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Introduction

There has been an increase in tumours detected in the central nervous system (CNS) during the second half of the 20th century. It has been speculated that this rise is associated with the modern society's use of electricity in different forms [1]. During recent years, the possible connection between mobile phone use and brain cancer has been addressed frequently in medical journals and media. In June 2011, the International Agency for Research on Cancer (IARC) classified radiofrequency electromagnetic fields, e.g. from mobile telephony, as "possible carcinogens" (class 2B), the same class as e.g. DDT. One reason for this classification was that some rare cancer types are more frequently found on the ipsilateral side of the brain, i.e. the same side a mobile phone is usually held against. Several reports have concluded that long-term use results in a significantly increased risk for brain tumours on this side, and the expert group within the IARC concluded it was no longer possible to ignore or disregard these findings as a matter of coincidence.

Other reports, highlighted by cooperative research within the Interphone study, also pointed out that most studies found that there tended to be a significantly reduced risk for brain cancer on the contralateral side of the brain [2]. This finding has not been debated nearly as much as the increasing risks on the ipsilateral side. It is the objective of this report to discuss the possible implications of this finding, and to draw some conclusions about how it may affect future brain cancer trends.

Materials and Methods

If the cancer risk after many years of cell phone use is significantly increased for the ipsilateral side of the brain, then we must assume the initial cell damage occurred several years before the tumour was diagnosed, due to expected latency. It is also logical to expect that this cell damage may develop in the brains of nearly all cell phone users, especially those living in rural areas where the output power from the

on the ipsilateral side, possibly prevalent in a large portion of the population already today.