

New publication reinforcing the potential of masitinib in amyotrophic lateral sclerosis (ALS), following a successful phase 3 interim analysis for masitinib in this indication

Frontiers in Aging Neuroscience publishes a comprehensive review on the future potential of masitinib in ALS

Upcoming final phase 3 readout

AB Science SA (NYSE Euronext - FR0010557264 - AB), a pharmaceutical company specializing in the research, development and commercialization of protein kinase inhibitors (PKIs), today reports publication of a wide-ranging review article that highlights masitinib as a potential addition to the therapeutic arsenal available for patients with amyotrophic lateral sclerosis (ALS), also known as Lou Gehrig's disease.

Entitled 'ALS clinical trials review: 20 years of failure. Are we any closer to registering a new treatment?' published in the peer-reviewed journal *Frontiers in Aging Neuroscience* [Petrov D, et al. (2017) Front. Aging Neurosci. 9:68. doi:10.3389/fnagi.2017.00068], this article and supplemental material are freely accessible online from the journal website: http://journal.frontiersin.org/article/10.3389/fnagi.2017.00068/abstract.

This article reviews over 50 advanced-stage clinical trials in 24 candidate drugs conducted over the last 20 years. Despite significant research efforts, the overwhelming majority of human clinical trials have failed to demonstrate clinical efficacy. This publication follows the clinical milestone of masitinib's successful phase 3 interim analysis in this indication as an add-on to riluzole therapy. In particular, the potential therapeutic role of masitinib in ALS is presented with commentary on its advanced phase of clinical development, relative ease of use, and less restrictive patient applicability (as based on comparison of clinical trial patient inclusion criteria).

An extract from the Discussion section of this article related to masitinib's phase 3 study in ALS reads as: "Patient recruitment has been completed at the time this manuscript was submitted. A planned interim analysis was carried out when 50% (191) patients had completed 48 weeks of treatment, with ALSFRS-R as the primary endpoint. Results demonstrated success on the primary ALSFRS-R endpoint (with a p-value <0.01) in the intent-to-treat population, as well as significance in numerous sensitivity analyses of the primary endpoint. Of note, the study employed relatively broad patient inclusion criteria, including patients with Forced Vital Capacity (FVC) score above 60% and time since disease onset of less than 3 years. When these and other inclusion criteria are taken into consideration, masitinib appears to have included a far wider subgroup of ALS patients when compared with the only other [other reported] successful clinical trial [...](i.e. in that study clinical benefit was demonstrated in a population representative of only 18% of ALS patients eligible for the masitinib trial)".

"This review of past randomized clinical trials reveals that the development of effective pharmacological therapies in ALS is a major challenge. A near comprehensive lack of success from over 20 years of drug development is a reflection on the complexity of this neurodegenerative disease and also highlights the urgent unmet medical need in this indication" said Professor Olivier Hermine, M.D., President of the Scientific Committee of AB Science. "Confirmation of masitinib's successful interim analysis by the final phase 3 data would represent a significant breakthrough, providing encouragement that ALS patients and physicians may soon have a new and more effective treatment option available."

About the Frontiers in Aging Neuroscience medical journal

Frontiers in Aging Neuroscience has an Impact Factor of 4.348 (2016 Release of Journal Citation Reports®, Thomson Reuters). The Impact Factor (IF), defined as the total number of citations in a given year divided by the number of citable articles over the previous two-year period, is the most commonly accepted metric of journal quality. Frontiers in Aging Neuroscience is from the 'Frontiers in' journal series, which is the #1 cited and largest open-access publisher in the category of Neuroscience. It is described as a cutting-edge multidisciplinary journal aimed at fostering the understanding of mechanistic processes associated with CNS aging and age-related neuronal diseases.

About masitinib

Masitinib is a new orally administered tyrosine kinase inhibitor that targets mast cells and macrophages, important cells for immunity, through inhibiting a limited number of kinases. Based on its unique mechanism of action, masitinib can be developed in a large number of conditions in oncology, in inflammatory diseases, and in certain diseases of the central nervous system. In oncology due to its immunotherapy effect, masitinib can have an effect on survival, alone or in combination with chemotherapy. Through its activity on mast cells and microglia and consequently the inhibition of the activation of the inflammatory process, masitinib can have an effect on the symptoms associated with some inflammatory and central nervous system diseases and the degeneration of these diseases.

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 in cancers, inflammatory diseases, and central nervous system diseases, both in humans and animal health.

AB Science has developed a proprietary portfolio of molecules and the Company's lead compound, masitinib, has already been registered for veterinary medicine in Europe and in the USA. The company is currently pursuing thirteen phase 3 studies in human medicine in metastatic prostate cancer, metastatic pancreatic cancer, relapsing metastatic colorectal cancer, relapsing metastatic ovarian cancer, first-line GIST, second-line GIST, metastatic melanoma expressing JM mutation of c-Kit, relapsing multiple myeloma, relapsing T-cell lymphoma, severe asthma, amyotrophic lateral sclerosis, Alzheimer's disease and progressive forms of multiple sclerosis. 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 filed by AB Science with the Autorité des Marchés Financiers (AMF), including those listed in the Chapter 4 "Risk Factors" of AB Science reference document filed with the AMF on November 22, 2016, under the number R. 16-078. 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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