

#### TESTS AVAILABLE

**Protease Inhibitors:** Fosamprenavir, Atazanavir, Darunavir, Indinavir, Lopinavir, Nelfinavir, Ritonavir, Saquinavir, Tipranavir

**NNRTIs:** Efavirenz, Etravirine, Nevirapine

**NRTIs:** Tenofovir, Lamivudine

**Integrase Inhibitors:** Raltegravir

**Fusion Inhibitors:** Enfuvirtide

**CCR5 Antagonist:** Maraviroc

#### SAMPLES

Blood samples should be obtained using EDTA or lithium heparin collection tubes. The blood should be centrifuged within 4h of collection. This means that pre- and post samples can be sent to the lab together. After centrifugation, plasma should be placed in a plain tube, ideally 1.5 ml screw top tubes (~48 mm x 13 mm) as these are optimal for freezer racking. Please do not overfill the tubes and allow for expansion on freezing. Ensure that the Test Request Form is completed fully; especially the dose, time since last dose and the drug to be analysed.

Trough levels are utilised to determine whether the drug is within the desired target range (i.e. to check for efficacy) and we will usually provide an interpretation of the trough level. Peak samples are not routinely required but may be useful in certain situations; for example, if the patient is experiencing toxicity on a particular drug. For most antiretroviral drugs there is no defined toxicity level. We can, however, provide information on where a patient's level falls compared to population PK data.

In certain situations it can be difficult to collect trough samples. In the case of Efavirenz, Etravirine and Nevirapine, we can project trough concentrations using mean population half-life data on samples collected >4h post-dose. In the case of the PI regimens listed below, we can use population PK (percentile) data for samples taken >4 h post-dose to predict whether the trough is likely to be above or below the target value:

- Darunavir/r
- Fosamprenavir/r
- Atazanavir/r
- Atazanavir (unboosted)
- Lopinavir
- Saquinavir/r

Please note that this is not 100% accurate and a trough sample is preferable. For drug regimens not listed above, a true trough sample is required.

#### SAMPLE STORAGE

If collection and transport of the samples is to occur on the same day, the samples should be kept in a fridge at 4°C prior to transport. If transport is to be later than 24h after collection, plasma may be stored at -20°C (or lower) and allowed to thaw in transit.

#### TEST REQUEST FORM

Please ensure that you complete the Test Request Form as thoroughly as possible to aid us in the interpretation of the results. Please ensure that the samples are anonymised and that the full name of the patient does not appear on the form or the sample tube(s). Do not staple the form to sample bags as this presents a hazard in the laboratory. The form is available from Lab21 Customer Services.

#### TRANSPORT

We are a member of the DX network, and samples sent using DX should be sent Monday-Thursday. Samples may also be sent using First Class post as long as all the requirements for the packaging of diagnostic specimens and, where relevant, dry ice are met. If you use First Class Post, please send samples early in the week (Monday-Wednesday) so that packages will not remain in transit or storage over the weekend.

#### RESULTS

Samples will be analysed as soon as possible and within 14 working days of sample receipt. Results will be emailed as PDF files to the recipients nominated on the Account Set-Up Form.

#### PHARMACEUTICAL SCHEMES

Various schemes are in place where companies will meet the full or partial cost of analysis if patients meet certain criteria. Details are available from Lab21 Customer Service and from pharmaceutical company representatives. When samples are analysed for a drug under a scheme, the company will be invoiced directly for the cost of the analysis of the relevant drug(s).

#### DELIVERY ADDRESS AND CONTACT DETAILS

##### 1<sup>st</sup> Class post

Lab21 Ltd  
184 Cambridge Science Park  
Cambridge CB4 0GA

##### DX

Lab21  
DX 6055300  
Cambridge 94 CB

##### Customer Services

T 01223 395 450  
F 01223 395 451  
E [info@lab21.com](mailto:info@lab21.com)  
W [www.lab21.com](http://www.lab21.com)