

Yalom M: *History of the breast*, 1998, Ballantine Books. [A scholarly work on the cultural, political, psychologic, artistic, physical, and religious significance of the breast.]

### Risk Factors for Developing Carcinoma

- Benson JR, Jatoi I: The global breast cancer burden. *Future Oncol* 8:697, 2012. [The incidence of breast cancer is increasing rapidly in developing countries. This review discusses possible etiologic factors and the challenge of diagnosing and treating cancer in areas with limited resources.]
- Fanale D, Amodeo V, Corsini LR, et al: Breast cancer genome-wide association studies: there is strength in numbers. *Oncogene* 31:2121, 2012. [In addition to known high-risk genes, additional genes confer a smaller but appreciable risk for breast cancer. This review describes some of the "suspects".]
- Gage N, Wattendorf D, Henry LR: Translational advances regarding hereditary breast cancer syndromes. *J Surg Oncol* 105:444, 2012. [The major germline mutations conferring a high risk for developing breast cancer are discussed along with guidelines for testing and interpretation.]
- Hopper JL, Jenkins MA, Dowty JG, et al: Using tumour pathology to identify people at high genetic risk of breast and colorectal cancers. *Pathology* 44:89, 2012. [Describes how the use of histological characteristics of cancers can be used to help identify kindreds with germline mutations associated with high breast cancer risk.]
- Kurian AW, Fish K, Shema SJ, et al: Lifetime risks of specific breast cancer subtypes among women in four racial/ethnic groups. *Breast Cancer Research* 12:R99, 2010. [Breast cancer must now be investigated as a group of related, but distinct, diseases. In this study, the risk of different subtypes of cancers is shown to vary for different racial groups.]
- Peres J: Understanding breast density and breast cancer risk. *J Natl Cancer Inst* 104:1345, 2012. [Density as defined by mammography has been identified as predictor of increased risk and underscores the importance of the tumor environment in the biology of cancer.]

### Biology of Breast Carcinoma

- Bombonati A and Sgroi DC: The molecular pathology of breast cancer progression. *J Pathol* 223:307, 2011. [New techniques allow the breast cancer precursor lesions to be identified and studied; this review describes the early events in breast cancer development.]
- Boudreau A, van't Veer LJ, Bissell MJ: An "elite hacker": breast tumors exploit the normal microenvironment program to instruct their progression and biological diversity. *Cell Adh Migr* 6:236, 2012. [Stroma is an important partner in cancer progression, but has been difficult to study. This paper reviews the stromal changes during breast development that might be co-opted by cancer cells and the contribution of the microenvironment to clinical outcomes.]
- Gray J, Druker B: Genomics: the breast cancer landscape. *Nature* 486:328, 2012. [This paper summarizes the results of five important papers on genomic analysis of breast cancer; findings include the identification of new breast cancer subtypes, mutations in triple negative cancers, additional driver mutations, and genomic changes associated with resistance to aromatase inhibitors.]
- Hernandez L, Wilkerson PM, Lambros MB, et al: Genomic and mutational profiling of ductal carcinomas in situ and matched adjacent invasive breast cancers reveals intra-tumour genetic heterogeneity and clonal selection. *J Pathol* 227:42, 2012. [A detailed study showing that the genetic heterogeneity in breast cancers is present at the in situ stage.]
- Nik-Zainal S, Alexandrov LB, Wedge DC, et al: Mutational processes molding the genomes of 21 breast cancers. *Cell* 149:979, 2012. [This study from the Cancer Genome Project analyzes specific patterns of mutation and describes the phenomenon of "kataegis" or localized hypermutation.]
- Nik-Zainal S, Van Loo P, Wedge DC, et al: The life history of 21 breast cancers. *Cell* 149:994, 2012. [Another study from the Cancer Genome Project uses DNA sequencing of multiple subclones within a cancer to reconstruct the order in which mutations accumulated over time.]
- Stephens PJ, Tarpey PS, Davies H, et al: The landscape of cancer genes and mutational processes in breast cancer. *Nature* 486:400, 2012. [The Wellcome Trust Sanger Institute in the United Kingdom has created the Cancer Genome Project, which is analogous to the Cancer Genome Atlas Network in the U.S. This study of 100 breast cancers uses exome sequencing in order to identify the most important driver mutations.]
- The Cancer Genome Atlas Network: Comprehensive molecular portraits of human breast tumours. *Nature* 490:61, 2012. [In this report,

data on over 400 invasive breast cancers including genomic DNA copy number arrays, DNA methylation, exome sequencing, messenger RNA arrays, microRNA sequencing, and reverse-phase protein arrays are described.]

