

Creating a pathway for advanced thyroid cancer management

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ROYAL NORTH SHORE
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of Medical Research



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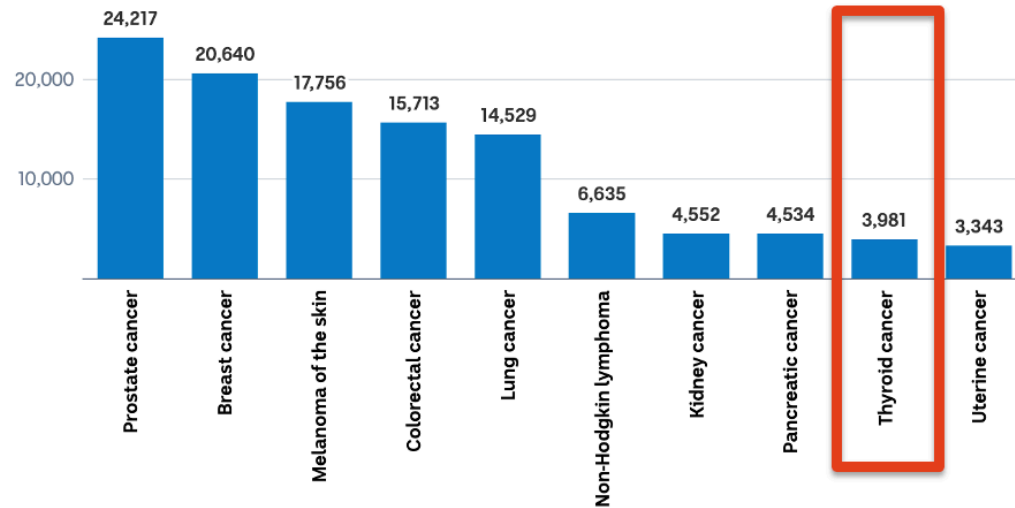
Declaration

No financial conflict of interest

Thyroid cancer in 2023

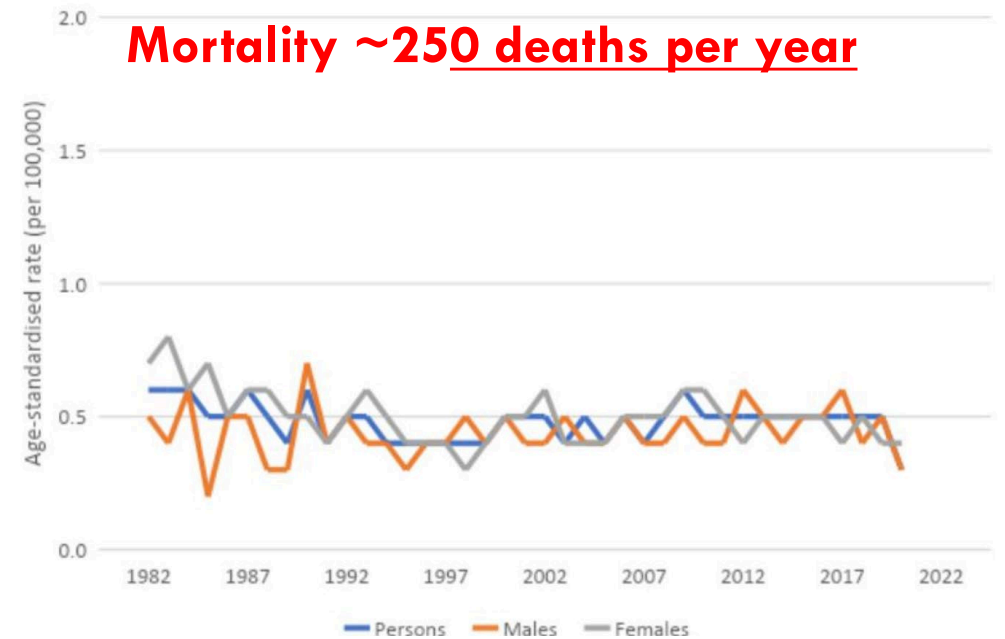
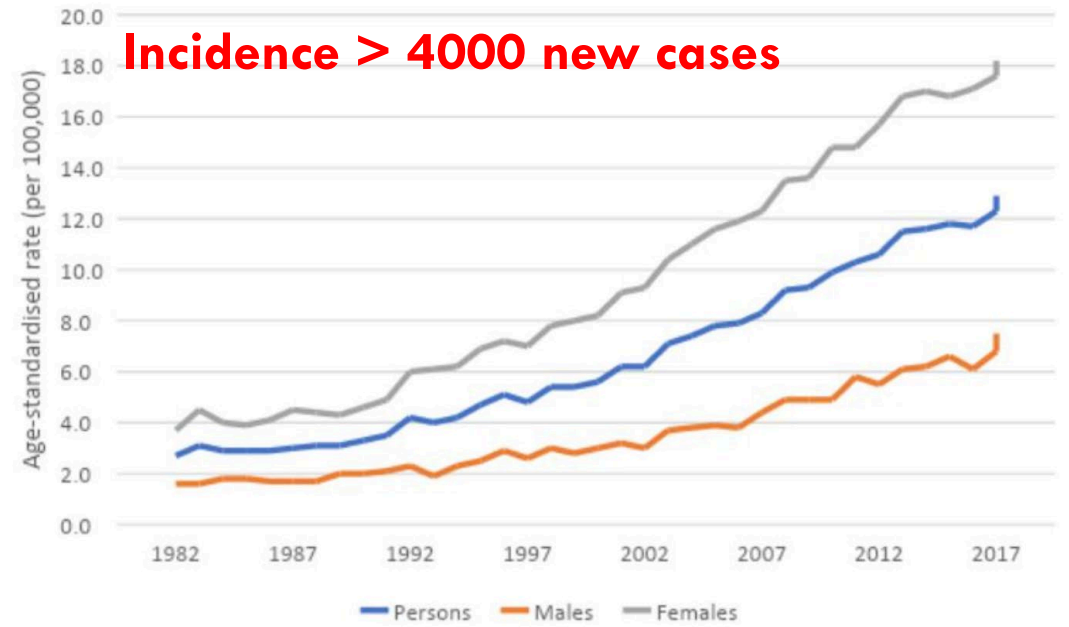
Thyroid cancer

