Author's response to reviews

Title: Automatic Colorimetric Calibration of Human Wound

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Author's response to reviews: see over
Dear Dr. Andrea Bucceri,

We are grateful to address the comments of the revised manuscript with Title: Automatic Colorimetric Calibration of Human Wounds. In this letter you can find a point-by-point response to the concerns of the peer review.

Title: Automatic Colorimetric Calibration of Human Wound  
Version: 4 Date: 19 October 2009  
Reviewer: Ilias Maglogiannis  
Reviewer's report:

1. "...However my bigger concern regarding the assessment of the proposed system on actual skin images and a corresponding clinical evaluation by physicians still remains. We do understand the concerns of the reviewer. The initiatives of our research consortium should demonstrate our concerns of the current interpretation of clinical wound images without any calibration or reference procedure. Therefore we are investigating techniques to promote standardization.

2. The authors claim in their response sheet that this is an ongoing work of the wound ontology consortium. This consortium is not presented at all in the paper. It could be useful to know if this research is a part of a bigger framework and what could be expected in the field. Nevertheless the evaluation of the system is an important aspect that may not be neglected and it will improve the scientific merit of the paper. Therefore authors should present at least initial results.

The activity and research of the Woundontology Consortium, as mentioned in 4. is integrated in the discussion. The Woundontology Consortium is a semi-open, international, virtual community of practice devoted to advancing the field of research in
non-invasive wound assessment by image analysis, ontology and semantic interpretation and knowledge extraction (content-based visual information retrieval).

3. **Authors should present for convenience the basic features of the calibration algorithm in order to provide an integrated solution to the reader, along with an explanation of this selection for the specific problem.**

The basic features of the calibration protocol are shown in a new illustration: Figure 2.

4. **Authors are urged to include more experiments if this is possible.**

More research experiments are to be finished in the near future, are submitted or have been presented already. Some topics under investigation.

- Research on the methodology used by the Woundontology Consortium based on Wiki technology, a collaborative environment to develop a woundontology using Collaborative Ontology Development Service (CODS) and the image server: The Establishment of a Community Driven, Semantic Content Analysis Platform for Digital Wound Imaging
- Research on the Wound Bed Colour: THE RED-YELLOW-BLACK (R-Y-B) SYSTEM: A COLORIMETRIC ANALYSIS OF CONVEX HULLS IN THE CIELAB COLOR SPACE has been accepted for oral presentation and was presented at the EWMA 2009 conference in Helsinki, Finland.
Research on wound bed texture analysis using "MaZda" which is a computer program used for calculation of texture parameters (features) in digitized wound images. It has been under development since 1998, to satisfy the needs of the participants of COST B11 European project "Quantitative Analysis of Magnetic Resonance Image Texture" (1998-2002). Additionally, wound bed texture parameter data-mining is analyzed using "RapidMiner" which is the world-wide leading open-source data mining solution.

5. The discussion should be extended to include the clinical evaluation aspect.
Answered in paragraph 2 and 4.

Hoping that this additional information is considered as sufficient to publish this paper,

I send you my best greetings and respect from Belgium

Dr. Sven Van Poucke