



Cancer – changing landscape in Asia

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EAAC 2013, Singapore

SWISS RE
150
YEARS

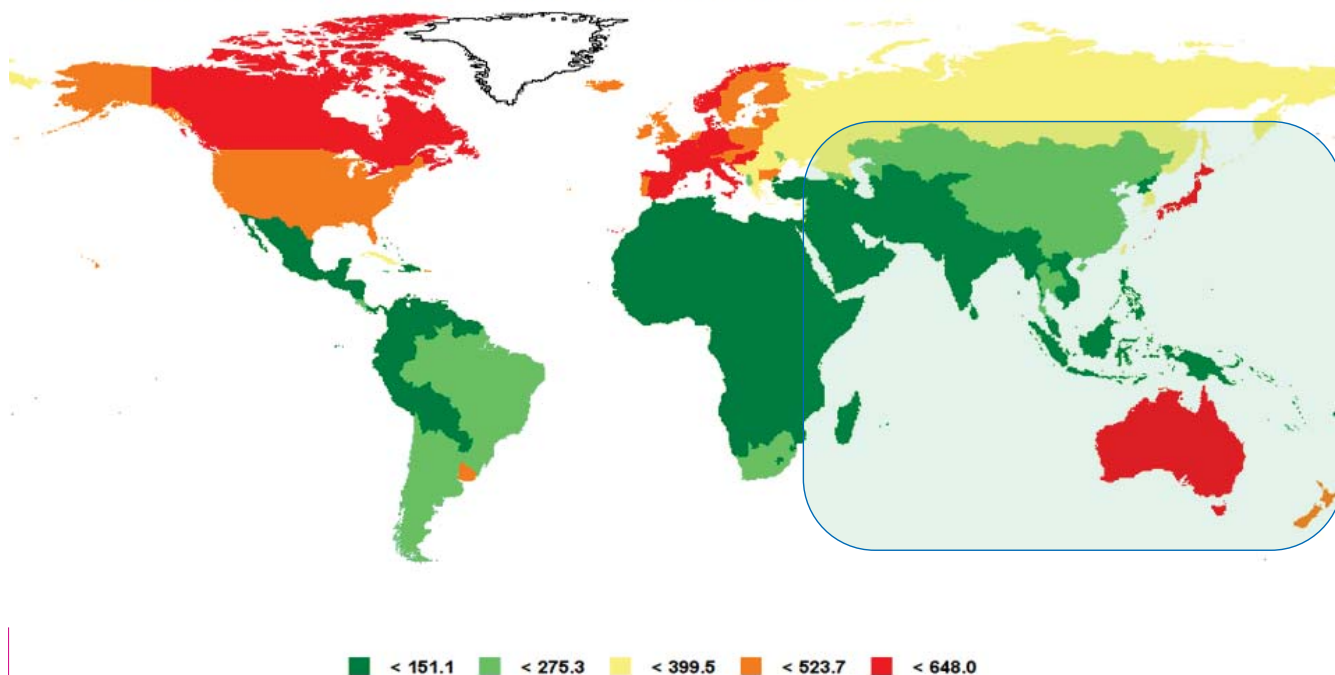


Cancer Risk in Asia

- Current landscape across Asia

Cancer incidence varies across Asia

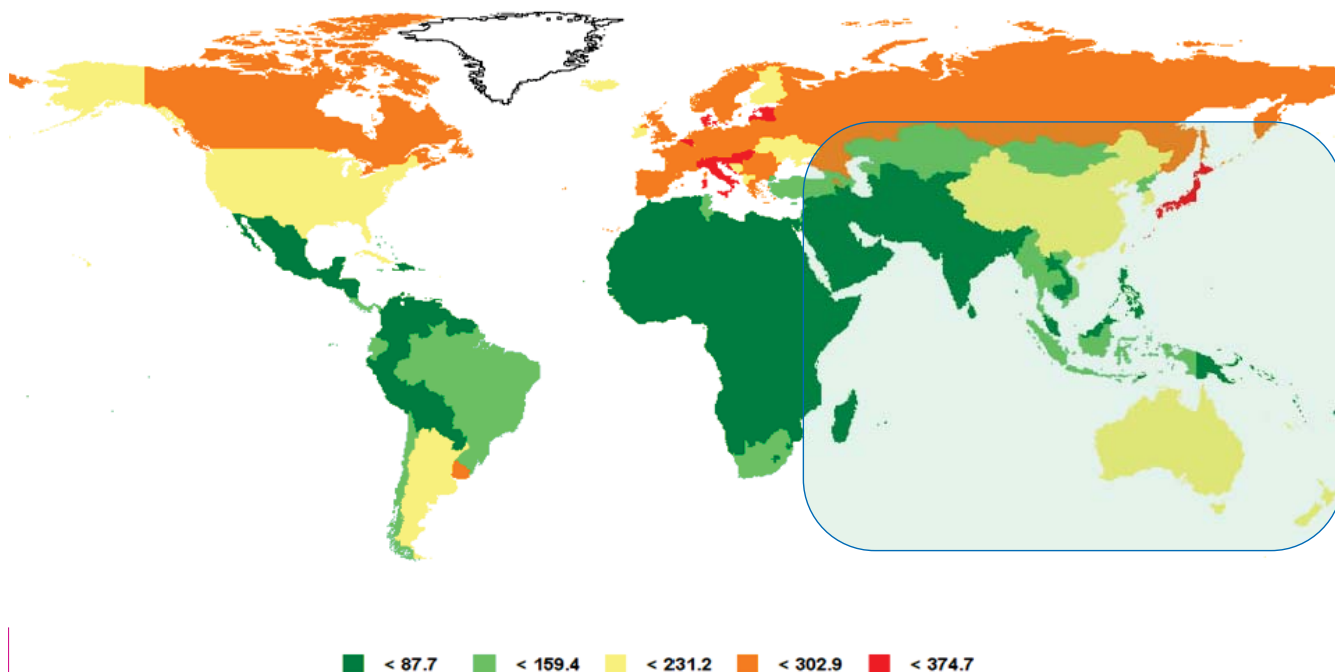
Estimated crude incidence rate per 100,000
All cancers excl. non-melanoma skin cancer: male, all ages



