Re: Analysis of Renal Cancer Cell Lines from Two Major Resources Enables Genomics-Guided Cell Line Selection

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*Nat Commun 2017; **8:** 15165. doi: 10.1038/ncomms15165*

Abstract available at http://www.ncbi.nlm.nih.gov/pubmed/28489074

Editorial Comment: The authors used publicly available genomic data from the Cancer Genome Atlas, the Cancer Cell Line Encyclopedia and the COSMIC Cell Lines Project to compare the molecular profiles of human renal cell carcinoma tumors to those of commercially available cell lines. They show that the majority of cell lines resemble clear cell renal cell carcinoma tumors, although the highly cited ACHN cell line resembles papillary renal cell carcinoma. They also demonstrate that tumors most likely to be well represented by cell lines tend to carry hallmarks of aggressive disease and, conversely, most cell lines resemble the expression based clear cell renal cell carcinoma subtype associated with more aggressive disease. This study may therefore serve as a guide for future investigators regarding the suitability of particular renal cell carcinoma cell lines for in vitro examination.

Anthony Atala, MD

Suggested Reading

Boguslawska J, Kedzierska H, Poplawski P et al: Expression of genes involved in cellular adhesion and extracellular matrix remodeling correlates with poor survival of patients with renal cancer. J Urol 2016; **195:** 1892.

Voiding Function and Dysfunction, Bladder Physiology and Pharmacology, and Female Urology

Re: Unravelling Detrusor Underactivity: Development of a Bladder Outlet Resistance-Bladder Contractility Nomogram for Adult Male Patients with Lower Urinary Tract Symptoms

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*Neurourol Urodyn 2016; **35:** 980–986. doi: 10.1002/nau.22841*

Abstract available at http://www.ncbi.nlm.nih.gov/pubmed/26235823

Editorial Comment: This impressive group of authors offers a nomogram to define detrusor underactivity in adult male patients. They cite their very valuable prior contribution, which concludes that because maximum Watts factor (Wmax) increases with increasing bladder outlet obstruction, it is impossible to define a single number for Wmax or bladder contractility index threshold value for the diagnosis of detrusor underactivity. They offer a nomogram that adjusts for the compensatory increase in Wmax. The nomogram plots Wmax against the bladder outlet obstruction index. What they report in their study of 822 men with interpretable urodynamic traces is that men in the less than 25th percentile groups were significantly different from men in higher percentiles with respect to age, post-void residual, voiding efficiency and cystometric bladder capacity—clinical parameters that they cite as previously thought to be associated with detrusor underactivity. Interestingly a comparison of values between the 10th and 25th percentile groups did not show statistically significant differences for the majority of investigated parameters. This is an impressive

mathematical feat but let's consider the actual differences in parameters (below 25th percentile vs 25th to 50th percentile groups): 167 vs 116 ml post-void residual; 67% vs 72% voiding efficiency; 503 vs 442 ml cystometric bladder capacity, and 7.9 vs 11.7 Wmax. No significant differences were found when comparing peak flow rates, voided volume, bladder outlet obstruction index or bladder contractility index. Furthermore, perhaps my urodynamic machines are different but I find that very often the machine calculated Wmax values differ significantly between voiding events in the same individual.

I think what the majority of us are looking for in a urodynamic definition of detrusor underactivity is some practical advice regarding subjects such as, "Is it safe to treat such an individual with an antimuscarinic?" and "Can I expect a successful result after outlet reduction?" Perhaps these questions will be answered in subsequent studies but for the moment I think we still lack a definition of detrusor underactivity that is associated with practical significance.

Alan J. Wein, MD, PhD (hon)

Re: Bladder Wall Thickness in Women with Symptoms of Overactive Bladder and Detrusor Overactivity: Results from the Randomised, Placebo-Controlled SHRINK Study

D. Robinson, M. Oelke, V. Khullar, H. Wijkstra, R. Tretter, B. Stow, G. Compion and A. Tubaro

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*Neurourol Urodyn 2016; **35:** 819–825. doi: 10.1002/nau.22808*

Abstract available at http://www.ncbi.nlm.nih.gov/pubmed/26199198

Editorial Comment: Bladder wall thickness has been suggested to be a marker for overactive bladder with detrusor overactivity. Conversely a decrease in thickness has been suggested as a potentially useful biomarker for documenting success in such patients treated with antimuscarinics. A bladder wall thickness of 5 mm has been considered increased by some authors in comparison to an asymptomatic patient.

This manufacturer sponsored study showed no clear effect of solifenacin on bladder wall thickness as measured by transvaginal ultrasound, and the absence of a statistically significant correlation between bladder wall thickness and symptom severity suggests that bladder wall thickness is unlikely to be a reliable indicator of detrusor overactivity or a response to at least antimuscarinic treatment. Both 5 mg and 10 mg doses of solifenacin were associated with improvements in efficacy and patient satisfaction end points vs placebo.

Alan J. Wein, MD, PhD (hon)

Re: Tension-Free Vaginal Tape-Obturator for Treatment of Pure Urodynamic Stress Urinary Incontinence: Efficacy and Adverse Effects at 10-Year Follow-up

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*Eur Urol 2017; **71:** 674–679. doi: 10.1016/j.eururo.2016.08.054*

Abstract available at http://www.ncbi.nlm.nih.gov/pubmed/27597239

Editorial Comment: This data set reveals outstanding results in a population of 168 women with "pure" stress urinary incontinence collected from 5 tertiary referral centers in 3 countries. Patients