MUT/MIN/2023/01

COMMITTEE ON MUTAGENICITY OF CHEMICALS IN FOOD, CONSUMER PRODUCTS AND THE ENVIRONMENT

Minutes of the meeting held at 10.30 on 23rd February 2023 via MS Teams.

Present:

Chairman:	Professor G Jenkins
Members:	Mr A Bhagwat
	Dr C Beevers
	Dr A Doherty (Co-opted member)
	Dr P Fowler
	Dr N Goldsmith (Associate member)
	Dr G Johnson
	Professor D Harrison (Ex officio)
	Professor S Doak
	Ms J Kenny
	Dr A Povey
	Mr P Rawlinson
	Mrs M Wang
Secretariat:	Dr O Sepai (UKHSA Scientific Secretary)
	Mr S Robjohns (UKHSA Secretariat)
	Ms B Gadeberg (UKHSA Secretariat)
	Dr B Doer (FSA Secretariat)
Secretariat Support:	Dr R Bevan (IEH Consulting)
Assessors:	Ms F Fernandez (VMD)
	Ms F Hill (DBT)
	Ms Jo Little (HSE)
	Dr Akosua Adjei (MHRA)
	Dr I Martin (EA)
Observers:	Professor A Boobis (COT)
	Mr J O'Brien (Food Observatory)
	Paula Braun (PETA)

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ITEM 1: WELCOME AND APOLOGIES FOR ABSENCE

1. The Chair welcomed the COM members, assessors and secretariat. The Chair also welcomed Dr Ruth Bevan from IEH Consulting providing support to the COM secretariat.

ITEM 2: ANNOUNCEMENTS

2. Members were requested to declare any interests before the discussion of any items.

3. The Chair informed the COM that there were currently vacancies within the committee. Some recruitment had been delayed while waiting for sign off from ministers. However, recruitment would take place through 2023. It was noted that the members Julie Kenny and George Johnson would come to the end of their three-year term at the end of May 2023.

4. The COM had already recruited Nathan Goldsmith as an associate member and was looking to recruit another associate member.

ITEM 3: MINUTES OF THE MEETING HELD ON 13th OCTOBER 2023 (MUT/MIN/2022/03)

5. The minutes of the COM meeting held on the 13th of October 2023 were agreed subject to minor typographical amendments.

ITEM 4: MATTERS ARISING

6. There were no matters arising not already on the agenda.

ITEM 5: SCOPING PAPER – IN VITRO BIOMARKERS OF GENOTOXICITY (MUT/2023/01)

7. No interests were declared for this item.

8. At the March 2022 meeting, COM agreed to develop a Guidance Statement on DNA adducts and *in vivo* genotoxicity biomarkers, to complement and enhance the information included in the revised COC Guidance Statement G04 'The Use of Biomarkers in Carcinogenic Risk assessment'. Draft scoping and first draft documents of the COM document were presented and discussed by the COM at the June 2022 (MUT/22/06) and October 2022 (MUT/2022/11) meetings respectively, and the final document was in the process of being prepared.

9. During discussion of the *in vivo* genotoxicity biomarkers document, COM considered that a complementary paper outlining the use of biomarkers of genotoxicity measured using *in vitro* methods would also be useful. The paper presented (MUT/2023/01), provided a brief overview of the proposed content for such a paper, for discussion and agreement by members.

10. There was broad support for the development of an *in vitro* methods paper which, from a testing strategy perspective, would highlight the potential alternatives to the *in vivo* approaches described in the GS[SR1] and the use of *in vitro* assays to follow up mode of action questions. It should also be given another name rather than '*in vitro* biomarkers' as this was not an appropriate term. Members considered that the document should avoid duplicating previous COM guidance and should go wider than the standard OECD Test Guidelines assays, to discuss how different biomarker information could be used to inform on how testing could be refined for risk assessment purposes.

11. It was agreed that a first draft document would be prepared for discussion at the COM meeting in June 2023. Members were requested to provide the Secretariat with a list of assays that they considered should be included in the paper.

RESERVED ITEM

ITEM 6: DRAFT PAPER – SAFETY ASSESSMENT OF A COATING IN CANNED FOOD PACKAGING MATERIALS (MUT/2023/02)[SR2]

ITEM 7: LAY SUMMARIES (MUT/2023/03)

No interests were declared for this item.

