Drug Class Review Monograph — GPI Class 85 – Hematological Agents, Miscellaneous

Review Time Frame: January February 02/2015 – 01/January 2016

Previous Class Review: N/A

Background:
Hematological agents, miscellaneous, are drugs used to treat various hematologic disorders. These agents may include:

- Platelet aggregation inhibitors: reduce platelet aggregation;
- Hemorheologic agents (e.g., pentoxifylline): increase erythrocyte flexibility and decrease blood viscosity, resulting in increased blood flow to the microcirculation and enhanced tissue oxygenation.
- Bradykinin B2 receptor antagonist (e.g., Firazyr): inhibits bradykinin from binding to the B2 receptor, thus treating the symptoms of an acute hereditary angioedema attack.

New Treatment guideline recommendations:
- The American Heart Association and American Red Cross Guideline 2015 update recommends aspirin for persons with chest pain due to suspected myocardial infarction (Class I, LOE B-R).
- The 2016 CHEST Guideline and Expert Panel Report noted that aspirin is not considered a reasonable alternative to anticoagulant therapy in patients who want extended therapy with unprovoked venous thromboembolism.
- The 2016 ACC/AHA Guideline Focused Update on Duration of Dual Antiplatelet Therapy in Patients with Coronary Artery Disease stated that updated recommendations for duration of dual antiplatelet therapy (DAPT) are now similar for patients with non-ST-elevated acute coronary syndrome (NSTE-ACS) and ST-elevated myocardial infarction (STEMI), as both are part of the spectrum of acute coronary syndrome.
  - In patients with ACS (NSTE-ACS or STEMI) treated with DAPT after coronary stent implantation and in patients with NSTE-ACS treated with medical therapy alone (without revascularization), it is reasonable to use ticagrelor in preference to clopidogrel for maintenance P2Y12 inhibitor therapy.
  - In patients with ACS (NSTE-ACS or STEMI) treated with DAPT after coronary stent implantation who are not at high risk for bleeding complications and who do not have a history of stroke or transient ischemic attack (TIA), it is reasonable to choose prasugrel over clopidogrel for maintenance P2Y12 inhibitor therapy.
  - Prasugrel should not be administered to patients with a prior history of stroke or TIA.

Newly approved drugs:
- Approved 09/14/2016: Yosprala (Aspirin/Omeprazole) 81 mg/40 mg, 325 mg/40 mg delayed release tablets; product launched 09/19/2016.

Newly approved formulations:
- None identified.
- Durlaza (aspirin) extended release capsules, approved on 09/04/2015.

Newly approved generics:
- None identified.

Discontinued drugs:
- None identified.

FDA Safety Alert/black box warnings:
- None identified.
- FDA Drug Safety Communication 11/06/2015: FDA review finds long term treatment with blood thinning medicine Plavix (clopidogrel) does not change risk of death. For more details, refer to page 6.

Pipeline alerts:

Agents pending FDA approval include:

*generic availability

[07-30-2015] FDA warns about prescribing and dispensing errors resulting from brand name confusion with antidepressant Brintellix (vortioxetine) and antiplatelet Brilinta (ticagrelor).