Committee on CARCINOGENICITY

CC/MIN/2015/03

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

Minutes of the meeting held at 10.30am on Thursday 12th November 2015 at Department of Health, Skipton House, 80 London Road, Elephant and Castle, London, SE1 6LH.

Present

Chair:	Professor D Phillips	
Members:	Mr D Bodey	
	Dr G Clare	
	Dr J Doe	
	Dr P Greaves	
	Professor R Kemp	
	Dr D Lovell	
	Professor J Peto	
	Dr C Powell	
	Dr L Rushton	
	Professor H Wallace	
	Dr R Waring	
	Professor S Warnakulasuriya	
Secretariat:	Ms F Pollitt	PHE Scientific Secretary
	Dr D Gott	FSA
	Mrs N Blowfield	PHE Administrative Secretary
	Miss B Gadeberg	PHE
	Dr H Garavini	Toxicology Unit, Imperial College
	Dr K Vassaux	Toxicology Unit, Imperial College
Assessors:	Dr H McGarry	HSE (by teleconference) (Item 4.2 – 8)
Officials:	Dr O Sepai	PHE
	Miss K Foxall	PHE (by teleconference) (Item 4.2 – 6)

ITEM 1: Apologies for absence and announcements

1. The Chair welcomed the Members and Assessors to the meeting. Apologies were received from Professor N Pearce and Dr D Benford (FSA Scientific Secretary) who was represented by Dr D Gott. Apologies were also received from assessors Professor T Gant (PHE), Dr H Stemplewski (MHRA), and Mr I Martin (EA).

2. The Chair also welcomed Mrs Natalie Blowfield who had recently been appointed as the Committee Administrator.

3. Members were reminded to declare any interests they may have in an item before its discussion.

ITEM 2: Minutes of meeting held on 9th July 2015 (CC/MIN/2015/02)

4. A minor amendment was made to the minutes in paragraph 22.

ITEM 3: Matters arising

COM Triennial Review

5. Members were informed that the COM had recently undergone a triennial review process, due to its Advisory Non Departmental Public Body (ANDPB) status. The review had gone well and the draft report contained a number of recommendations. Of relevance to COC was the recommendation that the COC and COM Chairs should have a formal meeting once per year and to undertake a joint horizon scanning exercise.

ITEM 4: Alcohol and Cancer risk

6. Dr Clare declared an interest as a shareholder in Diageo. This was considered a personal, non-specific interest. It was agreed that Dr Clare would not participate in the discussion or conclusions of this topic.

7. Dr Rushton declared that she had helped with the drafts of a number of these papers. It was agreed that this was not a conflict and Dr Rushton could participate fully in the discussion.

8. Members were thanked for their contributions by correspondence in September 2015 to the CMOs work on alcohol guidelines.

Item 4.1: Statement on consumption of alcoholic beverages and risk of cancer (Third Draft) (CC/2015/14)

9. This paper presented a third draft statement which had been updated following the comments received at the July 2015 meeting and during correspondence discussion of the second draft statement in October 2015.

10. This document was discussed in detail, with various amendments made throughout the text, including the glossary and lay summary. It was agreed that the text could be cleared by Chair's action ready for publication in December 2015.

Item 4.2: ***Paper for Information – Study by Cao et al (2015) Light to moderate intake of alcohol, drinking patterns, and risk of cancer: results from two prospective US cohort studies (CC/2015/15)***

11. This paper was presented for information as it was published after the end date of the literature searches for the COC statement. The Committee considered that the findings were consistent with the third draft statement (CC/2015/14) and noted the in women the main effect of low to moderate drinking was on breast cancer incidence.

ITEM 5: Guidance Statement G09 – Assessing the risk of acute and short-term exposure to carcinogens (CC/2015/16)

12. Due to time constraints at the meeting, this item was deferred to a future meeting. Members were invited to send comments to the Secretariat by correspondence.

ITEM 6: Horizon Scanning 2015 (CC/2015/17)

13. Dr Doe declared an interest as one of his clients manufactures glyphosate. He was permitted to remain in the room but was not involved in discussion of glyphosate.

14. This paper presented an update on topics completed and discussed during 2014 and 2015, outlined the list of topics of interest from the last horizon scanning discussion in 2013[a], and provided a brief outline of possible items of interest identified by the Secretariat. In addition, a verbal update on the discussion of glyphosate by EFSA, ECHA, EU Member States and IARC was provided by the HSE assessor as Members had previously expressed interest in being kept informed of developments on this.

