

Erratum to: Platelet Derived Biomaterials for Therapeutic Use: Review of Technical Aspects

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The aim of this erratum is to acknowledge that certain scientific text in the article is common with the review article “Burnouf T, Goubran HA, Chen TM, Ou K-L, El-Ekiaby M, Radosevic M. Blood-derived biomaterials and platelet growth factors in regenerative medicine. *Blood Rev.* 2013;27(2):77–89. DOI:10.1016/j.blre.2013.02.001. Review”. The authors regret this lapse and agree to attribute the identified text to the review article by Burnouf et al.

The corrected text should read as:

Plasma derivatives are fresh frozen plasma and cryoprecipitates for transfusion as well as medicinal products manufactured from large pools of plasma (typically from thousands of plasma donors) by plasma fractionation. Most blood products are to be administered intravenously but topically used blood-derived biomaterials represent a unique group of blood products which may be used in combination with plasma- or cell-derived active components [*].

The understanding of blood coagulation cascade and role of platelets leading to tissue regeneration [*, 21] following trauma helps us to understand the therapeutic action

of these platelet biomaterials. Platelet-mediated primary hemostasis and the formation of a platelet fibrin clot occlude vascular lesions after trauma. “Coagulation factors, growth factors, and cytokines released in the clot by the activated platelets orchestrate complex physiological events leading to tissue repair and regeneration” [*].

“FS (Fig. 1a) contains concentrated fibrinogen and thrombin as its main active proteins [20] and is usually formulated in the presence of calcium chloride, which speeds up fibrin polymerization” [*].

A platelet gel (Fig. 1c) is obtained by activating platelets by thrombin or CaCl₂ to convert fibrinogen into a fibrin gel (platelet gel) and activate platelets to release growth factors into the tissue environment [*, 26].

This biomaterial physiological activation of the coagulation cascade during centrifugation leads to the formation of a fibrin clot which could be squeezed into a growth factor-rich fibrin membrane, releasing a cell-free serum-like material (releasate) that contained growth factors and could promote cell growth [*].

The new reference added [*] is:

Burnouf T, Goubran HA, Chen TM, Ou K-L, El-Ekiaby M, Radosevic M. Blood-derived biomaterials and platelet growth factors in regenerative medicine. *Blood Rev.* 2013;27(2):77–89. DOI:10.1016/j.blre.2013.02.001. Review.

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