



BAGS
A·B·C BIONEST SYSTEM

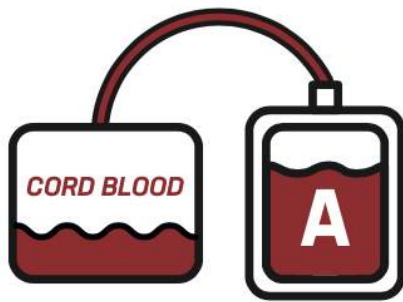
*A medical device for
Multicomponent Cord Blood Banking*

Intended use

Medical device for the preparation, storage and use of Cord Blood components.

Fields of application

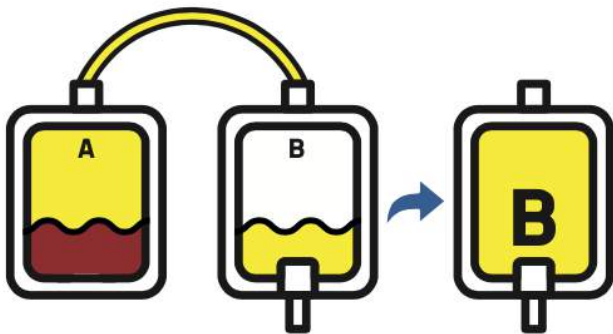
- Neonate to neonate red blood cell transfusion
- Wound healing
- Eye drops



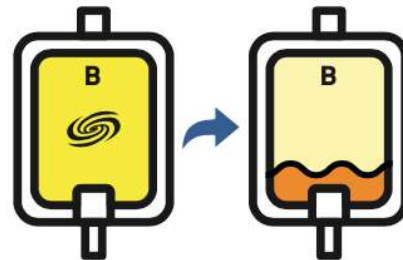
- 1** CB is aseptically transferred from the original collection bag into bag "A" by sterile connection



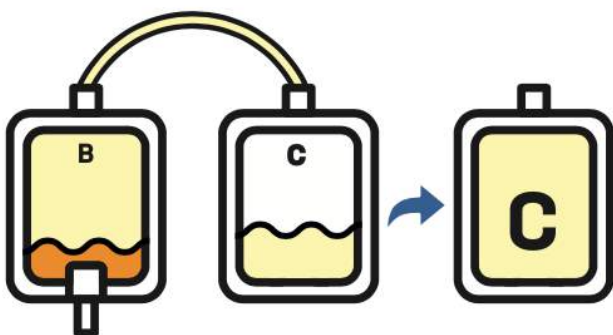
- 2** Bag "A" is centrifuged with bags "B" and "C" at low speed to sediment the red blood cells and to concentrate the white blood cells into the buffy coat and the platelets into the supernatant platelet rich plasma (PRP)



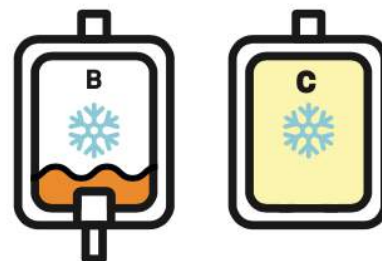
- 3** Transfer of PRP into bag "B", sealing, separation and storage at 2-6 °C of bag "A", which contains red blood cells



- 4** High speed centrifugation of "B-C" bags



- 5** Transfer platelet-poor plasma (PPP) into bag "C" except the volume necessary to ensure a predefined concentration of the platelets concentrated in the bottom of bag "B" (for example: 1 million per microliter)



- 6** Sealing, separation and freezing of "B" and "C" bags at temperatures below -25 °C

