Accepted Manuscript

Ribociclib shows potential for pharmacokinetic drug-drug interactions being a substrate of ABCB1 and potent inhibitor of ABCB1, ABCG2 and CYP450 isoforms *in vitro*

Ales Sorf, Jakub Hofman, Radim Kučera, Frantisek Staud, Martina Ceckova

PII: S0006-2952(18)30156-4

DOI: https://doi.org/10.1016/j.bcp.2018.04.013

Reference: BCP 13122

To appear in: Biochemical Pharmacology

Received Date: 9 March 2018 Accepted Date: 13 April 2018



Please cite this article as: A. Sorf, J. Hofman, R. Kučera, F. Staud, M. Ceckova, Ribociclib shows potential for pharmacokinetic drug-drug interactions being a substrate of ABCB1 and potent inhibitor of ABCB1, ABCG2 and CYP450 isoforms *in vitro*, *Biochemical Pharmacology* (2018), doi: https://doi.org/10.1016/j.bcp.2018.04.013

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.

ACCEPTED MANUSCRIPT

Ribociclib shows potential for pharmacokinetic drug-drug interactions being a substrate of ABCB1 and potent inhibitor of ABCB1, ABCG2 and CYP450 isoforms *in vitro*

Ales Sorf¹, Jakub Hofman¹, Radim Kučera², Frantisek Staud¹, Martina Ceckova*¹

Abbreviations

95% CI, 95% confidential interval; AB, apical-to-basolateral; ABC, ATP-binding cassette; Abcb1, canine P-glycoprotein; ABCB1, human P-glycoprotein; ABCC1, multidrug resistance-associated protein 1; ABCG2, breast cancer resistance protein; BA, basolateral-to-apical; CDK, cyclin-dependent kinase; CDKI, cyclin-dependent kinase inhibitors; CI, combination index; CYP, cytochrome P450; DDI, drug-drug interaction; DMEM, Dulbecco's modified Eagle's medium; DNR, daunorubicin; EMA, European Medicines Agency; ER+, estrogen receptor positive; FA, fraction of cells affected; FDA, US Food and Drug Administration; HER2-, human epidermal growth factor receptor 2; ITC, International Transporter Consortium; MDCKII, Madin-Darby canine kidney; MIT, mitoxantrone; PMS, phenazine methosulfate; qRT-PCR, quantitative reverse-transcription polymerase chain reaction; TKI, tyrosine kinase inhibitor; XTT, sodium 2,3-bis(2-methoxy-4-nitro-5-sulfophenyl)-5-[(phenylamino)-carbonyl]-2H-tetrazolium inner salt.

*Corresponding author: Assoc. Prof. Dr. Martina Ceckova Ph.D., Department of Pharmacology and Toxicology, Faculty of Pharmacy in Hradec Kralove, Charles University, Akademika Heyrovskeho 1203, 500 05 Hradec Kralove, Czech Republic. Tel.: +420495067218, Fax: +420495067170, Email: martina.ceckova@faf.cuni.cz

¹Department of Pharmacology and Toxicology, Faculty of Pharmacy in Hradec Kralove, Charles University, Czech Republic, CZ

²Department of Pharmaceutical Chemistry and Drug Control, Faculty of Pharmacy in Hradec Kralove, Charles University, Czech Republic, CZ

Download English Version:

https://daneshyari.com/en/article/8523956

Download Persian Version:

https://daneshyari.com/article/8523956

<u>Daneshyari.com</u>