Letter to Editor http://www.ijos.org.cn

doi: 10.4248/IJOS10079

Response

To Editor

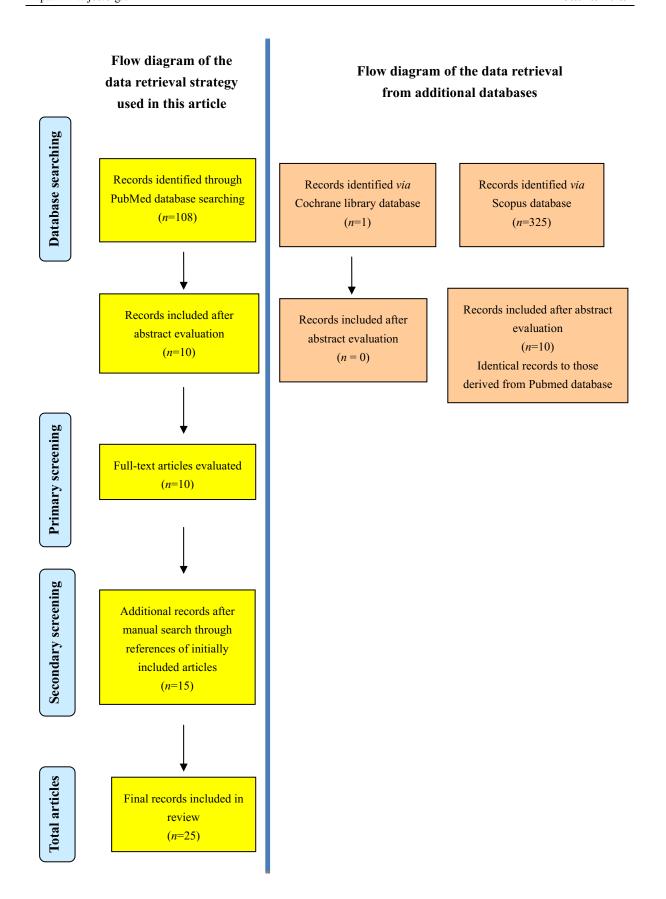
I deeply appreciate the careful comments from Pitak-Arnnop *et al.* on potential pitfalls of the article entitled "Transplantation of cryopreservation teeth: a systematic review". In general, the review publications in basic biomedical science (either by invitation or proposal submission) were performed by well-known experts in particular fields. These traditional literature review articles provide in depth information in recent scientific advancements; however, the information selection and presentation biases may occur. A systematic review is usually employed in clinical medicine to minimize these biases. One encourages the use of systematic reviews in many fields, including basic biomedical science, and urge editors (both basic science and clinical journals) to promote a systematic review process in the "Instruction for Author" section of their journals. In this review article, I attempt to emphasize the employment of the systematic review process to evaluate, methodologically, the information from basic science knowledge. Therefore, as stated in the publication, the aim of the article was to examine the research articles regarding biological and mechanical properties of cryopreserved teeth. The determination of inclusion criteria in this article was performed by a single researcher. One may argue for potential selection bias, and I concur that the bias can be minimized by addition of other researchers.

I do agree with Pitak-Arnnop *et al*'s suggestion on the use of various search engines. In this review article, the Pubmed database was employed to identify the included articles (10 articles). Manual searching was performed through the references of included primary articles to identify additional publications that potentially met the inclusion criteria (an additional 15 articles). Further, the search was limited to English-language articles. Although, Pitak-Arnnop *et al.* suggested that there is no influence of language restriction on the main outcome of some systematic reviews, language competency may be a barrier to evaluation of articles for analyses. Therefore, an international collaboration on information gathering would definitely advance the exchange of knowledge within the scientific community.

Without confining the level of evidences in the inclusion criteria, all included articles can be categorized in five levels of evidences (Oxford Centre, 2009). Doing so includes articles divided into three types: case reports, laboratory results (both *in vitro* and *in vivo*), and traditional literature reviews. These were classed as grade D level recommendations (Oxford Centre, 2009). As the implementation of research findings in routine clinical practice should be based on randomized controlled trials and meta-analyses, the shortfalls of basic science knowledge and clinical limitations have been discussed in the article. More information and investigation of both laboratory and clinical issues are needed. In summary, I would like to reiterate Pitak-Arnnop *et al*'s advice on the importance of the systematic review procedure and evidence-based medical practice.

I have attached the flow diagram of data retrieving strategy used in the review article and also added 2 additional databases for searching using the same criteria as published in the review article to give other dimensions of the information. However, the main included articles for reviewing were not altered.

http://www.ijos.org.cn Letter to Editor



Letter to Editor http://www.ijos.org.cn

Thanaphum Osathanon DDS, PhD

DDS, PhD
Department of Anatomy, Faculty of Dentistry
Chulalongkorn University
34 Henri-Dunant Rd. Pathumwan
Bangkok 10330 THAILAND

E-mail: osathanon.t@gmail.com

Reference

Oxford Centre for Evidence Based Medicine, Levels of Evidence (March 2009). [WWW document]. URL http://www.cebm.net/index.aspx? o=1025 [accessed Sep 20, 2010].