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ORAL ABSTRACTS

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

Mosunetuzumab Monotherapy Continues to Demonstrate Durable Responses in Patients with Relapsed and/or Refractory Follicular Lymphoma after >2 Prior Therapies: 3-Year Follow-up from a Pivotal Phase II Study Stephen J. Schuster, MD¹, Laurie H. Sehn, MD MPH², Nancy L. Bartlett, MD³, Matthew Matasar⁴, Sarit Assouline, MD⁵, Pratyush Giri, MBBS⁶, John Kuruvilla, MD⁷, Mazyar Shadman, MD MPH⁸, Chan Y. Cheah, MBBS^{9,10}, Sascha Dietrich, MD¹¹, Keith Fay, MBChB, FRACP, FRCPA¹², Matthew Ku, MBBS¹³, Loretta J. Nastoupil, MD¹⁴, Michael C. Wei, MD PhD¹⁵, Shen Yin, PhD¹⁵, Iris To, PharmD¹⁵, Jiangeng Huang, PhD¹⁵, Antonia Kwan, MBBS, PhD¹⁵, Elicia Penuel, PhD¹⁵, L. Elizabeth Budde, MD PhD¹⁶ ¹ Lymphoma Program, Abramson Cancer Center, University of Pennsylvania, Philadelphia, PA ²BC Cancer Centre for Lymphoid Cancer and The University of British Columbia, Vancouver, Canada ³ Siteman Cancer Center, Washington University School of Medicine, St. Louis, MO ⁴Rutgers Cancer Institute of New Jersey, New Brunswick, NJ ⁵ Jewish General Hospital, Montreal, Canada ⁶Royal Adelaide Hospital, Adelaide, Australia ⁷ Princess Margaret Cancer Centre, Toronto, Canada ⁸ Fred Hutchinson Cancer Research Center and University of Washington, Seattle, WA ⁹The University of Western Australia, Perth, Australia ¹⁰Linear Clinical Research, Sir Charles Gairdner Hospital, Nedlands, Australia ¹¹Heidelberg University Hospital, Heidelberg, Germany ¹² St Vincent's Hospital and Royal North Shore Hospital, Sydney, Australia ¹³St Vincent's Hospital, University of Melbourne, Melbourne, Australia

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Background: Mosunetuzumab is a CD20xCD3 T-cell engaging bispecific antibody that redirects T cells to eliminate malignant B cells. In a pivotal Phase II study (NCT02500407), mosunetuzumab demonstrated a high complete response (CR) rate with a manageable safety profile in patients with relapsed/refractory (R/R) follicular lymphoma (FL) and \geq 2 prior lines of therapy (Budde et al. Lancet Oncol 2022). Mosunetuzumab is a fixed-duration treatment that can be administered in an outpatient setting. Here, we present updated data for patients with R/R FL and \geq 2 prior lines of therapy, after 3 years of follow-up.

Methods: Eligible patients with R/R FL Grade (Gr) 1-3a and \geq 2 prior therapies received intravenous mosunetuzumab in 21day cycles with step-up dosing in Cycle (C) 1 (C1 Day [D] 1, 1mg; C1D8, 2mg; C1D15/C2D1, 60mg; C3D1 and onwards, 30mg). Hospitalization for treatment was not required. Patients achieving a CR by C8 completed treatment without additional cycles; patients with a partial response or stable disease received a total of 17 cycles. The primary endpoint was CR rate as determined by an Independent Review Committee (as best response; Cheson 2007 criteria). Duration of response (DOR), duration of complete response (DOCR), progression-free survival (PFS), event-free survival (EFS), and safety were secondary endpoints. Time to next treatment (TTNT), response to retreatment, biomarkers of minimal residual disease (MRD), and circulating B-cell counts were exploratory endpoints.

