

Report on the Peer Review of the Draft NTP Technical Reports on Radio Frequency Radiation Exposure to Rats (900 MHz) in TR-595 and Mice (1900 MHz) in TR-596

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The National Toxicology Program (NTP) convened a Peer Review Panel on March 26-28, 2018 to for reviewing these two Draft NTP Technical Reports. These reports contained the NTP's evaluation of the potential chronic toxicity and carcinogenicity from radio frequency radiation at two frequencies and modulations. The frequencies 900 MHz (rats) and 1900 MHz (mice) and modulations of GSM and CDMA were selected based on common usage in cell phone devices and modeled exposure tolerances. This research program was made up of a series of technical, logistical and toxicity evaluations starting with the development, construction, and validation of the exposure chambers, to initial pilot studies in animals, followed by 28-day toxicity studies, and ultimately the two-year study in both species.

The review of the two technical reports began with an assessment of the exposure system. A Panel of experts in the area of radio frequency radiation reviewed the exposure system which was developed, constructed, and validated in conjunction with National Institute of Standards and Technology (NIST) and IT'IS Foundation. A second Panel made up of experts in toxicology, pathology, and statistics reviewed the toxicity studies (the 28-day toxicity studies and the two-year studies) starting with the mouse report (TR-595), and then the rat report (TR-596).

There was robust discussion by the Peer Review Panels on the exposure system and NTP's draft scientific interpretations. The Panel recommended increasing the NTP's level of evidence calls regarding the heart in male and female rats, adrenal gland in male rats (GSM only), and the brain (gliomas) in male rats of both modulations.

The Panel's comments on the draft interpretations will be captured in the peer review report, which will be posted with other meeting materials when completed. NTP will carefully consider the Panel's recommendations when finalizing these technical reports, which will be published on the NTP website in fall 2018 (<https://ntp.niehs.nih.gov/go/36144>).