

Table 1. U.S. EPA Endocrine Disruptor Screening Program (EDSP) tier 1 screening battery assays and tier 2 testing assays, high-throughput screening (HTS) assays, and predictive model alternatives (U.S. EPA, 2015a; Kleinstreuer et al., 2016b).

| Level                    | EDSP assays                              | HTS assays and predictive model alternatives |
|--------------------------|--|--|
| Tier 1 screening battery | Estrogen receptor (ER) binding           | ER Model                                     |
| Tier 1 screening battery | Estrogen receptor transactivation (ERTA) | ER Model                                     |
| Tier 1 screening battery | Uterotrophic                             | ER Model                                     |
| Tier 1 screening battery | Androgen receptor (AR) binding           | AR Model                                     |
| Tier 1 screening battery | Hershberger                              | AR Model                                     |
| Tier 1 screening battery | Aromatase inhibition                     | STR  |
| Tier 1 screening battery | Steroidogenesis (STR)                    | STR  |
| Tier 1 screening battery | Female rat pubertal                      | ER, STR, THY                                 |
| Tier 1 screening battery | Male rat pubertal                        | AR, STR, THY                                 |
| Tier 1 screening battery | Fish short term reproduction             | ER, AR, STR                                  |
| Tier 1 screening battery | Amphibian metamorphosis                  | THY  |
| Tier 2 definitive test   | Rat 2-gen/EOGRT                          | ER, AR, STR, THY                             |
| Tier 2 definitive test   | MEOGRT                                   | ER, AR, STR                                  |
| Tier 2 definitive test   | LAGDA                                    | THY  |
| Tier 2 definitive test   | Japanese Quail 2-gen                     | ER, AR, STR, THY                             |

Note: AR, androgen receptor; EOGRT, extended one-generation reproductive toxicity; ER, estrogen receptor; LGDA, larval amphibian growth and development assay; MEOGRT, Medaka extended one-generation reproductive test; STR, steroidogenesis; THY, thyroid. Bold type indicates total for whole-animal *in vivo* assays (e.g., female rat pubertal assay), several predictive models may be needed in an integrated approach to testing assessment (IATA).