The Issue of Peer-Review
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It is widely accepted that peer-review is the process that validates the published scientific literature. However, it is known to be inconsistent, biased, onerous, slow, and expensive. The typical journal, such as Dentistry 3000, follows these common steps:

1. The editor, upon receiving a manuscript submission, will decide if the paper should be peer-reviewed. If the decision is “no,” the editor will reject the paper. If the decision is yes, the process of inviting individuals to revise the manuscript begins.

2. The peer-reviewers provide a general impression about the paper. Typically, these include suggestions to revise the paper and resubmit.

3. The editor receives from the authors a revised version of the manuscript and he/she will decide if the new version is acceptable or not, and often will send it to peer-review again, trying to have the same reviewers look at the revised manuscript. This process can have multiple iterations with the authors.

This peer-review process gives credibility to publications and is not only used for defining which papers should be published, but also for making decisions on funding of research projects. Additionally, journals quite often suggest to authors their acceptance rates, some proud to reject 60% or more of the submissions without even sending to peer-review. Journals define themselves, not only thematically, but also on the types of papers they publish. Many journals emphasize originality and positive results. It is more difficult to publish the results of a well-designed clinical trial when they are negative.

Therefore, the challenge is in how to improve the peer-review process. Dentistry 3000 is trying to address that by increasing consistency among reviews and by publishing independently from the authors and their affiliations. Dentistry 3000 has published close to 70% of its submissions. The main goal is to disseminate information, and publish in all areas and topics relevant to dental, oral and craniofacial research. Authors are not charged publication fees. Once there is enough material, Dentistry 3000’s contents will be listed in PubMed. In the future, scientific publications will receive bigger emphasis on reactions to papers after publishing, rather than the delayed peer-review process, which could be streamlined to be less demanding, since this process will continue to rely on trust. Alternatives such as evaluating raw data are too demanding and time consuming to be feasible.