



中山醫學大學附設醫院

攝護腺癌診療指引

臨床指引參考台灣國家衛生研究院、與美國 NCCN 版本
再依據中山醫學大學附設醫院泌尿道癌小組經驗作編修

泌尿道癌醫療小組

2025/12/12 Version 17.0
 2024/12/27 Version 16.0
 2023/12/08 Version 15.0
 2022/11/11 Version 14.0
 2021/11/05 Version 13.0
 2020/11/13 Version 12.0
 2019/11/15 Version 11.0
 2018/04/02 Version 10.0
 2017/12/01 Version 9.0
 2016/11/04 Version 8.0
 2015/11/20 Version 7.0
 2014/12/19 Version 6.0
 2013/12/27 Version 5.0
 2012/12/07 Version 4.0
 2011/12/02 Version 3.1
 2011/01/21 Version 3.0
 2010/05/28 Version 2.0
 2009/12/16 Version 1.0

癌症委員會主任委員	癌症委員會執行長	癌症中心主任	抗癌藥物安全小組	團隊負責人



修訂內容

頁數	第 16 版	第 17 版																																									
第 1 頁	美國 National Comprehensive Cancer Network (NCCN) 的 Practice Guide-lines in Prostate Cancer V4.2024版	美國 National Comprehensive Cancer Network (NCCN) 的 Practice Guide-lines in Prostate Cancer V2.2026版																																									
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第 11 頁	EBRT+ brachytherapy+ ADT (1-3 年 ; category 1 for ADT)	刪除 EBRT+ brachytherapy+ ADT (1-3 年 ; category 1 for ADT) 新增 or Palliative therapy
第 15 頁	<p>六、根治性攝護腺切除手術治療後復發之救援處置⁴¹</p> <p>PSADT: Prostate-specific antigen doubling time⁴¹ 前列腺特异性抗原倍增時間⁴¹</p>	<p>六、根治性攝護腺切除手術治療後復發之救援處置⁴¹</p> <p>PSADT: Prostate-specific antigen doubling time⁴¹ 前列腺特异性抗原倍增時間⁴¹</p>
第 18 頁	無	WORKUP AND TREATMENT OF METACHRONOUS OLIGOMETASTATIC CSPC WORKUP FOR METASTASES
第 19 頁	無	WORKUP AND TREATMENT OF LOW-VOLUME M1 (METACHRONOUS OR SYNCHRONOUS) OR SYNCHRONOUS OLIGOMETASTATIC CSPC WORKUP FOR METASTASES
第 20 頁	無	WORKUP AND TREATMENT OF HIGH-VOLUME M1 CSPC WORKUP FOR METASTASES



SYSTEMIC THERAPY FOR M1 CRPC: ADENOCARCINOMA

Table with 2 columns: 'No prior docetaxel/no prior novel hormone therapy' and 'Prior novel hormone therapy/No prior docetaxel'. Lists preferred regimens and useful agents like abiraterone, docetaxel, enzalutamide, sipuleucel-L, etc.

SYSTEMIC THERAPY FOR M1 CRPC: ADENOCARCINOMA

Table with 3 columns: 'Pre-ARPI^{aa, kkk}', 'Post-ARPI^{kkk}/Pre-Docetaxel^{aa}', and 'Post-ARPI^{kkk}/Post-Docetaxel^{aa}'. Lists preferred regimens and useful agents categorized by ARPI status and docetaxel use.

SYSTEMIC THERAPY FOR M1 CRPC: ADENOCARCINOMA

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Table with 2 columns: 'Disease State-Specific Therapy' and 'Molecular Biomarker-Directed Therapy'. Lists additional options irrespective of prior ARPI or docetaxel use, such as sipuleucel-L, pembrolizumab, and radium-223.



<p>第 27 頁</p>	<p>無</p>	<table border="1"> <tr> <td>藥名(學名)[↕]</td> <td>Zoladex 10.8mg/syr LA Depot 1amp Q3M SC[↕]</td> </tr> <tr> <td>藥名(學名)[↕]</td> <td>Zoladex 3.6mg/syr Depot 1amp Q3M SC[↕]</td> </tr> <tr> <td>Ref.[↕]</td> <td>Soloway, M. d M., Smith jr, m.d joseph a., gerald chodak., m.d. Mark scott, ph.d vogelzang, M. d N. j., gerald bennealey, M. d. block, M. d N. l., . gay., M. d timothy c., & Schellhammer, m.d Paul f. (1991, January). <i>Zoladex versus Orchiectomy in Treatment of Advanced Prostate Cancer: A Randomized Trial.</i> https://www.sciencedirect.com/https://www.sciencedirect.com/science/article/pii/009042959180077K[↕]</td> </tr> <tr> <td>↕</td> <td></td> </tr> <tr> <td>藥名(學名)[↕]</td> <td>Leuplin depot 3M S.C.11.25mg/vial 1vial Q3M SC[↕]</td> </tr> <tr> <td>Ref.[↕]</td> <td>Chung BH, Horie S, Chiang E. Clinical studies investigating the use of leuprolerin for prostate cancer in Asia. <i>Prostate Int.</i> 2020 Mar;8(1):1-9. doi: 10.1016/j.pnil.2019.06.001. Epub 2019 Jul 4. PMID: 32257971; PMCID: PMC7125360.[↕]</td> </tr> <tr> <td>↕</td> <td></td> </tr> <tr> <td>藥名(學名)[↕]</td> <td>Diphereline 3-month P.R.11.25mg/vial 1vial Q3M IM[↕]</td> </tr> <tr> <td>藥名(學名)[↕]</td> <td>Diphereline 3.75mg/vial 1vial Q1M IM[↕]</td> </tr> <tr> <td>Ref.[↕]</td> <td>Ezazli F, Nowroozi MR, Ayati M, Latifi S, Taheri Mahmoodi M, Norouzi Javidan A, Janshidian H, Arbab A. Comparison of the Efficacy of Two Brands of Triptorelin (<i>Microvalin</i> and <i>Diphereline</i>) in Reducing Prostate-Specific Antigen and Serum Testosterone in Prostate Cancer: A Double-Blinded Randomized Clinical Trial. <i>Nephrourol Mon.</i> 2015 May 25;7(3):e27107. doi: 10.5812/nmmonthly.7(3)2015.27107. PMID: 26290848; PMCID: PMC4537641.[↕]</td> </tr> </table>	藥名(學名) [↕]	Zoladex 10.8mg/syr LA Depot 1amp Q3M SC[↕]	藥名(學名) [↕]	Zoladex 3.6mg/syr Depot 1amp Q3M SC[↕]	Ref. [↕]	Soloway, M. d M., Smith jr, m.d joseph a., gerald chodak., m.d. Mark scott, ph.d vogelzang, M. d N. j., gerald bennealey, M. d. block, M. d N. l., . gay., M. d timothy c., & Schellhammer, m.d Paul f. (1991, January). <i>Zoladex versus Orchiectomy in Treatment of Advanced Prostate Cancer: A Randomized Trial.</i> 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[↕]	Ref. [↕]	Chung BH, Horie S, Chiang E. Clinical studies investigating the use of leuprolerin for prostate cancer in Asia. <i>Prostate Int.</i> 2020 Mar;8(1):1-9. doi: 10.1016/j.pnil.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[↕]	藥名(學名) [↕]	Diphereline 3.75mg/vial 1vial Q1M IM[↕]	Ref. [↕]	Ezazli F, Nowroozi MR, Ayati M, Latifi S, Taheri Mahmoodi M, Norouzi Javidan A, Janshidian H, Arbab A. Comparison of the Efficacy of Two Brands of Triptorelin (<i>Microvalin</i> and <i>Diphereline</i>) in Reducing Prostate-Specific Antigen and Serum Testosterone in Prostate Cancer: A Double-Blinded Randomized Clinical Trial. <i>Nephrourol Mon.</i> 2015 May 25;7(3):e27107. doi: 10.5812/nmmonthly.7(3)2015.27107. PMID: 26290848; PMCID: PMC4537641. [↕]
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第 31 頁	無	<p>新增 Immunotherapy</p>												
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一、前言

本共識手冊內所提之各種診治意見，為原則性之建議，希望能為癌症患者及其家屬提供一個正確的指引；但對臨床醫師之醫療行為無絕對之法律性約束力！由於醫藥科技持續在進步，每位患者的病情亦不盡相同；醫師應就病人之病情做個別的考量，病人和家屬亦應與醫師溝通討論，以決定最適當之診治方式。

據衛生福利部的統計，攝護腺癌的發生率與死亡率近年來均呈逐年增加之現象；2021年死亡排名佔全部癌症的第5位、男性癌症的第6位。本院登錄攝護腺惡性腫瘤5年個案數近為417例，發病年齡在65歲以上明顯增加，在80歲以上的組距佔最大族群。隨著老年化人口的來臨，攝護腺惡性腫瘤的篩檢顯得的格外重要。

隨著篩檢工具（攝護腺特定抗原 PSA 檢測）的準確率提高，病患健康意識的提昇，將來攝護腺癌的發生率必將持續增加，也因此本院積極整合泌尿外科、病理科、腫瘤內科、醫學影像部與放射腫瘤科以堅強的團隊，提供攝護腺癌有效的預防與全方位的治療。本院治療攝護腺惡性腫瘤具有相當優異成果，於民國90年成為中部第一所完成攝護腺組織插種近接治療單位，引進先進且精準的光子刀/亞瑟刀放射定位治療儀器；在微創(局部)治療部分，也陸續引進海福刀(HIFU)及冷凍療法(Cryotherapy)；在手術方面，引進達文西機械手臂系統，是中部地區治療攝護腺癌的重要醫院。本團隊目的是整合現有人力、資源、研究計劃、臨床試驗、空間設備針對攝護腺癌做完善的診斷及治療。

