

Referrals to Edmonton Cancer Genetics Clinic

The program is designed to offer cancer risk assessment, genetic counselling and, when appropriate, arrange genetic testing in patients at high risk for hereditary cancer (cancer associated with mutations in known cancer susceptibility genes).

Contact:	By Phone:	780-407-7333	By FAX:	780-407-6845
	By Mail:	Medical Genetics Clinic University of Alberta 8-53 Medical Sciences Building Edmonton, Alberta T6G 2H7		

Clinic Protocol

1. Referral (letter preferred) by specialist or primary care physician to the Cancer Genetics Clinic.
2. Preliminary workup by us – pedigree construction and obtaining/reviewing medical records.
3. Appointment made with patient/family.
4. First appointment. Contents to include: assessment of hereditary cancer risk in patient/family; discussion of potential molecular testing including risks/benefits/limitations; recommendations for clinical management. Letter sent to patient(s), referring physician, and other physician(s) as designated by patient.
5. Where possible, and if patient/family interested, genetic testing proceeds. *Except in VERY exceptional circumstances, this testing is possible only if there is a living cancer survivor in the family, and this individual is willing to participate.*
6. Results relayed back to patient/family in second appointment. Further discussion of genetic cancer risk in patient/family; recommendations for clinical management. Letter sent to patient(s), referring physician, and other physician(s) as designated by patient.
7. If a pathogenic mutation is identified, other family members may request counselling/testing.

Referral Criteria - Hereditary Breast or Breast-Ovarian Cancer

1. Relatives of an individual with a confirmed pathogenic BRCA1 or BRCA2 mutation.

Breast Cancer

1. Personal history of breast cancer diagnosed before age 40.
2. Personal history of breast cancer diagnosed before age 50, AND a first or second degree relative with breast cancer diagnosed before age 50.
3. Personal history of breast cancer, AND two related family members with breast cancer diagnosed at any age, spanning two generations.
4. Personal history of more than one primary breast cancer, one diagnosed before age 50.
5. Personal history of “triple negative” tumour (ER-ve, PR-ve, Her2-ve), diagnosed before age 50

Ovarian Cancer

1. Personal history of invasive serous ovarian cancer diagnosed at any age.
2. Personal history of ovarian cancer* diagnosed before age 50.
3. Personal history of ovarian cancer* diagnosed at any age, AND a first or second degree relative diagnosed with ovarian cancer* at any age.

*ovarian cancer refers to invasive non-mucinous epithelial ovarian cancer, and includes primary peritoneal cancers and primary fallopian tube cancers.

Breast and Ovarian Cancer

1. Personal history of both breast and ovarian cancer* diagnosed at any age.
2. Personal history of breast cancer diagnosed before age 50 AND a first or second degree relative with ovarian cancer* at any age.
3. Personal history of male breast cancer diagnosed before age 65

Ashkenazi Jewish Ancestry:

1. Personal history of breast or ovarian cancer* diagnosed any age (genetic testing is limited to the Ashkenazi mutation panel followed by a full screen ONLY for individuals who meet another criteria).
2. Unaffected individuals with a first degree relative with breast cancer diagnosed before age 50, ovarian cancer* diagnosed at any age, male breast cancer diagnosed at any age, or multiple related relatives with breast and/or ovarian cancer*diagnosed at any age (genetic testing is limited to the Ashkenazi mutation panel ONLY).

Other:

1. Families who have a significant clustering (above general population prevalence) of breast and/or ovarian cancer, but who do NOT meet above criteria (for assessment only).

Referral Criteria – Hereditary Colorectal Cancer

1. Relatives of an individual with a confirmed pathogenic FAP or Lynch (HNPCC) mutation

Familial Adenomatous Polyposis (FAP):

1. Firm, clinical diagnosis of FAP in patient or first-degree relative

Ashkenazi Jewish Ancestry:

1. Any individual of Ashkenazi Jewish descent with a personal or family history of colorectal cancer in a first degree relative may be tested for the APC mutation I1307K.

Lynch Syndrome (formerly known as Hereditary Non-Polyposis Colorectal Cancer (HNPCC):**

1. Three family members with colorectal or colorectal PLUS related cancer (stomach, pancreas, gallbladder, endometrium, ovary, kidney, ureter, bladder, small bowel) ie. Modified Amsterdam Criteria. One cancer must be diagnosed under the age of 50; one affected individual must be a first degree relative of the other two; at least two successive generations must be affected.
2. Tumour IHC results suggestive of a germline mutation in the patient or deceased first degree relative.

** Individuals meeting Bethesda criteria for possible Lynch Syndrome should first have MSI (microsatellite instability) and/or IHC (immunohistochemistry) testing on their tumour(s). These tests of performed by pathology.

Referral Criteria – Other Specific Hereditary Cancer Syndromes

1. Individuals/families with suspected or known hereditary cancer syndromes (such as Multiple Endocrine Neoplasia, von Hippel-Lindau syndrome, Li-Fraumeni, other)

Referral Criteria – Other

Cancer is common in the general population. Certain family characteristics may raise concern for hereditary cancer:

1. Two or more cases of an uncommon cancer in first and/or second degree relatives
2. Cancer that is diagnosed much younger than usual, where there is another cancer of the same type, at any age, in a first and/or second degree relative
3. Clustering of cancer in a family, significantly above expected for the size of family

Exceptions:

- a. Lung – almost always due to personal or second-hand smoking, or environmental exposure
- b. Cervical – almost always due to a viral infection

If you are uncertain about whether a patient/family may be at risk for hereditary cancer, please contact 780-407-7333 and speak to the genetic counsellor or Dr. D Gilchrist.