

MEDICAL ONCOLOGY GROUP OF AUSTRALIA INCORPORATED

A.B.N 94 601 175 669

## Emerging issues in Australian Cancer Care, Management and Research

MOGA Chair Associate Professor Rosemary Harrup ASIA ESMO Singapore 2015



- MOGA formed in 1978 with Prof Martin Tattersall as inaugural Chair.
- Specialty Society of the Royal Australasian College of Physicians (RACP); works closely with the College on professional matters, policy initiatives, the national curriculum for medical oncology and delivery of specialty training.
- The Association currently has 432 consultant members and 171 trainee members. (230 ESMO members!)

### **Emerging Issues**

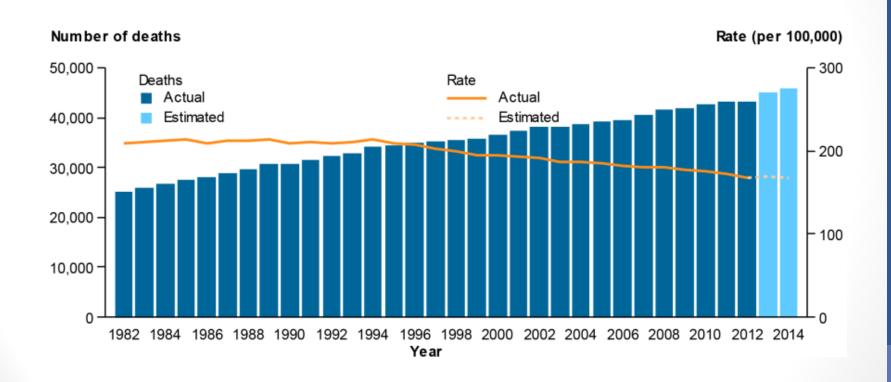
- Current State of Play
- Medical Oncology Workforce
- Access to new (high cost) therapies
- Current research landscape



#### New Cancer Cases

- In 2014, there were approximately 123,920 new cancers diagnosed in Australia (excluding basal and squamous cell carcinomas of the skin), which is a rate of 467 per 100,000 persons.
- 2.6x number in 1982
- 58% were in people aged > 65 years
- 55% were in males.

### Deaths from all cancers combined, Australia 1982-2014



Source: AIHW National Mortality Database

## International Comparison

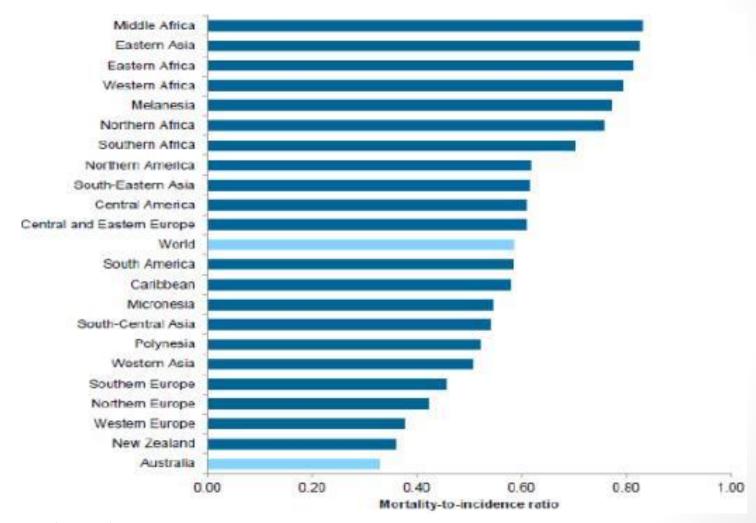
#### In 2012:

- Estimated 14.1 million cancers diagnosed and 8.2 million deaths worldwide
- Australia accounted for 0.9% of all cancers diagnosed and 0.5% of all cancer deaths
- Australia had a higher incidence rate for all cancers combined than other country groups, ? partly attributable to national population screening programs

### Population Based Screening

Program	Participation rate	Abnormality rate
Breast Screen	55%	104 /10,000 women (aged 50–69) first time screen.
National Cervical Screening Program	58%	8/1000 precancerous lesions
National Bowel Screening Program	33%	32 / 1000 bowel cancers  57 / 1000 advanced pre-cancerous polyps

#### International comparison of mortality-toincidence ratios for all cancers combined, persons, 2012



Source: Ferlay et al. 2010.

