## Accepted Manuscript

Title: Impurities contained in antifungal drug ketoconazole are potent activators of human aryl hydrocarbon receptor

Author: Aneta Grycová Aneta Dořičáková Zdeněk Dvořák

PII: S0378-4274(15)30043-6

DOI: http://dx.doi.org/doi:10.1016/j.toxlet.2015.09.004

Reference: TOXLET 9200

To appear in: Toxicology Letters

Received date: 13-8-2015 Revised date: 3-9-2015 Accepted date: 7-9-2015

Please cite this article as: Grycová, Aneta, Dořičáková, Aneta, Dvořák, Zdeněk, Impurities contained in antifungal drug ketoconazole are potent activators of human aryl hydrocarbon receptor. Toxicology Letters http://dx.doi.org/10.1016/j.toxlet.2015.09.004

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

Impurities contained in antifungal drug ketoconazole are potent activators of human aryl hydrocarbon receptor

Aneta Grycová, Aneta Dořičáková, Zdeněk Dvořák\*

Department of Cell Biology and Genetics, Faculty of Science, Palacky University, Slechtitelu 11, 783 71 Olomouc, Czech Republic

Corresponding author\*: Zdeněk Dvořák

Department of Cell Biology and Genetics

Faculty of Science, Palacky University

Slechtitelu 27, 783 71 Olomouc

Czech Republic

E-mail: moulin@email.cz

Tel.: +420585634903 Fax: +420585634905

### **Graphical abstract**

Highlights

Antifungal drug ketoconazole contains several impurities.

- ► Ketoconazole was identified as an activator of aryl hydrocarbon receptor AhR
- ▶ Impurities contained in ketoconazole are strong activators of human AhR
- ▶ Impurities contained in ketoconazole are inducers of human CYP1A1
- ▶ The data may have implications in ketoconazole role in skin chemoprevention

#### **ABSTRACT**

Antifungal drug ketoconazole is a mixture of (+)/(-) *cis*-enantiomers, which also contains several impurities. Ketoconazole was identified as an activator of aryl hydrocarbon receptor AhR by three independent research teams. In the current paper we demonstrate that impurities

#### Download English Version:

# https://daneshyari.com/en/article/5859879

Download Persian Version:

https://daneshyari.com/article/5859879

Daneshyari.com