45P - Environmental Scan of Molecular Profiling in Canada

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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. Personalized medicines in particular depend on access to both the drug and molecular testing for the appropriate biomarker.

The use of national guidelines for oncology clinical practice encourages standardization of biomarker testing in the US (1); in the absence of national guidelines in Canada, healthcare professionals rely on periodic publication of recommended testing standards by oncologists in their area of specialty (1, 2, 3, 4). Furthermore, the process for reimbursement of molecular profiling is a patchwork in Canada (1), with limited data on current practices, rates of reimbursement, equity of access, and patient outcomes.

OBJECTIVES

Through the Get Personal (GP) program, Colorectal Cancer Canada (CCC) developed a pan-tumour, pan-Canadian survey that was sent to multi-disciplinary healthcare professionals aimed to conduct a high-level environmental scan of current molecular profiling practices at cancer care institutions across Canada.

Due to the survey-based data collection and relatively small sample size, this project was not intended to be a systematic analysis of cancer care administration, but rather a high-level environmental scan of molecular profiling practices.

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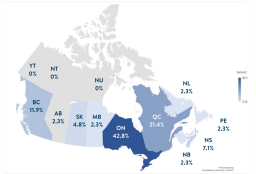
METHODS

The survey was disseminated in August 2020 using the free web-based software Google Forms. Around 150 multi-disciplinary healthcare professionals received invitations via email. Questions were developed by CCC in collaboration with a scientific advisory committee. Questions were written to include all cancer types and were optional to answer. Data was collected in excel format and analyzed using descriptive statistics in November 2020. Data was reported in aggregate only and pooled by province.

RESULTS

Demographics



The survey sample consisted of 42 healthcare professionals within 26 different institutions, with at least one representative from each province.

Represented cancer sites:
66.7 colorectal, 42.5% pancreas, 40.5% esophagus, 38.1% hepatobiliary, 35.7% lung, 26.2% breast, 7.14% hematologic, 11.9% ovarian, 9.5% prostate, 9.5% brain/CNS

Survey Results

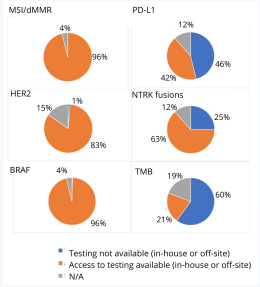
- The earliest stage at which cancer patients are offered molecular testing to explore therapeutic options varied

28.5% of respondents reported Stage I and 28.5% reported Stage III as the earliest stage. Reported staging varied across institutions in different provinces as well. Most respondents specifically mentioned that ordered testing varied by the cancer type.

RESULTS (cont'd)

- Variation in Access to Testing for Different Biomarkers for Colorectal Cancer (CRC)

CRC patients are shown to have access to most predictive CRC biomarkers. However, turnaround times (TAT) for predictive biomarkers varied depending on the type of biomarker, testing modality, and the availability of testing in-house, with an average TAT of 3.26 weeks for NGS.

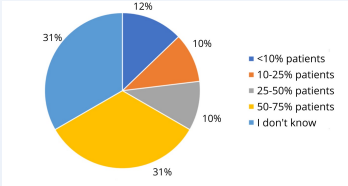


- Molecular Profiling is Used to Make Patient Care Decisions in Different Settings

69% of respondents reported that molecular profiling is used to make patient care decisions for patients with metastatic disease. 59.5% of respondents reported that molecular profiling be done only if there is a Health Canada approved therapy associated with the biomarker.

- Low Percentage of Patients Who Received their Profiling Results in Time to Decide First-line Therapy

31% of respondents in ON (2), QC (1), BC (1) and NS (1) report that only 10% of their patients will have their results in time in time to decide first-line therapy.



- 86% of respondents reported that medical oncologists order molecular profiling for their patients; however, 80% of respondents suggested pathologists should have the ability to order molecular profiling for patients as well.

- Common Challenges and Barriers Faced with Molecular Profiling as Reported by Respondents

78%: inadequacy and insufficiency of samples
66%: inadequate reimbursement for the test
53.7%: unavailability of a certain test
48.8%: long TATs

Top four cited barriers to administering precision oncology care include: funding of testing, lack of availability of readily available molecular testing, lack of funding given to laboratories, lack of reflex testing.

CONCLUSIONS

Molecular profiling is not currently uniformly a standard of care in Canada, and the lack of standardized guidelines and coordination between centres may prevent the administration of precision oncology care in Canada.

→ 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.

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