Check for updates

ELSEVIER

Blood 142 (2023) 4499–4501

The 65th ASH Annual Meeting Abstracts

POSTER ABSTRACTS

627.AGGRESSIVE LYMPHOMAS: CLINICAL AND EPIDEMIOLOGICAL

Impact of Progression-Free Survival at 24 Months on Subsequent Survival in Patients with Diffuse Large B-Cell Lymphoma Treated with R-CHOP Therapy: A Supplementary Analysis of JCOG0601

Ayumi Fujimoto, MD[1], *Wataru Munakata*[2], *Gakuto Ogawa*[3], *Tomotaka Suzuki*[4], *Kazuyuki Shimada*[5], *Tsutomu Kobayashi*[6], *Ken Ohmachi, MD*[7], *Tomohiro Kinoshita*[8], *Kiyoshi Ando*[9], *Dai Maruyama*[10], *Hirokazu Nagai, MD PhD*[11]

[1] Department of Hematology and Oncology, Shimane University, School of Medicine, Koto-Ku, Japan
[2] Department of Hematology, National Cancer Center Hospital, Tokyo, Japan
[3] JCOG Data Center, National Cancer Center Hospital, Tokyo, Japan
[4] Department of Hematology and Oncology, Nagoya City University Graduate School of Medical Sciences, Nagoya, Japan
[5] Department of Hematology and Oncology, Nagoya University Graduate School of Medicine, Nagoya, Japan
[6] Department of Hematology, Japanese Red Cross Kyoto Daiichi Hospital, Kyoto, Japan
[7] Department of Hematology and Oncology, Tokai University School of Medicine, Isehara, Japan
[8] Department of Hematology and Cell Therapy, Aichi Cancer Center Hospital, Nagoya, Japan
[9] Department of Hematology and Oncology, Tokai University School of Medicine, Isehara, Japan
[10] Department of Hematology Oncology, Cancer Institute Hospital, Japanese Foundation for Cancer Research, Tokyo, Japan
[11] Department of Hematology and Oncology Research, National Hospital Organization, Nagoya Medical Center, Nagoya, Japan

Introduction

The impact of progression-free survival status at 24 months (PFS24) or event-free survival status at 24 months (EFS24) on subsequent survival has been evaluated in patients with various lymphoma subtypes. Patients with newly diagnosed diffuse large B-cell lymphoma (DLBCL) who achieve PFS24 or EFS24 generally have excellent outcomes. It has been observed that the overall survival (OS) after achieving EFS24 was not significantly different from that of the general population (M.J. Maurer. J Clin Oncol, 2014). However, the OS after achieving PFS24 was significantly worse than that of the general population (M.J. Maurer. Ann Oncol, 2018). Consequently, the impact of achieving PFS24 for DLBCL patients remains controversial. In this supplementary analysis, we evaluated the impact of achieving PFS24 on the subsequent survival of untreated DLBCL patients by using data from JCOG0601, a randomized phase2/3 study assessing the schedule of rituximab administration in combination with tri-weekly CHOP (Ohmachi K. Blood Adv, 2021).

Methods

Among 422 patients enrolled between Dec 2007 and Dec 2014 in JCOG0601, 409 patients were eligible for this analysis (Data cutoff date: Dec 19, 2017). PFS24 was defined as being alive without progression or relapse for 24 months from randomization. The protocol treatment was initiated within 7 days after randomization. OS from PFS24 was defined as the time from achieving PFS24 or the date of progression or relapse to death from any cause. We compared OS from PFS24 with that of age-, sex-, and calendar period-matched Japanese general population using standardized mortality ratios (SMRs). Similarly, PFS12 and PFS60, as well as OS from PFS12 and PFS60, were defined in the same manner as PFS24 and OS from PFS24. The log-rank P-values for OS were calculated.

