

Supplementary material for:

Reconsidering sufficient and optimal test design in acute toxicity testing

Tjalling Jager

Dept. of Theoretical Biology, VU University Amsterdam, de Boelelaan 1085, NL-1081 HV,
Amsterdam, the Netherlands

E-mail: tjalling.jager@vu.nl

Website: www.debtox.info (includes software for GUTS and DEBtox calculations)

Tel.: +31-20-59 87134

Fax: +31-20-59 87123

Data used in this manuscript

Naphthalene data for fathead minnows. Concentrations in mM (horizontal), time in hours (vertical), counts are number of surviving individuals.

| | 0 | 0.033781 | 0.04716 | 0.080356 |
|----|----|----------|---------|----------|
| 0 | 50 | 50 | 50 | 50 |
| 24 | 50 | 50 | 46 | 3 |
| 48 | 50 | 50 | 25 | 1 |
| 72 | 50 | 50 | 20 | 0 |
| 96 | 50 | 50 | 20 | 0 |

Dichlorobutene data for fathead minnows. Concentrations in mM (horizontal), time in hours (vertical), counts are number of surviving individuals.

| | 0 | 0.044 | 0.0748 | 0.1216 | 0.1936 | 0.3576 |
|----|----|-------|--------|--------|--------|--------|
| 0 | 20 | 20 | 20 | 20 | 20 | 20 |
| 24 | 20 | 20 | 20 | 20 | 16 | 0 |
| 48 | 20 | 20 | 20 | 4 | 0 | 0 |
| 72 | 20 | 20 | 17 | 0 | 0 | 0 |
| 96 | 20 | 20 | 0 | 0 | 0 | 0 |

Diazinon data for *Gammarus*. The full data set can be downloaded from www.ecotoxmodels.org/data/ but here only part of that set is used.

| time (days) | conc. diazinon in water (nmol/L) |
|----------------|-------------------------------------|
| 0 | 100.78 |
| 1.02 | 106.32 |
| 1.03 | 0 |
| 8 | 0 |
| 8.01 | 103.56 |
| 9 | 95.82 |
| 9.01 | 0 |
| 15 | 0 |
| 22.01 | 0 |

| day | Survivors controls | Survivors treatment |
|-----|-----------------------|------------------------|
| 0 | 60 | 70 |
| 1 | 55 | 65 |
| 2 | 53 | 59 |
| 3 | 51 | 56 |
| 4 | 51 | 54 |
| 5 | 51 | 50 |
| 6 | 51 | 47 |
| 7 | 48 | 46 |
| 8 | 48 | 46 |
| 9 | 46 | 40 |
| 10 | 45 | 23 |
| 11 | 44 | 22 |
| 12 | 42 | 22 |
| 13 | 41 | 21 |
| 14 | 41 | 18 |
| 15 | 40 | 17 |
| 16 | 38 | 17 |
| 17 | 38 | 13 |
| 18 | 37 | 13 |
| 19 | 37 | 13 |
| 20 | 37 | 11 |
| 21 | 37 | 11 |
| 22 | 36 | 11 |