



Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists

Media Release

5 December 2011

IMMUNE SYSTEM PLAYS ROLE IN HIGH BLOOD PRESSURE

New research by Dr Antony Vinh at Monash University shows that the immune system plays a prominent role in the control of high blood pressure (also known as hypertension). Dr Vinh will be presenting his findings at ASCEPT's Annual Scientific Meeting in Perth on the 5 December.

High blood pressure is still a major cause of death in heart failure, stroke and vascular disease. 2005 ABS data confirms that around 3.7 millions Australians over the age of 25 had high blood pressure or were on medication for the condition. Every year 3% of the adult population develop hypertensive disease with the risk increasing from 1% for those aged between 25 and 34 years to 8% for those aged between 65 and 74 years (IDI 2006)¹. Whilst there are several anti-hypertensive treatment options to control blood pressure, 20-30% of all sufferers are resistant to multiple current therapies.

It is proposed that hypertension be considered as an immune disorder as it has been found that immune cells known as T cells contribute significantly to the condition. T cells are a particular white blood cell that protects the body from infections from viruses and bacteria.

Dr Vinh's research suggests that T cells can be activated and actually promote the development of hypertension. Also, using a current drug approved to treat immune-disorders such as rheumatoid arthritis, he has demonstrated that this drug is able to also prevent and reverse experimental hypertension. His research clearly suggests that drugs which target some of the immune system such as T cells, may, in the future, be able to lower difficult-to-treat hypertension.

Dr Vinh's current research aims to understand how T cells contribute to hypertension and identify the specific type(s) of T cells, which are responsible for high blood pressure. The global aim of his research is to develop novel therapies to treat this condition of epidemic proportions.

National and international leaders in pharmacology and toxicology are meeting in Perth between the 4th and 7th December 2011 to discuss the latest research on drugs and chemical safety.

The [program](#) of plenary lectures, symposia and workshops, [oral presentations and posters](#) will be academically and scientifically stimulating and lead to new collaborations and research opportunities. [Annual awards and prizes](#) will also be presented at this meeting.

Ends.

¹ <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4821.0.55.001>

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