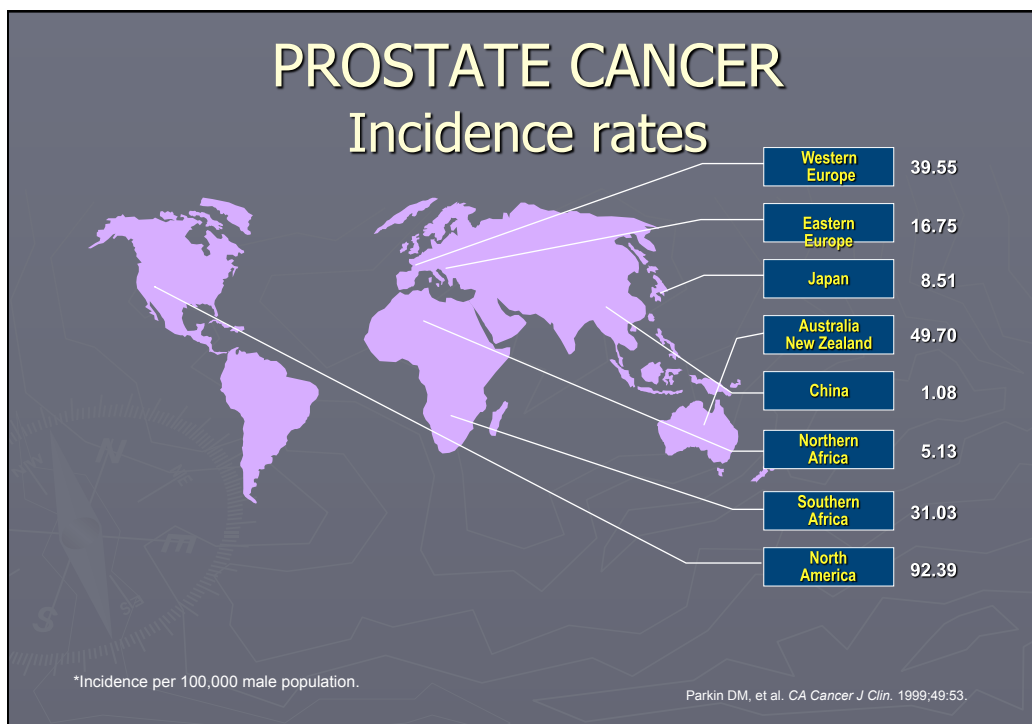


# Prostate cancer 2011

Presentation by Dr Paul Craft  
to the Prostate Cancer Support  
Group – ACT Region on 10 October  
2011

## Prostate Cancer

- Sixth most common cancer in the world; ~ 396,000 new cases annually (11,191 in the Australia in 2001)
- Predicted incidence in Australia rising to 15,200 in 2011
- Life time risk in ACT (to age 75 yrs) is 1:8
- Incidence ACT 186 cases, 29 deaths per year
- 85% to 100% of patients who develop advanced prostate cancer will have bone metastases (often osteoblastic)
  - Pain, fractures, and spinal cord compression are serious and morbid complications



## Risk Factors for Prostate Cancer

- ▶ Age
- ▶ Obesity
- ▶ Alcohol and dietary factors
- ▶ Hereditary factors



## How to treat Prostate Cancer

- ▶ Low risk (stage T1,T2A or B, PSA < 10, GS≤7): watch and wait, prostatectomy, or radiotherapy.
- ▶ Locally advanced (T2 & GS≥8, T3 or T4, PSA <40): radiotherapy and adjuvant androgen deprivation therapy.
- ▶ Metastatic disease hormone sensitive: Androgen deprivation therapy.
- ▶ Metastatic disease castrate resistant: bisphosphonates (esp Zometa), and chemotherapy.

