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POSTER ABSTRACTS

623.MANTLE CELL, FOLLICULAR, AND OTHER INDOLENT B CELL LYMPHOMAS: CLINICAL AND EPIDEMIOLOGICAL

Single-Center Experience of Carfilzomib-Based Combinations for Patients with Lymphoplasmacytic Lymphoma

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Single-Center Experience of Carfilzomib-based Combinations for patients with Lymphoplasmacytic Lymphomas

Background

Use of bortezomib in Waldenstrom macroglobulinemia (WM) produces a response rate of 60-70% in treatment naïve or relapsed WM(Dimopoulos et al., 2005)(Chen et al., 2006). However, it is associated with an increased risk of peripheral neuropathy (PN). This is important considering that WM can be associated frequently with PN. Carfilzomib(K) is a second-generation proteasome inhibitor that is associated with a lower PN risk and offers a PN-sparing approach for treatment for patients(pts) with WM. In the CARD trial, K-based combinations produced a high ORR with a tolerable safety profile(Treon et al., 2014). We report our single-center experience with the use of K-based combinations in pts with treatment naïve or relapsed lymphoplasmacytic lymphoma (LPL).

Patients and Methods

We conducted a single-center retrospective study on an IRB-approved protocol for all pts who were treated with K-based combinations at Hackensack University Medical Center between June 2015 and July 2022. Demographic characteristics, molecular studies, treatment and response information were recorded and included in the study. Efficacy outcomes included overall response rates (ORR), progression free survival (PFS), overall survival (OS). Survival analysis was performed using the Kaplan-Meier method including PFS and Overall survival (OS). PFS was defined as time from initiation of treatment to progression of disease or death whichever occurred first. OS was defined as time from initiation of treatment to death. The consensus criteria from the 6 th International Workshop on WM were utilized for response assessment.

Results

We identified 36 patients with a diagnosis of WM and 1 patient with IgA-kappa LPL who were treated with K-based combinations between June 2015 and July 2022. 4 patients (10.8%) had a concomitant diagnosis of systemic light chain amyloidosis (AL). 67.6% pts were male, the median age at treatment initiation was 67.5 yrs. Majority of the pts were treatment naïve (86.4%, N=32). Data for MYD88 mutation was available in 30 pts, 93.3% (n=28) were found to have MYD88 mutation on next generation sequencing (NGS) performed on bone marrow aspirate samples. As per the RPISSWM risk stratification, 30% (9) pts were found to have poor risk, 33.3% (10) had intermediate risk and 36.7% (11) had good risk. Median bone marrow involvement by WM was 30%. The majority of the pts (91.9%, n=34) received KCD-R (Carfilzomib, cyclophosphamide, dexamethasone and rituximab) as their treatment regimen, while the remaining patients received KD-R(carfilzomib, dexamethasone and rituximab). Pts received a median of 6 cycles of treatment. ORR was found to be 97.3% (n=36) with 48.6%(n=18) pts achieving a very good partial response or better (>=VGPR). Median PFS was found to be 51.08 months and median OS was not reached (NR). Two patients needed treatment discontinuation following 1 cycle or less, due to toxicity (dyspnea, one of which was non-cardiogenic) associated with carfilzomib and were changed to an alternative regimen (Bortezomib, cyclophosphamide, dexamethasone and rituximab). Further data for toxicities are being gathered and will be presented at the meeting. Baseline characteristics and outcomes data are summarized in Table 1.

Conclusions

K-based combinations produce a high ORR with durable responses in patients with symptomatic LPL. Treatment discontinuation rate due to toxicity was low with only two patients needing change of therapy in our cohort. Our data supports the use of K-based combinations in pts with treatment naïve or relapsed LPL.

