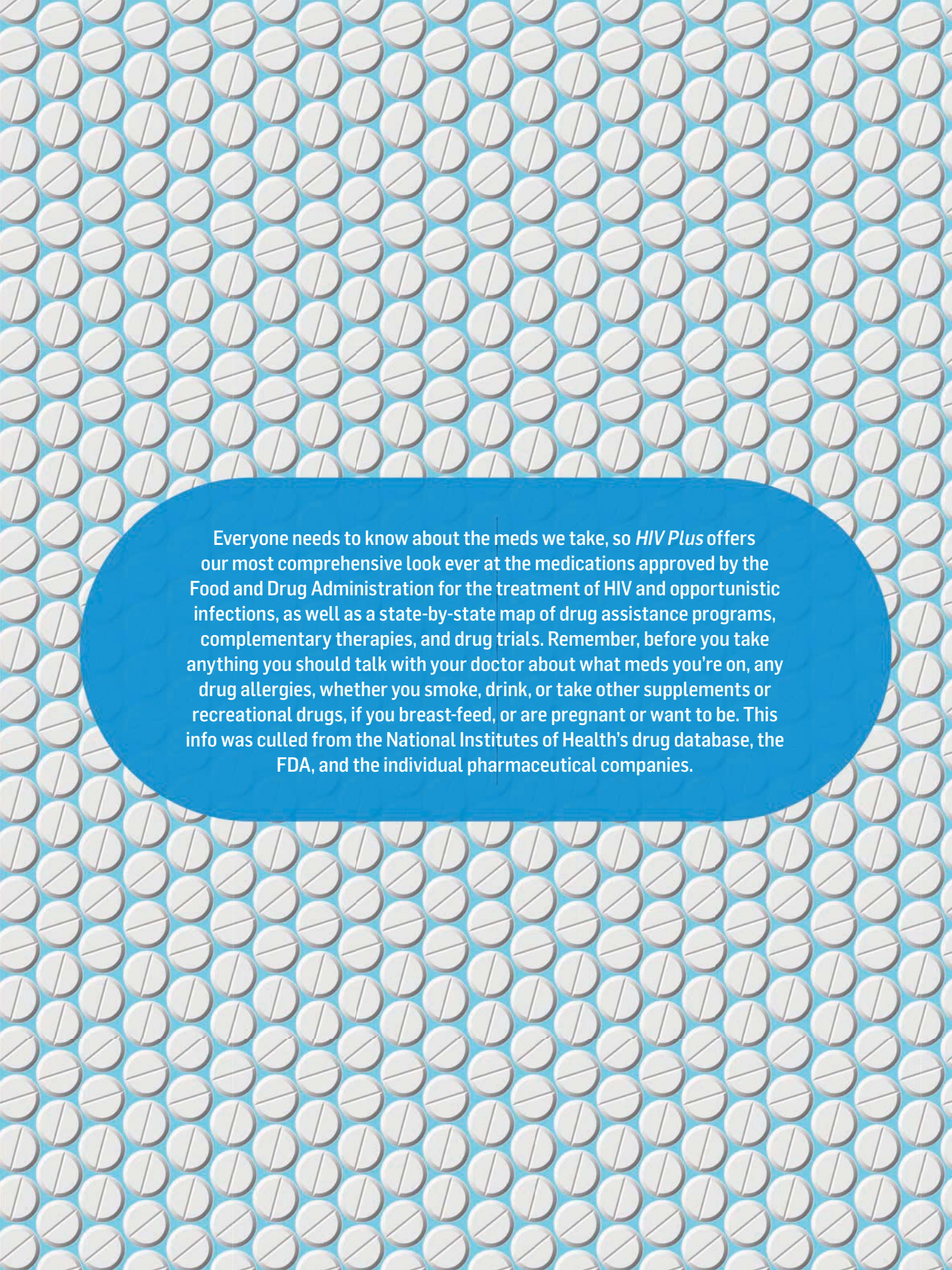




**2013**  
**COMPLETE**  
**HIV**  
**TREATMENT**  
**GUIDE**

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Everyone needs to know about the meds we take, so *HIV Plus* offers our most comprehensive look ever at the medications approved by the Food and Drug Administration for the treatment of HIV and opportunistic infections, as well as a state-by-state map of drug assistance programs, complementary therapies, and drug trials. Remember, before you take anything you should talk with your doctor about what meds you're on, any drug allergies, whether you smoke, drink, or take other supplements or recreational drugs, if you breast-feed, or are pregnant or want to be. This info was culled from the National Institutes of Health's drug database, the FDA, and the individual pharmaceutical companies.

PROTEASE INHIBITORS HELP PREVENT REPLICATION OF HIV

<b>MEDICATION</b> <i>Generic Name</i> Maker	<b>TRADITIONAL DOSAGE</b>	<b>DRUG INTERACTIONS, PRECAUTIONS, &amp; RECOMMENDATIONS</b>	<b>SIDE EFFECTS</b>
<p><b>PREZISTA</b> <i>darunavir</i></p> <p>Janssen</p> 	<p>Two 400-mg capsules or one 800-mg tablet with one 100-mg Norvir capsule, once daily, with food</p>	<p>Drugs in this class attack protease, which HIV needs to reproduce. Do not take Prezista with UroXatral, Victrelis, D.H.E. 45, Emborex, Migranal, Cafergot, Ergomar, methylergonovine, Propulsid, Orap, oral midazolam, Halcion, Saint-John's-wort, Mevacor, Altoprev, Advicor, Zocor, Simcor, Vytorin, Rifadin, Rifater, Rifamate, Rimactane, Revatio when used to treat pulmonary arterial hypertension, Crixivan, Kaletra, Invirase, or Incivek. Use with caution if taking Viagra, Revatio, Levitra, Staxyn, Cialis, Adcirca, Lipitor, Crestor, Pravachol, Colcrys, or Col-Probenecid, Coartem, or Riamet. May reduce birth control pills' efficacy; take other precautions.</p>	<p><b>Most serious:</b> severe liver disease, severe rash, high blood sugar or diabetes, changes in body fat or immune system <b>Other:</b> diarrhea, nausea, mild rash, headache, stomach pain, vomiting</p>
<p><b>REYATAZ</b> <i>atazanavir</i></p> <p>Bristol-Myers Squibb</p> 	<p>300 mg, in capsule form, taken with 100 mg of Norvir, once daily, with food. For adults unable to tolerate Norvir, 400 mg of Reyataz with food is recommended. Take at the same time every day</p>	<p>Do not take with Versed, Halcion, Cafergot, Migranal, D.H.E. 45, Methergine, other ergot medicines, or Orap, Camptosar, Crixivan, Mevacor, Zocor, UroXatral, Revatio, Rimactane, Rifadin, Rifater, Rifamate, Saint-John's-wort, Viramune, Diskus, or Advair. Do not take Vfend or Victrelis if you are taking Reyataz and Norvir, and do not take Tegretol with Reyataz alone. If you are taking Videx, Videx EC, or antacids, take Reyataz two hours before or one hour after those medicines. Use with caution if taking drugs for indigestion, heartburn, or ulcers.</p>	<p><b>Most serious:</b> severe rash, yellowing of skin or eyes, heart rhythm change, diabetes, kidney stones, changes in body fat, changes in immune system, worsening liver disease, increased bleeding problems, gallbladder disorders <b>Other:</b> nausea, headache, stomach pain, vomiting, diarrhea, depression, fever, dizziness, trouble sleeping, muscle pain, numbness, tingling, or burning of hands or feet</p>
<p><b>APTIVUS</b> <i>tipranavir</i></p> <p>Boehringer Ingelheim</p> 	<p>500 mg (two 250-mg capsules or 5 milliliters of oral solution) with 200 mg (two 100-mg capsules/tablets or 2.5 milliliters of solution) of Norvir, twice daily. Capsules or solution may be taken with or without meals; tablets must be taken with meals</p>	<p>For treatment-experienced patients only. Take with at least two other anti-HIV drugs, but do not use with other protease inhibitors. Use with caution if taking certain antiseizure medications. Use with caution if you have hemophilia or other conditions that increase the chance of bleeding, or liver disorders.</p>	<p><b>Most serious:</b> severe or fatal liver disease, severe bleeding in the brain, new or worsened diabetes <b>Other:</b> diarrhea, nausea, fever, vomiting, tiredness, headache, and stomach pain</p>
<p><b>CRIXIVAN</b> <i>indinavir</i></p> <p>Merck</p> 	<p>800 mg, taken every eight hours, with water or another beverage, without food (one hour before or two hours after a meal) or with a light meal</p>	<p>Do not take with oral Versed, Propulsid, Zocor, Mevacor, Orap, Cordarone, Hismanal, Halcion, Xanax, Revatio, UroXatral, Rifadin, Rimactane, Rifamate, Rifater, Saint-John's-wort, Wigraine, Cafergot, D.H.E. 45, Migranal, Ergotrate, Methergine, or Reyataz. Use with caution with Viagra, Cialis, Levitra, Lipitor, and Crestor. Drink plenty of fluids and do not take the drug with meals that are high in calories, fat, and protein.</p>	<p><b>Most serious:</b> Liver failure, kidney stones, changes in body fat, diabetes, anemia, severe pain, muscle weakness <b>Other:</b> abdominal pain, fatigue or weakness, low red blood cell count, flank pain, painful urination, feeling unwell, nausea, upset stomach, diarrhea, vomiting, acid regurgitation, increased or decreased appetite, back pain, headache, dizziness, taste changes, rash, itchy skin, yellowing of the skin and/or eyes, upper respiratory infection, dry skin, sore throat</p>




## PROTEASE INHIBITORS HELP PREVENT REPLICATION OF HIV

<b>MEDICATION</b> <i>Generic Name</i> <i>Maker</i>	<b>TRADITIONAL DOSAGE</b>	<b>DRUG INTERACTIONS, PRECAUTIONS, &amp; RECOMMENDATIONS</b>	<b>SIDE EFFECTS</b>
<p><b>INVIRASE</b> <i>saquinavir mesylate</i></p> <p><b>Hoffmann-La Roche</b></p> 	<p>1,000 mg (five 200-mg capsules or two 500-mg tablets), in combination with 100 mg of Norvir, twice daily, at least two hours after a meal</p>	<p>Do not use with UroXatral, Cordarone, Vascor, Tikosyn, Tambocor, intravenous lidocaine, Rythmol, Quinidine, Propulsid, ergot medications such as Parlodel, Migranal, Ergonovine, Bellamine, Cafergot, Ergomar, Methergine, or Permax, oral Versed, Orap, Rifadin, Revatio when used to treat pulmonary hypertension, Mevacor, Advicor, Zocor, Juvisync, Simcor, Vytorin, Desyrel, Oleptro, or Halcion. Use with caution with Reyataz, Crixivan, Kaletra, Viracept, Aptivus, Rescriptor, Viramune, Lipitor, Crestor, Viagra, Levitra, Cialis, Adcirca, Saint-John's-wort, garlic capsules, hormonal contraceptives, certain calcium channel blockers, certain antibiotics and antifungal medicines, some antipsychotics or antidepressants, and proton pump inhibitors. Do not use if you have severe liver problems, low potassium or low magnesium in your blood, Congenital Long QT Syndrome, or complete atrioventricular block. Use with caution if you have other heart or liver problems, hemophilia, or diabetes.</p>	<p><b>Most serious:</b> worsening of liver problems, increased bleeding with hemophilia, diabetes or high blood sugar, elevated cholesterol or triglycerides, changes in body fat, immune system, or heart rhythm <b>Other:</b> Nausea, vomiting, diarrhea, fatigue, abdominal pain</p>
<p><b>KALETRA</b> <i>lopinavir and ritonavir</i></p> <p><b>Abbott Laboratories</b></p> 	<p>800 mg, typically four tablets, once daily, or 400 mg, typically two tablets, twice daily. Swallow tablets whole; do not chew, break, or crush. An oral solution is available but should be taken with food</p>	<p>Do not take with Halcion, midazolam oral syrup, certain steroids, Incivek, Orap, Mevacor, Zocor, Rimactane, Rifadin, Rifater, Rifamate, Revatio when used to treat pulmonary arterial hypertension, Stendra, UroXatral, Victrelis, Xarelto, Saint-John's-wort, ergot-containing medicines, including ergotamine (Cafergot and others), dihydroergotamine (D.H.E. 45 and others), ergonovine (Ergotrate), and methylergonovine (Methergine). Use with caution with Viagra, Cialis, Levitra, Adcirca, birth control pills or contraceptive patches containing estrogen, Tasigna, Sprycel, Lipitor, Crestor, Atripla, Sustiva, Viramune, Agenerase, Lexiva, Viracept, Dilantin, Tegretol, Mycobutin, Flonase, Serevent, Advair, Colcrys, Tracleer, Duragesic, Ionsys, Fentora, and methadone.</p>	<p><b>Most serious:</b> changes in heart rhythm, severe liver problems, pancreatitis, changes in immune system, changes in body fat, new or worsened diabetes, elevated triglyceride or cholesterol levels <b>Other:</b> diarrhea, nausea, stomach pain, vomiting, weakness, headache</p>
<p><b>LEXIVA</b> <i>fosamprenavir</i></p> <p><b>ViiV Healthcare</b></p> 	<p>For those used to protease inhibitors, 700 mg plus a 100-mg capsule of Norvir, twice daily. For those new to therapy, 1,400 mg of Lexiva twice daily, sometimes paired with Norvir, depending on the patient. Lexiva is available in tablets or oral solution; tablets can be taken with or without food, oral solution without food. Reduced dosage recommended for patients with liver impairment</p>	<p>Do not take with Rescriptor, UroXatral, Rifadin, Rimactane, Saint-John's-wort, certain arrhythmia medications, ergot-based medications, Propulsid, Zocor, Mevacor, Orap, Revatio when used to treat pulmonary arterial hypertension, Versed, or Halcion. If you take oral contraceptives, consider alternative birth control methods. Do not take with Viramune unless also taking Norvir. Use with caution with H2 blockers and calcium channel blockers. Do not use if you have Stevens-Johnson syndrome or if you take drugs that use the enzyme CYP3A4 to metabolize.</p>	<p><b>Most serious:</b> severe skin reactions including Stevens-Johnson syndrome, new or worsened diabetes, redistribution of body fat, elevated cholesterol, anemia, spontaneous bleeding, kidney stones <b>Other:</b> diarrhea, rash, nausea, vomiting, headache</p>

