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Blood 142 (2023) 2037–2038

The 65th ASH Annual Meeting Abstracts

POSTER ABSTRACTS

654.MGUS, AMYLOIDOSIS AND OTHER NON-MYELOMA PLASMA CELL DYSCRASIAS: CLINICAL AND EPIDEMIOLOGICAL

Multicenter Prospective Phase II Study of Rituximab Combined, Bortezomib, Lenalidomide, Dexamethasone Followed By Lenalidomide Maintenance (R-VRD) in Patients with Waldenstrom's Macroglobulinemia (KMM1803)

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Backgroud: Waldenström macroglobulinemia (WM) is an indolent B-cell malignancy characterized by the presence of immunoglobulin M (IgM) monoclonal gammopathy and lymphoplasmacytic bone marrow infiltration. Recently, the superior efficacy of BTK inhibitors and other novel agents has been established. However, BTK inhibitors has been shown limited efficacy in patients with CXCR4 mutation and MYD88 wild type. Therefore, the importance of chemotherapy which do not contain BTK inhibitors still remain. This study was conducted to estimate the efficacy and safety of the combination of rituximab, bortezomib, lenalidomide and dexamethasone in patients with WM in South Korea.
Methods : Between Aug. 2018 and Aug. 2022, a total of 39 patients were included in this study at 12 academic institutes in South Korea. The primary end-point of the study was the median progression-free survival (PFS), and the secondary end-points were the overall survival (OS), overall response rate (ORR), minimal residual disease (MRD) achievement and toxicities. Eligible patients were confirmed clinicopathological diagnosis of WM who has Measurable and symptomatic disease meeting at least 1 of the recommendations from the Second International Workshop on Waldenström Macroglobulinemia (IMWWM) for requiring treatment. Pateints who received rituximab treatment within the last 12 months before the first dose of study drug were excluded. Patients received the 28-day cycle of Rituximab (375 mg/m ^{2} IV on day 1), Bortezomib (1.3 mg/m ^{2} SC on day 1, 8, 15), Lenalidomide (15 mg per oral day 1-21) and dexamethasone (20 mg iv or oral day 1-4). Enrolled patients were received induction therapy with rituximab and bortezomib, lenalidomide and dexamethasone every 4 weeks for 6 cycles and then lenalidomide (10 mg on day 1-21) maintenance for 2 years. All patients were checked MYD88 and CXCR4 mutation at the baseline work up of this study and MRD achievement was checked by MYD88 PCR every 6 months for 3 years.
Results : The median (range) age was 65.2 years. Lymphadenopathy were noted around 50%. In this study, MYD88 mutation was noted 74.3% and CXCR4 mutation was noted 20%, respectively. The response rates were following: CR in 4 (13.3%), VGPR **in** 3 (10.0 **%) PR in**14 (46.7 **%), MR in** 3 (10.0%) **and** < **MR in** 6 (20.0 **%)**. Overall response rates (≥PR (partial response)) rate was

70.0 % and more than MR were 80%. 2yrs PFS and OS were 56% and 93%, respectively. We are now checking MRD by MYD88 PCR for ongoing patients. The detailed response rates and survival outcomes will be reported soon according to MYD88 and CXCR4 mutation status. And comparison of survival difference according to MRD negativity will be also announced after finishing data collection of MRD.

Conclusions: R-VRD regiment could be helpful for MYD88 mutation negative or CXCR4 mutation positive patients. BTK inhibitors show superior response and survival outcomes for patients with MYD88 mutation positive and CXCR4 mutation negative. So, we are supposed that R-VRD could be optional treatment for patients who are not suitable for BTK inhibitors.

Disclosures No relevant conflicts of interest to declare.

https://doi.org/10.1182/blood-2023-180325