

# Evaluating the Quality of Social Media Content on Platelet-Rich Plasma for Androgenetic Alopecia and Facial Aesthetics: A Cross-Sectional Study

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## BACKGROUND

Platelet-rich plasma (PRP) has emerged as a widely popular treatment in dermatology, particularly for hair. The introduction of PRP releases stored growth factors from platelets, inducing cellular proliferation, angiogenesis, proliferation of dermal fibroblasts and matrix metalloproteinases (MMP), and collagen synthesis. These mechanisms are believed to underlie its efficacy in promoting hair follicle survival and growth, making it a prominent option for treating various forms of alopecia, including androgenetic alopecia (AGA). The efficacy of PRP in treating hair loss has been well studied with promising results from randomized clinical trials (RCTs) for AGA. However, while some studies demonstrate significant improvements in hair density and quality, others report limited efficacy.

## METHODS

TikTok was searched using keywords related to PRP. Sixty videos met criteria and were stratified by creator and content type. Eighty videos on PRP for facial aesthetics were included as supplemental data. Creator categories were dermatologists, other physicians, non-physician health care providers (NPHCPs), or laypeople. Three reviewers assessed each video using the modified-DISCERN tool. The scoring of the videos was classified as follows: very poor, poor, fair, good, or excellent quality. An example for a very poor quality video presented a lack of a clear aim or achievement of the aim, a lack of evidence-based and reliable sources of information presented, biased or unbalanced information, a lack of additional evidence-based sources of information listed for reference, and a failure to address areas of uncertainty with PRP treatment. In contrast, in an excellent quality video, the aims were clear and achieved, reliable and evidence-based sources of balanced and unbiased information were used, additional sources of evidence-based information were listed for patient reference, and areas of uncertainty with PRP treatment were addressed. An analysis of variance (ANOVA) test was used to compare mean scores across creator categories.

## RESULTS

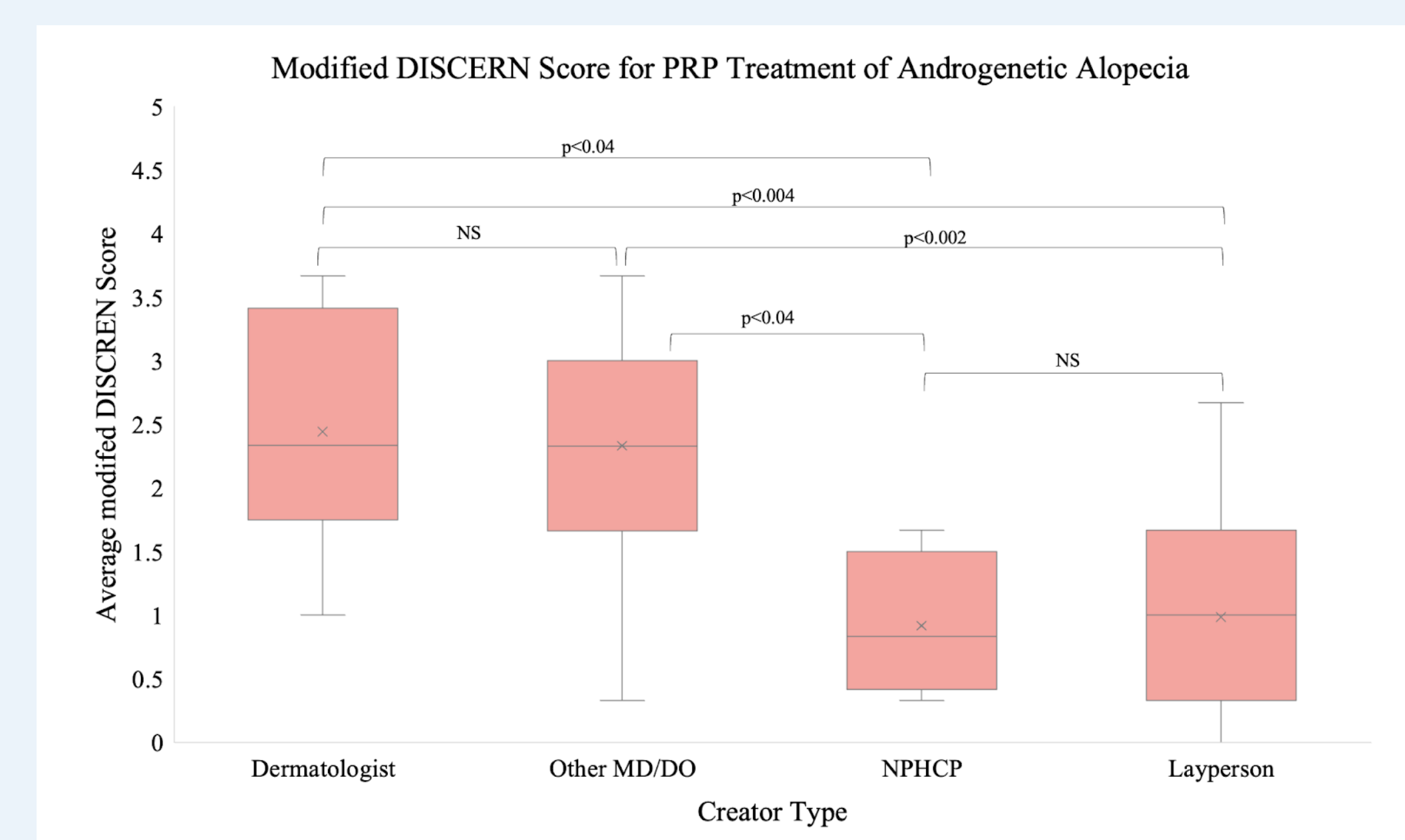
In total, these videos accrued about 138 million views and 6 million likes. A gross assessment of creator type revealed that dermatologists (11%) and other MD/DO physicians (12%) had less content among the top liked than laypeople (61%) and NPHCPs (15%). The content created by dermatologists and other MD/DO physicians was mostly educational (69% and 65%, respectively). The content created by laypeople consisted mostly of advertisements (36%) or was based on experience (58%). NPHCPs created a mix of advertisements (25%), educational (38%), and experience based content (38%).

