

Prostate Cancer
Updates 2019

Peter Chong

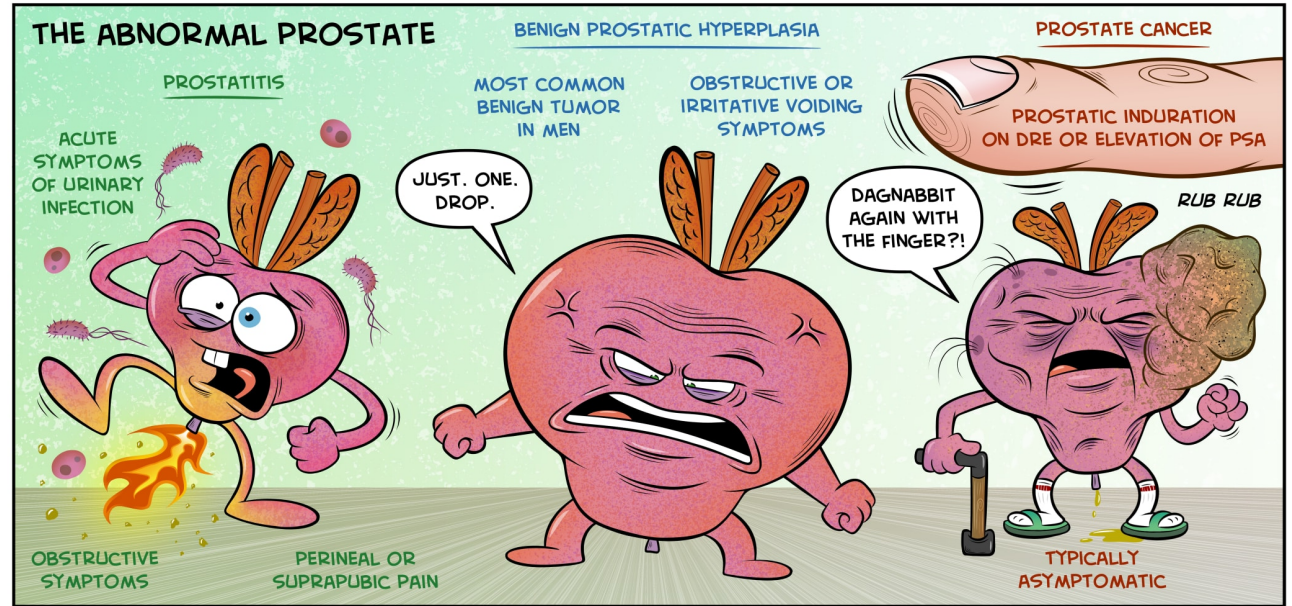


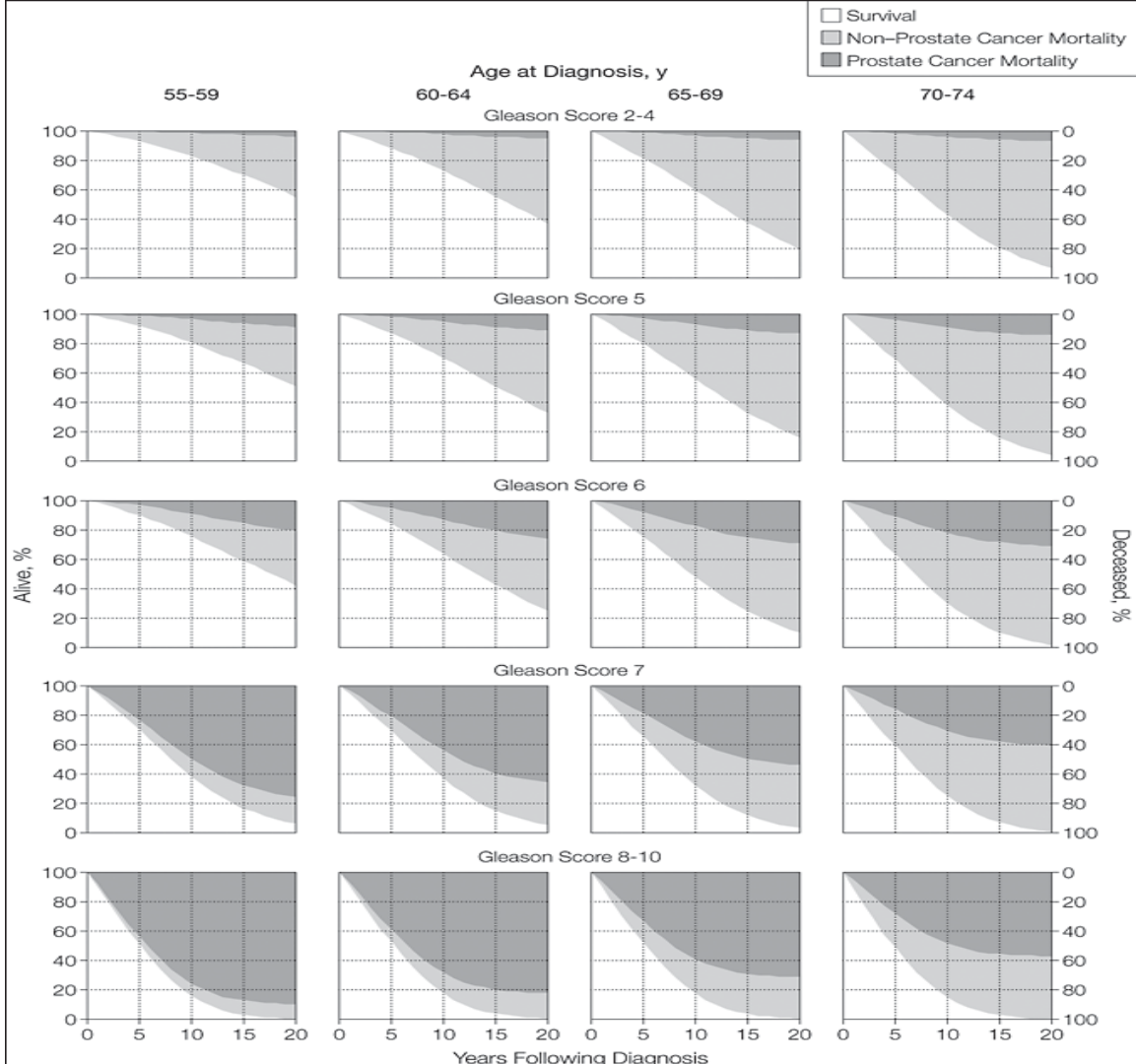
Jarad Martin



SYNOPSIS

- MRI
- Transperineal biopsy
- Robotic surgery
- Radiotherapy update
- SpaceOAR
- SBRT Brachytherapy
- Trials in Newcastle
- PSMA PET
- Case studies





MRI





New Medicare Benefits Schedule (MBS) Items for multiparametric magnetic resonance imaging (mpMRI) of the prostate

Last updated: 22/05/2018

What are the new services?

From 1 July 2018, Medicare rebates will be available for four new items covering mpMRI prostate scans for both the diagnosis of prostate cancer (items 63541 K & 63542 NK) and the active surveillance of patients with a proven diagnosis following biopsy histopathology (items 63543 K & 63544 NK). The MBS fee for K items 63541 and 63543 will be \$450. For the NK equivalents, 63542 and 63544, the MBS fee will be \$225. All items include the use of contrast.

Who can request these items?

Specialists and consultant physicians are eligible to request these items. General practitioners are not eligible to request these items.

