# EAU-EANM-ESTRO-ESUR-SIOG GUIDELINES ON PROSTATE CANCER

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#### Introduction

Prostate cancer (PCa) is a complex disease, in which disease characteristics, age, comorbidities and individual patient preference will impact treatment choice. All available management options need to be discussed, in full, with the patient.

## **Epidemiology and Risk Prevention**

Prostate cancer is the second most common cancer in males. It is a major health concern, especially in developed countries due to the greater proportion of elderly men in the general population, and the potential risk of over-treatment following early diagnosis. There are three well-established risk factors for PCa: increasing age, ethnic origin, and genetic predisposition. There is currently no high-level evidence that preventative measures may reduce the risk of PCa.

#### Classification and Staging Systems

The 2017 Tumour Node Metastasis (TNM) classification is used for staging (Table 1).

#### Table 1: 2017 TNM classification

	T - Primary Tumour			
(stag	ge base	ed on digital rectal examination [DRE] only)		
TX	Prim	ary tumour cannot be assessed		
T0	No e	No evidence of primary tumour		
T1	Clinic	cally inapparent tumour that is not palpable		
	T1a	Tumour incidental histological finding in 5% or less of tissue resected		
	T1b	Tumour incidental histological finding in more than 5% of tissue resected		
	T1c	Tumour identified by needle biopsy (e.g. because of elevated PSA)		
T2	Tumo	our that is <b>palpable</b> and confined within prostate		
	T2a	Tumour involves one half of one lobe or less		
	T2b	Tumour involves more than half of one lobe, but not both lobes		
	T2c	Tumour involves both lobes		
T3	Tumo	our extends through the prostatic capsule		
	T3a	Extracapsular extension (unilateral or bilateral)		
	T3b	Tumour invades seminal vesicle(s)		
T4	Tumo	our is fixed or invades adjacent structures other		
	than seminal vesicles: external sphincter, rectum,			
	levat	or muscles, and/or pelvic wall		
N - Regional (pelvic) Lymph Nodes <sup>1</sup>				
NX	Regio	onal lymph nodes cannot be assessed		
N0	No re	egional lymph node metastasis		
N1	Regio	onal lymph node metastasis		

M - Distant Metastasis <sup>2</sup>		
M0	No di	stant metastasis
M1	Dista	nt metastasis
	M1a	Non-regional lymph node(s)
	M1b	Bone(s)
	M1c	Other site(s)

<sup>&</sup>lt;sup>1</sup> Metastasis no larger than 0.2 cm can be designated pNmi.

Pathological staging (pTNM) is based on histopathological tissue assessment and largely parallels the clinical TNM. except for clinical stage T1c and the T2 substages. All histopathologically confirmed organ-confined PCas after radical prostatectomy (RP) are pathological stage T2 and the current UICC no longer recognises pT2 substages.

Table 2: EAU risk groups for biochemical recurrence of localised and locally advanced prostate cancer

Definition			
Low-risk	Intermediate-	High-risk	
PSA < 10 ng/mL	PSA 10-20 ng/mL	PSA > 20 ng/mL	any PSA
and GS < 7	or GS 7	or GS > 7	any GS (any
(ISUP grade 1)	(ISUP grade 2/3)	(ISUP grade 4/5)	ISUP grade)
and cT1-2a	or cT2b	or cT2c	cT3-4 or cN+
Localised			Locally
			advanced

GS = Gleason score; ISUP = International Society for Urological Pathology; PSA = prostate-specific antigen.

<sup>&</sup>lt;sup>2</sup> When more than one site of metastasis is present, the most advanced category is used. (p)M1c is the most advanced category.

The International Society of Urological Pathology (ISUP) World Health Organization (WHO) 2014 grade groups have been adopted which allow patients to better understand the behaviour of their diagnosed prostate carcinoma, while separating GS 7 adenocarcinoma into two prognostically very distinct categories; grade group 2 for GS 7(3+4) and grade group 3 for GS 7(4+3) (see Table 3).

