Appendix S1

MATERIAL AND METHODS

Real-time PCR for melanogenesis gene transcripts

Gene expression analysis was carried out using the ABI Prism 7000 real-time PCR system (Applied Biosystems, Foster City, CA). Reactions (10 µl) were carried out in replicates using TaqMan universal PCR master mix (Applied Biosystems) and FAM- and TAMRA-labeled TaqMan probes. normalization was carried out using 18S rRNA probes labeled with VIC and MGB 4319413E-0710034. Data analysis was carried out as previously described (1).

Transmission electron microscopy

Transmission electron microscopy was performed on hyper- and hypo-pigmented lesions using standard protocols. Briefly, 3mm biopsies were fixed in 2.5% gluteraldehyde and 4% paraformaldehyde, osmicated in 1 % osmium tetroxide, dehydrated in graded series of alcohol and infiltrated with Epon 812 resin. Ultrathin sections were cut on RMC ultramicrotome, collected on copper grids and stained with uranyl acetate and lead citrate. Samples were visualized on Tecnai G2 20 twin (FEI) transmission electron microscope.

1. Natarajan VT, Singh A, Kumar AA et al (2010). Transcriptional upregulation of Nrf2-dependent phase II detoxification genes in the involved epidermis of vitiligo vulgaris. J Invest Dermatol; 130(12): 2781-2789.