

Results

The evidence was reviewed critically, and overall evaluated as being *limited*² among users of wireless telephones for glioma and acoustic neuroma, and *inadequate*³ to draw conclusions for other types of cancers. The evidence from the occupational and environmental exposures mentioned above was similarly judged inadequate. The Working Group did not quantitate the risk; however, one study of past cell phone use (up to the year 2004), showed a 40% increased risk for gliomas in the highest category of heavy users (reported average: 30 minutes per day over a 10-year period).

Conclusions

Dr Jonathan Samet (University of Southern California, USA), overall Chairman of the Working Group, indicated that "the evidence, while still accumulating, is strong enough to support a conclusion and the 2B classification. The conclusion means that there could be some risk, and therefore we need to keep a close watch for a link between cell phones and cancer risk."

"Given the potential consequences for public health of this classification and findings," said IARC Director Christopher Wild, "it is important that additional research be conducted into the long-term, heavy use of mobile phones. Pending the availability of such information, it is important to take pragmatic measures to reduce exposure such as hands-free devices or texting."

The Working Group considered hundreds of scientific articles; the complete list will be published in the Monograph. It is noteworthy to mention that several recent in-press scientific articles⁴ resulting from the Interphone study were made available to the working group shortly before it was due to convene, reflecting their acceptance for publication at that time, and were included in the evaluation.

A concise report summarizing the main conclusions of the IARC Working Group and the evaluations of the carcinogenic hazard from radiofrequency electromagnetic fields (including the use of mobile telephones) will be published in The Lancet Oncology in its July 1 issue, and in a few days online.

² '**Limited evidence of carcinogenicity**': A positive association has been observed between exposure to the agent and cancer for which a causal interpretation is considered by the Working Group to be credible, but chance, bias or confounding could not be ruled out with reasonable confidence.

³ '**Inadequate evidence of carcinogenicity**': The available studies are of insufficient quality, consistency or statistical power to permit a conclusion regarding the presence or absence of a causal association between exposure and cancer, or no data on cancer in humans are available.

⁴ a. 'Acoustic neuroma risk in relation to mobile telephone use: results of the INTERPHONE international case-control study' (the Interphone Study Group, in *Cancer Epidemiology*, *in press*)
b. 'Estimation of RF energy absorbed in the brain from mobile phones in the Interphone study' (Cardis et al., *Occupational and Environmental Medicine*, *in press*)
c. 'Risk of brain tumours in relation to estimated RF dose from mobile phones – results from five Interphone countries' (Cardis et al., *Occupational and Environmental Medicine*, *in press*)
d. 'Location of Gliomas in Relation to Mobile Telephone Use: A Case-Case and Case-Specular Analysis' (*American Journal of Epidemiology*, May 24, 2011. [Epub ahead of print].