PRESS RELEASE

PUBLICATION OF THE MASITINIB PIVOTAL PHASE 3 CLINICAL TRIAL IN PROGRESSIVE FORMS OF MULTIPLE SCLEROSIS IN THE JOURNAL *NEUROLOGY®: NEUROIMMUNOLOGY & NEUROINFLAMMATION*

Paris, 22 February, 2022, 6pm CET

AB Science SA (Euronext - FR0010557264 - AB) today announced publication of results from its positive pivotal phase 3 trial of masitinib in progressive forms of multiple sclerosis in the peer-reviewed journal *Neurology® Neuroimmunology & Neuroinflammation*, an official journal of the American Academy of Neurology [1].

This article, titled 'Efficacy and Safety of Masitinib in Progressive Forms of Multiple Sclerosis: A Randomized, Phase 3, Clinical Trial' is freely accessible online from the journal website: https://nn.neurology.org/content/nnn/9/3/e1148.full.pdf.

Patrick Vermersch, MD, Professor of Neurology at the University of Lille, France, and senior author of this article commented: "*This publication provides the first clinical evidence that targeting the innate immune system is an effective strategy for the treatment of progressive forms of MS. More specifically, results showed that masitinib at 4.5 mg/kg/d can benefit patients by slowing EDSS-based disability worsening, including a statistically significant reduction in the risk of requiring a wheelchair, which is a clinically meaningful outcome for patients. Remarkably, the results of study AB07002 demonstrate, for the first time, the efficacy of a therapeutic product in the treatment of MS patients who were progressing but not clinically active, which includes non-active primary progressive and secondary progressive MS. There is currently no approved therapy that encompasses this particular population of progressive MS. I am therefore excited to continuing the development of masitinib in its confirmatory Phase 3 study (AB20009), with the anticipation that it could be a new therapeutic hope for these patients.*"

Professor Olivier Hermine, MD, President of the Scientific Committee of AB Science and member of the Académie des Sciences in France said, "*Masitinib is a truly innovative drug for MS because unlike the majority of drug development research in this indication, masitinib targets mast cells and microglia in the central nervous system. These cells of the innate immune system are increasingly implicated in the pathophysiology of progressive MS [2–4]. Indeed, considering also the successful clinical demonstration of masitinib's neuroprotective benefits in Alzheimer's disease [5] and amyotrophic lateral sclerosis (ALS) [6,7], targeting of the innate immune system appears to be a valid general strategy for treatment of neurodegenerative disorders. Masitinib is therefore uniquely positioned to realize this potential therapeutic game changer.*"

Study AB07002 met its primary analysis endpoint, demonstrating a statistically significant reduction in cumulative change on Expanded Disability Status Scale (EDSS) score with masitinib 4.5 mg/kg/d (p=0.0256). This treatment-effect was consistent for both primary progressive MS (PPMS) and non-active secondary progressive (nSPMS) patient subgroups. In addition, masitinib significantly reduced the risk of first disability progression by 42% and reduced the risk of confirmed (3 months) disability progression by 37%. Masitinib also significantly reduced the risk of reaching an EDSS score of 7.0, corresponding to disability severe enough that the patient is restricted to a wheelchair (p=0.0093). Safety was consistent with masitinib's known profile, with no elevated risk of infection, which could prove advantageous compared with other MS drugs, many of which are associated with increased risk of infectious complications.

Confirmatory study AB20009 has recently been approved by the French Medicine Agency (ANSM) and also the Swedish Medical Products Agency. This study will enroll 800 patients from numerous study centers with EDSS score between 3.0 to 6.0 and absence of T1 Gadolinium-enhancing brain lesions as measured by magnetic resonance imaging (MRI). The primary objective of the study will be to evaluate the effect of masitinib on time to confirmed disability progression, with progression defined as 1-point worsening when EDSS baseline score ≤5.5, or 0.5 if baseline score >5.5 from randomization to week 96.

About multiple sclerosis

Multiple sclerosis (MS) is an autoimmune disease of the central nervous system and the leading cause of nontraumatic neurological disability in young and middle-age adults. Multiple sclerosis affects about 2.5 million people worldwide, including more than 100,000 people in France. It is characterized by a progressive degradation of the nerve cells of the central nervous system by the patient's immune system and comes in two main forms.

The relapsing-remitting form characterized by relapses of the disease. This includes relapsing-remitting MS (RRMS) and active secondary progressive MS (SPMS). During these relapses, patients experience the onset of new symptoms or the worsening of symptoms already present. These flare-ups are usually followed by recovery periods of varying length, after which some symptoms may persist. The relapsing-remitting forms of multiple sclerosis are mostly associated with dysfunctions of adaptive immunity (B cells and T cells).

The progressive form, characterized by a constant and regular worsening of the symptoms of the disease, without a distinct relapse or period of recovery. This includes primary progressive MS (PPMS) and non-active (SPMS). The rate of onset of severe, disabling, and irreversible disability is much higher in the progressive forms of the disease than in the relapsing remitting forms. In progressive multiple sclerosis, innate immune cells such as macrophages, microglia or mast cells have been shown to probably play a major role.

A strong medical need for the progressive forms of MS

Patients with progressive forms of MS have a reduced life expectancy relative to the general population. A gradual worsening of neurological disability from disease onset is associated with a major reduction in quality of life and typically necessitates wheelchair use for a substantial part of the patient’s lifetime. There is currently no cure for MS. The large majority of registered disease-modifying therapies for MS are only effective in relapsing forms of the disease (i.e., relapsing-remitting MS or active secondary progressive MS) and have failed to demonstrate efficacy in progressive forms of MS (i.e., primary progressive MS or non-active secondary progressive MS). There is currently no approved therapy for the targeted population of studies AB07002 and AB20009, namely, non clinically active progressive forms of MS.

References

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About AB Science

Founded in 2001, AB Science is a pharmaceutical company specializing in the research, development and commercialization of protein kinase inhibitors (PKIs), a class of targeted proteins whose action are key in signaling pathways within cells. Our programs target only diseases with high unmet medical needs, often lethal with short term survival or rare or refractory to previous line of treatment.

AB Science has developed a proprietary portfolio of molecules and the Company's lead compound, masitinib, has already been registered for veterinary medicine and is developed in human medicine in oncology, neurological diseases, inflammatory diseases and viral diseases. The company is headquartered in Paris, France, and listed on Euronext Paris (ticker: AB).

Further information is available on AB Science's website:
www.ab-science.com.

Forward-looking Statements - AB Science

This press release contains forward-looking statements. These statements are not historical facts. These statements include projections and estimates as well as the assumptions on which they are based, statements based on projects, objectives, intentions and expectations regarding financial results, events, operations, future services, product development and their potential or future performance.

These forward-looking statements can often be identified by the words "expect", "anticipate", "believe", "intend", "estimate" or "plan" as well as other similar terms. While AB Science believes these forward-looking statements are reasonable, investors are cautioned that these forward-looking statements are subject to numerous risks and uncertainties that are difficult to predict and generally beyond the control of AB Science and which may imply that results and actual events significantly differ from those expressed, induced or anticipated in the forward-looking information and statements. These risks and uncertainties include the uncertainties related to product development of the Company which may not be successful or to the marketing authorizations granted by competent authorities or, more generally, any factors that may affect marketing capacity of the products developed by AB Science, as well as those developed or identified in the public documents published by AB Science. AB Science disclaims any obligation or undertaking to update the forward-looking information and statements, subject to the applicable regulations, in particular articles 223-1 et seq. of the AMF General Regulations.

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