**PROTEASE INHIBITORS HELP PREVENT REPLICATION OF HIV**


<b>MEDICATION</b> <i>Generic Name</i> Maker	<b>TRADITIONAL DOSAGE</b>	<b>DRUG INTERACTIONS, PRECAUTIONS, &amp; RECOMMENDATIONS</b>	<b>SIDE EFFECTS</b>
<p><b>NORVIR</b> <i>ritonavir</i></p> <p>Abbott Laboratories</p> 	<p>600 mg (six 100-mg tablets), twice daily, with a meal. Swallow tablets whole with water; do not chew, break, or crush. Also available in capsules or oral solution. Reduced dosage recommended for people taking other protease inhibitors</p>	<p>Do not take with Xatral, Cordarone, Tambocor, Vasacor, Rythmol, Fucidin, Hismanal, Seldane, Orap, Propulsid, Cafergot, Migranal, D.H.E. 45, Ergotrate, Maleate, Vfend, Mevacor, Zocor, Halcion, Versed, Advair, Serevent, Levitra, Revatio if used for pulmonary arterial hypertension, Saint-John's-wort. Do not take with both Invirase and any version of rifampin (Rimactane, Rifadin, Rifater, or Rifamate), and use with caution with either of those drugs separately. Use with caution with Lipitor, Crestor, Viagra, Levitra, Cialis, Adcirca, Tracleer, Rapamune, Flonase, Agenerase, Crixivan, Viracept, Videx, Mycobutin, Aptivus, Rescriptor, Reyataz, Celsentrin, Telzir, Prezista, Tiazac, Adalat, Isoptin, Nizoral, Sporanox, Demerol, Tegretol, Dilantin, phenobarbital, Mycobutin, Biaxin, Duragesic, theophylline, Colcrys used for treatment of gout, certain anticancer medications, certain antidepressants. Use with caution if you have other liver problems or diabetes.</p>	<p><b>Most serious:</b> worsening of liver disease, pancreatitis, diabetes or high blood sugar, elevated cholesterol or triglycerides, changes in body fat, increased bleeding among hemophiliacs, severe skin reactions <b>Other:</b> rash, abdominal pain, diarrhea, feeling weak or tired, headache, nausea, vomiting, changes in taste, loss of appetite, dizziness, tingling feeling or numbness in hands, in feet, or around the lips</p>
<p><b>VIRACEPT</b> <i>zidovudine</i></p> <p>ViiV Healthcare</p> 	<p>1,250 mg (five 250-mg tablets or two 625-mg tablets), twice daily, or 750 milligrams (three 250-mg tablets) three times daily. Each dose should be taken with a meal. An oral powder is also available</p>	<p>Do not take with Cordarone, Orap, Quinidine, Quinaglute, Cardioquin, Quinidex, D.H.E. 45 Injection, Ergomar, Migranal, Wigraine, Cafergot, Methergine, Halcion, Versed, Revatio if used for pulmonary arterial hypertension, UroXatral, Prilosec, Rimactane, Rifadin, Rifater, Rifamate, Saint-John's-wort, Mevacor, Zocor, or Serevent. Use with caution with Lipitor, Crestor, Pravachol, Lescol, Viagra, Levitra, Cialis, Adcirca, or Tracleer. If also taking Videx, take Viracept with food one hour after or more than two hours before you take Videx. May reduce effectiveness of birth control pills, so use additional or alternative form of contraception. Doses of Crixivan, Norvir, Invirase, Fortovase, Mycobutin or Dilantin may need to be adjusted. Rescriptor may lower the amount of Viracept in the blood or vice versa. Do not take if you have moderate to severe liver impairment.</p>	<p><b>Most serious:</b> diabetes and high blood sugar, high blood pressure, changes in body fat, changes in immune system <b>Other:</b> diarrhea, nausea, rash</p>

**ENTRY AND FUSION INHIBITORS HELP BLOCK HIV FROM ENTERING T CELLS**


<b>MEDICATION</b> <i>Generic Name</i> Maker	<b>TRADITIONAL DOSAGE</b>	<b>WHAT IT DOES</b>	<b>DRUG INTERACTIONS, PRECAUTIONS, &amp; RECOMMENDATIONS</b>	<b>SIDE EFFECTS</b>
<p><b>SELZENTRY</b> <i>maraviroc</i></p> <p>ViiV Healthcare</p> 	<p>300 mg twice daily, or 150 mg twice daily if given with potent CYP3A inhibitors, or 600 mg twice daily if given with potent CYP3A inducers</p>	<p>This is yet another mechanism of inhibiting viral replication. Always taken with other anti-HIV medications.</p>	<p>Do not take Saint-John's-wort, as it can lower the amount of Selzentry in the blood. Some other medications may also affect the amount of Selzentry in the blood. Tell your doctor if you have a history of hepatitis B or C, have heart or kidney problems, or if you have low blood pressure or take medication to lower it.</p>	<p><b>Most serious:</b> heart or liver disorders, lowered blood pressure when standing up, possible increased risk of cancer and other infections, changes in the immune system, severe rash or allergic reaction leading to hepatotoxicity <b>Other:</b> cough, fever, dizziness, headache, lowered blood pressure, nausea, bladder irritation, upper respiratory infection</p>







## ENTRY AND FUSION INHIBITORS HELP BLOCK HIV FROM ENTERING T CELLS

MEDICATION		DRUG INTERACTIONS, PRECAUTIONS, & RECOMMENDATIONS		
Generic Name Maker	TRADITIONAL DOSAGE	WHAT IT DOES	SIDE EFFECTS	
<b>FUZEON</b> <i>enfuvirtide</i>  Roche Laboratories (brand name) Trimeris (generic)  	Injection of 90 mg in the upper arm, upper leg, or stomach twice daily	This is another mechanism of inhibiting viral replication. Always taken with other anti-HIV medications.	Some people use the Biojector 2000, a needle-free device, to administer Fuzeon, but in some it causes nerve pain, tingling, bruising, and collection of blood under the skin.	<b>Most serious:</b> injection-site infections or reactions such as itching, swelling, redness, pain or tenderness, hardened skin, bumps at the site of injection; allergic reactions—also, patients taking Fuzeon may develop bacterial pneumonia more often than others, although it is unclear if the drug is the cause <b>Other:</b> pain and numbness in feet or legs, loss of sleep, depression, decreased appetite, sinus problems, enlarged lymph nodes, weight decrease, weakness or loss of strength, muscle pain, constipation, and pancreas problems

## INTEGRASE INHIBITORS HELP BLOCK AN HIV-ENABLING ENZYME





<b>ISENTRISS</b> <i>raltegravir</i>  Merck  	One 400-mg tablet, twice daily	Blocks integrase, an enzyme HIV needs to reproduce itself. Always taken with other anti-HIV medications.	Tell your doctor if you take the tuberculosis medication rifampin or if you have liver problems or phenylketonuria. If you miss a dose, skip the missed dose and go back to your regular schedule. Do not double your next dose.	<b>Most serious:</b> severe skin reactions and allergic reactions, liver problems, changes in your immune system <b>Other:</b> headache, trouble sleeping, nausea, tiredness; less common side effects include weakness, stomach pain, dizziness, depression, and suicidal thoughts and actions
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**NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS (NRTI)**  
**HELP PREVENT REPLICATION OF HIV**

<b>MEDICATION</b> <i>Generic Name</i> <i>Maker</i>	<b>TRADITIONAL DOSAGE</b>	<b>DRUG INTERACTIONS, PRECAUTIONS, &amp; RECOMMENDATIONS</b>	<b>SIDE EFFECTS</b>
<p><b>TRUVADA</b>  <i>emtricitabine and tenofovir disoproxil fumarate</i>                      Gilead Sciences</p> 	<p>One tablet, containing 200 mg of emtricitabine and 300 mg of tenofovir disoproxil fumarate, once daily</p>	<p>Truvada contains two NRTIs, which act on reverse transcriptase, a substance HIV needs for replication. Do not take Truvada if you take Atripla, Combivir, Emtriva, Epivir or Epivir-HBV, Epzicom, Trizivir, or Viread, which have the same or similar active ingredients. You may need to adjust dosage if also taking Videx, Reyataz, or Kaletra. Do not take with Hepsera. If you have had kidney problems or take other drugs that can cause kidney problems, your doctor should do regular blood tests to check your kidneys. In 2012, the FDA approved Truvada for use in HIV prevention among HIV-negative people who are at high risk of acquiring the virus. The FDA's updated labeling on the drug notes that persons using the drug preventatively need to be confirmed as HIV-negative every three months and use the drug as prescribed, in combination with safer-sex practices and counseling.</p>	<p><b>Most serious:</b> buildup of lactic acid in the blood, serious liver problems, flare-ups of hepatitis B virus infection, kidney problems, thinning bones, changes in body fat, symptoms of inflammation from previous infections <b>Other:</b> diarrhea, dizziness, nausea, vomiting, headache, fatigue, abnormal dreams, sleeping problems, rash, depression, shortness of breath, pain, fatty liver, stomach pain, weakness, indigestion, intestinal gas, high volume of urine, excessive thirst, skin discoloration. In patients using Truvada for prevention, the most common side effects have been headache, abdominal pain, and weight loss.</p>
<p><b>COMBIVIR</b>  <i>lamivudine and zidovudine</i>                      ViiV Healthcare (Brand name)                      Teva Pharmaceuticals (Generic)</p> 	<p>One tablet, containing 150 mg of lamivudine and 300 mg zidovudine (both NRTIs), twice daily</p>	<p>Do not take with other medicines containing lamivudine, zidovudine, or emtricitabine (such as Epivir, Epivir-HBV, Retrovir, Epzicom, Trizivir, Atripla, Emtriva, and Truvada). Use caution with if taking interferon alfa, ribavirin, doxorubicin, or ganciclovir. Tell your doctor if you've previously had any kidney or liver problems (such as hepatitis or cirrhosis), pancreatitis, or low red/white blood cell counts.</p>	<p><b>Most serious:</b> low white and red blood cell counts, serious allergic reactions, buildup of lactic acid in the blood, liver toxicity or worsening of liver disease, pancreatitis, muscle disorders and inflammation, changes in body fat, changes in the immune system <b>Other:</b> headache, nausea, fatigue, diarrhea, cough, stuffy nose, general feeling of discomfort</p>
<p><b>EMTRIVA</b>  <i>emtricitabine</i>                      Gilead Sciences</p> 	<p>One 200-mg capsule or 240 mg of oral solution, once daily</p>	<p>Do not use with other drugs containing emtricitabine, such as Atripla, Complera, Truvada, or Stribild.</p>	<p><b>Most serious:</b> buildup of lactic acid in the blood, liver problems including flare-up of hepatitis B after discontinuation <b>Other:</b> headache, diarrhea, nausea, fatigue, dizziness, depression, insomnia, abnormal dreams, rash, abdominal pain, asthenia, increased cough, rhinitis</p>
<p><b>EPIVIR</b>  <i>lamivudine or 3TC</i>                      ViiV Healthcare</p> 	<p>300 mg daily, in one or two doses, in tablets or oral solution</p>	<p>Do not take with Emtriva, Combivir, Epzicom, Trizivir, Atripla, Truvada, Stribild, or Complera. Epivir is not recommended for use in combination with zalcitabine. If you have hepatitis C, there is a chance of severe liver decomposition if you are taking combination antiretroviral therapy and interferon alfa drugs for hep C.</p>	<p><b>Most serious:</b> buildup of lactic acid in the blood, severe liver problems, changes in the immune system, changes in body fat <b>Other:</b> headache, nausea, malaise and fatigue, nasal problems, diarrhea, and cough</p>






## NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS (NRTI) HELP PREVENT REPLICATION OF HIV

<b>MEDICATION</b> <i>Generic Name</i> <i>Maker</i>	<b>TRADITIONAL DOSAGE</b>	<b>DRUG INTERACTIONS, PRECAUTIONS, &amp; RECOMMENDATIONS</b>	<b>SIDE EFFECTS</b>
<p><b>EPZICOM</b> <i>abacavir sulfate and lamivudine</i></p> <p>ViiV Healthcare</p> 	<p>One tablet, containing 600 mg of abacavir sulfate and 300 mg of lamivudine (both NRTIs), once daily</p>	<p>Do not take if you have kidney problems or are prone to heart disease. Use with caution if you already take Atripla, Combivir, Emtriva, Epivir, Trizivir, Truvada, Ziagen, methadone, or medicines used to treat hepatitis. If you have hepatitis B, do not run out of Epzicom or stop taking it without talking to your health care provider. Your provider should monitor your health and do regular blood tests to check your liver if you stop taking Epzicom. Do not take if you have moderate to severe liver problems.</p>	<p><b>Most serious:</b> severe allergic reactions, buildup of acid in the blood, liver problems <b>Other:</b> insomnia, depression, headache, tiredness, dizziness, nausea, diarrhea, rash, and fever</p>
<p><b>RETROVIR</b> <i>zidovudine or AZT</i></p> <p>ViiV Healthcare; generic versions also available</p> 	<p>600 mg a day, taken in divided doses, in tablets, capsule, or syrup. Can also be given as an intravenous infusion, one mg per kilogram of body weight, over one hour, five or six times daily</p>	<p>Do not take with other medicines that contain the same active ingredients, including Combivir and Trizivir. Not recommended for use with the antihepatitis drugs Copegus, Rebetol, RibaTab, or Ribasphere. Use with caution if taking ganciclovir or interferon alfa. Do not use Retrovir with stavudine or doxorubicin. Retrovir can also be used to prevent transmission of HIV from a mother to her unborn child.</p>	<p><b>Most serious:</b> neutropenia and anemia (low white and red blood cell counts), myopathy and myositis (muscle disorders and inflammation), buildup of lactic acid in the blood, severe liver problems, changes in the immune system, changes in body fat <b>Other:</b> headache, malaise, nausea, anorexia, and vomiting</p>
<p><b>TRIZIVIR</b> <i>abacavir sulfate, lamivudine, and zidovudine</i></p> <p>ViiV Healthcare</p> 	<p>One tablet (300 mg of abacavir sulfate, 150 mg of lamivudine, and 300 mg of zidovudine, all NRTIs), twice daily</p>	<p>Do not take if you have certain liver problems or weigh less than 90 pounds. Take with caution if you have a particular gene variation called HLA-B*5701, hepatitis B, kidney or heart problems, low blood cell counts, high blood pressure, high cholesterol, or diabetes. Use with caution if you take Bactrim, Septra, Cytovene, DHPG, interferon-alfa, Adriamycin, Copegys, Rebetol, Virazole, bone marrow suppressive medicines or cytotoxic medicines, Atripla, Combivir, Complera, Emtriva, Epivir or Epivir-HBV, Epzicom, Retrovir, Truvada, Zerit, or Ziagen.</p>	<p><b>Most serious:</b> severe or fatal allergic reactions, heart attack, buildup of lactic acid in the blood, liver disorders, blood problems, muscle weakness, changes in body fat, changes in immune system <b>Other:</b> nausea, vomiting, headache, weakness or tiredness, diarrhea, fever and/or chills, depression, muscle and joint pain, skin rashes, cold symptoms, nervousness, and ear, nose, and throat infections</p>
<p><b>VIDEX EC</b> <i>didanosine</i></p> <p>Bristol-Myers Squibb</p> 	<p>Depends on weight. For individuals weighing 132 pounds or more, the recommended dose is 400 mg in enteric-coated capsules, once daily. For adults weighing less than 132 pounds, the recommended dose is 250 mg, once daily. Take the drug on an empty stomach, and swallow the capsules whole; do not chew, break, crush, or dissolve. A powder form to be mixed with water is available for children</p>	<p>Do not take if you take Lopurin or Zylprim, which are used to treat gout and kidney stones, or the antihepatitis drugs Copegus, Rebetol, Riba-Tab, or Ribasphere. Use with caution if taking methadone or ganciclovir, or any drugs that may cause toxicity to the pancreas or nervous system. If you are also taking Viread, the dose of Videx EC should be reduced, and it should be taken on an empty stomach or with a light meal.</p>	<p><b>Most serious:</b> pancreatitis, buildup of lactic acid in the blood, liver disorders, vision problems, changes in immune system, changes in body fat, peripheral neuropathy <b>Other:</b> diarrhea, nausea, vomiting, headache, stomach pain, skin rash</p>






**NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS (NRTI)**  
**HELP PREVENT REPLICATION OF HIV**

<b>MEDICATION</b> <i>Generic Name</i> <i>Maker</i>	<b>TRADITIONAL DOSAGE</b>	<b>DRUG INTERACTIONS, PRECAUTIONS, &amp; RECOMMENDATIONS</b>	<b>SIDE EFFECTS</b>
<p><b>VIREAD</b>  <i>tenofovir disoproxil fumarate</i>                      Gilead Sciences</p> 	<p>One 300-mg tablet, once daily. Adults who are unable to swallow tablets whole may take 7½ scoops of Viread oral powder. Patients with kidney problems may be prescribed a lower dose</p>	<p>Do not take Viread if you are taking other medicines that contain tenofovir (Atripla, Complera, Truvada, or Stribild) or adefovir (Hepsera). Dosages may need to be changed if you are taking Videx EC, Reyataz, or Kaletra.</p> <p>Viread is also used to treat hepatitis B.</p>	<p><b>Most serious:</b> buildup of lactic acid in the blood, severe liver problems, changes in body fat, changes in the immune system, bone pain, softening, or thinning <b>Other:</b> nausea, rash, diarrhea, headache, pain, depression, weakness</p>
<p><b>ZERIT</b>  <i>stavudine or d4T</i>                      Bristol-Myers Squibb</p> 	<p>For patients weighing 132 pounds or more, 40 mg, in capsules or oral solution, twice daily; for patients weighing less than 132 pounds, 30 mg twice daily</p>	<p>Do not take with Retrovir (zidovudine) or any zidovudine-containing products, such as Combivir or Trizivir. Do not take with hydroxyurea, which is marketed under brand names Droxia and Hydrea. Use with caution with Videx EC, Adriamycin, Rubex, Copegus, RebetoL, Ribasphere, Virazole, Roferon-A, and Intron-A. Use with caution if you have liver, pancreas, or kidney problems, peripheral neuropathy, or gallstones. For patients with renal impairment or undergoing hemodialysis, dosing adjustments may be needed. Do not drink alcohol while on the drug.</p>	<p><b>Most serious:</b> buildup of an acid in the blood, serious liver problems, pancreatitis, changes in body fat, changes in immune system, peripheral neuropathy <b>Other:</b> headache, diarrhea, rash, nausea, vomiting</p>
<p><b>ZIAGEN</b>  <i>abacavir</i>                      GlaxoSmithKline</p> 	<p>600 mg in tablets daily, administered as either 300 mg twice daily or 600 mg once daily. Also available as an oral solution. Patients with mild liver impairment should take 200 mg twice daily</p>	<p>Do not take if you have moderate to severe liver impairment. Do not breast-feed while taking the drug. If you have a severe allergic reaction, do not resume taking Ziagen or any other abacavir-containing drug (Epzicom, Trizivir). Risk of allergic reaction is higher if you have a gene variation called HLA-B*5701.</p>	<p><b>Most serious:</b> severe allergic reaction, buildup of lactic acid in the blood with liver enlargement, changes in body fat, changes in immune system, increased risk of heart attack, especially if you have other risk factors such as smoking, history of heart trouble, diabetes, high blood pressure, or high cholesterol <b>Other:</b> nausea, vomiting, tiredness, headache, diarrhea, trouble sleeping, fever and chills, and loss of appetite</p>






## NONNUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS (NNRTI) HELP PREVENT REPLICATION OF HIV

<b>MEDICATION</b> <i>Generic Name</i> <i>Maker</i>	<b>TRADITIONAL DOSAGE</b>	<b>DRUG INTERACTIONS, PRECAUTIONS, &amp; RECOMMENDATIONS</b>	<b>SIDE EFFECTS</b>
<b>EDURANT</b> <i>rilpivirine</i>  <b>Janssen</b>  	One 25-mg tablet, once daily, with a meal	NNRTIs attack the same enzyme NRTIs do, in a different way. Do not take Edurant with antiseizure drugs like Tegretol, Trileptal, and Dilantin; antibacterials Mycobutin, Rifadin, Rimactane, or Prifitin; proton pump inhibitors such as Nexium, Vimovo, Prevacid, Prilosec, Protonix, and Aciphex; more than one dose of dexamethasone; or Saint-John's-wort. Use with caution with antifungals taken orally, antibiotics like Biaxin and erythromycin, and methadone. Take antacids or H2 blockers at least 12 hours before or four hours after Edurant.	<b>Most serious:</b> depression or mood changes, including suicidal thoughts; changes in body fat; changes in immune system <b>Other:</b> insomnia, headache, rash
<b>INTELENCE</b> <i>etravirine</i>  <b>Janssen</b>  	200 mg (one 200-mg tablet or two 100-mg tablets), twice daily	Do not take with the anti-HIV drugs Actavis, Lexiva, Reyataz, full-dose Norvir, Viamune, Sustiva, or Rescriptor; epilepsy and seizure medicines Tegretol, Carbatrol, Luminal, Dilantin, or Phenytek; herbal products containing Saint-John's-wort; or the antibacterial drugs Mycobutin, Rifadin, Rifater, Rifamate, or Prifitin. Always take after a meal and swallow the pill with a full glass of water; do not chew.	<b>Most serious:</b> severe skin rash or allergic reaction <b>Other:</b> changes in body shape or body fat, changes in immune system, tingling or pain in the hands or feet, numbness
<b>RESCRIPTOR</b> <i>delavirdine</i>  <b>ViiV Healthcare</b>  	400 mg (two or four tablets) three times daily	When taking Rescriptor, do not take Versed, Halcion, Xanax, D.H.E. 45 Injection, Ergomar, Migranal, Wigraine, Cafegot, Orap, Propulsid, Hismanal, Seldane, rifampin, phenobarbital, Dilantin, Tegretol, Saint-John's-wort, Mevacor, or Zocor. Talk to your doctor before taking Viagra, Lipitor, Baycol, or Lescol. If taking Videx or antacids, take an hour before or an hour after taking Rescriptor. Doses of protease inhibitors Agenerase, Crixivan, Invirase, Fortovase, Kaletra, Norvir, and Viracept may need to be adjusted. Talk with your doctor if you have liver or kidney disease.	<b>Most serious:</b> severe skin rash accompanied by blisters, fever, joint or muscle pain, redness or swelling of the eyes, or sores in the mouth <b>Other:</b> headache, nausea, diarrhea, and tiredness
<b>SUSTIVA</b> <i>efavirenz</i>  <b>Bristol-Myers Squibb</b>  	600 mg (three capsules at once or one tablet), taken daily	Do not take Atripla, Vascor, Propulsid, Versed, Orap, Halcion, or ergot medications (such as Wigraine and Cafegot). The following medicines may need to be replaced with another when you are taking Sustiva: Fortovase, Invirase, Biaxin, Carbatrol, Tegretol, Noxafil, Sporanox, and Reyataz (if this is not the first time you have been treated for HIV). The following drugs may require a change in the dose of either Sustiva or the other medicine: Cardizem, Tiazac, Covera HS, Isoptin SR, Lipitor, Pravachol, Zocor, Crixivan, Kaletra, methadone, Mycobutin, Reyataz, Rifadin, Rifamate, Rifater, Selzentry, Vfend, Gengraf, Neoral, Sandimmune, Prograf, Rapamune, Wellbutrin, Zolofit, and Zyvan. If you are taking Sustiva and Reyataz, you should also be taking Norvir. Tell your doctor if you have had hepatitis or other liver problems, mental illness, or seizures. Take Sustiva on an empty stomach, preferably at bedtime, with water.	<b>Most serious:</b> severe liver problems, rashes, and skin reactions <b>Other:</b> changes in the immune system, changes in body fat, dizziness, nausea, headache, insomnia, tiredness
<b>VIRAMUNE</b> <i>nevirapine</i>  <b>Boehringer Ingelheim</b>  	One 200-mg tablet daily for first 14 days, then one 200-mg twice daily; also available in oral suspension	Do not take Saint-John's-wort, Sustiva, Atripla, Kaletra, Lexiva, Reyataz, Nizoral, Sporanox, Rifadin, Rifamate, Rifater, or birth control pills. Tell doctor if taking Biaxin, Diflucan, Crixivan, methadone, Viracept, Mycobutin, Coumadin, Jantoven, or Invirase. Discontinue immediately if you develop signs of hepatitis, severe skin reactions, or rash with systemic symptoms.	<b>Most serious:</b> severe psychiatric problems, including suicidal thoughts; liver disorders; severe rash <b>Other:</b> dizziness, nausea, vomiting, diarrhea, rash, sleep disturbances, drowsiness, trouble concentrating, or unusual dreams



