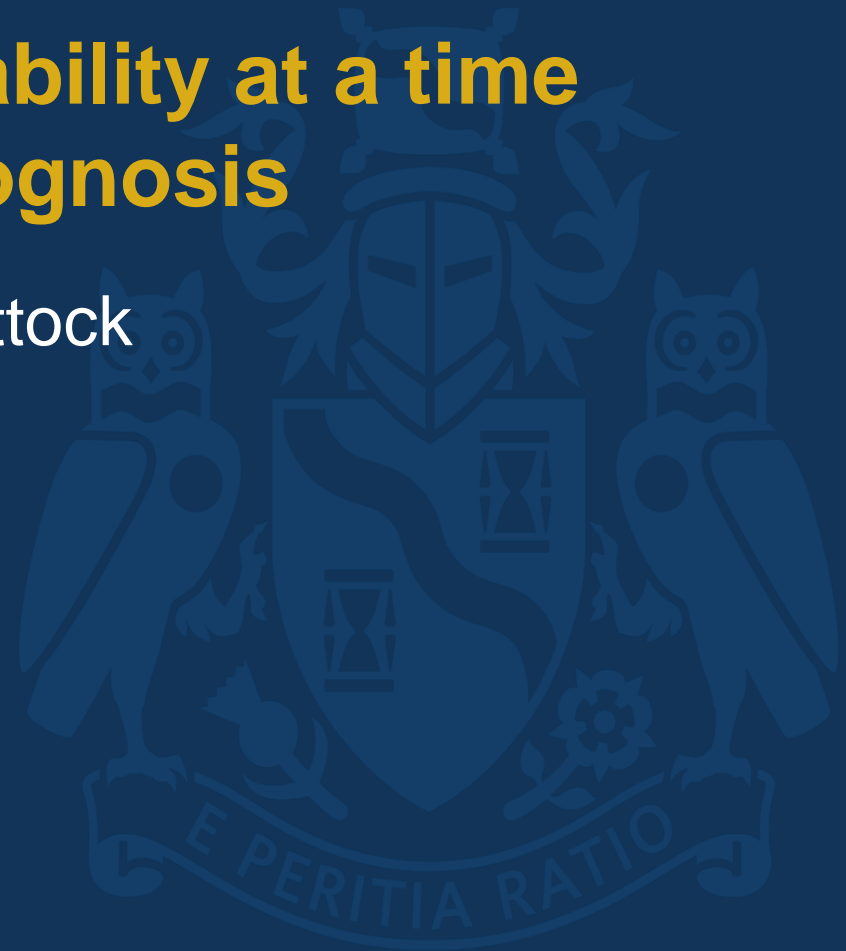




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Cancer claims and disability at a time of changing Rx and prognosis

Dr Nigel Dear and James Shattock



Contents

- Cancer Claims in a disability block
- Brief words on Emerging Therapies
- Case Studies
- A CMO view of the future and final thoughts





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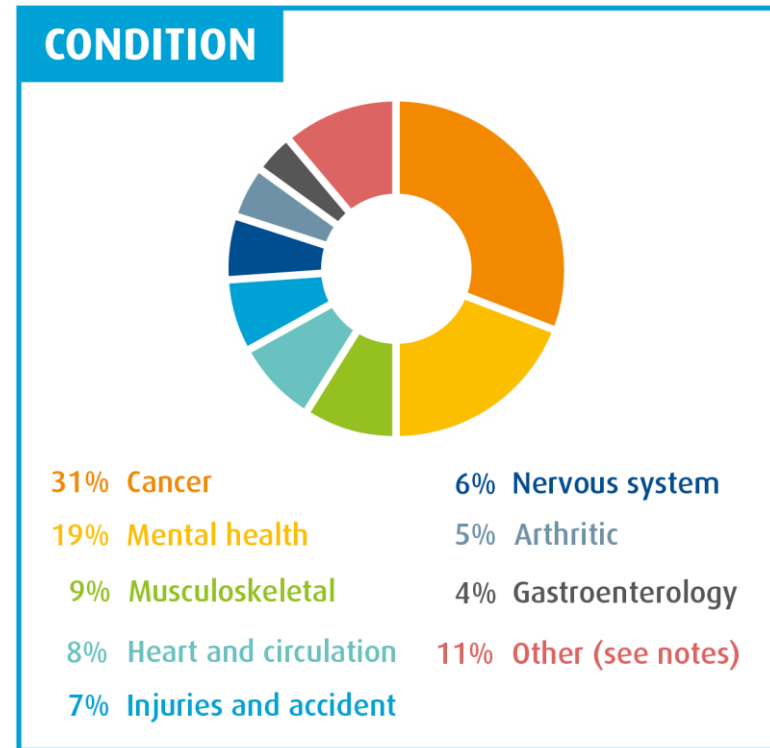
Cancer Claims in a disability block

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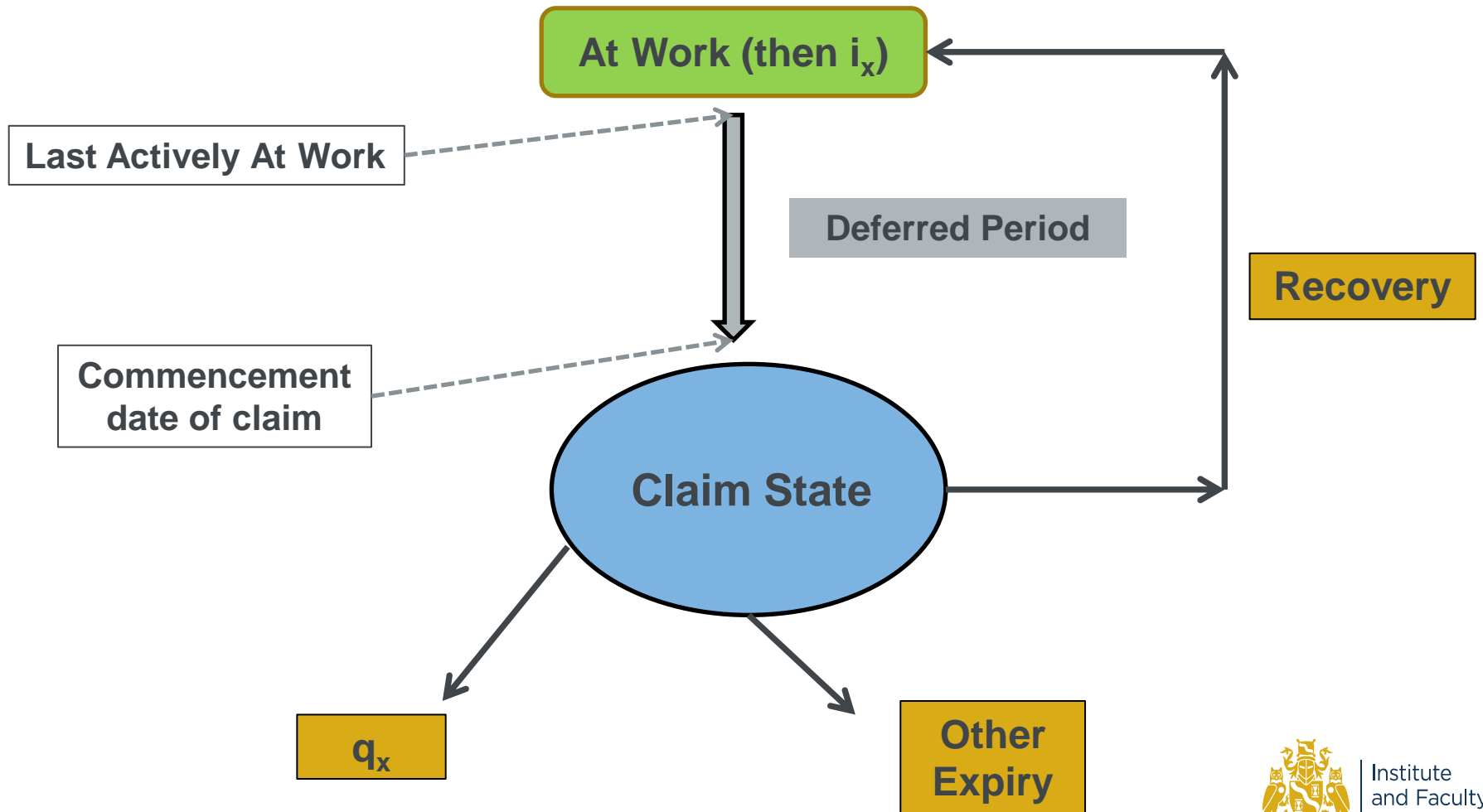
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The UNUM disability claims block

