

Position Statement

PSA Testing

| Number: | Pol 033 | Version: | | 1.0 | |
|----------------|--------------------|----------------|----------|--------------|----------|
| Subject: | Patient Care | Distribution: | | Public | |
| Authorised by: | Board of Directors | Approved Date: | 04/09/22 | Review Date: | Nov 2025 |

Purpose and Scope

The purpose of this position statement is to serve as an interim document for the optimised use of PSA testing in Australia and New Zealand until the Prostate Cancer Foundation of Australia (PCFA) and Royal Australian College of General Practitioners (RACGP) guidelines are updated.

This statement is not intended for direct use by patients or consumer organisations as issues outlined require assessment by practitioners skilled in the diagnosis and treatment of prostate cancer.

Statement

1. Relevant prostate cancer statistics¹⁻³

- Prostate cancer is one of the most commonly diagnosed cancers in Australia and New Zealand, and it is now the most commonly diagnosed cancer among men.
- Prostate cancer is the 2nd most common cause of death from cancer in Australian men and the 3rd most common cause of cancer-related male deaths in New Zealand.
- 24,217 Australian men will be diagnosed with prostate cancer in 2022.
- 3,507 Australian men will die from prostate cancer in 2022.
- 66 Australian men are diagnosed each day with prostate cancer, and about 10
 Australian men will die each day from the disease.
- 240,245 Australian men are alive today after a diagnosis of prostate cancer between
 1982 and 2017
- In New Zealand approximately 4,000 men are diagnosed with prostate cancer each year and 700 men die from it each year.
- Indigenous men in Australia and New Zealand have a higher prostate cancer mortality attributed to specific cultural issues affecting presentation, treatment challenges and other health conditions coupled with healthcare disparities and reduced prostate cancer awareness.

2. <u>Existing PSA testing guidelines</u>

PSA testing guidelines were created by the Prostate Cancer Foundation of Australia (PCFA) and the Cancer Council of Australia. They were endorsed by a number of organisations including the National Health and Medical Research Council (NHMRC), the Royal Australian College of General Practitioners (RACGP) and the Urological Society of Australia and New Zealand (USANZ) in November 2015. ⁴ (http://wiki.cancer.org.au/australia/Guidelines:PSA_Testing).

The guidelines recommend offering PSA testing from age 50 to informed men (that is, men who have been informed of the risks and benefits of testing) who wish to be tested for prostate cancer. These recommendations however are not reflected in the 9th Edition RACGP Red Book.⁵

3. Need for review of existing PSA testing guidelines

The guidelines have now lapsed and require review. In this period, data supporting PSA testing has matured, reinforcing long-term significant survival advantages with appropriately utilised PSA testing. In addition, there have been substantial changes in practice with a paradigm shift in prostate cancer diagnosis and treatment pathways which have reduced the risks associated with PSA testing.

USANZ recommends an urgent need to update clinical practice and RACGP Red Book guidelines.

Evidence from the U.S.A shows that abandoning PSA screening practices related to the U.S. Preventative Task Force (USPTF) recommendations in 2012 resulted in increased incidences of advanced and metastatic prostate cancers which negatively impacted cancer survival. This resulted in a re-evaluation and subsequent reversal of the USPTF recommendations in 2018 to recommend PSA screening. ⁶

Since the development of the 2015 PSA guidelines, there have been significant advances in prostate cancer diagnosis, staging and management, which must be incorporated in any future update.

The benefits of testing have been further strengthened by:

Long-term data follow-up from the European Randomi**s**ed study of Screening for Prostate Cancer (ERSPC) trial revealed a significant population survival advantage from appropriately performed PSA testing programs. ⁷

Several of the previous concerns regarding the harm of PSA testing are now mitigated with "risk-stratified" PSA testing strategies. 8-12

- The shortcomings of ineffectively performed PSA testing programs have been identified.
- The introduction of multi-parametric Prostate Magnetic Resonance Imaging (mpMRI)
 has reduced unnecessary prostate biopsies and the detection of clinically insignificant
 prostate cancers.
- Advances in biopsy techniques (including transperineal biopsies and MRI fusion) have increased clinically significant prostate cancer detection. These techniques have also reduced the morbidity associated with biopsy.
- Active surveillance programs have been increasingly utilised and are the current standard of care for low-risk prostate cancer, reducing overtreatment.
- Improved staging (such as with PSMA Positron Emission Tomographic and MRI scans)
 has ensured optimised treatment plans.
- Improvements in surgical and radiation techniques have resulted in lower treatmentrelated morbidity.
- The binational Prostate Cancer Outcomes Registry (PCOR) database has ensured that diagnostic and treatment quality control was introduced into practice.

Access to healthcare and healthcare disparities has resulted in inequitable access to PSA testing for many men in Australia and New Zealand. These inequities must be addressed by ensuring all eligible men have reasonable access to information and appropriately delivered PSA testing, including issues associated with the ongoing COVID pandemic when patients do not readily seek or delay seeking medical care.

