

Lanadelumab

- Real-world clinical effectiveness of lanadelumab, for patients newly initiated on lanadelumab or for patients who have previous experience with alternative therapies for HAE
- Novel efficacy outcomes (e.g. remission) or composite efficacy end-points (e.g. patient-reported outcomes and biomarkers) in patients with HAE treated with lanadelumab
- Investigate potential for lanadelumab to modify the contact system (e.g. changes in trigger sensitivity, sustained control or suppression)
- Efficacy of lanadelumab in other conditions where bradykinin or the kallikrein–kinin system may form the pathological basis of disease

Icatibant

- Real-world effectiveness and safety of icatibant including pediatrics
- Efficacy of icatibant in other conditions where bradykinin may form the pathological basis of disease

HAE

- Approaches to facilitating diagnosis and decreasing diagnostic delay
- Characterization of non-histaminergic angioedema, including pathophysiology, prodrome, diagnosis and biomarkers
- Explore the burden of illness and the burden of treatment, including paediatrics
- Appropriate management with on-demand and LTP, and those patient profile

Hemophilia A

- Studies examining the cost efficiency of recombinant Antihemophilic Factor (ADVATE) and PEGylated –recombinant Antihemophilic Factor (ADYNOVATE/ADYNOVI) with or without myPKFiT
- Studies examining the relationship between FVIII levels and the occurrence of bleeds at varying physical activity levels with or without the use of the myPKFiT mobile app
- Studies to investigate changes in adherence and quality of life (QoL) in patients using recombinant Antihemophilic Factor (ADVATE) and the myPKFiT patient app
- Real World Evidence on use of PEGylated -recombinant Antihemophilic Factor (ADYNOVATE/ADYNOVI), an extended half-life rFVIII (EHL rFVIII), in clinical practice with or without myPKFiT (including safety, efficacy, utilization, QoL, adherence, patient satisfaction etc.)
- Studies on other non-coagulation effects of Factor VIII
- Studies looking at the GOAL-HEM (Goal Attainment Scaling for Life – Hemophilia) as a patient-centered reported outcome measure to monitor clinical progress
- Non-clinical studies on Polyethylenglycol (PEG) safety
- Role of PEGylated -recombinant Antihemophilic Factor (ADYNOVATE/ADYNOVI) for tolerization or in previously tolerized/partially tolerized patients
- Studies to investigate appropriate assessment of joint health and prevention/management of all bleeds including subclinical
- Studies to investigate benefit of FVIII replacement therapy vs. non-factor therapy in optimising bleed outcomes

Recombinant-porcine Antihemophilic Factor and Acquired Hemophilia (AHA)

- Prospective or retrospective studies that provide insights on first-line use, loading dose, dosing over time, FVIII:c and anti-drug antibodies
- Explore efficacy and safety of recombinant-porcine Antihemophilic Factor in patient subpopulations (i.e. post-partum or patients with specific comorbidities) with AHA
- Relationship between treatment effectiveness, FVIII level and anti-pFVIII inhibitor titer in subjects with AHA receiving recombinant-porcine Antihemophilic factor
- Development/validation of dosing algorithms for recombinant-porcine Antihemophilic factor, initial and follow-on, when the anti-porcine FVIII titers are unknown.
- Relationship between treatment effectiveness and recombinant-porcine Antihemophilic factor dosing in subjects with AHA
- Explore the potential use of recombinant-porcine Antihemophilic factor as treatment for breakthrough bleeds in patients treated with non-factor therapies [i.e. Emicizumab]
- Studies intended to develop flexible and tailored dosing regimens for recombinant-porcine Antihemophilic Factor
- Investigate effectiveness, safety and treatment outcomes of the continuous infusion of recombinant-porcine Antihemophilic Factor
- Collect long term data on treatment for patients with AHA
- Clinical outcomes of Anti-Inhibitor Coagulant Complex for treatment of AHA patients

Hemophilia Gene Therapy

- Investigate novel technology (novel FVIII mutant, delivery system etc.)

Thrombotic Thrombocytopenic Purpura (TTP)

- Long-term outcomes and disease progression in TTP (congenital and or/acquired TTP) with current standard of care
- Studies of the epidemiology, disease burden, and/or health care utilization of TTP patients
- Genotype/phenotype correlations among TTP patients
- Correlation of ADAMTS13 levels with outcomes
- Investigate effects and adverse events associated with chronic plasma use
- Mechanistic investigations into rADAMTS13 and TTP
- Interactions of ADAMTS13 with other proteins that might affect clinical outcomes
- Understanding the relationship between subclinical events and development of disease-related complications in TTP
- Using clinical biomarkers as proxy for on-going development of disease-related complications in TTP

von Willebrand Disease (VWD)

- Projects aiming to improve knowledge in the management of prophylaxis, heavy menstrual bleeding (HMB), post-partum bleeding, gastrointestinal (GI) bleeding, severe epistaxis, major surgeries
- Comparison of plasma-derived von Willebrand factor (pdVWF) and recombinant von Willebrand factor (rVWF) in the treatment of GI bleeds or HMB
- Effectiveness and safety of von Willebrand factor (VWF) in on demand/surgery and prophylaxis in real world setting (including elderly patient or those having a cancer or thrombotic risk)
- Personalization of VWD therapy (genetic, bleed prediction, bleeding assessment tools, multidisciplinary approach, ...)
- Studies to examine the relationship(s) between the rVWF characteristics, its half-life, its multimeric profile and its clinical efficacy
- Role of VWF multimeric forms in the control of angiogenesis including biomarkers of angiogenesis (rVWF in angiodysplasia)
- Impact of long-term management of joint bleeds on quality of life (QoL) and/or healthcare resource utilization (HRU); impact of the management of HMB on QoL and HRU
- Assessment of the efficacy of VWF (pdVWF or rVWF) in acquired VWS – left ventricular assist device (LVAD), extracorporeal membrane oxygenation (ECMO)

