

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

Minutes of the meeting held at 10.30am on Thursday 20<sup>th</sup> July 2017 at Department of Health, Skipton House, 80 London Road, Elephant and Castle, London, SE1 6LH.

Present

Chair: Professor D Harrison

Members: Mr D Bodey  
Dr G Clare  
Dr J Doe  
Professor R Kemp  
Dr D Lovell  
Professor N Pearce (Items 1-5)  
Dr L Rushton  
Professor H Wallace  
Dr R Waring  
Professor S Warnakulasuriya

Secretariat: Miss B Gadeberg PHE Scientific Secretary  
Ms C Mulholland FSA

Assessors: Ms L Lawton Defra  
Dr H McGarry HSE  
Mr N O'Brien VMD  
Dr O Sepai PHE

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**ITEM 1: Apologies for absence and announcements**

1. Apologies were received from Drs C Powell and P Greaves, Dr Gott (FSA Secretariat) who was represented by Ms Mulholland, and Assessors Dr Henry Stemplewski (MHRA), Dr Colin Ramsay (Health Protection Scotland), Mr Ian Martin (EA), Dr Jacqui McElhinney and Dr Will Munro (Food Standards Scotland). Dr Steve Morris and Dr Penny Carmichael (Defra) sent apologies and were represented by Ms Lawton.

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

3. The Committee had in early 2016 been informed of the review of attendance and reading fees by DH. It was noted that Members reappointed as of 1<sup>st</sup> June 2016 would no longer receive attendance and reading fees from 31<sup>st</sup> May 2017 in accordance with their reappointment letters, unless there were exceptional circumstances. Members still receiving fees and all Members claiming expenses needed to submit claim forms and return these to Natalie Blowfield, COC Administrative Secretary.

**ITEM 2: Minutes of meeting held on 23<sup>rd</sup> March 2017 (CC/MIN/2017/01)**

4. Only one typographical amendment was made to the March 2017 minutes.

**ITEM 3: Matters arising**

***Item 5: Synthesising Epidemiological Evidence subgroup – draft report (CC/2017/02)***

5. Following the COC meeting in March, the Synthesising Epidemiological Evidence subgroup (SEES) reports were reviewed by the COT. The COT had requested that some minor changes be made to the report and for the following actions to be undertaken:

- The COT agreed that the one of the recommendations “A designated individual representing government advisory committees should have continued contact with international methodological initiatives (e.g. the Cochrane collaboration policy group, RISK21 group) and that resources are made available for this, including attendance at key meetings” should be brought to the attention of the Food Standards Agency’s Chief Scientific Advisor and the Chief Medical Officer.
- With regard to epidemiology training for the secretariat and new COT Members, the COT were informed that the Interdepartmental Group on Health Risks from Chemicals (IGHRC) currently had no plans to repeat this course in the future due to funding constraints. The COT Secretariat would bring this to the attention of the IGHRC Secretariat and also look into other options.
- With respect to “further work on combining epidemiological and toxicological evidence and understanding of cross-design synthesis studies” the COT concluded that since the recommendations would need to be considered by the FSA, the Chairs of the COC and the COT would write and bring the

67 recommendations to the attention of the FSA's Chief Scientific Advisor and  
68 the Chief Medical Officer.

- 69 • The document would be finalised with input from the COC and COT and then  
70 circulated to other committees and the IGHRC. The COT agreed that this  
71 report would be of benefit to a wider range of people and organisations. The  
72 Committee recommended that the report should also be published in the  
73 scientific literature. It was agreed that the subgroup should aim for submission  
74 in the summer.

75 6. The SEES subgroup Secretariat and Dr Hansell would be meeting on the 26th  
76 July to discuss the completion of the report, for distribution to other Committees, and  
77 preparation of a manuscript for publication.

78 7. The Committee noted that the document would form a useful part of induction  
79 to the working of the COC, in addition to sitting as part of Guidance Statement G02  
80 on "Interpretation of Evidence of Carcinogenicity in Humans: Epidemiology and Case  
81 Reports".

82 ***Item 6b: Draft updated General Introduction to G07 Alternatives to the 2-year***  
83 ***Bioassay (CC/2017/04)***

84 8. This document had been amended, and would be cleared by Chair's action,  
85 along with parts C and D, when part C, to be discussed as part of this meeting  
86 agenda, was agreed by the Committee.

87 ***Item 7: OECD guidelines: Standard Project Submission Form for the***  
88 ***ToxTracker assay (CC/2017/06)***

89 9. The Committees comments on this assay had been provided to the co-  
90 ordinators of the UK response to the submission.

91 ***Item 9: Follow up discussion of horizon scanning topics (CC/2017/08)***

92 10. It had been agreed at the March meeting that a scoping paper on  
93 nanomaterials should be brought to the present meeting, but this had as yet not  
94 been progressed. There would be an update from Defra on nanomaterials under any  
95 other business at this meeting and then it would be raised at the joint COC, COM  
96 and COT horizon scanning session in October.

