancet Oncol 2018;19(4):497-509.

Neoadjuvant/Adjuvant combined Target Therapy

Trastuzumab(Herceptin;H, Ogivri) +/- Paclitaxel (weekly)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Trastuzumab	loading dose 8 mg/kg followed by 6 mg/kg	IV or SC	90 mins or 5 mins	Q3w	than 6 mg/kg iv q3w, for 1 year
Trastuzumab	loading dose 4 mg/kg followed by 2 mg/kg	IV or SC	90 mins or 5 mins	Qw	than 6 mg/kg iv q3w, for 1 year
Paclitaxel	80 mg/m^2	IV	60 mins, day 1 8 15	12 weeks	

Tolaney S, Barry W, Dang C, et al. Adjuvant paclitaxel and trastuzumab for node-negative HER2-positive breast cancer. N Engl J Med 2015;372:134-141.
健保給付：條件如下~早期乳癌:(1)外科手術前後、化學療法(術前輔助治療或輔助治療)治療後，具 HER2 過度表現(IHC 3+或 FISH+)，且具腋下淋巴結轉移但無遠處臟器轉移之早期乳癌患者，作為輔助性治療用藥。(2) 使用至多以一年為限。

Trastuzumab (Herceptin;H, Ogivri)+/- Docetaxel + Carboplantin(TCPH)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Trastuzumab	loading dose 8 mg/kg followed by 6 mg/kg	IV or SC	90 mins or 5 mins	Q3w	than 6 mg/kg iv q3w, for 1 year
Trastuzumab	loading dose 4 mg/kg followed by 2 mg/kg	IV or SC	90 mins or 5 mins	Qw	than 6 mg/kg iv q3w, for 1 year

Docetaxel	60-75 mg/m^2	IV	60 mins, day1	Cycled every 21 days for 4-6 cycles	
Carboplantin	6 mg, AUC	IV	60 mins, day1		

Slamon D, Eiermann W, Robert N, et al. Adjuvant trastuzumab in HER2-positive breast cancer. N Engl J Med 2011;365:1273-1283.

健保給付：條件如下~早期乳癌:(1)外科手術前後、化學療法(術前輔助治療或輔助治療)治療後，具 HER2 過度表現(IHC 3+或 FISH+)，且具腋下淋巴結轉移但無遠處臟器轉移之早期乳癌患者，作為輔助性治療用藥。(2) 使用至多以一年為限。

Trastuzumab + Pertuzumab or Phesgo(sc) +/- Docetaxel + Carboplantin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Trastuzumab + Pertuzumab	loading dose 840mg followed by 420mg	IV	90 mins+120 mins	Q3w	than 420 mg iv q3w, for 1 year
Docetaxel	60-75 mg/m^2	IV	60 mins, day1	Cycled every 21 days for 4-6 cycles	
Carboplantin	AUC 6	IV	60 mins, day1		

Schneeweiss A, Chia S, Hickish T, et al. Pertuzumab plus trastuzumab in combination with standard neoadjuvant anthracycline-containing and anthracycline-free chemotherapy regimens in patients with HER2-positive early breast cancer: a randomized phase II cardiac safety study (TRYPHAENA). Ann Oncol 2013;24:2278-2284.

健保給付：早期乳癌

(1)外科手術前後以本藥品及化學療法(術前輔助治療或輔助治療)併用作為輔助性治療用藥，用於具 HER2 過度表現(IHC3+或 FISH+)，且具腋下淋巴結轉移但無遠處臟器轉移之早期乳癌病人，若使用於外科手術後，須達病理上緩解(pCR)。

(2)下列Ⅰ~III使用於外科手術前後之總療程合併計算，依藥品仿單記載以 18 個療程為上限：

Ⅰ：本藥品

II：trastuzumab

III：pertuzumab 與 trastuzumab 併用

(3)須經事前審查核准後使用，核准後每 18 週須檢附療效評估資料再次申請，若疾病有惡化情形即不應再行申請。

Neoadjuvant Chemotherapy with Immunotherapy

Paclitaxel(Weekly) + Carboplatin + Pembrolizumab(Keytruda)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	80 mg/m^2	IV	60 mins, day 1	q1w	any histology
Carboplatin	AUC 5 (q3w) AUC 1.5(q1w)	IV	60 mins, day 1		
Pembrolizumab	200 mg	IV	30 mins, day 1	q3wks	

1. Gupta S, Nair NS, Hawaldar RW, et al. Addition of platinum to sequential taxane-anthracycline neoadjuvant Chemotherapy in patients with triple-negative breast cancer: A phase III randomized controlled trial. Presented at: 2022 San Antonio Breast Cancer Symposium; December 6-10, 2022; San Antonio, TX. Abstract GS5-01.

2. Schmid P, Cortes J, Pusztai L, et al. Pembrolizumab for early triple-negative breast cancer. N Engl J Med, 2020;382:810-821

3. Sharma P, Kimler BF, O'Dea A, et al. Randomized phase II trial of anthracycline-free and anthracycline-containing neoadjuvant Carboplatin Chemotherapy regimens in stage I-III triple-negative breast cancer (NeoSTOP). Clin Cancer Res 2021;27:975-982.

健保給付：早期三陰性乳癌：非轉移性、第 II 期至第 IIIb 期（cT1c N1-2 或 T2-4 N0-2）

I.術前前導性治療：

限 Pembrolizumab 每 3 週 1 次與 Carboplatin 和 Paclitaxel 併用至多 4 個療程，接續 Pembrolizumab 每 3 週 1 次與 cyclophosphamide 和 Doxorubicin 或 epirubicin 併用至多 4 個療程，做為初診斷病人前導性治療用藥。

II.術後輔助治療：上述病人接受過術前前導性治療後，限手術後未達 pCR 者，單用 Pembrolizumab 每 3 週 1 次，做為輔助治療用藥，且至多使用 9 個療程。

III.上述 Pembrolizumab 用於早期三陰性乳癌依前述療程規定至多使用 17 個療程，且用於術後輔助治療，Pembrolizumab 與 olaparib 僅能擇一支付。

Adjuvant Chemotherapy regimens

Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75 mg/m^2	IV	120 mins, day1	Q3w	

Silver DP et al. Efficacy of neoadjuvant Cisplatin in triple negative breast cancer. J Clin Oncol 2010;28:1145.

Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 6	IV	60 mins, day1	Q3w	

Silver DP et al. Efficacy of neoadjuvant Cisplatin in triple negative breast cancer. J Clin Oncol 2010;28:1145.

TS-1 (S-1)(愛斯萬) +/- endocrine therapy

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
TS-1(S-1)	依體表面積(BSA)計算 < 1.25 1.25 至 < 1.5 ≥ 1.5	po	40 mg/次(80mg/天) 50 mg/次(100mg/天) 60 mg/次(120mg/天)	早晚服用，連續服用 14 天後停藥一天，為期一年

EBC：Toi M, Imoto S, Ishida T et al.Adjuvant S-1 plus endocrine therapy for oestrogen receptor-positive, HER2-negative, primary breast cancer: a multicentre, open-label, randomised, controlled, phase 3 trial.The Lancet Oncology, 22, 74-84
MBC：Takashima T, Mukai H, Hara F et al..Taxanes versus S-1 as the first-line chemotherapy for metastatic breast cancer (SELECT BC): an open-label, non-inferiority, randomised phase 3 trial.The Lancet Oncology, 2015; 17, 90-98
健保給付：1. 晚期乳癌使用屬於「仿單適應症外使用（Off-label use）」，目前健保不給付，需由病人全額自費。
2. 健保適應症：
早期乳癌：併用內分泌療法，適用於具有高復發風險的荷爾蒙受體(HR)陽性和第二型人類上皮生長因子接受體(HER2)陰性早期乳癌之婦女的術後輔助治療。

UFT

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Uracil/Tegafur	270 mg/m^2 /day	PO	7 days/week		

Oral Uracil and Tegafur Compared With Classic Cyclophosphamide, Methotrexate, Fluorouracil As Postoperative Chemotherapy in Patients With Node-Negative, High-Risk Breast Cancer: National Surgical Adjuvant Study for Breast Cancer 01 TrialToru Watanabe twatanab@oncoloplan.com, Muneaki Sano, Shigemitsu Takashima, Tomoki Kitaya, Yutaka Tokuda, Masataka Yoshimoto, Norio Kohno, Kazuhiko Nakagami, Hiroji Iwata, Kojiro Shimozuma, Hiroshi Sonoo, Hitoshi Tsuda, Goi Sakamoto, and Yasuo Ohashi.J Clin Oncol 27, 1368-1374(2009)Volume 27, Number 9.

Ribocilcib (kisqali) + Endocrine therapy

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Ribocilcib	400mg/day	po	Qd，吃三週，休一週	連續 3 年

Ribociclib plus Endocrine Therapy in Early Breast Cancer. Dennis Slamon, M.D., Ph.D., Oleg Lipatov, M.D., Zbigniew Nowecki, M.D., Nicholas McAndrew, M.D., Bozena Kukielka-Budny, M.D., Daniil Stroyakovskiy, M.D., Ph.D., Denise A. Yardley, M.D, and Gabriel Hortobagyi, M.D Published March 20, 2024. N Engl J Med 2024;390:1080-1091.DOI: 10.1056/NEJMoa2305488.VOL. 390 NO. 12

適應症：1. Patients with HR+/HER2− EBC

2. Prior ET allowed up to 12 months

- Anatomic stage IIA
  N0 with:
  Grade 2 and evidence of high risk:
  Ki-67 ≥20%
  Oncotype DX Breast Recurrence Score ≥26 or High risk via other genomic risk profiling
  Grade 3
  N1
- Anatomic stage IIB, N0 or N1
- Anatomic stage III, N0, N1, N2 or N3

Adjuvant Immunotherapy regimens

Pembrolizumab(Keytruda)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	30 mins, day 1	q3wks	for 9cycles

Sharma P, Kimler BF, O'Dea A, et al. Randomized phase II trial of anthracycline-free and anthracycline-containing neoadjuvant Carboplatin Chemotherapy regimens in stage I-III triple-negative breast cancer (NeoSTOP). Clin Cancer Res 2021;27:975-982.

健保給付：早期三陰性乳癌：非轉移性、第 II 期至第 IIIb 期（cT1c N1-2 或 T2-4 N0-2）

II.術後輔助治療：上述病人接受過術前前導性治療後，限手術後未達 pCR 者，單用 Pembrolizumab 每 3 週 1 次，做為輔助治療用藥，且至多使用 9 個療程。

III.上述 Pembrolizumab 用於早期三陰性乳癌依前述療程規定至多使用 17 個療程，且用於術後輔助治療，Pembrolizumab 與 olaparib 僅能擇一支付。

Advanced/Metastasis regimens

Doxorubicin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	60-75 mg/m^2	IV	drip 60 mins, day1	Q3w	
or					
Doxorubicin	20 mg/m^2	IV	drip 60 mins, day1	Qw	

1.Chan S et al. Prospective randomized trial of docotaxel versus Doxorubicin in patients with metastatic breast cancer. J Clin Oncol 1999;17:2341.
2.Gasparini G et al. Weekly epirubicin versus Doxorubicin as second line Therapy in advanced breast cancer. A randomized clinial trial. Am J Clin Oncol 1991;14:38.

Epirubicin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Epirubicin	60-90 mg/m^2	IV	drip 60 mins, day1	Q3w	
or					
Epirubicin	20 mg/m^2	IV	drip 60 mins, day1	Qw	

1.Bastholt L et al. Dose-response relationship of epirubicin in the treatment of Postmenopausal patients with metastatic breast cancer: a randomized study of epirubicin at four different dose levels performed by the Danish Breast Cancer Cooperative Group. J Clin Oncol 1996;14:1146.
2.Gasparini G et al. Weekly epirubicin versus Doxorubicin as second line Therapy in advanced breast cancer. A randomized clinial trial. Am J Clin Oncol 1991;14:38.

Liposomal Doxorubicin(Lipo-Dox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Liposomal Doxorubicin	35-50 mg/m^2	IV	60 mins	Q3-4w	

O'Brien ME et al. Reduced cardiotoxicity and comparable efficacy in a phase III trial of pegylated liPOsomal Doxorubicin HCL versus conventional Doxorubicin for first line treatment of metastatic breast cancer. Ann Oncol 2004;15:440.
健保給付：1.用於單一治療有心臟疾病風險考量之轉移性乳癌患者。2.除以上條件，其餘皆自費。

Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75 mg/m^2	IV	60 mins	Q3w	

Silver DP et al. Efficacy of neoadjuvant Cisplatin in triple negative breast cancer. J Clin Oncol 2010;28:1145.

Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 6	IV	30 mins	Q3w	

Silver DP et al. Efficacy of neoadjuvant Cisplatin in triple negative breast cancer. J Clin Oncol 2010;28:1145.

Docetaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	25-40 mg/m^2	IV	60 mins	Qw	

Harvey V et al. Phase III trial of comparing three doses of docetaxel for second-line treatment of advanced breast cancer. J Clin Oncol 2006; 24:4963.
Burstein, HJ et al. Docetaxel adminsistered on a weekly basis for metastatic breast cancer. J Clin Oncol 2000; 18:1212.

Paclitaxel Qw

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	80 mg/m^2	IV	60 mins	Qw	

1.Bishop, JF et al. Initial Paclitaxel improves outcome compared with CMFP combination Chemotherapy as front-line Therapy in untreated metastatic breast cancer. J Clin Oncol 1999; 17:2355.
2.Seidman AD et al. Randomized phase III trial of weekly compared with every-3-weeks Paclitaxel for metastatic breast cancer, with trastuzumab for all Her-2 overexpressors and random assignment to trastuzumab or not in Her-2 nonoverexpressors: Final results of Cancer and Leukemia Group B Protocol 9840. J Clin Oncol 2008; 26:1642.
健保給付：Paclitaxel 限用於已使用合併療法(除非有禁忌症、至少應包括使用 anthracycline)失敗的轉移性乳癌患者。

Gemcitabine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	800-1200 mg/m^2	IV	30 mins	day 1.8.15 Q4w	

Carmichael, J et al. Advanced breast cancer: a phase II trial with gemcitabine. J Clin Oncol 1995; 13:2731

健保給付：Gemcitabine（如 Gemzar）限用於 Gemcitabine 與 Paclitaxel 併用，可使用於曾經使用過 anthracycline 之局部復發且無法手術切除或轉移性之乳癌病患。

Gemcitabine + Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	800-1200 mg/m^2	IV	30 mins	day 1.8.Q3w	following Paclitaxel on day 1 Cycled every 21 days.
Paclitaxel	175 mg/m^2	IV	60 mins	day 1 Q3w	

Kun-Minsg Rau et al.Weekly Paclitaxel Combining with Gemcitabine is an Effective and Safe Treatment for Advanced Breast Cancer Patients Jpn J Clin Oncol 2011;41(4)455–461

Gemcitabine +Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	800-1200 mg/m^2	IV	30 mins	day 1.8 Q3w	
Carboplatin	AUC 2	IV	60 mins	day 1.8 Q3w	

Vinorelbine(Navelbine)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Vinorelbine	50-80 mg/m^2	PO QW(total dose)		Tiw	

Gasparini, G et al. Vinorelbine is an active antiproliferative agent in pretreated advanced breast cancer patients: a phase II study. J Clin Oncol 1994; 12:2094.

健保給付：Vinorelbine 晚期或無法手術切除之非小細胞肺癌及轉移性乳癌病患。本成分之口服劑型與注射劑型不得併用

Capecitabine (Xeloda)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Capecitabine	800-1250 mg/m^2	PO BID	day 1-14	Q3w	

Fumoleau, P et al. Multicentre, phase II study evaluating Capecitabine monotherapy in patients with anthracycline- and taxane-pretreated metastatic breast cancer. Eur J Cancer 2004; 40:536.

健保給付：1. Capecitabine 與 docetaxel 併用於治療對 anthracycline 化學治療無效之局部晚期或轉移性乳癌病患。
2.單獨用於對 taxanes 及 anthracycline 化學治療無效，或無法使用 anthracycline 治療之局部晚期或轉移性乳癌病患。

UFT

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Uracil/Tegafur	270 mg/m^2 /day	PO	7 days/week		

Y Park. Uracil-tegafur and tamoxifen vs cyclophosphamide, methotrexate, Fluorouracil, and tamoxifen in Post-operative adjuvant Therapy for stage I, II, or IIIA lymph node-positive breast cancer: a comparative study. British Journal of Cancer (2009), 1 – 7

健保給付：Uracil-Tegafur 限轉移性胃癌、轉移性直腸癌、轉移性結腸癌、轉移性乳癌之病患使用。

Eribulin(Halaven)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Eribulin	1.4 mg/m^2	IV	60 mins	day1.8 Q3w	

Pooled analyses of eribulin in metastatic breast cancer patients with at least one prior Chemotherapy. Pivot X1, Marmé F2, Koenigsberg R3, Guo M4, Berrak E5, Wolfer A6. 2016 Aug;27(8):1525-31. doi: 10.1093/annonc/mdw203. Epub 2016 May 13.

健保給付：1.用於治療轉移性乳癌患者且先前曾接受過 anthracycline 和 taxane 兩種針對轉移性乳癌之化學治療輔助性治療。健保規範:（如 Halaven）:（103/12/1、106/11/1）
2.每 3 個療程需進行療效評估，病歷應留存評估紀錄，無疾病惡化方可繼續使用。(106/11/1)

Ixabepilone

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ixabepilone	40 mg/m^2	IV	3 hours	day 1, Q3w	
Capecitabine	2000 mg/m^2	PO QD		day1, Q3w	

1. Li J, Ren J, Sun W. Systematic review of ixabepilone for treating metastatic breast cancer. Breast Cancer. 2017 Mar;24(2):171-179. doi:10.1007/s12282-016-0717-0. Epub 2016 Aug 4. Review. PubMed PMID: 27491426.2.Puhalla, S., & Brufsky, A. (2008). Ixabepilone: a new chemotherapeutic option for refractory metastatic breast cancer. Biologics : Targets & Therapy, 2(3), 505–515.

2.Sparano, J. A., Vrdoljak, E., Rixe, O., Xu, B., Manikhas, A., Medina, C., ... Conte, P. (2010). Randomized Phase III Trial of Ixabepilone Plus Capecitabine Versus Capecitabine in Patients With Metastatic Breast Cancer Previously Treated With an Anthracycline and a Taxane. Journal of Clinical Oncology, 28(20), 3256–3263. http://doi.org/10.1200/JCO.2009.24.4244

健保給付：Ixabepilone (如 Ixempra)：(110/2/1) 1.限 Ixabepilone 合併 Capecitabine 用於局部晚期或轉移性乳癌患者，需符合以下 條件之一：(1)對 taxane 有抗藥性且無法接受 anthracycline 治療者 (2)對 taxane 及 anthracycline 治療無效者。 2.每 3 個療程需進行療效評估，病歷應留存評估紀錄，無疾病惡化方可繼續使用。 3.Ixabepilone 與 eribulin 用於治療上述之轉移性乳癌患者時，僅得擇一使用，且不得互換(ixabepilone 限用於未曾使用過 eribulin 之病患)。

Bevacizumab(自費)(Avastin) + Chemotherapy

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Bevacizumab	10 mg/m^2	IV	90 mins	day 1, Q2w	
Bevacizumab	15 mg/m^2	IV	90 mins	day1, Q3w	

1.Miller KD et al. Paclitaxel plus Bevacizumab versus Paclitaxel alone for metastatic breast cancer. N Eng J Med 2007; 357:2666.

2.Miles D et al. Randomized, double-blind, placebo-controlled, phase III study of Bevacizumab (BV) with docetaxel (D) or docetaxel with placebo (PL) as first-line Therapy for patients with locally recurrent or metastatic breast cancer (mBC): AVADO. 2008 ASCO annual meeting. LBA1011.

Lapatinib(Tykerb) + Xeloda

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Lapatinib	1250 mg/m^2	PO QD	-	day 1-14	
Capecitabine	2000 mg/m^2	PO QD	-	day 1-14	

Lancet Oncol 2013 Jan;14(1):64-71.doi:10.1016/S1470-2045(12)70432-1.Epub 2012 Nov.

健保給付：Lapatinib（如 Tykerb）1.與 Capecitabine 併用，使用於曾接受 anthracycline,taxane 以及 trastuzumab 治療後病況惡化之轉移性乳癌併有腦部轉移，且為 HER2 過度表現(IHC3+或 FISH+)患者。2.每 3 個月需進行療效評估，病歷應留存評估紀錄，無疾病惡化方可繼續使用。(106/11/1)Capecitabine（如 Xeloda）1. Capecitabine 與 docetaxel 併用於治療對 anthracycline 化學治療無效之局部晚期或轉移性乳癌病患。2.單獨用於對 taxanes 及 anthracycline 化學治療無效，或無法使用 anthracycline 治療之局部晚期或轉移性乳癌病患。

Everolimus(Afinitor) + Endocrine Therapy

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Everolimus	10 mg	PO QD		day 1-14	

1.Bachelot T, Bourgier c, Cropet C, et al. TAMRAD: A GINECO randomized phase II trial of everolimus in combination with tamoxifenversus tamoxifen alone in patients (pts) with hormone-receptor positive, HER2 negative metastatic breast Cancer (MBC) with prior exposure to aromatase inhibitors (AI) [abstract]. Cancer Res 2010;70(24 Supplement):
2.Yardley DA, Noguchi S, Pritchard KI, et al. Everolimus plusexemestane in Postmenopausal patients with HR(+) breast cancer: BOLERO-2 final progression-free survival analysis. Adv Ther2013;30:870-884.
3.Baselga J, Campone M, Piccart M, et al. Everolimus in Postmenopausal hormone-receptor-positive advanced breast cancer. N Engl J Med 2012;366:520-529.
健保給付：Everolimus 5mg 及 10mg(如 Afinitor 5mg 及 10mg)：
與 exemestane 併用，作為先前已使用過非類固醇類之芳香環酶抑制劑治療無效，而未曾使用 exemestane 之荷爾蒙接受體陽性、HER2 受體陰性且尚未出現器官轉移危急症狀 (visceral crisis)之轉移性乳癌病人的治療，且使用本品無效後，不得申請 CDK4/6 抑制劑藥品（104/9/1、109/4/1）。限每日最大劑量為 10mg。（108/10/1）

Tucidinostat (Kepida) +endocrine therapy

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Tucidinostat	5 mg/tab	PO QD	Twice of week	Day1-4，每次 6 顆

Tucidinostat plus exemestane for postmenopausal patients with advanced, hormone receptor-positive breast cancer (ACE): a randomised, double-blind, placebo-controlled, phase 3 trial, Lancet Oncol 2019; 20: 806–15
健保給付：1. 與 exemestan e 併用， 適用於曾接受過至少一種治療轉移性的內分泌，併用 CDK4/6 抑制劑治療後復發或惡化 且未曾使用 exemestane 之荷爾蒙接受體陽性、 HER2 受體陰性且尚未出現器官轉移危急症狀(visceral 之 停經後轉移性乳癌病人 。
2. 需經事前審查核准後使用，每次申請之療程以 3 個月為限。初次申請時需檢送病理報告及影像報告，之後每 3 個月申請一次，再次申請時需檢附影像資料及前次治療結果評估資料證實無惡化，才可繼續使用。
3. 本藥品與 everolimus 僅得擇一使用，除因耐受性不良，不得互換。
備註：CDK4/6 failure 後接續二線藥物

Target Therapy

HER2 過度表現(IHC3+ or FISH+)

First-line Therapy

Regimen	Trastuzumab (Herceptin;H, Ogivri) IV/SC +/- Chemotherapy
	Trastuzumab 8mg/kg iv over 90 mins first wk followed by 6 mg/kg iv over 30 mins q3w Trastuzumab 4 mg/kg loading dose followed by 2 mg/kg iv qw Trastuzumab 600mg sc for a total of 1 year
藥名(學名)	Trastuzumab

Cobleigh, MA et al. Multinational study of the efficacy and safety of humanized anti-HER2 monoclonal antibody in women who have HER2-overexpressing metastatic breast cancer that has progressed after Chemotherapy for metastatic disease. J Clin Oncol 1999; 17:2639.

健保給付：轉移性乳癌(1)單獨使用於治療腫瘤細胞上有 HER2 過度表現(IHC3+或 FISH+)，曾接受過一次以上化學治療之轉移性乳癌病人。(91/4/1、99/1/1)(2)與 Paclitaxel 或 docetaxel 併用，使用於未曾接受過化學治療之轉移性乳癌病患，且為 HER2 過度表現(IHC3+或 FISH+)者(93/8/1、95/2/1、99/1/1)
(3)轉移性乳癌且 HER2 過度表現之病人，僅限先前未使用過本藥品者方可使用；但 Pertuzumab 及 docetaxel 併用時，不在此限。(99/1/1、108/5/1)經事前審查核准後使用，核准後每 24 週須檢附療效評估資料再次申請，若疾病有惡化情形即不應再行申請(105/11/1)。

HER2 過度表現(IHC3+ or FISH+)

First-line Therapy

Regimen	Pertuzumab (Perjeta;P)+/- Chemotherapy 840 mg IV day 1 followed by 420 mg IV Cycled every 21 days to complete 1 y of Therapy q3w
藥名(學名)	Pertuzumab

1.Schneeweiss A, Chia S, Hickish T, et al. Pertuzumab plus trastuzumab in combination with standard neoadjuvant anthracycline-containing and anthracycline-free Chemotherapy regimens in patients with HER2-POsitive early breast cancer: a randomized phase II cardiac safety study (TRYPHAENA). Ann Oncol 2013;24:2278-2284.Swain S, Kim S-B, Cortes J, et al. Confirmatory overall survival(OS) analysis of CLEOPATRA: a randomized, double-blind, placebocontrolledPhase III study with Pertuzumab (P), trastuzumab (T), anddocetaxel (D) in patients (pts) with HER2-POsitive first-line (1L)metastatic breast cancer (MBC). Cancer Research 2012;72:P5-18-26.
2.Baselga J, Cortes J, Kim SB, et al. Pertuzumab plus trastuzumab plus docetaxel for metastatic breast cancer. N Engl J Med 2012;366:109-119.Datko F, D'Andrea G, Dickler M, et al. Phase II study of Pertuzumab, trastuzumab, and weekly Paclitaxel in patients with metastatic HER2-overexpressing metastatic breastcancer [abstract]. Cancer Research 2012;72:Abstract P5-18-20.
3.Gianni L, Pienkowski T, Im YH, et al. Efficacy and safety of neoadjuvant Pertuzumab and trastuzumab in women with locallyadvanced, inflammatory, or early HER2-POsitive breast cancer(NeoSphere): a randomised multicentre, open-label, phase 2 trial.Lancet Oncol 2012;13:25-32

健保給付：Pertuzumab 與 trastuzumab 及 docetaxel 併用於治療轉移後未曾以抗 HER2 或化學療 法治療之 HER2 過度表現(IHC3+或 FISH+)轉移性乳癌病患。 2. 須經事前審查核准後使用，核准後每 18 週須檢附療效評估資料再次申請，若疾病有惡化情形即不應再行申請，每位病人至多給付 18 個月為限。

HER2 過度表現(IHC3+ or FISH+)

Second-line Therapy

Ado-trastuzumab emtansine(TDM1, Kadcyla) 3.6 mg/kg IV day 1, Cycled every 21 days	
藥名(學名)	**Trastuzumab emtansine**

1.Verma S, Miles D, Gianni L, et al. Trastuzumab emtansine for HER2-POsitive advanced breast cancer [supplementary appendix available online]. N Engl J Med2012;367:1783-1791.
2.Ellis PA, Barrios CH, Eiermann W, et al. Phase III, randomized study of trastuzumab emtansine (T-DM1) {+/-} Pertuzumab (P) vs trastuzumab + taxane (HT) for first-line treatment of HER2-POsitiveMBC: Primary results from the MARIANNE study. ASCO Meeting Abstracts 2015;33:507
健保給付：(1)限單獨使用於先前未使用過本藥品且 HER2 過度表現(IHC3+或 FISH+)之轉移性乳癌患者作為二線治療，並同時 符合下列情形：I.之前分別接受過 trastuzumab 與一種 taxane 藥物治療，或其合併療法，或 Pertuzumab 與 trastuzumab 與一種 taxane 藥物治療。II.之前已經接受過轉移性癌症治療，或在輔助療法治療期間或完成治療後 6 個月內癌症復發。III.合併有主要臟器(不包含骨及軟組織)轉移。(2)經事前審查核准後使用，核准後每 12 週須檢附療效評估資料再次申請，若疾病有惡化情形即不應再行申請，每位病人至多給付 10 個月(13 個療程為上限)。(3)Trastuzumab emtansine 和 Lapatinib 僅能擇一使用，不得互換

for HER2 IHC 1+ or 2+/FISH negative)

Second-line Therapy

Trastuzumab deruxtecan (Enhertu, T-DXd) 5.4 mg/kg iv d1 Q3w	
藥名(學名)	Trastuzumab deruxtecan

Modi S, Jacot W, Yamashita T, et al. Trastuzumab deruxtecan in previously treated HER2-lowadvanced breast cancer [article and supplementary appendix published online ahead of print June 5, 2022]. N Engl J Med 2022.Modi S, Saura C, Yamashita T, et al. Trastuzumab deruxtecan in previously treated HER2-POsitive breast cancer. N Engl J Med 2020;382:610-621.

for HER2 IHC 1+ or 2+/ISH negative)、ER(+)

Adjuvant Therapy (EBC)

Neratinib (Nerlynx) 240 mg PO daily on days 1–28 *12cycle	
藥名(學名)	**Neratinib** *self-pay* *120 mg PO daily on days 1–7; Followed by:*

	160 mg PO daily on days 8–14; Followed by: *240 mg PO daily on days 15–28*

1.Chan A, Delaloge S, Holmes FA, et al. Neratinib after trastuzumab-based adjuvant Therapy in patients with HER2-POsitive breast cancer (ExteNET): a multicentre, randomised, double-blind, placebo-controlled, phase 3 trial. Lancet Oncol 2016;17:367-377.
2.Saura C, Oliveira M, Feng YH, et al. Neratinib plus Capecitabine versus Lapatinib plus Capecitabine in patients with HER2-POsitive metastatic breast cancer previously treated with≥2 HER2-directed regimens: Findings from the multinational, randomized, phase 3 NALA trial. Presented at the American Society of Clinical Oncology (ASCO) Annual Meeting. May 31-June 4, 2019; Chicago, IL. J Clin Oncol 2019;37(suppl): abstract 1002.

