MANITOBA
HIV PROGRAM

LABORATORY TESTING SCHEDULE & REQUISITIONS FOR ADULTS LIVING WITH HIV IN MANITOBA: QUICK REFERENCE FOR PRIMARY CARE PROVIDERS

Laboratory Testing Schedule for Baseline and Monitoring Investigations of Adults Living with HIV in Manitoba

Laboratory test	Baseline	1 month post ART- initiation, re-initiation or change in ART	Every 3-6 months	Annually
HIV ½ Ag/Ab Combo	✓			
HAV IgG iImmunity), HBcAb (total), HBsAg, HBsAb (immunity)	✓			✓ [1]
HCV Ab or HCV PCR/QUANT if known to be HCV Ab positive	✓			✓ [2]
Toxoplasma IgG, CMV IgG, Varicella IgG	✓			
Syphilis, gonorrhea and chlamydia, trichomoniasis screen if indicated	✓		✓ [3,4]	✓ [5]
IGRA[6], chest x-ray	✓ [6]			
HIV viral load	✓ [7]	✓ [7]	✓ [7]	
HIV genotype/drug resistance	✓			
HIV INSTI resistance	✓			
CD3, CD4, CD8[8]	✓ [8]	✓ [8]	✓ [7,8,9]	✓ [8,9]
HLA-B*5701	✓			
CBC with differential	✓	✓	✓	✓
ALT, AST, ALP, GGT, total bilirubin, direct bilirubin, LDH, albumin, Na, K, Cl, CO2, Ca, Ca corr, albumin, phosphate, urea, creatinine	✓	✓	✓	
INR	✓			
U/A, UACR	✓	✓	✓	✓
Lipid profile	✓			✓ [10]
HgbA1c, glucose	✓			✓ [10]
TST	✓ [7]			✓ [11]
Pap test[12]	✓			✓ [12]
Pregnancy test[13]	✓		✓	

1. Repeat HBV screening annually if non-immune and no chronic infection.
2. Repeat HCV screening annually if high risk (e.g active IDU).
3. Repeat syphilis screening after syphilis treatment, every 3 months for 1 year and at 24 months, then move to annually.
4. If high risk (multiple partners, recurrent STIs, IDU) offer complete STI screening every 3-6 months.
5. Offer annual STI screening for all people living with PLHIV.
6. IGRA must be received by lab within 4 hours of blood draw, **Monday to Thursday a.m. only**. Otherwise, screen at baseline with TST.
7. Every 3 to 6 months until suppressed for 1 year and then extend to every 6 months.
8. Must be received at lab **within 24-48 hours of blood draw.**
9. If consistently suppressed for over 2 years and CD4 cell count >500 cells/mm^3 can consider annual CD4 count.
10. Can individualize and move to less frequent CVD risk assessment as per general population recommendations if low risk for CVD, consider continuing with annual screening if previous abnormal, other CVD risk factors, strong family history, or on medication with high risk metabolic side effects. Consider discontinuing lipid screening if on a statin.
11. Repeat annually if ongoing risks for TB exposure.
12. Annually for all people with a cervix between 21 and 69 years of age. After 3 consecutive normal Pap test results, screening interval can be extended to 3 years if client CD4 count is >500 cells/mm^3. Any abnormal Pap test results should be referred for colposcopy (including low-grade abnormalities).
13. For all persons of childbearing potential.

For more information on caring for adults living with HIV in Manitoba, see the *Manitoba HIV Program Primary Care Recommendations for the Management of Adults Living with HIV in Manitoba* at www.mbHIV.ca