Table 3: ISUP 2014 grade

Gleason score	ISUP grade
2-6	1
7(3+4)	2
7(4+3)	3
8(4+4 or 3+5 or 5+3)	4
9-10	5

Recommendations for screening and early detection	Strength rating
Do not subject men to prostate-specific antigen (PSA) testing without counselling them on the potential risks and benefits.	Strong
Offer an individualised risk-adapted strategy for early detection to a well-informed man and a life-expectancy of at least 10 to 15 years.	Weak
Offer early PSA testing to well-informed men at elevated risk of having PCa:  • men > 50 years of age;  • men > 45 years of age and a family history of PCa;  • men of African descent > 45 years of age;  • men carrying BRCA2 mutations > 40 years of age.	Strong

Offer a risk-adapted strategy (based on	Weak
initial PSA level), with follow-up intervals of	
2 years for those initially at risk:	
<ul> <li>men with a PSA level of &gt; 1 ng/mL at</li> </ul>	
40 years of age;	
• men with a PSA level of > 2 ng/mL at	
60 years of age;	
Postpone follow-up to 8 years in those not	
at risk.	
Stop early diagnosis of PCa based on life	Strong
expectancy and performance status; men	
who have a life-expectancy of < 15 years are	
unlikely to benefit.	

# **Diagnostic Evaluation**

#### Clinical diagnosis

Prostate cancer is usually suspected on the basis of DRE and/or PSA levels. Definitive diagnosis depends on histopathological verification of adenocarcinoma in prostate biopsy cores, specimens from transurethral resection of the prostate (TURP), or prostatectomy for benign prostatic enlargement.

The decision whether to proceed with further diagnostic or staging work-up is guided by which treatment options are available to the patient, taking the patient's life expectancy into consideration. Diagnostic procedures that will not affect the treatment decision can usually be avoided.

Guidelines for diagnostic imaging	Strength rating	
Recommendations for all patients		
Do not use multi-parametric magnetic	Strong	
resonance imaging (mpMRI) as an initial		
screening tool.		

Adhere to PI-RADS guidelines for mpMRI acquisition and interpretation and evaluate mpMRI results in multidisciplinary meetings with pathological feedback.	Strong		
Recommendations in biopsy-naïve patients			
Perform mpMRI before prostate biopsy.	Strong		
When mpMRI is positive (i.e. PI-RADS $\geq$ 3), combine targeted and systematic biopsy.	Strong		
When mpMRI is negative (i.e., PI-RADS ≤ 2), and clinical suspicion of PCa is low, omit biopsy based on shared decision making with the patient.	Weak		
Recommendations in patients with prior negative biopsy			
Perform mpMRI before prostate biopsy.	Strong		
When mpMRI is positive (i.e. PI-RADS $\geq$ 3), perform targeted biopsy only.	Weak		
When mpMRI is negative (i.e., PI-RADS ≤ 2), and clinical suspicion of PCa is high, perform systematic biopsy based on shared decision making with the patient.	Strong		

#### Pathology of prostate biopsies

A biopsy pathology report includes the type of carcinoma and parameters describing its extent (e.g. proportion of positive cores, percentage or mm of carcinoma involvement per core) as well as Gleason score (GS) per biopsy site and global GS. Reporting of a RP specimen includes type of carcinoma, global ISUP grade, pathological stage and surgical margin status

Recommendations for the clinical diagnosis	Strength rating
Perform transrectal prostate needle	Strong
biopsies under antibiotic protection.	
Use a local anaesthetic by peri-prostatic	Strong
infiltration for prostate needle biopsies.	

Do not offer non-targeted transition zone sampling at initial biopsies due to low detection rates.	Weak
Ensure that prostate core biopsies from different sites are submitted separately for	Strong
processing and pathology reporting.	