<u>for TNBC or HR+/HER 2-</u>

Second-line Therapy

Sacituzumab govitecan-hziy(Trodelvy; SG) 10mg/kg iv d1,8 Q3w	
藥名	**Sacituzumab govitecan-hziy**

A Bardia, SA Hurvitz, SM Tolaney, et al. Sacituzumab govitecan in metastatic triple-negative breast cancer: ASCENT Clinical Trial Investigators. N Engl J Med 2021;384:1529-41.
健保給付：1.用於治療先前已接受兩次以上全身性治療無效(其中一次需為治療晚期疾病)之無法切除的局部晚期或轉移性的三陰性乳癌成人病人。(113/2/1、114/2/1)
(1)須符合下列各項條件：I.病人身體狀況良好（ECOG≦1II.須使用過 taxane 類藥物至少 1 個療程。III.先前未接受過 trastuzumab deruxtecan 治療。(114/2/1)
(2)須經事前審查核准後使用，每次申請之療程以 3 個月為限，初次申請時需檢附 ER、PR、HER2 皆為陰性之檢測報告。
(3)再次申請必須提出客觀證據（如：影像學）證實無惡化，才可繼續使用。
(4)Sacituzumab govitecan 和 trastuzumab deruxtecan 僅能擇一給付，不得互換。(114/2/1)。
2.用於治療患有無法切除的局部晚期或轉移性的 HR 陽性、HER2 陰性之乳癌成人病人。(114/10/1)(1)須符合下列各項條件：
I.須排除活動性腦轉移。
II.曾接受 CDK4/6 抑制劑≦12 個月，並有內臟轉移。III.曾接受至少兩線(每線至少兩個完整療程或於第二個療程中產生疾病惡化)的轉移性乳癌化學治療。
(2)須經事前審查核准後使用，每次申請之療程以 3 個月為限，初次申請時需檢附 HR 陽性、HER2 陰性(IHC 0、IHC 1+或 IHC 2+/ISH–)之檢測報告。
(3)再次申請必須提出客觀證據（如：影像學）證實無惡化，才可繼續使用。

<u>(PARP) inhibitor indicated:</u>

BRCA1/2 mutation/ HER2(-) (mBC)

Olaparib (Lynparza) 150mg*2/ Bid, 600mg/day, PO	
藥名	**Olaparib**

LYNPARZA® (olaparib) [prescribing information]. Wilminsgton, DE: AstraZeneca Pharmaceuticals LP; 2025.
2. Robson M, Im SA, Senkus E, et al. Olaparib for metastatic breast cancer in patients with a germline BRCA mutation. N Engl J Med. 2017;377(6):523-533.
3. Robson ME, Tung N, Conte P, et al. OlympiAD final overall survival and tolerability results: olaparib versus Chemotherapy treatment of physician's choice in patients with a germline BRCA mutation and HER2-negative metastatic breast cancer. Ann Oncol. 2019;30(4):558-566.
4. Robson M, Im SA, Senkus E, et al. OlympiAD extended follow-up for overall survival and safety: olaparib versus Chemotherapy treatment of physician's choice in patients with a

germline BRCA mutation and HER2-negative metastatic breast cancer. Poster presented at: The San Antonio Breast Cancer Symposium; December 10-14, 2019; San Antonio, TX.
5. Data on File, US-47776. AstraZeneca Pharmaceuticals LP.
8. Tung NM, Im SA, Senkus-Konefka E, et al. Olaparib versus Chemotherapy treatment of physician's choice in patients with a germline BRCA mutation and HER2-negative metastatic breast cancer (OlympiAD): efficacy in patients with visceral metastases. Poster presented at: 2018 ASCO Annual Meeting; June 1-5, 2018; Chicago, IL.
健保給付：高復發風險之早期乳癌(olaparib)：(114/6/1) (1)Olaparib 適用於曾接受前導性化療或術後輔助性化療，且具遺傳性 BRCA1/2 (germline BRCA1/2)突變併 HER2 陰性而有高復發風險之早期乳癌成年病人術後輔助治療，依藥品仿單記載以 1 年為上限。 (2)病人須完成至少 6 個週期的前導性化療或術後輔助性化療，且化療處方須含有 anthracyclines 類藥物、taxane 類藥物，或兩者的複方；亦允許含鉑化療。 (3)病人須在最後一次治療(包括手術、化療或放療)完成後的 12 週內使用 olaparib。 (4)須符合下列之高復發風險條件： I.三陰性乳癌： i.針對曾接受前導性化療的病人，須符合於乳房和/或手術切除的淋巴結中發現有殘餘的侵襲性癌症(non-pCR)。 ii.針對曾接受手術且接續術後輔助性化療的病人，須具有腋窩淋巴結陽性(≧pN1)，或腋窩淋巴結陰性(pN0)且原發性病理腫瘤大小≧2 公分(≧pT2)。 II.HR 陽性且 HER2 陰性乳癌： i.針對曾接受前導性化療的病人，須為 non-pCR。 ii.針對曾接受手術且接續術後輔助性化療的病人，須具有 4 個以上經病理學證實的陽性淋巴結。 (5)須經事前審查核准後使用： I.每次申請之療程以 3 個月為限。 II.初次申請時需檢附 HER2 為陰性之檢測報告、ER 和 PR 之檢測報告，以及 germline BRCA 1/2 突變之檢測報告，且需符合全民健康保險藥品給付規定之通則十二。 III.再次申請必須提出客觀證據（如：影像學）證實無惡化，才可繼續使用。 IV. 用於術後輔助治療，olaparib 與 Pembrolizumab 僅能擇一給付。 5.Olaparib 每日最多使用 4 粒(112/1/1)

PIK3CA activating mutation

HR-Positive, HER2-negative

Inavolisib (ltovebi) 9mg PO QD + palbociclib (Ibrance) 125mg PO QD+ Fulvestrant INJ 500 mg IM Q1.Q15 Q4W *self-pay**	
藥名	**Inavolisib 9mg PO QD + Palbociclib 125mg PO QD+ Fulvestrant INJ 250MG/5ML Q1.Q15 Q4W**

Turner NC, Im SA, Saura C, et al. Inavolisib-based Therapy in PIK3CA-mutated advanced breast cancer. N Engl J Med 2024;391:1584-1596.

PIK3CA activating mutation

HR-Positive, HER2-negative

Alpelisib(Piqray) 300mg PO QD+ Fulvestrant INJ 500 mg IM Q1.Q15 Q4W	
藥名	**Alpelisib 300mg PO QD+ Fulvestrant INJ 500 mg IM Q1.Q15 Q4W**

Andre F, Ciruelos E, Rubovszky G, et al. Alpelisib for PIK3CA-mutated, hormone receptor-positive advanced breast cancer. N Engl J Med 2019;380:1929-1940.
健保給付：1.與 fulvestrant 併用於曾接受 CDK4/6 抑制劑治療但疾病惡化的停經後轉移性乳癌病人，且須完全符合下列條件：
(1)荷爾蒙受體為：ER 或 PR＞30%。
(2)HER-2 檢測為陰性。
(3)具有 PIK3CA 基因突變。
2.需經事前審查核准後使用：
(1)初次申請需檢附 PIK3CA 基因突變檢測報告，且需符合全民健康保險藥品給付規定之通則十二。
(2)核准後每 12 週需檢附療效評估資料再次申請，若疾病惡化及必須停止使用。
3.每日最多處方 2 粒。

PIK3CA or AKT1

activating mutations or PTEN alterations

HR-Positive, HER2-negative	
Capivasertib(Truqap) 400mg(200mg/tab) BID PO + Fulvestrant 500 mg IM Q1.Q15 Q4W *self-pay**	
藥名	**Capivasertib 400mg(200mg/tab) BID PO + Fulvestrant 500 mg IM Q1.Q15 Q4W**

Turner NC, Oliveira M, Howell SJ, et al. Capivasertib in hormone receptor–Positive advanced breast cancer. N Engl J Med 2023;388:2058-2070.

CDK4/6 inhibitor

HR-Positive, HER2-negative

Ribociclib (Kisqali) 400mg PO QD Q3W (in combination with an aromatase inhibitor)	
藥名	**Ribociclib**

1.Slamon D, Lipatov O, Nowecki Z, et al. Ribociclib plus endocrine Therapy in early breast cancer. N Engl J Med 2024;390:1080-1091
2.Hortobagyi GN, Stemmer SM, Burris HA, et al. Updated results from MONALEESA-2, a phase III trial of first-line ribociclib plus letrozole versus placebo plus letrozole in hormone receptor-Positive, HER2- negative advanced breast cancer. Ann Oncol 2018;29:1541-1547
健保給付：1.用於停經後乳癌婦女發生遠端轉移後之全身性藥物治療，須完全符合以下條件：(109/10/1、110/5/1、110/10/1、113/1/1)
(1)荷爾蒙接受體為：ER 或 PR>30%。(109/10/1、113/1/1)
(2)HER-2 檢測為陰性。
(3)經完整疾病評估後未出現器官轉移危急症狀 (visceralcrisis)且無中樞神經系統(CNS)轉移。(110/10/1)
(4)骨轉移不可為唯一轉移部位。(110/10/1)
(5)病患目前未接受卵巢功能抑制治療 (包含 GnRH analogue 等)且滿足下列條件之一：(110/5/1)
I.年齡滿 55 歲。
II.曾接受雙側卵巢切除術。
III.FSH 及 estradiol 血液檢測值在停經後數值範圍內。
2.用於停經前/正在停經乳癌婦女及男性乳癌發生遠端轉移後之全身性
藥物治療，須與芳香環轉化酶抑制劑及 GnRH analogue 併用。(113/1/1、114/7/1)
(1)荷爾蒙接受體為：ER 或 PR>30%。
(2)HER-2 檢測為陰性。
(3)經完整疾病評估後未出現器官轉移危急症狀 (visceral crisis)且無中樞神經系統(CNS)轉移。
(4)骨轉移不可為唯一轉移部位。
3.經事前審查核准後使用，核准後每 24 週須檢附療效評估資料再次申請，若疾病惡化即必須停止使用，且後續不得再申請使用本類藥品。(110/10/1)
4.使用限制：
(1)ribociclib 每日最多處方 3 粒。

(2)palbociclib 每日最多處方 1 粒。
(3)本類藥品僅得擇一使用，唯有在耐受不良時方可轉換使用，使用總療程合併計算，以每人終生給付 24 個月為上限。
5.110 年 9 月 30 日以前已核定用藥之病人，得經事前審查核准後，使用至總療程(即終生 24 個月)或總療程期間疾病惡化為止，且後續不得再申請使用本類藥品。（110/10/1、113/1/1）
6.若先前使用 everolimus 無效後，不得再申請本類藥品。(109/4/1)
7.若先前於早期乳癌使用 abemaciclib 無效後，不得再申請本類藥品。(113/3/1)

CDK4/6 inhibitor

HR-Positive, HER2-negative

Abemaciclib(Verzenio) 150mg/200mg PO QD Q3W (in combination with an aromatase inhibitor)	
藥名	**Abemaciclib**

Jhaveri KL, Neven P, Casalnuovo ML, et al. Imlunestrant with or without abemaciclib in advanced breast cancer. N Engl J Med 2025;392:1189-1202.
健保給付：1. 早期乳癌：
併用內分泌療法 (tamoxifen 或芳香環酶抑制劑)，可做為荷爾蒙受體(HR)陽性、第二型人類表皮生長因子受體(HER2)陰性、淋巴結陽性，高復發風險之早期乳癌成年病人的輔助治療。
2. 晚期乳癌：
(1) 併用芳香環酶抑制劑(aromatase inhibitor)，可做為治療荷爾蒙受體(HR)陽性、第二型人類表皮生長因子受體(HER2)陰性之晚期或轉移性乳癌之停經後婦女及男性的第一線內分泌療法(endocrine-based Therapy)。
(2) 併用 fulvestrant，可治療荷爾蒙受體(HR)陽性、第二型人類表皮生長因子受體(HER2)陰性，且接受內分泌療法後疾病惡化之晚期或轉移性乳癌的成人病人。
(3) 單獨用於治療荷爾蒙受體(HR)陽性、第二型人類表皮生長因子受體(HER2)陰性，曾經接受過內分泌治療及於轉移後接受化學治療後又發生疾病惡化之晚期或轉移性乳癌的成人病人。

Endocrine Therapy

藥名(學名)	**Tamoxifen 10mg BID**

藥名(學名)	**Letrozole 2.5mg QD for 3-5years**

健保給付：1. 接受抗動情激素治療失敗的自然或人工停經後之末期乳癌病人之治療、停經後之局部晚期或轉移性乳癌婦女患者之第一線治療用藥。
2. 停經後且荷爾蒙接受體呈陽性，有淋巴結轉移之乳癌病人，作為 tamoxifen 治療五年後的延伸治療，且不得與其他 aromatase inhibitor 併用。使用時需同時符合下列規定：(97/11/1)
(1) 手術後大於等於 11 年且無復發者不得使用。 (2)每日最大劑量 2.5mg，使用不得超過四年。
3. 停經後且荷爾蒙接受體呈陽性之早期乳癌病人，經外科手術切除後之輔助治療，且不得與 tamoxifen 或其他 aromatase inhibitor 併用。使用時需同時符合下列規定：(98/11/1、99/9/1、102/8/1)
(1) 每日最大劑量 2.5mg，使用不得超過五年；

(2) 若由 tamoxifen 轉換使用本品，則使用期限合計不得超過 5 年。
4. 病歷上應詳細記載手術資料、病理報告(應包含 ER、PR 之檢測結果且無復發現象)及用藥紀錄(如 tamoxifen 使用五年證明)。

藥名(學名)	Exemestane 25mg QD

健保給付：1. 限停經後或卵巢切除後，且女性荷爾蒙受體(estrogen receptor)陽性之晚期乳癌病患，經使用 tamoxifen 無效後，方可使用。
2. 具有雌激素受體陽性之停經婦女，使用 tamoxifen 至少兩年之高危險早期侵犯性乳癌的輔助治療，且不得與 tamoxifen 或其他 aromatase inhibitor 併用。使用時需同時符合下列規定：(105/8/1)
(1) 病歷上應詳細記載手術資料、病理報告(應包含 ER、PR 之檢測結果且無復發現象)。
(2) 本案藥品使用不得超過三年。

藥名(學名)	Anastrozole 1mg QD

健保給付：1. 停經後雌激素接受器為陽性或不清楚之局部晚期或轉移性乳癌第一線治療。 (92/3/1)
2. 停經後婦女晚期乳癌，雌激素接受器為陰性，但曾對 tamoxifen 有陽性反應者。
(92/3/1)
3. 停經後婦女罹患早期侵犯性乳癌，經外科手術切除後且雌激素接受器為陽性，且有血栓栓塞症或子宮內膜異常增生的高危險群，而無法使用 tamoxifen 治療者。
(93/6/1)
備註：療程期間以不超過五年為原則。血栓栓塞症或子宮內膜異常增生的高危險群需符合下列情形之一：
(1) 有腦血管梗塞病史者。
(2) 有靜脈血栓栓塞症病史者。
(3) 有子宮異常出血病史，且「經陰道超音波檢查」判定為子宮內膜異常增生的高危險群。

藥名(學名)	Goserelin 3.6mg QM

健保給付：停經前(或更年期前)之早期乳癌，且須完全符合以下六點：(100/2/1、106/2/1、109/2/1)
I.與 tamoxifen 合併使用，作為手術後取代化學治療之輔助療法。
II.荷爾蒙接受體為強陽性：ER/PR 為 2+或 3+。
III.Her-2 Fish 檢測為陰性或 IHC 為 1+。
IV.淋巴結轉移數目須≦3 個。
V.使用期限：leuprorelin、goserelin 或 triptorelin 使用 3 年，tamoxifen 使用 5 年。(106/2/1、109/2/1)
VI.須事前審查，並於申請時說明無法接受化學治療之原因。

藥名(學名)	Leuprorelin 22.5mg Q3M

健保給付：停經前(或更年期前)之早期乳癌，且須完全符合以下六點：(100/2/1、106/2/1、109/2/1)
I.與 tamoxifen 合併使用，作為手術後取代化學治療之輔助療法。
II.荷爾蒙接受體為強陽性：ER/PR 為 2+或 3+。

III.Her-2 Fish 檢測為陰性或 IHC 為 1+。
IV.淋巴結轉移數目須≦3 個。
V.使用期限：leuprorelin、goserelin 或 triptorelin 使用 3 年，tamoxifen 使用 5 年。(106/2/1、109/2/1)
VI.須事前審查，並於申請時說明無法接受化學治療之原因。

藥名(學名)	**Triptorelin 11.25mg Q3M**

健保給付：停經前(或更年期前)之早期乳癌，且須完全符合以下六點：(100/2/1、106/2/1、109/2/1)
I.與 tamoxifen 合併使用，作為手術後取代化學治療之輔助療法。
II.荷爾蒙接受體為強陽性：ER/PR 為 2+或 3+。
III.Her-2 Fish 檢測為陰性或 IHC 為 1+。
IV.淋巴結轉移數目須≦3 個。
V.使用期限：leuprorelin、goserelin 或 triptorelin 使用 3 年，tamoxifen 使用 5 年。(106/2/1、109/2/1)
VI.須事前審查，並於申請時說明無法接受化學治療之原因。

藥名(學名)	**Fulvestrant 250mg loading dose 500mg then 250mg QM**

Ref. for Hormone therapy

1 Sparano JA, Gray RJ, Makower DF, et al. Adjuvant Chemotherapy guided by a 21-gene expression assay in breast cancer. N Engl J Med 2018;379:111-121.
2 Kalinsky K, Barlow WE, Meric-Bernstam F, et al. First results from a phase III randomized clinical trial of standard adjuvant endocrine Therapy (ET) +/- Chemotherapy (CT) in patients (pts) with 1-3 positive nodes, hormone receptor-positive (HR+) and HER2-negative (HER2-) breast cancer (BC) with recurrence score (RS) < 25: SWOG S1007 (RxPOnder). Cancer Res 2021;81:Abstract GS3-00.
3 Piccart M, van 't Veer LJ, POncet C, et al. 70-gene signature as an aid for treatment decisions in early breast cancer: updated results of the phase 3 randomised MINSDACT trial with an exploratory analysis by age. Lancet Oncol 2021;22:476-488.
4 Laenkholm AV, Jensen MB, Eriksen JO, et al. PAM50 risk of recurrence score predicts 10-year distant recurrence in a comprehensive Danish cohort of postmenopausal women allocated to 5 years of endocrine Therapy for hormone receptor-POsitive early breast cancer. J Clin Oncol 2018;36:735-740.
5 Sestak I, Buus R, Cuzick J, et al. Comparison of the performance of 6 prognostic signatures for estrogen receptor–positive breast cancer: A secondary analysis of a randomized clinical trial. JAMA Oncol 2018;4:545-553.
6 Filipits M, Rudas M, Jakesz R, et al. A new molecular predictor of distant recurrence in ER-positive, HER2-negative breast cancer adds independent information to conventional clinical risk factors. Clin Cancer Res 2011;17:6012-6020.
7 Sestak I, Martín M, Dubsky P, et al. Prediction of Chemotherapy benefit by EndoPredict in patients with breast cancer who received adjuvant endocrine Therapy plus Chemotherapy or endocrine Therapy alone. Breast Cancer Res Treat 2019;176:377-386.
8 Noordhoek I, Treuner K, Putter H, et al. Breast cancer index predicts extended endocrine benefit to individualize selection of patients with HR(+) early-stage breast cancer for 10 years of endocrine Therapy. Clin Cancer Res 2021;27:311-319.
9 Sgroi DC, Carney E, Zarrella E, et al. Prediction of late disease recurrence and extended adjuvant letrozole benefit by the HOXB13/IL17BR biomarker. J Natl Cancer Inst 2013;105:1036-1042.

10 Blok EJ, Kroep JR, Meershoek-Klein Kranenbarg E, et al. Optimal duration of extended adjuvant endocrine Therapy for early breast cancer; Results of the IDEAL Trial (BOOG 2006-05). J Natl Cancer Inst 2017;110:40-48.
11 Bartlett JMS, Sgroi DC, Treuner K, et al. Breast cancer index and prediction of benefit from extended endocrine Therapy in breast cancer patients treated in the Adjuvant Tamoxifen-To Offer More? (aTTom) trial. Ann Oncol 2019;30:1776-1783.

子宮頸癌

Induction & Neoadjuvant Chemotherapy regimens

Carboplatin+Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 2	IV	drip 60 mins D1	Every weeks for 6 cycles	
Paclitaxel	80 mg/m^2	IV	drip 3 hours D1		

McCormack, M., Eminsowicz, G., Gallardo, D., Diez, P., Farrelly, L., Kent, C., Hudson, E., Panades, M., Mathew, T., Anand, A., Persic, M., Forrest, J., Bhana, R., Reed, N., Drake, A., Adusumalli, M., Mukhopadhyay, A., King, M., Whitmarsh, K., . . . Ledermann, J. A. (2024). Induction Chemotherapy followed by standard chemoradioTherapy versus standard chemoradioTherapy alone in patients with locally advanced cervical cancer (GCIG INTERLACE): an international, multicentre, randomised phase 3 trial. The Lancet, 404(10462), 1525–1535. https://doi.org/10.1016/s0140-6736(24)01438-7

Cisplatin+ Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours, D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.

Cisplatin+ Paclitaxel(135)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7. 5 mg/kg	IV	drip 90 mins ,D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic

Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.
3.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Cisplatin+ Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.

Cisplatin+ Paclitaxel(175)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.
3.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Carboplatin+Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		

Moore KN, Herzog TJ, Lewin S, et al. A comparison of Cisplatin/Paclitaxel and Carboplatin/Paclitaxel in stage IVB, recurrent or persistent cervical cancer. Gynecol Oncol 2007;105:299-303.

Carboplatin+Paclitaxel(135)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Moore KN, Herzog TJ, Lewin S, et al. A comparison of Cisplatin/Paclitaxel and Carboplatin/Paclitaxel in stage IVB, recurrent or persistent cervical cancer. Gynecol Oncol 2007;105:299-303.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–107.

Carboplatin+Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		

Moore KN, Herzog TJ, Lewin S, et al. A comparison of Cisplatin/Paclitaxel and Carboplatin/Paclitaxel in stage IVB, recurrent or persistent cervical cancer. Gynecol Oncol 2007;105:299-303.

Carboplatin+Paclitaxel(175)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Moore KN, Herzog TJ, Lewin S, et al. A comparison of Cisplatin/Paclitaxel and Carboplatin/Paclitaxel in stage IVB, recurrent or persistent cervical cancer. Gynecol Oncol 2007;105:299-303.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Adjuvant Chemotherapy

Cisplatin+ Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.

Cisplatin+ Paclitaxel(135)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic

Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.
3.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Cisplatin+ Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.

Cisplatin+ Paclitaxel(175)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.
3.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Carboplatin+Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		

Moore KN, Herzog TJ, Lewin S, et al. A comparison of Cisplatin/Paclitaxel and Carboplatin/Paclitaxel in stage IVB, recurrent or persistent cervical cancer. Gynecol Oncol 2007;105:299-303.

Carboplatin+Paclitaxel(135)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Moore KN, Herzog TJ, Lewin S, et al. A comparison of Cisplatin/Paclitaxel and Carboplatin/Paclitaxel in stage IVB, recurrent or persistent cervical cancer. Gynecol Oncol 2007;105:299-303.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Carboplatin+Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		

Moore KN, Herzog TJ, Lewin S, et al. A comparison of Cisplatin/Paclitaxel and Carboplatin/Paclitaxel in stage IVB, recurrent or persistent cervical cancer. Gynecol Oncol 2007;105:299-303.

Carboplatin+Paclitaxel(175)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Moore KN, Herzog TJ, Lewin S, et al. A comparison of Cisplatin/Paclitaxel and Carboplatin/Paclitaxel in stage IVB, recurrent or persistent cervical cancer. Gynecol Oncol 2007;105:299-303.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Cisplatin+Ifosfamide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Ifosfamide	1.5 g/m^2	IV	drip 20 hours ,D1		

Coleman RE, Harper PG, Gallagher C, et al. A phase II study of ifosfamide in advanced and relapsed carcinoma of the cervix. Cancer Chemother Pharmacol 1986;18:280-283. Available at:http://www.ncbi.nlm.nih.gov/pubmed/3802384.

Cisplatin+Ifosfamide+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,	Every 3 weeks for 3-6 cycles	
Ifosfamide	1.5 g/m^2	IV	drip 20 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Coleman RE, Harper PG, Gallagher C, et al. A phase II study of ifosfamide in advanced and relapsed carcinoma of the cervix. Cancer Chemother Pharmacol 1986;18:280-283. Available at:http://www.ncbi.nlm.nih.gov/pubmed/3802384.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Carboplatin+Ifosfamide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Ifosfamide	1.5 g/m^2	IV	drip 20 hours ,D1		

Sutton GP, Blessing JA, McGuire WP, et al. Phase II trial of ifosfamide and mesna in patients with advanced or recurrent squamouscarcinoma of the cervix who had never received Chemotherapy: a Gynecologic Oncology Group study. Am J Obstet Gynecol 1993;168:805-807. Available at:http://www.ncbi.nlm.nih.gov/pubmed/8456884.

