Comments on the NTP study

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The opinions expressed in this talk are solely those of the speaker (AJS) and should not be considered as official positions of the Inserm, IARC-WHO or the University
Who am I?

• I am a physician having spent the last 35 years working as a cancer epidemiologist
• An MD and 3 Harvard degrees (MPH, SM Bio-Epi, DrPH Epi, Bio, Evaluation)
• Researcher at the *INSERM* (French NIH)
• Former Unit Chief of *Epidemiology for Cancer Prevention* at IARC-WHO
• Former Acting Chief of Programme for Cancer Control at WHO
• Over the decades switching from behavioral and lifestyle risk factors to environmental ones
RFR and (non) health

- **Exposure**: most probably the fastest increase in the past 30 years, becoming ubiquitous, leaving hardly anyone unexposed
- **Epidemiology**: very clear; in almost all studies, in particular case-referent studies, an increase in risk is seen among the « most heavily » exposed
- **Experimental studies**: needed to back up what is known in humans and soon will be the only studies with unexposed reference groups
Figure 2 – Age–standardised incidence rates for all C71 glioma cases diagnosed between 1995 and 2015 analysed by type and year (Data in Table 3). Grouping details:

(1) = 94403–94433  
(2) = 93843, 94003–94303  
(3) = 93803  
(4) = 93813, 93823, 93903–93943, 94503–94733
Figure 5. Age-standardized incidence of pituitary tumors (ICD-7 195.3) in Sweden 1970-2016 for men and women.
The NTP study

- Large and well conducted study, methodologically sound
- Some questions: exposure, doses, differences between rats and mice, males and females, mechanisms, statistical considerations
- Pertinent results: type of tumors, similarity with humans, evidence of genotoxicity
- Conforted by the results of the Ramazzini study
- More evidence of carcinogenicity of RFR
Hippocrates
*Primum non nocere*
First do no harm
*Epidemics (I,5) around 410 BC*

Translation in the **2008**
context: precautionary principle
David Servan-Schreiber-Annie Sasco
appeal on cell phones

Today in **2018**: time to move from precaution to prevention