Check for updates

ELSEVIER

Blood 142 (2023) 2331–2332

The 65th ASH Annual Meeting Abstracts

POSTER ABSTRACTS

902.HEALTH SERVICES AND QUALITY IMPROVEMENT - LYMPHOID MALIGNANCIES

Improved Outcome of Relapsed/Refractory B-Cell Lymphomas Treated in Phase I Trials with T-Cell Engaging Bispecific Antibodies: A Single Center Experience

Monica Rondi[1], *Silvia Ferrari*[1], *Anna Maria Barbui, MD*[1], *Andrea Rossi, MD*[1], *Chiara Pavoni*[1], *Anna Grassi*[1], *Federico Lussana, MD*[2,3], *Alessandro Rambaldi, MD*[4,5], *Giuseppe Gritti*[1]

[1] Azienda Socio Sanitaria Territoriale Papa Giovanni XXIII, Bergamo, Italy
[2] Department of Oncology-Hematology, Azienda Socio Sanitaria Territoriale Papa Giovanni XXIII, Bergamo, Italy
[3] Department of Oncology and Hematology, University of Milan, Milan, Italy
[4] Department of Oncology and Hematology, University of Milan and Azienda Socio-Sanitaria Territoriale Papa Giovanni XXIII, Bergamo BG, Italy
[5] Hematology and Bone Marrow Transplant Unit, Azienda Socio-Sanitaria Territoriale Papa Giovanni XXIII, Bergamo, Italy

Background. Phase I trials usually enroll patients (pts) refractory to standard treatments in order to evaluate the toxicity, pharmacokinetic and preliminary efficacy of new therapeutic agents. However, in the last decade, the emergence of targeted and immune therapies has rapidly expanded the scope and eligibility of phase I trials which currently include also the efficacy assessment. This is particularly evident in B-cell non-Hodgkin lymphomas (NHL), were several treatments proved substantial efficacy in the relapsed/refractory (R/R) setting. Specifically, T-cell based immunotherapy i.e. CART cells and T-cell engaging bispecific antibodies (BSA) showed practice changing results. Aim of this study was to compare the outcome of pts enrolled in phase I trials treated with BSA-based treatment versus all the other treatment modality, with the exclusion of CART cells therapy.
Methods. A total of 93 R/R B-NHL pts were enrolled and treated in 11 phase I trials from September 2016 to May 2022 at ASST Papa Giovanni XXIII Hospital of Bergamo, Italy. Investigational treatments included BSA, antibody-drug conjugate, small molecules and immunomodulatory agents, both as single agent or in combination. Clinical characteristics and outcome of patients treated with BSA-based treatment (BSA group) were compared to those of patients treated with the other classes of drug (other group). To assess clinical efficacy, the PFS of the line of treatment prior to enrollment in the phase I trial was compared to the PFS achieved after enrollment.
Results. Pts population included 49 pts receiving BSA-based treatment (DLBCL=32, MCL=2, FL=12, MZL=2) and 44 pts other classes of drug (DLBCL=35, MCL=1, FL=8). Median age was 63 years-old (range 19-83) for BSA group and 61 (range 32-79) for the other group. At enrollment, most of the pts were in advanced stage (75% for BSA group and 71% for other group). In the BSA group, the median number of previous treatment lines were 4 (range 2-7) including autologous SCT (28%) and CAR-T cells (4%). In the other group median previous treatment lines were 4 (range 2-9) including autologous SCT (20%) and CAR-T cells (11%). The 2-year PFS in the BSA group was 14% and 9% with the last line of treatment (i.e. prior enrollment) and 53% and 17% after the investigational treatment in the BSA and other groups, respectively (Figure 1). We further analyzed predictor of response and PFS in the BSA group. By univariate analysis, primary or secondary refractory status ($P<0.001$) were correlated with clinical response. Refractory status (P=0.02), high Ki67 (P=0.016), elevated ferritin (P=0.012), ECOG >1 (P=0.004) and aggressive NHL histology (P=0.026) were correlated with poor PFS. Of note, clinical indices e.g. IPI or FLIPI, did not correlated with clinical outcome.
Conclusion. The use of BSA-based treatment markedly improved the outcome of patients with R/R B-cell NHL enrolled in phase I trials, with substantial response rates and durable disease control not commonly seen with other classes of drug.

