

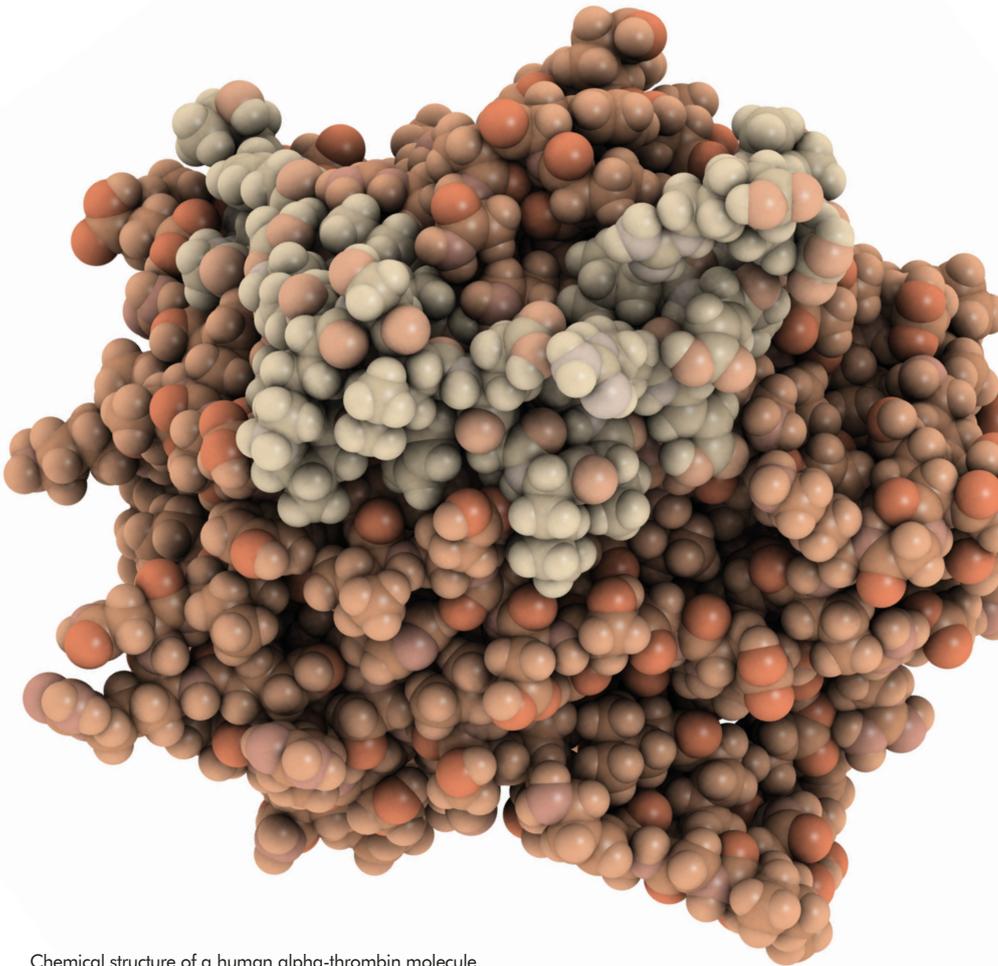


# PATHOLOGY TESTS EXPLAINED

Information about pathology tests to help everyone take control of their health and make the right decisions about their care.

## WHAT YOU SHOULD KNOW ABOUT YOUR **INR/PT TEST**

The INR/PT test measures the time it takes for your blood to clot. It is used to monitor warfarin or similar anti-clotting medications. The PT test can also be used to check if you have a blood clotting problem.



Chemical structure of a human alpha-thrombin molecule

If you are taking warfarin or a similar anti-clotting medication your doctor will check your INR regularly to make sure that your prescription is working properly. There is no set frequency for doing the test. Your doctor will order it often enough to make sure that your dosage is correct.

Having the right dosage of medication is important. It needs to achieve just the right balance – too much and there is a risk of internal bleeding, too little and there is more chance of your blood clotting.

Prothrombin is a protein that acts as a clotting factor in your blood, helping it to stay at the right consistency. It is one of several clotting factors produced by the liver.

Clotting is caused by a series of chemical reactions called the coagulation cascade, in which clotting factors are activated one after another to form a clot. There must be a sufficient quantity of each clotting factor, and each must function properly, in order for normal clotting to occur. One of these steps is the conversion of prothrombin to thrombin.

The prothrombin time (PT) test measures the number of seconds it takes for a clot to form in your sample of blood. The INR is a calculation based on the results of the PT test.

The chemicals and instruments used to perform the PT test vary from one laboratory to another and give different results.

To standardise results, in 1984 the World Health Organisation (WHO) developed the Internationalised Normalised Ratio (INR), a calculation based on the results of the PT test, to help work out the dosage for people on warfarin medication.



## What can your results tell you?

Most people on warfarin medication have a target INR range of 2.0 to 3.0. This is a prothrombin time two to three times as long as that of a healthy person, using standardised conditions.

For some people who have a higher risk of clotting, the INR needs to be higher – up to 3.0 to 4.0. Your doctor will use the INR to adjust the dose of your medication to get the PT into the range that is right for you.

### Preparing for the test

Some common medications can interfere with the PT test and give a misleading result. Antibiotics, aspirin and cimetidine can increase PT. Barbiturates, oral contraceptives and hormone-replacement therapy (HRT), and vitamin K - either in a multivitamin or liquid nutrition supplement - can decrease PT.

Drinking alcohol can also affect PT results as can certain foods that contain high levels of vitamin K.

Make sure that your doctor knows all the medications you are taking so that the PT results are interpreted correctly.



### 5 questions to ask your doctor

Why does this test need to be done?

Do I need to prepare (such as fast or avoid medications) for the sample collection?

Will an abnormal result mean I need further tests?

How could it change the course of my care?

What will happen next, after the test?



### Having a medical test

The choice of tests your doctor makes will be based on your medical history and symptoms. It is important that you tell them everything you think might help.

You play a central role in making sure your test results are accurate. Do everything you can to make sure the information you provide is correct and follow instructions closely.

Talk to your doctor about any medications you are taking. Find out if you need to fast or stop any particular foods or supplements. These may affect your results.



For more detailed information on these and many other tests go to [pathologytestsexplained.org.au](http://pathologytestsexplained.org.au)

Please use this QR code to access more information



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[www.pathologytestsexplained.org.au](http://www.pathologytestsexplained.org.au)

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You'll find a direct link to the Pathology Tests Explained website embedded in the pathology results pages of your record.

Click on the link to find information about what your tests are investigating or measuring and what your results can tell your doctor.