PRESS RELEASE

AB SCIENCE REPORTS FOURTH CONSECUTIVE CASE OF RESPONSE FROM PHASE 1 DATA FOR THE COMBINATION OF AB8939 WITH VENETOCLAX FOR THE TREATMENT OF REFRACTORY OR RELAPSED ACUTE MYELOID LEUKEMIA

- The combination treatment was well-tolerated, with no hematological toxicity and no dose limiting toxicity
- The fourth patient had a complex karyotype including a monosomy of chromosome 5 and TP53 mutation, and was in the third-line of treatment. He had a near complete response after 14 days of treatment with AB8939 at 21 mg/m^2 plus venetoclax
- This is the fourth patient responding to the combination from a total of 4 patients treated
- The partial response rate is 100% (4/4), including one patient in complete remission, one near complete response and 2 partial responses
- The results were obtained after the first cycle of treatment (14 days) in patients receiving third- or fourth-line treatment, two of whom had previously progressed on venetoclax in combination with other chemotherapies
- These four patients all have very difficult to treat cytogenetic profiles, including complex karyotype, TP53 mutation, NRAS mutation, monosomy 5 and MECOM-rearrangement, that typically have a poor prognosis due to their aggressive disease course and treatment resistance
- This diversity of responsive patients appears to corroborate the mechanism of action of AB8939, which is capable of destabilizing microtubules while evading multi-drug resistance and also targeting cancer stem cells without eliminating non tumoral stem cells
- These results corroborate the positioning of AB8939 in patients with adverse genetics, complex karyotypes, TP53 mutations, NRAS and KRAS mutations, monosomy 5 and 7, and MECOM-rearrangement, which represents the highest unmet medical need.

Paris, 07 January 2026, 6pm CET

AB Science SA (Euronext - FR0010557264 - AB) today provides an update on the Phase 1 study of the molecule AB8939 and the fourth consecutive response with the combination of AB8939 + venetoclax in patients with acute myeloid leukemia (AML) associated with a very unfavorable genetic profile.

The fourth patient received AB8939 (21.3 mg/m²) plus venetoclax for 14 days.

The patient had AML with a very negative risk profile,

- complex karyotype including a monosomy of chromosome 5 and also an identified TP53 mutation
- in third-line of treatment, having progressed after CPX-351 treatment and Citarine + Idarrubincine + Fludarabine (3+7) regimen.

Under the AB8939 + venetoclax combination, the patient achieved a partial response.

This fourth result is consistent with the responses previously reported on October 14, 2025, in the first three patients who received AB8939 + venetoclax.

Nicholas J. Short, MD, Associate Professor and Co-Lead of the Section of Developmental Therapeutics, Department of Leukemia, MD Anderson Cancer Center, said, "*This new data is very encouraging, particularly*

considering the very adverse risk profile of this patient's leukemia. These early efficacy and safety data suggest that AB8939 can be combined with venetoclax and could have significant activity in the highest-risk subtypes of AML. There is a strong interest in continuing the development of this combination in patients whose AML has high-risk features that are expected to lead to resistance to venetoclax + azacitidine."

Professor Olivier Hermine, MD, President of the Scientific Committee of AB Science and member of the Académie des Sciences in France, said, "*There is a strong rationale to combine AB8939 and venetoclax as both molecules have low hematologic toxicity and complementary mode of actions. These first results are supportive of this rationale.*"

About AB8939

AB8939 is a drug candidate that targets (i) cancer cells by destabilizing microtubules (essential for cell division) and (ii) cancer stem cells by inhibiting ALDH1A1 and ALDH2 (enzymes essential for maintaining their physiological state and survival).

- AB8939 has shown *in vitro* activity in Ara-C (cytarabine, which is one of the standards of care) resistant patient cell lines, including adverse genetic MECOM and TP53 mutations.
- Analysis of cell lines responsive to AB8939 showed that AB8939 is effective in cell lines with TP53 mutations, MECOM, and complex karyotypes, whereas ARAC and azacitidine are not effective.
- AB8939 increased survival and had an additive effect in combination with venetoclax (another standard of care) *in vivo* in a MECOM-grafted PDX mouse model.
- AB8939 increased survival and had an additive effect in combination with Vidaza (azacitidine, another standard of care) *in vivo* in the MECOM PDX#C1005 mouse model of leukemia.
- AB8939 eradicated Leukemia Cancer Stem Cells *in vivo* in a human PDX AML mouse model, which is compatible with targeting stem cells via ALDH.

AB8939 is currently being evaluated in a Phase 1 clinical trial (study AB18001, NCT05211570) in patients with refractory and relapsed AML.

The Phase 1 clinical trial of AB8939 has completed its first two stages, which consisted of determining the maximum tolerated dose (MTD) after 3 and 14 consecutive days of monotherapy. In both cases, the MTD was 21.3 mg/m².

The third stage, currently underway, involves evaluating the combination of AB8939 and venetoclax. Three patients were evaluated at the first dose level (AB8939 14 days at a dose of 16 mg/m² + venetoclax 14 days). The current dose level evaluates (AB8939 14 days at a dose of 21.3 mg/m² + venetoclax 14 days)

Medical need in AML and AB8939 mechanism of action

Although several drugs have been registered for AML, 70% of patients still relapse and die, creating a persistent unmet medical need for effective treatments. Acute myeloid leukemia remains the most lethal form of leukemia in humans.

