

## INTRODUCTION

Cancer care in Canada is administered and delivered by the provinces and territories (1), a model which may impede harmonization of healthcare, and equity of access across the country.

Through the Get Personal Program, Colorectal Cancer Canada (CCC) developed a two-phase project. The first phase of the project included a pan-tumour, pan-Canadian survey that was sent to multi-disciplinary healthcare professionals aimed to conduct a high-level environmental scan of current biomarker testing (BT) practices at cancer care institutions across Canada. Results of this survey revealed that the lack of standardized guidelines and coordination between centres may inhibit the administration of precision oncology care in Canada.

CCC developed a second-phase survey to assess needs and gaps in Canadian personalized medicine by gathering patients' and caregivers' experiences with BT in cancer treatment centres across Canada. This survey represents the first Canadian specific data.

## OBJECTIVES

Short-term objectives:

- Identify patients' knowledge and awareness of biomarker testing.
- Describe patients' experiences with biomarker testing.
- Describe difficulties and restrictions patients face throughout the process of biomarker testing.
- Describe patients' value of biomarker testing.

Long-term objectives:

- To improve access to biomarker testing for Canadian patients.
- To improve the quality of biomarker testing in order to improve outcomes for cancer patients.

## METHODS

The survey was disseminated in February 2021 using the cloud-based survey tool Survey Monkey. It was disseminated to Canadian cancer patients and caregivers through social media and through intermediary of various patient groups of different cancer sites.

Respondents were asked to answer questions related to their knowledge & awareness of, experience with, difficulties with, and their value of BT.

Data was collected in excel format and analyzed using descriptive statistics in May 2021.

## RESULTS

### Demographics



The survey sample consisted of 128 respondents from across Canada with representation from all provinces and one territory.

Represented cancer sites:

46.9% colorectal, 28.9% blood, 9.4% breast, 3.9% other, 2.3% lung, 1.6% melanoma, 1.6% endometrial, 0.8% thyroid, 0.8% ovary, 0.8% oral, 0.8% CNS, 0.8% cervix.

### Survey Results

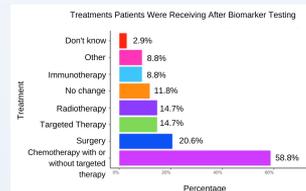
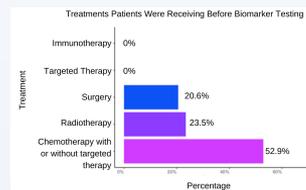
- Familiarity with Biomarker Testing:
  - 46.8% said they are unfamiliar with the term "biomarker".
  - 50.8% said they are unfamiliar with the term "personalized medicine".
  - 69.1% said they were unaware that biomarkers could help determine the best treatment for them.

## RESULTS (cont'd)

- Respondents' Experiences with Biomarker Testing
  - 60.4% of all survey respondents said their oncologist did not offer them BT prior to determining their treatment.
  - Only 16.0% of respondents said their oncologist or other member of medical team explained BT before treatment started.
  - 26.6% (34/128) of all survey respondents received BT:

Tumour Site	% Tested	% Not Tested
Colorectal (n = 60)	26.7% (16/60)	73.3% (44/60)
Blood (n = 37)	18.9% (7/37)	83.7% (31/37)
Breast (n = 12)	41.7% (5/12)	58.3% (7/12)
Lung (n = 3)	100.0 % (3/3)	0.0% (0/3)

- Before receiving BT, none received targeted therapy or immunotherapy. But after receiving BT, 23.5% patients accessed targeted therapy or immunotherapy.



## RESULTS (cont'd)

- 55.9% of respondents who received BT felt that it helped them find the right personalized treatment.
- 76.5% of respondents who received BT expected that access to testing and personalized treatment would increase their overall survival. 55.9% expected that it would improve their quality of life.
  - "...my current treatment has kept me stable for almost two years. That would not have happened with out testing."
  - Participant with Stage III, Lung Cancer
- The most common difficulties with access to BT experienced by survey respondents include lack of awareness (20.6%), lack of availability (14.7%), and lack of access to a clinical trial for their biomarker (11.8%).

## CONCLUSIONS

The survey results suggest that there is lack of education on BT, as well as inequitable access to BT which varies by tumour site and by province and institution. This implicates the need for increased awareness, education and advocacy as personalized treatments have the potential to increase patients' overall survival and improve their quality of life.

- This research is intended to generate knowledge of current profiling practices, inform decision making and provide opportunities for standardization of care and access to molecular profiling in Canada.

This research was funded by sponsorships granted to CCC's Get Personal program.

## REFERENCES

- Government of Canada (2011). Canada's Health Care System. <https://www.canada.ca/en/health-canada/services/health-care-system/reports-publications/health-care-system/canada.html>

## CONTACT

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