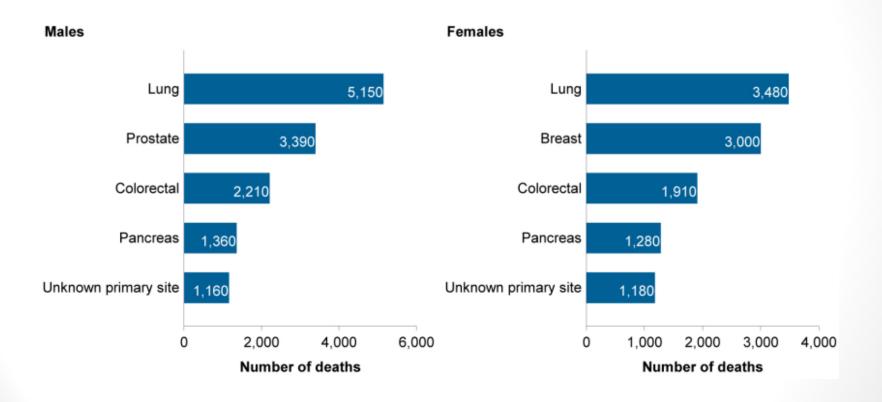
### International Comparison

- Australia's mortality rate was lower than the average world rate
- The mortality-to-incidence ratio (MIR) for Australia was 0.3, suggesting that cancer survival was high in Australia.
- Australia's incidence melanoma > x11 the average world rate with mortality rate > x6 average world rate.



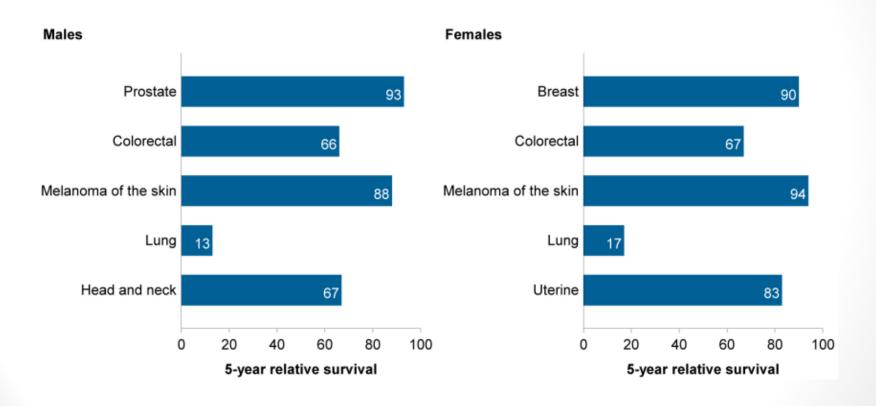
Hartz Mt: Latitude 42 °south UV index 10!

## Australia- Five most common causes of death from cancer (2014)



Source: AIHW National Mortality Database

## 5-year relative survival for five most commonly diagnosed cancers, 2007–11.



# Cancer Australia- Lung Cancer Demonstration Project

- Reduce variations in lung cancer outcomes by ensuring equity of access to cancer treatment irrespective of where people live, or their cultural background
- By implementing champion multidisciplinary team meetings for the patient's lung cancer journey
- 4 health service collaborations are participate in the pilot project:
  - Sydney Local Health District (NSW)
  - Metro North Hospital and Health Service (QLD)
  - Tasmanian Health Organisation South (TAS)
  - Western Australia Cancer & Palliative Care Network (WA)

## Indigenous lung cancer



 Between 2008 - 2012, Indigenous Australians were <u>30%</u> more likely to die from cancer than non-Indigenous Australians.

#### The higher mortality rate may be partly explained by:

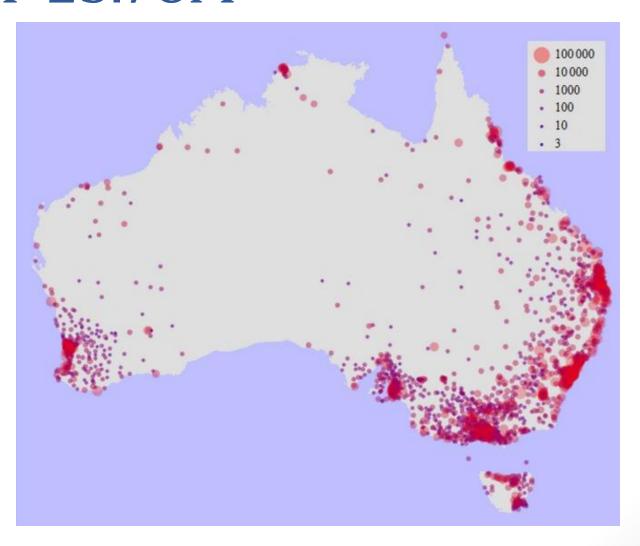
- a greater likelihood of having cancers with poor survival (e.g. lung cancer and cancer of unknown primary site) (Condon et al. 2003; Threlfall & Thompson 2009)
- being diagnosed at an advanced stage (AIHW 2014a; Cunningham et al. 2008).
- x1.7 more likely to be diagnosed with lung cancer
- Higher smoking rates

