

HOT TOPIC: INTERPHONE & AFTER INTERPHONE

Chair: Maria Feychting, Institute of Environmental Medicine, Karolinska Institutet, Sweden.

Speakers: Bruce Armstrong, Sydney School of Public Health, University of Sydney, Australia

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The long awaited results from the Interphone study will finally be available at the time of the BEMS meeting. This symposium will discuss the findings from different points of views, in the light of different sources of bias, and in relation to other available studies, and will address research strategies for the future in the light of the Interphone results.

Interphone is a case-control study of recalled mobile phone use and tumours of the brain (glioma and meningioma), vestibular nerve and parotid gland. 16 centres in 13 countries interviewed 6,420 newly diagnosed cases (72% participation) and 7,658 controls (53%) 30-59 years of age between 2000 and 2004. Several methodological papers have been published. One of the Interphone investigators will talk about the first major report with results for glioma and meningioma of the brain. The results will be described, compared with meta-analyses of published results of non-Interphone studies, and their significance assessed.

The symposium will also include comments from a well-renowned epidemiologist outside Interphone, who will give a critical look at the design decisions made for the Interphone study, and discuss which lessons we have learned and how this experience can be used in future RF research based on epidemiologic methods. The association between mobile phone use and risk of brain tumours has been studied using three different epidemiological designs, namely case-control studies, cohort studies and time trend analyses of incidence rates. A general limitation is that all studies to date included only cases occurring until 2003 and therefore comprised only a small proportion of longer term users of mobile phones. Prospective cohort studies are promising but also related to many challenges. Further monitoring of time trends is needed, especially when combined with more detailed information on tumour location. Further case-control studies are indicated if biases and errors operating in the current studies can be reduced.