USANZ 2026 Conference Review™

Making Education Easy

28 February – 3 March, 2026

In this review:

Abbreviations used in this review:

ARSi = androgen receptor signalling inhibitor
AS = active surveillance
DAC = ductal adenocarcinoma
DDR = DNA damage repair
DKI = diffusion kurtosis imaging
FLA = focal laser ablation
MIBC = muscle-invasive bladder cancer
mpMRI = multiparametric MRI
PARPi = poly ADP ribose polymerase inhibitor
PTNS = percutaneous tibial nerve stimulation
TPUS = transperineal ultrasound
TURBT = transurethral resection of bladder tumour

Welcome to our review of the 78th USANZ Annual Scientific Meeting held in Melbourne, Australia.

This year's ASM offered a rich programme on the latest developments in urological research across Australasia. Here I have discussed ten abstracts which were particularly noteworthy – eight of which received prizes and awards. We begin with a study which showed that transperineal ultrasound (TPUS) could reliably assess pelvic floor function in prostatectomy patients, while indicating long-term continence outcomes. The next abstract provides data on the promising performance of ProFocal® focal ablation therapy for intermediate-risk prostate cancer, with minimal detection of in-field clinically significant disease and low recurrence rates. This is followed by an analysis which found that MRI and histopathological features were not reliable indicators of progression risk among men with Grade Group 2 prostate cancer on active surveillance. Other research describes the implementation of robotic artificial urinary sphincter surgery for female incontinence in Australia and NZ, and the accuracy of pre-resection mpMRI for identifying MIBC.

I trust that you will enjoy this review and find it valuable for the lives of your patients. Your feedback is valued – I encourage you to send it in. Abstracts are available online here.

Kind Regards,

Professor Eric Chung
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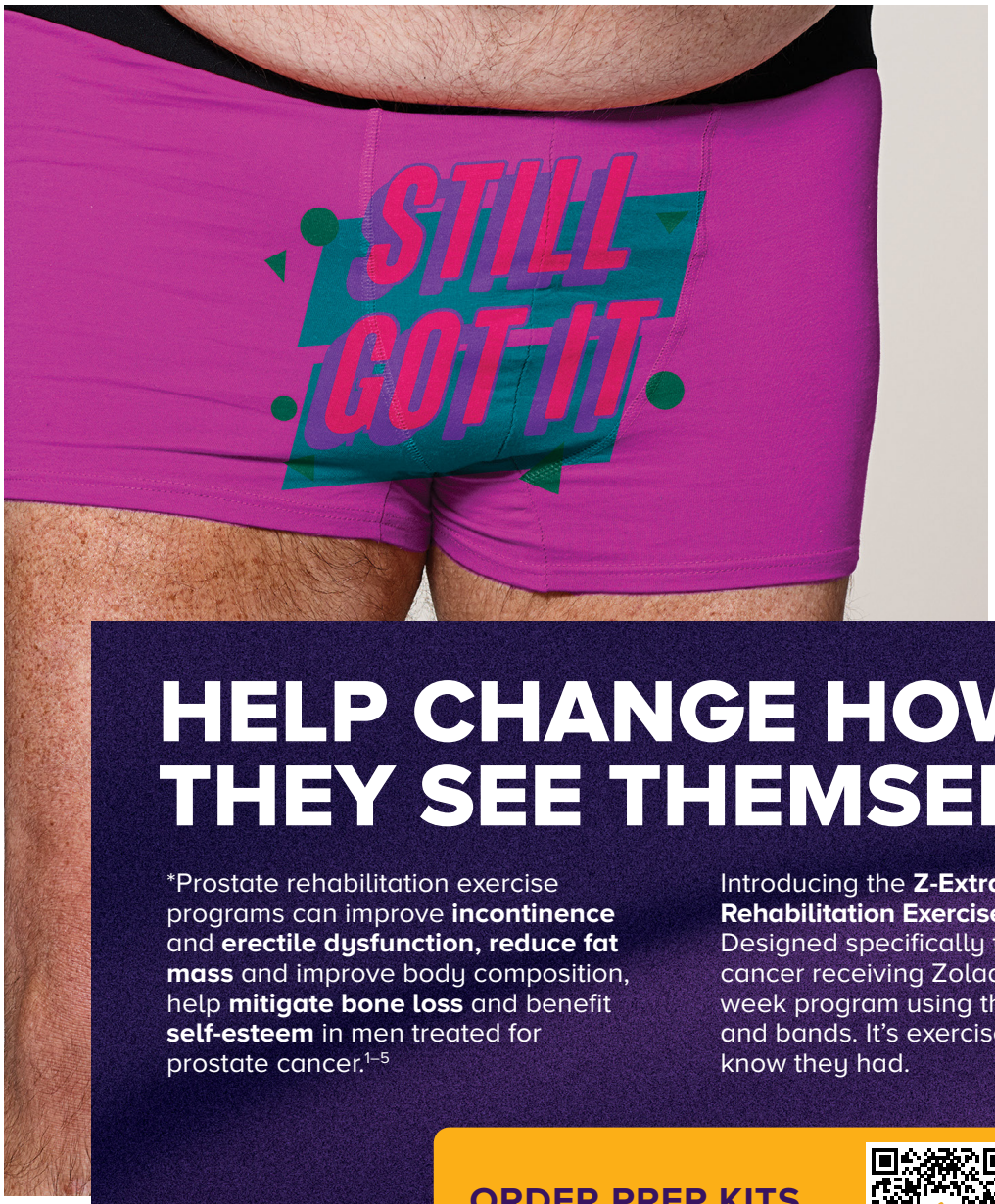
Transperineal ultrasound assessment of pelvic floor function and correlation with long term continence outcomes post radical prostatectomy

