

## SenzaGen and AstraZeneca initiate technology development collaboration

SenzaGen has signed a collaboration agreement with the global biopharmaceutical company AstraZeneca. The collaboration focuses on testing and development of SenzaGen's sensitization test GARDair, in order to distinguish between allergens and irritants in the respiratory tract. The goal is the validation of *in vitro* toxicological tests that could be applied to the discovery of new treatments for respiratory diseases without respiratory tract irritancy as a side effect.

The collaboration means that SenzaGen will use its leading technology platform **GARD**, with the help of AstraZeneca's well-documented substance libraries, to develop a new genomic signature to distinguish allergens from irritants in the respiratory tract, something which is not possible today with *in vitro* methods. **GARD** examines and finds allergens in chemicals and medicines through a unique technology in accordance with the international 3Rs principle, Reduce, Replace and Refine, as an alternative to animal testing.

“During our research and drug discovery activities, it is important to be able to identify and mitigate potential toxicological issues as early as possible, to ensure our novel candidate drugs have the right safety profile for patients. This requires *in vitro* toxicological methods that are properly validated for their predictivity of clinical toxicity and that are compatible with integration into the drug discovery process. By combining SenzaGen’s technological expertise and our experience with inhaled compounds, we aim to develop a novel method to investigate whether novel drug-like molecules induce similar genomic signatures as known respiratory irritants. That could ultimately be applied to steer away from a potential irritancy hazard and enable the discovery of safer drugs for patients” says **Jorrit Hornberg**, Director of Discovery Safety at AstraZeneca Gothenburg.

With this new agreement SenzaGen is initiating yet another important development collaboration with the pharmaceutical industry. SenzaGen's focus is on introducing its tests into the pharmaceutical industry and on striving to demonstrate that there are safer and more accurate tests than those that use animals.

“This collaboration with AstraZeneca is a milestone for SenzaGen. It shows that leading pharmaceutical companies see the potential of next-generation testing and that this testing has considerable industrial value. Furthermore, the collaboration will provide SenzaGen with valuable knowledge and will help to refine and develop our **GARD** test for further commercial opportunities,” says **Anki Malmberg Hager**, CEO of SenzaGen.

The research project will run for 12 to 18 months and is in collaboration with AstraZeneca Gothenburg, contributing to the EU Horizon 2020 project granted to SenzaGen for the development of *in vitro* respiratory sensitization test.

### For more information:

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### About GARD

GARD is a group of tests for assessing chemical skin sensitizers. The tests make use of genetic biomarkers for more than 200 genes which cover the entire immune reaction and are relevant to predicting the risk of hypersensitivity. The tests have 90% reliability. This compares with the current predominant test method, experiments on mice, which has a reliability rating of 72%. SenzaGen's tests are also capable of measuring the potency of a substance's allergenic properties. Consequently GARD tests provide a much more comprehensive basis for determining whether a substance should be classified as an allergen than current testing methods.

### About SenzaGen

SenzaGen makes it possible to replace animal experiments with in vitro genetic testing to determine the allergenicity of the chemicals we come into contact with in our daily lives, such as for example in cosmetics, pharmaceuticals, food products and dyes. The company's patented tests are the most reliable on the market and provide more information than traditional evaluation methods. We ourselves sell the tests in Sweden and the USA, and we sell through partners in several other countries. Over the next few years the company will expand geographically, make alliances with more distribution partners and launch further unique tests. SenzaGen has its headquarters in Lund in Sweden and a subsidiary in San Francisco, USA. For more information visit [www.senzagen.com](http://www.senzagen.com).

### About AstraZeneca

AstraZeneca is a global, science-led biopharmaceutical company that focuses on the discovery, development and commercialisation of prescription medicines, primarily for the treatment of diseases in three main therapy areas - Oncology, Cardiovascular & Metabolic Diseases and Respiratory. The Company also is selectively active in the areas of autoimmunity, neuroscience and infection. AstraZeneca operates in over 100 countries and its innovative medicines are used by millions of patients worldwide.