

**Read all about it...** It can be awkward when a patient asks you about a report in their favourite tabloid detailing an amazing research breakthrough or a 'cutting-edge' new treatment / test and you don't know what they are talking about! So this section fills you in on the facts.

## A depression pill from 70 years ago could be used to treat prostate cancer, research suggests

The Daily Mail – 24 November 2020

This story concerns publication of the results of a clinical trial of the effects of phenelzine on prostate cancer. Published in Prostate Cancer and Prostatic Diseases, the results of a phase 2 trial conducted at The University of Southern California are detailed in this article. The Californian team were examining the role of phenelzine (a MAO / monoamine oxidase inhibitor) in biochemical recurrent, castrate sensitive prostate cancer.

This small, single-arm study took men with biochemical recurrence post-prostatectomy after radiotherapy and treated them with 30mg BD of the antidepressant. The primary endpoint was a prostate specific antigen (PSA) decline of at least 50% from baseline. Twenty men were enrolled, two men achieved a PSA reduction of 50% and five reached a 30% reduction.

There has been a flurry of interest in MAO inhibitors in the last year, with numerous publications going to press.

Particularly, there has also been interest in the potential use of these drugs in reverting enzalutamide resistance in castration resistant prostate cancer.

This remains however, a very small field of research and the results are far from conclusive. There would appear to be an increased expression of monoamine oxidase-A in some prostate cancers, particularly high grade, castrate resistant disease and this plays a role in cell growth and metastasis. This work signifies an avenue for future means of controlling prostate cancer and targeting prostate cancer and a proof of concept (of sorts) that targeting MAO-A can exert a significant clinical effect. This has the potential to lead to the development of drugs that may better achieve this effect, but there is still a great deal of investigation to be done and (unlike the article title would suggest) there is little chance of phenelzine itself being used to treated prostate cancer.

## Pioneering drug that hits prostate cancer's weak spot gives hope to men with incurable disease

The Mail on Sunday – 29 November 2020

This story, similarly, centres around a drug which began its life employed elsewhere, but whose use has been investigated in the field of prostate cancer in recent years. In the past few years there have been numerous publications detailing the potential role of poly-ADP ribose polymerase (PARP) inhibitors in prostate cancer. PARP is an enzyme heavily involved in DNA repair and genomic stability and therefore plays a key role in perpetuating and maintaining cell growth in cancer.

PARP inhibitors have an established role in BRCA cancers already as the BRCA mutation itself leads to poor cell repair and knocking out PARP is effectively a fatal blow to cancer cells. This article reports on a trial of olaparib (a PARP inhibitor) and its effect in castrate

resistant disease. As you might expect, trials thus far have centred on treating men who have been identified to have a cell repair mutation (BRCA, PALB2, DDR or some other similar defect). These treatments are therefore not suitable for just any patient and the results are not entirely predictable. Overall / composite response rates in trials are around 50% and adverse reactions are not uncommon with over one third of patients developing anaemia. Treatment related deaths have occurred in some trials.

On balance, this seems a reasonable treatment protocol to offer for the management of cohorts of men with castrate resistant disease, provided that treatment can be funded and patients are aware of possible adverse effects and the possibility of no appreciable response.

## Size matters – how penis size determines your salary

The Sun – 18 November 2020

A slightly more light-hearted article to close out on. The Sun reports on a survey carried out by a small online retailer. An example of rigorous scientific method, this is not. The self-reported survey of 997 men took their reported penis size and compared this to their annual salary and profession.

The results will make anyone who has missed out on a CEA this year a little bit happier, as apparently men with smaller penis sizes tend to more highly paid. Those who are lower paid, tend to be anatomically blessed. According to the survey, men employed in the arts tend to most well-endowed, whilst those in medical professions tend to be average.

It is almost a shame that this has not been conducted in a more clinically robust way. I am sure that we have all seen men in the outpatient clinic who have serious psychological morbidity due to a perceived issue with the size of their genitalia. I believe there could have potentially been the possibility for a glimpse into that psychology.

### SECTION EDITOR



**Jordan Durrant,**

Consultant Urological Surgeon, East Surrey Hospital.

E: [jordandurrant@gmail.com](mailto:jordandurrant@gmail.com)