GLOBOCAN 2008 (IARC) - 30.8.2013

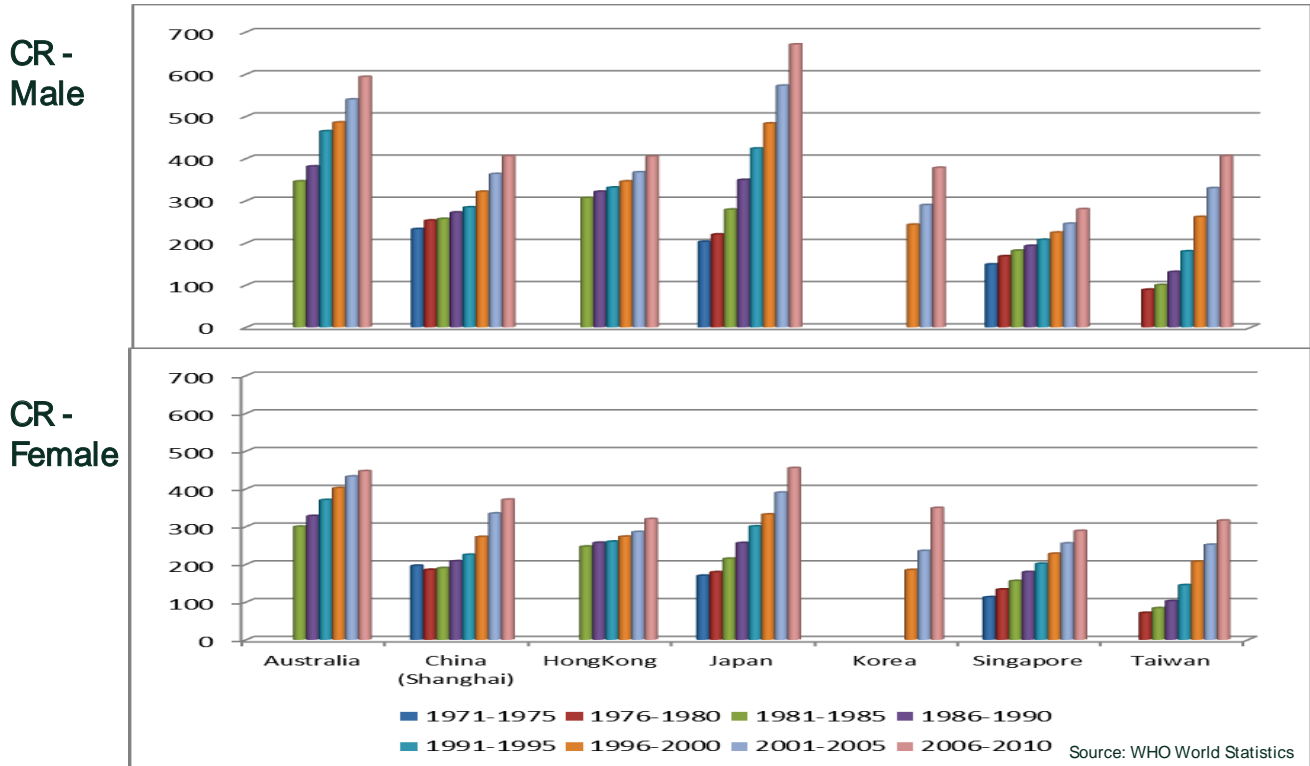
Cancer mortality rates varies across Asia

Estimated crude mortality rate per 100,000
All cancers excl. non-melanoma skin cancer: male, all ages

