

Accepted Manuscript

Title: A Pharmacokinetic Study on Lapatinib in Type 2 Diabetic Rats

Authors: Agnieszka Karbownik, Edyta Szalek, Katarzyna Sobańska, Agnieszka Klupczynska, Szymon Plewa, Tomasz Grabowski, Anna Wolc, Marta Moch, Zenon J. Kokot, Edmund Grześkowiak



PII: S1734-1140(17)30311-0
DOI: <http://dx.doi.org/10.1016/j.pharep.2017.09.003>
Reference: PHAREP 792

To appear in:

Received date: 28-4-2017
Revised date: 31-7-2017
Accepted date: 15-9-2017

Please cite this article as: Agnieszka Karbownik, Edyta Szalek, Katarzyna Sobańska, Agnieszka Klupczynska, Szymon Plewa, Tomasz Grabowski, Anna Wolc, Marta Moch, Zenon J. Kokot, Edmund Grześkowiak, A Pharmacokinetic Study on Lapatinib in Type 2 Diabetic Rats (2010), <http://dx.doi.org/10.1016/j.pharep.2017.09.003>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Title: A Pharmacokinetic Study on Lapatinib in Type 2 Diabetic Rats

Title: A Pharmacokinetic Study on Lapatinib in Type 2 Diabetic Rats

Running title: The Influence of Diabetes on the Pharmacokinetics of Lapatinib

Agnieszka Karbownik¹, Edyta Szalek¹, Katarzyna Sobańska¹, Agnieszka Klupczynska², Szymon Plewa², Tomasz Grabowski³, Anna Wolc^{4,5}, Marta Moch¹, Zenon J. Kokot², Edmund Grześkowiak¹

¹Department of Clinical Pharmacy and Biopharmacy, Poznań University of Medical Sciences, ul. Św. Marii Magdaleny 14, 61-861 Poznań, Poland

²Department of Inorganic and Analytical Chemistry, Poznań University of Medical Sciences, 6 Grunwaldzka Str., 60-780 Poznań, Poland

³Polpharma Biologics, ul. Trzy Lipy 3, 80-172 Gdańsk, Poland,

⁴Department of Animal Science, Iowa State University, 239E Kildee Hall, Ames, IA 50011, USA

⁵Hy-Line International, 2583 240th Street, Dallas Center, IA 50063, USA

Correspondence: Agnieszka Karbownik, e-mail: agnieszkakarbownik@o2.pl

The authors have no funding to report.

Abstract

Background. Diabetes mellitus (DM) is a complex metabolic disorder which affects the function of numerous tissues and alters the pharmacokinetic parameters of many drugs. As many oncological patients are diabetics, it is important to determine the influence of this chronic disease on the pharmacokinetics (PK) of anticancer drugs. Lapatinib is a tyrosine kinase inhibitor (TKI), approved for the treatment of human epidermal growth factor receptor 2 (HER2)-positive metastatic breast cancer. The aim of the study was to compare the PK of lapatinib in normal and type 2 diabetes mellitus (T2DM) model rats. Additionally, the effect of lapatinib on blood glucose concentrations was examined.

Download English Version:

<https://daneshyari.com/en/article/8349607>

Download Persian Version:

<https://daneshyari.com/article/8349607>

[Daneshyari.com](https://daneshyari.com)