



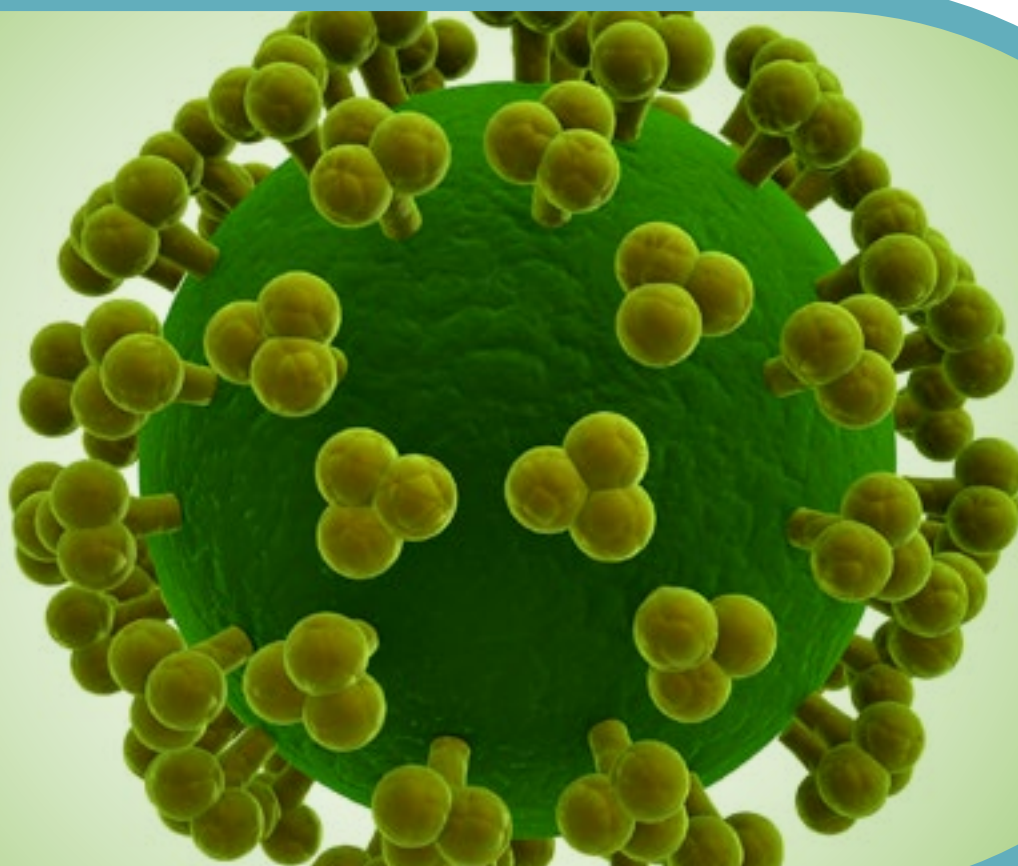
# Antiretroviral reference materials

Antiretroviral (ARV) drugs are used for the treatment of infection by retroviruses, primarily Human Immunodeficiency Virus (HIV), but also hepatitis, influenza and other viral infections. There are a number of different antiretroviral drugs, which are broadly classified by the stage of retroviral life-cycle they inhibit.

These classes of drugs are co-administered in a regimen known as Highly Active Antiretroviral Therapy (HAART). This therapy is extremely

effective in managing chronic diseases such as HIV and in reducing mortality. There are inherent complexities in selecting and following a drug regime, together with significant side effects and complications such as viral resistance. For these reasons many ARV agents are emerging as potential candidates for therapeutic drug monitoring (TDM).

ARV TDM is still a relatively novel area with protease inhibitors (PIs) and non-nucleoside reverse transcriptase inhibitors (NNRTIs) being the primary focus. LGC now offers the most complete list of ARV reference materials.



