Vivostat® Application system

Vivostat® Products

Vivostat® Fibrin Sealant
Vivostat® Fibrin Sealant offers a safe and effective alternative to conventional fibrin sealants. The fully automated system prepares approximately 5-6 ml of autologous fibrin sealant from only 120 ml of the patient’s own blood in just 24 minutes.

The autologous nature of the product eliminates the risks of viral infection and unlike conventional fibrin sealants, Vivostat® Fibrin Sealant does not contain any exogenous thrombin or bovine components.

Vivostat® PRF®
Vivostat® PRF® (Platelet Rich Fibrin) utilizes the revolutionary Vivostat® Fibrin Sealant blood processing technology.

Combining a platelet concentrate with a fibrin sealant solution provides a carrier, a controlled release, and a scaffold – all in one product, Vivostat® PRF®.

From 120 ml blood, 5-6 ml of Vivostat® PRF® can be prepared with 7 times the platelet level of the donor’s blood – corresponding to a platelet level above 1 million platelets/μl. Unlike conventional PRF systems, the instant polymerisation of the fibrin ensures that the growth factors remain precisely where they are applied.

Application Devices

Spraypen Kit (also available as Co-Delivery)
The Spraypen enables the surgeon to apply Vivostat Fibrin Sealant or Vivostat PRF® intermittently throughout the entire procedure without experiencing blockage.

The Spraypen gives the surgeon freedom to place the solution very accurately in pin point applications, micro anastomosis, and difficult to reach areas.

Spraypen Kit - Concorde
With its carefully optimized angle on the spraytip, the Concorde Spraypen has been developed for surgical procedures where Vivostat® Fibrin Sealant or Vivostat® PRF® must be applied in difficult to reach areas, for example anastomosis on the backside of the heart and sealing of the mammary bed.

Endoscopic Kit (also available as Co-Delivery)
The Vivostat® Endoscopic Kit is used in various types of Minimally Invasive Surgery. The single-use endoscopic application catheter is easily loaded into the endoscopic handle,

which is inserted via a 5 mm trocar. The pre-bent spraytip enables the surgeon to manipulate the tip and spray in multiple directions.

Endoscopic Kit - Straight
The Vivostat® Endoscopic Kit - Straight can be used in multiple different endoscopic solutions e.g. Colonoscopes, Bronchoscopes, Laparoscopes or Gastroscopes. It can further be used in deep wounds and fistulas. In combination with specially designed spray modes for the Applicator Unit, the flexible catheter completely fills wounds and fistulas without leaving any cavities.
The Vivostat® Application system

The Vivostat® Applicator Unit is a fully automated device that controls the delivery of the Vivostat® Fibrin Sealant or Vivostat PRF®. During the procedure, the Applicator Unit informs about the volume of Vivostat® available and allows the healthcare specialist to choose from a number of different spray modes that carefully control the delivery of Vivostat® Fibrin Sealant or Vivostat PRF® to the site of treatment.

The Vivostat® system offers a range of unique application devices, designed for the delivery of Vivostat® Fibrin Sealant or Vivostat PRF® to the site of treatment in a precise and targeted manner with minimum waste and without blockage.

Applying the Vivostat® micro-spray technology the Vivostat® application system applies Fibrin Sealant or Vivostat PRF® with minimal impact on the tissue. The airflow is much lower than that used by competing application systems and it minimizes the risk of air embolisms.

Vivostat® Co-Delivery
Vivostat® has developed the revolutionary Co-Delivery system that makes it possible to co-deliver a desired substance (drugs, stem cells etc.) with Vivostat® Fibrin Sealant or Vivostat PRF® (Platelet Rich Fibrin).

Options for Co-Delivery include:
- Drugs
  - Antibiotics
  - Chemotherapeutics
  - Pain medications
- Stem cells
  - Bone marrow derived
  - Adipose tissue derived

The fibrin matrix found in both Vivostat® Fibrin Sealant and Vivostat PRF® has been shown to postpone the fibrinolytic degradation process. This means that the fibrin membrane ensures a slow and sustained release of the substance offering a prolonged effect.

“In summary, these studies suggest that the Vivostat® applicator has a number of potential clinical advantages over conventional fibrin sealant application systems.”

Vivostat Co-Delivery

Different spray modes
The Vivostat® applicator offers the surgeon multiple different spray modes. This allows the surgeon to apply with different spray volumes, and apply without air e.g. relevant for endoscopic applications.

4 min. of non-stop application
From 5-6 ml of Vivostat PRF® or Vivostat® Fibrin Sealant it is possible to spray for up to 4 minutes non-stop depending on the selected spray mode.

Immediate polymerization
Vivostat® Fibrin Sealant or Vivostat PRF® polymerizes immediately upon application with the Vivostat application system.

Minimum airflow
The Vivostat® application system uses a significantly lower airflow than competing application systems. This is also why the Vivostat® application system was not part of the warning concerning risk of air embolisms that has been issued by the FDA and the European Medicines Agency.

Foot Switch
Depending upon the preferences of the surgeon all Vivostat® application devices can also be controlled with the Vivostat® foot switch.

Foot Switch
According to the Vivostat® application system - a companion with conventional fibrin sealant application systems: R.A. Dodda et al Technology and Health Care 10 (2002) 401-411

Multiple Application Devices
Whether you are doing open surgery, work in an endoscopic setting, need to treat fistulas or cavity wounds - Vivostat® provides an optimal application device.

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