Appendix S1

SUPPLEMENTARY MATERIAL AND METHODS

A survey was conducted in France by HC Conseil (Paris, France) using a sample of mothers, which was drawn from a representative sample of the population aged 15 or older. The mothers were selected and then interviewed if they had at least one child under the age of 6 years. For mothers with several children, the questions were focused on the younger ones. A minimum of 100 children per age group was required.

The interviewees responded to an open question concerning whether sensitive skin was present in themselves or their children, with no specific details about topography. The mothers were then asked about the occurrence of burning, prickling, or irritation in the presence of various factors, including emotion, cold, heat, sun, cosmetics, dry air, air conditioning, water, pollution, and temperature changes. They were also asked if they experienced frequent flushing for no apparent reason, if their facial skin was easily irritated, if they had consulted a dermatologist during the previous year or if they had a skin disorder.

Statistical methods

Quantitative variables are expressed as the mean and standard deviation. Qualitative variables are expressed as frequencies and percentages. Between-group comparisons were performed using Student's *t*-test in the case of 2 groups of quantitative variables and ANOVA when there were more than 2 groups. If the use of these tests was not pertinent, non-parametric tests (Wilcoxon or Kruskal-Wallis) were performed. For dichotomous variables, intergroup comparisons were performed with the χ^2 test or Fischer's exact test if necessary. The level of significance was set at 5%. Data were analyzed using SAS® software version 8.2 (SAS Institute Inc., Cary, NC, USA) with Windows hardware. Each variable was evaluated independently in a univariate analysis adjusted for age and sex. Variables were retained in a stepwise manner to determine whether they were independently associated with sensitive skin syndrome or irritable bowel syndrome at a probability threshold of 0.05. Odds ratios were consequently generated. Stepwise logistic regression was employed to identify predictive variables of skin sensitivity. The Akaike Information Criterion was used to select variables for reduced models. The area under the curve was calculated to characterize the success of the prediction. All statistics were two-tailed, and significance was set at pc=0.032 (using False Discovery Rate correction) and 0.002 (using Bonferroni correction).