Know Your Lab Tests

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Having HIV means monitoring your health regularly. You'll have blood drawn every three to six months to see how well you are responding to HIV treatment, as well as how good your overall health looks. Here are some of the lab tests you'll become familiar with:

CD4 Cell Count
CD4s are immune system white blood cells (also called T cells) that fight invaders in your body. They are also the cells that HIV targets and destroys. A normal CD4 count ranges between 500 and 1,500 cells per cubic milliliter of blood, but as untreated HIV disease progresses, CD4s drop to as low as zero. Below 200, you're at an increased risk of an AIDS-related infection or cancer, like Kaposi's sarcoma or non-Hodgkin's lymphoma. The U.S. government currently recommends beginning treatment when CD4s fall below 350, though this number might be increased because of the higher risk of certain diseases in HIV-positive people with CD4s between 350 and 500.

Viral Load (VL)
This test checks the amount of HIV in your blood and is often used to make sure that treatment is working. An "undetectable" result—generally, a VL below 50 copies of virus per cubic milliliter of blood—indicates that therapy is doing what it should be. "I expect all of my patients to be undetectable if they are taking their meds properly," Richard Loftus, MD, says. A VL that fails to go undetectable while on treatment, or becomes detectable again, he adds, could mean that treatment has stopped working effectively. "Then we need to do something about it."

Complete Blood Count (CBC)
A CBC measures the major blood cells, notably red blood cells, white blood cells and platelets. Monitoring your CBC is important, as it can help you and your health care provider determine the cause of possible fatigue, weakness, infection, bruising or bleeding. HIV infection, other diseases and ARVs used to treat the virus can all cause CBC abnormalities.

Blood Lipids
This one measures the fats in your blood (lipids), including cholesterol and triglycerides. Some HIV meds can raise blood fats, and high lipids can be a signal of increased heart-disease risk.

Blood Sugar
High blood sugar (also called glucose) can be a sign of insulin resistance, which can turn into

diabetes. Some HIV meds can put you at greater risk of diabetes.

Liver and Kidney Function
These tests show how well these two organs are working. Your liver processes everything you take in, and some HIV meds can cause liver toxicity and kidney problems. Liver tests are especially important if you also have hepatitis B or C.

Drug-Resistance Tests
Soon after you're diagnosed, your doctor may want to test your virus to see whether it is resistant to any of the available ARVs—this can help guide your treatment when you're ready to start. These tests are also useful for people whose VL suggests that their treatment is not working correctly.

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