

# Anthony B. Miller, MD, FRCP

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- He has served as:
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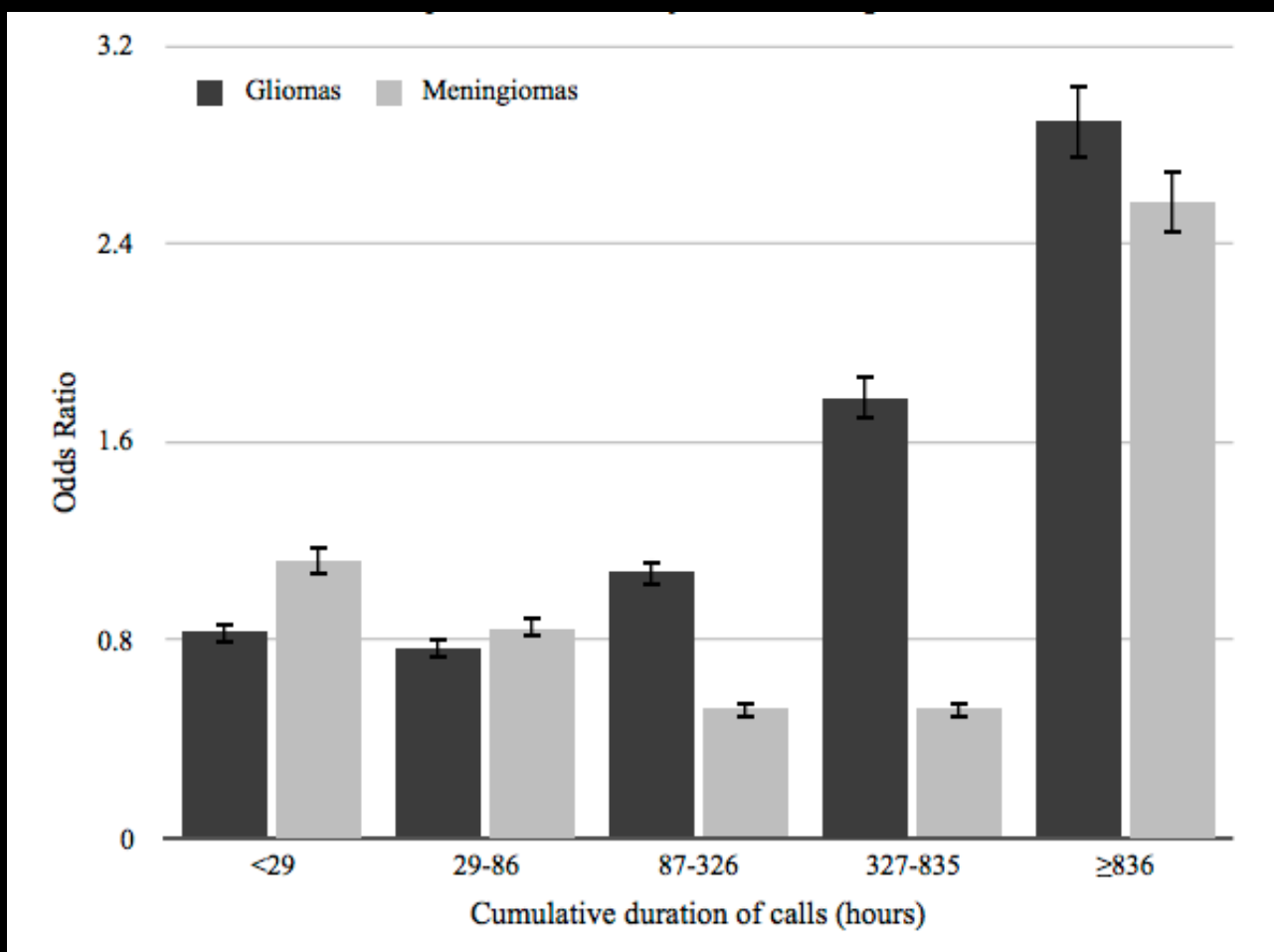
# Human Evidence that Cell Phones Probably Cause Brain Cancer

Three important sets of studies:

- Interphone (2010, 2014) ~2-fold increased risk for 10+ years use of cell phones
- Hardell in Sweden (2012 and earlier) 2-5-fold increased risk after prolonged use of cell and cordless phones
- Cerenat France (2014), ~5-fold increased risk for 5+ years use of cell phones