What are the patient eligibility requirements?

These items are only for scans of patients with specified indications. The request form must list the relevant clinical indications.

For MBS items 63541 and 63542 (NK) the patient must be suspected of having prostate cancer based on:

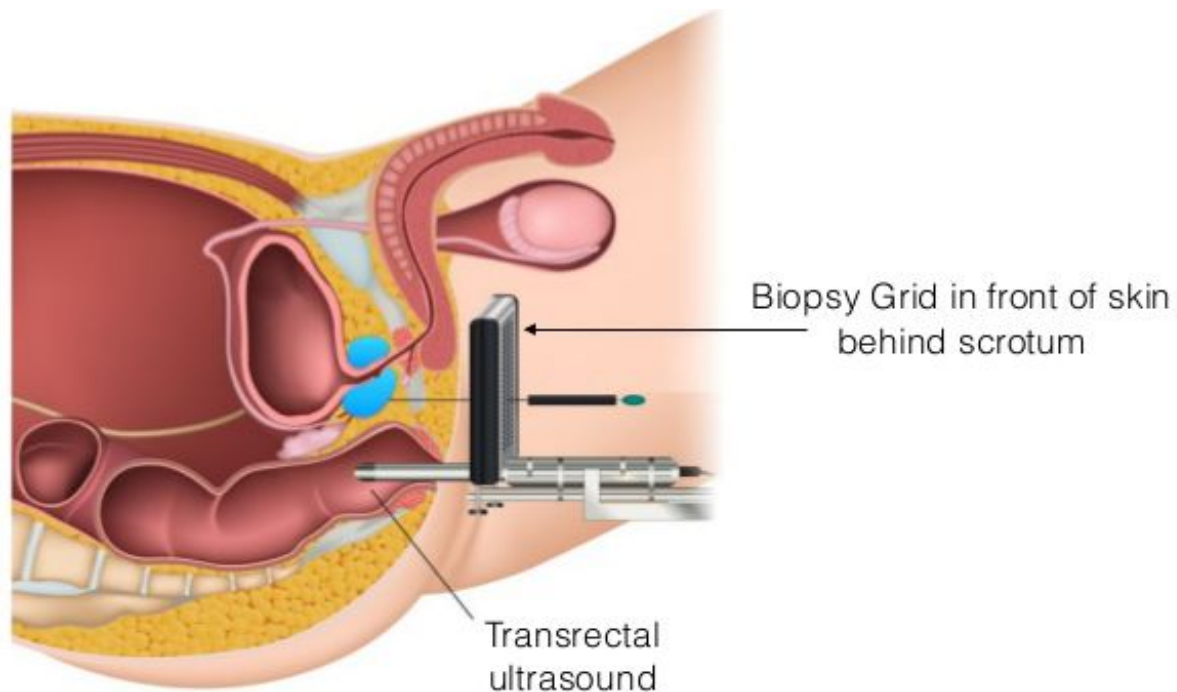
- a) a digital rectal examination (DRE) which is suspicious for prostate cancer; or
- b) in a person aged less than 70 years, at least two prostate specific antigen (PSA) tests performed within an interval of 1- 3 months are greater than 3.0 ng/ml, and the free/total PSA ratio is less than 25% or the repeat PSA exceeds 5.5 ng/ml; or
- c) in a person aged less than 70 years, whose risk of developing prostate cancer based on family history is at least double the average risk, at least two PSA tests performed within an interval of 1- 3 months are greater than 2.0 ng/ml, and the free/total PSA ratio is less than 25%; or
- d) in a person aged 70 years or older, at least two PSA tests performed within an interval of 1- 3 months are greater than 5.5ng/ml and the free/total PSA ratio is less than 25%.

