Avillion's positive Phase 2 trial of tri-specific Nanobody® sonelokimab (M1095) in chronic psoriasis published in *The Lancet*

- All Primary and Secondary endpoints met with high statistical significance
- Sonelokimab is a novel, investigational tri-specific Nanobody® that neutralizes both IL-17A and IL-17F
- Trial completed under a co-development agreement between Avillion and Merck KGaA Darmstadt, Germany

London, UK, 23 April 2021 – Avillion LLP, a drug development company focused on the co-development and financing of pharmaceutical candidates from proof-of-concept through to regulatory approval, announces that its positive Phase 2 trial of sonelokimab (M1095) in patients with chronic psoriasis has been published in the prestigious peer-reviewed medical journal *The Lancet* (Papp *et al*. ref. 1).

Sonelokimab is a novel tri-specific Nanobody® targeting IL 17A and IL-17F that also has an extended half-life and enhanced biodistribution through engineered binding affinity to albumin. The IL-17 family of cytokines induce and mediate proinflammatory responses and are implicated in a variety of autoimmune diseases in dermatology and rheumatology.

The Phase 2 trial with sonelokimab was conducted by Avillion under a co-development agreement with Merck KGaA Darmstadt, Germany and completed ahead of schedule in 2020 (ClinicalTrials.gov Identifier: NCT03384745).

The trial evaluated four dose regimens of sonelokimab and included both placebo and an active control arm of the IL-17A inhibitor secukinumab. 313 patients were randomized (n=51–53 for each group) with demographic and baseline characteristics generally similar between arms. The trial enrolled patients at 41 investigator sites in North America and Europe.

The trial met its primary efficacy endpoint based on Investigator's Global Assessment (IGA) at week 12 with clinically meaningful and statistically significant results for all tested doses ($p<0.001$). All secondary endpoints – Psoriasis Area and Severity Index (or PASI 75, PASI 90, and PASI 100) at week 12 – were also met with high statistical significance ($p\leq0.002$).

Sonelokimab was also found to be generally well tolerated with a safety profile in line with other biologic therapies for psoriasis at all doses tested.

At the highest dose, sonelokimab provided rapid and meaningful responses including:

- PASI 90 responses in approximately 1/3 of patients at week 4
- PASI 90 responses in approximately 8 of 10 patients at week 12
- PASI 100 responses or total skin clearance in almost 6 of 10 of patients at week 24

The majority of adverse events (AEs) reported during the placebo-controlled period were mild to moderate. Approximately half of patients reported one or more AEs, with the most frequent (incidence ≥5%) being nasopharyngitis (13.5%) and pruritus (6.7%). Five patients treated with sonelokimab experienced serious AEs (none related to study drug) and three discontinued due to an AE. Over one year, sonelokimab safety was similar to secukinumab with the possible exception of manageable Candida infections.

Prof. Dr. Kristian Reich, Professor for Translational Research in Inflammatory Skin Diseases, University Medical Center Hamburg-Eppendorf and an internationally recognised dermatology expert, played a pivotal role in designing and implementing the study and interpreting the data.

Commenting on the results, Prof. Dr. Reich said: "Chronic psoriasis has a significant negative impact on the health and quality of life of patients and effective new treatments are in great need. The positive results from this trial with sonelokimab are very encouraging as they demonstrate the speed of effect, durability and tolerability of this novel tri-specific nanobody approach targeting both IL-17A and IL-17F in patients with plaque-type psoriasis. Phase 3 studies are clearly warranted to confirm the benefits of sonelokimab and its potential to significantly improve upon existing therapeutic options."

Allison Jeynes, MD, Chief Executive Officer of Avillion, added: "We are extremely grateful to the investigators and patients across North American and Europe who participated in the Phase 2 trial with sonelokimab. Its efficient conduct and positive conclusion are a great example of the expertise, capabilities and value-add that Avillion brings to advance its partner's candidates through late-stage clinical development."

Top-line results from this study were first announced on 10 September 2020 and subsequently presented in the Late-Breaking News session at the European Academy of Dermatology and Venereology (EADV) 2020 Virtual Congress in October 2020.

Reference

1. K.A. Papp, M. Weinberg, A. Morris, K. Reich. IL17A/F nanobody sonelokimab in patients with plaque psoriasis: a multicentre, randomised, placebo-controlled, phase 2b study. *The Lancet* (2021);397: 1564-75.

