



**AB SCIENCE ANNOUNCES NEW PUBLICATION ON MEDRXIV DEMONSTRATING SUBSTANTIAL SURVIVAL BENEFITS AND PRESERVED QUALITY OF LIFE WITH MASITINIB IN AMYOTROPHIC LATERAL SCLEROSIS PATIENTS**

- **Masitinib treatment associated with a 5-year survival rate from disease onset of 42.3%, representing a 2-fold improvement over historical benchmarks**
- **The 5-year survival rate from disease onset reached 52.9% in a subset of ALS patients without prior complete loss of functionality, highlighting the importance of early intervention**
- **Among the long-term survivors (patients who reached the 5-year survival milestone from symptom onset), 49% maintained a satisfactory quality of life, without need for mechanical assistance, such as ventilation, gastrostomy, tracheostomy, or wheelchair dependence**
- **Median overall survival of 121 months observed in long-term masitinib-treated survivors compared to 42 months predicted for this cohort by the ENCALS model, resulting in a 79-month residual median survival gain**

*Paris, April 20, 2026, 9pm CET*

**AB Science SA** (Euronext - FR0010557264 - AB) announced the publication of a new article on the preprint platform medRxiv, evaluating long-term amyotrophic lateral sclerosis (ALS) survivors treated with masitinib at 4.5 mg/kg/day in the phase 2b/3 AB10015 study. The article is titled 'Evaluation of Long-Term Amyotrophic Lateral Sclerosis Survivors Treated' and is freely accessible online from the medRxiv website [1].

Albert Ludolph, MD, lead author and Senior Professor of Neurology at the University of Ulm, stated: *"This analysis of long-term survivors in study AB10015 appears to reveal a substantial and clinically meaningful survival advantage for ALS patients treated with masitinib as compared to historical benchmarks. Most importantly, half of these long-term survivors maintained a good quality of life, underscoring that extended survival need not come at the expense of their functional independence. Further confirmatory evidence will be crucial for translating these promising findings into clinical practice."*

Professor Olivier Hermine, MD, President of the Scientific Committee of AB Science and co-author of this article commented: *"These 5-year survival data show that masitinib's mechanism of action of targeting microglial and mast cell activity may well translate into meaningful clinical benefit. Notably, the observation that long-term survival appears largely independent of most baseline ALS prognostic factors indicates the presence of a specific patient subpopulation in which microglial and mast cell activity plays a significant role. This mechanistic insight suggests that a new biomarker may help identify patients most likely to respond to masitinib, potentially enabling more precise patient selection and enhanced treatment outcomes."*

The analysis focused on patients receiving masitinib at 4.5 mg/kg/day from study AB10015, an international phase 2b/3 randomized placebo-controlled trial [2]. This analysis compared observed survival data to predicted benchmarks using the ENCALS model and historical benchmarks, demonstrating the potential of masitinib to extend survival in patients with ALS. The analysis of long-term survivors revealed remarkable clinical benefits, with patients achieving substantially longer survival than predicted by established prognostic models

Masitinib is a tyrosine kinase inhibitor targeting microglial and mast cell activity in ALS pathogenesis, offering potential neuroprotection. The analysis indicated that long-term survivors were largely independent of various ALS baseline prognostic factors, suggesting a patient subpopulation that is driven by microglial and mast cell activity. If this is the case, then the recent discovery of a potential plasma biomarker that detects the effect of masitinib on pathological pro-inflammatory microglia [3] could facilitate the early identification of ALS patients most likely to achieve long-term survival.

The key findings and messages of this study are as follows:

- **Improved 5-Year Survival Rates:** The 5-year survival rate from disease onset reached 42.3% across all 130 patients receiving masitinib 4.5mg/kg/day, increasing to 50% in patients with slower disease progression (ALSFRS-R progression rate <1.1 points/month) and 52.9% in those without complete loss of functionality at baseline. This surpasses the historical benchmarks ranging from 7% to 27.8% (weighted average approximately 23.5%).
- **Delayed Need for Mechanical Assistance:** Half of the long-term survivors maintained satisfactory quality of life, defined as no requirement for mechanical assistance such as ventilation, gastrostomy, tracheostomy or wheelchair dependence.
- **Substantial Median Survival Gain:** Among long-term masitinib-treated survivors (n=55), the median overall survival was 121 months compared to 42 months predicted by the ENCALs model, representing a 79-month residual median survival gain.
- **Benefits Across Diverse Patient Types:** Long-term survivors were prevalent across various ALS baseline prognostic factors, including those with slow or moderate disease progression, severe or moderate functional severity, bulbar or spinal site of onset, varying respiratory function, and different ages.
- **Subpopulation Identification:** The observation that long-term survivors were largely independent of traditional ALS prognostic factors suggests the presence of a specific subpopulation whose disease progression is primarily driven by microglial and/or mast cell activity.

### Masitinib Study AB23005 in ALS

Study AB23005 is a prospective, multicenter, randomized, double-blind, placebo-controlled, two-arm study in patients with amyotrophic lateral sclerosis (ALS), to confirm the efficacy and safety of masitinib (at a dose of 4.5 mg/kg/day in combination with riluzole) as compared against riluzole in combination with placebo after 48 weeks of treatment. The study will include 408 patients (randomized 1:1) with ALS, with normal disease progression (i.e., functional decline of less than 1.1 points per month) and no total loss of function (i.e., a score of at least 1 on each of the 12 items of the ALSFRS-R score). US patients receiving edaravone will also be eligible to participate in the study, with the use of this drug being a stratification factor.

### References

- [1] Albert C Ludolph, Terry Heiman-Patterson, Jesus S Mora, Gabriel Rodriguez, Natalia Bohorquez Morera, Patrick Vermersch, Alain Moussy, Colin Mansfield, Olivier Hermine. Evaluation of Long-Term Amyotrophic Lateral Sclerosis Survivors Treated with Masitinib in Study AB10015. medRxiv 2026.04.10.26350104; doi: <https://doi.org/10.64898/2026.04.10.26350104>
- [2] Mora JS, Genge A, Chio A, et al. Masitinib as an add-on therapy to riluzole in patients with amyotrophic lateral sclerosis: a randomized clinical trial. *Amyotroph Lateral Scler Frontotemporal Degener.* 2020;21(1-2):5-14. doi:10.1080/21678421.2019.1632346

#### **About MedRxiv**

MedRxiv (pronounced "med-archive") is a free online archive and distribution service for unpublished preprints in the life sciences. Launched to accelerate communication and collaboration across the medical community, the platform provides early access to important studies prior to peer review, helping researchers, clinicians, and public health leaders stay informed about emerging evidence.

#### **About masitinib**

Masitinib is a 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 is key in signalling pathways within cells. Our programs target only diseases with high unmet medical needs, which are often lethal with short-term survival or rare or refractory to previous lines 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 being developed for human medicine in oncology, neurological diseases, inflammatory diseases, and viral diseases. The company is headquartered in Paris, France and is listed on Euronext Paris (ticker: AB).

Further information is available on AB Science's website: [www.ab-science.com](http://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, 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 uncertainties related to the 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 the 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 forward-looking information and statements, subject to the applicable regulations, in particular articles 223-1 et seq. of the AMF General Regulations.

**For additional information, please contact:**

#### **AB Science**

Financial Communication & Media Relations

[investors@ab-science.com](mailto:investors@ab-science.com)