## COMBINATION DRUGS HELP PREVENT REPLICATION OF HIV

MEDICATION	TRADITIONAL DOSAGE	DRUG INTERACTIONS, PRECAUTIONS, & RECOMMENDATIONS	SIDE EFFECTS
<p><b>STRIBILD</b> <i>elvitegravir, cobicistat, emtricitabine, tenofovir disoproxil fumarate</i></p> <p>Gilead Sciences</p> 	<p><b>One tablet, once daily, with a meal</b> (150 mg of elvitegravir, 150 mg of cobicistat, 200 mg of emtricitabine, and 300 mg of tenofovir disoproxil fumarate)</p>	<p>Stribild is not approved for treatment of patients who have hepatitis B, as Stribild can exacerbate the disease and cause flare-ups. Stribild should not be used for patients with an estimated creatinine clearance below 70 mL per minute. Do not use with other anti-HIV drugs containing emtricitabine or tenofovir disoproxil fumarate, including Atripla, Complera, Emtriva, Truvada, or Viread; do not use with drugs containing lamivudine or with drugs or regimens containing ritonavir, such as Combivir, Epivir, Epivir-HBV, Epzicom, or Trizivir. Do not administer in combination with Hepsera. Do not use with sildenafil when branded as Revatio, though sildenafil when dosed as Viagra may be safe, so consult your doctor. Do not use with alfuzosin, rifampin, cisapride, pimozide, or the herbal remedy Saint-John's-wort. Do not take Stribild with ergot derivatives (such as dihydroergotamine, ergotamine, or methylergonovine), HMG-CoA Reductase inhibitors (such as lovastatin and simvastatin), or with sedative hypnotics.</p>	<p><b>Most serious:</b> buildup of lactic acid in the blood; severe liver or kidney problems, which could lead to potentially fatal renal failure; thinning bones, and changes in the immune system. <b>Other:</b> nausea and diarrhea</p>
<p><b>ATRIPLA</b> <i>efavirenz, emtricitabine, and tenofovir disoproxil fumarate</i></p> <p>Bristol-Myers Squibb &amp; Gilead Sciences</p> 	<p><b>One tablet, once daily, on an empty stomach, preferably at bedtime</b> (containing 600 mg of efavirenz, 200 mg of emtricitabine, and 300 mg of tenofovir disoproxil fumarate). If you are also taking Rifadin, add 200 mg of efavirenz</p>	<p>Efavirenz is a nonnucleoside reverse transcriptase inhibitor (NNRTI), the other components are nucleoside reverse transcriptase inhibitors (NRTIs); the different types of drugs attack HIV at different stages in its replication process. Do not take Atripla with anti-HIV drugs Combivir, Complera, Emtriva, Epivir or Epivir-HBV, Epzicom, Trizivir, Truvada, Viread, or Stribild, which have the same or similar active ingredients. Take with Sustiva only if your doctor recommends. If you are taking Kaletra, dosage of that drug may need to be adjusted. Do not take with Victrelis, Vascor, Propulsid, Versed, Orap, Halcion, ergot medications (such as Wigraine and Cafergot), Vfend, Hepsera, or the herbal remedy Saint-John's-wort. Use with caution with Fortovase, Invirase, Videx, Reyataz, Crixivan, Selzentry, Biaxin, Noxafil, Sporanox, calcium channel blockers (such as diltiazem and verapamil, which have various brand names), immunosuppressant drugs (such as cyclosporine, tacrolimus, and sirolimus, sold under various brand names), methadone, Mycobutin, Rifadin, Rimactane, Lipitor, Pravachol, Zocor, Zolof, or seizure meds (such as phenytoin, carbamazepine, and phenobarbital). If you have hepatitis B and stop taking Atripla, you may experience a flare-up of the disease. Do not take if you have severe kidney impairment.</p>	<p><b>Most serious:</b> buildup of lactic acid in the blood, severe liver or kidney problems, serious psychiatric problems, thinning bones (a vitamin D supplement may be indicated for the latter) <b>Other:</b> dizziness, headache, insomnia, drowsiness, trouble concentrating, unusual dreams, fatigue, upset stomach, nausea, vomiting, gas, diarrhea</p>
<p><b>COMPLERA</b> <i>emtricitabine, rilpivirine, and tenofovir disoproxil fumarate</i></p> <p>Gilead Sciences</p> 	<p><b>One tablet, once daily, with a meal</b> (200 mg of emtricitabine, 25 mg of rilpivirine, and 300 mg of tenofovir disoproxil fumarate)</p>	<p>Rilpivirine is an NNRTI, the other components NRTIs. Complera is only for patients who have not previously taken anti-retroviral drugs and have a viral load of 100,000 copies per milliliter of blood or less. Do not take with medicines that contain lamivudine (Epivir, Epivir-HBV, Epzicom, Combivir, and Trizivir), other HIV antiretroviral medications, drugs to treat seizures or tuberculosis, proton-pump inhibitors such as Kapidex or Dexilant, Hespera, Saint-John's-wort, or more than one dose of dexamethasone. Use caution when taking antacids, antifungal medications, H2-receptor antagonists, antibiotics, or methadone.</p>	<p><b>Most serious:</b> buildup of lactic acid in the blood, severe liver problems, hepatitis B virus infection flare-ups, depression, bone thinning, and changes in the immune system <b>Other:</b> insomnia, headache, rashes, diarrhea, nausea, fatigue, dizziness, depression, abnormal dreams, vomiting, stomach or other pain, and skin discoloration</p>

OPPORTUNISTIC INFECTIONS AND OTHER DRUGS



MEDICATION <i>Generic Name Maker</i>	TRADITIONAL DOSAGE	WHAT IT DOES	DRUG INTERACTIONS, PRECAUTIONS, & RECOMMENDATIONS	SIDE EFFECTS
<b>EGRIFTA</b> <i>tesamorelin</i> EMD Serono	2 mg injected subcutaneously (just below the skin), once daily	Helps reduce HIV-related excess belly fat by encouraging the body to produce natural growth hormones that reduce fat	Do not take if you have or had issues involving your pituitary gland, if you have active cancer, or if you are pregnant or breast-feeding.	<b>Most serious:</b> severe allergic reaction or fluid retention, injection site reactions, or increase in glucose intolerance/diabetes <b>Other:</b> Pain, swelling, muscle soreness, tingling, numbness and pricking, nausea, vomiting, rash, itching
<b>BACTRIM, SEPTRA, SULFATRIM</b> <i>sulfamethoxazole/trimethoprim</i> Various (see HIVPlusmag.com)	400 mg (two or four tablets) three times daily	Treats and helps prevent recurrence of Pneumocystis pneumonia in HIV-positive patients; also used on other bacterial infections	Take at the same time every day. Try not to miss a dose.	<b>Most serious:</b> skin rash, joint or muscle aches, sore throat or fever, unusual bleeding or bruising <b>Other:</b> dizziness, nausea, vomiting, diarrhea, loss of appetite, fatigue, headache
<b>TYZEKA</b> <i>telbivudine</i> Idenix/Novartis	One 600-mg tablet, every 72 hours, or 200 mg of oral solution, once daily	Treats hepatitis B	Do not take Pegasys. If using oral solution, close bottle and clean dosing cup immediately after dosing, keep cup dry between uses, and do not use for anything else.	<b>Most serious:</b> buildup of lactic acid in body, severe liver problems, muscle pain or weakness, nerve problems, flare-up of hepatitis B after discontinuation <b>Other:</b> diarrhea, abdominal pain or swelling, cough, headache, dizziness, sore throat, fever
<b>VALCYTE</b> <i>valganciclovir</i> Genentech	Two 450 mg tablets, twice daily, for 21 days, then two tablets once daily	Treats the eye infection cytomegalovirus retinitis	Use with caution if also taking Retrovir, Benemid, CellCept, Myfortic, or Videx. Since Valcyte can cause seizures, do not drive until you know how the medication affects you.	<b>Most serious:</b> anemia, fertility impairment, fetal abnormalities, kidney failure <b>Other:</b> diarrhea, vomiting, fever, tremors, and seizures
<b>EPOGEN, PROCRIT</b> <i>epoetin alfa</i> Amgen (Epoegen); Janssen (Procrit)	100 units per kilogram of body weight, three times a week, given intravenously	Treats anemia that results as a side effect of Retrovir	Do not take if you have uncontrolled high blood pressure. Iron supplements may be needed for patients who undergo blood transfusions. Talk to your doctor if you have cancer.	<b>Most serious:</b> high blood pressure, seizures, development of antibodies against the drug, severe allergic reactions <b>Other:</b> joint, muscle, or bone pain, fever, cough, rash, nausea, vomiting, soreness of mouth, itching, headache, pain at injection site
<b>MEGACE ES</b> <i>megestrol acetate</i> Strativa	625 mg (one teaspoon), once daily	Treats appetite loss, severe malnutrition, or unexplained, significant weight loss	May decrease effectiveness of Crixivan. If you have a history of blood clots, check with your doctor before taking.	<b>Most serious:</b> Cushing's syndrome, development or worsening of diabetes <b>Other:</b> decreased sexual desire or performance, flatulence, rash, high blood pressure, insomnia, upset stomach, increased blood sugar, between-period bleeding
<b>SEROSTIM</b> <i>somatropin</i> EMD Serono	0.1 mg per kilogram of body weight daily (up to 6 mg), injected subcutaneously at bedtime	Treats wasting (HIV-related weight loss)	Do not use if you have acute critical illness following open heart or abdominal surgery, multiple accidental trauma, or acute respiratory failure. Do not use if you have neoplasia.	<b>Most serious:</b> Glucose intolerance, which may require adjustment of diabetes medications for patients with this disorder; musculoskeletal discomfort; carpal tunnel syndrome; swelling of the hands and feet
<b>MEGACE ORAL SUSPENSION</b> <i>megestrol acetate</i> Bristol-Myers Squibb	800 mg, once daily	Treats severe malnutrition, appetite loss, or significant weight loss	No significant interactions discovered to date. If you have a history of blood clots, check with your doctor before taking.	<b>Most serious:</b> Cushing's syndrome, diabetes <b>Other:</b> decreased libido, flatulence, high blood pressure, insomnia, upset stomach, increased blood sugar, between-period bleeding

