Comparisons of oncological and functional outcomes among radical retropubic prostatectomy, high dose rate brachytherapy, cryoablation and high-intensity focused ultrasound for localized prostate cancer

Po Hui Chiang and Yi Yang Liu

Study Summary

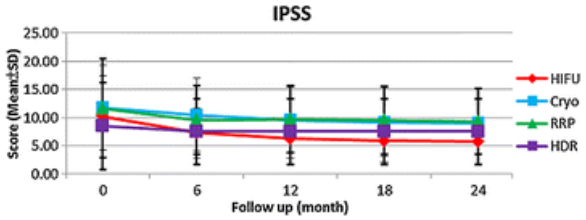
Retrospective single institution comparative study of Radical retropubic prostatectomy (RRP), high dose rate brachytherapy (HDRBT), cryoablation and High Intensity Focused Ultrasound (HIFU) in localized prostate cancer.

	HIFU (N=120)	RRP (N=97)	HDR (N=161)	Cryo (N=114)
Age (mean)	68.06	63.53	71.92	69.76
Low risk	12.5%	9.3%	3.7%	16.7%
Intermediate risk	39.2%	10.3%	20%	21.1%
High risk	48.3%	80.4%	76.4%	62.3%

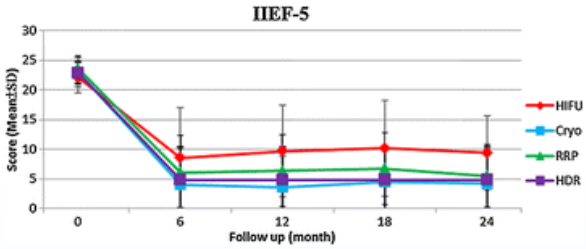
- → Large number of patients for each group
- → Majority of Intermediate and high risks patients

Results

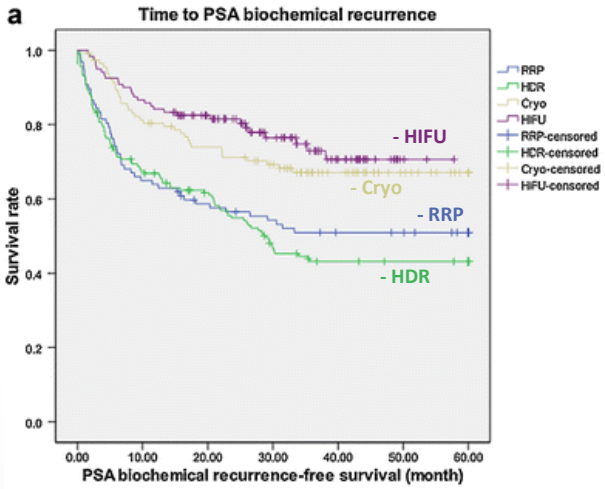
Urinary functions (lower is better) :



Erectile function (higher is better) :



PSA biochemical recurrence was defined as
PSA ≥ 0.2ng/mL for RRP and
PSA ≥ PSA nadir +2 ng/mL for HIFU, Cryo and HDR



- → Efficacy (BFSR) for HIFU is the highest compared to other techniques
- → HIFU patients have seen an improvement of their urinary symptoms
- → Despite having older patients than RRP, HIFU patients have the best IIEF-5 score (sexual functions)
- → **In this study patients undergoing HIFU had the best survival rate with optimal preservation of urinary and sexual function**

Conclusions

Quote from the publication

"In consideration of trifecta, HIFU may provide equivalent cancer control and better quality of life for patients of localized prostate cancer "

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