From the Editor

Debu Tripathy, MD
Editor-in-Chief

The treatment of early-stage breast cancer represents a very large part of most oncology practices. The field has moved rapidly with the introduction of newer drugs and sequences across the spectrum of subtypes—hormone-responsive, HER2+, and triple-negative disease. However, as the overall outcomes improve, it is becoming more challenging to continue to raise the bar, and the trials that are needed have become larger. In addition, clinicians and patients face dilemmas regarding how to apply the findings of recent trials to clinical practice in lower-risk cases, where small benefits must be traded off against short- and long-term side effects of therapy.

In this issue of *AJHO*, two feature articles, by Drs Santa-Maria and Gradishar and by Drs Isaacs and Roesch, cover the nuances of extended hormonal therapy and ovarian suppression, as well as the treatment of small HER2+ tumors. In addition to quantifying the lowering of recurrence and death risk for individual cases, today's oncologists need to understand their patients' goals and values, and better appreciate the toxicities and costs of therapy and how these may affect the overall treatment decisions. While it has been shown that patients prefer a shared decision-making approach, they do not simply want to be given a set of choices to think over, but really want true counseling in arriving at a decision that is right for their situation and leaves them with the least amount of "decisional regret."

As the authors point out, we need better tools to further personalize therapy in order to more precisely estimate the benefits versus the associated side effects for individual patients. The articles cover this nicely in the context of extended hormonal therapy and gene profiling assays that could help identify patients with hormone receptor-positive disease that might merit a full additional 5 years of therapy or, for premenopausal patients, identify patients who would benefit from ovarian blockade.

Another concern is that the era of large phase III trials with several thousand patients per arm is coming to a close, despite this being the size needed to demonstrate small benefits in the range of 3% to 5% differences in 5- to 10-year disease-free survival. It is a good problem to have—we welcome very low rates of recurrence and continue to find ways to focus our therapies more on those who need them. The National Cancer Institute is prioritizing the funding of "smaller and smarter" trials that use surrogate endpoints, newer tissue and blood assays, and even computer-assisted modeling to run "virtual trials." In some cases, a single-arm trial may be sufficient to change practice, as evidenced by the weekly paclitaxel and trastuzumab regimen showing a >98% 3-year invasive disease-free survival rate,[1] which is increasingly being adopted into practice and serving as the "control" arm compared with the immunoconjugate ado-trastuzumab emtansine (T-DM1) for 1 year in the ATEMPT trial. There is still much room for improvement, especially for those who present with higher-risk breast cancer.

REFERENCE

1. Tolaney SM, Barry WT, Dang CT, et al. Adjuvant paclitaxel and trastuzumab for node-negative, HER2-positive breast cancer. *N Engl J Med.* 2015;372(2):134-141.