本攝護腺癌診斷及治療指引的建立，除了依據已發表的實證醫學證據及專家意見外，並參考國家衛生研究院攝護腺癌臨床指引、美國 National Comprehensive Cancer Network (NCCN) 的Practice Guide-lines in Prostate Cancer V2.2026版、及中山醫學大學附設醫院攝護腺癌治療經驗進行編修。

二、症狀、診斷和檢查

攝護腺癌在初期很少有症狀，多半都是在腫瘤較大且壓迫到膀胱或尿道時，才會出現像頻尿，解尿困難，排尿時有疼痛及燒灼的感覺，甚至解血尿。不過由於良性的攝護腺肥大也會有類似的症狀產生，所以有時也很難以這些症狀來判斷是否罹患攝護腺癌。攝護腺癌發生遠端轉移的時候，最常轉移到骨骼，此時多半會引起骨頭疼痛，或壓迫神經引起神經痛的症狀，嚴重的話，還會有病理性骨折的情形。

要診斷攝護腺癌，首先要詳細的詢問病史，並要進行完整的身體檢查及評估，這些檢查包括：

1. 肛門指檢：直腸就在攝護腺的後側，所以醫師可以用食指經肛門放入病人的直腸，來觸診攝護腺。正常的攝護腺應該是柔軟有彈性的，如同握拳時大姆指旁虎口的肌肉，而攝護腺癌觸摸起來卻是如結節般的硬塊，甚至硬如石頭。但如果遇到攝護腺肥大、攝護腺發炎、攝護腺結石、或做過經尿道攝護腺切除手術及切片的病人，則肛門指檢就不易判讀。
2. 攝護腺特異抗原(**prostate specific antigen**，簡稱**PSA**)：這是一種攝護腺產生的蛋白質，其生理功能是使射精後的精液液化，可能有助於精子游走和授孕。攝護腺的上皮細胞與癌細胞都會分泌PSA，但癌細胞會分泌數倍以上的量。血中PSA的正常值是小於4.0 ng/ml，若抽血檢驗PSA大於正常值，就要懷疑有攝護腺癌的可能。但由於攝護腺肥大、攝護腺發炎、肛門指檢、導尿管的置放、膀胱鏡的檢查、經直腸超音波檢查及攝護腺的切片，都會使PSA有不同程度的升高，所以一旦發現病人有PSA升高的情形，必須先排除其他非攝護腺癌所引起的PSA升高因素，才能下診斷。
3. 攝護腺切片：取得攝護腺組織的方式有兩種，其一是經尿道攝護腺刮除手術，再者則是經直腸/會陰影像導引攝護腺切片。由於攝護腺是深埋在人體的一個小器官，一般的X光只能看到外形的影子，而肛門指診有時又會有人為因素的誤差，因此就發展出經直腸/會陰影像導引檢查，可由距離攝護腺最近的位置直接掃描，觀察攝護腺的變化。當發現病灶時，還可藉由影像導引，將病變切片送檢查；另外一種方式是經尿道攝護腺刮除手術，經由尿道將攝護腺中間近尿道部分刮除，缺點是攝護腺週邊的腫瘤無法測得。
4. 電腦斷層及核磁共振攝影：為了確實了解病灶與鄰近器官的關係，可以做電腦斷層及核磁共振攝影，較清楚的



評估骨盆腔內的淋巴結，及其他器官是否有被癌細胞侵犯。

5. 其他：倘若懷疑有骨頭的轉移，還要做骨骼掃描，或是胸部X光檢查，以觀察是否有肺部轉移。

三、組織病理分類與分化

* 格里森分級系統 (Gleason grading system)：

此為攝護腺癌分級中最常使用的分級系統，此系統是將腫瘤標本置於顯微鏡下，依據細胞分化的成熟度將其分成 1~5 級，分化最成熟的為 1 級，分化最不成熟的則為 5 級；而考慮攝護腺癌的多發性以及客觀評估預後，此系統從攝護腺癌組織切片中，取前二大面積者的級數相加而成格里森分數(2~10) (Gleason score)。格里森分數在 7 以上的病人預後明顯比格里森分數在 6 以下的病人來得差。

Grade Group	Gleason Score	Gleason Pattern(s)
1	≤ 6	$\leq 3+3$
2	7	3+4
3	7	4+3
4	8	4+4(3+5/5+3)
5	9 or 10	4+5,5+4,or5+5



四、臨床分期與病理分期

臨床T期可依肛門指診及影像學檢查來評估腫瘤是否於攝護腺包膜內 (T1, T2) 或包膜外 (T3,T4)

TNM staging system 為採用 AJCC 2017 出版的第八版。

PRIMARY TUMOR (T)	
TX	Primary tumor cannot be assessed
T0	No evidence of primary tumor
T1	Clinically inapparent tumor that is not palpable
T1a	Tumor incidental histologic finding in 5% or less of tissue resected
T1b	Tumor incidental histologic finding in more than 5% of tissue resected
T1c	Tumor identified by needle biopsy found in one or both sides, but not palpable
T2	Tumor is palpable and confined within prostate
T2a	Tumor involves one-half of one side or less
T2b	Tumor involves more than one-half of one side but not both sides
T2c	Tumor involves both sides
T3	Extraprostatic Tumor that is not fixed or does not invade adjacent structures
T3a	Extraprostatic extension (unilateral or bilateral)
T3b	Tumor invades seminal vesicle(s)
T4	Tumor is fixed or invades adjacent structures other than seminal vesicles: such as external sphincter, rectum, bladder, levator muscles, and/or pelvic wall



PATHOLOGICAL(T)	
pT2	Organ confined
pT3	Extraprostatic extension
pT3a	Extraprostatic extension or microscopic invasion of bladder neck
pT3b	Seminal vesicle invasion
pT4	Tumor is fixed or invasion of adjacent structures other than seminal vesicle such as external sphincter, rectum, bladder, levator muscles and/or pelvic wall

Note: There is no pathological T1 classification.

Note: Positive surgical margin should be indicated by an R1 descriptor, indicating residual microscopic disease

REGIONAL LYMPH NODES (N)	
NX	Regional lymph nodes were not assessed
N0	No regional lymph node metastasis
N1	Metastasis in regional lymph node(s)

DISTANT METASTASIS (M)	
M0	No distant metastasis
M1	Distant metastasis
M1a	Non-regional lymph node(s)
M1b	Bone(s)
M1c	Other site(s) with or without bone disease
	Note : When more than one site of metastasis is present, the most advanced category is used. M1c is most advanced.



Anatomic Stage · Prognostic Groups					
<input type="checkbox"/> CLINICAL <input type="checkbox"/> PATHOLOGIC					
Stage	T	N	M	PSA	Gleason Score
I	cT1a-c T2a	N0	M0	<10	≤ 6
	pT2	N0	M0	<10	≤ 6
IIA	cT1a-c	N0	M0	≥ 10<20	≤ 6
	cT2a	N0	M0	≥10 <20	≤ 6
	pT2	N0	M0	≥10 <20	≤ 6
	cT2b-c	N0	M0	<20	≤ 6
IIB	T1-2	N0	M0	<20	7(3+4)
IIC	T1-2	N0	M0	<20	7(4+3)
	T1-2	N0	M0	<20	8
IIIA	T1-2	N0	M0	≥20	6-8
IIIB	T3-4	N0	M0	Any	6-8
IIC	AnyT	N0	M0	Any	9or10
IVA	AnyT	N1	M0	Any	Any
IVB	AnyT	AnyN	M1	Any	Any



復發風險分層表

RISK GROUP	臨床/病理期別		Initial Therapy
低度 low	Has all of the following but does not qualify for very low risk: •T1-T2a •Grade Group1 •PSA < 10 ng/mL		見P.8頁
中度 intermediate	Has all of the following: • No high-risk group features • No very-high-risk group features • Has one or more intermediate risk factors (IRF): ➢ T2b-T2c OR ➢ Grade Group 2-3 OR ➢ PSA 10-20 ng/mL	Favorable	Has all of the following: 1 IRF and Grade Group 1 or 2 and <50% biopsy scores positive
		Unfavorable	Has one or more of the following: 2 or 3 IRF and/or Grade Group 3 and/or ≧50% biopsy scores positive
高度 high	Has one or more high-risk features, but does not meet criteria for very high risk : • cT3-T4 • Grade Group4 or Grade Group5 • PSA >20 ng/mL		見 P.11 頁
非常高度 Very high	Has at least two of the following: • T3b-T4OR • Grade Group4 or Grade Group5 •PSA >40 ng/mL		見P.11頁



