

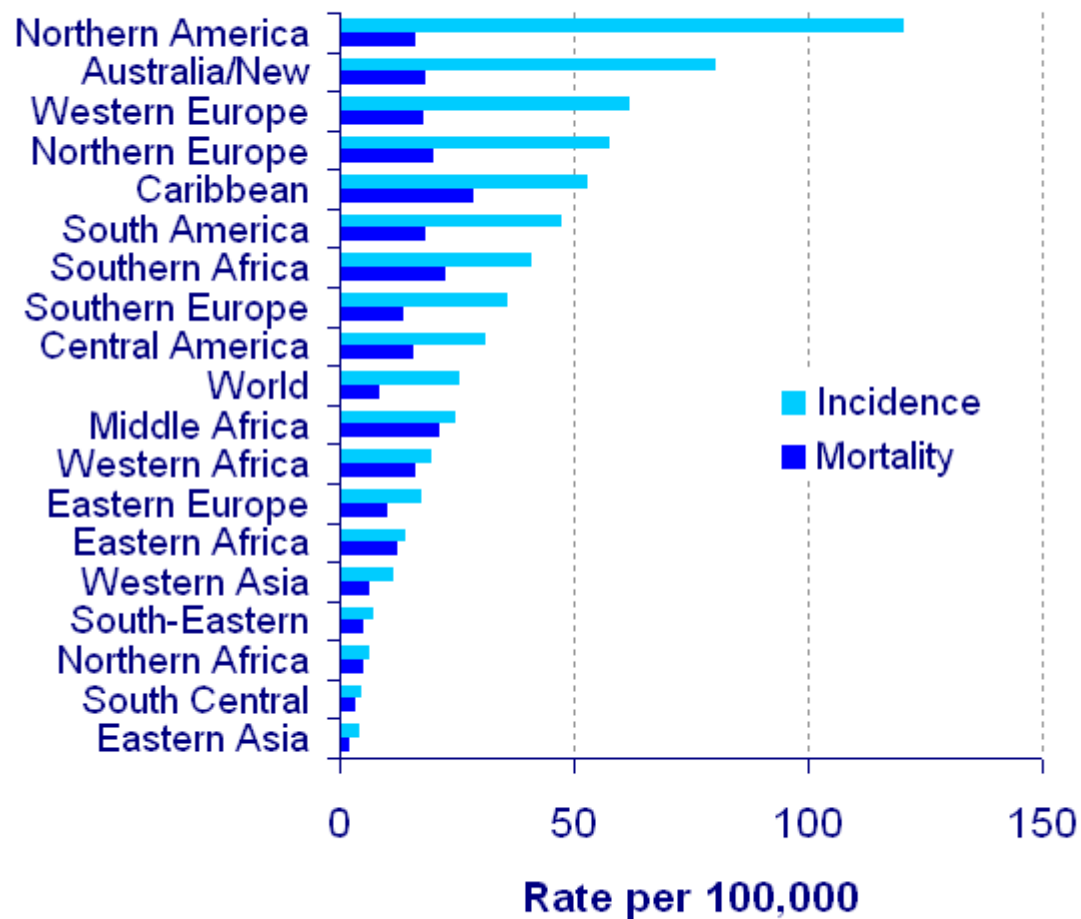
Prostate Cancer: An Overview

Helen Johnson
Urology Specialist Nurse
Salford Royal Hospital
Manchester

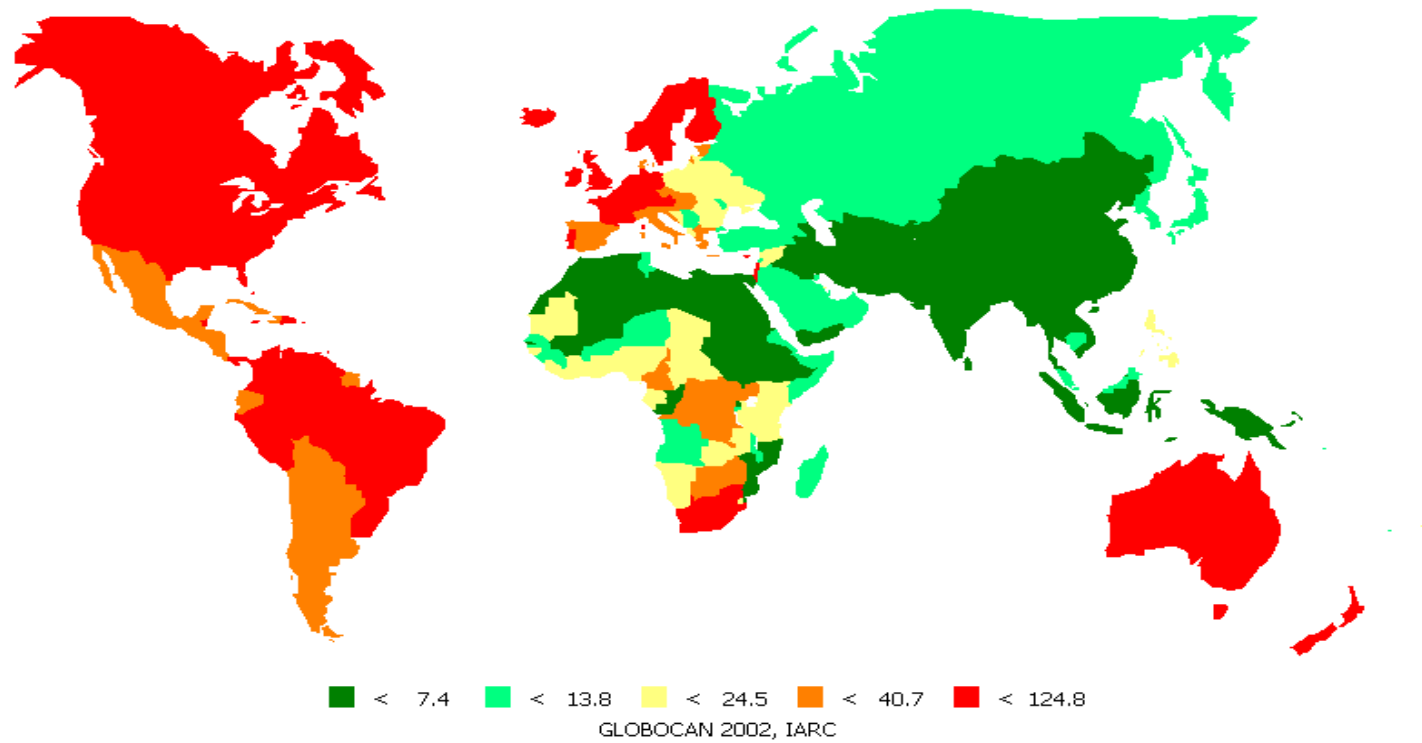
Background

- “ Most common cancer in men in UK
- “ Risk - Age
 - Race
 - Familial
- “ Prevalence increasing
- “ Mortality rates unchanged

Figure 1.2: Age-standardised* incidence and mortality rates for prostate cancer by world regions, 2002 estimates



Prostate
Age-Standardized incidence rate per 100,000



Patient Journey

Symptomatic

- ” LUTS
- ” Bone Pain
- ” PSA
- ” DRE
- ” Referral to Urologist
- ” Biopsy
- ” +/- Imaging

Asymptomatic

- ” PSA request
- ” Incidental Finding
- ” Incidental PSA test
- ” DRE
- ” Referral to Urologist
- ” Biopsy
- ” +/- Imaging

PSA

“ Normal range is age dependent

40-50 yrs	<2.5ng/mL
-----------	-----------

50-60 yrs	<3.5
-----------	------

60-70 yrs	<4.5
-----------	------

>70 yrs	<6.5
---------	------

“ Not specific for prostate cancer

“ Affected by prostate volume

“ Variability in assays

DRE



- “ For determining clinical or T stage
- “ Asymmetry of gland
- “ Nodules in 1 or both lobes
- “ Hard woody consistency
- “ Palpable seminal vesicles
- “ False positives

