## **Cancer and Genetics: Part III**

# Prepared by Marty Weinar, MS, RN, Claire Alexander, RN, BSN, OCN®, and Gayle A. Seely, RN, BSN

#### **Cancer Risk Assessment**

- American Gastroenterological Association. (2001). Hereditary colorectal cancer and genetic testing [Position statement]. *Gastroenterology*, *121*, 195–197.
- American Society of Clinical Oncology. (2003).
  Genetic testing for cancer susceptibility [Position statement]. *Journal of Clinical Oncology*, 21, 1–10.
- Borum, M. (2001). Colorectal cancer screening. Primary Care: Clinics in Office Practice, 28, 661–675
- Brose, M., Rebbeck, T., Calzone, K., Stopfer, J., Nathanson, K., & Weber, B. (2002). Cancer risk estimates for BRCA1 mutation carriers identified in a risk evaluation program. Journal of the National Cancer Institute, 94, 1365–1372.
- Claus, E., Risch, N., & Thompson, D. (1993a). Autosomal dominant inheritance of early-onset breast cancer—Implications for risk prediction. *Cancer*, 73, 643–651.
- Claus, E., Risch, N., & Thompson, D. (1993b). The calculation of breast cancer risk for women with a first-degree family history of ovarian cancer. *Breast Cancer Research and Treatment*, 28, 115–120.
- Domchek, S., Eisen, A., Calzone, K., Stopfer, J., Blackwood, A., & Weber, B. (2003). Application of breast cancer risk in clinical practice. *Journal of Clinical Oncology*, 21, 593–601.
- Euhus, D., Smith, K., Robinson, L., Stucky, A., Olopade, O., Cummings, S., et al. (2002). Pretest prediction of BRCA1 or BRCA2 mutation by risk counselors and the computer model BRCAPRO. Journal of the National Cancer Institute, 94, 844–851.
- Frank, T., & Critchfield, G. (2002). Hereditary risk of women's cancers. Best Practice and Research Clinical Obstetrics and Gynaecology, 16, 703–713.
- Ivanovich, J., Read, T., Ciske, D., Kodner, J., & Whelan, A. (1999). A practical approach to familial and hereditary colorectal cancer. American Journal of Medicine, 107, 68–77.

- Leventhal, H., Kelly, K., & Leventhal, E. (1999).Population risk, actual risk, perceived risk, and cancer control: Discussion. *Journal of the National Cancer Institute Monographs*, 25, 81–85.
- Lynch, H., & Chapelle, A. (1999). Genetic susceptibility to non-polyposis colorectal cancer. *Journal of Medical Genetics*, 36, 801–818.
- Mahon, S. (1998). Cancer risk assessment: Conceptual considerations for clinical practice. Oncology Nursing Forum, 25, 1535–1547.
- Narod, S. (2002). Modifiers of risk of hereditary breast and ovarian cancer. *Nature Reviews Can*cer, 2, 113–123.
- Offit, K., Levran, O., Mullaney, B., Mah, K., Nafa, K., Batish, S., et al. (2003). Shared genetic susceptibility to breast cancer, brain tumors, and Fanconi anemia. *Journal of the National Cancer Institute*, 95, 1548–1551.
- Oncology Nursing Society. (2000). Cancer predisposition genetic testing and risk assessment counseling [Position statement]. *Oncology Nursing Forum*, 27, 1349.
- Rhodes, D. (2002). Identifying and counseling women at increased risk for breast cancer. *Mayo Clinic Proceedings*, 77, 355–361.
- Schneider, K. (2002). *Counseling about cancer*. New York: Wiley-Liss.
- Shannon, K., Lubratovich, M., Finkelstein, D., Smith, B., Powell, S., & Seiden, M. (2002). Model-based predictions of *BRCA1/2* mutation status in breast carcinoma patients treated at an academic medical center. *Cancer*, 94, 305–313.
- Shattuck-Eidens, D., Oliphant, A., McClure, M., McBride, C., Gupte, J., Rubano, T., et al. (1997). BRCA1 sequence analysis in women at high risk for susceptibility mutations. Risk factor analysis and implications for genetic testing. JAMA, 278, 1242–1250.
- Stopfer, J. (2000). Genetic counseling and clinical cancer genetics services. Seminars in Surgical Oncology, 18, 347–357.
- Struewing, J., Hartge, P., Wacholder, S., Baker, S., Berlin, M., McAdams, M., et al. (1997). The risk of cancer associated with specific mutations of *BRCA1* and *BRCA2* among Ashkenazi Jews.

- New England Journal of Medicine, 336, 1401–1408.
- Sweet, K., Bradley, T., & Westman, J. (2002). Identification and referral of families at high risk for cancer susceptibility. *Journal of Clinical Oncology*, 20, 528–537.
- Tranin, A.S., Masny, A., & Jenkins, J. (2003). Genetics in oncology practice: Cancer risk assessment. Pittsburgh, PA: Oncology Nursing Society.
- Vogel, V. (1996). Assessing women's potential risk of developing breast cancer. *Oncology*, 10, 1451–1463.
- Weitzel, J. (1999). Genetic cancer risk assessment. Cancer Supplement, 86, 2483–2492.

