Paris, 09 December, 2019, 8.30am

AB Science announces publication of three AB8939 scientific abstracts in the special ASH Annual Meeting issue of Blood

AB Science SA (NYSE Euronext - FR0010557264 - AB) today announced that three scientific abstracts regarding its AB8939 preclinical development program were published in the special edition of the leading hematology journal Blood, prior to the start of the Annual Meeting of the American Society of Hematology (ASH) being held December 7-10th in Orlando, Florida.

An overview of these AB8939 data (*in vivo, ex vivo and in vitro*), which are supportive for the treatment of acute myeloid leukemia (AML) were delivered by Professor Olivier Hermine (President of the Scientific Committee of AB Science and member of the Académie des Sciences in France) as part of the Chemical Biology and Experimental Therapeutics session.

"Taken together, these findings provide a compelling preclinical rationale for the development of AB8939 as a next-generation tubulin inhibitor for AML" commented Professor Olivier Hermine. *"AB8939 seems particularly well-suited for treatment of relapsed/refractory AML and a first in human, Phase 1 trial of AB8939 in this indication is planned for next year".*

➢ Details of the published abstracts

The journal citation and brief overview of each abstract is provided below. Full text from the abstracts is freely accessible online from the scientific journal Blood.

- ***In Vivo* Assessment of the Next Generation Microtubule-Destabilizing Agent AB8939 in Patient-derived Xenograft Models of Acute Myeloid Leukemia**
  Goubard A, Humbert M, Mansfield C, Hermine O, Dubreuil P, et al.
  Blood (2019) 134 (Supplement_1): 5142. DOI: https://doi.org/10.1182/blood-2019-127143

  The therapeutic potential of AB8939 was investigated through a series of *in vivo* experiments using three patient-derived xenograft (PDX) mouse models and a cytarabine (Ara-C) resistant mouse model. Overall, these *in vivo* data provide compelling proof-of-concept for AB8939 as a treatment of AML. AB8939 administered alone or in combination with Ara-C was demonstrated to significantly increase survival and reduce tumor growth as compared with single agent Ara-C in relevant animal models of AML.

- **AB8939, a Microtubule-Destabilizing Agent with Potential to Overcome Multidrug Resistance, is Active Across the Range (M0–M7) of Acute Myeloid Leukemia Subtypes**
  Goubard A, Humbert M, Mansfield C, Hermine O, Dubreuil P, et al.
  Blood (2019) 134 (Supplement_1): 5154. https://doi.org/10.1182/blood-2019-127021

  A series of *ex vivo* and *in vivo* studies provide proof-of-concept that AB8939 has broad anti-proliferative activity across the breadth of acute myeloid leukemia (AML) subtypes, i.e. M0 through M7 of the French-American-British AML classification. AB8939 produced a strong anti-proliferative effect against blasts isolated from AML patients with a majority of IC50 values ranging from 1.4 nM to 1.0 µM. The potential of AB8939 to overcome Ara-C-resistance was also evident with 66% of Ara-C-resistant blasts (i.e. IC50 >5 µM) being sensitive to AB8939. These findings provide preclinical proof-of-concept for the development of AB8939 as a next-generation tubulin inhibitor for AML, in particular for poor-prognosis AML subsets and relapsed/refractory AML; i.e. patients that currently have very limited therapeutic options and represent the highest unmet medical need.

- **Anticancer Activity of a Highly Potent Small Molecule Tubulin Polymerization Inhibitor, AB8939**
  Humbert M, Goubard A, Mansfield C, Hermine O, Dubreuil P, et al.
  Blood (2019) 134 (Supplement_1): 2075. https://doi.org/10.1182/blood-2019-122540

  We have identified the small chemical molecule AB8939 as being a structurally novel, synthesized tubulin inhibitor that can circumvent resistance mechanisms known to limit the effectiveness of existing tubulin inhibitors; e.g., P-glycoprotein (Pgp) and myeloperoxidase (MPO) mediated resistance. A series of *in vitro* preclinical studies provide proof-of-concept that AB8939 has broad applicability as a potent anticancer drug, particularly in tumors of hematopoietic and lymphoid tissues, including acute myeloid leukemia (AML).

About AB8939
AB8939 is a novel microtubule destabilizing agent that is differentiated from other drugs of this class primarily by its inability to be transported by P-glycoprotein, thereby having potential to overcome Pgp-dependent multidrug resistance in cancer patients.

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.

For additional information, please contact:

AB Science
Financial Communication & Media Relations
investors@ab-science.com