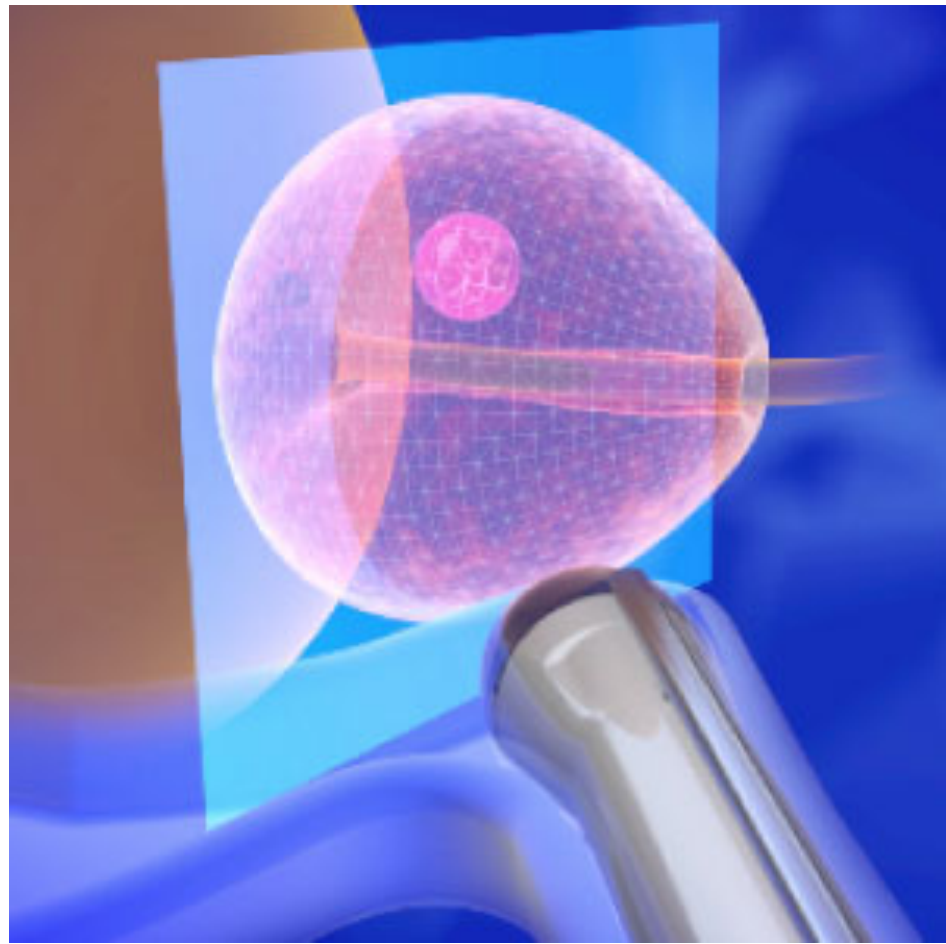
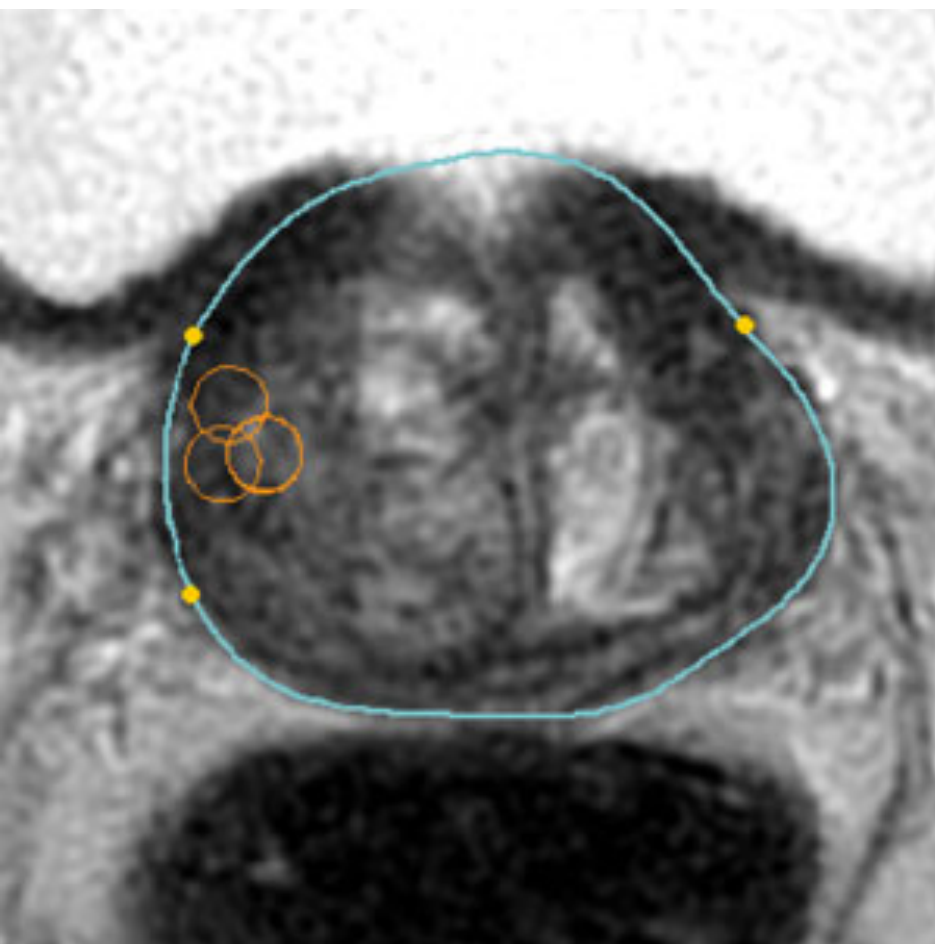
Note: Relevant family history is a first degree relative with prostate cancer or suspected of carrying a BRCA 1, BRCA 2 mutation.