五、攝護腺癌臨床指引

RISK GROUP – Low

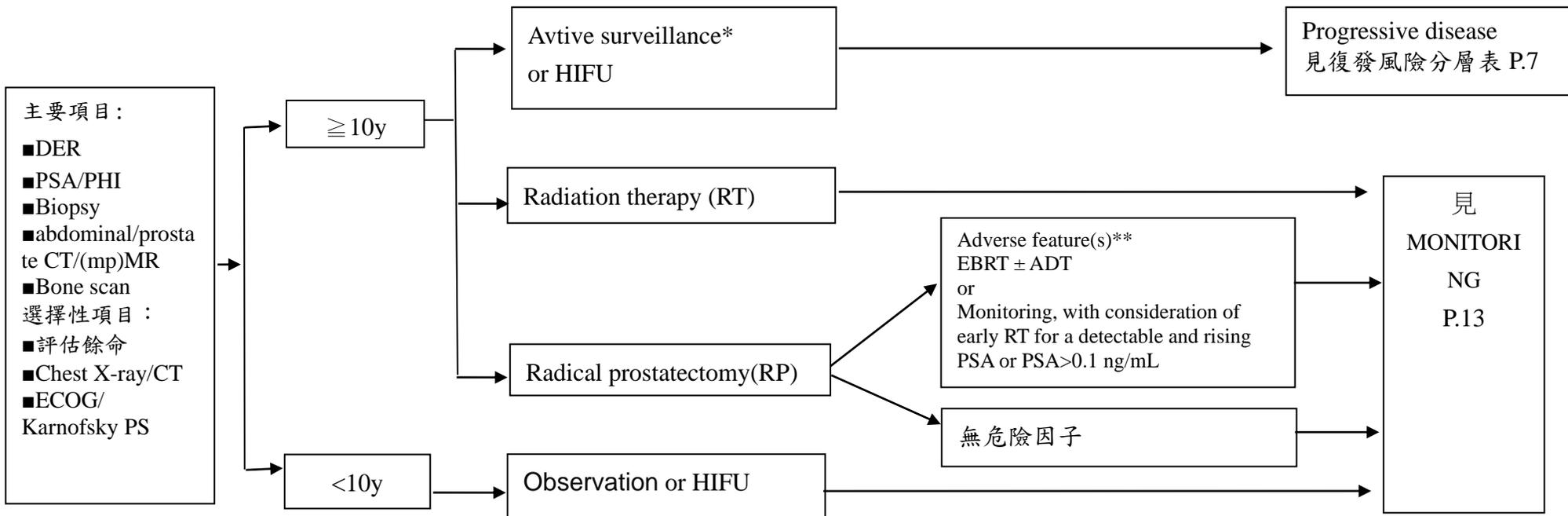
WORK UP

EXPECTED SURVIVAL

INITIAL THERAPY

ADJUVANT THERAPY

MONITORING



** Adverse laboratory/pathologic features include: positive margin(s); seminal vesicle invasion; extracapsular extension; or detectable PSA.



RISK GROUP -High or Very high

WORK UP

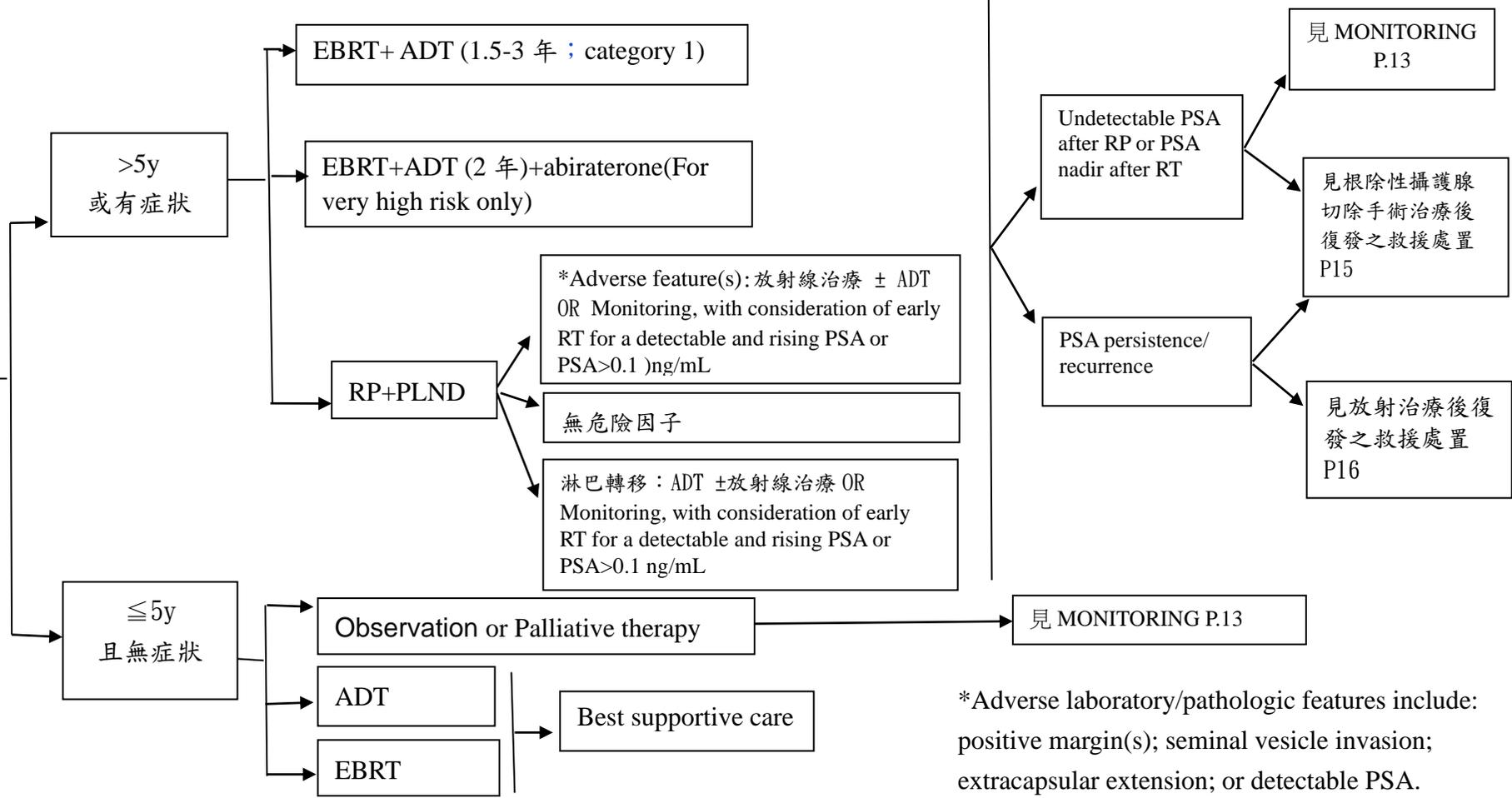
EXPECTED SURVIVAL

INITIAL THERAPY

ADJUVANT THERAPY

MONITORING

- 主要項目：
- DER
 - PSA/PHI
 - Biopsy
 - abdominal/prostate CT/(mp)MR
 - Bone scan
- 選擇性項目：
- 評估餘命
 - Chest X-ray/CT
 - ECOG/Karnofsky PS



*Adverse laboratory/pathologic features include: positive margin(s); seminal vesicle invasion; extracapsular extension; or detectable PSA.



RISK GROUP-Regional (任何T期,N1,M0)

WORK UP	EXPECTED SURVIVAL	INITIAL THERAPY	MONITORING
---------	-------------------	-----------------	------------

- 主要項目：
- DER
 - PSA/PHI
 - Biopsy
 - abdominal/prostate CT/(mp)MR
 - Bone scan
- 選擇性項目：
- 評估餘命
 - Chest X-ray/CT
 - ECOG/Karnofsky PS
 - 基因檢測

>5年
或有症狀

- EBRT + ADT
- EBRT+ ADT+ abiraterone(preferred)
- ADT ± abiraterone

RP+PLND

*Adverse feature(s)且無淋巴轉移：EBRT ± ADT
or
Monitoring, with consideration of early RT for a detectable and rising PSA or PSA>0.1 ng/mL

無危險因子

淋巴轉移：ADT(category 1) ± EBRT(category 2B) OR
Monitoring, with consideration of early RT for a detectable and rising PSA or PSA>0.1 ng/mL