Speaker: Dr Athina Pirpiris (Concord Repatriation General Hospital, Sydney)

Summary: In this prospective study, researchers evaluated whether changes in pelvic floor function and structure following radical prostatectomy (as assessed via transperineal ultrasound [TPUS]) were correlated with long-term continence outcomes. TPUS was performed pre-operatively in 182 men (mean age 64 years) undergoing radical prostatectomy, and post-operatively at 3, 6 and 12 months. Continence outcomes were assessed at 12 months and 5 years. Dr Athina Pirpiris noted that 2D TPUS could reliably visualise pelvic floor structures before and after prostatectomy. There was a decrease in membranous urethral length following prostatectomy (mean 1.33 vs 1.15cm; $p<0.001$), albeit with no significant changes in pelvic floor superior/anterior displacement at 12 months, and no significant change in pelvic floor contraction strength ($p=0.45$). Long-term continence symptoms were improved among patients with longer pre- and post-contraction membranous urethral length, greater anterior pelvic floor movement, and a greater percentage change during pelvic floor contraction.

Comment: TPUS is a non-invasive tool that has been widely used in the evaluation of female urinary incontinence and functional disorders of the pelvic floor. In recent times, there has been an increasing interest in TPUS use to evaluate male pelvic floor dysfunction through functional dynamic evaluation of proximal urethral mobility and the pelvic floor in prostatectomy patients. In this study, TPUS provides a reliable longitudinal dynamic assessment of various pelvic floor parameters and has shown that longer membranous urethral length and greater anterior pelvic floor movement improved long-term continence outcomes post-prostatectomy. The dynamic real-time acquisition of TPUS provides useful insights into the pathophysiology of the pelvic floor structures and anatomical changes, and importantly, can be used to provide real-time visual feedback to better educate and train patients, especially in post-prostatectomy incontinence. What is relevant and useful will be to standardise the technical parameters in TPUS with competency frameworks, and ensure quality assurance methods for the broader clinical adoption of these standards.

USANZ Platinum Trophy



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References: 1. Prostate Cancer UK. Physical Wellbeing. Available at: https://prostatecanceruk.org/prostate-information-and-support/get-support/wellbeing-hub/physical-wellbeing. Accessed February 2026. **2.** Baumann F *et al. Support Care Cancer* 2012;20:221–33. **3.** Dorey G *et al. BJU Int* 2005;96(4):595–7. **4.** European Association of Urology Guidelines on Prostate Cancer 2025. Available at: https://uroweb.org/guidelines/prostate-cancer. Accessed January 2026. **5.** Edmunds K *et al. Support Care Cancer* 2020;28(12):5661–71.