## Reference materials

| Product code   | Description                           | Unit 1 | Unit 2 |
|--|---------------------------------------|--------|--------|
| <b>Nucleoside and Nucleotide Reverse Transcriptase Inhibitors (NRTI)</b> |                                       |        |        |
| TRC-A105000  | Abacavir Sulfate                      | 5 mg   | 50 mg  |
| TRC-A105002  | Abacavir-d4                           | 1 mg   | 10 mg  |
| TRC-A105010  | Abacavir 5'-beta-D-Glucuronide        | 1 mg   | 10 mg  |
| TRC-A247500  | Adefovir                              | 10 mg  | 100 mg |
| TRC-A280465  | Adefovir Dipivoxil                    | 25 mg  | 250 mg |
| TRC-A247502  | Adefovir-d4                           | 2.5 mg | 25 mg  |
| TRC-A628917  | Adefovir-d4, Diethyl Ester            | 2.5 mg | 25 mg  |
| TRC-D440950  | 2',3'-Didanosine                      | 10 mg  | 100 mg |
| TRC-D440952  | 2',3'-Didanosine-15N4                 | 0.5 mg | 5 mg   |
| TRC-E525000  | Emtricitabine                         | 10 mg  | 100 mg |
| TRC-E525002  | Emtricitabine-13C,15N2                | 0.5 mg | 5 mg   |
| TRC-E558900  | Entecavir                             | 10 mg  | 100 mg |
| TRC-E558903  | Entecavir-d2                          | 25 mg  |        |
| TRC-E558902  | Entecavir-13C2,15N                    | 1 mg   | 5 mg   |
| TRC-L172500  | Lamivudine                            | 10 mg  | 100 mg |
| TRC-L172502  | Lamivudine-15N2,13C                   | 1 mg   | 10 mg  |
| TRC-S685250  | Stavudine                             | 10 mg  | 100 mg |
| TRC-S685252  | Stavudine-d3                          | 1 mg   | 10 mg  |
| TRC-T016000  | Telbivudine                           | 10 mg  | 100 mg |
| TRC-T016002  | Telbivudine-d3                        | 1 mg   | 10 mg  |
| TRC-T018500  | Tenofovir                             | 5 mg   | 50 mg  |
| TRC-T018503  | Tenofovir-d5                          | 10 mg  |        |
| TRC-T018502  | Tenofovir-d6                          | 1 mg   | 10 mg  |
| TRC-Z140000  | Zalcitabine                           | 10 mg  | 100 mg |
| TRC-A825000  | Zidovudine                            | 250 mg | 2.5 g  |
| TRC-A825002  | Zidovudine-d3                         | 1 mg   | 10 mg  |
| TRC-A825050  | Zidovudine Glucuronide Sodium Salt    | 10 mg  | 100 mg |
| TRC-A825052  | Zidovudine-d3 Glucuronide Sodium Salt | 1 mg   | 10 mg  |

|  |                                 |            |        |
|--|---------------------------------|------------|--------|
| <b>Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTI)</b> |                                 |            |        |
| TRC-D230625  | Delavirdine                     | 10 mg      | 100 mg |
| TRC-D230630  | Delavirdine, Mesylate           | 10 mg      | 100 mg |
| TRC-E425000  | Efavirenz                       | 10 mg      | 100 mg |
| TRC-E425005  | Efavirenz, enantiomer           | 2.5 mg     | 25 mg  |
| TRC-E425003  | Efavirenz-d5, racemic           | On request |        |
| TRC-H941820  | 7-Hydroxy Efavirenz, racemic    | 1 mg       | 10 mg  |
| TRC-H941822  | 7-Hydroxy Efavirenz-d4, racemic | 1 mg       | 10 mg  |
| TRC-H941825  | 8-Hydroxy Efavirenz, racemic    | 1 mg       | 10 mg  |
| TRC-H941827  | 8-Hydroxy Efavirenz-d4, racemic | 1 mg       | 10 mg  |

| Product code  | Description             | Unit 1 | Unit 2 |
|---|-------------------------|--------|--------|
| <b>Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTI) (continued...)</b> |                         |        |        |
| TRC-E937000   | Etravirine              | 5 mg   | 50 mg  |
| TRC-E937003   | Etravirine-d6           | 10 mg  |        |
| TRC-E937002   | Etravirine-13C3         | 1 mg   | 10 mg  |
| TRC-N391275   | Nevirapine              | 5 mg   | 50 mg  |
| TRC-N391277   | Nevirapine-d5           | 1 mg   | 10 mg  |
| TRC-N391278   | Nevirapine-d3           | 2.5 mg | 25 mg  |
| TRC-H948630   | 3-Hydroxy Nevirapine    | 1 mg   | 10 mg  |
| TRC-H948632   | 3-Hydroxy Nevirapine-d3 | 0.5 mg | 5 mg   |

