



# atovaquone (Mepron)

---

## **WHAT IS ATOVAQUONE?**

Atovaquone is an antibiotic. In the U.S., its brand name is Mepron. It is sold under different names in other parts of the world. Antibiotics fight infections caused by bacteria. Atovaquone is used to fight [opportunistic infections \(OIs\)](#) in people with HIV.

## **WHY DO PEOPLE WITH HIV TAKE ATOVAQUONE?**

Atovaquone interferes with the reproduction of protozoa (single-cell organisms) that can cause disease in the body.

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 \(OIs\)](#). People with advanced HIV disease can get OIs.

Atovaquone is prescribed to treat [pneumocystis pneumonia \(PCP\)](#). PCP is caused by a fungus. A healthy immune system can control the fungus. However, when the immune system is weak or damaged, PCP causes illness in children and in adults.

PCP almost always affects the lungs, causing a form of pneumonia. People with [CD4 cell counts](#) under 200 cells/mm<sup>3</sup> have the highest risk of developing PCP. People with counts under 300 cells/mm<sup>3</sup> who have already had another OI are also at risk. Most people who get PCP become much weaker, lose a lot of weight, and are likely to get PCP again.

Atovaquone is also used to treat [toxoplasmosis \(toxoplasmosis\)](#), an infection caused by the parasite *Toxoplasma gondii*. A parasite lives inside another living organism (the host) and takes all of its nutrients from the host. Up to 60 million Americans are infected with toxo. A healthy immune system will keep toxo from causing any disease. However, a weakened immune system cannot always keep toxo in check. It does not seem to spread from person to person. Pregnant people who are exposed to toxo may pass it to their babies.

The most common illness caused by toxo is an infection of the brain (encephalitis), but toxo can also infect other parts of the body. Toxo can lead to coma and death. The risk of toxo is highest when CD4 cell counts are below 100 cells/mm<sup>3</sup>.

Atovaquone can be given to prevent PCP or toxoplasmosis as well as treat them. It is also given in cases where a person is allergic to [trimethoprim/sulfamethoxazole \(TMP/SMX, Bactrim, Septra\)](#) or [diaminodiphenyl sulfone \(Dapsone\)](#) or when other therapies have been ineffective.

Atovaquone is as effective as more commonly prescribed drugs and it has fewer and different side effects. However, it is very expensive. Because of its cost, it is usually only considered for people who cannot tolerate Bactrim or Dapsone.

Combination [antiretroviral therapy \(ART\)](#) can make your [CD4 cell count](#) go up. If it goes over 200 cells/mm<sup>3</sup> and stays there for 3 months, it may be safe to stop taking PCP medications such as atovaquone.

**Be sure to talk with your healthcare provider  
before you stop taking any of your prescribed medications.**

### ***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 atovaquone to treat PCP and you miss too many doses, the PCP in your body could develop resistance to atovaquone. Then you would have to take a different drug or combination of drugs to treat thrush.

### ***HOW IS ATOVAQUONE USED?***

Atovaquone is not the first choice for treatment of PCP or toxo. However, your healthcare provider may decide to use it if you have certain allergies or bad side effects to other medications. Your healthcare provider will recommend a specific dosage. Atovaquone is also used against malaria in a combination pill called Malarone.

### ***WHAT ARE THE SIDE EFFECTS?***

The most common side effects of atovaquone are fever and skin rash. Other side effects may occur that usually don't require medical attention. However, if they become severe talk to your healthcare provider. These include cough, diarrhea, headache, nausea, vomiting, and trouble sleeping.

### ***HOW DOES ATOVAQUONE INTERACT WITH OTHER DRUGS?***

Atovaquone can interact with rifampin (Rifadin), a drug used to treat [tuberculosis \(TB\)](#). The interaction decreases the amount of atovaquone in the blood. This may also occur with a related drug, rifabutin which is also used to treat tuberculosis and as part of a combination drug used to fight malaria. Atovaquone can increase blood levels of [etravirine \(Intelence\)](#) and saquinavir (Invirase).

In addition, several [antiretroviral medications \(ARVs\)](#) used to treat HIV appear to significantly reduce blood levels of atovaquone. Be sure your healthcare provider knows if you are taking Malarone and HIV medications at the same time.

## ***THE BOTTOM LINE***

Atovaquone is used to treat PCP and toxoplasmosis. It can prevent new infections or treat active infections. Atovaquone is not the first choice for these situations. Therefore, it is normally used only when other drugs have failed or cannot be used.

If your CD4 cell count is below 300 cells/mm<sup>3</sup>, talk to your healthcare provider about taking drugs to prevent PCP. **Everyone** whose CD4 cell count is below 200 cells/mm<sup>3</sup> should be taking anti-PCP medication.

## ***MORE INFORMATION***

MedlinePlus: [Atovaquone](#)

Drugs.com: [Atovaquone](#)

**Reviewed March 2021**