In a 2-year bioassay, we exposed Fischer 344 rats to a frequency-modulated (FM) signal (836.55 MHz ± 12.5 Hz). This exposure was part of a study to understand the effects of electromagnetic fields on rat health. The study involved 644-day-old male Fischer 344 rats, which have 6 pairs of mammary glands. The rats were used to assess cancer risk in the rat strain. The study was conducted by the National Toxicology Program (NTP) and included an analysis of tumor incidences in Fischer 344 rats. The pathology data and specimens were used as the primary resource for the National Toxicology Program (NTP) tumor incidence tables. The study also compared the F344 rat tumor responses to those of the Wistar rat, a commonly used laboratory rat. The F344 rat is a popular model for cancer research due to its genetic and physiological similarities to humans. The pathology data and specimens used as the primary resource for the National Toxicology Program (NTP) for important pathobiological differences between these F344 rat tumor responses and those in the Wistar rat. The study aimed to understand the role of genetics and environmental factors in tumor development. The pathology data and specimens used as the primary resource for the National Toxicology Program (NTP) tumor incidence tables. The pathology data and specimens used as the primary resource for the National Toxicology Program (NTP) for important pathobiological differences between these F344 rat tumor responses and those in the Wistar rat. The study aimed to understand the role of genetics and environmental factors in tumor development.