
Overview of non-invasive biophysical skin measurements carried out at IVTD

Skin parameter	Measuring principle / protocol	Measuring device / tool
1) Skin hydration 2) TEWL	Capacitance measurements - Water gradient method - Open and closed chamber techniques	Corneometer CM825® Tewameter TM300® VapoMeter® SWL-2 AquaFlux® AF200
3) Skin surface lipids (sebum)	Light transmission technique	Sebumeter SM810®
4) Apparent skin pH	Potentiometric measurement	Skin pH-meter PH900®
5) Skin color (erythema) (pigmentation)	Chroma measurement (combined with a scoring analysis)	Chromameter CR-300® (+ digital camera)
6) Skin scaliness (skin desquamation)	- Squamometry (collection and staining of corneocytes) - Corneofix F20 discs - In-vivo camera (non quantitative)	Chromameter CR-300® (+ visual scoring) Skin Visiometer SV600® Visioscan VC98®
7) Skin relief (skin topography / micro relief)	Light transmission technique (replica technique)	Skin Visiometer SV600®
8) Skin surface lipids (hydrolipidic film)	Tape-stripping technique (extractions / HPTLC)	Densitometric measurements (CAMAG)
9) Skin elasticity (in collaboration with the department of Prof. Peter Clarys)	Suction method (viscoelasticity) Shear wave propagation method	Cutometer MPA580® Reviscometer RVM660®
10) Skin compatibility (in collaboration with the department of Prof. Jan Gutermuth)	Patch testing (at the department of dermatology – UZ Brussels)	Visual and clinical scoring
