



DAPSONE (Avlosulfon)

WHAT IS DAPSONE?

Dapsone is an antibiotic drug. It is sold as Dapsone or Avlosulfon. Antibiotics fight infections caused by bacteria. Dapsone is also used to fight opportunistic infections in people with HIV. Jacobus manufactures it.

WHY DO PEOPLE WITH HIV TAKE DAPSONE?

Dapsone is usually used to fight leprosy or a skin problem called *dermatitis herpetiformis*.

Many germs live in our bodies or are common in our surroundings. A healthy immune system can fight them off or keep them under control. However, HIV infection can weaken the immune system. Infections that take advantage of weakened immune defenses are called "opportunistic infections." People with advanced HIV disease can get opportunistic infections. See Fact Sheet 500 for more information on opportunistic infections.

One opportunistic infection in people with HIV is PCP. This stands for *pneumocystis jiroveci pneumonia*, which affects the lungs. See Fact Sheet 515 for more information on PCP. People who have a CD4 cell count of less than 200 may develop PCP.

Health care providers sometimes use a combination of trimethoprim (see fact sheet 535) and dapsone to treat PCP. Dapsone can also be used to prevent PCP. If your CD4 cell count is below 200, ask your doctor if you should be taking dapsone or another drug to prevent PCP.

Another opportunistic infection is toxoplasmosis (tox), which affects the brain. See Fact Sheet 517 for more information on tox. People who have a CD4 cell count of less than 100 may develop tox. Dapsone can be used with the drug pyrimethamine to treat cases of tox. This combination can also be used to prevent tox.

Who Should Not Take Dapsone:

- Some people are allergic to dapsone. Be sure to tell your health care provider if you are allergic to any antibiotics.

- Dapsone can cause anemia. People who are anemic should talk to their health care provider about whether dapsone is the best drug for them.

- Some people have low levels of an enzyme known as glucose-6-phosphate dehydrogenase, or G6PD. Up to 15% of African-American men and many men of Mediterranean ancestry have this shortage and should not take dapsone. They could develop sudden, severe anemia.

- Taking dapsone during pregnancy may increase the risk of birth defects. Women who are pregnant or are breastfeeding should avoid taking it if possible.

WHAT ABOUT DRUG RESISTANCE?

Whenever you take medication, be sure to take all of the prescribed doses. Many people stop if they feel better. This is not a good idea. If the drug doesn't kill all of the germs, they might change (mutate) so that they can survive even when you are taking medications. When this happens, the drug will stop working. This is called "developing resistance" to the drug.

For example, if you are taking dapsone to fight PCP and you miss too many doses, the PCP in your body could develop resistance to dapsone. Then you would have to take a different drug or combination of drugs to fight it.

HOW IS DAPSONE TAKEN?

Dapsone is available in tablets of 25 or 100 milligrams (mg). It is normally taken once a day or three times a week. The dose you take depends on the type of infection you are trying to treat or prevent.

The treatment continues as long as your CD4 cell count is low enough for you to develop toxo or PCP.

Dapsone can be taken with or without food. If your stomach gets upset when you take dapsone, take it with food.

WHAT ARE THE SIDE EFFECTS?

The main side effect of dapsone is anemia, a loss of red blood cells.

Stomach upset is also common. A few people get leg or back pain, nausea, vomiting, headache, dizziness, or peripheral neuropathy (see fact sheet 555 on peripheral neuropathy).

Dapsone can make you sensitive to sunlight. If this occurs, use sun block on your skin and/or wear sunglasses.

Tell your health care provider if your skin gets pale or yellowish, or you get a sore throat, fever, or rash, even after a few weeks of taking dapsone. These might indicate a serious drug reaction.

HOW DOES DAPSONE REACT WITH OTHER DRUGS?

Dapsone is broken down by the liver. It can interact with other drugs that also use the liver. Scientists have not yet studied all the possible interactions. Dapsone probably interacts with some blood thinners, heart medications, seizure medications, and other antibiotics. **Be sure your health care provider knows about all the medications you are taking.**

Your health care provider should watch carefully for drug interactions if you are taking dapsone along with the protease inhibitors **fosamprenavir (Lexiva)**, **saquinavir (Invirase)**, **tipranavir (Aptivus)** or the non-nucleoside reverse transcriptase inhibitors **etravirine (Intelence)** or **delavirdine (Rescriptor)**.

Blood levels of dapsone can be reduced if you take **rifampin**, a drug used to treat tuberculosis (see fact sheet 518) or MAC (see fact sheet 514). Also, **ddl** can reduce absorption of dapsone. Take dapsone at least 2 hours before or after you take **ddl**.

The risk of developing anemia is higher if you take dapsone at the same time as other drugs that can cause anemia, such as **AZT (Retrovir, see fact sheet 411)**.

The risk of developing peripheral neuropathy is higher if you take dapsone at the same time as other drugs that can cause neuropathy, such as **ddl** and **d4T** (see fact sheets 413 and 414).

Reviewed April 21, 2014