

Oncology Nursing Society's Genomics and Precision Oncology Learning Library Resources for Nursing Practice

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Oncology nurses need an understanding of genomic science to provide optimal care, yet they may have limited background in how this science guides treatment. The Oncology Nursing Society (ONS) responded to this identified need by developing the ONS Genomics and Precision Oncology Learning Library. Oncology nurses, nursing faculty, staff educators, and administrators can use these resources to support genomics-informed care.

AT A GLANCE

- Oncology nurses regularly provide staff and patient education about how genomic science guides care across the cancer trajectory.
- The ONS Genomics and Precision Oncology Learning Library provides more than 50 unique resources developed by genomics experts for professional education, patient education, and clinical practice, as well as a clinical decision support tool for biomarker testing.
- Diverse stakeholders can use the resources in the Learning Library for personal professional development, staff education, patient education, and clinical decision-making to provide optimal genomics-informed care.

KEYWORDS

genomics; precision oncology; staff education; nursing education resources

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Genomic science guides cancer care across the cancer trajectory. As members of the interprofessional healthcare team, oncology nurses assess for and support genomic-associated biomarker testing and results management throughout the testing process. Nurses often reinforce patient education from the provider, identify biomarker test results that inform treatment options, and provide emotional support to patients and families affected by the results (Dodson, 2018; Rahman et al., 2022). In addition to somatic biomarker testing of the tumor, nurses compile family histories suggestive of potential germline (inherited) risk, facilitate referrals to genetics professionals, and coordinate care for cancer prevention and screening based on the results of germline testing (Greco et al., 2012; Hoxhaj et al., 2021).

As the role of oncology nurses evolves in delivering genomic-associated clinical care, many nurses lack a knowledge base regarding the application of biomarker testing results and a foundation that supports patient shared decision-making based on family history and genomic information (Gleeson et al., 2020; Seven et al., 2017). To build a clinical knowledge base, confidence, and clinical skills associated with genomics and biomarker testing, nurses benefit from education and access to resources (Rahman et al., 2022).

Studies and a 2020 Oncology Nursing Society (ONS) survey confirm that nurses lack knowledge about genomic applications to clinical oncology practice despite regularly having genomics-based conversations with patients and/or family members (Rahman et al., 2022). In February 2020, ONS, through a first-of-its-kind memberwide survey, assessed the genomics learning needs of oncology nurses across the United States. A total of 701 surveys were returned. More than 72% ($n = 505$) of the respondents did not receive genomics content in their prelicensure curriculum, and 45% ($n = 315$) reported that their overall genomics knowledge was poor. These results indicate that a significant number of survey respondents identified a need to attain genomics education postlicensure. Knowledge question responses suggest that most nurses were uncertain about some foundational genomics concepts. In addition, 49% ($n = 343$) reported that their ability to discuss genomics was poor. However, respondents overwhelmingly indicated that a