



## **‘Search and destroy’ molecule offers hope to men with advanced prostate cancer**

**PRESS RELEASE, Australia** (6 August, 2018) – A game-changing technology that makes it easier to find and treat cancer cells is offering new hope to men with advanced prostate cancer.

Prostate-Specific Membrane Antigen (PSMA) is a protein that sits on prostate cancer cells, acting as a marker that can be used to find cancer cells and destroy them.

Since 2011 the [Movember Foundation](#) has invested more than \$3.2M across 11 projects in supporting a global research effort to build evidence around the use of PSMA for imaging and treating prostate cancer, with promising results. In order to conduct this essential research into prostate cancer, the Foundation works with trusted men’s health partners in each country. Locally, this is the Prostate Cancer Foundation of Australia.

Each year, it’s estimated that more than 1.4M men will be diagnosed with the disease. And 380,000 will die from it.<sup>i</sup> For men with advanced prostate cancer that has spread to distant sites, 5-year survival is approximately 30%.<sup>ii</sup>

For these men, standard imaging involves a CT scan, a bone scan and maybe an MRI. Yet even together, these tests can sometimes miss the signs of advancing disease.

Michael Hofman, Professor of Nuclear Medicine at the Peter MacCallum Cancer Centre in Melbourne, compares it to *Where’s Wally*.

“You do a scan – a CT or MRI scan – and you get unbelievable images with lots of detail. But if you’re trying to find Wally, it can be hard,” said Professor Hofman.

PSMA offers another tool to find Wally. Using a radioactive substance that attaches itself to PSMA, prostate cancer cells light up on PET scans.

“It’s a really clever way to find and visualize prostate cancer,” said Professor Hofman. “On PSMA PET we can visualise disease down to as small as 2-3 millimetres. Which is extraordinary for imaging.”

It’s also possible to attach other radioactive substances to PSMA, which can kill the prostate cancer cell instead of just showing where it is. This is called “theranostics.”

While it’s hoped that PSMA theranostics will be beneficial for those at all stages of the disease, it’s proving to be a game-changer for some men with advanced prostate cancer. Men like Richard Cook, a barrister and university residential college founder who was diagnosed with metastatic prostate cancer at 55.

In the 13 years since diagnosis, Richard’s journey through prostate cancer has included treatment with radiotherapy, hormone therapy and chemotherapy. All eventually failed.

Under Professor Hofman’s care, Richard has experienced first-hand the search and destroy capability of PSMA.



“I’d had PSMA imaging done, and I lit up like a lighthouse,” said Richard.

Richard underwent Lu-PSMA therapy, which shifts the process from finding cancer cells to destroying them by changing the radioactive substance that attaches to PSMA.

“Unlike some conventional therapies like chemo that have a lot of side effects and damage a lot of normal tissues, PSMA therapy is extremely targeted, and it seems to be highly effective in patients who have failed conventional therapies,” said Professor Hofman.

“The work the Movember Foundation and Prostate Cancer Foundation of Australia are funding has been driven toward developing the evidence base that’s needed to get this mainstream.”

Richard finished his treatment early in 2017 and has since been living a normal life with no significant cancer recurrence on follow-up scans.

“It lets me do wonderful things like watch my children and grandchildren grow up, keep running my college, keep on being a barrister,” he said.

Movember Foundation Chief Executive Officer Owen Sharp said that while early results like Richard’s were promising, more evidence was needed to show that imaging and treatment using PSMA is safe, effective and cost-effective.

“At the Movember Foundation, this means fostering and participating in collaborations that span disciplines, countries, industries and sectors,” said Mr Sharp. “That’s why the Foundation has established the largest ever global alliance of researchers and health experts dedicated to changing the face of men’s health.”

Jane Endacott, CEO of the Prostate Cancer Foundation of Australia said: “PCFA is proud to be the prostate cancer health partner for the Movember Foundation in Australia. Our work together is making a remarkable difference to the lives of all Australians impacted by prostate cancer.”

This work includes a partnership between PCFA and [ANZUP Cancer Trials Group](#) which saw the TheraP advanced prostate cancer trial – led by Professor Hofman – open around Australia in February 2018. TheraP will compare treatment with the radioactive molecule Lu-PSMA against cabazitaxel chemotherapy for men diagnosed with metastatic castration resistant prostate cancer. TheraP is supported by the Australian Nuclear Science and Technology Organisation (ANSTO), Endocyte, It’s a Bloke Thing, The Movember Foundation, the Distinguished Gentlemen’s Ride and CAN4CANCER.

ANZUP Chair Professor Ian Davis said: “This clinical trial is the first of its kind. These trials are complex, difficult to do, and expensive, but without them we cannot make any progress. We are extremely grateful to our partners in enabling us to conduct this study.”

**Media Contact:**

Movember Foundation: Lisa McKoy – 0468 366 691 or [lisa.mckoy@movember.com](mailto:lisa.mckoy@movember.com)



### **About the Movember Foundation**

The Movember Foundation is the leading charity dedicated to changing the face of men's health around the world. With a singular goal to stop men dying too young, the Foundation supports the following causes: prostate cancer, testicular cancer, mental health and suicide prevention. By funding projects like those exploring the role of PSMA, the [Movember Foundation](#) is working towards its goal to halve the number of deaths from prostate cancer by 2030. Since 2003, the support of more than 5 million participants has funded over 1,200 innovative projects across more than 20 countries. To donate or learn more, please visit [Movember.com](#).

### **About the Prostate Cancer Foundation of Australia**

The Prostate Cancer Foundation of Australia is the peak national body for prostate cancer in Australia. PCFA is dedicated to reducing the impact of prostate cancer on Australian men, their partners and families, whilst recognising the diversity of the Australian community.

The Prostate Cancer Foundation of Australia does this in three key ways. Firstly by promoting and funding world leading, innovative research into prostate cancer. Secondly, PCFA implements awareness campaigns and education programs for the community, health professionals and government. PCFA's third pillar is supporting men and their communities affected by prostate cancer through evidence-based information and resources, support groups and Prostate Cancer Specialist Nurses. PCFA relies on the generosity of the community and partnerships with organisations such as the Movember Foundation to carry out its essential work.

### **About ANZUP**

ANZUP is a cooperative cancer clinical trials group with over 1,300 members across Australia, New Zealand and internationally. ANZUP was established to bring together all the professional disciplines and groups involved in researching and treating urogenital cancers. ANZUP exists to conduct clinical trial research and to improve outcomes for people affected by these cancers.

For information about the TheraP trial (ANZUP 1603) visit [www.anzup.org.au](http://www.anzup.org.au) or contact Michelle Bowers on 0415 098 485 or [michelle.bowers@anzup.org.au](mailto:michelle.bowers@anzup.org.au)

### **References:**

---

i Figures from the Global Burden of Disease Study (GBD) <http://ghdx.healthdata.org/gbd-results-tool>

ii Figure from American Cancer Society, Cancer Facts and Figures 2018 (<https://www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2018.html>)