

## Rituximab Plus Bendamustine Outperforms Rituximab Plus CHOP in Indolent Lymphoma

A phase III study, reported at the 51st annual American Society of Hematology (ASH) meeting (Abstract 405), demonstrated superior progression-free survival (PFS) and a better toxicity profile in advanced lymphoma patients receiving bendamustine (Treanda, Cephalon) plus rituximab (Rituxan, Genentech) compared to those receiving CHOP (cyclophosphamide, doxorubicin, vincristine, prednisone) chemotherapy plus rituximab. The study, led by Dr. Rummel, randomized 513 patients with advanced follicular, indolent and mantle cell lymphomas. Study findings showed similar overall response rates between the 2 groups (93.8% with bendamustine + rituximab vs 93.5% with CHOP + rituximab); however, significantly more complete responses were seen with bendamustine (40.1% vs 30.8%;  $P=.0323$ ). This higher rate of complete response translated into a 20-month improvement in median PFS (54.8 vs 34.8 months;  $P=.0002$ ). At a median follow-up of 32 months, overall survival (OS) was not significantly different between the 2 groups. The safety analysis revealed a much lower rate of grade 3/4 hematologic toxicities in patients receiving bendamustine compared to those receiving CHOP. Paresthesia, stomatitis, and infectious complications (including sepsis) of all grades were also significantly lower in patients receiving bendamustine. Dr. Rummel suggested that the improved toxicity profile seen in patients receiving bendamustine is likely related to the 90 mg/m<sup>2</sup> (every 4 weeks on 2 consecutive days) bendamustine dose administered in this study, which is lower than the approved dose in the United States (120 mg/m<sup>2</sup> every 3 weeks).

## Omacetaxine: Potential Therapy for Tyrosine Kinase Inhibitor (TKI)-resistant Chronic Myeloid Leukemia

Results of a multicenter phase II/III study of chronic myeloid leukemia patients with the T315I mutation, led by Dr. Cortes-Franco and presented at ASH (Abstract 861), demonstrated a complete hematologic response in most patients receiving omacetaxine mepesuccinate (ChemGenex Pharmaceuticals). Almost all study participants to date (64/65) had previously failed treatment with imatinib (Gleevec, Novartis), and most

had not responded to other TKIs. Patients were injected with 1.25 mg/m<sup>2</sup> of omacetaxine twice daily for 14 days in 28-day induction cycles and subsequently received the same dose for 7 days as maintenance therapy.

Of 30 chronic phase patients, 18 had a complete hematologic response (CHR) and 6 had a major cytogenetic response. Of the 20 accelerated phase and 15 blast phase patients, overall hematologic response was achieved in 15 (12 CHR and 3 return to chronic phase) and 8 patients (6 CHR and 2 return to chronic phase), respectively. No deaths were reported in chronic phase patients. The median OS has not yet been reached in accelerated phase patients; at the time of data cut-off, 13 patients were alive. Median OS was 14.5 months for blast phase patients. The most frequently reported adverse events were hematologic toxicities, and nonhematologic toxicities were mostly grade 1/2. Overall, the drug was well tolerated and has potential as a therapeutic option for patients who have failed multiple TKIs.

## Four-drug Combination Shows Efficacy in Newly-diagnosed Myeloma Patients

This prospective, randomized, phase III trial, presented at ASH (Abstract 128), compared a 4-drug combination consisting of bortezomib (Velcade, Celgene), melphalan, prednisone, and thalidomide (Thalomid, Celgene; VMPT) plus a maintenance regimen of bortezomib and thalidomide to VMP without a maintenance regimen. The primary endpoint was PFS. In the study, which was led by Dr. Palumbo, patients older than 65 years were randomized to receive VMPT with maintenance (n=254) or VMP (n=257). Study results demonstrated superior response rates in the VMPT group compared to the VMP group (partial response [PR] rate: 86% vs 79%; very good PR rate: 55% vs 47%; and complete response rate: 34% vs 21%). At a median follow-up of 17.8 months, the 2-year PFS rate was 70% in the VMPT group and 58.2% in the VMP group. The 2-year OS was similar in both groups (89.6% vs 89.0%). Grade 3/4 neutropenia and cardiac complications were reported more frequently in the VMPT group, whereas the incidence of other grade 3/4 adverse events was similar in the 2 groups. Findings also showed that a weekly infusion of maintenance bortezomib significantly reduced the incidence of peripheral neuropathy.