Carboplatin+Ifosfamide+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Ifosfamide	1.5 g/m^2	IV	drip 20 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Sutton GP, Blessing JA, McGuire WP, et al. Phase II trial of ifosfamide and mesna in patients with advanced or recurrent squamouscarcinoma of the cervix who had never received Chemotherapy: a Gynecologic Oncology Group study. Am J Obstet Gynecol 1993;168:805-807. Available at:http://www.ncbi.nlm.nih.gov/pubmed/8456884.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Cisplatin+ Topotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks	
Topotecan	0.75 mg/m^2	IV	drip 30 mins, D1-D3		

1.Long HJ, 3rd, Bundy BN, Grendys EC, Jr., et al. Randomized phase III trial of Cisplatin with or without Topotecan in carcinoma of the uterine cervix: a Gynecologic Oncology Group Study. J Clin Oncol 2005;23:4626-4633.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Cisplatin+ Topotecan+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks	
Topotecan	0.75 mg/m^2	IV	drip 30 mins, D1-D3		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Long HJ, 3rd, Bundy BN, Grendys EC, Jr., et al. Randomized phase III trial of Cisplatin with or without Topotecan in carcinoma of the uterine cervix: a Gynecologic Oncology Group Study. J Clin Oncol 2005;23:4626-4633.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.
4.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Carboplatin+ Topotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins, D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Topotecan	2.5mg/m^2	IV	drip 30 mins, D1-D3		

1.M A Bookman, H Malmström, G Bolis, et al. Topotecan for the treatment of advanced epithelial ovarian cancer: an open-label phase II study in patients treated after prior Chemotherapy that contained Cisplatin or Carboplatin and Paclitaxel.JCO October 1998 vol. 16 no. 10 3345-3352
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Carboplatin+ Topotecan+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins, D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Topotecan	2.5mg/m^2	IV	drip 30 mins, D1-D3		
Bevacizumab	7.5mg/kg	IV	drip 90 mins, D1		

1.M A Bookman, H Malmström, G Bolis, et al. Topotecan for the treatment of advanced epithelial ovarian cancer: an open-label phase II study in patients treated after prior

Chemotherapy that contained Cisplatin or Carboplatin and Paclitaxel.JCO October 1998 vol. 16 no. 10 3345-3352
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Concurrent Chemoradiation regimens

Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	40 mg/m^2	IV	drip 60 mins, D1	Every 1 weeks for 4-6 cycles	

Toita, T., Kitagawa, R., Hamano, T., , et al (2012). Feasibility and acute toxicity of concurrent chemoradiotherapy (CCRT) with high-dose-rate intracavitary brachytherapy (HDR-ICBT) and 40-mg/m² weekly cisplatin for Japanese patients with cervical cancer: Results of a multi-institutional phase 2 study (JGOG1066). International Journal of Gynecological Cancer, 22(8), 1420–1426.

Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 2	IV	drip 30 mins,D1	Every 1 weeks for 4-6 cycles	

Tharavichitkul E, Lorvidhaya V, Kamnerdsupaphon P, Sukthomya V, Chakrabandhu S, Klunklin P, Onchan W, Supawongwattana B, Pukanhaphan N, Galalae R, Chitapanarux I. Combined Chemoradiation of Cisplatin versus Carboplatin in cervical carcinoma: a single institution experience from Thailand. BMC Cancer. 2016 Jul 19;16:501. doi: 10.1186/s12885-016-2558-9. PMID: 27435245; PMCID: PMC4950639.

Cisplatin+ pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Cisplatin	40 mg/m^2	IV	drip 2 hours, d1	Q1W /4-6 cycles
Pembrolizumab	100-200 mg	IV	drip 30 mins, d1	Q3W/2 cycles then Q6W/15 cycles

Lorusso, D., Xiang, Y., Hasegawa, K., Scambia, G., Leiva, M., Ramos-Elias, P., et al. (2024). Pembrolizumab or placebo with chemoradiotherapy followed by pembrolizumab or placebo for newly diagnosed, high-risk, locally advanced cervical cancer (ENGOT-cx11/GOG-3047/KEYNOTE-A18): A randomised, double-blind, phase 3 clinical trial. Lancet, 403(10434), 1341–1350. https://doi.org/10.1016/S0140-6736(24)00317-9

Carboplatin+ pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Carboplatin	AUC (2)	IV	drip 2 hours, d1	Q1W /4-6 cycles
Pembrolizumab	100-200 mg	IV	drip 30 mins, d1	Q3W/2 cycles then Q6W/15 cycles

Lorusso, D., Xiang, Y., Hasegawa, K., Scambia, G., Leiva, M., Ramos-Elias, P., et al. (2024). Pembrolizumab or placebo with chemoradiotherapy followed by pembrolizumab or placebo for newly diagnosed, high-risk, locally advanced cervical cancer (ENGOT-cx11/GOG-3047/KEYNOTE-A18): A randomised, double-blind, phase 3 clinical trial. Lancet, 403(10434), 1341–1350. https://doi.org/10.1016/S0140-6736(24)00317-9

Advanced/Recurrence regimens

Cisplatin+ Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D2	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	D1 for 24 hours		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.

Cisplatin+ Paclitaxel(135) + Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic Oncology Group Study. J Clin Oncol 2009;27:4649-4655.

2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.
3.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Cisplatin+ Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.

Cisplatin+ Paclitaxel(175) + Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.
3.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Carboplatin+Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6	腎功能不好者可使用

Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1	cycles	

Moore KN, Herzog TJ, Lewin S, et al. A comparison of Cisplatin/Paclitaxel and Carboplatin/Paclitaxel in stage IVB, recurrent or persistent cervical cancer. Gynecol Oncol 2007;105:299-303.

Carboplatin+Paclitaxel(135) + Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Moore KN, Herzog TJ, Lewin S, et al. A comparison of Cisplatin/Paclitaxel and Carboplatin/Paclitaxel in stage IVB, recurrent or persistent cervical cancer. Gynecol Oncol 2007;105:299-303.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Carboplatin+Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		

Moore KN, Herzog TJ, Lewin S, et al. A comparison of Cisplatin/Paclitaxel and Carboplatin/Paclitaxel in stage IVB, recurrent or persistent cervical cancer. Gynecol Oncol 2007;105:299-303.

Carboplatin+Paclitaxel(175) + Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Moore KN, Herzog TJ, Lewin S, et al. A comparison of Cisplatin/Paclitaxel and Carboplatin/Paclitaxel in stage IVB, recurrent or persistent cervical cancer. Gynecol Oncol 2007;105:299-303.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Cisplatin+Ifosfamide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Ifosfamide	1.5 g/m^2	IV	drip 20 hours ,D1		

Coleman RE, Harper PG, Gallagher C, et al. A phase II study of ifosfamide in advanced and relapsed carcinoma of the cervix. Cancer Chemother Pharmacol 1986;18:280-283. Available at:http:// www. ncbi.nlm.nih.gov/pubmed/3802384.

Cisplatin+Ifosfamide + Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Ifosfamide	1.5 g/m^2	IV	drip 20 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Coleman RE, Harper PG, Gallagher C, et al. A phase II study of ifosfamide in advanced and relapsed carcinoma of the cervix. Cancer Chemother Pharmacol 1986;18:280-283. Available at:http://www.ncbi.nlm.nih.gov/pubmed/3802384.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Carboplatin+Ifosfamide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Ifosfamide	1.5 g/m^2	IV	drip 20 hours ,D1		

Sutton GP, Blessing JA, McGuire WP, et al. Phase II trial of ifosfamide and mesna in patients with advanced or recurrent squamouscarcinoma of the cervix who had never received Chemotherapy: a Gynecologic Oncology Group study. Am J Obstet Gynecol 1993;168:805-807. Available at:http://www.ncbi.nlm.nih.gov/pubmed/8456884.

Carboplatin+Ifosfamide + Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Ifosfamide	1.5 g/m^2	IV	drip 20 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Sutton GP, Blessing JA, McGuire WP, et al. Phase II trial of ifosfamide and mesna in patients with advanced or recurrent squamouscarcinoma of the cervix who had never received Chemotherapy: a Gynecologic Oncology Group study. Am J Obstet Gynecol 1993;168:805-807. Available at:http://www.ncbi.nlm.nih.gov/pubmed/8456884.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Cisplatin+ Topotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins, D1	Every 3 weeks	
Topotecan	0.75 mg/m^2	IV	drip 30 mins, D1-D3		

1.Long HJ, 3rd, Bundy BN, Grendys EC, Jr., et al. Randomized phase III trial of Cisplatin with or without Topotecan in carcinoma of the uterine cervix: a Gynecologic Oncology Group Study. J Clin Oncol 2005;23:4626-4633.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Cisplatin+ Topotecan + Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 30 mins, D1	Every 3 weeks	
Topotecan	0.75 mg/m^2	IV	drip 30 mins, D1-D3		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins, D1		

1.Long HJ, 3rd, Bundy BN, Grendys EC, Jr., et al. Randomized phase III trial of Cisplatin with or without Topotecan in carcinoma of the uterine cervix: a Gynecologic Oncology Group Study. J Clin Oncol 2005;23:4626-4633.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.

3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.
4.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Carboplatin+ Topotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Topotecan	2.5 mg/m^2	IV	drip 30 mins ,D1-D3		

1.M A Bookman, H Malmström, G Bolis, et al. Topotecan for the treatment of advanced epithelial ovarian cancer: an open-label phase II study in patients treated after prior Chemotherapy that contained Cisplatin or Carboplatin and Paclitaxel.JCO October 1998 vol. 16 no. 10 3345-3352
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Carboplatin+ Topotecan + Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Topotecan	2.5 mg/m^2	IV	drip 30 mins ,D1-D3		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.M A Bookman, H Malmström, G Bolis, et al. Topotecan for the treatment of advanced epithelial ovarian cancer: an open-label phase II study in patients treated after prior Chemotherapy that contained Cisplatin or Carboplatin and Paclitaxel.JCO October 1998 vol. 16 no. 10 3345-3352
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.
4.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Palliative Therapy

Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	40 mg/m^2	IV	drip 60 mins ,D1	Every weeks for 3-6 cycles	

Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.

Carboplatin + Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	

Mailankody Sharada, Dhanushkodi Manikandan, Ganesan Trivadi S, Radhakrishnan Venkatraman, Christopher Vasanth, Ganesharajah Selvaluxmy, Sagar Tenali Gnana (2020) Recurrent cervical cancer treated with palliative Chemotherapy: real-world outcome ecancer 14 1122.

Paclitaxel(80)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	80 mg/m^2	IV	drip 3 hours ,D1	Every 1 weeks for 3-6 cycles	

Kudelka AP, Winn R, Edwards CL, et al. An update of a phase II study of Paclitaxel in advanced or recurrent squamous cell cancer of the cervix. Anticancer Drugs 1997;8:657-661.

Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	

Kudelka AP, Winn R, Edwards CL, et al. An update of a phase II study of Paclitaxel in advanced or recurrent squamous cell cancer of the cervix. Anticancer Drugs 1997;8:657-661.

Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	

Kudelka AP, Winn R, Edwards CL, et al. An update of a phase II study of Paclitaxel in advanced or recurrent squamous cell cancer of the cervix. Anticancer Drugs 1997;8:657-661.

Cisplatin+Topotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins, D1	Every 3 weeks for 3-6 cycles	
Topotecan	0.75 mg/m^2	IV	drip 30 mins, D1-D3		

1.Long HJ, 3rd, Bundy BN, Grendys EC, Jr., et al. Randomized phase III trial of Cisplatin with or without Topotecan in carcinoma of the uterine cervix: a Gynecologic Oncology Group Study. J Clin Oncol 2005;23:4626-4633.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Cisplatin+ Topotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Topotecan	2.25 mg/m^2	IV	drip 30 mins ,D1		

1. HJ, 3rd, Bundy BN, Grendys EC, Jr., et al. Randomized phase III trial of Cisplatin with or without Topotecan in carcinoma of the uterine cervix: a Gynecologic Oncology Group Study. J Clin Oncol 2005;23:4626-4633.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Carboplatin+Topotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	

Topotecan	0.75 mg/m^2	IV	drip 60 mins, D1-D3		

1.Long HJ, 3rd, Bundy BN, Grendys EC, Jr., et al. Randomized phase III trial of Cisplatin with or without Topotecan in carcinoma of the uterine cervix: a Gynecologic Oncology Group Study. J Clin Oncol 2005;23:4626-4633.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Carboplatin+ Topotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	
Topotecan	2.25 mg/m^2	IV	drip 30 mins ,D1		

1.N. R. Abu-Rustum, S. Lee, L. S. Massad. Topotecan for recurrent cervical cancer after platinum-based Therapy.International Journal of Gynecological Cancer, Volume 10, Issue 4, pages 285–288, July/August 2000
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Cisplatin+Paclitaxel(135)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

Tewari KS, Sill MW, Long HJ 3rd,et al. Improved survival with Bevacizumab in advanced cervical cancer. N Engl J Med. 2014 Fed 20;370(8):734-43.

Cisplatin+Paclitaxel(175)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		

Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

Tewari KS, Sill MW, Long HJ 3rd,et al. Improved survival with Bevacizumab in advanced cervical cancer. N Engl J Med. 2014 Fed 20;370(8):734-43.

Topotecan+Paclitaxel(135)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Topotecan	0.75 mg/m^2	IV	drip 30 mins, D1-D3		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

Tewari KS, Sill MW, Long HJ 3rd,et al. Improved survival with Bevacizumab in advanced cervical cancer. N Engl J Med. 2014 Fed 20;370(8):734-43

Topotecan+Paclitaxel(175)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Topotecan	0.75 mg/m^2	IV	drip 30 mins ,D1-D3		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

Tewari KS, Sill MW, Long HJ 3rd,et al. Improved survival with Bevacizumab in advanced cervical cancer. N Engl J Med. 2014 Fed 20;370(8):734-43

Paclitaxel(135) +Doxorubicin liposome (Lipo-dox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 2 hours ,D1		
Ref.					

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated Liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Paclitaxel(135) +Doxorubicin liposome (Lipo-dox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	25 mg/ m^2	IV	drip 120 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Paclitaxel(175) +Doxorubicin liposome (Lipo-dox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 2 hours ,D1		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Paclitaxel(175) +Doxorubicin liposome (Lipo-dox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 2 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Doxorubicin liposome (Lipo-dox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin liposome	25 mg/m^2	IV	drip 2 hours ,D1	Every 3 weeks for 3-6 cycles	

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Doxorubicin liposome (Lipo-dox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin liposome	25 mg/m^2	IV	drip 2 hours ,D1	Every 3 weeks for 3-6 cycles	
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Carboplatin+Doxorubicin liposome (Lipo-dox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 2 hours ,D1		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Carboplatin+Doxorubicin liposome (Lipo-dox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	25 mg/ m^2	IV	drip 2 hours ,D1		

Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Topotecan+Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Topotecan	4 mg/m^2	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		

1.Long HJ, 3rd, Bundy BN, Grendys EC, Jr., et al. Randomized phase III trial of Cisplatin with or without Topotecan in carcinoma of the uterine cervix: a Gynecologic Oncology Group Study. J Clin Oncol 2005;23:4626-4633.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Topotecan+Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Topotecan	4 mg/m^2	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		

1.Long HJ, 3rd, Bundy BN, Grendys EC, Jr., et al. Randomized phase III trial of Cisplatin with or without Topotecan in carcinoma of the uterine cervix: a Gynecologic Oncology Group Study. J Clin Oncol 2005;23:4626-4633.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Topotecan+Paclitaxel(135)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Topotecan	4 mg/m^2	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	

Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Long HJ, 3rd, Bundy BN, Grendys EC, Jr., et al. Randomized phase III trial of Cisplatin with or without Topotecan in carcinoma of the uterine cervix: a Gynecologic Oncology Group Study. J Clin Oncol 2005;23:4626-4633.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Topotecan+Paclitaxel(175)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Topotecan	4 mg/m^2	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Long HJ, 3rd, Bundy BN, Grendys EC, Jr., et al. Randomized phase III trial of Cisplatin with or without Topotecan in carcinoma of the uterine cervix: a Gynecologic Oncology Group Study. J Clin Oncol 2005;23:4626-4633.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1	Every 3 weeks for 3-6 cycles	

1.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.

Immunotherapy

Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	

Hyun Cheol Chung, MD, PhD, et al.Efficacy and Safety of Pembrolizumab in Previously Treated Advanced Cervical Cancer: Results From the Phase II KEYNOTE-158 Study. Journal of Clinical Oncology 37, no. 17 (June 10, 2019) 1470-1478.

Cisplatin+ Paclitaxel(135)+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.
3.Hyun Cheol Chung, MD, PhD, et al.Efficacy and Safety of Pembrolizumab in Previously Treated Advanced Cervical Cancer: Results From the Phase II KEYNOTE-158 Study. Journal of Clinical Oncology 37, no. 17 (June 10, 2019) 1470-1478.

Cisplatin+ Paclitaxel(135)+ Bevacizumab+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic

Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.
3.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.
4.Hyun Cheol Chung, MD, PhD, et al.Efficacy and Safety of Pembrolizumab in Previously Treated Advanced Cervical Cancer: Results From the Phase II KEYNOTE-158 Study. Journal of Clinical Oncology 37, no. 17 (June 10, 2019) 1470-1478.

Cisplatin+ Paclitaxel(175)+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.
3.Hyun Cheol Chung, MD, PhD, et al.Efficacy and Safety of Pembrolizumab in Previously Treated Advanced Cervical Cancer: Results From the Phase II KEYNOTE-158 Study. Journal of Clinical Oncology 37, no. 17 (June 10, 2019) 1470-1478.

Cisplatin+ Paclitaxel(175)+ Bevacizumab+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		

1.Monk BJ, Sill MW, McMeekin DS, et al. Phase III trial of four Cisplatin-containing doublet combinations in stage IVB, recurrent, or persistent cervical carcinoma: A Gynecologic Oncology Group Study. J Clin Oncol 2009;27:4649-4655.
2.Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.

3.NCCN Clinical Practice Guidelines in Oncology™. Cervical Cancer.v 1.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/cervical.pdf. Accessed February 13, 2012.
4.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.
5.Hyun Cheol Chung, MD, PhD, et al.Efficacy and Safety of Pembrolizumab in Previously Treated Advanced Cervical Cancer: Results From the Phase II KEYNOTE-158 Study. Journal of Clinical Oncology 37, no. 17 (June 10, 2019) 1470-1478.

Carboplatin+Paclitaxel(135)+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		

1.Moore KN, Herzog TJ, Lewin S, et al. A comparison of Cisplatin/Paclitaxel and Carboplatin/Paclitaxel in stage IVB, recurrent or persistent cervical cancer. Gynecol Oncol 2007;105:299-303.
2.Hyun Cheol Chung, MD, PhD, et al.Efficacy and Safety of Pembrolizumab in Previously Treated Advanced Cervical Cancer: Results From the Phase II KEYNOTE-158 Study. Journal of Clinical Oncology 37, no. 17 (June 10, 2019) 1470-1478.

Carboplatin+Paclitaxel(135)+ Bevacizumab+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		

1.Moore KN, Herzog TJ, Lewin S, et al. A comparison of Cisplatin/Paclitaxel and Carboplatin/Paclitaxel in stage IVB, recurrent or persistent cervical cancer. Gynecol Oncol 2007;105:299-303.
2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.
3.Hyun Cheol Chung, MD, PhD, et al.Efficacy and Safety of Pembrolizumab in Previously Treated Advanced Cervical Cancer: Results From the Phase II KEYNOTE-158 Study. Journal of Clinical Oncology 37, no. 17 (June 10, 2019) 1470-1478.

Carboplatin+Paclitaxel(175)+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		

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2.Hyun Cheol Chung, MD, PhD, et al.Efficacy and Safety of Pembrolizumab in Previously Treated Advanced Cervical Cancer: Results From the Phase II KEYNOTE-158 Study. Journal of Clinical Oncology 37, no. 17 (June 10, 2019) 1470-1478.

Carboplatin+Paclitaxel(175)+ Bevacizumab+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		

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2.Monk BJ, Sill MW, Burger RA, Gray HJ, Buekers TE, Roman LD.Phase II trial of Bevacizumab in the treatment of persistent or recurrent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2009;27:1069–1074.
3.Hyun Cheol Chung, MD, PhD, et al.Efficacy and Safety of Pembrolizumab in Previously Treated Advanced Cervical Cancer: Results From the Phase II KEYNOTE-158 Study. Journal of Clinical Oncology 37, no. 17 (June 10, 2019) 1470-1478.

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Adjuvant Chemotherapy

Carboplatin+Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		

Miller D, Filiaci V, Fleminsg G, et al. Randomized phase III noninferiority trial of first line Chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.

Carboplatin+Paclitaxel(135)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins, D1		

1.Miller D, Filiaci V, Fleminsg G, et al. Randomized phase III noninferiority trial of first line Chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Carboplatin+Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		

Miller D, Filiaci V, Fleminsg G, et al. Randomized phase III noninferiority trial of first line Chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic

Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.

Carboplatin+Paclitaxel(175)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Miller D, Filiaci V, Fleminsg G, et al. Randomized phase III noninferiority trial of first line Chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Cisplatin+ Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Cisplatin+ Paclitaxel(135)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol.

2011;29(16): 2259–2265.

Cisplatin+ Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Cisplatin+ Paclitaxel(175)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins, D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hous ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins, D1		

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Doxorubicin(Adriamycin) +Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Cisplatin	75 mg/m^2	IV	drip 60 mins ,D1		

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Doxorubicin(Adriamycin) +Cisplatin+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Cisplatin	75 mg/m^2	IV	drip 60 mins, D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Doxorubicin(Adriamycin) +Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin (Adriamycin)	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能差者可使用
Carboplatin	AUC 5	IV	drip 60 mins D1		

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Doxorubicin(Adriamycin) +Carboplatin+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin (Adriamycin)	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能差者可使用
Carboplatin	AUC 5	IV	drip 60 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol.

2011;29(16): 2259–2265.

Paclitaxel(135)+Doxorubicin liposome(Lipodox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome (Lipodox)	45 mg/m^2	IV	drip 120 mins, D1		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Paclitaxel(135)+Doxorubicin liposome(Lipodox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome (Lipodox)	45 mg/m^2	IV	drip 120 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Paclitaxel(175)+Doxorubicin liposome(Lipodox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome (Lipodox)	45 mg/m^2	IV	drip 120 mins, D1		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated lipoomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Paclitaxel(175)+Doxorubicin liposome(Lipodox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome (Lipodox)	45 mg/m^2	IV	drip 120 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Cisplatin+Doxorubicin liposome(Lipodox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome (Lipodox)	45 mg/m^2	IV	drip 120 mins ,D1		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Carboplatin+Doxorubicin liposome(Lipodox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 120mins ,D1		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Carboplatin+Doxorubicin liposome(Lipodox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins, D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome (Lipodox)	45 mg/m^2	IV	drip 120 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

EBRT+ Platinum based Chemotherapy

Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	40 mg/m^2	IV	drip 60 mins, D1	Every 1 weeks for 3-6 cycles	

Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of Cisplatin with or without Paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.

Carboplatin + Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	40 mg/m^2	IV	drip 180 mins, D1	Every 1 weeks for 3-6 cycles	後需再接兩次 consolidation Chemotherapy (Paclitaxol 175 mg/m^2 + Carboplatin AUC 5)
Carboplatin	AUC 2	IV	drip 60 mins, D1	Every 1 weeks for 3-6 cycles	

Wen Q, Shao Z, Yang Z. Concomitant Paclitaxel plus Carboplatin and radiotherapy for high-risk or advanced endometrial cancer. Int J Gynecol Cancer. 2013 May;23(4):685-9. doi: 10.1097/IGC. 0b013e3182808232. PMID: 23615571.

Immunotherapy

Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	for stage III–IV tumors, except for carcinosarcoma

Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Durvalumab	1120 mg	IV	drip 30 mins, D1	Every 3 weeks for 3-6 cycles	for stage III–IV dMMR tumors pMMR patient with Olaparib use

Westin SN, Moore K, Chon HS, Lee JY, Thomes Pepin J, Sundborg M, Shai A, de la Garza J, Nishio S, Gold MA, Wang K, McIntyre K, Tillmanns TD, Blank SV, Liu JH, McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Carboplatin+Paclitaxel(135)+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		for stage III–IV tumors, except for

					carcinosarcoma

1.Miller D, Filiaci V, Fleminsg G, et al. Randomized phase III noninferiority trial of first line Chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Carboplatin+Paclitaxel(135)+Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins, D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Durvalumab	1120 mg	IV	drip 30 mins ,D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Miller D, Filiaci V, Fleminsg G, et al. Randomized phase III noninferiority trial of first line Chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.Westin SN, Moore K, Chon HS, Lee JY, Thomes Pepin J, Sundborg M, Shai A, de la Garza J, Nishio S, Gold MA, Wang K, McIntyre K, Tillmanns TD, Blank SV, Liu JH, McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Carboplatin+Paclitaxel(135)+ Bevacizumab+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins, D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

Pembrolizumab	200 mg	IV	drip 30 mins ,D1		for stage III–IV tumors, except for carcinosarcoma

1.Miller D, Filiaci V, Fleminsg G, et al. Randomized phase III noninferiority trial of first line Chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
3.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Carboplatin+Paclitaxel(135)+ Bevacizumab+Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours, D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Durvalumab	1120 mg	IV	drip 30 mins ,D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Miller D, Filiaci V, Fleminsg G, et al. Randomized phase III noninferiority trial of first line Chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
3.Westin SN, Moore K, Chon HS, Lee JY, Thomes Pepin J, Sundborg M, Shai A, de la Garza J, Nishio S, Gold MA, Wang K, McIntyre K, Tillmanns TD, Blank SV, Liu JH, McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Carboplatin+Paclitaxel(175)+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins, D1		for stage III–IV tumors, except for carcinosarcoma

1.Miller D, Filiaci V, Fleminsg G, et al. Randomized phase III noninferiority trial of first line Chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Carboplatin+Paclitaxel(175)+Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Durvalumab	1120 mg	IV	drip 30 mins ,D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Miller D, Filiaci V, Fleminsg G, et al. Randomized phase III noninferiority trial of first line Chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.Westin SN, Moore K, Chon HS, Lee JY, Thomes Pepin J, Sundborg M, Shai A, de la Garza J, Nishio S, Gold MA, Wang K, McIntyre K, Tillmanns TD, Blank SV, Liu JH, McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Carboplatin+Paclitaxel(175)+ Bevacizumab +Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		for stage III–IV tumors, except for carcinosarcoma

1.Miller D, Filiaci V, Fleminsg G, et al. Randomized phase III noninferiority trial of first line Chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
3.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Carboplatin+Paclitaxel(175)+ Bevacizumab+Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Durvalumab	1120 mg	IV	drip 30 mins, D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Miller D, Filiaci V, Fleminsg G, et al. Randomized phase III noninferiority trial of first line Chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol.