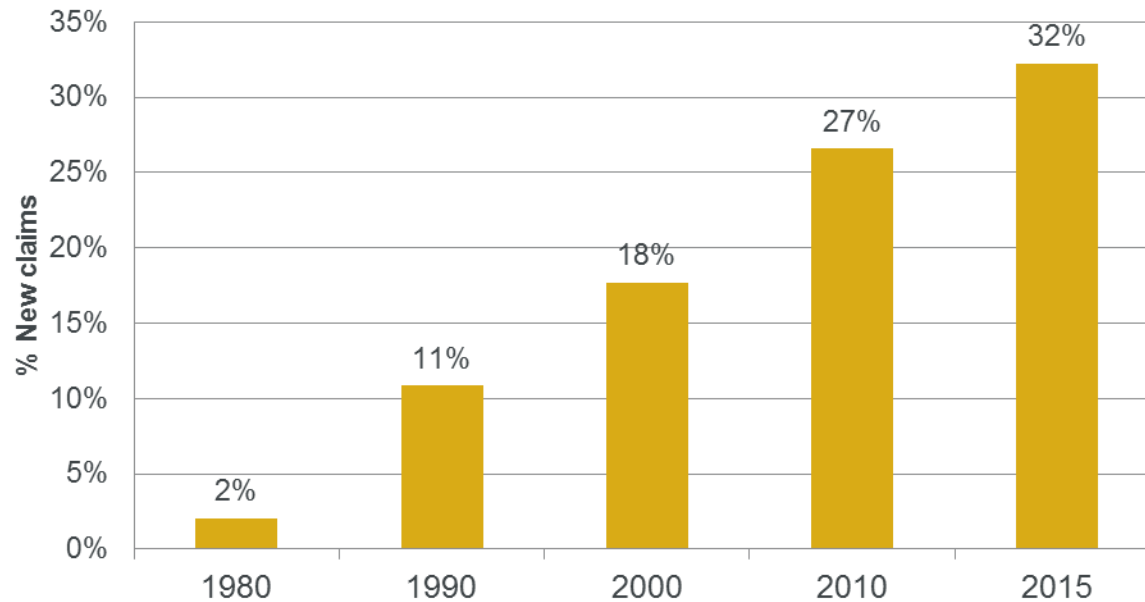
- ≈ 60,000 disability claims
- Group Risk block
 - Typically 26 week deferred period
 - Own Occupation
 - Benefit to retirement age
 - Longest paid claim for 35 years
 - Claims ICD9 coded
 - Remember the Employer and Employee dynamics



Claims in practice



Cancer as percentage of new claims in UNUM block

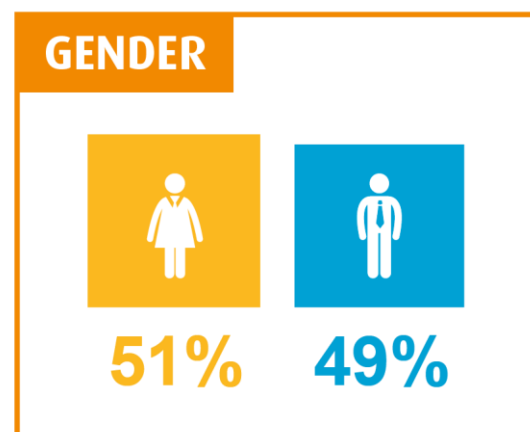
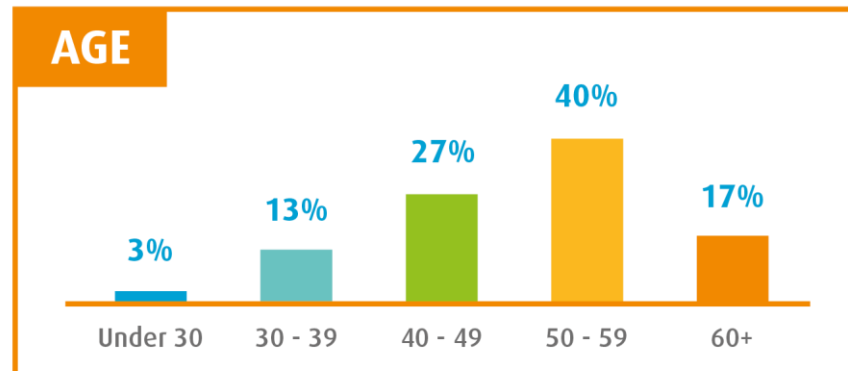
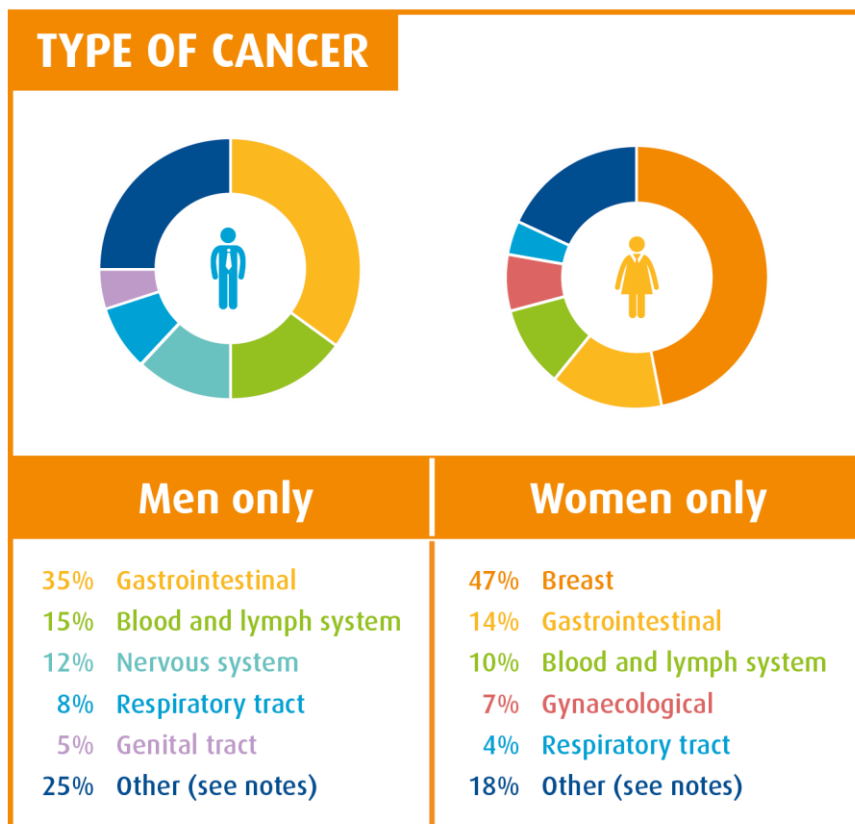