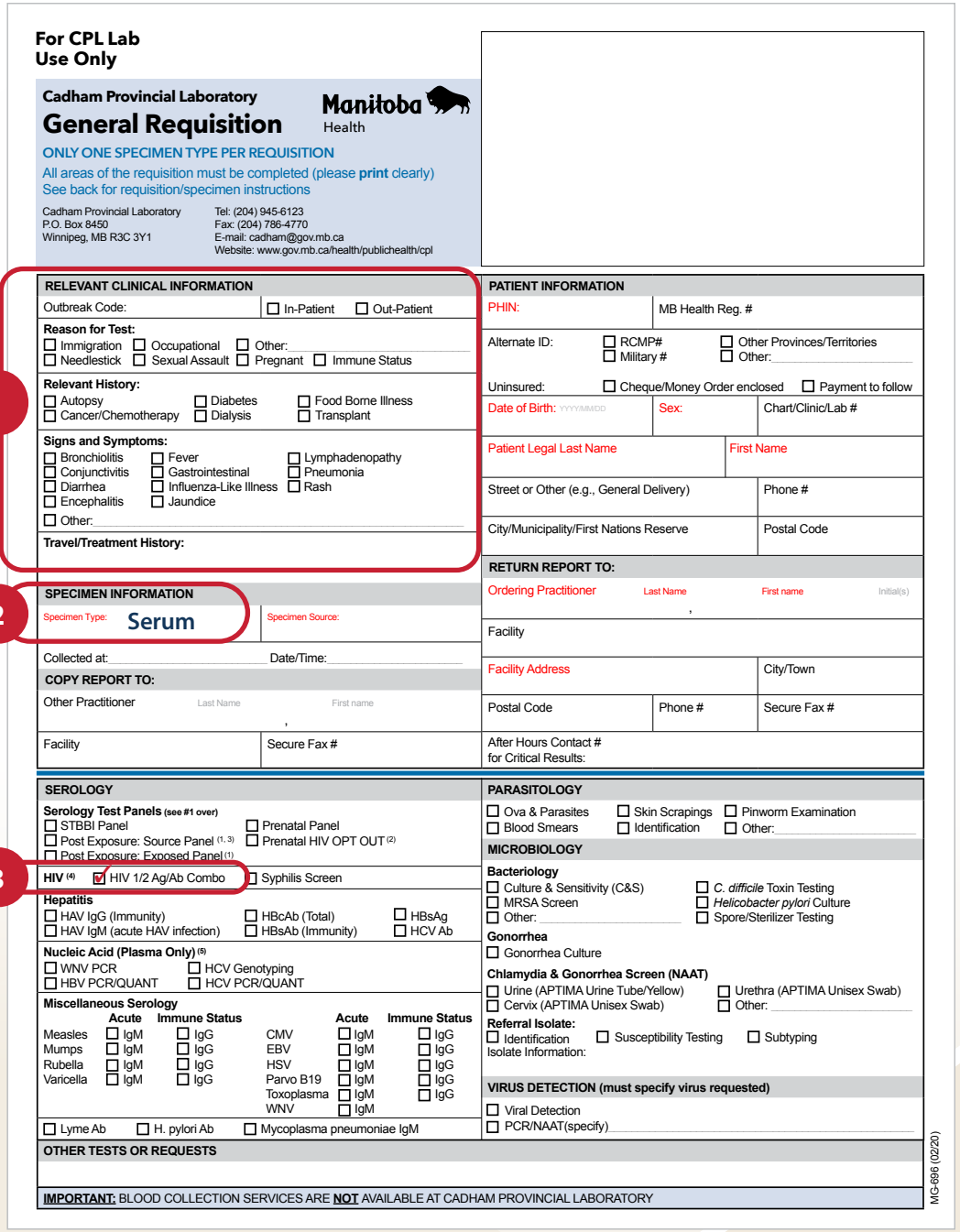
HIV ANTIBODY TEST / HIV ½ Ag/Ab Combo

What is it for?	Diagnoses a person with HIV. Repeat testing not necessary if a person has already tested positive for HIV in Manitoba.
When is it used?	When a person's HIV status is unknown and according to the *Manitoba HIV Program HIV Testing Guidelines*.
What requisition is used?	Cadham Provincial Laboratory General Requisition
Which blood tubes are used?	Red or red/yellow top tube. Sample requires 1 full 9mL serum separator tube (Z serum sep clot activator). 