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3.Westin SN, Moore K, Chon HS, Lee JY, Thomes Pepin J, Sundborg M, Shai A, de la Garza J, Nishio S, Gold MA, Wang K, McIntyre K, Tillmanns TD, Blank SV, Liu JH, McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Cisplatin+ Paclitaxel(135)+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins, D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours, D1		
Pembrolizumab	200 mg	IV	drip 30 mins, D1		for stage III–IV tumors, except for carcinosarcoma

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Cisplatin+ Paclitaxel(135)+Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Durvalumab	1120 mg	IV	drip 30 mins, D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

2.Westin SN, Moore K, Chon HS, Lee JY, Thomes Pepin J, Sundborg M, Shai A, de la Garza J, Nishio S, Gold MA, Wang K, McIntyre K, Tillmanns TD, Blank SV, Liu JH, 2.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Cisplatin+ Paclitaxel(135)+ Bevacizumab+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins, D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	10 mg/kg	IV	drip 90 mins ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		for stage III–IV tumors, except for carcinosarcoma

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
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Cisplatin+ Paclitaxel(135)+ Bevacizumab+Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	10 mg/kg	IV	drip 90 mins ,D1		
Durvalumab	1120 mg	IV	drip 30 mins ,D1		for stage III–IV dMMR tumors

					pMMR patient with Olaparib use

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
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Cisplatin+ Paclitaxel(175)+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins, D1		for stage III–IV tumors, except for carcinosarcoma

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
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Cisplatin+ Paclitaxel(175)+Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Durvalumab	1120 mg	IV	drip 30 mins ,D1		for stage III–IV dMMR tumors

					pMMR patient with Olaparib use

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
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Cisplatin+ Paclitaxel(175)+ Bevacizumab +Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		
Bevacizumab	10 mg/kg	IV	drip 90 mins, D1		
Pembrolizumab	200 mg	IV	drip 30 mins, D1		for stage III–IV tumors, except for carcinosarcoma

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
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Cisplatin+ Paclitaxel(175)+ Bevacizumab+Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		

Bevacizumab	10 mg/kg	IV	drip 90 mins ,D1		
Durvalumab	1120 mg	IV	drip 30 mins, D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
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Doxorubicin(Adriamycin) +Cisplatin +Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Cisplatin	75 mg/m^2	IV	drip 60 mins, D1		
Pembrolizumab	200 mg	IV	drip 30 mins D1		for stage III–IV tumors, except for carcinosarcoma

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Doxorubicin(Adriamycin) +Cisplatin +Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	50 mg/m^2	IV	drip 60 mins, D1	Every 3 weeks for 3-6 cycles	
Cisplatin	75 mg/m^2	IV	drip 60 mins D1		
Durvalumab	1120 mg	IV	drip 30 mins D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
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Doxorubicin(Adriamycin) +Cisplatin+ Bevacizumab +Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	50 mg/m^2	IV	drip 60 mins, D1	Every 3 weeks for 3-6 cycles	
Cisplatin	75-100 mg/m^2	IV	drip 60 mins D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins D1		
Pembrolizumab	200 mg	IV	drip 30 mins D1		for stage III–IV tumors, except for carcinosarcoma

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

3.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Doxorubicin(Adriamycin) +Cisplatin+ Bevacizumab +Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Cisplatin	75-100 mg/m^2	IV	drip 60 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Durvalumab	1120 mg	IV	drip 30 mins ,D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
3.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Doxorubicin(Adriamycin) +Carboplatin+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能差者可使用
Carboplatin	AUC 5	IV	drip 60 mins ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		for stage III–IV tumors, except for carcinosarcoma

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Doxorubicin(Adriamycin) +Carboplatin +Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能差者可使用
Carboplatin	AUC 5	IV	drip 60 mins ,D1		
Durvalumab	1120 mg	IV	drip 30 mins ,D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Doxorubicin(Adriamycin) +Carboplatin+ Bevacizumab+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能差者可使用
Carboplatin	AUC 5	IV	drip 60 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		for stage III–IV tumors, except for carcinosarcoma

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
3.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Doxorubicin(Adriamycin) +Carboplatin+ Bevacizumab+Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	50 mg/m^2	IV	drip 30 mins, D1	Every 3 weeks for 3-6 cycles	腎功能差者可使用
Carboplatin	AUC 5	IV	drip 60 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Durvalumab	1120 mg	IV	drip 30 mins ,D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
3.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Paclitaxel(135)+Doxorubicin liposome(Lipodox)+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 2 hours,D1		

Pembrolizumab	200 mg	IV	drip 30 mins ,D1		for stage III–IV tumors, except for carcinosarcoma

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Paclitaxel(135)+Doxorubicin liposome(Lipodox)+Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 3 hours, D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 2 hours ,D1		
Durvalumab	1120 mg	IV	drip 30 mins, D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO. 23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Paclitaxel(135)+Doxorubicin liposome(Lipodox)+ Bevacizumab+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 2 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

Pembrolizumab	200 mg	IV	drip 30 mins ,D1		for stage III–IV tumors, except for carcinosarcoma

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
3.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Paclitaxel(135)+Doxorubicin liposome(Lipodox)+ Bevacizumab+Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 2 hours, D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Durvalumab	1120 mg	IV	drip 30 mins ,D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
3.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Paclitaxel(175)+Doxorubicin liposome(Lipodox)+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 3 hpurs ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 2 hours ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		for stage III–IV tumors, except for carcinosarcoma

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Paclitaxel(175)+Doxorubicin liposome(Lipodox)+Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 2 hours ,D1		
Durvalumab	1120 mg	IV	drip 30 mins ,D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Paclitaxel(175)+Doxorubicin liposome(Lipodox)+ Bevacizumab +Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 2 hours ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		for stage III–IV tumors, except for carcinosarcoma

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
3.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Paclitaxel(175)+Doxorubicin liposome(Lipodox)+ Bevacizumab+Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 180 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 60 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Durvalumab	1120 mg	IV	drip 30 mins, D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol.

2011;29(16): 2259–2265.
3.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Cisplatin+Doxorubicin liposome(Lipodox) +Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 120 mins, D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		for stage III–IV tumors, except for carcinosarcoma

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Cisplatin+Doxorubicin liposome(Lipodox) +Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 120 mins, D1		
Durvalumab	1120 mg	IV	drip 30 mins ,D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly

C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO. 23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Carboplatin+Doxorubicin liposome(Lipodox)+Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 120 mins, D1		
Pembrolizumab	200 mg	IV	drip 30 mins, D1		for stage III–IV tumors, except for carcinosarcoma

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Carboplatin+Doxorubicin liposome(Lipodox) +Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins, D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 120 mins ,D1		
Durvalumab	1120 mg	IV	drip 30 mins ,D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23. 02132. Epub 2023 Oct 21.

Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Carboplatin+Doxorubicin liposome(Lipodox)+ Bevacizumab +Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome(Lipodox)	45 mg/m^2	IV	drip 120 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Pembrolizumab	200 mg	IV	drip 30 mins ,D1		for stage III–IV tumors, except for carcinosarcoma

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
3.Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Carboplatin+Doxorubicin liposome(Lipodox)+ Bevacizumab +Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins, D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 120 mins, D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		
Durvalumab	1120 mg	IV	drip 30 mins ,D1		for stage III–IV dMMR tumors pMMR patient with Olaparib use

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
4.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23. 02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Maintenance Therapy

Olaparib(Lynparza)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Olaparib	300 mg	PO	BID		for pMMR tumors +Durvalumab use

Westin SN, Moore K, Chon HS, Lee JY, Thomes Pepin J, Sundborg M, Shai A, de la Garza J, Nishio S, Gold MA, Wang K, McIntyre K, Tillmanns TD, Blank SV, Liu JH, McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	for stage III–IV tumors, except for carcinosarcoma

Eskander, R. N., et al. (2023). Pembrolizumab plus Chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Durvalumab	1120 mg*6cycle then 1500 mg	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	for stage III–IV dMMR tumors pMMR patient with Olaparib use

Westin SN, Moore K, Chon HS, Lee JY, Thomes Pepin J, Sundborg M, Shai A, de la Garza J, Nishio S, Gold MA, Wang K, McIntyre K, Tillmanns TD, Blank SV, Liu JH, McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Hormone Therapy

Megestrol

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Megestrol	40-160 mg /d	PO	QD	QD*6months	

1.Fiorica JV, Brunetto VL, Hanjani P, et al. Phase II trial of alternating courses of megestrol acetate and tamoxifen in advanced endometrial carcinoma: a Gynecologic Oncology Group study. Gynecol Oncol 2004;92:10-14. Available at:http://www.ncbi.nlm.nih.gov/pubmed/14751131.
2.Pandya KJ, Yeap BY, Weiner LM, et al. Megestrol and tamoxifen in patients with advanced endometrial cancer: an Eastern Cooperative Oncology Group Study (E4882). Am J Clin Oncol 2001;24:43-46. Available at: http://www.ncbi.nlm.nih.gov/pubmed/11232948.

Medroxyprogesterone

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Medroxyprogesterone	400-800 mg /d	PO	QD	QD*6months	

1.Whitney CW, Brunetto VL, Zaino RJ, et al. Phase II study of medroxyprogesterone acetate plus tamoxifen in advanced endometrial carcinoma: a Gynecologic Oncology Group study. Gynecol Oncol 2004;92:4-9. Available at:http://www.ncbi.nlm.nih.gov/pubmed/14751130.
2.Thigpen JT, Brady MF, Alvarez RD, et al. Oral medroxyprogesterone acetate in the treatment of advanced or recurrentendometrial carcinoma: a dose-resPOnse study by the Gynecologic Oncology Group. J Clin Oncol 1999;17:1736-1744. Available at:http://www.ncbi.nlm. nih.gov/pubmed/ 10561210.

Levonorgestrel IUD

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Levonorgestrel IUD		Intrauterine Devise x1			

Baker J, Obermair A, Gebski V, Janda M. Efficacy of oral or intrauterine device-delivered progestin in patients with complex endometrial hyperplasia with atypia or early endometrial adenocarcinoma: a meta-analysis and systematic review of the literature. Gynecol Oncol 2012;125:263-270. Available at:http://www.ncbi.nlm.nih.gov/pubmed/22196499.

Leupline

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Leupline	375 mg	IM	QM	qm x 6months	

1.A.R. Jeyarajah, M.D.C.J. Gallagher, M.D., Ph.D.P.R. Blake, M.D,et al.Long-Term Follow-up of Gonadotrophin-Releasing Hormone Analog Treatment for Recurrent Endometrial Cancer. Gynecologic Oncology Volume 63, Issue 1, October 1996, Pages 47–52
2.Tirso Pérez-Medina, M.D.José Bajo, M.D.Gonzalo Folgueira, M.D.,et al.Atypical Endometrial Hyperplasia Treatment with Progestogens and Gonadotropin-Releasing Hormone Analogues: Long-Term Follow-up. Gynecologic Oncology Volume 73, Issue 2, May 1999, Pages 299–304

For Sarcoma

Epirubicin+Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Epirubicin	60 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1		

Lissoni1, A. Gabriele1, G. Gorga2, et al. Cisplatin-, epirubicin- and aclitaxel-containing Chemotherapy in uterine adenocarcinoma.Ann Oncol (1997) 8 (10): 969-972

Epirubicin+Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Epirubicin	60 mg/m^2	IV	drip 60 mins , D1	Every 3 weeks for 3-6 cycles	
Carboplatin	AUC 5	IV	drip 60 mins ,D1		

F. Calero, E. Asins-Codoñerb, J. Jimenoc,et al. Epirubicin in advanced endometrial adenocarcinoma: a phase II study of the Grupo ginecologico Español para el tratamiento oncologico (GGETO).European Journal of Cancer and Clinical Oncology, Volume 27, Issue 7, July 1991, Pages 864–866

Cisplatin+ Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Cisplatin+ Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Carboplatin+Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1		

Miller D, Filiaci V, Fleminsg G, et al. Randomized phase III noninferiority trial of first line Chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.

Carboplatin+Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	腎功能不好者可使用
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1		

Miller D, Filiaci V, Fleminsg G, et al. Randomized phase III noninferiority trial of first line Chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.

Doxorubicin(Adriamycin) +Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	50 mg/m^2	IV	drip 60 mins ,,D1	Every 3 weeks for 3-6 cycles	
Cisplatin	50 mg/m^2	IV	drip 60 mins D1		

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Doxorubicin(Adriamycin) +Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Carboplatin	AUC 5	IV	drip 60 mins D1		

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by Cisplatin and Doxorubicin with or without Paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Cisplatin+Ifosfamide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	20 mg/m^2	IV	drip 6 hours ,D1	Every 3 weeks for 3-6 cycles	
Ifosfamide	1.5 g/m^2	IV	drip 20 hours ,D1		

Wolfson, A. H., Brady, M. F., Rocereto, T., Mannel, R. S., Lee, Y. C., Futoran, R. J., Cohn, D. E., & Ioffe, O. B. (2007). A Gynecologic Oncology Group randomized phase III trial of whole abdominal irradiation (WAI) versus cisplatin–ifosfamide and mesna (CIM) as post-surgical therapy in stage I–IV carcinosarcoma (CS) of the uterus. Gynecologic Oncology, 107(2), 177–185.

Carboplatin+Ifosfamide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Ifosfamide	1.5 g/m^2	IV	drip 20 hours ,D1		

A. Pawinski1, a, e, S. Tumolob, G. Hoeselc, A. Cervantesd, et al. Cyclophosphamide or ifosfamide in patients with advanced and/or recurrent endometrial carcinoma: a randomized phase II study of the EORTC Gynecological Cancer Cooperative Group.European Journal of Obstetrics & Gynecology and Reproductive Biology Volume 86, Issue 2, October 1999, Pages 179–183

Doxorubicin (Adriamycin)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin (Adriamycin)	75 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	

1.Sarcoma Meta-analysis Collaboration (SMAC). Cochrane Database Syst Rev. 2000;4:CD001419.

Gemcitabine (Gemzar) +docetaxel (Taxotere)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	900 mg/m^2	IV	drip 30 mins D1	Every 3 weeks for 3-6 cycles	
Docetaxel	100 mg/m^2	IV	drip 30 mins ,D8		

1.Hensley ML, Blessing JA, Mannel R, Rose PG. Fixed-dose rate gemcitabine plus docetaxel as first-line Therapy for metastatic uterine leiomyosarcoma: a Gynecologic Oncology Group phase II trial. Gynecol Oncol. 2008;109:329–34.

Gemcitabine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1,000 mg/m^2	IV	drip 30 mins D1,8,15	Every 4 weeks for 3-6 cycles	

1.Look KY, Sandler A, Blessing JA, Lucci JA 3rd, Rose PG; Gynecologic Oncology Group (GOG) Study. Phase II trial of gemcitabine as second-line Chemotherapy of uterine leiomyosarcoma: a Gynecologic Oncology Group (GOG) Study. Gynecol Oncol. 2004;92:644–647.

Gemcitabine+Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1,000 mg/m^2	IV	drip 30 mins D1,8,15	Every 4 weeks for 3-6 cycles	
Carboplatin	AUC 5	IV	drip 60 mins, D1		

1.Look KY, Sandler A, Blessing JA, Lucci JA 3rd, Rose PG; Gynecologic Oncology Group (GOG) Study. Phase II trial of gemcitabine as second-line Chemotherapy of uterine leiomyosarcoma: a Gynecologic Oncology Group (GOG) Study. Gynecol Oncol. 2004;92:644–647.

Doxorubicin liposome(Lipodox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin liposome(Lipodox)	45 mg/m^2	IV	drip 120 mins ,D1	Every 3 weeks for 3-6 cycles	

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Paclitaxel(135)+Doxorubicin liposome(Lipo-dox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 180 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/ m^2	IV	drip 120 mins ,D1		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Paclitaxel(175)+Doxorubicin liposome(Lipo-dox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 180 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/ m^2	IV	drip 120 mins ,D1		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Cisplatin+Doxorubicin liposome(Lipo-dox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/ m^2	IV	drip 2 hours D1		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Carboplatin+Doxorubicin liposome(Lipo-dox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/ m^2	IV	drip 2 hours D1		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Trabectedin(Yondelis)+Doxorubicin liposome(Lipo-dox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Trabectedin	1.2 mg/ m^2	IV	drip 24 hours ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	45 mg/m^2	IV	drip 120 mins ,D1		

Pautier, P., Italiano, A., Piperno-Neumann, S.,et al.(2024). Doxorubicin–trabectedin with trabectedin maintenance in leiomyosarcoma. The New England Journal of Medicine, 391(9), 789–799.

Pazopanib(Votrient)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pazopanib	800 mg	PO	QD		

Veli Sunar , Vakkas Korkmaz , Serkan Akin, et al.Efficacy of Pazopanib in patients with metastatic uterine sarcoma: A multi-institutional study.JBUON 2019; 24(6): 2327-2332

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Neoadjuvant Chemotherapy regimens

Carboplatin+Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-4 cycles	
Paclitaxel	135 mg/m^2	IV	drip 180 mins ,D1		

Parmar MK, Ledermann JA, Colombo N, et al. Paclitaxel plus platinum-based Chemotherapy versus conventional platinum-based Chemotherapy in women with relapsed ovarian cancer: the ICON4/AGO-OVAR-2.2 trial. Lancet 2003;361:2099-2106.

Carboplatin+Paclitaxel(135)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-4 cycles	
Paclitaxel	135 mg/m^2	IV	drip 180 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Parmar MK, Ledermann JA, Colombo N, et al. Paclitaxel plus platinum-based Chemotherapy versus conventional platinum-based Chemotherapy in women with relapsed ovarian cancer: the ICON4/AGO-OVAR-2.2 trial. Lancet 2003;361:2099-2106.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Carboplatin+Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-4 cycles	
Paclitaxel	175 mg/m^2	IV	drip 180 mins ,D1		

Parmar MK, Ledermann JA, Colombo N, et al. Paclitaxel plus platinum-based Chemotherapy versus conventional platinum-based Chemotherapy in women with relapsed ovarian cancer: the ICON4/AGO-OVAR-2.2 trial. Lancet 2003;361:2099-2106.

Carboplatin+Paclitaxel(175)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 180 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Parmar MK, Ledermann JA, Colombo N, et al. Paclitaxel plus platinum-based Chemotherapy versus conventional platinum-based Chemotherapy in women with relapsed ovarian cancer: the ICON4/AGO-OVAR-2.2 trial. Lancet 2003;361:2099-2106.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Cisplatin+ Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135mg/m^2	IV	drip 180 mins ,D1		

Ignace Vergote, M.D., Ph.D., Claes G. Tropé, M.D., Ph.D., Frédéric Amant, M.D., Ph.D., et al. Neoadjuvant Chemotherapy or Primary Surgery in Stage IIIC or IV Ovarian Cancer.N Engl J Med 2010; 363:943-953September 2, 2010

Cisplatin+ Paclitaxel(135)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 180 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Ignace Vergote, M.D., Ph.D., Claes G. Tropé, M.D., Ph.D., Frédéric Amant, M.D., Ph.D., et al. Neoadjuvant Chemotherapy or Primary Surgery in Stage IIIC or IV Ovarian Cancer.N Engl J Med 2010; 363:943-953September 2, 2010
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Cisplatin+ Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins, D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 180 mins ,D1		

Ignace Vergote, M.D., Ph.D., Claes G. Tropé, M.D., Ph.D., Frédéric Amant, M.D., Ph.D., et al. Neoadjuvant Chemotherapy or Primary Surgery in Stage IIIC or IV Ovarian Cancer.N Engl J Med 2010; 363:943-953September 2, 2010

Cisplatin+ Paclitaxel(175)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 180 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Ignace Vergote, M.D., Ph.D., Claes G. Tropé, M.D., Ph.D., Frédéric Amant, M.D., Ph.D., et al. Neoadjuvant Chemotherapy or Primary Surgery in Stage IIIC or IV Ovarian Cancer.N Engl J Med 2010; 363:943-953September 2, 2010.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Paclitaxel(135)+Doxorubicin liposome (Lipodox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 180 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 120 mins ,D1		

Eleftherios P. Mamounas, John Bryant, Barry Lembersky, et al. Paclitaxel After Doxorubicin Plus Cyclophosphamide As Adjuvant Chemotherapy for Node-positive Breast Cancer: Results From NSABP B-28.JCO June 1, 2005 vol. 23 no. 16 3686-3696.

Paclitaxel(135)+Doxorubicin liposome (Lipodox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 180 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 120 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Eleftherios P. Mamounas, John Bryant, Barry Lembersky, et al. Paclitaxel After Doxorubicin Plus Cyclophosphamide As Adjuvant Chemotherapy for Node-Positive Breast Cancer: Results From NSABP B-28.JCO June 1, 2005 vol. 23 no. 16 3686-3696
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Paclitaxel(175)+Doxorubicin liposome (Lipodox)

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Doxorubicin liposome	25 mg/m^2	IV	drip 120 mins ,D1		

Eleftherios P. Mamounas, John Bryant, Barry Lembersky, et al. Paclitaxel After Doxorubicin Plus Cyclophosphamide As Adjuvant Chemotherapy for Node-Positive Breast Cancer: Results From NSABP B-28.JCO June 1, 2005 vol. 23 no. 16 3686-3696.

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Paclitaxel	175 mg/m^2	IV	drip 180 mins ,D1	Every 3 weeks for 3-6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 120 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins D1		

1.Eleftherios P. Mamounas, John Bryant, Barry Lembersky, et al. Paclitaxel After Doxorubicin Plus Cyclophosphamide As Adjuvant Chemotherapy for Node-Positive Breast Cancer: Results From NSABP B-28.JCO June 1, 2005 vol. 23 no. 16 3686-3696.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Adjuvant Chemotherapy regimens

Carboplatin+Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 6 cycles	If early stage Every 3week for 4cycles
Paclitaxel	135 mg/m^2	IV	drip 180 mins ,D1		

Parmar MK, Ledermann JA, Colombo N, et al. Paclitaxel plus platinum-based Chemotherapy versus conventional platinum-based Chemotherapy in women with relapsed ovarian cancer: the ICON4/AGO-OVAR-2.2 trial. Lancet 2003;361:2099-2106.

Carboplatin+Paclitaxel(135)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 180 mins, D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Parmar MK, Ledermann JA, Colombo N, et al. Paclitaxel plus platinum-based Chemotherapy versus conventional platinum-based Chemotherapy in women with relapsed ovarian cancer: the ICON4/AGO-OVAR-2.2 trial. Lancet 2003;361:2099-2106.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

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Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 180 mins ,D1		

Parmar MK, Ledermann JA, Colombo N, et al. Paclitaxel plus platinum-based Chemotherapy versus conventional platinum-based Chemotherapy in women with relapsed ovarian cancer: the ICON4/AGO-OVAR-2.2 trial. Lancet 2003;361:2099-2106.

Carboplatin+Paclitaxel(175)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 3 weeks for 6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 180 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Parmar MK, Ledermann JA, Colombo N, et al. Paclitaxel plus platinum-based Chemotherapy versus conventional platinum-based Chemotherapy in women with relapsed ovarian cancer: the ICON4/AGO-OVAR-2.2 trial. Lancet 2003;361:2099-2106.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Cisplatin+ Paclitaxel(135)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 180 mins, D1		

Ignace Vergote, M.D., Ph.D., Claes G. Tropé, M.D., Ph.D., Frédéric Amant, M.D., Ph.D., et al. Neoadjuvant Chemotherapy or Primary Surgery in Stage IIIC or IV Ovarian Cancer.N Engl J Med 2010; 363:943-953September 2, 2010

Cisplatin+ Paclitaxel(135)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins, D1	Every 3 weeks for 6 cycles	
Paclitaxel	135 mg/m^2	IV	drip 180 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins, D1		

1.Ignace Vergote, M.D., Ph.D., Claes G. Tropé, M.D., Ph.D., Frédéric Amant, M.D., Ph.D., et al. Neoadjuvant Chemotherapy or Primary Surgery in Stage IIIC or IV Ovarian Cancer.N Engl J Med 2010; 363:943-953September 2, 2010
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Cisplatin+ Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins, D1	Every 3 weeks for 3-6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 180 mins ,D1		

Ignace Vergote, M.D., Ph.D., Claes G. Tropé, M.D., Ph.D., Frédéric Amant, M.D., Ph.D., et al. Neoadjuvant Chemotherapy or Primary Surgery in Stage IIIC or IV Ovarian Cancer.N Engl J Med 2010; 363:943-953September 2, 2010

Cisplatin+ Paclitaxel(175)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 3 weeks for 6 cycles	
Paclitaxel	175 mg/m^2	IV	drip 180 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Ignace Vergote, M.D., Ph.D., Claes G. Tropé, M.D., Ph.D., Frédéric Amant, M.D., Ph.D., et al. Neoadjuvant Chemotherapy or Primary Surgery in Stage IIIC or IV Ovarian Cancer.N Engl J Med 2010; 363:943-953September 2, 2010
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Paclitaxel(135)+Doxorubicin liposome (Lipodox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 180 mins ,D1	Every 3 weeks for 6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 120 mins ,D1		

Eleftherios P. Mamounas, John Bryant, Barry Lembersky, et al. Paclitaxel After Doxorubicin Plus Cyclophosphamide As Adjuvant Chemotherapy for Node-positive Breast Cancer: Results From NSABP B-28.JCO June 1, 2005 vol. 23 no. 16 3686-3696

Paclitaxel(135)+Doxorubicin liposome (Lipodox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 180 mins ,D1	Every 3 weeks for 6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 120 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

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Paclitaxel(175)+Doxorubicin liposome (Lipodox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 180 mins, D1	Every 3 weeks for 6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 120 mins ,D1		

Eleftherios P. Mamounas, John Bryant, Barry Lembersky, et al. Paclitaxel After Doxorubicin Plus Cyclophosphamide As Adjuvant Chemotherapy for Node-positive Breast Cancer: Results From NSABP B-28.JCO June 1, 2005 vol. 23 no. 16 3686-3696

Paclitaxel(175)+Doxorubicin liposome (Lipodox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip120 mins, D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Eleftherios P. Mamounas, John Bryant, Barry Lembersky, et al. Paclitaxel After Doxorubicin Plus Cyclophosphamide As Adjuvant Chemotherapy for Node-positive Breast Cancer: Results From NSABP B-28.JCO June 1, 2005 vol. 23 no. 16 3686-3696
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Cisplatin+Cyclophopsamide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75 mg/m^2	IV	drip 60 mins, D1	Every 3 weeks for 6 cycles	For stage I,II
Cyclophosphamide	750 mg/m^2	IV	drip 30 mins, D1		

McGuire WP, Hoskins WJ, Brady MF, et al. Cyclophosphamide and Cisplatin compared with Paclitaxel and Cisplatin in patients with stage III and stage IV ovarian cancer. N Engl J Med 1996;334:1-6.Available at: http://www.ncbi.nlm.nih.gov/pubmed/7494563.

Carboplatin+Cyclophopsamide

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins D1	Every 3 weeks for 6 cycles	For stage I,II
Cyclophosphamide	750 mg/m^2	IV	drip 30 mins D1		

Swenerton K, Jeffrey J, Stuart G, et al. Cisplatin-cyclophosphamide versus Carboplatin-cyclophosphamide in advanced ovarian cancer: a randomized phase III study of the National Cancer Institute of Canada Clinical Trials Group. J Clin Oncol 1992;10:718-726.

Oxaliplatin/capecitabine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Oxaliplatin	130 mg/m^2	IV	drip 2 hours, d1	Q3W/ 5-6 cycles
capecitabine	850mg/m	orally	twice daily, d1-14	

McGuire, W. P., Penson, R. T., Gore, M., et al. (2019). An international, phase III randomized trial in patients with mucinous epithelial ovarian cancer (mEOC/GOG 0241) with long-term follow-up: and experience of conducting a clinical trial in a rare gynecological tumor. Gynecologic Oncology, 153(3), 541–548. https://doi.org/10.1016/j.ygyno.2019.03.256(GOG-0241)

Advanced/Metastasis regimens

Paclitaxel(80)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	80 mg/m^2	IV	drip 3 hours ,D1	Every 1weeks for at least 12cycles	or Every 3 weeks rest 1week for at least 12cycles

Markman M, Blessing J, Rubin SC, et al. Phase II trial of weekly Paclitaxel (80 mg/m) in platinum and Paclitaxel-resistant ovarian and primary peritoneal cancers: a Gynecologic Oncology Group study. Gynecol Oncol 2006;101:436-440.

Paclitaxel(175)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 6 cycles	

Chan, J. K., Brady, M. F., Penson, R. T.et al, (2016). Weekly vs. every-3-week Paclitaxel and Carboplatin for ovarian cancer. New England Journal of Medicine, 374(8), 738–748.

