

## Summary of Analysis

Dose-response data quality good.

Best model found:log\_logistic

Model fit might be unreliable.

p-val for chi-squared statistic was  $< 0.1$  for all converged models.

# Model Predictions

| Model          | Chi-squared | p-val | AIC     | BMD10  | BMDL10 |
|----------------|-------------|-------|---------|--------|--------|
| logistic       | 24.429      | 0.0   | 234.735 | 15.754 | 13.238 |
| gamma          | nan         | nan   | nan     | nan    | nan    |
| weibull        | 16.08       | 0.007 | 231.563 | 2.84   | 2.334  |
| log_logistic   | 11.17       | 0.048 | 222.357 | 8.229  | 4.74   |
| probit         | 22.922      | 0.001 | 232.883 | 14.818 | 12.602 |
| log_probit     | 11.539      | 0.042 | 222.45  | 8.464  | nan    |
| multistage_2   | 321.133     | 0.0   | 365.723 | 1.823  | nan    |
| quantal_linear | nan         | nan   | nan     | nan    | nan    |

# Scaled Residuals

| Model          | dose0     | dose1     | dose2    | dose3     | dose4    | dose5     | dose6     | dose7     |
|----------------|-----------|-----------|----------|-----------|----------|-----------|-----------|-----------|
| logistic       | 1.121836  | 0.578734  | 1.844684 | -0.82216  | 1.231061 | -0.940278 | -3.428614 | 2.14505   |
| gamma          | nan       | nan       | nan      | nan       | nan      | nan       | nan       | nan       |
| weibull        | -0.126093 | 0.395853  | 2.018339 | 0.293472  | 2.489444 | 1.097551  | -2.08177  | -0.109798 |
| log_logistic   | 0.053536  | -0.710132 | 1.264099 | -1.564375 | 1.440936 | 0.42898   | -1.798601 | 1.059448  |
| probit         | 0.982596  | 0.422143  | 1.754493 | -0.978363 | 1.178139 | -0.91787  | -3.399175 | 1.98946   |
| log_probit     | 0.19753   | -0.69046  | 1.210966 | -1.755886 | 1.456404 | 0.535924  | -1.800565 | 0.90714   |
| multistage_2   | 1.444444  | 1.593701  | 2.983512 | 2.17694   | 4.925531 | 5.565547  | 4.246369  | 15.152492 |
| quantal_linear | nan       | nan       | nan      | nan       | nan      | nan       | nan       | nan       |

Dose-response with best fit model (log\_logistic)

