Intramammary Infusion of Insulin-Like Growth Factor-1 Increases Bromodeoxyuridine Labeling in Mammary Epithelial Cells of Prepubertal Heifers. By Silva et al., page 2771.

The objective was to determine if intramammary infusions of insulin-like growth factor-1 (IGF-I) would stimulate mammogenesis in prepubertal heifers in vivo. Intramammary infusion of IGF-I over 7 d increased the prevalence of epithelial cells in S-phase by 52%. The response to IGF-I was similar in each parenchymal region. Although local IGF-I increased proliferation of mammary cells in prepubertal heifers, mammary development is impaired in heifers receiving high-energy diets resulting in high serum IGF-I. Therefore, factors other than serum IGF-I concentrations likely affect prepubertal mammogenesis.