PALB2
HEREDITARY BREAST CANCER

4 THINGS YOU NEED TO KNOW

1. Patients with a personal and/or family history of early onset breast cancer or multiple breast cancers should consider genetic testing that includes PALB2.

2. Individuals with a germline mutation in PALB2 are at increased risk for breast, pancreatic and other cancers.

3. Women with a PALB2 mutation should consider increased breast cancer screening and may consider preventive options, such as prophylactic mastectomy to reduce their risk of breast cancer.

4. Family members of patients with a mutation may be at an increased risk for cancer and should consider genetic testing.

WHICH PATIENTS SHOULD CONSIDER GENETIC TESTING FOR PALB2?

Consider testing for PALB2 and other breast cancer related genes for patients with:

- Early onset (<45y) or multiple primary breast cancers
- A close relative with early onset breast cancer or male breast cancer
- Multiple close relatives with breast, pancreatic, prostate, ovarian, or other cancers

HOW DOES A POSITIVE RESULT IMPACT MY PATIENT’S CANCER RISK?

PALB2 Mutation Lifetime Cancer Risks (%)

Note: Biallelic (one mutation in the same gene from each parent) mutations in PALB2 are known to cause Fanconi Anemia (FA). Parents who each carry a mutation in one of these genes have a 25% chance for a child with FA with each pregnancy. These risks should be discussed with mutation carriers of reproductive age.
WHAT ARE THE MEDICAL MANAGEMENT RECOMMENDATIONS* FOR A PATIENT WITH A MUTATION IN PALB2?

- Annual mammogram and breast MRI starting at age 30y
- Consider risk-reducing mastectomy based on family history

*Adapted from national guidelines

WHAT ARE THE IMPLICATIONS FOR MY PATIENT’S FAMILY?

- First degree relatives (parents, siblings, and children) of a patient with a PALB2 mutation have a 50% chance to have the same mutation
- Additional relatives may also be at risk and should consider genetic testing under the advisement of a healthcare professional

TESTS THAT INCLUDE PALB2:
- BRCAplus
- BreastNext
- GYNplus
- OvaNext
- CancerNext
- CancerNext-Expanded
- CustomNext-Cancer

REFERENCES