BC CANCER VANCOUVER
Provincial Health Services Authority

MEMORANDUM

Date: April 30, 2026

To: Drs. Kevin Song, Christopher Venner, Andrew Cowan, and Nadia Medvedev; Lorraine Liu

From: Stephen Yip, MD, PhD, FRCPC
Medical Director – Cancer Genetics & Genomics Laboratory

RE: Clonotype Identification in Newly Diagnosed-Transplant-Eligible Multiple Myeloma Patients

This letter is to inform you that effective **May 1st, 2026**, the Cancer Genetics and Genomics Laboratory (CGL) at BC Cancer will be accepting bone marrow specimens collected from newly diagnosed multiple myeloma patients who may be transplant eligible (ND-TEMM), facilitating the on-label use of **daratumumab (Darzalex™)** as part of quadruplet-based therapy in this patient cohort. Collection of bone marrow specimens at diagnosis allows for the identification of the plasma cell immunoglobulin clonotype (IgH VDJ or IgK VJ) post-transplant. Identification of this clonotype is required for later measurable residual disease (MRD) assessments. MRD assessment will be performed one- and two-years post-transplant on patients in a suspected complete response (CR) or those in very good partial response (VGPR) where the persistent monoclonal protein is thought to be related to detection of daratumumab, with the aim of discontinuing daratumumab in patients found to be MRD negative.

How is the clonotype identified?

The clonotype will be determined using the Invivoscribe Lymphotrack™ NGS solution (pending completion of test validation at CGL by the end of Q3 2026).

Who qualifies for testing?

The current funding approval covers clonotype identification (and later MRD assessment) of newly diagnosed multiple myeloma patients potentially eligible for stem cell transplantation or where this is not yet determined. Initially, testing of stored genomic DNA will be performed only on those patients that have undergone an auto-transplant. It is anticipated that approximately 5% of tested patients will not harbour a clonotype detectable by this method.

How is the test ordered?

Testing can be ordered using either the CGL Lymphoid Requisition or Myeloid Requisition (link). It should be noted that, although testing has been requested, testing will only be initiated upon completion of test validation at CGL and notification to CGL that the patient has undergone an auto-transplant and meets above serologic response criteria.

What sample is required?

In addition to current standard of care tests for newly diagnosed multiple myeloma patients, CGL requires an *additional* 2mL aspirated bone marrow (purple top (EDTA) vacutainer).

For transplant-eligible multiple myeloma, below is a summary of specimens required.

NOTE: Requirements for flow cytometry and FISH (items 2ii and 2iii) may vary by region; please consult with your local laboratory to coordinate appropriate bone marrow collection.

BASELINE DIAGNOSTIC SAMPLE:

1. Trephine biopsy
2. Aspirate (to be drawn in this order):
    i. 0.5 mL morphological assessment
    ii. 1 x 2 mL EDTA, Dx sample for clonotyping at CGL - NEW
    iii. 2 x 1 mL FISH (CGL requires aspirate in transport media; please follow local lab requirements)
    iv. 1 mL flow cytometry
    v. 5-10mL Biobank sample (if consented, to be procured at sites set up for consenting, procurement and shipping of sample)

MRD TESTING SAMPLE:

Upon completion of the Invivoscribe Lymphotrack™ test validation and launch of test, a subsequent memo will be distributed.

Questions regarding biobanking should be directed to the BC Myeloma and Plasma Cell Dyscrasia Program Translational Lead - Dr. Florian Kuchenbauer or Clinical Lead - Dr. Christopher Venner.

More detailed guidelines on sample requirements can be found at www.cancergeneticslab.ca/guidelines/specimens/.

Where and how does the sample get sent?

Bone Marrow specimens for Molecular:

Department of Pathology and Laboratory Medicine
BC Cancer – Vancouver
Room #3225-600 West 10th Avenue
Vancouver, BC V5Z 4E6

Ship at room temperature.

Further information: https://cancergeneticslab.ca/guidelines/specimens/#Shipping

How will the test be reported?

Specimens received under this indication will be held pending test initiation. A report acknowledging receipt will be issued.

Results of the subsequent clonotyping and MRD tests will be conveyed by report (content to be determined in consultation with the relevant clinical partners).

What is the expected turnaround time (TAT) for results?

Initial storage report will be issued within 7 days.

TAT of the subsequent clonotyping and MRD tests to be determined in consultation with the relevant clinical partners.

How can I access the clinical report results for my patients?

The clinical report will be:

- Generated using the CGL SHIRE platform which is used for all CGL reporting
- Uploaded electronically to CAIS, CST Cerner and CareConnect
  - For CareConnect information on how to view the report or to request access, click here
- Mailed as a paper copy via Canada Post unless previously opted out
  - To discontinue receipt of the mailed paper copy, complete this form

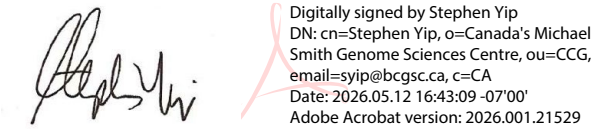
References

1. Pieter Sonneveld, *et al*, Daratumumab, Bortezomib, Lenalidomide, and Dexamethasone for Multiple Myeloma (2024) *NEJM* **390**:301-313.

Questions

Email: cancergeneticslab@bccancer.bc.ca

Website: cancergeneticslab.ca



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