

**GENETICS AND GENODERMATOSES** 

## THE INFLUENCE OF MC1R IN DIFFERENT SKIN COMPARTMENTS AS UNVEILED BY NON-INVASIVE SKIN IMAGING TECHNIQUES

S Guida<sup>(1)</sup> - S Ciardo<sup>(1)</sup> - B De Pace<sup>(1)</sup> - N De Carvalho<sup>(1)</sup> - F Peccerillo<sup>(1)</sup> - M Manfredini<sup>(1)</sup> - G Guida<sup>(2)</sup> - G Pellacani<sup>(1)</sup>

University Of Modena And Reggio Emilia, Department Of Surgical, Medical, Dental And Morphological Science With Interest Transplant, Oncological And Regenerative Medicine - Dermatology Unit, Modena, Italy <sup>(1)</sup> - University Of Bari "aldo Moro", Department Of Basic Medical Sciences, Neurosciences And Sense Organs - Molecular Biology Section, Bari, Italy <sup>(2)</sup>

Introduction: The melanocortin1 receptor (MC1R) gene codifies for the MC1R. Several polymorphisms of this receptor have been described across populations, with some variants being strongly associated with phenotypic characteristics of individuals and skin cancers. Recently, an association between MC1R variants and perceived age have been reported. However, the correlation with specific features of the different skin compartments has not been studied so far.

Objective: The aim of this study is to identify potential correlation between specific skin features and MC1R status.

Materials and methods: A total of 100 subjects between 35 and 55 years have been enrolled in this study. MC1R genotype has been evaluated through blood sample processing, after informed consent. Non-invasive skin imaging tools have been used to analyse specific features of different skin compartments.

Results: Our results show the significant correlation between MC1R RCH variants and specific epidermal and dermal skin features.

Conclusions: Interestingly, our results seem to shed light on the role of MC1R in cell types different from melanocytes.





