
Category III-D-4. Medical Oncology Decision Making

Patient-centric Development of Shared Decision-making Aids: The ASSESS Online Personalized Early Breast Cancer Treatment Decision Support Tool and Resource Website

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Objective: People newly diagnosed with breast cancer spend a considerable amount of time researching their diagnosis, treatment options and associated side effects. Even with access to trusted evidence-based information, such as Susan G. Komen's About Breast Cancer pages (<https://www.komen.org/breast-cancer/>), patients and doctors may struggle to account for the many factors in an individual's diagnosis that influence treatment and outcomes, making it hard to balance the potential benefits of therapy with the risks of side effects on a personalized basis. The discontinuation of the popular adjuvant! Online tool compounded this challenge, creating a need for a new, publicly available tool to provide survival estimates for the U.S. early-stage breast cancer population.

Materials and Methods: Komen collaborated with teams from MD Anderson and Yale Cancer Centers to develop a web-based decision support tool that

provides personalized five-year survival estimates for women with early-stage breast cancer. The tool, ASSESS, uses an algorithm developed with U.S.-based SEER data to estimate outcomes for various systemic adjuvant therapies based on an individual's clinical and pathological characteristics. The ASSESS online tool was designed and built by a multidisciplinary team of experts, including scientists, clinicians, website developers and marketing professionals, using an iterative approach to incorporate feedback from breast cancer patient advocates and clinicians. Initial design requirements for ASSESS included a simple, engaging user interface and a public-facing design suitable for clinical use as a shared decision-making tool. It was designed to be responsive and support use on multiple devices, incorporating best practices for communicating risks and offering a summary feature to save and print results. Cognitive interviews with patient advocates and breast cancer clinicians informed the tool's design, resulting in changes that made the interface and output clearer and more accessible to a lay audience. Once finalized, additional usability testing was conducted with patient advocates and breast cancer medical oncologists to ensure the tool was deployed as intended.

Results: The ASSESS tool (www.komen.org/assess-tool), which was launched in December 2025, helps providers visually demonstrate outcomes for different treatment options and provides links to accessible information that can be shared with patients for each treatment, including details on how it works, its side effects, and references to the associated expert clinical guidelines.

Conclusion: Built using a patient-centered approach, the ASSESS tool supports shared decision-making for people with early-stage breast cancer, helping them make the best individual decisions for their treatment and care.

Keywords: Newly diagnosed; advocates; treatment