Community care of Prostate Cancer

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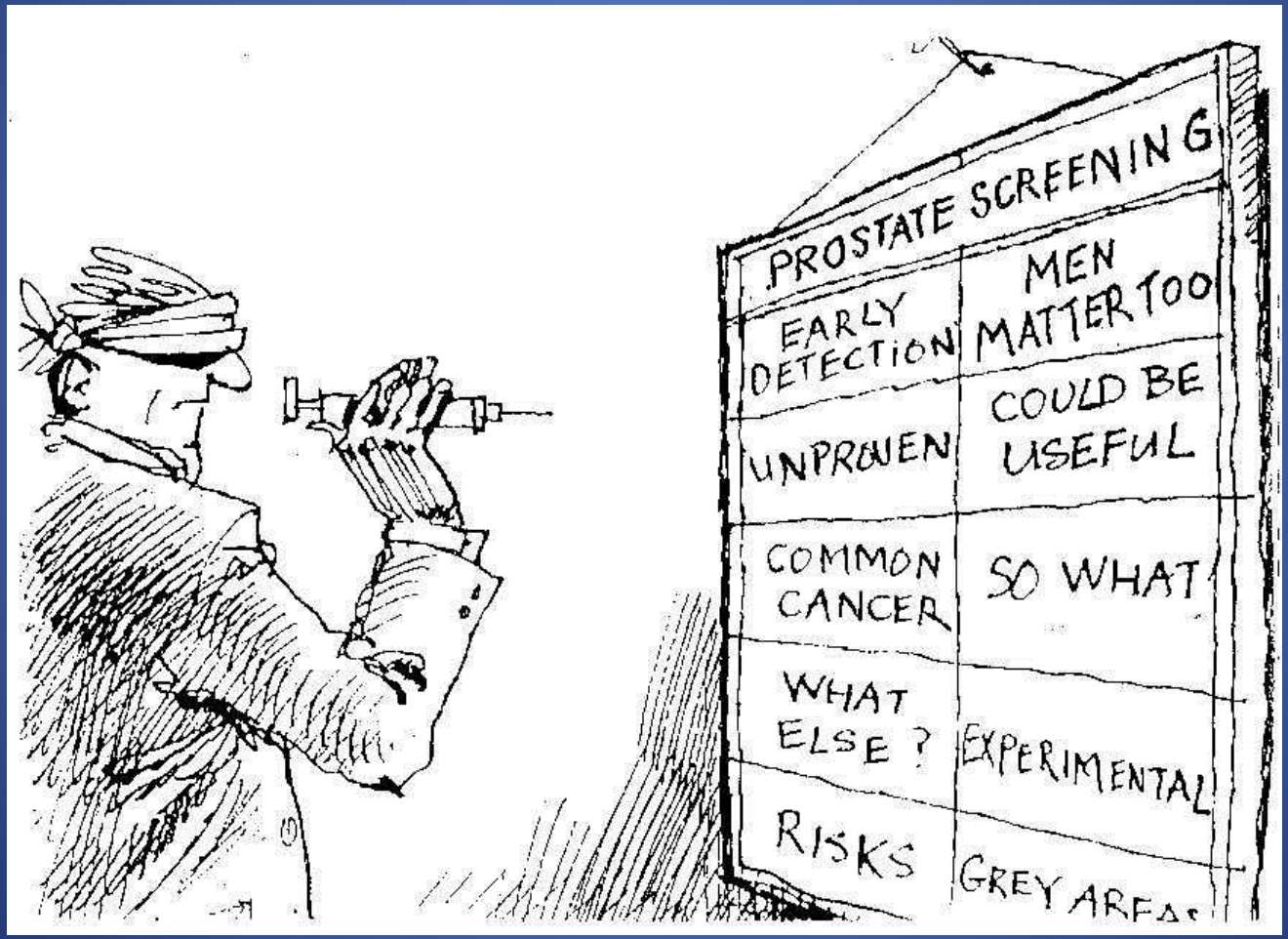
Southern Cancer Network

