

Provincial Elections and Timing of Cancer Drug Funding

Amirrtha Srikanthan¹, Sudeep S. Gill², and Kelvin K.W. Chan³

¹Division of Medical Oncology, BC Cancer Agency, Vancouver Centre, 600 West 10th Avenue, Vancouver, British Columbia, V5Z 4E6, Canada

²Department of Medicine, Queen's University, 94 Stuart Hall, Kingston, Ontario, K7L 3N6, Canada

³Division of Medical Oncology, Sunnybrook Odette Cancer Centre, 2075 Bayview Avenue, Toronto, Ontario, M4N 3M5, Canada

Background

- Concerns have been raised regarding the potential influence of political pressures on drug funding decisions.^{1,2,3}
- Capturing political pressure on drug funding decisions is challenging.
- Elections have been suggested as one quantifiable method.⁴
- We evaluate the temporal relationship between cancer drug funding and provincial elections in nine Canadian provinces.
- HYPOTHESIS: An association between election dates and cancer drug funding announcements exists in Canada.**

Methods

- Retrospective cohort study.
- Identified new indications for cancer drugs between January 2003 and December 2012 inclusive.
- Dates of provincial official funding dates and provincial election dates between January 1, 2003 and December 31, 2014 were retrieved.
- The probability of drug funding announcements in the 60-day period preceding provincial elections was evaluated using **binomial probability distribution analysis**.
- Statistical significance was one-sided and defined as $p < 0.05$.

Results

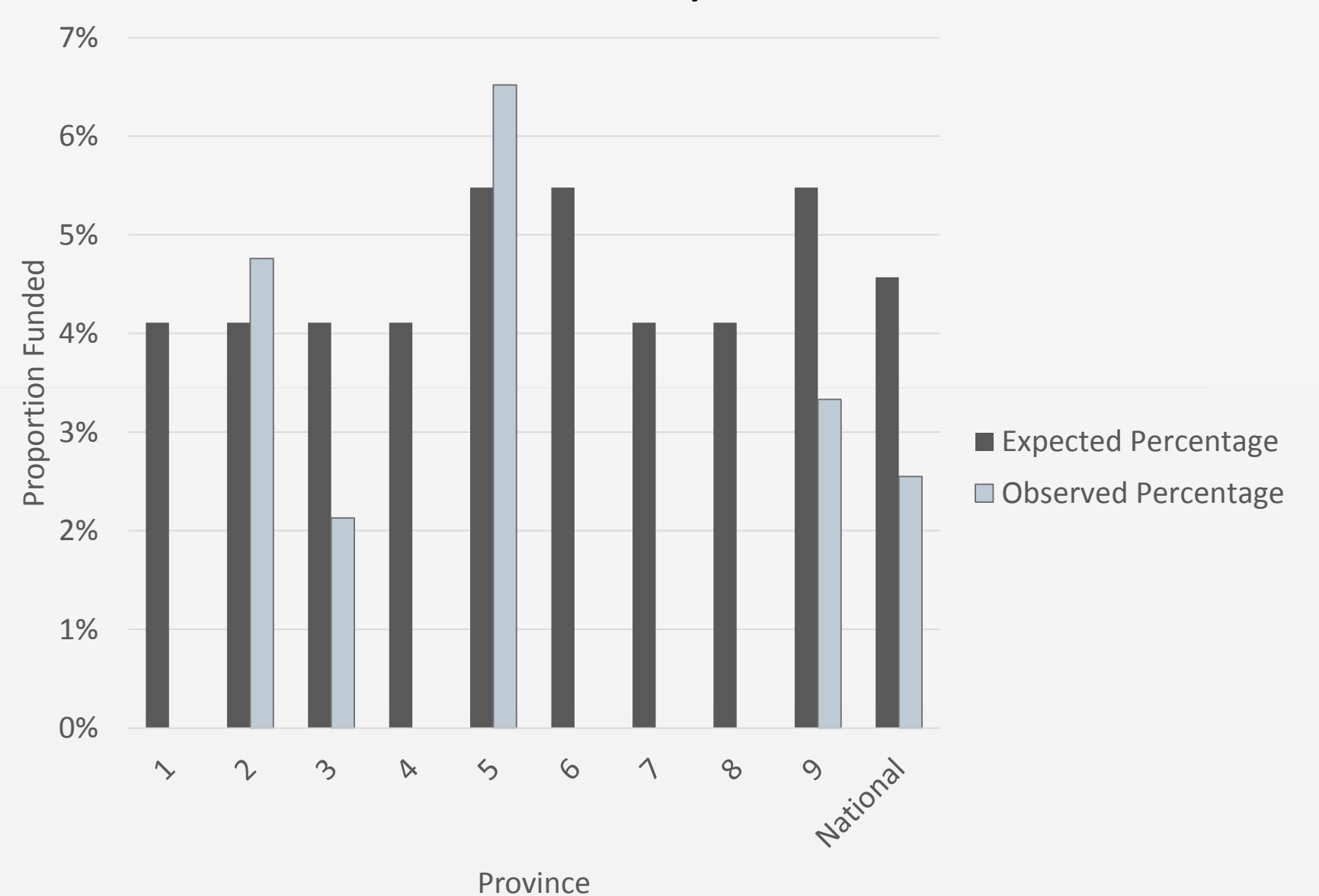
- Data were available from nine provinces (all Canadian provinces except Quebec).
- Sixty-nine indications comprising 39 individual drugs were identified.
- Variation in the availability of funding dates was identified.
- Two provinces did not have data available for all 69 indications at the time of data collection.
- Across the nine provinces, the number of funded indications during the 60-day period preceding elections ranged from 0 to 3.
- No statistically significant difference in the proportion of indications funded pre-election was identified.**
- Additional analyses also failed to demonstrate any significant associations for the 90-day interval prior to elections, or the 60- and 90-day intervals following elections.

Baseline characteristics of indications

Characteristic	Number (%)
Total Number of Indications Reviewed	69 (100)
Total Number of Chemical Entities Reviewed	39 (NA)
Route of Administration	
Oral	33 (48)
Intravenous	27 (39)
Subcutaneous	7 (10)
Intramuscular	1 (1)
Topical	1 (1)
Submission Period	
Pre-iJODR	10 (14)
iJODR	43 (62)
pCODR	16 (23)
Tumour Group	
Hematology	22 (32)
Lung	10 (14)
Gastrointestinal	10 (14)
Renal	8 (12)
Breast	5 (7)
Prostate	4 (6)
Dermatology	3 (4)
Sarcoma	3 (4)
Other*	4 (6)

iJODR, interim Joint Oncology Drug Review; NA, not applicable; pCODR, pan-Canadian Oncology Drug Review, * 1 each: Head and Neck, Ovarian, Thyroid, Central Nervous System

Indications Funded 60-days Prior to Elections



Discussion

- Reassuring finding; however, ongoing concerns persist.
- Difficult to quantify all political factors, such as lobbying from stakeholders, including patient advocacy groups and pharmaceutical companies.

LIMITATIONS

- Unable to capture the impact of lobbying effects.
- Lack of transparency in negotiations between provincial governments and manufacturers.
- Date of funding by provincial formularies may be different from funding decision dates.

Conclusion

There was no clear temporal relationship between provincial election dates and funding decisions in this recent sample of Canadian cancer drugs.

References

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