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# Almirall and X-Chem will collaborate to develop oral compounds for dermatological diseases

[Almirall, S.A.](#) announced today that they have signed a collaborative research and license agreement with the **X-Chem, Inc.** for the development of oral compounds for patients suffering from dermatological diseases, a strategic area for Almirall. X-Chem, Inc. is a privately held biotechnology company focused on applying its industry-leading DNA-encoded library (DEX™) drug discovery engine to the generation of novel small molecule therapeutics.

This collaboration will enrich Almirall's R&D pipeline with the development of new solutions for patients with dermatological unmet medical needs. Under the terms of the agreement, X-Chem will screen its proprietary DEX libraries, which contain >120 billion individually DNA-encoded small molecules, toward the discovery of novel, high-value therapeutic leads for dermatological diseases. Almirall will subsequently assess the biochemical and/or cellular activity, novelty of the structures, and in some cases advanced properties. Almirall has the option to license drug leads discovered under the collaboration, and will be responsible for further development and commercialization of the resulting programs.

**Bhushan Hardas, M.D., MBA, Chief Scientific Officer of Almirall**, commented *"this agreement takes us one step further in our goal of becoming a leading medical dermatology company. With the cutting edge technology offered by X-Chem and our strong knowledge of the area of dermatology, we will be able to broaden our pipeline and provide further medical solutions for the physicians and patients, specially designed for dermatological diseases with unmet medical needs"*.

**Rick Wagner, Ph.D., President and Chief Executive Officer of X-Chem**, stated *"the treatment of skin disease is an important field of research with unmet medical needs. We are delighted to align with Almirall, a leader in dermatology, to apply our DEX platform to the discovery of new treatments for patients worldwide"*.

## About Almirall

Almirall is a leading skin-health focused global pharmaceutical company that partners with healthcare professionals, applying Science to provide medical solutions to patients & future generations. Our efforts are focused on fighting against skin health diseases and helping people feel and look their best. We support healthcare professionals in continuous improvement, bringing our innovative solutions where they are needed.

The company, founded in 1943 and with headquarters in Barcelona, is listed on the Spanish Stock Exchange (ticker: ALM). Almirall has become a key element of value creation to society according to its commitment with its major shareholders and its decision to help others, to understand their challenges and to use Science to provide them with solutions for real life. Total revenue in 2017 was 755.8 million euros and more than 1,830 employees are devoted to Science.

For more information, please visit [almirall.com](http://almirall.com)

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

X-Chem's DEX drug discovery engine is based on a collection of DNA-encoded libraries comprising over 120 billion unique small molecules derived from iterative combinatorial chemistry processes, where the identity of each compound is recorded in a linked DNA barcode. The pooled libraries are used in low volume, affinity-based screening 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 success against difficult and intractable targets that have failed in conventional screening, and have generated over 100 fragment, low molecular weight heterocycle, macrocycle, and irreversible covalent electrophilic lead series that have been licensed by X-Chem's partners.

## 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, Astellas, AstraZeneca, Bayer, Gilead, Janssen, MD Anderson Cancer Center, Ono, Otsuka, Pfizer, Roche, Sanofi, Taiho, 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/>.

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