HIV Treatment Recommendations

The following information comes from the most recent update (May 2018) of the federal guidelines on treating HIV infection: U.S. Department of Health and Human Services’ Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents. This resource often changes from year to year. For the full Guidelines, click here.

The basis for controlling HIV infection is to use several HIV medications together: two drugs from one class and one drug from another class. This will suppress HIV in two places along its life cycle. This usually means using two nucleoside reverse transcriptase inhibitors (NRTIs) along with one integrase inhibitor (INSTI) or one protease inhibitor (PI) or one non-nucleoside reverse transcriptase inhibitor (NNRTI).

Recommended Combinations for Most People with HIV Who are Starting Treatment

These regimens are drug combinations that maintain viral load suppression, are generally well tolerated, have fewer side effects and are all taken once a day. These regimens include one INSTI plus two NRTIs. Brand names are in upper case and generic names are in lower case.

- **Genvoya** (elvitegravir + cobicistat + tenofovir alafenamide + emtricitabine)
- **Isentress** (raltegravir) AND EITHER:
  - **Descovy** (tenofovir alafenamide + emtricitabine)
  - **Truvada** (tenofovir disoproxil + emtricitabine)
  - **Viread** (tenofovir disoproxil) + **Epivir** (lamivudine)
- **Stribild** (elvitegravir + cobicistat + tenofovir disoproxil + emtricitabine)
- **Tivicay** (dolutegravir) AND EITHER:
  - **Descovy** (tenofovir alafenamide + emtricitabine)
  - **Truvada** (tenofovir disoproxil + emtricitabine)
  - **Viread** (tenofovir disoproxil) + **Epivir** (lamivudine)
- **Triumeq** (dolutegravir + abacavir + lamivudine)
Recommended Combinations in Certain Situations

The following regimens are effective and tolerable, but have some disadvantages when compared to the regimens listed above. These can include: more pills and/or doses to take, higher risk of side effects and less supporting data from clinical studies. However, one of these may be preferred for some people.

INSTI-Based Regimens

- **Isentress** (raltegravir)\(^3\) AND **Ziagen** (abacavir)\(^1\) + **Emtriva** (emtricitabine)
- **Isentress** (raltegravir)\(^3\) AND **Ziagen** (abacavir)\(^1\) + **Epivir** (lamivudine)

NNRTI-Based Regimens

- **Atripla** (efavirenz + tenofovir disoproxil + emtricitabine)
- **Complera** (rilpivirine + tenofovir disoproxil + emtricitabine)\(^2\)
- **Odefsey** (rilpivirine + tenofovir alafenamide + emtricitabine)\(^2\)
- **Sustiva** (efavirenz) AND EITHER:
  - **Descovy** (tenofovir alafenamide + emtricitabine)
  - **Viread** (tenofovir disoproxil) + **Epivir** (lamivudine)

PI-Based Regimens

- **Evotaz** (atazanavir + cobicistat) AND EITHER:
  - **Descovy** (tenofovir alafenamide + emtricitabine)
  - **Truvada** (tenofovir disoproxil + emtricitabine), or **Viread** (tenofovir disoproxil) + **Emtriva** (emtricitabine)
  - **Viread** (tenofovir disoproxil) + **Epivir** (lamivudine)
  - **Epzicom** (abacavir\(^1\) + lamivudine), or **Ziagen** (abacavir)\(^1\) + **Epivir** (lamivudine)\(^3\)
- **Prezcobix** (darunavir + cobicistat) AND EITHER:
  - **Descovy** (tenofovir alafenamide + emtricitabine)
  - **Truvada** (tenofovir disoproxil + emtricitabine), or **Viread** (tenofovir disoproxil) + **Emtriva** (emtricitabine)
- **Viread** (tenofovir disoproxil) + **Epivir** (lamivudine)

- **Epzicom** (abacavir + lamivudine), or **Ziagen** (abacavir) + **Epivir** (lamivudine)

- **Prezista** (darunavir) PLUS low-dose **Norvir** (ritonavir) AND EITHER:
  - **Descovy** (tenofovir alafenamide + emtricitabine)
  - **Truvada** (tenofovir disoproxil + emtricitabine), or **Viread** (tenofovir disoproxil) + **Emtriva** (emtricitabine)
  - **Viread** (tenofovir disoproxil) + **Epivir** (lamivudine)

- **Epzicom** (abacavir + lamivudine), or **Ziagen** (abacavir) + **Epivir** (lamivudine)

- **Reyataz** (atazanavir) PLUS low-dose **Norvir** (ritonavir) AND EITHER:
  - **Descovy** (tenofovir alafenamide + emtricitabine)
  - **Truvada** (tenofovir disoproxil + emtricitabine), or **Viread** (tenofovir disoproxil) + **Emtriva** (emtricitabine)
  - **Viread** (tenofovir disoproxil) + **Epivir** (lamivudine)

  - **Epzicom** (abacavir + lamivudine), or **Ziagen** (abacavir) + **Epivir** (lamivudine)

Regimens to consider when the NRTIs abacavir or tenofovir cannot be used:

- **Prezista** (darunavir) + low-dose **Norvir** (ritonavir) AND **Isentress** (raltegravir)

- **Kaletra** (lopinavir/ritonavir) AND **Epivir** (lamivudine) or **Emtriva** (emtricitabine)

Important notes:

1. Should only be used by people who test negative for HLA-B*5701, a genetic mutation that greatly increases the risk of a serious allergic reaction.

2. Should only be used if pre-treatment viral load is below 100,000 copies/mL and CD4 count is higher than 200 cells/mm3.

3. Should only be used if pre-treatment viral load is below 100,000 copies/mL.

4. Can be dosed once a day or twice a day.

Some of the drugs listed above are available as generics. Abacavir and lamivudine—originally marketed as Epzicom—are now available as a generic combination. Generic lamivudine can also be used in place of emtricitabine (which is not available as a generic). This may mean taking more
pills, but the regimen should be no less effective.

With respect to tenofovir alafenamide (TAF) and tenofovir disoproxil (TDF), both are approved by the FDA. TAF has fewer bone and kidney toxicities than TDF. TDF is associated with lower lipid levels. Safety, cost and access should be considered when choosing between these drugs.

While the DHHS Guidelines can seem a bit overwhelming, the experts responsible for writing this document stress a very important point: selecting a regimen should be based on an HIV-positive person’s individual needs. In other words, an HIV-positive person may have specific needs such as these:

- effectiveness (perhaps against drug-resistant virus)
- dosing (number of pills and number of times each day pills are taken)
- side effects (people may be more sensitive to some than others)
- drug interactions (some HIV drugs are difficult to combine with other medications that HIV-positive people take)
- other infections or illnesses (people with hepatitis B or hepatitis C may need to be treated with certain HIV drugs very carefully)

The DHHS also recommends the use of drug resistance testing to help figure out which HIV meds should be used as first-time treatment. This is because some people are infected with drug-resistant strains of HIV that may limit certain treatment options, even in people starting treatment for the first time.

To learn more about HIV drug resistance and drug resistance testing, click here.

Above all, it is important that you take the correct dose of your medications every time you’re supposed to take them. This includes some of the following:

- Can you take them with or without food?
- What should you do if the pills are too large to swallow?
- How do you take them with other medications, such as antacids?
- Can you take them with herbal supplements? (For example, St. Johns Wort is not recommended to be taken with HIV medications.)

Discuss these issues with your health care provider or pharmacist. This is called treatment adherence—taking your medications correctly to help keep you healthy. To learn more about
treatment adherence, click here.