## CAREMARK TrendsRx® Alert

	What's newWhat's nextWhat to do now	August 2006
PRE- APPROVAL	Galvus® (vildagliptin) and Januvia™ (s	sitagliptin)
	Galvus (vildagliptin, Novartis Pharmaceuticals Corporation) and Januvia (sitagliptin, Merck & Co., Inc.) are pending approval by the US Food and Drug Administration (FDA) for the treatment of type 2 diabetes. <sup>1-3</sup>	
Mechanism of Action:	<ul> <li>Oral dipeptidyl peptidase 4 (DPP-4) inhibitors<sup>1-3</sup></li> <li>Similar mechanism of action to the injectable incretin mimetic, Byetta<sup>®</sup> (exenatide, Amylin Pharmaceuticals, Inc.)<sup>2-4</sup></li> </ul>	
Adverse Effects:	<ul> <li>Not associated with weight gain<sup>2,3,5</sup></li> <li>Overall incidence of adverse effects, including low blood glucose, wa placebo<sup>2,3</sup></li> </ul>	is similar to
Approval:	• Galvus: Late November 2006	
Launch:	• Galvus and Januvia: Fourth Quarter 2006	
Comments:	<ul> <li>If approved, Galvus and/or Januvia will be the first in a new class of c for type 2 diabetes.<sup>2,3</sup></li> <li>Galvus and Januvia are once-daily products that have been studied for combination with other anti-diabetes medications.<sup>2,7</sup></li> <li>A combination product containing Januvia and metformin, currently MK-0431A (Merck &amp; Co., Inc.), is also pending FDA approval for the type 2 diabetes.<sup>8</sup> Approval is anticipated in March of 2007.<sup>8</sup></li> </ul>	r use alone or in known as
BACKGROUND	<ul> <li>According to a 2005 estimate from the Centers for Disease Control a 20.8 million people in the United States, or 7% of the population, h.</li> <li>About 90% to 95% of people with diabetes have type 2 diabetes.<sup>9</sup></li> <li>The estimated annual total economic cost of diabetes in 2002 was \$1 than \$1 of every \$10 spent on healthcare in the United States.<sup>9,10</sup></li> <li>Diabetes was the sixth leading cause of death in the United States in Improved blood glucose control can reduce the risk of certain diabete including eye, kidney, and nerve disease.<sup>9</sup></li> </ul>	ave diabetes. <sup>9</sup> 132 billion, or more 1 2002. <sup>9</sup>
ECONOMIC IMPACT	<ul> <li>Caremark estimates Galvus will increase pharmacy budgets by approx \$0.06 Per Member Per Month (\$0.51 to \$0.67 Per Member Per Year) on the market.<sup>11</sup></li> <li>Januvia is estimated to increase pharmacy budgets by approximately S Per Member Per Month (\$0.70 to \$0.90 Per Member Per Year) during the market.<sup>11</sup></li> <li>These estimates assume that Galvus and Januvia will compete as second therapy for patients with type 2 diabetes.<sup>12</sup> Galvus and Januvia are expression of the pricing and length of therapy.<sup>12</sup></li> </ul>	during its first year \$0.06 to \$0.08 g its first year on ond-line oral

## CAREMARK RESPONSE

- Caremark recognizes the unique needs of plan participants with diabetes.
- Plan participants requiring Galvus or Januvia may be good candidates for the
  - CarePatterns<sup>®</sup> Health Management Program for Diabetes. This disease management program helps plan participants with diabetes better manage their condition, including reinforcing the importance of medication compliance, leading to overall decreased healthcare costs and improved outcomes.
  - Upon FDA approval, Galvus and Januvia will be considered for inclusion into selected UR*Plus* diabetes interventions. UR*Plus* is a retrospective utilization management program that uses pharmacy and medical claims data to assist with prescriber adherence to national clinical guidelines.
  - Caremark will continue to monitor the development of Galvus and Januvia to determine if other clinical programs are needed.

## CAREMARK CONTACT

For more information call your Caremark account representative.

Please Note: This document provides a brief overview of the subject. This review is provided as a reference only, and is based in part on information derived from third parties.

## References

- 1. ADIS R&D Insight. AdisInsight Web site. Available with subscription at: http://bi.adisinsight.com/login/login.aspx. Accessed August 9, 2006.
- New drug application for Galvus<sup>®</sup>, an innovative oral therapy for people with type 2 diabetes, accepted for review by FDA [press release]. East Hanover, NJ: Novartis Pharmaceuticals Corporation; March 30, 2006. Available at: http://www.pharma.us.novartis.com/newsroom/pressReleases/releaseDetail.jsp?PRID=1984. Accessed August 9, 2006.
- Merck announces FDA acceptance of new drug application for Januvia<sup>w</sup>, the company's investigational medicine for type 2 diabetes [press release]. Whitehouse Station, NJ: Merck & Co., Inc.; February 15, 2006. Available at: http://www.merck.com/newsroom/press\_releases/research\_and\_development/2006\_0215.html. Accessed August 9, 2006.
- 4. Lebovitz HE. Therapeutic options in development for management of diabetes: pharmacologic agents and new technologies. Endocr Pract. 2006;12 Suppl 1:142-147.
- In new data at one year, Januvia<sup>™</sup>, an investigational once-daily medicine for type 2 diabetes, demonstrated substantial glucose-lowering effect, with significant differences compared to glipizide (a sulfonylurea) in weight change and hypoglycemia [press release]. Whitehouse Station, NJ: Merck & Co., Inc.; June 13, 2006. Available at: http://www.merck.com/newsroom/press\_releases/research\_and\_development/2006\_0613.html. Accessed August 9, 2006.
- 6. Caremark: RxPipeline Insider. Available at: www.rxpipelineinsider.com. Accessed August 9, 2006.
- Newly released Phase III studies for Januxia", Merck's investigational once-daily medicine for type 2 diabetes, showed significantly reduced blood sugar levels when used as monotherapy or as add-on treatment [press release]. Whitehouse Station, NI: Merck & Co., Inc.; June 10, 2006. Available at: http://www.merck.com/newsroom/press\_releases/research\_and\_development/2006\_0610.html. Accessed August 9, 2006.
- Merck announces FDA acceptance of new drug application for MK-0431A, an investigational fixed dose combination of Januvia<sup>™</sup> and metformin for type 2 diabetes [press release]. Whitehouse Station, NJ: Merck & Co., Inc; July 31, 2006. Available at: http://www.merck.com/newsroom/press\_releases/research\_and\_development/2006\_0731.html. Accessed August 9, 2006.
- Centers for Disease Control and Prevention. National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2005. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2005. Available at: http://www.diabetes.org/uedocuments/NationalDiabetesFactSheetRev.pdf. Accessed August 9, 2006.
- 10. Hogan P, Dall T, Nikolov P; American Diabetes Association. Economic costs of diabetes in the US in 2002. Diabetes Care. 2003;26(3):917-32.
- 11. Caremark Internal Pharmacy Budget Impact, Research and Development
- 12. Credit Suisse. "Pre-ADA Thoughts: Outlook on Evolving Diabetes Standards." June 8, 2006.

