The Quickening Pace of Oncology Research

One of the hallmarks of the oncology scientific community has been a general reluctance to sensationalize advances. Although the news media tends to blare forth with the breakthrough of the week, or even du jour, investigators reporting results usually cloak them with caution and almost always point to the need for further studies.

This is not to say, however, that the oncology community is shrouded in a pall of pessimism. The willingness to treat these devastating diseases and provide compassionate support and hope, grounded in realistic expectations, has earned the specialty the (sometimes begrudging) admiration of non-oncology practitioners. And for many years, one of the precepts that enabled oncologists to provide honest succor to patients was the well-grounded belief that progress was being made, if slowly, in small but well-defined increments.

Thus, the breathtaking change in pace we see now in understanding the underlying mechanisms of carcinogenesis and introducing innovative approaches to therapy based on this understanding that now confronts (blesses) the oncology world evokes almost a sense of disbelief. I would guess that, for the past decade, no clinician has left a major meeting thinking, “nothing really new is happening.”

Multiple myeloma, highlighted in this issue, may well serve as the cover disease for this remarkable change of pace. When first published, the NCCN Multiple Myeloma Clinical Practice Guidelines rested squarely on standard alkylating agents and corticosteroid treatment or well-tested regimens such as VAD that had been the mainstay of treatment for more than 30 years.

Since this initial guideline was originally released, two remarkable new agents, thalidomide, reported in 1999, and bortezomib, reported in 2003, have been added to the list of efficacious agents for the management of advanced disease. Patients with refractory or relapsing myeloma now have solid options for achieving meaningful responses, with increases in time to progression and perhaps even survival. Ongoing studies are now incorporating these agents into new combinations, and these studies will, hopefully, lead to even more beneficial responses.

The area of high-dose therapy with bone marrow support has shown the greatest changes. As detailed in the review by Bensinger, researchers appear to have solid evidence for the role of high-dose, autologous-supported chemotherapy, either up front or at the time of relapse, in improving overall survival. Of possibly greater import is the profusion of studies of allogeneic-oriented therapies that may lead to even more durable control of the disease. The path is not an easy one; transplant-related toxicity and mortality is still a reality. However, experiments with non-myeloablative regimens and controlled graft-versus-myeloma interactions make cautious optimism a reasonable outlook.

And as repeatedly pointed out in JNCCN articles, the goal must always be defined in terms of patient benefit. Lee’s review of the role of quality of life studies being interjected into all phases of myeloma testing speaks to the tremendous emphasis on assessing new therapies from a quality as well as quantity perspective. This becomes especially essential for treatments that carry significant side-effects. For instance, meaningful assessment of the role of interferon is not
possible without balancing its benefits for maintaining response with the price that must be paid. Hopefully, as new regimens and approaches are tested, these quality of life studies will be included at the onset. Thus, when final trial results are available, the clinician caring for the myeloma patient will be able to honestly and forthrightly discuss the complete ramifications of each therapeutic option.

To keep pace with this prodigious outpouring of new information, JNCCN is committed to publishing full updates of each of its guidelines on an every 2- to 3-year cycle. Because all guidelines are updated on an annual basis, we will also feature more frequent concise updates to alert readers that new findings have led to substantive changes. The reader can then access the full guideline at www.nccn.org to get a fuller explanation of the impact of the new trial results.

What exciting times we live in.

References