

Cardiovascular medication and health service use in individuals with cancer

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BACKGROUND & OBJECTIVE

- Cancer and cardiovascular disease (CVD) frequently coexist but little is known about CVD medication use in cancer survivors.
- **Objective:** To compare CVD medication and medical service use between individuals with and without cancer.

METHODS

- **Data source:** Australian National Health Survey 2020-21 linked with medication dispensing, medical services and death registry data
- **Study design:** Retrospective cohort study
- **Population:** Adults aged ≥ 25 years (cancer versus non-cancer groups)
- **Outcomes:** 1-year CVD medication & medical service use from date of survey completion
- **Statistical analysis:** (i) Logistic regression comparing patterns of CVD medication use; (ii) negative binomial regression comparing patterns of medical service utilisation

RESULTS

Cohort Characteristics, n (%)	Cancer, n= 1,828	Non-cancer, n= 7,505
Sex		
Female	1,009 (55)	4,057 (54)
Age group		
25-34 (in years)	19 (1)	1,340 (18)
35-49	200 (11)	2,516 (33)
50-64	567 (31)	2,097 (28)
≥ 65	1,042 (57)	1,552 (21)
Presence of CVD		
Yes	564 (31)	971 (13)
Number of other health conditions		
0	276 (15)	2,079 (28)
1-2	955 (52)	3,927 (52)
≥ 3	597 (33)	1,502 (20)

- **Cancer survivors were more likely to be:**



& were more likely to have:



- **No difference** in adjusted use of CVD medications between cancer vs. non-cancer
- **Increased rate of health service use** in those with CVD and cancer.

Types of CVD medications

Any CVD medications

ATC C01 (cardiac therapy)

ATC C02 (anti-adrenergic)

ATC C03 (diuretics)

ATC C07 (beta-blocking agents)

ATC C08 (calcium channel blockers)

ATC C09 (agents acting on the renin-angiotensin system)

ATC C10 (lipid modifying agents)

ATC B01 (antithrombotic agents)

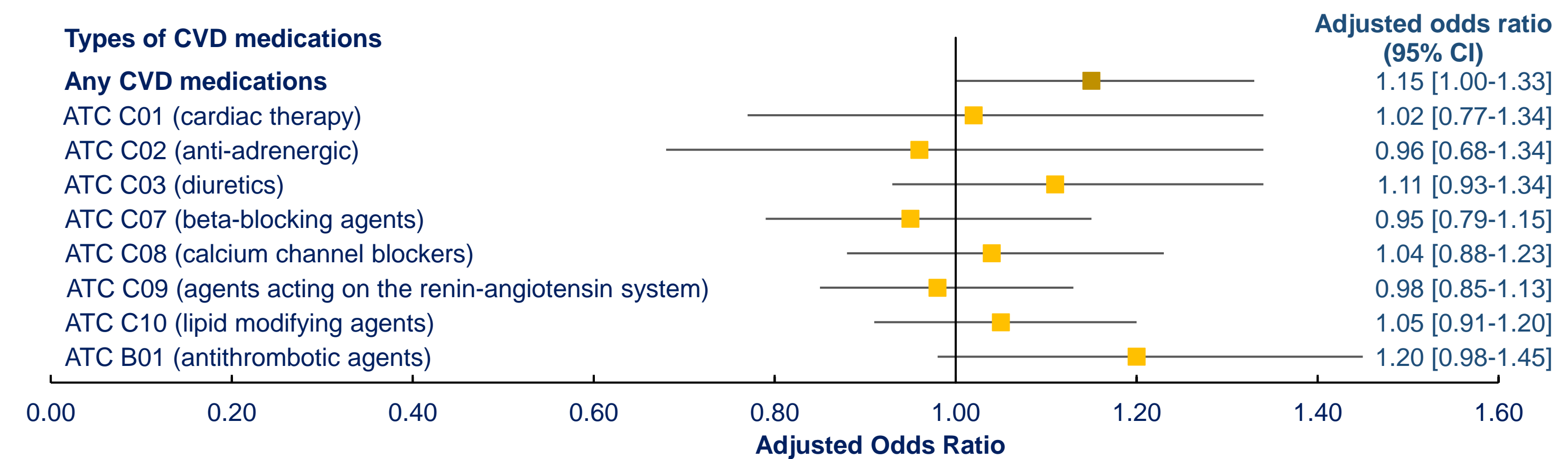


Figure 1: The odds of dispensing of CVD medications between people with and without cancer (reference category)