Introduction



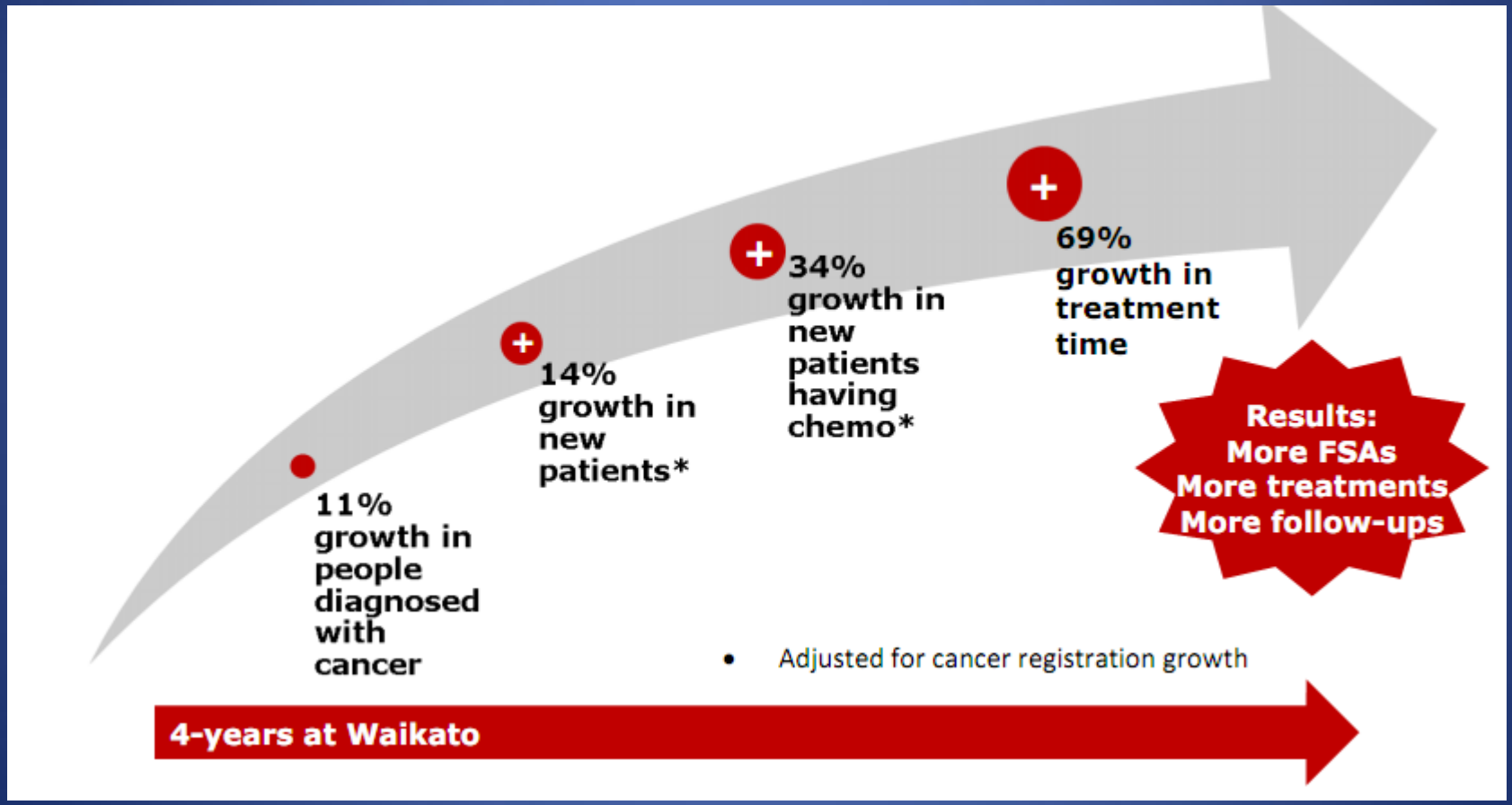

DROP 'EM
IT COULD SAVE YOUR LIFE!

Why is GP follow up of prostate cancer important

e – five-year cumulative relative survival ratios, by sex

Males		
opulation	Non-Māori population	Total population
683	0.823	0.818
621	0.847	0.837
706	0.855	0.849
718	0.908	0.899
736	0.924	0.914