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Outcomes of focal laser ablation (ProFocal®) treatment in clinically localised prostate cancer

Speaker: Dr Jonathan Kam (Nepean Urology Research Group, Kingswood and University of Sydney)

Summary: PFLT-PC was a single-arm, open-label, efficacy and safety trial of ProFocal® focal laser ablation (FLA) therapy for prostate cancer. This presentation described the oncological outcomes of ProFocal® therapy as stratified by tumour location in PFLT-PC. Between 2020–23, 100 eligible men (median age 66 years; PSA 5.9ng/mL; prostate volume 39cc; MRI lesion volume 0.84cc) with intermediate-risk, untreated prostate cancer underwent treatment with ProFocal®. At the 3-month surveillance biopsy, 16 men had ISUP ≥2 infield disease. It was noted that there was an initial learning curve associated with treatment delivery: 12/16 cases occurred among the first 50 cases, while 4/16 occurred in the following 50 cases (4%). Among the patients who had anterior (n=26) and posterior (n=64) tumours, the recurrence rates were 11.5% and 15.6%, respectively.

Comment: Several focal prostate energy therapies, such as FLA, cryotherapy, and photodynamic therapy have been developed to treat low- and medium-risk prostate cancer. FLA has undergone significant development as a focus therapy model, and ProFocal® has been reported in this study to show great promise with minimal detection of in-field clinically significant disease (around 4%) and low recurrence rates (11.5–15.6%). Currently, precision surgery is popularised in oncology to optimise oncological outcomes and minimise the impact (unwanted side effects) on patient quality of life. Although active surveillance and FLA avoid complications caused by overtreatment, choosing between them in clinical practice needs further study, since FLA is not completely devoid of morbidity. Furthermore, a long-term tumour prognosis for patients treated with FLA is lacking, and a cost-benefit analysis should be conducted to determine the place of FLA compared to other focal therapies.

BAUS Trophy Award

The value of MRI and histological features at the diagnosis in predicting progression outcomes in men with Grade Group 2 disease on active surveillance

Speaker: Dr Kieran Sandhu (Cambridge University Hospitals, Cambridgeshire, UK)

Summary: These investigators examined whether MRI or histopathological characteristics could reliably indicate risk of progression among men with Grade Group 2 prostate cancer on active surveillance (AS). Data from 78 men (median age 66.0 years) were reviewed from the prospective STRATCANS AS cohort. The study specified four progression endpoints: (1) progression to ≥Cambridge Prognostic Group 3; (2) any pathological/stage progression; (3) ≥Grade Group 3 or any treatment; (4) ≥Grade Group 4, metastasis or prostate cancer-related mortality. At a median follow-up of 5 years, progression endpoints 1, 2, 3 and 4 occurred in 21.8%, 26.9%, 37.2% and 3.8% of men, respectively, and progression showed no association with tumour core involvement across any of these endpoints (p=0.38; p=0.22; p=0.16 and p=0.31). However, cancer core cut-off thresholds of ≥6mm and ≥4mm were associated with progression according to endpoint 1 (p=0.009 and 0.045). For all endpoints, there were no associations between progression and percentage of tumour involvement, or MRI characteristics such as location and laterality.

Comment: In the AS setting, mpMRI improves baseline risk allocation by identifying men who need early treatment, detecting progression in men on surveillance, and reducing the need for serial biopsies. In fact, many international guidelines support mpMRI for all AS candidates. It is known that MRI visibility of disease in AS candidates confers a higher probability of adverse pathology (at surgery), which indicates an association between MRI phenotypes and biological features. However, in this study, neither MRI nor histopathological features provided a reliable signal of progression risk in Grade Group 2 patients; MRI characteristics such as lesion size, location or laterality were not associated with progression, regardless of the endpoints used. It is important to acknowledge the considerable heterogeneity of men enrolled in AS, and it is important to risk-stratify these men to reduce AS failure rates. Further studies are necessary to define and validate the use of risk-stratified AS protocols where MRI, coupled with histopathological features, can be appropriately adopted for baseline stratification and dynamic monitoring.