Important information when completing this requisition:

1. Ensure that all related clinical information is entered completely into this section.
2. Specimen type is "serum"
3. Check off "HIV 1/2 Ag/Ab Combo."

See Cadham Provincial Laboratory Guide to Services for more information on sampling.



For CPL Lab Use Only

Cadham Provincial Laboratory
General Requisition
Manitoba Health

ONLY ONE SPECIMEN TYPE PER REQUISITION
All areas of the requisition must be completed (please **print** clearly)
See back for requisition/specimen instructions

Cadham Provincial Laboratory
P.O. Box 8450
Winnipeg, MB R3C 3Y1

Tel: (204) 945-6123
Fax: (204) 786-4770
E-mail: cadham@gov.mb.ca
Website: www.gov.mb.ca/health/publichealth/cpl

RELEVANT CLINICAL INFORMATION

Outbreak Code: ☐ In-Patient ☐ Out-Patient

Reason for Test:
☐ Immigration ☐ Occupational ☐ Other:
☐ Needlestick ☐ Sexual Assault ☐ Pregnant ☐ Immune Status

Relevant History:
☐ Autopsy ☐ Diabetes ☐ Food Borne Illness
☐ Cancer/Chemotherapy ☐ Dialysis ☐ Transplant

Signs and Symptoms:
☐ Bronchiolitis ☐ Fever ☐ Lymphadenopathy
☐ Conjunctivitis ☐ Gastrointestinal ☐ Pneumonia
☐ Diarrhea ☐ Influenza-Like Illness ☐ Rash
☐ Encephalitis ☐ Jaundice
☐ Other:

Travel/Treatment History:

PATIENT INFORMATION

PHIN: | MB Health Reg. #

Alternate ID: ☐ RCMP# ☐ Military # ☐ Other Provinces/Territories ☐ Other:

Uninsured: ☐ Cheque/Money Order enclosed ☐ Payment to follow

Date of Birth: YYYY/MM/DD | Sex: | Chart/Clinic/Lab #

Patient Legal Last Name | First Name

Street or Other (e.g., General Delivery) | Phone #

City/Municipality/First Nations Reserve | Postal Code

RETURN REPORT TO:

Ordering Practitioner Last Name , First name Initial(s)

Facility

Facility Address | City/Town

Postal Code | Phone # | Secure Fax #

After Hours Contact # for Critical Results:

SPECIMEN INFORMATION

Specimen Type: Serum | Specimen Source:

Collected at: Date/Time:

COPY REPORT TO:

Other Practitioner Last Name , First name

Facility | Secure Fax #

SEROLOGY

Serology Test Panels (see #1 over)
☐ STBBI Panel ☐ Prenatal Panel
☐ Post Exposure: Source Panel (1, 3) ☐ Prenatal HIV OPT OUT (2)
☐ Post Exposure: Exposed Panel (1)

HIV (4) ☑ HIV 1/2 Ag/Ab Combo ☐ Syphilis Screen

Hepatitis
☐ HAV IgG (Immunity) ☐ HBcAb (Total) ☐ HBsAg
☐ HAV IgM (acute HAV infection) ☐ HBsAb (Immunity) ☐ HCV Ab

Nucleic Acid (Plasma Only) (5)
☐ WNV PCR ☐ HCV Genotyping
☐ HBV PCR/QUANT ☐ HCV PCR/QUANT

Miscellaneous Serology

	Acute	Immune Status		Acute	Immune Status
Measles	☐ IgM	☐ IgG	CMV	☐ IgM	☐ IgG
Mumps	☐ IgM	☐ IgG	EBV	☐ IgM	☐ IgG
Rubella	☐ IgM	☐ IgG	HSV	☐ IgM	☐ IgG
Varicella	☐ IgM	☐ IgG	Parvo B19	☐ IgM	☐ IgG
			Toxoplasma	☐ IgM	☐ IgG
			WNV	☐ IgM	

☐ Lyme Ab ☐ H. pylori Ab ☐ Mycoplasma pneumoniae IgM

PARASITOLOGY
☐ Ova & Parasites ☐ Skin Scrapings ☐ Pinworm Examination
☐ Blood Smears ☐ Identification ☐ Other:

