E-TEAM: Evaluation of the Tier 1 Tools Used for Exposure Assessment under REACH

Challenges and perspectives for tier 1 exposure assessment under REACH and the Health & Safety Act (Dutch "Arbowet")

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Introduction
Tier 1 (conservative) exposure tools are extensively used during registration of substances under REACH. For occupational exposures these tools include ECETOC TRA, MEASE, STOFFENMANAGER, and the EMKG-EXPO TOOL. ECETOC TRA and MEASE provide estimates for both inhalation and dermal exposure, while STOFFENMANAGER and EMKG-EXPO-TOOL only provide estimates for inhalation exposure. In addition, the RISKOFDERM tool can be used to estimate exposure for dermal exposure. Unfortunately, this set of tools has not been comprehensively evaluated in order to determine their performance to estimate exposure. The ETEAM project, funded by BauA, was launched towards the end of 2011 with the aim to evaluate these generic first tier exposure tools in order to determine/confirm the applicability domains of the models and to achieve more confidence about the accuracy and reliability of model predictions. In addition, ETEAM aimed to review the user friendliness of the tools to identify strengths and weaknesses in their practical usage.

Methods
The E-TEAM project broadly consisted of a number of elements:
- A conceptual evaluation of the tool
- A survey to determine the user-friendliness of the tools
- A survey and workshop to determine the between-user reliability of the tools
- A comparison of tool predictions with results of exposure measurements
- An evaluation of the sources of uncertainty in the tools

Results
At the time of writing of this abstract, results are not yet publicly available, hence cannot be provided in this abstract. During the session, we will present a summary of the main results and implications for model users.

During the session we will:
- Present/disseminate a summary of the main results of the E-TEAM
- Present any implications from the results and practical recommendations for users
- Discuss challenges and perspectives for tier 1 exposure assessment

Programme
- Tier 1 exposure assessment under REACH & Health & Safety Act (Dutch "Arbowet") Dr Wouter Fransman (10 min)
- Between-user reliability of tools – Judith Lamb (20 min)
- Comparison tool estimates with measurement results - Dr Martie van Tongeren (20 mins)
- Summary and implications – Dr Martie van Tongeren (10 mins)
- Discussion - Dr Henri Heussen (30 min)