4Years In Waikato



Faster Cancer Treatment

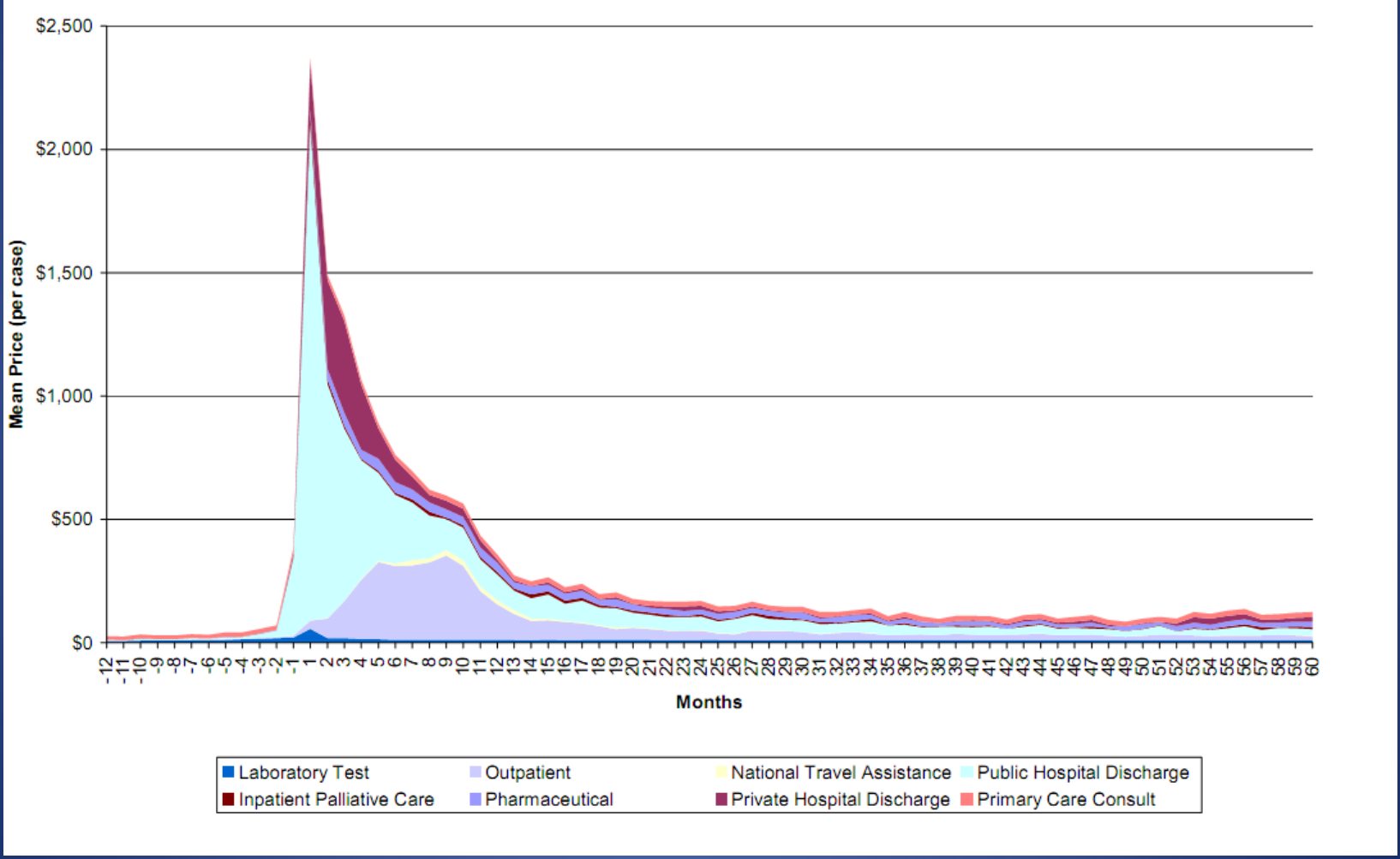
Reporting against the 3 FCT indicators
based on four data points

SCN
Southern Cancer Network

What do we Know?

- Specialists lacked confidence in GPs / Nurses.
- GPs/Nurses confident if educated and a clear plan given
- Breast cancer patients satisfied with GP follow up
- Better overall health care from GPs
- Cost to patients is a barrier

Prostate Mean Price per case



Community Management of prostate Cancer

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Non surgical non radiation management

- Primary management of non metastatic disease ….. Androgen depravation therapy, watch and wait
- Primary management of metastatic disease…. Androgen depravation therapy, bisphosphonate therapy
- Follow up of non metastatic disease …. managing PSA and managing expectations

- Follow up of metastatic disease management of PSA and when to re refer.

