

## Criteria for Referral for Cancer Genetics Evaluation

**Directions:** Evaluate cancer history on **both** sides of the family history. Include:

- Patient's cancer history
- First degree relatives (parents, siblings, children)
- Second degree relatives (aunts, uncles, nieces, nephews, grandparents) and
- Third degree relatives (cousins, great-grandparents, great-aunts and uncles).

Refer patients who have cancer in their personal or family history on the same side who meet any of the following criteria.

### Breast and Ovarian Cancer

- Personal or family history of mutation in cancer susceptibility gene
- 1 person with breast cancer if
  - diagnosed  $\leq$  age 50 **or**
  - Ashkenazi Jewish **or**
  - 2 breast primaries **or**
  - Triple negative breast cancer **or**
  - Male breast cancer **or**
  - Known gene mutation in family
  - Personal or family history of *any of the following cancers*: ovarian, pancreatic, prostate, sarcoma, adrenocortical, brain, endometrial, thyroid, leukemia, lymphoma, diffuse gastric
- 2 people on same side of family with breast cancer
- 1 person with ovarian cancer

### Melanoma

- Personal or family history of mutation in cancer susceptibility gene
- $\geq 2$  people on the same side of the family with melanoma and/or pancreatic cancer

### Colorectal and Endometrial Cancers

- Personal or family history of mutation in cancer susceptibility gene
- 1 person with endometrial cancer if
  - diagnosed  $\leq$  age 50 **or**
  - personal or family history of Lynch syndrome cancers\* **or**
  - positive tumor testing for Lynch syndrome
- 1 person with colorectal cancer if
  - diagnosed  $\leq$  age 50 **or**
  - $\geq 10$  adenomas **or**
  - polyposis or multiple hamartomas **or**
  - personal or family history of Lynch syndrome cancers\* **or**
  - personal or family history of desmoids **or**
  - positive tumor testing for Lynch syndrome
- 2 Lynch syndrome cancers\* in one person, one diagnosed  $<$  age 50
- 2 Lynch syndrome cancers\* on same side of family, one diagnosed  $<$  age 50
- 3 Lynch syndrome cancers\* on same side of family (any age)
- person with 10 or more colorectal adenomas

\***Lynch syndrome cancers**=

colorectal, endometrial, stomach, ovarian, pancreatic, ureter, renal pelvis, biliary tract, brain, small bowel cancer, or sebaceous adenoma/carcinoma

### Endocrine Cancers

- Personal or family history of mutation in cancer susceptibility gene
- Personal or family history of 1 person with ANY of the following:
  - medullary thyroid cancer
  - pheochromocytoma
  - paraganglioma
  - carotid body tumor
  - adrenalcortical carcinoma
- 2 or more tumors associated with Multiple Endocrine Neoplasia, type 1 in one person OR on same side of the family:
  - parathyroid hyperplasia
  - pancreatic islet neuroendocrine
  - pituitary
- 2 people on same side of family with thyroid cancer, breast cancer, renal or endometrial cancer

### Pancreatic Cancer

- Personal or family history of mutation in cancer susceptibility gene
- 2 people on same side of family with pancreatic cancer
- 1 person with pancreatic cancer AND personal or family history of melanoma, breast, ovarian, colon cancers

### Gastric Cancer

- Personal or family history of mutation in cancer susceptibility gene
- 1 person with diffuse gastric cancer if
  - diagnosed  $\leq$  age 50 **or**
  - personal or family history of lobular breast cancer or colon cancer
- 2 people on the same side of the family with diffuse gastric cancer

## Familial Renal Cancer

- Personal or family history of mutation in cancer susceptibility gene
- 1 person with kidney cancer if
  - Early age of onset **or**
  - multifocal or bilateral disease **or**
  - chromophobe or oncocytic pathology **or**
- 1 with renal cancer and personal or family history of:
  - uterine fibroids
  - cutaneous leiomyoma
  - thyroid or breast cancer
  - hemangioblastoma
  - pheochromocytoma
  - spontaneous pneumothorax
  - fibrofolliculoma
- ≥2 with renal cancer