≤5年
且無症狀

Observation or Palliative therapy

ADT

Best supportive care

Undetectable PSA after RP or PSA nadir after RT

見 MONITORING P.13

見根治性攝護腺切除手術治療後復發之救援處置 P15

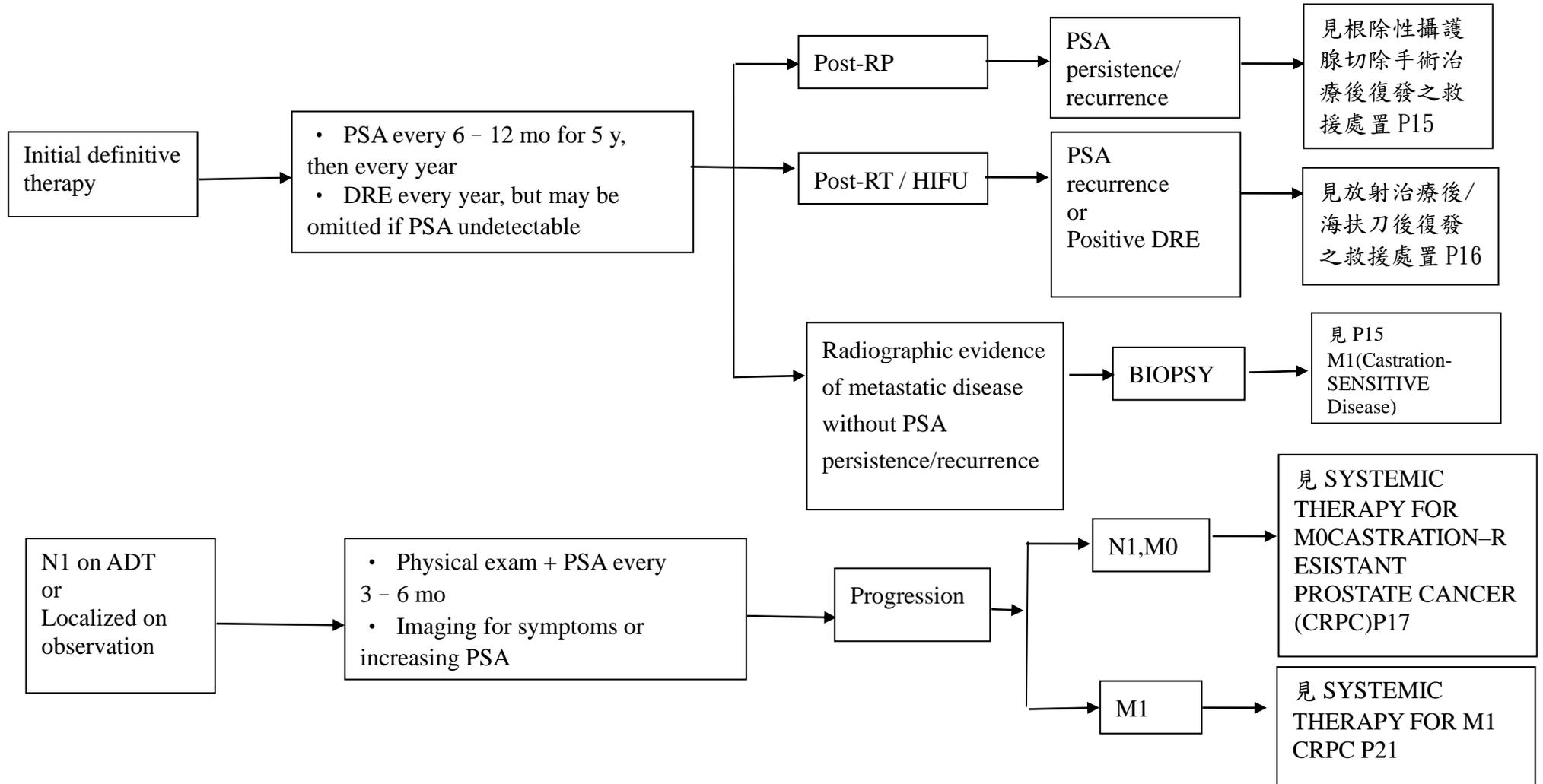
PSA persistence/recurrence

見放射治療後復發之救援處置 P16



MONITORING

RECURRENCE





RISK GROUP-Metastatic(任何T,任何N,M1)

Castration SENSITIVE Disease

WORK UP

主要項目：

- DER
 - PSA/PHI
 - Biopsy
 - abdominal/prostate CT/(mp)MR
 - Bone scan
- 選擇性項目：
- 評估餘命
 - Chest X-ray/CT
 - ECOG/Karnofsky PS
 - 基因檢測

INITIAL THERAPY

ADT with one of the following:

- Preferred regimens:
 - Apalutamide(category 1)
 - Abiraterone(category 1)
 - Docetaxel
 - Enzalutamide(category 1)

or

ADT with docetaxel and one of the following:

- Preferred regimens:
 - Abiraterone (category 1)
 - Darolutamide (category 1)

