

ToxStrategies

Draft Toxicological Review of *ETBE*

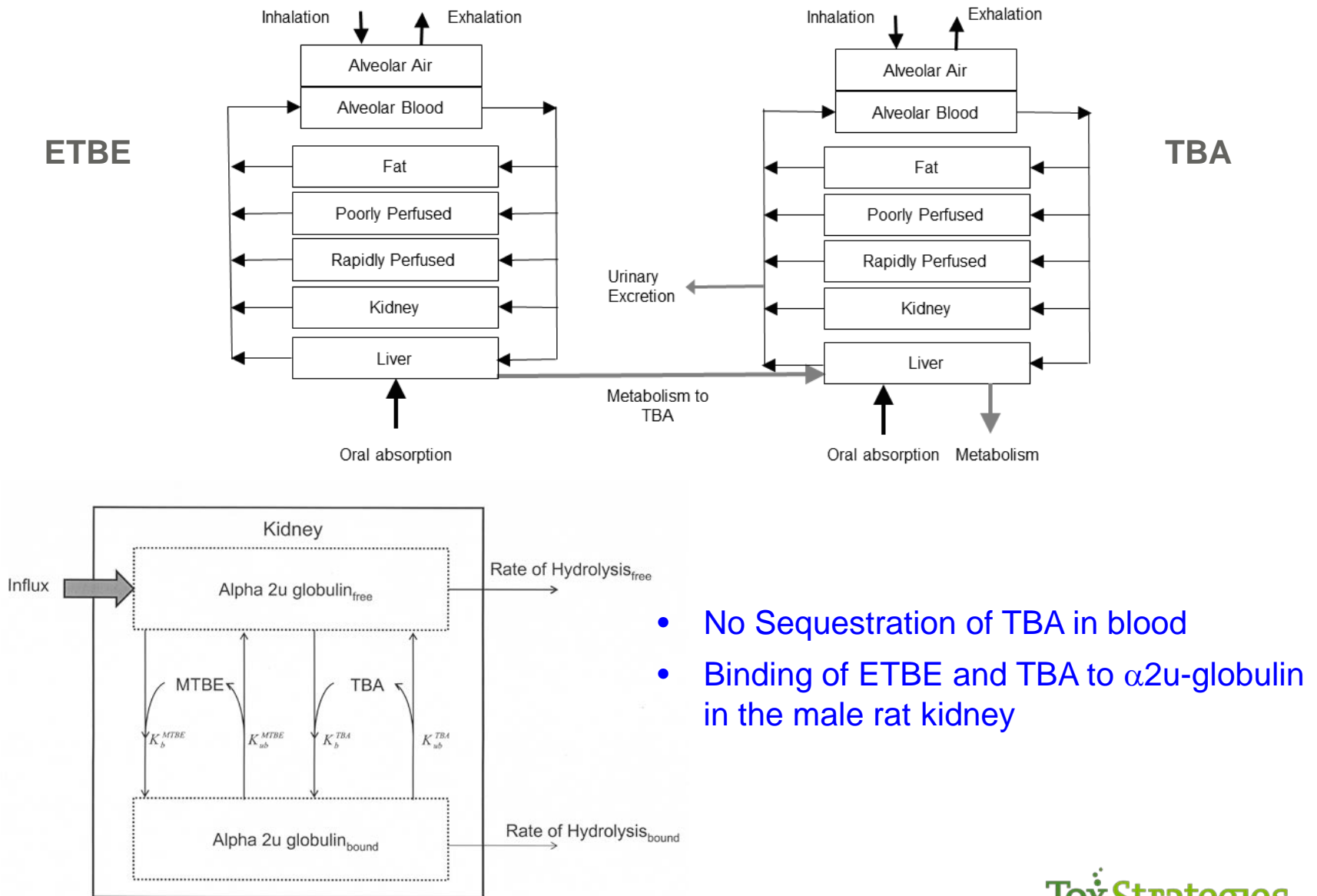
General Discussion

Susan Borghoff PhD, DABT; Comments on behalf of LyondellBasell
IRIS Public Science Meeting, October 26, 2016
Arlington, VA