'T' Stage

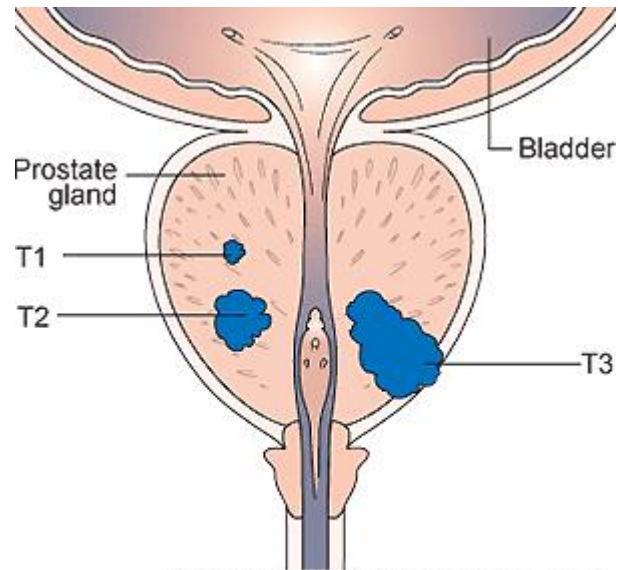


Diagram showing T1-3 stages of prostate cancer
© CancerHelp UK

