Introduction and Background - PFAS/2023/02

In this guide

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This is a paper for discussion.

This does not represent the views of the committee and should not be cited.

Introduction

1. This is a paper for discussion regarding how future papers on PFAS should be presented to the subgroup.

2. The subgroup is presented with a number of questions for discussion, with examples given in Annexes. As the paper is related to the methodological aspects of the presentation of the evidence base, Members are asked not to review and comment on the data presented in the examples, as they are for illustrative purposes only.

3. For each broad endpoint (e.g. thyroid toxicity) *in vivo*, *in vitro* and epidemiology data will be presented for all PFAS, from which sensitive endpoints (e.g. thyroid hormone levels, liver weight, preputial separation) will be identified. Opinions on the pertinent sensitive endpoints will also be summarised from

authoritative body reports, and a discussion will be provided as to the relevance to humans and whether the sensitive endpoint is considered adverse. Options for the presentation of these data are provided in Annexes 1-5 for the subgroup to consider. In addition, the subgroup should consider whether any specific evaluation approaches should be used by the Secretariat for assessing the data, taking into account the guidance in the SETE report.

4. Based on COT paper TOX/2022/67, the Committee has asked as a minimum for thyroid, liver, developmental and immunotoxicity endpoints to be considered. It may be appropriate for nephrotoxicity, neurotoxicity, and reproductive toxicity to also be considered, as well as any other endpoints subgroup members think should be reviewed.

Summary

Overall, this paper aims to give members options regarding how work assessing the toxicological effects of PFAS can be carried out in a thorough yet effective manner.

Questions on which the views of the Committee are sought

Members are invited to consider the following questions:

i. Should papers undergo reliability scoring or quality assessment to assess reliability prior to inclusion into the narrative/table? The subgroup may wish to consider providing specific guidance on epidemiology, *in vivo* and *in vitro* studies, respectively (Annex 1).

ii. Due to the large number of studies, how do members want data presented (Annex 2);

a. Narratives on all studies plus a summary.

b. Tabular format plus a summary.

c. Graphical format, including any preference on the type of presentation, plus a summary.

d. Any combination of a, b and c above.

iii. When writing summaries of the data, how do members want the data presented (Annex 3);

a. Summary per sensitive endpoint (e.g. liver weight, clinical chemistry, gene expression, cholesterol).

b. Summary per individual PFAS.

c. Summary per group or sub-group of PFAS (e.g. PFCA or PFSA).

iv. In the narrative and/or table, do members want quantitative data presented (e.g. XX increase in Y endpoint, vs significant increase in Y endpoint)? (Annex 4).

v. Currently, endpoints being assessed include thyroid toxicity, hepatotoxicity, developmental toxicity and immunotoxicity (Annex 5);

a. Should nephrotoxicity, neurotoxicity and reproductive toxicity also be assessed.

b. Are any other endpoints of interest?

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