



## AB Science advances Ultra-Selective SYK Kinase Inhibitor into Full Preclinical Development Targeting B-cell Malignancies and Inflammatory Diseases

**AB Science SA** (NYSE Euronext - FR0010557264 - AB), a pharmaceutical company specializing in the research, development and commercialization of protein kinase inhibitors (PKIs), reported the advancement of a novel, small molecule SYK kinase inhibitor named AB8779 into full preclinical development.

Spleen tyrosine kinase (SYK) is a tyrosine kinase that is an important mediator of signaling in a variety of inflammatory cells, including mast cells, macrophage, dendritic cells (DC), natural killer (NK) cells, neutrophils, and B-cells.

Inhibition of SYK appears to be a good therapeutic strategy for B-cell malignancies, including non-Hodgkin lymphoma (NHL) and chronic lymphocytic leukemia (CLL), as well as for certain inflammatory diseases such as asthma and rheumatoid arthritis.

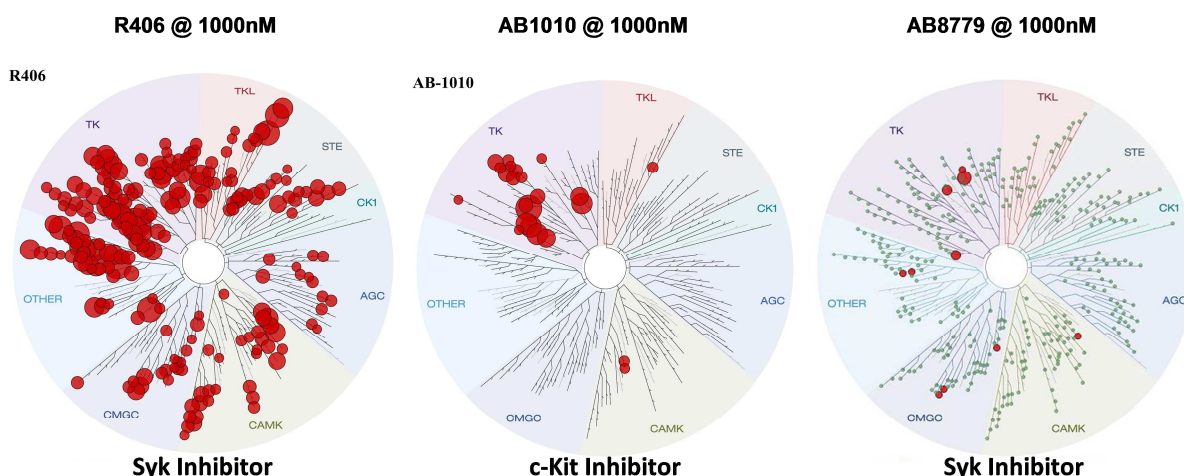
The compound is entirely owned by AB Science and is brought forward into formal development as part of a strategy to bring potent and selective compounds from the proprietary drug discovery technology through clinical development and into commercialization.

AB Science has developed a proprietary technology that improves predictability of activity and selectivity of tyrosine kinase inhibitors, allowing for the design and retain of compounds with very high selectivity for designated kinases and stringent tests to avoid potential class-effect toxicities.

The aim of AB Science with AB8779 has been to design a potent and selective SYK inhibitor with good safety profile with no cardiac and neuronal toxicity.

*In vitro*, AB Science SYK inhibitor AB8779 was shown to be as potent as tamsitinib (R406), the active metabolite of anti-SYK inhibitor fostamatinib (Rigel) ( $IC_{50} = 0.04 \mu M$  and  $0.02 \mu M$ , respectively) but exhibited an ultra-selective profile, as illustrated below from DiscoverX.

### Treespot™ interaction maps of AB Science compounds AB8779 and masitinib (AB1010) compared to fostamatinib (R406)



Preclinical data demonstrate that AB Science SYK inhibitor AB8779 has biological activity *in vitro* and *in vivo* in inflammatory murine models of asthma and rheumatoid arthritis. Additionally, it was shown that AB8779 induces apoptosis of B-cell chronic lymphocytic leukemia cells and has anti-tumoral activity *in vivo* in a mouse model of mantle cell lymphoma (MCL). It was further demonstrated that AB8779 has no cardiotoxicity *in vitro* on both human and rat cardiomyocytes. *In vitro* safety pharmacology and pharmacokinetics studies have also demonstrated that AB Science SYK inhibitor AB8779 has good bioavailability and an absence of mutagenic activity.

Alain Moussy, co-founder and CEO of AB Science commented: *“Our compound exhibits strong and very high selective anti-SYK activity in vitro and in vivo with good safety and pharmacokinetic profiles. Our findings show that AB8779 could represent a clear efficacy and safety advance for the treatment of certain forms of lymphoma as well as for mast cell diseases. The design of this new drug candidate has been made possible thanks to our proprietary drug discovery technology which prioritizes selectivity”*.

#### **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 first-line and second-line GIST, metastatic melanoma expressing JM mutation of c-Kit, multiple myeloma, metastatic colorectal cancer, metastatic prostate cancer, pancreatic cancer, mastocytosis, severe persistent asthma, rheumatoid arthritis, Alzheimer’s disease, progressive forms of multiple sclerosis, and Amyotrophic Lateral 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](http://www.ab-science.com)

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