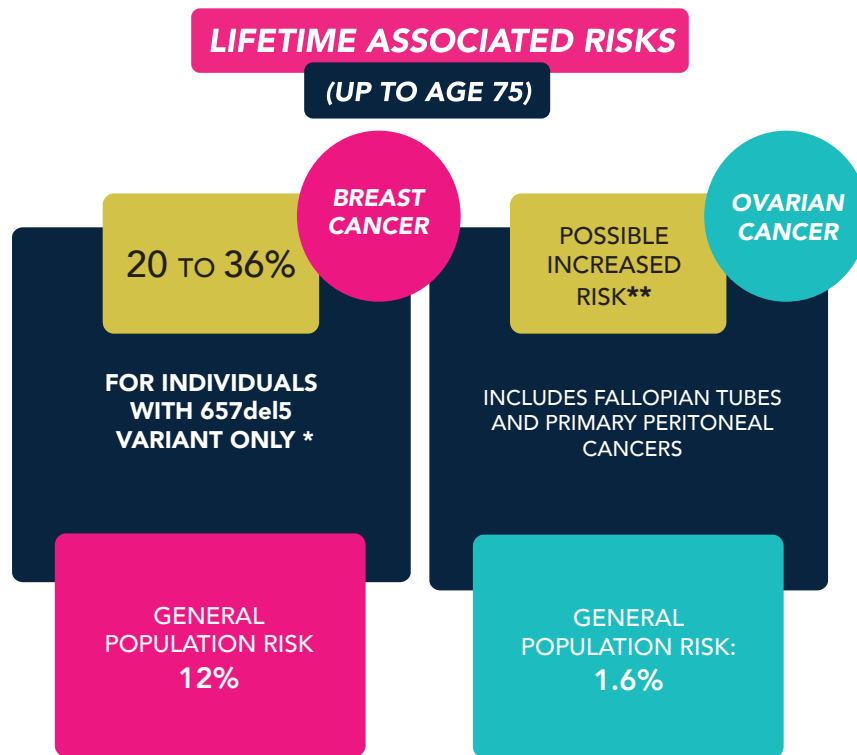




The medical management guidelines from the National Comprehensive Cancer Network (NCCN) for patients with a NBN pathogenic / likely pathogenic variant are listed in this document.

This overview is for informational purposes and does not constitute a personalised recommendation. **Recommended options may vary based on your personal and family history. Access to some options may also vary from one medical center to another.** The specific references should be consulted for more details before developing a treatment plan.

In addition, the information available on hereditary cancer susceptibility genes is constantly evolving and **it is recommended to check this information annually as the management guidelines may change in the future.**



\*Current data suggest that breast cancer risks are **NOT** increased for other pathogenic / likely pathogenic variants.

### OTHER TYPES OF CANCER

**\*\*Preliminary evidence suggests a possible increased risk for other types of cancer, including ovarian cancer.**

However, specific risks have not been established and more research is needed to confirm these findings.

#### References:

Daly M et coll. NCCN Clinical Practice Guidelines in Oncology: Genetic/Familial High-Risk Assessment: Breast and Ovarian. Version 1.2020. December 4, 2019. <http://www.nccn.org>



**\*\* Genetic testing for the NBN gene is recommended for the spouse of an individual with a NBN pathogenic/likely pathogenic variant to assess the risk of Nijmegen breakage syndrome (NBS) in this couple's children.**

When both parents carry a NBN pathogenic/likely pathogenic variant, their children have a 25% risk of inheriting both NBN pathogenic/likely pathogenic variants, which is associated with a rare genetic disease called Nijmegen breakage syndrome (NBS). This condition is associated with physical anomalies, immunodeficiency, increased cancer risk and cognitive impairment.

## BREAST CANCER

### SCREENING

#### INDIVIDUALIZED

- BREAST AWARENESS
- ◊ PROMPTLY REPORT ANY CHANGES TO YOUR HEALTHCARE PROVIDER

#### STARTING AT AGE 40

- MAMMOGRAM WITH CONSIDERATION OF TOMOSYNTHESIS EVERY 12 MONTHS
- CONSIDER BREAST MAGNETIC RESONANCE IMAGING (MRI) WITH CONTRAST EVERY 12 MONTHS

40

75

#### WHEN GENETIC RISK IS IDENTIFIED

- CLINICAL BREAST EXAM BY A PHYSICIAN EVERY 6 TO 12 MONTHS

#### STARTING AT AGE 75

- MANAGEMENT SHOULD BE DETERMINED ON AN INDIVIDUAL BASIS

## BREAST CANCER

### RISK REDUCTION

#### SURGERY

REGARDING THE NBN GENE, THERE IS CURRENTLY INSUFFICIENT EVIDENCE TO RECOMMEND A PROPHYLACTIC BILATERAL MASTECTOMY (REMOVAL OF THE BREASTS BEFORE CANCER DEVELOPS).

THIS OPTION MAY BE CONSIDERED BASED ON THE FAMILY HISTORY OF BREAST CANCER.



## OVARIAN CANCER

### SCREENING

**CURRENT KNOWLEDGE IS INSUFFICIENT TO ESTABLISH SPECIFIC GUIDELINES FOR SCREENING FOR THE RISK OF OVARIAN CANCER ASSOCIATED WITH THE NBN GENE.**

- IT IS SUGGESTED TO FOLLOW THE RECOMMENDATIONS FOR PREVENTION AND SCREENING FOR THE GENERAL POPULATION.
- **FOR INDIVIDUALS WITH A FAMILY HISTORY OF OVARIAN CANCER**, SCREENING RECOMMENDATIONS SHOULD BE INITIATED AT A YOUNGER AGE.
  - ◊ CONSIDER TRANSVAGINAL ULTRASOUND AND CA-125 MEASUREMENT EVERY 6 MONTHS.

### RISK REDUCTION

REGARDING THE NBN GENE, THERE IS CURRENTLY INSUFFICIENT EVIDENCE TO RECOMMEND A PROPHYLACTIC BILATERAL SALPINGO-OOPHORECTOMY, (REMOVAL OF THE FALLOPIAN TUBES AND OVARIES BEFORE CANCER DEVELOPS).

THIS OPTION MAY BE CONSIDERED BASED ON THE FAMILY HISTORY OF OVARIAN CANCER.