

**US National Toxicology Program Animal Study** 

Researchers at the National Toxicology Program (NTP) have released partial findings in relation to their RF exposure study on rats and mice<sup>1</sup>. The study report released found 'low incidences' of malignant gliomas in the brain and schwannomas in the heart of male rats exposed to RF energy. These results were not seen in female rats or in mice.

There was only one statistically significant finding in the results that have been released to date and this was at the level of the highest exposure of 6 W/kg. By comparison this is 75 times the maximum whole body exposure level for the general public.

The study authors themselves have acknowledged limitations with the study as have other reviewers<sup>2</sup>. The study itself though makes an important contribution in this field but highlights again that no single study can answer any scientific question, and this study, like all others, must be viewed against the very large database of existing research.

In May 2016 the Scientific Council on Electromagnetic Fields of the Swedish Radiation Safety Authority published a new report<sup>3</sup> that reviewed research over the past decade and concluded:

Many animal studies have been performed using a large spectrum of tumour types and long term, often lifelong, exposure. With very few exceptions, no effect of RF exposure on tumour growth and development has been found.'

When studies find results which are inconsistent with the current consensus, such as with the partial results released by the NTP, the well-established scientific process of replication and validation are required before the results can be accurately assessed within the whole body of scientific evidence.

Industry continues to endorse the importance of sound, peer reviewed and replicated research and relies on the expert judgment of independent public health authorities such as the World Health Organization to review and advise on the status of the scientific research.

The WHO's most recent fact sheet on mobile phones and health<sup>4</sup>, says:

A large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. To date, no adverse health effects have been established as being caused by mobile phone use.

## As Professor Rodney Croft stated in response to this study<sup>5</sup>:

"The NTP study will thus need to be fully evaluated once further details become available, and considered within the context of RF emissions science as a whole. At present though, and particularly given a range of uncertainties regarding its results, the NTP report does not provide reason to move from the current scientific consensus that mobile phone-like exposure does not impact health."

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<sup>&</sup>lt;sup>1</sup> http://biorxiv.org/content/biorxiv/early/2016/05/26/055699.full.pdf

<sup>&</sup>lt;sup>2</sup> See Appendix G of the NTP study report.

<sup>&</sup>lt;sup>3</sup> https://www.stralsakerhetsmyndigheten.se/Global/Publikationer/Rapport/Stralskydd/2016/SSM\_Rapport\_2016\_15\_webb\_1.pdf

<sup>&</sup>lt;sup>4</sup> http://www.who.int/mediacentr-e/factsheets/fs193/en/index.html

<sup>&</sup>lt;sup>5</sup> Director of the Australian Centre for Electromagnetic Bioeffects Research. The response is available at https://www.scimex.org/newsfeed/expert-reaction-mobile-phone-exposure-linked-to-cancer-in-rats