Androgen Depravation Therapy

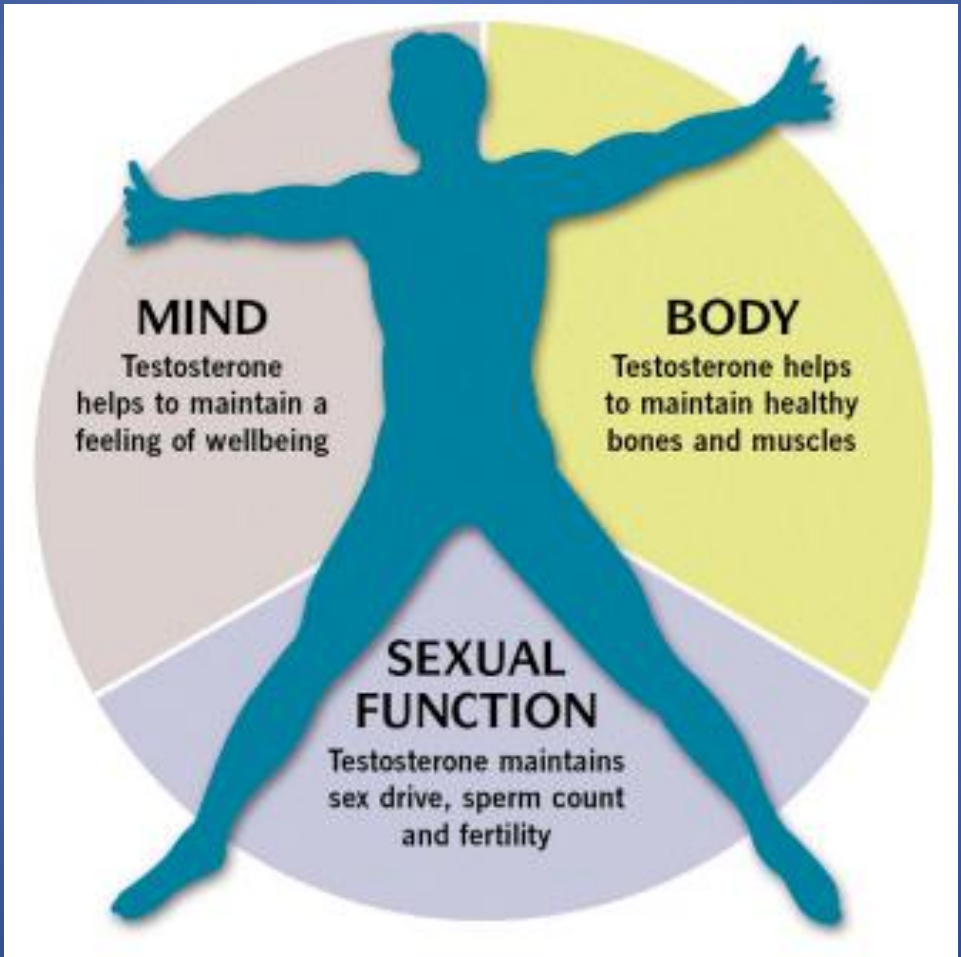
- Prostate cancer is hormonally dependent
- Castrate resistance is driven by increased sensitivity to testosterone rather than resistance

Androgen suppression for prostate cancer

- Orchidectomy
- LHRH
- Non sterodal blockers
- Steroidal blockers

- Side effects – osteoporosis, fatigue, impotence, impaired glucose tolerance and lipids, excess CV mortality

Hypogonadism in males



Metabolic Syndrome

- Hypertension, dyslipidaemia, central obesity and insulin resistance can follow androgen suppression
- screening is indicated in these patients

Bone morbidity with androgen suppression

- patients treated with androgen inhibition should have baseline and periodic DEXA-scans to detect osteopaenia
- patients with significant osteopaenia should receive calcium and vitamin D plus zoledronate or alendronate
- the risk of bone fracture with androgen inhibition is increased by 50%
- patients with hormone refractory prostate ca and bone metastases should receive monthly zoledronate therapy – reduces skeletal related events by 35%. The evidence for hormone sensitive disease is still awaited

Cardiovascular morbidity with androgen suppression

CVS effects of androgen deprivation and androgen replacement therapy

Possible Effect	ADT	Androgen Replacement Therapy
Plasma lipids		
LDL	Elevated[17,23]	Reduced[20] or unchanged[21]
Triglycerides	Elevated[17,23]	Unchanged[21]
HDL	Elevated[23]	Reduced[20,21] or unchanged[20]
Blood pressure	Elevated*[26,27]	Uncertain
Left ventricular mass	Increased*[27]	Uncertain
Glucose intolerance	Increased*[35]	Reduced*[35,36]
Vasodilation	Uncertain	Induced†[39]
Exercise tolerance	Uncertain	Increased[16,42]
Hypercoagulability	Increased[31]	Decreased[31]
Obesity	Induced[23,47,48]	Reduced[20]
Arrhythmia	QT interval elongation[51]	No known effect

Zoledronate

- Bisphosphonate
- Prevention of osteoporosis annual dosing 4 mg
- Management of bone metastasis 4 mg monthly
- Renal function
- Osteonecrosis dental hygiene
- Community delivery

