



- HME MCH  
  HGM MGH  
  HRV RVH  
 HNM MNH  
  ITM MCI  
  CL LC



**QUEBEC ANTIRETROVIRAL THERAPEUTIC  
DRUG MONITORING PROGRAM**

**Data collection for analysis and clinical  
interpretation of plasma concentrations**

Referring professional : \_\_\_\_\_ License No. : \_\_\_\_\_  
 Clinic – Hospital : \_\_\_\_\_ Telephone No. : \_\_\_\_\_  
 Mailing address : \_\_\_\_\_ Fax No. : \_\_\_\_\_

**PATIENT INFORMATION:**

Weight: \_\_\_\_\_ kg    Height: \_\_\_\_\_ m

**Indication (check all that apply):**

- Control                       Drug interaction: \_\_\_\_\_  
 Virologic failure             Toxicity / adverse reaction: \_\_\_\_\_  
 Low viral load                 Hepatic impairment  
 Pregnancy: \_\_\_\_\_ weeks    Off-label dosing  
 Pediatrics                       Validation after dosage adjustment  
 Newborn: gestational age at birth: \_\_\_\_\_ weeks  
 Other: \_\_\_\_\_

**Current medications** (prescribed, over the counter, natural health products) OR see attached list

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Previous virologic failure to	Yes	No	Cumulative list of mutations
Nucleoside reverse transcriptase inhibitor	<input type="checkbox"/>	<input type="checkbox"/>	OR see attached all genotypes <input type="checkbox"/>
Non-nucleoside reverse transcriptase inhibitor	<input type="checkbox"/>	<input type="checkbox"/>	_____
Protease inhibitor	<input type="checkbox"/>	<input type="checkbox"/>	_____
Integrase inhibitor	<input type="checkbox"/>	<input type="checkbox"/>	_____
Other class: _____	<input type="checkbox"/>	<input type="checkbox"/>	_____

**If on Cabenuva:**

Regimen:  
 q 1 month    q 2 months  
 Date of first IM injection  
 (YYYY/MM/DD): \_\_\_\_/\_\_\_\_/\_\_\_\_  
 Oral lead-in received:  
 Yes  No

**Last HIV viral load:** \_\_\_\_\_ cop/mL    **Date of viral load (YYYY/MM/DD):** \_\_\_\_/\_\_\_\_/\_\_\_\_

**SAMPLE PROCUREMENT** taken on (YYYY/MM/DD): \_\_\_\_/\_\_\_\_/\_\_\_\_ Time (00:00): \_\_\_\_:\_\_\_\_

Test requested (See back)	Dose (mg)	No. doses / day	LAST DOSE taken		
			Date (MM/DD)	Time (00:00)	with meal?
<input type="checkbox"/> Atazanavir	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Bictegravir	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Cabotegravir	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Darunavir	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Dolutegravir	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Doravirine	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Efavirenz	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Elvitegravir	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Etravirine	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Maraviroc	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Nevirapine	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Raltegravir	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Rilpivirine	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Ritonavir	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Other: _____	_____	_____	____/____/____	____:____	<input type="checkbox"/> Yes <input type="checkbox"/> No

**IMPORTANT**  
 Failure to provide  
**date AND time**  
**of sample**  
**procurement**  
**AND last dose**  
 will limit the  
 capacity to  
 interpret the  
 results.

**Adherence**  
 No. of doses  
 missed of  
 antiretroviral to be  
 analyzed over the  
 last...  
 2 days: \_\_\_\_\_  
 7 days: \_\_\_\_\_

# QUEBEC ANTIRETROVIRAL THERAPEUTIC DRUG MONITORING PROGRAM

## Tests available

In addition to the antiretrovirals (ARV) mentioned on the front page, the program can analyse the plasma concentrations of amprenavir (fosamprenavir), lopinavir and tipranavir. The program does not analyse concentrations of nucleoside reverse transcriptase inhibitors, enfuvirtide, fostemsavir or cobicistat.

## Blood drawing

Blood should be drawn just prior to the next dose (pre-dose). If this is not possible, blood drawing should be done between 6 and 14 hours postdose for ARVs administered twice daily or between 12 and 26 hours postdose for ARVs administered once daily. Samples taken to measure efavirenz concentrations should be drawn greater than or equal to 10 hours postdose. If malabsorption is suspected, the sample should be drawn at the time expected for the maximum concentration (Tmax).

## Tube type

One heparinized (green-top, non gel) tube should be used. One tube is sufficient, even if the request is for more than one ARV.

## Data collection form

Complete the requisition in its entirety as all of the information is essential to the individualization of the pharmacological advice which will accompany the results. **Please do not forget to indicate the ARVs to be tested, the dose, the date and time of the last intake of the ARV to be tested, and the date and time the blood sample was drawn.** If a patient is receiving long acting IM cabotegravir/rilpivirine, indicate the date of the first intramuscular injection (loading dose) and if the patient received an oral lead-in of cabotegravir/rilpivirine. Forward the white and yellow copies (or 2 copies) of the requisition with the plasma specimen.

## Specimen handling and storage

Centrifuge the specimen (3000 x g for 5 minutes) within 6 hours of procurement, and forward the recovered plasma to the Québec Antiretroviral Therapeutic Drug Monitoring Program laboratory. For adults, send 1 mL of plasma per sample in a cryotube (1.5 mL size or greater). For children, a 200 µL plasma specimen is sufficient.

Plasma shipped the same day as it is drawn should be kept at 4°C. Otherwise, the plasma should be stored frozen at less than or equal to -20°C until it is sent.

## Specimen transport

Samples should be sent only Monday to Wednesday, inclusively, to ensure reception before the weekend. Send the specimen at room temperature (no dry ice) to the Centralized Lab Reception of the McGill University Health Centre (Glen site) at the address indicated below, in accordance with guidelines for shipping infectious materials. If you foresee that shipping will exceed 48 hours, send the sample on dry ice following appropriate safety measures.

**CENTRALIZED LAB RECEPTION – Room E04.1044  
McGill University Health Centre  
1001 Decarie Blvd.  
Montreal, Quebec H4A 3J1**

## Results and interpretations

Results and interpretation reports will be sent by mail 2 to 3 weeks after receiving the sample. Please indicate the full mailing address on the requisition form.

## Contact information

You may contact a member of the Québec Antiretroviral Therapeutic Drug Monitoring Program from Monday to Friday, 9:00 to 16:00.

**Québec Antiretroviral Therapeutic Drug Monitoring Program**  
McGill University Health Centre  
Tel.: (514) 934-1934, ext. 32169 Fax: (514) 843-2828  
vih.pharmacometrie@muhc.mcgill.ca  
www.muhc.ca/quebec\_tdm