

Checklist for Cancer Genetics Evaluation

Patient Name _____ DOB _____ MRN _____

Date completed/updated _____

Directions: Evaluate cancer history on **both** sides of the family and include:

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

Refer patients who have cancer or a family history of cancer (on the same side of family)

❖ Lynch Syndrome (Hereditary Nonpolyposis Colorectal Cancer)

- Mutation in *MLH1*, *MSH2*, *MSH6*, *PMS2*
- Colon cancer < 50
- Endometrial cancer < 50
- ≥ 2 Lynch tumors* in one person (any age)
- ≥ 2 Lynch tumors in family, one <50
- ≥ 3 Lynch tumors in family (any age)
- MSI-H and/or IHC positive tumor

**Includes colorectal, endometrial, stomach, ovarian, pancreas, ureter and renal pelvis, biliary tract, brain, sebaceous gland, small bowel cancer*

❖ Hereditary Colorectal Polyposis

- Mutation in *APC* or *MYH* genes
- ≥ 10 to 20 accumulated colorectal polyps
- Family history of polyposis

❖ Hereditary Breast Ovarian Cancer

- Mutation in *BRCA1* or *BRCA2* genes
- Personal hx of breast cancer IF
 - ≤ 40 OR
 - Ashkenazi Jewish (any age)
- 2 people with breast cancer IF
 - ≥ 1 diagnosed ≤ 50 OR
 - ≥ 1 male breast cancer OR
 - ≥ 1 with multiple primary foci
 - 3 people with breast cancer (any age)
- Breast and ovarian ca in person or family
- Personal history of ovarian cancer

Combination of the following:

- Breast, thyroid, renal, endometrial
- Breast, sarcoma, adrenal cortical, leukemia, brain, other
- Breast, ovarian (sex cord with annular tubules), GI cancer/polyps
- Lobular breast and diffuse gastric ca

❖ Plan:

- Refer for genetic evaluation Appointment _____
- Genetic testing for _____ Result _____
- Test affected family member
- Declines testing
- Increased screening measures:
(1) _____ (2) _____ (3) _____

Adapted with permission from the Ohio Department of Health

❖ Melanoma

- Mutation in *CDKN2A* gene
- multiple primary melanomas
- > 2 people melanoma and/or pancreatic ca

❖ Multiple Endocrine Neoplasias

- Mutation in *MEN1* or *RET* genes
- ≥ 2 of the following (patient and/or family):
 - Pancreatic (islet cell) cancer
 - Parathyroid hyperplasia
 - Pituitary adenoma
- ≥ 1 Medullary thyroid cancer (any age)
- ≥ 1 Pheochromocytoma

❖ Familial Renal Cancer

- Familial mutation in *VHL* or other renal cancer susceptibility gene
- Bilateral or multiple primary renal cancer
- ≥ 2 with renal cancer
- ≥ 1 with renal cancer AND:
 - Multiple renal cysts OR
 - Hemangioblastoma OR
 - Pheochromocytoma OR
 - Pancreatic tumors/cysts OR
 - Multiple bilateral lung cysts OR
 - Spontaneous pneumothorax
- Rare renal tumors: renal oncocytoma, chromophobe, oncocytic hybrid tumor

❖ Miscellaneous

- Single case of rare tumor
- 3 or more cases of:
 - ❖ Brain tumor
 - ❖ Hematological malignancy
 - ❖ Prostate cancer
 - ❖ Lung cancer
 - ❖ Non-medullary thyroid cancer
 - ❖ Pancreatic cancer
 - ❖ Sarcoma
 - ❖ Stomach cancer