BY WILLIAM D. TAP, MD | Editor-In-Chief

Clinical trials in sarcoma bring hope and promise

In this issue of *The Sarcoma Journal*, we highlight research and developments presented at the 2019 ASCO annual meeting. Despite the rarity of sarcoma, it was not lost among the thousands of abstracts, posters, and talks presented during the four-and-a-half days of the meeting.

In the past 5 years, there has been a resurgence of phase 3 clinical trials in sarcoma, including several large first-line studies comparing combination therapies to doxorubicin—the gold standard since the mid-1970s. None have shown superiority. Despite this, there has been a gradual improvement in overall survival. This is attributed to advances in the multidisciplinary management of sarcomas and available supportive care services as well as a better understanding of and emergent therapies for individual sarcoma subtypes.

In the United States, we have seen the approval of several agents in sarcoma: pazopanib, with a 3-month improvement in progression-free survival (PFS) over placebo; trabectedin in liposarcoma and leiomyosarcoma, with a 2.7-month improvement in PFS over dacarbazine; and eribulin, based on a liposarcoma subgroup analysis that showed a 7-month improvement in overall survival over dacarbazine. None of these therapies are approved in the US in the front-line setting; rather, all after a patient generally receives a doxorubicin-based therapy.

We have learned a great deal from these studies. They highlight some of the challenges in designing clinical trials in a rare and heterogeneous group of malignancies. The sarcoma community is very much focused on overcoming these challenges by designing clinical trials appropriate to the disease and the therapy that is being studied. This includes the incorporation of novel endpoints, imaging modalities, patient-reported outcome measures, and statistical methodologies to best serve the patient and to determine whether and how the therapy is helping them.

There is tremendous hope and promise in sarcoma due to significant advancements in our understanding of mesenchymal biology and of the genetic diversity in these diseases. This has led to an influx of promising agents and trials, many of which have transformed treatment paradigms on specific sarcoma subtypes. This issue provides a glimpse into the progress being made.

From Dr. Tap's plenary presentation at ASCO 2019

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