

157 O

A NEW APPROACH TO REFRACTORY CARCINOMA OF THE PROSTATE: MICROTUBULAR INHIBITION WITH ESTRAMUSTINE AND VINDORELBIN.
Giuseppe Morgia, Francesco Ferrà, Alberto Saita and Mario Motta-Urology University - Catania (Italy).

This study has evaluated the efficacy and tolerance to administration of EMP associated with VNB in the treatment of hormone refractory prostate cancer. Treated with a schedule as follows: oral EMP (400 mg/twice daily); i.v. VNB (20mg/m²/weekly); complete restaging at 8 weeks. Patients who completed at least one cycle and were reevaluated were considered evaluable. Patients' mean age was 69 years, PS was in 8/18 and 2 in 6/18; bone metastases were present in all and extraosseous in 3. Mean basal PSA value was 112 ng/l (19-980). Mean duration of follow-up was 9 months (5-16). Side effects were nausea (83%) and breast tension (72%). The anemia observed in 60% of pts had been present before treatment in most cases. Leucopenia was in 55.5% (39%) achieved PR (6 after the first treatment, 1 after the third. Progression with the first cycle occurred in 4 (22%). 7 pts (39%) achieved SD, and quality of life improved in 78%.

159 P

INDUCTION OF LNCaP TUMOR GROWTH IN VIVO BY HUMAN PROSTATE FIBROBLASTS FROM DIFFERENT ZONAL ORIGIN.

G. N. Thalmann (Berne, Switzerland), S. M. Chang and L. W. K. Chung (Charlottesville, VA), and L.M. Franks (London, Great Britain).

Stromal-epithelial interaction plays an important role in regulating tumor growth, progression, and metastasis. We have previously demonstrated organ-specificity in the induction of human prostate cancer growth in vivo. In the present study, we investigated whether fibroblasts derived from different zones of the human prostate can differentially induce the growth and formation of recombinant chimeric prostate tissue. Therefore, we first established human prostate fibroblast cell lines from histologically normal areas of the peripheral zone (PZ), the transition zone (TZ), and the central zone (CZ) of radical prostatectomy specimens.

All of the fibroblasts derived from the prostate specimens, when injected alone in intact male athymic nude mice failed to form tumors. When coinoculated with nontumorigenic LNCaP human prostate cancer cells, fibroblasts derived from the TZ, PZ, and CZ induced tumors in 91% (10/11), 89% (8/9), and 50% (1/2) of the hosts, respectively. One hundred percent of TZ, 85% of PZ, and 100% of CZ fibroblast-induced tumors expressed elevated levels of prostate-specific antigen (PSA). Tumors differed in histomorphologic analysis. Prostate fibroblasts differed in dihydrotestosterone growth stimulation, induction of anchorage-independent growth, and doubling time.

In summary, fibroblasts derived from the peripheral, transition, and central zones of the human prostate induced human nontumorigenic LNCaP cells to form PSA-expressing tumors. These results illustrate the importance of stromal-epithelial interactions affecting growth and morphology in prostate cancer development.

158 O

PSA DOUBLING TIME AFTER BRACHYTHERAPY WITH I-125 FOR PROSTATIC CARCINOMA CATEGORY T1c-3G1-3N0M0

R.A. Schipper, G. van Andel, Th. R. de Reyke, K.H. Kurth, Department of Urology, Academic Medical Center, Amsterdam

Patients with locally confined prostate cancer (T1c-3G1-3N0M0) are treated with either radical prostatectomy or I-125 implantation, according to the wishes of the patient. The results and prognostic value of PSA doubling time (DT) after interstitial radiotherapy are examined.

From June 1985 to Dec. 1993, 78 patients were treated for T1-3G1-3N0M0 prostatic carcinoma with I-125 implantation. PSA measurements, radiological evaluation and prostatic biopsies were done at regular intervals. The follow-up period ranges from 6 - 120 months (mean 53.9 months). Progression was defined 1) as occurrence of metastases, seen during radiological evaluation or 2) a > 25% increase in the volume of the primary.

Progression was observed in 9 patients (11%), 7/9 pts died. Overall 27 pts died (35.1%) 22 not related to prostate cancer. Mean time to progression was 27.7 months. Neither staging, nor grading correlated with risk for progression or survival. PSA serial measurements could be evaluated in 54 patients. The PSA-DT was < 12 months in 15 patients. (28%), 8/15 showed progression (53%). Of the 39 patients with a PSA-DT > 12 months, no patient showed progression.

We conclude that, in the present study PSA-DT was the most powerful predictor of progression. The likelihood of either local progression or distant failure is small in pts. with PSA-DT > 12 months compared to PSA-DT < 12 months.

160 O

QUALITY OF LIFE ASSESSMENT IN PATIENTS WITH PROSTATIC CARCINOMA CATEGORY T1-3 N1-3 M0, RECEIVING OR NOT RECEIVING HORMONAL TREATMENT.

G. van Andel¹, KH Kurth², H de Haes³,
¹Department of Urology, OLVG Hospital Amsterdam, ²Department of Urology, ³Institute of Medical Psychology, University of Amsterdam.

Clinical evaluation in oncology has typically focussed on outcome indicators, while relatively little systematic attention has been paid to how treatment affects quality of life of the patient. Purpose of the present study was to examine the impact of immediate or delayed treatment in patients with prostatic carcinoma (T1-3 N1-3 M0) on quality of life parameters. To this end an extended questionnaire was constructed, containing 59 items, consisting of the EORTC Core Quality of Life Questionnaire (EORTC-QOL-C30), a global measurement of Quality of Life (Selby uniscale), the IPS score, the sexual behaviour questionnaire and questions about the side-effect of hormonal treatment. Furthermore we examined the correlation between PSA level and QOL parameters, using several PSA cut-off values. 47 patients, of whom 39 took part in the EORTC-study 30846, participated in this study. They all completed the self-administered questionnaire. The comparison between the affective and the cognitive component of quality of life in prostate cancer patients with or without treatment did not show significant differences except for psychological distress, hot flushes, erectile dysfunction and lessening of sexual enjoyment, all of which were more frequently experienced by treated patients. The premise that active treatment would improve the psychological quality of life was not substantiated; the no-therapy group had better psychic and sexual functioning. Analysis of the questionnaire results of the hormonal treated patients using a PSA cut-off value of 20 ng/ml showed significant differences in physical role, emotional, cognitive and social function as well as the overall quality of life, fatigue, energy and sexual pleasure. The patients with a PSA > 20 ng/ml always performing worse than the patients with a PSA < 20 ng/ml. Analysis in the rest of the groups with respect to the various PSA cut-off values did not show significant differences in one of the items.