### National Aboriginal and Torres Strait Islander Cancer Framework

- Partnership between Cancer Australia and Menzies School of Health Research
- Framework will be
  - Evidence based
  - Nationally agreed
  - Nationally coordinated

 Aims to eliminate the variation in cancer outcomes experienced by Indigenous Australians.

# The Australian Landscape-POP 23.78M



#### The Australian situation

- Publically funded universal health care scheme (Medicare) since 1975 funded by 2% levy on taxable income
- Coexists with a private health system with 47.2% having private health insurance
- Medicare will cost \$23.6B in 2016/17
- The other key component of the Australian health system is the pharmaceutical benefits scheme (PBS)
- Commenced 1948 with 139 life saving or disease preventing drugs, 4-5% annual growth and will cost \$6.5B in 2015/16

## Key Workforce Issues-2009

- With the increase in effective cancer treatments, improved outcomes and increasing patient numbers there were concerns about workforce adequacy to ensure equity of care.
- Medical Oncology workforce data was not routinely collected in Australia.
- Planning for the future Australian medical oncology workforce was considered essential to ensure all future patients would have access to high quality cancer care.

# Australian Medical Oncologist Workforce Study 2009

- Cross sectional study of medical oncologists in Australia using a study specific 23 item survey mailed to all private and public oncology practices in June 2009, to retrospectively collect 2008 workforce data.
- Numbers of new cancer diagnoses were obtained from each State cancer registry and trainee numbers from the Royal Australasian College of Physicians (RACP).

#### Results

- 81% RR- 476 medical oncologists, 234 fulltime equivalents (FTE), 28.6 FTE vacant.
- 29% female.
- 94 trainees
- 150 workplaces (excluding rural outreach), 78% metropolitan, and 22% rural locations,
- 37% of locations in Victoria, and 28% of locations in NSW.
- 31.3 FTE (13%) of Medical Oncologists planned to retire over the next five years.

#### Results

- With an optimal workload of 150-180 new patients per FTE medical oncologist per year, the national shortfall was estimated to range from 92-157 FTE, with a projected need of 126-198 new FTE by 2014.
- Chemotherapy utilisation rate was calculated to be 19%well below the evidence based standard of 51% (or 43% if haematologic malignancies excluded).

#### Conclusions

- Medical oncologist shortage
- Likely to worsen in the future.
- Uneven workforce distribution with greater shortages in some states and in rural areas.
- Projected shortage would impact other craft groups such as radiation oncologists.
- The workforce shortage indicated little capacity to increase the low chemotherapy utilization rate.

## Current Medical Oncologist Workforce Study 2014-2016

- In 2014 MOGA commenced a second Workforce Study to implement our long term strategy to development and maintain a MOGA database to continue to address workforce issues at the national level
- Part 1 is completed and Part 2 will commence shortly

### Access to New Cancer Therapies



"The red are for the illness, the blue are for the side effects of the red and the green are for the effects of the blue."

## Availability of Cancer Drugs

 November Yields Record Number of FDA Approvals for New Oncology Drugs and Drug Indications

ASCO Post December 10, 2015, Volume 6, Issue 22

- While the past 2 years have seen an unprecedented <u>accelerated</u> <u>pace</u> in the number of new oncology drugs entering the market, the years ahead look even more promising for new treatment options.
- In 2014, the U.S. Food and Drug Administration (FDA) approved <u>9</u>
   new drugs and biologics in the treatment of cancer
- So far this year, the FDA has already surpassed that number, with 13 new drug approvals— 6 in November alone.
- Another milestone in 2015, the first FDA-approved biosimilar product.

