Reviewer's report

Title: Sitagliptin is effective and safe with type 1 or type 2 diabetic patients without endogenous insulin secretion: a case report

Version: 1 Date: 22 November 2010

Reviewer: Barry Goldstein

Which of the following following best describes what type of case report this is?: Presentations, diagnoses and/or management of new and emerging diseases

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: No

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: No

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Comments to authors:

This is a very interesting and timely account of 3 patients who share in common the clinical finding of documented insulin-deficient diabetes, one of whom also had positive autoantibodies associated with Type 1 diabetes. While sitagliptin has recently been widely approved for clinical use in Type 2 diabetes in combination with insulin, it has not been studied in the kinds of insulin-deficient patients specifically described in these case reports. The author provides an appropriate speculation that in the absence of a measurable rise in post-meal insulin (albeit a small peripheral increase, or an intraislet increase cannot be excluded), that the improvement in glycemic control in this setting may be due to GLP-1 action to suppress glucagon, independent of a large increase in insulin signaling. the author’s speculation that "the glycemic effects of sitagliptin [in these
cases?] may be through mechanisms that are independent of the GLP-1 axis" should be made more specific to possibly relate to the type of patients described in this clinical case study.

Minor points

1. The title states "a case report", when in fact there are 3 cases reported; also the common denominator is more that these patients are relatively or absolutely insulin-deficient, not whether they have strictly-speaking type 1 or type 2 diabetes, and I would suggest changing the title to reflect that point.

2. There are multiple spelling errors throughout – introduction "incretin", "vital?"

**Quality of written English:** Acceptable

**Declaration of competing interests:**

I am a full-time employee and hold stock and stock-options in Merck & Co, the manufacturer of sitagliptin.