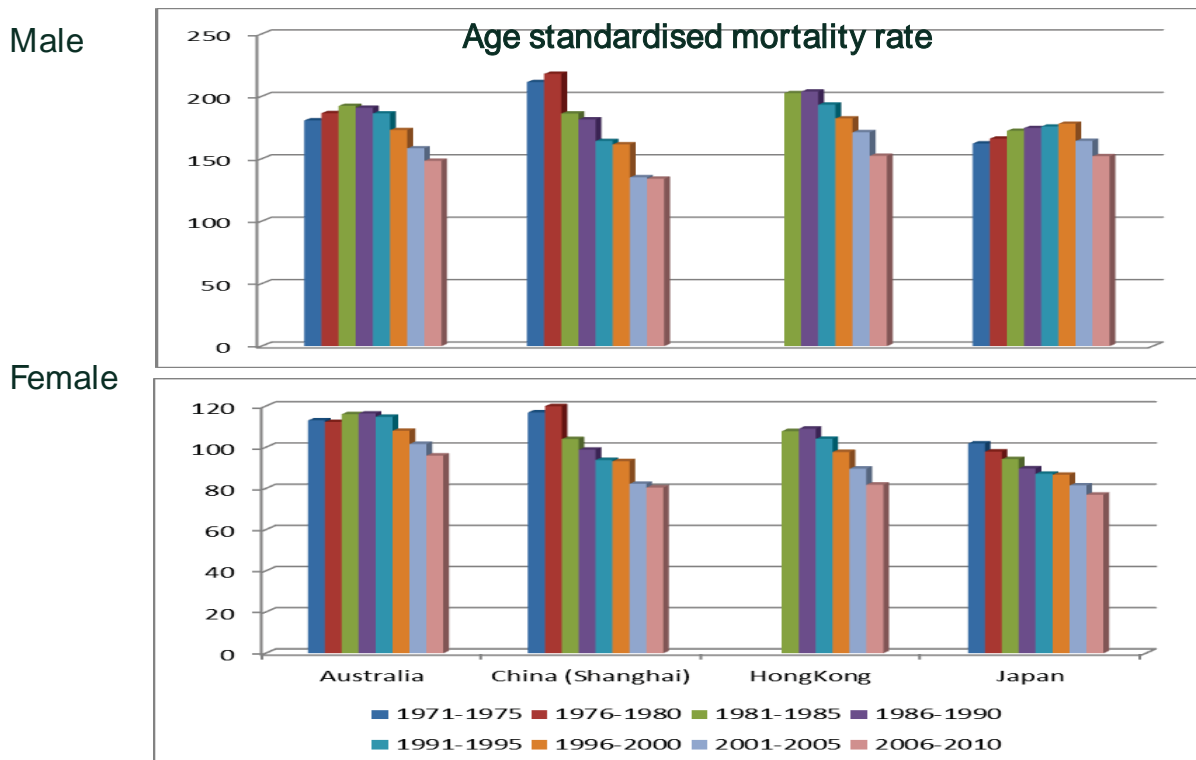


GLOBOCAN 2008 (IARC) - 30.8.2013

More people are getting cancer in Asia

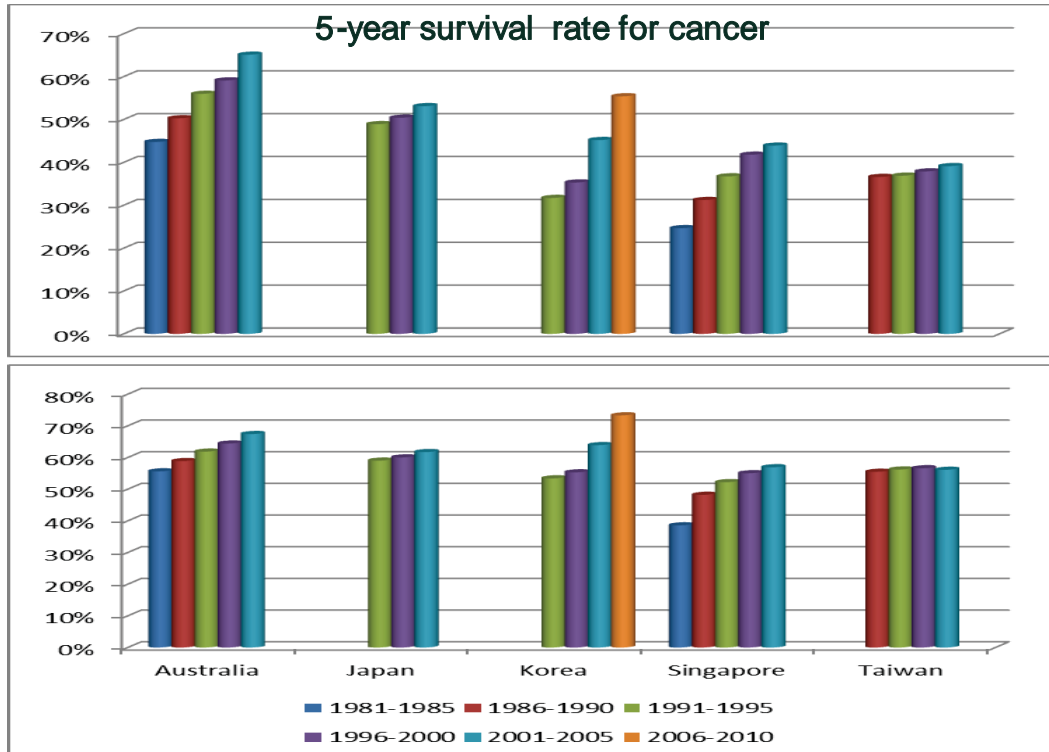


More people are surviving cancer



Cancer survivors are surviving longer

Male



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Important facts across the cancer journey

- Getting cancer
- Detection cancer
- Treatment cancer
- Life after cancer

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1) Getting cancer

- Changes in society actions
- Changes in lifestyle/ dietary

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Society has taken pro-active steps to address **Swiss Re**
cancer risk:
 Smoking Campaign in Hong Kong



吸煙可加速皮膚老化

焦油： 毫克 尼古丁： 毫克

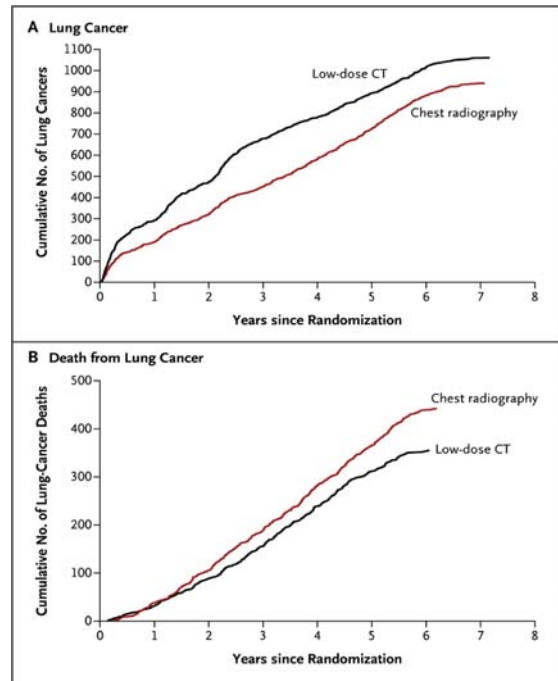
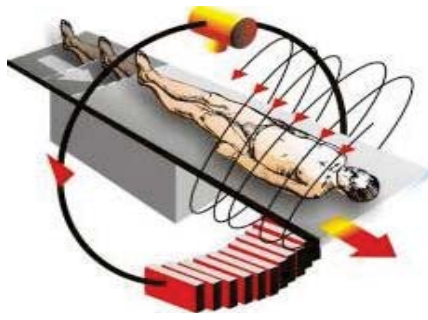
Changes in diet/lifestyle affects the risk of getting cancer



2) Detection

- Impact of Medical advancement
- Development of National Screening Programs

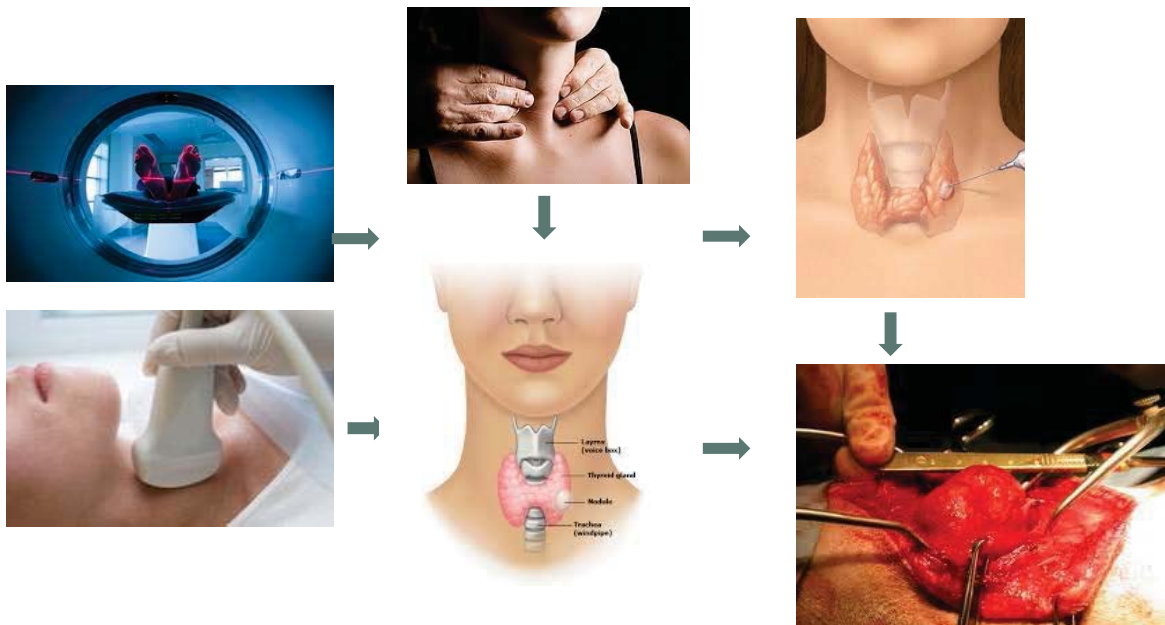
Medical advancement has lead to earlier detection:
Lung cancer: CT Scans/Chest X-Ray, Biopsy