Paclitaxel(175)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 6 cycles	
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Markman M, Blessing J, Rubin SC, et al. Phase II trial of weekly Paclitaxel (80 mg/m) in platinum and Paclitaxel-resistant ovarian and primary peritoneal cancers: a Gynecologic Oncology Group study. Gynecol Oncol 2006;101:436-440.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Doxorubicin-liposome

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin liposome	45 mg/m^2	IV	drip 120 mins ,D1	Every 3 weeks for 6 cycles	

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-

sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Doxorubicin-liposome + Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin liposome	45 mg/m^2	IV	drip 120 mins, D1	Every 3 weeks for 6 cycles	
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Carboplatin+Doxorubicin liposome(Lipodox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 2 hours ,D1		

1.Mutch DG, Orlando M, Goss T, et al. Randomized phase III trial of gemcitabine compared with pegylated liPOsomal Doxorubicin in patients with platinum-resistant ovarian cancer. J Clin Oncol 2007;25:2811-2818.
2.Ferrandina G, Ludovisi M, Lorusso D, et al. Phase III trial of gemcitabine compared with pegylated liposomal Doxorubicin in progressive or recurrent ovarian cancer. J Clin Oncol 2008;26:890-896.

Carboplatin+Doxorubicin liposome(Lipodox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 3 weeks for 6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 2 hours ,D1		
Bevacizumab	7.5mg/kg	IV	drip 90 mins, D1		

1.Mutch DG, Orlando M, Goss T, et al. Randomized phase III trial of gemcitabine compared with pegylated liposomal Doxorubicin in patients with platinum-resistant ovarian cancer. J Clin Oncol 2007;25:2811-2818.
2.Ferrandina G, Ludovisi M, Lorusso D, et al. Phase III trial of gemcitabine compared with pegylated liposomal Doxorubicin in progressive or recurrent ovarian cancer. J Clin

Oncol 2008;26:890-896.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Paclitaxel(135)+Doxorubicin liposome(Lipodox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 2 hours, D1		

Elizabeth M. Swisher, M.D., David G. Mutch, M.D., Janet S. Rader, M.D., et al. Topotecan in Platinum- and Paclitaxel-Resistant Ovarian Cancer .Gynecologic Oncology, Volume 66, Issue 3, September 1997, Pages 480–486

Paclitaxel(135)+Doxorubicin liposome(Lipodox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	135 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 2 hours, D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Elizabeth M. Swisher, M.D., David G. Mutch, M.D., Janet S. Rader, M.D., et al. Topotecan in Platinum- and Paclitaxel-Resistant Ovarian Cancer .Gynecologic Oncology, Volume 66, Issue 3, September 1997, Pages 480–486
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Paclitaxel(175)+Doxorubicin liposome(Lipodox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 2 hourss ,D1		

Elizabeth M. Swisher, M.D., David G. Mutch, M.D., Janet S. Rader, M.D., et al. Topotecan in Platinum- and Paclitaxel-Resistant Ovarian Cancer .Gynecologic Oncology, Volume 66, Issue 3, September 1997, Pages 480–486

Paclitaxel(175)+Doxorubicin liposome(Lipodox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	175 mg/m^2	IV	drip 3 hours ,D1	Every 3 weeks for 6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 2 hours, D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins, D1		

1.Elizabeth M. Swisher, M.D., David G. Mutch, M.D., Janet S. Rader, M.D., et al. Topotecan in Platinum- and Paclitaxel-Resistant Ovarian Cancer .Gynecologic Oncology, Volume 66, Issue 3, September 1997, Pages 480–486
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Topotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Topotecan	0.75 mg/ m^2	IV	drip 30 mins, D1	Every weeks for 6 cycles	

1.Sehouli J, Stengel D, Harter P, et al. Topotecan weekly versus conventional 5-day schedule in patients with platinum-resistant ovarian cancer: A randomized multicenter phase II trial of the North-Eastern German Society of Gynecological Oncology Ovarian Cancer Study Group. J Clin Oncol 2011;29:242-248.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3 American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Topotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Topotecan	1.25 mg/m^2	IV	drip 30 mins ,D1	Every 3 weeks for 6 cycles	

1.Gordon AN, Tonda M, Sun S, Rackoff W. Long-term survival advantage for women treated with pegylated liposomal Doxorubicin compared with Topotecan in a phase 3 randomized study of recurrent and refractory epithelial ovarian cancer. Gynecol Oncol 2004;95:1-8.
2.Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3.American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Cisplatin+ Topotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75 mg/m^2	IV	drip 60 mins ,D1	Every 10 days for 3 cycles	
Topotecan	0.75 mg/m^2	IV	drip 30 mins ,D1		

1.M A Bookman, H Malmström, G Bolis, et al. Topotecan for the treatment of advanced epithelial ovarian cancer: an open-label phase II study in patients treated after prior Chemotherapy that contained Cisplatin or Carboplatin and Paclitaxel.JCO October 1998 vol. 16 no. 10 3345-3352
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Carboplatin+ Topotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 60 mins ,D1	Every 10days for 3 cycles	
Topotecan	0.75 mg/m^2	IV	drip 30 mins ,D1		

1.M A Bookman, H Malmström, G Bolis, et al. Topotecan for the treatment of advanced epithelial ovarian cancer: an open-label phase II study in patients treated after prior Chemotherapy that contained Cisplatin or Carboplatin and Paclitaxel.JCO October 1998 vol. 16 no. 10 3345-3352
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Bevacizumab	15 mg/kg	IV	drip 90 mins ,D1	Every 3 weeks for 3-6 cycles	

Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Mirvetuximab soravtansine(ADC)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Mirvetuximab soravtansine	6 mg/kg AIBW	IV	drip 30 mins, d1	every 3 weeks

IBW = (0.9 x 實際身高 [CM])−92
AIBW = IBW + 0.4 x (實際體重 [kg]−IBW)
Moore, K. N., Angelergues, A., Konecny, G. E., García, Y., Banerjee, S., Lorusso, D., et al. (2023). Mirvetuximab soravtansine in FRα-positive, platinum-resistant ovarian cancer. New England Journal of Medicine, 389(23), 2162–2174. https://doi.org/10.1056/NEJMoa2309169 ***(MIRASOL trial)***

Palliative Therapy

Gemcitabine+Doxorubicin liposome(Lipodox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1000 mg/m^2	IV	drip 30 mins ,D1	Every 3 weeks rest 1 week for 6 cycles	
Doxorubicin liposome	30 mg/m^2	IV	drip 120 mins, D1		

1.Mutch DG, Orlando M, Goss T, et al. Randomized phase III trial of gemcitabine compared with pegylated liposomal Doxorubicin in patients with platinum-resistant ovarian cancer. J Clin Oncol 2007;25:2811-2818.
2.Ferrandina G, Ludovisi M, Lorusso D, et al. Phase III trial of gemcitabine compared with pegylated liposomal Doxorubicin in progressive or recurrent ovarian cancer. J Clin Oncol 2008;26:890-896.

Gemcitabine+Doxorubicin liposome(Lipodox) Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1000 mg/m^2	IV	drip 30 mins ,D1	Every 3 weeks rest 1 week for 6 cycles	
Doxorubicin liposome	30 mg/m^2	IV	drip 120 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Mutch DG, Orlando M, Goss T, et al. Randomized phase III trial of gemcitabine compared with pegylated liposomal Doxorubicin in patients with platinum-resistant ovarian cancer. J Clin Oncol 2007;25:2811-2818.
2.Ferrandina G, Ludovisi M, Lorusso D, et al. Phase III trial of gemcitabine compared with pegylated liposomal Doxorubicin in progressive or recurrent ovarian cancer. J Clin Oncol 2008;26:890-896.

3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	80 mg/m^2	IV	drip 3 hours,D1	Every weeks for 6 cycles	

Markman M, Blessing J, Rubin SC, et al. Phase II trial of weekly Paclitaxel (80 mg/m) in platinum and Paclitaxel-resistant ovarian and primary peritoneal cancers: a Gynecologic Oncology Group study. Gynecol Oncol 2006;101:436-440.

Doxorubicin liposome (Lipo-dox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin liposome	25 mg/m^2	IV	drip 120 mins ,D1	Every 4 weeks for 6 cycles	

1.Mutch DG, Orlando M, Goss T, et al. Randomized phase III trial of gemcitabine compared with pegylated liposomal Doxorubicin in patients with platinum-resistant ovarian cancer. J Clin Oncol 2007;25:2811-2818.
2.Ferrandina G, Ludovisi M, Lorusso D, et al. Phase III trial of gemcitabine compared with pegylated liposomal Doxorubicin in progressive or recurrent ovarian cancer. J Clin Oncol 2008;26:890-896.

Doxorubicin liposome (Lipo-dox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin liposome	25 mg/m^2	IV	drip 120 mins, D1	Every 4 weeks for 6 cycles	
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Mutch DG, Orlando M, Goss T, et al. Randomized phase III trial of gemcitabine compared with pegylated liposomal Doxorubicin in patients with platinum-resistant ovarian cancer. J Clin Oncol 2007;25:2811-2818.
2.Ferrandina G, Ludovisi M, Lorusso D, et al. Phase III trial of gemcitabine compared with pegylated liposomal Doxorubicin in progressive or recurrent ovarian cancer. J Clin Oncol 2008;26:890-896.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Carboplatin + Doxorubicin liposome(Lipodox)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 4 weeks for 6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 120 mins, D1		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Carboplatin + Doxorubicin liposome(Lipodox)+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Carboplatin	AUC 5	IV	drip 30 mins ,D1	Every 4 weeks for 6 cycles	
Doxorubicin liposome	25 mg/m^2	IV	drip 120 mins, D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal Doxorubicin and Carboplatin compared with Paclitaxel and Carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Topotecan(0.75)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Topotecan	0.75 mg/m^2	IV	drip 30 mins ,D1	Every weeks for 6 cycles	

1.Gordon AN, Tonda M, Sun S, Rackoff W. Long-term survival advantage for women treated with pegylated liposomal Doxorubicin compared with Topotecan in a phase 3 randomized study of recurrent and refractory epithelial ovarian cancer. Gynecol Oncol 2004;95:1-8.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Topotecan(1.25)

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Topotecan	1.25 mg/m^2	IV	drip 30 mins ,D1	Every weeks for 6 cycles	

1.Gordon AN, Tonda M, Sun S, Rackoff W. Long-term survival advantage for women treated with pegylated liposomal Doxorubicin compared with Topotecan in a phase 3 randomized study of recurrent and refractory epithelial ovarian cancer. Gynecol Oncol 2004;95:1-8.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Cisplatin+ Topotecan

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 10days for 3 cycles	
Topotecan	1.25 mg/m^2	IV	drip 30 mins ,D1		

1.M A Bookman, H Malmström, G Bolis, et al. Topotecan for the treatment of advanced epithelial ovarian cancer: an open-label phase II study in patients treated after prior Chemotherapy that contained Cisplatin or Carboplatin and Paclitaxel.JCO October 1998 vol. 16 no. 10 3345-3352
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Cisplatin+ Topotecan+ Bevacizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	50 mg/m^2	IV	drip 60 mins ,D1	Every 10days for 3 cycles	
Topotecan	1.25 mg/m^2	IV	drip 30 mins ,D1		
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1		

1.M A Bookman, H Malmström, G Bolis, et al. Topotecan for the treatment of advanced epithelial ovarian cancer: an open-label phase II study in patients treated after prior Chemotherapy that contained Cisplatin or Carboplatin and Paclitaxel.JCO October 1998 vol. 16 no. 10 3345-3352
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.
4.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Intraperitoneal for stage III regimens

Cisplatin IP

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75-100 mg/m^2	IP	drip 60 mins	During operation	Then follow by 3 times CT

1.David S. Alberts, M.D., P.Y. Liu, Ph.D., Edward V. Hannigan, M.D.,et al. Intraperitoneal Cisplatin plus Intravenous Cyclophosphamide versus Intravenous Cisplatin plus Intravenous Cyclophosphamide for Stage III Ovarian Cancer.N Engl J Med 1996; 335:1950-1955December 26, 1996
2.Hyperthermic intraperitoneal chemotherapy for recurrent ovarian cancer (CHIPOR): a randomised, open-label, phase 3 trial Classe, Jean-Marc et al. The Lancet Oncology, Volume 25, Issue 12, 1551 - 1562
3.New England Journal of Medicine Volume 378 • Number 3 • January 18, 2018 Pages: 230-240

Ovary for Dysgerminsoma/Embryonal regimens

BEP 3 day regimen

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Etoposide	165 mg/m^2	IV	drip 2 hours Day1,2,3	Every 3 weeks for 3-4cycles	
Cisplatin	35 mg/m^2	IV	drip 6 hours Day1,2,3		
± Bleomycin	30 U	IV	drip 30 mins Day1,8,15		

Alberta Provincial Gynecologic Oncology Tumour Team. Ovarian germ cell tumours. Edmonton (Alberta): CancerControl Alberta; 2013 Apr. 12 p. (Clinical practice guideline; no. GYNE-001).

Patients who do not respond to BEP may benefit from the following as salvage Therapy (TIP):

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	35 mg/m^2	IV	drip 6 hours,D1,2,3	Every 3 weeks for 3-6cycles	
Ifosfamide	2 gm/m^2	IV	drip 6 hours ,D2,3,4		

Alberta Provincial Gynecologic Oncology Tumour Team. Ovarian germ cell tumours. Edmonton (Alberta): Cancer Control Alberta; 2013 Apr. 12 p. (Clinical practice guideline; no. GYNE-001).

Patients who do not respond to BEP may benefit from the following as salvage Therapy (TIP):

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	35 mg/m^2	IV	drip 60 mins, D1,2,3	Every 3 weeks for 3-6cycles	
Paclitaxel	135 mg/m^2	IV	drip 180mins ,D1		

Alberta Provincial Gynecologic Oncology Tumour Team. Ovarian germ cell tumours. Edmonton (Alberta): Cancer Control Alberta; 2013 Apr. 12 p. (Clinical practice guideline; no. GYNE-001).

Maintenance Therapy

Olaparib(Lynparza)

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Olaparib	300 mg	PO	BID	for 2years	HRD(+)

Kathleen Moore, M.D., Nicoletta Colombo, M.D., et al.Maintenance Olaparib in Patients with Newly Diagnosed Advanced Ovarian Cancer.N Engl J Med 2018; 379:2495-2505

Niraparib(Zejula)

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Niraparib(Zejula)	100 mg	PO	BID	for 2years	無須檢驗 HRD 但是要 platin-sensitivity

*A. González-Martín, B. Pothuri, I. Vergote, R. DePOnt Christensen, W. Graybill, M.R. Mirza, C. McCormick,D. Lorusso, P. Hoskins, G. Freyer, K. Baumann, K. Jardon, A. Redondo, R.G. Moore, C. Vulsteke, R.E. O'Cearbhaill, B. Lund, F. Backes, P. Barretina-Ginesta, A.F. Haggerty, M.J. Rubio-Pérez, M.S. Shahin, G. Mangili,W.H. Bradley, I. Bruchim, K. Sun, I.A. Malinowska, Y. Li, D. Gupta, and B.J. Monk,for the PRIMA/ENGOT-OV26/GOG-3012 Investigators**

Bevacizumab

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Bevacizumab	7.5 mg/kg	IV	drip 90 mins ,D1	Every 3 weeks for 3-6 cycles	

Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of Bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

攝護腺癌

Advanced/Metastasis regimens

Docetaxel+ Prednisolone

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	60-75 mg/m^2	IV	drip 60 mins ,D1	Q3w	
Docetaxel	50 mg/m^2	IV	drip 60 mins, D1	Q2w	
Prednisolone	10 mg/day	IV			

Berthold DR et al. Docetaxel plus prednisone or mitoxantrone plus prednisone for advanced prostate cancer: updated survival in the TAX 327 study. J Clin Oncol 2008; 26:242 (link to the article)

Docetaxel+ Prednisolone

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	30 mg/m^2	IV	drip 60 mins D1,8,15,22,29	Q6w	
Prednisolone	10 mg/day	IV			

Tannock IF et al. Docetaxel plus prednisone or mitoxantrone plus prednisone for advanced prostate cancer. N Eng J Med 2004; 351:1502

Mitoxantrone+ Prednisolone

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Mitoxantrone	12 mg/m^2	IV	over 10 mins, D1	Q3w	
Prednisolone	10 mg/day	IV			

Tannock IF et al. Docetaxel plus prednisone or mitoxantrone plus prednisone for advanced prostate cancer. N Eng J Med 2004; 351:1502.

Cabazitaxel+ Prednisolone

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cabazitaxel	20-25 mg/m^2	IV	over 60 mins, D1	Q3w	
Prednisolone	10 mg/day	IV			

NCCN (National Comprehensive Cancer Network) Practice Guidelines in Oncology version 1. 2022 in Prostate Cancer.

Immunotherapy

Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins, D1	q3w for 35 weeks	

A. R.Hansen,C.Massard,P.A.Ott, et al.Pembrolizumab for advanced prostate adenocarcinoma: findings of the KEYNOTE-028 study.Annals of Oncology;Volume 29, Issue 8, August 2018, Pages 1807-1813

Target Therapy

藥名(學名)	**Olaparib(Lynparza) 300mg PO BID**

NCCN (National Comprehensive Cancer Network) Practice Guidelines in Oncology version 1. 2022 in Prostate Cancer.

Hormone Therapy

藥名(學名)	**Zoladex10.8mg/syr LA Depot 1amp Q3M SC**
	Zoladex 3.6mg/syr Depot 1amp Q1M SC

Soloway, M. d M., Smith jr, m.d joseph a, gerald chodak , m.d, Mark scott, ph.d, vogelzang, M. d N. j, gerald kennealey, M. d, block, M. d N. l, . gau , M. d timothy c., &

Schellhammer, m.d Paul f. (1991, January). Zoladex versus Orchiectomy in Treatmentof Advanced Prostate Cancer: A Randomized Trial. Https://Www.Sciencedirect.Com/.https://www.sciencedirect.com/science/article/pii/009042959180077K

藥名(學名)	**Leuplin depot 3M S.C.11.25mg/vial 1vial Q3M SC**

Chung BH, Horie S, Chiong E. Clinical studies investigating the use of leuprorelin for prostate cancer in Asia. Prostate Int. 2020 Mar;8(1):1-9. doi: 10.1016/j.prnil.2019.06.001. Epub 2019 Jul 4. PMID: 32257971; PMCID: PMC7125360.

藥名(學名)	**Diphereline 3-month P.R.11.25mg/vial 1vial Q3M IM**
	Diphereline 3.75mg/vial 1vial Q1M IM

Fazeli F, Nowroozi MR, Ayati M, Latifi S, Taheri Mahmoodi M, Norouzi Javidan A, Jamshidian H, Arbab A. Comparison of the Efficacy of Two Brands of Triptorelin (Microrelin and Diphereline) in Reducing Prostate-Specific Antigen and Serum Testosterone in Prostate Cancer: A Double-Blinded Randomized Clinical Trial. Nephrourol Mon. 2015 May 25;7(3):e27107. doi: 10.5812/numonthly.7(3)2015.27107. PMID: 26290848; PMCID: PMC4537641.

藥名	**Bicalutamide(CASODEX) 1tab QD PO**

Paul F. Schellhammer, John W. Davis,An Evaluation of Bicalutamide in the Treatment of Prostate Cancer,Clinical Prostate Cancer,Volume 2, Issue 4,2004,Pages 213-219,ISSN 1540-0352, https://doi.org/10.3816/CGC.2004.n.002.

藥名	**Enzalutamide(Xtandi F.C.) 160 mg/tab 1tab QD PO**

*Ian D. Davis, M.B., B.S., Ph.D. https://orcid.org/0000-0002-9066-8244, Andrew J. Martin, Ph.D., Martin R. Stockler, M.B., B.S., Stephen Begbie, M.B., B.S., Kim N. Chi, M.D., Simon Chowdhury, M.B., B.S., Ph.D., Xanthi Coskinas, M.Med.Sc.,for the ENZAMET Trial Investigators and the Australian and New Zealand Urogenital and Prostate Cancer Trials Group*Author Info & AffiliationsPublished June 2, 2019.N Engl J Med 2019;381:121-131.DOI: 10.1056/NEJMoa1903835.VOL. 381 NO. 2.*

藥名	**Apalutamide (Erleada) 60mg/tab 4tab QD PO**

*Kim N. Chi, M.D., Neeraj Agarwal, M.D., Anders Bjartell, M.D., Byung Ha Chung, M.D., Andrea J. Pereira de Santana Gomes, M.D., Robert Given, M.D., Álvaro Juárez Soto, M.D., for the TITAN Investigators*Author Info & Affiliations.Published May 31, 2019.N Engl J Med 2019;381:13-24.DOI: 10.1056/ NEJM oa 1903307. VOL. 381 NO.*

藥名	**Darolutamide (Nubeqa F.C.) 300mg/tab 2tab BID PO**

*Matthew R. Smith, M.D., Ph.D., Maha Hussain, M.D., Fred Saad, M.D., Karim Fizazi, M.D., Ph.D., Cora N. Sternberg, M.D., E. David Crawford, M.D., Evgeny Kopyltsov, M.D, for the ARASENS Trial Investigators*Author Info & Affiliations.Published February 17, 2022.N Engl J Med 2022;386:1132-1142.DOI:10.1056/NEJMoa2119115.VOL. 386 NO. 12.*

藥名	**Abiraterone (Abiratred F.C.) 250mg/tab 4tab QDAC PO**

Nicholas D. James, Ph.D., Johann S. de Bono, Ph.D., Melissa R. Spears, M.Sc., Noel W. Clarke, Ch.M., Malcolm D. Mason, F.R.C.R., David P. Dearnaley, F.R.C.R., Alastair

*W.S. Ritchie, M.D. for the STAMPEDE Investigators*Author Info & Affiliations Published July 27, 2017.N Engl J Med 2017;377:338-351.DOI: 10.1056/NEJMoa1702900.VOL. 377 NO. 4*

泌尿道系統癌(膀胱癌、腎盂癌及輸尿管癌)

Intravesical Chemotherapy for Tis ,Ta 及 T1 cancer

Mitomycin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Mitomycin (Miomycin-C)	30 mg	IRRI	D1	qw x6 with/without qm x3	immediate Post-TURBt 12~48 hr by physician 's choice

BCG

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
BCG	120 mg	IRRI	weekly x6; weekly x3 at month 3, 6, 12, 18, 24, 30, 36	induction: qw x6 w/wt maintenance Therapy1~3 years by physician's choice	SII-ONCO-BCG 40mg/vial

Gemcitabine

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	2000 mg	IRRI	drip 30 mins, D1	biw/qw*3	

Mi Ah Han 1, Philipp Maisch 2, Jae Hung Jung, et.al. Intravesical gemcitabine for non-muscle invasive bladder cancer. 2021 Jun 14;2021(6):CD009294. doi: 10.1002/14651858.CD009294.pub3.

Phamarubicin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Phamarubicin	30 mg	IRRI	drip 60 mins, D1	qw x6 with/without qm x3	

Neoadjuvant regimens

MVAC

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Methotrexate	30 mg/m^2	IV	drip 15 mins, D1, 15 and 22	Q4w x 3 cycles	
Vinblastine	3 mg/m^2	IV	drip 15 mins, D2, 15 an d 22		
Doxorubicin	30 mg/m^2	IV	drip 15 mins, D2		
Cisplatin	70 mg/m^2	IV	drip 120 mins, D1		
or					
Carboplatin	AUC 4	IV	drip 60 mins, D2		if Crt <60

Grossman HB et a l. Neuadjuvant Chemotherapy plus cystectomy compared with cystect omy alone for lo cally advanced bladder cancer. N Eng J Med 2003; 349:859

Gemcitabine+ Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	800-1000 mg/m^2	IV	drip 30 mins, D1, 8 and 15	Q4w x 3 cycles	
Cisplatin	70 mg/m^2	IV	drip 60 mins ,D1		

Von der Maase H et al.Gemcitabine and Cisplatin versus methotrexate, vinblastine, Doxorubicin and Cisplatin in advanced or metastatic bladder cancer: results of a large, randomized, multinational, multicenter, phase III study. J Clin Oncol 2000; 18:3068

CMV

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	70 mg/m^2	IV	drip 3 hours, D2	Q3w x 3 cycles	
Vinblastine	4 mg/m^2	IV	drip 15 mins, D1, 8		
Methotrexate	30 mg/m^2	IV	drip 15 mins, D1, 8		

Internationa Collaboration of Trialists. Neoadjuvant Cisplatin, methotrexate, and vinblastine Chemotherapy for muscle invasive bladder cancer:a randomized controlled trial. Lancet 1999; 354:533

Neoadjuvant Chemotherapy with Immunotherapy

Gemcitabine+ Cisplatin+ Durvalumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	1000-1250 mg/m^2	IV	drip 30 mins, D1, 8	Q3w x 4 cycles	Peri-operative use of Durvalumab
Cisplatin	100 mg/m^2	IV	drip 1 hours, D1		
Durvalumab	1500 mg	IVD	drip 30 mins,D1		

Thomas Powles, M.D., James W.F. Catto, Ph.D., F.R.C.S.(Urol.), Toan Quang Vu, M.D., for the NIAGARA Investigators; Perioperative Durvalumab with Neoadjuvant Chemotherapy in Operable Bladder Cancer. N Engl J Med 2024;391:1773-1786 VOL. 391 NO. 19

Enfortumab Vendotin+ Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Enfortumab Vendotin	1.25 mg/kg	IV	drip 30 mins, D1, 8	Q3w x 3 cycles	1. Cis-ineligible 2. Peri-operative use of EV+P
Pembrolizumab	200 mg	IV	drip 30 mins, D1		

Sridhar SS ASCO BT 2024

Enfortumab Vendotin+ Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Enfortumab Vendotin	1.25 mg/kg	IV	drip 30 mins, D1, 8	Q3w x 4 cycles	1. Cis-eligible 2. Peri-operative use of EV+P
Pembrolizumab	200 mg	IV	drip 30 mins,D1		

Sridhar SS ASCO BT 2024

Adjuvant CCRT(only for Bladder cancer)

Cisplatin

Drug Combination	Dosage	Route of adminsistration	Times	Frequency/Duration
Cisplatin	20 mg/m^2	IV	drip 30 mins, d 1,2,8,9,15,16	during RT

*RTOG 97-06: Initial report of a Phase I–II trial of selective bladder conservation using TURBT, twice-daily accelerated irradiation sensitized with cisplatin, and adjuvant MCV combination chemotherapy,International Journal of Radiation Oncology*Biology*Physics,Volume 57, Issue 3,2003,Pages 665-672.*

Gemcitabine

Drug Combination	Dosage	Route of adminsistration	Times	Frequency/Duration
Gemcitabine	27 mg/m^2	IV	drip 30 mins, d1,4,8,11,15,18,22,25	during RT

Bladder Preservation With Twice-a-Day Radiation Plus Fluorouracil/Cisplatin or Once Daily Radiation Plus Gemcitabine for Muscle-Invasive Bladder Cancer: NRG/RTOG 0712—A Randomized Phase II Trial, J Clin Oncol 37, 44-51(2019).Volume 37, Number 1.

Adjuvant regimens

Nivolumab

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg	IV	drip 30 mins ,D1	Q2w for 1 year	CheckMate 274

Dean F. Bajorin, M.D., J. Alfred Witjes, M.D., Matthew D. Galsky, M.D.Published June 2, 2021. NEngl J Med 2021;384:2102-2114. DOI: 10.1056/NEJMoa2034442.VOL. 384 NO. 222

MVAC

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Methotrexate	30 mg/m^2	IV	drip 15 mins, D1, 15 and 22	Q4w x 6 cycles	Useful under certain circumstances
Vinblastine	3 mg/m^2	IV	drip 15 mins, D2, 15 an d 22		
Doxorubicin	30 mg/m^2	IV	drip 15 mins, D2		
Cisplatin	70 mg/m^2	IV	drip 120 mins, D1		

or					
Carboplatin	AUC 4-6	IV	drip 60 mins, D1		If Ccr<60
Avelumab	10 mg/Kg	IV	drip 30 mins,Q2w		

Sternberg CN, de Mulder PH, Schornagel JH, et al. Randomized phase III trial of high-dose-intensity methotrexate, vinblastine, Doxorubicin, and Cisplatin (MVAC) Chemotherapy and recombinant human granulocyte colony-stimulating factor versus classic MVAC in advanced urothelial tract tumors: European Organization for Research and Treatment of Cancer Protocol no. 30924. J Clin Oncol 2001;19:2638-2646.

