

US EPA ARCHIVE DOCUMENT

FIFRA SAP Meeting - March 25-28, 2008
Review of the Endocrine Disruptor Screening Program (EDSP)
Proposed Tier-1 Screening Battery

Charge Questions to the SAP

The SAP is asked to review and provide comment on each of the charges listed below:

1. Please comment on the ability of the proposed Tier 1 screening battery to provide sufficient information to determine whether or not a substance potentially interacts with the estrogen, androgen, and thyroid hormonal systems based on the modes of action covered within the battery:
 - a. Estrogenicity: acting agonistically by potentiating the estrogen signal.
 - b. Anti-estrogenicity: acting antagonistically by attenuating the estrogen signal.
 - c. Androgenicity: acting agonistically by potentiating the androgen signal.
 - d. Anti-androgenicity: acting antagonistically by attenuating the androgen signal.
 - e. Steroidogenesis effects: acting agonistically or antagonistically by modulating normal steroidogenic processes including aromatase.
 - f. Hypothalamic/pituitary/gonadal effects: acting agonistically or antagonistically by modulating processes not captured in the above categories.
 - g. Hypothalamic/pituitary/thyroid effects: acting agonistically or antagonistically by modulating processes associated with direct thyroid hormone receptor interaction as well as those processes involved indirectly (e.g., synthesis, secretion, elimination of thyroid hormones) in thyroid function.
2. EPA proposed a Tier 1 screening battery that includes many assays that are complementary in nature and in their coverage of the EAT hormonal systems (the strengths of one assay offset the limitations of another), albeit by different taxa, life-stages, endpoints, exposure and use of in vitro and in vivo methods executed at different levels of biological organization (e.g., cytosolic receptor binding, cell-based assays, whole organism).
 - a. Please comment on how well the proposed battery minimizes the potential for “false negatives” and “false positives.”
 - b. Please comment on whether there are unnecessary redundancies for MOAs across the battery.
 - c. Please comment on whether a different combination of validated assays would be more effective in achieving the purpose of the battery than that proposed by EPA.