# CERENAT: French National Study

## Increased risk of brain tumors with heaviest users

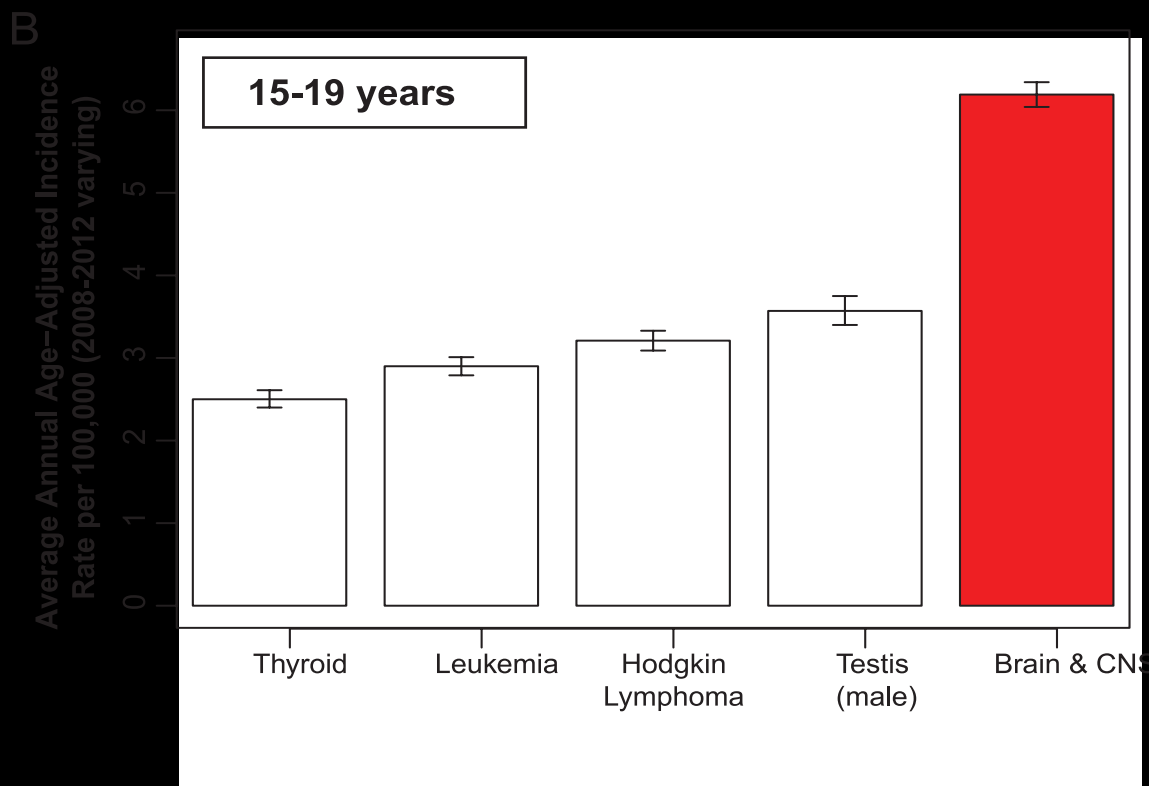


# Why Is There No Overall Increase in Brain Cancer Incidence?

- Expectation: Change will be slow, and small
- Potential confounding: Trends in diagnosis
- Latent period: Likely to be prolonged
- Younger cases are increasing in US, UK, Australia, Israel (parotid gland tumors)

# Cancer Incidence in Adolescents in the United States

Source: CBTRUS (99+% pop'n)



Brain tumors are now the highest incidence cancers in US adolescents

# Conclusions

- ✓ From epidemiology: Radiofrequency Radiation is a Probable Human Carcinogen (IARC Category 2A)
- ✓ With NTP: There is *Sufficient evidence* that Radiofrequency radiation is carcinogenic to humans (IARC Category 1)

# Implications

- ✓ Radiofrequency radiation is now ubiquitous
- ✓ Although the risk per individual is low, the radiation is widely distributed and could result in major public health problems
- ✓ The Precautionary Principle must be applied now and exposure reduced to As Low a level As Reasonably Achievable.