Acne is one of the most common skin diseases, with an estimated prevalence of 50 million people in the United States alone, and has significant impact on quality of life. The high prevalence and seriousness of acne makes crafting innovative avenues for patient education about this disease very important. Twitter has become a popular social networking phenomenon with a user base of over 140 million active users and 340 million tweets per day. Its popularity makes it a potentially powerful source of information and route of communication for acne, especially since the Internet can be an adolescent’s primary source of health information.

Methods. Twitter is an online social networking service that allows users to post 140-character messages called “tweets” and to subsequently repost or “retweet” these messages from their own account. Using a form of real-time data capture through the use of the Twitter Streaming Application Programming Interface (API), we obtained an institutional review board–exempt status and collected all tweets that contained 1 or more of 5 keywords: pimple, pimples, zit, zits, and acne for a 2-week period from June 10 through June 23, 2012, with additional data monitoring in order to calculate a 1-week retweet count for each tweet. We applied an English filter that we determined had a 93% sensitivity and 97% specificity. These data were then exported as a comma-separated values (CSV) file via the TwitterToCSV software library that one of us (A.C.) developed for this research and that we have made available as an open-source package. High-impact tweets, defined as tweets with one or more retweets, were the only tweets examined in this study. These high-impact tweets were frequency weighted by retweet count and categorized by content into 4 main categories: personal, celebrity, education, and irrelevant/excluded. The education category was further subdivided into: disease question, disease information, treatment question, treatment information (branded), treatment information (non-branded), and treatment information (ambiguous). The language and content of these high-impact tweets were then compared to the acne patient information website published by the American Academy of Dermatology (AAD).

Results. There were a total of 8192 English high-impact tweets of a total of 392 617 tweets collected. Personal tweets about acne were the most common type of high-impact tweets (43.1%), followed by tweets about celebrities (20.4%), and then education-related tweets (27.1%); 9.4% of tweets were excluded. By education subcategory, 16.9% and 8.9% of all high-impact tweets were about disease information and treatment information, respectively.

Results of a more detailed analysis of disease and treatment related tweets are summarized in Table. A total of 67.3% of disease question tweets related to some
Discussion. Twitter is emerging as a popular forum where people exchange health information. Health providers can not only learn about the perceptions and misperceptions of diseases like acne, but they might also communicate reliable medical information. There is a significant amount of negative commentary about acne on Twitter, in addition to myths, incorrect information, and unconventional home remedies. The dermatology community should be aware of these popular beliefs to effectively address them and to deliver the best patient education and care possible, both online and in the clinic.

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On the Comparison of Diagnosis and Management of Melanoma Between Dermatologists and MelaFind

In a recent issue of JAMA Dermatology, Wells et al1 compare the recommendations of the MelaFind device (Mela Sciences Inc) with those of 39 dermatologists who did not use MelaFind for sensitivity and specificity of melanoma diagnosis. The specificity of the device was so low that I find the conclusions of the authors that it is a useful and “very sensitive tool to guide dermatologists”1(p1085) not supported by their data. The authors report that on a test set of 47 lesions, MelaFind recommended biopsy in 44 lesions and no biopsy in 3. Of the 3 nonbiopsy lesions, 1 was melanoma.