MICROBIOLOGY

Bacteriology
☐ Culture & Sensitivity (C&S) ☐ *C. difficile* Toxin Testing
☐ MRSA Screen ☐ *Helicobacter pylori* Culture
☐ Other: ☐ Spore/Sterilizer Testing

Gonorrhea
☐ Gonorrhea Culture

Chlamydia & Gonorrhea Screen (NAAT)
☐ Urine (APTIMA Urine Tube/Yellow) ☐ Urethra (APTIMA Unisex Swab)
☐ Cervix (APTIMA Unisex Swab) ☐ Other:

Referral Isolate:
☐ Identification ☐ Susceptibility Testing ☐ Subtyping
Isolate Information:

VIRUS DETECTION (must specify virus requested)
☐ Viral Detection
☐ PCR/NAAT(specify)

OTHER TESTS OR REQUESTS

IMPORTANT: BLOOD COLLECTION SERVICES ARE **NOT** AVAILABLE AT CADHAM PROVINCIAL LABORATORY

MG-696 (02/20)

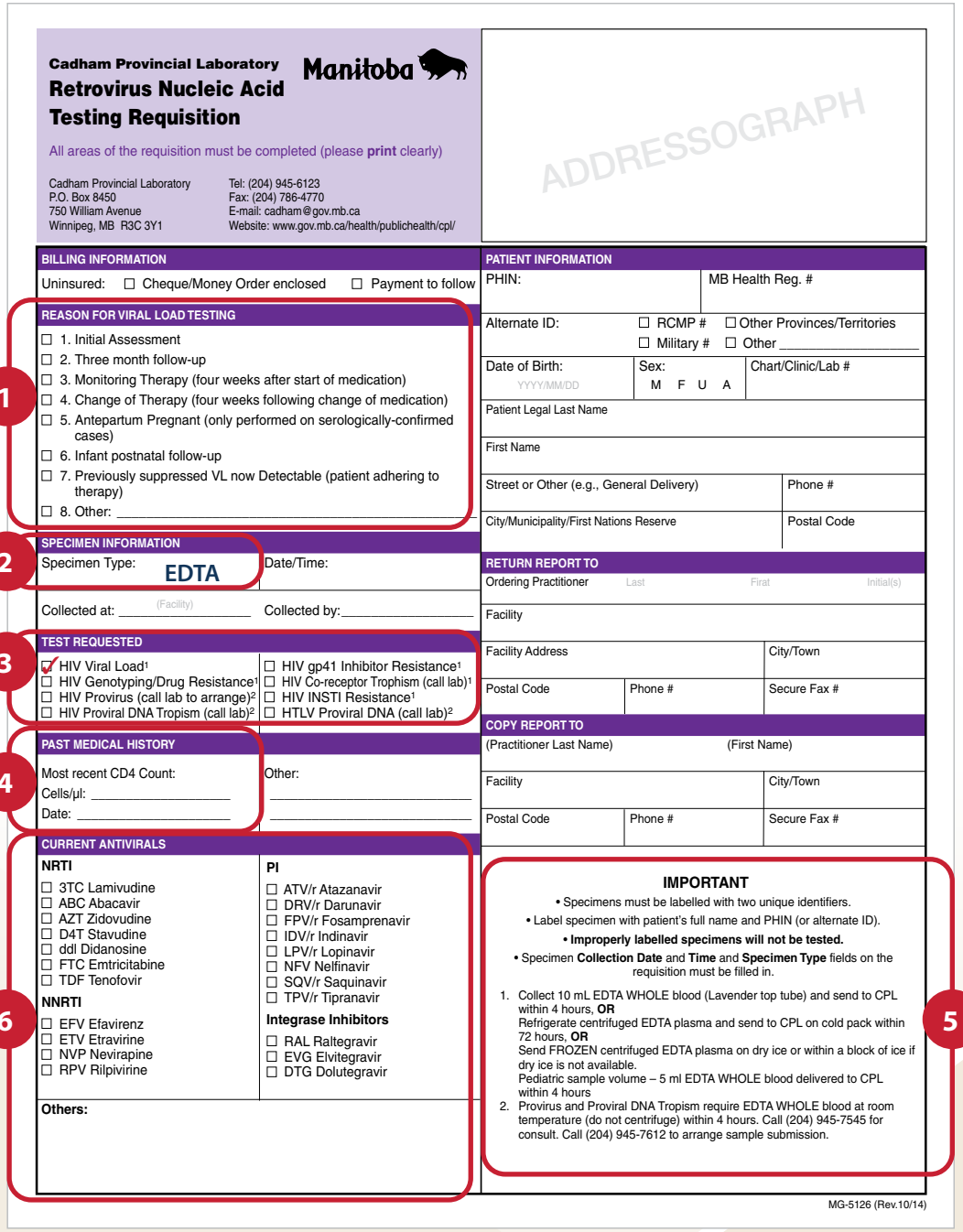
HIV Viral Load/HIV RNA, HIV Nucleic Acid Testing

