MICRO WAVE NEWS

Vol. XXIX No. 4 A Report on Non-Ionizing Radiation May 11, 2009

Support *Microwave News*, the independent source for news and opinion on the health effects of EMFs and RF radiation

Microwave News is now distributed free of charge, so we need your support more than ever. Please send us what you can. See the form on p.3.

Thank you!

The Web version of this article has useful links to people, organizations and publications.

MICROWAVE NEWS • ISSN 0275-6595 • 155 East 77th Street, New York, NY 10075 • (212) 517-2800 • Fax: (212) 734-0316 • E-mail: <info@microwavenews.com> • Web: <www.microwavenews.com> • Editor and Publisher: Louis Slesin, PhD; Assistant Editor: Danny Nassre •

IARC Director Forces Publication Of Interphone Brain Tumor Results

Much Remains To Be Done

The stalemate over **Interphone** is coming to an end. A project of the International Agency for Research on Cancer (**IARC**) on the possible links between mobile phones and tumors, Interphone has been bogged down for over three years while its members feuded over how to interpret their results. Now, *Microwave News* has learned, a paper on brain tumor risks is about to be submitted for publication. **Christopher Wild**, the director of IARC, forced a compromise to resolve what had become a major embarrassment for the agency.

In fact, Wild has only achieved a partial resolution. After the brain tumor paper is finally published later this year, much more work on Interphone will still need to be done.

A draft of the brain tumor (gliomas and meningiomas) results was completed back in 2005, but the principal investigators in the 13 countries participating in the Interphone project were unable to agree on how to frame the results. Some believed that the data point to higher risks, while others dismissed these findings as artifacts. A number of further drafts were circulated over the years, but in each case a consensus could not be reached. While the final group paper remained in limbo, teams from individual countries published their own results. Five European countries pooled their data and published them too. A number of these papers have indicated a tumor risk associated with long-term use of cell phones.

In January, when he took over as the head of IARC, Wild set out to break the impasse and bring an end to the growing criticism of his agency. For instance, the *Economist* ran an item last fall under the title "**Mobile Madness**" and declared that Interphone had "ended in chaos" (see our post of **September 26, 2008**). Wild established a three-person working group to revise the brain tumor paper—he himself was one of the three—and demanded that all participating project investigators accept this group's version as the final text.

This latest, final draft—some say it's the fifth, others the sixth—has now been completed and is in the hands of all the Interphone groups. One member of the project predicted that it would likely be sent to

(continued on p.2)

either *Epidemiology* or the *International Journal of Epidemiology*. The paper must still go through a journal's peer review which will further delay its release to the public for some months.

Elisabeth Cardis, the coordinator of Interphone, declined to comment other than to say that she hoped the paper would be submitted soon. In March 2008, Cardis left IARC to join the Center for Research in Environmental Epidemiology (**CREAL**) in Barcelona. Some are saying that her move to Spain has complicated the process because of difficulties in moving data from one country to another.

Acoustic Neuroma Analysis Languishes as the Feud Continues

Even when the brain tumor paper comes out, the Interphone project will be far from finished. The joint results on two other types of tumors, of the acoustic nerve (acoustic neuroma) and of the salivary gland (parotid gland), must still be completed. *Microwave News* has also been told that these papers have never been drafted—not even once. Indeed, one participant said that a complete set of the raw Interphone data on acoustic neuromas has yet to be circulated to all members of the Interphone project. Writing and submitting these papers for publication could well take a long time because the underlying conflicts among Interphone researchers have not been resolved.

"When the glioma paper became contentious, everything else was pushed aside," explained another source close to the project. "The whole focus was on brain tumors and the data on acoustic neuromas were moved to the back burner."

The first Interphone results on acoustic neuromas were **published** by the Danish team *over five years ago*. The Swedes **followed** about a year later. The Danes had only two cases that had used a cell phone for more than ten years and did not see a long-term tumor risk, while the Swedish team had 12 cases and did see an elevated risk following long-term use. At the time, Sweden's **Anders Ahlbom** told *Microwave News* that his group's results were "strong" (see our post of **October 12, 2004**). In 2005, five of the Interphone Northern European countries, including Sweden and Denmark, pooled their data and **reported** a significant 80% increased risk of acoustic neuroma on the side of the head the phone was used after ten or more years.