Disclosures Lussana: *Amgen:* Speakers Bureau; *Pfizer:* Membership on an entity's Board of Directors or advisory committees, Speakers Bureau; *Incyte:* Speakers Bureau; *Bristol Myers Squibb:* Membership on an entity's Board of Directors or advisory committees, Speakers Bureau; *AbbVie:* Membership on an entity's Board of Directors or advisory committees; *Clinigen:* Membership on an entity's Board of Directors or advisory committees. **Rambaldi:** *Abbvie:* Honoraria. **Gritti:** *Takeda:* Consultancy; *F. Hoffmann-La Roche Ltd, Takeda, Kite-Gilead, Ideogen, Genmab, Italfarmaco:* Membership on an entity's Board of Directors or advisory committees; *Clinigen, Sandoz, Beigene, Incyte, Janssen, Novartis:* Other; *Roche, Takeda, Kite-Gilead, Italfarmaco,*

Downloaded from http://ashpublications.net/blood/article-pdf/142/Supplement 1/2331/2186519/blood-8933-main.pdf by guest on 07 June 2024

© 2023 by The American Society of Hematology

Ideogen, Genmab: Other: Advisory Board; *Roche, Sandoz, Beigene, Janssen:* Other: Support for attending meetings; *Takeda, Clinigen, Ideogen, Beigene, Incyte, Novartis:* Other: Training activity; *Takeda:* Consultancy.

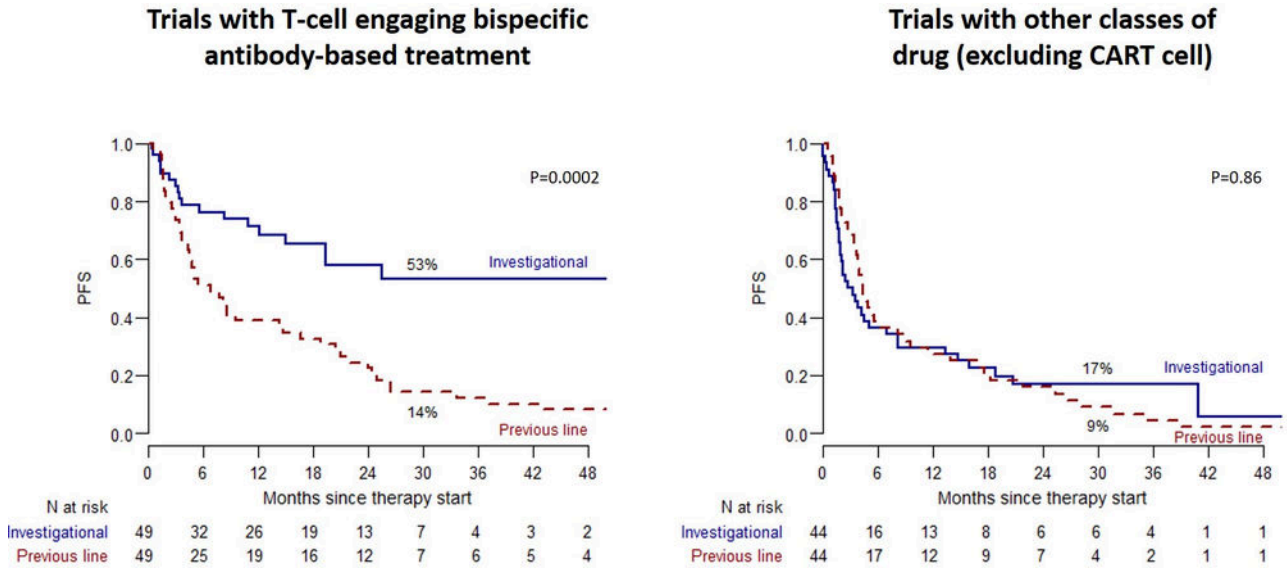

Figure 1

https://doi.org/10.1182/blood-2023-189911

Downloaded from http://ashpublications.net/blood/article-pdf/142/Supplement 1/2331/2186519/blood-8933-main.pdf by guest on 07 June 2024