



Committed to Aortic Care



Discover solutions for every segment of the aorta
[terumoaortic.com](https://www.terumoaortic.com)



Visit our website for more information on use, indications, contraindications, warnings/precautions and availability within your market.

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INFORMATION LEAFLET

AQUABRID® Surgical Sealant

- ▶ **READY TO USE**¹
No manual mixing or preparation required
- ▶ **SHORT REACTION TIME**
Stops bleeding within a few minutes^{3,4}
- ▶ **OPTIMAL USE FOR WET SURFACES**
Regardless of heparinisation conditions^{3,4}



For more information, visit
[terumoaortic.com/aquabrid](https://www.terumoaortic.com/aquabrid)

AQUABRID® - For sealing aortic anastomoses

“Effective hemostasis is the key to the success of aortic surgery.”²

AQUABRID® is a fully synthetic surgical sealant for aortic surgical procedures. It is applied to bleeding blood vessels or tissues treated by standard methods of cardiovascular surgical repair to seal.

AQUABRID® can be applied immediately to the aortic anastomosis.

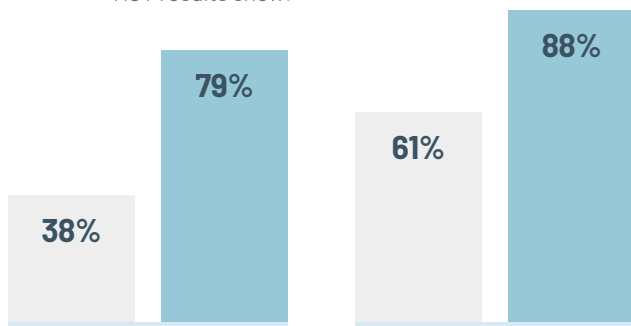
- ▶ It reacts with water in blood and forms an elastic layer – making it optimal for use in wet conditions.^{3,4}
- ▶ It stretches and shrinks with the vessel contractions, while maintaining a strong seal during the pulsatile stress-loads of the aorta.^{1,3,4}



AQUABRID® effectively controls aortic bleeding²

AQUABRID® is supportive in **achieving hemostasis**, even under fully heparinised conditions.

RCT results show:

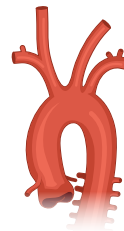


Complete haemostasis was obtained in 155 anastomoses (79 %) vs. 45 anastomoses (38 % of control group ($p < 0.001$)) **before protamine** sulfate administration

Complete hemostatis was obtained in 173 anastomoses (88 %) vs. 71 anastomoses (61 % of control group ($p < 0.001$)) **15 minutes after protamine** sulfate infusion

Control Group AQUABRID® Group

Bleeding complications in aortic procedures



15%

Aortic procedures were associated with **the highest bleeding complication rate**⁵

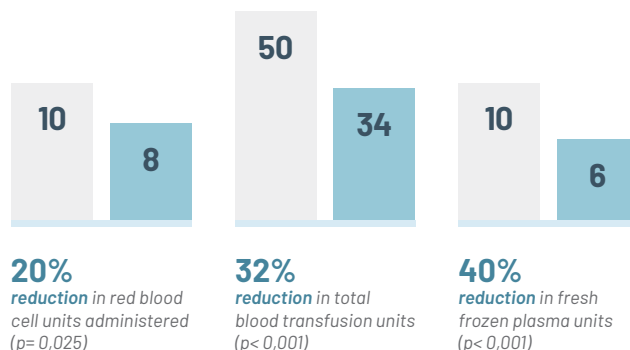
Bleeding complications are associated with:⁵

- ▶ Higher risk of infection,
- ▶ In-hospital mortality,
- ▶ Transfusion-related adverse events



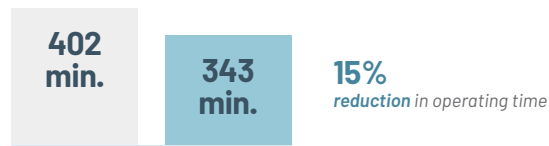
AQUABRID® helps save hospitals money on blood products⁶

The use of AQUABRID® shows a **significant reduction** in **blood transfusions** in acute aortic dissection operations.



AQUABRID® saves time in the OR⁶

The use of AQUABRID® shows a significant reduction in operating time during acute aortic dissection operations.



1. AQUABRID® Instructions for Use.

2. Morita, Shigeki et al. "Randomized clinical trial of an elastomeric sealant for hemostasis in thoracic aortic surgery." *General thoracic and cardiovascular surgery* vol. 68,2 (2020): 112-121. doi:10.1007/s11748-019-01169-5

3. Eto M et al. Elastomeric surgical sealant for hemostasis of cardiovascular anastomosis under full heparinisation. *Europ. J. Cardio Surg.* 2007; 730-734.

4. Oda S. et al. Experimental use of an elastomeric surgical sealant for arterial hemostasis and its long-term tissue response. *Interac. Cardio. and Thor. Surgery.* 2010; 258-261.

5. Al-Attar et al. Impact of bleeding complications on length of stay and critical care utilisation in cardiac surgery patient in England; *Journal of Cardio Thoracic Surgery.* 2019; 14:64.

6. Matsuoka, Tadashi et al. "A surgical sealant, AQUABRID decreased the volume of intraoperative blood transfusions and operative time for acute aortic dissection repair." *Journal of Cardiac Surgery.* Vol. 37,12 (2022): 5073-5080. doi:10.1111/jocs.17208