## RESULTS (CONT.)

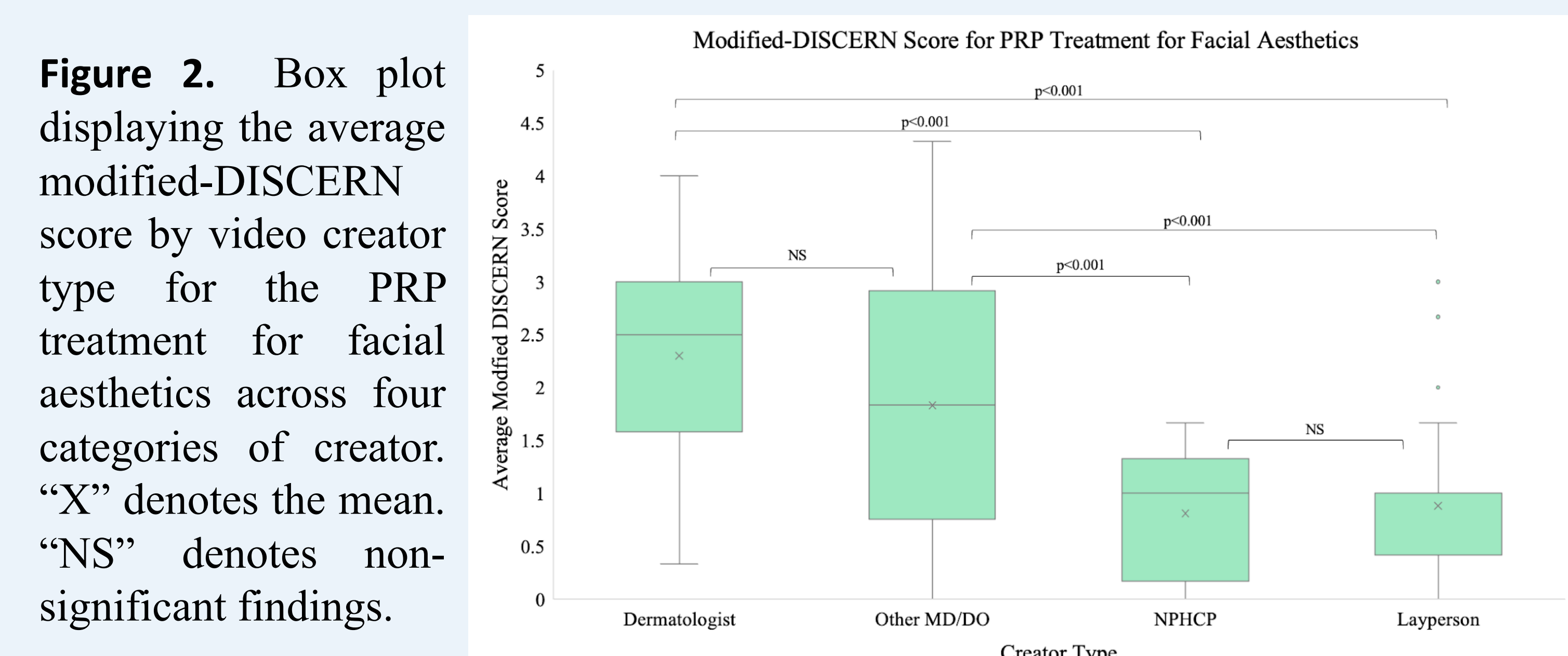
Among the videos, 43% (n=60) addressed PRP treatment for androgenetic alopecia, while 57% (n=80) focused on PRP treatment for facial aesthetics. The ICC score among the three evaluators was 0.77, correlating to “good”. Of the PRP videos targeting androgenetic alopecia, 0% were excellent, 10% were good, 20% were fair, 42.5% were poor, and 27.5% were very poor in quality. Of the PRP videos on facial aesthetics, 1.3% were excellent, 7.5% were good, 6.3% were fair, 53.8% were poor, and 31.3% were very poor in quality.

