



## Final Phase II Results for UCB's Rozanolixizumab in Primary Immune Thrombocytopenia (ITP) Published in *Blood Advances*

- Phase II data demonstrated clinically meaningful platelet count increases with meaningful decreases in IgG concentration
- Rozanolixizumab's subcutaneous route of administration shows potential to deliver targeted individualized patient care for people living with Primary Immune Thrombocytopenia

**Brussels, Belgium: 9<sup>th</sup> September 2020, 07:00 CEST**– UCB, a global biopharmaceutical company, today announced positive results from a Phase II study (TP0001; NCT02718716) of its investigational treatment, rozanolixizumab, the first subcutaneously infused monoclonal FcRn antibody being investigated for patients with primary immune thrombocytopenia (ITP). The results were published in the September online issue of *Blood Advances*.<sup>1</sup>

ITP is a rare, often chronic autoimmune disease that is characterized by unpredictable and debilitating symptoms, including spontaneous bruising, bleeding and extreme fatigue, that can greatly impact patients' activities of daily life.<sup>2</sup>

*"Patients are at the core of everything we do at UCB, and through the scientific discovery of novel therapies like rozanolixizumab, we are dedicated to developing new solutions that can help improve health outcomes for people living with primary ITP and other rare, IgG autoantibody-mediated diseases," said Dr. Iris Loew-Friedrich, Chief Medical Officer, Executive Vice-President, UCB. "These results are a critical step forward for rozanolixizumab, which has one of the largest clinical trial programmes worldwide in ITP."*

In this study<sup>1</sup>, clinically relevant improvements in platelet count (i.e., reaching  $\geq 50 \times 10^9/L$ ) and meaningful decreases in immunoglobulin G (IgG) levels were observed across all dose groups,

with advantages seen in the single-dose cohorts (15 and 20 mg/kg) compared with the multiple-dose cohorts (5x4, 3x7 and 2x10 mg/kg weekly, cumulative dose of approximately 20mg/kg). Specifically, platelet counts of  $\geq 50 \times 10^9/L$  were achieved by more patients following a single infusion of 15 or 20 mg/kg: (66.7% and 54.5% patients, respectively) vs multiple infusions to achieve an approximate cumulative dose of 20mg/kg (5x4, 3x7, or 2x10 mg/kg: 35.7%, 35.7% and 45.5% patients, respectively), and occurred more rapidly in single-dose cohorts. Minimum mean IgG occurred by Day 8 in higher (15 and 20 mg/kg) single dose cohorts, and by Day  $\geq 15$  in multiple dose cohorts. The subcutaneous administration of rozanolixizumab demonstrated a generally tolerated safety profile across all reported dose groups,<sup>1</sup> consistent with other rozanolixizumab studies.<sup>3,4</sup> The most commonly reported adverse event was mild to moderate headache, with highest occurrence in the 20mg/kg cohort; other reported adverse events included diarrhea and vomiting, the latter only observed in single dose cohorts. All were managed with standard medication (if required) of short duration, and all resolved without clinical sequelae. No patient discontinued the study due to side effects.<sup>1</sup>

*“People who have primary ITP may experience low platelet count that puts them at risk for severe bleeding, and there are limited options to reduce this risk,” said Professor Tadeusz Robak, Professor of Hematology at the Medical University of Lodz, Poland. “New treatment options for ITP that have the potential to provide improvement in platelet count are urgently needed, and I am encouraged by the results in this phase 2 study, which is now being tested also in a chronic use program in phase 3.”*

Current treatment options for people with ITP are limited and can be time-consuming and invasive. There continues to be a need for new treatment options that can improve patients' health outcomes and quality of life. Rozanolixizumab is an investigational, advanced SC anti-neonatal Fc receptor (FcRn) therapy that has the potential to provide targeted individualized patient care.

*“These data build on the growing body of evidence that targeting the FcRn pathway has the potential to treat people with rare IgG autoantibody-mediated diseases such as primary ITP”,* said James Bussel\*, MD, professor emeritus of pediatrics at Weill Cornell Medicine.

*“Publication of these findings in Blood Advances encourages us to continue to deepen our understanding of primary ITP and the ways rozanolixizumab may help treat people living with this disease”.*

### **About the rozanolixizumab clinical study<sup>1</sup>**

TP0001 (NCT02718716) is a Phase II, multi-center, open-label, multiple-dose study of rozanolixizumab in adult patients with persistent/chronic primary ITP. Sixty-six patients were

assigned to one of five groups with different dosing regimens (5 x 4 mg/kg, 3 x 7 mg/kg, 2 x 10 mg/kg, 1 x 15 mg/kg or 1 x 20 mg/kg; multiple doses were administered at weekly intervals), receiving rozanolixizumab by SC infusion. All patients were monitored for an 8-week observation period after completion of treatment. The primary objective of the study assessed safety and tolerability of subcutaneous rozanolixizumab infusion in patients with persistent/chronic primary ITP, and the secondary objective considered the clinical efficacy (platelet count) and pharmacodynamic (total IgG) effects. The study was designed to explore a range of therapeutic doses in order to develop an appropriate dosing regimen for patients with ITP.

