

Reviewer's report

Title: No effects of GSM-modulated 900 MHz electromagnetic fields on survival rate and spontaneous development of lymphoma in female AKR/J mice.

Version: 1 **Date:** 5 May 2004

Reviewer: Maren Fedrowitz

Reviewer's report:

General

This article deals with the question if exposure to 900 MHz electromagnetic fields, as it occurs when using mobile phones or running base stations, affects lymphoma incidence in genetically predisposed mice. The relevance of the chosen exposure conditions to human exposure, the predictability of this animal model for human health risks, and results of other studies are well discussed. Furthermore, this work holds some refinements compared to previous studies. The mice were unrestrained (in contrast to Utteridge [34]), i.e., minimizing stress to the animals, the SAR variations had a much smaller range compared to Repacholi et al. [17], and mice were exposed 24 hours daily.

This article is of high interest to a very broad audience because with increasing use of mobile phones and rising number of base stations, studies on possible health risks of electromagnetic fields are highly recommended, particularly if they tie up to prior studies like this one improving some weak points.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

None

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

When did the exposure start ? Animals arrived at an age of 4-5 weeks, were weighed and palpated weekly and were sacrificed when signs of disease occurred or with an age of about 42 weeks. But the graphs (e.g. the body weight) contain about 42 data points per group indicating a duration of exposure of about 42 weeks (about 280-290 days from the graphs). Thus, what was the age of the mice when the exposure started ?

It is difficult to follow, why the authors did separate the replication study to Repacholi et al. [17] done by Utteridge et al. [34] in the discussion and did mention it just at the end of the discussion. Why it was not mentioned earlier when lymphoma risks and the use of Pim1 mice are discussed or even in the background section?

Were the exposed and the sham exposed mice located in the same room ?

- Please type "W/kg" instead of "W/Kg" (all pages except „Field exposure and monitoring“ of the methods section where it is typed correctly)
- Page 2: Misspelling: "health protection" instead of "heath protection"
- Page 6, line 3: Misspelling: "Repacholi et al." instead of "el al."

Discretionary Revisions (which the author can choose to ignore)
None

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

None