**SUPPLEMENTAL TABLES**

**Supplemental Table 1**. Conversion factors for DFO-NP from µmol/kg to mg/kg and mg/kg DFO equivalents.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Conversion Factor** | **3.3 µmol/kg DFO-NP** | **10 µmol/kg DFO-NP** | **30 µmol/kg DFO-NP** |
| *mg/kg DFO-NP* | 9.8 | 32 | 98 | 295 |
| *mg/kg DFO equivalent* | 2.8 | 9 | 28 | 83 |

**Supplemental Table 2**. Complete set of NCA parameters for IV administration of DFO-NP in Sprague-Dawley rats. Results are representative of n=4 per group, and data were expressed as mean ± SD.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Units** | **Mean ± SD** | **Mean ± SD** | **Mean ± SD** | **ANOVA p Value** |
| **Nominal Dose** | *µmol/kg* | 3.3 | 10 | 30 |  |
| **Kel** | *1/h* | 0.343 ± 0.027 | 0.313 ± 0.089 | 0.221 ± 0.022\* | 0.0301 |
| **R2 for Kel** |  | 0.9660 ± 0.0422 | 0.9964 ± 0.0013 | 0.9974 ± 0.0036 |  |
| **T½** | *h* | 2.03 ± 0.16 | 2.33 ± 0.54 | 3.17 ± 0.33\*# | 0.0056 |
| **Tmax** | *h* | 0.017 | 0.017 | 0.017 |  |
| **Cmax** | *µM* | 74.0 ± 4.5 | 201.3 ± 16.9 | 447.4 ± 31.3\*# | <0.0001 |
| **AUC0-last** | *µM h* | 29.7 ± 2.8 | 71.3 ± 5.8 | 164.6 ± 5.0 |  |
| **AUC0-∞** | *µM h* | 30.1 ± 2.9 | 72.3 ± 6.5\* | 168.0 ± 5.1\*# | <0.0001 |
| **AUC Extrapolated %** | *%* | 1.06 ± 0.44 | 1.38 ± 0.97 | 2.04 ± 0.66 |  |
| **AUMC0-last** | *µM h2* | 39.0 ± 6.8 | 93.9 ± 21.4 | 202.3 ± 25.1 |  |
| **AUMC0-∞** | *µM h2* | 43.9 ± 8.6 | 110.3 ± 33.5 | 259.5 ± 41.0 | 0.0864 |
| **AUMC Extrapolated %** | *%* | 10.8 ± 4.0 | 13.2 ± 7.8 | 21.7 ± 5.0 |  |
| **MRT** | *h* | 1.45 ± 0.15 | 1.50 ± 0.34 | 1.54 ± 0.22 | 0.8707 |
| **CL** | *L/h/kg* | 0.111 ± 0.010 | 0.139 ± 0.012\* | 0.179 ± 0.006\*# | <0.0001 |
| **Vz** | *L/kg* | 0.322 ± 0.014 | 0.462 ± 0.082\* | 0.816 ± 0.088\*# | <0.0001 |
| **Vss** | *L/kg* | 0.159 ± 0.006 | 0.206 ± 0.030 | 0.275 ± 0.035\*# | 0.0006 |
| **C0** | *µM* | 82.6 ± 4.3 | 225.8 ± 19.8 | 499.9 ± 36.9\*# | <0.0001 |
| Comparison to 3.3 µmol/kg Dose: \* p<0.05  Comparison to 10 µmol/kg Dose: # p<0.05  Kel: elimination rate constant; T½: half life; Tmax: time of maximum serum concentration; Cmax: maximum serum concentration; AUC0‑last: area under the concentration-time curve from time zero to the last measured time point; AUC0-∞: area under the concentration-time curve from time zero to time infinity; AUMC0‑last: area under the first moment curve from time zero to the last measured time point; AUMC0-∞: area under the first moment curve from time zero to time infinity; MRT: mean residence time; CL: clearance; Vz: volume of distribution based on terminal slope; Vss: volume of distribution at steady state; C0: extrapolated concentration at time zero. | | | | | |

**Supplemental Table 3.** Complete set of NCA parameters for SC administration of DFO-NP in Sprague-Dawley rats. Results are representative of n=4 per group. Data were expressed as mean ± SD.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parameter** | **Units** | **Mean ± SD** | **Mean ± SD** | **Mean ± SD** | **ANOVA**  **p Value** |
| **Nominal Dose** | *µmol/kg* | 3.3 | 10 | 30 |  |
| **Kel** | *1/h* | 0.125 ± 0.026 | 0.103 ± 0.035 | 0.070 ± 0.012\* | 0.0461 |
| **R2 for Kel** |  | 0.9590 ± 0.0760 | 0.9673 ± 0.0344 | 0.9403 ± 0.0664 |  |
| **T½** | *h* | 5.71 ± 0.98 | 7.47 ± 2.83 | 10.16 ± 1.66\* | 0.0366 |
| **Tmax** | *h* | 2.5 ± 1.0 | 2.0 ± 0.0 | 3.8 ± 0.5# | 0.0108 |
| **Cmax** | *µM* | 1.18 ± 0.17 | 3.59 ± 0.42 | 8.69 ± 0.80 | 0.0731 |
| **AUC0-last** | *µM h* | 10.3 ± 0.4 | 29.0 ± 4.2 | 144.3 ± 6.9 |  |
| **AUC0-∞** | *µM h* | 14.2 ± 1.4 | 45.2 ± 14.0 | 179.3 ± 7.4 | 0.0447 |
| **AUC Extrapolated %** | *%* | 27.0 ± 5.5 | 32.7 ± 13.6 | 19.5 ± 3.1 |  |
| **F** |  | 0.47 | 0.63 | 1.07 |  |
| **AUMC0-last** | *µM h2* | 55 ± 4 | 147 ± 25 | 1453 ± 51 |  |
| **AUMC0-∞** | *µM h2* | 135 ± 30 | 547 ± 351 | 2811 ± 322\* | 0.0193 |
| **AUMC Extrapolated %** | *%* | 58.1 ± 8.6 | 65.7 ± 15.5 | 47.8 ± 5.6 |  |
| **MRT** | *h* | 9.4 ± 1.2 | 11.2 ± 4.1 | 15.7 ± 1.6\* | 0.0230 |
| **MAT** | *h* | 7.9 | 9.7 | 14.1 |  |
| **CL/F** | *L/h/kg* | 0.234 ± 0.026 | 0.239 ± 0.075 | 0.168 ± 0.007 | 0.0979 |
| **V\_z/F** | *L/kg* | 1.90 ± 0.16 | 2.37 ± 0.28 | 2.43 ± 0.41 | 0.0692 |
| Comparison to 3.3 µmol/kg Dose: \* p<0.05  Comparison to 10 µmol/kg Dose: # p<0.05  Kel: elimination rate constant; T½: half life; Tmax: time of maximum serum concentration; Cmax: maximum serum concentration; AUC0‑last: area under the concentration-time curve from time zero to the last measured time point; AUC0-∞: area under the concentration-time curve from time zero to time infinity; F: bioavailability; AUMC0‑last: area under the first moment curve from time zero to the last measured time point; AUMC0-∞: area under the first moment curve from time zero to time infinity; MRT: mean residence time; MAT: mean absorption time; CL: clearance; Vz: volume of distribution based on terminal slope. | | | | | |