## Localised Prostate Cancer

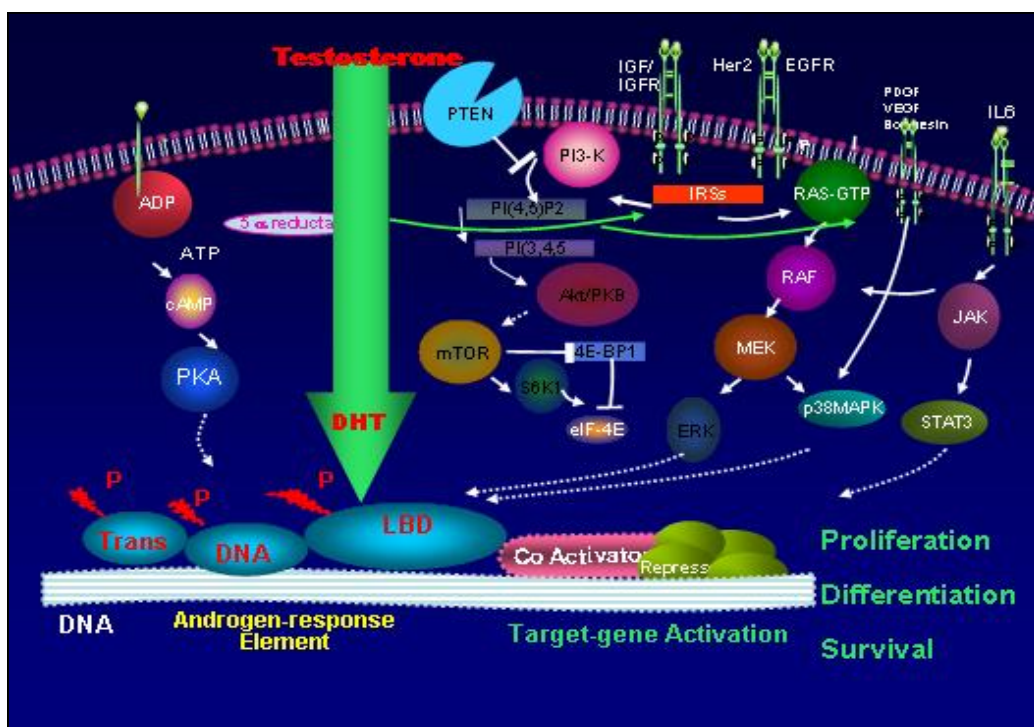
“Is cure necessary in those in whom it may possible, and is cure possible in those in whom it is necessary?”

*Whitmore, 1990*

## Patient Selection PRETHERAPY CLINICAL FACTORS IN RISK PREDICTION

*D'Amico et al, JAMA, 1998*

Extent of Risk	Clinical/Pathologic features	Estimated 5 year PSA-failure free survival
Low	<ul style="list-style-type: none"> <li>• Stage-T1c or T2a</li> <li>• PSA <math>\leq</math> 10ng/ml</li> <li>• Gleason score <math>\leq</math> 6</li> </ul>	> 85%
Intermediate	<ul style="list-style-type: none"> <li>• Stage-T2b or</li> <li>• PSA 11-20ng/ml or</li> <li>• Gleason score of 7</li> </ul>	60%
High	<ul style="list-style-type: none"> <li>• Stage &gt; T2c or</li> <li>• PSA &gt; 20ng/ml</li> <li>• Gleason score &gt; 7</li> </ul>	< 30%



## Androgen Deprivation Therapy

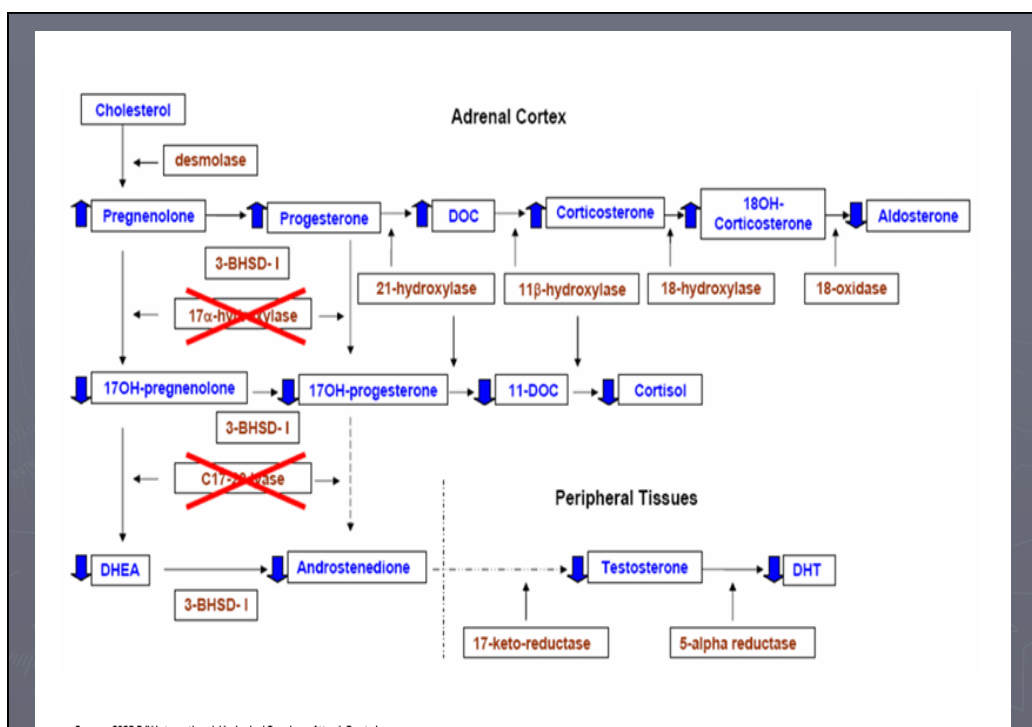
- ▶ Bilateral orchidectomy: effective, cheap, safe. Also permanent.
- ▶ LHRH analogue: Simple and safe, produces a brief surge in serum testosterone at about day 10-14.
- ▶ Non-steroidal anti-androgens. Bind to competitively to the ligand-binding pocket of the AR.