Results

The baseline characteristics of the 409 patients were as follows: a median age of 62 years (range, 20-79), with males accounting for 56% (n=227) of the patients. At diagnosis, 46% (n=188) of the patients were Ann Arbor stage III or IV. The majority of patients (82%; n=335) were classified as international prognostic index low or low-intermediate risk. Based on the Hans algorithm for cell-of-origin, 51% (n=210) of the patients were categorized as non-germinal center B-cell type (non-GCB). At a median follow-up of 5.3 years among all patients, a total of 334 patients (82%) achieved PFS24, while 66 patients (16%) failed to achieve PFS24. Five patients died without progression within 24 months, and four patients were lost to follow-up within 24 months. Multivariable analysis revealed that risk factors for failing to achieve PFS24 included serum LDH levels higher than the upper normal limit and two or more extranodal lesions. Patients who achieved PFS24 had a significantly better OS than

Downloaded from http://ashpublications.net/blood/article-pdf/142/Supplement 1/4499/2187293/blood-1100-main.pdf by guest on 18 May 2024

© 2023 by The American Society of Hematology

those who failed to achieve PFS24 (median OS, not reached vs. 1.3 years; $P < 0.001$). Similar results were observed when using PFS12 and PFS60, regardless of the cell-of-origin. Among the patients who failed to achieve PFS24, non-GCB type patients more frequently had relapsed or refractory diseases in extranodal sites (72%: n=26/36) compared to GCB type patients (43%; n=6/14). The OS after achieving PFS24 or PFS60 was not remarkably different from that of the general population (PFS24: SMR 1.29, 95% confidence interval [CI] 0.72-2.12, $P = 0.39$; PFS60: SMR 1.43, 95% CI 0.47-3.33, $P = 0.55$). However, the OS after achieving PFS12 was significantly worse than that of the general population (SMR 2.30, 95%CI 1.59-3.22, $P < 0.001$). The primary cause of death for patients achieving PFS12 was DLBCL with the cumulative incidence of more than 5% at 5 years, while the incidence of death due to DLBCL was less than 5% for those achieving PFS24. The primary cause of death for the patients achieving PFS24 was other diseases except for DLBCL and treatment-related toxicity, including secondary malignancies (n=4/7) and pneumonia (n=3/7).

Conclusion

Newly diagnosed DLBCL patients treated with R-CHOP who achieved PFS24 exhibited an excellent subsequent outcome, which did not differ from those of age-, sex-, calendar-period matched individuals in the general population. Our findings suggest that PFS24 achievement could serve as a surrogate endpoint for OS in DLBCL patients. Further research is warranted to establish the utility of PFS24 achievement as a reliable milestone in clinical practice.