Enfortumab vedotin-ejfv

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Enfortumab vedotin-ejfv	1.25 mg/kg	IV	drip 30 mins, D1, 8, 15	Q4w	EV 301 trial

Thomas Powles, M.D., Jonathan E. Rosenberg, M.D.,Daniel P. Petrylak, M.D.Author Info & Affiliations,Published February 12, 2021.N Engl J Med.2021;384:1125-1135.DOI: 10.1056/ NEJM oa2035807.VOL. 384 NO. 12.

Gemcitabine+ Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	800-1000 mg/m^2	IV	drip 30 mins, D1, 8 and 15	Q4w x 4 cycles	
Carboplatin	AUC 4-6	IV	drip 30 mins, D1		

Carles J, Nogué M, Domènech M, Pérez C, Saigí E, Villadiego K, Guasch I, Ibeas R. Carboplatin-gemcitabine treatment of patients with transitional cell carcinoma of the bladder and impaired renal function. Oncology. 2000 Jun;59(1):24-7

Gemcitabine + Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	800-1000 mg/m^2	IV	drip 30 mins D1, 8 and 15	Q4w x 4 cycles	
Cisplatin	70 mg/m^2	IV	drip 60 mins, D1		

von der Maase H et al. Gemcitabine and Cisplatin versus methotrexate, vi nbl as tine, Doxorubicin and Cisplatin in advanced or metastatic bladder cancer: results of a large, randomized, multinational, multicenter, phase III study. J Clin Oncol 2000; 18:3068

Unresectable/Metastasis regimens

MVAC

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Methotrexate	30 mg/m^2	IV	drip 15 mins, D1, 15 and 22	3-6 cycles	No previous platinum-based neoadjuvant Therapy (pT3, pT4a, pN+)
Vinblastine	3 mg/m^2	IV	drip 15mins, D2, 15 an d 22		
Doxorubicin	30 mg/m^2	IV	drip 15mins ,D2		
Cisplatin	70 mg/m^2	IV	drip 120 mins, D1		
or					
Carboplatin	AUC 4	IV	drip 60 mins,D2		if Ccr <60

1.Han KS et al. Methotrex at e, vinblastine, Doxorubicin and Cisplatin combination regimen as salvage Chemotherapy for patients with advanced or metastatic transitional cell carcinoma after failure of gemcitabine and Cisplatin Chemotherapy. Br J Cancer 2008; 98:86.
2.Logothetis CJ et a l. A prospective randomized trial comparing MVAC with CISCA Chemotherapy for patients with metastatic urothelial tumors. J Clin Oncol 1990; 8:1050.

Gemcitabine+ Cisplatin+ Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Gemcitabine	800-1000 mg/m^2	IV	drip 30 mins, D1, 8 and 15	4 cycles	(≧yPT2 or pT3~4a or pN+)
Cisplatin	70 mg/m^2	IV	drip 60 mins, D1		
Nivolumab	120-240 mg	IV	drip 30 mins, D1		

*Michiel S. van der Heijden, M.D., Ph.D., Guru Sonpavde, M.D., Thomas Powles, M.D. , for the CheckMate 901 Trial Investigators*Author Info & Affiliations Published October 22, 2023.N Engl J Med 2023;389:1778-1789.DOI: 10.1056/NEJMoa2309863,VOL. 389 NO. 19*

Gemcitabine+ Cisplatin+ Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Nivolumab	360 mg/m^2	IV	drip 30 mins, d1	Q 3w x 6 cycles

				Nivolumab 480mg maintenance Q 4w (ntil disease progression/unacceptable toxicity or up to 24 months)
Gemcitabine	1000 mg/m^2	IV	drip 2 hours, d 1.8	Q 3w x 6 cycles
Cisplatin	70 mg/m^2	IV	drip 30 hours, d 1	

the 2023 European Society of Medical Oncology (ESMO) Annual Congress held in Madrid, Spain between October 20th and 24th, 2023

Enfortumab Vendotin+ Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Enfortumab Vendotin	1.25 mg/Kg	IV	drip 30 mins, D1,8	q3w; 35 cycles for Pembrolizumab	EV 302 trial
Pembrolizumab	200 mg	IV	drip 30 mins , D1		

Thomas Powles, M.D., Gopa Iyer, M.D., Published March 6, 2024. N Engl J Med 2024;390:875-888. DOI: 10.1056/NEJMoa2312117. VOL. 390 NO. 10

Avelumab+ Gemcitabine+ Cisplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Avelumab	10 mg/Kg	IV	drip 30mins, Q2w	Avelumab as 1st line maintenance	JAVELINE 100 trial
Gemcitabine	1000-1250 mg/m^2	IV	drip 30 mins, D1, 8 and 15		
Cisplatin	70 mg/m^2	IV	drip 60 mins, D1		

Thomas Powles, M.D., Se Hoon Park, M.D., Ph.D., Petros Grivas, M.D., Ph.D.Author Info & Affiliations,Published September 18, 2020.N Engl J Med 2020;383:1218-1230.DOI: 10.1056/NEJMoa2002788.VOL. 383 NO. 13

Avelumab+ Gemcitabine+ Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Avelumab	10 mg/kg	IV	drip 30 mins, Q2w	Avelumab as 1st line maintenance	JAVELINE 100 trial
Gemcitabine	1000-1250 mg/m^2	IV	drip 30 mins, D1, 8		

Carboplatin	AUC 4	IV	drip 30 mins, D1		

Thomas Powles, M.D., Se Hoon Park, M.D., Ph.D., Petros Grivas, M.D., Ph.D.Author Info & Affiliations,Published September 18, 2020.N Engl J Med 2020;383:1218-1230.DOI: 10.1056/NEJMoa2002788.VOL. 383 NO. 13

Pembrolizumab

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins	q3w for 2 years	KeyNote 045 trial (mUC)

Joaquim Bellmunt, M.D., Lawrence Fong, M.D., Nicholas J. Vogelzang, M.D., Published March 16, 2017,N Engl J Med 2017;376:1015-1026DOI: 10.1056/NEJMoa1613683.VOL. 376 NO. 11

Target Therapy

藥名(學名)	**Erdafitinib** **8 mg PO daily initially; increase to 9 mg PO daily**

Yohann Loriot, M.D., Ph.D., Nobuaki Matsubara, M.D., Se Hoon Park, M.D., Ph.D., Robert A. Huddart, M.B., B.S., Ph.D., Earle F. Burgess, M.D., Banek, M.D., Published October 20, 2023
N Engl J Med 2023;389:1961-1971.DOI: 10.1056/NEJMoa2308849.VOL. 389 NO. 21

腎細胞癌

Cabozantinib+ Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cabozantinib	40 mg	PO	QD		CheckMate 9ER
Nivolumab	240 mg	IV	drip 30 mins	Q2w	

Choueiri TK, et al. N Engl J Med. 2021;384(9):829-841.

Lenvatinib+ Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Lenvatinib	20 mg	PO	QD		CLEAR trial
Pembrolizumab	200 mg	IV	drip 30 mins	Q3w	

J Clin Oncol. 2024 Apr 10;42(11):1222-1228. doi: 10.1200/JCO.23.01569. Epub 2024 Jan 16.

Ipilimumab+ Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ipilimumab	1 mg/kg	IV	drip 30 mins	Q3w 4 cycles then NIVO 3mg/Kg q2w	CheckMate 214 trial
Nivolumab	3 mg/kg	IV	drip 30 mins		

Robert J. Motzer, M.D., Nizar M. Tannir, Elizabeth R. Plimack, M.D., Published March 21, 2018. N Engl J Med 2018;378:1277-1290 DOI: 10.1056/NEJMoa1712126. VOL. 378 NO. 14

Pembrolizumab+ Axitinib

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins, Q3w	35 cycles for	KeyNote 426

Axitinib	5 mg	PO	BID	Pembrolizumab	

Brian I. Rini, M.D., Elizabeth R. Plimack, M.D., Frédéric Pouliot, M.D., Ph.D., Published February 16, 2019. N Engl J Med 2019;380:1116-1127.DOI: 10.1056/NEJMoa1816714. VOL. 380 NO. 12

Pembrolizumab

Drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins	q3w for 2 years	KeyNote 045 trial (mUC)

Joaquim Bellmunt, M.D., Lawrence Fong, M.D., Nicholas J. Vogelzang, M.D., Published March 16, 2017,N Engl J Med 2017;376:1015-1026DOI: 10.1056/NEJMoa1613683.VOL. 376 NO. 11

Target Therapy

藥名(學名)	**Cabozantinib 40-60 mg PO qd**

ToniK. Choueiri, M.D., Bernard Escudier, M.D., Thomas POwles, M.D., Hans Hammers, M.D., Published November 5, 2015,N Engl J Med 2015;373:1814-1823

藥名(學名)	**Pazopanib 800mg PO qd**

Sternberg CN, Davis ID, Mardiak J, et al. Pazopanib in locally advanced or metastatic renal cell carcinoma: results of a randomized phase III trial. J Clin Oncol 2010; 28: 1061-8

藥名(學名)	**Sunitinib 50 mg, PO 4/2 or 2/1 week (on/off)**

Robert J. Motzer, M.D., Thomas E. Hutson, D.O., Stéphane Oudard, M.D., Published January 11, 2007. N Engl J Med 2007;356:115-124. DOI: 10.1056/NEJMoa065044. VOL. 356 NO. 2

藥名	**Axitinib 5mg PO bid**

The Lancet. Volume 378, Issue 9807p1931-1939December 03, 2011. AXIS trial

藥名	**Everolimus 10mg PO qd**

Ann Oncol. 2016 Mar;27(3):441-8. doi: 10.1093/annonc/mdv612. Epub 2015 Dec 17.

藥名	**Tivozanib 1.34 mg PO day1~21**

Tivozanib plus Nivolumab versus tivozanib monotherapy in patients with renal cell carcinoma following an immune checkpoint inhibitor: results of the phase 3 TiNivo-2 Study

藥名	**Belzutifan 120 mg PO qd**

Choueiri TK, Powles T, Peltola K, et al. Belzutifan versus Everolimus for Advanced Renal-Cell Carcinoma. N Engl J Med. 2024 Aug 22;391(8):710-721.

藥名	**Lenvatinib 10~20 mg PO qd**

Zachary Klaassen, MD, MSc – Urologic Oncologist, Assistant Professor of Urology, Georgia Cancer Center, Augusta University/Medical College of Georgia, @zklaassen_md on Twitter during the 2021 European Society for Medical Oncology (ESMO) Annual Congress 2021, Thursday, Sep 16, 2021 – Tuesday, Sep 21, 2021.

淋巴癌(Hodgkin Lymphoma)

ABVD：(Doxorubicin、bleomycin、vinblastine、dacarbazine)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin (Adriamycin)	25 mg/m^2	IV	drip 60 mins, D1 and 15	Q4w	
Bleomycin	10 U/m^2	IV	drip 30 mins, D1 and 15		
Vinblastine	6 mg/m^2	IV	drip 30 mins, D1 and 15		
Dacarbazine(DTIC)	375 mg/m^2	IV	drip 60 mins, D1 and 15		

1.McKelvey EM. cancer 1976;38:1484-1493.Lenz G. J clin Oncol 2005;23:1984-1992.
2.Hiddemann W.Blood 2005;106:3725-3732

AAVD (Adcetris、Adriamycin、Velban、Dacarbazine)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Brentuximab vedotin (Adcetris)	1.2 mg/kg	IV	drip over 30 mins, D1 and 15	Q4w	
Doxorubicin (Adriamycin)	25 mg/m^2	IV	drip 60 mins, D1 and 15		
Vinblastine (Velban)	6 mg/m^2	IV	drip 30 mins, D1 and 15		
Dacarbazine (DTIC)	375 mg/m^2	IV	drip 60 mins, D1 and 15		

1.MSK 13-034: Kumar A, Casulo C, Yahalom J, Schöder H, Barr PM, Caron P, Chiu A, Constine LS, Drullinsky P, Friedberg JW, Gerecitano JF, Hamilton A, Hamlin PA, Horwitz SM,Jacob AG, Matasar MJ, McArthur GN, McCall SJ, Moskowitz AJ, Noy A, Palomba ML, Portlock CS, Straus DJ, VanderEls N, Verwys SL, Yang J, Younes A, Zelenetz AD, Zhang Z, Moskowitz CH. Brentuximab vedotin and AVD followed by involved-site radiotherapy in early stage, unfavorable risk Hodgkin lymphoma. Blood. 2016 Sep 15;128(11):1458-64. Epub 2016 Jul 25. link to original article dosing details in manuscript have been reviewed by our editors free full text available at EuroPMC EuroPMC NCT01868451

淋巴癌(Diffuse Large B-Cell Lymphoma)

First line

RCHOP

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Rituximab	375 mg/m²	IV	drip 4 hours, day 1	Repeat cycle every21-28 d	
Cyclophosphamide	750 mg/m²	IV	drip 60 mins day 1		
Doxorubicin 50	50 mg/m²	IV	drip 60 mins day 1		
Vincristine	1.4 mg/m²	IV	drip 60 mins day 1		(maximum dose of 2 mg)
Prednisone	100mg	PO	day1-5		

McKelvey EM. cancer 1976;38:1484-1493.Lenz G. J clin Oncol 2005;23:1984-1992. Hiddemann W.Blood 2005;106:3725-3732

RCEOP

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Rituximab	375 mg/m²	IV	drip 4 hours, day 1	Repeat cycle every21-28 d	
Cyclophosphamide	750 mg/m²	IV	drip 60 mins ,day 1		
Epirubicin	50 mg/m²	IV	drip 60 mins ,day 1		
Vincristine	1.4 mg/m²	IV	drip 60 mins ,day 1		(maximum dose of 2 mg)
Prednisone	100 mg	PO	day1-5		

McKelvey EM. cancer 1976;38:1484-1493.Lenz G. J clin Oncol 2005;23:1984-1992. Hiddemann W.Blood 2005;106:3725-3732

DA-EPOCH±Rituximab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Rituximab (Rituxan)	375 mg/m^2	IV	over 3 hours once on day 1	Repeat cycle every21-28 d	
Etoposide (Vepesid)	50 mg/m^2/day	IV	over 96 hours, started on day 1		(total dose per cycle: 200 mg/m2)
Vincristine (Oncovin)	0.4 mg/m^2/day	IV	over 96 hours, started on day 1		(total dose per cycle: 1.6 mg/m2; dose was not capped)
Cyclophosphamide (Cytoxan)	750 mg/m^2	IV	over 2 hours once on day5		
Doxorubicin (Adriamycin)	10 mg/m^2/day	IV	over 96 hours, started on day 1		(total dose per cycle: 40 mg/m2)
Prednisone (Sterapred)	60 mg/m^2/dose	PO	twice per day on days 1 to 5		
註: patients >80 of age with comorbidities R-minsi CHOP					

Giulino-Roth L, O'Donohue T, Chen Z, Bartlett NL, LaCasce A, Martin-Doyle W, Barth MJ, Davies K, Blum KA, Christian B, Casulo C, Smith SM, Godfrey J, Termuhlen A, Oberley MJ, Alexander S, Weitzman S, Appel B, Mizukawa B, Svoboda J, Afify Z, Pauly M, Dave H, Gardner R, Stephens DM, Zeitler WA, Forlenza C, Levine J, Williams ME, Sima JL, Bollard CM, Leonard JP. Outcomes of adults and children with primary mediastinal B-cell lymphoma treated with dose-adjusted EPOCH-R. Br J Haematol. 2017 Dec;179(5):739-747. doi: 10.1111/bjh.14951. Epub 2017 Oct 29. PMID: 29082519; PMCID: PMC6650639.

Pola-R-CHP

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration
Polatuzumab vedotin(Polivy)	1.8 mg/kg	IV	over 1.5 hours once on day1	Q 3w x6 cycles
Rituximab (Rituxan)	375 mg/m^2	IV	over 3 hours once on day1	
Cyclophosphamide	750 mg/m^2	IV	over 2 hours once on day 5	

(Cytoxan)				
Doxorubicin (Adriamycin)	10 mg/m^2	IV	over 96 hours, started on day 1 (total dose per cycle: 40 mg/m2)	
Prednisone (Sterapred)	60 mg/m^2/dose	PO	twice per day on days 1 to 5	

Tilly H, Morschhauser F, Sehn LH, Friedberg JW, Trněný M, Sharman JP, Herbaux C, Burke JM, Matasar M, Rai S, Izutsu K, Mehta-Shah N, Oberic L, Chauchet A, Jurczak W, Song Y, Greil R, Mykhalska L, Bergua-Burgués JM, Cheung MC, Pinto A, Shin HJ, Hapgood G, Munhoz E, Abrisqueta P, Gau JP, Hirata J, Jiang Y, Yan M, Lee C, Flowers CR, Salles G. Polatuzumab Vedotin in Previously Untreated Diffuse Large B-Cell Lymphoma. N Engl J Med. 2022 Jan 27;386(4):351-363. Epub 2021 Dec 14

Second line

DHAP±Rituximab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	80-100 mg/m²	CIVI	over 24 hours on day 1	Repeat cycle every21-28 d	
Cytarabine	2000 mg/m²	IV	q12h x2 dose on day 2		
Dexamethasone	40 mg/m²	PO/IV	daily on day 1-4		

Velasquez WS. Blood 1988;71:117-122.

ESHAP±Rituximab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Etoposide	40 mg/m²	IV	drip 60 mins, on days 1-4	Repeat cycle every21-28 d	
Methylprednisolone	500 mg/m²	IV	drip 60 mins, on days 1-5		
Cytarabine	2000 mg/m²	CIVI	CIVI on day 5		
Cisplatin	25 mg/m²	IV	over 24 hours on days 1-4		

Velasquez WS. J clin Oncol 1994;12:1169-1176.

ICE ± Rituximab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ifosfamide	5000 mg/m²	CIVI	over 24 hours on day 2	Repeat cycle every21-28 d	
Mesna	5000 mg/m²	CIVI	over 24 hours on day 2		
Carboplatin	AUC 5	IV	drip 60 mins , on day 2		
Etoposide	100 mg/m²	IV	drip 60 mins , on days 1-3		
±Rituximab	375 mg/m²	IV	48 h before start of cycle 1 and on day 1 of each cycle		

Kewalramani, T., et al., Rituximab and ICE as second-line therapy before autologous stem cell transplantation for relapsed or primary refractory diffuse large B-cell lymphoma. Blood, 2004. 103(10): p. 3684-3688.

Polatuzumab vedotin-piiq ± Bendamustine ± Rituximab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Polatuzumab vedotin-piiq (Polivy)	1.8 mg/kg	IV	90 mins repeat cycle every 21 d	Repeat cycle every21-28 d	Total 6 cycle
± Benamustine	90 mg/m^2/day	IV	drip 60 mins,day1, day2		
±Rituximab	375 mg/m²	IV	drip 4 hours,day 1		

1.Morschhauser F, Flinn IW, Advani R, et al. Polatuzumab vedotin or pinatuzumab vedotin plus Rituximab in patients with relapsed or refractory non-Hodgkin lymphoma: final results from a phase 2 randomised study (ROMULUS). Lancet Haematol 2019;6:e254-e265.
2.Sehn LH, Herrera AF, Flowers CR, et al. Polatuzumab vedotin in relapsed or refractory diffuse large B-cell lymphoma. J Clin Oncol 2020;38:155-165.

RB

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Rituximab	375 mg/m^2	IV	drip 4 hours ,day 1	Repeat cycle every21-28 d	
Bendamustine	90-120 mg/m^2	IV	drip 60 mins, day 1-2		
備註:化學治療原則劑量會依病患體能狀況，調整劑量。					

Jeffrey L Vacirca, Peter I Acs, Imad A Tabbara.et,al.Bendamustine combined with Rituximab for patients with relapsed or refractory diffuse large B cell lymphoma,Ann Hematol. 2013 Aug 17;93(3):403–409. doi: 10.1007/s00277-013-1879.

淋巴癌 (Follicular Lymphoma)

RCHOP

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Rituximab	375 mg/m²	IV	drip 4 hours, day 1	Repeat cycle every 21-28 d	
Cyclophosphamide	750 mg/m²	IV	drip 60 mins, day 1		
Doxorubicin 50	50 mg/m²	IV	drip 60 mins, day 1		
Vincristine	1.4 mg/m²	IV	drip 10 mins, day 1		(maximum dose of 2 mg)
Prednisone	100 mg	PO	day1-5		

McKelvey EM. cancer 1976;38:1484-1493.Lenz G. J clin Oncol 2005;23:1984-1992. Hiddemann W.Blood 2005;106:3725-3732

RCEOP

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Rituximab	375 mg/m²	IV	drip 4 hours ,day 1	Repeat cycle every21-28 d	
Cyclophosphamide	750 mg/m²	IV	drip 60 mins ,day 1		
Epirubicin	50 mg/m²	IV	drip 60 mins ,day 1		
Vincristine	1.4 mg/m²	IV	drip 10 mins ,day 1		(maximum dose of 2 mg)
Prednisone	100 mg	PO	day1-5		

McKelvey EM. cancer 1976;38:1484-1493.Lenz G. J clin Oncol 2005;23:1984-1992. Hiddemann W.Blood 2005;106:3725-3732

BR

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Rituximab	375 mg/m²	IV	drip 4 hours ,day 1	Repeat cycle every21-28 d	
Bendamustine	90-120 mg/m^2	IV	drip 60 mins, day 1-2		

Nastoupil LJ, Hess G, Pavlovsky MA, Danielewicz I, Freeman J, García-Sancho AM, Glazunova V, Grigg A, Hou JZ, Janssens A, Kim SJ, Masliak Z, McKay P, Merli F, Munakata W, Nagai H, Özcan M, Preis M, Wang T, Rowe M, Tamegnon M, Qin R, Henninger T, Curtis M, Caces DB, Thieblemont C, Salles G. Phase 3 SELENE study: ibrutinib plus BR/R-CHOP in previ-ously treated patients with follicular or marginal zone lym-phoma. Blood Adv. 2023 Nov 28;7(22):7141-7150

GB

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Bendamustine	90-120 mg/m^2	IV	drip 60 mins, day 1-2	Repeat cycle every21-28 d	
Obinutuzumab maintenance	1000 mg	IV	every 8 weeks for 12 doses		

Sehn, L. H., N. Chua, J. Mayer, et al. 2016. "Obinutuzumab plus Bendamustine versus Bendamustine monoTherapy in pa-tients with Rituximab-refractory indolent non-Hodgkin lym-phoma (GADOLIN): a randomised, controlled, open-label, multicentre, phase 3 trial." Lancet Oncol 17(8):1081-1093.

RCOP

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Rituximab	375 mg/m²	IV	drip 4 hours, day 1	Repeat cycle every21-28 d	
Cyclophosphamide	750 mg/m²	IV	drip 60 mins, day 1		
Vincristine	1.4 mg/m²	IV	drip 10 mins, day 1		(maximum dose of 2 mg)
Prednisone	100 mg	PO	day1-5		

van Oers MH, Klasa R, Marcus RE, Wolf M, Kimby E, Gas-coyne RD, Jack A, Van 't Veer M, Vranovsky A, Holte H, van Glabbeke M, Teodorovic I, Rozewicz C, Hagenbeek A. Rituximab maintenance improves clinical outcome of re-lapsed/resistant follicular non-Hodgkin lymphoma in patients both with and without Rituximab during induction: results of a prospective randomized phase 3 intergroup trial. Blood. 2006 Nov 15;108(10):3295-301. Epub 2006 Jul 27

Second line

DHAP ± Rituximab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	100 mg/m²	CIVI	over 24 hours on day 1	Repeat cycle every21-28 d	
Cytarabine	2000 mg/m²	IV	q12h x2 dose on day 2		
Dexamethasone	40 mg/m²	PO/IV	daily on day 1-4		

Velasquez WS. Blood 1988;71:117-122.

ESHAP ± Rituximab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Etoposide	40 mg/m²	IV	drip 60 mins ,on days 1-4	Repeat cycle every21-28 d	
Methylprednisolone	500 mg/m²	IV	drip 60 mins ,on days 1-5		
Cytarabine	2000 mg/m²	IV	CIVI on day 5		
Cisplatin	25 mg/m²	IV	drip 60 mins ,on days 1-4		

Velasquez WS. J clin Oncol 1994;12:1169-1176.

ICE ± Rituximab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Ifosfamide	5000 mg/m²	CIVI	over 24 hours on day 2	Repeat cycle every 14-15 d	
Mesna	5000 mg/m²	CIVI	over 24 hours on day 2		
Carboplatin	AUC 5	IV	day 2(maximum dose of 800 mg)		

Etoposide	100 mg/m²	IV	drip 60mins ,on days 1-3		
±Rituximab	375 mg/m²	IV	48 hours before start of cycle 1 and on day 1 of each cycle		

Moskowitz CH0J clin oncol 1999;17:3776-3785.
Kewalramans T. blood 2004;103:3684-3688

皮膚癌(Basal Cell Skin)

Neoadjuvant/Adjuvant Chemotherapy regimens

Cisplatin + paclitaxol (self pay)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	75 mg/m^2	IV	drip 30 mins,on day 1	every 3 weeks	Treat as recurrent/metastatic head and neck squamous cell carcinoma
Paclitaxel	135 mg/m^2	IV	drip 30 mins,on day 1		

Metastatic basal cell carcinoma: rapid symptomatic response to cisplatin and paclitaxel. ANZ J Surg. 2004 Aug;74(8):704-5.

皮膚癌(Squamous Cell Skin Cancer)

Cisplatin + 5-FU

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cisplatin	100 mg/m^2	IV	drip 30 mins,on day 1	every 3 weeks *6cucles	Till IV or unacceptable toxicity
5-FU	1g/m^2	IV	drip 30 mins,on day 1-4		

Khansur T, Kennedy A. Cisplatin and 5-fluorouracil for advanced locoregional and metastatic squamous cell carcinoma of the skin. Cancer 1991;67:2030-2032.

Cetuximab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cetuximab	400mg/m^2 Week 1 then 250mg/m^2	IV	QW	every 3 weeks *6cucles	Till IV or unacceptable toxicity

Maubec E, Petrow P, Scheer-Senyarich I, et al. Phase II study of cetuximab as first- line single-drug therapy in patients with unresectable squamous cell carcinoma of the skin. J Clin Oncol 2011;29:3419-3426.

皮膚癌(Melanoma)

Adjuvant Systemic therapy

Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins,on day 1	every 3 weeks for 2 cycle(up to 6 weeks)	

1.Robert C, Hamid O, Daud A, Hodi FS, et al. Five-year survival outcomes for patients with advanced melanoma treated with pembrolizumab in KEYNOTE-001. Ann Oncol. 2019;30(4):582–588.
2.Pembrolizumab in Chinese patients with advanced melanoma: 3-year follow-up of the KEYNOTE-151 study. PubMed. 2022; (NCT02821000).
3.Pembrolizumab (Keytruda) in advanced melanoma: a review of efficacy evidence. PubMed. 2023.
4.Efficacy of pembrolizumab for advanced/metastatic melanoma: a meta-analysis. PubMed. 2021.
5.Pembrolizumab: A Review in Advanced Melanoma. PubMed. 2016.

Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	200 mg fix	IV	drip 60 mins,on day 1	every 2 weeks for 2cycle(up to 6 weeks)	

1.Weber JS, D'Angelo SP, Minor D, et al. Nivolumab versus chemotherapy in patients with advanced melanoma who progressed after anti-CTLA-4 treatment (CheckMate 037): a randomised, controlled, open-label, phase 3 trial. Lancet Oncol. 2015;16(4):375–384.
2.Wolchok JD, Chiarion-Sileni V, Gonzalez R, et al. Overall survival with combined nivolumab and ipilimumab in advanced melanoma (CheckMate 067): 10-year follow-up results. N Engl J Med. 2024; doi:10.1056/NEJMoa2208661. 3.National Cancer Institute. Nivolumab-based treatments for advanced melanoma: Summary of efficacy and survival data from CheckMate trials. Cancer.gov.

