Effective preventive drugs are declined by most women at high risk for breast cancer because of systemic toxicity, which may be decreased by the delivery of drugs through the breast skin. Lee and colleagues randomized women awaiting DCIS resection to 6-10 weeks of oral tamoxifen or 4-hydroxytamoxifen gel applied to the breast skin. The authors observed equivalent breast concentrations of 4-hydroxytamoxifen in both groups and similar reductions in the Ki67 labelling of DCIS cells, but far lower plasma concentrations in the transdermal group. Thus transdermal delivery appears to be a viable and potentially safer approach to breast cancer prevention, requiring further study.