Biomarker Testing Nursing Process

Assess all patients with cancer for appropriate germline and/or somatic biomarker testing to inform the treatment plan. You may be unfamiliar with some of the terms on this algorithm; refer to the ONS Genomics Taxonomy* for evidence-based definitions.

Does the patient have biomarker testing results?

YES — Paired somatic and germline
Ensure the patient has been seen by a genetics healthcare professional in the past year.

Review the Paired Somatic and Germline Testing Resource* for additional considerations.

YES — Germline
Ensure the patient has been seen by a genetics healthcare professional in the past year.

Provide patient education and support.*

YES — Somatic
Do results indicate the need for germline biomarker testing?
If yes, refer to a genetics healthcare professional.

Are there clinically actionable biomarkers?

YES
Advocate for appropriate intervention.
Germline testing: Refer to a genetics healthcare professional.
Somatic testing: Notify the healthcare team.

NO
No actionable target was identified. No immediate nursing action is indicated.

NO
Reevaluate if there is progression or recurrence, or if patient or family history changes.

NO
Should the patient have undergone somatic, germline, or paired germline and somatic biomarker testing?*

YES

Germline: Does the patient have a personal or family history that is consistent with hereditary cancer? Review the ONS When to Refer to a Genetics Professional quick guide.*

Somatic: Is biomarker testing associated with the tumor type? Refer to the NCCN Guidelines.**

What implications does this have on the treatment plan?