Or

ADT with EBRT to the primary tumor for low-volume M1

Or

ADT

MONITORING

- Physical exam +PSA every 3 – 6 month
- Imaging for symptoms or increasing PSA

Progress 見 SYSTEMIC THERAPY FOR M1 CRPC P21

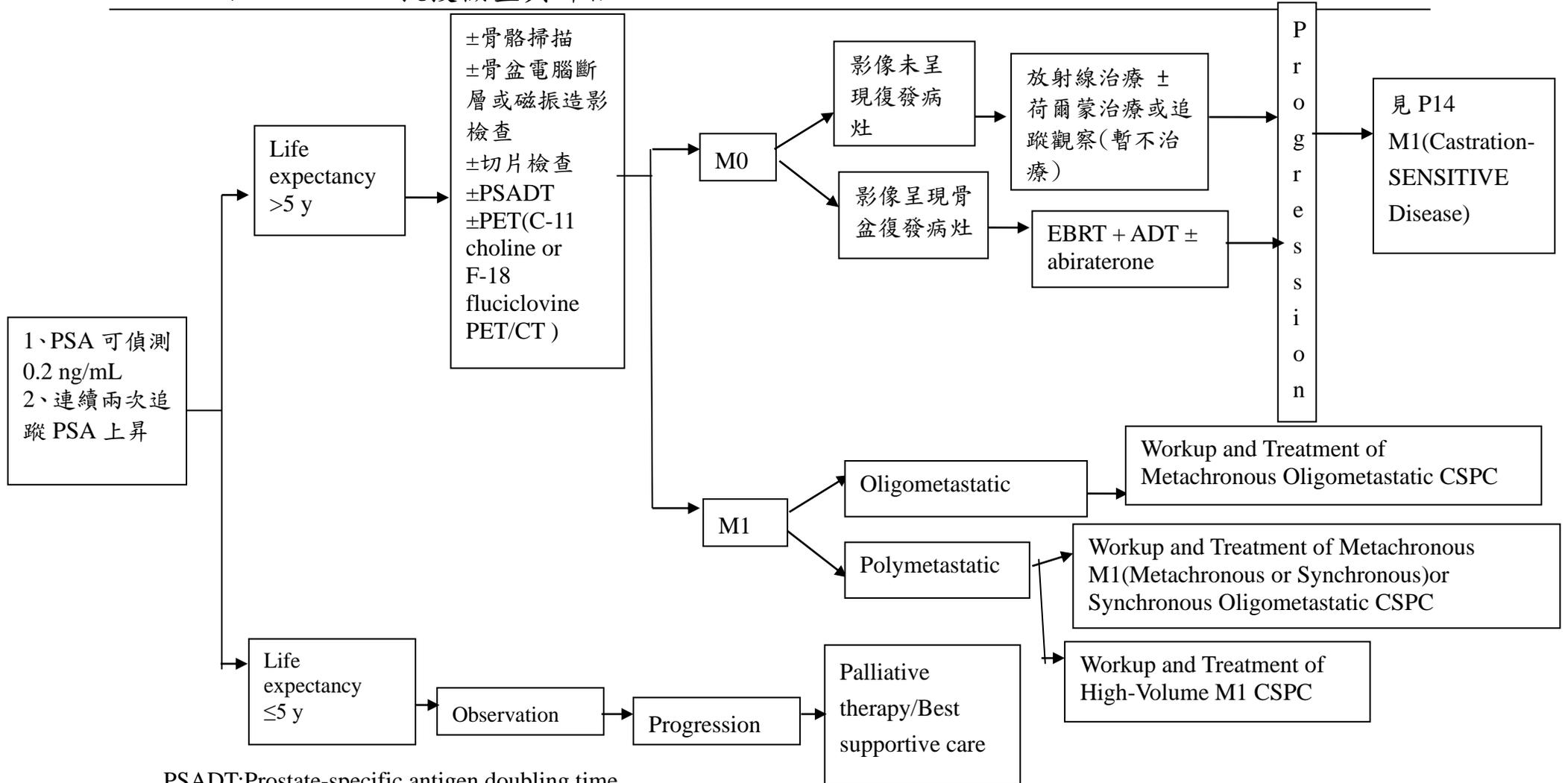
※2021 預期餘命依據內政部的男性簡易生命表為 77.67 歲

六、根治性攝護腺切除手術治療後復發之救援處置

復發情況

救援檢查與評估

初步救援治療



PSADT: Prostate-specific antigen doubling time
前列腺特异性抗原倍增時間

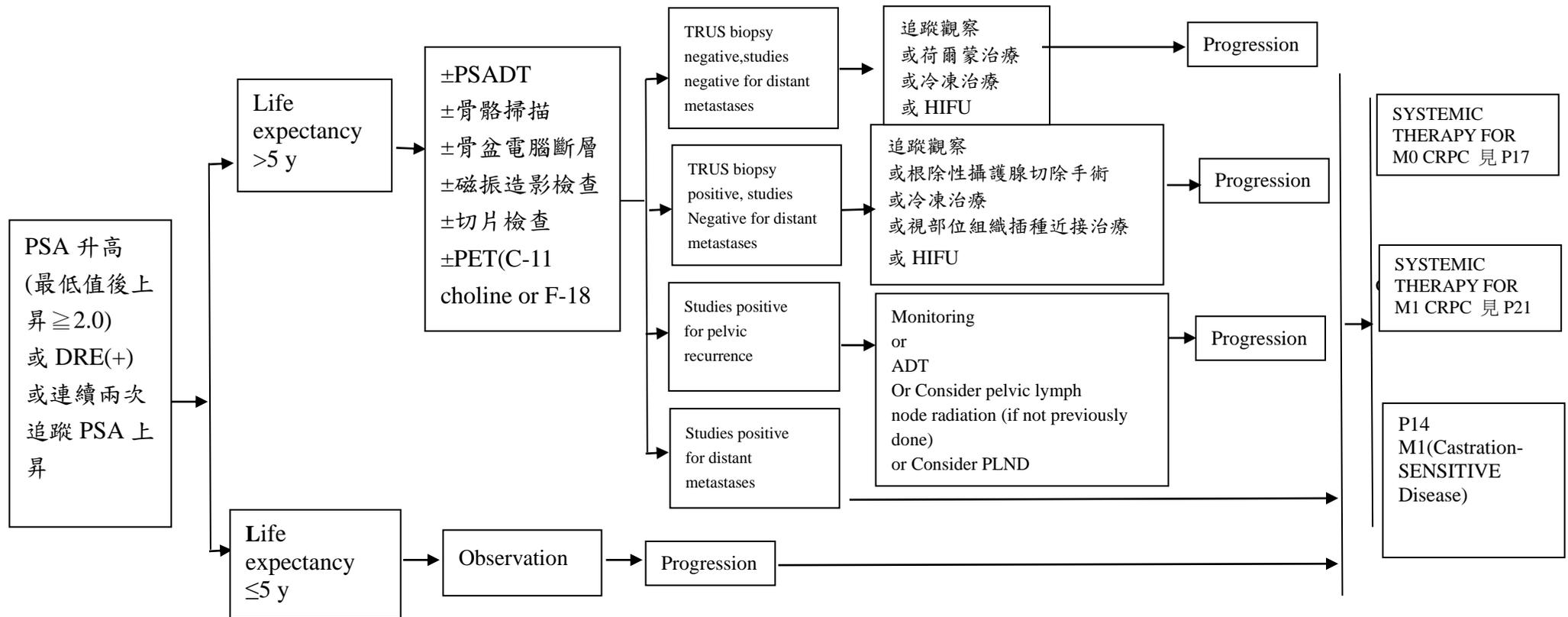


七、放射治療後/海扶刀後 復發之救援處置

復發情況

救援檢查與評估

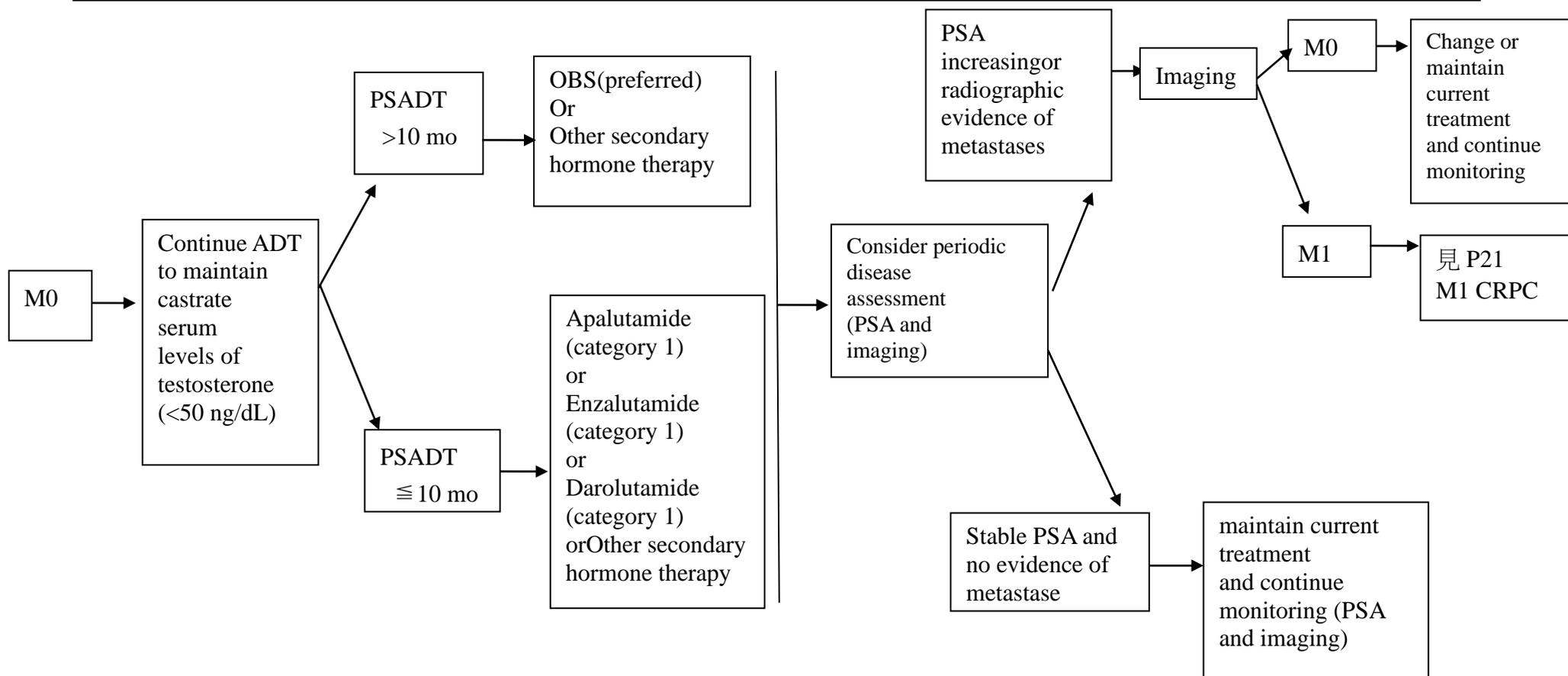
初步救援治療



PSADT: Prostate-specific antigen doubling time
前列腺特異性抗原倍增時間

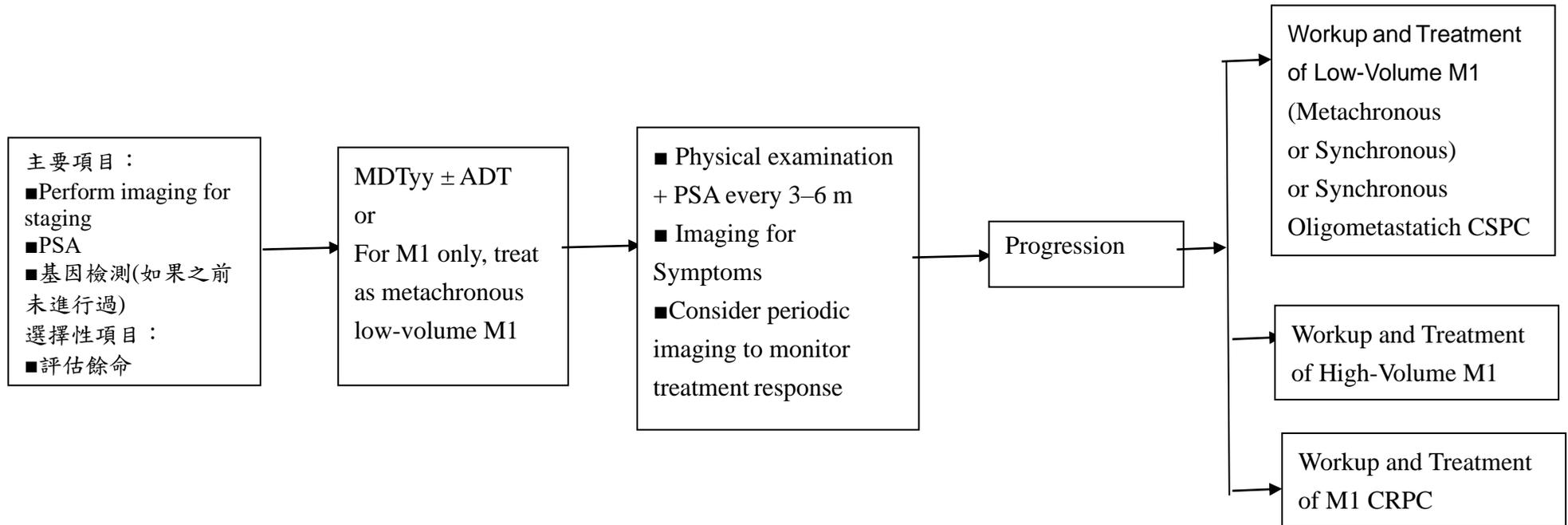
八、荷爾蒙治療失敗之救援處置

SYSTEMIC THERAPY FOR M0 CASTRATION - RESISTANT PROSTATE CANCER (CRPC)