# **Guidelines for staging of PCa**

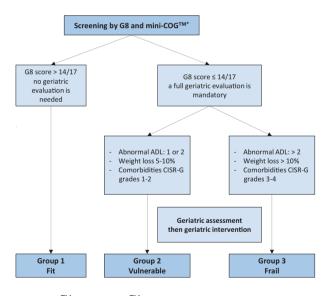
Any risk group staging	Strength rating	
Use pre-biopsy mpMRI for staging	Weak	
information.		
Low-risk localised PCa		
Do not use additional imaging for staging	Strong	
purposes.		
Intermediate-risk PCa		
In ISUP grade ≥ 3, include at least a cross-	Weak	
sectional abdominopelvic imaging and		
bone-scan for metastatic screening.		
High-risk localised PCa/locally advanced PCa		
Perform metastatic screening including at	Strong	
least cross-sectional abdominopelvic		
imaging and a bone-scan.		

# **Evaluating health status and life expectancy**

Recommendations	Strength rating
Use individual life expectancy, health status,	Strong
and comorbidity in PCa management.	
Use the Geriatric-8 and mini-COG tools for	Strong
health status screening.	
Perform a full specialist geriatric evaluation	Strong
in patients with a G8 score < 14.	

Consider standard treatment in vulnerable patients with reversible impairments (after resolution of geriatric problems) similar to fit patients, if life expectancy is > 10 years.	Weak
Offer adapted treatment to patients with irreversible impairment.	Weak
Offer symptom-directed therapy alone to frail patients.	Strong

Figure 1: Decision tree for health status screening (men > 70 years)\*



 $Mini-COG^{TM} = Mini-COG^{TM}$  cognitive test; ADLs = activities of daily living; CIRS-G = Cumulative Illness Rating Score - Geriatrics; CGA = comprehensive geriatric assessment.

- \*For Mini-COG<sup>TM</sup>, a cut-off point of < 3/5 indicates a need to refer the patient for full evaluation of potential dementia.
- \*\*Reproduced with permission of Elsevier, from Boyle H.J., et al. Eur J Cancer 2019:116: 116.

## **Disease Management** Deferred treatment

Many men with localised PCa will not benefit from definitive treatment and 45% of men with PSA-detected PCa may be candidates for deferred management.

In men with comorbidity and a limited life expectancy, treatment of localised PCa may be deferred to avoid loss of quality of life (QoL).

## General guidelines for active treatment of PCa

Recommendations	Strength rating
Inform patients that no active treatment	Strong
modality has shown superiority over any	
other active management options or	
deferred active treatment in terms of	
overall- and PCa-specific survival for	
clinically localised disease.	
Offer a watchful waiting policy to asympto-	Strong
matic patients with a life expectancy < 10	
years (based on comorbidities).	
Inform patients that all active treatments	Strong
have side effects.	
Surgical treatment	
Inform patients that no surgical approach	Weak
(open-, laparoscopic- or robotic radical	
prostatectomy) has clearly shown	
superiority in terms of functional or	
oncological results.	

When a lymph node dissection (LND) is deemed necessary, perform an extended LND template for optimal staging.	Strong
Do not perform nerve-sparing surgery when there is a risk of ipsilateral extracapsular extension (based on cT stage, ISUP grade, nomogram, multiparametric magnetic resonance imaging).	Weak
Do not offer neoadjuvant androgen deprivation therapy before surgery.	Strong
Radiotherapeutic treatment	
Offer intensity-modulated radiation therapy (IMRT) or volumetric arc external-beam radiotherapy (VMAT) for definitive treatment of PCa by external-beam radiation therapy.	Strong
Offer moderate hypofractionation (HFX) with IMRT/VMAT, including image-guided radiation therapy to the prostate, to carefully selected patients with localised disease.	Strong
Ensure that moderate HFX adheres to radiotherapy protocols from trials with equivalent outcome and toxicity, i.e. 60 Gy/20 fractions in 4 weeks or 70 Gy/28 fractions in 6 weeks.	Strong
Active therapeutic options outside surgery and radiotherapy	
Only offer cryotherapy and high-intensity focused ultrasound within a clinical trial setting or well-designed prospective cohort study.	Strong
Only offer focal therapy within a clinical trial setting or well-designed prospective cohort study.	Strong

