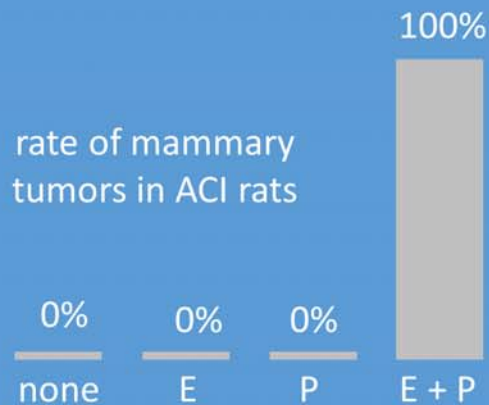


## Rat Models of $17\beta$ -Estradiol-Induced Mammary Cancer Reveal Novel Insights into Breast Cancer Etiology and Prevention

Rats help researchers understand the biology of cancer and opportunities for prevention.

Rats called ACI rats are special because they respond to both estrogen (E) and progesterone (P)



*Hormones given to ACI rats after both ovaries removed*

Rat models can be used to study gene and environmental factors together, and identify high risk groups in both rats and humans

39 genetic polymorphisms



9 ACI *Emca* loci



Mammary cancer in ACI rats is associated with oxidative stress, which can damage cells. Diet and other factors can influence this process.

