

## ***BARD1* Mutations**

### **What You Should Know About *BARD1* Mutations**

Individuals with a *BARD1* gene mutation may have an increased chance to develop breast cancer. There is currently limited information regarding the specific lifetime cancer risks and management recommendations for individuals with *BARD1* mutations.

### **Cancer Risks Associated with a *BARD1* Mutation**

Females with a *BARD1* mutation may have an increased risk to develop breast cancer (including triple negative breast cancer). Lifetime risk to develop other cancers, including ovarian cancer, in individuals with a *BARD1* mutation is currently unknown.

### **Risks to Family Members**

Mutations in the *BARD1* gene are inherited in an autosomal dominant fashion. This means that children, brothers, sisters, and parents of individuals with a *BARD1* mutation have a 1 in 2 (50%) chance of having the mutation as well. Both males and females can inherit a *BARD1* mutation and can pass it on to their children. Individuals with a *BARD1* mutation may develop breast cancer.

### **Managing Cancer Risks**

There are currently no formal management guidelines specific to individuals with *BARD1* mutations. Recent guidelines from the National Comprehensive Cancer Network (NCCN) state that there is insufficient evidence for intervention with increased breast screenings or surgeries to remove breast/ovarian tissue prior to a cancer diagnosis. However, the following surveillance has been suggested based on expert opinion. Family history and personal history should be considered when discussing medical management with your physician.

- Discuss family history of breast cancer and personal medical history with physicians:
  - Annual breast MRI in conjunction with mammogram is recommended for individuals with a lifetime risk of breast cancer >20%
  - Risk-reducing chemoprevention may be considered in individuals with a 5-year risk to develop breast cancer >1.66%
- Discuss family history of ovarian cancer to determine management
  - Ovarian cancer screening or risk-reducing surgery may be considered based on family history

*Last updated 01/09/2020*