



Recent scientific publications relevant to mobile telephony

## January 2015

### Details

**Austria:** Synoptic Analysis of Epidemiologic Evidence of Brain Cancer Risks from Mobile Communication, [Leitgeb, Journal of Electromagnetic Analysis and Applications](#), 6:413-424, December 2014.

*'...it could be shown that with the number of exposed cases both data pools exhibit a clear trend of risk estimates (odds ratios) towards the final result, namely a reduced cancer risk of OR = 0.8, though from either side of the zero-risk line...Overall, the synoptic analysis supports reassuring rather than alarming conclusions on RF EMF health risks from mobile telecommunication...'*

**China:** Dosimetry of electromagnetic field exposure of an active armband and its electromagnetic interference to the cardiac pacemakers using adult, child and infant models, [Yang et al., Electromagnetic Biology and Medicine](#), Posted online on January 8, 2015.

*'...The studied RFID armband would not produce the EMF exposure exceeding the safety limits. The calculated interference voltage was highly dependent on the distance between the RFID armband and the CP [cardiac pacemaker]...'*

**China:** Effects of frequency, irradiation geometry and polarisation on computation of SAR in human brain, [Zhou et al., Radiation Protection Dosimetry](#), 162(4):463-468, December 1, 2014.

*'...results suggested that high SAR values were found in the brain, i.e. ~250 MHz for vertical polarisation and 900-1200 MHz both for vertical and horizontal polarisation, which may be the result of head resonance at these frequencies...'*

**Germany:** Exposure knowledge and risk perception of RF EMF, [Freudenstein et al., Frontiers in Public Health](#), 2:289, Published Online: 12 Dec 2014.

*'...The results show that participants are more concerned about base stations than about all other RF EMF sources...The results show a tendency that better exposure knowledge leads to higher risk perception, especially for mobile phones...'*

**Netherlands:** Different roles of electromagnetic field experts when giving policy advice: an expert consultation, [Spruijt et al., Environmental Health](#), 14(1):7, Published: 21 January 2015.

*'...Four expert roles were found. Most striking differences between the four roles are whether experts consider current EMF policies adequate or not, whether additional -precautionary- measures are needed, and how experts view their position vis-a-vis policymakers and/or other stakeholders...'*

**Russia:** The role of the NF- $\kappa$ B, SAPK/JNK, and TLR4 signalling pathways in the responses of RAW 264.7 cells to extremely low-intensity microwaves, [Glushkova et al., International Journal of Radiation Biology](#), Posted online on December 15, 2014.

*'...Low-intensity MW promotes macrophage activity via mechanisms involving cellular signalling, particularly the NF- $\kappa$ B pathway...'*

**South Korea:** Effect of whole-body exposure to the 848.5 MHz code division multiple access (CDMA) electromagnetic field on adult neurogenesis in the young, healthy rat brain, [Kim et al., International Journal of Radiation Biology](#), Posted online on January 24, 2015.

*'...Exposure to the CDMA signal does not affect neurogenesis in the adult rat brain, at least under our experimental conditions...'*

**Turkey:** Long term and excessive use of 900 MHz radiofrequency radiation alter microrna expression in brain, [Dasdag et al., International Journal of Radiation Biology](#), Posted online on December 20, 2014.

*'...900 MHz RF radiation can alter some of the miRNAs, which, in turn, may lead to adverse effects. Therefore, further studies should be performed...'*

---

The MMF is an international association of wireless communications manufacturers established to support scientific research in relation to mobile telephony and health [www.mmfa.info](http://www.mmfa.info)

The GSM Association (GSMA) is the global trade association that exists to promote, protect and enhance the interests of GSM mobile operators throughout the world. [www.gsma.com/mobile-and-health](http://www.gsma.com/mobile-and-health)

*Disclaimer: The views expressed in the abstracts mentioned in this document are those of the authors and do not necessarily reflect the views of either the MMF or GSMA.*

*If you are aware of an article published this month that isn't mentioned here please email [articles@mmfa.info](mailto:articles@mmfa.info)*