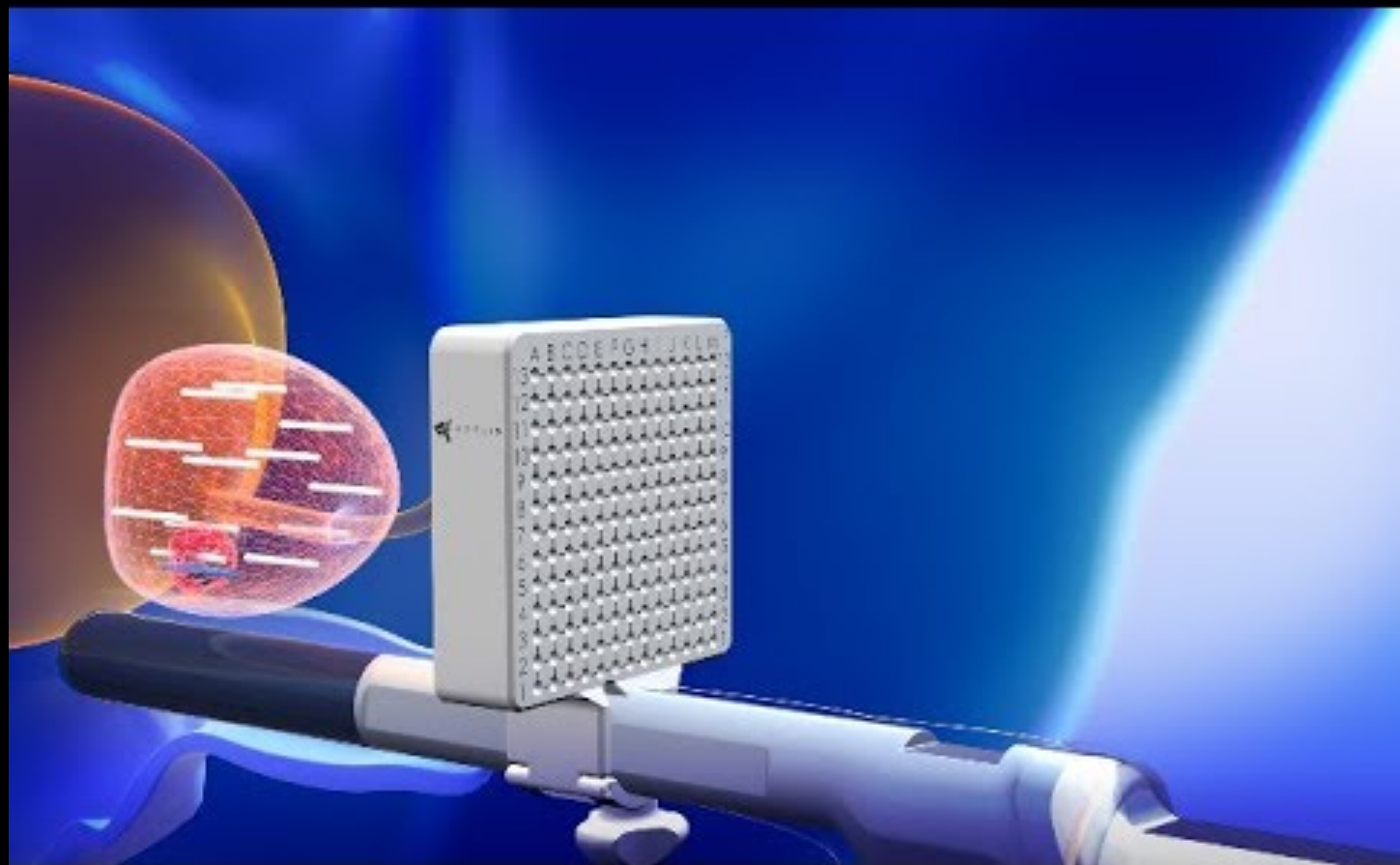
For MBS items 63543 and 63544 (NK) the below clinical criteria must be met:

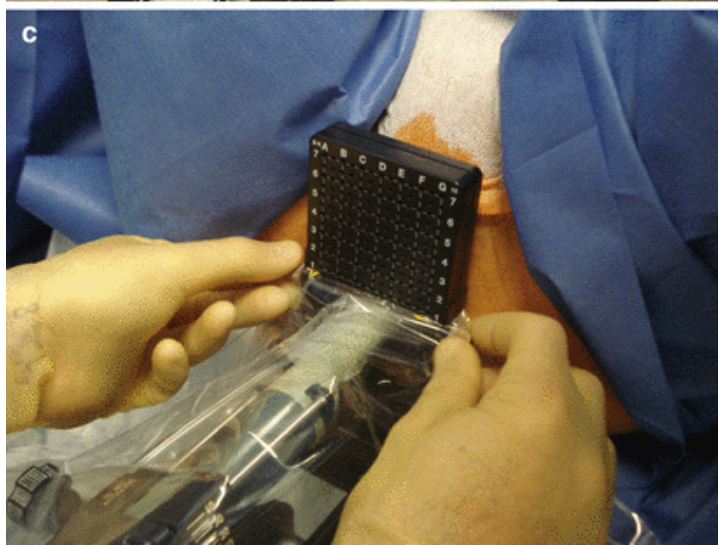
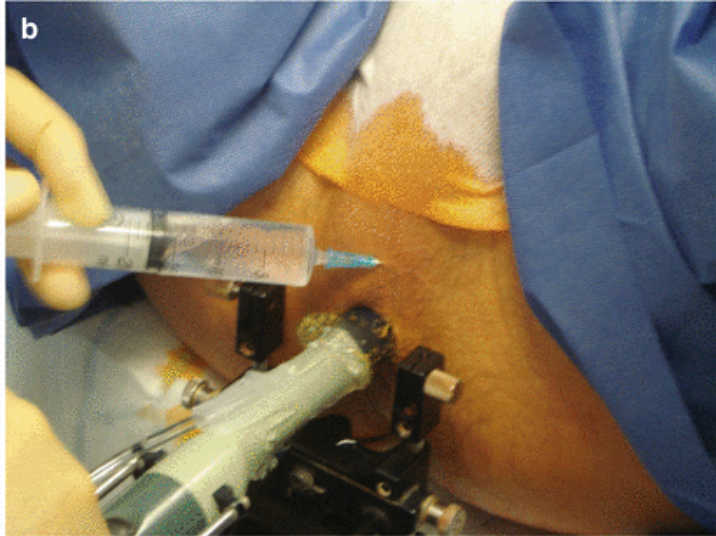
- a) the patient is under active surveillance following a confirmed diagnosis of prostate cancer by biopsy histopathology; and
- b) the patient is not planning or undergoing treatment for prostate cancer.