Innovative Solutions
Sound Science

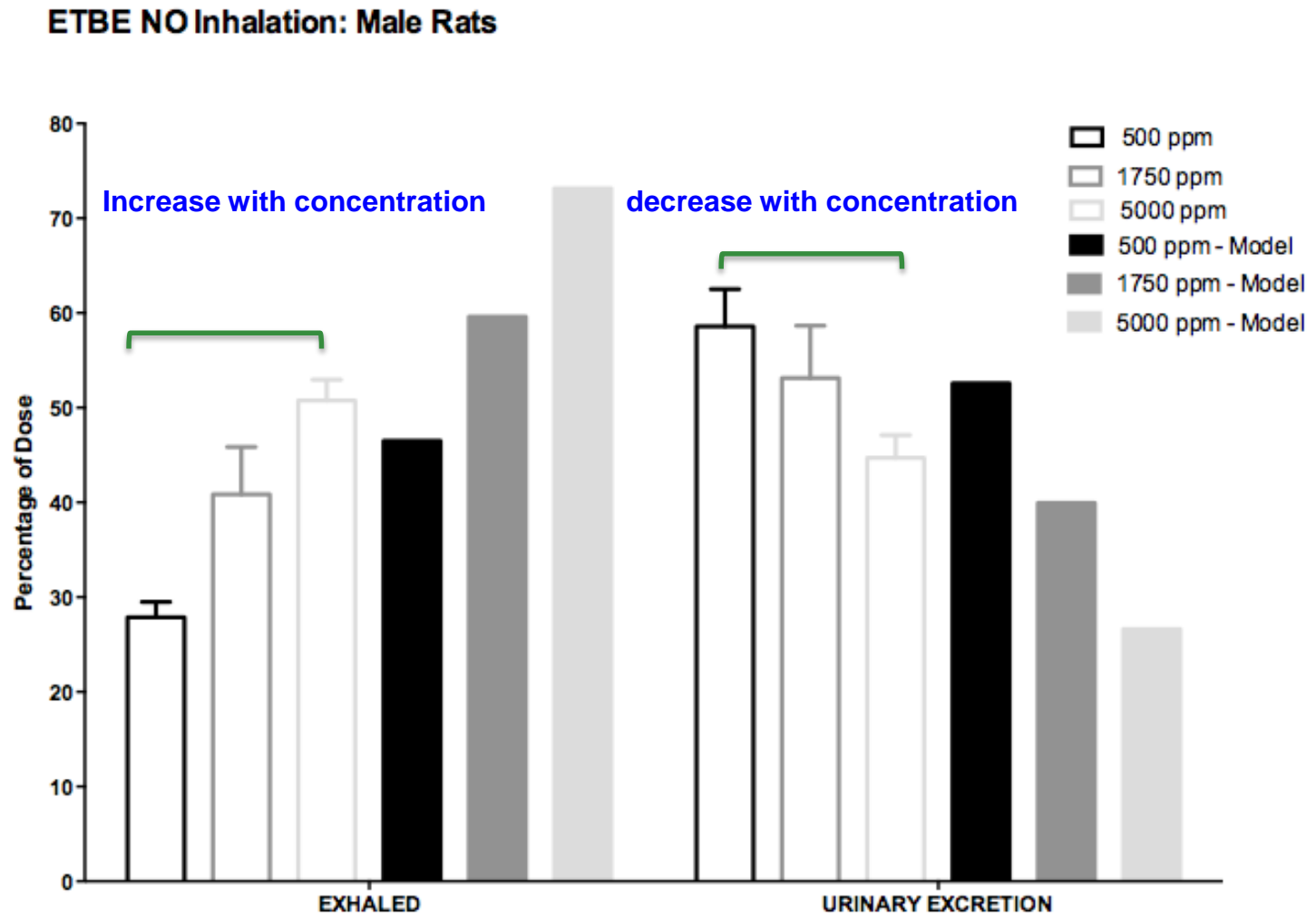
PBPK Model for ETBE-TBA in Rats;

Borghoff, Ring, Banton, and Leavens. 2016 (Accepted for publication)



- No Sequestration of TBA in blood
- Binding of ETBE and TBA to $\alpha 2u$ -globulin in the male rat kidney

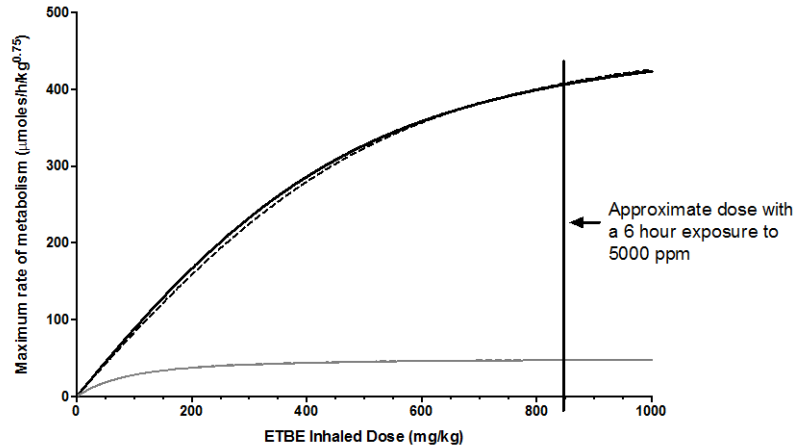
Percentage of dose of ^{14}C -ETBE exhaled or eliminated in urine; Saturation of ETBE metabolism



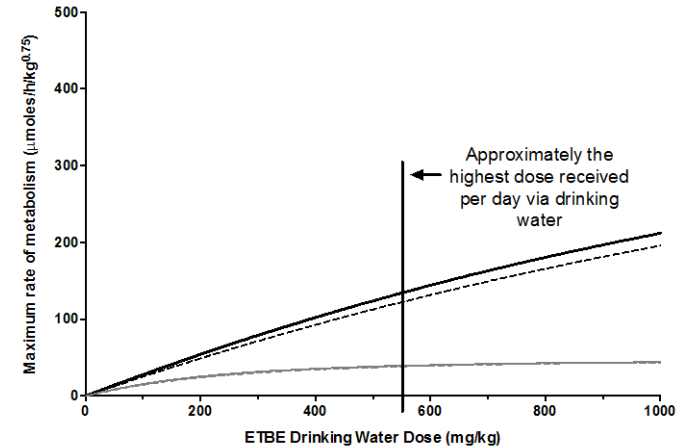
Borghoff and Asgharian, 1996
Borghoff et al., 2016 (in press)

Rate of ETBE metabolism under different exposure scenarios; Saturation of ETBE metabolism

A. ETBE Inhalation Exposure



B. ETBE Drinking Water Exposure



Saturation of ETBE metabolism following inhalation and oral gavage dosing only.

C. ETBE Oral Gavage Administration