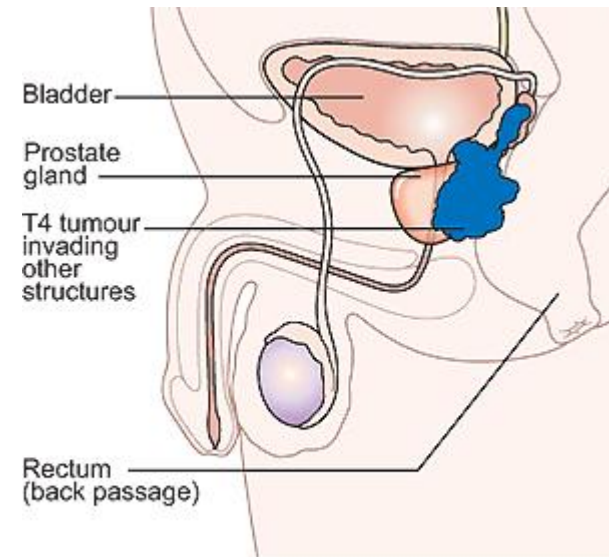
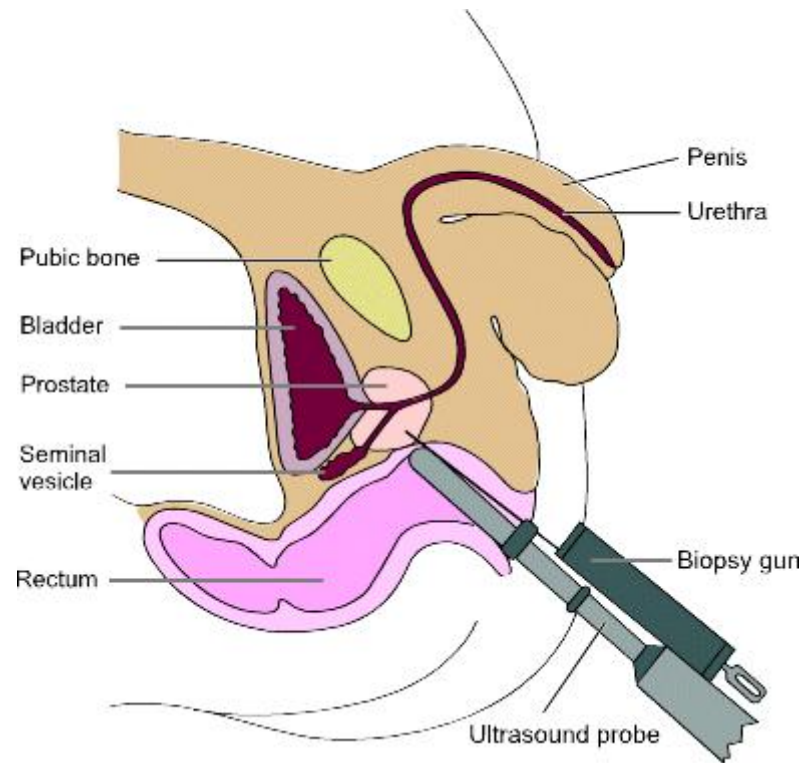
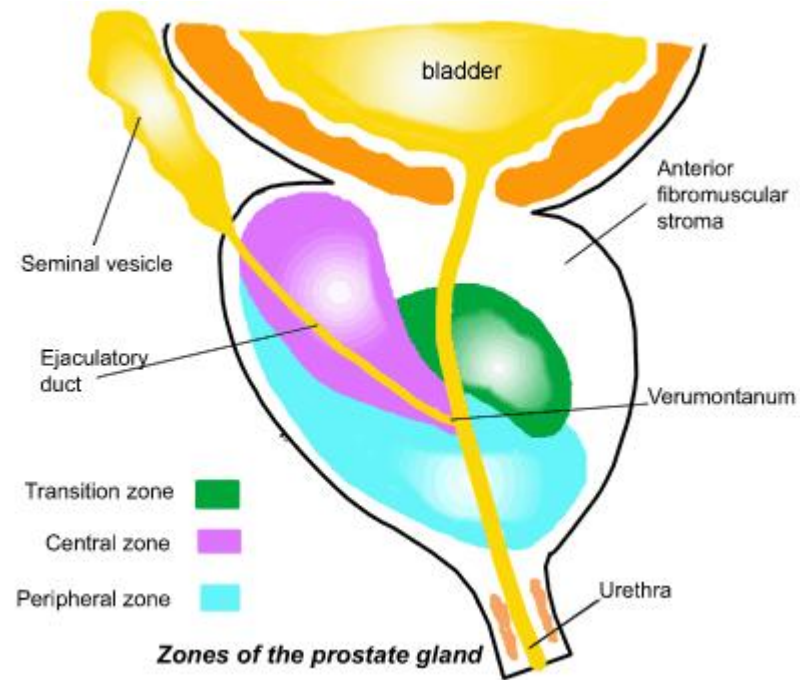


