Name ID DOB

Physician Exam date current Exam date comparator

Soft tissues RECIST criteria	MET-RADS Prostate Report	Bones MET-RADS criteria

Primary
Involved Y N
RAC 1◦ 2◦
Comment

Pelvic nodes
Involved Y N
RAC 1◦ 2◦
Comment

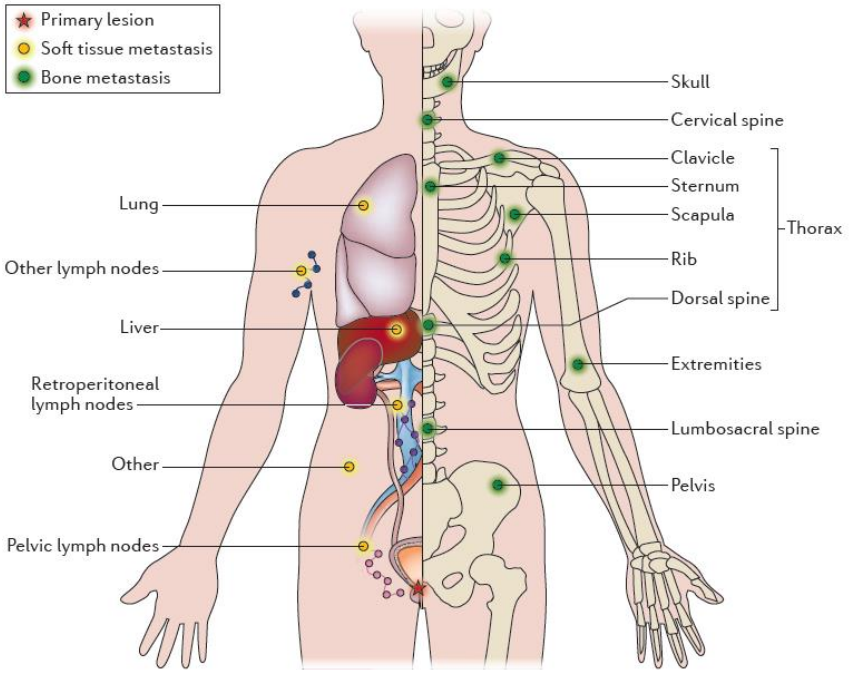
Retroperitoneal
Involved Y N
RAC 1◦ 2◦
Comment

Other nodes
Involved Y N
RAC 1◦ 2◦
Comment

Liver
Involved Y N
RAC 1◦ 2◦
Comment

Lungs
Involved Y N
RAC 1◦ 2◦
Comment

Other sites
Involved Y N
RAC 1◦ 2◦
Comment



OVERALL ASSESSMENT

	No dis	CR	PR	SD	PD	Mixed
Primary						Minor or major
Nodes						for progressive lesions
Viscera						overall SD/PR
Bones			RAC 1/2	RAC3	RAC 4/5	assessments

Comments

Skull
Involved Y N
RAC 1◦ 2◦
Comment

Cervical spine
Involved Y N
RAC 1◦ 2◦
Comment

Dorsal spine
Involved Y N
RAC 1◦ 2◦
Comment

Lumbosacral spine
Involved Y N
RAC 1◦ 2◦
Comment

Pelvis
Involved Y N
RAC 1◦ 2◦
Comment

Thorax
Involved Y N
RAC 1◦ 2◦
Comment

Limbs
Involved Y N
RAC 1◦ 2◦
Comment

Response assessment categories (RAC): 1 Response: highly likely; 2 Response: likely; 3 Stable; 4 Progression: likely; 5 progression: highly likely. Single lesion 1° RAC only; ≥2 lesions or diffuse disease use both RACs

METastasis Reporting and Data System for Prostate Cancer: Practical Guidelines for Acquisition, Interpretation, and Reporting [MET-RADS-P] of Whole-body MRI Evaluations of Multiorgan Involvement in Advanced Prostate Cancer. Eur Urol. 2017; 71:81-92