## Single Case of:

- Adrenocortical carcinoma
- Retinoblastoma
- Wilms tumor (bilateral)
- Pheochromocytoma
- Medullary thyroid cancer
- Paraganglioma or carotid body tumors
- Hepatoblastoma
- Hemangioblastoma of brain or spine
- Pleuropulmonary blastoma
- Choroid plexus carcinoma
- Pediatric rhabdoid tumor: kidney or brain
- Optic glioma

## Resources for Family History Collection

US Surgeon General [www.hhs.gov/familyhistory](http://www.hhs.gov/familyhistory)  
American Medical Association <http://www.ama-assn.org/ama/pub/category/2380.html>  
March of Dimes [http://www.marchofdimes.com/pnhec/4439\\_1109.asp](http://www.marchofdimes.com/pnhec/4439_1109.asp)  
National Society of Genetic Counselors <http://www.nsgc.org/consumer/familytree/index.cfm>

## For More Information — Ohio Cancer Risk Assessment

### — Akron —

**Akron Children's Hospital**  
Genetic Cancer Program: **330-543-8792**  
[www.akronchildrens.org/hereditarycancer](http://www.akronchildrens.org/hereditarycancer)

### — Canton —

**Aultman Hospital**  
Cancer Genetics Program: **330-363-4363**  
[www.aultman.com](http://www.aultman.com)

### — Cincinnati —

**Cincinnati Children's Hospital Medical Center**  
Hereditary Cancer Program: **513-636-4760**  
<http://bit.ly/171eEbW>

**Tri Health Institute**  
Cancer Genetics Program: **513-865-5578**  
<http://bit.ly/15fKZ1C>

### — Cleveland —

**Cleveland Clinic**, Center for Personalized Genetic Healthcare: **216-445-5686**  
<http://bit.ly/17vhPHJ>

**Hillcrest Hospital**  
Cancer Program: **440-312-5634**  
[www.hillcresthospital.org](http://www.hillcresthospital.org)

**MetroHealth Medical Center**  
Hereditary Cancer Clinic: **216-778-4323**  
<http://bit.ly/13JM6S2>

**University Hospital Center for Human Genetics**  
Cancer Genetics Clinic: **216-844-3936**  
<http://bit.ly/190DFpS>

### — Columbus —

**Mount Carmel Health System**  
Cancer Risk Program: **614-546-4330**  
<http://bit.ly/191dhfE>

**OhioHealth Genetics Counseling**: **614-566-4363**  
[www.ohiohealthcancercare.com](http://www.ohiohealthcancercare.com)

**Nationwide Children's Hospital**  
Hematology/Oncology/BMT Genetics Program: **614-722-3695**  
<http://bit.ly/mJCHkO>

**The Ohio State University James Cancer Hospital and Solove Research Institute**  
Clinical Cancer Genetics Program: **614-293-6694** or **888-329-1654**  
<http://bit.ly/1b8Xufi>

### — Dayton —

**Dayton Children's—The Children's Medical Center**  
Cancer Genetics Program: **937-641-3800**  
<http://bit.ly/19KGGou>

**Miami Valley Hospital**  
Cancer Genetics Services: **937-438-3830**  
<http://bit.ly/13CXNgV>

### — Toledo —

**Mercy St. Vincent Medical Center**  
Hereditary Cancer Program: **419-383-3727**  
[www.mercyweb.org/childrens\\_genetics.aspx](http://www.mercyweb.org/childrens_genetics.aspx)

**ProMedica Cancer Institute**, Hickman Cancer Center at Flower Hospital: **419-824-1952**  
[www.promedica.org/cancergenetics](http://www.promedica.org/cancergenetics)

### — Youngstown —

**Akron Children's Hospital**, Boardman Medical Pavilion, Cancer Genetics Program: **330-729-1145**  
<http://bit.ly/14ggUgF>

