Preferred Drug List

NEW DRUG REVIEW

Proprietary Name: Brilinta™

Common Name: Ticagrelor

PDL Category: Platelet Aggregation Inhibitors

Comparable Products	Preferred Drug List Status
Effient™	**Non-Preferred**
Plavix ®	**Preferred**
Ticlopidine	**Preferred**

Summary

Indications and Usage: Indicated to reduce the rate of thrombotic cardiovascular events in patients with acute coronary syndrome (ACS) (unstable angina, non-ST elevation myocardial infarction, or ST elevation myocardial infarction). [1]

Mechanism of Action: Reversibly interacts with platelet $P2Y_{12}$ ADP receptor to prevent signal transduction and platelet activation.[1]

Dosage Forms: Film-Coated Tablet: 90mg

Recommended Dosage: Initiate with a single 180mg oral loading dose. Continue at 90mg twice daily with or without food in combination with aspirin. After initial loading dose of aspirin (usually 325mg), aspirin daily maintenance dose is 75-100mg.[1]

Common Adverse Drug Reactions: Dyspnea, bleeding, bradyarrhythmias, increases in serum uric acid and creatinine concentrations. [1]

Contraindications: History of intracranial hemorrhage. Active bleeding. Severe hepatic impairment. [1]

Manufacturer: AstraZeneca

Analysis: Brilinta™ is a new oral antiplatelet drug to be used with aspirin to reduce the rate of thrombotic cardiovascular events in patients with ACS. Unlike Plavix® and Effient™, Brilinta™ binds to platelets reversibly. Its shorter duration may be favorable in an acute setting, but requires twice daily dosing and must still be discontinued five days prior to surgery. In the trial used to gain FDA approval, Brilinta™ was compared to Plavix®, in combination with aspirin, for 6 to 12 months. The occurrence of the primary endpoint (cardiovascular death, non-fatal myocardial infarction (MI), or non-fatal stroke) was 9.8% with Brilinta™ versus 11.7% with Plavix®. There was no beneficial effect on strokes with Brilinta™. There was no significant difference in the rates of major bleeding. The trial indicates a decreased effectiveness of Brilinta™ with aspirin daily maintenance doses above 100mg. Preferred alternatives appear on the Preferred Drug List, which have a similar safety profile, afford once daily dosing, and are more cost effective. Therefore, it is recommended that Brilinta™ be added to the Preferred Drug List as a non-preferred drug.

IME Recommendation:

- ☐ Preferred Drug
- ☒ Non-Preferred Drug
- ☐ Preferred Drug with Conditions
- ☐ Recommended Drug
- ☐ Non-Recommended Drug

1. Brilinta™ [package insert]. Wilmington, DE: AstraZeneca; 2011.