LETTER FROM THE EDITOR

Almost 40 years ago, while I was at the National Cancer Institute (NCI), my branch director suggested that several of us band together to produce a manuscript on differentiating agents in cancer. At the time, there was a hypothesis that if we could induce tumor cells to terminally differentiate, we could cure these diseases. As the hematologist in the group, I focused on acute myelogenous leukemia (AML) and myelodysplastic syndrome (MDS)—notably their treatment with low-dose cytarabine, which was *en vogue* at the time.

What I encountered in the hundreds of published papers was that the definitions of response varied so widely that a "response" in one study was a "failure" in another. So, I took it upon myself to develop a standard definition. I then applied this definition to the data, resulting in a series of publications and presentations of my own on the topic of low-dose cytarabine. What followed was a career-long interest in more formally standardizing response criteria for various hematologic disorders. I convened a group of experts, first as the NCI-sponsored Working Group, and later—when I escaped the government—a series of international working groups. Criteria were generated for chronic lymphocytic leukemia (updated 3 times), lymphoma (updated 3 times), AML (updated twice), and MDS (updated twice). These have remained the standards.

Two papers were just published electronically in the *Journal of Clinical Oncology* that were the culmination of 3 years of effort by a group of hematologist-oncologists, pathologists, radiologists, and nuclear medicine physicians (Cheson BD et al. *J Clin Oncol*. 2014. doi:10.1200/JCO.2013.54.8800 and Barrington SF et al. *J Clin Oncol*. 2014. doi:10.1200/JCO.2013.53.5229). This effort began in June 2011 in the beautiful town of Lugano, Switzerland, at the 11th International Conference on Malignant Lymphoma (ICML). Every 2 years, the world's lymphoma researchers convene at that scenic lakeside town for perhaps the best lymphoma conference, a meeting founded by Dr Franco Cavalli. Three years ago, we convened a meeting that included representatives of most of the major cooperative groups and cancer centers in the world that are involved in lymphoma research to update the International Harmonization Project on Lymphoma recommendations of 2007. The objectives had been to simplify past criteria, delete tests and designations no longer necessary, and result in practices more relevant to how patients are currently evaluated and treated.

Task forces were formed (one for imaging, the other for clinical issues), additional meetings and conference calls were held, and another get-together was scheduled 2 years later, at the 12th ICML meeting. The result of these efforts was these 2 papers, one describing the current role of ^{18}F-fluorodeoxyglucose–positron emission tomography/computed tomography (FDG-PET/CT) in lymphoma, and the other revising both staging and response assessment of these patients. The recommendations included that FDG-PET/CT be the standard for staging of FDG-avid lymphomas. Although a modified Ann Arbor staging system is still used to delineate the extent of the disease, treatment should be directed more by whether disease is limited or advanced, and various prognostic factors. The designations *A* and *B* for absence or presence of disease-related symptoms remain relevant only for Hodgkin lymphoma. With the use of FDG-PET/CT, routine chest x-ray becomes superfluous, and the dreaded bone marrow biopsy becomes unnecessary in Hodgkin lymphoma and most diffuse large B-cell lymphoma. Interpretation of FDG-PET/CT is now more standardized with the Deauville 5-point scale, and a single node can be used to indicate progressive disease (within certain parameters), rather than the cumbersome need to measure the sum of the product of the perpendicular diameters of 6 nodes, as in the past.

As is always the case, I fully anticipate that, over time, new information will require a revision of the so-called Lugano classification. Perhaps, by then, I will be sitting on my deck with a glass of Amarone, overlooking the Assawoman Canal in Delaware, watching the geese swim by and the blue heron feeding on the fish. However, if given the opportunity to revise these criteria once again, I only hope that I have colleagues as splendid as those I was honored to work with this time around.

Until next month…

Bruce D. Cheson, MD