

## **Fludarabine Plus Cyclophosphamide: Standard Therapy for CLL**

Patients with chronic lymphocytic leukemia (CLL) experience significantly better progression-free survival when treated with fludarabine plus cyclophosphamide than monotherapy with fludarabine or chlorambucil. Dr. C. Catovsky and colleagues reported the findings of their research in the July 21 issue of *The Lancet*. They analyzed survival outcomes of 777 patients who received one of the three treatments on a randomized basis. Fludarabine as monotherapy or in combination with cyclophosphamide was administered for six courses, and chlorambucil was administered for 12 courses. Progression-free survival at 5 years was 36% for the combination and 10% for each of the monotherapies ( $P < .00005$ ). Treatment responses were also higher with the combination regimen, but overall survival was comparable among the three regimens. The authors noted that poor-risk CLL patients with the 17p (p53) deletion do not respond well to the combination therapy. Fludarabine alone or in combination was associated with a higher incidence of neutropenia, and hence longer hospital stays, than chlorambucil alone, but the combination therapy was associated with less hemolytic anemia than either monotherapy. Overall, with the exception of poor-risk patients, the combination of fludarabine and cyclophosphamide is recommended as standard therapy for CLL due to consistently better outcomes. It was stated in a related editorial, by Dr. Tait D. Shanafelt and Dr. Neil E. Kay, that results from ongoing studies of rituximab (Rituxan, Genentech/Biogen Idec) added to the combination of fludarabine and cyclophosphamide are awaited to elucidate whether outcomes can be additionally improved.

## **Electrode Radiofrequency Ablation Safe and Efficacious for Liver Cancer**

*American Journal of Roentgenology* recently published results of a retrospective study conducted by researchers at the University of Wisconsin in Madison to assess the safety and efficacy of percutaneous multiple-electrode radiofrequency ablation for treating hepatic malignancies. The study examined 38 malignant hepatic tumors (mean diameter, 2.7 cm; range, 0.7–10.0 cm) in 23 patients (12 men and 11 women; mean age, 65 years; range, 40–84 years) who were treated in 26 radiofrequency ablation sessions with an impedance-based multiple-electrode system. Contrast-enhanced computed tomography (CT) scans were obtained immediately after ablation, as well as follow-up CT scans at 1, 3, 6, 9, and 12 months

(mean, 4 months) to assess for tumor progression and new metastases. Local control was achieved in 37 of 38 tumors, with 34 of these tumors requiring only one session. The total ablation time was reduced by approximately 54% compared to utilizing the single-electrode system (1,014 vs 2,196 minutes). Complications included 1 death from a presumed postprocedure pulmonary embolus, 1 pneumothorax, and 1 asymptomatic perihepatic hemorrhage. The authors concluded that multiple-electrode radiofrequency ablation was safe and efficacious for local control in large or multiple hepatic malignancies at short-term follow-up and that longer term follow-up was necessary to properly assess its impact on patient survival and tumor recurrence rates.

## **Surgically Resected Stage 1 NSCLC Associated With Greatly Increased Survival Compared to Untreated Disease**

Dr. Dan J. Raz and colleagues analyzed the California Cancer Center registry to assess the benefits of surgical resection in comparison to nonsurgical treatment or no treatment at all in stage 1 non-small cell lung cancer (NSCLC). Results of the analysis of 101,844 incident cases were published in the July issue of *Chest*. The researchers found 19,702 cases of stage 1 disease, and 1,432 cases had no treatment. Of those patients who received no treatment, only 42 were still alive 5 years after diagnosis (overall survival, 6%). For those with T1 tumors and those who did not undergo surgical resection, 5-year overall survival rates were 9% and 11%, respectively. Median overall survival times for untreated patients, those with T1 disease, and those who refused resection were 9, 13, and 14 months, respectively. In contrast, the 5-year survival for patients with stage 1 NSCLC who undergo surgical resection is 60–80% in published clinical studies. As a result of their findings, the authors unequivocally recommend surgical resection for early-stage lung cancer. They argue, “Despite the ongoing controversy regarding overdiagnosis of clinically insignificant lung cancers with screening, untreated lung cancer is a fatal disease in the great majority of patients with stage 1 disease.” They further comment, “In the not-so-distant future, clinicians are going to be treating lung cancer by first analyzing genomic markers and using that information to direct treatment—which could one day include no treatment for indolent tumors.” The findings of this research support aggressive treatment for patients with stage 1 disease—as well as screening—including radiation or radiofrequency ablation for those patients who are not candidates for surgical resection.