Types of services

Any medical services

Non-cancer & no CVD

Cancer & CVD

Non-cancer & CVD

Cancer & no CVD

Specialist attendance

Non-cancer & no CVD

Cancer & CVD

Non-cancer & CVD

Cancer & no CVD

Practice nurse

Non-cancer & no CVD

Cancer & CVD

Non-cancer & CVD

Cancer & no CVD

Pathology tests

Non-cancer & no CVD

Cancer & CVD

Non-cancer & CVD

Cancer & no CVD

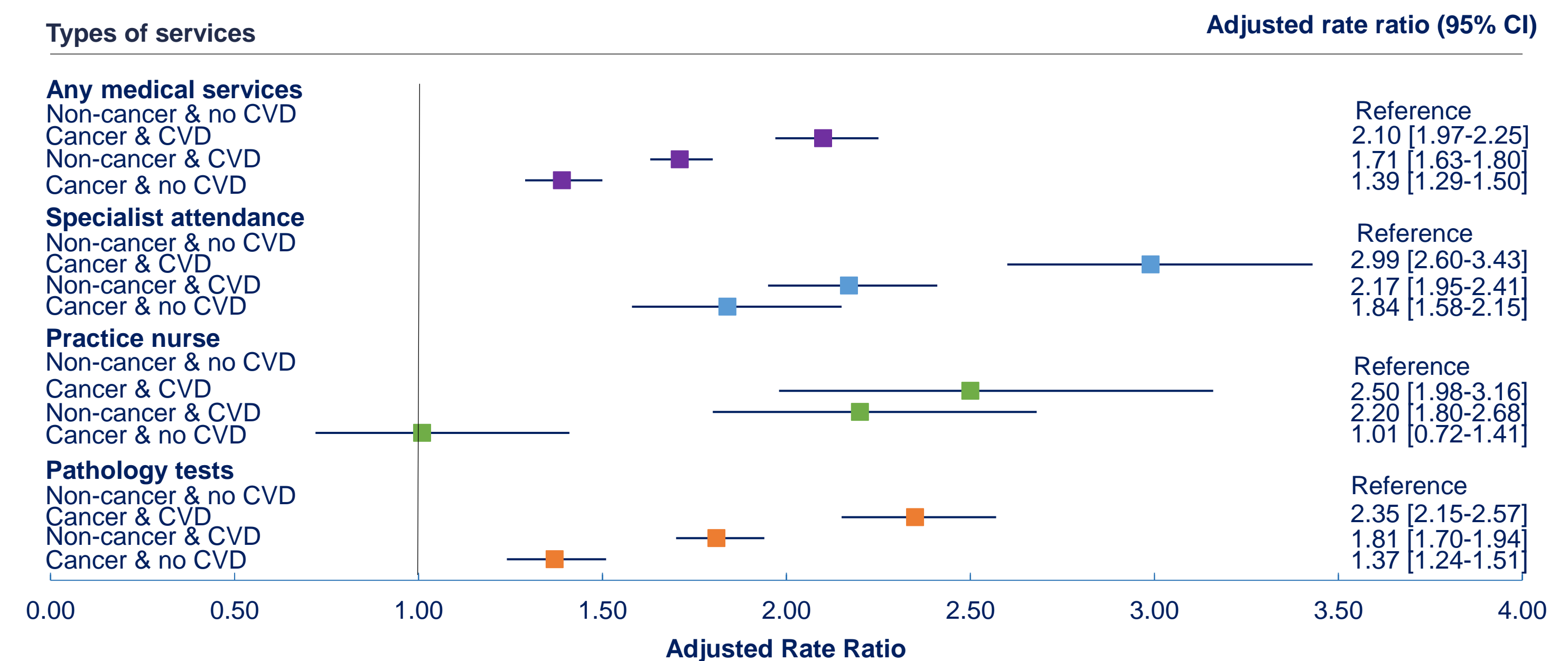


Figure 2: Medical service use by cancer and CVD status

CONCLUSIONS

- Despite having a higher prevalence of CVD, and higher health service utilisation, **the overall use of CVD medication did not differ** between people with and without cancer.
- **Cancer survivors with CVD** had a higher rate of medical services use compared with people with either condition alone or neither condition.
- **Further research** should explore the underlying reasons behind these data to inform strategies to mitigate the detrimental effects of comorbid CVD in cancer.

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