From the Editor

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Last year, ASCO cited transformation in the treatment of chronic lymphocytic leukemia (CLL) as a hallmark achievement. As you will read in this issue of *AJHO*, there is good reason for this designation. Newer immunotherapy drugs obinutuzumab and ofatumumab delay progression of first-line CLL by more than one year when combined with chemotherapy, and may be better options for older patients in comparison with standard CLL therapies. Coupled with novel oral targeted therapies such as ibrutinib and idelasib for relapsed disease, these drugs have truly changed the therapeutic landscape.

It is estimated that there are slightly less than 120,000 individuals in the U.S. living with CLL, many of whom are older individuals, making more effective and less toxic therapies particularly welcome. Nearly 19,000 new cases of CLL are expected this year, and while survival rates vary, this can, in many cases, be considered a chronic disease, as the 5-year survival rate is about 80%, with a trend toward improvement in the last few years. We have learned more about the biology of CLL, with prognostic indices such as *IGHV* mutation status, fluorescence in situ hybridization, ZAP-70, CD38, and β2-microglobulin increasingly being used for decision-making. Newer pharmacological approaches have emerged through our understanding of signaling pathway components such as Bruton's tyrosine kinase (BTK) and specific PI3K isoforms, as well as newer targetable receptors such as CD23 that added to the CD20-based antibodies in existence for some time. Novel drugs targeting Bcl-2 and older immunomodulatory drugs such as lenalidomide also hold potential for refractory disease.

Cancer therapies often come in large quantum leaps for a particular disease, as we witnessed at the turn of the century for breast and colorectal cancers, followed by significant advances in lung cancer, then in melanoma, and more recently for multiple myeloma and CLL. We hope to see this trend continue—with more effective and better-tolerated drugs—as evidenced by how we manage CLL all the way from diagnosis through frontline therapies and beyond.