Researchers at the University of South Florida have developed a new mouse model for mammary cancer research. Mouse models are available to researchers with unique genetics to deliberately produce a disease, make the animal more susceptible to diseases, or produce novel characteristics.

This new mouse model combines the human oncogene ras, which is associated with about 30% of human tumors, and a knockout of the p21 gene, which is thought to slow or stop the onset of cancer.

The result is a model where 100% of the ras/p21 mice develop tumors by day 63, whereas the mice in the control group with only the ras transgene had only a 22% incidence of tumors in 221 days. This is nearly five times as many mice developing tumors in less than a third of the time.

ADVANTAGES:
- Shorter time until tumor appearance
- Greater percentage of mice with tumors
- Lower cost for researchers because of smaller number of mice needed
- Length of study dramatically decreased

More Mice Develop Tumors Faster Resulting in Saving Time and Money

J Adnane et al., Oncogene (2000) 19, 5338-5347

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Mammary Ductal Carcinomas in ras/p21 Mouse