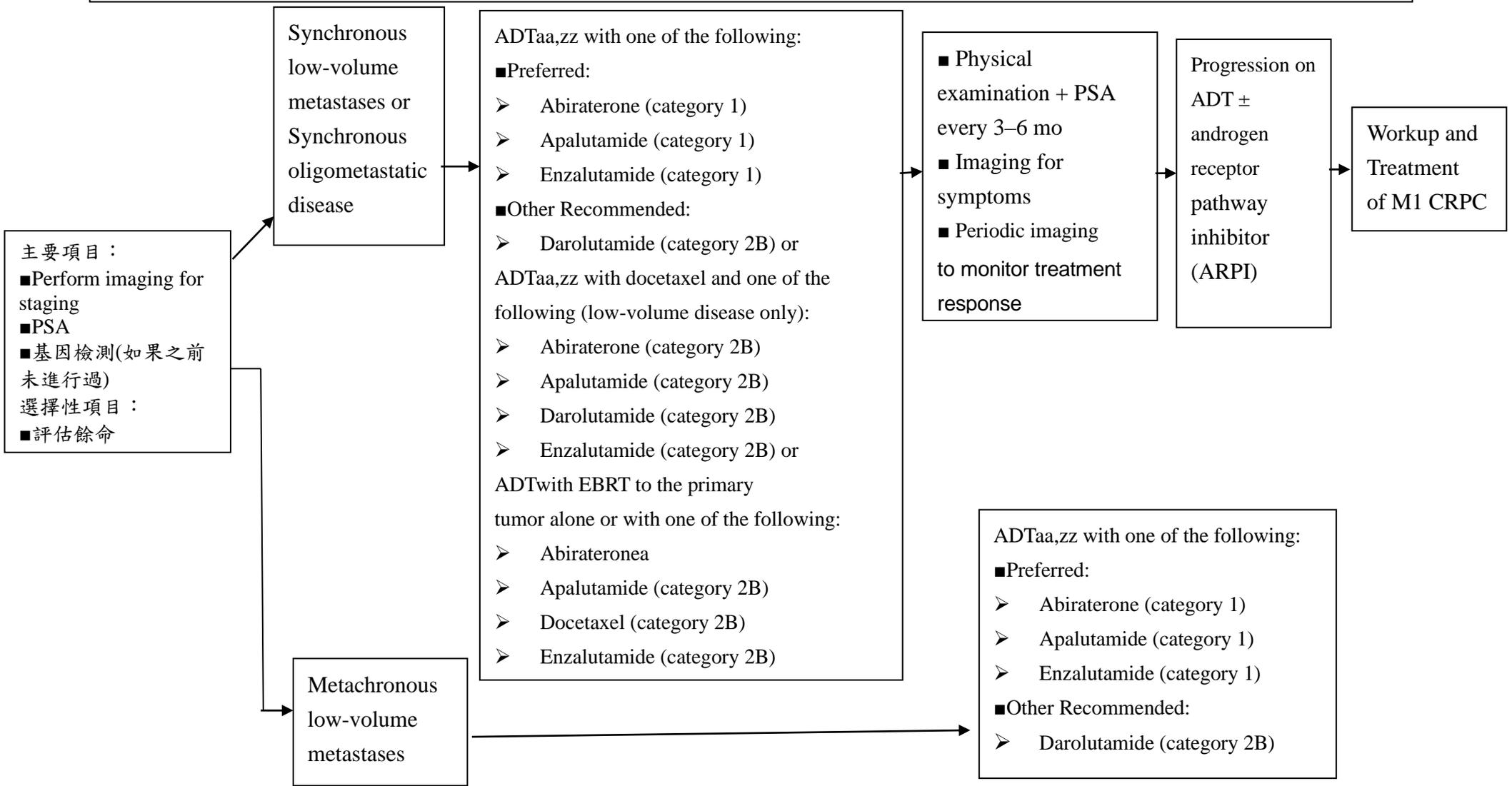


**WORKUP AND TREATMENT OF METACHRONOUS OLIGOMETASTATIC CSPC
WORKUP FOR METASTASES**



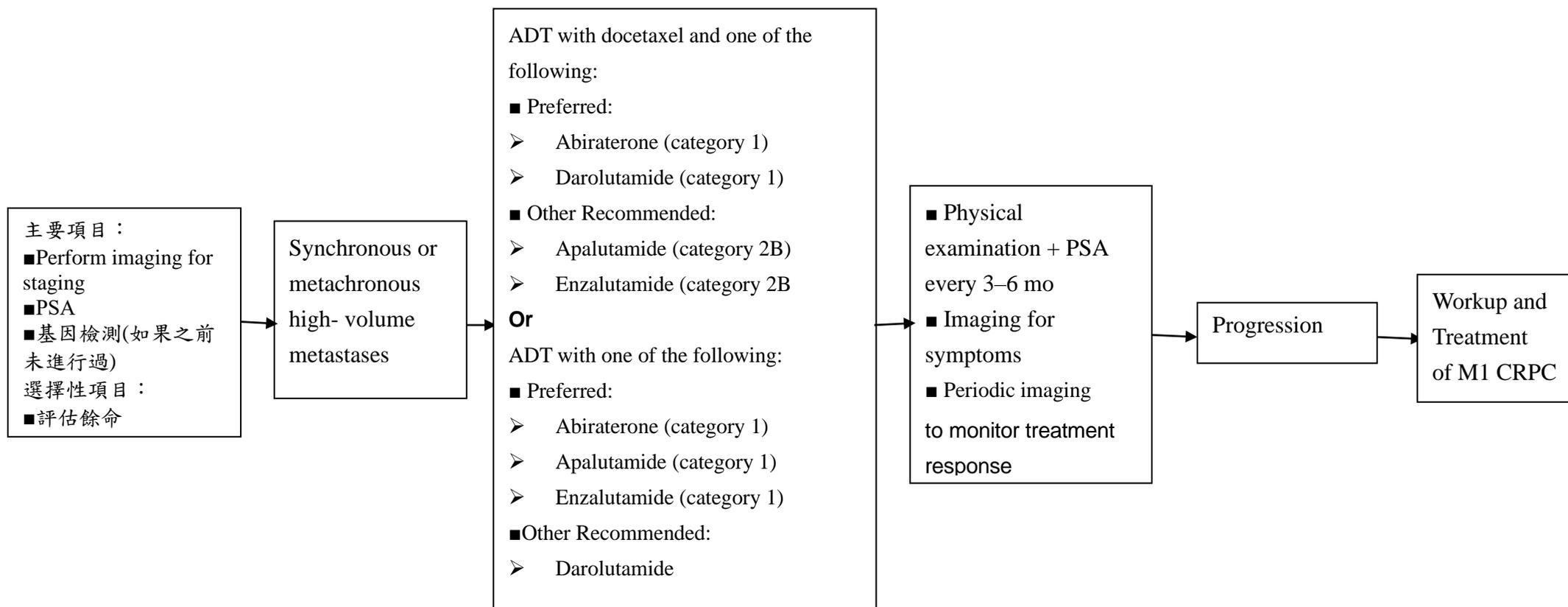


**WORKUP AND TREATMENT OF LOW-VOLUME M1 (METACHRONOUS OR SYNCHRONOUS) OR SYNCHRONOUS OLIGOMETASTATIC CSPC
WORKUP FOR METASTASES**



