Informal Brainstorming meeting on skin allergies and research needs, Brussels, 9 February 2011

Introduction

The meeting was organised in the context of the work of the Scientific Committee on Consumer Safety (SCCS) on skin allergies in order to identify areas where further research activities are needed in the area of skin contact allergy in light of the upcoming calls under the 7th Framework and the Public Health programmes.

Skin allergy is caused by sensitizing chemicals in the environment, in consumer products, and in the work place. Published reports estimate that more than 20% of the European adult population is sensitized to substances such as metals, fragrances, dyes, preservatives or glues. The symptoms are is eczema, an inflammation of the skin, which may affect the face, hands, feet or the whole body depending on the causative exposures.

The European Commission Scientific Committees and in particular the SCCS have on numerous occasions addressed the issue of skin allergy in their opinions or in memoranda to the Commission.

The meeting was attended by members of the SCCS Working Group on skin allergies, other academic experts on the field, Member State experts designated by the members of the skin allergy sub-group under the Cosmetics Directive (76/768/EEC), representatives of patient groups, and Commission officials. A total of 25 participants attended the meeting.

Objectives of the meeting

The aim of the workshop was to stock take the situation regarding the incidence, prevalence and severity of skin allergy in Europe as it is established by scientists and patients, and to identify the knowledge gaps in research which could serve as the basis for research themes and proposals at European level. The draft agenda is attached.

Meeting Participants

Participating in the meeting were members of the Commission Scientific Committee on Consumer safety (SCCS), Commission officials (DG SANCO, ENTR, RTD), academic experts, representatives of national RA bodies from the Member States, and patient group representatives.
Mr. Takis Daskaleros, Head of Sector in the Risk Assessment Unit of DG SANCO opened the meeting. After welcoming the participants and presenting the draft agenda for adoption, Mr. Daskaleros briefly explained the purpose of the meeting and set out the objectives for the discussion.

The meeting progressed with four presentations. The first presentation provided an overview of the clinical, epidemiological, and public health perspectives of skin allergies by Prof. J. D. Johansen (University of Copenhagen), stressing very much the fact that skin allergy in Europe is on the rise, it is costly in terms of work hours lost, medical care and quality of life considerations, it is preventable, and that there is concerted need to generate European data on prevalence and severity. The second presentation, by Prof. J.-P. Lepoittevin (Université de Strasbourg), focused on the exposure aspects of allergy and the need for proper exposure assessments to assess their potential. The third presentation by Prof. T. Rustemeyer (VU Amsterdam), focused on the mechanisms of immune response of the skin to allergens at the cellular and molecular level and the potential areas of research. The fourth and final presentation by Susanna Palkonen (European Federation of Allergy, EFA) presented the patients' point of view focusing on the issues allergy patients face in their daily lives (e.g. when the clinical symptoms erupt, diagnosis, identifying and avoiding products containing allergens, potentially misleading advertising of 'hypoallergenic' products etc) and the efforts EFA is undertaking to assist and help allergy and asthma patients in Europe.

**Discussion Points and Conclusions**

In the ensuing discussion the following research needs were identified:

- Monitoring and evaluate the effects of regulation of allergens with a view to modify limits and condition. The example of nickel in jewellery and chromium in cement are good cases where EU regulations had an effect (decline in new allergies) although a certain percentage of new cases are reported each year.

- Research concerning skin exposure to allergens including identifying product use patterns which result in exposures, standardised methods to measure concentration on the skin and extract chemicals from the skin, understanding the activation of the chemical (hapten) and hapten-immune cell interactions at the cellular and molecular levels.

- Epidemiological studies at EU level to better understand and quantify the burden of disease, chemicals and products, activity and lifestyle types (hair dying, tattooing, fragrances, etc), genetic factors influencing one's propensity to develop skin allergy, tolerance, age, environment factors that may contribute or play a role in the development of skin allergies.

- Innovative research involving dermatologists and product developers (e.g. shoes, fabrics, hair dyes, fragrances, etc) aiming to develop new chemicals and new products with low allergy potential.

- Research to better understand and establish dose response relationships at the induction and elicitation stages of skin allergy so that better regulatory limits can be set offering a high level of health protection.

- Investigation of the effects of mixtures and combinations of chemicals on skin allergy (e.g. adjuvant effects, mitigating effects, other interactions etc). In addition, the total
exposure to single chemicals from many sources (products, environment, etc) will need to be investigated.

Skin allergy potential of the products of new technological innovation, e.g. nanoparticles.

In depth investigation of sensitised individuals in the occupational or consumer settings to see if additional knowledge can be obtained on the mechanisms of skin allergy and on ways to prevent it.

**Tentative conclusions**

Participants agreed that a systematic investigation into skin allergy in terms of epidemiology, mechanisms and exposure can pay high dividends in allowing product developers to develop products with low allergy potential or which contain no sensitizers, policy makers to manage skin allergen risks by setting appropriate limits, and European citizens to enjoy a high level of health protection. It was also felt that skin allergies are wrongly perceived as a nuisance rather than real and potentially serious health conditions which affect the lives of millions of Europeans. Finally participants concluded that this informal workshop did provide a good basis for interested stakeholders (academic scientists, Member States, civil society) and the Commission to explore potential ways to develop and eventually support research projects on the identified needs.