Other therapies

- Oestragens
- Chemotherapy
- Abiaterone

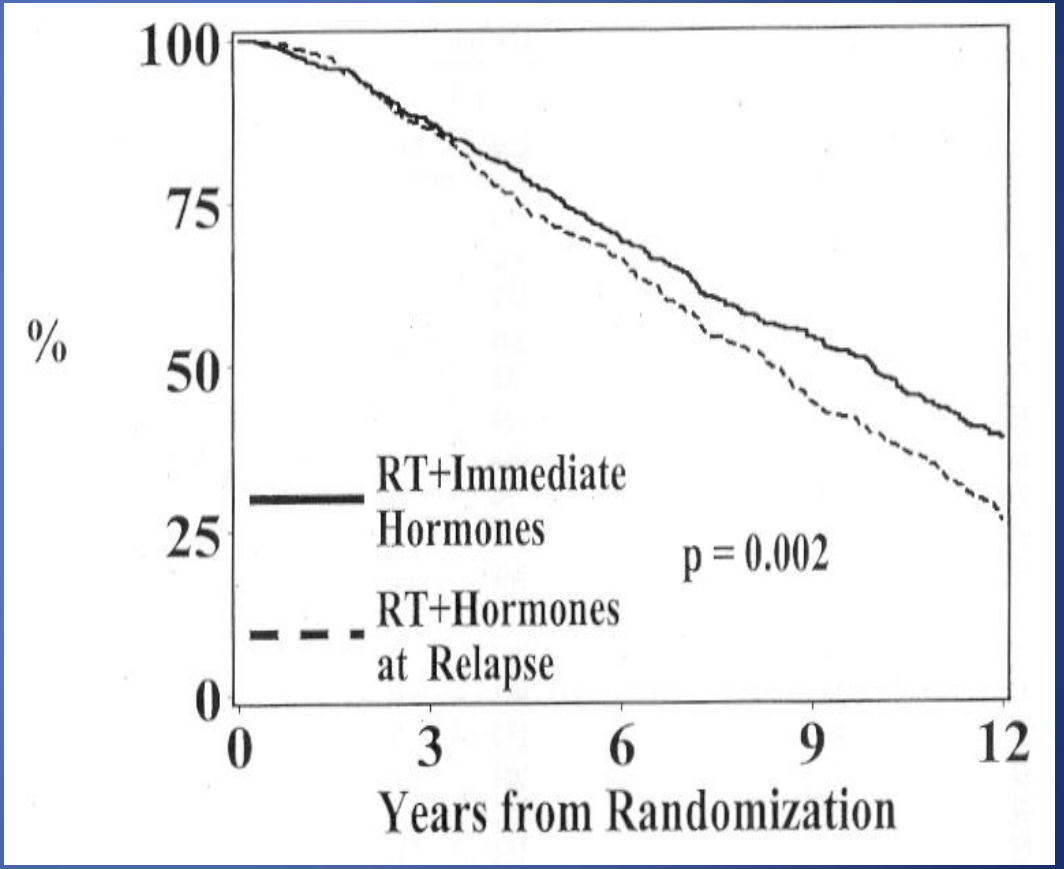
Primary therapy

- External beam Radiotherapy
- Brachytherapy
- Surgery
- Watch and wait

- Neo adjuvant therapies / Adjuvant therapues

Primary management of non metastatic disease

- ADT is used in two forms neo adjuvant 6 months and adjuvant 3 yrs
- Possible role for GP prescription, administration and monitoring PSA and testosterone
- PSA falling to undetectable <0.1 testosterone castrate levels <0.4
- Management of pharmacomorbidity



Watchful Waiting

When it come to prostate, watch and wait
Major cancer group endorses active surveillance for prostate cancer
March 28, 2010|By Judith Graham, Tribune Newspapers

Five years ago, when he was diagnosed with cancer, Kevin Brick gratefully accepted a doctor's offer to wait and see what happened to the tiny tumor in his prostate gland.
So far, there is no evidence the cancer is growing or becoming more aggressive.
"Everything seems to be going fine," says Brick, 60, whose doctor examines his prostate and administers tests every six months.

Prostate cancer : watchful waiting

- previously thought appropriate for patients with low risk disease [T1 or low volume T2, Gleason grade <7] and life expectancy < 10 years, however -
- low risk disease can de-differentiate and progress
- a recent phase 3 Scandanavian study [NEJM 2005,352:1977-84] compared radical prostatectomy with watchful waiting in T1B/2, low/mod grade disease – 8.2 year F/U showed relative risks -

  for death : 0.56, **for distant mets** : 0.60, **for local progression** : 0.33 - in favour of prostatectomy – these benefits largely seen in men <65 years

PIVOT Trial

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 JULY 19, 2012 VOL. 367 NO. 3

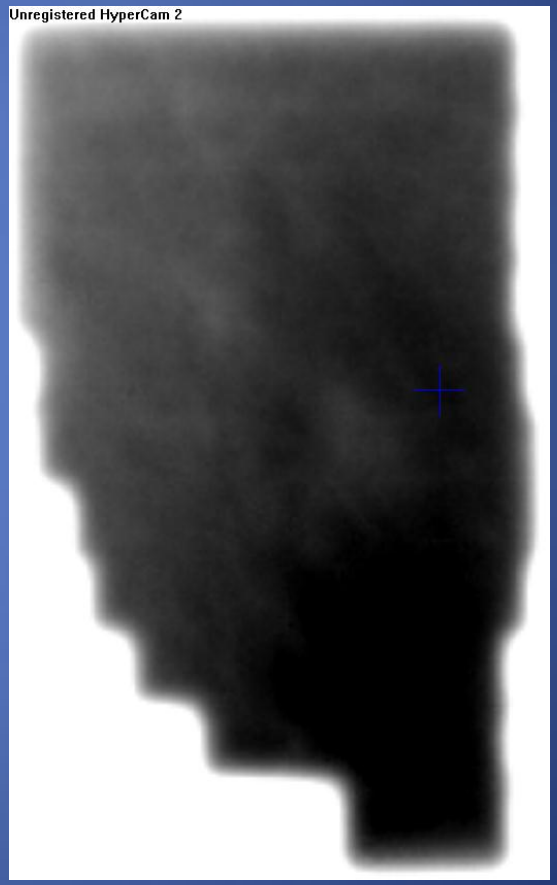
Radical Prostatectomy versus Observation for Localized Prostate Cancer

