The Vivostat® idea was conceived in 1992 by a group of Danish researchers, searching for a simple and fully automated way of preparing fibrin sealant, on-site and from the patient’s own blood.

Following the initial development phase, the idea was further matured in cooperation with specialists from across the world, and in 2001, the first generation of the Vivostat® products – Vivostat® Fibrin Sealant – was launched by the Danish company Vivostat A/S.

Today, the Vivostat® technology comprises more than fibrin sealant. The advanced blood processing and application technology has been further developed and now also includes Vivostat PRF® (Platelets Rich Fibrin). These products are used on a daily basis in surgical departments and wound care centres across Europe and Asia.

The idea has come to life!

What you should know

We advise you to consult your surgeon about how Vivostat® Fibrin Sealant and Vivostat PRF® may help you during surgery. Moreover, the blood components extracted by the Vivostat® system can be influenced by medication or diet, therefore, please always discuss this with your surgeon during consultation.

We encourage you to visit our web page www.vivostat.com. Here you will find additional information about Vivostat and scientific articles that explain the unique possibilities of our products Vivostat® Fibrin Sealant and Vivostat PRF®.

If you have any questions you are always welcome to send us an e-mail at info@vivostat.com. We will do our utmost to assist you with more information about the Vivostat® treatment and how it may help you.
**Fibrinogen** is a protein that is essential to the clotting of blood and the stopping of bleeding. All people have fibrinogen, in different concentrations, in their blood. If bleeding occurs, the body will naturally start to use the fibrinogen, which is turned into fibrin to stop the bleeding. By extracting fibrinogen from the patient's own blood and applying it if bleeding occurs during surgery, it is possible to assist the body and effectively stop the bleeding. When applied Vivostat® Fibrin Sealant is transformed into a fibrin gel that stops the bleeding. The fibrin gel consists of tiny strings of fibrin that forms a dense net - see microscope image 1.

**Platelets** are tiny cell fragments that contain growth factors. See microscopic image 2. Growth factors are essential to help regenerate tissue. By applying a concentrate of platelets to the damaged tissue the body helps itself regenerate tissue faster.

**Blood** consists of a number of important components amongst others fibrinogen and platelets. It is these two components that the Vivostat® systems is able to extract from the patient's own blood and use to stop bleeding and regenerate tissue.

**Vivostat® products**

1. **Vivostat® Fibrin Sealant**
   - Vivostat® Fibrin Sealant is a product used primarily to stop bleeding during surgery.
   - Vivostat® Fibrin Sealant is an autologous product i.e. the donor and the recipient are the same person. This is highly beneficial since the body is less likely to react negatively towards an autologous product. Most other sealants are developed from donor blood, pooled blood or bovine components. This involves a risk of transferring contamination from the donor blood to the patient receiving the fibrin. The autologous nature of Vivostat® efficiently eliminates this risk.
   - Using Vivostat® Fibrin Sealant to stop bleeding is highly beneficial to the patient as it can minimise postoperative bleeding and thereby reduce the risk of complications. Further, it can reduce the drainage volume and the length of stay at the hospital.

2. **Vivostat PRF® (Platelet Rich Fibrin)**
   - Vivostat PRF® is a product that is suitable for stopping bleeding during surgery, moreover, it assists the body with the regeneration of tissue.
   - Vivostat PRF® contains a high concentration of both Fibrin and Platelets. The fibrin can help stop bleeding but it also protects the platelets and slowly releases them over time.
   - The fact that Vivostat PRF® continuously supply platelets to the tissue the body can regenerate the damaged tissue quicker and more effectively. This can have a positive effect on pain and on the time it takes for the patient to get back to their everyday lives.

Beyond safety and efficacy, the Vivostat® system is exceptionally user friendly. This allows the surgeon to maintain full focus on the procedure and the well-being of the patient.

**Three easy steps**

1. Draw blood from the patient
   - Prior to treatment 120 ml of the patient’s own blood is drawn into the Preparation Unit.

2. Process the patient’s blood
   - The Preparation Unit is placed in the Processor Unit. At the touch of a button the fully automated Processor Unit prepares an autologous Vivostat® Fibrin Sealant or Vivostat PRF® solution ready to use.

3. Load the Applicator Unit and spray
   - The Vivostat® Fibrin Sealant or Vivostat PRF® solution is easily loaded into the Applicator Unit and is applied to the site of treatment in a gentle and precise manner.