19. A series of non-expert summaries has been requested by COM to be added to the beginning of individual COM Guidance Statements to increase their accessibility.

20. At the COM meeting in October 2022, a draft non-expert summary of the overarching COM guideline 'Guidance on a strategy for genotoxicity testing of chemicals' was presented (MUT/2022/13). Following discussion, members suggested a number of amendments, which were included in second draft paper presented at this meeting. In addition, first draft non-expert summaries were also prepared for the COM guidance statements on quantitative assessment of genotoxicity data and the use of mutation spectra in genetic toxicology for discussion.

21. Members considered that the approach taken to simplify the science in the non-expert summaries (top-down approach) may have made wording overly complex and a bottom-up approach may be better. The terms used could also be broader. For example, a general term such as 'genetic' damage could be used with no need to refer to different specific types of genetic damage. Overall, it was suggested that a more journalistic style could be appropriate which would reach a wider audience, for example, via the UKHSA public-facing website that is being developed[SR3]. It was also noted by members that the mutation spectra guidance statement was out of date and there was a need for COM to revisit this area.

22. It was agreed that the current documents would be updated to take on board the comments made. A small sub-group of interested members would be formed to review and comment on these and future non-expert summaries.

ITEM 8: DRAFT COM ANNUAL REPORT (MUT/2023/04)

23. The draft annual COM report was not yet completed and would be brought to a future meeting.

ITEM 9: TITANIUM DIOXIDE – UPDATE ON THE PROGRESS OF THE COM EVALUATION

24. The Food Standards Agency had asked the COM in October 2021 to consider the European Food Safety Authority (EFSA) opinion on the genotoxicity of titanium dioxide. The COM had decided to undertake its own evaluation. The Chair provided an update on the progress of the evaluation of the genotoxicity of titanium dioxide.

25. The first steps had been to agree criteria for sifting the available studies in terms of the characterisation of the test material (e.g., micro, or nano sized particles) and the quality of studies in terms of reliability and how well the genotoxicity studies had been conducted. The characterisation criteria had been agreed and there would be a sub-group meeting following this meeting to discuss the evaluation. The evaluation of suitable studies had not yet started but it was hoped an evaluation would be ready for the October 2023 COM meeting.

ITEM 10: OECD UPDATES

26. Members were informed that there would be an OECD review of Toxtracker and the use of 3D skins cells in the coming year. Also, there could be consideration of modification of germ cell mutagenicity within the GHS classification system. Reviews would be initially considered by OECD expert committees before being seen by the COM. It was noted that the timings of consideration required by the OECD did not always fit in with the timing of the three COM meetings per year.

27. One member highlighted that an OECD standard submission form (SPF) from France on the gamma H2AX *in vitro* assay would be discussed in April 2023. It was also possible that an SPF would be considered on updating the guidance or guidelines [SR4]on the use of historical control data. There was a growing interest in supporting this area of work.

28. Additionally, members were informed that EFSA had highlighted that the text referring to cytotoxicity in the OECD Test Guideline 487 on the *in vitro* micronucleus was currently confusing. The COM agreed that the current wording was confusing and needed to be amended noting that 55% cytotoxicity plus or minus 5% was the threshold that needed to be focused on. Additionally, it was noted that there were some concerns over 24-hour sample time and recovery time, and it that would also be useful to consider these aspects of the Test guideline. It was hoped that these OECD issues would come to the COM for consideration at a later date.

ITEM 11: AOB

29. One member asked whether there would be a report published on the COM meeting held in Birmingham in 2019 on the interpretation of genotoxicity testing, which had been attended by several regulatory organisations. A draft report had been produced but was currently on hold. It was suggested that this could be published on the COM website.

30. The Chair requested that members suggest any relevant topics that could be useful for the COM to consider at future meetings and to suggest relevant speakers that could be invited to future meetings.

31. Members were informed of a upcoming workshop being organised on gene therapy and potential DNA off target effects.

ITEM 12: DATE OF NEXT MEETING

33. Date of the next meeting 15th June 2023.