



Eye Research Australia

## **MEDIA RELEASE**

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### **Healing from research: a real possibility**

An eye test that could one day help prevent heart attacks is being supported by a \$300,000 grant from Australia's leading research-based medicines company.

Pfizer Australia's three-year collaborative partnership is funding research in advanced stages that proves eyes show early signs of heart disease.

It is work headed by Associate Professor Tien Wong at the Retinal Vascular Imaging Centre (RetVIC) at the Centre for Eye Research Australia.

One day a simple visit to the ophthalmologist or optometrist could provide you with routine screening for life threatening cardiovascular disease and diabetes.

RetVIC is a collaboration between several teams including Pfizer Australia. The group, managed by the Centre for Eye Research Australia, is located at the Royal Victorian Eye and Ear Hospital and will work towards developing special retinal software that can analyse images of the eye and show predictors of cardiovascular disease including stroke, hypertension and heart failure.

"It is an ambitious goal but our ultimate aim is to develop a web-based imaging system from which optometrists and ophthalmologists can upload images which will then be assessed for retinal markers of future cardiovascular disease," Associate professor Tien Wong said.

"We hope the treating specialist will then be able to determine someone's likelihood of developing cardiovascular disease by looking at the images so that appropriate intervention may take place."

Development of this retinal imaging system follows on from Associate Professor Wong's research which is the first in the world to categorically demonstrate that subtle damage to blood vessels in the retina can predict cardiovascular disease.

"The idea that the eye is a window to the human body and can predict other areas of human health has been around for more than a century," he said.

"But our team has demonstrated this prediction in precise and quantitative terms, which is important if there is to be clinical application."

Using data collected from three large clinical trials involving about 20,000 people, Associate Professor Wong's research demonstrated the link between different changes in retinal blood vessels and different types of cardiovascular disease.

His research showed that more severe changes in the retinal arteries predicted stroke, but that subtle degrees of narrowing of blood vessels predicted high blood pressure, diabetes and heart disease.

Associate Professor Wong has authored more than 80 articles on this subject in the past three years, published in prestigious journals including the New England Journal of Medicine, the Lancet, the Journal of the American Medical Association and the British Medical Journal.

Pfizer Australia is the nation's leading research-based health care company. It discovers, develops, manufactures and markets innovative medical treatments for both humans and animals. Pfizer Australia is investing \$A40m in local research and development. For more information visit [www.pfizer.com.au](http://www.pfizer.com.au)

The Retinal Vascular Imaging Centre (RetVIC) is a collaboration between Centre for Eye Research Australia, The University of Melbourne, Baker Medical Research Institute, Diabetes Australia, The Royal Victorian Eye and Ear Hospital, St Vincent's Hospital, Royal Melbourne Hospital, Centre for Vision Research at the University of Sydney, International Diabetes Institute, Pfizer Australia, National Stroke Research Institute and Monash University. Additional support is provided by: National Heart Foundation of Australia, National Stroke Foundation, Save Sight Institute at the University of Sydney and BSC Electronics.

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