

PROSTATE CANCER TREATED WITH HIFU: LONG TERM RESULTS.

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OBJECTIVES: The disease progression-free rate has been calculated in localized prostate cancer patients treated with transrectal High Intensity Focalized Ultrasound in order to establish the durability of the therapy.

METHODS: 100 patients with biopsy-proven localized T1-T2 prostate cancer and who were not suitable candidates for surgical prostatectomy underwent transrectal HIFU ablation with the Ablatherm™ device. At date, the mean follow-up is 18 months, ranging from 3 to 75 months. The disease progression was strictly defined as (i) any positive biopsy results, regardless of PSA levels, or (ii) the occurrence of 3 successive increases of the PSA levels, with a PSA velocity ≥ 0.75 ng/ml/year. Times to specific events (positive biopsy or PSA elevation) were analyzed according to Kaplan-Meier survival method.

RESULTS: Main baseline characteristics included a mean age of 70.7 ± 6.12 years, a mean PSA level at 8.38 ± 4.72 ng/ml, and a mean prostate volume at 33.2 ± 16.75 cc. At last follow-up, 76 patients were still presenting negative biopsies, with a mean PSA nadir at 0.59 ± 0.94 ; 11 of them presented increasing PSA levels, and were not considered as disease progression-free. The overall findings evidenced therefore the absence of disease progression for 65% of the patients after HIFU prostate ablation. When patients were stratified according to their initial disease-related risk, this disease-free rate (DFR) was increased up to 80% for patients at "low risk":

Overall	n = 100	DFR = 65%
PSA < 10 ng/ml	n = 67	DFR = 73%
PSA 10-20 ng/ml	n = 33	DFR = 49%
Gleason sum 2-6	n = 55	DFR = 80%
Gleason sum 7-10	n = 45	DFR = 46%

CONCLUSION: Data indicate that the previously observed results are maintained through longer follow-up, and confirm that transrectal HIFU prostate ablation is an effective therapeutic alternative for treating patients with localized prostatic adenocarcinoma.