

# Researchers discover genetic markers that identify people at risk of clot formation and heart attack

November 25 2010

---

An international team led by researchers from the Universities of Leicester and Cambridge has announced a breakthrough in identifying people at risk of developing potentially fatal blood clots that can lead to heart attack.

The discovery, published this week (25 November) in the leading haematology journal *Blood*, is expected to advance ways of detecting and treating coronary [heart disease](#) – the most common form of disease affecting the heart and an important cause of premature death.

The research led by Professor Alison Goodall from the University of Leicester and Professor Willem Ouwehand from the University of Cambridge and NHS Blood and Transplant was carried out in collaboration with colleagues at the Wellcome Trust Sanger Institute, University College Dublin, and the University of Leuven, as part of a large programme to discover novel genes regulating platelets; the tiny cells in the blood that stick together to form a [blood](#) clot.

Understanding what makes these cells more sticky in some people than others could provide potential therapeutic targets for treatment of cardiovascular disease.

Lead author Professor Goodall, of the Department of Cardiovascular Sciences at the University of Leicester, said: "We have long known that

platelet activity and clot formation varied between different people – but we now have identified some of the genetic reasons for this."

Professor Ouwehand said the research had uncovered a new molecule that plays an important role in platelets. He said: "Studies in large number of NHS patients who experienced a heart attack and healthy controls suggests that genetic differences in the gene for this protein slightly modifies the risk for [blood clots](#). This type of study will help us to unravel the complex question why some people have a higher risk of a [heart attack](#) than others. One day this type of research may lead to a new generation of drugs that can be used to reduce the risk of this devastating disease."

**More information:** The URL to the paper is:  
[bloodjournal.hematologylibrary ... abstract/116/22/4646](#)

Provided by University of Leicester

Citation: Researchers discover genetic markers that identify people at risk of clot formation and heart attack (2010, November 25) retrieved 3 May 2024 from  
<https://medicalxpress.com/news/2010-11-genetic-markers-people-clot-formation.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--