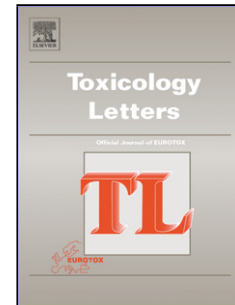


Accepted Manuscript

Title: Impact of lincosamides antibiotics on the composition of the rat gut microbiota and the metabolite profile of plasma and feces

Authors: C. Behr, S. Ramírez-Hincapié, H.J. Cameron, V. Strauss, T. Walk, M. Herold, K. Beekmann, I.M.C.M. Rietjens, B. van Ravenzwaay



PII: S0378-4274(18)31677-1
DOI: <https://doi.org/10.1016/j.toxlet.2018.08.002>
Reference: TOXLET 10290

To appear in: *Toxicology Letters*

Received date: 13-6-2018
Revised date: 31-7-2018
Accepted date: 2-8-2018

Please cite this article as: Behr C, Ramírez-Hincapié S, Cameron HJ, Strauss V, Walk T, Herold M, Beekmann K, Rietjens IMCM, van Ravenzwaay B, Impact of lincosamides antibiotics on the composition of the rat gut microbiota and the metabolite profile of plasma and feces, *Toxicology Letters* (2018), <https://doi.org/10.1016/j.toxlet.2018.08.002>

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.

Impact of lincosamides antibiotics on the composition of the rat gut microbiota and the metabolite profile of plasma and feces

Authors

C. Behr¹, S. Ramírez-Hincapié¹, H.J. Cameron², V. Strauss¹, T. Walk³, M. Herold³, K. Beekmann⁴, I.M.C.M. Rietjens⁴, and B. van Ravenzwaay^{1*}

¹BASF SE, 67056 Ludwigshafen, Germany

²BASF Plant Science LP, Research Triangle Park, USA

³metanomics GmbH, 10589 Berlin, Germany

⁴Division of Toxicology, Wageningen University, 6700 EA Wageningen, The Netherlands

*corresponding author: Bennard van Ravenzwaay, BASF SE, GB/T - Z470, 67056 Ludwigshafen, Germany. Phone: +49 621 60-56419. Email: bennard.ravenzwaay@basf.com

Highlights

- Alterations of the gut microbiome affect the plasma metabolome in rats.
- Main metabolite changes were observed in bile acids, fatty acids and amino acids.
- The microbial community of male and female animals were comparable.
- Applied lincosamides showed a treatment-related effect in the feces.
- Specific plasma patterns for the antibiotic effects were established in MetaMap®Tox.

Download English Version:

<https://daneshyari.com/en/article/8553072>

Download Persian Version:

<https://daneshyari.com/article/8553072>

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