



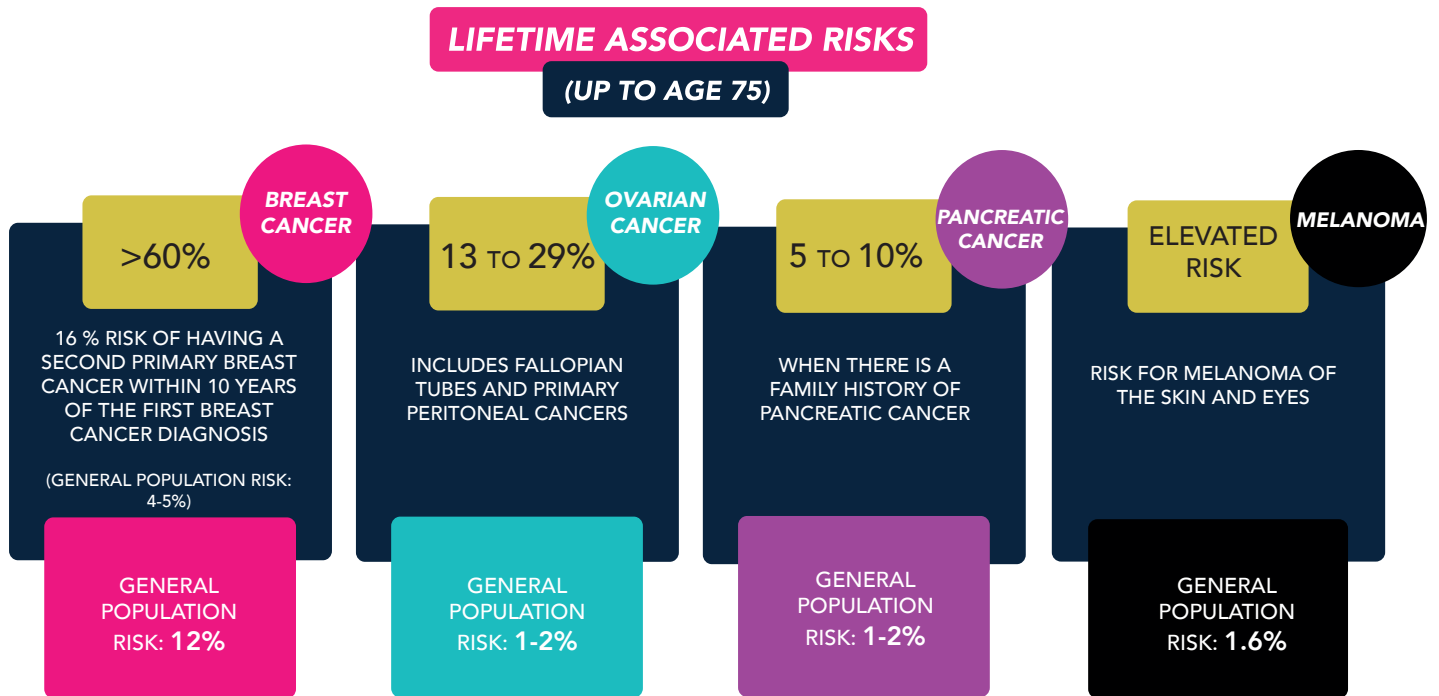
BRCA2 WOMEN



The medical management guidelines from the National Comprehensive Cancer Network (NCCN) for patients with a BRCA2 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.**



References:

Daly M et coll. NCCN Clinical Practice Guidelines in Oncology: Genetic/Familial High-Risk Assessment: Breast, Ovarian and Pancreatic. Version 2.2021. November 20, 2020. <http://www.nccn.org>

Petrucelli N, Daly MB, Pal T. BRCA1- and BRCA2-Associated Hereditary Breast and Ovarian Cancer. 1998 Sep 4 [Updated 2016 Dec 15]. In : Pagon RA, Adam MP, Ardinger HH, et al., editors. GeneReviews® [Internet]. Seattle (WA) : University of Washington, Seattle; 1993-2017. Available at : <https://www.ncbi.nlm.nih.gov/books/NBK1247>

Canto MI, Harinck F, Hruban RH, et coll. International Cancer of the Pancreas Screening (CAPS) Consortium summit on the management of patients with increased risk for familial pancreatic cancer. Gut 2013 ; 62:339-347.

Kuchenbaecker KB, Hopper JL, Barnes DR, et al. Risks of Breast, Ovarian, and Contralateral Breast Cancer for BRCA1 and BRCA2 Mutation Carriers. JAMA. 2017;317(23):2402-2416. doi:10.1001/jama.2017.7112



BRCA2 WOMEN



**** Genetic testing for the BRCA2 gene is recommended for the spouse of an individual with a BRCA2 pathogenic/likely pathogenic variant to assess the risk of Fanconi Anemia in this couple's children.**

When both parents carry a BRCA2 pathogenic/likely pathogenic variant, their children have a 25% risk of inheriting both BRCA2 pathogenic/likely pathogenic variants, which is associated with a rare genetic disease called Fanconi Anemia. This condition is associated with an increased risk of childhood cancers as well as physical anomalies.