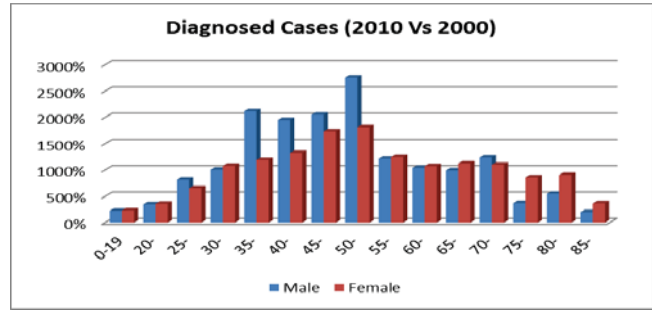
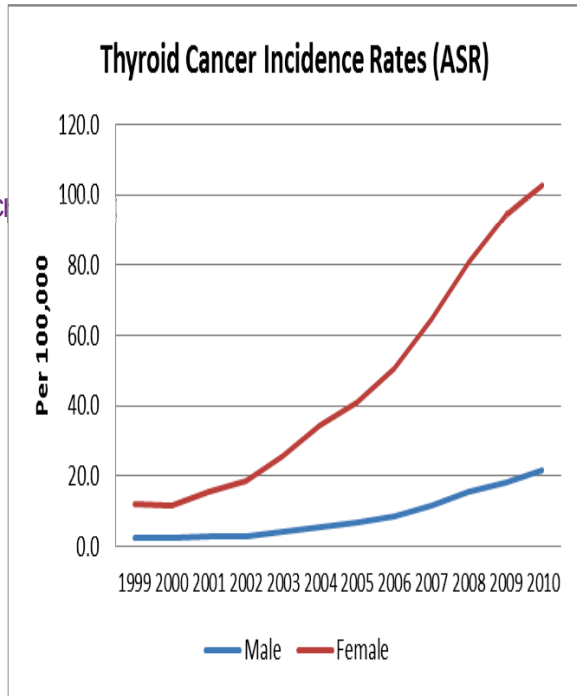
The National Lung Screening Trial Research Team . N Engl J



Medical advancement has lead to earlier detection:
Thyroid cancer: Ultrasonography



Earlier detection leads to changes in cancer pattern: Changes in thyroid cancer pattern in Korea



| Age | Male | Female |
|-------|-------|--------|
| 30-39 | - | 11.5% |
| 40-49 | 5.8% | 13.8% |
| 50-59 | 10.3% | 26.3% |
| 60+ | 10.8% | 17.0% |

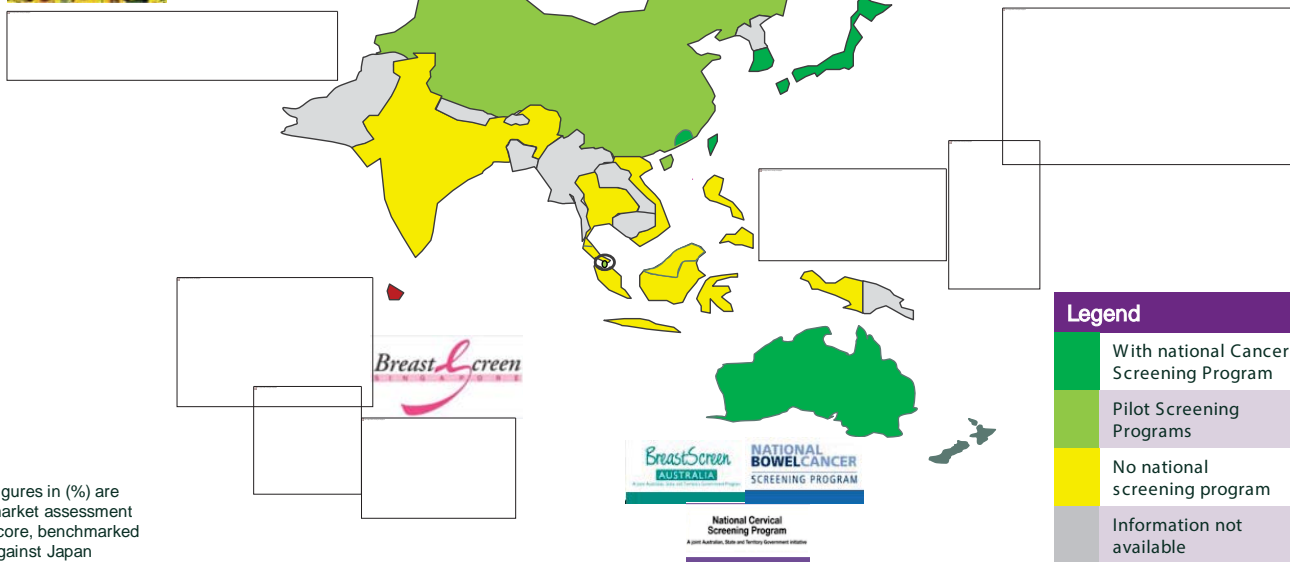
Screening Rate (2009 Korean National cancer screening survey)

Screening rate in Korea was 95%/27% (M/F) higher in people having private health insurance compared with people having not.