Diagram showing stage T4 prostate cancer
© CancerHelp UK

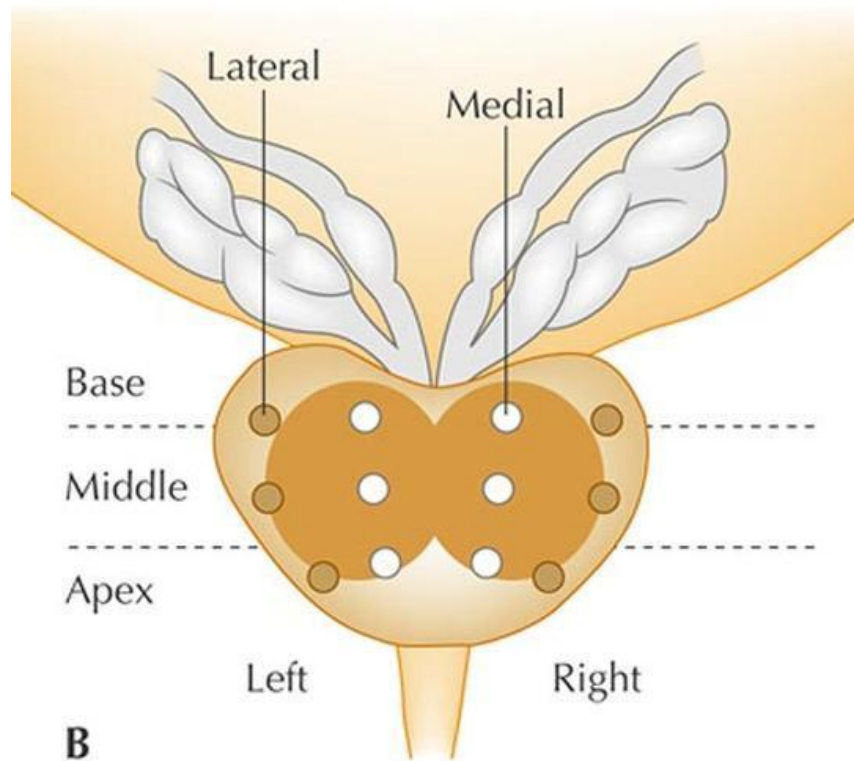
TRUSS & Biopsy



The Prostate



Systematic Biopsies



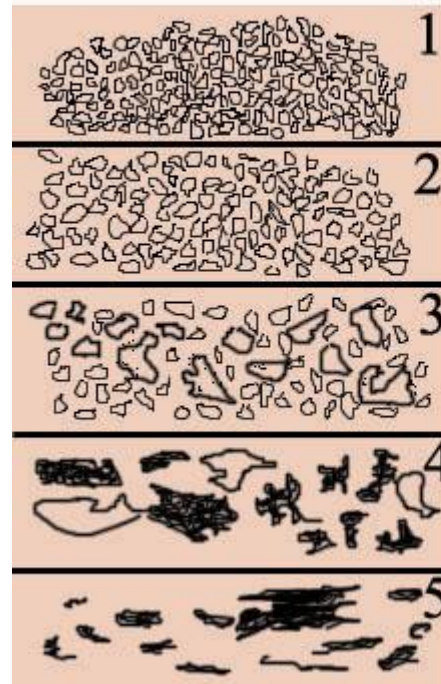
TRUSS & Biopsy - Risks

- “ Bleeding
- “ Infection
- “ Retention
- “ Need for repeat biopsy
- “ Histological diagnosis - Gleason