TRANSPERINEAL PROSTATE BIOPSIES





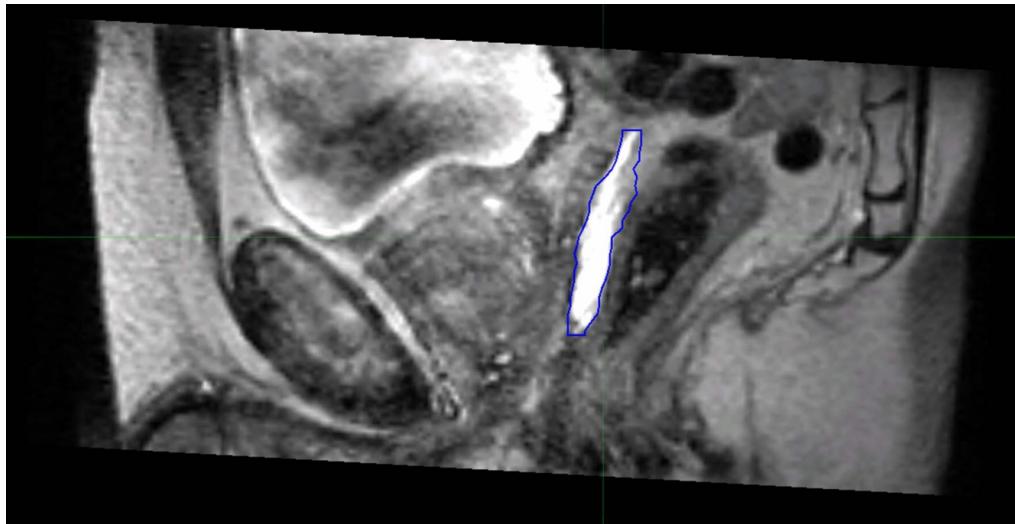
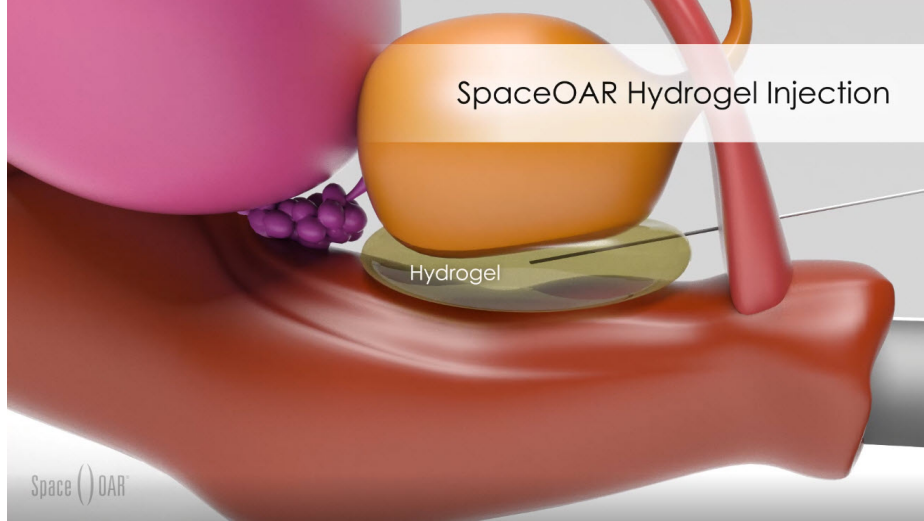




