

**January 25, 2005**

**Press Release Sens-it-iv                      FINAL**

## **EC to support in vitro testing of allergies with 11 million Euro**

### **In short:**

The European Commission pledges support of 11 million Euros to a consortium of 28 European universities, institutes, companies and organisations for the development of 'Novel Testing Strategies for In Vitro Assessment of Allergens'.

### **Driving forces: Public opinion and new legislations**

According to the latest available EU-statistics (2002), 10.7 million animals are used annually for testing in EU laboratories

Since the mid-1980s, work to achieve a reduction in animal testing has slowly been gaining momentum in the EU initially under pressure from animal welfare groups, public opinion and ethical debates.

In 1986, an EU directive on the protection of animals used for experimental purposes forbid the use of an animal experiment when a scientifically approved alternative exists. The 7<sup>th</sup> amendment of the Cosmetics Directive bans cosmetic products that have undergone animal testing as of 2013. Finally, the REACH legislation will soon be implemented, resulting in an increase in the number of animal experiments to be carried out for risk assessment of nearly 30,000 chemicals marketed in the EU.

### **In vitro tests for allergens – Sens-it-iv**

At present, the EU is supporting research aimed at replacing animal testing for 'difficult' targets, such as reproductive toxicity, acute toxicity, hepatotoxicity, cell screening in nanodrops and biosensors. The latest addition, a project to develop **novel testing strategies for in vitro assessment of allergens**, is in financial terms also the largest Integrated Project in this field: the total budget amounts to 13.7 m€, with a contribution of the European Commission amounting to 11 m€. It will run from 2006-2010.

Risk assessment of potential skin and lung sensitisers is currently entirely based on animal experiments, often giving unreliable data. In addition, allergy has become an important global health problem.

**The overall aim of the Sens-it-iv project is to develop in vitro alternatives, resulting in** a reduction of the number of animals, and in more economic and more accurate tools for product development. This will be at the benefit of both industry and consumer.

In this large project, work will be carried out at different levels:

- **Cell cultures:** it must be investigated how cells in the lung and skin interact and become sensitized when exposed to a chemical. This will be done using cultures of a single cell type or three-dimensional cell cultures;
- **X-omics:** for a good prediction of a toxic effect, the toxic effect must be measurable. A novel approach is looking at changes in gene expression, changes in protein expression (which proteins are made or not) or at changes in metabolism. This can nowadays be investigated using genomic, proteomic and metabonomic techniques;
- **Chemical selection:** chemicals must be selected to ensure that all participants use the same chemical compounds
- **Bioinformatics:** the newly gained knowledge and techniques will be analyzed using bio-informatics, made accessible in a database and used to develop novel testing strategies and novel in vitro methods. The resulting method(s) will be developed in such a way that they will be suitable for later (pre)validation by ECVAM, the European Centre for the Validation of Alternative Methods, and consequently appropriate for acceptance in international legislation at a later stage;
- **Technology transfer:** finally, there will be a continuous effort to transfer the results achieved to the potential end-users, predominantly in industry. For that purpose, a number of organizations active in the field, such as COLIPA, IVTIP and ECOPA, are involved as well (for abbreviations, see the list of participants).

For more information: please contact the overall coordinator, Dr. Erwin Roggen, Novozymes, Denmark ([elro@novozymes.com](mailto:elro@novozymes.com)), the vice-coordinator Dr. Hans-Ulrich Weltzien ([weltzien@immunbio.mpg.de](mailto:weltzien@immunbio.mpg.de)) or the Technology Transfer Officer, Dr. Helma Hermans ([sciwricon@terra.es](mailto:sciwricon@terra.es))

### **The participants:**

A full listing of our participants is included with this press release as an editorial annex. Alternatively, information about participants can be found on [www.sens-it-iv.eu](http://www.sens-it-iv.eu)

Annex 1 to Sens-it-iv Press release

**Full listing Sens-it-iv participants:**

**Full list of participants:**

**Overall coordinator:** Novozymes A/S (NZ), Bagsvaerd, Denmark

**Participating Universities:**

University of Heidelberg (UHEI), Heidelberg, Germany

Lunds Universitet (ULUND), Lund, Sweden

VU University Medical Centre (VUMC), Amsterdam, The Netherlands

University of Liverpool (LPOOL), Liverpool, U.K.

University of the West of England (UWE), Bristol, UK

Fraunhofer Institute of Toxicology and Experimental Medicine (Fraunhofer ITEM), München, Germany

Università degli Studi di Milano (UNIMI), Milan, Italy

Provincia italiana della Congregazione dei Figli dell'Immacolata Concezione, Istituto Dermopatico dell'Immacolata, IRCCS (IDI-IRCCS), Rome, Italy

The Max-Planck-Institut für Immunbiologie, Max-Planck-gesellschaft zur Förderung der Wissenschaften e.V. (MPIIB), Freiburg, Germany

Università di Firenze (UNIFI), Firenze, Italy

Rheinisch-Westfälische Technische Hochschule Aachen (RWTH Aachen), Aachen, Germany.

Université Louis Pasteur (ULP), Strasbourg, France

Albert-Ludwigs-University Freiburg Inst. f. Computer Science (ALU-ICS), Freiburg, Germany

University of Freiburg, Faculty for Medicine (Hautklinik Freiburg), Freiburg; Germany

**Research organizations**

EU Joint Research Centre (JRC), Ispra, Italy- ECVAM

Institute for Research in Biomedicine (IRB), Bellinzona, Switzerland

**Companies/commercial organizations**

Syngenta Central Toxicology Laboratory (Syngenta CTL), Alderley Park, Macclesfield, SK10 4TJ, UK

L'Oreal (L'Oreal), Paris, France

Unilever UK Central Resource Limited (Unilever), London, UK  
Vlaamse Instelling voor Technologisch Onderzoek (VITO), Mol, Belgium  
Miltenyi Biotec GmbH (Miltenyi), Bergisch Gladbach, Germany  
Cosmital SA (Subsidiary of Wella AG, Darmstadt, Germany) (Cosmital), Marly,  
Switzerland  
Scientific Writing & Consultancy S.C. (SW&C), Pedreguer, Spain  
Proteomika S.L. (Proteomika). Derio, Spain.

**EU-wide organizations:**

The European Cosmetic Toiletry and Perfumery Association (COLIPA),  
Brussels, Belgium  
*In vitro* Testing Industrial Platform (IVTIP), Tres Cantos Madrid, Spain  
European Consensus Platform on Alternatives (*ecopa*), Brussels, Belgium