Development of National Screening Program leading to earlier detection



Pilot programmes stated in 2012 and 2015



Figures in (%) are market assessment score, benchmarked against Japan

3) Treatment

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Recent medical advances in cancer treatment

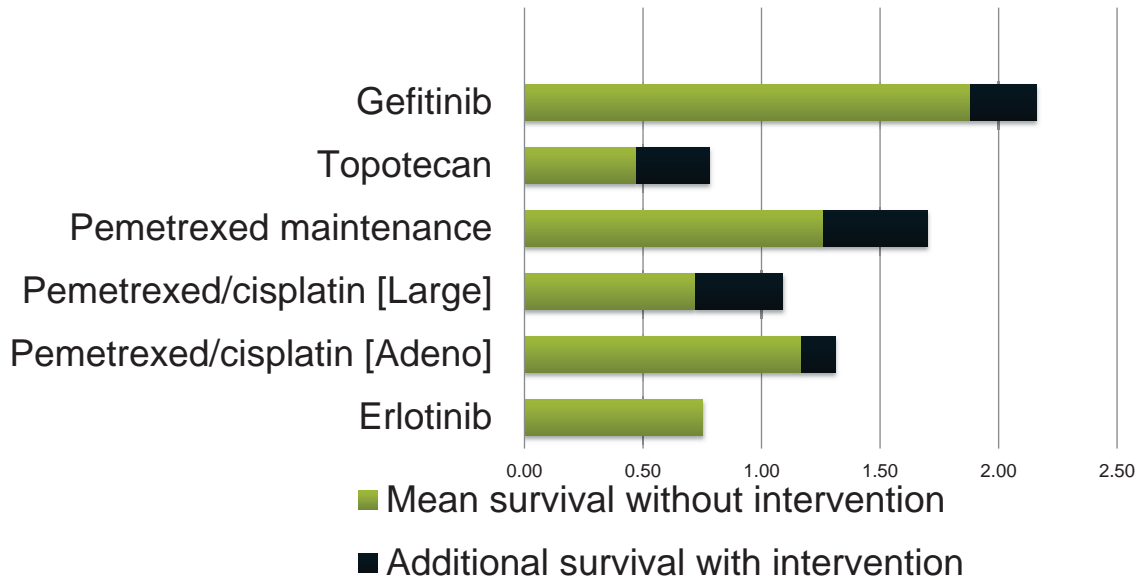
- **Targeted therapies** a major advance in last 20 to 30 years
 - monoclonal antibodies
 - small molecules
- **Chemotherapy**
use drugs to destroy cells that grow quickly (including cancer cells and other cells)
- **Radiotherapy**
use radiation to damage the DNA of cancer cells (and surrounding tissue), thereby destroying them
- **Bone Marrow / Stem Cell Transplant**
to restore stem cells destroyed by chemo/radio
- **Combination therapy** to overcome cancer cells that have built up natural resistance

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Advances in treatment leads to longer life expectancy:

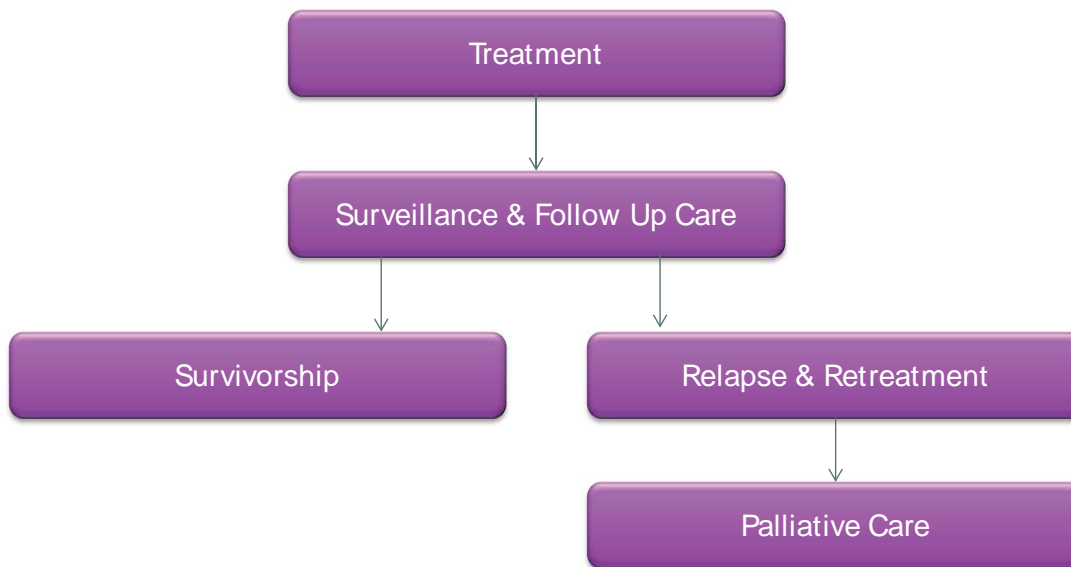
Lung cancer treatments

Modelled life expectancy with and without interventions



4) post cancer

Little focus on post cancer in Asia
Not much has been done...



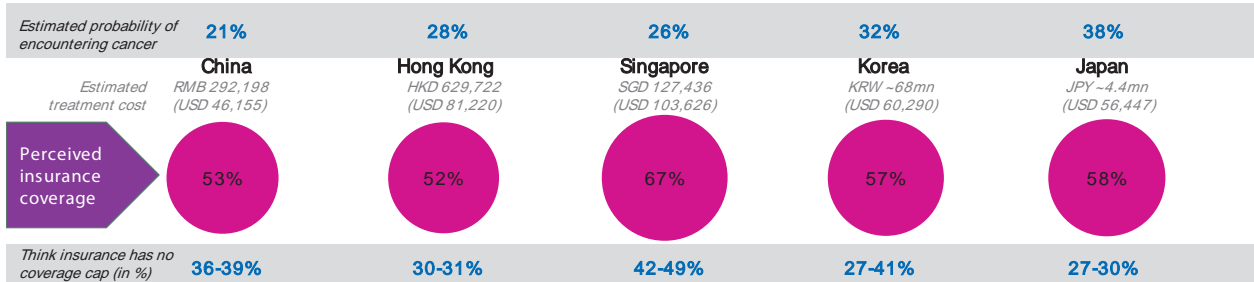
Where do insurers fit in?