15. The EFSA conclusion on glyphosate was published online on the day of the COC meeting. The aspects covered in the supplemental document explaining the carcinogenicity assessment of glyphosate[b] were outlined to the Committee. It was noted that some of the differences in the conclusions between IARC and EFSA were due to different studies being considered, as IARC only considers data which is published or has been accepted for publication in peer-reviewed journals. The Committee suggested there could be a benefit to companies publishing the findings of the regulatory studies once market approval has been obtained. It was agreed that the Committee would be kept informed of developments following publication of the EFSA documents, but there was no requirement for further work at this point in time.

16. Of the new topics raised, studying cancer genomics through next-generation DNA sequencing was considered very topical, but it was unclear whether there would yet be sufficient data available. It was suggested that the Committee should keep a watching brief and be provided with papers for information as they are published. The need for a specific question to be identified for the COC to address

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[a] No horizon scanning had been undertaken in 2014, due to the volume of work being undertaken at the time.

[b] EFSA explains the carcinogenicity assessment of glyphosate (12th November 2015). Available here: http://www.efsa.europa.eu/sites/default/files/4302_glyphosate_complementary.pdf

was also raised. It was noted that the COM statement on mutational spectra was due to be published and this might inform on the human relevance of findings in experimental species.

17. Considering the risk characterisation for exposure of young children to genotoxic carcinogens and the interpretation of margins of exposure (MOE) for children was of interest. It was felt that examples or a case study were required to aid discussion, but it could then be a high priority topic. It was noted that EFSA have a new working group on applicability of acceptable daily intakes to infant exposure, and the finding of this group might be informative. It was suggested that data on radiation from the IARC paper on dose-time modelling might be helpful, as would consideration of animal data on in utero and lifetime exposure, if available, to investigate differences in susceptibility.

18. One Member gave a presentation asking whether COC should develop a categorisation system based on potency to help with risk management prioritisation and risk communication. This was suggested following recent hazard classifications by IARC for which the risks of cancer are not necessarily sufficiently communicated, leading to difficulties for public perception, and also challenges for risk management when based on hazard rather than risk classification. Members found the presentation interesting but considered that developing a global categorisation system for carcinogens would not be a readily achievable goal as a future topic for the Committee. It was noted that the COC has developed the MOE banding system for genotoxic carcinogens which aims to assist risk management and risk communication and that, while risk management is outside the remit of the Committee, there could be a role for COC in helping to explain risks.

19. It was suggested that the COC look at the developing understanding of cancer genetics and how industrial exposures can lead to advancement of cancer. A comment by COC, if appropriate, could influence whether or not industrial compensation is paid. A recent paper discussing the influence of genetics would be sent to the Secretariat for consideration by the COC. One other suggestion was made to consider immunomodulation having a role in cancer susceptibility.

20. It was agreed that alternatives in risk assessment remained a high priority. The mode of action framework remained medium-high but could become high if there was an example case where it had been used or if the COC wished to use the framework. The COM is awaiting publication of a series of papers on Thresholds of Genotoxicity and will then consider the item, so the COC would wait until this had completed. For nanomaterials it was suggested that biopersistent fibres be considered separately to other nanomaterials when this was taken forward. The item on dose-response modelling in epidemiology studies would be considered as part of Guidance Statement G02: Interpretation of Evidence of Carcinogenicity in Humans, when the COT/COC joint subgroup on synthesising epidemiological evidence has completed its work. For the work on *in vitro* cell lines it was agreed that this would be expanded to encompass *in vitro* systems such as microphysiological models and organoids, and the presentation on 3D cell models given to COM could also be provided to COC. Environmental Tobacco Smoke was considered a low priority as there was no specific question asked of the COC, though questions such as is adult cancer affected by smoke exposure in the home in childhood could be considered.

21. Following this discussion the priority list is:

High priority:

- Alternatives in Risk assessment

Medium-high Priority

- Mode of action framework

Medium Priority

- Applicability of Margins of Exposure for exposure of young children
- Thresholds of Genotoxicity – keep informed of COM work
- Nanomaterials – presentation on research on inhalation of nanomaterials
- Dose response modelling in epidemiology studies - this will be covered as part of the Guidance series G2 (Interpretation of Evidence of Carcinogenicity in Humans)
- *In vitro* systems - to be undertaken when resource allows
- Studying cancer genomics through next generation DNA sequencing – as relevant papers are published
- Cancer genetics and cancer advancement by industrial exposure
- Effect of immunomodulation on cancer susceptibility

Low Priority

- Environmental Tobacco Smoke Exposure in Childhood and Cancer Risk

ITEM 7: Any other business

Guidance Statement G07- Alternatives to the 2-year bioassay – Introduction, parts A and B

22. This guidance statement had been circulated as a final draft for correspondence. Few comments had been received to date. Members were invited to comment as soon as possible after the meeting, as the guidance statement would then be finalised for publication.

ITEM 8: Date of next meeting

23. The date of the next meeting is 17th March 2016.