

**Summary of the 2-Year Carcinogenesis and Genetic Toxicology Studies  
of GSM- and CDMA-Modulated Cell Phone RFR Exposure in Rats**

	<b>GSM-Modulated Cell Phone RFR Male Rats</b>	<b>GSM-Modulated Cell Phone RFR Female Rats</b>	<b>CDMA-Modulated Cell Phone RFR Male Rats</b>	<b>CDMA-Modulated Cell Phone RFR Female Rats</b>
<b>Whole-body GSM- or CDMA-modulated cell phone RFR exposure</b>	0, 1.5, 3, or 6 W/kg	0, 1.5, 3, or 6 W/kg	0, 1.5, 3, or 6 W/kg	0, 1.5, 3, or 6 W/kg
<b>Survival rates</b>	25/90, 45/90, 50/90, 60/90	48/90, 53/90, 48/90, 57/90	25/90, 43/90, 56/90, 43/90	48/90, 46/90, 50/90, 61/90
<b>Body weights</b>	Exposed groups similar to the sham control group	Exposed groups similar to the sham control group	Exposed groups similar to the sham control group	Exposed groups similar to the sham control group
<b>Nonneoplastic effects</b>	<u>Heart:</u> ventricle right, cardiomyopathy (54/90, 62/90, 72/90, 74/90); Schwann cell hyperplasia (0/90, 1/90, 0/90, 2/90)  <u>Brain:</u> glial cell, hyperplasia (0/90, 2/90, 3/90, 1/90)  <u>Prostate gland:</u> epithelium, hyperplasia (5/90, 13/90, 11/90, 11/90)	<u>Heart:</u> ventricle right, cardiomyopathy (4/90, 9/90, 14/90, 15/90)  <u>Thyroid gland:</u> C-cell, hyperplasia (28/90, 49/88, 45/90, 43/88)  <u>Adrenal medulla:</u> hyperplasia (13/86, 19/90, 14/90, 25/86)	<u>Heart:</u> Schwann cell hyperplasia (0/90, 0/90, 0/90, 3/90)  <u>Brain:</u> glial cell, hyperplasia (0/90, 2/90, 0/90, 2/90)  <u>Prostate gland:</u> epithelium, hyperplasia (5/90, 11/90, 9/90, 15/85)	<u>Brain:</u> glial cell, hyperplasia (0/90, 0/90, 1/90, 1/90)
<b>Neoplastic effects</b>	<u>Heart:</u> schwannoma malignant (0/90, 2/90, 1/90, 5/90)  <u>Brain:</u> glioma malignant (0/90, 3/90, 3/90, 2/90)  <u>Adrenal medulla:</u> benign, malignant, or complex pheochromocytoma (11/88, 24/90, 28/89, 14/87)	None	<u>Heart:</u> schwannoma malignant (0/90, 2/90, 3/90, 6/90)  <u>Brain:</u> glioma malignant (0/90, 0/90, 0/90, 3/90)	None
<b>Equivocal findings</b>	<u>Brain:</u> meninges, granular cell tumor benign or malignant (1/90, 3/90, 4/90, 3/90)  <u>Prostate gland:</u> adenoma or carcinoma (2/90, 2/90, 7/90, 3/90)  <u>Pituitary gland:</u> pars distalis, adenoma (17/89, 28/90, 26/90, 26/90)  <u>Islets, pancreatic:</u> adenoma or carcinoma (13/90, 27/89, 19/86, 16/85)	<u>Heart:</u> schwannoma malignant (0/90, 0/90, 2/90, 0/90)	<u>Pituitary gland:</u> pars distalis, adenoma (17/89, 25/90, 34/90, 13/90)  <u>Liver:</u> hepatocellular adenoma or carcinoma (combined) (0/90, 2/90, 4/89, 1/88)	<u>Heart:</u> schwannoma malignant (0/90, 2/90, 0/90, 2/90)  <u>Brain:</u> glioma malignant (0/90, 3/90, 0/90, 0/90)  <u>Adrenal medulla:</u> benign, malignant, or complex pheochromocytoma (1/86, 9/89, 5/87, 4/88)