PRESS RELEASE

NEW INDEPENDENT PUBLICATION IN THE PEER-REVIEWED SCIENTIFIC REVIEW *CELLS* CONFIRMS THE ROLE OF MASITINIB AS A POTENTIAL THERAPY IN PANCREATIC CANCER

IDENTIFICATION OF TWO TISSUE BIOMARKERS THAT COULD POTENTIALLY SERVE AS PREDICTIVE BIOMARKERS OF RESPONSE FOR MASITINIB TREATMENT

Paris, 23 February 2021, 8am CET

AB Science SA (NYSE Euronext - FR0010557264 - AB) today announced the publication of a peer-reviewed research article in which the authors conclude that inhibition of mast cells with masitinib could represent a novel antiangiogenetic approach in pancreatic cancer (antiangiogenic therapies reduce the growth of new blood vessels needed by tumors to grow and metastasize). The article, entitled 'Mast Cells Positive for c-Kit Receptor and Tryptase Correlate with Angiogenesis in Cancerous and Adjacent Normal Pancreatic Tissue', [1] is freely accessible online from the Cells journal site https://www.mdpi.com/2073-4409/10/2/444

This study examined mast cell activity through immunohistochemistry and image analysis, in a series of non-metastatic pancreatic cancer patients. Results showed that:

- Various markers of mast cell activity were increased in pancreatic ductal adenocarcinoma tissue as compared with adjacent normal tissue.
- Mast cells are strongly associated with angiogenesis in pancreatic cancer tissue.
- The density of mast cells positive for tryptase (MCDPT) and area of mast cells positive for tryptase (MCAPT) are tissue biomarkers that could be predictive of response to masitinib (anti-c-Kit therapy).

This research supports results from the confirmatory phase 3 study, AB12005, that evaluated masitinib at 6.0 mg/kg/day in combination with gemcitabine as a first-line treatment of unresectable locally advanced or metastatic pancreatic cancer patients with pain; pain being hypothesized to be a marker of mast cell activation.

Andrew Hendifar, MD, MPH, Head of Gastrointestinal Oncology at Cedars-Sinai Medical Center in Los Angeles said: "*This research provides new and robust evidence confirming the relevance of targeting mast cells in pancreatic cancer. Furthermore, the identified tissue biomarkers could potentially be used as an alternative or additional marker to pain when initiating masitinib treatment in patients with locally advanced pancreatic cancer.*"

As a reminder [2], study AB12005 met its primary objective to demonstrate increase in survival in pancreatic cancer patients with pain. In the population with unresectable locally advanced tumors with pain, the masitinib treatment-arm showed a significant improvement in overall survival (OS) relative to the control arm. The between group difference in median OS was 1.8 months (p=0.007) in favor of masitinib (13.0 months in masitinib arm versus 11.2 months in control group), with a 0.46 hazard ratio (HR) of death, which represents a reduction in risk of death of 54% for masitinib-treated patients relative to control. Results on the primary endpoint were consistent with secondary analysis in progression free survival (PFS), which measures the time to tumor progression or death (whichever occurs first) from the start of treatment. The between group difference in median PFS was 1.8 months (p=0.039) in favor of masitinib (7.4 months in masitinib arm versus 5.6 months in control group), with a 0.47 hazard ratio representing a reduction in risk of having a progression or death of 53%. The safety of masitinib 6.0 mg/kg/day in combination with

gemcitabine compared favorably to that of gemcitabine as a single agent, with fewer adverse event and severe adverse events reported in the masitinib arm as compared with the control arm.

[1] Ammendola, M.; Curr, G.; Laface, C.; Zuccal, V.; Memeo, R.; Luposella, F.; Laforgia, M.; Zizzo, N.; Zito, A.; Loisi, D.; et al. Mast Cells Positive for c-Kit Receptor and Tryptase Correlate with Angiogenesis in Cancerous and Adjacent Normal Pancreatic Tissue. Cells 2021, 10, 444. https://doi.org/10.3390/cells10020444

[2] AB Science press release. Dec 04,2020. http://www.ab-science.com/years/2020/

About Cells
Cells is an international, peer-reviewed, open access, journal of cell biology, molecular biology, and biophysics. Cells is published monthly online by MDPI.

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.
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, and inflammatory 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 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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