ABOUT THE COVER

The links between obesity (highly prevalent in many parts of the world) and claudin-low or basal-like breast cancers are unclear. Given the poor prognosis of these intrinsic breast cancer subtypes, the identification of mechanistic targets and strategies to prevent or control them is critical. The cover features an immunofluorescence photomicrograph (X60 magnification) of E-Wnt basal-like mammary tumors derived from MMTV-Wnt-1 transgenic mice. The epithelial morphology of these tumors is reflected by high expression of the common epithelial marker E-cadherin (green; nuclei are blue). E-cadherin expression is lost in M-Wnt claudin-low mammary tumors, which have a mesenchymal morphology and very poor prognosis. Diet-induced obesity significantly decreased E-cadherin expression and increased mesenchymal marker expression in E-Wnt cells, whereas calorie restriction increased E-cadherin expression and suppressed growth in both E-Wnt and M-Wnt tumors. Therefore, components of the epithelial-to-mesenchymal transition pathway represent possible targets for breaking the obesity-breast cancer link, particularly for the poor prognosis, often therapy-resistant subtypes basal-like and claudin-low breast cancers. See article by Dunlap et al. (beginning on page 930) for more information.