

Supplementary Material to

# Retaining skin barrier function properties of the stratum corneum with components of the natural moisturizing factor – a randomized, placebo-controlled double-blind *in vivo* study

Johannes Schleusener <sup>1</sup>, Andrew Salazar <sup>2</sup>, Jörg von Hagen <sup>2</sup>, Jürgen Lademann <sup>1</sup> and Maxim E. Darvin <sup>1,\*</sup>

<sup>1</sup> Charité – Universitätsmedizin Berlin, Corporate Member of Freie Universität Berlin and Humboldt-Universität zu Berlin, Center of Experimental and Applied Cutaneous Physiology, Department of Dermatology, Venerology and Allergology, Charitéplatz 1, 10117, Berlin, Germany; johannes.schleusener@charite.de (J.S.); juergen.lademann@charite.de (J.L.); maxim.darvin@charite.de (M.D.)

<sup>2</sup> Merck KGaA, Frankfurterstr. 250, 64293 Darmstadt; joerg.von.hagen@merckgroup.com (J.v.H.); andrew.salazar@merckgroup.com (A.S.)

\* Correspondence: [maxim.darvin@charite.de](mailto:maxim.darvin@charite.de)

**Table S1.** Components of the applied formulations.

Ingredients	INCI (EU)	[%]
Montanov 68	CETEARYL ALCOHOL, CETAEARYL GLUCOSIDE	4.00
Span 60	SORBITAN STEARATE	1.50
Lanette® O	CETEARYL ALCOHOL	1.00
Isopropyl Palmitate	ISOPROPYLPALMITATE	3.00
Cetiol® CC	DICAPRYLYL CARBONATE	3.00
Lanol 99	ISONONYL ISONONANOATE	3.00
Water, demineralized	AQUA	59.40
1,2-Propanediol	PROPYLENE GLYCOL	3.00
Rhodicare XC	XANTHAN GUM	0.30
Citric acid anhydrous	CITRIC ACID	0.10
tri-Sodium Citrate dihydrate	SODIUM CITRATE	4.70
Euxyl® PE 9010	PHENOXYETHANOL, ETHYLHEXYLGLYCERIN	1.00
Water, demineralized	AQUA	15.00
proprietary mixture based on the composition of NMF (Verum) OR Water, demineralized (Placebo)	SERINE, CALCIUM LACTATE, PCA, ARGININE, HISTIDINE (Verum) OR AQUA (Placebo)	1.00
		100.00