

DATE:	2021 April 27
TO:	Hematologists & Thrombosis Physicians – Alberta-Wide
FROM:	Special Coagulation Laboratories, Alberta Precision Laboratories, North & South Sectors
RE:	Specimen requirements for investigation of COVID-19 Vaccine-Induced Immune Thrombotic Thrombocytopenia (VITT)

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message

- Laboratory testing for VITT (a.k.a. VIPIT) must be requested by a consulting Hematologist or Thrombosis Physician, who will:
 - 1) Oversee the collection of required specimens (and specify required tubes in the order).
 - 2) Complete the special laboratory requisitions, and
 - 3) Communicate with their Special Coagulation Laboratory
- The Special Coagulation Laboratory will oversee local testing and external send-outs.

Background

- Cases of suspected VITT in Alberta require consultation with a Hematologist or Thrombosis Physician who may request laboratory testing for patients with sufficient likelihood (see [interim guidance from the ISTH](#)).
- So far, data indicate that cases of VITT are associated with a distinct pattern when screened with the existing Heparin-Induced Thrombocytopenia (HIT) assays available in Alberta:
 - Positive anti-PF4 HIT ELISA (performed in Edmonton), but negative immunoturbidometric HIT assay (performed in Calgary).
- The platelet-activating capabilities of the antibodies -- and diagnosis of VITT -- is confirmed by a modified Serotonin Release Assay (SRA), performed at McMaster University in Ontario.

How this will impact you

- When testing is requested by a consultant, specimens will be tested by all three sites: the anti-PF4 HIT ELISA in Edmonton, the immunoturbidometric HIT assay in Calgary, and send out to McMaster for the SRA.
 - E.g., a patient in Edmonton will have the local anti-PF4 ELISA performed **and** specimens will be shipped to both Calgary (for the immunoturbidometric test) and Ontario (for the SRA).
- Once specimens & requisitions are received, the Special Coagulation Labs will organize any send-outs and testing.
- Hematologists/Thrombosis Physicians who are requesting laboratory testing for VITT will be required to arrange the specimen collection, complete the specialty requisitions for local and external testing, and communicate with their Special Coagulation Laboratory (see subsequent section for details).
- Estimated turnaround time for results:
 - Alberta assays: three business days.
 - McMaster assays: approximately one week.



- A summary of all three laboratory results will be available in Alberta Netcare and ConnectCare in the Coagulation folder under the test name "Heparin-Induced Thrombocytopenia (HIT)".
 - Note that a preliminary report(s) will be issued as soon as local Alberta testing is available, and a final report will be issued once results from McMaster are received. Preliminary results in Netcare remain *italicized*, so please ensure to check these regardless.

Action Required/Instructions for Collection

Note: Specimens must be collected prior to IVIG therapy

- 1) Order a HIT Assay on your local Special Hematology/Coagulation requisition or in ConnectCare
- 2) Use the ORDER COMMENT field in ConnectCare or indicate specifically on your paper Special Coagulation requisition that the following tubes must be collected for the HIT Assay:
 - **One Gold** top (serum SST) tube
 - **Two Red** top (serum) tubes
 - **Three Blue** top (sodium citrate) tubes
- 3) Complete & print the McMaster Specialty Requisition, and submit to the Special Coagulation Lab with the collected specimens: <https://fhs.mcmaster.ca/plateletimmunology/vipit.html>
- 4) Notify the Special Coagulation Laboratory of incoming testing:
 - Edmonton Lab (serves Red Deer & north): 780-407-8487
 - Calgary Lab (serves southern Alberta): 403-770-3598
 - Leave a message outside of business hours.
 - If assistance is required, contact the Hematopathologist (non-transfusion) on call.

Note: Labs outside Edmonton & Calgary can separate and freeze the specimens, and send frozen aliquots and requisitions to the attention of the Special Coagulation lab that serves their region.

- E.g., Red Deer will send all VITT testing specimens and requisitions to the attention of the Edmonton Special Coagulation Laboratory. The Edmonton lab will oversee subsequent send out to Calgary and Ontario.

Effective: Immediately

Questions/Concerns

- Dr. E. Turley, Edmonton Special Coagulation Laboratory, Elona.Turley@aplabs.ca 780-407-7212
- Dr. X. Jiang, Calgary Special Coagulation Laboratory, Xiu.Jiang@aplabs.ca 403-770-3548

Approved by

- Dr. A. Szkotak, Hematopathology Chief, APL - North Sector, Artur.Szkotak@aplabs.ca
- Dr. T. Shabani-Rad, Hematopathology Chief, APL - South Sector meer-Taher.shabani-Rad@aplabs.ca
- Dr. C. O'Hara, Interim Chief Medical Lab Officer, APL, Carolyn.OHara@aplabs.ca