**Supplementary Table 2.** Parameters explored in a representative sample of various skin quality studies

| **Study and Study Type** | **Skin Quality Parameters Assessed** | **Assessment Instrument(s) Used** | **Parameter Definitions** |
| --- | --- | --- | --- |
| Dayan et al, 201962  Prospective, randomized, uncontrolled, single center, investigator blinded (N=20) | Tone (dyschromia)  Elasticity (firmness)  Texture (smoothness)  Radiance | SQA (10-point scale for improvement in skin quality parameters, where 0=none) | Not provided |
| Serra et al, 201898  Prospective, single center, observational, open-label (N=10) | Radiance  Smoothness  Pigmentation  Erythema  Pore size  Clarity  Brightness  Tone  Luminosity  Complexion | SQA | Not provided |
| Makino et al, 201837  Randomized, double-blind, placebo-controlled (N=36) | Overall damage  Tone evenness  Tactile roughness  Visible redness | Modified Griffiths’ grading scale (10-point scale for visible skin condition, where 0=best possible condition) | Not provided |
| Sundaram et al, 201859  Prospective, randomized, investigator blinded, parallel arm (N=34) | Hydration  Elasticity  Tonicity  Firmness  Moisture  Tone/ complexion  Radiance  Texture  Uniformity  Global appearance | Corneometer,  Cutometer,  Investigator-assessed 10-point visual analog scales | *Elasticity/firmness*: deformational behavior of skin in response to applied pressure  *Tonicity*: skin retraction and recovery time |
| Birnbaum et al, 20179  Randomized, multicenter, double-blind, placebo-controlled (N=171) | Hydration  Barrier integrity  Fine lines/wrinkles  Dark circles/bags  Discoloration  Complexion  Smoothness  Dryness  Mottled hyperpigmentation  Sallowness/ yellowing  Roughness/texture | Corneometer,  TEWL,  Subject 10-point skin improvement rating scale (−3=definite worsening; 0=no change; 3=definite improvement), IGA | *Mottled hyperpigmentation:* uneven, patchy, blotchy areas of light and dark and solar lentigines |
| Bonaparte et al, 201599  Prospective, single center, cohort (N=43) | Pliability  Overall elasticity  Elastic recoil | Cutometer | *Pliability*: distance skin may be stretched during suction  *Elastic recoil*: percentage of skin returning to baseline after no suction  *Overall elasticity*: ratio of elastic recoil after suction release, divided by pliability |
| Choi et al, 20148  Prospective, randomized, controlled, open-label, blinded (N=32) | Hydration  Elasticity  Erythema and pigmentation | Corneometer,  TEWL,  Cutometer,  Mexameter | Not provided; TEWL indicated as measure of hydration rather than skin barrier function as indicated by Birnbaum et al9 |

**SQA:**Skin Quality Assessment; **TEWL**:transepidermal water loss; **IGA**: Investigator Global Assessment