Rozanolixizumab was generally tolerated across all dose groups (4–20 mg/kg) with mild-to-moderate headaches seen at higher doses; no patient discontinued the study due to side effects.

In the study, clinically relevant improvements in platelet count (to  $\geq 50 \times 10^9/L$ ) were observed in patients with primary ITP receiving rozanolixizumab across all dose groups as were decreases in serum IgG concentration. More patients receiving a single, higher-dose infusion achieved platelet counts of  $\geq 50 \times 10^9/L$  at least once at any time (66.7% and 54.5% in the 1 x 15 mg/kg and 1 x 20 mg/kg dose groups, respectively) compared with patients in the multiple-dose cohorts (35.7%, 35.7% and 45.5% in the 5 x 4 mg/kg, 3 x 7 mg/kg, and 2 x 10 mg/kg groups, respectively). Minimum mean IgG levels and maximum mean platelet counts both occurred by Day 8 in the higher (15 and 20 mg/kg) single dose cohorts, and maximum mean platelet count occurred from day 11 onwards in the multiple dose cohorts.

### **About primary immune thrombocytopenia**

Primary ITP is an acquired autoimmune disorder characterized, in most cases, by the presence of pathogenic IgG autoantibodies, with an estimated prevalence of approximately 10 people per 100,000 (USA).<sup>5</sup> Pathogenic IgG autoantibodies target platelets and megakaryocytes (platelet precursors), leading to the removal and destruction of both circulating and newly formed platelets<sup>6,7,8</sup>, ultimately resulting in a propensity for bleeding in patients with ITP. The standard of care for patients with newly diagnosed ITP consists of corticosteroids or intravenous immunoglobulin (IVIg).<sup>9</sup> Patients intolerant to corticosteroids or with contraindications are treated with IVIg or anti-D (where appropriate). Subsequent treatments include thrombopoietin receptor agonists, rituximab, immunosuppressive agents or splenectomy.<sup>10</sup>

### **About rozanolixizumab**

Rozanolixizumab is a subcutaneously administered, humanized monoclonal antibody that specifically binds, with high affinity, to human FcRn. It has been designed to block the

interaction of FcRn and IgG, inhibiting IgG recycling and inducing the removal of pathogenic IgG autoantibodies.<sup>1,11</sup>

Rozanolixizumab is under clinical development with the aim of improving the lives of people with pathogenic IgG-autoantibody-driven autoimmune diseases, including ITP, myasthenia gravis (MG) and chronic inflammatory demyelinating polyneuropathy (CIDP), by driving removal of pathogenic IgG autoantibodies.

Rozanolixizumab, an investigational monoclonal antibody, was granted orphan drug designation for the treatment of ITP by the US Food and Drug Administration on 30 April 2018 and by the European Commission on 11 January 2019.<sup>12,13</sup> The safety and efficacy of rozanolixizumab has not been established; it is not currently approved by any regulatory authority worldwide.

### **About UCB in Rare Diseases**

At UCB, we don't just see patients or population sizes, we see people in need. Through decades of serving the neurology and immunology communities, we have improved lives with impactful medicines and by enhancing the social and emotional well-being of patients. As a continuation of our heritage, we are now expanding our efforts to tackle rare neurological and immunologic diseases where current options offer little hope, including investigational treatments for primary immune thrombocytopenia (ITP), myasthenia gravis (MG), chronic inflammatory demyelinating polyneuropathy (CIDP) and progressive supranuclear palsy (PSP).

### **About UCB**

UCB, Brussels, Belgium ([www.ucb.com](http://www.ucb.com)) is a global biopharmaceutical company focused on the discovery and development of innovative medicines and solutions to transform the lives of people living with severe diseases of the immune system or of the central nervous system. With 7,600 people in approximately 40 countries, the company generated revenue of €4.9 billion in 2019. UCB is listed on Euronext Brussels (symbol: UCB). Follow us on Twitter: @UCB\_news

###

### **For further information, UCB:**

#### **Corporate Communications**

Jim Baxter  
Neurology Communications (Global), UCB  
T+32.2.473.78.85.01,  
[jim.baxter@ucb.com](mailto:jim.baxter@ucb.com)

Laurent Schots  
Media Relations, (Global) UCB  
T+32.2.559.92.64,  
[laurent.schots@ucb.com](mailto:laurent.schots@ucb.com)

#### **Investor Relations**

Antje Witte,  
Investor Relations, UCB  
T+32.2.559.94.14,  
[antje.witte@ucb.com](mailto:antje.witte@ucb.com)

Isabelle Ghellynck,  
Investor Relations, UCB  
T +32.2.559.95.88,  
[isabelle.ghellynck@ucb.com](mailto:isabelle.ghellynck@ucb.com)

## Forward-looking statements

This press release contains forward-looking statements based on current plans, estimates and beliefs of management. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements, including estimates of revenues, operating margins, capital expenditures, cash, other financial information, expected legal, political, regulatory or clinical results and other such estimates and results. By their nature, such forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties and assumptions which could cause actual results to differ materially from those that may be implied by such forward-looking statements contained in this press release. Important factors that could result in such differences include: changes in general economic, business and competitive conditions, the inability to obtain necessary regulatory approvals or to obtain them on acceptable terms, costs associated with research and development, changes in the prospects for products in the pipeline or under development by UCB, effects of future judicial decisions or governmental investigations, product liability claims, challenges to patent protection for products or product candidates, changes in laws or regulations, exchange rate fluctuations, changes or uncertainties in tax laws or the administration of such laws and hiring and retention of its employees.

