



# Gold

(*Myochrysine*,  
*Ridaura*, *Solganol*)

Gold has been used for more than 75 years to treat [rheumatoid arthritis](#) (RA). (Indeed, gold preparations are among the original medications targeting this form of arthritis). Before its use in RA, gold was used to treat infections, including tuberculosis. Gold is one of a class of medications known as disease-modifying antirheumatic drugs (DMARDs), because it not only decreases the pain and swelling of arthritis but also can prevent joint damage and disability. While gold can be very effective at suppressing the signs and symptoms of RA for some patients, it is used less frequently as new, better tolerated medications have been identified.

Several forms of gold are available. Rheumatologists talking about "gold" usually are referring to one of the injectable forms of gold salts: gold sodium thiomalate (*Myochrysine*) and aurothioglucose (*Solganal*). There is also an oral tablet that contains gold, auranofin (*Ridaura*); however, this preparation is distinct from the injectable forms and much less effective.

## Fast Facts

- Gold is one of the original medications identified to reduce the symptoms of RA and slow its progression.
- Gold usually is given as a weekly injection (and eventually may be given every 4 weeks), although a pill form also exists.
- Gold injections can affect kidney function and the bone marrow and require careful monitoring.
- Gold largely has been replaced by better tolerated and more effective medications for RA.

## Uses

Gold preparations can be recommended to treat RA as well as other forms of arthritis.

## How it works

Gold is an anti-inflammatory drug, meaning it interferes with cells and substances in the immune system that cause swelling and pain. Although it is not entirely clear how gold works to treat RA, it is believed to modify the immune response that is abnormal in this disease.

## Dosing

Adults and teenagers taking aurothioglucose (*Solganal*) receive intramuscular injections (similar to a vaccine inoculation) once a week. The usual starting dose is 10 milligrams (mg), which is increased to 25 mg once a week for the next two weeks, and then 25 or 50 mg once a week. Usually after about 6 months, the injections may be given every 2 to 4 weeks.

Adults and teenagers taking sodium thiomalate (*Myochrysine*) for RA follow a dosing regimen similar to that of aurothioglucose. For children with [juvenile arthritis](#), the first dose of sodium thiomalate is usually 10 mg. The next doses usually are based on 1 mg/kg of body weight, but not more than a total of 50 mg, once a week. After several months, as with aurothioglucose, the injection may be given every 3 to 4 weeks.

For oral gold, the typical starting dose (auranofin or *Ridaura*) for adult patients with RA is 6 mg once a day or 3 mg twice a day. After 6 months, your doctor may increase the dose to 3 mg three times a day for maximal effect.

## Time to effect

It may take some time to see any improvement of symptoms while taking gold therapy. Most patients experience an improvement after 3 to 6 months of therapy.

## Side effects

Up to a third of patients on gold therapy commonly experience side effects involving the skin and the mucous membranes of the mouth, including oral ulcers (like canker sores), altered taste and skin rashes. Skin side effects vary, but usually include itching or mild rashes. Occasionally, patients develop a more serious rash requiring medical attention. These side effects typically occur during the first year of therapy, but can appear at any time. Most will subside following discontinuation of therapy.

Gold also can affect the kidneys or the blood cells. Most kidney problems are mild and do not cause long-term complications. Oral gold tablets seem to cause fewer kidney problems, but increase the risk of diarrhea. A small proportion of patients taking gold experience a reduction in the number of blood cells, usually the platelets. In less than 1 percent of patients, red cell count may be lowered, causing anemia. Your doctor will perform periodic blood and urine tests while you are on this medication, because these side effects do not always cause symptoms.

More unusual side effects include an inflammation of the intestines called enterocolitis, liver injury or lung disease. Although these conditions can be serious, they occur very rarely.

Occasionally, patients experience a reaction after receiving gold injections. Most of these reactions include symptoms of stiffness, joint or muscle aches, or fatigue, which occur within a day of the injection and may last

up to 5 days. Less commonly, patients experience nausea and vomiting, weakness, sweating, palpitations or flushing. These symptoms generally do not cause any real problems, but may require switching to a more tolerable therapy.

## Points to remember

Use of an effective form of birth control is important while taking this medication. It is unclear whether gold causes birth defects in children, but studies have shown it does cause such defects in animals. If you are pregnant or are considering having a child, discuss this issue with your doctor before beginning this medication. Women who have just given birth and want to breast-feed also should discuss this matter with their physicians. Breast-feeding while taking injectable gold is not recommended. It is not yet known if the oral form of this medication is passed into breast milk.

## Drug Interactions

Very little information is available regarding drug interactions with gold therapy, although interactions are uncommon.

## Information to discuss with your primary care physician and other specialists

Be sure to notify your other physicians that you are taking this drug. Women taking this medication should discuss appropriate forms of birth control with their primary care physician or gynecologist. Live vaccines should be avoided while on this medication, and you should discuss updating your vaccinations prior to starting this medication. Because this medication can lower your immunity, it is important you discuss this with any physician treating you for an infection, as this may lead to a different evaluation or treatment.

Gold is rarely prescribed to treat rheumatic diseases because other drugs work better or have fewer side effects. Please ask your rheumatologist about gold and other treatment options.

## To find a rheumatologist

[View a listing of rheumatologists in your area](#)

Learn more information about [rheumatologists](#) and [rheumatology health professionals](#)

## For additional Information

The American College of Rheumatology has compiled this list to give you a starting point for your own additional research. The ACR does not endorse or maintain these Web sites, and is not responsible for any information or claims provided on them. It is always best to talk with your rheumatologist for more information and before making any decisions about your care.

National Institutes of Health

[www.nlm.nih.gov/medlineplus/druginfo/meds/a685038.html](http://www.nlm.nih.gov/medlineplus/druginfo/meds/a685038.html)

Rheum Info

<http://rheuminfo.com/medications/gold-myochrisine/gold-myochrisine-detailed-information>

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