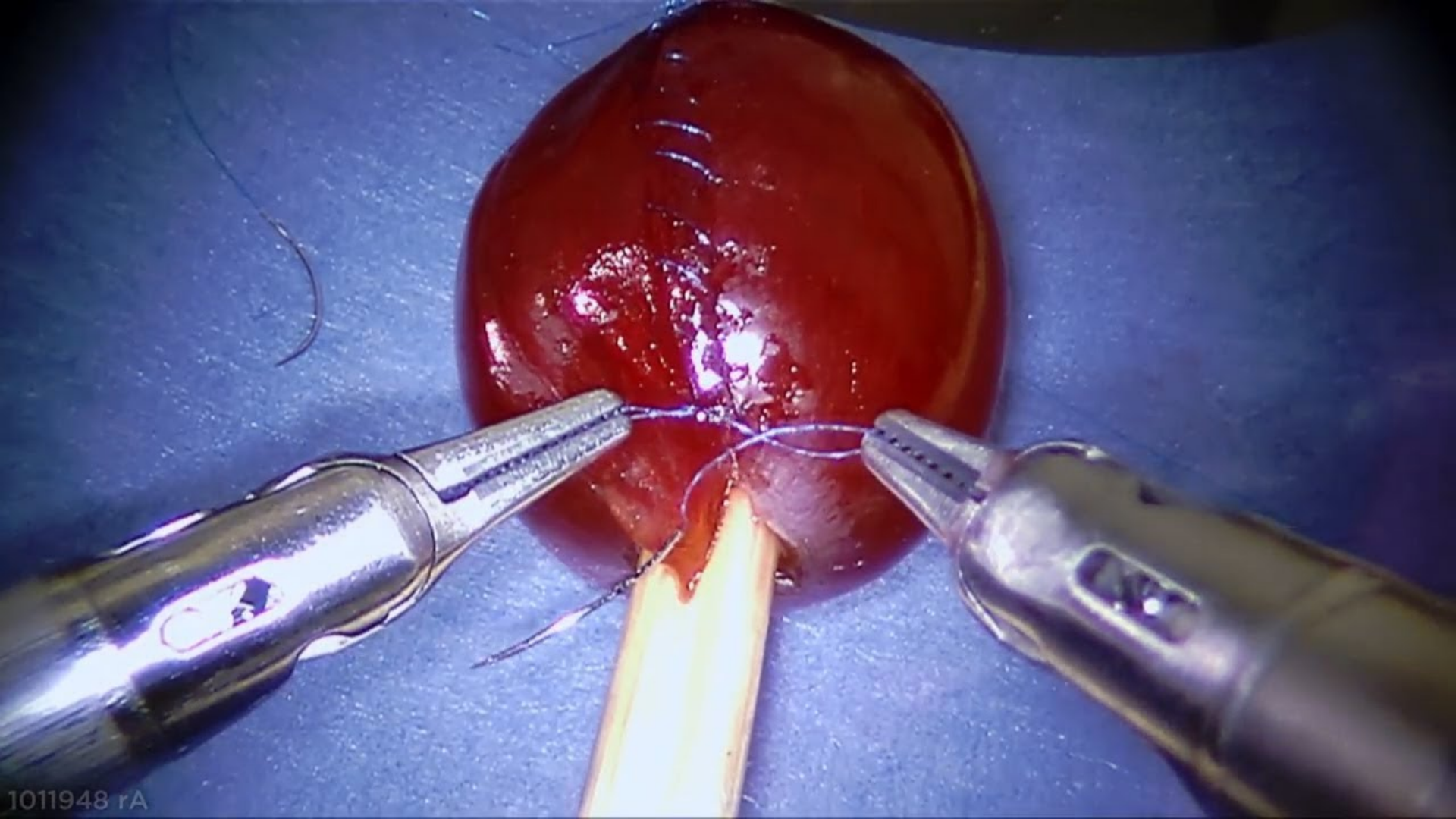


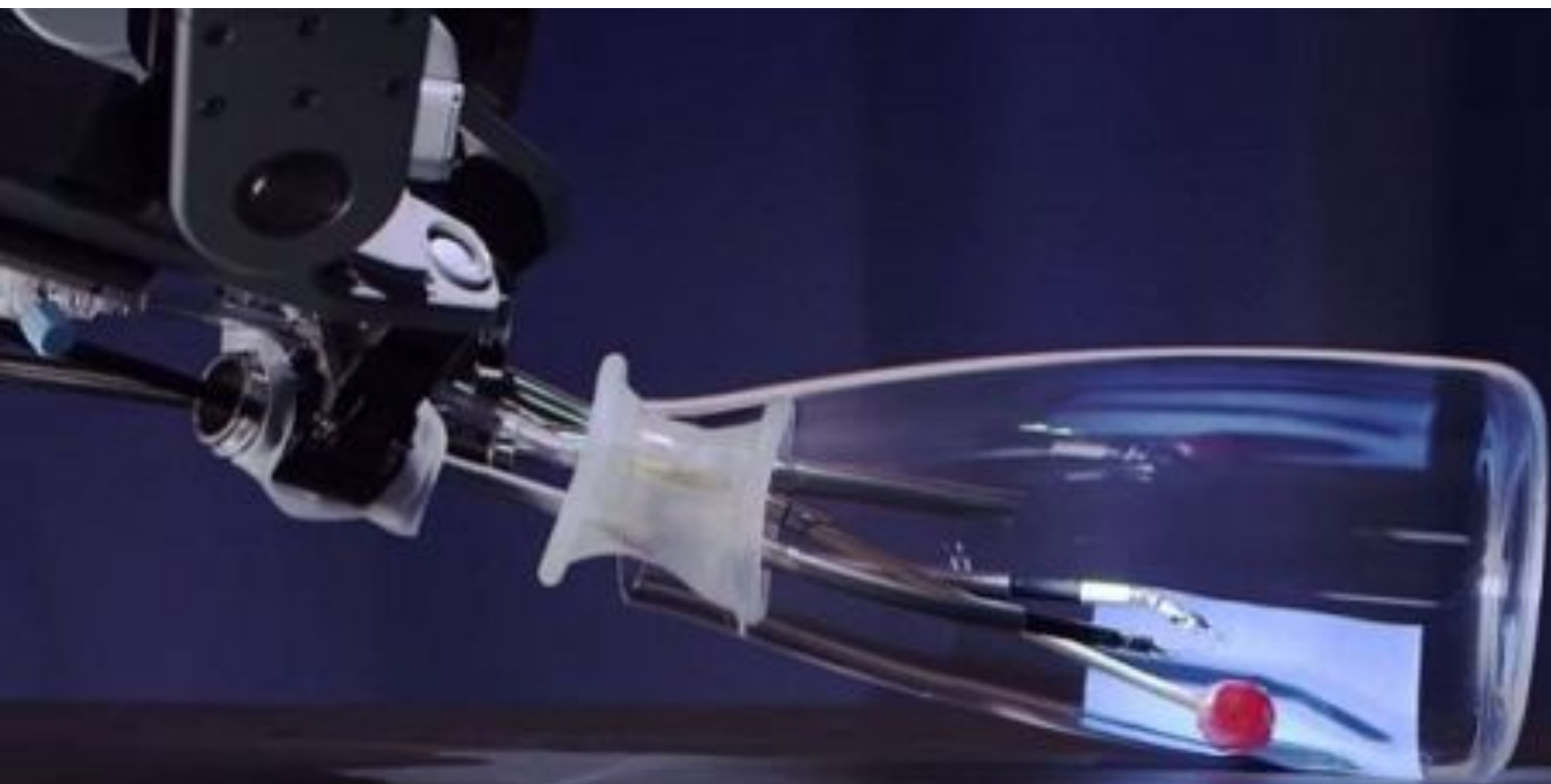
SPACEOAR

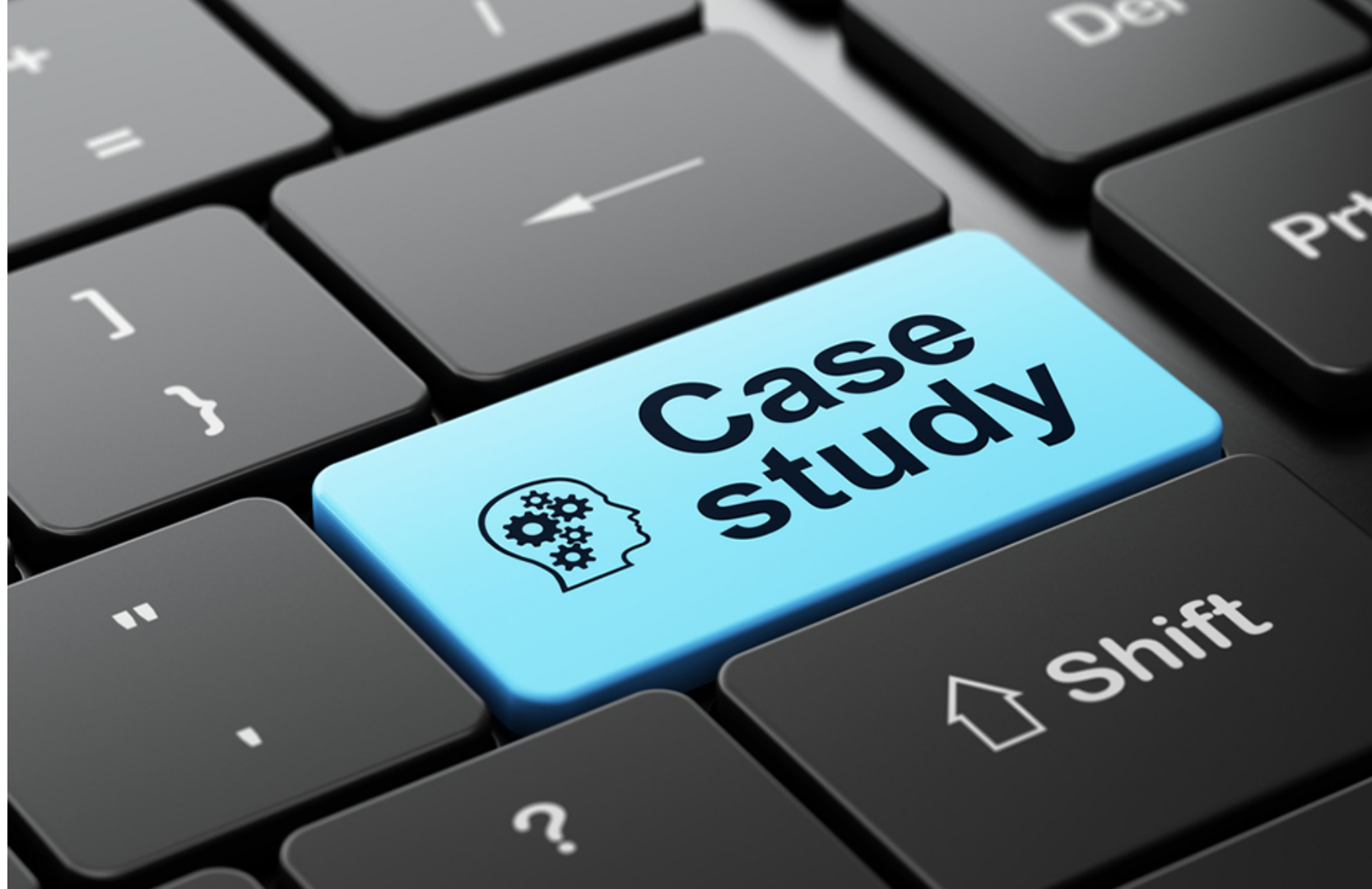












CASE STUDIES

CANCER FACTORS

PSA

ISUP and Gleason score

Localised?

Staging scans

PATIENT FACTORS

Age and expected life expectancy

Medical co-morbidities

Patient preferences

Fitness for surgery

Previous abdominal surgery

Existing LUTS and erectile dysfunction

