Supplemental Material

Developmental Effects of the ToxCast™ Phase I and II Chemicals in *Caenorhabditis elegans* and Corresponding Responses in Zebrafish, Rats, and Rabbits

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Table S1. Estimated Z-factors and summary statistics using 4% DMSO with vehicle control

Table S2. Estimated Z-factors and summary statistics using parathion

Table S3. Estimated Z-factors and summary statistics using dichlorvos

Table S4. Description of chemicals in the lower panel of Figure 4

Figure S1. Effect of DMSO (vehicle control) on C. elegans growth. The red dashed line indicates the AC50 (half-maximal concentration; 3.1 % DMSO); the blue dashed line indicates the benchmark concentration lower limit (1.6 % DMSO), below which no effect was observed compared to the untreated control. The benchmark concentration was calculated using mean nematode sizes for exposure wells, with size at time = 0 subtracted from the size at t=48 h. The definition of Crump (2002) was used to calculate the BMC with bootstrapping on residuals for the 90% one-sided confidence interval as previously described (Boyd et al. 2010a; Crump 2002).

Supplemental Code and Data Zip File

Excel Table S1. ToxCast Phase I mean log(EXT) values and weighted t-test Bonferoni-corrected p-values

Excel Table S2. Phase I and II *C. elegans* and zebrafish toxicity estimates