Results: Ninety patients with R/R FL were enrolled. As of May 2, 2023, median time on study was 37.4 (range: 2.0-48.0) months. Investigator-assessed best overall response and CR rates were 77.8% (95% CI: 67.8-85.9) and 60.0% (95% CI: 49.1-70.2), respectively. The median DOR was 35.9 months (95% CI: 20.7-not reached [NR]). Median DOCR was NR (95% CI: 33.0-NR); the estimated 30-month DOCR rate was 72.4% (95% CI: 59.2-85.6) (**Table**). Three years after the end of treatment, 57.1% of 70 responding patients were alive and disease progression-free. Median PFS was 24.0 months (95% CI: 12.0-NR) (**Figure**). The median TTNT was 37.3 months (95% CI: 18.0-NR); estimated EFS at 36 months was 51.8% (95% CI: 40.8-62.8). After initial mosunetuzumab treatment, 34/90 (37.8%) patients had received a new anti-lymphoma therapy, including 33/90 (36.7%) patients

who received a new systemic treatment (8/33 [24.2%] of these patients received chimeric antigen receptor T-cell therapy); 8/90 (8.9%) had radiotherapy; 2/90 (2.2%) had excision of tumor; 2/90 (2.2%) had an allogeneic stem cell transplant; and 1/90 (1.1%) had an autologous stem cell transplant. Five patients received retreatment with mosunetuzumab, 3/5 of these patients had a CR. No new cytokine release syndrome (CRS) events, serious, or Gr \geq 3 adverse events (AEs) were reported since the previous analysis (median follow-up of 28.3 months; Bartlett et al. ASH 2022). CRS events occurred in 44.4% of patients and 2.2% were Gr 3/4 in severity; all CRS events resolved. Overall AEs and serious AEs were comparable to the previous analysis (Bartlett et al. ASH 2022); febrile neutropenia was not reported. Forty-six (51.1%) patients experienced Gr 3/4 AEs related to mosunetuzumab; the rate of AEs leading to discontinuation was low (4.4%). Peripheral blood B-cell depletion following treatment with mosunetuzumab occurred in all patients, and recovery was observed after a median of 18 months following the end of treatment in patients with a sustained response using follow-up samples. MRD kinetics following mosunetuzumab therapy will be presented.

Conclusions: In this updated analysis, with a median follow-up of 37.4 months, durable responses continued to be observed with fixed-duration mosunetuzumab in patients with R/R FL. The manageable safety profile was consistent with previous reports. Evidence of B-cell recovery was observed after a median of 18 months following the end of treatment.

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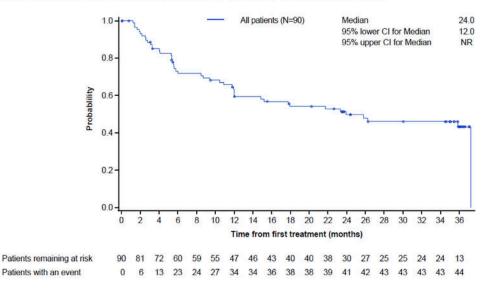
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Efficacy endpoints assessed by investigators	All patients N=90
	n=70
Median DOR, months (95% CI)	35.9 (20.7–NR)
30-month DOR rate, % (95% CI)*	56.6 (44.2–68.9)
	n=54
Median DOCR, months (95% CI)	NR (33.0–NR)
30-month DOCR rate, % (95% CI)*	72.4 (59.2–85.6)
Median PFS, months (95% CI)	24.0 (12.0-NR)
36-month PFS rate, % (95% CI)	43.2 (31.3–55.2)
Median OS, months (95% CI)	NR (NR–NR)
36-month OS rate, % (95% Cl)	82.4 (73.8–91.0)

Table: Efficacy in all patients at the end of mosunetuzumab treatment

*36-month DOR/DOCR data are not available as this analysis was conducted from the first response assessment, therefore the landmark analysis is shorter for the duration outputs. CI, confidence interval; DOCR, duration of complete response; DOR, duration of response; NR, not reached; OS, overall survival; PFS, progression-free survival.





CI, confidence interval; NR, not reached.

Figure 1

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