

Education

Blood (Serum) Glutamate Pyruvate Transaminase (SGPT) Test

What is the SGPT test?

This test measures the amount of an enzyme called glutamate pyruvate transaminase (GPT) in your blood. This enzyme is found in many body tissues in small amounts, but it is very concentrated in the liver. It is released into the blood when cells that contain it are damaged. This enzyme is also called alanine transaminase, or ALT.

Why is this test done?

The GPT level is tested to look for and evaluate damage to the liver. It is also measured to check medical treatments that may lead to liver inflammation.

How do I prepare for this test?

- You may need to avoid taking certain medicines before the test because they might affect the test result. Make sure your health care provider knows about any medicines, herbs, or supplements that you are taking. Don't stop any of your regular medicines without first consulting with your health care provider.
- Talk to your health care provider if you have any questions.

How is the test done?

A small amount of blood is taken from your arm with a needle. The blood is collected in tubes and sent to a lab.

Having this test will take just a few minutes of your time. There is no risk of getting AIDS, hepatitis, or any other blood-borne disease from this test.

How will I get the test result?

Ask your health care provider when and how you will get the result of your test.

What does the test result mean?

The normal GPT range for adults in most labs is 0 to 35 units per liter (U/L). The normal range may vary slightly from lab to lab. Normal ranges are usually shown next to your results in the lab report.

Your SGPT level may be much higher than normal (up to 50 times the upper limit of normal) if:

- You have liver damage from an acute viral infection such as viral hepatitis A, B, or C.
- You have liver damage caused by medicines you have taken.

Your SGPT levels may be higher than normal also if:

- You drink too much alcohol.
- You have mononucleosis.
- You have chronic liver infection or inflammation.
- You have gallbladder inflammation, such as may caused by gallstones.
- You have a gallbladder infection.
- You have congested blood flow through the liver due to heart failure.
- You have liver cancer or another cancer that has spread to the liver.
- You are taking certain medicines, such as:
 - medicines used to lower cholesterol levels
 - antifungal medicines
 - some narcotics and barbiturates

- methotrexate
- acetaminophen
- salicylates (aspirin).

No medical problems are known to cause an SGPT level that is lower than normal. Sometimes the test result may be lower than normal but it does not signify a problem.

What if my test result is not normal?

Test results are only one part of a larger picture that takes into account your medical history and current health. Sometimes a test needs to be repeated to check the first result. Talk to your health care provider about your result and ask questions.

If your test results are not normal, ask your health care provider:

- if you need additional tests
- what you can do to work toward a normal value
- when you need to be tested again.

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