Dabrafenib + Trametinib (For BRAF V600E-mutated tumors)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dabrafenib	150 mg	PO	twice daily	every 2 weeks	
Trametinib	2 mg	PO	daily		

1. Long GV, Stroyakovskiy D, Gogas H, et al. Dabrafenib and trametinib versus dabrafenib and placebo for Val600 BRAF-mutant melanoma: a multicentre, double-blind, phase 3 randomised controlled trial. Lancet. 2015;386(9992):410-419. doi:10.1016/S0140-6736(15)60972-2.
2. Robert C, Karaszewska B, Schachter J, et al. Improved overall survival in melanoma with combined dabrafenib and trametinib. N Engl J Med. 2015;372(1):30-39.

3. Sun C, Wang L, Huang S. Dabrafenib and trametinib, alone and in combination for BRAF-mutant metastatic melanoma. Oncologist. 2014;19(8): 846-854.

Systemic therapy for metastatic or unresectable diseases

FIRST-LINE THERAPY

Preferred regimens

- Combination checkpoint blockade (preferred)

Nivolumab/Ipilimumab (category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	200 mg fix	IV	drip 60 mins,on day 1	every 2 weeks for 2 cycle (up to 6 weeks)	
ipilimumab	50mg	IV	drip 60 mins,on day 1		

1.Tawbi HA, Forsyth PA, Hodi FS, et al. Long-term outcomes of patients with active melanoma brain metastases treated with combination nivolumab plus ipilimumab (CheckMate 204): final results of an open-label, multicentre, phase 2 study. Lancet Oncol 2021;22:1692-1704.
2.Wolchok, JT, Chiarion-Sileni V, Gonzalez R, et al. Long-term outcomes with nivolumab plus ipilimumab or nivolumab alone versus ipilimumab in patients with advanced melanoma. J Clin Oncol 2022;40:127-137.

Anti-PD-1 monotherapy

Pembrolizumab(category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins,on day 1	every 3 weeks for 2 cycle(up to 6 weeks)	

1.Ribas A, Puzanov I, Dummer R, et al. Pembrolizumab versus investigator-choice chemotherapy for ipilimumab-refractory melanoma (KEYNOTE-002): a randomised, controlled, phase 2 trial. Lancet Oncol 2015;16:908-918.
2.Hamid O, Puzanov I, Dummer R, et al. Final analysis of a randomised trial comparing pembrolizumab versus investigator-choice chemotherapy for ipilimumab-refractory advanced melanoma. Eur J Cancer 2017;86:37-45.

Nivolumab(category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	200 mg fix	IV	drip 60 mins,on day 1	every 2 weeks for 2cycle(up to 6	

				weeks)	

1.Weber JS, D'Angelo SP, Minor D, et al. Nivolumab versus chemotherapy in patients with advanced melanoma who progressed after anti-CTLA-4 treatment (CheckMate 037): a randomised, controlled, open-label, phase 3 trial. Lancet Oncol 2015;16:375-384.
2.Ascierto PA, Long GV, Robert C, et al. Survival outcomes in patients with previously untreated BRAF wild-type advanced melanoma treated with nivolumab therapy: Three-year follow-up of a randomized phase 3 trial. JAMA Oncol 2019;5:187-194.

Other recommended regimens

- Combination targeted therapy if BRAF V600 mutation positive

Dabrafenib + Trametinib (For BRAF V600E-mutated tumors) (category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dabrafenib	150 mg	PO	twice daily	every 2 weeks for 2cycle(up to 6 weeks)	
Trametinib	2 mg	PO	daily		

1.Long GV, Stroyakovskiy D, Gogas H, et al. Dabrafenib and trametinib versus dabrafenib and placebo for Val600 BRAF-mutant melanoma: a multicentre, double-blind, phase 3 randomised controlled trial. Lancet 2015;386:444-451.
2.Long GV, Flaherty KT, Stroyakovskiy D, et al. Dabrafenib plus trametinib versus dabrafenib monotherapy in patients with metastatic BRAF V600E/K-mutant melanoma: long-term survival and safety analysis of a phase 3 study. Ann Oncol 2017;28:1631-1639.

Vemurafenib + Cobimetinib (For BRAF V600E-mutated tumors) (category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Vemurafenib	150 mg	PO	twice daily	every 2 weeks for 2cycle(up to 6 weeks)	
Cobimetinib	60 mg	PO	daily	21days on and 7days off	

1.Larkin J, Ascierto PA, Dreno B, et al. Combined vemurafenib and cobimetinib in BRAF-mutated melanoma. N Engl J Med 2014;371:1867-1876.
2.Ascierto PA, McArthur GA, Dreno B, et al. Cobimetinib combined with vemurafenib in advanced BRAF(V600)-mutant melanoma (coBRIM): updated efficacy results from a randomised, double-blind, phase 3 trial. Lancet Oncol 2016;17:1248-1260.

Encorafenib + Binimetinib(category 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Encorafenib	450 mg	PO	QD	every 28 days	
Binimetinib	45 mg	PO	BID	every 28 days	

1.Dummer R, Ascierto PA, Gogas HJ, et al. Encorafenib plus binimetinib versus vemurafenib or encorafenib in patients with BRAF-mutant melanoma(COLUMBUS): a multicentre, open-label, randomised phase 3 trial. Lancet Oncol 2018;19:603-615.
2.Dummer R, Ascierto PA, Gogas HJ, et al. Overall survival in patients with BRAF-mutant melanoma receiving encorafenib plus binimetinib versus vemurafenib or encorafenib (COLUMBUS): a multicentre, open-label, randomised, phase 3 trial. Lancet Oncol 2018;19:1315-1327.

Pembrolizumab /low-dose Ipilimumab (category 2B)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg fix	IV	drip 60 mins,on day 1	every 3 weeks for 4cycles then pembrolizumab alone for up to 2 years	
Ipilimumab	1 mg/mg	IV	drip 60 mins,on day 1	every 3 weeks for 4cycles)	

1.Carlino MS, Menzies AM, Atkinson V, et al. Long-term follow-up of standard-dose pembrolizumab plus reduced-dose ipilimumab in patients with advanced melanoma: KEYNOTE-029 Part 1B. Clin Cancer Res 2020;26:5086-5091.
2.Olson DJ, Eroglu Z, Brockstein B, et al. Pembrolizumab plus ipilimumab following anti-PD-1/L1 failure in melanoma. J Clin Oncol 2021;39:2647-2655.

SECOND-LINE OR SUBSEQUENT THERAPY

Anti-PD-1 monotherapy

Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins,on day 1	every 3 weeks for 2cycle(up to 6 weeks)	

1.Ribas A, Puzanov I, Dummer R, et al. Pembrolizumab versus investigator-choice chemotherapy for ipilimumab-refractory melanoma (KEYNOTE-002): a randomised, controlled, phase 2 trial. Lancet Oncol 2015;16:908-918.
2.Hamid O, Puzanov I, Dummer R, et al. Final analysis of a randomised trial comparing pembrolizumab versus investigator-choice chemotherapy for ipilimumab-refractory advanced melanoma. Eur J Cancer 2017;86:37-45.

Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	200 mg fix	IV	drip 60 mins,on day 1	every 2 weeks for 2cycle(up to 6 weeks)	

1.Weber JS, D'Angelo SP, Minor D, et al. Nivolumab versus chemotherapy in patients with advanced melanoma who progressed after anti-CTLA-4 treatment (CheckMate 037): a randomised, controlled, open-label, phase 3 trial. Lancet Oncol 2015;16:375-384.
2.Ascierto PA, Long GV, Robert C, et al. Survival outcomes in patients with previously untreated BRAF wild-type advanced melanoma treated with nivolumab therapy: Three-year follow-up of a randomized phase 3 trial. JAMA Oncol 2019;5:187-194.

For activating mutations of KIT

KIT inhibitor therapy

Imatinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Imatinib	mg	PO	BID	every 28 days	

1.Hodi FS, Corless CL, Giobbie-Hurder A, et al. Imatinib for melanomas harboring mutationally activated or amplified KIT arising on mucosal, acral, and chronically sun-damaged skin. J Clin Oncol 2013;31:3182-3190.
2.Carvajal RD, Antonescu CR, Wolchok, JD, et al. KIT as a therapeutic target in metastatic melanoma. JAMA 2011;395:2327-2334.

For NTRK fusions

Larotrectinib

藥名(學名)	**Larotrectinib 100 mg PO twice daily**

Drilon A, Laetsch TW, Kummar W, et al. Efficacy of larotrectinib in TRK fusion-positive cancers in adults and children. N Engl J Med 2018;378:731-739.

Entrectinib

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Entrectinib	600 mg	PO	QD	every 28 days	

1.Drilon A, Siena S, Ou SI, et al. Safety and antitumor activity of the multitargeted Pan-TRK, ROS1, and ALK inhibitor entrectinib: Combined results from two phase I trials (ALKA-372-001 and STARTRK-1). Cancer Discov 2017;7:400-409.

2.Doebele RC, Drilon A, Paz-Ares L, et al. Entrectinib in patients with advanced or metastatic NTRK fusion-positive solid tumours: integrated analysis of three phase 1-2 trials. Lancet Oncol 2020;21:271-282.

For BRAF fusions and non-V600 mutations

Trametinib

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Trametinib	2 mg	PO	daily		

1.Long GV, Stroyakovskiy D, Gogas H, et al. Dabrafenib and trametinib versus dabrafenib and placebo for Val600 BRAF-mutant melanoma: a multicentre, double-blind, phase 3 randomised controlled trial. Lancet 2015;386:444-451.
2.Long GV, Flaherty KT, Stroyakovskiy D, et al. Dabrafenib plus trametinib versus dabrafenib monotherapy in patients with metastatic BRAF V600E/K-mutant melanoma: long-term survival and safety analysis of a phase 3 study. Ann Oncol 2017;28:1631-1639.

For NRAS-mutated tumors (for progression following immune checkpoint inhibitor therapy)

Binimetinibv(category 2B)

Scientific name of drug	Dosage	Route of administration	Times	Frequency/Duration	Notes
Binimetinibv	mg	PO	QD	every 28 days	

Dummer R, Schadendorf D, Ascierto PA, et al. Binimetinib versus dacarbazine in patients with advanced NRAS-mutant melanoma (NEMO): a multicentre, open-label, randomised, phase 3 trial. Lancet Oncol 2017;18:435-445.

Combination therapy

Pembrolizumab/Lenvatinib

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins,on day 1	every 3 weeks for 2cycle(up to 6 weeks)	

1.Arance A, de la Cruz-Merino L, et al. Phase II LEAP-004 study of lenvatinib plus pembrolizumab for melanoma with confirmed progression on a programmed cell death protein-1 or programmed death ligand 1 inhibitor given as monotherapy or in combination. J Clin Oncol 2023;41:75-85. Erratum in: J Clin Oncol 2023;41:2454.

甲狀腺癌

Advanced/Metastasis regimens

Pembrolizumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Pembrolizumab	200 mg	IV	drip 30 mins,on day 1	every 3 weeks	
or					
Pembrolizumab	400 mg	IV	drip 30 mins,on day 1	every 6 weeks	

Oh, D. Y., Algazi, A., Capdevila, J., Longo, F., Miller Jr, W., Chun Bing, J. T., ... & Lebellec, L. (2023). Efficacy and safety of Pembrolizumab monotherapy in patients with advanced thyroid cancer in the phase 2 KEYNOTE-158 study. Cancer, 129(8), 1195-1204.

Nivolumab

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Nivolumab	240 mg	IV	drip 30-60 mins, on day 1	every 2 weeks	
or					
Nivolumab	480 mg	IV	drip 30-60 mins, on day 1	every 4 weeks	

Kollipara R, Schneider B, Radovich M, et al. Exceptional response with Immunotherapy in a patient with anaplastic thyroid cancer. Oncologist 2017;22:1149-1151.12 Ma D, Ding XP, Zhang C, Shi P. Combined targeted Therapy and Immunotherapy in anaplastic thyroid carcinoma with distant metastasis: A case rePOrt. World J ClinCases 2022;10:3849-3855.

Paclitaxel

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	60-80 mg/m^2	IV	drip 3 hours, on day 1	weekly	
or					

Paclitaxel	135-150 mg/m^2	IV	drip 3 hours, on day 1	every 3-4 weeks	

Smallridge RC, Ain KB, Asa SL, et al. American Thyroid Association guidelines for management of patients with anaplastic thyroid cancer. Thyroid 2012;22:1104-1139.

Paclitaxel/Carboplatin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Paclitaxel	60–80 mg/m^2	IV	drip 3 hours, on day 1	weekly	
Carboplatin	AUC 2	IV	drip 60 mins on day 1		
or					
Paclitaxel	135–150 mg/m^2	IV	drip 3 hours, on day 1	every 3–4 Weeks	
Carboplatin	AUC 5–6	IV	drip 60 mins on day 1		

Smallridge RC, Ain KB, Asa SL, et al. American Thyroid Association guidelines for management of patients with anaplastic thyroid cancer. Thyroid 2012;22:1104-1139.

Doxorubicin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Doxorubicin	20 mg/m^2	IV	drip 60 mins on day 1	weekly	

Bible KC, Kebebew E, Brierley J, et al. 2021 American Thyroid Association guidelines for management of patients with anaplastic thyroid cancer. Thyroid 2021;31:337-386.

Docetaxel/Doxorubicin

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Docetaxel	60 mg/m^2	IV	drip 60 mins on day 1	every 3–4 weeks	
Doxorubicin	60 mg/m^2	IV	drip 60 mins on day 1		
or					
Docetaxel	20 mg/m^2	IV	drip 60 mins on day 1	weekly	

Doxorubicin	20mg/m^2	IV	drip 60 mins on day 1		

Smallridge RC, Ain KB, Asa SL, et al. American Thyroid Association guidelines for management of patients with anaplastic thyroid cancer. Thyroid 2012;22:1104-1139.

Target Therapy

藥名(學名)	Lenvatinib 24mg Oral Daily

Schlumberger M, Tahara M, Wirth LJ, Robinson B, Brose MS, Elisei R, Habra MA, Newbold K, Shah MH, Hoff AO, Gianoukakis AG, Kiyota N, Taylor MH, Kim SB, Krzyzanowska MK, Dutcus CE, de las Heras B, Zhu J, Sherman SI. Lenvatinib versus placebo in radioiodine-refractory thyroid cancer. N Engl J Med. 2015 Feb 12;372(7):621-30. doi: 10.1056/NEJMoa1406470. PMID: 25671254.

健保給付：用於放射性碘治療無效之局部晚期或轉移性的進行性(progressive)分化型甲狀腺癌(RAI-RDTC)：
(1)需經事前審查核准後使用，每次申請之療程以 3 個月為限，送審時需檢送影像資料，每 3 個月評估一次。
(2)Lenvatinib 與 sorafenib 不得合併使用。(109/8/1)

藥名(學名)	Sorafenib 400mg Oral Twice daily

Brose MS, Nutting CM, Jarzab B, Elisei R, Siena S, Bastholt L, de la Fouchardiere C, Pacini F, Paschke R, Shong YK, Sherman SI, Smit JW, Chung J, Kappeler C, Peña C, Molnár I, Schlumberger MJ; DECISION investigators. Sorafenib in radioactive iodine-refractory, locally advanced or metastatic differentiated thyroid cancer: a randomised, double-blind, phase 3 trial. Lancet. 2014 Jul 26;384(9940):319-28. doi: 10.1016/S0140-6736(14)60421-9. Epub 2014 Apr 24. PMID: 24768112; PMCID: PMC4366116.

健保給付：用於放射性碘治療無效之局部晚期或轉移性的進行性(progressive)分化型甲狀腺癌(RAI-RDTC)：(106/1/1)
(1)放射性碘治療無效之局部晚期或轉移性的進行性(progressive)分化型甲狀腺癌。
(2)需經事前審查核准後使用，每次申請之療程以 3 個月為限，送審時需檢送影像資料，每 3 個月評估一次。
(3)Sorafenib 與 lenvatinib 不得合併使用。(107/7/1)

藥名(學名)	Cabozantinib 60mg Daily

Elghawy, O., Barsouk, A., Xu, J., Chen, S., Cohen, R. B., & Sun, L. (2024). Real word outcomes of cabozantinib Therapy in Poorly differentiated thyroid carcinoma. European Thyroid Journal, 13(6).

健保給付：(1)適用於治療成人及 12 歲以上兒童曾接受 VEGFR 標靶治療後惡化、放射碘治療無效或不適用放射碘治療的局部晚期或轉移性分化型甲狀腺癌病人。
(2)須經事前審查核准後使用，每次申請療程以 3 個月為限，送審時需檢送影像資料，每 3 個月評估一次，無疾病惡化方可繼續使用。
(3)每日限用 1 粒。

For BRAF V600E mutation that has progressed following prior treatment with no satisfactory alternative treatment options

藥名(學名)	**Dabrafenib/Trametinib** **Dabrafenib 150 mg PO Twice daily** **Trametinib 2mg PO Once daily**

1.Subbiah V, Kreitman RJ, Wainberg ZA, Cho JY, Schellens JHM, Soria JC, Wen PY, Zielinski C, Cabanillas ME, Urbanowitz G, Mookerjee B, Wang D, Rangwala F, Keam B. Dabrafenib and Trametinib Treatment in Patients With Locally Advanced or Metastatic BRAF V600-Mutant Anaplastic Thyroid Cancer. J Clin Oncol. 2018 Jan 1;36(1):7-13. doi: 10.1200/JCO.2017.73.6785. Epub 2017 Oct 26. PMID: 29072975; PMCID: PMC5791845.
2.Subbiah, V., Kreitman, R. J., Wainberg, Z. A., Cho, J. Y., Schellens, J. H. M., Soria, J. C., ... & Keam, B. (2022). Dabrafenib plus Trametinib in patients with BRAF V600E-mutant anaplastic thyroid cancer: updated analysis from the phase II ROAR basket study. Annals of oncology, 33(4), 406-415.

For NTRK gene fusion Positive

藥名	**Larotrectinib 100 mg PO Twice daily**

1.Drilon A, Laetsch TW, Kummar S, DuBois SG, Lassen UN, Demetri GD, Nathenson M, Doebele RC, Farago AF, PappPO AS, Turpin B, Dowlati A, Brose MS, Mascarenhas L, Federman N, Berlin J, El-Deiry WS, Baik C, Deeken J, Boni V, Nagasubramanian R, Taylor M, Rudzinski ER, Meric-Bernstam F, Sohal DPS, Ma PC, Raez LE, Hechtman JF, Benayed R, Ladanyi M, Tuch BB, Ebata K, Cruickshank S, Ku NC, Cox MC, Hawkins DS, Hong DS, Hyman DM. Efficacy of Larotrectinib in TRK Fusion-positive Cancers in Adults and Children. N Engl J Med. 2018 Feb 22;378(8):731-739. doi: 10.1056/NEJMoa1714448. PMID: 29466156; PMCID: PMC5857389.
2.Waguespack, S. G., Drilon, A., Lin, J. J., Brose, M. S., McDermott, R., Almubarak, M., ... & Cabanillas, M. E. (2022). Efficacy and safety of larotrectinib in patients with TRK fusion-positive thyroid carcinoma. European journal of endocrinology, 186(6), 631-643..
3.Waguespack, S. G., Drilon, A., Lin, J. J., Brose, M. S., McDermott, R., Almubarak, M., ... & Cabanillas, M. E. (2022). Efficacy and safety of larotrectinib in patients with TRK fusion-positive thyroid carcinoma. European journal of endocrinology, 186(6), 631-643.
健保給付：用於放射性碘治療無效之局部晚期或轉移性的進行性 (progressive)甲狀腺癌。

藥名	**Entrectinib 600mg PO Once daily**

1.Bazhenova, L., Hescot, S., Folprecht, G., Daga, H., Massarelli, E., Lamartina, L., ... & Carrizosa, D. (2022, September). Entrectinib in patients with ntrk fusion-positive (ntrk-fp) thyroid cancer: updated data from startrk-2. In Endocrine Abstracts (Vol. 84). Bioscientifica.
2.Doebele RC, Drilon A, Paz-Ares L, Siena S, Shaw AT, Farago AF, Blakely CM, Seto T, Cho BC, Tosi D, Besse B, Chawla SP, Bazhenova L, Krauss JC, Chae YK, Barve M, Garrido-Laguna I, Liu SV, Conkling P, John T, Fakih M, Sigal D, Loong HH, Buchschacher GL Jr, Garrido P, Nieva J, Steuer C, Overbeck TR, Bowles DW, Fox E, Riehl T, Chow-Maneval E, Simmons B, Cui N, Johnson A, Eng S, Wilson TR, Demetri GD; trial investigators. Entrectinib in patients with advanced or metastatic NTRK fusion-positive solid tumours: integrated analysis of three phase 1-2 trials. Lancet Oncol. 2020 Feb;21(2):271-282. doi: 10.1016/S1470-2045(19)30691-6. Epub 2019 Dec 11. Erratum in: Lancet Oncol. 2020 Feb;21(2):e70. doi: 10.1016/S1470-2045(20)30029-2. Erratum in: Lancet Oncol. 2020 Jul;21(7):e341. doi: 10.1016/S1470-2045(20)30345-4. Erratum in: Lancet Oncol. 2020 Aug;21(8):e372. doi: 10.1016/S1470-2045(20)30382-X. Erratum in: Lancet Oncol. 2021 Oct;22(10):e428. doi: 10.1016/S1470-2045(21)00538-6. PMID: 31838007; PMCID: PMC7461630.

For RET fusion Positive

藥名	Selpercatinib 120 mg PO (< 50 kg) or 160 mg PO (≥ 50 kg) Twice daily

1.Bradford, D., Larkins, E., Mushti, S. L., Rodriguez, L., Skinner, A. M., Helms, W. S., ... & Singh, H. (2021). FDA approval summary: selpercatinib for the treatment of lung and thyroid cancers with RET gene mutations or fusions. Clinical Cancer Research, 27(8), 2130-2135.
2.Wirth LJ, Sherman E, Robinson B, Solomon B, Kang H, Lorch J, Worden F, Brose M, Patel J, Leboulleux S, Godbert Y, Barlesi F, Morris JC, Owonikoko TK, Tan DSW, Gautschi O, Weiss J, de la Fouchardière C, Burkard ME, Laskin J, Taylor MH, Kroiss M, Medioni J, Goldman JW, Bauer TM, Levy B, Zhu VW, Lakhani N, Moreno V, Ebata K, Nguyen M, Heirich D, Zhu EY, Huang X, Yang L, Kherani J, Rothenberg SM, Drilon A, Subbiah V, Shah MH, Cabanillas ME. Efficacy of Selpercatinib in RET-Altered Thyroid Cancers. N Engl J Med. 2020 Aug 27;383(9):825-835. doi: 10.1056/NEJMoa2005651. PMID: 32846061; PMCID: PMC10777663.

藥名	Pralsetinib 400mg PO Once daily

1.Kim, J., Bradford, D., Larkins, E., Pai-Scherf, L. H., Chatterjee, S., Mishra-Kalyani, P. S., ... & Singh, H. (2021). FDA approval summary: pralsetinib for the treatment of lung and thyroid cancers with RET gene mutations or fusions. Clinical Cancer Research, 27(20), 5452-5456.
2.Subbiah V, Hu MI, Wirth LJ, Schuler M, Mansfield AS, Curigliano G, Brose MS, Zhu VW, Leboulleux S, Bowles DW, Baik CS, Adkins D, Keam B, Matos I, Garralda E, Gainor JF, Lopes G, Lin CC, Godbert Y, Sarker D, Miller SG, Clifford C, Zhang H, Turner CD, Taylor MH. Pralsetinib for patients with advanced or metastatic RET-altered thyroid cancer (ARROW): a multi-cohort, open-label, registrational, phase 1/2 study. Lancet Diabetes Endocrinol. 2021 Aug;9(8):491-501. doi: 10.1016/S2213-8587(21)00120-0. Epub 2021 Jun 9. Erratum in: Lancet Diabetes Endocrinol. 2021 Oct;9(10):e4. doi: 10.1016/S2213-8587(21)00247-3. PMID: 34118198.