Alban Gee Prize

Robotic artificial urinary sphincter (AUS) for women with stress urinary incontinence

Speaker: Dr Marnique Basto (Northern Beaches Hospital, North Shore Private Hospital and University of Sydney)

Summary: Dr Marnique Basto presented data from an initial Australasian experience of robotic artificial urinary sphincter (AUS) implementation among women with stress urinary incontinence. Between 2022–25, 18 women (median age 64 years; mean 7 pre-operative pads/day) underwent AUS in five institutions throughout Australia and NZ. Most women (n=17) had undergone previous incontinence surgeries (sling + bulking agent n=14). With a mean operative time of 312 mins, all women proceeded to AUS implantation, and five intra-operative injuries occurred (28%). It was noted that these patients required complex surgical dissection as a result of numerous prior surgeries. Catheterisation was carried out for a median of 2 days, and the mean length of stay was 3 days. A total of five minor Clavien complications occurred (28%), with four Clavien IIIb complications (22%). Adjunct intradetrusor botox was administered to two patients. At a mean follow-up of 10.5 months, 27% of patients had improved continence and 67% were completely dry. An additional patient was also dry; however, they regressed following spinal surgery with prolonged catheterisation.

Comment: Since the first implantation of an AUS in a female patient in 1973, excellent results in terms of continence have been described. However, its use has failed to spread over the years in the female population, and has long been hindered by the technical challenge and morbidity of the open implantation technique. The robotic system, with its enhanced 3D vision in the pelvis and EndoWrist® technology, makes it particularly useful to intervene in narrow and deep cavities, which is particularly convenient for female AUS implantation. Furthermore, a robotic approach could minimise the risk of intra-operative bladder neck or vaginal injury, while also allowing early identification of these injuries when they occur (so that these injuries can be repaired carefully under direct vision). In this ANZ study, robotic AUS has been safely undertaken in 18 patients with reasonable continence outcomes (67% patients were completely dry) and modest complication rates (28% intra-operative injuries). From a general standpoint, the robotic approach to AUS implantation in women is probably going to replace open surgery. The development and advances in surgical robots certainly bring the possibility of regionalising surgeries in AUS implantation, and improving the use of AUS in female incontinence (in the setting of mesh concerns).

Low-Arnold Award in Female & Functional Urology

Independent commentary by Professor Eric Chung

Professor Eric Chung is a consultant urological surgeon at the AndroUrology Centre for Sexual, Urinary, and Reproductive Excellence and holds professorial academic appointments at the University of Queensland in Brisbane and Macquarie University Hospital in Sydney, Australia. He holds several executive positions in scientific organisations, including President-elect of the International Society of Sexual Medicine (ISSM) and Chair of the Education and Research Office in Sexual Medicine (EROS) for the Asia Pacific Society of Sexual Medicine (APSSM). He is the youngest recipient of the Urological Society of Australia and New Zealand (USANZ) Medal and served as the Past Chair of the Male LUTS and Andrology sections. He runs an active clinical research unit and has authored more than 250 peer-reviewed papers and book chapters.

Interim analysis of the MBC trial: diagnostic accuracy of pre-TURBT bladder mpMRI and diffusion kurtosis imaging for T-staging in bladder cancer

Speaker: Dr Ramesh Shanmugasundaram (St George Hospital, Kogarah, Sydney)

Summary: The aim of the prospective, multicentre MBC trial is to assess the diagnostic performance of pre-resection mpMRI for identifying muscle-invasive bladder cancer (MIBC). This analysis reports on 100 patients (median age 72 years; 73% men) who underwent mpMRI prior to TURBT. According to histopathology, 23% of patients had MIBC and 69% had non-MIBC. Pre-resection mpMRI showed high diagnostic accuracy for identifying MIBC, particularly at a VI-RADS cut-off of ≥4 (specificity 85.7%; sensitivity 78.3%; positive predictive value 62.1%; negative predictive value 93.0%; AUROC 0.87). VI-RADS was also found to have very high inter-reader agreement (κ 0.81). Predictive performance was further enhanced by a multivariable model that integrated VI-RADS, tumour size, age and sex (AUROC 0.93).

Comment: Precise diagnosis of tumour phenotypes and recurrence risk is pivotal in the clinical management of bladder cancer. Radiomics has also shown great potential in the precise diagnosis of bladder cancer, and pre-operative prediction of recurrence risk using radiomics-empowered image interpretation can amplify the differences in tumour heterogeneity between different phenotypes. In this MBC trial, pre-resection mpMRI, particularly at a VI-RADS cutoff of ≥4, provides high diagnostic accuracy for identifying MIBC, with excellent inter-observer reliability (κ 0.81), and integrating clinical variables such as DKI (kurtosis) correlates with histologic grade and may act as a non-invasive biomarker for aggressive variants (r 0.44; threshold >663.44 enriched for high-grade tumours). Bladder cancer is often heterogeneous at the metabolomics and genomics levels, and incorporation of state-of-the-art multiomics features can significantly improve the predictive performance of the recurrence risk, and more importantly, allow for a better understanding of the disease and more personalised treatment approaches for patients with bladder cancer.

