LIPID

PREVENTING DEATH FROM CARDIOVASCULAR DISEASE BY ONE QUARTER

Pravastatin treatment for six years was found to reduce death from cardiovascular disease by 24%, and overall mortality by 23%. Long-term follow-up has shown that this improved survival rate continues for almost two decades, largely due to the prevention of cardiovascular deaths. This represents an absolute reduction of 3% in mortality (i.e. 33 patients needed to be treated with pravastatin over 6 years to save one life).

The results of LIPID impacted upon cholesterol treatment guidelines worldwide.

Trial snapshot

Start date: 1990
End date: 1992

9,000
participants
ANZ

Collaborators:

- Bristol Myers Squibb
- National Heart Foundation of Australia

BACKGROUND

The LIPID study was the first trial in the world to examine the effects of statins on coronary mortality in patients with a previous acute coronary syndrome and a broad range of cholesterol levels at baseline, reflecting patients seen in usual clinical settings.

The LIPID team comprised of Australian and New Zealand physicians and research coordinators from a total 87 hospitals. The study was funded by Bristol Myers Squibb, supported by the National Heart Foundation of Australia, and coordinated by the NHMRC Clinical Trials Centre, University of Sydney.
The study proved the statin-lowering approach significantly increased the chances of study participants living a longer life with fewer heart attacks, strokes and other cardiovascular events. LIPID has changed clinical practices worldwide, and after 20 years, LIPID is still answering questions about atherosclerotic vascular diseases.

FAST FACTS

- Over 9,000 patients from 87 hospitals in Australia and New Zealand were randomised between 1990 and 1992
- Pravastatin treatment over a mean six years was found to reduce death from coronary heart disease by 24%, and overall mortality by 23%. This represents an absolute reduction of 3% in mortality (i.e. 33 patients needed to be treated with pravastatin over 6 years to save one life)
- Long-term follow-up has shown that this improved survival rate continues for at least 16 years, largely due to prevention of cardiovascular deaths
- Long-term treatment with statins is not associated with an increase in the rates of new cancers or non-vascular deaths
- LIPID led to broader eligibility for patients with coronary heart disease for subsidy of statins under the Pharmaceutical Benefits Scheme
- LIPID investigators have collaborated with, among others, scientists from Australia, Germany, Sweden and the United States in studies of what molecular biomarkers (from LIPID study participants) are related to heart disease events, and how potential changes in biomarker levels might modify this risk