Outcome Measures in Dermatology

In the article by Vrijman et al, “construct” refers to any method used to determine the outcome of a clinical trial of the treatment of patients with vitiligo. Construct validity refers to the experimental demonstration that the construct (ie, method) actually measures what it claims to measure. Criterion validity refers to the experimental demonstration that the method compares with a well-accepted standard (“gold standard”). Structural validity refers to internal consistency of the method. (See: Mokkink LB, Terwee CB, Knol DL, et al. The COSMIN checklist for evaluating the methodological quality of studies on measurement properties: a clarification of its content. BMC Med Res Methodol. 2010;10:22.)

As noted by the authors, the development of scales and indices for skin diseases and testing their measurement properties has been inadequate. (See: Allen AM. Clinical trials in dermatology, part 3: measuring responses to treatment. Int J Dermatol. 1980;19[1]:1-6; and Bigby M, Gadenne A-S. Understanding and evaluating clinical trials. J Am Acad Dermatol. 1996;34[4]:555-590.) The Consensus-Based Standards for the Selection of Health Status Measurement Instruments (COSMIN) checklist represents the application of methods from the social sciences to test the measurement properties of outcome measures in clinical trials.

Michael Bigby, MD