

Understanding Lipoprotein(a)

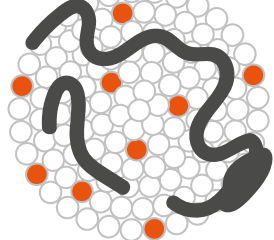


What is lipoprotein ‘little’ a, or Lp(a)?

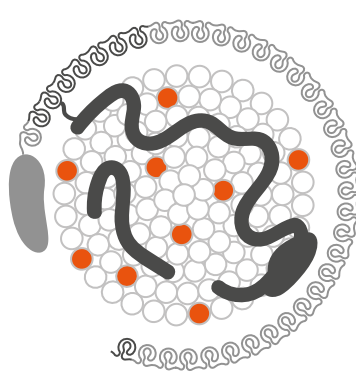
Lp(a) is a large lipoprotein made by the liver. Lipoproteins are parcels of fat and protein which carry lipids (fats) around the body in the blood. Lp(a) is very similar to low-density lipoproteins, or LDL, which is sometimes referred to as ‘bad cholesterol’. Lp(a) is a LDL-like particle **with an added second protein, apo(a)**, which is “stickier” than LDL. **Lp(a) can stick to your artery walls and clog them up**, leading to heart disease and stroke at a young age.¹

A high level of Lp(a) can increase your risk of cardiovascular disease (CVD). High levels of Lp(a) causes furring up of the arteries which can lead to heart attacks, strokes, peripheral arterial disease, aortic valve disease and heart failure.²

LDL

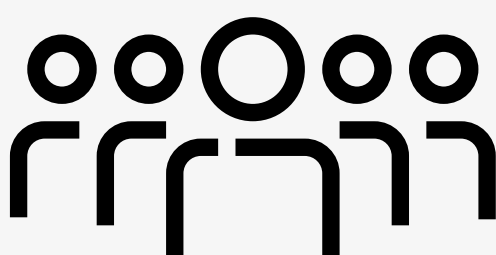


Lp(a)



Key facts about Lp(a)

Approximately **1.4 billion people worldwide** are estimated to have high Lp(a).²



Multiple guidelines recommend those who have had a cardiovascular event have their levels tested at least once in their lifetime, as Lp(a) levels remain relatively consistent over a lifetime.

Usually, one Lp(a) measurement is enough in most patients unless there is an alternative suspected cause of high Lp(a).³



High Lp(a) is an independent risk factor for cardiovascular disease.²



Upon receiving your Lp(a) result, you will be given a number, in either in **nmol/L** or **mg/dL**, which your specialist can explain to you further!¹

How is high Lp(a) diagnosed?

Lp(a) is not routinely measured as part of a standard cholesterol blood check in the UK. It can be tested via referral to a specialist lipid clinic.¹ HEART UK currently recommend that the following individuals should have their Lp(a) tested to help provide a better understanding of each person's overall cardiovascular risk.

- Premature cardiovascular disease (CVD), or premature CVD in the family
- A family history of high Lp(a)
- Familial Hypercholesterolemia or other inherited lipid conditions
- Calcific aortic valve disease (or a family history)
- A borderline (but <15%) 10-year risk of CVD

Lp(a) levels are mainly genetically determined by genes. If you are found to have high levels, you should discuss the need to screen your family members with your specialist team.

More than or equal to

90% (approx)

of an individual's Lp(a) is genetically determined.⁴

Know your Lp(a) numbers

High Lp(a) levels are classed as more than or equal to 105nmol/L or more than 50mg/dL⁵ and can occur in people of all races and ethnicities but appear to be more common in black, young and female people.^{5,6}

Upon receiving your Lp(a) results, you will be given a number which your specialist can explain to you further. Knowing your numbers and understanding them allows you to make more informed decisions about other risk factors that can impact your cardiovascular health such as diet or exercise changes.

If you have been diagnosed with high Lp(a) levels

Remember you are not alone. After a diagnosis it can be difficult to come to terms with the fact that you are at higher risk of cardiovascular disease. However, there are things you can do to manage your risk factors as best you can after being diagnosed with an high Lp(a) level. If you have been diagnosed with high Lp(a) levels, you should let your GP know as soon as possible.



Your healthcare team should consider your Lp(a) level as part of your overall CVD risk assessment. Whilst there are currently no approved pharmacological treatments available for high Lp(a), your healthcare professionals will give you information about reducing your other cardiovascular risk factors.



For example, you could **improve your diet to keep your overall cholesterol levels as low as possible** and you may be prescribed medications, such as statins to lower your LDL cholesterol. Your specialist will help you to make changes in order to keep your non-HDL (all the ‘bad’ cholesterol added together, including your LDL cholesterol) as low as possible. It is particularly important to keep track of as high levels of LDL increase your risk of developing heart disease. You could also aim to achieve a healthy weight and BMI, quit smoking, keep physically active and ensure your blood pressure is kept within a healthy range.¹

If you are feeling worried and need advice about how to best handle your diagnosis, talk to your healthcare professional.

What can you do in the meantime?



Learn as much as you can about how to reduce your risk of cardiovascular disease.

The HEART UK website has a range of resources to support you:

www.heartuk.org.uk

or email:

ask@heartuk.org.uk

or call:

01628 777046



Talk to your family about the importance of understanding their risk factors.



Take notes at appointments to help you remember important information like cholesterol levels and blood pressure readings.



Join an online community of others with high Lp(a) to find support and learn from their experiences such as Patient UK or the National Lipid Association forums.

For further support and Lp(a) information visit the HEART UK website

HEART UK is the UK's only cholesterol charity, providing support, information and influencing services for families and health professionals. They have carried out extensive research into the effects of high Lp(a) and have a helpful and informative webinar video on their website, which was created to help you better understand Lp(a).



Maintaining your overall health

Lp(a) is determined by your genes and therefore does not change throughout your life.

Although Lp(a) levels are generally unaffected by diet, lifestyle or environment, being overweight, having raised cholesterol or blood pressure, inactivity, poor diet, smoking and drinking can all increase your risk of developing heart disease. Therefore healthy lifestyle changes are recommended regardless of their effect on your Lp(a) levels.¹

Cholesterol lowering medications

If you find out you do have high levels of Lp(a), there are currently no medications that are approved for directly lowering Lp(a) levels. If you have high Lp(a) levels, your HCP may recommend taking other cholesterol-lowering medications such as statins. These medications help to lower LDL cholesterol (bad cholesterol) which helps to reduce your overall risk of cardiovascular disease.



References

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