What is it for?	Monitors effectiveness of antiretroviral treatment (ART) or how active the virus is for patients who have already tested positive for HIV. HIV viral load is not a diagnostic test.
When is it used?	At baseline and routine intervals according to "Laboratory Testing Schedule for Baseline and Monitoring Investigations of Adults Living with HIV in Manitoba" and the *Primary Care Recommendations for the Management of Adults Living with HIV in Manitoba*.
What requisition is used?	Cadham Provincial Laboratory Retrovirus Nucleic Acid Testing Requisition
Which blood tubes are used?	Purple/lavender top tubes. Sample requires 2 full 6mL EDTA tubes. 

Important information when completing this requisition:

1. Ensure correct reason is checked off in order for the lab to process the sample.
2. Specimen type is EDTA (same as the tube).
3. Ensure HIV viral load is checked off.
4. Ensure most recent CD4 count result and date is checked off in order for the lab to process the sample.
5. Note the time sensitivity of samples and preparation instructions.
6. Ensure all patient antiretrovirals are checked off. Use the "others" section for medications not included in this list.

See Cadham Provincial Laboratory Guide to Services for more information on sampling.



Cadham Provincial Laboratory
Retrovirus Nucleic Acid Testing Requisition

Manitoba

All areas of the requisition must be completed (please **print** clearly)

Cadham Provincial Laboratory
P.O. Box 8450
750 William Avenue
Winnipeg, MB R3C 3Y1

Tel: (204) 945-6123
Fax: (204) 786-4770
E-mail: cadham@gov.mb.ca
Website: www.gov.mb.ca/health/publichealth/cpl/

ADDRESSOGRAPH

BILLING INFORMATION
Uninsured: ☐ Cheque/Money Order enclosed ☐ Payment to follow

PATIENT INFORMATION
PHIN: | MB Health Reg. #
Alternate ID: ☐ RCMP # ☐ Other Provinces/Territories ☐ Military # ☐ Other
Date of Birth: YYYY/MM/DD | Sex: M F U A | Chart/Clinic/Lab #
Patient Legal Last Name
First Name
Street or Other (e.g., General Delivery) | Phone #
City/Municipality/First Nations Reserve | Postal Code

1 **REASON FOR VIRAL LOAD TESTING**
☐ 1. Initial Assessment
☐ 2. Three month follow-up
☐ 3. Monitoring Therapy (four weeks after start of medication)
☐ 4. Change of Therapy (four weeks following change of medication)
☐ 5. Antepartum Pregnant (only performed on serologically-confirmed cases)
☐ 6. Infant postnatal follow-up
☐ 7. Previously suppressed VL now Detectable (patient adhering to therapy)
☐ 8. Other: _____

2 **SPECIMEN INFORMATION**
Specimen Type: EDTA | Date/Time:
Collected at: _____ (Facility) | Collected by: _____