Median scores showed dermatologist content was fair, while content from other MD/DOs was poor, and laypeople and NPHCPs rated very poor (2.34, 1.33, 1, 1, respectively). Dermatologists and other physicians scored significantly higher than laypeople ( $p < 0.004$  and  $< 0.002$ , respectively) and NPHCPs ( $p < 0.04$  and  $< 0.04$ , respectively) on the mod-DISCERN for content on androgenetic alopecia. No significant difference between scores was observed between dermatologists and other MD/DOs ( $p > 0.96$ ) and NPHCPs and laypeople ( $p > 0.99$ ).

Dermatologists/other physicians scored significantly higher than laypeople ( $p < 0.001$  and  $< 0.001$ , respectively) and NPHCPs ( $p < 0.001$  and  $< 0.001$ , respectively) on the modified-DISCERN for content on facial aesthetics. No significant difference between scores was observed between dermatologists and other MD/DOs ( $p > 0.43$ ) and NPHCPs and laypeople ( $p > 0.96$ ).



**Figure 1.** Box plot displaying the average modified-DISCERN score by video creator type for PRP treatment of androgenetic alopecia across four categories of creator. “X” denotes the mean. “NS” denotes non-significant findings.



**Figure 2.** Box plot displaying the average modified-DISCERN score by video creator type for the PRP treatment for facial aesthetics across four categories of creator. “X” denotes the mean. “NS” denotes non-significant findings.

## DISCUSSION

Social media provides accessible but often unreliable medical information, which patients increasingly use for decision-making. Our study found that most top-liked TikTok videos on PRP were created by individuals without medical expertise, which aligns with previous studies.

Although PRP’s role in androgenetic alopecia is established, its use in facial aesthetics remains controversial due to limited evidence. Yet, content promoting PRP for skin rejuvenation outpaces that for alopecia, likely due to the appeal of anti-aging treatments, influencer marketing, and alignment with self-care trends. However, anecdotal promotion can contribute to misinformation for patients seeking evidence-based care.

While physicians produced higher-quality content than NPHCPs and laypeople, overall quality remained poor. Social media’s informal nature likely encourages brevity and engagement over accuracy, leading to oversimplified and lower-quality information from both groups.

We hypothesize a “role reversal” phenomenon: dermatologists, while medical experts, may prioritize engagement by creating short, trend-driven videos lacking depth, whereas influencers attempt to convey authority by producing denser, more convincing content. This dynamic may explain the minimal quality difference observed.

Overall, the evaluated content was poor in quality, underscoring the need for balanced, evidence-based information—created by both physicians and non-physicians—that includes guidelines, risks, and benefits to help patients make informed decisions.

## REFERENCES & DISCLOSURES

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