Gleason Score

Gleason Scale

Well differentiated



1

Small, uniform glands

2

More space between glands

3

Infiltration of cells from glands at margins

4

Irregular masses of cells with few glands

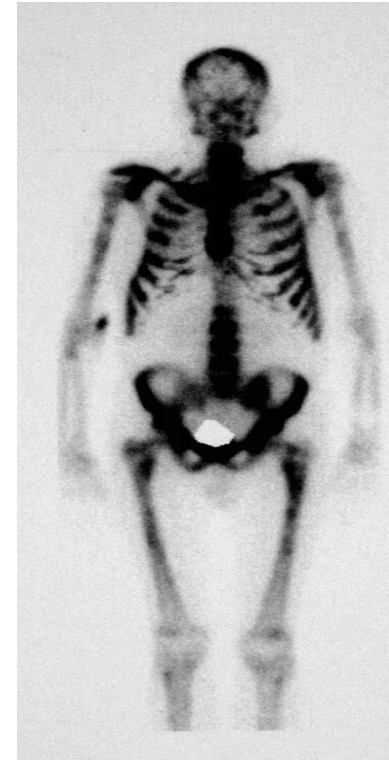
5

Lack of glands, sheets of cells



Poorly differentiated

Radiological Staging



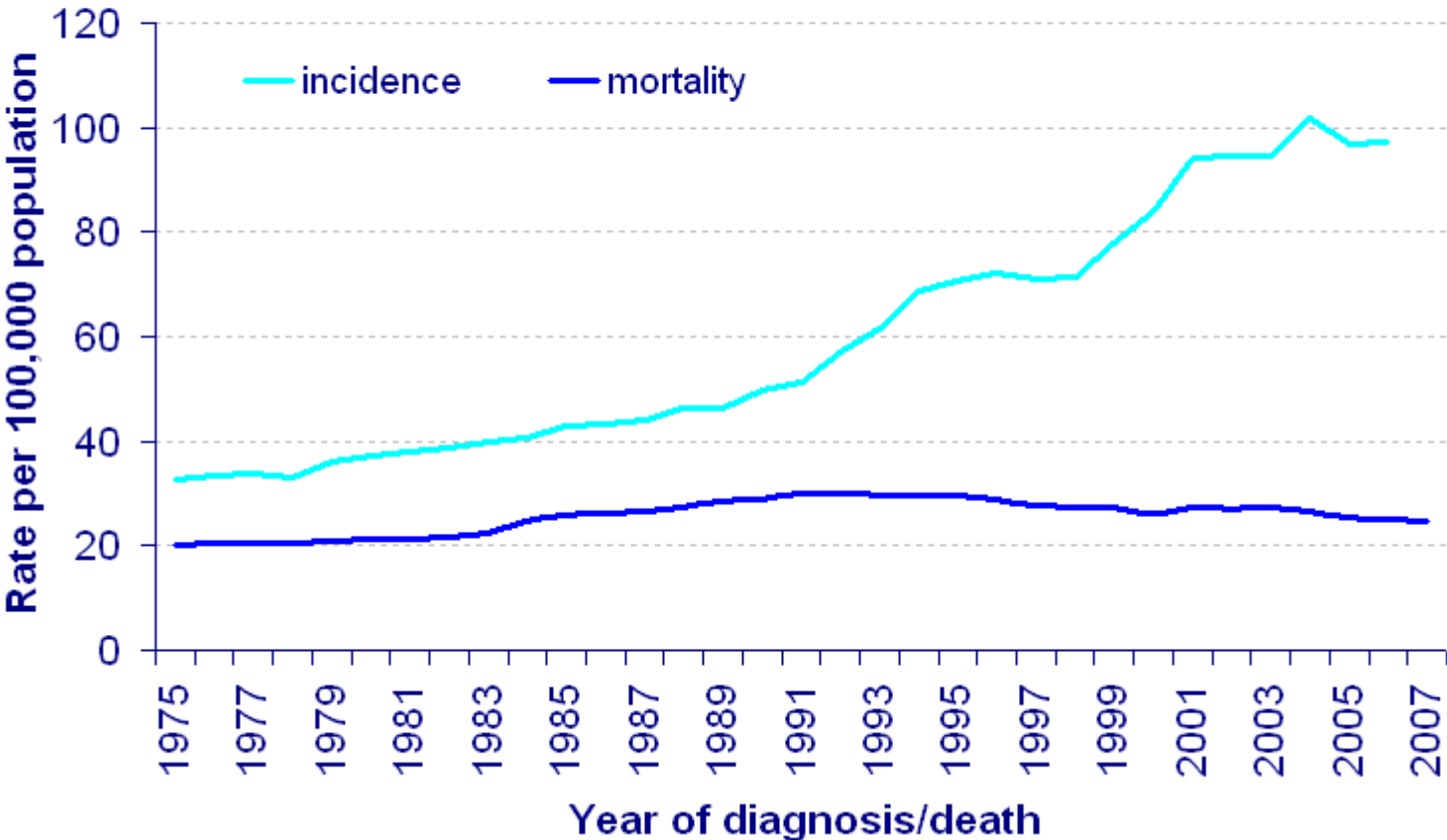
Treatment options for late prostate cancer

- “ Hormones
- “ Palliative care
- “ Chemotherapy
- “ Bisphosphonates
- “ Research trials

Treatment options for early prostate cancer

- “ Active Surveillance
- “ Surgery
- “ Conformal Radiotherapy
- “ Brachytherapy

Figure 1.4: Age standardised (European) incidence and mortality rates, prostate cancer, males, GB, 1975-2007



Current Predictors of Bio-potential

- “ Gleason
- “ Clinical Stage/Extent of prostatic involvement
- “ PSA at presentation
- “ Rate of PSA change (velocity/doubling time)

Thank You