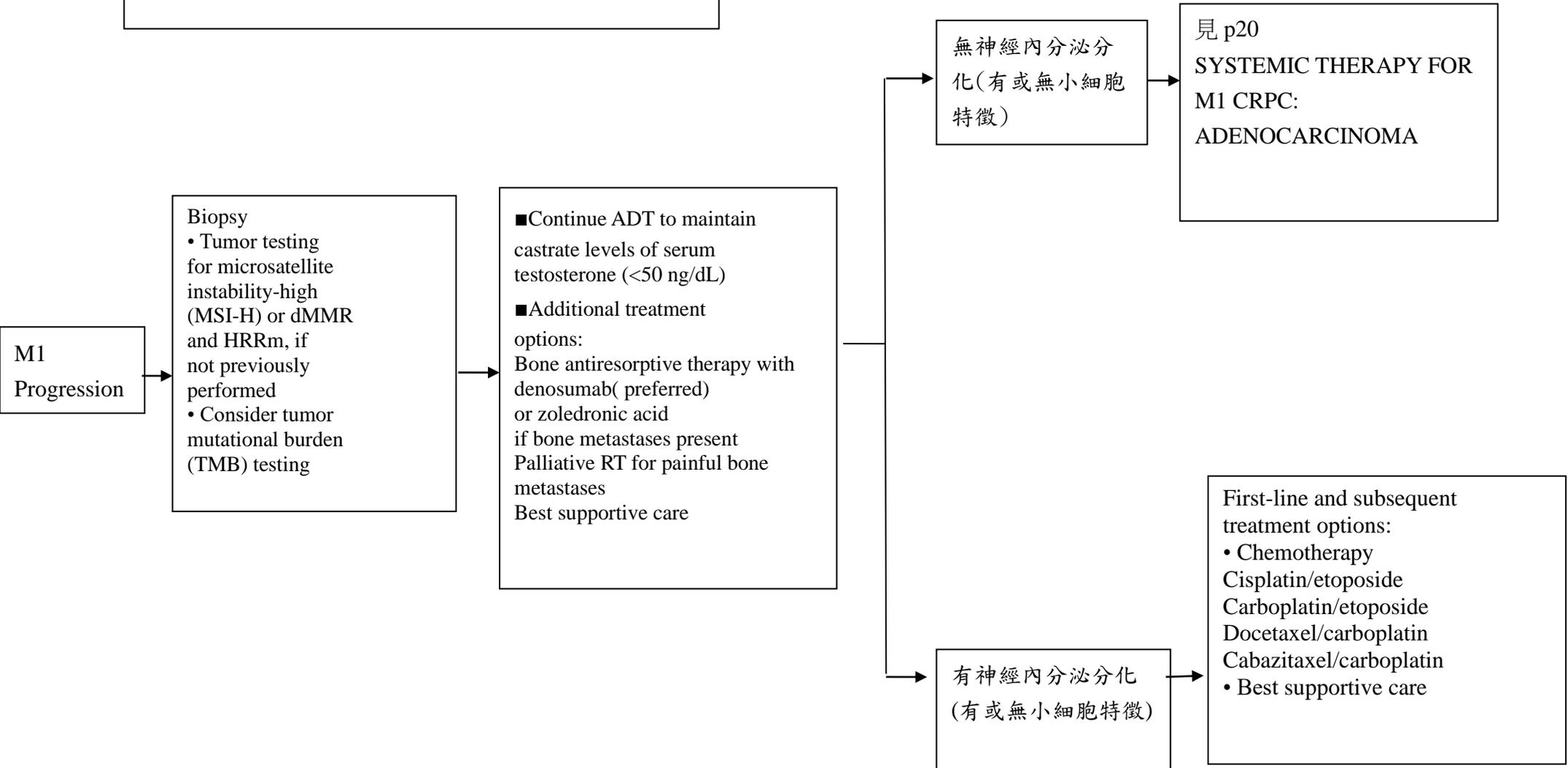


WORKUP AND TREATMENT OF HIGH-VOLUME M1 CSPC WORKUP FOR METASTASES





SYSTEMIC THERAPY FOR M1 CRPC





SYSTEMIC THERAPY FOR M1 CRPC: ADENOCARCINOMA

Pre-ARPI ^{aa, kkk}	Post-ARPI ^{kkk} /Pre-Docetaxel ^{aa}	Post-ARPI ^{kkk} /Post-Docetaxel ^{aa}
<p>Preferred:</p> <ul style="list-style-type: none"> • Abiraterone (category 1) • Enzalutamide (category 1) <p>Other Recommended:</p> <ul style="list-style-type: none"> • Docetaxel⁹⁹⁹ (category 1) <p>Useful in Certain Circumstances:</p> <ul style="list-style-type: none"> • <u>Molecular Biomarker-Directed Therapy</u> <ul style="list-style-type: none"> ▶ <i>BRCA</i> mutation <ul style="list-style-type: none"> ◇ Niraparib/abiraterone^{lll} (category 1) ◇ Olaparib/abiraterone^{lll} (category 1) ◇ Talazoparib/enzalutamide^{lll} (category 1) ▶ <i>HRRm</i> (other than <i>BRCA1/2</i>) <ul style="list-style-type: none"> ◇ Talazoparib/enzalutamide^{lll} (category 1) • <u>Disease State-Specific Therapy</u> <ul style="list-style-type: none"> ▶ Bone metastases <ul style="list-style-type: none"> ◇ Radium-223ⁿⁿⁿ/enzalutamide 	<p>Preferred:</p> <ul style="list-style-type: none"> • Docetaxel⁹⁹⁹ (category 1) <p>Useful in Certain Circumstances:</p> <ul style="list-style-type: none"> • <u>Molecular Biomarker-Directed Therapy</u> <ul style="list-style-type: none"> ▶ <i>BRCA</i> mutation <ul style="list-style-type: none"> ◇ Olaparib^{lll} (category 1, preferred) ◇ Rucaparib^{lll} (category 1, preferred) ◇ Niraparib/abiraterone^{lll} (category 2B) ◇ Talazoparib/enzalutamide^{lll} (category 2B) ▶ <i>HRRm</i> (other than <i>BRCA1/2</i>) <ul style="list-style-type: none"> ◇ Olaparib^{lll} ◇ Talazoparib/enzalutamide^{lll} (category 2B) • <u>Disease State-Specific Therapy</u> <ul style="list-style-type: none"> ▶ PSMA-positive metastases <ul style="list-style-type: none"> ◇ Lutetium Lu 177 vipivotide tetraxetan (Lu-177-PSMA-617)^{ppp} ▶ Aggressive variant^{hhh} <ul style="list-style-type: none"> ◇ Cabazitaxel/Carboplatin⁹⁹⁹ 	<p>Preferred:</p> <ul style="list-style-type: none"> • Cabazitaxel⁹⁹⁹ (category 1) • Docetaxel rechallenge⁹⁹⁹ <p>Useful in Certain Circumstances:</p> <ul style="list-style-type: none"> • <u>Molecular Biomarker-Directed Therapy</u> <ul style="list-style-type: none"> ▶ <i>BRCA</i> mutation <ul style="list-style-type: none"> ◇ Olaparib^{lll} (category 1) ◇ Rucaparib^{lll} ▶ <i>HRRm</i> (other than <i>BRCA1/2</i>) <ul style="list-style-type: none"> ◇ Olaparib^{lll} ▶ Other FDA-approved agents for tissue agnostic indications⁹⁹⁹ • <u>Disease State-Specific Therapy</u> <ul style="list-style-type: none"> ▶ PSMA-positive metastases <ul style="list-style-type: none"> ◇ Lu-177-PSMA-617^{ppp} (category 1) ▶ Aggressive variant^{hhh} <ul style="list-style-type: none"> ◇ Cabazitaxel/carboplatin⁹⁹⁹ ▶ Palliation for symptomatic patients unable to tolerate other therapies <ul style="list-style-type: none"> ◇ Mitoxantrone⁹⁹⁹



Additional Options Irrespective of Prior ARPI or Prior Docetaxel (Useful in Certain Circumstances)

Disease State-Specific Therapy

- ▶ Asymptomatic without visceral metastases
- Sipuleucel-T^{ggg,ooo}
- ▶ Oligometastatic^h/Oligoprogressive disease
- Metastasis-directed therapy^{mmm} with metastatic castration-resistant prostate cancer (mCRPC) systemic therapy
- ▶ Symptomatic bone-predominant metastases
- Radium-223ⁿⁿⁿ (category 1)

Molecular Biomarker-Directed Therapy

- ▶ MSI-High (MSI-H)/dMMR
- ▶ Pembrolizumab^{ggg} (category 2B)



九、放射治療、化學治療及荷爾蒙治療處置

1. Principles of radiation

(1) Regimen and Dose/Fractionation

EBRT Regimen	Preferred Dose/Fraction	Definitive RT						Post-Treatment RT			Advanced Disease	
		Low	FIR	UIR	High	Very-High	Regional	Post-RP		Post-RT	Primary Tumor	Metastases
								aRT	sRT		sRT	mCSPC M0 CRPC mCRPC
Conventional	1.8–2 Gy x 37–45 fx	+	+	☼	☼	✓	✓				☼	
	1.8–2 Gy x 30–39 fx							✓	✓		☼	
Moderate Hypofractionation	3 Gy x 20 fx (preferred) ^a 2.7 Gy x 26 fx 2.5 Gy x 28 fx	☼	✓	✓	✓	✓	✓			☼	☼	☼
	2.63–2.75 Gy x 20 fx 2.5 Gy x 25 fx							✓	✓	☼	✓	☼
Ultra Hypofractionation (SBRT)	9.5 Gy x 4 fx 7.25–8 Gy x 5 fx 6 Gy x 6 fx 6.1 Gy x 7 fx	☼	✓	✓	✓	☼	☼		☼	✓	✓	✓
	9–10 Gy x 3 fx 12 Gy x 2 fx 16–24 Gy x 1 fx											✓
	6.2–6.4 Gy x 5 fx								☼			



EBRT Boost Techniques												
EBRT with simultaneous integrated boost	See footnote b.		☆	✓	✓	☆	☆		☆	☆	☆	
EBRT with Sequential SBRT boost	<i>Prostate:</i> 1.8 Gy x 23–28 fx <i>Boost:</i> 6 Gy x 3 fx 9.5 Gy x 2 fx			☆	☆	☆						

(✓ Preferred; ☆ Acceptable based on clinical and medical need; Regimens shaded gray are not recommended)

(+:Not a preferred regimen, but for patients who cannot afford or access advanced radiotherapy techniques, conventional fractionation may still be retained as an option for safety considerations. :EAU-EANM-ESTRO-ESUR-ISUP-SIOG Guidelines on Prostate Cancer,2024 Update and NCCN 2026)

(2) Post-Prostatectomy Radiation Therapy

- Indications for adjuvant RT include pT3a disease, positive margin(s),or seminal vesicle involvement. Adjuvant RT is usually given within 1 year after RP and after operative side effects have improved/stabilized. Patients with positive surgical margins may benefit the most.



2.Hormonal Therapy

用於轉移性攝護腺癌或在高風險病人併用放射線治療。在轉移性攝護腺癌須終身使用，在合併放射線治療時通常使用六個月~二至三年

種類	藥物
1. LHRH agonist alone	Goserelin(Zoladex) Leuprolide(Leuplin) / Triptorelin(Diphereline)
2. LHRH agonist (as above) plus first-generation antiandrogen	Nilutamide、Flutamide(護腺寧錠®)Bicalutamide(CASODEX)
2. LHRH antagonist	Degarelix(FIRMAGON®)、Relugolix
3. First-generation antiandrogen	Nilutamide、Flutamide、Bicalutamide
4. Second-generation antiandrogen	Enzalutamide、Apalutamide、Darolutamide
5. Androgen biosynthesis inhibitor	Abiraterone(澤珂®/阿比特龍)
6. Other	Ketoconazole plus Hydrocortisone Corticosteroids(hydrocortisone, prednisone, or dexamethasone) Estrogens including diethylstilbestrol (DES) or other estrogen



藥名(學名)	Zoladex 10.8mg/syr LA Depot 1amp Q3M SC
藥名(學名)	Zoladex 3.6mg/syr Depot 1amp Q3M SC
Ref.	<i>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 Treatment of Advanced Prostate Cancer: A Randomized Trial. https://www.sciencedirect.com/science/article/pii/009042959180077K</i>
藥名(學名)	Leuplin depot 3M S.C.11.25mg/vial 1vial Q3M SC
Ref.	<i>Chung BH, Horie S, Chiong E. Clinical studies investigating the use of leuprorelin for prostate cancer in Asia. <i>Prostate Int.</i> 2020 Mar;8(1):1-9. doi: 10.1016/j.pnil.2019.06.001. Epub 2019 Jul 4. PMID: 32257971; PMCID: PMC7125360.</i>
藥名(學名)	Diphereline 3-month P.R.11.25mg/vial 1vial Q3M IM
藥名(學名)	Diphereline 3.75mg/vial 1vial Q1M IM
Ref.	<i>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. <i>Nephrourol Mon.</i> 2015 May 25;7(3):e27107. doi: 10.5812/numonthly.7(3)2015.27107. PMID: 26290848; PMCID: PMC4537641.</i>



藥名	Bicalutamide(CASODEX) 1tab QD PO
Ref.	<i>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.</i>

藥名	Enzalutamide(Xtandi F.C.) 160 mg/tab 1tab QD PO
Ref.	<i>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 & Affiliations Published June 2, 2019. N Engl J Med 2019;381:121-131. DOI: 10.1056/NEJMoa1903835. VOL. 381 NO. 2.</i>

藥名	Apalutamide (Erleada) 60mg/tab 4tab QD PO
Ref.	<i>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/NEJMoa1903307. VOL. 381 NO.</i>



藥名	Darolutamide (Nubeqa F.C.) 300mg/tab 2tab BID PO
Ref.	<i>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.</i>
藥名	Abiraterone (Abiratred F.C.) 250mg/tab 4tab QDAC PO
Ref.	<i>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</i>



3. Principles of chemotherapy

Advanced/Metastatic regimens

Docetaxel + Prednisolone

Docetaxel	60-75 mg/m ²	d1
Prednisolone	10mg/day	
Q3w		

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

Docetaxel	50mg/m ²	d1
Prednisolone	10mg/day	
Q2w		

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

Docetaxel	30 mg/m ²	d1,8,15,22,29
Prednisolone	10mg/day	
Q6w		

Tannock IF et al. Docetaxel plus prednisone or mitoxantrone plus prednisone for advanced prostate cancer. *N Eng J Med* 2004; 351:1502.

**Mitoxantrone + Prednisone**

Mitoxantrone	12 mg/m ²	d1
Prednisolone	10mg/day	
Q3w		

Tannock IF et al. Docetaxel plus prednisone or mitoxantrone plus prednisone for advanced prostate cancer. N Eng J Med 2004; 351:1502.

Cabazitaxel + Prednisone

Cabazitaxel	20-25 mg/m ²	d1
Prednisolone	10mg/day	
Q3w		

NCCN (National Comprehensive Cancer Network) Practice Guidelines in Oncology version 1. 2022 in Prostate Cancer.

Immunotherapy**Pembrolizumab**

Pembrolizumab	200 mg	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****Olaparib(Lynparza)**

Olaparib(Lynparza)	300mg po	BID
QD		

NCCN (National Comprehensive Cancer Network) Practice Guidelines in Oncology version 1. 2022 in Prostate Cancer.