3 **TEST REQUESTED**
☑ HIV Viral Load[1]
☐ HIV Genotyping/Drug Resistance[1]
☐ HIV Provirus (call lab to arrange)[2]
☐ HIV Proviral DNA Tropism (call lab)[2]
☐ HIV gp41 Inhibitor Resistance[1]
☐ HIV Co-receptor Trophism (call lab)[1]
☐ HIV INSTI Resistance[1]
☐ HTLV Proviral DNA (call lab)[2]

RETURN REPORT TO
Ordering Practitioner Last Firat Initial(s)
Facility
Facility Address | City/Town
Postal Code | Phone # | Secure Fax #

COPY REPORT TO
(Practitioner Last Name) (First Name)
Facility | City/Town
Postal Code | Phone # | Secure Fax #

4 **PAST MEDICAL HISTORY**
Most recent CD4 Count:
Cells/µl: _____
Date: _____
Other: _____

6 **CURRENT ANTIVIRALS**
NRTI
☐ 3TC Lamivudine
☐ ABC Abacavir
☐ AZT Zidovudine
☐ D4T Stavudine
☐ ddI Didanosine
☐ FTC Emtricitabine
☐ TDF Tenofovir
NNRTI
☐ EFV Efavirenz
☐ ETV Etravirine
☐ NVP Nevirapine
☐ RPV Rilpivirine
PI
☐ ATV/r Atazanavir
☐ DRV/r Darunavir
☐ FPV/r Fosamprenavir
☐ IDV/r Indinavir
☐ LPV/r Lopinavir
☐ NFV Nelfinavir
☐ SQV/r Saquinavir
☐ TPV/r Tipranavir
Integrase Inhibitors
☐ RAL Raltegravir
☐ EVG Elvitegravir
☐ DTG Dolutegravir
Others:

5 **IMPORTANT**
• Specimens must be labelled with two unique identifiers.
• Label specimen with patient's full name and PHIN (or alternate ID).
• **Improperly labelled specimens will not be tested.**
• Specimen **Collection Date** and **Time** and **Specimen Type** fields on the requisition must be filled in.

1. Collect 10 mL EDTA WHOLE blood (Lavender top tube) and send to CPL within 4 hours, **OR**
   Refrigerate centrifuged EDTA plasma and send to CPL on cold pack within 72 hours, **OR**
   Send FROZEN centrifuged EDTA plasma on dry ice or within a block of ice if dry ice is not available.
   Pediatric sample volume – 5 ml EDTA WHOLE blood delivered to CPL within 4 hours
2. Provirus and Proviral DNA Tropism require EDTA WHOLE blood at room temperature (do not centrifuge) within 4 hours. Call (204) 945-7545 for consult. Call (204) 945-7612 to arrange sample submission.