- Funding for cancer treatment
- Funding for post treatment cost
- Opportunities & Challenges

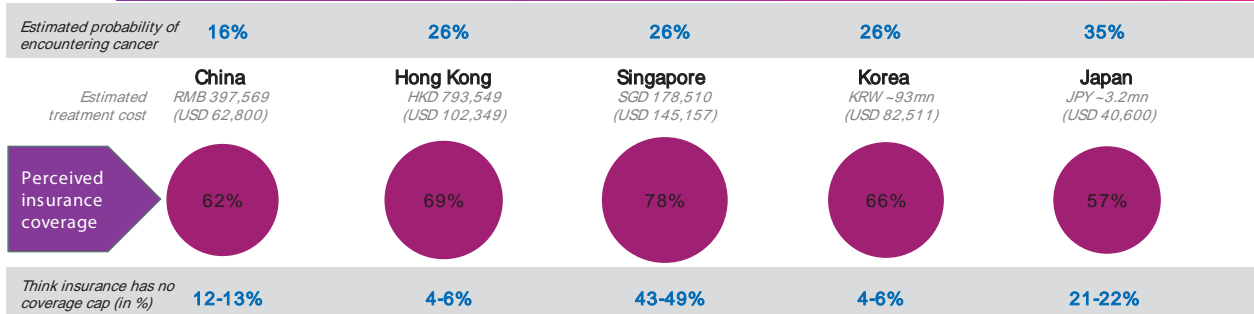
Funding for the treatment cost

Perceived treatment cost and % of insurance coverage for Cancer

Pre-retirees (%)



Retirees (%)



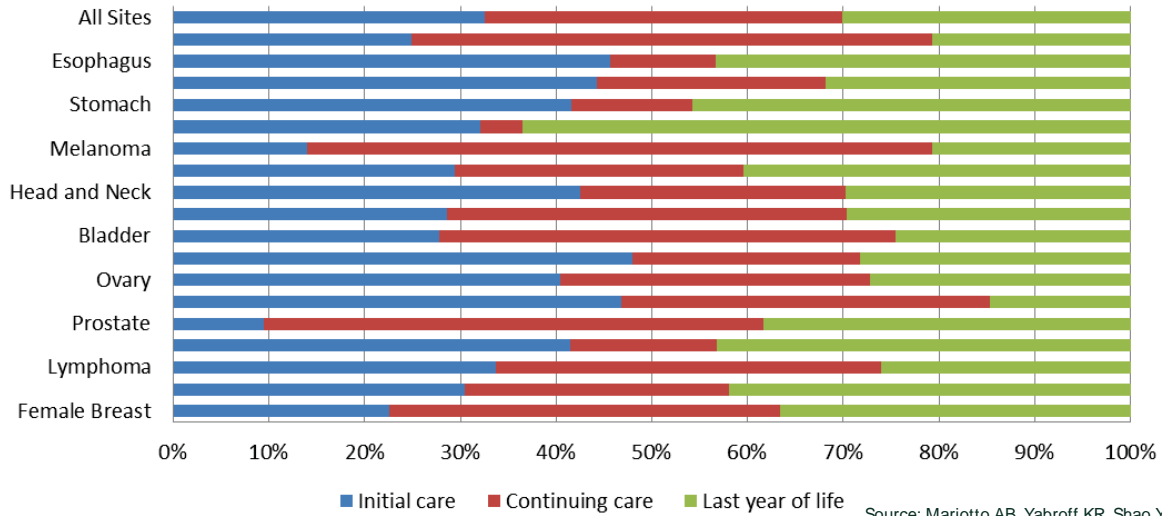
Funding for post cancer cost

Post cancer issue needs to be address



Post treatment cost is significant

Estimate of proportion of national expenditure for cancer care in 2010 by cancer site and phase of care



Source: Mariotto AB, Yabroff KR, Shao Y, Feuer EJ, Brown ML. Projections of the cost of cancer care in the U.S.: 2010-2020.

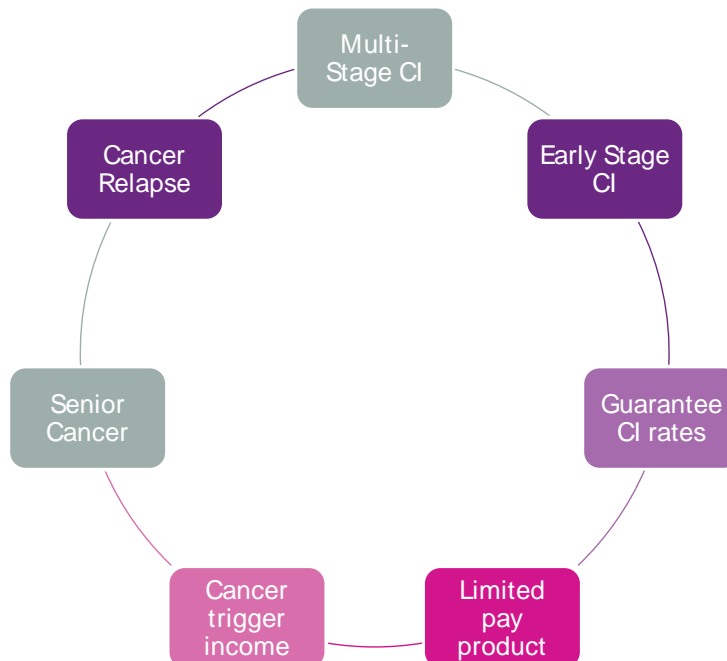
Opportunities & Challenges

Huge opportunities for insurers to fill up the gaps in current offerings

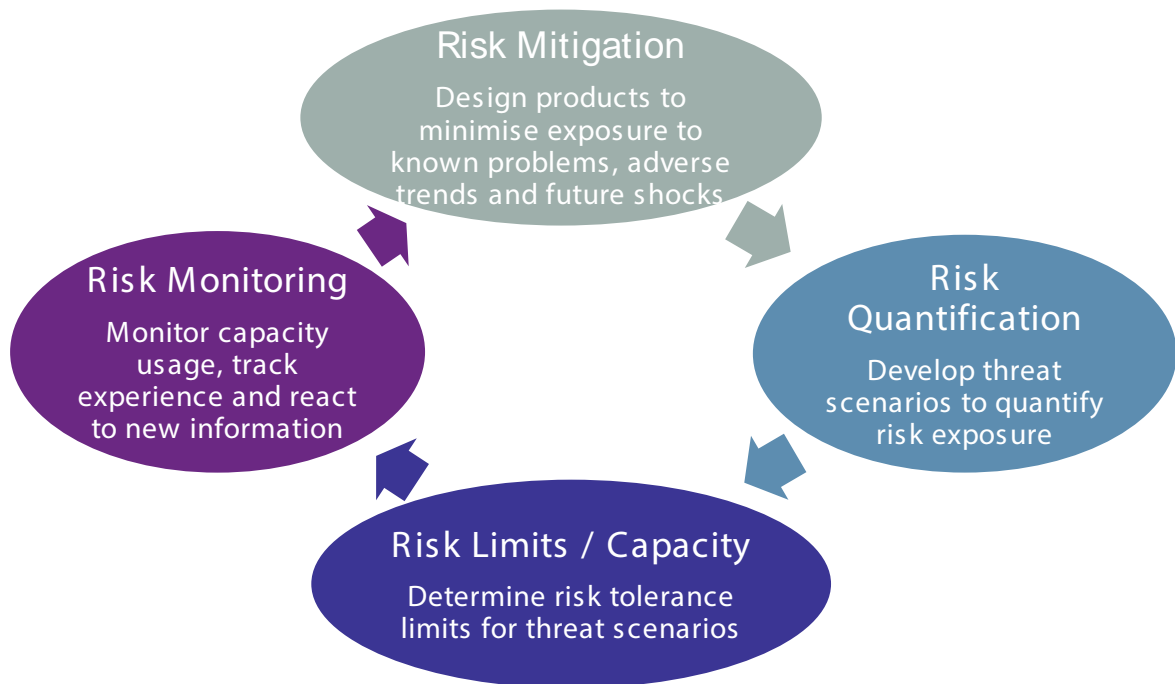
- Lack of holistic cancer coverage in current offerings
- Lack of understanding of cancer risk and it's implications
- Lack of ability to afford insurance at older ages