# **Guidelines for first-line treatment of various disease** stages

Recommendation	ons	Strength rating
Low-risk diseas	e	
Active surveillance (AS)	Offer AS to patients with a life expectancy > 10 years and lowrisk disease.	Strong
	If a patient has had upfront multiparametric magnetic resonance imaging (mpMRI) followed by systematic and targeted biopsies there is no need for confirmatory biopsies.	Weak
	Patients with intraductal and cribiform histology on biopsy should be excluded from AS.	Strong
	If required, perform mpMRI before a confirmatory biopsy.	Strong
	Take both targeted biopsy (of any PI-RADS > 3 lesion) and systematic biopsy if confirmatory biopsy performed.	Strong
	Perform serum prostate-specific antigen (PSA) assessment every 6 months.	Strong
	Perform digital rectal examination (DRE) every 12 months.	Strong

	Repeat biopsy should be performed if there is evidence of PSA progression, clinical progression on DRE or radiological progression on mpMRI.	Strong
	During follow-up, if mpMRI is negative (i.e., PI-RADS ≤ 2), and clinical suspicion of PCa progression is low (e.g. low PSA velocity, long PSA doubling time [DT]), omit biopsy based on shared decision making with the patient.	Weak
	Counsel patients about the possibility of needing further treatment in the future.	Strong
Active treatment	Offer surgery and radiotherapy (RT) as alternatives to AS to patients suitable for such treatments and who accept a trade-off between toxicity and prevention of disease progression.	Weak
Pelvic lymph node dissection (PLND)	Do not perform a PLND (estimated risk for pN+ $\leq$ 5%).	Strong

Radiotherapy	Offer low-dose rate (LDR) brachytherapy to patients with low-risk PCa, without a previous transurethral resection of the prostate (TURP), with a good International Prostatic Symptom Score (IPSS) and a prostate volume < 50 mL.  Use intensity-modulated radiation therapy (IMRT) with a total dose of 74-80 Gy or moderate hypofractionation (60 Gy/20 fx in 4 weeks, or 70 Gy/28 fx in 6	Strong
	weeks), without androgen deprivation therapy (ADT).	
Other options	Only offer whole gland treatment (such as cryotherapy, high-intensity focused ultrasound [HIFU], etc.) or focal treatment within a clinical trial setting or well-designed prospective cohort study.	Strong
Intermediate-ris	k disease	
Active surveillance	Offer AS to highly selected patients (< 10% Gleason pattern 4) accepting the potential increased risk of further metastases.	Weak
Radical prostatectomy (RP)	Offer RP to patients with intermediate-risk disease and a life expectancy > 10 years.	Strong
	Offer nerve-sparing surgery to patients with a low risk of extracapsular disease.	Strong

Extended pelvic lymph node dissection (ePLND)	Perform an ePLND in intermediate-risk disease if the estimated risk for positive LNs exceeds 5%.	Strong
Radiotherapy	Offer LDR brachytherapy to selected patients; patients without a previous TURP, with a good IPSS and a prostate volume < 50 mL.	Strong
	For EBRT, use a total dose of 76-78 Gy or moderate hypo-fractionation (60 Gy/20 fx in 4 weeks or 70 Gy/28 fx in 6 weeks), in combination with short-term neoadjuvant plus concomitant ADT (4 to 6 months).	Strong
	In patients not willing to undergo ADT, use an escalated dose of EBRT (76-80 Gy) or a combi- nation with brachytherapy.	Weak
Other therapeutic options	Only offer whole-gland ablative therapy (such as cryotherapy, HIFU, etc.) or focal ablative therapy for intermediate-risk disease within a clinical trial setting or well-designed prospective cohort study.	Strong
	Do not offer ADT monotherapy to intermediate-risk asympto- matic men unable to receive any local treatment.	Weak