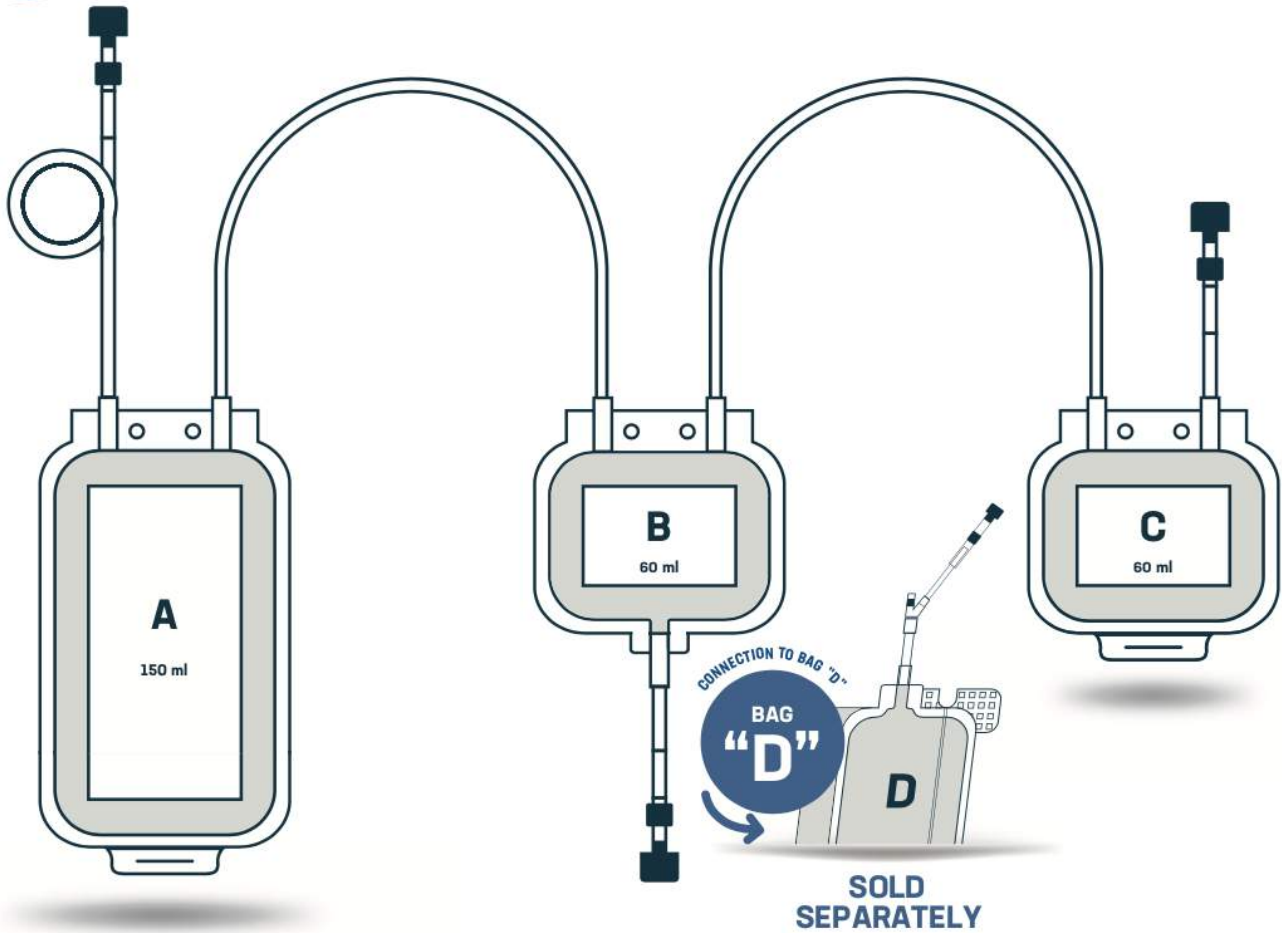




INFORMATION

for BioNest system users

Besides the classical use as a source of hemopoietic stem cells for allogenic transplantation, Cord Blood can be fractionated into "A" red blood cells, "B" platelets, and "C" platelet poor plasma.



BAG
"A"
CBRBC
Neonatal
Transfusion

BAG
"B"
CBPG*
Wound Healing
BAG
"D"

BAG
"C"
CBPPP
Eye Drops

*Cord Blood Platelet Gel (CBPG) can be prepared and easily administered using the BioNest transfer bag "D" (sold separately, product code 4211000000).



A SELECTION OF SCIENTIFIC LITERATURE ON CORD BLOOD COMPONENTS

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1. Gelmetti A, et al. Cord blood platelet gel for the treatment of inherited epidermolysis bullosa. *Transfus Apher Sci.* 2018;57:370-3.
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4. Volpe P, et al. Efficacy of cord blood platelet gel application for enhancing diabetic foot ulcer healing after lower limb revascularization. *Semin Vasc Surg.* 2017;30:106-12.
5. Sindici E, et al. Cord blood platelet gel alone or in combination with photobiomodulation therapy for the treatment of oral ulcerations in patients with epidermolysis bullosa: A pilot clinical comparative study. *Photodermatol Photoimmunol Photomed.* 2017 Nov 15. doi: 10.1111/phpp.12366.
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14. Yoon KC. Use of umbilical cord serum in ophthalmology. *Chonnam Med J.* 2014;50:82-5.
15. Erdem E, et al. Umbilical cord blood serum therapy for the management of persistent corneal epithelial defects. *Int J Ophthalmol.* 2014;7:807-10.
16. Petrini C. Ethical and legal considerations regarding the ownership and commercial use of human biological materials and their derivatives. *J Blood Med.* 2012;3:87-96.
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DISCLAIMER

This medical device is intended for use by qualified health personnel only. The present information does not constitute and does not intend to constitute recommendations for medical treatment. The company assumes no responsibility for improper use of the device and for incorrect application of the instructions contained in the package leaflet. The use of blood components is the responsibility of the qualified health personnel.