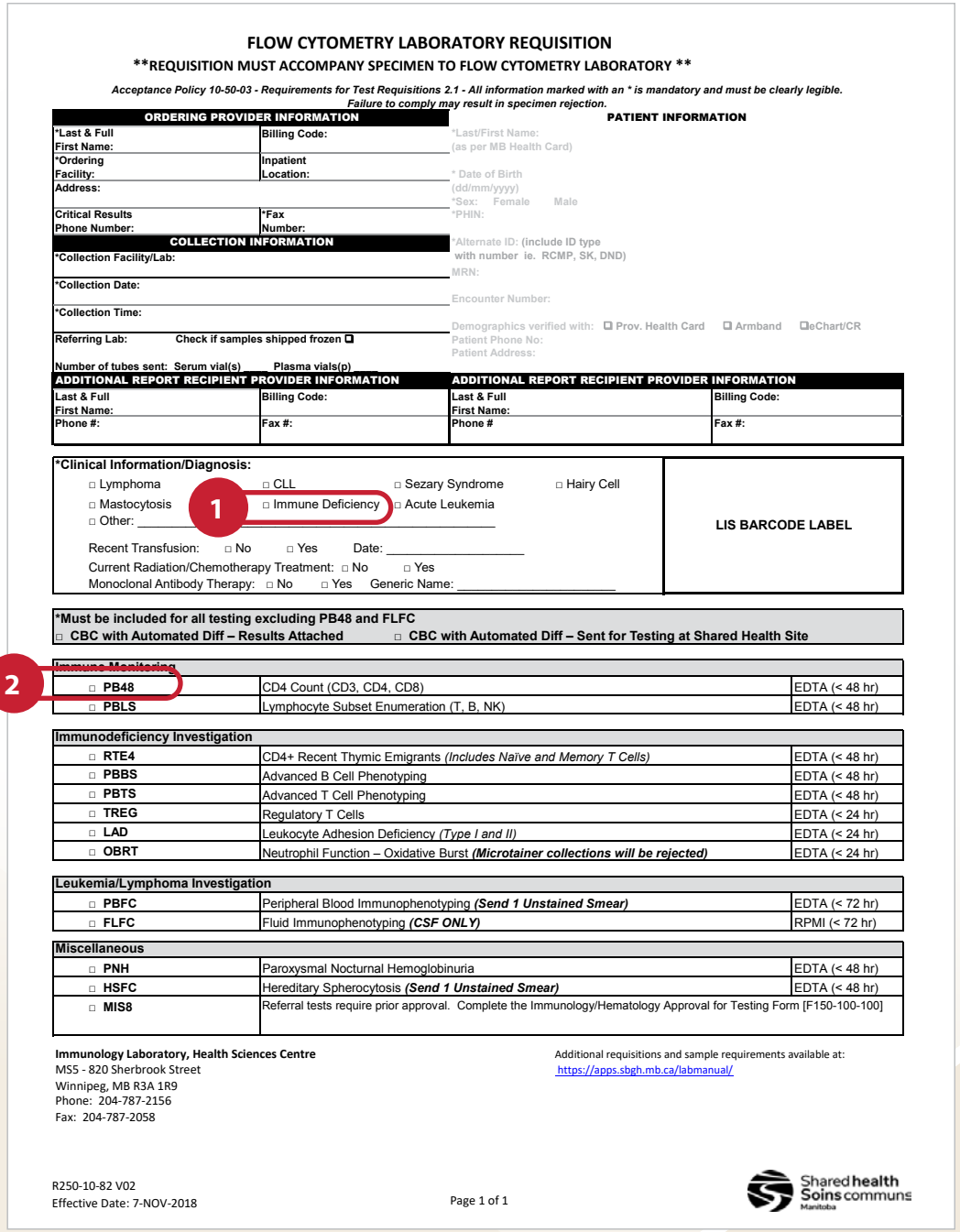
MG-5126 (Rev.10/14)

CD4 COUNT / CD3, CD4, CD8

What is it for?	Monitors a patient's immune system health/ strength, for patients who have already tested positive for HIV. The lab reports on a count of the number of CD4 cells in a drop of blood. Patients with treated and controlled HIV will usually have a stable immune system with CD4 count >200 cells/mm^3.
When is it used?	At baseline and routine intervals according to "Laboratory Testing Schedule for Baseline and Monitoring Investigations of Adults Living with HIV in Manitoba" and the *Primary Care Recommendations for the Management of Adults Living with HIV in Manitoba*.
What requisition is used?	Shared Health, Immunology Laboratory, Health Sciences Centre Flow Cytometry Laboratory Requisition (Immunology)
Which blood tubes are used?	Purple/lavender top tube. Sample requires 1 full 6mL K2 EDTA tube. 
Special considerations?	Sample must be received by lab within 48 hours, Monday through Friday, by 4pm.

