



## Preferred Drug List

### NEW DRUG REVIEW

**Proprietary Name:** Januvia™

**Common Name:** Sitagliptin Phosphate

PDL Category: Diabetic- Other

<u>Comparable Products</u>	<u>Preferred Drug List/ Recommended Drug List Status</u>
N/A	

#### Summary

**Indications and Usage:** Type 2 Diabetes

**Mechanism of Action:** Inhibits dipeptidyl peptidase-4 (DPP-4) thus slowing the inactivation of incretin hormones and improving blood sugar control

**Dosage Forms:** Tablets; 25mg, 50mg, and 100mg

**Recommended Dosage:** 100mg once daily

**Common Adverse Drug Reactions:** Runny nose, sore throat, upper respiratory infection, headache

**Contraindications:** Type 1 diabetes, diabetic ketoacidosis

**Manufacturer:** Merck & Co., Inc.

**Analysis:** Januvia™ is the first drug introduced into a new therapeutic class that targets dipeptidyl peptidase-4, which can be used as monotherapy or in combination with metformin or thiazolidinediones in type 2 diabetics. Januvia™ works to correct the diminished insulin release from dysfunctional beta cells in the pancreas and the uncontrolled production of glucose by the liver due to dysfunctional alpha and beta cells. Januvia™ has been shown to lower A1C, when used as monotherapy, with no increased risk of hypoglycemia or increased weight gain. Existing oral therapies for type 2 diabetes, when used as monotherapy, typically result in a decrease in A1C of 1.5% with metformin, 1.5% with sulfonylureas, and 0.5-1.4% with thiazolidinediones (*The Medical Letter*, Volume 49, Issue 1251, January 1, 2007, pg. 1). In clinical trials, when used as monotherapy, Januvia™ reported an adjusted mean decrease in A1C of 0.5%. When Januvia™ was combined with at least 1500mg of metformin, the adjusted mean decrease in A1C was 0.7%. In patients inadequately controlled with metformin, the addition of either (up to) 20mg/day of glipizide or Januvia™ resulted in a mean decrease in A1C of 0.7%. Combining Januvia™ and 30 - 45mg of pioglitazone led to the adjusted mean decrease in A1C of 0.85%. By comparison, combination of Byetta® and at least 1500mg of metformin has shown to have an adjusted mean decrease in A1C of 0.4% – 0.8%. Combination of Exubera® and metformin has shown to have an adjusted mean decrease in A1C of 1.8%. Despite the unique mechanism of action, there are other preferred drugs on the Iowa Medicaid Preferred Drug List that offer an alternative to injectable insulin and/or the addition of a second or third oral anti-diabetic medication to a metformin and/or thiazolidinedione regimen, that are more cost effective than Januvia™.

**IME Recommendation:**

Preferred Drug

Non-Preferred Drug

Preferred Drug with Conditions

Recommended Drug

Non-Recommended Drug