



SALVAGE THERAPY

WHAT IS SALVAGE THERAPY?

Antiretroviral therapy (ART) sometimes needs to be changed if the treatment is not working. This usually happens when the HIV viral load (see fact sheet 125) rises instead of staying very low. A rise in viral load in someone taking ART almost always means that HIV has developed resistance (see fact sheet 126) to the antiretroviral drugs (ARVs). When HIV begins to increase even when someone is taking ART, this is known as treatment failure. Resistance and treatment failure are often caused by missing doses of ARVs (poor adherence, see fact sheet 405).

When treatment failure is caused by drug resistance, it is important for the health care provider to change the ARVs to a new combination that can reduce the HIV viral load despite the resistance. Changing only one ARV may not be enough because HIV can quickly become resistant to a single new drug. It takes a combination of effective ARVs to stop HIV from growing and have treatment success.

As a patient's virus becomes more and more resistant, it becomes harder to choose ARVs that can control it. When a person has very few treatment options available, then the patient needs "salvage therapy." The number of people with HIV in the US who need salvage therapy is unknown, but is estimated to be between 1,000 and 5,000.

HOW CAN YOU AVOID SALVAGE THERAPY?

The best way to avoid salvage therapy is to make ART last as long as you can. Be sure to stick to taking doses on a regular schedule and avoid missing doses. Ask your health care provider how to avoid treatment failure and ensure treatment success (see fact sheet 405 on tips for adherence).

If possible, you should always have two or more active ARVs in your ART regimen. An active ARV is one that is expected to work against your own HIV based on its particular resistance. If you have a rising viral load, find out if your

HIV has resistance to any ARVs. Your health care provider will need to review the results of a resistance test (see fact sheet 126) to tell which ARVs are active against your HIV. This can be a genotypic test or a phenotypic test.

WHEN DOES SOMEONE NEED SALVAGE THERAPY?

When treatment failure continues for too long, the chances of serious HIV disease are higher. This is especially true for patients with low CD4 counts (see fact sheet 124.) You may need to make an immediate change in ART if:

- you are losing weight
- your CD4 count is dropping
- you have serious side effects
- you have increasing symptoms

When resistant HIV cannot be controlled because there are not enough active ARVs available, then a patient needs salvage therapy.

However, if your health and CD4 count are stable, you can go onto a "holding regimen" while you wait for new ARVs to be developed. **Do not stop taking medications to prevent opportunistic infections (OIs, see fact sheet 500).** The drugs you need to take to prevent OIs are based on your CD4 count.

WHAT IS A "HOLDING REGIMEN"?

If you don't have at least two active ARVs to use, you need to preserve your CD4 count and keep your viral load as low as possible. You also want to preserve your treatment options. This normally means stopping any ARVs that are only partly effective so that your virus doesn't develop more resistance to them. This would make them totally ineffective. However, stopping all ARVs can be harmful.

Managing salvage therapy is not easy. Your doctor must evaluate up-to-date treatment information to balance between getting the most out of available ARVs and avoiding disease, while keeping options open for the future when new ARVs become available.

GETTING ACCESS TO NEW ARVs

You may not have to wait until new ARVs are approved before you can use them. It may be possible to join a clinical trial (see fact sheet 105) of a new ARV in development. Some new ARVs become available through an expanded access program long before they are approved.

Remember that you want to be able to combine a new ARV with at least one other active ARV. You should review clinical trials carefully with your health care provider so that you will be sure to get at least two active ARVs in the trial. In some trials it is possible to get assigned to a "placebo" arm and not receive the new ARV. More information on clinical trials is available at the following web sites:

<http://www.salvagetherapies.org/clinical.html>
http://trialssearch.org/clinical_trials/index.html
or <http://www.clinicaltrials.gov/>

The best option for people who need salvage therapy is to use an ARV in a new class along with one or more other active ARVs. Your virus will almost certainly not have any resistance to an ARV from a new class of drugs. Recent new classes of ARVs include integrase inhibitors (see fact sheet 470), fusion inhibitors (see fact sheet 461), and attachment inhibitors (see fact sheet 460).

THE BOTTOM LINE

There are more options today for people with HIV than at any time in the past. Treatment can have excellent results, even for people whose virus is resistant to most existing ARVs. An experienced health care provider is very important in helping you decide when to change treatment and when to wait.

Reviewed September 30, 2014