

## Cosmetic & Pharmaceutical Research > Cosmetic & Pharmaceutical Research > Thickness

### 3

**Standardized tape stripping: a practical and reproducible protocol to uniformly reduce the stratum corneum.**

*Dickel H, Goulioumis A, Gambichler T, Fluhr JW, Kamphowe J, Altmeyer P, Kuss O.; Skin Pharmacol Physiol. 2010;23(5):259-65. doi: 10.1159/000314700.*

#### **ABSTRACT**

The basic idea of the strip patch test (SPT), a modification of the conventional patch test (PT), is to increase the bioavailability of a test substance in the deeper epidermal cell layers by defined tape stripping of the test area on the back prior to a PT. In a prospective, investigator-blinded clinical study, we evaluated the variability and the interrater agreement of our proposed SPT protocol. The relative stratum corneum (SC) reduction after tape stripping was measured on 75 subjects for variability and in a subgroup of 18 subjects for interrater agreement, by performing in vivo confocal laser scanning microscopy. We found good reproducibility with an SC reduction of 31%, with 95% of the values lying between 22 and 40%, and good interrater agreement. As a result, our SPT protocol yields a clinically adequate standardization of the SC reduction and the SPT may therefore be recommended for performance in daily clinical routine.