Additionally, information contained in this document shall not constitute an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any offer, solicitation or sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of such jurisdiction. UCB is providing this information as of the date of this document and expressly disclaims any duty to update any information contained in this press release, either to confirm the actual results or to report a change in its expectations.

There is no guarantee that new product candidates in the pipeline will progress to product approval or that new indications for existing products will be developed and approved. Products or potential products which are the subject of partnerships, joint ventures or licensing collaborations may be subject to differences between the partners. Also, UCB or others could discover safety, side effects or manufacturing problems with its products after they are marketed.

Moreover, sales may be impacted by international and domestic trends toward managed care and health care cost containment and the reimbursement policies imposed by third-party payers as well as legislation affecting biopharmaceutical pricing and reimbursement.

*\*Dr. James Bussel is a paid consultant for various companies in the ITP space including Amgen, Argenx, Dova, Johnson and Johnson, Momenta, Principia, Rigel and UCB.*

## References

1. Robak T., Kaźmierczak M., Jarque I., Musteata V., Trelński J. et al. Phase 2 multiple-dose study of an FcRn inhibitor, rozanolixizumab, in patients with primary immune thrombocytopenia. *Blood advances* 2020; 4(17):4136–46
2. Kohli, R, Chaturvedi, S (2019) Epidemiology and Clinical Manifestations of Immune Thrombocytopenia. *Hamostaseologie* 2019; 39(3):238–249
3. Kiessling, P, Lledo-Garcia, R. S, Watanabe et al. (2017) The FcRn inhibitor rozanolixizumab reduces human serum IgG concentration: A randomized phase 1 study. *Sci Transl Med.* 9(414)
4. Brill, V, Benatar, M. Brock, M et al. (2019) Proof-of-Concept and Safety of the Anti-FcRn Antibody Rozanolixizumab in Patients with Moderate-to-Severe Generalized Myasthenia Gravis (GMG): A Phase 2a Study. *Neurology (Abstracts: AAN 71th Annual Meeting, Philadelphia)* *Neurology* 2019; 92(15 Suppl.): abs S43.001
5. National Organization for Rare Disorders (NORD). Immune thrombocytopenia. Retrieved from: <https://rarediseases.org/rare-diseases/immune-thrombocytopenia/> Accessed September 2020

6. Cortelazzo, S., Finazzi G., Buelli, M., Molteni, A., Viero P. and Barbui, T. (1991) High risk of severe bleeding in aged patients with chronic idiopathic thrombocytopenic purpura. *Blood*. 77(1):p31-
7. Chang, M., Nakagawa P.A., Williams S.A. et al. (2003) Immune thrombocytopenic purpura (ITP) plasma and purified ITP monoclonal autoantibodies inhibit megakaryocytopoiesis in vitro. *Blood*. 102(3):p887-95
8. Chan, H., Moore J.C., Finch C.N., Warkentin T.E., and Kelton J.G. (2003) The IgG subclasses of platelet-associated autoantibodies directed against platelet glycoproteins IIb/IIIa in patients with idiopathic thrombocytopenic purpura. *Br J Haematol*. 122(5):p818-24
9. Neunert, C., Terrell, D.R., Arnold, D.M., et al. American Society of Hematology 2019 guidelines for immune thrombocytopenia. *Blood Adv*. 2019;3(23):3829-3866.
10. Provan, D., Arnold D.M., Bussel, J.B., et al. (2019) Updated international consensus report on the investigation and management of primary immune thrombocytopenia. *Blood Adv*. (2019) 3 (22): 3780–3817.
11. Smith B, Kiessling A, Lledo-Garcia R, et al. Generation and characterization of a high affinity anti-human FcRn antibody, rozanolixizumab, and the effects of different molecular formats on the reduction of plasma IgG concentration. *MAbs*2018;10:1111-30
12. U.S. Food and Drug Administration (FDA). (2018). Orphan drug designations and approvals. Retrieved from: <https://www.accessdata.fda.gov/scripts/opdlisting/oopd/detailedIndex.cfm?cfgridkey=636618> Accessed September 2020
13. European Medicines Agency (EMA). (2019). Public summary of opinion on orphan designation. Retrieved from: <https://www.ema.europa.eu/en/medicines/human/orphan-designations/eu3182131> Accessed September 2020