Comments on the NTP study

Annie J. Sasco, MD, DrPH
Former IARC-WHO Unit Chief
Retired Director of Research INSERM (French NIH) at the University of Bordeaux, France

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