## Long term androgen deprivation therapy

- ▶ Loss of libido, sexual function
- ▶ Fatigue
- ▶ Osteoporosis
- ▶ Diabetes
- ▶ Hyperlipidaemia
- ▶ Reduced muscle strength

## New information in 2011

- ▶ For locally advanced disease, omitting radiotherapy and relying on life long hormonal therapy alone is inferior.
- ▶ Second line chemotherapy with cabazitaxel associated with a small survival benefit after failure of docetaxel.
- ▶ Abiraterone is effective in castrate-resistant metastatic prostate cancer.
- ▶ Denosumab is slightly superior to zoledronate in preventing bone complications in castrate resistant prostate cancer.



## Methods COU-AA-301

- ▶ 1195 pts with m castrate resistant prostate cancer previously treated with docetaxel were randomise 2:1 to abiraterone 1000mg + prednisone 5mg bd vs. placebo + prednisone 5mg bd.
- ▶ Primary endpoint was OS

## Conclusions

- ▶ Abiraterone + prednisone significantly improves OS, time to PSA progression, time to radiographic progression, and PSA response rate in advanced metastatic CRPC.
- ▶ Toxicity was mechanism related and easily managed.
- ▶ A phase IV study/access program may be available in TCH in new year.

**Cabazitaxel + prednisone (CBZP) versus mitoxantrone+ prednisone (MP) in the treatment of metastatic castration-resistant prostate cancer (mCRPC) previously treated with a docetaxel-based regimen**

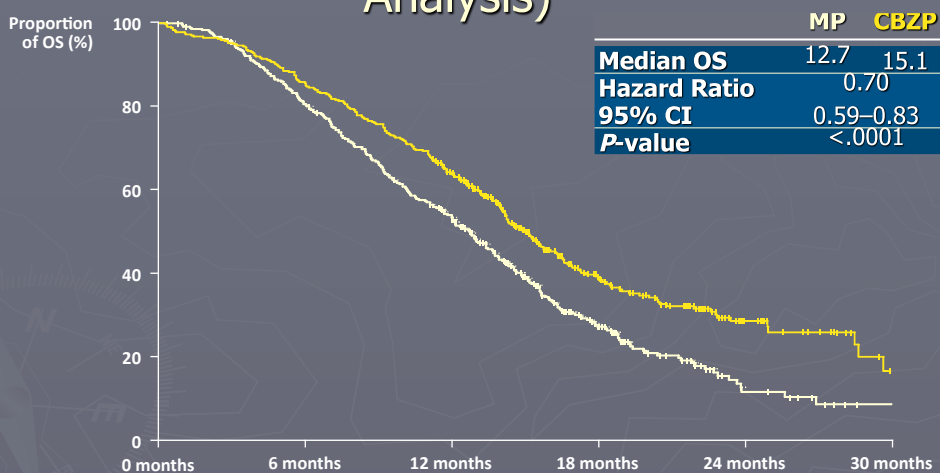
*Final Results of the Phase III TROPIC Trial*

Oliver Sartor, MD

Johann de Bono, MD, PhD

On behalf of the TROPIC Investigators

**Primary Endpoint: Overall Survival (ITT Analysis)**



Number at risk	MP	377	300	188	67	11	1
CBZP	378	321	231	90	28	4	

## Research

- ▶ Most pressing need is a reliable biomarker of aggressiveness of an early prostate cancer to inform the decision to treat radically.
- ▶ Many clinical trials in advanced disease:
  - TAK-700 in chemo naive CRMPC.
  - Cabazitaxel in docetaxel resistant MPC.
  - Abiraterone in docetaxel resistant MPC.

## Research

- ▶ PC4 = Primary Care Collaborative Trials Group, funded by Cancer Australia.  
<http://www.pc4tg.com.au/>
- ▶ Proposing a trial of follow-up of post prostatectomy patients in a primary care setting.