Keith Kirkland's Prize

Scatter of urology

Speaker: Dr Bharti Arora (Queen Elizabeth II Jubilee Hospital, Brisbane)

Summary: In this session, Dr Bharti Arora discussed the rapid and exponential increase of urology literature available to clinicians in recent years, and the implications that this can have for urologists and their clinical practice. Over the last 10 years, 6335 systematic reviews and randomised controlled trials were published in the field of urology, across 1631 journals. The US contributed the largest proportion of published research, and the two most published topics were oncology (2918 papers in 643 journals) and stone disease (1037 papers in 274 journals). It was noted that this 'scatter of urology' research can make it particularly challenging for urologists to remain up-do-date with the latest advancements in evidence-based medicine.

Comment: The traditional *"keeping abreast with medical journals"* is often time-intensive, and it can be difficult to cover the entire breadth of topics within a subspecialty. This unique *"vast scatter of urology research"* study concluded that *"urologists need to read an impractical 108 journals to be up to date with 50% of level 1 and 2 evidence"*. Medical education and knowledge acquisition are not active and static processes of reading journals alone, i.e., one gains continuous knowledge through clinical experience, regular (informal) discussion with other colleagues, multidisciplinary team forums and scientific meetings. The emergence of chatbots, particularly those powered by advanced large language models, is integrating AI into medical education and acquisition, and the broader healthcare ecosystem.

Villis Marshall Prize

Targeting highly aggressive ductal prostate tumours with poly ADP ribose polymerase inhibitor (PARPi) and androgen receptor signaling inhibitor (ARSi) combination therapy

Speaker: A/Prof Weranja Ranasinghe (Austin Health, Monash Health and Monash University, Melbourne)

Summary: The objective of this study was to evaluate the efficacy of combined PARPi and ARSi therapy in DDR-proficient prostate ductal adenocarcinoma (DAC) tumours. Researchers used patient-derived xenografts from DDR-proficient radical prostatectomy and *BRCA2* heterozygous mutant metastatic tumours, to develop DAC organoids. For up to 11 days, these organoids were exposed to different PARPis and ARSis, and results were validated *in vivo* in DDR-proficient patient-derived xenografts. Organoid viability was significantly decreased with combined PARPi + ARSi versus either treatment alone. In patient-derived xenografts, PARPi + ARSi decreased tumour volume by 40% versus PARPi alone (p=0.0326) and by 58% versus controls (p=0.0198).

Comment: Prostate DAC is a rare morphologic subtype, and contemporary literature reports that DAC is more likely to present with distant metastasis than acinar tumours, with at least a two-fold increase in risk of prostate cancer-specific mortality in population-based studies. There is compelling data to suggest important clinical-pathologic differences between ductal and acinar prostatic adenocarcinoma. In this study, primary DACs have a unique genomic and transcriptomic landscape with high rates of mutations associated with intrinsic androgen resistance, and PARPi + ARSi were more effective at decreasing DAC organoid viability than either treatment alone, regardless of the HR status. While androgen deprivation therapy remains the mainstay of (metastatic) prostate cancer therapy, PARPi + ARSi decrease androgen signalling and have been shown to increase radiological progression-free survival and overall survival among patients with metastatic disease. There is growing evidence that molecular tumour boards are the future of the oncological therapeutic approach in prostate cancer. There is a need to clarify the biomarkers of immune responsiveness and DDR pathways to determine prognostic and predictive factors to achieve more effective treatment outcomes.

Dennis Deane Arnold Prize

The AUSSIE study: preliminary evaluation of Cxbladder Triage Plus for urothelial carcinoma detection in patients with haematuria

Speaker: A/Prof Weranja Ranasinghe (Austin Health, Monash Health and Monash University, Melbourne)

Summary: The non-invasive, urine-based Cxbladder Triage Plus assay was developed to identify haematuria patients at low risk of urothelial cancer, through evaluating six single-nucleotide variants from the *TERT* and *FGFR3* genes, and five biomarkers of urothelial cancer. In the multicentre, prospective AUSSIE study, researchers sought to validate the diagnostic accuracy of Cxbladder Triage Plus in Australian patients with haematuria. The study enrolled 747 patients across 4 sites (39.2% aged ≥70 years; 63.7% men), of whom 61.2% and 26.8% had visible and non-visible haematuria, respectively. Among the 616 patients who were stratified for risk, 88.1% had a high risk of urothelial cancer, and 11.9% had an intermediate risk. Cystoscopy confirmed urothelial cancer in 53 patients, and 8 of these patients had non-visible haematuria. Additional data on the diagnostic performance of Cxbladder Triage Plus were presented at the conference.