Disclosures Fujimoto: *Chugai Pharmaceuticals:* Honoraria; *Meiji Seika Pharma:* Honoraria; *Sanofi:* Honoraria. **Munakata:** *Janssen, Takeda, Celgene, ONO PHARMACEUTICAL, Eisai, CHUGAI, Novartis Pharma, Bristol-Myers Squibb, AstraZeneca, SymBio Pharmaceuticals, Genmab, NIPPON SHINYAKU, Nippon Kayaku, Gilead Sciences, Otsuka Pharmaceutical, Kyowa Kirin:* Honoraria, Research Funding. **Suzuki:** *Astellas:* Honoraria; *Sanofi:* Honoraria; *Janssen:* Honoraria; *BMS:* Honoraria; *SymBio Pharmaceuticals:* Honoraria; *Chugai Pharma:* Honoraria. **Shimada:** *AstraZeneca, Eisai, Takeda, Janssen, Bristol-Myers Squibb, Chugai, Kyowa Kirin, Nippon Shinyaku, Daiichi Sankyo, Meiji Seika Pharma, Ono, AbbVie, Novartis, Gilead, CSL Behring, Genmab:* Honoraria; *Bristol-Myers Squibb, Otsuka, Kyowa Kirin:* Research Funding; *Incite, Daiichi Sankyo, AbbVie, Chugai, Meiji Seika Pharma, Bristol-Myers Squibb, Novartis:* Consultancy. **Kobayashi:** *Bristol Myers Squibb, Chugai Pharmaceutical, Nippon Shinyaku, Ono Pharmaceutical, Sanofi, Nippon Kayaku, AstraZeneca, Abbvie, MSD, and Janssen Pharmaceutical:* Honoraria. **Ohmachi:** *Novartis Pharma:* Honoraria; *Meiji Seika Pharma:* Honoraria; *Chugai pharma:* Honoraria; *Kyowa Kirin:* Honoraria; *Genmab:* Honoraria; *Symbio pharma:* Honoraria; *Yakuzemi total learning:* Honoraria; *Janssen Pharma:* Honoraria. **Kinoshita:** *Japanese Red Cross, Director of Aichi Blood Center:* Current Employment. **Ando:** *Chugai Pharmaceutical:* Research Funding; *Nippon Shinyaku:* Honoraria, Research Funding; *Takeda Pharmaceutical:* Research Funding; *Eisai:* Honoraria, Research Funding; *Kyowa Kirin:* Research Funding; *Otsuka Pharmaceutical:* Research Funding; *Novartis:* Research Funding; *BMS:* Honoraria, Research Funding; *Asthelas:* Research Funding; *Janssen:* Honoraria; *Meiji seika pharma:* Honoraria; *Nippon kayaku:* Honoraria. **Maruyama:** *Takeda:* Honoraria, Research Funding; *Chugai Pharma:* Honoraria, Research Funding; *Eizai:* Honoraria, Research Funding; *Bristol Myers Squibb:* Honoraria, Research Funding; *Taiho:* Research Funding; *Amgen Astellas Biopharma:* Research Funding; *Kyowa Kirin:* Honoraria, Research Funding; *Sanofi:* Honoraria, Research Funding; *Pfizer:* Membership on an entity's Board of Directors or advisory committees, Research Funding; *Celgene:* Honoraria, Research Funding; *Novartis:* Research Funding; *Janssen:* Honoraria, Research Funding; *Otsuka:* Research Funding; *Astellas:* Research Funding; *Abbvie:* Honoraria, Research Funding; *MSD:* Honoraria, Research Funding; *Ono Pharmaceuticals:* Honoraria, Research Funding; *Nippon Shinyaku:* Honoraria; *Mundipharma:* Honoraria, Research Funding; *Zenyaku:* Honoraria; *SymBio Pharmaceuticals:* Honoraria; *AstraZeneca:* Honoraria. **Nagai:** *Eli Lilly:* Honoraria, Research Funding; *Janssen:* Honoraria, Research Funding; *HUYA:* Research Funding; *Genmab:* Honoraria, Research Funding; *Takeda:* Honoraria, Research Funding; *Kyowa Kirin:* Honoraria, Research Funding; *MSD:* Honoraria, Research Funding; *Mitsubishi Tanabe:* Research Funding; *Chugai:* Honoraria, Research Funding; *Daiichi Sankyo:* Research Funding; *BMS:* Honoraria; *Zenyaku Kogyo:* Research Funding; *Solasia:* Research Funding; *Ono:* Honoraria, Research Funding; *Eisai:* Honoraria; *Novartis:* Honoraria; *Sumitomo Pharma:* Honoraria; *Meiji Seika Pharma:* Honoraria; *Mundi pharma:* Honoraria; *GSK:* Honoraria; *Celgene:* Research Funding; *Abbvie:* Honoraria, Research Funding; *Beigene:* Research Funding; *Astra Zeneka:* Honoraria, Research Funding.

https://doi.org/10.1182/blood-2023-173433

Downloaded from http://ashpublications.net/blood/article-pdf/142/Supplement 1/4499/2187293/blood-1100-main.pdf by guest on 18 May 2024

Downloaded from http://ashpublications.net/blood/article-pdf/142/Supplement 1/4499/2187293/blood-1100-main.pdf by guest on 18 May 2024