High-risk localised disease		
Radical prostatectomy (RP)	Offer RP to selected patients with high-risk localised PCa, as part of a potential multi-modal therapy.	Strong
Extended pelvic	Perform an ePLND in high-risk PCa.	Strong
lymph node dissection	Do not perform a frozen section of nodes during RP to decide whether to proceed with, or abandon, the procedure.	Strong
Radiotherapy	In patients with high-risk localised disease, use ERBT with 76-78 Gy in combination with long-term ADT (2 to 3 years).	Strong
	In patients with high-risk localised disease, use EBRT with brachytherapy boost (either HDR or LDR), in combination with long-term ADT (2 to 3 years).	Weak
Other options	Do not offer either whole gland or focal therapy to high-risk patients.	Strong
	Do not use ADT monotherapy in asymptomatic patients.	Strong
Locally-advanced disease		
Radical prostatectomy	Offer RP to highly selected patients with cT3b-T4 N0 or any cN1 disease only as part of multi-modal therapy.	Strong

Extended pelvic lymph node dissection	Perform an ePLND in high-risk PCa.	Strong
Radiotherapy	In patients with locally advanced cN0 disease, offer RT in combination with long-term ADT.	Strong
	Offer long-term ADT for at least 2 years.	Weak
Other options	Do not offer whole gland treatment or focal treatment to high-risk patients.	Strong
	Only offer ADT monotherapy to those patients unwilling or unable to receive any form of local treatment if they have a PSA-DT < 12 months, and either a PSA > 50 ng/mL, a poorly-differentiated tumour or trouble-some local disease-related symptoms.	Strong
	Offer patients with cN1 disease a local treatment (either RP or EBRT) plus long-term ADT.	Weak
Adjuvant treatm	ent after radical prostatectomy	
	Do not prescribe adjuvant ADT in pN0 patients.	Strong
	Offer adjuvant EBRT to the surgical field to highly selected patients.	Strong

	Discuss three management	Weak
	options with patients with pN+	
	disease after an ePLND, based	
	on nodal involvement	
	characteristics:	
	1. Offer adjuvant ADT;	
	2. Offer adjuvant ADT with	
	additional radiotherapy;	
	3. Offer observation (expectant	
	management) to a patient	
	after eLND and ≤ 2 nodes with	
	microscopic involvement,	
	and a PSA < 0.1 ng/mL and	
	absence of extranodal	
	extension.	
Non-curative or	palliative treatments in a first-line	setting
Localised diseas	se	
Watchful	Offer WW to asymptomatic	Strong
waiting (WW)	patients not eligible for local	
	curative treatment and those	
	with a short life expectancy.	
Localised advar	nced disease	
Watchful	Offer a deferred treatment	Strong
waiting	policy using ADT monotherapy	
	to M0 asymptomatic patients	
	with a PSA-DT > 12 months,	
	a PSA < 50 ng/mL and well-	
	differentiated tumour, who are	
	unwilling or unable to receive	
	any form of local treatment.	

Persistent PSA after RP	
Offer a prostate-specific membrane antigen	Weak
(PSMA) positron emission tomography (PET)	
scan to men with a persistent PSA > 0.2 ng/mL	
to exclude metastatic disease.	
Treat men with no evidence of metastatic	Weak
disease with salvage radiotherapy and additional	
hormonal therapy.	

#### Follow-up after treatment with curative intent

- After RP, PSA should be undetectable (< 0.1 ng/mL).</li>
   A PSA of > 0.1 ng/mL after RP is a signal of residual prostate tumour tissue. After an undetectable PSA is obtained following RP, a PSA > 0.4 ng/mL and rising, best predicts further metastases.
- After RT, an increase in PSA > nadir + 2 ng/mL best predicts further metastases.
- Palpable nodules and increasing serum PSA are often signs of local recurrence.

Recommendations for follow-up	Strength rating
Routinely follow up asymptomatic patients	Strong
by obtaining at least a disease-specific	
history and serum prostate-specific	
antigen (PSA) measurement. These should	
be performed at 3, 6 and 12 months after	
treatment, then every 6 months until	
3 years, and then annually.	
At recurrence, only perform imaging to	Strong
detect local recurrence if the outcome will	
affect treatment planning.	

Only offer bone scans and other imaging	Strong
modalities to men with biochemical	
recurrence or symptoms suggestive of	
progression without signs of biochemical	
relapse.	