AML is a heterogeneous disease, and its outcome is highly dependent on genetic factors. TP53 mutation has a very poor prognosis, with a median overall survival (OS) of 5.5 months. NRAS and KRAS mutants have a poor prognosis, with a median OS of 12.1 months. MECOM also has a very poor prognosis in AML, with a median OS of 5.5 months in relapsed or refractory settings.

The challenge in AML is the recurrence of tumors due to a combination of two factors: the resistance of cancer cells to chemotherapy and relapse due to the persistence of cancer stem cells. This challenge may be overcome by AB8939's dual mechanism of action.

- First, AB8939 blocks the proliferation of leukemia cells through microtubule disruption. It is not subject to multi-drug resistance as it does not bind to PgP, which is responsible for efflux outside the cells, and is not degraded by myeloperoxidase.

- Second, AB8939 targets leukemia cancer stem cells by inhibiting ALDH and promotes bone marrow repopulation of normal progenitors.

AB8939 + venetoclax combination

There is a strong rationale to combine AB8939 with venetoclax

- Both molecules exhibit low hematologic toxicity. This combination is expected to be less toxic than azacitidine + venetoclax as first-line treatment for AML
- These molecules have different and complementary targets in cancer cells. There is an additive, even synergistic, efficacy potential for the combination, with three mechanisms of action in a single treatment.
    - Venetoclax's mechanism of action inhibits the BCL2 pathway, a protein that prevents apoptosis (programmed cell death) in cancer cells. BCL2 is a key factor in AML resistance, as it allows cancer cells to survive despite treatment
    - AB8939 is pro-apoptotic, destabilizing microtubules, and would benefit from BCL2 inhibition to optimize apoptosis
    - In addition, AB8939 specifically targets cancer stem cells by inhibiting ALDH, reducing resistance to treatment and limiting the risk of relapse

Next steps

The next step is to complete phase 1 in combination and launch an expansion study in approximately 15 AML patients eligible for AB8939 + venetoclax at the appropriate dose. The expansion phase is expected to generate robust preliminary evidence of efficacy in the AML label, sufficient to support the clinical development plan and a beneficial partnership agreement.

AB Science has started to discuss three possibilities for registration studies, which are not mutually exclusive, with the European Medicines Agency (EMA) and US Food and Drug Administration (FDA):

- AB8939 + venetoclax as first-line treatment, with aged patients and/or patients with adverse genetics (complex karyotypes, TP53 mutations, NRAS and KRAS mutations, monosomy 5 and 7, and MECOM-rearrangement)
- AB8939 + venetoclax as a second- or third-line treatment, in all patients or patients with adverse genetics
- AB8939 as a single agent in MECOM as a second or third-line treatment.

Addressable market with AB8939 in relapsed/refractory AML

Treatments for relapsed or refractory AML represent an estimated market size potential of greater than EUR 2 billion per annum.

Region	**Incidence Case (1)**	**% Relapse or Refractory (2,3)**	**% Insured Patients (4)**	**Drug Price (€)**	**Market Size (per in Mio EUR)**
USA / CANADA	23,700	50%	90%	100,000[(5)]	1 000 000
EUROPE	27,600		90%	60,000	770 000
APAC	27,800		30%	60,000	250 000
INDIA	11,000		30%	60,000	100,000
LATAM	7,200		30%	60,000	65 000
MENA	3,900		30%	60,000	35 000

TOTAL	**90,200**				**2 200 000**

EUROPE = EU27 + Norway + United Kingdom + Switzerland ; APAC = Australia, People's Republic of China , Japan, New Zealand, Singapore, Taiwan ; LATAM = Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico ; MENA = Algeria, Bahrain, Egypt, Israel, Kuwait, Morocco, Oman, Qatar, Saudi Arabia, Tunisia, United Arab Emirates

(1) Zhou, Y et al. Global, regional, and national burden of acute myeloid leukemia, 1990–2021: a systematic analysis for the global burden of disease study 2021. Biomark Res 12, 101 (2024).

(2) Ravandi F. Relapsed acute myeloid leukemia: Why is there no standard of care Best Pract Res Clin Haematol. 2013;26(3):253-9

(3) Walter RB et al. Resistance prediction in AML: analysis of 4601 patients from MRC/NCRI, HOVON/SAKK, SWOG and MD Anderson Cancer Center. Leukemia (2015) 29:312–20. .

(4) Estimated

(5) Choi M. et al. Costs per patient achieving remission with venetoclax-based combinations in newly diagnosed patients with acute myeloid leukemia ineligible for intensive induction chemotherapy. Journal of Managed Care & Specialty Pharmacy Volume 28, Number 9. https://doi.org/10.18553/jmcp.2022.22021

Intellectual property

AB8939 intellectual property rights in AML are secured until 2036 through a 'composition of matter' patent and potentially until 2041 with a 5 years extension. Two additional 'second medical use' patent applications have been filed to protect the use of AB8939 in the treatment of AML with specific chromosomal abnormalities. If these applications are accepted, the protection for AB8939 will be extended until 2044 and 2046 for these AML subpopulations.

AB8939 has also received orphan drug designation for AML by both the EMA and FDA. This orphan drug designation confers 10 and 7 years of marketing exclusivity in Europe and the US, respectively, from the date of product registration.

AB Science is the sole proprietary holder of AB8939 and its family of compounds.

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

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