

〈報 告〉

## シワ評価法に関する検討 第1報

——シワモデル標準板を用いた各種シワ測定法の比較検討——

岡野 由利<sup>1,2,\*</sup>, 赤崎 秀一<sup>1,3</sup>, 小出 千春<sup>1,4</sup>, 白石 泰規<sup>1,5</sup>  
曾根 俊郎<sup>1,6</sup>, 高橋 元次<sup>1,7</sup>, 広瀬 統<sup>1,8</sup>, 舛田 勇二<sup>1,7</sup>  
松江 浩二<sup>1,9</sup>, 松本 克夫<sup>1,10</sup>, 宮本久喜三<sup>1,11</sup>, 三村 邦雄<sup>1,9</sup>

### Evaluation of Measurement Methodologies for Wrinkles on the Face Part I

—Validation of various methods for the measurement of wrinkles using a standard scale—

Yuri OKANO,<sup>1,2,\*</sup> Syuichi AKAZAKI,<sup>1,3</sup> Chiharu KOIDE,<sup>1,4</sup> Hiromi SHIRAIISHI<sup>1,5</sup>  
Toshiro SONE,<sup>1,6</sup> Motoji TAKAHASHI,<sup>1,7</sup> Osamu HIROSE,<sup>1,8</sup> Yuji MASUDA<sup>1,7</sup>  
Kohji MATSUE,<sup>1,9</sup> Katsuo MATSUMOTO,<sup>1,10</sup> Kukizo MIYAMOTO,<sup>1,11</sup> Kunio MIMUARA<sup>1,9</sup>

#### Abstract

It is well known that wrinkling on the face is a key appearance of skin aging. Prevention and improvement of wrinkles are desired by cosmetic treatments. Various types of methodologies to measure wrinkles have been reported, but there are no reports which reviewed and weighed those methods in an evenhanded fashion. In order to develop a guideline for evaluation of facial wrinkles, we conducted validation trials to compare a number of methods. We quantified the depth of wrinkles with selected 2 D-and 3 D-methods by using replicas of a standard scale with known depth of grooves that simulated wrinkles. Although absolute values of measured depth with these methods slightly varied, high correlation was observed between the measured depth values and the known depth values of the standard scale. Results showed this validation method is appropriate to relatively compare and validate methods to measure depth of wrinkles.

**Key words:** wrinkles, evaluating method, validation, standard scale, depth.