

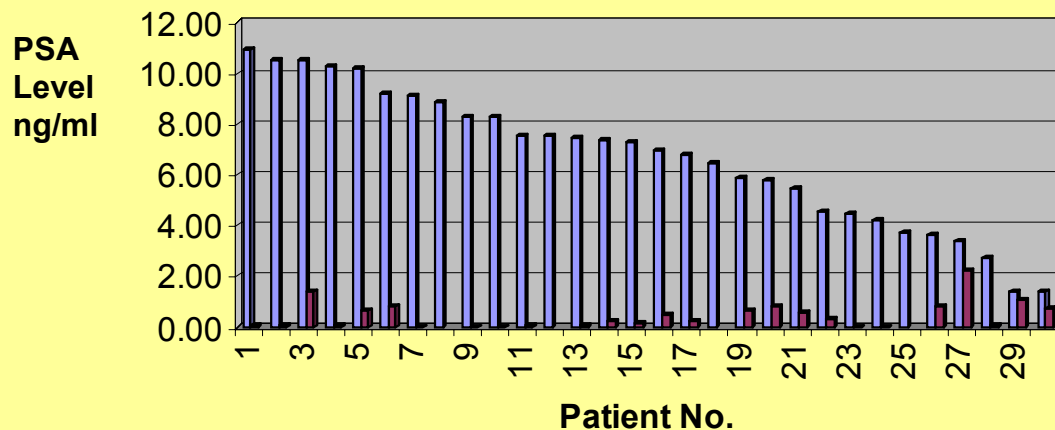
# Localized Prostate Cancer Treatment by High Intensity Focused Ultrasound (HIFU): Preliminary Results

Toyoaki Uchida M.D., Department of Urology, Kitasato University, Tokyo, Japan

**Summary of Protocol and Method:** Thirty patients with localized Prostate Cancer (T1B-2N0M0), PSA < 11ng/ml and Gleason score < 7, were treated with a High Intensity Focused Ultrasound (HIFU) device, the Sonablate (Focus Surgery, Inc. Indianapolis, IN). Patients were followed on a regular interval at 24 hours, 1, 3, 6, 12, and 36 months post treatment. Measured parameters including PSA, biopsy results, sexual potency, retention after treatment, prostate volume change, etc. were recorded. The treatments were performed using multiple focal length probes. The treatment covered the entire prostate by selecting treatment areas in the transverse and longitudinal ultrasound image planning planes. To achieve higher efficiency and shorter operation time, the split beam HIFU method (larger focal zone) was employed during the treatment with 3 second ON / 6 second OFF HIFU cycle.

## PRE and POST HIFU PSA (n=30)

Pre Max=10.9, Min=1.9  
Post Max=2.2, Min = 0.0



### Results :

All patients with a pre-treatment PSA level less than 11.0 ng/ml resulted in 100% negative biopsy and Nadir PSA level of 0.0-0.5 ng/ml (65%), 0.6-1.0 ng/ml (27%) and 1.0-2.0 ng/ml (8%).

**Notable factors of the treatment:** 1) All patients had negative biopsies 2) Lower complication rates were experienced and 3) The treatment is minimally invasive and is repeatable.

### Conclusion:

HIFU therapy is safe and effective for the treatment of localized prostate cancer.

*This summary has been abstracted from previously published work and supplemented by additional new treatment data prepared by Dr. T. Uchida, M.D. by Focus Surgery, Inc.*