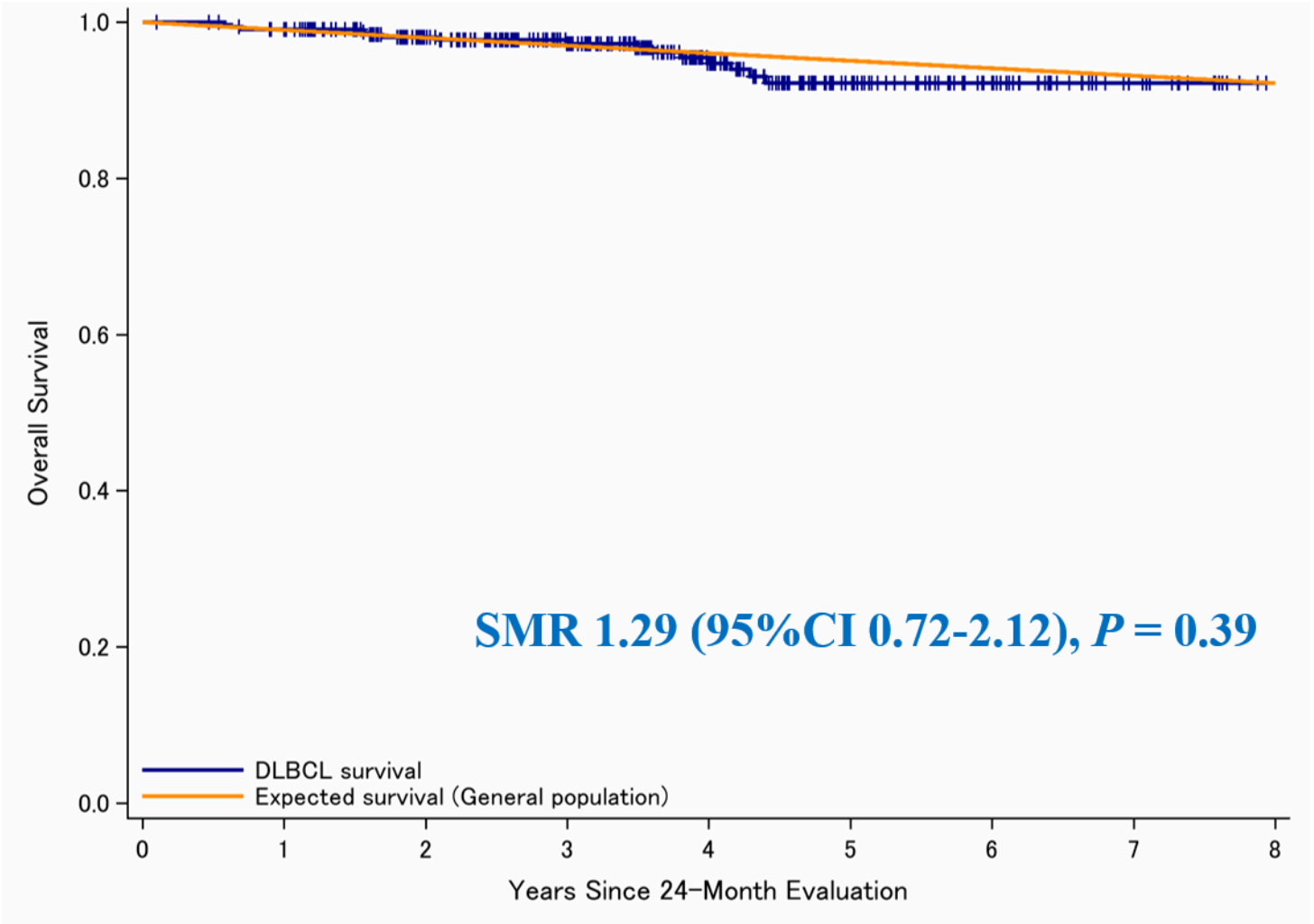

Figure. OS of patients who achieved PFS24 versus expected survival from age-, sex-, and calendar-period matched general population data.

Figure 1