## The Australian Drug Regulatory Environment

Therapeutic Goods Authority (Efficacy) Pharmaceutical Board Advisory Committee MSAC Pharmaceutical Benefits scheme

(Funded for indication) \$6.10/\$37.70

## Sample time line for drug "A"

**Australia** 

Somewhere else

TGA Sept 2013

PBAC rejection Nov 2013

PBAC recomme ndation Mar 2014

PBS listing Jul 2015

Accelerated approval Aug 2011

General approval Nov 2013

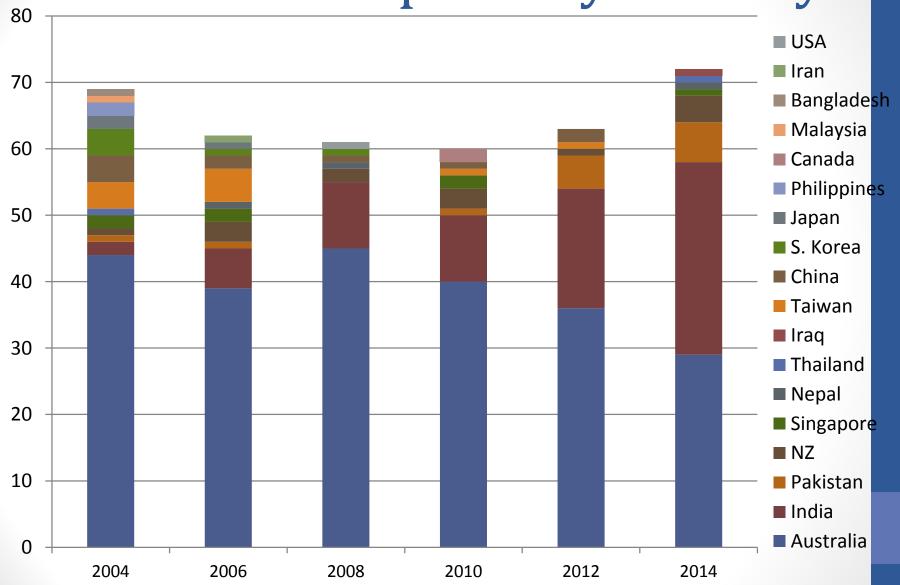


13 Australian (and New Zealand) Cooperative Clinical Trials Groups	Established
Australasian Leukaemia and Lymphoma Group	1973
Australian New Zealand Breast Cancer Trials Group	1979
Australian & New Zealand Children's Haematology and Oncology Group	1986
Trans-Tasman Radiation Oncology Group	1989
Australasian Gastro-Intestinal Trials Group	1991
Australia and New Zealand Melanoma Trials Group	1999
Australia New Zealand Gynaecological Oncology Group	2000
Australasian Lung Cancer Trials Group	2004
Psycho-Oncology Co-operative Research Group	2005
Australasian Sarcoma Study Group	2007
Cooperative Trials Group for Neuro-Oncology	2007
Australian & New Zealand Urogenital and Prostate Cancer Trials Group	2008
Primary Care Collaborative Cancer Clinical Trials Group	2009

## Research landscape

- Clinical Trials Centre was the brain child of 3 oncologists
   who identified a need for a trials statistical and data
   management centre. Gained National Health and Medical
   Research Committee funding and now involves 150
   researchers and supports collaborative trials in many
   disciplines
- Baume report 1991 made it easier to perform investigator initiated Phase 1 & 2 trials in Australia
- Australian and Asia-Pacific Clinical Oncology Research
   Development (ACORD) initiative 7<sup>th</sup> bi-annual workshop for clinical trial design September 2016

**ACORD Participants by Country** 



### **ACORD 2016**

Tuggerah, NSW, September 11-17

Applications open 6 November 2015

Applications close 26 February 2016

Concept outline for a proposed study (<500 words)

Support from supervisor, department and/or group

www.acord.org.au

www.moga.org.au

#### Submit

in by... back by...

**Concept Outline** 

Protocol 1st half draft

Protocol 2<sup>nd</sup> half draft

Protocol & Patient

**Information Sheet** 

7pm Mon

7pm Tue

7pm Wed

7pm Thu

11am Tue

11am Wed

11am Thu

2pm Fri



#### **MOGA Executive Committee**

Chair – Associate Professor Rosemary Harrup

Deputy Chair/Treasurer – Dr Zarnie Lwin

Member - Dr George Au-Yeung

Member - Dr Prunella Blinman

Member - Dr Joanna Dewar

Member - Dr Eryn Dow

Member - Associate Professor Chris Karapetis

Member - Dr Deme Karikios

Member - Associate Professor Phil Parente

Member - Dr Brian Stein



# Therapeutic Goods Administration (TGA)

- Evolved between 1962 and 1988
- TGA is part of the <u>Australian Government Department of Health</u>, and is responsible for regulating therapeutic goods including prescription medicines, vaccines, sunscreens, vitamins and minerals, medical devices, blood and blood products.
- Almost any product for which therapeutic claims are made must be assessed and if successful entered in the <u>Australian</u> <u>Register of Therapeutic Goods (ARTG)</u> before it can be supplied in Australia.

