Effective Health Care

Antiplatelet Treatment for Women with Acute Coronary Syndrome Nomination Summary Document

Results of Topic Selection Process & Next Steps

- The nomination "Antiplatelet treatment for women with acute coronary syndrome (ACS)" covers three disease processes: unstable angina, non-ST elevation myocardial infarction, and ST-elevation myocardial infarction.
- The topic of antiplatelet treatment for women with unstable angina (UA) or non-ST elevation myocardial infarction (NSTEMI) was found to be addressed by the in-process AHRQ comparative effectiveness review titled *Antiplatelet and Anticoagulant Treatments for Unstable Angina/Non-ST Elevation Myocardial Infarction*. Given that the existing in-process review covers this nomination, no further activity will be undertaken on this topic.
  - To view a description and status of the research review, please go to: http://www.effectivehealthcare.ahrq.gov/index.cfm/search-for-guides-reviews-and-reports/.
  - To sign up for notification when this and other Effective Health Care (EHC) Program topics are posted, please go to http://effectivehealthcare.ahrq.gov/index.cfm/join-the-email-list1/.
- Antiplatelet treatment for women with ACS with ST-elevation myocardial infarction is not feasible for a full systematic review due to the limited data available for a review at this time.

Topic Description

Nominator: Individual

Nomination Summary: The nominator is interested in the comparative effectiveness and safety of newer versus older antiplatelet agents for women with ACS.

Staff-Generated PICO
Population(s): Female patients with ACS, with early invasive therapy (undergoing PCI, CABG, or medical therapy)
Intervention(s): Clopidigrel (with or without aspirin therapy)
Comparator(s): Prasugrel and/or ticagrelor (with or without aspirin therapy)
Outcome(s):

1. Bleeding, including but not limited to hemorrhagic stroke, PCI access site, pseudoaneurysms, need for transfusion, and hemoglobin and hematocrit levels
2. Ischemic Events (both stroke and myocardial infarction)
3. Mortality (cardiovascular and all-cause)
4. Adverse drug reactions (thrombocytopenia, allergic drug reaction, stent

thrombosis)
5. Quality of Life

Key Questions from Nominator:

1. For women presenting with an acute coronary syndrome, what is the comparative effectiveness and safety of the newer and more potent antiplatelet agents vs. older and less potent antiplatelet agents?

Considerations

- The topic meets 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/.)

- Acute coronary syndrome (ACS) encompasses three different disease processes: (1) ST-elevation myocardial infarction (STEMI); (2) non-ST elevation myocardial infarction (NSTEMI); and (3) unstable angina (UA). These three processes are often grouped into two categories – STEMI and UA/NSTEMI – because of the similar pathophysiology, mortality rate, and management strategy of UA and NSTEMI compared to STEMI.

- The topic of antiplatelet treatment for women with ACS with UA or NSTEMI was found to be addressed by an in-process AHRQ comparative effectiveness review titled *Antiplatelet and Anticoagulant Treatments for Unstable Angina/Non-ST Elevation Myocardial Infarction*. Key questions from this report include:
  1. In patients undergoing an *early invasive* approach for treating unstable angina/non-ST elevation myocardial infarction (UA/NSTEMI):
     a. What are the comparative effectiveness (dose and timing) and comparative safety of an intravenous (IV) glycoprotein IIb/IIIa inhibitor versus oral antiplatelet agent as initial therapy before going to the catheterization laboratory?
     b. What are the comparative effectiveness (dose and timing) and comparative safety of coadministration of IV or oral antiplatelet agents in patients undergoing percutaneous coronary intervention for improving cardiovascular outcomes? Do the effectiveness and safety vary based on which initial anticoagulant is used or the combination of anticoagulant and antiplatelet agents?
     c. Based on demographic and other clinical characteristics, are there subgroups of patients for whom the effectiveness and safety differ?
  2. In patients undergoing an *initial conservative* approach for treating UA/NSTEMI:
     a. What are the comparative effectiveness (dose and timing) and comparative safety of different anticoagulants on improving cardiovascular outcomes?
     b. What are the comparative effectiveness (dose and timing) and comparative safety of different antiplatelet agents on improving cardiovascular outcomes?
     c. Based on demographic and other characteristics, are there subgroups of patients for whom the effectiveness and safety differ?
  3. In patients treated for UA/NSTEMI *after hospitalization (postdischarge)*:
     a. What are the comparative effectiveness (dose and duration) and comparative safety of the available oral antiplatelet agents given in combination with aspirin? Do the effectiveness and safety vary based on the dose of aspirin used?

b. What are the comparative effectiveness and comparative safety of proton pump inhibitors (PPIs) for reducing bleeding events in patients receiving dual antiplatelet therapy after UA/NSTEMI? Do the effectiveness and safety vary by oral antiplatelet therapy and PPI?
c. In patients with an indication for long-term anticoagulant therapy, what are the comparative effectiveness and comparative safety of adding an oral anticoagulant to aspirin and another antiplatelet agent for improving cardiovascular outcomes?
d. Based on demographic and other characteristics, are there subgroups of patients for whom the effectiveness and safety differ?

- Very few studies have been conducted on antiplatelet treatment for women with ACS with STEMI; therefore, this topic is not feasible for a full systematic review due to the limited data available for a review at this time.