

Study title	Patient #	Main finding(s)	Reference
Computer-aided ultrasonography (HistoScanning): a novel technology for locating and characterising prostate cancer.	29	Prostate HistoScanning has the potential to identify and characterise prostate cancer foci noninvasively. The precision appears to be sufficient to suggest that PHS might be useful as a triage test for men deemed to be at risk of prostate cancer and who wish to avoid prostate biopsy.	i, ii
The accuracy of transrectal ultrasonography supplemented with computer-aided ultrasonometry for detecting small prostate cancers.	29	In this preliminary study, HistoScanning accurately detected cancer foci of 0.50 mL; these encouraging results will need to be verified in a larger group of patients.	i, iii
Detection, localisation and characterisation of prostate cancer by Prostate HistoScanning™.	27	Prostate HistoScanning has the ability to identify and locate prostate cancer and consequently may aid in pre-treatment and pre-surgical planning. In men with a lesion identified, it has potential to enable improved targeting, allowing better risk stratification by obtaining more representative cores. However further verification from the results of the blinded phase of this study are awaited.	i, iv
Correlation of 3-dimensional ultrasound computer-aided interpretation with dynamic contrast enhanced pelvic MRI in the detection of post radical prostatectomy of local recurrence of prostate cancer.	9	HistoScanning™ image processing correlated highly with DCE MRI abnormalities and locally recurrent cancer detected by TRUS bx. This novel imaging technique shows promise for precise guidance of prostate fossa biopsies, targeting of salvage and focal therapies.	v
Detection of prostate cancer by HistoScanning.	85	HistoScanning seems to have a great potential in the detection of significant prostate cancer. In particular, extra capsular, poorly differentiated and large prostate cancers show a high detection rate. However, larger prospective studies are needed to verify these preliminary results.	vi
The value of computer-aided ultrasonography in the detection and evaluation of prostate cancer.	85	The positive predictive PCa rate was 80%. An exact correlation of tumour localisation was noted in 77.6% of patients. An exact correlation of tumour volume was noted in 71.2% of patients.	vii
Blinded assessment of Prostate HistoScanning™ accuracy compared to elective radical prostatectomy step sectioned histopathology.	24	Tumour recognition with Prostate HistoScanning is reasonably accurate when compared to radical prostatectomy step histopathology, very few significant lesions are missed.	viii
Can HistoScanning™ help in the assessment of patients with raised serum PSA level: a pilot study.	42	HistoScanning™ showed one HistoScanning volume (HV) ≥ 0.20 cc in 10 men, and two HV ≥ 0.20 cc in 24 men.	xiii
Prostate HistoScanning™ examination in patients with past negative biopsy sessions: a pilot study.	50	HistoScanning Volumes estimated by Prostate HistoScanning decrease with increasing number of previously negative biopsy sessions. Eighteen men had at least one positive core at re-biopsy; 32 had a negative re-biopsy.	xiv
The value of Prostate HistoScanning in men at risk of prostate cancer.	94	Every cancer volume of 1mm estimated by Prostate HistoScanning was associated with a nearly 3 fold increase in the probability of having a positive biopsy Prostate HistoScanning may be useful in selecting men at risk for prostate cancer.	xv
HistoScanning-guided prostate biopsy in comparison to a systemic 14-fold transrectal prostate biopsy.	43	The detection rate of carcinomas in the clinic was high and the detection rates between the systemic trans rectal and the guided perineal prostate biopsy were comparable. The number of cores needed to detect the carcinoma was much lower in the HistoScanning guided biopsy than in the systemic trans rectal biopsy.	xvi
Accuracy of computer-aided transrectal ultrasonography detection (HistoScanning™) of prostate cancer in the prediction of a negative margin in radical prostatectomy patients.	80	HistoScanning could avoid approximately 40% unnecessary frozen sections, reducing the operation time and cost and achieving almost the same oncological safety for a nerve sparing procedure with sensitivity of 95%.	xvii
Pre-operative staging of prostate cancer with HistoScanning™ facilitates nerve sparing prostatectomy and may increase complete excision of prostate cancers.	25	Refined optimised pre-operative staging with Prostate HistoScanning may reduce positive surgical margin rates and may make extra- and intra-fascial nerve sparing radical prostatectomy oncologically safer.	xviii
Inter-observer variability in the interpretation of HistoScanning™ characterisation of prostate cancer.	12	Both observers found a refined HistoScanning focus of 0.5cc in 40 sextants and no such focus in 138 sextants. Both observers agreed on the presence or absence of focus in 90% of sextants, achieving a kappa statistic of 0.73.	xix
Ultrasound spectral interrogation of histological grade in prostate cancer using Prostate HistoScanning™.	3	Interrogation of raw radiofrequency ultrasound spectra by Prostate HistoScanning™ may be able to discriminate between prostate cancers of different histological grade.	xx

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