"That's amazing, in fact it's shocking," commented **Lennart Hardell** on hearing that so little progress has been made on Interphone's acoustic neuroma analysis. In his own **studies**, Hardell of Sweden's **Öreboro University Hospital** has seen an increased risk of both gliomas and acoustic neuromas after ten years of mobile phone use.

Tumor Location Analysis Also Sidelined

Another major piece of Interphone still to be completed is an investigation of the location of the tumors relative to the areas of the brain that were exposed to RF radiation from the phones. This work is crucial because it could eliminate many of problems posed by recall bias that have bedeviled cell phone studies and could bring the feud between the Interphone groups to an end. The issue here is whether people correctly recall which side of the head they used the phone or whether they simply point to where their tumor is.

In a **paper** published last May, Cardis and members of the Interphone exposure assessment team concluded that location analysis was "important" for the interpretation of the results, yet this work has not yet gotten underway. "This too remains undone because of the lack of cooperation among the participating epidemiologists," disclosed one Interphone source. Even if all the researchers would get along, this analysis will take time because of its complexity. (See also a related dosimetry paper from the Japanese Interphone group **published** just last month.)

It is not known whether IARC will seek to fast-track the papers on acoustic neuromas and on tumor location. Wild, its director, declined to be interviewed for this story.

Most people don't expect the Interphone paper to show a general increase in brain tumors among mobile phones users. One often-raised concern is the way the project **protocol** defines a "regular user": a person who made as little as one call a week for six months. "This is an occasional user at most," said **Dariusz Leszczynski** at the ***5th International EMF Seminar*** in Hangzhou, China, last month."This definition would dilute any effect." Leszczynski is with the Finnish Radiation and Nuclear Safety Authority (**STUK**) in Helsinki and a visiting professor at Zhejiang University in Hangzhou. Such an argument may become moot if there are enough cases in the combined Interphone analysis to tease out a dose-response relationship, if one exists.

Though each is limited by the small number of cases with high exposures, many of the participating countries have published papers suggesting that there are higher tumor risks among those who had used a cell phone for ten years or more—most often on the side of the head the phone

was used. Three different types of tumors have been implicated: glioma (brain), acoustic neuroma (acoustic nerve) and parotid gland (salivary gland). These findings have prompted a number of Interphone investigators to call for a precautionary approach to the use of phones, especially with respect to children. These include **Bruce Armstrong** of Australia, **Siegal Sadetzki** of Israel and, notably, Cardis herself (see **March 9, 2009**; **January 30, 2008**; and **June 19, 2008**, respectively).

Other Interphone members disagree and discount the ten-year risks, arguing that biases—primarily recall bias—are responsible. Ironically, this faction is largely composed of members from the Northern European countries who have reported significant excesses of both **gliomas** and **acoustic neuromas.** These findings have been central to triggering concerns over long-term risks. Among the members of this group are Sweden's Ahlbom and **Maria Feychting**, Denmark's Christoffer Johansen and Joachim Schüz, and the U.K.'s **Tony Swerdlow**. (Schüz is also a member of the German team.)

By last summer, as the Interphone saga continued to drag on, tensions among some of the Interphone teams had risen to the breaking point (see "**Interphone Project: The Cracks Begin To Show**"). This, no doubt, helped prompt Wild to intervene when he took over IARC in January. The situation has not improved since then. "Trust is still in short supply among some of the epidemiologists," said one knowledgeable source. "They can hardly agree on the time of day."

Even as so much of the Interphone project remains undone, many of its members are already working on other, related epidemiological studies. Cardis is involved with two: one looking at possible risks to **workers** and the other to **children**. An **announcement** for the MOBI-Kids project was released today. **Armstrong** and **Sadetzki**, among others, are also working on MOBI-Kids. Ahlbom, **Johansen and Schüz**, and Finland's **Anssi Auvinen**, are tracking the health of phone users in the **COSMOS** project, a prospective epidemiological study that is slated to continue for 20-30 years.