

Germline Confirmation of Pathogenic Variants Identified by Oncopanel

Nov 15, 2022

Dear Colleagues,

This memo is to update physicians who frequently order Oncopanel tumour testing through the Cancer Genetics and Genomics Laboratory (CGL) at BC Cancer. This panel assesses important biomarkers in colorectal cancer, melanoma, ovarian and prostate cancer and has the potential to identify sequence variants in genes associated with hereditary cancer. Pathogenic variants identified in these genes by tumour testing may have arisen within the tumour (acquired/somatic) or may have been inherited from a parent (germline). Follow-up testing of a peripheral blood specimen is necessary to determine if the identified variants are acquired or germline.

As of July 1, 2022, germline confirmation can be ordered by any physician involved in a patient's oncology care. Key points regarding this new process are outlined below:

Test Ordering

If you choose to offer germline confirmation testing to your patient, you will be responsible for:

- Discussing the testing with your patient and confirming that they consent to proceed.
- Fully completing and signing a [CGL Hereditary Panel requisition](#) to give to your patient so they can have their blood drawn at any phlebotomy lab (including LifeLabs)
 - Testing Indication = "Confirmation of pathogenic variant result (include relevant report(s) from tumour testing or clinical trial/research testing"
 - Indication/Variant Details = type of tumour test (e.g. Oncopanel), variant details from the report and associated CGL BM# (if available)
- Giving the [Hereditary Cancer Genetic Testing Patient Information Sheet](#) to the patient
- Following up with your patient if they do not have their blood drawn.
- Disclosing the genetic test result to your patient.
- For those physicians on Cerner, the HCP panel can be ordered using test code "Hereditary Cancer Genetics Panel"

A checklist for test ordering is available [online](#) and is attached for reference.

If you do not feel comfortable offering genetic testing to your patients, you can [refer them to the Hereditary Cancer Program \(HCP\)](#). You only need to complete page 1 of the referral form; check "pathogenic gene variant result" as the referral indication.

Physician Support

The HCP team will support you and a genetic counsellor within CGL will:

- Review all mainstreamed genetic testing reports
- Create reflex referrals to HCP for all patients who have a confirmed germline pathogenic/likely pathogenic variant or a concerning variant of uncertain significance

- Notify you when your patient's report is ready for you to review and whether they have created a reflex referral to HCP for your patient
- Provide a patient information sheet tailored to their results
- Questions can be directed to the Lab Genetic Counsellor at genetic.counsellor@bccancer.bc.ca

Test Reporting and Clinical Use

- Target TAT is 6-8 weeks from the time the blood is received in CGL
- Reports will be available in both CAIS and Cerner. Reports are not currently available in CareConnect. Reports will also be distributed via regular mail to all non-BC Cancer – VCC physicians.

For more information regarding these tests and when they should be ordered, please see the attached document (and/or visit www.cancergeneticslab.ca).

NOTE:

The Oncopanel test is a tumour screening test and is not a substitute for a dedicated hereditary cancer germline mutation screen as it does not currently assess copy number variants (CNVs) and includes fewer genes. If a patient has clinical features or a personal or family history suggestive of an inherited syndrome, refer them to HCP regardless of their Oncopanel results.

We anticipate this new process for Oncopanel germline confirmations will improve patient care by more effectively identifying patients and families with an inherited cancer predisposition. Please feel free to contact Dr. Sophie Sun, Dr. Intan Schrader, Katie Compton or the CGL Geneticists for questions or problems that arise related to this initiative.

Best Regards,



Sophie Sun, Intan Schrader, Katie Compton, Tracy Tucker, Ian Bosdet, Sean Young, Stephen Yip, and the CGL team.