- Now easily largest cause of claim
- Main other trend is fall of Cardiovascular over the same period



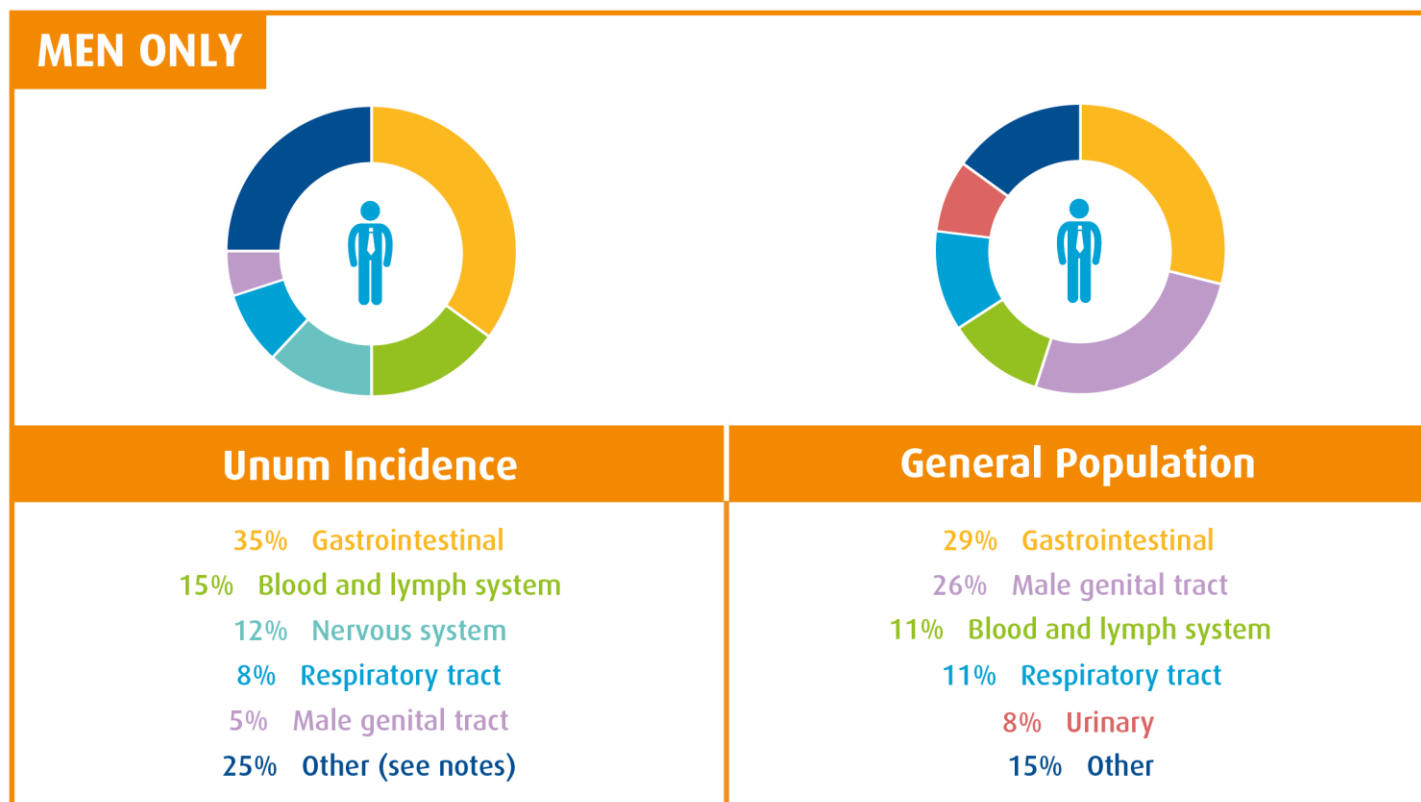
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UNUM 2016 Claims Statement – Cancer



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UNUM Incidence vs. General Population

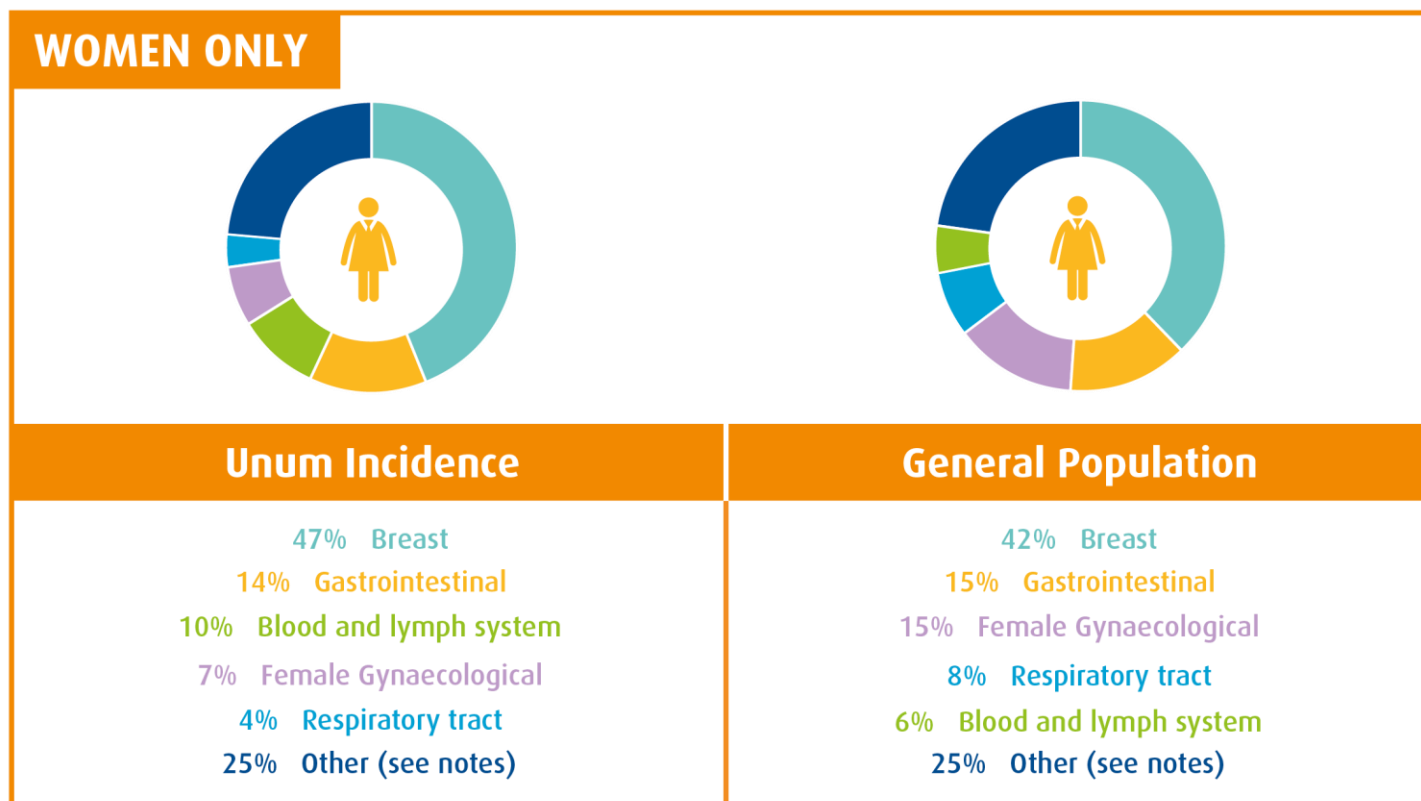


- Gastrointestinal most common for both populations
- Fewer Prostate claims, more Brain cancer claims