Timothy J. Wilt, M.D., M.P.H., Michael K. Brawer, M.D., Karen M. Jones, M.S., Michael J. Barry, M.D., William J. Aronson, M.D., Steven Fox, M.D., M.P.H., Jeffrey R. Gingrich, M.D., John T. Wei, M.D., Patricia Gilhooly, M.D., B. Mayer Grob, M.D., Imad Nsouli, M.D., Padmini Iyer, M.D., Ruben Cartagena, M.D., Glenn Snider, M.D., Claus Roehrborn, M.D., Ph.D., Roohollah Sharifi, M.D., William Blank, M.D., Parikshit Pandya, M.D., Gerald L. Andriole, M.D., Daniel Culkin, M.D., and Thomas Wheeler, M.D., for the Prostate Cancer Intervention versus Observation Trial (PIVOT) Study Group

Watch and Wait

- Indicated in those who are likely to die with disease rather than of disease.
- Frequency of follow up
- PSA
- PSA Velocity
- Need for clinical examination
- Point of re - referral:
- PSA > 50 (70)
- PSA doubling time < 3 months
- Symptoms or clinical signs of significant progression likely to cause symptoms

Follow up after surgery or radiotherapy



Follow up of non metastatic disease after definitive treatment

- at three months post-treatment: clinical review plus PSA
  – to two years post-treatment: clinical review plus PSA every six months
- – to five years post-treatment: clinical review plus PSA every 12 months
- – to at least 15 years post-treatment: clinical review every 12 months.

