

Solutran[®]hemo BioNest

by Meditalia

your solution

Platelet gel from cord blood

SUMMARY

Method for preparing **platelet fractions** which can be obtained **from placental blood**, with high concentrations of platelet factors as well as gels and lysates.

BACKGROUND

It is known that human blood contains also a platelet fraction and other factors or proteins, which have multiple biological properties. The platelet fraction can be used *in vivo* as a hemostatic agent, a medicament for treating lesion, or *in vitro* as a part of cell culture medium. For *in vivo* uses the platelet fraction may be derived from autologous human peripheral blood, but this option involves quite relevant drawbacks and problems, particularly in elderly and pediatric patients.

Allogeneic umbilical cord blood (CB) is an important alternative source of platelet fraction for clinical use, particularly in **regenerative medicine applications**.

TECHNOLOGY

The platelet fraction, obtained from umbilical CB, can be found in the lighter blood part (plasma) and can be divided into two portions, i.e. platelet-poor plasma (PPP) and platelet-rich plasma (PRP).

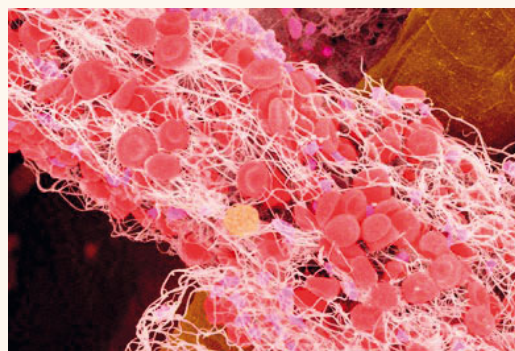
The Platelet Gel (PG) for clinical application is prepared from PRP upon appropriate centrifugation. Once isolated, the PRP fraction is transferred into biobags and stored at -80°C. When needed, the biobag is thawed and activated with a commercial available enzyme and/or calcium gluconate.

The CBPG is promptly ready to use for desired clinical applications. This method is **simple, safe and highly reproducible**.

STAGE OF DEVELOPMENT

Several clinical trials have been performed with platelets gels to test feasibility, compare clinical efficacy and evaluate costs.

Preliminary clinical evidence suggests that CBPG could be a valuable therapeutic tool for the treatment of **skin ulcers, corneal lesions, in maxillofacial and periodontal surgery**.



Current development stage

- Clinical trials on different tissue repair procedures

Intellectual property rights

- Europe and USA patents