Fabry Disease

- Studies for the development or evaluation of biomarkers or diagnostic capabilities to:
 - ✓ Identify high risk populations
 - ✓ Facilitate early disease detection
 - ✓ Detection of early disease progression
 - ✓ Monitor disease progression
 - ✓ Predict/measure therapy effectiveness
- Research on cardiac treatment outcomes
- Studies of genotypes and phenotypes, as well as their correlation, in different geographies
- Studies on disease progression in specific agalsidase alfa treated sub populations or segments (e.g., females and pediatrics subjects).
- Studies on early treatment
- Studies examining outcomes in patients with amenable mutations
- Research fostering understanding of inflammation and immunogenicity in Fabry disease (FD)

Gaucher Disease

- Screening for patients with Gaucher disease
- Generation of data on patient reported outcomes (PRO)
- Generation of data on the role of Lyso-Gb1 as a novel biomarker
- Studies fostering understanding of inflammation and immunogenicity in Gaucher disease
- Enzyme replacement therapy (ERT) infusion optimization (e.g. location (hospital/home), infusion pumps, etc.) that could have potential positive impact on patient experience and patient Quality of Life (QoL)
- Genotypes and phenotypes

Rare autoimmune diseases (RAID), including chronic inflammatory demyelinating polyradiculoneuropathy (CIDP), multifocal motor neuropathy (MMN) and other peripheral neuropathies

- Studies intended to improve diagnosis and care
- Research that intends to identify biomarkers to improve diagnosis or to measure treatment outcome
- Studies that assess and evaluate QoL, personalized health, and perceived health

Immunodeficiencies

Secondary Immunodeficiency (SID):

- Studies that intend to understand the course of infections in patients with cancer-and treatment-related SID (especially chimeric antigen receptor (CAR) T-cell therapy, posthematopoietic stem cell transplant (HSCT), and solid organ transplantation (SOT)), for example: timing of infections, frequency, types, and impact on patient outcomes and treatment
- Studies that aim to establish or validate existing predictive model or to identify single biomarker that could help to select patients at high risk of developing infections in cancer related and treatment related SID
- Studies with a focus on understanding who would benefit the most from prophylactic or on demand immunoglobulin (IG) therapy
- Analyses that quantify and qualify the impact of SIDs and/or impact of IG therapy (prophylactic and on-demand) vs standard of care (SOC) on clinical and patients' related outcomes (e.g. efficacy, long term safety, quality of life, personalized health, and perceived health)

Primary Immunodeficiency (PID):

- Real World Evidence studies that provide insights into usage and administration parameters of subcutaneous immunoglobulin (SCIG) products, particularly in special populations (pediatric, elderly, obese patients)
- Studies that assess and evaluate QoL, personalized health, and perceived health for IG replacement therapy
- Studies that assess and evaluate the application of new device or digital health concepts in the management of PID
- Studies that explore novel or validate existing approaches in support of earlier PID diagnosis – especially those that could have global impact
- Studies with a focus on understanding the full presentation of PID including the impact of comorbidities to PID and/or vice versa

Hemophilia A and B Inhibitor prevention and management

- Pre-clinical and clinical studies examining the care and treatment of persons with inhibitors and the use of Anti-Inhibitor Coagulant Complex to control and prevent bleeding episodes and perioperative management in adults and children as well as its impact on quality of life (QoL).
- Studies exploring the potential immunotolerance effect of Anti-Inhibitor Coagulant Complex prophylaxis during Immunotolerance induction (ITI) in hemophilia patients with inhibitors.
- Studies examining clinical effectiveness and pharmacoeconomic aspects of using Anti-Inhibitor Coagulant Complex in prophylaxis as well as in ITI.
- Studies examining the use of Anti-Inhibitor Coagulant Complex in prophylaxis with low dose regimens: regimens, clinical outcomes, pharmacoeconomic implications, QoL
- Studies examining potential correlations between thrombin generation assay (TGA) parameters and clinical outcomes.
- Investigations of differences in patient profiles for hemophilia patients with and without inhibitors, and possible correlations with prediction, prevention, eradication and prophylaxis of inhibitors.
- Explore whether knowledge from other immunological disease states can be used to develop better management of inhibitor patients.
- Investigate safety profile of Anti-Inhibitor Coagulant Complex to identify possible predictors of outcomes.
- Investigate the use and cost effectiveness of low dose FVIII ITI with Anti-Inhibitor Coagulant Complex as compared to high dose FVIII ITI alone.
- Investigate the use and cost effectiveness of low dose FIX ITI with Anti-Inhibitor Coagulant Complex as compared to high dose FIX ITI alone or with other components
- Preclinical and clinical studies examining the interaction between the co-administration of Anti-Inhibitor Coagulant Complex and non-factor replacement therapies: regimens and doses, clinical outcomes, safety (TMAs & TEEs), pharmacoeconomic implications, global assays.