

The Role of Imaging in the Diagnosis of Primary Prostate Cancer: Q&A

1. Is PIRAD scoring based solely on MRI scan findings?

Yes, it is based solely on the anatomic and functional sequences obtained during Multiparametric MRI (MP-MRI) scans.

2. How do we advise patients based on PIRADS grading? Interval of follow-up?

Guidelines vary in different countries. In the UK (NICE guidelines), a lesion with a score of 3 or greater should have a biopsy. For lesions with a lower score, follow up may be considered if clinical suspicion of prostate cancer is low (e.g. after correlating with free PSA ratio). In this scenario some recommend follow up PSA in 6 months.

3. Is contrast recommended with MRI prostate?

Yes, I.V. contrast is recommended for grading according to PIRADS criteria.

4. When we order MRI for prostate, do we have to indicate MP MRI or is it automatically done?

All prostate MRI scans are performed following multiparametric protocol at our centres as far as possible. There may be instances where a sequence may be omitted. For example, omitting the dynamic contrast enhancement (DCE) sequence in patients with contrast allergy.

5. Is there any value in Ultrasound Prostate?

In the primary care setting, ultrasound prostate is useful determine the prostate volume (to calculate PSA density) and evaluate BPH.

Transrectal ultrasound is commonly used to guide prostate biopsy.

6. Isn't it only the PIRAD 3 that require contrast? 1,2,4, and 5 are defined by the TW and DWI findings.

That is correct. The use of DCE is recommended by the PIRADS committee for MP-MRI.

7. If Clinical suspicion of prostate malignancy is low and Ultrasound Prostate shows calcifications – would it be better for surveillance VS going on to an MRI?

Calcifications in the prostate are mainly benign. If there are no other clinically suspicious findings, MP-MRI is not recommended to assess for cancer.

8. In the Situation of PIRADS 4 and 5, do you still need dynamic contrast?

Yes, the DCE scan is needed to assess for extra prostate disease and locoregional metastasis.