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UNUM Incidence vs. General Population

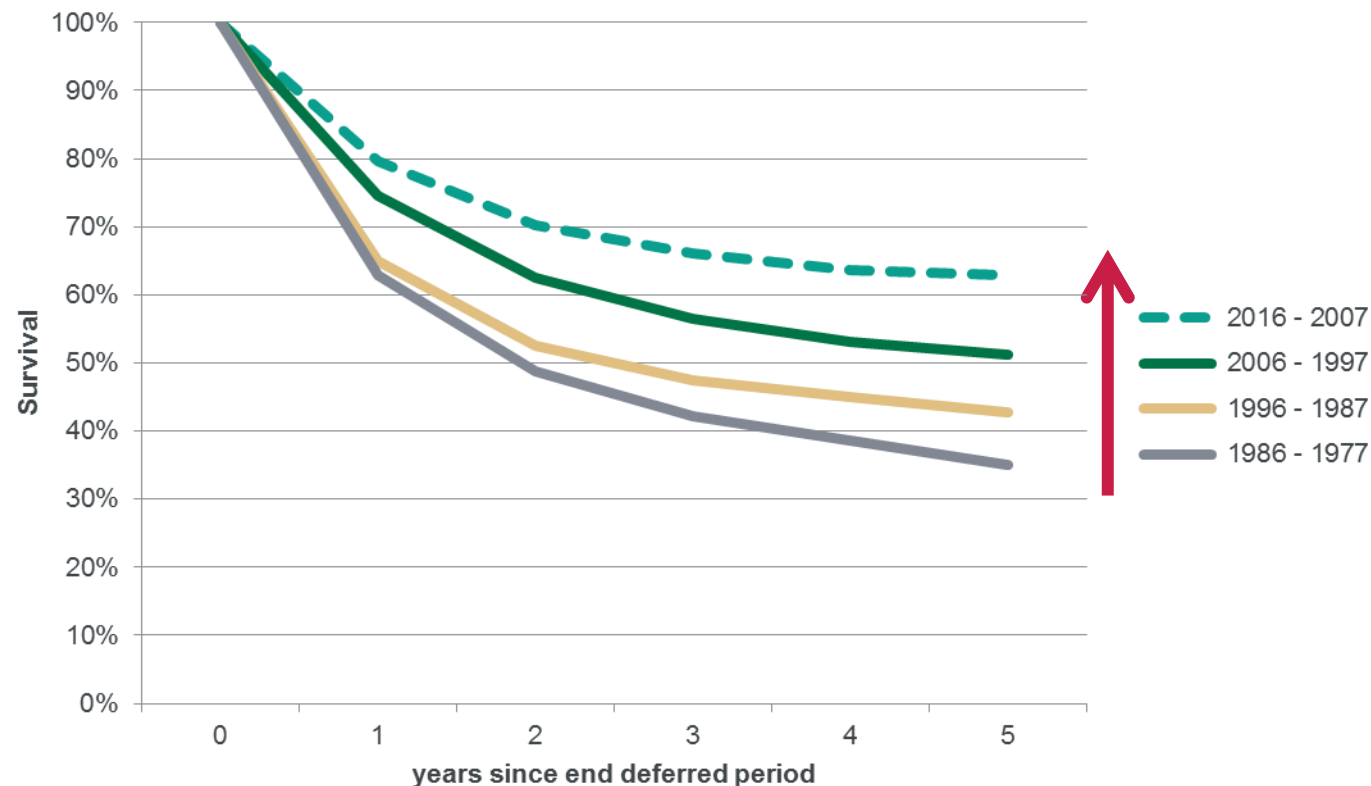


- GI and Breast most common for both populations
- Mix very similar



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Cancer survival is improving over time in UNUM block

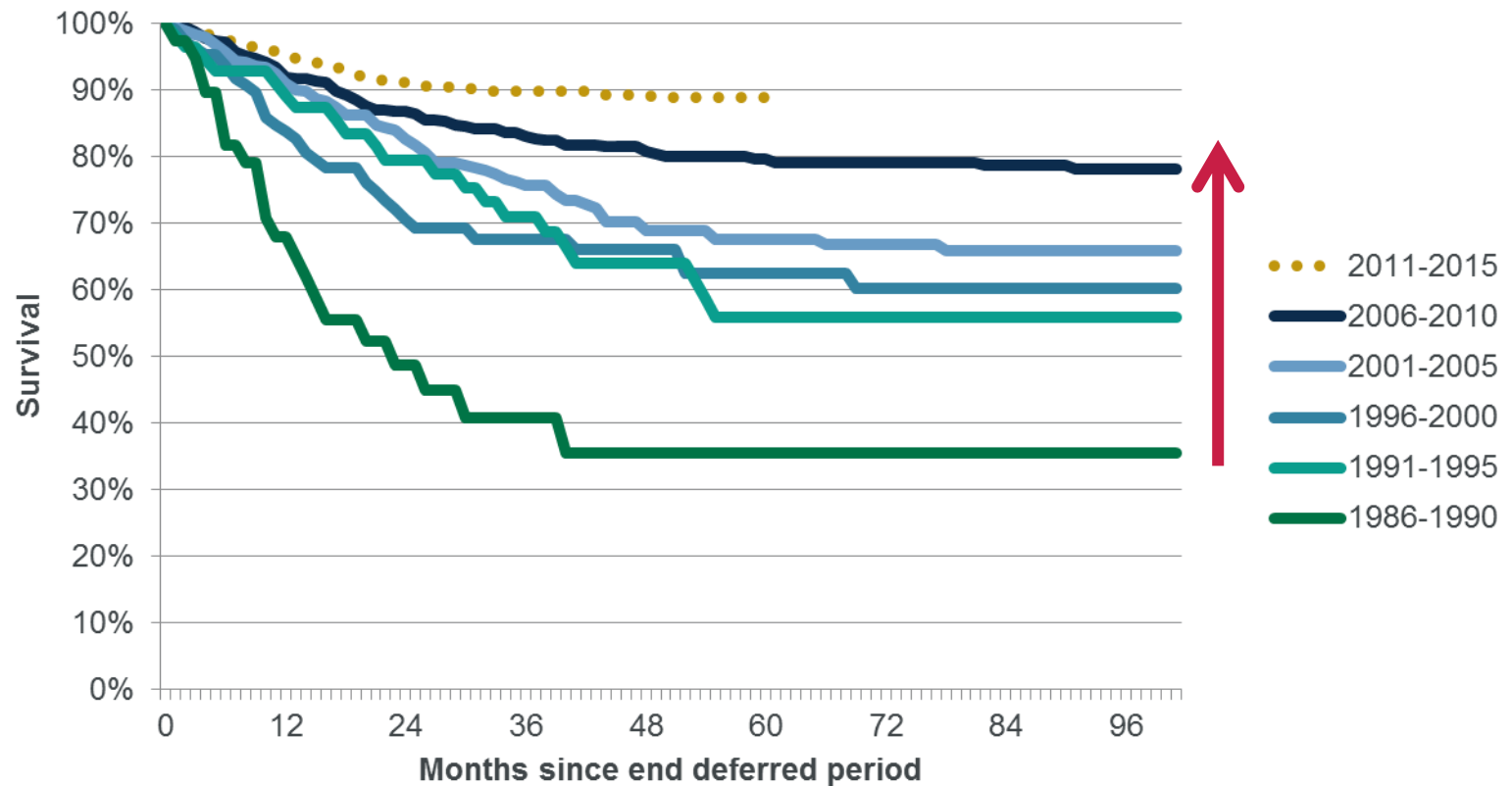


- Survival on claim



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Breast Cancer survival improving in block

