



## Breast Cancer In *Young Women*

### The facts: breast cancer in young women

- Breast cancer is the leading cause of cancer deaths in women under the age of 40.
- 18% of all new breast cancer cases in Canada are diagnosed in women less than 50 years of age. For young women, especially those under the age of 40, breast cancer tends to be more advanced at the time of diagnosis and often presents as a more aggressive disease, exhibiting increased resistance to standard treatments, resulting in a poor prognosis. (*Canadian Cancer Society's Advisory Committee on Cancer Statistics. Canadian Cancer Statistics 2013. Toronto, ON: Canadian Cancer Society; 2013.p27, 31*)
- Young women are significantly more distressed (anxiety, depression, fears of recurrence) and experience poorer quality of life than women diagnosed at a later stage of life. (*Bell et al., 2009; Kornblith et al., 2007; Kroenke et al., 2004*) and a diminished quality of life may extend for years post diagnosis. (*Avis et al., 2005; Bloom et al., 2012*).
- In 2013, 4% of breast cancers in Canada occurred in women under the age of 40 (approximately 1,055 cases). (*Canadian Cancer Society's Advisory Committee on Cancer Statistics. Canadian Cancer Statistics 2013. Toronto, ON: Canadian Cancer Society; 2013.*) which is similar to another study from the U.S. showing that 7% of women diagnosed with breast cancer between 2000 and 2005 were below the age of 40. (*from CK, Johnson R, Litton J, Phillips M, Bleyer A: Breast cancer before age 40 years. Semin Oncol 2009, 36:237-249., reported in Gabriel and Domchek 2010*)
- Diagnosing breast cancer in women less than 40 years of age can be challenging. Due to the relatively low incidence of cancer in this age group and the fact that younger women generally have denser breast tissue resulting in lower mammography sensitivity, routine breast cancer screening is not performed in this age group in the absence of major risk factors. Physicians do not expect to find a breast cancer at such a young age and so diagnosis may be delayed. (*CBCF-CIHR Young Women Workshop Report, 2012*)
- Young women with breast cancer have unique concerns, including:
  - Premature menopause and infertility related to treatment; facing mortality early; not seeing children to adulthood; body image; pregnancy and/or egg harvesting issues complicating treatment decisions (*Adams et al., 2011; Anderson et al., 2011; Avis et al., 2004; Connell et al., 2006; Coyne & Borbasi, 2007; Dunn & Steginga, 2000; Fobair et al., 2006; Lee et al., 2007*)
  - Depression and social support (*Wong-Kim & Bloom, 2004*); size of social network related to emotional support, which in turn, translates into well-being (*Bloom et al., 2001*)
  - Spousal relationships challenges related to communication and sexuality (*Adams et al., 2011; Cebeci et al., 2010; Lewis et al., 2012; Walsh et al., 2005*) with sexual function reported as more problematic than loss of interest (*Avis et al., 2004*); fathers of young families (*Forrest et al., 2008*);
  - Early career disruptions
  - Care of young children amid the complex reactions of family, friends and partners
  - Shock of facing an unexpected cancer diagnosis at such a young age
- Based on statistics provided by the Canadian Cancer Research Alliance, breast cancer research in Canada is relatively well funded with a total investment of \$575 million from 2000-2009. However, of the 2,033 projects funded during this period, only 8% were focused specifically on young women, with most of those related to genetic/familial factors, and do not specifically address the challenges related to breast cancer in young women.
- Currently, the biology of breast cancers in young women is poorly understood and it is unclear to what extent breast cancer in this age group represents a disease that is fundamentally different from breast cancer in older women. (*CBCF-CIHR Young Women Workshop Report, 2012*)