Consider if clinical trials or other systemic therapies are not available or appropriate

藥名	Vandetanib Max 300mg Oral Daily

Wells SA Jr, Robinson BG, Gagel RF, Dralle H, Fagin JA, Santoro M, Baudin E, Elisei R, Jarzab B, Vasselli JR, Read J, Langmuir P, Ryan AJ, Schlumberger MJ. Vandetanib in patients with locally advanced or metastatic medullary thyroid cancer: a randomized, double-blind phase III trial. J Clin Oncol. 2012 Jan 10;30(2):134-41. doi: 10.1200/JCO.2011.35.5040. Epub 2011 Oct 24. Erratum in: J Clin Oncol. 2013 Aug 20;31(24):3049. PMID: 22025146; PMCID: PMC3675689.
健保給付：適用於無法進行手術切除的局部侵犯或轉移性甲狀腺髓質癌，並且為症狀性及疾病侵襲性的患者。
1.需經事前審查核准後使用，每次申請之療程以 6 個月為限，送審時需檢送影像資料，每 6 個月評估一次。
2.出現疾病惡化或無法忍受之藥物不良反應，應立即停用。
3.每日最大劑量為 300 毫克。

非何杰金氏淋巴瘤(兒癌)

TPOG 24 pB-LBL Schema(Induction protocol I, week 1-9)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Prednisolone	60 mg/m^2 /day	PO	NA	TID/Day 1-28	then taper over 3x3 days
Vincristine (VCR)	1.5 mg/m^2, (Max 2mg)	IV	10 mins	QW/Day 8, 15, 22, 29	
Epirubicin (EPI)	20 mg/m^2	IV	60 mins	QW/Day 8, 15, 22, 29	
L-asparaginase(L-Asp)	5000 IU/m^2 /dose	IM	NA	Days 12,15,18,21,24,27,30,33	
Cyclophosphamide	1000 mg/m^2	IV	1hr	Day 36, 64	
Cytarabine	75 mg/m^2	IV/SC	3 hrs	Day 38-41,45-48,52-55,59-62	
Mercaptopurine	60 mg/m^2	PO	NA	Day 36-63	
Triple intrathecal Therapy (TIT)	NA	IT	5 mins	Day 1, 12, 33, 45, 59	
Triple intrathecal Therapy (TIT)	NA	IT	5 mins	Day 1, 8, 12, 22, 33, 45, 59	

TPOG-NHL 2024 protocol

TPOG 24 pB-LBL Schema(Triple intrathecal Therapy ,TIT)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
MTX	6 mg	IT	5 mins	Day 1,15	Age <1 Yr
Hydrocortisone	6 mg				

Cytarabine	12 mg				
MTX	8 mg	IT	5 mins	Day 1,15	Age 1-2 Yr
Hydrocortisone	8 mg				
Cytarabine	16 mg				
MTX	10 mh	IT	5 mins	Day 1,15	Age 2-3 Yr
Hydrocortisone	10 mg				
Cytarabine	20 mg				
MTX	12 mg	IT	5 mins	Day 1,15	Age >3 Yr
Hydrocortisone	12 mg				
Cytarabine	24 mg				

TPOG-NHL 2024 protocol

TPOG 24 pB-LBL Schema(Consolidation protocol M, starting 2 weeks after the end of protocol I)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
6-mercaptopurine (6MP)	25 mg/m^2/day	PO		Day 1-56	
Methotrexate (MTX)	5 gm/m^2/day	IV	24 hours	Days 8, 22, 36, 50	
Triple intrathecal Therapy (TIT)		IT	5 mins	Days 8, 22, 36, 50	

TPOG-NHL 2024 protocol

TPOG 24 pB-LBL Schema(Reinduction protocol II, starting 2 weeks after the end of protocol M)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dexamethasone (Dexa)	10 mg/m^2/day	PO	NA	Day 1-21	then taper over 3x3 days
Vincristine (VCR)	1.5 mg/m^2/dose (Max 2mg)	IV	10 mins	Days 8, 15, 22, 29	
Epirubicin (EPI)	30 mg/m^2/dose	IV	10 mins	Days 8, 15, 22, 29	
L-asparaginase (L-Asp)	5000 IU/m^2 /dose	IM	NA	Days 8, 11, 15, 18	
Cyclophosphamide (CY)	1000 mg/m^2/dose	IV	1 hour	Day36	
Cytarabine (Ara-C)	75 mg/m^2/dose	IV	3 hours	Days 38-41,45-48	
6-mercaptopurine (6MP)	60 mg/m^2/day	PO	NA	Days 36-49	
Triple intrathecal Therapy (TIT)		IT	5 mins	Days 38, 45	

TPOG-NHL 2024 protocol

TPOG 24 pB-LBL Schema(Maintenance Therapy, until 2 years from start of treatment)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
6-mercaptopurine (6MP)	60 mg/m^2/day	PO	NA	Day 1-63	
Methotrexate (MTX)	20 mg/m^2/day	IV or IM	NA	Days 1, 8, 15, 22, 29, 36, 43, 50, 57	
Vincristine (VCR)	1.5 mg/m^2/dose (Max 2 mg)	IV	10 mins	Days 1,57	

Dexamethasone (Dexa)	6 mg/m^2/day	PO	NA	Days 57-63	

TPOG-NHL 2024 protocol

TPOG 24 T-LBL Schema(Induction protocol I, week 1-9)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Prednisolone	60 mg/m^2 /day	PO	NA	TID/Day 1-28	then taper over 3x3 days
Vincristine (VCR)	1.5 mg/m^2 (Max 2)/day	IV	10 mins	QW/Days 8, 15, 22, 29	
Epirubicin (EPI)	20 mg/m^2/day	IV	60 mins	QW/Days 8, 15, 22, 29	
Bortezomib	1.3 mg/m^2/day	IV	10 mins	Days 8, 11, 15, 18	
L-asparaginase(L-Asp)	5000 IU/m^2 /dose/day	IM	NA	Days 12,15,18,21,24,27,30,33	
Cyclophosphamide	1000 mg/m^2/day	IV	NA	Day 36, 64	
Cytarabine	75 mg/m^2/day	IV/SC	3 hours	Day 38-41,45-48,52-55,59-62	
Mercaptopurine	60 mg/m^2/day	PO	NA	Day 36-63	
Triple intrathecal Therapy (TIT)	NA	IT	5 mins	Day 1, 12, 33, 45, 59	
Triple intrathecal Therapy (TIT)	NA	IT	5 mins	Day 1, 8, 12, 22, 33, 45, 59	

TPOG-NHL 2024 protocol

TPOG 24 T-LBL Schema(Triple intrathecal Therapy, TIT)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
MTX	6 mg	IT	5 mins	Day 1,15	Age <1 Yr
Hydrocortisone	6 mg				
Cytarabine	12 mg				
MTX	8 mg	IT	5 mins	Day 1,15	Age 1-2 Yr
Hydrocortisone	8 mg				
Cytarabine	16 mg				
MTX	10 mh	IT	5 mins	Day 1,15	Age 2-3 Yr
Hydrocortisone	10 mg				
Cytarabine	20 mg				
MTX	12 mg	IT	5 mins	Day 1,15	Age >3 Yr
Hydrocortisone	12 mg				
Cytarabine	24 mg				

TPOG-NHL 2024 protocol

TPOG 24 T-LBL Schema(Consolidation protocol M, starting 2 weeks after the end of protocol I)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
6-mercaptopurine (6MP)	25 mg/m^2/day	PO	NA	Day 1-56	
Methotrexate (MTX)	5 gm/m^2/day	IV	24 hours	Days 8, 22, 36, 50	
Triple intrathecal		IT	5 mins	Days 8, 22, 36, 50	

Therapy (TIT)					

TPOG-NHL 2024 protocol

TPOG 24 T-LBL Schema(Reinduction protocol II, starting 2 weeks after the end of protocol M)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dexamethasone (Dexa)	10 mg/m^2/day	PO	NA	Day 1-21	then taper over 3x3 days
Vincristine (VCR)	1.5 mg/m^2/dose (Max 2mg)	IV	10 mins	Days 8, 15, 22, 29	
Epirubicin (EPI)	30 mg/m^2/dose	IV	10 mins	Days 8, 15, 22, 29	
Bortezomib	1.3 mg/m^2/day	IV	10 mins	Days 8, 11, 15, 18	
L-asparaginase (L-Asp)	5000 IU/m^2 /dose	IM	NA	Days 8, 11, 15, 18	
Cyclophosphamide (CY)	1000 mg/m^2/dose	IV	1 hour	Day36	
Cytarabine(Ara-C)	75 mg/m^2/dose	IV	3 hrs	Days 38-41,45-48	
6-mercaptopurine (6MP)	60 mg/m^2/day	PO		Day 36-49	
Triple intrathecal Therapy (TIT)		IT	5 mins	Days 38, 45	

TPOG-NHL 2024 protocol

TPOG 24 T-LBL Schema(Maintenance Therapy, until 2 years from start of treatment)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
6-mercaptopurine (6MP)	60 mg/m^2/day	PO	NA	Day 1-63	

Methotrexate (MTX)	20 mg/m^2/day	IV or IM	5 mins	Days 1, 8, 15, 22, 29, 36, 43, 50, 57	
Vincristine (VCR)	1.5 mg/m^2/dose (Max 2mg)	IV	10 mins	Days 1,57	
Dexamethasone (Dexa)	6 mg/m^2/day	PO	NA	Days 57-63	

TPOG-NHL 2024 protocol

TPOG 24 B-NHL Schema(Cytoreductive Prephase V)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dexamethasone (Dexa)	5 mg/m^2 /day	PO	NA	Days 1,2	
Dexamethasone (Dexa)	10 mg/m^2/day	PO	NA	Day 3-5	
Cyclophosphamide	200 mg/m^2/day	IV	NA	Days 1,2	

TPOG-NHL 2024 protocol

TPOG 24 B-NHL Schema(Course A)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Rituximab	375 mg/m^2 /day	IV	NA	Days 0	
Dexamethasone (Dexa)	10 mg/m^2/day	PO	NA	Day 1-5	
Vincristine (VCR)	1.5 mg/m$^{2/}$dose (Max 2mg)	IV	10 mins	Day1	
Ifosfamide	800 mg/m^2/day	IV	4 hours	Day 1-5	
Methotrexate (MTX)	1 gm/m^2/day	IV	4 hours	Day 1	
Triple intrathecal		IT	5 mins	Day 1	

Therapy (TIT)					
Cytarabine (Ara-C)	150 mg/m^2/dose	IV	1 hour	Q12H/Days 4,5	
Etoposide	100 mg/m^2/dose	IV	1 hour	Days 4,5	

TPOG-NHL 2024 protocol

TPOG 24 B-NHL Schema(Course B)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Rituximab	375 mg/m^2 /day	IV	6 hours	Days 0	
Dexamethasone (Dexa)	10 mg/m^2/day	PO	NA	Day 1-5	
Cyclophosphamide (CY)	200 mg/m^2/dose	IV	1 hour	Day 1-5	
Vincristine (VCR)	1.5 mg/m^2/dose (Max 2mg)	IV	10 mins	Day1	
Methotrexate (MTX)	1 gm/m^2/day	IV	4 hours	Day 1	
Triple intrathecal Therapy (TIT)		IT	5 mins	Day 1	
Epirubicin (EPI)	25 mg/m^2/day	IV	1 hour	Days 4,5	

TPOG-NHL 2024 protocol

TPOG 24 B-NHL Schema(Course AA & BB (the same as A & B), except)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Methotrexate (MTX)	5g/m^2/day	IV	24hours	Day 1	

TPOG-NHL 2024 protocol

TPOG 24 B-NHL Schema(Course CC)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Rituximab	375 mg/m^2 /day	IV	6 hours	Days 0	
Dexamethasone (Dexa)	10 mg/m^2/day	PO	NA	Day 1-5	
Vincristine (VCR)	1.5 mg/m^2/dose (Max 2mg)	IV	10 mins	Day1	
Cytarabine (Ara-C)	3 g/m^2/dose	IV	1 hour	Q12H/Days 1,2	
Etoposide	100 mg/m^2/dose	IV	1 hour	Q12H/Day 3-5	
Triple intrathecal Therapy (TIT)		IT	5 mins	Day 5	

TPOG-NHL 2024 protocol

TPOG 24 B-NHL Schema(Triple intrathecal Therapy (TIT)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
MTX	6 mg	IT	5 mins	Day 1,15	Age <1 Yr
Hydrocortisone	6 mg				
Cytarabine	12 mg				
MTX	8 mg	IT	5 mins	Day 1,15	Age 1-2 Yr
Hydrocortisone	8 mg				
Cytarabine	16 mg				
MTX	10 mh	IT	5 mins	Day 1,15	Age 2-3 Yr
Hydrocortisone	10 mg				

Cytarabine	20 mg				
MTX	12 mg	IT	5 mins	Day 1,15	Age >3 Yr
Hydrocortisone	12 mg				
Cytarabine	24 mg				

TPOG-NHL 2024 protocol

TPOG 24 ALCL Schema(Cytoreductive Prephase V)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dexamethasone (Dexa)	5 mg/m^2 /day	PO	NA	Days 1,2	
Dexamethasone (Dexa)	10 mg/m^2/day	PO	NA	Day 3-5	
Cyclophosphamide	200 mg/m^2/day	IV	NA	Days 1,2	
Triple intrathecal Therapy (TIT)		IT	5 mins	Day 1	

TPOG-NHL 2024 protocol

TPOG 24 ALCL Schema(Course A)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Brentuximab vedotin	1.8 mg/kg /day	IV	NA	Days 1	
Dexamethasone (Dexa)	10 mg/m^2/day	PO	NA	Day 1-5	
Methotrexate (MTX)	3 g/m^2/day	IV	3hours	Day 1	
Ifosfamide	800 mg/m^2/day	IV	4hours	Day 1-5	
Cytarabine (Ara-C)	150 mg/m^2/dose	IV	1 hr	Q12H/Days 4,5	

Etoposide	100 mg/m^2/dose	IV	1 hr	Days 4,5	

TPOG-NHL 2024 protocol

TPOG 24 ALCL Schema(Course B)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Brentuximab vedotin	1.8 mg/kg /day	IV	NA	Days 1	
Dexamethasone (Dexa)	10 mg/m^2/day	PO	NA	Day 1-5	
Methotrexate (MTX)	3 g/m^2/day	IV	3hrs	Day 1	
Cyclophosphamide	200 mg/m^2/day	IV	NA	Day 1-5	
Doxorubicin	25 mg/m^2/day	IV		Days 4,5	

TPOG-NHL 2024 protocol

TPOG 24 PMBLa Schema(EPOCH starting dose level, level 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Etoposide	50 mg/m^2/day	CIV	24 hours	Days 1,2,3,4	
Epirubicin (EPI)	10 mg/m^2/day	CIV	24 hours	Days 1,2,3,4	
Vincristine (VCR)	0.4mg/m^2/day	CIV	24 hours	Days 1,2,3,4	
Cyclophosphamide	750 mg/m^2/day	IV	NA	Day 5	
Prednisolone	60 mg/m^2/day	PO	NA	Days 1,2,3,4	
Rituximab	375 mg/m^2 /day	IV	NA	Days 1	
G-CSF	5 μg/kg/day	SC	NA	Day6	

TPOG-NHL 2024 protocol

TPOG 24 PMBLb Schema(EPOCH starting dose level, level 1)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Rituximab	375 mg/m^2 /day	IV	NA	Days 1	
Cyclophosphamide	750 mg/m^2/day	IV	NA	Day 1	
Vincristine (VCR)	1.4mg/m^2/day	CIV	24 hours	Day 1	
Epirubicin (EPI)	50 mg/m^2/day	CIV	24 hours	Day 1	
Prednisolone	60 mg/m^2/day	PO	NA	Day 1-5	

TPOG-NHL 2024 protocol

Acute Lymphod Leukemia(兒癌)

Induction I (first 3 weeks) for B-ALL

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Prednisone (PRED)	40/60 mg/m^2 /day	PO	NA	TID/Day 1-28	
Vincristine (VCR)	1.5 mg/m^2, (Max 2)	IV	10 mins	QW/Day 1,8,15	
Epirubicin (EPI)	20 mg/m^2	IV	10 mins	QW/Day 1,8	The second dose of epirubicin on day 8 may be delayed in SR patients who has cleared circulating blasts and has severe neutropenia, or in any risk group patient who is sick with infection. The second dose of epirubicin could be omitted in SR with MD1 <0.1%; but it is suggested to be given on weeks 3/4 in SR with MRD1 ≥0.1%.
L-asparaginase (L-Asp)	6000 IU/m^2 /dose	IM	NA	Days 3, 5, 7, 10, 12, 14, 17, 19, 21	
Dasatinib	80 mg/m^2/day (Max	PO	NA	QD	

(for Ph+ALL)	140 mg),				
Triple intrathecal Therapy (TIT)		IT	5 mins	Day 1,15	reference of Regimen "Triple intrathecal Therapy (TIT)"

TPOG ALL-2021 protocol

Triple intrathecal Therapy (TIT)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
MTX	3 mg	IT	5 mins	Day 1,15	Age <3 months
Hydrocortisone	6 mg				
Cytarabine	9 mg				
MTX	6 mg	IT	5 mins	Day 1,15	Age 3-12 months
Hydrocortisone	12 mg				
Cytarabine	18 mg				
MTX	8 mg	IT	5 mins	Day 1,15	Age 12-23 months
Hydrocortisone	16 mg				
Cytarabine	24 mg				
MTX	10 mg	IT	5 mins	Day 1,15	Age 24-35 months
Hydrocortisone	20 mg				
Cytarabine	30 mg				
MTX	12 mg	IT	5 mins	Day 1,15	Age ≥36 months
Hydrocortisone	24 mg				

Cytarabine	36 mg				

TPOG ALL-2021 protocol

Induction II-A for B-ALL

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Prednisone (PRED)	40/60 mg/m^2 /day	PO	NA	TID/Day 1-28	
Vincristine (VCR)	1.5 mg/m^2, (Max 2)	IV	10 mins	QW/Day 22	
Triple intrathecal Therapy (TIT)		IT	5 mins	Day 22	The TIT will be given according to risk group/CNS status. See Summary of Intrathecal Therapy on TPOG-ALL-2021.

TPOG ALL-2021 protocol

Induction II-B for B-ALL

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Prednisone (PRED)	40/60 mg/m^2 /day	PO	NA	TID/Day 1-28	
Vincristine (VCR)	1.5 mg/m^2, (Max 2)	IV	10 mins	QW/Day 22	
L-asparaginase(L-Asp)	6000 IU/m^2 /dose	IM	NA	Day 24, 26, 28	
Cyclophosphamide (CY)	1000mg/m^2	IV	1 hr	Day 29	
Cytarabine (Ara-C)	75 mg/m^2/day	IV	30 mins	Day 30-33, 37-40	
6-mercaptopurine	30 mg/m^2/day	PO	NA	Day 29-42	

(MP)					
Dasatinib (for Ph+ALL)	80 mg/m^2/day (Max 140 mg),	PO	NA	QD	
Triple intrathecal Therapy (TIT)		IT	5 mins	Day 29	The additional TIT on Day 22 will be given according to risk group/CNS status.

TPOG ALL-2021 protocol

Induction II-C (=Induction B plus Bort) for B-ALL

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Prednisone (PRED)	40/60 mg/m^2 /day	PO	NA	TID/Day 1-28	
Vincristine (VCR)	1.5 mg/m^2, (Max 2)	IV	10 mins	QW/Day 22	
L-asparaginase(L-Asp)	6000 IU/m^2 /dose	IM	NA	Day 24, 26, 28	
Cyclophosphamide (CY)	1000 mg/m^2	IV	1 hr	Day 29	
Cytarabine (Ara-C)	75 mg/m^2/day	IV	30 mins	Day 30-33	
6-mercaptopurine (MP)	30 mg/m^2/day	PO	NA	Day 29-42	
Bortezomib (Bort)	1.3 mg/m^2	IV	10 mins	Day 30, 33	
Triple intrathecal Therapy (TIT)		IT	5 mins	Day 29	The additional TIT on Day 22 will be given according to risk group/CNS status.

TPOG ALL-2021 protocol

Induction I (first 3 weeks) for T-ALL

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dexamethasone (Dexa)#	10/8 mg/m^2/day	PO	NA	TID/Day 1-21	#Dexa: 10 mg/m'/day for age<10; 8 mg/m /day for age ≥10
Vincristine (VCR)	1.5 mg/m^2, (Max 2)	IV	10 mins	QW/Day 1,8,15	
Epirubicin (EPI)	20 mg/m^2	IV	10 mins	QW/Day 1,8	
L-asparaginase (L-Asp)	6000 IUm^2 /dose	IM	NA	Days 3, 5, 7, 10, 12, 14, 17, 19, 21	
Triple intrathecal Therapy (TIT)		IT	5 mins	Days 1*, 8‡, 15	‡The 2nd TIT could be done 1 week after the first TIT or twice a week if POssible. The additional TIT on Day 11 will be given according to risk group/CNS status. See Summary of Intrathecal Therapy on TPOGALL-2021.

TPOG ALL-2021 protocol

Induction II-C* for T-ALL

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dexamethasone (Dexa)*	10/8 mg/m^2/day	PO	NA	TID/Day 1-21	
Vincristine (VCR)	1.5 mg/m^2, (Max 2)	IV	10 mins	QW/Day 22	

L-asparaginase(L-Asp)	6000 IU/m^2/dose	IM	NA	Day 24, 26, 28	
Cyclophosphamide (CY)	1000mg/m^2	IV	1 hr	Day 29	
Cytarabine (Ara-C)	75 mg/m^2/day	IV	30 mins	Day 30-33	
6-mercaptopurine (MP)	30 mg/m^2/day	PO	NA	Day 29-35	
Bortezomib (Bort)	1.3 mg/m^2	IV	10 mins	Day 30, 33	
Triple intrathecal Therapy (TIT)		IT	5 mins	Day 22, 29	

TPOG ALL-2021 protocol

Early Intensification (EI)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cyclophosphamide (CY)	1000mg/m^2	IV	1 hr	Day 50	
Cytarabine (Ara-C)	75 mg/m^2/day	IV	30 mins	Day 51-54, 58-61	
L-asparaginase (L-Asp)	6000 IU/m^2 /dose	IM	NA	Days 52, 54, 56	
Dasatinib (for Ph+ALL)	80 mg/m^2/day (Max 140 mg)	PO	NA	QD	
Triple intrathecal Therapy (TIT)		IT	5 mins	Day 50	

TPOG ALL 2021 protocol

Early Intensification plus (EI+)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Cyclophosphamide (CY)	1000mg/m^2	IV	1 hr	Day 50	
Cytarabine (Ara-C)	75 mg/m^2/day	IV	30 mins	Day 51-54, 58-61	
L-asparaginase (L-Asp)	6000 IU/m^2 /dose	IM	NA	Days 52, 54, 56	
Bortezomib (Bort)	1.3 mg/m^2	IV	10 mins	Day 51, 54	
Triple intrathecal Therapy (TIT)		IT	5 mins	Day 50	

TPOG ALL-2021 protocol

Venetoclax-Early Intensification (V-EI)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Vincristine (VCR)	1.5 mg/m^2, (Max 2)	IV	10 mins	QW/Day 1,15	
Dexamethasone (Dexa)#	8 mg/m^2/day	PO	NA	TID/Day 1-8, 15-21	
Venetoclax	240 mg/m^2, (Max 400)	PO	NA	Day 1-21	
L-asparaginase (L-Asp)	6000 IU/m^2 /dose	IM	NA	Days 8, 10, 12, 15, 17, 19	
Triple intrathecal Therapy (TIT)		IT	5 mins	Day 1	

TPOG ALL-2021 protocol

Consolidation Therapy (SR, HR, VHR)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
MTX	2.5g/m^2	IV	24 hrs	Q2W/Day 1, 15, 29, 43	SR with MRD1 <0.1%
6-mercaptopurine (MP)	40 mg/m^2	PO	NA	HS/Day 1-56	
MTX	5g/m^2	IV	24 hrs	Q2W/Day 1, 15, 29, 43	HR/VHR & SR with MRD1 0.1-0.99%
6-mercaptopurine (MP)	40 mg/m^2	PO	NA	HS/Day 1-56	
Triple intrathecal Therapy (TIT)		IT	5 mins	Q2W/Day 1, 15, 29, 43	Before High dose MTX

TPOG ALL-2021 protocol

Reintensification: Regimen-A

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dexamethasone (Dexa)#	20 mg/m^2/day	PO/IV	NA	TID/Day 1-6	
Cytarabine (Ara-C)	2 g/m^2	IV	3 hrs	Q12H/Day 1-2	
Etoposide (VP-16)	100 mg/m^2	IV	1 hr	Q12H/Day 3-5	
L-asparaginase (L-Asp)	25000 IU/m^2 /dose	IM	NA	Day 6	
Triple intrathecal Therapy (TIT)		IT	5 mins	Day 5	

TPOG ALL-2021 protocol

Reintensification: Regimen-B

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Clofarabine	25 mg/m^2/day	PO/IV	2hrs	QD/Day 1-5	
Etoposide (VP-16)	100 mg/m^2	IV	2hrs	QD/Day 1-5	
Cyclophosphamide (CY)	300 mg/m^2	IV	30-60mins	QD/Day 1-5	
Dexamethasone (Dexa)#	8 mg/m^2/day	PO/IV	NA	TID/Day 1-5	

TPOG ALL-2021 protocol

CONTINUATION TREATMENT OF SR (Weeks 1-3: Reinduction for SR)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dexamethasone (Dexa)#	10 mg/m^2/day	PO	NA	TID/Day 1-8, 15-21	
Vincristine (VCR)	1.5 mg/m^2, (Max 2)	IV	10 mins	QW/Day 1, 8, 15	
Epirubicin (EPI)	30 mg/m^2	IV	10 mins	QW/Day 1,8	
L-asparaginase (L-Asp)	6000 IU/m^2 /dose	IM	NA	Days 3, 5, 7, 10, 12, 14, 17, 19, 21	
Triple intrathecal Therapy (TIT)		IT	5 mins	Day 1	

TPOG ALL-2021 protocol

CONTINUATION TREATMENT OF SR (Weeks 4 to end of the Therapy)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
6-mercaptopurine (6MP)	50 mg/m^2/day	PO	NA	QD/Start wk4 to the end	
Methotrexate (MTX)	40 mg/m^2/day	IV or IM	10 mins	Day1(Wk4-7,9-11,13-15,17-19,21-23, 25-27,29-31,33-35,37-39,41-43, 45-47,49-120)	
Vincristine (VCR)	2.0 mg/m^2/dose (Max 2)	IV	10 mins	Day1(Wk1,2,3,8,12,16,20,24,28,32,36,40,44,48)	
Dexamethasone (Dexa)#	8 mg/m^2/day	PO	NA	TID/Day1-5(Wk1,3,8,12,16,20,24,28,32,36, 40,44,48)	
Triple intrathecal Therapy (TIT)	Age-dependent	IT	5 mins	Wk1,6,11,16,24,(28),32,(36),40,(44),48	

TPOG ALL-2021 protocol

CONTINUATION TREATMENT OF HR/VHR(Weeks 1 to 6 and 10 to 16)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dexamethasone (Dexa)	12 mg/m^2/day	PO	NA	TID/Day 1-5(Wk1,4,14)	
Epirubicin (EPI)	30 mg/m^2/dose	IV	10 mins	Day 1(Wk1,4,11,14)	
Vincristine (VCR)	2.0 mg/m^2/dose (Max 2)	IV	10 mins	Day 1(Wk1,4,11,14)	
L-asparaginase	10,000 U/m^2/dose	IM	NA	Days 1(Wk1-6,10-16)	

(L-Asp)					
Triple intrathecal Therapy (TIT)	Age-dependent	IT	5 mins	Wk (3), 12	
Dasatinib	80 mg/m^2/day (Max 140 mg)	PO	NA	Continue to the end	

TPOG ALL-2021 protocol

Reinduction I for HR/VHR

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dexamethasone (Dexa)	12 mg/m^2/day	PO	NA	TID/Days 1-8, 15-21	
Vincristine (VCR)	1.5 mg/m^2/dose, (Max 2)	IV	10 mins	Days 1, 8, 15	
Epirubicin (EPI)	30 mg/m^2/dose	IV	10 mins	Days 1, 8	
L-asparaginase (L-Asp)	6,000 U/m^2/dose	IM	NA	Days 1, 3, 5, 7, 10, 12, 14, 17, 19	
Triple intrathecal Therapy (TIT)	Age-dependent	IT	5 mins	Day 1	
Dasatinib	80 mg/m^2/day (Max 140 mg)	PO	NA		

TPOG ALL-2021 protocol

Reinduction I for HR/VHR

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Dexamethasone (Dexa)	12 mg/m^2/day	PO	NA	TID/Days 1-8, 15-21	
Vincristine (VCR)	1.5 mg/m^2/dose, (Max 2)	IV	10 mins	Days 1, 8, 15	

Epirubicin (EPI)	30 mg/m^2/dose	IV	10 mins	Days 1, 8	
L-asparaginase (L-Asp)	6,000 U/m^2/dose	IM	NA	Days 1, 3, 5, 7, 10, 12, 14, 17, 19	
Triple intrathecal Therapy (TIT)	Age-dependent	IT	5 mins	Day 1	
Dasatinib	80 mg/m^2/day (Max 140 mg)	PO	NA		

TPOG ALL-2021 protocol

CONTINUATION TREATMENT OF HR/VHR (week 21 to end of Therapy)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
6-mercaptopurine (6MP)	50 mg/m^2/day	PO	NA	Wk21,22,25,26,29,30,33, 34,37,38,41,42,45,46,49, 50,52-54,56-120	
Methotrexate (MTX)	40 mg/m^2/day	IV or IM	10 mins	Day1 (Wk21,22,25,26,29,30,33 ,34,37,38,41 ,42,45,46,49 ,50,52-54,57-63,65-71, 73-79,81-87,89-95,97-120)	
Vincristine (VCR)	2.0 mg/m^2/dose (Max 2)	IV	10 mins	Day1(Wk24,28,32,36,40, 44,48,56,64,72,80,88,96)	
Dexamethasone (Dexa)	1st year: 12 mg/m^2/day, Days 1-5, PO, TID 2nd year (since wk56): 6 mg/m^2/day, Days 1-5, PO, TID	PO	NA	TID/Day1-5(Wk24,28,32,36,40,44,48,56,64,72,80,88,96)	

Cyclophosphamide (CY)	300 mg/m^2/dose	IV	4hrs	Day1(Wk23,27,31,35,39, 43,47,51,55)	
Cytarabine(Ara-C)	300mg/m^2/dose	IV	4hrs	Day1(Wk23,27,31,35,39, 43,47,51,55)	
Triple intrathecal Therapy (TIT)	Age-dependent	IT	5 mins	Wk24,28,32,36,40,44,48, (56),(64), (72),(80)	
Dasatinib	80 mg/m^2/day (Max 140 mg)	PO	NA		

TPOG ALL-2021 protocol

Blinatumomab (Blincyto) (first 10 weeks of continuation Therapy)

Drug Combination	Dosage	Route of administration	Times	Frequency/Duration	Notes
Blinatumomab	BW < 45 kg：5 mcg/m^2/day, Max. 9 mcg BW >=45 kg：9 mcg/day	IV	24 hrs	Wk1	
	BW < 45 kg：15 mcg/m^2/day, Max. 28 mcg BW >=45 kg：28 mcg/day	IV	24 hrs	Wk2,3,4,7,8,9,10	

TPOG ALL-2021 protocol