**BARD1 gene**

**Associated Syndrome Name: BARD1-associated Cancer Risk**

**BARD1 Summary Cancer Risk Table**

<table>
<thead>
<tr>
<th>CANCER</th>
<th>GENETIC CANCER RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Breast</td>
<td>Elevated Risk</td>
</tr>
</tbody>
</table>

**BARD1 gene Overview**

BARD1-associated Cancer Risk $^{1,2,3}$

- *BARD1* mutations have been found in families suspected of having a form of Hereditary Breast and Ovarian Cancer syndrome (HBOC), but without detectable mutations in BRCA1 or BRCA2, with almost all of the mutations found in patients with breast cancer. Therefore, it is believed that women with *BARD1* mutations have a risk for breast cancer that is increased over the 12.5% lifetime risk for women in the general population of the United States. There is not sufficient evidence at this time to say that there is also an increased risk for ovarian cancer in women with *BARD1* mutations.

- At this time, there are no known cancer risks for men due to mutations in *BARD1*.

- There are currently no widely accepted guidelines for the medical management of women with *BARD1* mutations, and the exact breast cancer risk is not known. Medical management options based on other conditions which increase the risk of breast cancer are listed below. Since information about the cancer risks associated with *BARD1* mutations is relatively new, and there is uncertainty about the best ways to reduce these risks, it may be appropriate to interpret these results in consultation with cancer genetics professionals who have expertise in this emerging area of knowledge.

**BARD1 gene Cancer Risk Table**

<table>
<thead>
<tr>
<th>CANCER TYPE</th>
<th>AGE RANGE</th>
<th>CANCER RISK</th>
<th>RISK FOR GENERAL POPULATION $^4$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Breast</td>
<td>To age 80 $^{1,2}$</td>
<td>Elevated risk</td>
<td>10.2%</td>
</tr>
</tbody>
</table>

**BARD1 Cancer Risk Management Table**

The overview of medical management options provided is a summary of professional society guidelines as of the last Myriad update shown on this page. The specific reference provided (e.g., NCCN guidelines) should be consulted for more details and up-to-date information before developing a treatment plan for a particular patient.

This overview is provided for informational purposes only and does not constitute a recommendation. While the medical society guidelines summarized herein provide important and useful information, medical management decisions for any particular patient should be made in consultation between that patient and his or her healthcare provider and may differ from society guidelines based on a complete understanding of the patient's personal medical history, surgeries and other treatments.
Currently there are no specific medical management guidelines for breast cancer risk in mutation carriers. However, the possibility of an increased risk for breast cancer warrants consideration of individualized breast cancer risk-reduction strategies, such as the modification of standard population screening recommendations by starting screening at younger ages and/or performing screenings at greater frequency.5,6

<table>
<thead>
<tr>
<th>CANCER TYPE</th>
<th>PROCEDURE</th>
<th>AGE TO BEGIN</th>
<th>FREQUENCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Breast</td>
<td>Currently there are no specific medical management guidelines for breast cancer risk in mutation carriers. However, the possibility of an increased risk for breast cancer warrants consideration of individualized breast cancer risk-reduction strategies, such as the modification of standard population screening recommendations by starting screening at younger ages and/or performing screenings at greater frequency.</td>
<td>Individualized</td>
<td>NA</td>
</tr>
</tbody>
</table>

Information for Family Members

The following information for Family Members will appear as part of the MMT for a patient found to have a mutation in the BARD1 gene.

A major potential benefit of myRisk genetic testing for hereditary cancer risk is the opportunity to prevent cancer in relatives of patients in whom clinically significant mutations are identified. Healthcare providers have an important role in making sure that patients with clinically significant mutations are informed about the risks to relatives, and ways in which genetic testing can guide lifesaving interventions.

At this time, there are no known cancer risks for men due to mutations in BARD1.

References


Last Updated on 31-Aug-2017