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Agenda

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Code	Title	Authors	Session	Date	Pres Time	Room	Topic
N/A	A NOVEL DECISION SUPPORT SYSTEM FOR TRAINING AND DIAGNOSIS IN DERMATOLOGY	Elisabeth Riedl, Antonia Wesinger, Harald Kittler, Rosa Rodríguez Domínguez, Arno Lukas, Gernot Salzer	Poster Session - Tuesday, June 9 to Friday, June 12	Tuesday 09 June 2015	N/A	International Poster Gallery, Exhibit Hall	Dermatologic Education
N/A	NON-MELANOMA SKIN CANCER ASSOCIATED WITH ANTIHYPERTENSIVE DRUGS: A REPORT FROM THE RADAR (RESEARCH ON ADVERSE DRUG EVENTS AND REPORTS) PROJECT.	Beatrice Nardone, Sara Majewski, Rivka Friedland, Tina Kiguradze, Sikia Waite, Ahmad Amin, Anne E Laumann, Beatrice J Edwards, Steven M. Belknap, Dennis P. West	Poster Session - Tuesday, June 9 to Friday, June 12	Tuesday 09 June 2015	N/A	International Poster Gallery, Exhibit Hall	Skin Cancer, Neoplasms, and Oncology, Medical Therapeutics, Clinical Research
N/A	A NOVEL DECISION SUPPORT SYSTEM FOR TRAINING AND DIAGNOSIS IN DERMATOLOGY	Elisabeth Riedl, Antonia Wesinger, Harald Kittler, Rosa Rodríguez Domínguez, Arno Lukas, Gernot Salzer	FP05: Feature E-Poster Session 5	Thursday 11 June 2015	N/A	International Poster Gallery, Exhibit Hall	Dermatologic Education

**[3028083] A NOVEL DECISION SUPPORT SYSTEM FOR TRAINING AND DIAGNOSIS IN DERMATOLOGY**

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**Background:** Skin diseases pose a significant burden on public health and early recognition is often crucial to prevent delay of accurate and timely treatment. Diagnostic decision support tools in medicine are an attractive option to improve the diagnostic accuracy in daily clinical practice.

**Objective:** to develop a prototype of a medical decision support system that serves as a training platform for dermatologists and assists general practitioners in diagnosing skin diseases. **Methods:** We created a comprehensive dermatological knowledge base with a central database for clinical data and images, tailored algorithms from fuzzy and probabilistic reasoning to dermatological diagnosis and implemented them into an interactive, web-based application for desktop computers.

**Results:** The clinical database consists of a predefined disease profile based on clinical characteristics and currently contains a set of 350 clinical diagnoses. This corresponds to more than 50.000 data items that were determined based on clinical expertise and on research data. Clinical test cases to evaluate the accuracy of the algorithm yielded a high success rate in a preliminary analysis. The disease results are displayed together with representative clinical images supporting the identification of the correct diagnosis.

**Conclusions:** Due to its accurate knowledge base, innovative reasoning component and userfriendly interface we have obtained a stable product that has the potential to improve the quality of care for patients with skin diseases.

**Limitations:** The results presented here are preliminary and need to be validated by a clinical study.

Author(s) conflict declaration not received at the time of publication.