

The CLL Foundation awarded Dr. Sean Post of the MD Anderson Cancer Center in Houston a grant to assess the treatment potential of a two-drug combination for CLL patients with a deletion or mutation of the TP53 gene. The prognosis for such patients is poor. Although the drug, ibrutinib, has proven to be an effective treatment for patients with alterations to the TP53 gene, the effectiveness of the drug decreases over time. Dr. Post believes that combining ABT-199, a drug that inhibits the activity of the Bcl-2 gene, with ibrutinib might be more effective than treatment with ibrutinib alone. Our grant will enable Dr. Post to study the effects of the two drugs when applied singly or in combination to mouse and human B-CLL cell lines with p53 alterations and to leukemic mice with TP53 gene mutations. The research will evaluate the therapeutic efficacy of the two-drug combination, will provide insights into the molecular pathways altered by the two drugs, and may provide a basis for clinical trials of the combination therapy.