3rd Victorian
CANCER SURVIVORSHIP CONFERENCE

A 2020 VISION
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12-13 MARCH 2020
Crown Convention Centre, Melbourne
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VICTORIAN COMPREHENSIVE CANCER CENTRE
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Celebrating 10 years of progress
A Richard Pratt Legacy

Australian Cancer Survivorship Centre

EACH CYCLE OF CHEMOTHERAPY FOR STAGE III COLON CANCER IMPROVES ONE-YEAR MORTALITY OUTCOMES

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Victorian Agency for Health Information

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Each cycle of chemotherapy for stage III colon cancer improves one-year mortality outcomes

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Optimal Cancer Pathways Project

Collaboration between Commonwealth DoH and DHHS Victoria (Cancer Strategy and Funding Policy)

- Involved a bi-lateral working group
- Ethics approval and cross-jurisdictional linkage undertaken at AIHW
- First use of Commonwealth-State linked data?

Linked datasets (2008-2014)

- Commonwealth (MBS & PBS)
- Victorian (VAED, VDI, Cancer Registry)

Real World Evidence (RWE) – a disclaimer

- There are examples where RWE has been misleading
- RWE raises interesting hypotheses but should be balanced against other evidence (experiments)

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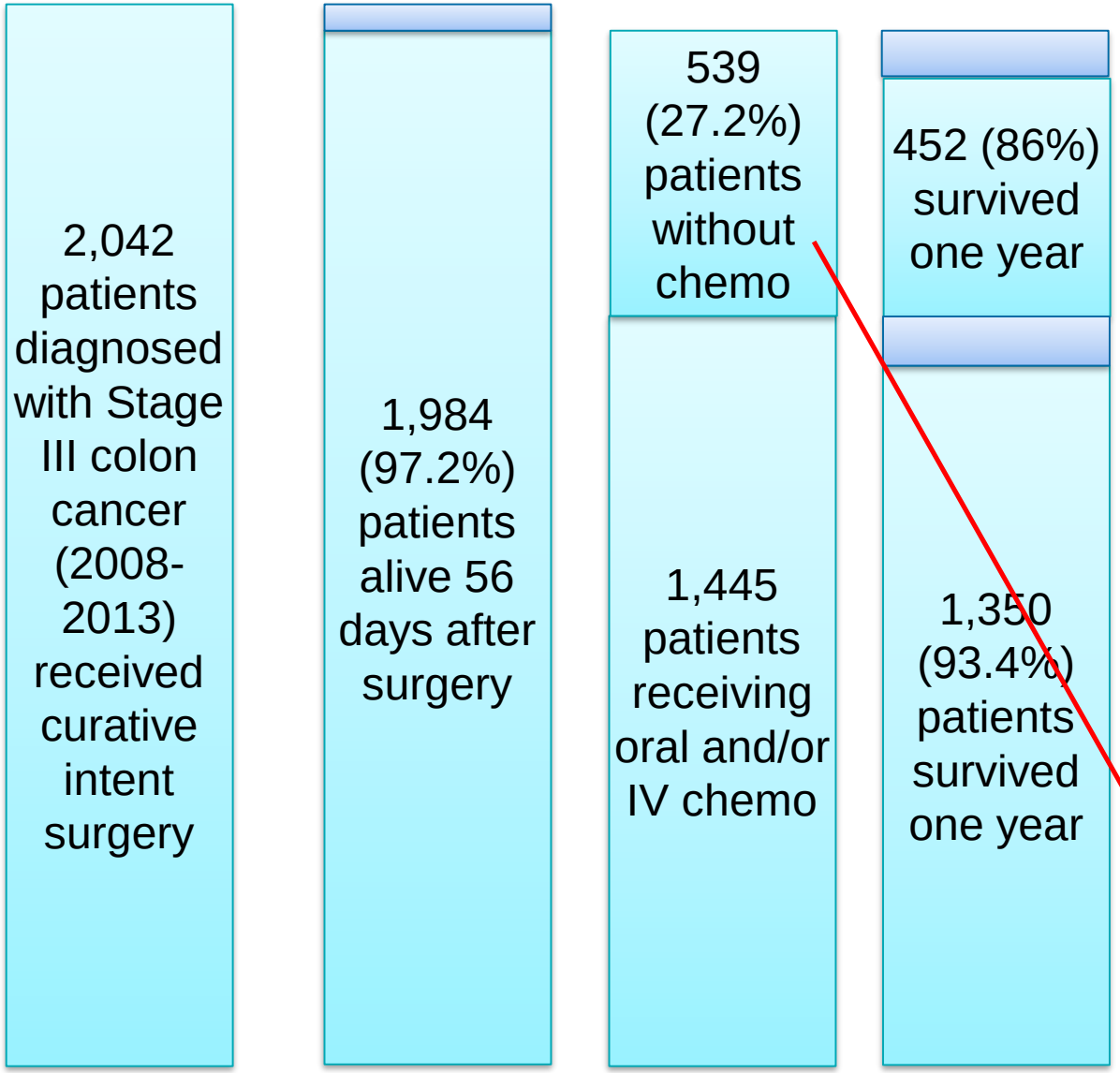

