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*APPLICATION NUMBER:*

**201281Orig1s000**

**PHARMACOLOGY REVIEW(S)**

REV-NONCLINICAL-05 (Review Noted (NAI))  
NDA-201281  
ORIG-1  
Supporting Document 23  
Resubmission/Class 1  
Submit Date: 11/30/2011 - FDA Received Date: 11/30/2011

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Class 1 resubmission of NDA 201281, linagliptin plus metformin HCl FDC tablets. The resubmission addresses CMC issues in the original NDA review. No nonclinical data were included in the resubmission. The pharmacology/toxicology approval recommendation and labeling recommendations from the original NDA review remain unchanged.

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/s/

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DAVID B CARLSON

01/26/2012

Pharmtox approval recommendation (unchanged from original NDA review recommendation)

TODD M BOURCIER

01/26/2012

**PHARMACOLOGY/TOXICOLOGY  
MEMO TO FILE**

Date:	15 November, 2011
NDA #	201280 201281
Sponsor:	Boehringer Ingelheim
Drug:	Tradjenta® (Linagliptin) Jentadueto® (Linagliptin + Metformin FDC)
Reviewer:	David B. Carlson, Ph.D.

Boehringer Ingelheim's drug linagliptin, a DPP4 inhibitor, was recently reviewed for treatment of type 2 diabetes mellitus as both a monotherapy and a fixed dose combination with metformin. The initial pharmacology/toxicology reviews of rabbit embryofetal development studies were completed during the IND phase and results were further reviewed and summarized in the NDA reviews. During the course of labeling discussions it became apparent that the pharmacology/toxicology reviews for NDA 201280 and NDA 201281 inadvertently listed an incorrect rabbit strain. This memo serves as an amendment to the original pharmacology/toxicology reviews to clarify that Himalayan rabbits, not New Zealand White rabbits, were used in the pivotal embryofetal development studies with linagliptin.

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/s/  
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DAVID B CARLSON

11/15/2011

Correction regarding rabbit strain -- no change in pharmtox conclusions or recommendations

TODD M BOURCIER

11/16/2011

Correction memo

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