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Re: NTP TECHNICAL REPORT ON THE TOXICOLOGY AND CARCINOGENESIS STUDIES IN Hsd:SPRAGUE DAWLEY SD RATS EXPOSED TO WHOLE-BODY RADIO FREQUENCY RADIATION AT A FREQUENCY (900 MHz) AND MODULATIONS (GSM AND CDMA) USED BY CELL PHONES

In the opening paragraph of the Discussion of the report on the NTP study in rats the following appears:
"While epidemiology studies have not definitively established an association between cell phone radio frequency radiation (RFR) exposure and any specific health problems in humans, the results from some studies are suggestive of potential effects (Lönn et al., 2004b; Hardell et al., 2006, 2007b; Hardell and Carlberg, 2009; INTERPHONE 2010, 2011; Benson et al., 2013). Based on available studies, a working group of the International Agency for Research on Cancer (IARC, 2011) classified radiofrequency electromagnetic fields as possibly carcinogenic to humans. Of particular concern were possible associations (limited evidence) with brain glioma and acoustic neuroma (vestibular schwannoma) in the region of the head that is most exposed to RFR when a wireless phone is used at the ear. However, interpretation of these results is complicated by potential misclassification of exposures and by selection and recall biases. It is also possible that exposures to RFR in the general population, such as those from cellular communication, have not occurred for a long enough period of time to ascertain an effect due to the apparent long latency period for some types of adult-onset cancers in humans."

In fact, there is now more evidence from further epidemiology studies, especially in France (Coureau et al. 2014), Sweden (Hardell et al. 2013b, Hardell and Carlberg 2015), and from the Interphone study (Grell et al. 2016) that confirms the earlier evidence that prolonged exposure to radiofrequency radiation from cell phones more than doubles the risk of glioblastoma and increases the risks of acoustic neuroma (vestibular schwannoma (Hardell et al. 2013a). Hardell and Carlberg (2015) found that those who began using cell phones and/or cordless phones regularly as children had between 4-8-fold increased risk of glioma as adults. In addition, a re-analysis of the Canadian component of the international Interphone study has shown that "potential misclassification of exposures and by selection and recall biases" does not explain the associations previously found in the Interphone study (Momoli et al., 2017).

Brain cancers have now become the number one cancer in children and young adults (Gittleman et al. 2015). It is more than probable that we are on the verge of a major increase in glioblastomas and vestibular schwannomas in humans the world over. We need to take urgent action to reduce exposure to radiofrequency radiation to as low as reasonably achievable, as we learnt to do many years ago for ionizing radiation.

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