97 ***Item 10: 2016 Annual report contribution***

98 11. This had been cleared by the Chair and it was expected that the Joint COT,  
99 COM and COC Annual report would be published on 21st July 2017. The Secretariat  
100 was working on getting website statistics to use as feedback on use of Committee  
101 advice.

102 **ITEM 4: Second draft statement on possible carcinogenic hazard to**  
103 **consumers from Insulin-like growth factor-1 (IGF-I) in the diet**  
104 **(CC/2017/10)**

105 12. No interests were declared for this item.

106 13. This paper presented a non-technical summary to the statement, along with a  
107 revised version of the statement for discussion. A tabled paper had been provided  
108 which contained updated data tables from the back of the draft statement following  
109 further checking.

110 14. The main amendments to the paper since the draft reviewed in March were  
111 updated exposure data, and the original reference providing information on  
112 endogenous IGF-I production had been identified.

113 15. With respect to the non-technical summary, a number of suggestions for  
114 amendment were made, and it was agreed that focus should be on the main  
115 messages to take from the statement. It was agreed that the public interest  
116 representatives would work with the Secretariat to amend the non-technical  
117 summary, before circulation to all Members for comment and then agreement by  
118 Chair's action.

119 16. For the main statement, it was queried whether an Ames test had been  
120 carried out. The statement would be reviewed to ensure it was clear when studies  
121 were considering circulating IGF-I or dietary IGF-I, to appropriately support the  
122 conclusions about IGF-I in the diet.

123 17. Comments were also requested from Members by correspondence on the  
124 data tables provided in the tabled paper.

#### 125 **ITEM 5: Guidance statements**

126 18. Professor Heather Wallace declared that she had been appointed as the  
127 Chair of a new European Food Safety Authority (EFSA) working group on the  
128 Threshold of Toxicological Concern.

#### 129 ***Item 5a) Discussion of presentation of Guidance statement series***

130 19. With the guidance statement series nearing completion, a number of aspects  
131 were briefly discussed. It was agreed that non-technical summaries would not be  
132 produced for each guidance statement, as the General Introduction would cover the  
133 whole series.

134 20. The Committee would also adopt the approach of using a version number  
135 (X.1) for minor updates to any document, but full revisions would give a new version  
136 number (X+1.0).

137 21. Finally it was noted that some of the statements did not as yet include the  
138 cover sheets present on the newer documents. These would be added as the  
139 revisions go forward.

#### 140 ***Item 5b) Revised draft General Introduction to the Guidance Statement*** 141 ***series (CC/2017/11)***

142 22. This paper presented a revised draft of the General Introduction to the  
143 guidance statement series following discussion in March.

144 23. A number of comments were made on the revised draft. It was agreed that the  
145 amendments would be incorporated in the document and then circulated to Members  
146 for agreement prior to approval.

147 24. It was noted that a glossary document covering all the statements would also  
148 be prepared.

149 **Item 5c) Second draft of COC Guidance statement COC/G07: Part c)**  
150 **Omics, high-throughput screening, and bioinformatics**  
151 **(CC/2017/12)**

152 25. This paper presented a second draft of this part of the guidance statement on  
153 alternatives to the two-year bioassay.

154 26. It was agreed that the Chair would consider this statement particularly with  
155 reference to big data approaches and revise the document accordingly. It would then  
156 be circulated for comment by correspondence.

157 **Item 5d) Draft updated COC/G03: Hazard identification and**  
158 **Characterisation: Conduct and interpretation of animal**  
159 **carcinogenicity studies (CC/2017/13)**

160 27. Minor suggestions were made for this draft update to the guidance statement,  
161 in particular outlining the difference between genotoxic and non-genotoxic  
162 carcinogenicity. It was agreed that the revisions could be made and the document  
163 approved by Chair's action.

164 **Item 5e) Draft updated COC/G04: The use of biomarkers in Carcinogenic**  
165 **Risk Assessment (CC/2017/14)**

166 28. This paper presented a draft update on the guidance statement on use of  
167 biomarkers.

168 29. It was agreed that while the updates should reference newer work as  
169 appropriate, the list of references should not be extensive as the short updates to the  
170 guidance were not a systematic review. It was also noted that distinction should be  
171 made for biomarkers which accumulate in the body and those which only provide a  
172 measure of current exposure.

173 **Item 5f) Draft updated COC/G05: Defining a point of departure and**  
174 **potency estimates in carcinogenic dose response (CC/2017/15)**

175 30. This paper presented a draft update to this guidance statement and  
176 highlighted recent guidance from EFSA on the benchmark dose (BMD) approach  
177 and from EFSA and the World Health Organization (WHO) on the threshold of  
178 toxicological concern (TTC).