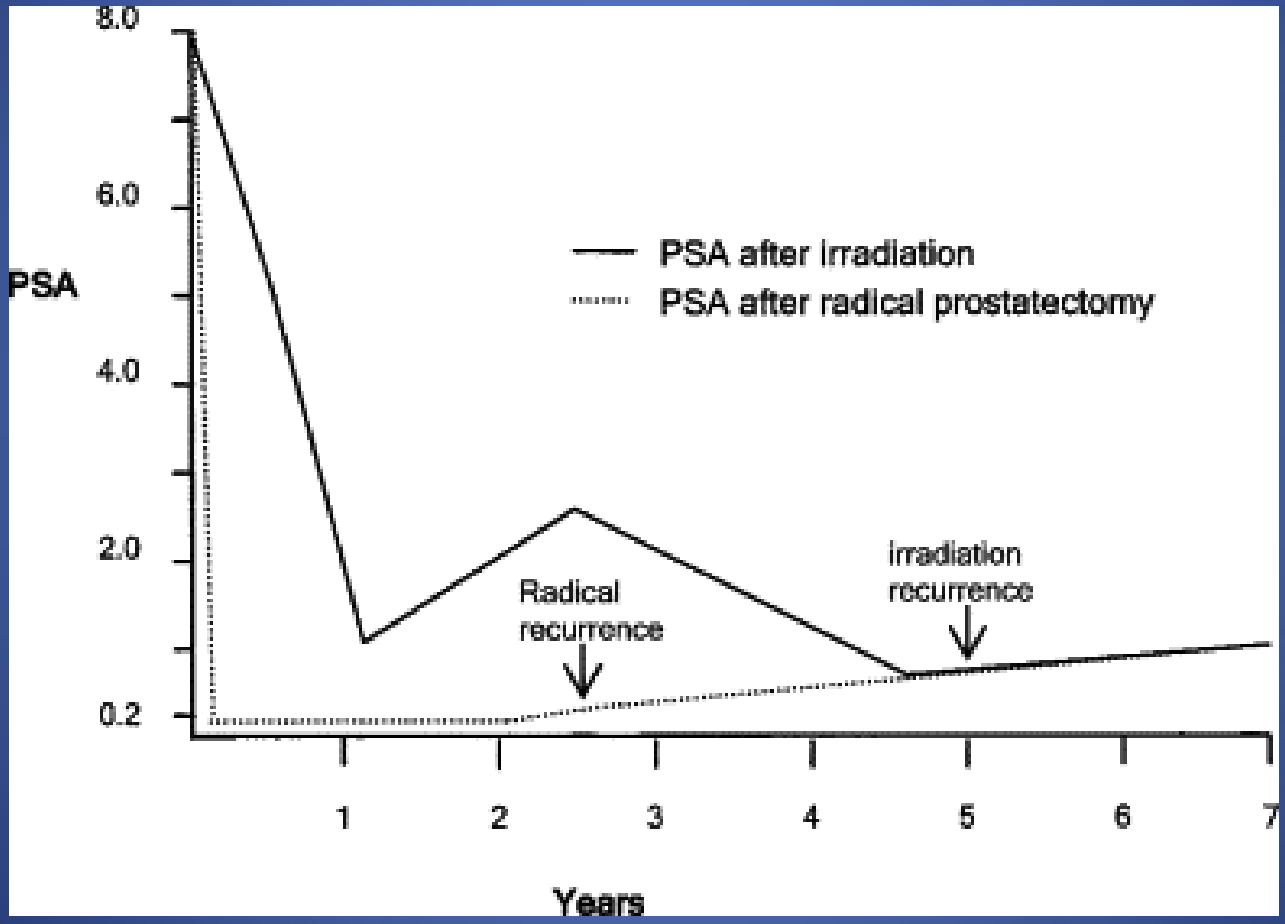
Biochemical testing

- Post prostatectomy the PSA should be undetectable and remain so.
- Post radiotherapy the PSA will fall progressively to reach a nadir.
- The nadir determines the prognosis
- Whilst on adjuvant ADT the PSA should be 0.1 and the testosterone castrate
- After ADT the PSA may rise with the testosterone but should stabilize or fall when the testosterone plateaus.

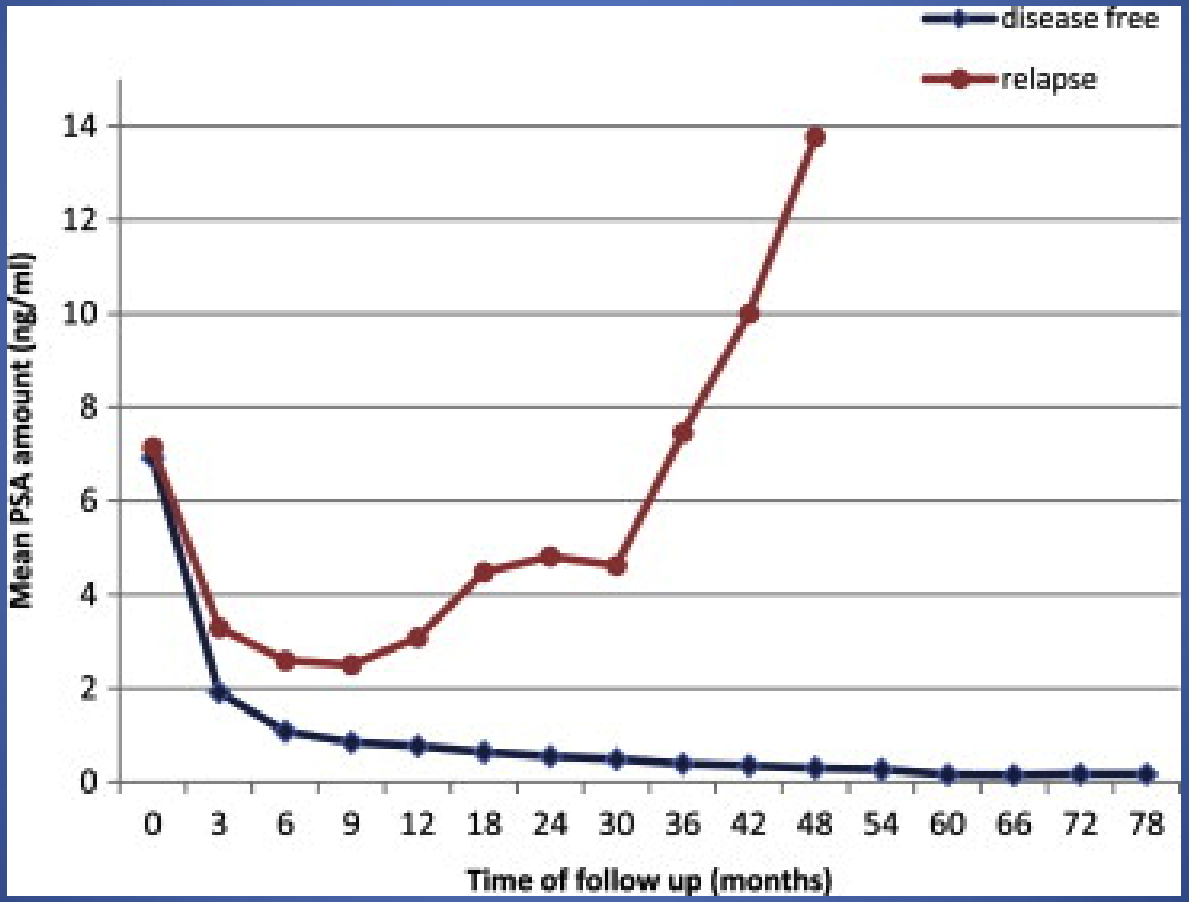
Re -referral criteria

- Post prostatectomy: any rise in PSA
- Post RT: 3 consecutive rises in PSA over 12 weeks or a PSA greater than 2.0ng/l
- Post RT plus ADT: 3 consecutive rises in PSA over 12 weeks or a PSA greater than 2.0ng/l with a stable testosterone