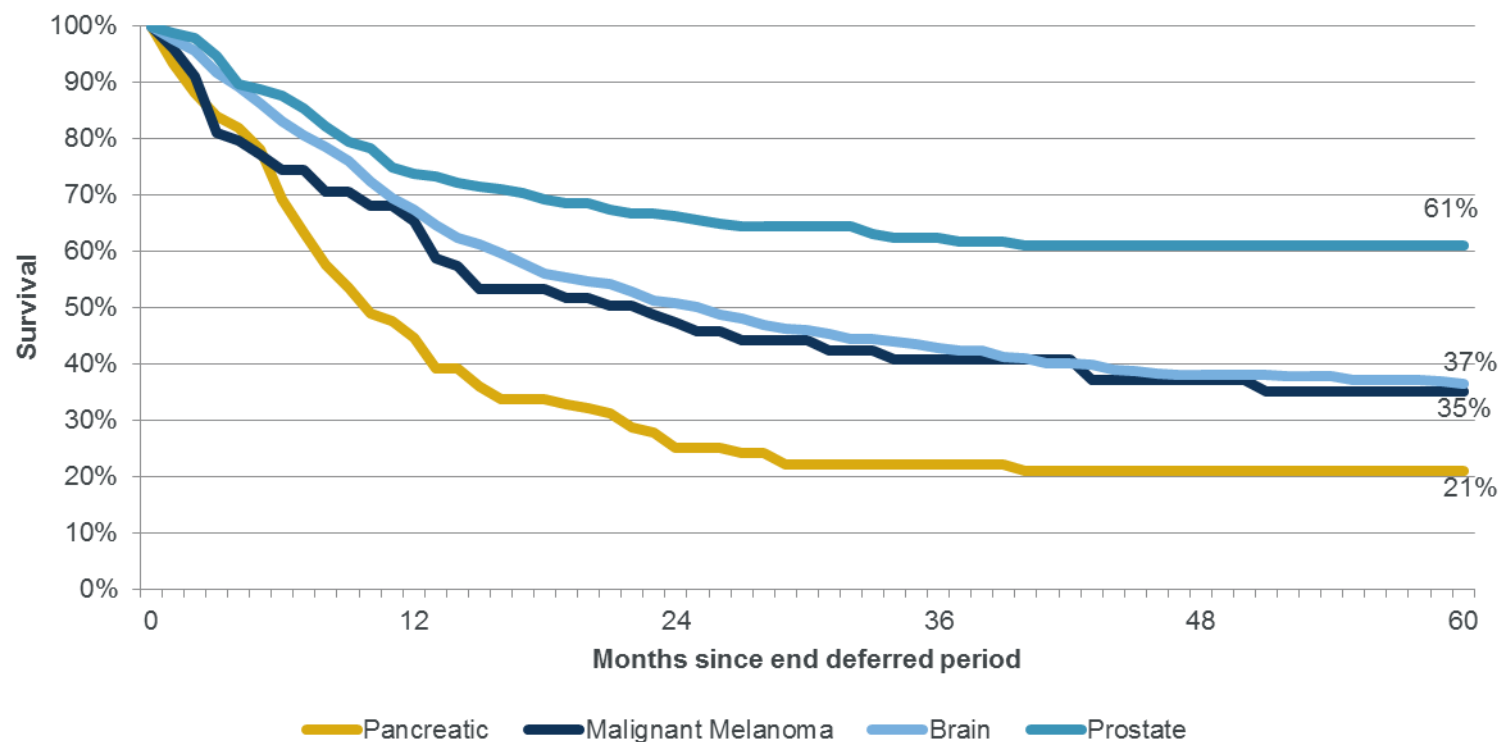


- Most common cancer type
- Increasing counts and improving survival by cohort



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Not what you might first expect by type?

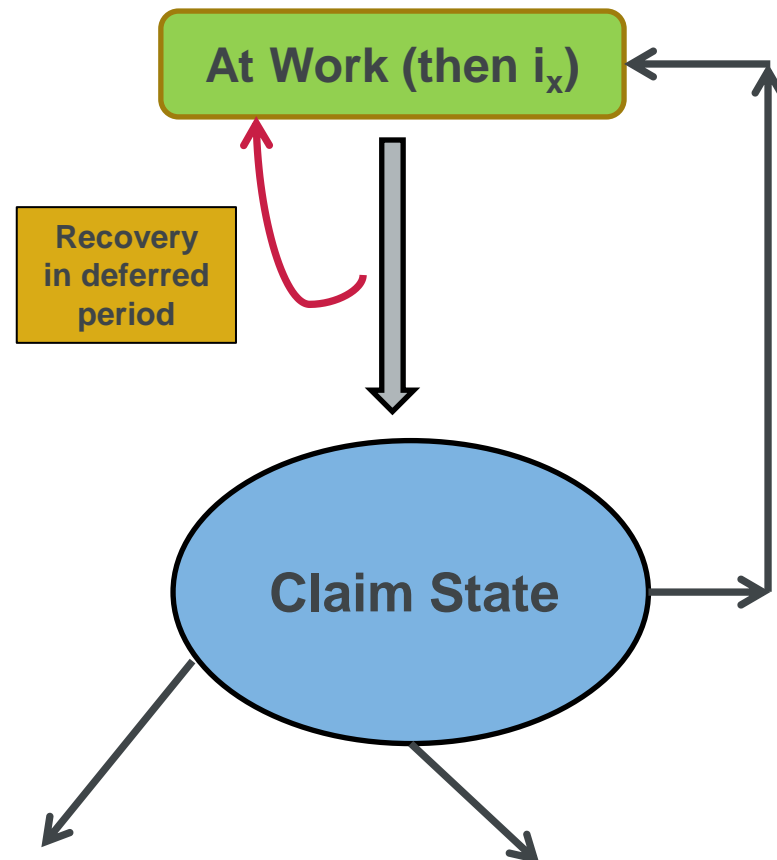
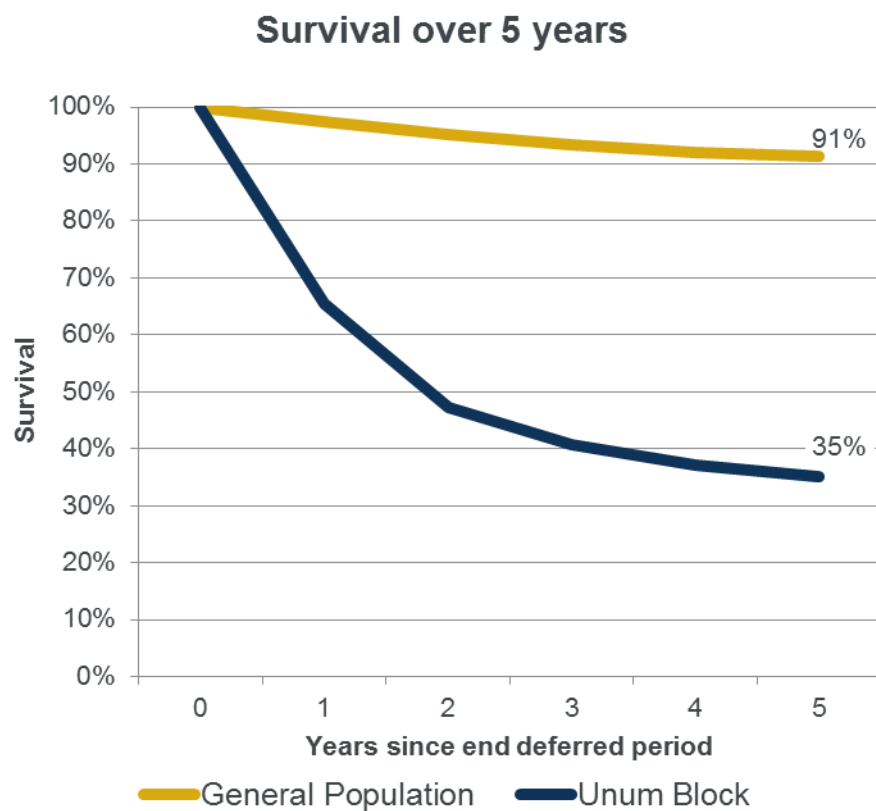


