

Safety concern	Routine risk minimisation measures	Additional risk minimisation measures
	given to pregnant women only if clearly necessary. Prescription only medicine	

VI.2 Elements for a public summary

VI.2.1 *Overview of disease epidemiology*

Ezetimibe is used to treat hypercholesterolemia (excess cholesterol in the blood stream). It does this by lowering levels of total cholesterol, "bad" cholesterol (LDL cholesterol) and fatty substances called triglycerides in the blood, whilst raising levels of "good" cholesterol (HDL cholesterol). The active ingredient ezetimibe reduces the cholesterol absorbed in your digestive tract.

Familial hypercholesterolaemia is a genetic disorder caused by a defect in a gene which controls the way cholesterol is handled in the body. As a result of the defect, bad cholesterol is not broken down properly and builds up in the bloodstream. In most cases the defective gene is inherited from one parent (heterozygous inheritance). If you inherit it from both parents (homozygous inheritance), the condition is more severe. Heterozygous familial hypercholesterolaemia affects about 1 in 500 people in the US and Europe (reference 1). However, familial hypercholesterolaemia is more common in other populations. The homozygous condition is rare; one case per million persons in the United States.

The concept that coronary heart disease (CHD) can be prevented has increasingly become a driving force in cardiovascular medicine. Preventive medical therapies are now available to intervene on coronary atherosclerotic disease before it becomes clinically manifest and it has been demonstrated that cholesterol-lowering therapy reduces risk for major coronary events beyond previous expectations.

Homozygous sitosterolaemia, also known as phytosterolaemia, is a hereditary illness that increases the levels of plant sterols in your blood. Sitosterolemia is thought to be a very rare disorder. Only approximately 40 patients had been identified worldwide by 2000. More than likely, sitosterolemia is significantly underdiagnosed. Many patients are probably misdiagnosed with hyperlipidemia.

VI.2.2 *Summary of treatment benefits*

Based on the available data from clinical studies and clinical experience of several years, ezetimibe represents an effective drug in the lowering of bloodstream cholesterol levels.

For the treatment of primary hypercholesterolaemia, the effectiveness of adding ezetimibe to statin therapy was compared to placebo (dummy treatment) in 769 adults. Patients received either ezetimibe 10mg daily or placebo (dummy treatment) for eight weeks. The main outcome measure tested was the lowering of 'bad' cholesterol (LDL-cholesterol) levels. 71.5% of patients treated with ezetimibe and a statin reached their cholesterol level goals compared to 18.9% in the placebo group.

Several large and well-designed trials have demonstrated that the addition of Ezetimibe to a statin achieves significant improvements in lipid profiles in patients with hypercholesterolemia at high risk of cardiovascular disease (CVD).

The lipid-lowering efficacy of Ezetimibe and its combination with statins is clear. However, up until recently when the results of the IMPROVE-IT trial were published, the role of Ezetimibe in CVD risk reduction has been more uncertain. Several trials had been published (ENHANCE, SEAS, ARBITER 6-