Comment: Cxbladder Triage Plus is a multimodal urinary biomarker assay that combines reverse transcription-quantitative analysis of five mRNA targets and droplet-digital polymerase chain reaction (ddPCR) analysis of six DNA single-nucleotide variants from two genes (fibroblast growth factor receptor 3 *[FGFR3]* and telomerase reverse transcriptase *[TERT]*) to provide risk stratification for urothelial carcinoma in patients with haematuria. For biomarker tests to be integrated into routine clinical practice, they must show strong analytical validity, clinical validity and clinical utility. This study aims to show that Cxbladder Triage Plus, as a urinary diagnostic assay, allows for more accurate assessment of urothelial carcinoma risk in patients presenting with haematuria in routine clinical practice.

Best Oncology Presentation

See how adjustment for crossover affects overall survival

~70% of BRCA-mutated mCRPC patients in the control arm of PROfound crossed over to receive LYNPARZA following radiographic progression[3^]

UNADJUSTED FOR CROSSOVER:[1]

37% reduction
in the risk of death with LYNPARZA vs NHA retreatment
HR 0.63; 95% CI 0.42, 0.95; p-value not reported

ADJUSTED FOR CROSSOVER:[3†]

72% reduction
in the risk of death with LYNPARZA vs NHA retreatment
HR 0.28; 95% CI 0.18, 0.85; p-value not reported

^102 patients randomised to LYNPARZA and 58 to NHA retreatment. The primary endpoint of radiographic progression-free survival was met.[1] †*Post-hoc* analysis using the RPSFTM method with re-censoring. The impact of treatment switching can be assessed using a variety of validated statistical methods. The RPSFTM was considered the most appropriate approach for the PROfound trial. Sensitivity analyses showed the RPSFTM results were robust to deviation from the common treatment effect assumption, and the randomisation assumption was considered to hold.[3]

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IN THE PROFOUND TRIAL, LYNPARZA WAS GENERALLY WELL TOLERATED[4,5]

- 80% of patients remained on LYNPARZA without discontinuing due to AEs[‡5]
- 76% of patients remained on the full recommended dose of LYNPARZA[‡5]
- Adverse reactions reported in ≥10% of patients in the PROfound study included anaemia, nausea, fatigue (including asthenia), decreased appetite, diarrhoea, vomiting, thrombocytopenia, cough and dyspnoea[1]

‡Calculated from ITT population.

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"*BRCA*-mutated" refers to patients with a mutation in *BRCA*1 and/or *BRCA*2. *BRCA:* BReast CAncer gene; AE: adverse event; CI: confidence interval; HR: hazard ratio; ITT: intent to treat; mCRPC: metastatic castration-resistant prostate cancer; NHA: novel hormonal agent; OS: overall survival; RPSFTM: Rank Preserving Structural Failure Time Model. **References: 1.** LYNPARZA® (olaparib) Product Information, accessed February 2026. **2.** NCCN Clinical Practice Guidelines in Oncology. Prostate Cancer: NCCN Evidence Blocks. Version 5.2026 – January 23, 2026. **3.** Evans R *et al. Targeted Oncol* 2021;16:613–23. **4.** de Bono J *et al. N Engl J Med.* 2020;382(22):2091–2102. **5.** Hussain M *et al. N Engl J Med.* 2020;doi: 10.1056/NEJMoa2022485.

