

### Drugs recently approved or pending approval

#### NEULASTA

The US Food and Drug Administration (FDA) has approved marketing of Neulasta (pegfilgrastim) by Amgen, Inc (Thousand Oaks, CA) to treat chemotherapy-induced febrile neutropenia. Neulasta was evaluated in 2 randomized, double-blind, active control studies that used doxorubicin 60 mg/m<sup>2</sup> body surface area and docetaxel 75 mg/m<sup>2</sup> administered every 21 days for up to 4 cycles as chemotherapy for metastatic breast cancer. In study 1, 157 subjects were randomized to receive either 6 mg of Neulasta in a single subcutaneous dose on day 2 of each chemotherapy cycle or 5 µg/kg body weight per day of filgrastim subcutaneously beginning on day 2 of each cycle. In study 2, 310 subjects were randomized to receive either 100 µg/kg of Neulasta in a single subcutaneous injection on day 2 or 5 µg/kg per day of filgrastim subcutaneously beginning on day 2 of each cycle of chemotherapy. Both studies showed that the mean duration of severe neutropenia in Neulasta-treated patients did not exceed that in filgrastim-treated patients by more than 1 day in cycle 1 of chemotherapy. The rates of febrile neutropenia in both studies were comparable for Neulasta and filgrastim (10%–20%). Neulasta is contraindicated in patients with known hypersensitivity to *Escherichia coli*-derived proteins, pegfilgrastim, filgrastim, or any other product component. The most common adverse event attributed to Neulasta was medullary bone pain, reported in 26% of subjects. The recommended dose of Neulasta is a single subcutaneous injection of 6 mg administered once per chemotherapy cycle.

#### PLAVIX

Sanofi-Synthelabo (Paris, France) and Bristol-Myers Squibb Company (Princeton, NJ) received approval from the FDA to market Plavix (clopidogrel bisulfate) to treat acute coronary syndrome (ACS) (ie, unstable angina and non-Q-wave myocardial infarction). Plavix was originally approved for marketing in the United States to treat patients with a history of recent myocardial infarction, recent stroke, or established peripheral arterial disease. Efficacy of Plavix for the new indication was evaluated in the Clopidogrel in Unstable Angina to Prevent Recurrent Events (CURE) study. In this study, 12,562 patients with ACS received either Plavix or placebo; both groups also received standard therapy, including aspirin. CURE demonstrated that using Plavix significantly reduced the risk for myocardial infarction, stroke, or cardiovascular death by 20% in patients with mild myocardial infarction or unstable angina. Plavix is contraindicated in patients with active pathologic

bleeding (eg, from peptic ulcer or intracranial hemorrhage) and in patients with hypersensitivity to the drug or any of its components. The most common adverse effects associated with Plavix were pruritus, purpura, diarrhea, and rash. The recommended dose of Plavix is 75 mg once daily with or without food.

#### ZEVALIN

The FDA granted approval to IDEC Pharmaceuticals Corporation (San Diego, CA) to market Zevalin (ibritumomab tiuxetan) to be used in combination with the previously approved Rituxan (rituximab) to treat low-grade B-cell non-Hodgkin's lymphoma. Zevalin is the first radioimmunotherapy approved by the FDA. Two multicenter trials were conducted to determine the safety and efficacy of the Zevalin therapeutic regimen. In the first trial, 54 patients who were no longer responding to chemotherapy or to Rituxan received the new regimen. The overall response rate was 74%, with 15% of patients achieving complete remission. The second trial enrolled 143 patients not responding to chemotherapy who had not yet received Rituxan. The overall response rate in this trial was 80%, compared with 56% for Rituxan alone; 30% of Zevalin patients achieved a complete remission, and another 4% achieved an unconfirmed complete remission (compared with 16% of Rituxan

patients achieving a complete remission and 4% achieving an unconfirmed complete remission). The Zevalin regimen was more toxic than was Rituxan alone, with more than half of the patients experiencing significant reductions in leukocyte and platelet counts lasting 3 to 4 weeks. The Zevalin therapeutic regimen is approved only for patients who have failed other treatments. The Zevalin therapeutic regimen is contraindicated in patients with known type I hypersensitivity or anaphylactic reactions to murine proteins or product components (including rituximab, yttrium chloride, and indium chloride). The most serious adverse reactions include bacterial infections, allergic reactions, and thrombocytopenia with hemorrhage. The Zevalin regimen is administered in 2 steps: a single infusion of Rituxan (250 mg/m<sup>2</sup>) preceding a fixed dose of indium-III Zevalin (5 mCi), followed in 7 to 9 days by the same infusion of Rituxan preceding a dose of 0.4 mCi/kg of yttrium-90 Zevalin.



*Compiled from press reports and pharmaceutical company press releases. For more information, contact Nora H. Landon, Hospital Physician, 125 Strafford Avenue, Suite 220, Wayne, PA 19087-3391.*