Patients and treatments

Case selection

- All patients diagnosed with stage III left or right colon cancer treated with ‘curative intent’ surgery
- Excludes patients where Stage IV cancer is detected within four months or patients that receive treatment specific to stage IV cancer

Guidelines:

- Patients age < 86 years are treated with curative intent surgery and chemotherapy (12 IV cycles or 6 oral cycles)
- Patients are expected to survive at least a year in most cases with many being cured

Finding 1: 27% of patients receiving curative intent surgery don’t receive chemotherapy

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Regression analyses: one year mortality

Analyses

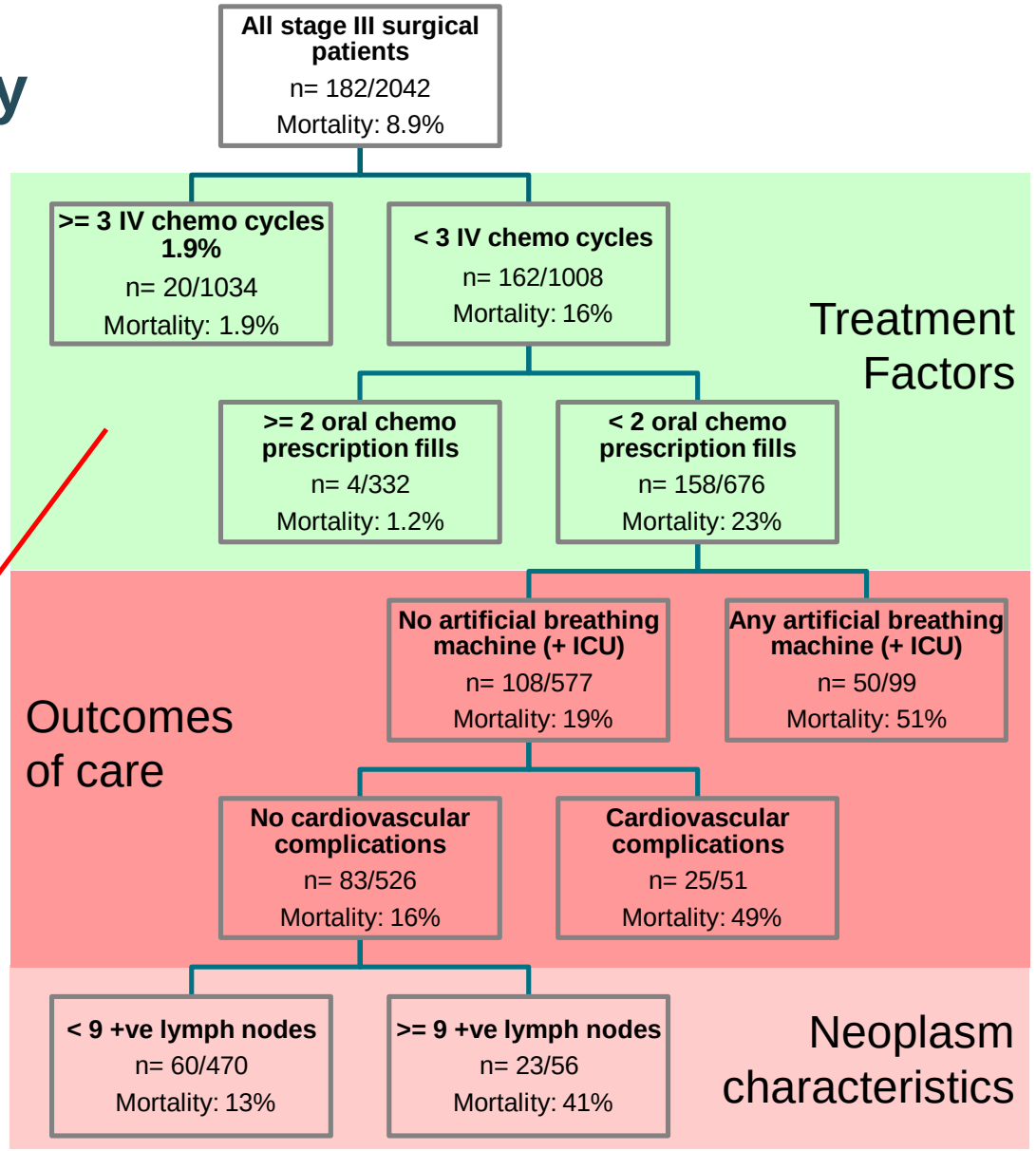
1. Logistic (regression) model
2. Classification and Regression Tree (Greedy)
3. Random forest (bottom up approach)

Variables included:

- Demographics (e.g., age, sex, SES quintile)
- Pre-diagnosis factors (e.g., colonoscopy, GP)
- Neoplasm characteristics (e.g., stage and site)
- Surgery characteristics (e.g., admission type)
- Chemotherapy regime and cycle
- All complications of inpatient care (CHADx)