4. Recommendations for PSA testing

While the current guidelines are being updated, we suggest the following 'risk-stratified' recommendations¹³:

- Ensure prostate cancer awareness amongst men as an essential public health initiative
- Ensure appropriate counselling on the potential risks and benefits of PSA testing
- Offer an individualised risk-adapted strategy for early detection to a well-informed man
 50 yrs of age with a life expectancy of at least 10 yrs
- Offer early PSA testing to well-informed men at an elevated risk of having prostate cancer:
 - Men >45 yrs of age with a family history of prostate cancer
 - Men of high-risk ethnicities (including Indigenous men) >45 yrs of age
 - Men carrying BRCA2 mutations >40 yrs of age
- Stop early diagnosis of prostate cancer based on limited life expectancy and poor performance status; for example, men with a life expectancy of <10 yrs are unlikely to benefit.
- For men with an initial PSA test of >3 ng/ml, the use of risk stratification (which considers factors such as age, family history, digital rectal examination and PSA density) can help guide the need for further testing, including MRI and biopsy.

Roles and responsibilities

• The <u>USANZ Board of Directors</u> is the approval authority for Position Statements and other Policies that relate to patient care.

Superseded documents

None

Revision history

| Version | Date | Notes | Ву |
|---------|-------------|----------|--------------------|
| 1.0 | 4 Sept 2022 | Approved | Board of Directors |

Review date

This position statement will be reviewed every 3 years by the Board of Directors. The next review date is November 2025 or upon release of new PSA testing guidelines by the PCFA.

Contact

USANZ President

Email: president@usanz.org.au

References

- 1. AIHW. Cancer data in Australia. Australian Institute and Health Welfare. (https://www.aihw.gov.au/reports/cancer-data-in-australia/contents/about).
- 2. TeAhoOTeKahu. Information about Prostate Cancer. Cancer Control Agency (https://teaho.govt.nz/cancer/types/prostate).
- Prostate Cancer Foundation of New Zealand (PCFNZ) (https://prostate.org.nz/prostate-cancer/).
- Cancer Council. Clinical practice guidelines for PSA testing and early management of testdetected prostate cancer. Cancer Council of Australia. (https://wiki.cancer.org.au/australia/Guidelines:PSA Testing).
- RACGP. Guidelines for preventive activities in general practice. Royal Australian College of General Practitioners.
 (https://www.racgp.org.au/download/Documents/Guidelines/Redbook9/17048-Red-Book-9th-Edition.pdf).
- 6. Jemal A, Culp MB, Ma J, Islami F, Fedewa SA. Prostate Cancer Incidence 5 Years After US Preventive Services Task Force Recommendations Against Screening. J Natl Cancer Inst 2021;113(1):64-71. DOI: 10.1093/jnci/djaa068.
- 7. Hugosson J, Roobol MJ, Mansson M, et al. A 16-yr Follow-up of the European Randomized study of Screening for Prostate Cancer. Eur Urol 2019;76(1):43-51. DOI: 10.1016/j.eururo.2019.02.009.
- 8. Stavrinides V, Giganti F, Trock B, et al. Five-year Outcomes of Magnetic Resonance Imaging-based Active Surveillance for Prostate Cancer: A Large Cohort Study. Eur Urol 2020;78(3):443-451. DOI: 10.1016/j.eururo.2020.03.035.
- 9. Kasivisvanathan V, Rannikko AS, Borghi M, et al. MRI-Targeted or Standard Biopsy for Prostate-Cancer Diagnosis. N Engl J Med 2018;378(19):1767-1777. DOI: 10.1056/NEJMoa1801993.
- 10. Grummet J, Gorin MA, Popert R, et al. "TREXIT 2020": why the time to abandon transrectal prostate biopsy starts now. Prostate Cancer Prostatic Dis 2020;23(1):62-65. DOI: 10.1038/s41391-020-0204-8.
- de Rooij M, van Poppel H, Barentsz JO. Risk Stratification and Artificial Intelligence in Early Magnetic Resonance Imaging-based Detection of Prostate Cancer. Eur Urol Focus 2021. DOI: 10.1016/j.euf.2021.11.005.
- 12. O'Callaghan M, Papa N, Pase M, et al. Patterns of care for prostate cancer treatment and improving outcomes are national registries the answer? BJU Int 2021;128 Suppl 1:6-8. DOI: 10.1111/bju.15366.
- 13. Van Poppel H, Roobol MJ, Chapple CR, et al. Prostate-specific Antigen Testing as Part of a Risk-Adapted Early Detection Strategy for Prostate Cancer: European Association of Urology Position and Recommendations for 2021. Eur Urol 2021;80(6):703-711. DOI: 10.1016/j.eururo.2021.07.024.