Before initiating HIV treatment, order:
- HIVQN / HIV-1 RNA Detection and Quantification, Plasma to determine baseline viral load
  OR
- HIRGT / HIV-1 RNA Quantification with Reflex to HIV-1 Genotypic Drug Resistance to Protease and Reverse Transcriptase Inhibitors, Plasma to determine baseline viral load and antiviral drug resistance profile

Patient on treatment-monitor every 3 months

Select 1 of the 2 following options

**HIV-1 RNA ≥500 copies/mL**

Very treatment-experienced patient

Consider phenotypic drug resistance tests:
- FPHIV / Phensense HIV Drug Resistance Replication Capacity (for HIV-1 RNA level ≥500 copies/mL)
- FPFUZ / Phensense Entry HIV Drug Resistance Assay (for HIV-1 RNA level ≥500 copies/mL)
- FFTRP / Trolife Co-Receptor Tropism Assay (for HIV-1 RNA level ≥1,000 copies/mL)
- FFTRO / Trolife DNA Co-Receptor Tropism Assay (for HIV-1 RNA level <1,000 copies/mL)

If patient is not responding to treatment (ie, viral load is not dropping as expected)

Relatively treatment-naive patient

HIV-1 RNA ≥500 copies/mL

Order HIVPR and HIFI to guide selection of drug combinations

If multiple resistance mutations are detected without obvious drug options

Alter treatment as necessary and monitor viral load every 3 months

Consider for certain patients*

- HIVPR / HIV-1 Genotypic Protease Inhibitor and Reverse Transcriptase Inhibitor Drug Resistance, Plasma (requires minimum HIV-1 RNA level of 500 copies/mL)
- If considering addition of integrase inhibitor therapy, also order HIFI / HIV-1 Genotypic Integrase Inhibitor Drug Resistance, Plasma (requires minimum HIV-1 RNA levels of 500 copies/mL) with or without HIFI

*For newly infected patients (infected within last 12 months) and pregnant women