





# **LUS newsletter**

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# The 90-Day Cause Specific Mortality After Radical Prostatectomy

**BJU International** 

The authors of this retrospective study evaluated the frequency of 90-day mortality following radical prostatectomy and the cause of death. Out of a total of 44,635 patients, 58 (0,13%) died within 90 days, with the most common causes being cardiovascular events and thromboembolic disease. Patients undergoing open retropubic radical prostatectomy had a higher mortality rate (0,19%) than those undergoing robotic prostatectomy (0,09%) but this difference was likely explained by the robotic prostatectomy cohort being a more recent cohort. Patients with a known cardiac history require close perioperative monitoring with their cardiologist a,er radical prostatectomy.

# E!cacy and Safety of Mirabegron in Children and Adolescents With Neurogenic Detrusor Overactivity

## **Neurourology and Urodynamics**

This open-label dose-titration study administered mirabegron to children (ages 3-18 years) with neurogenic detrusor overactivity at a dose to mirror serum concentrations with the equivalent





of 25 mg in adults with increase to equivalent of 50 mg in the absence of concerns over safety and/or tolerability. At 24 weeks, there were significant improvements in multiple urodynamic and clinical parameters. Specifically, maximum cystometric capacity increased by 87 mL, bladder compliance increased by ~ 14mL/cmH O, detrusor overactivity contractions decreased by 1,5, and detrusor pressure and end-fill decreased by 16 cmH O.

Children also experienced significant improvements in catheterized volumes (+43 mL) and leaks per day (-1,4). Mild increases in systolic blood pressure were observed (~5 mmHg at 24 weeks and 6 mmHg at 52 weeks). Only 1 patient experienced QT prolongation at week 24. These findings suggest that mirabegron is likely safe and effective for children older than 3 years of age with neurogenic lower urinary tract dysfunction.

## Round Ligament Suspending Treatment in Orthotopic Neobladder After Radical Cystectomy in Women

#### **BJU International**

Women undergoing an orthotopic neobladder for bladder cancer may require catheterization to ensure complete emptying. In this randomized study, the authors performed a round ligament suspending cystectomy versus a conventional procedure with 41 patients in each arm. Of the 37 patients with a standard neobladder, 15 needed to perform clean intermittent catheterization (CIC) compared with 4 of 39 in the round ligament suspending arm.

This resulted in a significant risk reduction for





CIC in women undergoing a round ligament suspending cystectomy at 24 months (HR, 0.22). While this is a single institution study, the ability to reduce the need for CIC is attractive. Patient selection remains critical, but further prospective studies can be performed to validate this innovative approach to improving cystectomy outcomes.

The Role of Cytoreductive Radical Prostatectomy in the Treatment of Newly Diagnosed Low Volume Metastatic Prostate Cancer

### **European Urology Open Science**

The authors of this study compared overall survival, cancer-specific survival, and local event-free survival associated with radiotherapy to the prostate (RTp), cytoreductive radical prostatectomy (cRP), and no local therapy (NLT) for men with low-volume newly diagnosed metastatic prostate cancer. The 2-year overall survival rates for RTp, cRP, and NLT were 93%, 100%, and 69%, respectively, and the 2-year cancer-specific survival rates were 93%, 100%, and 75%, respectively. The local event-free survival rates were 92%, 77%, and 60%, respectively. Although limited by a small sample size, the results of this study indicate that cRP is equally as beneficial as RTp for low-volume newly diagnosed metastatic prostate cancer. This approach also helps prevent urinary problems caused by cancer progression.





## Anesthetic Bladder Capacity and Interstitial Cystitis/Bladder Pain Syndrome Subtypes Urology

This study evaluated correlations between anesthetic bladder capacity and clinical "subtypes" of interstitial cystitis/bladder pain syndrome (BPS) in 257 women. Anesthetic capacity was assessed after hydrodistention of the bladder to a pressure of 100 cm H O for 5 minutes, after which assessment for Hunner's lesions was performed.

Clinical symptoms, including pain scores and lower urinary tract symptoms, were significantly correlated with decreasing bladder capacity, as was the presence of Hunner's lesions. In contrast, a diagnosis of endometriosis was significantly associated with greater bladder capacity. The results of this study confirm that higher bladder capacity correlates with higher numbers of non-bladder-centric syndromes while lower bladder capacity correlates with bladder-specific pathology.