MEDICATION	DOSAGE	WHAT IT DOES	WHAT TO KNOW	SIDE EFFECTS
<b>TAXOL</b> <i>paclitaxel</i> Bristol-Myers Squibb (name brand); Teva Parenteral Medicines (generic)	135 mg per square meter of body surface, intravenously over three hours every three weeks, or 100 mg per square meter of body surface, intravenously over three hours every two weeks	Provides second-line treatment for Kaposi's sarcoma	Use caution when taking with Versed, Buspar, Vansar, Plendil, Altocor, Altoprev, Mevacor, Zocor, Relpax, Revatio, Viagra, Halcion, Reyataz, Biaxin, Crixivan, Sporanox, Feoris, Nizoral, Serzone, Viracept, Norvir, and several other drugs. See HIVPlus-Mag.com for others.	<b>Most serious:</b> bone marrow disorders <b>Other:</b> tiredness, weakness, shortness of breath, nausea, vomiting, diarrhea, unusual bleeding or bruising, joint pain or numbness, hair loss
<b>PEGINTRON</b> <i>peginterferon alfa-2b</i> Merck	1.5 micrograms per kilogram of body weight, once weekly, by subcutaneous injection	Treats chronic hepatitis C, alone or in combination with other drugs	Use with caution with drugs metabolized by CYP2C8/9 or CYP2D6. Monitor for toxicities when used with NRTIs. Do not take if you have autoimmune hepatitis or certain other liver problems.	<b>Most serious:</b> severe eye, blood, liver, nerve, thyroid, or lung problems, pancreatitis, colitis, high blood sugar or diabetes, allergic reaction <b>Other:</b> flu-like symptoms, tiredness, appetite problems, skin reactions, hair thinning
<b>PEGASYS</b> <i>peginterferon alfa-2a</i> Genentech	180 micrograms, once weekly, by subcutaneous injection	Treats chronic hepatitis C or B, alone or in combination with other drugs	Do not take if you have autoimmune hepatitis or liver problems. Do not take with Copegus if you are pregnant, if you or your partner plan to become pregnant, or if you take Videx. Use with caution if taking Tyzeka, Theo-24, Elixophyllin, Uniphyl, Theolair, methadone, Azasan, or Imuran.	<b>Most serious:</b> severe eye, blood, liver, nerve, thyroid, or lung problems, pancreatitis, colitis, high blood sugar or diabetes, allergic reaction <b>Other:</b> flu-like symptoms, tiredness and weakness, stomach problems, loss of appetite, skin reactions, hair thinning, trouble sleeping
<b>BARACLUE</b> <i>entecavir</i> Bristol-Myers Squibb	0.5 or 1.0 mg, once daily, in tablet form or oral solution. Should be taken without food, on an empty stomach at least two hours after a meal and two hours before the next meal	Treats chronic hepatitis B. May also help inhibit HIV replication, although this use has not been studied	People with HIV should be receiving antiretroviral treatment for that as well, as resistance to anti-HIV drugs may develop otherwise. May affect concentration of drugs that reduce kidney function or vice versa. Those with decreased kidney function may need to reduce dosage.	<b>Most serious:</b> worsening of hepatitis B after discontinuation of treatment, other liver problems, buildup of lactic acid in the blood <b>Other:</b> headache, fatigue, dizziness, nausea
<b>NEBUPENT</b> <i>pentamidine isethionate</i> APP Pharmaceuticals	300 mg every four weeks, via oral inhalation	Helps prevent Pneumocystis pneumonia in patients with a history of the disease or low T-cell counts	Use with caution with aminoglycosides (a class of antibiotics), amphotericin B (an antifungal drug marketed under various brand names), Platinol, Foscavir, or Vancocin. If breast-feeding, take only if doctor determines benefits outweigh risks.	<b>Most serious:</b> acute pancreatitis <b>Other:</b> night sweats, anemia, bronchitis, nonspecific herpes, herpes zoster, nonspecific influenza, oral Candida, pharyngitis, sinusitis, headache, chest pain, cough, wheezing
<b>INTRON A</b> <i>interferon alfa-2b</i> Schering	30 million international units per square meter of body surface, subcutaneously or intramuscularly, three times a week for Kaposi's sarcoma; 3 million IUs three times a week for chronic hepatitis C	Treats AIDS-related Kaposi's sarcoma and hepatitis infection, especially hepatitis C	Use caution if taken with Retrovir, theophylline, or Tyzeka. Do not take if you have autoimmune hepatitis, decompensated liver disease, thalassemia major, sickle-cell anemia, or problems with creatinine clearance. Use with caution if you have history of cardiovascular or cerebrovascular diseases.	<b>Most serious:</b> depression, suicidal thoughts, severe flu-like symptoms <b>Other:</b> difficulty sleeping, nervousness, muscle pain or numbness, blood in urine or stools, painful or difficult urination, chest pain, fever, chills, unusual bleeding or bruising
<b>ROFERON-A</b> <i>interferon alfa-2</i> Roche	3 million IUs per square meter of body surface, subcutaneously or intramuscularly, three times a week	Treats chronic hepatitis C	Use caution if taken with Retrovir and similar anti-HIV drugs; theophylline, marketed under various names to treat breathing problems; or Tyzeka.	<b>Most serious:</b> depression, suicidal behavior, pain, breathing and vision problems, fever, bleeding or bruising <b>Other:</b> flu-like symptoms, sleep disturbances, headache, thyroid problems, fatigue
<b>MEPRON</b> <i>atovaquone</i> GlaxoSmithKline	For prevention, 1,500 mg of oral solution, once daily, with a meal; for treatment, 750 mg of solution, twice daily, with meals	Helps prevent and treat mild to moderate Pneumocystis pneumonia in patients who cannot tolerate other drugs	If also taking rifampin, consider alternatives, as it may reduce the amount of Mepron in the body.	<b>Most serious:</b> rash, diarrhea, nausea

MEDICATION	DOSAGE	WHAT IT DOES	WHAT TO KNOW	SIDE EFFECTS
<b>TUBIZID</b> <i>isoniazid</i> Selleck Chemicals	5 mg per kg of body weight, daily for 9 months (for latent TB) or two weeks, then 15 mg/kg twice weekly for 18 weeks (for active TB) in combination with Rifadin, Rimactane, pyrazinamide, or Myambutol	Treats tuberculosis	Use with caution if taking acetaminophen, antacids, Tegretol, Antabuse, Nizoral, Dilantin, Theobid, Theo-Dur, Depakene, Depakote, and vitamins. Avoid alcoholic beverages. Tell your doctor if you have or have ever had liver disease or a history of alcoholism or injection drug use.	<b>Most serious:</b> severe/fatal liver damage, eye pain, numbness or tingling in extremities, rash, fever, swollen glands, sore throat, bleeding or bruising, stomach pains <b>Other:</b> diarrhea, vision problems
<b>SPORANOX</b> <i>itraconazole</i> Janssen	200 mg daily, in oral solution, for one to two weeks for oral candidiasis; 200 mg daily in capsule form, for other fungal infections, such as histoplasmosis and blastomycosis	Treats fungal infections such as oral candidiasis, also known as thrush	Do not take if taking D.H.E. 45, Migranal, Germinal, Hydergine, Ergotrate, Bellergal-S, Cafergot, Ergomar, Wigraine, Methergine, Sansert, Altacor, Altoprev, Mevacor, Zocor, or Halcion. Use caution if you have heart, lung, or kidney disease or take protease inhibitors. Do not take capsules if you have heart failure.	<b>Most serious:</b> liver failure, neuropathy, hearing loss <b>Other:</b> nausea, diarrhea, vomiting, fever, respiratory disorders, rash, headache
<b>GAMIMUNE N, GAMUNEX, GAMMAGARD</b> <i>immune globulin</i> Bayer Biological Talcis Biotherapeutics, Baxter Healthcare	300 to 600 mg per kg of body weight, every three to four weeks, administered intravenously	Helps fight bacterial infections in children with HIV	May interfere with immune response to live-virus vaccines for measles, mumps, or rubella.	<b>Most serious:</b> depression, suicidal behavior, severe pain, difficulty breathing, vision problems, high fever, bleeding or bruising <b>Other:</b> headache, nausea, diarrhea, chills, fatigue
<b>DOXIL</b> <i>doxorubicin, liposomal</i> Janssen	For AIDS-related Kaposi's sarcoma, 20 mg per square meter of body surface, every three weeks by intravenous infusion	Treats Kaposi's sarcoma in patients who cannot tolerate other medicines or whose disease is advanced	Dose may need to be adjusted if you have liver problems.	<b>Most serious:</b> congestive heart failure, decrease in blood cells <b>Other:</b> tingling or burning, swelling, blisters, mouth sores, fever, nerve damage and more (see HIVPlusMag.com)
<b>SCULPTRA</b> <i>injectable poly-L-lactic acid</i> Dermik Laboratories	Amount and frequency varies by patient; delivered by subcutaneous injection	Helps restore or correct signs of facial fat loss (lipoatrophy)	If you have an active skin infection or inflammation in or near the treatment area, do not use until this condition is under control. Minimize exposure to sunlight or sun lamps.	<b>Most serious:</b> bruising, edema, hematoma, injection site reactions
<b>COPEGUS</b> <i>ribivarin</i> Roche	800 to 1,200 mg daily, depending on patient's weight and type of virus, taken twice daily in 200-mg capsules, with food	In combination with Pegasys, treats chronic hepatitis C infection	Do not use if you take Videx or Videx EC. Use caution when taking with NRTIs like Combivir, Epivir, Epzicom, Retrovir, Trizivir, as drug interactions could lead to toxicity. Do not take if you have certain blood disorders, such as thalassemia major or sickle-cell anemia, or certain types of hepatitis. Do not take if you are pregnant or if you or your partner plan to become pregnant.	<b>Most serious:</b> severe eye, blood, lung, or liver problems, pancreatitis, depression or suicidal thoughts, high blood sugar or diabetes, fetal abnormalities <b>Other:</b> flu-like symptoms, tiredness and weakness, nausea and vomiting, loss of appetite, skin reactions, hair thinning, trouble sleeping
<b>CYTOVENE-IV, VITRASERT</b> <i>ganciclovir</i> Roche Laboratories (Cytovene-IV), Bausch and Lomb (Vitraser)	Vitraser, surgically implanted in the eye, consists of a 4.5-mg pellet of ganciclovir coated with polymers. For Cytovene-IV, dosages vary but should not exceed 6 mg per kg of body weight	Treats the eye infection cytomegalovirus retinitis in transplant recipients and people with weakened immune systems, such as those with HIV	Do not take with blood dyscrasia-causing medications, bone marrow depressants, radiation therapy, nephrotoxic medications, or Retrovir. Dosage may need adjustment if you have kidney problems or take Videx or Videx EC. Use caution if you take anti-HIV medications containing zidovudine or didanosine.	<b>Most serious:</b> blood disorders, black or tarry stools, cough, sore throat, fever or chills, pain, painful urination, seeing flashes or sparks of light, floating spots, or a partial veil across vision, unusual bleeding, and unusual tiredness or weakness <b>Other:</b> abdominal pain, changes in behavior, diarrhea, fever, headache, increased sweating, loss of appetite, vomiting, weight loss

