

## Cancer Advances: Ashkenazi Ovarian Cancer Patients with BRCA Mutations Live Longer Than Those with Normal Gene

Posted online January 1, 2008, on [www.jco.org](http://www.jco.org) [1].

While women who have mutations in the *BRCA1* or *BRCA2* genes are more likely to develop breast and ovarian cancer, a new study finds they may be more able to survive ovarian cancer. Israeli investigators have found that Ashkenazi Jewish women with ovarian cancer who have mutations in the *BRCA1* or *BRCA2* genes lived longer than Ashkenazi Jewish ovarian cancer patients without these mutations. The study was published in the *Journal of Clinical Oncology* (JCO).

Normal *BRCA1/2* genes control cell growth. Mutations in these genes, which are more common among Ashkenazi Jewish women (Jewish women of Eastern European descent) than in the general population, increase the risk of breast and ovarian cancers.

In one of the largest studies of this topic to date and after a follow-up period of up to nine years, researchers from the National Israeli Study of Ovarian Cancer compared five-year survival between 213 Ashkenazi ovarian cancer patients with *BRCA1/2* mutations (defined as ?carriers?) and 392 Ashkenazi ovarian cancer patients without the mutations (?non-carriers?).

After five years, 46 percent of the carriers were still alive, compared with 34.4 percent of the non-carriers. The differences in survival were most pronounced for women diagnosed with more advanced ovarian cancer, with five-year survival rates of 38.1 percent for carriers and 24.5 percent for non-carriers.

The researchers also analyzed ovarian cancer survival according to whether women had a *BRCA1* or *BRCA2* mutation. Women with *BRCA1* mutations lived a median of 45.1 months and women with *BRCA2* mutations lived a median of 52.5 months.

### What This Means for Patients

It is well known that *BRCA* mutations increase the risk of breast and ovarian cancers. These encouraging findings show that women with *BRCA* mutations who do develop ovarian cancer may have a better outcome than those without these mutations.

The researchers speculated that patients with *BRCA* mutations may respond better to chemotherapy than patients with normal genes. As researchers learn more about why these genes respond better to treatment, physicians will be able to tailor individual treatment, potentially improving survival even further.

### Helpful Links

[Ovarian Cancer](#) [2]

[Hereditary Breast and Ovarian Cancer](#) [3]

[The Genetics of Ovarian Cancer](#) [4]

#### Links:

[1] <http://www.jco.org>

[2] <http://www.cancer.net/patient/Cancer+Types/Ovarian+Cancer>

[3] <http://www.cancer.net/patient/Cancer+Types/Hereditary+Breast+and+Ovarian+Cancer>

[4] <http://www.cancer.net/patient/All+About+Cancer/Genetics/The+Genetics+of+Ovarian+Cancer>