# Guidelines for metastatic disease, second-line and palliative treatments

Recommendations	Strength rating	
Metastatic disease in a first-line setting		
Offer immediate systemic treatment with androgen deprivation therapy (ADT) to palliate symptoms and reduce the risk for potentially serious sequelae of advanced disease (spinal cord compression, pathological fractures, ureteral obstruction) to M1 symptomatic patients.	Strong	
Offer luteinising hormone-releasing hormone (LHRH) antagonists, especially to patients with an impending spinal cord compression or bladder outlet obstruction.	Weak	
Offer surgery and/or local radiotherapy (RT) to any patient with M1 disease and evidence of impending complications such as spinal cord compression or pathological fracture.	Strong	
Offer immediate systemic treatment also to M1 patients asymptomatic from their tumour.	Weak	

Discuss deferred ADT with well-informed M1 patients asymptomatic from their tumour since it lowers the treatment-related side-effects, provided the patient is closely monitored.	Weak
Offer short-term administration of an older generation androgen receptor (AR) antagonist to M1 patients starting LHRH agonist to reduce the risk of the 'flare-up' phenomenon.	Weak
Do not offer AR antagonists monotherapy to patients with M1 disease.	Strong
Offer ADT combined with chemotherapy (docetaxel) to patients whose first presentation is M1 disease and who are for docetaxel.	Strong
Offer ADT combined with abiraterone acetate plus prednisone or apalutamide or enzalutamide to patients whose first presentation is M1 disease and who are fit enough for the regimen.	Strong
Offer ADT combined with prostate RT to patients whose first presentation is M1 disease and who have low volume of disease by CHAARTED criteria.	Strong
Do not offer ADT combined with any local treatment (RT/surgery) to patients with high volume (CHAARTED criteria) M1 disease outside of clinical trials (except for symptom control).	Strong

Recommendations for imaging in	Strength rating	
biochemical recurrence		
Prostate-specific antigen (PSA) recurrence	after radical	
prostatectomy		
Perform prostate-specific membrane	Weak	
antigen positron emission tomography/		
computed tomography (PSMA PET/CT)		
if the PSA level is > 0.2 ng/mL and if the		
results will influence subsequent treatment		
decisions.		
In case PSMA PET/CT is not available, and	Weak	
the PSA level is ≥ 1 ng/mL, perform		
fluciclovine PET/CT or choline PET/CT		
imaging if the results will influence		
subsequent treatment decisions.		
PSA recurrence after radiotherapy		
Perform prostate mpMRI to localise	Weak	
abnormal areas and guide biopsies in		
patients fit for local salvage therapy.		
Perform PSMA PET/CT (if available) or	Strong	
fluciclovine PET/CT or choline PET/CT in		
patients fit for curative salvage treatment.		

Recommendation treatment with	ons for second-line therapy after curative intent	Strength rating	
Biochemical rec	Biochemical recurrence after treatment with curative intent		
Biochemical recurrence after radical prostatectomy (RP)	Offer PSA monitoring to patients with biochemical recurrence with low-risk features at relapse who may not benefit from intervention.	Weak	
	Offer salvage radiotherapy (SRT) to patients with a PSA rise from the undetectable range. Once the decision for SRT has been made, SRT (at least 66 Gy) should be given as soon as possible.	Strong	
	Offer hormonal therapy in addition to SRT to men with biochemical recurrence.	Weak	
Biochemical recurrence after RT	Treat highly selected patients with localised PCa and a histologically proven local recurrence with salvage RP (SRP).	Weak	
	Salvage RP should only be performed in experienced centres.	Weak	
	Only offer salvage high intensity focused ultrasound, salvage cryosurgical ablation and salvage brachytherapy to patients with proven local recurrence within a clinical trial setting or well-designed prospective cohort study.	Strong	

