



Breast cancer is usually described as uncontrolled cellular growth however recent research suggests that is not accurate – at least before primary surgery

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Bimodal relapse patterns after primary surgery in early stage breast cancer have been identified in approximately 15 databases from US, Asia and Europe. Analysis of these data suggests that over half of all relapses (increasing with primary size and positive nodes) are accelerated by primary surgery. There is a particularly strong early relapse signal for premenopausal patients with positive lymph nodes. We have suggested that metastatic deposits are usually in a dormant state when disease is initially diagnosed. But then surgery to remove the primary releases dormancy in many but not all patients. This single hypothesis explains a number of previously unconnected clinical observations. These include 1) why adjuvant chemotherapy is most effective by far for premenopausal node-positive patients, 2) why early detection of cancer is not very effective particularly for women age 40-49, 3) why metastatic disease is rarely found at initial diagnosis but, within several years, relapse is more common increasing with primary size and positive nodes, 3) why breast cancer is considered heterogeneous and 4) “aggressive” in young women, 5) why physicians from Celsus and Galen to Halsted recommended against surgical treatment for all but small tumors, 6) why the folk-saying “cancer spreads when the air hits” or words to that effect is commonly believed, 7) bimodal relapse patterns and 8) racial differences in breast cancer outcome. A major conclusion from this work is that while breast cancer research is often directed against uncontrolled cellular growth, the disease is highly controlled at least before surgery.

Biography

Michael Retsky has Ph.D in Physics (1974) from University of Chicago. He is director of a small business in electron beam technology (www.elopt.com), on the board of directors of Colon Cancer Alliance (www.ccalliance.org) and Connecticut Optics and Photonics Association (www.ct-opa.org). A 16-year survivor of stage III colon cancer, he was the first person to use what is now called metronomic chemotherapy. He has published over 50 papers in physics and cancer research journals. He has been guest editor of several journals including *Cancers* where a special issue is devoted to this research (http://www.mdpi.com/search/?s_journal=cancers&s_special_issue=707).