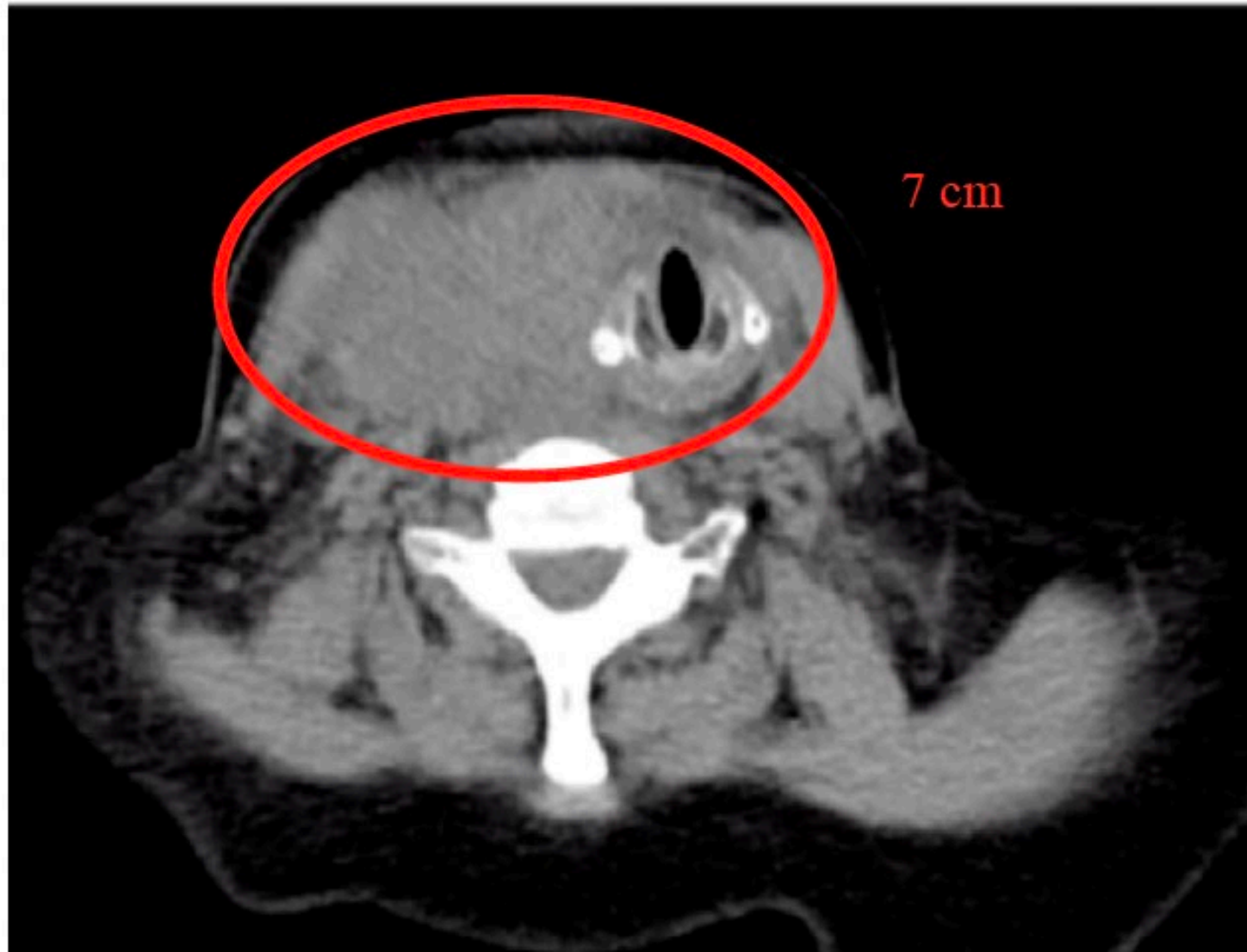
Australia's 10 most commonly-diagnosed cancers in 2022



