Letter to the Editor

Comment on “Review of Dohan Eherenfest et al. (2009) on classification of platelet concentrates: From pure platelet-rich plasma (p-prp) to leucocyte- and platelet-rich fibrin (l-prf)”

Dear Editor,

We have read with interest the review by Theodorakys Marin Fermín et al. titled “Review of Dohan Eherenfest et al. (2009) on Classification of platelet concentrates: From pure platelet-rich plasma (P-PRP) to leucocyte- and platelet-rich fibrin (L-PRF)” [1]. In their work, the authors review this classification of PRP published in 2009 [2], focusing on its importance and impact, and on the new PRP classifications in subsequent years.

The authors also address the need for such classifications in an attempt to minimize the problems and limitations of PRP research. One of the main problems is the great variability that accompanies this biological product. It includes factors related to PRP preparation, application protocol and type of patients [3]. This implies the publication of clinical results that often contradict each other. However, these cannot be compared since the products and protocols employed are different although the term PRP is used in all of them. Therefore, the authors of this article rightly recommend the use of PRP classifications in order to provide sufficient information and solid methodology in scientific works [4].

However, in the review of the different PRP classifications, the authors did not include the Universal Coding System (UCS) [5], which is the most recent coding and classification system. It was carried out by an international group of experts in the field of PRP that we would like to highlight it. Indeed, such has been the impact of this work that in only 3 years since its publication it has been cited more than 80 times according to the Journal Citations Reports (JCR) database [6]. This system is intended to address the needs of PRP research. It combines a simple coding system to identify PRP with minimum reporting guidelines for PRP studies. The code number quickly and easily defines the type of PRP according to the main variables, namely, platelet concentration, presence of erythrocytes and leukocytes, and method of activation. This code is a sequence of 6 digits grouped in pairs indicating the parameters of these variables with the aim of unifying the way PRP is classified for comparison. In addition, it is accompanied by informative tables that include data on the preparation and application of PRP, depending on whether the study is in vitro, in vivo or clinical. Thus, this system extends and adapts the parameters for the Studies Evaluating Biologics in Orthopedics (MIBO) system to the PRP [7]. Finally, its design allows it to be open and to evolve over time as knowledge about PRP increases.

This novel classification and information system should be spreading across the scientific community, including researchers, reviewers, journal editors and scientific societies. Thus, all stakeholders in the publication and dissemination of scientific work would be involved. Only in this way will it be possible to achieve the objective stated by Marin Fermín et al.: “to build a new body of evidence with high-quality reporting and reproducibility that will serve as the foundation of its so- longed-for standardization.”

Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this article.

References


Mikel Sánchez*
Arthroscopic Surgery Unit, Hospital Vitlas Vitoria, Vitoria-Gasteiz, Spain
Advanced Biological Therapy Unit, Hospital Vitlas Vitoria, Vitoria-Gasteiz, Spain

Diego Delgado
Advanced Biological Therapy Unit, Hospital Vitlas Vitoria, Vitoria-Gasteiz, Spain

João Espregueira-Mendes
Clínica Espregueira - FIFA Medical Centre of Excellence, Porto, Portugal
Dom Henrique Research Centre, Porto, Portugal
School of Medicine, University of Minho, Braga, Portugal

Received 20 August 2023; Received in revised form 8 September 2023; Accepted 1 October 2023
Available online xxxx
2059-7754/© 2023 The Authors. Published by Elsevier Inc. on behalf of International Society of Arthroscopy, Knee Surgery and Orthopedic Sports Medicine. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).
ICVS/3B’s-PT Government Associate Laboratory, Braga, Guimarães, Portugal

3B’s Research Group – Biomaterials, Biodegradables and Biomimetics, University of Minho, Headquarters of the European Institute of Excellence on Tissue Engineering and Regenerative Medicine, Barco, Guimarães, Portugal

* Corresponding author. Arthroscopic Surgery Unit, Hospital Vithas Vitoria, C/Beato Tomás de Zumárraga 10, 01008 Vitoria-Gasteiz, Spain. E-mail address: mikel.sanchez@ucatralima.com (M. Sánchez).