| <b>Protease Inhibitors</b> |                                  |         |        |
|----------------------------|----------------------------------|---------|--------|
| TRC-A634400                | Amprenavir                       | 5 mg    | 50 mg  |
| TRC-A634402                | Amprenavir-d4                    | 1 mg    | 10 mg  |
| TRC-A790051                | Atazanavir                       | 5 mg    | 50 mg  |
| TRC-A790052                | Atazanavir-d5                    | 1 mg    | 10 mg  |
| TRC-D193500                | Darunavir                        | 5 mg    | 50 mg  |
| TRC-D193502                | Darunavir-d9                     | 1 mg    | 10 mg  |
| TRC-F727250                | Fosamprenavir Calcium Salt       | 1 mg    | 10 mg  |
| TRC-F727250                | Fosamprenavir-d4 Calcium Salt    | 1 mg    | 10 mg  |
| TRC-I525000                | Indinavir Sulfate                | 5 mg    | 50 mg  |
| TRC-I525002                | Indinavir-d6                     | 1 mg    | 10 mg  |
| TRC-L469480                | Lopinavir                        | 10 mg   | 100 mg |
| TRC-L469482                | Lopinavir-d8                     | 1 mg    | 10 mg  |
| TRC-N389750                | Nelfinavir, Mesylate             | 10 mg   | 100 mg |
| TRC-N389752                | Nelfinavir-d3                    | 1 mg    | 10 mg  |
| TRC-R535000                | Ritonavir                        | 10 mg   | 100 mg |
| TRC-R535003                | Ritonavir-13C3                   | 5 mg    | 5 mg   |
| TRC-R535002                | Ritonavir-d6                     | 5 mg    | 5 mg   |
| TRC-R701700                | Rupintrivir                      | 2.5 mg  | 25 mg  |
| TRC-R701702                | Rupintrivir-d4                   | 0.25 mg | 2.5 mg |
| TRC-S135000                | Saquinavir, Mesylate             | 10 mg   | 100 mg |
| TRC-S135002                | Saquinavir-d9                    | 1 mg    | 10 mg  |
| TRC-T444900                | Tipranavir                       | 1 mg    | 10 mg  |
| TRC-T444902                | Tipranavir-d4                    | 1 mg    | 10 mg  |
| TRC-T444910                | Tipranavir beta-D-Glucuronide    | 1 mg    | 10 mg  |
| TRC-T444912                | Tipranavir-d4 beta-D-Glucuronide | 5 mg    | 5 mg   |

| <b>Entry Inhibitors</b> |                     |        |       |
|-------------------------|---------------------|--------|-------|
| TRC-E555600             | Enfuvirtide Acetate | 100 mg |       |
| TRC-M193000             | Maraviroc           | 2.5 mg | 25 mg |
| TRC-M193002             | Maraviroc-d6        | 1 mg   | 10 mg |

| Product code                | Description                    | Unit 1 | Unit 2 |
|-----------------------------|--------------------------------|--------|--------|
| <b>Integrase Inhibitors</b> |                                |        |        |
| TRC-R100300                 | Raltegravir Potassium Salt     | 1 mg   | 10 mg  |
| TRC-R100302                 | Raltegravir-d3, Potassium Salt | 1 mg   | 10 mg  |
| TRC-R100310                 | Raltegravir beta-D-Glucuronide | 1 mg   | 10 mg  |

| <b>Others</b> |                              |        |        |
|---------------|------------------------------|--------|--------|
| TRC-P681000   | Podophyllotoxin              | 500 mg | 5 g    |
| LGCFOR0542.00 | Ribavirin                    | 10 mg  |        |
| TRC-R414477   | Ribavirin-13C5               | 1 mg   | 10 mg  |
| TRC-R517000   | Rimantadine Hydrochloride    | 10 mg  | 100 mg |
| TRC-R517002   | Rimantadine-d4 Hydrochloride | 1 mg   | 10 mg  |
| TRC-T412000   | Thymidine                    | 25 g   | 250 g  |
| TRC-T412002   | Thymidine, Methyl-d3         | 2.5 mg | 25 mg  |
| TRC-T412003   | Thymidine-13C,15N2           | 1 mg   | 10 mg  |
| TRC-Z148000   | Zanamivir                    | 1 mg   | 10 mg  |
| TRC-Z148002   | Zanamivir-d3                 | 5 mg   |        |

| <b>Internal standard solution</b> |  |      |  |
|-----------------------------------|--|------|--|
| REC-MS4012                        | Internal Standard for Antiretrovirals (2.5 mg/l Amprenavir-d4, Atazanavir-d5, Darunavir-d9, Efavirenz-d4, Etravirine-d8, Indinavir-d6, Lopinavir-d8, Maraviroc-d6, Nelfinavir-d3, Nevirapine-d5, Raltegravir-d3, Ritonavir-d6, Saquinavir-d6, Tipranavir-d4) | 2 ml |  |

## Matrix materials

| Product code  | Description                                     | Pack size      |
|---|---|----------------|
| <b>Serum calibrators lyophilised</b>  |   |                |
| <i>Amprenavir, Atazanavir, Darunavir, Delavirdine, Efavirenz, Etravirine, Indinavir, Lopinavir, Maraviroc, Nelfinavir, Nevirapine, Raltegravir, Ritonavir, Saquinavir, Tipranavir</i> |   |                |
| REC-MS4013  | Antiretrovirals ClinCal® Calibrator (Level 0-6) | 7 x 1 x 0.5 ml |

|   |  |                |
|---|--|----------------|
| <b>Serum controls lyophilised</b>   |  |                |
| <i>Amprenavir, Atazanavir, Darunavir, Delavirdine, Efavirenz, Etravirine, Indinavir, Lopinavir, Maraviroc, Nelfinavir, Nevirapine, Raltegravir, Ritonavir, Saquinavir, Tipranavir</i> |  |                |
| REC-MS4082  | Antiretrovirals ClinChek® Control (Bi-level) | 2 x 5 x 0.5 ml |

*Note: Please contact your local office for actual drug concentrations in the matrix materials as they may vary batch to batch.*

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