



## BACKGROUND

- Widespread use of facial masks during the COVID-19 pandemic has been linked to the development of acne breakouts, frequently referred to as ‘maskne’<sup>1-2</sup>
- Social media platforms, including Twitter, have previously been shown to inform patient perceptions regarding acne<sup>3</sup>

## OBJECTIVE

- Given the growing influence of social media in providing health information,<sup>3-4</sup> we sought to characterize Tweets about mask-related acne to better recognize the distribution of potential influencers and the role of dermatologists in supplying education and guidance

## METHODS

- Retrospective analysis of English Tweets regarding mask-related acne posted in September 2020. Tweets were ‘high impact’ (had at least one retweet) and novel (not posted more than once by the same author). Retweets were not considered. Author types and demographics were collected using available information on public Twitter profiles. Tweet content was assessed and categorized into several major groups

## REFERENCES

- Gomolin T, Cline T, Russo M. Exacerbation or eruption of acne during the COVID-19 pandemic. *SKIN J Cutan Med* 2020; 4: 438–9.
- Teo WL. Diagnostic and management considerations for “maskne” in the era of COVID-19. *J Am Acad Dermatol* 2021; 84: 520–1.
- Shive M, Bhatt M, Cantino A et al. Perspectives on acne: what Twitter can teach health care providers. *JAMA Dermatol* 2013; 149: 621–2.
- Zhao Y, Zhang J. Consumer health information seeking in social media: a literature review. *Health Info Libr J* 2017; 34: 269–83.
- American Academy of Dermatology. 9 ways to prevent face mask skin problems. 2020. Available at: <https://www.aad.org/public/everyday-care/skin-care-secrets/face/prevent-face-mask-skin-problems>. (accessed 5 January 2021).

\*Conflicts of Interest: Hao Feng: Consultant, Cytrellis Biosystems, Inc; and Soliton, Inc  
Other Authors: None

Roman Drozdowski, BS<sup>a</sup>, Christian Gronbeck, MD<sup>a</sup>, Hao Feng, MD, MHS<sup>b\*</sup>  
<sup>a</sup>University of Connecticut School of Medicine;  
<sup>b</sup>Department of Dermatology, UConn Health, Farmington, CT

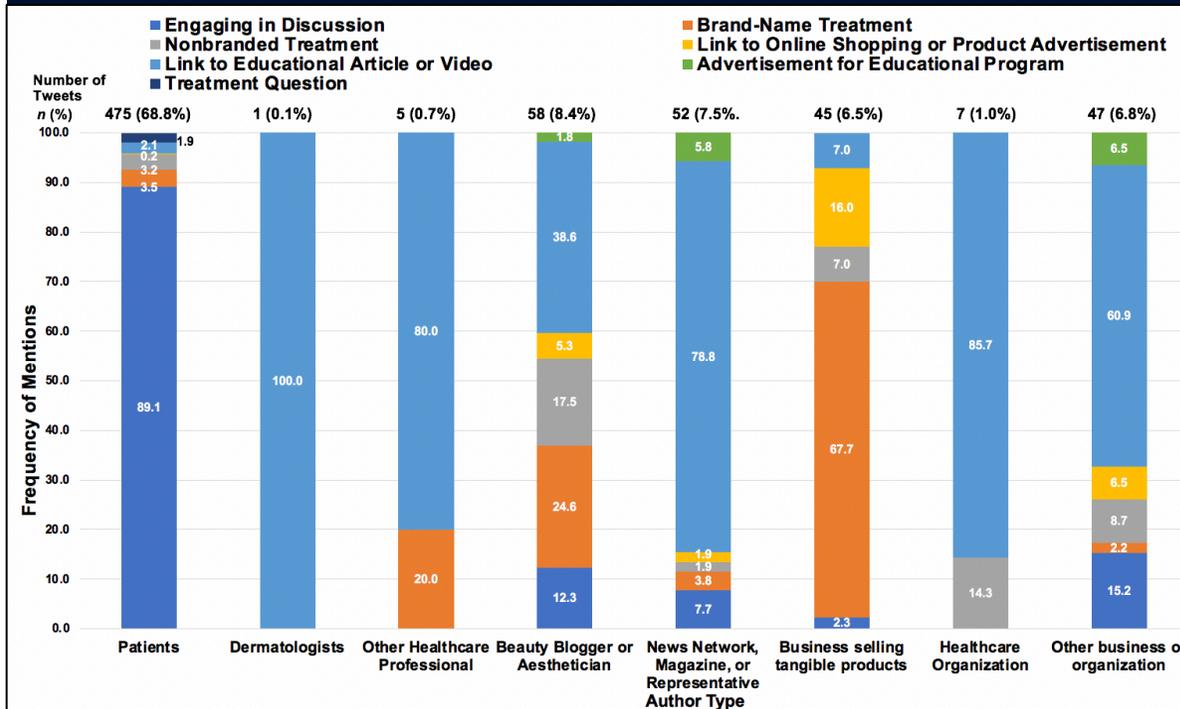


Figure 1: Overall volume, topic distribution and content of mask-related acne Tweets in September 2020, stratified by author type. For each author type, the total number of Tweets is denoted at the top of each bar in the figure. The distribution of Tweets is specifically delineated for each author type.

## RESULTS

- Most of the 690 Tweets analyzed were by patients (68.8% compared with 31.2% from nonpatients)
- Healthcare providers and organizations (1.7%) and dermatologists (0.1%) accounted for a small portion of Tweets
- Other nonpatient authors included beauty bloggers or aestheticians (8.4%), media networks and personnel (7.5%), and businesses selling tangible products (6.5%)
- Patients most frequently Tweeted complaints of or questions about mask-related acne (89.1%), whereas the majority of commercial business Tweets promoted brand-name acne treatments or online shopping links (83.7%) (Figure 1)

## Conclusion

- The findings emphasize a shortage of educational Tweets regarding mask-related acne, which is important given the frequency with which patients expressed frustration with mask-related acne and sought management guidance
- Although many healthcare professionals and health organizations posted links to educational videos, these individuals were overall under-represented in the sample of influencers
- Effective acne treatments were occasionally discussed on Twitter. However, many remedies that do not appear in the American Academy of Dermatology recommendations, such as turmeric masks, herpanacine supplements, and essential oil concoctions, were also promoted<sup>5</sup>
- As our understanding of mask-related acne continues to improve, the dermatology community should be encouraged to contribute its knowledge and recommendations regarding evidence-based practice through social media