Projections data based on observing trends in previous years. Prostate cancer case estimates use the latest incidence rates by age.

Source: Australian Institute of Health and Welfare

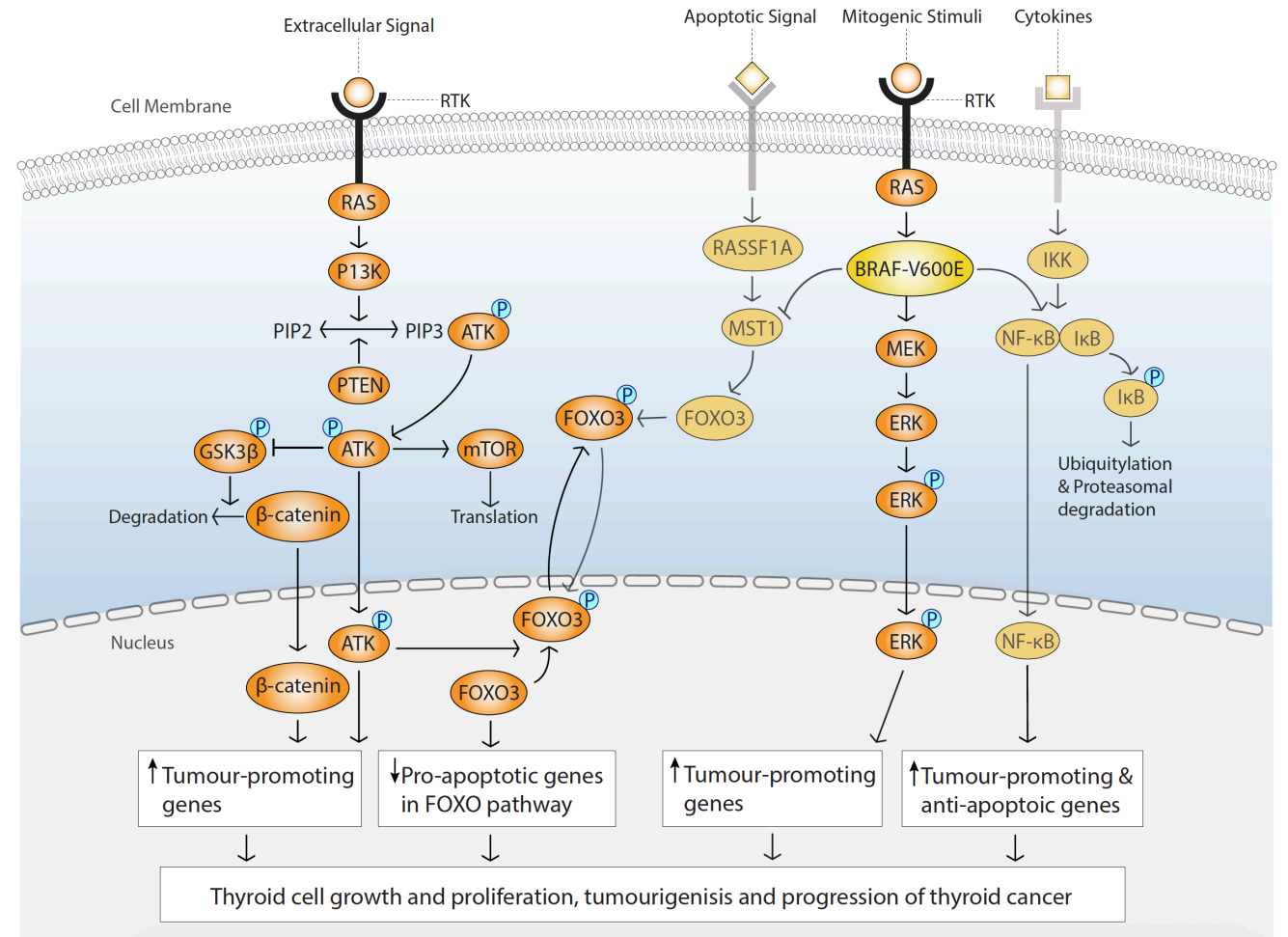




Nylén, C., et al. (2020). "Molecular Markers Guiding Thyroid Cancer Management." Cancers **12**(8).

Key drivers – BRAFV600E, RAS, RET, Fusions (RET, ALK, NTRK)

Known modifiers – PI3K kinase pathway, TERT promoter mutations, TP53 mutations



Issues

- Rare presentation
- Considerable variability of care and knowledge – standard of care not established
- Access to medications

Strengths

- Existing national registry for thyroid cancer
- Pathways for sequencing through existing clinical trials
- Informal referral pathways with hybrid MDTs available



AUSTRALIAN & NEW ZEALAND
THYROID CANCER
REGISTRY

John Mitchell Crouch Scholarship 2024 Recipient

Associate Professor Anthony Glover
General Surgeon, Royal North Shore Hospital
Host: Garvan Institute of Medical Research

Awarded: \$170,000

As an academic Endocrine Surgeon, Associate Professor Glover's goals are to improve the care of people with cancer by performing research with impact, providing expert surgical care and improving the practice of surgery and mentoring and developing future surgeons, researchers, and the healthcare workforce.

Research project title

Improving outcomes for patients with advanced thyroid cancer.

Project summary