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The Australasian Pelvic Floor Procedure Registry: a maturing stress urinary incontinence cohort

Speaker: Prof Susannah Ahern (Monash University, Melbourne)

Summary: The Australian government established the Australasian Pelvic Floor Procedure Registry (APFPR) in 2019 after an enquiry into pelvic mesh. In this session, Prof Susannah Ahern shared the outcomes from real-world stress urinary incontinence procedures within the APFPR between 2020–24, alongside patient characteristics, presenting symptoms, procedures and devices. Among 885 women who underwent primary procedures, the median ages for bulking agents, mid-urethral slings and native tissue were 65, 59 and 52 years, respectively. Overactive bladder was the most frequent additional urinary symptom, and urodynamic studies were performed in nearly all patients (93–96%). Mid-urethral slings were the predominant primary procedure (59%) followed by bulking agents (32%) and native tissue slings (6%). Gynaecare TVT Exact, Bulkamid and rectus fascia were the most common prostheses. Bladder injury was the most frequent complication (1.7%) and the overall rates of intra-operative complications ranged from 0.4% (bulking agents), to 6.8% (native tissue). The rates of post-operative complications were 17% with native tissue, 11% with mid-urethral slings and 3% with bulking agent procedures. Most patients experienced improvements in clinical symptoms (92% mid-urethral slings; 90% native tissue; 73% bulking agent procedures). Average APFQ scores were 10.39 at 6 months, 11.07 at 12 months and 10.86 at 24 months. Among 225 subsequent procedures, 73% were performed due to stress urinary incontinence recurrence (at ~22 days), and 15% as a result of surgical complications (at ~178 days). Subsequent procedures following complications related to mesh excision occurred at an average of 449 days. At 6–12 months, improvements were seen in 74% of patients who underwent subsequent procedures.

Comment: The 2018 Senate Committee Inquiry into transvaginal mesh implants highlighted the inadequacy of current reporting systems in estimating the number and outcomes of pelvic floor procedures being undertaken in Australia with respect to quality, safety and relative effectiveness in the face of significant variation in clinical outcomes. The APFPR was established in 2019, through an initial 3-year funding from the Commonwealth Department of Health, to address systemic deficits in the collection, analysis and reporting of pelvic floor procedures, to establish early warning systems, and to provide feedback to clinicians, hospitals, regulatory bodies, and ultimately the public, regarding the status of pelvic floor interventions. This report card from the APFPR provides an important resource for clinicians, allowing for comparative, contemporaneous real-world information regarding stress urinary incontinence procedures and outcomes in Australasia. Registries can improve the safety and quality of care by providing credible risk-adjusted data, providing an early warning if the safety or quality of care deteriorates, giving clinicians information about how their outcomes benchmark with others, and identifying and investigating variations in clinical practice and outcomes. The APFPR can serve as a foundation to evaluate new prostheses and treatments available in the future for pelvic floor procedures. Implementation of patient-reported outcome measures will also enable additional information and support the safety monitoring of mesh-related adverse events in the long term.

A pilot sham-controlled study to evaluate the safety and efficacy of a novel wearable microneedle percutaneous neuromodulation system for idiopathic overactive bladder and urinary incontinence

Speaker: Dr Danielle Delaney (The Mater Hospital, Sydney)

Summary: While clinic-based percutaneous tibial nerve stimulation (PTNS) is effective for urge urinary incontinence and overactive bladder, its real-world use is limited by needle placement and weekly clinic visits. This first-in-human pilot study explores the efficacy of a home-based, wearable, minimally-invasive microneedle PTNS system. Eligible patients with urinary incontinence and overactive bladder across two Australian sites have been randomised 3:1 to receive active treatment or sham stimulation. The PTNS device guides consistent placement through its design, and the intervention involves 30-min sessions once weekly, for 12 weeks. At the time of abstract submission, enrolment, randomisation, treatment and follow-up were ongoing. In pre-trial product testing, the home-based PTNS system achieved high scores for comfortability (mean 8.56/10, including sleep), ease of use (8.4/10) and helpfulness (9/10), with low levels of pain (mean 1.64/10; pain predominantly occurred after prolonged wear during exercise).

Comment: In the field of urology, neuromodulation targets and modulates the innervation system that controls the lower urinary tract, and it is increasingly more commonly utilised. Modulation of the tibial nerve provides retrograde stimulation to the sacral plexus, which drives bladder relaxation and contraction, and contemporary studies have proven PTNS to be an effective, acceptable, and non-invasive approach for overactive bladder. Several studies have proposed that the benefits of neuromodulation would diminish after the treatment period, necessitating the use of continuous application for better clinical outcomes. Therefore, home-based neuromodulation may be preferable to a large number of medical (or physiotherapy) appointments. In this study, a home-based microneedle PTNS system is shown to be effective, safe and easy to use.

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