

GIST Mutational testing in Canada, 2021

Available?

Cost?

Misconceptions?

Advocacy activities?



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Health care in Canada is funded *nationally*, administered *provincially*, and delivered *locally* in hospitals and clinics. So, procedures are different in each province/territory and even between hospitals.



Example: British Columbia



- Centralized cancer care administration
- Pro-active oncologists
(*e.g.*, Dr. Xiaolan Feng) and pathologists
- *Most* GISTs are sent for mutational testing
- No cost to patient

4th Toronto International Sarcoma Symposium, April 9, 2021

Tiffany Patterson ... Xiaolan Feng, “Utilization of mutational analysis in GIST management in British Columbia between 2008-2018: a retrospective population-based study”

Proportion of metastatic patients receiving mutational analysis:

2008-2011	n = 66	54.5%
2012-2015	n = 48	54.2%
2016-2018	n = 43	79.1%

Even in British Columbia, with a relatively centralized cancer care system and with GIST expert oncologists promoting mutational analysis, it is still not obtained in some metastatic cases.

Example: Manitoba; one oncologist (Winnipeg) treats most GIST patients



- **All metastatic GIST patients started on imatinib**
- **Response monitored by PET (!) at 4 weeks**
- **Mutational testing only if response is poor**
- **No cost to patient**

Example: Toronto, Ontario – biggest city, world-class research hospitals

- Excellent sarcoma oncologists**
- All (or almost all) GISTs are sent for mutational testing**
- No cost to patient**



Ontario – community hospitals



**Kenora-Toronto: 1900 km by road
(about the same as Amsterdam to Naples)**

- Little or no access to sarcoma specialists
- Doctor would have to send samples (to Toronto?) for mutational testing;
requires funding approval from local hospital administration
 - Some doctors are reluctant to order mutational testing, even when the patient requests it.

Misconceptions and barriers

Patients

- lack of knowledge concerning GIST**
- confusion between immunohistochemistry (IHC) testing for KIT protein expression (universal) vs mutational (DNA) analysis**

Doctors

- lack of knowledge concerning GIST**
- lack of knowledge of treatment options (*e.g.* avapritinib)**
- inertia**

System

- provincial and institutional barriers**
- bureaucracy**
- logistics**

Mutational testing in Canada: Life Raft Group advocacy efforts

- **Funding provided to Dr Feng's study in British Columbia**
- **Dec. 4, 2020: National workshop - virtual meeting:
patients, oncologists, pathologists, pharma reps**
- **Draft report prepared (for possible publication)**
- **Next steps: follow-up meeting; work plan for oncologist continuing education; identification of institutional barriers**
- **Progress has been delayed due to the pandemic "third wave"**