







### Risk Assessment Applications

#### 1) Prioritization

- Systematic testing with a "well-defined" endpoint
- QSAR Decision Support System for ER molecular initiating event
  - diverse chemical structures

Same approach can be taken for other molecular initiating events

- AR – diverse structures – extent may be same or less than ER
  - systematic testing needed to develop model for defined chemical list
    - assays available; may need to be optimized for anticipated low affinity chemicals (EPA problem); EU application?
- aromatase – diversity of structures causing enz inhib?
  - systematic testing needed to develop model for defined chemical list
    - assays available; need optimization??

other steroidogenic enzymes – (same approach as above)

#### 2) Higher Tier Assessment

HPG Systems Models assist data interpretation?

### Developmental Endpoints

#### HPT Systems Model

Identify molecular initiating events

NIS

TPO ( in vitro assays optimized for QSAR approach)

CYP induction – T4 kinetics (gluc)