About sonelokimab (M1095)

The Anti-IL-17 A/F Nanobody® sonelokimab is an investigational tri-specific half-life-extended Nanobody that is thought to neutralise both IL-17A and IL-17F with the potential to treat inflammatory diseases. Due to the small size and unique structure of Nanobodies®, they could be an ideal building block for a new generation of novel biological drugs.

Merck KGaA Darmstadt, Germany acquired full, exclusive rights to anti-IL-17 A/F Nanobody® through a global development and commercialisation deal with Ablynx in 2013. Avillion entered into a co-development agreement with Merck KGaA Darmstadt, Germany for the Phase 2 and Phase 3 development of sonelokimab in March 2017.

About Psoriasis

Psoriasis is a chronic, relapsing, inflammatory skin disease that affects approximately 8 million people in the US and 125 million worldwide[1]; 2-3 % of the total population have psoriasis, according to the World Psoriasis Day consortium. The exact causes leading to the development of psoriasis are not known yet, but some factors have been shown to play an important role, such as genetic predisposition or the presence of other diseases (comorbidities) or risk factors. Various treatments are available, but there is not yet a definite cure, meaning that psoriasis patients require a lifelong treatment. Psoriasis can begin at any age, and people affected are at an increased risk of developing other serious health conditions. Psoriasis has a significant impact on quality of life and on psychological health.

[1] *National Psoriasis Foundation. Statistics. https://www.psoriasis.org/content/statistics. Accessed October 2020*

About the sonelokimab (M1095) Phase 2 trial (NCT identifier NCT03384745)

The trial is a Phase 2b randomized, double-blind, placebo controlled, multi-centre study designed to assess sonelokimab 's efficacy, safety and tolerability in subjects with moderate to severe chronic plaque-type psoriasis. The trial enrolled 313 patients (age 18-75) with:

- chronic plaque psoriasis for at least six months
- an Investigator's Global Assessment (IGA) score ≥3
- involved body surface area (BSA) ≥10%, and
- Psoriasis Area and Severity Index (PASI) ≥12 at screening and at baseline.

Patients were randomised to one of four experimental arms (n=51–53 for each group) exploring four dose regimens with sonelokimab, or a placebo comparator arm or an active reference arm (secukinumab).

The study consisted of a 12-week placebo-controlled period, followed by a 12-week dose optimization part and a dose individualization part from week 24–52.

During the first 12 weeks, patients received placebo, sonelokimab 30 mg, 60 mg, or 120 mg at weeks 0, 2, 4, and 8 (denoted normal load); sonelokimab 120 mg at weeks 0, 2, 4, 6, 8 and 10 (denoted augmented load); or secukinumab 300 mg (weeks 0, 1, 2, 3, 4 and 8.

From weeks 12–24 (maintenance/escalation), patients randomized to 30 or 60 mg sonelokimab with an IGA score of >1 at week 12 were escalated to 120 mg once monthly (q4w), those receiving placebo were switched to 120 mg (weeks 12, 14, 16 and q4w), and patients receiving 120 mg normal load) and 120 mg augmented load) were treated q8w and q4w, respectively.

The primary endpoint was achievement of an IGA response (i.e. IGA score of 0 or 1, with an IGA reduction of at least 2 points from baseline) vs. placebo. IGA is the Investigator's assessment of the extent of psoriasis, with 0 = clear of psoriasis, 1 = almost clear, 2 = mild psoriasis, 3 = moderate psoriasis, and 4 = severe psoriasis (the worst assessment on this scale).

Secondary endpoints included PASI 75 (reduction in PASI burden by at least 75%), PASI 90 (reduction in PASI burden by at least 90%) and PASI 100 (psoriasis has completely cleared) at week 12 compared to baseline.

The trial enrolled patients at 41 investigator sites in North America and Europe.

About Avillion

Avillion offers pharma partners an innovative model providing additional funding and clinical development expertise, to maximise the potential of new and existing assets. With deal sizes ranging from $50M–$600M, Avillion takes on the full clinical and regulatory risk, focusing on the speed and quality of trial execution. Typically supporting programs post proof-of-concept through to registration and with an agnostic approach to therapy area, Avillion prides itself in adding value around operational expertise while being backed by established long-term investors.

Avillion was founded in 2012 and is backed by Abingworth and Blackstone Life Sciences (previously Clarus Ventures). Blackstone Life Sciences and Royalty Pharma funded the sonelokimab program.

For more information, please visit us at www.avillionllp.com

Contacts

Allison Jeynes, CEO
+44 (0)203 764 9530
avillion@avillionllp.com

Mark Swallow, Citigate Dewe Rogerson
+44 (0)203 926 8535
avillion@citigatedewerogerson.com