Disclosures Parmar: *Sanofi:* Consultancy, Honoraria; *Cellectar Biosciences:* Consultancy, Honoraria. **Biran:** *BMS:* Honoraria, Membership on an entity's Board of Directors or advisory committees, Research Funding; *Merck:* Research Funding; *Sanofi:* Honoraria, Membership on an entity's Board of Directors or advisory committees; *Takeda:* Honoraria, Membership on an entity's Board of Directors or advisory committees; *Abbvie:* Honoraria; *Genomic Testing Cooperative:* Divested equity in a private or publicly-traded company in the past 24 months; *GSK:* Membership on an entity's Board of Directors or advisory committees; *Pfizer:* Membership on an entity's Board of Directors or advisory committees; *Boehringer Ingelheim:* Other: spouse of employee; *Janssen:* Honoraria, Membership on an entity's Board of Directors or advisory committees, Research Funding; *Karyopharm:* Membership on an entity's Board of Directors or advisory committees, Research Funding; *Amgen:* Membership on an entity's Board of Directors or advisory committees, Research Funding. **Siegel:** *Celularity Scientific:* Consultancy, Membership on an entity's Board of Directors or advisory committees; *Celgene:* Consultancy, Honoraria, Membership on an entity's Board of Directors or advisory committees, Research Funding, Speakers Bureau; *Amgen:* Consultancy, Honoraria, Membership on an entity's Board of Directors or advisory committees, Research Funding, Speakers Bureau; *Janssen:* Consultancy, Honoraria, Membership on an entity's Board of Directors or advisory committees, Research Funding, Speakers Bureau; *Takeda:* Consultancy, Honoraria, Membership on an entity's Board of Directors or advisory committees, Research Funding, Speakers Bureau; *Novartis:* Consultancy, Honoraria, Membership on an entity's Board of Directors or advisory committees, Research Funding, Speakers Bureau; *Karyopharm:* Consultancy, Honoraria, Membership on an entity's Board of Directors or advisory committees, Research Funding, Speakers Bureau; *BMS:* Consultancy, Honoraria, Membership on an entity's Board of Directors or advisory committees, Research Funding, Speakers Bureau.

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Variable		N
No of patients, N (%)		37
Diagnosis	WM	36 (97.3%)
	LPL (IgA-K)	1 (2.7%)
	WM with AL	4 (10.8%)
Sex: Male		25 (67.6%)
Median age at treatment (years) (range)		67.5 (47.5-80.6)
Median prior lines of therapies (range)		0 (0-4)
Carfilzomib-based combinations	Used as 1st line	32 (86.4%)
	Used as 2nd line	4 (10.8%)
	Used as >=3rd line	1 (2.7%)
MYD88 mutated N (%) (Data available for 30 of 37 pts)		28 (93.3%)
RPISS-WM risk stratification (data available for 30 of 37 pts)	Good risk N (%)	11 (36.7%)
	Intermediate risk N(%)	10 (33.3%)
	Poor risk N (%)	9 (30%)
Median BM involvement % (IQR)		30% (20-60%)
Treatment regimen	KCD-R	34 (91.9%)
	KD-R	3 (8.1%)
	Maintenance	9 (24.3%)
Median N of cycles (Range)		6 (1-12)
Treatment discontinuation due to toxicity		2 (5.4%) (dyspnea, one of which was non-cardiogenic)
ORR (%)		36 (97.3%)
VGPR or better (%)		18 (48.6%)
Median PFS in months (Interquartile range)		51.08 (33.5-NR)
Median OS months (Interquartile range)		NR (NR-NR)

Table 1. Baseline characteristics and efficacy data for our patient cohort

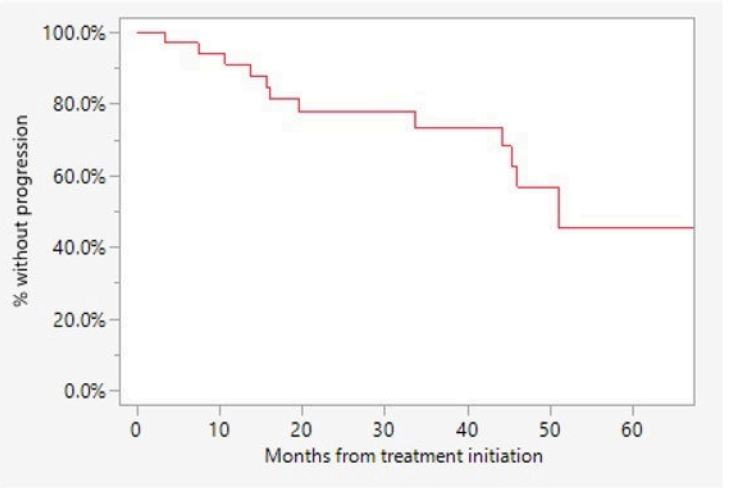

Figure 1. Progression free survival in months following initiation of treatment.

(mPFS= 51.01mos)

Figure 1