- Brain cancer far more common than Malignant Melanoma in block
- Little evidence of cohort improvements over time



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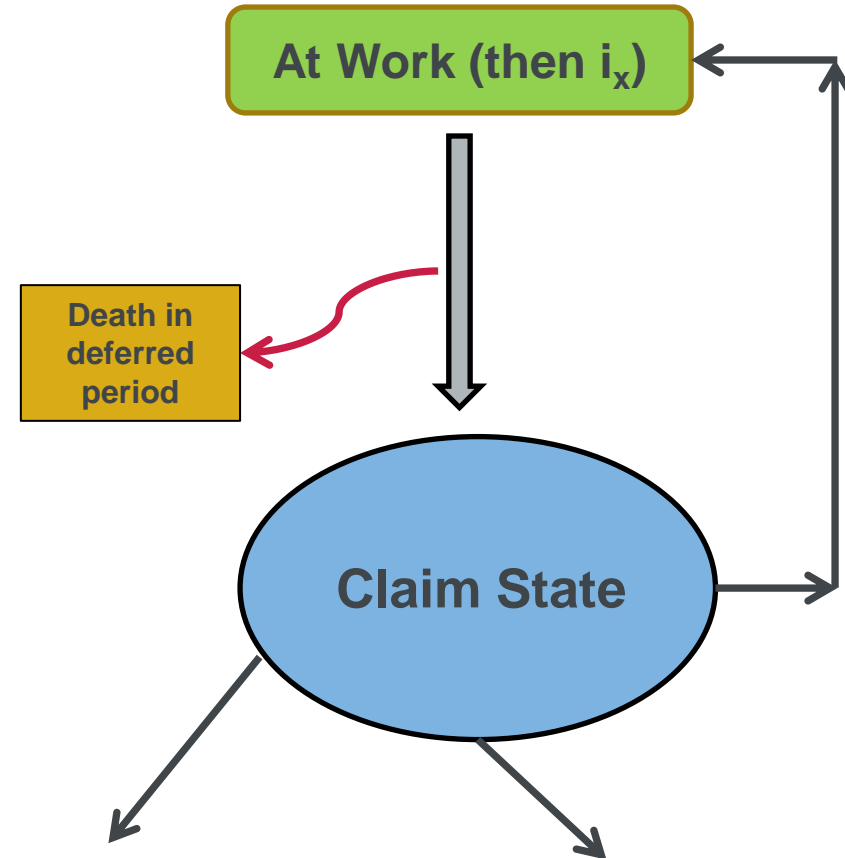
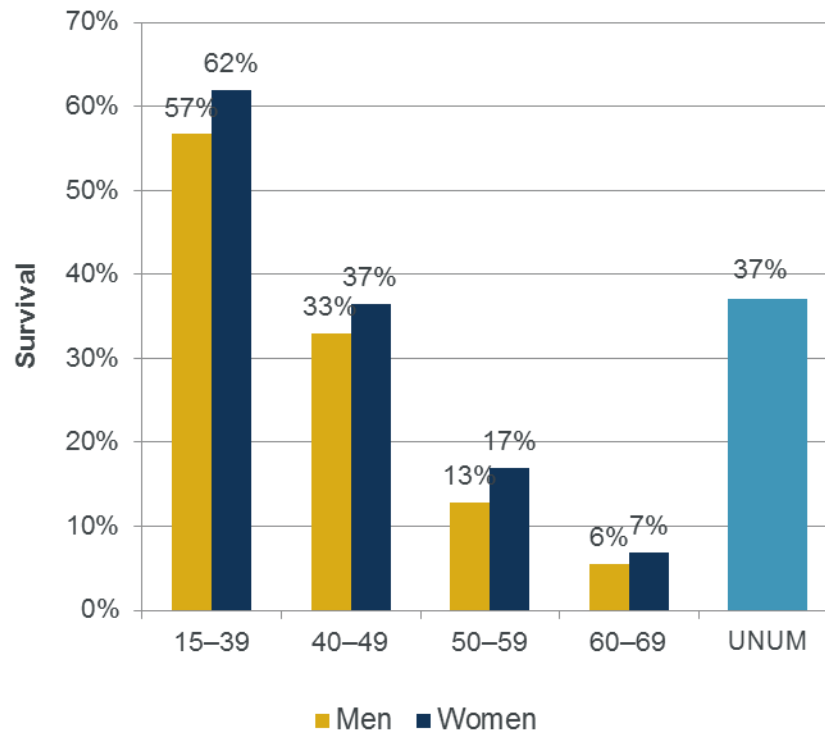
Malignant Melanoma



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Brain

5 Year Survival



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The deferred period effect

- To enter claim state, claimant must move through deferred period
 - Not all cancer sufferers stop working, or stop for full deferred period
 - Not all cancer sufferers survive full deferred period
- For some cancers, given claimant has remained unable to work for 6 months, they are more likely to have worse prognosis than general population





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Brief words on Emerging Therapies

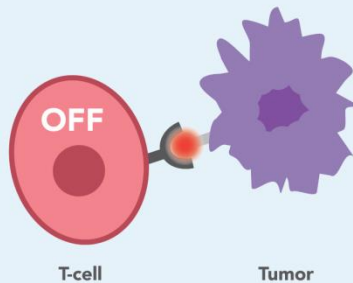
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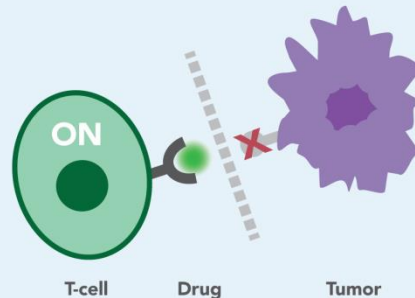
Living in interesting times for Cancer Treatment

How Does Immunotherapy Work?

