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EXPRESSION OF THE HER-2/NEU ONCOPROTEIN IN SERUM IN PATIENTS WITH RENAL CELL CARCINOMA

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HER-2/neu is a protooncogene from the epidermal growth factor family of receptor tyrosine kinases. The gene product, p185-HER-2, is expressed in about 30% of breast and ovarian cancer. An enzymatic immunoassay was used to assess p185-HER-2 in serum from 35 (22 male, 13 female) patients with histologically verified renal cell carcinoma. Eleven patients had stage I, 12 stage II–III, and 12 stage IV disease. The mean serum level of p185-HER-2 protein was 1847 ± 460 U/ml, and no significant difference was observed between the disease stages. However, nuclear grade 4 tumours showed a significantly decreased p185-HER-2 protein level, compared to grade 1–3 tumours ($P = 0.0037$). Our preliminary data seem to indicate a negative correlation between the serum level of p185-HER-2 protein and nuclear grade in renal cell carcinoma. Follow up data from a larger patient group will be discussed.

Prostate cancer and Kidney cancer

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CORRELATION AND PROGNOSTIC VALUE OF PATHOLOGICAL FEATURES, BIOLOGICAL AND CLINICAL DATA BEFORE TREATMENT, IN HIGH METASTATIC RISK CARCINOMA OF THE PROSTATE

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From 1987, 380 patients (pts) with high metastatic risk carcinoma of the prostate (T1/T2 with WHO grade 3, T3/T4 all grades) were treated in a randomized multicentric trial comparing curative radiotherapy alone with radiotherapy plus adjuvant LHRH analogue. The histology is currently reviewed by 2 reference pathologists.

The initial PSA value, the UICC T-classification, the WHO histological grade (G) (local and review diagnostic), and the Gleason score (GS) attributed by the reference pathologist (sum of the 2 gleason grades) were investigated as potential prognostic factors for relapse free survival amongst the 175 pts already reviewed by the referees. Local control and survival were not considered in the analysis because too few events have been recorded so far. The median FU was 2 years. The potential prognostic factors were investigated first by univariate analysis, (Kaplan Meier estimate and logrank test), and subsequently in a multivariate model (Cox regression model)..

The median age was 70 (51–80), the median GS was 7 (2–10), 50% of the pts were G2, 30% were G3, and T1–T2 were only 8.5% of the pts. For histological grade, we found a good concordance between the local and review diagnostic (71% of concordant cases). In the univariate analysis for relapse free survival, G (local diagnostic) was predictive ($P = 0.001$), G (review diagnostic) had a border line prognostic value ($P = 0.2$), and GS had a significant influence ($P = 0.002$). In the multivariate analysis, G only (local diagnostic) remained discriminant for relapse free survival ($P = 0.02$).

In conclusion this study confirmed the prognostic values of G and GS. However in the multivariate model GS did not provide any additional information to G. Surprisingly neither the PSA nor the T-class were found to be significant. This could be mainly explained by the selection of pts. The review process will be completed before the presentation and the present analysis will be accordingly updated.

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A RANDOMIZED DOUBLE-BLIND TRIAL IN 813 PREVIOUSLY UNTREATED METASTATIC PROSTATE CANCER (CAP) PATIENTS (PTS) COMPARING A NEW ANTIANDROGEN CASODEX® (BICALUTAMIDE) WITH EULEXIN (FLUTAMIDE) IN COMBINATION WITH LUTEINIZING HORMONE RELEASING HORMONE ANALOGUE (LHRH-A) THERAPY

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Pts (813) with stage D2 CaP were randomized between Jan 92 and Sept 93, to CASODEX (C), 50 mg once daily or EULEXIN (E), 250 mg tid, given as double blind therapy each in combination with LHRH-a, either goserelin acetate (ZOLADEX®) or leuprolide acetate (LUPRON). PSA responses were similar in both treatment groups: the median percentage fall was 99% after 3 months of therapy, at which time 70% of the pts had a PSA value within the normal range (0–4 ng/ml). Of the 404 pts randomized to C-LHRH-a therapy, 168 (42%) have reached a treatment failure end point, while of the 409 pts randomized to E-LHRH-a therapy, 218 (53%) have reached treatment failure. The hazard ratio with regard to time to treatment failure of C-LHRH-a to E-LHRH-a was 0.749 (95% confidence interval, 0.61 to 0.92), indicating a significant advantage ($P = 0.005$) for CASODEX-LHRH-a therapy. Hot flashes were the most frequent adverse event (C-LHRH-a: 49%, E-LHRH-a: 50%). The incidence of diarrhea was significantly higher for E-LHRH-a than for C-LHRH-a (24% vs. 10%; $P < 0.001$). 88 pts (32 C-LHRH-a, 56 E-LHRH-a) had randomized therapy withdrawn because of adverse events, with diarrhea as the most frequent reason (2 C-LHRH-a, 25 E-LHRH-a). The other reasons for withdrawal, including abnormal liver function tests, nausea and vomiting, kidney failure, and pain, were reported with similar frequencies in both treatment groups. These results demonstrate that CASODEX-LHRH therapy is better tolerated and more efficacious than flutamide.

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VARIABILITY OF PATIENT POSITIONING AND PROSTATE MOTION IN 3D CONFORMAL RADIOTHERAPY OF LOCALIZED PROSTATE CANCER

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The variability of patient positioning and prostate motion was determined and possible consequences of both errors on the calculated dose distribution in 3D conformal radiotherapy estimated.

Patient positioning variability was measured by comparing 54 orthogonal simulator films with 125 corresponding portal films from 27 patients. Prostate motion variability was determined by 107 computed tomography (CT) examinations with a CT simulator in 28 patients during radiotherapy.

The standard deviation (1SD) of the patient positioning variability in 3 directions ranged from 3.1 mm to 5.4 mm. The prostate motion variability was significantly greater in the anterior-posterior direction (1SD = 2.8 mm) than in the medio-lateral direction (1SD = 1.4 mm). Since both errors were independent and normally distributed, the combined error of both components could be calculated. The 1SD of the combined error was in the anterior-posterior direction 6.1 mm and in medio-lateral direction 3.6 mm.

Our data suggest that the variability of patient positioning and prostate movement is predictable under the patient setup conditions used. Dose volume histograms demonstrating the influence of the combined error of both components on the calculated dose distribution are presented.