### Genetics and Proteomics in Identification of Cancer

- Balmain, A., Gray, J., & Ponder, B. (2003). The genetics and genomics of cancer. *Nature Genetics Supplement*, 33, 238–244.
- Chakravarthy, B., & Peitenpol, J. (2003). Combined modality management of breast cancer: Development of predictive markers through proteomics. *Seminars in Oncology*, 30(Suppl. 4), 23–36.
- Gibbs, W. (2003). Untangling the roots of cancer. *Scientific American*, 289(1), 57–65.
- Hanahan, D., & Weinberg, R.A. (2000). The hall-marks of cancer. *Cell*, 100, 57–70.
- Knudson, A.G. (2002). Cancer genetics. American Journal of Medical Genetics, 111, 96–102.

Marty Weinar, MS, RN, is a nurse coordinator for the Cancer Risk Evaluation Program in the Abramson Cancer Center at the University of Pennsylvania in Philadelphia; Claire Alexander, RN, BSN, OCN®, is a senior manager of Clinical Operations at Genomic Health, Inc., in Redwood City, CA; and Gayle A. Seely, RN, BSN, is a senior account executive at Myriad Genetics Labs in Salt Lake City, UT.

Digital Object Identifier: 10.1188/04.ONF.195-196

- Lawrie, L., Fothergill, J., & Murray, G. (2001).Spot the differences: Proteomics in cancer research. *Lancet Oncology*, 2, 270–277.
- Patterson, S.D., & Aebersold, R.H. (2003). Proteomics: The first decade and beyond. *Nature Genetics Supplement*, 33, 311–323.
- Ponder, B.A.J. (2001). Cancer genetics. *Nature*, *411*, 336–341.
- Porta, M., Fernandez, E., & Alguacil, J. (2003). Semiology, proteomics, and the early detection of symptomatic cancer. *Journal of Clinical Epidemiology*, 56, 815–819.
- Verrills, N., & Kavallaris, M. (2003). Drug resistance mechanisms in cancer cells: A proteomics perspective. *Current Opinions in Molecular Therapeutics*, 5, 258–265.
- Wulfkuhle, J.D., Liotta, L.A., & Petricoin, E.F. (2003). Proteomic applications for the early detection of cancer. *Nature Reviews Cancer*, 3, 267–275.
- Wulfkuhle, J.D., Paweletz, C.P., Steeg, P.S., Petricoin, E.F., & Liotta, L. (2003). Proteomic approaches to the diagnosis, treatment, and monitoring of cancer. Advances in Experimental Medicine and Biology, 532, 59–68.

## The Role of the Nurse in Cancer Genetics

Bernhardt, B., Geller, G., Doksum, T., & Metz, S. (2000). Evaluation of nurses and genetic counselors as providers of education about breast cancer susceptibility testing. *Oncology Nursing* 

- Forum, 27, 33-39.
- Burrer, C., & Bauer, S. (2000). Insights into genetic testing for colon cancer: The nurse practitioner role. Clinical Excellence for Nurse Practitioners, 4, 349–355.
- Calzone, K., Jenkins, J., & Masny, A. (2002). Core competencies in cancer genetics for advanced practice oncology nurses. *Oncology Nursing Forum*, 29, 1327–1333.
- Greco, K., & Mahon, S. (2003). Genetics nursing practice enters a new era with credentialing. *Internet Journal of Advanced Nursing Practice*, 5(2). Retrieved January 13, 2004, from http://www.ispub.com/ostia/index.php?xmlFilePath=journals/ijanp/vol5n2/genetics.xml
- Greco, K.E. (2000). Cancer genetics nursing: Impact of the double helix. Oncology Nursing Forum, 27(9 Suppl.), 29–36.
- International Society of Nurses in Genetics. (2000).

  Informed decision-making and consent: The role of the nursing [Position statement]. Retrieved January 13, 2004, from http://global referrals.com/about/position\_statements/consent\_.htm
- International Society of Nurses in Genetics. (2002).

  Privacy and confidentiality of genetic information: The role of nursing [Position statement].

  Retrieved January 13, 2004, from http://global referrals.com/about/position\_statements/privacy htm
- International Society of Nurses in Genetics. (2003).
  Genetic counseling for vulnerable populations:
  The role of nursing [Position statement]. Re-

- trieved January 13, 2004, from http://global referrals.com/about/position\_statements/vul\_ pop.html
- Jenkins, J. (2002). Genetics competency: New directions for nursing. AACN Clinical Issues, 13, 486–491.
- Lea, D.H. (2000). Oncology: Genetics and cancer: Implications for nursing practice. *Home Health-care Consultant*, 7(3), 1A–7A.
- MacDonald, D.J. (1997). The oncology nurse's role in cancer risk assessment and counseling. Seminars in Oncology Nursing, 13(2), 123–128.
- Middleton, L., Dimond, E., Calzone, K., Davis, J., & Jenkins, J. (2002). The role of the nurse in cancer genetics. *Cancer Nursing*, 25, 196–206.
- Olsen, S.J., Feetham, S.L., Jenkins, J., Lewis, J.A., Nissly, T.L., Sigmon, H.D., et al. (2003). Creating a nursing vision for leadership in genetics. *Medsurg Nursing*, 12(3), 177–183.
- Oncology Nursing Society. (2000). The role of the oncology nurse in cancer genetic counseling [Position statement]. Oncology Nursing Forum, 27, 1348.
- Rieger, P.T. (1998). Overview of cancer and genetics: Implications for nurse practitioners. *Nurse Practitioner Forum*, 9(3), 122–133.
- Rieger, P.T., & Tinley, S.T. (2000). Cancer genetics and nursing practice: What every gastroenterology nurse needs to know. *Gastroenterology Nursing*, 23(1), 28–39.
- Vogel, W.H. (2003). The advanced practice nursing role in a high-risk breast cancer clinic. Oncology Nursing Forum, 30, 115–122.