



Medication Access Program Newsletter

April 2006
Issue 26

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The Medication Access Program (MAP) is a statewide program for solid-organ transplant recipients in Georgia that offers information about medication assistance programs and helps with the enrollment into these programs.

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World Transplant Congress Meeting (Transplant 2006) Boston, MA July 22 – July 27, 2006

The American Society of Transplant Surgeons (ASTS), the American Society of Transplantation (AST), and the Transplantation Society will be hosting an international Joint Transplant Meeting, the 2006 World Transplant Congress Meeting, on July 22 – July 27, 2006. This year the meeting will be held in Boston, Massachusetts. This meeting serves as a forum for the exchange of scientific and clinical information, ideas, and opinions for those who are interested in the research aspects of solid-organ and tissue transplantation. Physicians, surgeons, scientists, nurses, organ procurement personnel, and pharmacists attend workshops and meetings and present abstracts and posters, as well as participate in group sessions in an effort to examine and discuss issues and objectives that are relevant to organ and tissue transplantation. This meeting will be held at the Hynes Convention Center. For additional information visit the 2006 World Transplant Congress meeting website at: <http://www.wtc2006.org/>.

New Medications

Symlin® (pramlintide)

In March 2005, Symlin®, manufactured by Amylin Pharmaceuticals Inc., was approved by the FDA for adjunctive treatment in diabetics currently treated with insulin. Symlin® is indicated for patients with type 1 or type 2 diabetes mellitus who are unable to reach goal glucose levels with insulin therapy alone or with concurrent use of a sulfonyleurea and/or metformin.

Symlin® is contraindicated in patients with a known hypersensitivity to any of the components or a confirmed diagnosis of gastroparesis. Symlin® works as a synthetic analog of amylin to produce the following effects: (1) prolonged gastric emptying; (2) reduced post-prandial glucagon secretion; and (3) reduced caloric intake through appetite suppression. Time to peak is approximately twenty minutes and duration lasts for approximately three hours. Use in geriatric and pediatric populations has not been studied.

Clinical studies demonstrated that Symlin®, in addition to insulin use in patients with type 1 or 2 diabetes mellitus, experienced reduced mean post-prandial glucose concentrations, decreased glucose fluctuations, and decreased food intake.

The most common adverse effects seen with Symlin® use include nausea, vomiting and headache. Less common adverse effects include anorexia, fatigue, abdominal pain, dizziness, coughing and pharyngitis.

Patients on drugs altering gastrointestinal motility (e.g., anticholinergics) should not take Symlin® due to its prolonged gastric emptying. Since Symlin® also causes delayed absorption, oral medications in which a rapid onset is desired (e.g., analgesics) should be given one hour before or two hours after Symlin® administration. Symlin® should not be mixed in the same syringe as insulin and should be injected subcutaneously in an area at least two inches from the site of insulin injection.

Patients should be advised to always carry a source of sugar with them, such as hard candy or glucose tablets, in the event hypoglycemia occurs. The use of Symlin® may result in a decreased insulin dose for patients.

Symlin® is supplied in a 5 mL vial with the concentration of 0.6 mg/mL. Vials should be refrigerated before use. Once

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opened, the vials are stable for 28 days stored at room temperature or refrigerated. Dosing guidelines differ for those with type 1 and type 2 diabetes.

For information about Amylin Pharmaceutical's patient assistance program for Symlin® contact the pharmaceutical company at 1-858-552-2200, or call the MAP office at (706) 721-0131.

Authored by Ellen Lewis

Reference:

Symlin® Prescribing Information. Available at: <http://www.symmlin.com>
Accessed November 2, 2005

BiDil® **(isosorbide dinitrate/ hydralazine hydrochloride)**

In June 2005, BiDil®, manufactured by NitroMed, was approved by the FDA as an adjunctive treatment to standard therapy in self-identified black patients to improve survival, to prolong time to hospitalization for heart failure, and to improve patient-reported functional status. BiDil® contains a fixed combination of two older drugs, isosorbide dinitrate and hydralazine hydrochloride. Hydralazine works by direct vasodilation of arterioles, thereby decreasing vascular resistance. Isosorbide produces vasodilation of both veins and arteries, as well as vasodilation of smooth vascular muscle. The combined mechanisms produced by these two drugs allow the heart to pump more efficiently.