Important information when completing this requisition:

1. Check off "Immune Deficiency"
2. Check off "PB48"



FLOW CYTOMETRY LABORATORY REQUISITION

****REQUISITION MUST ACCOMPANY SPECIMEN TO FLOW CYTOMETRY LABORATORY ****

*Acceptance Policy 10-50-03 - Requirements for Test Requisitions 2.1 - All information marked with an * is mandatory and must be clearly legible. Failure to comply may result in specimen rejection.*

ORDERING PROVIDER INFORMATION

*Last & Full First Name:	Billing Code:
*Ordering Facility:	Inpatient Location:
Address:	
Critical Results Phone Number:	*Fax Number:

COLLECTION INFORMATION

*Collection Facility/Lab:
*Collection Date:
*Collection Time:
Referring Lab: Check if samples shipped frozen ☐
Number of tubes sent: Serum vial(s) ___ Plasma vials(p) ___

PATIENT INFORMATION

*Last/First Name:
(as per MB Health Card)
* Date of Birth
(dd/mm/yyyy)
*Sex: Female Male
*PHIN:
*Alternate ID: (include ID type with number ie. RCMP, SK, DND)
MRN:
Encounter Number:
Demographics verified with: ☐ Prov. Health Card ☐ Armband ☐eChart/CR
Patient Phone No:
Patient Address:

ADDITIONAL REPORT RECIPIENT PROVIDER INFORMATION		ADDITIONAL REPORT RECIPIENT PROVIDER INFORMATION	
Last & Full First Name:	Billing Code:	Last & Full First Name:	Billing Code:
Phone #:	Fax #:	Phone #	Fax #:

*Clinical Information/Diagnosis:

☐ Lymphoma ☐ CLL ☐ Sezary Syndrome ☐ Hairy Cell
☐ Mastocytosis ☐ Immune Deficiency ☐ Acute Leukemia
☐ Other: _____

Recent Transfusion: ☐ No ☐ Yes Date: _____
Current Radiation/Chemotherapy Treatment: ☐ No ☐ Yes
Monoclonal Antibody Therapy: ☐ No ☐ Yes Generic Name: _____

LIS BARCODE LABEL

*Must be included for all testing excluding PB48 and FLFC
☐ CBC with Automated Diff – Results Attached ☐ CBC with Automated Diff – Sent for Testing at Shared Health Site

Immune Monitoring		
☐ PB48	CD4 Count (CD3, CD4, CD8)	EDTA (< 48 hr)
☐ PBLS	Lymphocyte Subset Enumeration (T, B, NK)	EDTA (< 48 hr)

Immunodeficiency Investigation		
☐ RTE4	CD4+ Recent Thymic Emigrants *(Includes Naïve and Memory T Cells)*	EDTA (< 48 hr)
☐ PBBS	Advanced B Cell Phenotyping	EDTA (< 48 hr)
☐ PBTS	Advanced T Cell Phenotyping	EDTA (< 48 hr)
☐ TREG	Regulatory T Cells	EDTA (< 24 hr)
☐ LAD	Leukocyte Adhesion Deficiency *(Type I and II)*	EDTA (< 24 hr)
☐ OBRT	Neutrophil Function – Oxidative Burst ***(Microtainer collections will be rejected)***	EDTA (< 24 hr)

Leukemia/Lymphoma Investigation		
☐ PBFC	Peripheral Blood Immunophenotyping ***(Send 1 Unstained Smear)***	EDTA (< 72 hr)
☐ FLFC	Fluid Immunophenotyping ***(CSF ONLY)***	RPMI (< 72 hr)

Miscellaneous		
☐ PNH	Paroxysmal Nocturnal Hemoglobinuria	EDTA (< 48 hr)
☐ HSFC	Hereditary Spherocytosis ***(Send 1 Unstained Smear)***	EDTA (< 48 hr)
☐ MIS8	Referral tests require prior approval. Complete the Immunology/Hematology Approval for Testing Form [F150-100-100]	

Immunology Laboratory, Health Sciences Centre
MS5 - 820 Sherbrook Street
Winnipeg, MB R3A 1R9
Phone: 204-787-2156
Fax: 204-787-2058

Additional requisitions and sample requirements available at:
https://apps.sbgh.mb.ca/labmanual/

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Effective Date: 7-NOV-2018

Page 1 of 1

Shared health Soins communs Manitoba

MANITOBA HIV PROGRAM

TF. 1-866-449-0165
F. 204-318-3181
www.mbHIV.ca