Radiologist Date

RAC	Region	MET-RADS-P Descriptions
1 **RESPONSE: highly likely**	Local, nodal and visceral	Consistent with RECIST v1.1/PCWG criteria for unequivocal response (partial/complete).
	Bone	Return of normal marrow in areas previously infiltrated by focal/diffuse metastatic infiltration Decrease in number/size of focal lesions Evolution diffuse neoplastic pattern to focal lesions Decreasing soft tissue associated with bone disease Dense lesion sclerosis (edge to edge), sharply defined, very thin/disappearance of hyperintense rim on T2W-FS images The emergence of intra/peri-tumoural fat within/around lesions (fat dot/halo signs) Previously evident lesion shows increase in ADC from ≤1400 $\mu m^2/s$ to >1400 $\mu m^2/s$ ≥40% increase in ADC from baseline with corresponding decrease in high b-value SI; and morphological findings consistent with stable or responding disease
2 **RESPONSE: likely**	Local, nodal and visceral	Changes depicting tumour response that do not meet RECIST v1.1/PCWG criteria for partial or complete response (see below)
	Bone	Evidence of improvement, but not enough to fulfil criteria for RAC 1. For example: Previously evident lesions showing increases in ADC from ≤1000 $\mu m^2/s$ to <1400 $\mu m^2/s$ >25% but <40% increase in ADC from baseline with corresponding decrease in high b-value SI; and morphological findings consistent with stable or responding disease
3 **STABLE**	All	No observable change
4 **PROGRESSION : likely**	Local, nodal and visceral	Changes depicting tumour progression that do not meet RECIST v1.1/PCWG criteria for progression
	Bone	Evidence of worsening disease, but not enough to fulfil criteria for RAC 5. Equivocal appearance of new lesion(s) No change in size but increasing SI on high b-value images (with ADC values <1400 $\mu m^2/s$) consistent with possible disease progression Relapse disease: re-emergence of lesion(s) that previously disappeared or enlargement of lesion(s) lesions that had partially regressed/stabilized with prior treatments Imaging depicted bone lesions that might be clinically significant (therefore excludes asymptomatic fractures in non-critical bones) Soft tissue in spinal canal causing narrowing not associated with neurological findings and not requiring radiotherapy
5 **PROGRESSION: highly likely**	Local, nodal and visceral	Tumour progression that meet RECIST v1.1/PCWG criteria for unequivocal progression
	Bone	New critical fracture(s)/cord compression requiring radiotherapy/surgical intervention → only if confirmed as malignant by MRI signal intensity characteristics Unequivocal new focal(≥1cm)/diffuse metastatic infiltration in regions of prior normal marrow Unequivocal increase in number/size of focal lesions Evolution of focal lesions to diffuse neoplastic pattern Appearance/increasing soft tissue associated with bone disease New lesions/regions of high signal intensity on high b-value images with ADC value between 600-1000 $\mu m^2/s$

Response Assessment Category (RAC) allocation rules – compare to relevant prior scan

Multiple criteria are applied to determine RAC; when DWI & morphology are discordant then DWI has greater weighting for RAC score
Primary RAC value is based on the dominant response of more than half of the disease within the region; secondary RAC value is for the second most frequent response pattern (or RACS4/5 if minor pattern).
For a single lesion in a region only the primary number category is assessed. Regions with multiple lesions/diffuse disease, all with the same RAC, both the primary and secondary have the same values
When equal numbers of lesions are of higher and lower RACs then the primary pattern allocation is reserved for the higher RAC
Mixed response: use when overall assessment is SD/PR but individual lesion progression is detected. Minor/major progression subcategories indicates imaging recommendation on need to reassess therapy effectiveness

RECIST v1.1 categories

- Complete Response (CR): Disappearance of all target lesions
- Partial Response (PR): At least a 30% decrease in the sum of the longest diameter (LD) of target lesions, taking as reference the baseline sum LD
- Stable Disease (SD): Neither sufficient shrinkage to qualify for PR nor sufficient increase to qualify for PD, taking as reference the smallest sum LD since the treatment started
- Progressive Disease (PD): At least a 20% increase in the sum of the LD of target lesions, taking as reference the smallest sum LD recorded since the treatment started or the appearance of one or more new lesions

Progression of local prostate disease: Use RECIST v1.1 for progression criteria above applied to local disease
Progression of nodes (short axis)

- <1.0 cm nodes have to have grown by at least 5mm in from baseline or treatment nadir and be ≥1 cm to be considered to have progressed
- For nodes that are 1.0-1.5 cm that have grown by at least 5 mm from baseline or treatment nadir and are ≥1.5 cm in short axis can be considered to have progressed
- For nodes ≥1.5cm short axis use RECIST v1.1 progression criteria

Progression of visceral disease: Use RECIST v1.1 progression criteria above applied to visceral disease