Product Opportunities

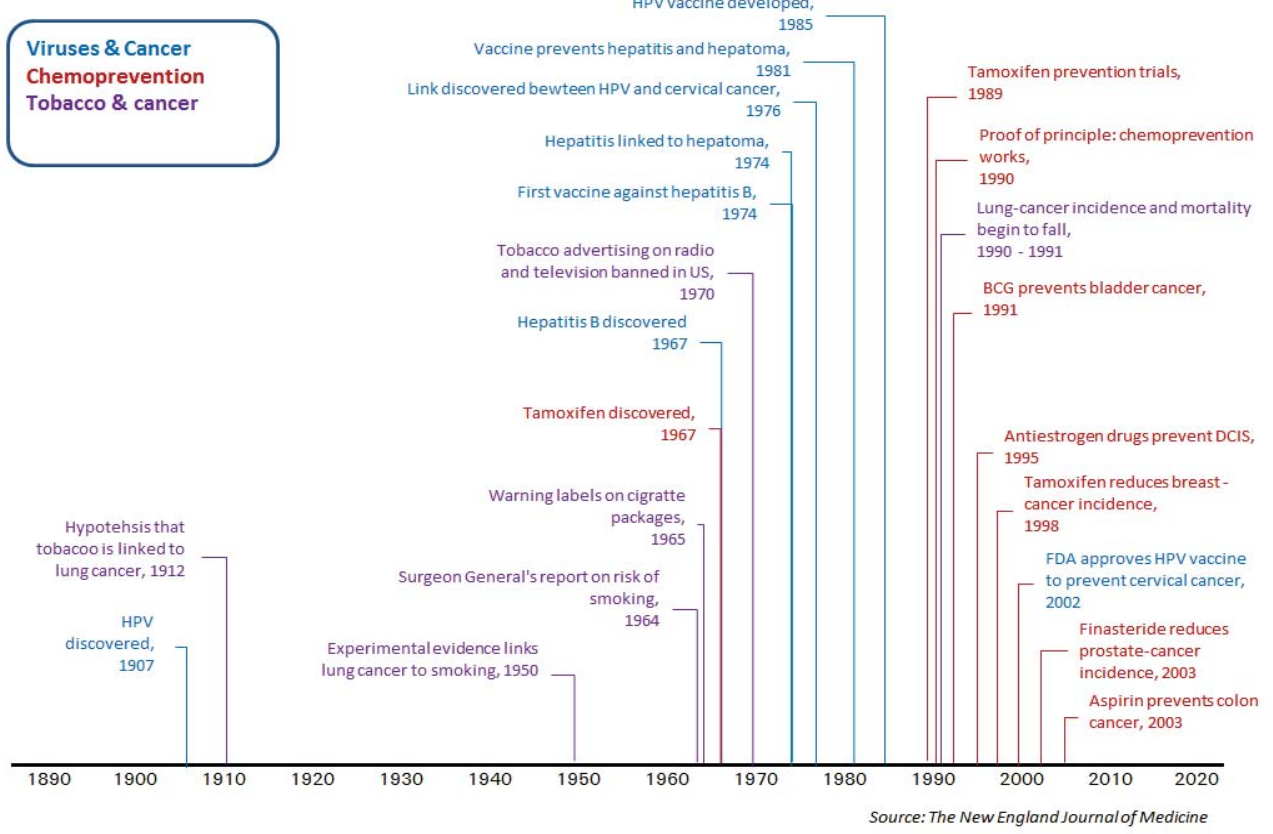


Importance of managing cancer risk

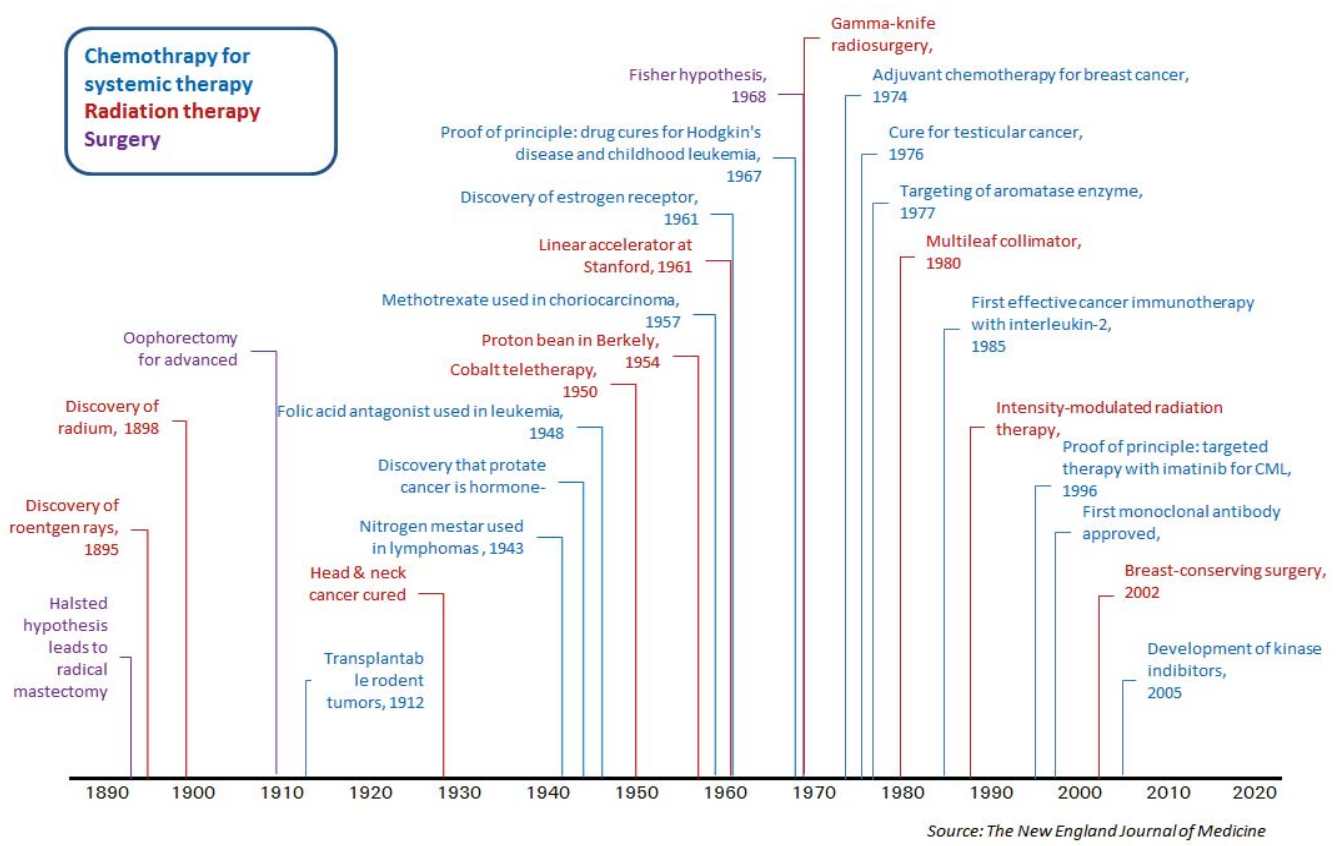


The landscape will continue to evolve...

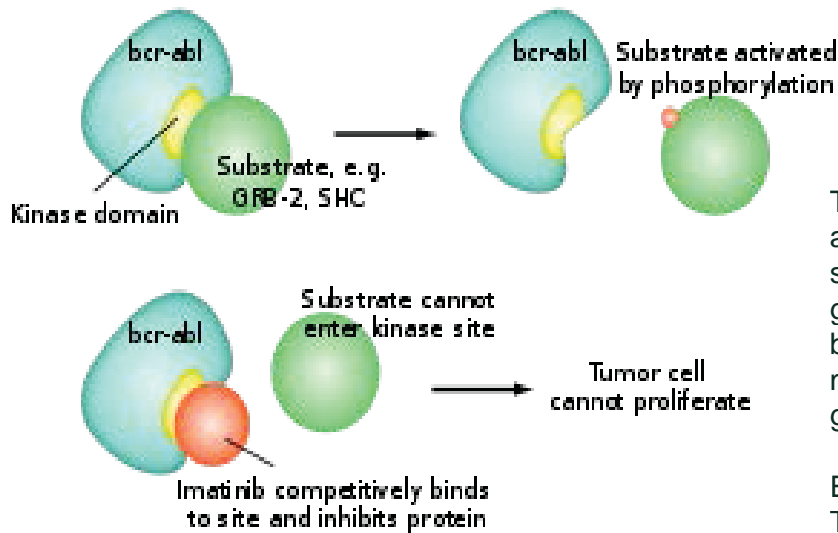
Progress will continue to happen: Cancer prevention



Progress will continue to happen: Cancer treatment



Advancement in the horizon: Targeted cancer therapy



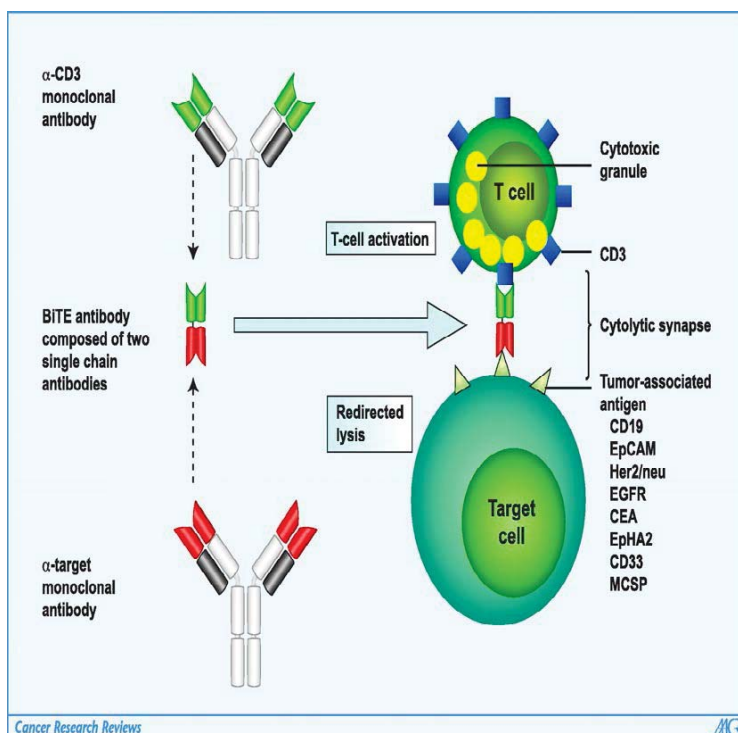
Targeted cancer therapies are drugs or other substances that block the growth and spread of cancer by interfering with specific molecules involved in tumor growth and progression.

Example:
Trastuzumab (Herceptin) for HER2 positive breast cancer.

http://en.wikipedia.org/wiki/Targeted_therapy

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Advancement in the horizon: T Cell treatment



BITE (antibody produced ex-vivo) can connect tumour cell and T lymph cell together and then start the lysis process.

Potential advantages:

- Activation of Innate body function
- Highly specific
- Self-escalating
- Prevention of relapse and even 1st primary

Blinatumomab (by Micromet) and ImmTac-gp100 (by Immunocore) already in clinical trial with some initial positive results. Billion dollar acquisition has been triggered in pharmacy industry although there are still big uncertainty ahead.

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Are we prepared?



Thank you



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