#### **PBAC**

- The PBAC is an independent expert body appointed by the Australian Government. Members include doctors, health professionals, health economists and consumer representatives.
- Its primary role is to recommend new medicines for listing on the PBS. No new medicine can be listed unless the committee makes a positive recommendation. The PBAC meets three times a year, usually in March, July and November.
- When recommending a medicine for listing, the PBAC takes into account the medical conditions for which the medicine was registered for use in Australia, its clinical effectiveness, safety and cost-effectiveness ('value for money') compared with other treatments.
- PBAC has two sub-committees to assist with analysis and advice in these areas:
- <u>Drug Utilisation Sub Committee</u>; and
- Economics Sub Committee.

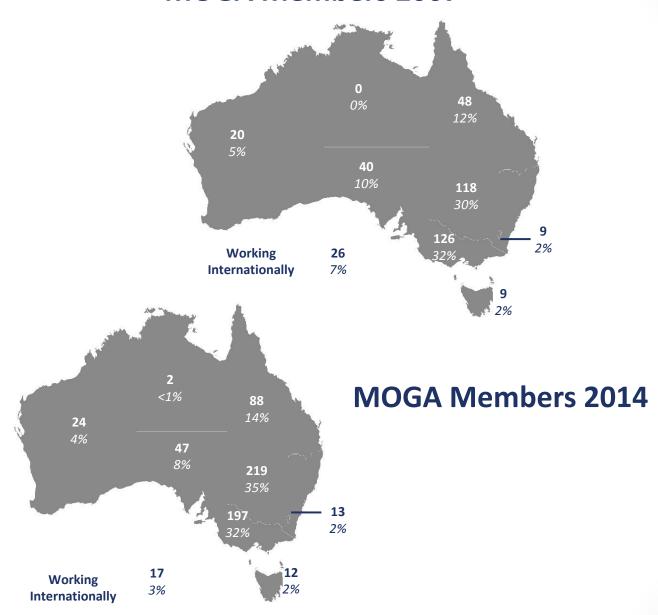
## Medical Services Advisory Committee

- The Medical Services Advisory Committee (MSAC) is an independent expert committee that provides advice to the Minister for Health on the strength of the evidence relating to the comparative safety, clinical effectiveness and costeffectiveness of any new or existing medical service or technology, and the circumstances under which public funding should be supported through listing on the Medicare Benefits Schedule (MBS).
- E.g. Companion testing such as EML4-ALK for crizotinib in NSCLC

### Recommendations

- Increase the supply of Australian medical oncologists.
- Establish a Medical Oncology Workforce Advisory Group to develop a National Workforce Plan 2010-15 in collaboration with relevant national and state agencies.
- Develop a strategy to conduct ongoing research and monitoring of the Australian workforce to inform future workforce planning for national medical oncology services.
- Establish national workforce standards for medical oncology.

#### **MOGA Members 2007**



## **Current Medical Oncologist Workforce Study 2014-2016**

- In 2014 MOGA commenced a second Workforce Study to implement our longitudinal strategy to development and maintain a MOGA database to address workforce issues at the national level
- Planned linkage with national database oncology specific data such as chemotherapy treatment item numbers and location.

## 2 Part Cross Sectional Study

- Part 1: June-October 2015. Qualitative study of face-to-face interviews with medical oncology consultants, young medical oncology consultants (within 5 years of Fellowship), and trainees based in New South Wales.
- Part 2: October 2015-December 2016.
   Quantitative study using an online questionnaire distributed to all MOGA and Private Cancer Physicians Australia members.

## Australian Medical Oncologist Workforce Study 2009

- Develop national benchmarks.
- To identify key supply and demand issues that would impact on the Australian medical oncology Workforce over the next 5-10 years.
- Working Group: Prof Bogda Koczwara AO,
   Prof Michael Barton
   A/Prof Euan Walpole,
   Dr Prunella Blinman
   A/Prof Peter Grimison.