All three analyses show similar results

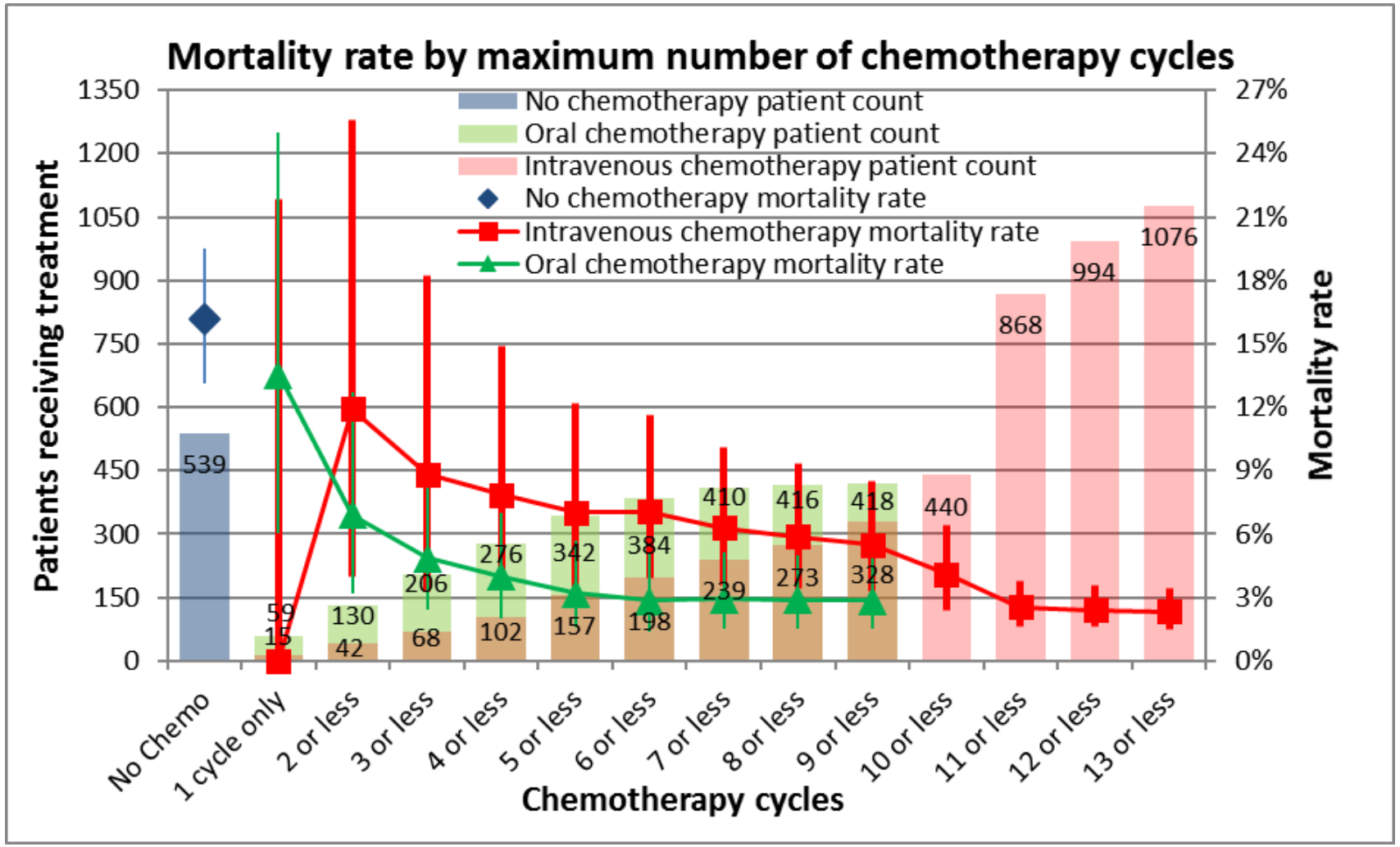
Finding 2: Two scripts for oral chemotherapy or three cycles of IV chemotherapy have the most impact on survival



Chemotherapy by cycles

The appears to be a dose-response relationship between chemotherapy cycles and one year mortality

Each cycle of chemotherapy for stage III colon cancer appears to improve one-year mortality outcomes



What does the study tell us?

Nothing about:

- What will happen in a prospective trial
- Long term survival (i.e. > one year)
- Colon cancer that is not stage III
- Which patients don't receive chemotherapy
- Why patients don't receive chemotherapy
- Why patients stopped treatment

It seems to indicate that:

- One in four patients surviving surgery 'fall between the cracks' and don't receive chemotherapy
- Small amounts of chemotherapy may be better than no chemotherapy
- There may be a dose-response relationship between one year mortality and treatment cycles.

Recommendations

- All patients surviving surgery should receive an oncology referral
- Consider changing the question from 'Should we start chemotherapy?' to 'When should we stop chemotherapy?' for patients who might otherwise not be offered treatment
- No guidelines for this approach; Further, more sophisticated analyses of complications data may provide insight

Questions?

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Questions?

Send your question via Slido

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