S504 Proffered Papers

prostate cancer who had undergone, or were planed for curative intended radiotherapy between December 2006 and March 2010. The QLQ-INFO25 consists of questions regarding the level of perceived information about the disease (4 items), medical tests (3 items), treatment (6 items) and other services (4 items) and 8 single items (different places of care, things you can do to help yourself get well, written information, information on CD tape/video, satisfaction with received information, wish for more or less information and if the information overall had been helpful). For 21 items the response format was a four-point scale from 1 ("Not at all") to 4 ("Very much") and for 4 items "Yes" or "No". Item scores were transformed to a 0 to 100 scale. Higher scores represent higher level of information received, higher information wishes and higher satisfaction.

**Results:** A total of 601 (91%) patients responded to the INFO-25 questionnaire. The mean value and standard deviation (SD) for perceived information about the disease was 55.0 (22.6). Corresponding figures for perceived information on medical tests and treatment were 70.1 (23.6) and 64.6 (21.9). Most patients, 69% were satisfied with the information (42% "quite a bit" and 27% "very much"). Analysis is ongoing and data will be presented on associations between levels of perceived information, information needs, satisfaction with information and time since treatment. **Conclusion:** Most patients were satisfied with the information, although lack of information concerning information about the disease, medical tests and treatment were observed.

7063 POSTER

## Bone Scan is of Doubtful Value as a First Staging Test in Prostate Cancer

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**Background:** Although reported as having lower sensitivity and specificity than MRI scanning, nuclear bone scanning is still the commonest initial staging test for patients with newly diagnosed prostate cancer. With the hypothesis that primary bone metastases are always in the pelvis or lumbar spine, we wished to assess if bone scan could be replaced by axial imaging as the primary staging test in newly diagnosed prostate cancer (CaP).

Materials and Methods: We reviewed all bone scans (n = 1201) identified as being carried out in newly diagnosed prostate cancer patients from 2000 to 2010. Patient age, ethnicity, PSA at diagnosis of CaP, TNM stage, Gleason score and serum Alkaline Phosphatase were recorded for multivariate analysis. The mean age was 72 years (41–96). 57% were white and 38% black. PSA mean PSA was 268.95 (0.5–106931). Gleason 7 was the most common reported (39.38%), followed by Gleason 6 (22%). Mean Alkaline phosphatase was 166 (7–2755). Patients were assigned to one of four groups according to possible bony metastases.

Results: See the table.

Results of initial analysis by possible bone metastases diagnosed by bone scan

Group 1	No metastases	818	68.11%
Group 2	Metastases only in pelvis and/or lumbar spine	136	11.32%
Group 3	Widespread metastasis including pelvis and lumbar spine	223	18.57%
Group 4	Distant metastases without pelvic or lumbar spine abnormalities	24	2%

The 24 patients in group 4 were analyzed in detail: 15 were shown by other imaging to be false positives, 6 were found to have had prior hormone therapy, 1 was diagnosed with multiple myeloma, and another had Paget's disease. Only one had disease that was detected only outside the pelvic and lumbar spine (4% of this group but 0.08% of the total), unfortunately there were not enough images to decide.

Conclusions: Bone scan is a useful investigation to confirm and monitor metastasic prostate cancer. However this data suggests that axial imaging is a more appropriate primary staging study, and that bone scan is unnecessary if CT or MRI of the pelvis and abdomen are clear of metastases.

## Oral Presentations (Sat, 24 Sep, 11:15-12:30) Genitourinary Malignancies - Prostate and Other

7100 ORAL

Prostate-specific Antigen and Long-term Prediction of Prostate Cancer Incidence and Mortality in the General Population

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**Background:** It is largely unknown whether prostate-specific antigen predicts long-term risk of prostate cancer incidence and mortality in the general population. We tested the hypothesis that baseline prostate-specific antigen levels predict long-term risk of prostate cancer incidence and mortality.

Materials and Methods: Using a prospective study, we examined 4383 20–94 year old men from the Danish general population followed in the Copenhagen City Heart Study from 1981 through 2009. We measured baseline prostate specific antigen and assessed prostate cancer incidence and mortality as a function of prostate specific antigen using Kaplan–Meier plots of cumulative incidence and Cox proportional hazard models, adjusted for potential confounders.

**Results:** During 28 years of follow-up, 170 men developed prostate cancer and 94 died from prostate cancer. For prostate cancer incidence, the age-adjusted hazard ratio was 2.5 (95% confidence interval 1.6–3.9) for a prostate-specific antigen level of 1.01-2.00 ng/ml, 5.0 (3.1–8.2) for 2.01-3.00 ng/ml, 6.1 (3.2–11) for 3.01-4.00 ng/ml, 12 (7.7–19) for 4.01-10.00 ng/ml, and 44 (26–74) for >10.00 ng/ml versus 0.01-1.00 ng/ml. For prostate cancer mortality, corresponding hazard ratios were 1.8 (1.0-3.1), 3.3 (1.8-6.0), 3.8 (1.6-9.1), 4.7 (2.4-9.2), and 12 (5.0-26.0). For men with prostate-specific antigen levels of 4.01-10.00 ng/ml, absolute 10-year risk of prostate cancer was 11% for age <50 years, 19% for 50-60 years, 21% for 60-70 years, 22% for age >70 years; corresponding values for levels >10.00 ng/ml were 37%, 68%, 73%, and 79%, respectively.

**Conclusions:** Stepwise increases in prostate-specific antigen predicted a 3–44 fold increased risk of prostate cancer and a 2–12 fold increased risk of prostate cancer mortality. Also, absolute 10-year risk of prostate cancer was 11–22% in those with prostate-specific antigen levels of 4.01–10.00 ng/ml and 37–79% in those with levels >10.00 ng/ml. These results may be useful during revisions of guidelines on use of prostate-specific antigen testing in healthy men.

7101 ORAI
Variations in Androgen Dependent Clinical Progression Kinetics in
Locally Advanced Prostate Cancer

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Trial Name: TROG 96.01: Short-term neoadjuvant androgen deprivation (NADT) and radiotherapy (RT) for locally advanced prostate cancer (PC). Registration No: Australian New Zealand Clinical Trials Registry ACTRN12607000237482. Status: Closed 31 August 2010 after minimum 10 years follow-up. Sponsors: Australian Government National Health and Medical Research Council; Hunter Medical Research Institute (Newcastle, Australia); AstraZeneca Pty Ltd (Sydney, Australia); Schering-Plough Pty Ltd (Sydney, Australia).

Design: Phase III randomised clinical trial.

**Objective:** To determine whether 3 or 6 months NADT reduces mortality after RT.

Endpoints: Clinical progression, mortality.

Background to the present study: To understand the impact of short term NADT on distant progression after RT for locally advanced PC.

**Methods:** Between 1996 and 2000, 802 eligible men with T2b, T2c, T3, and T4 N0 M0 prostate cancers were randomly allocated radiotherapy alone to 66 Gy (RT), 3 months NADT or 6 months NADT before RT. NADT comprised of goserelin 3.6 mgs monthly sc and flutamide 250 mgs tds orally. Cumulative incidences and interval hazards of local and distant progression were derived and compared across trial arms. Competing risks