MEDICATION	DOSAGE	WHAT IT DOES	WHAT TO KNOW	SIDE EFFECTS
<b>REBETOL</b> <i>ribavirin</i> Schering, Merck	800-1,400 mg daily, based on patient's weight, by capsule or oral solution, taken with food	In combination with Intron-A or PegIntron, treats chronic hepatitis C infection	Do not use if you take Videx or Videx EC. Do not take if you have autoimmune hepatitis, certain blood disorders, or severe kidney disease. Do not take if you are pregnant or if you or your partner plan to become pregnant. Use caution when taking with NRTIs such as Combivir, Epivir, Epzicom, Retrovir, or Trizivir.	<b>Most serious:</b> severe eye, lung, or blood problems, pancreatitis, severe depression or suicidal thoughts, dental problems caused by dry mouth <b>Other:</b> less serious mood changes, flu-like symptoms, headache, fever, stiffness, anorexia
<b>MYCOBUTIN</b> <i>rifabutin</i> Pfizer	300 mg in capsules, once daily. If prone to nausea or vomiting, split into two doses daily, with food	Helps prevent disseminated Mycobacterium avium complex (MAC) disease	Do not use with Rescriptor or Norvir. May reduce effectiveness of Sporanox, Biaxin, Fortovase, and Invirase as well as oral contraceptives. Cut dose in half if also taking Crixivan or Viracept. Do not take if you have active tuberculosis.	<b>Most serious:</b> neutropenia <b>Other:</b> rash, gastrointestinal disorders, flu-like symptoms
<b>RIFADIN, RIFADIN IV</b> <i>rifampin</i> Sanoifi-Aventis	10 mg per kg of body weight, once daily, orally in capsule form (Rifadin) or intravenously (Rifadin IV). Daily dosage should not exceed 600 milligrams. Oral dosage should be one hour before or two hours after a meal with water	Helps prevent or treat infections caused by a certain type of bacterium, including the one that causes tuberculosis	Do not take if taking Reyataz, Prezista, Lexiva, Fortovase, Invirase, or Aptivus. Dosage of anticoagulant drugs should be adjusted. Use with caution if you have diabetes. Switch to nonhormonal contraceptives.	<b>Most serious:</b> Gastrointestinal distress, changes in liver function, headache, drowsiness, dizziness, menstrual irregularities, jaundice, darkened urine <b>Other:</b> loss of appetite, fever, joint pain
<b>AMBISOME, AMPHOTEC, ABELCET, AMPHOCIN,</b> <i>amphotericin B</i> Astellas, Alkopharma, Sigma-Tau, Pfizer	No more than 1.5 mg per kg of body weight, administered intravenously, once daily	Treats fungal infections, including cryptococcal meningitis, which are more common in people with HIV	Individuals who cannot normally take traditional amphotericin B because it causes damage to their kidneys may be able to take the formulations in Ambisome, Abelcet, or Amphotec.	<b>Most serious:</b> allergic reaction, kidney problems, rash, irregular heart-beat, muscle cramps or pain, weakness, bleeding, hearing loss, blurred vision, hepatitis <b>Other:</b> fever, shaking, chills, weight loss, nausea, headache, jaundice
<b>PANRETIN GEL</b> <i>alitretinoin</i> Eisai	This topical gel should initially be applied twice a day to KS lesions, with frequency increased to three or four times a day, depending on tolerance, or reduced if skin is irritated or if there is a toxic reaction. Apply enough to cover the lesion thoroughly, but avoid getting on normal skin surrounding the lesion, and allow the gel to dry before covering the skin with clothing. Treatment can continue as long as needed	Provides topical treatment for KS lesions	Avoid using with products that contain DEET, a common ingredient of insect repellents. Minimize skin's exposure to sun.	<b>Most serious:</b> toxic skin reactions
<b>FAMVIR</b> <i>famciclovir</i> Novartis	500 mg in tablets twice daily for seven days; tablets come in 125, 250, or 500 mg strengths	Treats recurrent episodes of orolabial herpes (cold sores) or genital herpes	Dosage may need to be reduced for patients with kidney impairment. The drugs Benemid and Probalan, used to treat gout, may increase the level of Famvir in the patient's body, so this level should be monitored.	<b>Most serious:</b> acute kidney failure <b>Other:</b> headache, nausea

MEDICATION	DOSAGE	WHAT IT DOES	WHAT TO KNOW	SIDE EFFECTS
<b>VFEND</b> <i>voriconazole</i>  Pfizer	For esophageal candidiasis, 200 mg in tablets or oral solution, every 12 hours, at least an hour before or after a meal. For other fungal infections, treatment starts with an intravenous infusion of 6 mg per kilogram of weight every 12 hours for the first 24 hours, followed by a maintenance dose of either 4 mg per kilogram of weight every 12 hours or 200 mg in tablets or oral solution every 12 hours. Duration of treatment varies according to the infection	Treats fungal infections, such as esophageal candidiasis	Do not use with high-dose Norvir; use with caution with low-dose Norvir. Do not use with Saint-John's-wort, ergot alkaloids, terfenadine, astemizole, cisapride, pimozone, quinidine, or rifabutin. Use with caution in patients with heart arrhythmias.	<b>Most serious:</b> severe liver problems, heart arrhythmias, visual disturbances <b>Other:</b> fever, nausea, rash, vomiting, chills, headache
<b>ERAXIS</b> <i>anidulafungin</i>  Pfizer	For esophageal candidiasis, 100 mg by injection the first day, followed by 50 mg daily dose thereafter for a minimum of 14 days; for candidemia and other Candida infections, 200 mg by injection the first day, followed by 100 mg daily dose, with the number of days depending on the patient. Eraxis comes as a powder that is mixed with sterile water for infusion	Treats esophageal candidiasis, candidemia, and other candida infections	Effects on women who are pregnant or breast-feeding have not been studied, so discuss possibility of pregnancy with your doctor.	<b>Most serious:</b> Abnormal liver function, anaphylactic shock <b>Other:</b> nausea, diarrhea, vomiting
<b>DAUNOXOME</b> <i>daunorubicin liposomal</i>  Galen	Injected intravenously at a strength of 40 mg per square meter of body surface area every two weeks	Treats advanced HIV-related Kaposi's sarcoma	Do not use in patients with less than advanced KS.	<b>Most serious:</b> suppression of the bone marrow's production of blood cells and platelets; patients should have regular blood counts <b>Other:</b> back pain, flushing, chest tightness
<b>FOSCAVIR</b> <i>foscarnet sodium</i>  Hospira	Initial dose of Foscavir, a liquid solution, is an intravenous infusion of 90 mg per kilogram of weight every 12 hours or 60 mg/kg every eight hours for two to three weeks, followed by a maintenance dose of 90 mg/kg to 120 mg/kg daily. Dosage should be individualized according to patients' kidney function but should not exceed the recommended amount or frequency	Treats CMV retinitis	May be used in combination with ganciclovir drugs in patients who have relapsed after treatment with either drug by itself, but no other drug should be delivered in the same infusion. Use with caution with intravenous pentamidine.	<b>Most serious:</b> impairment of kidney function, electrolyte abnormalities, seizures, anemia <b>Other:</b> headache, nausea, vomiting, diarrhea, fever
<b>VISTIDE</b> <i>cidofovir</i>  Gilead	Delivered by intravenous infusion, the initial dose depends on the patient's weight, gender, and kidney function, with the latter measured by a test that determines how well the kidneys clear creatinine from the blood. Maintenance dose is 5 mg per kilogram of body weight, by infusion, once every two weeks	Treats CMV retinitis	The anti-gout drug probenecid (brand name Benemid or Probalan) should be taken orally with each Vistide treatment. Retrovir should be temporarily discontinued or the dosage halved on the day of each Vistide infusion. Do not use with any drugs that have the potential to cause kidney toxicity. Do not take if you have high creatinine levels, as measured by creatinine clearance test.	<b>Most serious:</b> kidney toxicity, decreased interocular pressure <b>Other:</b> nausea, vomiting, fever
<b>BIAXIN</b> <i>clarithromycin</i>  Abbott Laboratories	500 mg, 2 or 3 times daily, depending on the infection. Available in immediate release tablets, extended release tablets, and granules to be mixed with water	Fights bacterial infections, especially Mycobacterium avium complex (MAC)	There have been life-threatening interactions with Colcrys and serious interactions with Altacor, Altoprev, Mevacor, Zocor, Lipitor, and blood pressure drugs. Use caution when taking with Viagra.	<b>Most serious:</b> abdominal pain, fever, nausea, vomiting, bleeding or bruising, diarrhea, colitis, liver failure, hepatitis <b>Other:</b> milder diarrhea, headache, nausea and vomiting, change in taste

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## INVESTIGATIONAL MEDICATIONS

The medications used to treat HIV and all its complications went through extensive investigations and clinical trials before being approved for general use. Doctors are now working on vaccines and cures for HIV, utilizing everything from bone marrow transplants to injections of disease-killing cells. But there are even more promising advances coming from medical, university, and pharmaceutical organizations. Some of these new medications, which are not yet approved for use outside clinical trials, may soon be coming to a pharmacy near you.

NAME & MAKER	WHAT IT DOES
<p><b>BMS-806</b> Bristol-Myers Squibb</p>	<p>A microbicide is a substance that protects against microorganisms (bacteria, viruses, fungi), either by destroying the microbes or preventing them from establishing an infection. In HIV research, microbicide usually refers to a topical gel used against the virus. BMS-806 is an HIV entry inhibitor that has been studied both in an oral form to treat HIV and as a component of a vaginal microbicide gel to reduce HIV transmission. A microbicide based on a derivative of the drug, called DS003, is in development.</p>
<p><b>TENOFOVIR-UC781</b> Gilead Sciences</p>	<p>One form of tenofovir is marketed as an oral HIV medication under the brand name Viread, but it has also been studied as a component of a microbicide gel for a vaginal use. While some gel trials have produced disappointing results, scientists are studying whether tenofovir's performance can be improved by combining it with the nonnucleoside reverse transcriptase inhibitor UC781 in a vaginal gel and potentially a film.</p>
<p><b>ELVITEGRAVIR</b> Gilead Sciences</p>	<p>A type of medicine that blocks integrase, a protein that HIV needs to insert its viral genetic material into the genetic material of an infected cell, elvitegravir is taken orally to fight HIV, in combination with other antiretroviral medicines. Elvitegravir is a component of the Stribild combination pill. In April the Food and Drug Administration declined to approve it as a stand-alone drug and asked Gilead for further documentation on its study methods. The company is working to address the matter.</p>
<p><b>COBICISTAT (GS-9350)</b> Gilead Sciences</p>	<p>Cobicistat is a pharmaco-enhancer or "boosting agent" that raises the blood levels of other drugs that are broken down by the same protein. Cobicistat itself does not have any antiviral activity. Like elvitegravir, it is a component of Stribild. It was also rejected by the FDA as a stand-alone drug, for the same reason, and Gilead is addressing the issue.</p>
<p><b>572_TRII</b> ViiV</p>	<p>A single-pill, complete regimen that contains the investigational integrase inhibitor dolutegravir and Epzicom, an already-approved drug that prevents HIV from altering the genetic material of healthy CD4 cells. Dolutegravir is an integrase inhibitor that targets HIV integrase, an enzyme required for the integration of viral DNA into the host cell genome, in an effort to prevent HIV from replicating.</p>
<p><b>DOLUTEGRAVIR</b> ViiV</p>	<p>If approved for use, dolutegravir (see above) would be the second in a new class of integrase inhibitors that work by blocking HIV's ability to replicate. Applications were submitted to the FDA and the European Medicines Agency last December 2012, with an FDA decision expected in August.</p>
<p><b>'744 LAP</b> ViiV</p>	<p>S/GSK1265744, or simply '744 LAP, is an integrase inhibitor that is considered ViiV's follow-up to dolutegravir. The drug is currently in Phase II trials.</p>
<p><b>TENOFOVIR ALAFENAMIDE</b> Gilead Sciences</p>	<p>Tenofovir disoproxil fumarate, a nucleoside reverse transcriptase inhibitor, is already available as an anti-HIV pill under the brand name Viread and as a component of several combination drugs, including Stribild. Gilead is currently conducting clinical trials of a variant, tenofovir alafenamide or TAF (formerly GS-7340); TAF may be able to have a greater antiviral effect than Viread at a dose that is 10 times lower and is better distributed into lymphoid tissues, potentially improving the tolerability of HIV therapy. In a Phase II study, the TAF-based single tablet regimen suppressed the virus as well as Stribild while being gentler on kidneys and bones. A Phase III study enrolled in the spring.</p>



