

## Comments from Panel Members on 7-24-15 Draft Report\*:

### 1. Executive Summary:

Pg 4, line 3 – 8, “In addition, The Sab recommends that EPA....below that of Chen et al. (2012)

Dr. Helen Goeden commented: There were also concerns regarding the lack of developmental immunotoxicity studies.

### 2. Female Reproductive Hazards:

Pg. 14, line 13-14, “...effects of benzo[a]pyrene are limited and contradictory”

Dr. Helen Goeden commented: Are the studies actually contradictory or are they inconsistent?

### 3. Immunotoxicity:

Pg. 16, line 29 – 32, “ Because BaP is present in cigarette smoke, cigarette smoke studies are relevant...inclusion of cigarette studies is not recommended for this IRIS assessment”

Dr. Stephen Roberts commented: This seems to contradict the first sentence of the paragraph.

### Developmental Immunotoxicity

Pg 17, line 45 – Pg 18, line 4, “It is likely that the developing immune system may be one to two orders of magnitude more sensitive to BaP exposures....this may not be well documented for BaP in the present literature citations used for assessment”

Dr. Helen Goeden commented: Does this lend support for the application of DB UF?

### Recommendations:

Pg 18, line 10-11, “EPA should look for evidence of increased infections in cohorts as a demonstrated health effect .....indirect evidence of Immunotoxicity”

Dr. Stephen Roberts commented: Is this a research recommendation or are we asking for additional literature review? If the latter, can we cite anything as an example? If not, is this likely to be successful?

Pg 18, line 13-14, “EPA should consider developing Guidelines for Immunotoxicity assessment to standardize risk assessment and to identify data gaps,....”

Dr. Stephen Roberts commented: EPA has guidelines for conducting immunotoxicity studies in the Office of Pesticide Programs. Are we talking about something different?

Pg. 18, line 19-22, “BaP exposures are relatively high in woodsmoke inhalation studies,....other sources of human environmental exposure to BaP should be considered by EPA”

Dr. Stephen Roberts commented: The recommendation acknowledges that there is little information, and it seems to me that there is not much to be gained by asking EPA to add woodsmoke inhalation studies in the report. I suggest that we consider dropping this one to focus on more critical recommendations.

4. Public Comments:

Pg 41, line 14 - 18, “Use of decreased anxiety-like effects as a critical effect (p. G-6)...Further discussion on this endpoint is provided in the response to charge question 2a.”

Dr. Stephen Roberts commented: Actually I don't see where the current version of 2a explicitly addresses this point.

\*Editorial comments are not included in this compilation.