

# ALK-Abelló and X-Chem Announce Drug Discovery Collaboration

WALTHAM, Mass. – February 5, 2019 - X-Chem, Inc. (X-Chem), a privately held biotechnology company focused on applying its next-generation, industry-leading DNA-Encoded library (DEX™) drug discovery platform to the generation of novel small molecule therapeutics, announced today a drug discovery partnership with ALK-Abelló A/S (ALK), a Danish pharmaceutical company focused on the prevention and treatment of allergies. This collaboration will focus on the discovery of small molecule drug products to treat broad ranging allergies.

Under the terms of the agreement, X-Chem will utilize its DEX screening platform, which takes advantage of advanced drug-like DEX library designs and proprietary informatics tools, to search for novel leads for allergy targets identified by ALK. X-Chem's DEX libraries enable fast and efficient screening of vast areas of drug-like chemical space leading to the discovery of novel hits for some of the most challenging biological targets. ALK and X-Chem will collaborate to jointly advance identified hits to the clinic, leveraging X-Chem's expertise in medicinal chemistry with ALK's expertise in assays, animal models, and clinical development for the treatment of allergies. ALK has the exclusive global rights to commercialize any products resulting from the collaboration.

"The collaboration between X-Chem and ALK combines technologies and areas of expertise from both companies, making this joint discovery effort in the allergy space second to none," said Teit Johansen, Senior VP of Global Research at ALK. "At ALK, we look forward to working with X-Chem and leveraging their powerful drug-discovery platform to identify new drug leads for the treatment of allergy with its many disease manifestations. X-Chem is the clear leader in the field of encoded-libraries and we believe that X-Chem is the right partner for ALK to fuel our ambition of discovering new and innovative drugs in the field of allergy treatment".

"We are honored that ALK chose X-Chem as its partner for drug discovery," said Christelle Huguet, Chief Scientific Officer at X-Chem. "We are deeply impressed with ALK's expertise in allergy pathway biology and the tools and assays that they bring to the collaboration. We look forward to a long-term scientific collaboration with the ALK team to make advances in allergy treatment together."

X-Chem received an upfront payment from ALK upon the signing of the agreement, and is eligible for future research payments and milestones based on the achievement of pre-defined research achievements. In addition, X-Chem is also eligible to receive further payments upon ALK reaching certain regulatory and sales milestones, and royalties on sales of products identified under the collaboration.

## **About X-Chem's DNA-Encoded (DEX) Libraries and Platform**

X-Chem's DEX drug discovery engine is based on a collection of drug-like DNA-encoded libraries derived from iterative combinatorial chemistry processes in which the identity of each compound is recorded by a linked DNA barcode. The pooled libraries are used in low volume, affinity-based screens against biological targets, whereby ligands are 'fished out' and identified via DNA sequencing. Innovations in library design, screening methodologies, and bioinformatics underlie the exceptional performance of the DEX platform. The use of previously inaccessible chemical reactions and atom-efficient synthesis schemes generate maximal diversity and rule-of-five compliance. Parallel screens, either varying target concentration or including off-targets, mutants or known ligand competitors, allow for insight into the potency, mechanism of action, and specificity of putative hits. Proprietary statistical and bioinformatics tools identify multiple clusters of related molecules with emergent structure-activity relationships. These innovations underpin X-Chem's unparalleled success against difficult and intractable targets that have failed in conventional screening, and have generated >70 programs and >200 chemical series licensed by X-Chem's partners, including fragments, low molecular weight heterocycles, macrocycles, and irreversible covalent electrophiles.

**About X-Chem**

X-Chem, Inc. is a privately-owned biotechnology company based in Waltham, Massachusetts. The company's mission is to apply its powerful product engine to the discovery of small molecule leads against high-value therapeutic targets. X-Chem has established partnerships with AbbVie, Alexion, Amirall, Bristol-Myers Squibb, AstraZeneca, Bayer, Department of Defense/Harvard, Gilead, Janssen, Maruho, MD Anderson Cancer Center, Ono, Otsuka, Pfizer, Roche, Sanofi, Taiho Pharma, Vertex, and several other leading pharmaceutical companies, biotechnology organizations, and academic centers. For further information on X-Chem, please visit: <http://www.x-chemrx.com/>.

**About ALK**

ALK is a global allergy solutions company, with a wide range of allergy treatments, products and services that meet the unique needs of allergy sufferers, their families and doctors. Headquartered in Hørsholm, Denmark, the company employs around 2,400 people worldwide and is listed on Nasdaq Copenhagen. To learn more about ALK and allergies, visit [www.alk.net](http://www.alk.net).

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