Thyroid cancer is one of the most common cancers diagnosed but most are small and slow growing, however some people present with advanced thyroid cancer which can grow into the neck and have traditionally had limited treatment options. However, if these cancers are analysed for gene mutations and medication for these mutations are used (called neo-adjuvant therapy) some patients have shrinkage of these cancers which can make surgery possible and can lead to long-term survival. This project will provide a platform across Australia and NZ to understand how patients are presenting with advanced thyroid cancer and provide access to mutation analysis and advice for access to medications. A national network will be created, and analysis performed to understand which patients benefit from this approach and which do not. This project will also lead to an understanding of the economic benefits of this approach to develop it further in the future.



Associate Professor Anthony Glover



Plan

- Recruit patients to registry at diagnosis with advanced thyroid cancer
- Facilitate sequencing and MDT (if required) with central review of pathology
- Facilitate access to clinical trials/drug access (if required)

- Follow up at 1, 3 and 12 months with treating clinical team via registry
 - Primary outcome will be response to treatment
 - Overall and disease specific survival and treatment complications.

- Aim to create a resource to allow for further research studies:
 - Health economics
 - Image prediction tools
 - Relationship of genotype to outcomes
 - ? Further clinical trials

Why do we treat patients?

- Treat symptoms
- Improve survival
- Improve quality of life

Molecular testing of thyroid cancer?

- Improve diagnosis
- Improve risk assessment
- ? Will help shared decision making



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