Mobile Manufacturers Forum

Biggest Study Ever Reports on Mobiles and Brain Cancer

The *International Journal of Epidemiology* today published a combined data analysis from a multi national population-based case-control study of glioma and meningioma, the most common types of brain tumour. This is the first in a series of combined data analyses of head and neck tumours published as part of the internationally coordinated INTERPHONE project.

The authors reported the following conclusion:

> *Overall, no increase in risk of glioma or meningioma was observed with use of mobile phones. There were suggestions of an increased risk of glioma at the highest exposure levels, but biases and error prevent a causal interpretation. The possible effects of long-term heavy use of mobile phones require further investigation.*

In the press release accompanying the release of the paper, Dr Christopher Wild, Director of the International Agency for Research on Cancer (IARC) said: "An increased risk of brain cancer is not established from the data from Interphone. However, observations at the highest level of cumulative call time and the changing patterns of mobile phone use since the period studied by Interphone, particularly in young people, mean that further investigation of mobile phone use and brain cancer risk is merited."

Commenting on the study, Michael Milligan, Secretary General of the Mobile Manufacturers Forum said "The INTERPHONE project is the biggest study of its kind ever undertaken in this field and provides significant further reassurance about the safety of mobile phones. The overall analysis is consistent with previous studies and the significant body of research, reporting no increased health risk from using mobile phones."

He continued "The absence of increased health risks include long term mobile phone use for more than 10 years. The authors make it clear that the data was insufficient for a clear interpretation of possible risk from self-reported heavy use due to a number of possible errors or biases. For example, the paper notes that there is evidence that people diagnosed with a brain tumour over-reported their past mobile phone use and that 'recall bias' like this may be more likely if subjects perceive that mobile phone use is associated with brain tumours, as has been widely speculated in the media."

"Mobile phone users can take comfort in the fact that there is already a substantial body of scientific evidence on the long-tem use of mobile phones through whole-of-life animal studies, which have found no link between long-term exposure to radiofrequency and health impacts," added Mr Milligan.

The INTERPHONE results now need to be considered by independent health authorities, such as the World Health Organization (WHO) and other expert groups to assess their significance, if any, to people's health.

Mr Milligan added "The mobile industry supports the need for ongoing research. In fact, a number of longer-term studies are already underway such as the COSMOS study, which will follow the health of 250,000 European mobile users for 20-30 years, and several studies are now looking at children and teenagers, including the international MOBI-kids and CEFALO studies and the Australian MoRPhEUS project."

Although INTERPHONE is a large and important study, it must be viewed in context as only one of many studies that will be used in the overall cancer-risk assessment to be undertaken by IARC in 2011.

The mobile phone industry takes all questions regarding the safety of mobile phones seriously and has a strong commitment to supporting ongoing scientific research – such as the way it supported the INTERPHONE project.

17 May 2010

Notes for editors:

This study is part of the combined analysis of the national data collected as part of the 13 country INTERPHONE project, coordinated by the International Agency for Research on Cancer (IARC).

The MMF provided partial funding for the INTERPHONE project in conjunction with the GSM Association, the European Commission and many national research funding bodies. Funding was provided in such a manner as to ensure the full scientific independence of the study and the terms of the funding agreement are publicly available at http://www.iarc.fr/en/research-groups/RAD/RCAd.html

Tumours of the nervous system are rare and account for less than 2% of all malignancies (about 175,000 cases per year worldwide). Gliomas are a type of brain tumour arising in cells of the brain and are diagnosed each year at 6-8 per 100,000 people in the west. Meningiomas arise from cells that make up the covering around the brain and are even rarer, affecting fewer than 2 per 100,000 people.

Media enquiries: Kelly Parkinson - Phone + 61 3 9530 5070 Mobile + 61 (0) 419 521 059 (GMT +10)

Key Quotes from the paper, which can be downloaded from: http://ije.oxfordjournals.org/

"For meningioma …we conclude that INTERPHONE finds no signs of an increased risk of meningioma among users of mobile telephones."

"Still, the evidence for an increased risk of glioma among the highest users was inconclusive, as the increase could be due to one or more of the possible sources of error discussed below."

"As noted earlier, there is evidence that cases tended to overestimate their past exposure more than controls did."

"Our results are consistent with most of the research published to date."

"Much biological research has been done in recent years on possible biological effects of RF fields. This work covers in vitro and in vivo exposure, alone and in combination with other physical or chemical agents, and has found no evidence that RF fields are carcinogenic in laboratory rodents or cause DNA damage in cells in culture."