SPSF 2015: Feasibility study for minor enhancements of TG 414 (Prenatal Developmental Toxicity Study) with ED-relevant endpoints

DK submitted **SPSF on minor ED enhancement of TG414** in 2014 - WNT approved the inclusion into the OECD **work plan**

Purpose: investigate whether implementation of assessment of testosterone levels and anogenital distance (AGD) in male foetuses would be useful for investigating endocrine disruptive effects in the **OECD Test Guideline 414**

- Suggested endpoints: **AGD, Testosterone** levels and **further Guidance on evaluation of abnormalities of external genitalia**

Background

- Studies have shown that EDCs, e.g. some phthalates, can decrease the prenatal testosterone surge in males foetuses
- Leading to effects observed postnatally e.g. anogenital distance and reproductive organ weight changes
- The **testosterone** surge **can** be measured a few days before birth (e.g. **GD 21**) in **male foetuses** together with **AGD** and **malformations of external reproductive organs**

Workplan

- **2015:**
  - WNT inclusion on workplan and EG established
  - Teleconference with Expert group autumn discussions and application for data from lead and EG
- **2016:**
  - Analysis initiated (lead) January-March
  - April-mid June: Analysis completed and development of a draft feasibility report (and first draft of a preliminary revised TG) – discussion experts
  - WNT NCs and expert group 1-2nd commenting
  - Draft final revisions of TG and feasibility report by the end of 2016
- **2017:**
  - **if** TG 414 is agreed to be revised, adoption of the rev. TG at WNT OECD

Status

- **Denmark and the Secretariat:**
  - Request for data to enhance TG 414 with endocrine disrupter relevant endpoints – **deadline 25. September**
    - only a few people responded
  - Denmark and the Secretariat extend the period for receiving data to mid. October
- **Now: Data from lead & one other laboratory in France**
- **Challenges:**
  - Blood sampling of foetuses in TG 414
  - Foetuses allocated to soft tissue examination - **feasible technically** (avoid damaging the brain and keep the region of thyreoidea, thymus, ...)
  - 50% of foetuses not feasible.