

Indications for BRCA1/BRCA2 germline testing/referral — NEW ZEALAND

In Aotearoa New Zealand, there is **no population BRCA screening programme**. Health NZ/Te Aho o Te Kahu recommends assessment for hereditary cancer risk, with referral/testing based on personal and whānau cancer history and tumour characteristics. Importantly, the current NZ breast cancer pathway explicitly states that **New Zealand practice is informed by the [eviQ cancer-genetics referral guidelines](#)**.

Clinical setting	Current NZ indication for genetic assessment / BRCA1/2 testing
Known pathogenic variant in the family	An untested adult blood relative of someone with a pathogenic variant in BRCA1, BRCA2 or another relevant cancer-predisposition gene should be referred for predictive testing/genetic counselling. Health NZ specifically advises that predictive testing be undertaken through genetic counselling.
Breast cancer ≤50 years	Current eviQ testing criteria informing NZ practice include female breast cancer diagnosed at ≤50 years .
Triple-negative breast cancer	Triple-negative breast cancer at any age is currently an indication to consider germline BRCA1/2/PALB2 testing.
Male breast cancer	Male breast cancer at any age meets current genetic testing criteria.
Breast cancer age 51–60 with additional risk features	Testing is considered where there is bilateral breast cancer , or an untested first-/second-degree relative with breast cancer ≤50, male breast cancer, high-grade epithelial ovarian cancer, or pancreatic adenocarcinoma.
Breast cancer with ≥10% pathogenic-variant probability	Germline testing should be considered where a validated model such as CanRisk gives ≥10% probability of a pathogenic variant in a breast/ovarian cancer gene; a Manchester score meeting the equivalent threshold is also included in current criteria.
Breast cancer where BRCA status alters systemic therapy	Testing may be appropriate where demonstration of a BRCA1/2 pathogenic variant would determine eligibility for relevant systemic treatment .
High-grade epithelial ovarian / fallopian-tube / primary peritoneal cancer	High-grade epithelial ovarian, fallopian-tube or primary peritoneal cancer at any age meets current BRCA1/2/PALB2 testing criteria.
Serous tubal intraepithelial carcinoma (STIC)	STIC diagnosed at any age is included as an indication for germline BRCA1/2/PALB2 testing.
Other epithelial ovarian cancer with relevant family history	NZ ovarian guidance recommends genetics assessment where familial features are present. Examples include a first-/second-degree relative with invasive epithelial ovarian/fallopian-tube/primary-peritoneal cancer plus another close relative with ovarian, breast, early colorectal or early endometrial cancer.
Pancreatic cancer	Current BRCA1/2/PALB2 testing guidance includes adenocarcinoma of the pancreas, ampulla of Vater or cholangiocarcinoma at any age .
Prostate cancer	Individuals meeting the relevant prostate cancer hereditary panel-testing criteria should be considered for germline testing; BRCA2 in particular forms part of the hereditary prostate-cancer assessment pathway.
Unaffected person with strong whānau history	Referral is appropriate for a strong familial pattern. Current criteria include an unaffected person with ≥10% predicted probability of a pathogenic variant using CanRisk; breast-cancer referral criteria also include an unaffected woman with >30% lifetime breast-cancer risk using iPrevent.
Untested first-degree relative with high-grade ovarian cancer	An unaffected woman whose first-degree relative had high-grade epithelial ovarian cancer and is unavailable for testing is specifically included for consideration of genetic testing/referral.
Tumour BRCA result suggesting germline disease	A pathogenic/likely pathogenic BRCA1 or BRCA2 variant detected on tumour testing , particularly at an allele frequency suggesting possible germline origin, warrants consideration of germline confirmation/genetics referral.