

research is performed in collaboration with Magnus Bruze and co-workers at the Department of Occupational and Environmental Dermatology at Malmö University Hospital.

The impact of “free radicals” on our health has been debated. Investigations of a radical mechanism involved in the formation of immunogenic hapten-protein complexes by hydroperoxides, the most important haptens formed by autoxidation, have been performed. For the first time we have demonstrated that radicals form specific immunogens causing contact allergy.

A major area of work within the research into contact allergy is the study of the structure-activity relationship (SAR) using series of compounds modelled from one original allergenic hapten. The chemical reactivity of the model compounds with peptides and proteins, as well as their sensitizing capacity, are investigated in order to elucidate what structural alerts make the molecules allergenic. Investigations aiming to increase our

understanding of the SARs for metabolic activation of various groups of prohaptens are also of major interest within the platform. Collaborations have started with Hans Merk and his research group at the Interdisciplinary Centre for Clinical Research, (IZKF) BIOMAT, RWTH, Aachen, Germany. The group in Aachen has specific knowledge of skin metabolism and experience from work with in vitro experiments using dendritic cells. A skin-like cytochrome P450 enzyme mixture (CYP cocktail) consisting of human isoenzymes has been developed that also allows the investigation of compounds that are not allergenic themselves but need CYP-mediated metabolic activation to become sensitizers.

In 2007 a successful conference “Looking Skin Deep” was organized by the platform. It gathered a large number of international and national researchers within science and dermatology. During the conference several workshops were held within the field of skin imaging.

Continuing Medical Education

CME MCQ – Biologic Era:

The following questions are based on the Educational Review in Forum No. 3:

Ståhle M. Systemic Treatment for Psoriasis – a New Biologic Era. *Forum for Nordic Dermato-Venereology* 2008; 13: 69–73

- Which of the following registered drugs, and drugs in the pipeline, inhibits tumour necrosis factor alpha (TNF- α) signalling?
 - Infliximab
 - Efaluzimab
 - Adalimumab
 - Ustekinumab
 - Eterncept
 - ABT-874
- Combine the correct suffix with the correct class of biologic agent:
 - ximab; 2. umab; 3. zumab; 4. cept
 - Human monoclonal antibody
 - Chimeric monoclonal antibody
 - Receptor-antibody fusion protein
 - Humanized monoclonal antibody
- Novel regulatory mechanisms important for skin biology are being explored and one of the more exciting fields currently evolving is the role of small endogenous RNAs (micro RNAs). Which of the following (A-E) relates to this potential therapeutic target?
 - DNA
 - mitochondria
 - miR-203
 - FK-506
 - TNF blockage

Recommended answers:
1. A + C + E
2. 1-B; 2-A; 3-D; 4-C
3. C