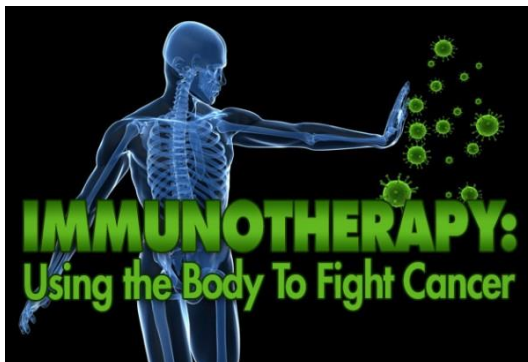
Tumor cells bind to T-cells to deactivate them



Immunotherapy drugs can block tumor cells from deactivating T-cells



 COLUMBIA UNIVERSITY
MEDICAL CENTER



New cancer drug offers hope of a lasting cure

The Times Feb 12th 2016

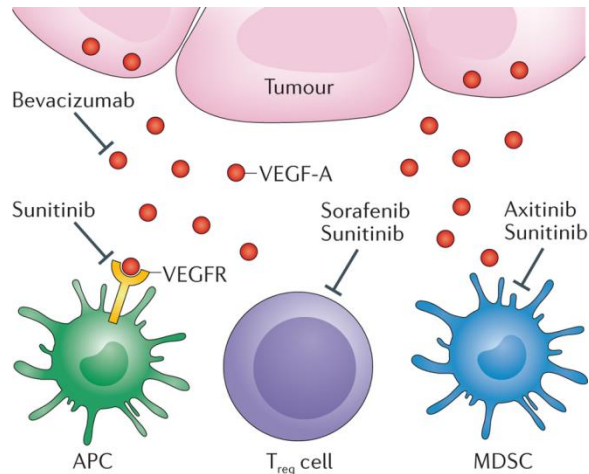
Are we near a cure for the Big C?

The Times 2016

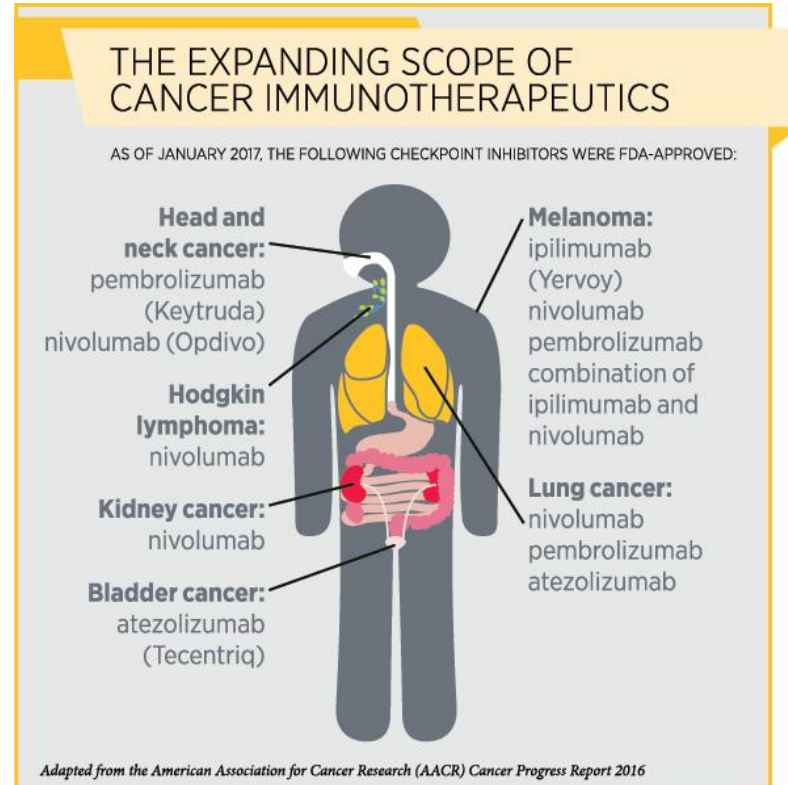


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Living in interesting times for Cancer Treatment



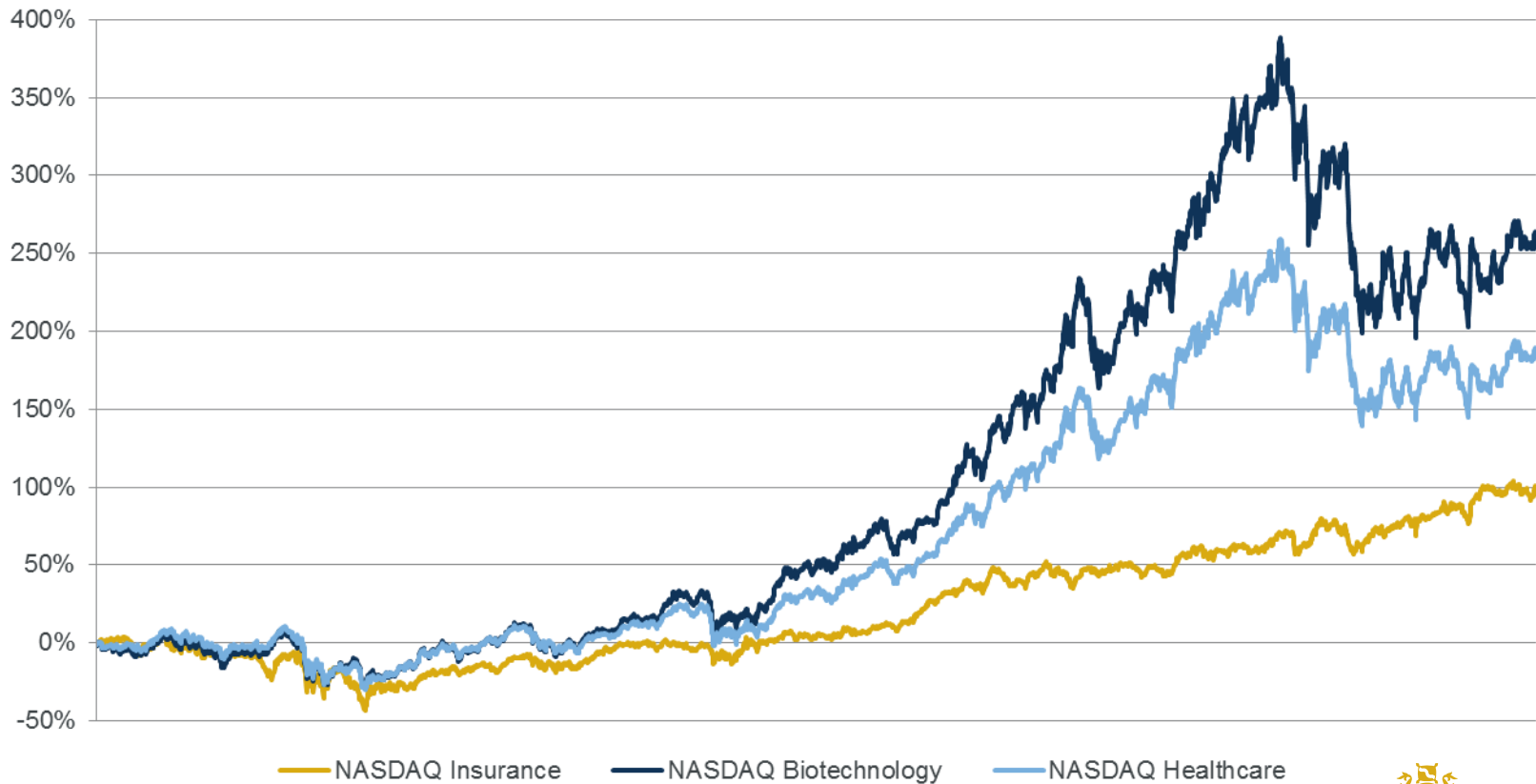
Nature Reviews | Urology



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The rise of Biotechnology

NASDAQ Sector Performance over 10 years



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Costs and Rationing

Cancer drugs fund cuts 23 treatments

BBC – September 2015

“The annual cost in the United States of a commonly prescribed drug combination for advanced skin cancer is, per patient, greater than the average cost of an American home.”