十、安寧緩和照護原則

若預期疾病難以治癒時，病人存活期小於6個月便適合安寧療護(Pomeranz & Brustman, 2005; Waldrop & Rinfrette, 2009)。若藉由症狀、檢驗數據、及確切的腫瘤診斷，證實臨床上該惡性腫瘤已經廣泛侵犯、或進展快速；功能分數(Palliative Performance Scale)低於70%；拒絕進一步腫瘤治癒性治療，或者在治療之下仍持續惡化者，即可轉介緩和醫療團隊(彭等，2006)。

十一、參考文獻

1. 衛生福利部國民健康署 (Health Promotion Administration, Ministry of Health and Welfare)：中華民國109年癌症登記報告。
2. 國家衛生研究院；攝護腺癌臨床指引。
3. US Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research 1992, p. 115–27. <http://www.ahcpr.gov/>.



4. H.-P. Schmid, W. Riesen and L. Prikler, Update on screening for prostate cancer with prostate specific antigen, *Crit Rev Oncol Hematol* 50 (2004), pp. 71–78.
5. G. Aus, C. Becker, S. Franzén, H. Lilja, P. Lodding and J. Hugosson, Cumulative prostate cancer risk assessment with the aid of the free-to-total prostate specific antigen ratio, *Eur Urol* 45 (2004), pp. 160–165.
6. G.W. Chodak, R.A. Thisted, G.S. Gerber, J.E. Johansson, J. Adolfsson, G.W. Jones, G.D. Chisholm, B. Moskovitz, P.M. Livne and J. Warner, Results of conservative management of clinically localized prostate cancer, *N Engl J Med* 330 (1994), pp. 242–248.
7. P.C. Albertsen, J.A. Hanley, D.F. Gleason and M.J. Barry, Competing risk analysis of men aged 55 to 74 years at diagnosis managed conservatively for clinically localized prostate cancer, *JAMA* 280 (1998), pp. 975–980. Full Text via CrossRef | View Record in Scopus | Cited By in Scopus (394)
8. L. Klotz, Active surveillance for prostate cancer: for whom?, *J Clin Oncol* 23 (2005), pp. 8165–8169. Full Text via CrossRef | View Record in Scopus | Cited By in Scopus (129)
9. A. Bill-Axelson, L. Holmberg and M. Ruutu et al., Scandinavian Prostate Cancer Group study no. 4: radical prostatectomy versus watchful waiting in early prostate cancer, *N Eng J Med* 352 (2005), pp. 1977–1984.
10. A. Heidenreich, C.H. Ohlmann and S. Polyakov, Anatomical extent of pelvic lymphadenectomy in patients undergoing radical prostatectomy, *Eur Urol* 52 (2007), pp. 29–37.
11. J.F. Ward, J.M. Slezak, M.L. Blute, E.J. Bergstralh and H. Zincke, Radical prostatectomy for clinically advanced (cT3) prostate cancer since the advent of prostate-specific antigen testing: 15-year outcome, *BJU Int* 95 (2005), pp. 751–756.
12. Kumar S, Shelley M, Harrison C, Coles B, Wilt TJ, Mason MD. Neo-adjuvant and adjuvant hormone therapy for localised and locally advanced prostate cancer. *Cochrane Database Syst Rev* 2006;CD006019.
13. E.M. Messing, J. Manola and J. Yao et al., Eastern Cooperative Oncology Group study EST 3886: immediate versus deferred androgen deprivation treatment in patients with node-positive prostate cancer after radical prostatectomy and



pelvic lymphadenectomy, *Lancet Oncol* 7 (2006), pp. 472–479.

14. A. Pollack, G.K. Zagars and L.G. Smith et al., Preliminary results of a randomized radiotherapy dose-escalation study comparing 70 Gy with 78 Gy for prostate cancer, *J Clin Oncol* 18 (2000), pp. 3904–3911. View Record in Scopus | Cited By in Scopus (315)
15. M. Bolla, D. Gonzalez and P. Warde et al., Improved survival in patients with locally advanced prostate cancer treated with radiotherapy and goserelin, *N Engl J Med* 337 (1997), pp. 295–300.
16. D. Ash, A. Flynn, J. Batterman, T. de Reijke, P. Lavagnini, L. Blank and ESTRA/EAU Urological Brachytherapy Group, EORTC Radiotherapy Group, ESTRO/EAU/EORTC recommendations on permanent seed implantation for localized prostate cancer, *Radiother Oncol* 57 (2000), pp. 315–321.
17. D. Bottke and T. Wiegel, Adjuvant radiotherapy after radical prostatectomy: indications, results and outcome, *Urol Int* 78 (2007), pp. 193–197. Full Text via CrossRef | View Record in Scopus | Cited By in Scopus (9)
18. G. Aus, Current status of HIFU and cryotherapy in prostate cancer – a review, *Eur Urol* 50 (2006), pp. 927–934.
19. J. Seidenfeld, D.J. Samson and V. Hasselblad et al., Single-therapy androgen suppression in men with advanced prostate cancer: a systematic review and meta-analysis, *Ann Intern Med* 132 (2000), pp. 566–577.
20. D.A. Loblaw, K.S. Virgo and R. Nam et al., Initial hormonal management of androgen-sensitive metastatic, recurrent, or progressive prostate cancer: 2006 update of an American Society of Clinical Oncology practice guideline, *J Clin Oncol* 25 (2007), pp. 1596–1605.
21. M. Hussain, C.M. Tangen and C. Higano et al., Absolute prostate-specific antigen value after androgen deprivation is a strong independent predictor of survival in new metastatic prostate cancer—data from Southwest Oncology Group Trial 9346 (INT-0162), *J Clin Oncol* 24 (2006), pp. 3984–3990. View Record in Scopus | Cited By in Scopus (59)
22. J.W. Moul, H. Wu and L. Sun et al., Early versus delayed hormonal therapy for prostate specific antigen only recurrence of prostate cancer after radical prostatectomy, *J Urol* 171 (2004), pp. 1141–1147.



23. M.S. Cookson, G. Aus and A.L. Burnett et al., Variation in the definition of biochemical recurrence in patients treated for localized prostate cancer: the American Urological Association Prostate Guidelines for localized prostate cancer update panel report and recommendations for a standard in the reporting of surgical outcomes, *J Urol* 177 (2007), pp. 540–545.
24. C.J. Ryan and E.J. Small, Role of secondary hormonal therapy in the management of recurrent disease, *Urology* 62 (Suppl 1) (2003), pp. 87–94.
25. D.P. Petrylak, C.M. Tangen and M.H. Hussain et al., Docetaxel and estramustine compared with mitoxantrone and prednisone for advanced refractory prostate cancer, *N Engl J Med* 351 (2004), pp. 1513–1520.
26. I.F. Tannock, R. de Wit and W.R. Berry et al., TAX 327 Investigators. Docetaxel plus prednisone or mitoxantrone plus prednisone for advanced prostate cancer, *N Engl J Med* 351 (2004), pp. 1502–1512.
27. F. Saad, D.M. Gleason and R. Murray et al., A randomized, placebo-controlled trial of zoledronic acid in patients with hormone-refractory metastatic prostate carcinoma, *J Natl Cancer Inst* 94 (2002), pp. 1458–1468.
28. M Perera, N Krishnananthan, U Lindner and N Lawrentschuk. An update on focal therapy for prostate cancer. *NATURE REVIEWS/UROLOGY. VOLUME 13* (2016); pp. 641-651.
29. W.V.D Bos, Berrend G, Muller, H Ahmed et al. Focal Therapy in Prostate Cancer: International Multidisciplinary Consensus on Trial Design. *EUROPEAN UROLOGY* 65 (2014); pp.1078-1083.
30. A Marien, I Gill, O Ukimura. Target ablation—Image-guided therapy in prostate cancer. *Urologic Oncology: Seminars and Original Investigations* 32(2014); 912–923.
31. HIFU文獻：Matthew G. Parry, Arunan Sujenthiran, Julie Nossiter et al., Prostate cancer outcomes following whole-gland and focal high-intensity focused ultrasound, *BJU International* 2023; 132: 568–574
32. NCCN Practice Guidelines in Oncology, 2026.



33. EAU-EANM-ESTRO-ESUR-ISUP-SIOG Guidelines on Prostate Cancer-2024 Update.
34. Clinically Localized Prostate Cancer (AUA/ASTRO/SUO)-2022.
35. Perez and Brady's : Principles and Practice of Radiation Oncology, 7th ed, 2018.
36. Eric K. Hansen, Handbook of Evidence-Based Radiation Oncology.
37. 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 Treatment of Advanced Prostate Cancer: A Randomized Trial.
<https://www.Sciencedirect.Com/.https://www.sciencedirect.com/science/article/pii/009042959180077K>
38. 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.
39. 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.
40. 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>.
41. 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 & Affiliations Published June 2, 2019. N Engl J Med 2019;381:121-131. DOI: 10.1056/NEJMoa1903835. VOL. 381 NO. 2.



42. 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/NEJMoa1903307. VOL. 381 NO.
43. 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.
44. 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



十二、攝護腺癌各期治療完治定義

期別	治療方式	完治定義	備註
第 I 期 第 II 期	1.Active surveillance 2.OP 3.R/T ± ADT	1.Active surveillance—回診三次(或回診一次加個管師電訪兩次)判完治 or 2.完成手術 or 3.完成 EBRT	
第 III 期	1.OP 2.R/T + ADT 3.ADT	1.完成手術 or 2.完成 EBRT 3.接受荷爾蒙治療持續 6 個月即完治。	
第 IV 期	H/T ± Palliative RT	1.STAGE IV 接受荷爾蒙治療追蹤 serum PSA 3 個月一次若下降即完治。 2.STAGE IV 接受放射治療一個療程 3.STAGE IV 接受安寧照護	