NAME & MAKER	WHAT IT DOES
<p><b>AMD070</b> Genzyme</p>	<p>A type of medicine called a CXCR4 inhibitor, which works by blocking HIV's entry into cells, AMD070 may work for patients who have resistance to or cannot take other anti-HIV drugs. In one human study ritonavir was found to heighten the supply of AMD070 in the body. AMD070 development is now on hold because of liver-related effects in animal subjects, but scientists still see potential benefit based on the ritonavir study.</p>
<p><b>IBALIZUMAB</b> TaiMed</p>	<p>Also a CXCR4 inhibitor, ibalizumab (formerly known as TMB-355), is injected intravenously to treat HIV. Various doses, based on body weight, have been studied.</p>
<p><b>APRICITABINE</b> Avexa Ltd.</p>	<p>Apricitabine is a new nucleoside reverse transcriptase inhibitor that may work for people with HIV strains that are resistant to other NRTIs. Other names for it include ATC, AVX754, and SPD754.</p>
<p><b>ELVUCITABINE</b> Achillion Pharmaceuticals</p>	<p>Another NRTI, elvucitabine (or ACH-126443) is similar to the FDA-approved anti-HIV drug lamivudine (Epivir). Elvucitabine may be effective in treating individuals infected with HIV strains resistant to lamivudine and may delay the emergence of resistance and prolong the effectiveness of therapy.</p>
<p><b>KP-1461</b> Koronis Pharmaceuticals</p>	<p>KP-1461 is an oral form of KP-1212, a compound shown to be effective in cell culture against HIV. It is also effective against viruses with mutations conferring resistance to many of the drugs currently approved for HIV treatment. It is being refined for further study.</p>
<p><b>VIVAGEL</b> Starpharma</p>	<p>VivaGel is a vaginal microbicide gel that is being studied for the prevention of HIV and other STIs, including herpes simplex virus-2. In tests, it has been given either once or twice daily, for up to two weeks. Its active ingredient is SPL7013, an HIV inhibitor.</p>
<p><b>PRO 140</b> CytoDyn</p>	<p>PRO 140 is an antibody designed to block HIV from entering a cell. It accomplishes this by binding to a molecule called CCR5, a normal cell protein that HIV attaches to after contact with the primary receptor for the virus. PRO 140 is an antibody, not a drug, and has no apparent issues with toxicity.</p>
<p><b>AMPLIGEN</b> Hemispherx Biopharma</p>	<p>Ampligen is an RNA drug product that is administered intravenously. It's in human clinical development for various therapeutically oriented studies, including treatment for HIV, renal cell carcinoma, and malignant melanoma.</p>
<p><b>CARRAGUARD</b> Population Council &amp; FMC BioPolymer</p>	<p>Carrageenan is a chemical found in certain types of seaweed, which scientists have discovered can protect cells from becoming infected with many viruses, including HIV, in laboratory environments. It was tested as the microbicidal component of the Population Council's vaginal gel (brand name Carraguard) to reduce HIV transmission. It did not prove effective in a clinical trial a few years ago, but it did prove safe, and Carraguard is a component of other gels being developed. The substance is also known as carragean, carrageenan gum, carrageenin, Irish moss extract, PC-515, and PC515.</p>
<p><b>MUCOCEPT</b> Osel Inc.</p>	<p>MucoCept, a third-generation engineered probiotic product, is in pre-clinical development and nearing an Investigational New Drug submission as a novel microbicide for the prevention of HIV infection in women.</p>
<p><b>DEPAKENE</b> Abbott Laboratories</p>	<p>Valproic acid, which Abbott markets under the brand name Depakene, is typically used to treat seizures and other nervous system problems. The acid may also work against HIV by releasing the virus from resting cells so other anti-HIV medicines can attack it, and studies have been undertaken to determine its effectiveness in this application. Also known as Depakote, divalproex sodium, VPA, and valproate.</p>



## COMPLEMENTARY AND ALTERNATIVE MEDICINE

The use of what's called complementary and alternative medicine (CAM) is popular in the U.S., where yoga and massage have become mainstream activities. In fact, according to a study published in the journal *AIDS Care*, 60% of HIV-positive people have tried some form of CAM, most in addition to their antiretrovirals. While some CAMs have demonstrated benefits, others are unproven and sometimes dangerous.

TREATMENT	WORTH IT?	WHAT IT DOES
<b>ACUPUNCTURE</b>	YES	Studies have shown it reduces symptoms of HIV and side effects of medications, including fatigue, pain, headache, forgetfulness, and nausea.
<b>CHINESE BITTER MELON</b>	MAYBE	Researchers found two proteins in bitter melon that inhibit HIV in laboratory tests: MAP 30 and momorcharin. But no one knows for sure if there's any clinical usefulness.
<b>COLLOIDAL SILVER</b>	NO	The FDA doesn't consider it to be safe. Among its many side effects is argyria, an irreversible bluish discoloration of the skin.
<b>MANGANESE</b>	NO	Scientists have discovered that increasing manganese in cells can decrease HIV's ability to replicate, but there's no evidence that dietary manganese has any effect on HIV.
<b>MASSAGE</b>	YES	Massage is a complimentary medicine that, according to the Mayo Clinic, reduces anxiety and pain, lowers blood pressure, releases endorphins, improves blood circulation, and boosts immunity.
<b>MULTIVITAMINS</b>	YES	One study found that multivitamins reduced HIV-positive women's risk of AIDS and death by 30%.
<b>PRAYER</b>	MAYBE	If you are a believer, there's ample evidence that prayer offers a positive interpersonal coping mechanism and may be as beneficial in helping you cope with, if not eliminate, symptoms.
<b>REFLEXOLOGY</b>	MAYBE	A study in Thailand found that foot reflexology reduced pain and fatigue in hospitalized AIDS patients.
<b>REIKI</b>	NO	Many participants feel better after this energy therapy, but there's no scientific proof it works.
<b>SELENIUM</b>	YES	A study in the <i>Archives of Internal Medicine</i> found that selenium increased healthy CD4 cells and reduced the amount of HIV in the blood.
<b>SPIRULINA</b>	YES	The health benefits of spirulina (also known as blue-green algae) have been touted for years because it naturally includes numerous vitamins. One study, in the <i>Journal of Acquired Immune Deficiency Syndromes</i> , found that the algae supplement inhibited HIV replication in the blood. A perk: It's sold in a powder that can easily be added to smoothies.
<b>VITAMIN A</b>	MAYBE	The WHO recommends vitamin A every four to six months for all young children at high risk of deficiency, but no study in the U.S. has shown it beneficial to HIV+ adults.
<b>YOGA</b>	YES	Numerous studies show it has a positive physiological effect and helps alleviate symptoms of HIV.
<b>ZINC</b>	YES	Zinc deficiency occurs in over 50% of HIV+ adults; studies show that zinc delays immunological failure and decreases diarrhea.



## A STATE-BY-STATE GUIDE TO THE AIDS DRUG ASSISTANCE PROGRAM (ADAP)

Don't have deep pockets? The federally created, state-managed AIDS Drug Assistance Program (ADAP) can help people pay for their HIV medications. The programs provide prescription medication to uninsured or underinsured people with HIV or AIDS. The requirements vary by state, but typically you have to be a resident, have HIV, and earn less than a certain amount per year, calculated as a percentage of the federal poverty level.

Below is a guide to ADAP income requirements, whether there is a waiting list to join, how many people are on it as of April (if available), and contact information. Each state's Maximum Qualifying Income (MQI) to be in ADAP is shown as a percentage of the federal poverty level as well as the dollar amount for a one-person household (in the 48 contiguous states the federal poverty level for one person is \$11,490; add \$4,020 per family member).

<p><b>ALABAMA</b>            Website: <a href="http://adph.org/aids">adph.org/aids</a>            Phone: (334) 206-5364            MQI: <b>250% or \$28,725</b>; Waiting List: <b>Yes, 27</b></p>	<p><b>IDAHO</b>            Website: <a href="http://safesex.idaho.gov">safesex.idaho.gov</a>            Phone: (208) 334-6527            MQI: <b>200% or \$22,980</b>; Waiting List: <b>Yes, 14</b></p>
<p><b>ALASKA</b>            Website: <a href="http://bit.ly/AKadap">bit.ly/AKadap</a>            (907) 263-2050            MQI: <b>300% or \$43,050</b>; Waiting List: <b>No</b></p>	<p><b>ILLINOIS</b>            Website: <a href="http://bit.ly/illinoisADAP">bit.ly/illinoisADAP</a>            Phone: (217) 524-5983            MQI: <b>300% or \$34,470</b>; Waiting List: <b>No</b></p>
<p><b>ARIZONA</b>            Website: <a href="http://bit.ly/AZadap">bit.ly/AZadap</a>            Phone: (800) 334-1540            MQI: <b>300% or \$34,470</b>; Waiting List: <b>No</b></p>	<p><b>INDIANA</b>            Website: <a href="http://bit.ly/indianaADAP">bit.ly/indianaADAP</a>            Phone: (866) 588-4948            MQI: <b>300% or \$34,470</b>; Waiting List: <b>No</b></p>
<p><b>ARKANSAS</b>            Website: <a href="http://bit.ly/ARadap">bit.ly/ARadap</a>            Phone: (501) 661-2408            MQI: <b>200% or \$22,980</b>; Waiting List: <b>Yes</b></p>	<p><b>IOWA</b>            Website: <a href="http://bit.ly/iowaADAP">bit.ly/iowaADAP</a>            Phone: (515) 281-4775            MQI: <b>200% or \$22,980</b>; Waiting List: <b>No</b></p>
<p><b>CALIFORNIA</b>            Website: <a href="http://bit.ly/CAadap">bit.ly/CAadap</a>            Phone: (916) 449-5900            MQI: <b>less than \$50,000</b>; Waiting List: <b>No</b></p>	<p><b>KANSAS</b>            Website: <a href="http://bit.ly/kansasADAP">bit.ly/kansasADAP</a>            Phone: (785) 368-8218            MQI: <b>300% or \$34,470</b>; Waiting List: <b>No</b></p>
<p><b>COLORADO</b>            Website: <a href="http://bit.ly/COadap">bit.ly/COadap</a>            Phone: (303) 692-2748            MQI: <b>400% or \$45,960</b>; Waiting List: <b>No</b></p>	<p><b>KENTUCKY</b>            Website: <a href="http://bit.ly/kentuckyADAP">bit.ly/kentuckyADAP</a>            Phone: (866) 510-0005            MQI: <b>300% or \$34,470</b>; Waiting List: <b>No</b></p>
<p><b>CONNECTICUT</b>            Website: <a href="http://bit.ly/CTadap">bit.ly/CTadap</a>            Phone: (800) 233-2503            MQI: <b>400% or \$45,960</b>; Waiting List: <b>No</b></p>	<p><b>LOUISIANA</b>            Website: <a href="http://hiv.dhh.louisiana.gov">hiv.dhh.louisiana.gov</a>            Phone: (504) 568-7474            MQI: <b>300% or \$34,470</b>; Waiting List: <b>Yes</b></p>
<p><b>DELAWARE</b>            Website: <a href="http://bit.ly/DEadap">bit.ly/DEadap</a>            Phone: (302) 744-1050            MQI: <b>500% or \$57,450</b>; Waiting List: <b>No</b></p>	<p><b>MAINE</b>            Website: <a href="http://bit.ly/MEadap">bit.ly/MEadap</a>            Phone: (207) 287-3747            MQI: <b>\$55,850, add \$3,960 per dependent</b>; Waiting List: <b>No</b></p>
<p><b>DISTRICT OF COLUMBIA</b>            Website: <a href="http://bit.ly/DCadap">bit.ly/DCadap</a>            Phone: (202) 671-4900            MQI: <b>500% or \$57,450</b>; Waiting List: <b>No</b></p>	<p><b>MARYLAND</b>            Website: <a href="http://bit.ly/MDadap">bit.ly/MDadap</a>            Phone: (800) 205-6308            MQI: <b>500% or \$57,450</b>; Waiting List: <b>No</b></p>
<p><b>FLORIDA</b>            Website: <a href="http://floridaADAP.org">floridaADAP.org</a>            Phone: (800) 352-2437            MQI: <b>400% or \$45,960</b>; Waiting List: <b>Yes, 22</b></p>	<p><b>MASSACHUSETTS</b>            Website: <a href="http://bit.ly/MAadap">bit.ly/MAadap</a>            Phone: (800) 228-2714            MQI: <b>500% or \$57,450</b>; Waiting List: <b>No</b></p>
<p><b>GEORGIA</b>            Website: <a href="http://bit.ly/georgiaADAP">bit.ly/georgiaADAP</a>            Phone: (404) 657-3100            MQI: <b>300% or \$34,470</b>; Waiting List: <b>No</b></p>	<p><b>MICHIGAN</b>            Website: <a href="http://michigan.gov/dap">michigan.gov/dap</a>            Phone: (888) 826-6565            MQI: <b>450% or \$51,705</b>; Waiting List: <b>No</b></p>
<p><b>HAWAII</b>            Website: <a href="http://bit.ly/hawaiiADAP">bit.ly/hawaiiADAP</a>            Phone: (808) 733-9360            MQI: <b>400% or \$52,920</b>; Waiting List: <b>No</b></p>	<p><b>MINNESOTA</b>            Website: <a href="http://bit.ly/minnesotaADAP">bit.ly/minnesotaADAP</a>            Phone: (800) 657-3761            MQI: <b>300% or \$34,470</b>; Waiting List: <b>No</b></p>