### Breast Cancer Classification

- Caddo KA, McArdle O, O'Shea AM, et al: Management of unusual histologic types of breast cancer. *Oncologist* 17:1135, 1012. [This study presents a compilation of information on rare subtypes of breast cancer.]
- International Agency for Research on Cancer: *World Health Organization Classification of Tumours of the Breast*, July, 2012. [Over 100 experts from around the world collaborate with W.H.O. to issue guidelines on the classification of breast cancers.]
- Masuda S: Breast cancer pathology: the impact of molecular taxonomy on morphological taxonomy. *Pathol Internat* 62:295, 2012. [The most useful classification systems combine information from morphology as well as gene expression.]

### Clinical Aspects of Breast Carcinoma

- American Joint Committee on Cancer: *AJCC Cancer Staging Manual*, ed 7, New York, 2009, Springer. [The AJCC, in cooperation with the Union Internationale Contre le Cancer, issues international guidelines on cancer staging.]
- Kaufmann M, et al: Recommendations from an international consensus conference on the current status and future of neoadjuvant systemic therapy in primary cancer. *Ann Surg Oncol* 19:1508, 2012. [Neoadjuvant therapy is a powerful tool for both patient care and research, as it is currently the only method to directly measure the degree to which carcinomas respond to different types of therapy.]
- Lester SC, Bose S, Chen YY, et al: Protocol for the examination of specimens from patients with invasive carcinoma of the breast. *Arch Pathol Lab Med* 133:1515, 2009. [The College of American Pathologists has developed national standards for the reporting of breast carcinoma and is currently working on developing a worldwide consensus.]
- Mukherjee S: *The Emperor of All Maladies: A biography of cancer*. Scribner 2011. [This look back at the evolution of our understanding of cancer includes the story of the discovery of HER2 and the remarkable impact of HER2 targeted therapy.]
- Murphy CG, Morris PG: Recent advances in novel targeted therapies for HER2-positive breast cancer. *Anticancer Drugs* 23:765, 2012. [New treatments for HER2 overexpressing carcinomas include antibodies to different epitopes, antibody-drug conjugates, targeting of downstream pathway components, and combination therapies.]
- Olson JS: *Bathsheba's breast: women, cancer, and history*, 2002, The Johns Hopkins University Press. [This book is a 2,000-year chronicle of breast cancer as told by the women who suffered from the disease as well as an informative history of the important milestones in cancer treatment.]
- Reis-Filho JS, Pusztai L: Gene expression profiling in breast cancer: classification, prognostication, and prediction. *Lancet* 378:1812, 2011. [Gene-expression profiling has been a method to classify the biologic types of cancers and have primarily been of use to help identify patients with hormone receptor positive cancers who do not benefit from chemotherapy.]
- Shah-Khan M, Boughey JC: Evolution of axillary nodal staging in breast cancer: clinical implications of the ACOSOG Z0011 trial. *Cancer Control* 19:267, 2012. [This paper discusses the diminishing need to sample nodes in women with breast cancer who receive systemic therapy.]
- Sharma K, et al: A systematic review of barriers to breast cancer care in developing countries resulting in delayed patient presentation. *J Oncol* 1012, Epub Aug 22 2012. [This study describes the challenges to basic health interventions such as local control and systemic treatment with hormonal agents in developing countries.]

### Other Tumors

- Karim RZ, O'Toole SA, Scolyer RA: Recent insights into the molecular pathogenesis of mammary phyllodes tumours. *J Clin Pathol* 2013 Feb 12 [Epub ahead of print]. [Molecular studies of phyllodes tumours, as described in this article, may enable pathologists to predict recurrences or rare metastases with greater accuracy.]
- Lucas DR: Angiosarcoma, radiation-associated angiosarcoma, and atypical vascular lesion. *Arch Pathol Lab Med* 133:1804, 2009. [This review describes the most important malignancy of the breast after carcinoma and the association of some cases with prior treatment.]