179 31. The Committee considered it important to fully review the recent  
180 developments in the BMD and TTC approaches to provide clear guidance on these  
181 topic areas, but this should form part of a substantial revision to the guidance. Such  
182 a revision could also link with ongoing work by COM considering quantitative  
183 genotoxicity assessment using the BMD approach, in addition to restructuring the  
184 order of the document.

185 32. It was agreed that a short update should be made to the statement in the  
186 short term adding a preamble noting the developments in the field and that a full  
187 revision of the statement would be undertaken following further detailed review of the  
188 recent developments in the BMD and TTC approaches.

189 **ITEM 6: The toxicological evaluation of novel heat-not-burn tobacco**  
190 **products: First draft statement and follow up information from the**  
191 **joint Committee discussion (Reserved business) (CC/2017/16)**

192 33. No interests were declared.

193 34. This item was discussed in reserved session as it pertains to commercial  
194 data.

195 **ITEM 7: Horizon scanning**

196 ***Papers of Interest***

197 ***Mutational signatures associated with tobacco smoking in human cancer –***  
198 ***and associated editorial paper (CC/2017/17)***

199 41. This paper provided a recent journal paper and associated editorial paper on  
200 mutational signatures associated with tobacco smoking. The Committee suggested  
201 that this paper could be considered when the guidance statement on biomarkers  
202 (G04) undergoes a full version revision.

203 ***Alcohol effects on the epigenome in the germline: Role in the inheritance of***  
204 ***alcohol-related pathology (CC/2017/18)***

205 42. This paper provided a recent journal paper on inheritance of alcohol effect  
206 through the epigenome. The Committee noted that the paper indicated a three  
207 generation effect through the male line following *in utero* exposure to alcohol, though  
208 these results needed to be reproduced. The paper also highlighted the complexity of  
209 such investigations.

210 ***Horizon scanning follow up paper (CC/2017/19)***

211 43. This paper presented an update following the discussions of horizon scanning  
212 in March 2017.

213 44. With respect to e-cigarettes it was queried whether COC would conduct any  
214 work in parallel with the COT, but it was expected that aspects of relevance would be  
215 referred to COC as required. The Secretariat agreed to check whether any of the EU  
216 non-food scientific committees had evaluated e-cigarettes.

217 45. It was suggested that a presentation on adverse outcome pathways (AOPs)  
218 would be helpful, and should include a discussion afterwards about the role of AOPs  
219 in predicting toxicity and explaining toxicity. The COM's work on N-ethyl-N-  
220 nitrosourea might also be of interest.

221 46. The Committee also agreed to consider the paper by Tomasetti, Li and  
222 Vogelstein (2017)<sup>a</sup> as a substantive item along with papers on causal inference at  
223 the November meeting.

224 **ITEM 8: Any other business**

225 ***Whitehall Working Group - Amendment of the REACH Annexes on***  
226 ***nanomaterials information requirements***

227 47. The Committee was informed that the Defra chemicals team was setting up a  
228 working group to discuss the modification of the REACH Annexes with respect to  
229 nanomaterials (NMs) as NMs were not specifically mentioned in the current legal  
230 text. The Annexes were being updated to amend this and Defra was seeking cross-  
231 Whitehall agreement on the UK negotiating position. A preliminary discussion  
232 meeting was being held on 19th July with further meetings to follow. It was  
233 highlighted that COC would consider the carcinogenicity of NMs.

234 ***Cell transformation assays***

235 48. Through the OECD, the Secretariat had been informed that the origin of the  
236 cells used for the Bhas 42 CTA appeared to have become contaminated many years  
237 ago. This affected the mechanisms in the assay altering how the cell line can be  
238 used and understood. An amendment to the OECD Guidance document was being  
239 discussed. This was flagged to the Committee in the context of guidance statement  
240 G07 Alternatives to the two-year bioassay part B, which refers to this COM guidance  
241 on CTAs.

242 ***Secretariat support contact***

243 49. The Committee were informed that the PHE Secretariat support contract,  
244 which had previously been provided by Imperial College London, was being  
245 negotiated. The Committee would be informed once the contract was in place.

246 ***Human biomonitoring for Europe (HBM4EU)***

247 50. PHE are one of the partners on a Horizon 2020 project on human  
248 biomonitoring, which links in with the Committee's guidance statement on  
249 biomarkers, discussed earlier at the meeting. The Committee were informed for  
250 awareness as the time points at which Committee input might be sought on outputs  
251 from the project were currently uncertain, but PHE would be keen for input to be  
252 obtained where relevant.

253 **ITEM 9: Date of next meeting**

254 51. The date of the next meeting will be the joint Committees meeting on 9<sup>th</sup>  
255 October 2017.

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<sup>a</sup> Tomasetti C, Li L, Vogelstein B (2017) Stem cell divisions, somatic mutations, cancer etiology and cancer prevention. Science 355, 1330-1334.