# Opdivo Approved as Adjuvant Treatment for High Risk Urothelial Carcinoma

The Food and Drug Administration (FDA) has approved Opdivo (nivolumab) for the adjuvant treatment of patients with urothelial carcinoma who are at high risk of recurrence after undergoing radical resection, regardless of prior neoadjuvant chemotherapy, nodal involvement or PD-L1 status.

The approval was based on data from the multicenter, randomized, double-blind, placebo-controlled phase 3 CheckMate-274 trial (ClinicalTrials.gov Identifier: NCT02632409) which evaluated the efficacy and safety of nivolumab as an adjuvant treatment in 699 adults who had undergone radical surgery for invasive urothelial carcinoma at high risk of recurrence. Patients were randomly assigned 1:1 to receive either nivolumab 240mg via intravenous infusion over 30 minutes every 2 weeks or placebo until August 27, 2021

recurrence or unacceptable toxicity for a maximum duration of 1 year.

The primary endpoint was disease-free survival (DFS), defined as the time between the date of randomization and the date of first recurrence (local urothelial tract, local non-urothelial tract, or distant metastasis) or death, from any cause. Key secondary endpoint included overall survival (OS). Results showed that patients treated with nivolumab achieved a statistically significant improvement in median DFS of 20.8 months (95% CI, 16.5-27.6) vs 10.8 months for placebo. Nivolumab reduced the risk of disease recurrence or death by 30% vs placebo (hazard





ratio [HR] 0.70; 95% CI, 0.57-0.86; P =.0008). Among patients whose tumors expressed programmed death-ligand 1 (PD-L1) of at least 1%, the median DFS was not reached (95% CI, 21.2-not evaluable; n=140) in the nivolumab arm vs 8.4 months (95% CI, 5.6-21.2; n=142) in the placebo arm. Nivolumab reduced the risk of disease recurrence or death by 45% vs placebo (HR 0.55; 95% CI, 0.39-0.77; P =.0005).

The Additive Diagnostic Value of Prostatespecific Membrane

Antigen Positron Emission Tomography Computed Tomography to Multiparametric Magnetic Resonance Imaging Triage in the Diagnosis of Prostate Cancer (PRIMARY): A Prospective Multicentre Study

**European Urology** 

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org/10.1016/j.eururo.2021.08.002



This trial aimed to determine whether the combination of PSMA + MRI was superior to MRI in diagnostic performance for detecting csPCa.

## 25 Septembert, 2021 | Zoom platform

The 6th North uro-onco meeting 2021







### Design, setting, and participants

A prospective multicentre phase II imaging trial was conducted. A total of 296 men were enrolled with suspected prostate cancer, with no prior biopsy or MRI, recent MRI (6 mo), and planned transperineal biopsy based on clinical risk and MRI. In all, 291 men underwent MRI, pelvic-only PSMA, and systematic ± targeted biopsy.

Outcome measurements and statistical analysis Sensitivity, specificity, and predictive values (negative predictive value [NPV] and positive predictive value) for csPCa were determined for MRI, PSMA, and PSMA + MRI. PSMA + MRI was defined as negative for PSMA negative Prostate Imaging Reporting and Data System (PI-RADS) 2/3 and positive for either MRI PI-RADS 4/5 or PSMA positive PI-RADS 2/3; csPCa was any International Society of Urological Pathology (ISUP) grade group ≥2 malignancy.

#### **Results and limitations**

Of the patients, 56% (n = 162) had csPCa; 67% had PI-RADS 3-5, 73% were PSMA positive, and 81% were combined PSMA + MRI positive. Combined PSMA + MRI improved NPV compared with MRI alone (91% vs 72%, test ratio = 1.27 [1.11–1.39], p < 0.001). Sensitivity also improved (97% vs 83%, p < 0.001); however, specificity was reduced (40% vs 53%, p = 0.011). Five csPCa cases were missed with PSMA + MRI (four ISUP 2 and one ISUP 3). Of all men, 19% (56/291) were PSMA + MRI negative (38% of PI-RADS 2/3) and could potentially have avoided biopsy, risking delayed csPCa detection in 3.1% men with csPCa (5/162) or 1.7% (5/291) overall.





#### Conclusions

PSMA + MRI improved NPV and sensitivity for csPCa in an MRI triaged population. Further randomised studies will determine whether biopsy can safely be omitted in men with a high clinical suspicion of csPCa but negative combined imaging.



# 3 - 4 Septembert, 2021 | Paris - France

















