made to identify demineralized lesions and the perception of how esthetics are compromised by them. Besides that, clinical records verified the number of first-time bond failures.

We find it important to discuss 2 of the conclusions. The authors report in the first affirmation that "There was no difference in the incidence of new demineralized lesions (DLs) in patients who received fixed orthodontic appliances bonded with either a light-cured RM-GIC or LCC." However, there was no standard to follow in the methodology for the photographs, because they were taken with different digital cameras and different environmental and lighting conditions. Besides that, the examiners did not receive a standardized training to take the photographs. Therefore, it is possible for the examiners to identify and evaluate DLs in the sample, but not to make any statement about the incidence of DLs in it. It is known that to evaluate DLs, there is the need of a clinical evaluation with the tooth surface clean and dry, as recommended by the International Caries Detection and Assessment System.[2]

As for the last conclusion, in which the authors reported "potential advantages to using RM-GIC, including reduced sensitivity to moisture, reduced cleanup time, as well as lower environmental and cytotoxic impacts," it is based on information described by previously published papers[3,4] and does not express an interpretation of the results of the study, because the chosen methodology was limited to evaluating failures after bonding orthodontic brackets with RM-GIC.

Despite having used the methodology in a satisfactory manner to compare RM-GIC and LCC efficacy when bonding orthodontic brackets, the fact that there was no standard procedure to take the photographs allowed them to be used only to evaluate how white spot lesions compromise esthetics, but not to identify the clinical incidence of those lesions. This fact can influence future studies that refer to the literature in search of information about the incidence of DLs in an improper manner.

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Authors' response

We thank the readers for their interest in our article and for their comments. The International Caries Detection and Assessment System (ICDAS) is an index developed for detection and classification of caries (https://www.iccms-web.com/content/icdas). The full ICDAS scores range from 0 (sound enamel) to 6 (extensive distinct cavity with visible dentin). Therefore, the full range of scores can be used to assess the severity of dental caries over time. In our study we showed our assessors the photographs from before treatment and from the day of debonding and asked them to simply decide if any new lesions, that might be due to demineralization during orthodontic treatment, were present or not. We used multiple assessors to improve validity. This equates to the ICDAS basic reporting tool of a dichotomous assessment (No/Yes obvious decay). This assesses the true incidence of demineralization (presence or absence of new lesions), but makes no attempt to determine severity. Severity was assessed with the use of a separate subjective assessment of esthetic impact by several clinicians and lay people, only after it was determined that new lesions were present.

Regarding the condition of the tooth surfaces, the before-treatment photographs were taken only after oral hygiene was considered to be sufficient for fixed orthodontic treatment. The day of debonding photographs were taken after removal of the appliances and cleaning of the tooth surface. Drying of the tooth surface might be important to improve the validity and reproducibility of the full ICDAS index scores indicating severity of lesions, but this would tend to overestimate the incidence of demineralization. We decided to examine the tooth surfaces in the natural state (ie, not air dried). We

disagree that it was an "improper" method, but rather a matter of judgment about assessing this outcome in a way that is meaningful to patients and clinicians.

Regarding the other advantages of RM-GIC, it is correct that this was a matter of conjecture by the authors and may be the subject of future research.

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Importance of using platelet-rich plasma

An interesting article in the January 2019 issue contributes to the advancement of orthodontics because it helps us to understand if dental movement can be accelerated with the use of platelet-rich plasma, prostaglandin E2, and others; it has not been demonstrated that there is any clinical treatment that accelerates tooth movement. The study, "Experimental investigation of effects of platelet-rich plasma on early phases of orthodontic tooth movement," was carried out by Sibel Akbulut, Ahmet Yagci, Arzu Hanim Yay, and Betul Yalcin in Turkey.[1]

The authors studied the acceleration and the force when moving teeth in laboratory rats. Certainly they controlled weight, sex, and type of feeding. Their sample was very small: 16 in each group divided into 4 subgroups according to evaluation period. This is a small sample from which to have a conclusion that allows some kind of external validity. Other authors are experimenting with an average of 40 rats, for example, Gudhimella et al[2] using 90 rats and Sugimori et al[3] in 2018 using 50 rats.

On the other hand, it is known that the immediate effect of platelet-rich plasma occurs in the first 24 hours and the continuity of this stimulus will depend on the type of plasma used,[4] the concentration of the same, and the anatomic site where it is applied; even so, its maximal effect will be noticed between 20 and 30 days,[5] so the authors had to consider a minimum study time of at least 30 days for the results to be the most beneficial.

Another point to be discussed in this article was that to accelerate the process of tooth movement they used platelet-rich plasma from other rats, that is, 6 extra rats from which they extracted blood to process the plasma. However, it is possible that when using plasma from other rats, the experimental rats did not achieve an adequate effect because the plasma did not have the same properties as their own might have had. This situation should be taken into account by readers to analyze the results with caution, and it deserves a comment from the authors to incorporate these control variables in future studies.

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Authors' response

Thank you for your comments on our article. We are happy to respond.

We used 4 rats in each subgroup. It is true that the larger the numbers, the greater the reliability of the study. However, we consulted a statistician before the study and determined that a power of 80% was achieved with 48 rats total and 4 rats in each subgroup. Power of 80% can be considered acceptable, and using more animals might be overuse and unethical.

We stated, "Biologic activity of growth factors was reported to last for 5 days, and 80% of the factor was reported to be released 24 hours after application and completed in 2 weeks. Therefore, 14 days is enough to