

Index

A

Abiraterone acetate, 23
Acinar adenocarcinoma, 11
Active surveillance (AS), 20, 32
Age and prostate cancer, 1–2
Age-standardised mortality rates, 2, 5
Alpha-methylacyl-CoA racemase (AMACR), 12
Alpharadin, 23
Androgen deprivation therapy, 20
Apical prostate tumour, axial MRI, 28, 29
Apparent diffusion coefficient (ADC), 30

B

Bisphosphonates, 23
Brachytherapy, 21–22

C

Castration-resistant metastatic prostate cancer (mCRPC), 22
¹¹C-choline PET/CT, 39, 41, 43
Central gland (CG) tumours, 28, 29
Charcoal sign, 29
Choline tracers, 34
Clinical presentation, 6
Contrast-enhanced CT, metastatic disease, 30

D

D'Amico criteria, 7–8
Denosumab, 23
Diffusion-weighted MRI, 29–30
Digital rectal examination (DRE), 1, 34
Dynamic contrast-enhanced MRI, 30
Dysuria, 6

E

EBRT. *See* External beam radiotherapy (EBRT)
Enzalutamide, 23
Epidemiology, 1–5
External beam radiotherapy (EBRT)
 androgen deprivation therapy, 20
 brachytherapy, 21–22
 hypofractionated techniques, 20
 image-guided intensity modulated radiotherapy, 20, 21
 indications, 21
 radical prostatectomy, 22
 side effects, 21

F

¹⁸F-choline PET/CT scan,
 35–37, 42, 43, 47
 feasibility, 46
 recurrent nodal disease, 34, 40
¹⁸F-choline PET/MRI scan, 41
¹⁸F-fluoride PET scan, 47
¹⁸F-fluoromethylcholine-PET/CT, 54–55

G

⁶⁸Ga-PSMA PET/CT, 42, 44–46, 54–55
Gleason grading, 12–15
Gleason score, 6

H

High-dose rate (HDR) brachytherapy, 22
Histological features, 11–12
Hormone therapy, 15
Hypofractionated techniques, 20

I

- Image-guided intensity modulated radiotherapy, 20, 21
- ¹²⁴I-MIP-1095 PET/CT, 55, 56
- Immunohistochemistry, 12
- Incidence, 1, 3, 5

L

- Localised prostate cancer, 19, 20
- Locoregional disease
 - clinical guidance, 31–32
 - magnetic resonance imaging, 28–30
 - transrectal ultrasound, 27–28
- Lower urinary tract symptoms, 6

M

- Magnetic resonance imaging (MRI)
 - diffusion-weighted MRI, 29–30
 - dynamic contrast-enhanced MRI, 30
 - morphological evaluation, 28–29
 - MR spectroscopy, 30
- Metastatic disease
 - alpharadin, 23
 - androgen deprivation therapy, 22
 - androgen receptor pathway targeted agents, 23
 - bisphosphonates, 23
 - common sites, 30
 - contrast-enhanced CT, 30
 - corticosteroids, 23
 - cytotoxic chemotherapy, 23
 - denosumab, 23
 - diffusion-weighted MRI, 30, 31
- Molecular markers, 16

N

- Nerve-sparing techniques, 22
- Nomograms, 16

P

- Peripheral zone (PZ) tumours, 28
- PET/CT
 - advantages and disadvantages, 47, 48
 - ¹¹C-choline PET/CT, 39, 41, 43
 - ¹⁸F-choline PET/CT scan, 35, 42, 43, 47
 - feasibility, 46
 - recurrent nodal disease, 34, 40
 - roles, 33–34
- Prostate biopsy, 6
- Prostate malignancies
 - assessing treatment response, 43
 - diagnosis, 34–35
 - restaging at disease recurrence, 42–43
 - staging, 35, 38, 39, 41–42
- Prostate-specific antigen (PSA) testing, 1, 34
- Prostate-specific membrane antigen (PSMA), 51
 - description, 52
 - endoradiotherapy, 55–56
 - high-affinity small-molecule inhibitors, 52
 - lesion-based analysis, 53
 - patient-based analysis, 53
 - PET tracers, 34

R

- Radical prostatectomy, 22
- Radiolabelled acetate tracers, 34
- Radiotherapy planning, 46–47
- Risk factors, 5–6
- Risk stratification, 7–8
 - of localised prostate cancer, 19, 20

T

- TNM prostate cancer staging classification, 7
- Transperineal approach, 6
- Trans-perineal low-dose rate (LDR) brachytherapy, 21
- Transrectal ultrasound (TRUS), 27–28
- Transrectal ultrasound (TRUS)-guided biopsy, 15, 16, 31, 34, 42