BiDil® is contraindicated in those allergic to organic nitrates. Peak concentrations are seen in approximately one hour. The half-life of BiDil® is two and four hours respectively for isosorbide and hydralazine. Currently, there is no information on the effect of food and BiDil® bioavailability. BiDil® use has not been established in patients less

than eighteen years of age or greater than sixty-five years.

In the Vasodilator-Heart Failure Trial I (V-HeFT I), BiDil®, or a combination of hydralazine hydrochloride, and isosorbide dinitrate, was compared to placebo in males on digitalis and diuretic therapy who had impaired cardiac function and reduced exercise tolerance (primarily NYHA class II and III). Subjects received either BiDil® (or a combination of hydralazine and isosorbide) at 75/40 mg four times a day or placebo. Although there was no significant difference in mortality for BiDil® and placebo groups, there was a trend favoring more effect in African American men treated with BiDil® or the combination of hydralazine and isosorbide. Vasodilator-Heart Failure Trial II (V-HeFT II) was then performed to compare the combination of hydralazine and isosorbide to enalapril in similar patients as in V-HeFT I. The combination of the two drugs was found to be inferior to enalapril treatment in the white population. However, there was essentially no difference between the hydralazine and isosorbide combination and enalapril in the African-American population.

Increased antihypertensive effect may be seen when given with beta-blockers (e.g., metoprolol, propranolol). NSAIDs may decrease the hemodynamic effects of hydralazine. Hydralazine is a weak inhibitor of cytochrome P450 3A4. Cytochrome P450 3A4 inducers (e.g., carbamazepine and phenytoin) may decrease the effect of hydralazine. Isosorbide is a major 3A4 substrate; therefore 3A4 inhibitors (e.g., azole antifungals and clarithromycin) may increase the levels of isosorbide. Concurrent use of BiDil® with monoamine oxidase inhibitors may result in a significant decrease in blood pressure. Significant blood pressure reduction is seen when BiDil® is given with Viagra®, Cialis®, and Levitra®; therefore, concomitant use of these drugs should be avoided.

Patients should also be aware that BiDil® may cause headaches which can be treated with aspirin or acetaminophen. The headaches should go away with continued use. The most common adverse effects seen with BiDil® include headache, dizziness, chest pain, asthenia (weakness) and nausea. Less common adverse effects include hypotension, bronchitis, sinusitis, ventricular tachycardia, palpitations, hyperglycemia, rhinitis, paresthesia, vomiting, amblyopia, tachycardia, and hyperlipidemia. Patients should be instructed to take BiDil® as directed by their physician and make no changes without first checking with their physician.

BiDil® is available in a fixed dose combination of isosorbide dinitrate 20 mg and hydralazine hydrochloride 37.5 mg. BiDil® is initiated with a starting dose of one tablet by mouth three times a day. The dosage may be increased, but not to exceed two tablets three times a day. In terms of pricing, BiDil is more expensive than both isosorbide and hydralazine. A thirty day supply of BiDil® consisting of ninety tablets is approximately \$255 compared to 100 tablets of isosorbide 20 mg at \$19 and 100 tablets of hydralazine 50 mg at \$19. For information about Nitromed's patient assistance program for BiDil® contact the pharmaceutical company at 1-888-992-4338, or call the MAP office at (706) 721-0131.

Authored by Ellen Lewis

Reference:

BiDil® Prescribing Information. Available at: <http://www.bidil.com> Accessed November 2, 2005

The MAP newsletter is published quarterly to present topics of interest to the transplant community. If you would like to submit material to be considered for publication in the newsletter, please contact MAP at:

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