Institute of Cancer Research (ICR) - Jan 2017

Scotland gets cancer drug that is too expensive for England

The Times April 2017

Cancer Drugs Fund ‘huge waste of money’

BBC April 2017

Fifth of new medicines to be rationed

The Times - Jan 19th 2017

THE TEN MOST EXPENSIVE MEDICINES

Drugs - given to patients via the Cancer Drugs Fund	Cancer type	Average treatment time	Average cost
Imbruvica (ibrutinib)	Leukaemia/lymphoma	16 months	£82,416
Adcetris (brentuximab)	Hodgkin's lymphoma	6.2 mths	£81,000
Perjeta (pertuzumab)	Breast	17.4 mths	£71,850
Nexavar (sorafenib)	Liver	8.2 mths	£69,208
Kadcyla (trastuzumab emtansine)	Breast	7.6 mths	£64,988
Xalkori (crizotinib)	Lung	7.2 mths	£37,814
Jevtana (cabazitaxel)	Prostate	4.2 mths	£26,610
Stivarga (regorafenib)	Gastrointestinal	5.3 mths	£23,813
Erbix (cetuximab)	Bowel	5.5 mths	£23,076
Afinitor (everolimus)	Breast	5.5 mths	£18,293

Costs are based on list price for average treatment time, and do not include confidential discounts offered to the NHS. Source: NHS England

The Daily Mail

May 2016



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Case studies

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A selection of emerging therapies treatments we have seen

Rituxan
Rituximab

 **Inlyta**
axitinib tablets

 **Revlimid**
(lenalidomide) capsules

 **YERVOY**
(ipilimumab)
Injection for intravenous use 5 mg/mL

KEYTRUDA
(pembrolizumab) Injection 100 mg

 **glivec**
imatinib

 **Herceptin**
trastuzumab

 **prolia**
(denosumab) injection

 **Nexavar**
(sorafenib) tablets

 **GILOTRIF**
(afatinib) tablets



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Case Study 1



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Case Study 2



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Case Study 3

KEYTRUDA[®]
(pembrolizumab) Injection 100 mg



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A CMO view of the future and final thoughts

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Challenges for Claimants and Employers

- All three case studies examples of cancer survival that would be unheard of only 5 years ago
- Co-morbidities of cancer
 - Less severe side effects of treatment are common
 - Potential severe side effects, some rare some not so rare
 - Psychological / emotional impact of diagnosis and treatment
 - Risk of depression, can occur after primary treatment completed



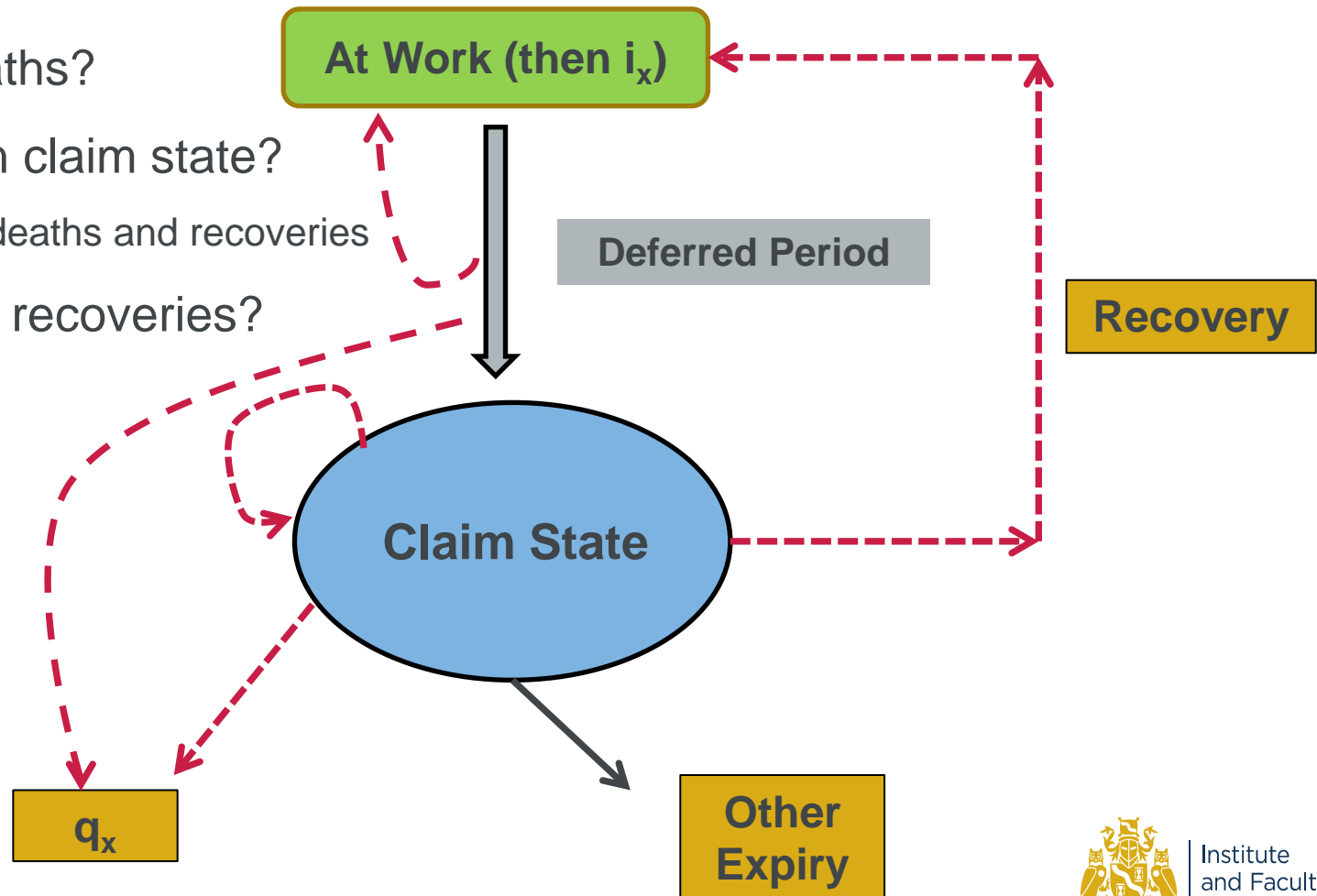
Challenges for Claimants and Employers

- Are they well enough to return to work?
 - Clear restriction or limitation
 - How do they ‘feel’
- What do those around them say?
 - This can be a major influence
 - Negative medical language or advice
- Difficult as not “cured”
 - Living with a disease on experimental drugs, prognosis very uncertain



Possible Impacts?

- Less deaths?
- Longer in claim state?
 - Less deaths and recoveries
- Or better recoveries?



Final Thoughts

- Cancer will continue to increase as cause of claim
 - this trend is linked to improving cancer survival in general
- Emerging Therapies are now becoming more prevalent in disability claims that we are seeing day to day
- Covering costs? GCI/PMI
- Too early to see a significant impact on experience,
 - but no doubt we are seeing an increasing number of advanced cancer claims with dramatic responses to treatment
- Cancer will remain a key cause of disability claim for the individual, employer and insurer



Questions

Comments

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