

**Table 4.**  $C_{max}$ /LCRD ratios for metabolomics and transcriptomics experiments to determine likelihood of therapeutic doses resulting in high enough exposure levels to cause observed responses in humans.

Chemical	Metabolomics BMC LCRD ( $\mu\text{M}$ )	Transcriptomics BMC LCRD ( $\mu\text{M}$ )	Reference Human Plasma Concentrations in $\mu\text{M}^1$	Metabolomics $C_{max}$ /LCRD	Transcriptomics $C_{max}$ /LCRD
Chlorpromazine	0.65	0.70	0.47	0.73	0.68
KCl	3.78	159.38	-----	-----	-----
Rifampicin	1.23	8.56	13.00	10.53	1.52
Ritonavir	0.20	0.32	15.50	75.98	47.84
Sucrose	20.02	72.74	-----	-----	-----
Tamoxifen	0.54	1.20	0.32	0.60	0.27

1. Reference human plasma concentrations were obtained from Drug Matrix, Goodman & Gilman, and the Physician's Desk Reference.