BREAST CANCER

OVARIAN CANCER

SCREENING

STARTING AT AGE 18

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

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STARTING AT AGE 30

- BREAST MRI WITH CONTRAST AND MAMMOGRAM **WITH** CONSIDERATION OF TOMOSYNTHESIS EVERY 12 MONTHS (ALTERNATING EACH EXAM EVERY 6 MONTHS)

30

STARTING AT AGE 75

- MANAGEMENT SHOULD BE DETERMINED ON AN INDIVIDUAL BASIS

75

25

STARTING AT AGE 25

OR EARLIER IF PRESENCE OF A FAMILY HISTORY OF BREAST CANCER BEFORE AGE 30

- CLINICAL BREAST EXAM BY A PHYSICIAN EVERY 6 TO 12 MONTHS
- BREAST MAGNETIC RESONANCE IMAGING (MRI) WITH CONTRAST **OR** (ONLY IF MRI IS NOT AVAILABLE), MAMMOGRAM WITH CONSIDERATION OF TOMOSYNTHESIS EVERY 12 MONTHS

35

STARTING AT AGE 30-35

- CONSIDER TRANSVAGINAL ULTRASOUND AND CA-125 MEASUREMENT EVERY 6 MONTHS

IMPORTANT : THESE SCREENING METHODS HAVE NOT BEEN PROVEN EFFECTIVE IN THE DETECTION OF EARLY-STAGE OVARIAN CANCER.



BRCA2 WOMEN



BREAST CANCER

RISK REDUCTION

SURGERY

PROPHYLACTIC BILATERAL MASTECTOMY (REMOVAL OF THE BREASTS BEFORE CANCER DEVELOPS), WITH OR WITHOUT RECONSTRUCTION, HAS BEEN SHOWN TO REDUCE THE RISK OF DEVELOPING BREAST CANCER BY UP TO 90%.

CHEMOPREVENTION

TAMOXIFEN AND RALOXIFEN ARE MEDICATIONS USED TO TREAT BREAST CANCER. THEY ALSO HAVE BEEN SHOWN TO REDUCE THE RISK FOR CERTAIN TYPES OF BREAST CANCER BY UP TO 50%.

OVARIAN CANCER

RISK REDUCTION

SURGERY

- PROPHYLACTIC BILATERAL SALPINGO-OOPHORECTOMY, (REMOVAL OF THE FALLOPIAN TUBES AND OVARIES BEFORE CANCER DEVELOPS), CAN BE PERFORMED **BETWEEN AGE 40 AND 45**, AFTER CHILDBEARING IS COMPLETE.
- THIS SURGERY REDUCES THE RISK OF OVARIAN CANCER BY APPROXIMATELY 96%.
- IF DONE BEFORE NATURAL MENOPAUSE, THIS SURGERY CAN REDUCE THE RISK OF BREAST CANCER.
- HYSTERECTOMY (REMOVAL OF THE UTERUS) MAY ALSO BE CONSIDERED. RECENT DATA SUGGESTS A SLIGHTLY INCREASED RISK OF UTERINE CANCER IN WOMEN WITH A BRCA1 PATHOGENIC / LIKELY PATHOGENIC VARIANT.

NOTE : SALPINGECTOMY ALONE (REMOVAL OF THE FALLOPIAN TUBES WHILE KEEPING THE OVARIES) IS NOT CURRENTLY STANDARD OF CARE FOR RISK REDUCTION.

IMPORTANT : THE HISTOLOGY ANALYSIS OF THE FALLOPIAN TUBES AND OVARIES SHOULD BE THOROUGH TO RULE OUT OCCULT CANCER WHICH MAY BE PRESENT IN ABOUT 5% OF CASES.

CURRENT STUDIES HAVE SHOWN THAT REPLACEMENT HORMONAL THERAPY DOES NOT IMPACT THE RISK REDUCTION FOR BREAST CANCER ASSOCIATED WITH THE PROPHYLACTIC BILATERAL SALPINGO-OOPHORECTOMY.

CHEMOPREVENTION

BIRTH CONTROL PILLS MAY ALSO BE CONSIDERED TO REDUCE THE RISK OF OVARIAN CANCER BY UP TO 60%.



PANCREATIC CANCER SCREENING

CURRENTLY, SCREENING FOR PANCREATIC CANCER IS NOT RECOMMENDED IN ABSENCE OF A FAMILY HISTORY OF PANCREATIC CANCER.

FOR PATHOGENIC/LIKELY PATHOGENIC VARIANT CARRIERS **WITH ≥ 1** FIRST-DEGREE RELATIVE (PARENT, CHILD OR SIBLING) OR SECOND-DEGREE RELATIVE (GRAND-PARENT, AUNT OR UNCLE, NIECE OR NEPHEW) (ON THE SAME SIDE OF THE FAMILY) DIAGNOSED WITH PANCREATIC CANCER:

STARTING AT AGE 50

OR 10 YEARS BEFORE THE EARLIEST PANCREATIC CANCER IN THE FAMILY

- CONSIDER SCREENING WITH MRI/MAGNETIC RESONANCE CHOLANGIOPANCREATOGRAPHY (MRCP) AND/OR ENDOSCOPIC ULTRASONOGRAPHY (EUS), IN AN EXPERIENCED CENTER, IDEALLY UNDER RESEARCH PROTOCOL.

MELANOMA SCREENING

THERE ARE NO SPECIFIC GUIDELINES AVAILABLE FOR SCREENING FOR MELANOMA.

- CONSIDER REFERRAL TO A DERMATOLOGIST FOR WHOLE-BODY SKIN EXAMINATION AND EYE EXAM.

RISK REDUCTION

- IT IS RECOMMENDED TO LIMIT EXPOSURE TO UV RADIATION BY AVOIDING EXCESSIVE SUN EXPOSURE, BY WEARING A HAT, SUNGLASSES AND LONG PROTECTIVE CLOTHES; BY APPLYING SUNSCREEN WITH A SUN PROTECTION FACTOR (SPF) OF 30 OR MORE; BY AVOIDING SUN TANNING BEDS AND LAMPS.
- REPORT TO YOUR HEALTHCARE PROVIDER ANY UNUSUAL OR CHANGES IN BEAUTY MARKS OR MOLES.