

Innovation all for the patients



Roche A member of the Roche group

Chugai Files a New Drug Application for Polatuzumab Vedotin for the Treatment of Relapsed or Refractory Diffuse Large B-cell Lymphoma

- This application is an essential step for polatuzumab vedotin to become a new treatment option for diffuse large B-cell lymphoma
- Confirmed usefulness in Japanese and overseas clinical studies for relapsed or refractory diffuse large B-cell lymphoma

TOKYO, June 30, 2020 -- [Chugai Pharmaceutical Co., Ltd.](#) (TOKYO: 4519) announced that it filed a new drug application to the Ministry of Health, Labour and Welfare (MHLW) for polatuzumab vedotin, an anti-CD79b antibody-drug conjugate, for the treatment of relapsed or refractory diffuse large B-cell lymphoma (DLBCL) on June 29. Polatuzumab vedotin received orphan drug designation from MHLW in November 2019.

“About 40% of patients with untreated DLBCL experience relapse of the disease after standard therapy and subsequent treatment options are limited. In many cases, therapeutic effects on relapsed or refractory DLBCL are insufficient, and there is a high unmet medical need” said Dr. Osamu Okuda, Chugai’s President and COO. “Polatuzumab vedotin is a therapeutic antibody which bolsters Chugai’s blood cancer franchise following Rituxan® and Gazyva®. We will continue our efforts to deliver polatuzumab vedotin, an antibody-drug conjugate with a novel mechanism of action, to patients as early as possible and contribute to the realization of better treatment.”

This application is based on the results from a multicenter, single-arm Japanese phase II study (JO40762/P-DRIVE study) that evaluated the efficacy and safety of the combination therapy of polatuzumab vedotin with bendamustine and rituximab (BR therapy) in relapsed or refractory DLBCL, and a multicenter overseas phase Ib/II clinical study (GO29365) comparing the efficacy and safety of polatuzumab vedotin in combination with BR therapy to BR therapy. A double-blind, placebo-controlled global phase III study (GO39942/POLARIX study) is ongoing for untreated DLBCL to compare the efficacy and safety of polatuzumab vedotin in combination with rituximab plus cyclophosphamide, doxorubicin, prednisolone (R-CHP) to rituximab plus cyclophosphamide, doxorubicin, vincristine, prednisolone (R-CHOP).

[Reference information]

Polatuzumab Vedotin Achieved Primary Endpoint in the Japanese Phase II study for Relapsed or Refractory Diffuse Large B-cell Lymphoma (Press release issued by Chugai on February 13, 2020)

https://www.chugai-pharm.co.jp/english/news/detail/20200213150000_697.html

European Commission approves Roche's Policy for people with previously treated aggressive lymphoma (Press release issued by Roche on January 21, 2020)

<https://www.roche.com/media/releases/med-cor-2020-01-21.htm>

Chugai Receives Orphan Drug Designation for Polatuzumab vedotin in Diffuse Large B-Cell Lymphoma from the MHLW (Press release issued by Chugai on November 20, 2019)

https://www.chugai-pharm.co.jp/english/news/detail/20191120113000_668.html

About polatuzumab vedotin

Polatuzumab vedotin was developed by Roche using Seattle Genetics' ADC technology. It is a first-in-class anti-CD79b antibody-drug conjugate (ADC), comprising the anti-CD79b humanized monoclonal antibody and a tubulin polymerization inhibitor attached together using a linker. The CD79b protein is expressed specifically in the majority of B-cells, making it a promising target for the development of new therapies^{1, 2}. Polatuzumab vedotin binds to CD79b and destroys these B-cells through the delivery of an anti-cancer agent, which is thought to suppress the effects on normal cells^{3, 4}. Polatuzumab vedotin was granted accelerated approval in the US in June 2019 and conditional marketing authorization in the EU in January 2020, respectively.

About diffuse large B-cell lymphoma (DLBCL)

DLBCL is one of the histologic subtypes of non-Hodgkin's lymphoma (NHL), which is categorized as an aggressive disease that progresses on a monthly basis. DLBCL is the most common form of NHL, accounting for 30-40 percent of NHL⁵⁻⁷. DLBCL frequently occurs in middle-aged and older people, mainly in their 60's⁸. The median age at diagnosis has been reported to be 64⁹.

The combination of rituximab and chemotherapy is the standard therapy for untreated DLBCL; however, recurrence has been observed in about 40% of the patients due to insufficient therapeutic effect¹⁰. In addition, although autologous stem cell transplantation (ASCT) is recommended in eligible patients with recurrent or refractory DLBCL, ASCT cannot be performed in about half of these patients due to failure of salvage chemotherapy prior to ASCT¹¹. Furthermore, no standard therapy has been established for patients ineligible for ASCT due to reasons including age or complications¹². Therefore, more useful new treatment options for relapsed or refractory DLBCL are in great need.

Sources

- 1 Dornan D, et al. Therapeutic potential of an anti-CD79b antibody-drug conjugate, anti-CD79b-vc-MMAE, for the treatment of non-Hodgkin lymphoma. *Blood* 2009; 114:2721-2729
- 2 Pfeifer M, et al. Anti-CD22 and anti-CD79B antibody drug conjugates are active in different molecular diffuse large B-cell lymphoma subtypes. *Leukemia* 2015; 29:1578-1586
- 3 Ducry L, Stump B. Antibody-drug conjugates: linking cytotoxic payloads to monoclonal antibodies. *Bioconjug Chem.* 2010; 21:5-13
- 4 ADC Review. What are antibody-drug conjugates? Available from: <https://adcreview.com/adc-university/adcs-101/antibody-drug-conjugates-adcs/> (accessed in June 2020)
- 5 Swerdlow SH, et al. WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues, Revised 4th Edition. Lyon, International Agency for Research on Cancer; 2017

- 6 Aoki R, et al. Distribution of malignant lymphoma in Japan: Analysis of 2260 cases.2001-2006. *Pathol Int* 2008; 58(3):174-182
- 7 Chihara D, et al. Differences in incidence and trends of haematological malignancies in Japan and the United States. *Br J Haematol* 2014 Feb; 164(4):536-545
- 8 Niitsu N, Diffuse large B-cell lymphoma. *The Journal of the Japanese Society of Internal Medicine* 2008; 97:1588-1594
- 9 Armitage JO, Weisenburger DD. New approach to classifying non-Hodgkin's lymphomas: clinical features of the major histologic subtypes. *Non-Hodgkin's Lymphoma Classification Project. J Clin Oncol* 1998; 16:2780-2795
- 10 Friedberg JW. Relapsed/Refractory Diffuse Large B-Cell Lymphoma. *Hematology Am Soc Hematol Educ Program* 2011; 2011:498-505
- 11 Gisselbrecht C, et al. Salvage Regimens With Autologous Transplantation for Relapsed Large B-Cell Lymphoma in the Rituximab Era. *J Clin Oncol* 2010; 28: 4184-4190
- 12 Japanese Society of Hematology. *Practical Guidelines for Hematological Malignancies*, 2018, Kanehara & Co., Ltd. (Japanese only)

###