Systemic	Do not offer ADT to M0 patients	Strong	
salvage	with a PSA-DT > 12 months.		
treatment			
Life-prolonging	treatments of castration-resistan	t disease	
	Ensure that testosterone levels are confirmed to		
be < 50 ng/dL, before diagnosing castration-			
resistant PCa (C	RPC).		
	e and treat patients with meta-	Strong	
	RPC) in a multidisciplinary team.		
	th mCRPC with life-prolonging	Strong	
0	choice of first-line treatment on		
	e status (PS), symptoms,		
	cation and extent of disease, ce, and on the previous treatment		
	nsitive metastatic PCa (HSPC)		
	` ,		
	(alphabetical order: abiraterone, cabazitaxel, docetaxel, enzalutamide, radium-223, sipuleucel-T).		
Cytotoxic treatments of castration-resistant disease			
-	Offer patients with mCRPC who are candidates Strong		
	rapy docetaxel with 75 mg/m <sup>2</sup>		
every 3 weeks.			
Offer patients w	ith mCRPC and progression	Strong	
	xel chemotherapy further		
life-prolonging treatment options, which include			
abiraterone, cabazitaxel, enzalutamide and			
radium-223.			
Base further treatment decisions of mCRPC on Strong			
pre-treatment PS, response to previous			
treatment, symptoms, comorbidities, extent of			
disease and patient preference.			
	I to patients previously treated	Strong	
with docetaxel and progressing within 12 months of treatment with abiraterone or enzalutamide.			
or treatment wit	n abiraterone or enzalutamide.		

Supportive care of castration-resistant disease		
Offer bone protective agents to patients with mCRPC and skeletal metastases to prevent osseous complications.	Strong	
Monitor serum calcium and offer calcium and vitamin D supplementation when prescribing either denosumab or bisphosphonates.	Strong	
Treat painful bone metastases early on with palliative measures such as EBRT and adequate use of analgesics.	Strong	
In patients with spinal cord compression start immediate high-dose corticosteroids and assess for spinal surgery followed by irradiation. Offer radiation therapy alone if surgery is not appropriate.	Strong	
Non-metastatic castrate-resistant disease		
Offer apalutamide, darolutamide or enzalutamide to patients with M0 CRPC and a high risk of developing metastasis (PSA-DT < 10 months) to prolong time to metastases.	Strong	

# Follow-up after treatment with life-prolonging treatments

Recommendations for follow-up during hormonal treatment	Strength rating
Evaluate patients at 3 to 6 months after the initiation of treatment.	Strong
The follow-up strategy must be individualised based on stage of disease, prior symptoms, prognostic factors and the treatment given.	Strong

In patients with stage M0 disease, schedule follow-up at least every 6 months. As a minimum requirement, include a disease-specific history, serum prostate-specific antigen (PSA) determination, as well as liver and renal function in the diagnostic work-up.	Strong
In patients with stage M1 disease, schedule follow-up every 3 to 6 months. As a minimum requirement, include an initial FRAX-score assessment, disease-specific history, digital rectal examination (DRE), serum PSA, haemoglobin, serum creatinine and alkaline phosphatase measurements in the diagnostic work-up. The testosterone level should be checked, especially during the first year. Pay attention to symptoms associated with metabolic syndrome as a side effect of androgen deprivation therapy (ADT). Phospholipid profiles and glucose levels should be checked and treated if abnormal.	Strong
Counsel patients (especially with M1b status) about the clinical signs suggestive of spinal cord compression.	Strong
When disease progression is suspected, adapt/individualise follow up.	Strong
In patients with suspected progression, assess the testosterone level. By definition, castration-resistant PCa requires a testosterone level < 50 ng/dL (< 1 mL/L).	Strong
Do not offer routine imaging to otherwise stable asymptomatic patients.	Strong

#### **Quality of Life**

Treating PCa can affect an individual both physically and mentally, as well as his close relations and his work or vocation. These multifaceted issues all have a bearing on his perception of 'quality of life (QoL)'. Prostate cancer care should not be reduced to focusing on the organ in isolation. Taking QoL into consideration relies on understanding the patient's wishes and preferences so that optimal treatment can be discussed. There is clear evidence of unmet needs and ongoing support requirements for some men after diagnosis and treatment for PCa.

This short booklet text is based on the more comprehensive EAU Guidelines (ISBN 978-94-92671-07-3), available to all members of the European Association of Urology at their website: <a href="http://www.uroweb.org/guidelines/">http://www.uroweb.org/guidelines/</a>.