Accessibility to care

Could you please review this gentleman's problem of his Prostate problems.

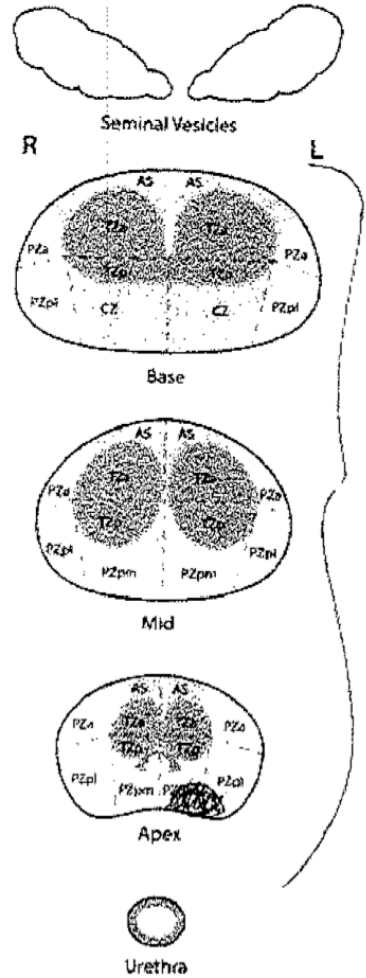
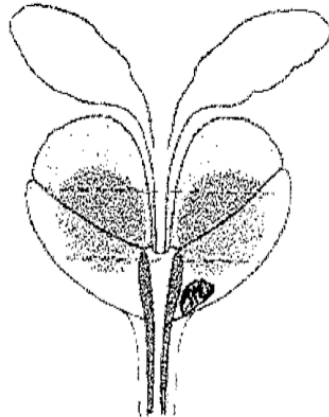
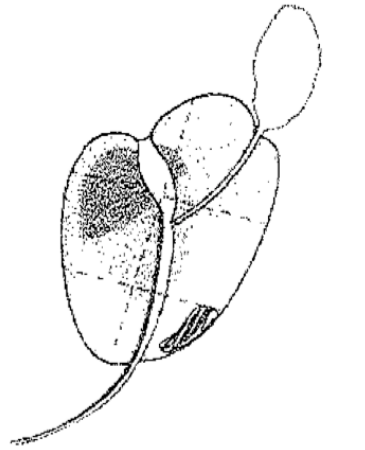
He has no frequency or urgency , mild nocturia and some lessening of stream.His PSA is elevated and his MRI indicated a small lesion in his left prosate that requires some review or biopsy .

