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POSTER ABSTRACTS

626.AGGRESSIVE LYMPHOMAS: PROSPECTIVE THERAPEUTIC TRIALS

A Phase I/II Trial to Evaluate the Safety, Pharmacokinetics, and Efficacy of Glofitamab As Monotherapy and in Combination with R-ICE Chemoimmunotherapy in Children and Young Adults with Relapsed/Refractory B-Cell Non-Hodgkin Lymphoma (iMATRIX-GLO)

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Background: Although rare,relapsed/refractory (R/R) B-cell non-Hodgkin lymphoma (B-NHL) in children, adolescents, and young adults is an area of high unmet need, with 1-year overall survival rates of <30% and complete remission (CR) rates of 27% after treatment with R-ICE (rituximab, ifosfamide, carboplatin, and etoposide) chemoimmunotherapy (Burke et al. Leukemia 2020). New treatment regimens are urgently needed (Woessmann et al. Blood 2020; Burkhardt et al. Cancers (Basel) 2021). T-cell engagers have been identified as medicinal products with the greatest probability of being beneficial for the pediatric population (Pearson et al. Eur J Cancer 2019).

Glofitamab is a CD20xCD3 T-cell engaging bispecific antibody that redirects T cells to eliminate B cells and is currently under investigation as monotherapy and in combination with chemoimmunotherapy for the treatment of adults with R/R B-NHL, with encouraging clinical activity and a manageable safety profile. Known risks associated with glofitamab are cytokine release syndrome (CRS), febrile neutropenia, tumor flare, tumor lysis syndrome, pyrexia, and infections. The safety profile of glofitamab in children is expected to be similar to that seen in adults.

Study Design and Methods: iMATRIX-GLO (NCT05533775) is a Phase I/II, open-label, single-arm, two-part trial to evaluate the safety, tolerability, pharmacokinetics (PK), and anti-tumor activity of glofitamab as monotherapy in children 6 months to <18 years of age with second and higher R/R B-NHL (i.e. relapse after 2 or more lines of treatment), or in combination with R-ICE in children and young adults ≤30 years of age with first R/R disease (i.e. relapse after the first line of treatment). Patients with a histologically confirmed diagnosis of CD20-positive R/R B-NHL are eligible. Study treatment is administered with a single dose of obinutuzumab pretreatment followed by glofitamab step doses and repeated glofitamab full doses every 21 days as monotherapy or in combination with R-ICE.

Primary objectives and endpoints are the achievement of CR after up to three cycles of combination therapy (glofitamab plus R-ICE) as determined by the investigator according to the International Pediatric NHL Response Criteria for pediatric participants and Lugano Classification for young adult participants, evaluation of glofitamab safety (CRS by ASTCT 2019 criteria, otherwise by NCI CTCAE v5.0 criteria), tolerability, and PK as monotherapy and as combination therapy. The first patient was enrolled in November 2022 and the study is ongoing. The study is planned at 23 sites in 9 countries (Europe, Australia, North America, South Korea, and China).

Disclosures Burkhardt: *Miltenyi, F. Hoffmann-La Roche Ltd, Novartis, Janssen, Abbvie:* Consultancy; *F. Hoffmann La Roche Ltd:* Research Funding. **Rossato:** *F. Hoffmann La Roche Ltd:* Current Employment, Current equity holder in publicly-traded company. **Dixon:** *Roche Products Ltd:* Current Employment; *F. Hoffmann La Roche Ltd:* Current equity holder in publicly-traded company, Divested equity in a private or publicly-traded company in the past 24 months. **Carlile:** *AstraZeneca, F. Hoffmann-La Roche Ltd:* Current equity holder in publicly-traded company; *F. Hoffmann-La Roche Ltd:* Current Employment. **Dmytrasz:** *F. Hoffmann La Roche Ltd:* Current Employment, Current equity holder in publicly-traded company. **Wulff:** *Genentech, Inc.:* Current Employment. **Negricea:** *F. Hoffmann La Roche Ltd:* Current equity holder in publicly-traded company; *Roche Products Ltd:* Current Employment. **Wulff:** *F. Hoffmann La Roche Ltd:* Current Employment, Current holder of *stock options* in a privately-held company.

OffLabel Disclosure: Glofitamab (Columvi) is a bispecific CD20-directed CD3 T-cell engager indicated for the treatment of adult patients with relapsed or refractory DLBCL, NOS or large B-cell lymphoma arising from FL, after two or more lines of systemic therapy.

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