

Primary Therapy of Waldenstrom's macroglobulinemia with Bendamustine Based Therapy

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Background: This multicenter, randomized, phase III study compared B-R and CHOP-R as first-line treatment in indolent lymphoma and MCL and was presented at ASH 2009 including a comprehensive safety analysis. Here we present an updated analysis with a cut-off date for 31 Oct 2011.

Methods: 549 patients (pts) with indolent or MCL were randomized to receive B-R or CHOP-R for a max of 6 cycles. The primary endpoint was PFS.

Results: 514 pts randomized pts were evaluable (261 B-R; 253 CHOP-R). Patient characteristics were well balanced between arms; median age was 64 years. At a median follow-up of 45 months, PFS was significantly prolonged with B-R compared with CHOP-R (HR 0.58, 95% CI 0.44–0.74; $P < 0.001$). Median PFS was 69.5 versus 31.2 months, respectively. The PFS benefit with B-R was maintained in all histological subtypes except marginal zone lymphoma. The PFS benefit with B-R was independent of age; HR 0.52 ($P = 0.002$) in pts ≤ 60 years ($n = 199$), and HR 0.62 ($P = 0.002$) in pts > 60 years ($n = 315$). In pts with normal LDH (62%), PFS was significantly prolonged with B-R compared with CHOP-R ($P < 0.001$), while in the elevated LDH group (38%) PFS was numerically, but not significantly increased with B-R compared with CHOP-R ($P = 0.118$). In patients with follicular lymphoma, FLIPI subgroups defined by 0–2 factors (favorable) and 3–5 factors (unfavorable) had a longer PFS with B-R than with CHOP-R ($P = 0.043$ and $P = 0.068$ for the favorable and unfavorable FLIPI subgroups, respectively). Seventy four salvage treatments had been initiated in the B-R group; compared with 116 in the CHOP-R group, of those in the CHOP-R group 52 pts received B-R as salvage regimen. Overall survival did not differ between the treatment arms, with 43 and 45 deaths in the B-R and CHOP-R arms, respectively. Twenty secondary malignancies were observed in the B-R group compared with 23 in the CHOP-R group, with 1 hematological malignancy in each group (1 MDS in B-R, 1 AML in CHOP-R).

Conclusions: In patients with previously untreated indolent lymphoma, and elderly patients with MCL, B-R demonstrates a PFS benefit and improved tolerability compared with CHOP-R.