



Effective Health Care

Duration of Clopidogrel Treatment After Drug-eluting Stents

Nomination Summary Document

Results of Topic Selection Process & Next Steps

- Ongoing research or activities are underway that impact the timing for developing this topic. Therefore, duration of clopidogrel treatment after drug-eluting stents will be revisited in the future when more data becomes available.
- Newer drugs that are replacements for clopidogrel could potentially be considered for new research in comparative effectiveness.

Topic Description

Nominator: Organization

Nomination Summary: The nominator identified the duration of clopidogrel treatment as an area in which significant morbidity, mortality, and variation in utilization persists and therefore future systematic review development should be a priority.

Staff-Generated PICO

Population(s): Patients who have received a drug-eluting stent for coronary artery disease; potential subgroups according to:

1. Anatomical location of implanted stent (major epicardial vessel [left anterior descending artery versus left circumflex artery versus right coronary artery] versus branch arteries)
2. Patients with comorbidities of interest (prior myocardial infarction, stroke, or concomitant peripheral arterial disease)
3. Patients with CYP2C19 polymorphisms who have lower levels of the active metabolite of clopidogrel

Intervention(s): Clopidogrel (with or without ASA therapy), 1 year post drug-eluting stent implantation

Comparator(s): Clopidogrel (with or without ASA therapy), indefinite use post drug-eluting stent implantation

Outcome(s): Benefits, including but not limited to, improvement in anginal symptoms, improvement in quality of life, reduction in in-stent thrombosis rates, reduction in target vessel revascularization hospitalizations, reduction in cardiovascular and all-cause mortality; harms, including but not limited to, in-stent thrombosis, repeat target vessel revascularization, bleeding, major adverse cardiovascular events, adverse drug reactions, increase cardiovascular hospitalizations, increase in cardiovascular and all-cause mortality

**Key Questions
from Nominator:**

1. Should clopidogrel be prescribed indefinitely in patients who have received drug-eluting stents for the treatment of coronary artery disease (CAD)?

Considerations

- The topic meets all EHC Program appropriateness and importance criteria. (For more information, see <http://effectivehealthcare.ahrq.gov/index.cfm/submit-a-suggestion-for-research/how-are-research-topics-chosen/>.)
- Coronary artery disease (CAD) is becoming more prevalent as society ages. Subsequently, there is an increase in the use of drug-eluting stents. There is clinical uncertainty surrounding the optimal duration of clopidogrel treatment after drug-eluting stent implantation in patients with CAD. There are currently 11 ongoing trials registered on www.clinicaltrials.gov that will provide data regarding optimal duration of clopidogrel treatment, many of which are scheduled to have data available by mid-2014; this topic will be reconsidered when this additional trial data is available.
- There is currently clinical uncertainty about the comparative effectiveness and safety of newer drugs that are replacements for clopidogrel; therefore, new research is needed on these newer drugs.