

Prasugrel (Efient®) with percutaneous coronary intervention for treating acute coronary syndromes (review of TA182): systematic review and economic analysis

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Plain English summary

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Plain English summary

Acute coronary syndromes (ACSs) are life-threatening conditions associated with heart attacks. There are three main types of ACS: (1) ST segment elevation myocardial infarction, (2) non-ST segment elevation myocardial infarction and (3) unstable angina. These conditions are usually caused by a reduction in blood flow to the heart as a result of a coronary artery becoming narrow or blocked by a build-up of fatty deposits. The underlying cause of ACS is an erosion of the fatty deposit, which leads to the formation of a blood clot. One treatment for ACSs is percutaneous coronary intervention (PCI). In the PCI procedure, a balloon passed over a guidewire is inserted into the affected artery and inflated at the site of the blockage to restore blood flow to the heart. A stent is usually implanted to act as a scaffold and to hold open the artery wall. All PCI procedures include treatment with drugs to reduce further blood clotting (antiplatelets). In the UK, the recommended antiplatelet treatment is a combination of aspirin with either clopidogrel, prasugrel (Efient®, Daiichi Sankyo Company Ltd UK/Eli Lilly and Company Ltd) or ticagrelor (Brilique®, AstraZeneca). We considered the benefits and costs of prasugrel compared with clopidogrel or ticagrelor. There was only one study relevant to the review, and it compared prasugrel with clopidogrel. There were no studies that compared prasugrel with ticagrelor. We concluded that prasugrel is more beneficial than clopidogrel for all ACS patients and offers value to the NHS. We were unable to assess the benefits of prasugrel compared with ticagrelor as there was not enough evidence available.

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