**MISSISSIPPI**

Website: [bit.ly/mississippiADAP](http://bit.ly/mississippiADAP)  
 Phone: (601) 362-4356  
 MQI: **400% or \$45,960**; Waiting List: **No**

**MISSOURI**

Website: [bit.ly/missouriADAP](http://bit.ly/missouriADAP)  
 Phone: (573) 751-6439  
 MQI: **300% or \$34,470**; Waiting List: **No**

**MONTANA**

Website: [bit.ly/montanaADAP](http://bit.ly/montanaADAP)  
 Phone: (406) 444-4744  
 MQI: **330% or \$37,917**; Waiting List: **No**

**NEBRASKA**

Website: [bit.ly/NEadap](http://bit.ly/NEadap)  
 Phone: (402) 559-4673  
 MQI: **200% or \$22,980**; Waiting List: **No**

**NEVADA**

Website: [bit.ly/nevadaADAP](http://bit.ly/nevadaADAP)  
 Phone: (775) 684-3499  
 MQI: **400% or \$45,960**; Waiting List: **No**

**NEW HAMPSHIRE**

Website: [bit.ly/NHadap](http://bit.ly/NHadap)  
 Phone: (603) 271-4502  
 MQI: **500% or \$57,450**; Waiting List: **No**

**NEW JERSEY**

Website: [bit.ly/newjerseyADAP](http://bit.ly/newjerseyADAP)  
 Phone: (877) 613-4533  
 MQI: **500% or \$57,450**; Waiting List: **No**

**NEW MEXICO**

Website: [bit.ly/newmexicoADAP](http://bit.ly/newmexicoADAP)  
 Phone: (505) 827-2433  
 MQI: **400% or \$45,960**; Waiting List: **No**

**NEW YORK**

Website: [bit.ly/newyorkADAP](http://bit.ly/newyorkADAP)  
 Phone: (800) 542-2437  
 MQI: **435% or \$49,981**; Waiting List: **No**

**NORTH CAROLINA**

Website: [bit.ly/NCadap](http://bit.ly/NCadap)  
 Phone: (877) 466-2232  
 MQI: **300% or \$34,470**; Waiting List: **No**

**NORTH DAKOTA**

Website: [ndhealth.gov/HIV](http://ndhealth.gov/HIV)  
 Phone: (701) 328-1059  
 MQI: **300% or \$34,470**; Waiting List: **No**

**OHIO**

Website: [bit.ly/OHadap](http://bit.ly/OHadap)  
 Phone: (866) 777-4775  
 MQI: **300% or \$34,470**; Waiting List: **No**

**OKLAHOMA**

Website: [bit.ly/OKADAP](http://bit.ly/OKADAP)  
 Phone: (405) 271-4636  
 MQI: **200% or \$22,980**; Waiting List: **No**

**OREGON**

Website: [bit.ly/oregonADAP](http://bit.ly/oregonADAP)  
 Phone: (800) 805-2313  
 MQI: **200% or \$22,980**; Waiting List: **No**

**PENNSYLVANIA**

Website: [bit.ly/PennADAP](http://bit.ly/PennADAP)  
 Phone: (800) 922-9384  
 MQI: **337% or \$38,721**; Waiting List: **No**

**RHODE ISLAND**

Website: [bit.ly/RIadap](http://bit.ly/RIadap)  
 Phone: (401) 222-2320  
 MQI: **400% or \$45,960**; Waiting List: **No**

**SOUTH CAROLINA**

Website: [scdhec.gov/adap](http://scdhec.gov/adap)  
 Phone: (803) 831-7806  
 MQI: **300% or \$34,470**; Waiting List: **No**

**SOUTH DAKOTA**

Website: [bit.ly/SDadap](http://bit.ly/SDadap)  
 Phone: (605) 773-3737  
 MQI: **300% or \$34,470**; Waiting List: **No**

**TENNESSEE**

Website: [bit.ly/TNadap](http://bit.ly/TNadap)  
 Phone: (615) 532-2392  
 MQI: **300% or \$34,470**; Waiting List: **No**

**TEXAS**

Website: [bit.ly/texasADAP](http://bit.ly/texasADAP)  
 Phone: (800) 255-1090  
 MQI: **200% or \$22,980**; Waiting List: **No**

**UTAH**

Website: [bit.ly/utahADAP](http://bit.ly/utahADAP)  
 Phone: (801) 538-6197  
 MQI: **250% or \$28,725**; Waiting List: **No**

**VERMONT**

Website: [bit.ly/vermontADAP](http://bit.ly/vermontADAP)  
 Phone: (802) 951-4005  
 MQI: **500% or \$57,540**; Waiting List: **No**

**VIRGINIA**

Website: [bit.ly/virginiaADAP](http://bit.ly/virginiaADAP)  
 Phone: (866) 392-1309  
 MQI: **400% or \$45,960**; Waiting List: **No**

**WASHINGTON**

Website: [bit.ly/WAadap](http://bit.ly/WAadap)  
 Phone: (360) 236-3426  
 MQI: **300% or \$34,470**; Waiting List: **No**

**WEST VIRGINIA**

Website: [bit.ly/WestVAADAP](http://bit.ly/WestVAADAP)  
 Phone: (304) 232-6822  
 MQI: **400% or \$45,960**; Waiting List: **No**

**WISCONSIN**

Website: [bit.ly/WIadap](http://bit.ly/WIadap)  
 Phone: (800) 991-5532  
 MQI: **300% or \$34,470**; Waiting List: **No**

**WYOMING**

Website: [bit.ly/WYadap](http://bit.ly/WYadap)  
 Phone: (307) 777-5856  
 MQI: **\$38,300-\$45,500, based on county**; Waiting List: **No**

*ADAP also covers Puerto Rico, Guam, the Virgin Islands, and Pacific Island Territories. Visit <http://bit.ly/ADAPfacts> for more information.*

MEDICATION	DOSAGE	WHAT IT DOES	WHAT TO KNOW	SIDE EFFECTS
<b>ETOPOPHOS</b> <i>etoposide</i> Bristol-Myers Squibb	Dosages vary for small cell lung cancer and testicular cancer, used in combination with other chemotherapeutic agents	Treats various types of cancer; being tested for treatment of non-Hodgkin's lymphoma and Kaposi's sarcoma	High-dose cyclosporine and drugs such as levamisole hydrochloride can cause interactions. Use of a live virus vaccine could be complicated by weakened immune mechanisms. Do not deliver by bolus intravenous injection.	<b>Most serious:</b> severe allergic reaction, alopecia (hair loss), chills or fever, nausea, constipation, abdominal pain <b>Other:</b> rash, unusual tiredness
<b>ZOVIRAX</b> <i>acyclovir</i> GlaxoSmithKline	Dosage varies depending on type of infection; available in capsules, tablets, oral suspension, topical cream, and as intravenous injectable.	Treats and controls herpes viral infections, like shingles, genital warts, and chicken pox	Use with caution with Retrovir, antifungal agents, Benemid, interferon, intrathecal methotrexate, and drugs that can cause kidney toxicity. Drink plenty of fluids while taking the drug.	<b>Most serious:</b> Severe allergic reaction, blood and liver disorders, hepatitis, peripheral edema (blood clotting leading to swelling of the legs or arms), gastrointestinal upset, nausea, alopecia (hair loss), jaundice, seizures, confusion, hallucination <b>Other:</b> headache, visual impairment, tremors, rash or stinging skin with topical ointment
<b>HEPSERA</b> <i>adefovir dipivoxil</i> Gilead	One 10-mg tablet daily	Treats chronic hepatitis B infection	Do not take with Viread, Atripla, Truvada, Complera, or Stribild. Use caution when taking with drugs that affect kidney function or are eliminated by the kidneys, or with other NRTIs.	<b>Most serious:</b> worsening of hepatitis B, kidney malfunction, buildup of lactic acid in the blood <b>Other:</b> weakness, headache, abdominal pain, nausea, diarrhea, indigestion, gas
<b>MARINOL</b> <i>dronabinol</i> Abbott Laboratories	Varies, but usually starts with one 2.5-mg capsule taken twice daily, before lunch and dinner. Also available in 5-mg or 10-mg capsules. Take the capsules whole; do not crush or chew	Helps stimulate the appetite of HIV patients	Can interact dangerously with alcohol, Valium, Librium, Seconal, Xanax, or Nembutal. Do not smoke marijuana, as this can cause an overdose. Can become habit-forming.	<b>Most serious:</b> amnesia, confusion, delusions, mood changes, feelings of unreality, hallucinations, depression, nervousness, anxiety, and rapid heartbeat <b>Other:</b> clumsiness or unsteadiness, dizziness, drowsiness, euphoria, trouble thinking, nausea, vomiting
<b>ZITHROMAX</b> <i>azithromycin</i> Pfizer (Zithromax); various others (generic)	For treatment of mycobacterium avium complex, one 600-mg tablet daily, with 15 mg of Myambutol; for prevention, two 600-mg tablets, once weekly, which may be combined with Mycobutin	Treats and helps prevent mycobacterium avium complex	When this drug is used with Viracept, which can increase concentrations of Zithromax, the patient should be monitored closely for known side effects of Zithromax, such as liver enzyme abnormalities and hearing impairment.	<b>Most serious:</b> irregular heart activity, in rare cases fatal; liver enzyme abnormalities and other liver problems, severe diarrhea, hearing impairment <b>Other:</b> nausea, vomiting, mild to moderate diarrhea, abdominal pain
<b>RADIESSE</b> <i>calcium hydroxylapatite</i> Merz Aesthetics	Varies; the drug is available in single-use vials with 0.3, 1, or 1.3 milliliters of calcium hydroxylapatite suspended in a water-based gel. It is injected into the skin, and results can last up to a year	Treats facial fat loss (lipoatrophy) and stimulates the body's collagen production to combat HIV-related facial wasting	Users of blood thinners or aspirin may have bleeding or bruising at the injection site. For 24 hours after treatment, avoid significant movement, massage, sun exposure, or makeup use.	Irritation, redness, swelling, itching, burning, or tenderness at the injection site may occur, but typically resolve shortly after treatment.
<b>FULYZAQ</b> <i>crofelmor</i> Salix	One 125-mg delayed-release tablet, twice daily, with or without food. Tablets should be swallowed whole and not crushed or chewed	Relieves diarrhea that is a side effect of anti-retroviral drugs	Patients should be tested to make sure the diarrhea is not caused by an infection or gastrointestinal disease.	<b>Most serious:</b> upper respiratory tract infection, bronchitis, cough, flatulence, and increased levels of the liver enzyme bilirubin
<b>DIFLUCAN</b> <i>fluconazole</i> Pfizer	Doses vary based on targeted infection. Available as tablets, a powder to be mixed with water and taken orally, or an injection formula	Treats many types of fungal infections, including AIDS-related Candida oral, esophageal, urinary, or vaginal yeast infections	Do not take with Quinaglute, Quinidex, Hismanal, Propulsid, Orap, or erythromycin. Use with caution with antidiabetic agents, anticonvulsants, blood pressure medications, immunosuppressive drugs, protease inhibitors, blood thinners, and vitamin A nutritional supplements.	<b>Most serious:</b> liver problems, potentially severe allergic reaction <b>Other:</b> rash, nausea, headache, vomiting, diarrhea