

**CARDIOLOGY IN A MINUTE - FACTS AND INFORMATION FOR THE BUSY GP**

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10 THINGS YOU NEED TO KNOW - NEW BIOMARKERS FOR HEART DISEASE

1. Most patients can have their overall risk assessed with the use of the **Framingham Risk Score** or equivalent risk algorithm. However individual prediction of risk may require more detailed assessment.
2. New biomarkers under consideration include **homocysteine, Lp(a), genetic markers and high sensitivity CRP (hs-CRP)**.
3. **Homocysteine** maybe a marker of risk in some patients but it is usually associated with other risk factors including renal disease. It is easily correctable with the addition of folic acid but trials of folic acid and B group vitamins have shown no improvement in outcomes. Therefore homocysteine is now less frequently used as a biomarker.
4. **Lp(a)** is a subfraction of the lipid profile which has recently been shown to add predictive value on top of the standard lipid profile. Lp(a) is not routinely available in laboratories and remains a research based tool.
5. To date there is no laboratory **genetic marker** available to predict high risk of heart disease, and taking a history family history to detect premature heart disease remains a reliable indicator of risk.
6. **High sensitivity C-reactive protein (hs-CRP)** is the most widely discussed new biomarker, but its role in risk stratification remains limited.
7. There is controversy about the reliability of **hs-CRP** because it can reflect non specific inflammation or obesity, and it is uncertain whether it really adds to the risk assessment after a detailed Framingham risk factor assessment has been completed.
8. If you wish to measure CRP in relation to a cardiovascular risk you must request high sensitivity CRP (**hs-CRP**) from the lab.
9. An **hs-CRP** in excess of 3 may indicate an increased risk.
10. A recent large clinical trial showed that **hs-CRP** can be used for identifying patients at high risk and likely to benefit from statin treatment even when the lipid profile is normal.

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