# Vivostat® Fibrin Sealant in cardiac surgery

Peri-operative bleeding continues to be a challenge during complicated cardiac surgical procedures. Today, Vivostat® Fibrin Sealant is used in a wide range of cardiac procedures to improve haemostasis, anastomotic sealing and prevent tamponade after minimally invasive procedures

Vivostat®
Fibrin

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Fibrin sealants have been used in cardiac surgery for decades and for several indications. Typically it is used in complicated procedures and in high-risk patients

Vivostat® Fibrin Sealant is an effective surgical haemostat[1] and being derived from the patient's own blood it offers excellent biocompatibility. Unlike conventional sealants, which are most often based on single donor blood, pooled blood or bovine components (e.g. aprotinin), Vivostat® Fibrin Sealant does not contain any exogenous thrombin or bovine components. The autologous nature of Vivostat® efficiently eliminates the risks of bovine or human borne contaminants.

Cardiac surgeons find Vivostat® autologous fibrin sealant most useful for the following surgical procedures:

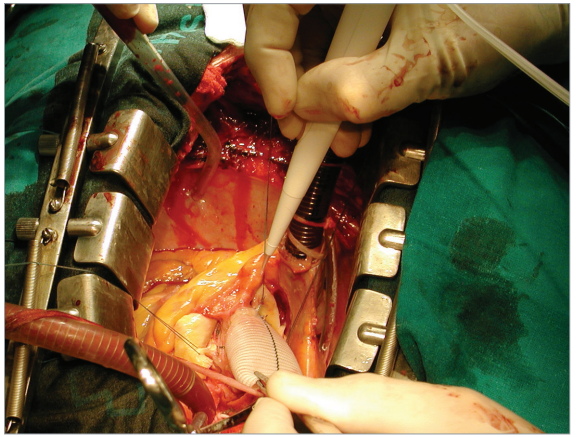
- Coronary artery bypass grafting (CABG)
- Aortic anastomosis during CABG
- Sternal wound sealing
- Congenital heart surgery
- Implantation of vascular prostheses
- Operation for active endocarditis of the aortic root
- Surgery in high-risk patients, i.e. patients in anticoagulation therapy, Plavix therapy and diabetic patients

The main advantages of using Vivostat® Fibrin Sealant in these procedures are:

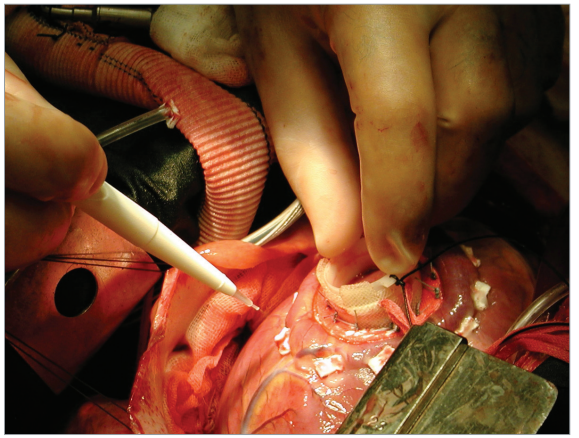
- Complete sealing of suture lines
- Haemostasis of diffuse bleedings (both from sternum and dissected tissue)
- Sealing of coronary anastomoses when the coronaries are heavily calcified
- Avoid kinking of graft during CABG by gluing the graft to the epicardium
- Reducing risk of tamponade in minimally invasive surgery

The wide range of unique Vivostat® application devices (e.g. the Concorde Spraypen®) are designed for the delivery of fibrin sealant to the surgical site in a precise and targeted manner, without experiencing the blockage that is common in conventional sealant systems. The application devices enable the surgeon to apply Vivostat® Fibrin Sealant accurately and intermittently throughout the entire procedure and the pre-bent tip of the Concorde Spraypen® allows the surgeon to apply Vivostat® Fibrin Sealant on difficult to reach areas e.g. on the backside of the heart.

1: A Comparison of the Haemostatic Effect of Vivostat® Patient-Derived Fibrin Sealant with Oxidised Cellulose (Surgicel®) in Multiple Surgical Procedures Hanks J.B. et al., European Surgical Research 2003; 35: 439–444



Sealing of proximal anastomosis in aortic root replacement



Sealing of suture lines during LVAD procedure