Could you assess.

Allergies: No known allergies/adverse reactions.

Medications:

Drug Name	Strength	Dosage	Reason	Last script
ZARONTIN Capsule (Ethosuximide)	250mg	1 Twice a day	Script (Prescri 16 ption written)	11/01/20



PS - RADSS
③

SYNOPTIC REPORT FOR PROSTATE BIOPSIES

Tumour Type: Adenocarcinoma, acinar
 Grade Group (2014) (Highest Core): 1
 Gleason Score (ISUP 2014): 3+3=6
 Primary pattern: 3
 Secondary pattern: 3
 Tertiary pattern: Not applicable
 % High Grade 4/5: 0%
 Location: Right mid, right lateral, left apex, left mid

Location Other Involved Sites: Not applicable
 Composite Gleason Score (ISUP 2014): 3+3=6
 % High Grade 4/5: 0%
 Intraductal carcinoma: Absent
 Number of cores involved / Total: 7 of 15
 Perineural invasion: Absent
 Vascular infiltration: Absent
 Extraprostatic extension: Absent

DIAGNOSIS:

PROSTATE BIOPSIES - ADENOCARCINOMA
 - GRADE GROUP 1

SYNOPTIC REPORT FOR PROSTATE BIOPSIES

Tumour Type:		Adenocarcinoma, NOS, acinar
Grade Group (2014) (Highest Core):		2
Gleason Score (ISUP 2014):		3+4 = 7
Primary pattern:	3	
Secondary pattern:	4	
Tertiary pattern:	-	
% High Grade 4/5:		10-30%
Cribriform Architecture:		Absent
Location:		Right posterior, left anterior
Location Other Involved Sites:		Right anterior, left lateral, left posterior
Composite Gleason Score (ISUP 2014):		3+4 = 7
% High Grade 4/5:		5%
Intraductal carcinoma:		Absent
Number of cores involved / Total:		6/17
Perineural invasion:		Absent
Vascular infiltration:		Absent
Extraprostatic extension:		Not seen

DIAGNOSIS:

PROSTATE BIOPSIES - **ADENOCARCINOMA**
- **GRADE GROUP 2**

Radical Prostatectomy Graphical Synoptic Report

DIAGNOSTIC SUMMARY

Tumour Type	Adenocarcinoma, Acinar
Grade Group	Grade Group 2
Margin Status	Negative
Lymph Nodes	Not Involved (0/1)
Stage (AJCC 8th Ed)	pT2

PROGNOSTIC FACTORS

Prostate Gland Weight 39g

INDEX CARCINOMA

Grade Group 2
 Index Gleason Score 3+4=7
 Primary pattern 3
 Secondary pattern 4
 Tertiary pattern -
 High grade (4/5) percentage 10%

COMPOSITE CARCINOMA

Composite Gleason Score 3+4=7
 High grade (4/5) percentage 5%
 Intraductal carcinoma Absent
 Lymphovascular invasion Absent
 Seminal vesicles Not Involved
 Lymph nodes Not Involved (0/1)

TUMOUR EXTENT

Volume 1.5cm³

Extraprostatic Extension Absent
 EPE distance (mm)

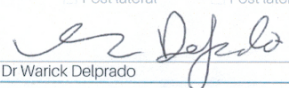
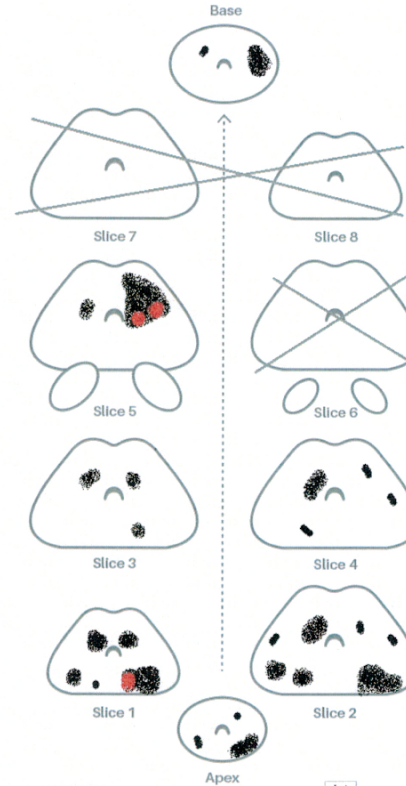
Margin Involvement Absent

Pattern at margin
 Margin length (mm)




<input type="checkbox"/> Base	<input type="checkbox"/> Right	<input type="checkbox"/> Left
<input type="checkbox"/> Anterior	<input type="checkbox"/> Lateral	<input type="checkbox"/> Lateral
<input type="checkbox"/> Posterior	<input type="checkbox"/> Post lateral	<input type="checkbox"/> Post lateral
<input type="checkbox"/> Apex		

SIGNED

Reported by Dr Warwick Delprado

LEGEND

- Index carcinoma 
- Other carcinoma 
- Capsule penetration 
- Positive margins (+) 