Beware the bounce Bounce



Biochemical relapse



Management of Biochemical relapse

- Expectant
- Time to symptom development 2 plus years
- Differing opinions on treatment thresholds
- Early intervention does not prolong life
- Early intervention does increase morbidity of treatment

What I do!

- PSA velocity < 3 months
- Symptoms … patient distress
- Absolute PSA > 50 (70)

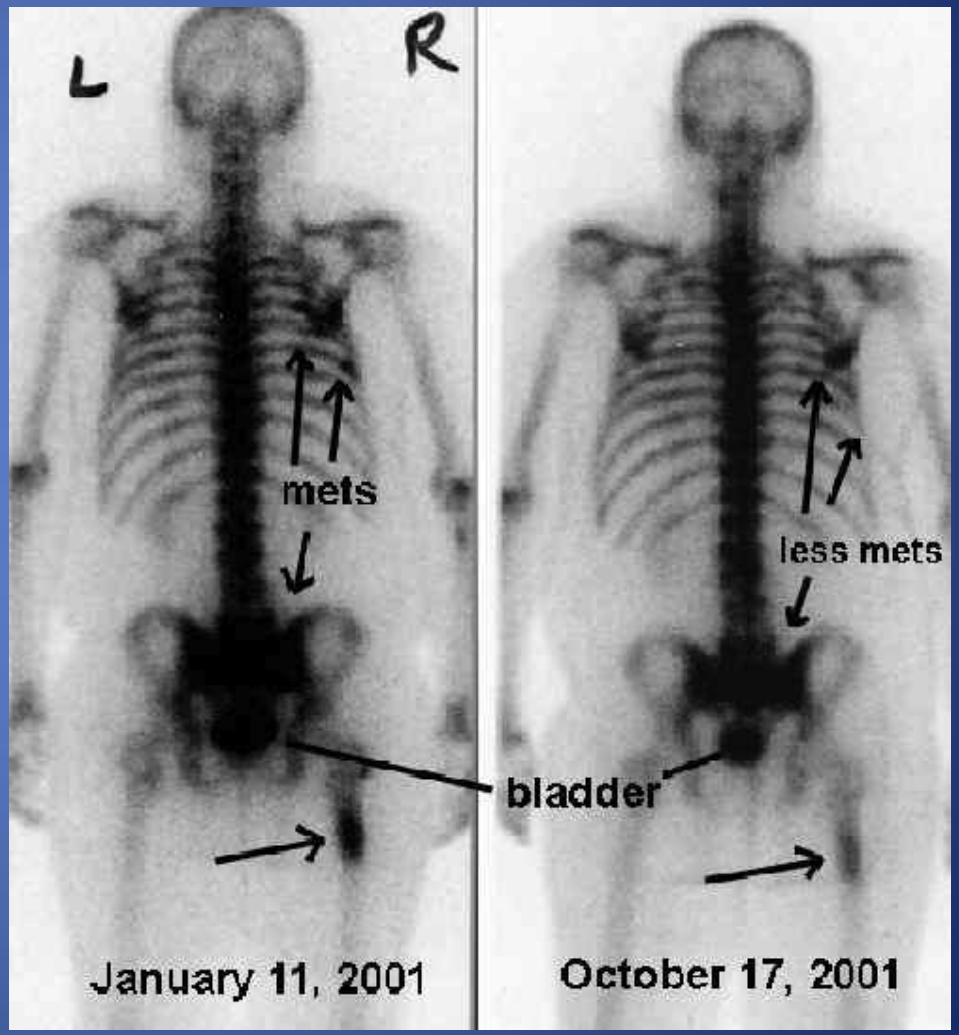
- ADT
- ADT plus bicalutamide
- Refer on failure

Primary/ on going management of metastatic disease

- Uncomplicated metastatic disease can be managed in primary care.
- Once disease is stabilized with a falling PSA care is primarily directed by PSA
- PSA frequency is determined by grade
- Three concurrent rises in PSA or clinical indications (symptoms / local progression) should trigger a re-referral or discussion

Imaging in prostate cancer

- Plain radiology
- Bone scan
- Complex imaging



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