

A workshop to explore the use of a new resorbable haemostat, TenaTac[®], in minimally invasive surgery using simulators

We are seeking surgeons, nurses and theatre staff who are involved in the preparation &/or insertion of haemostats in minimally invasive surgery. The workshop will take 1.5 hours.

The workshop will consist of:

- (I) A short presentation of TenaTac¹ summarising its application in a diverse range of procedures, including recent clinical data on controlling air leaks in MIS thoracic surgery
- (II) A practical session in which participants will familiarise themselves with the physical properties of the product and then test the ease of preparation and insertion via two port sizes. The data collected for this “human factors” workshop will be anonymised.

Background

TenaTac is an approved CE marked medical device and is available on NHS Supply Chain. The product is made from gelatin and incorporates a patented surface modification in which over 1000 miniature columns are formed that greatly increase adhesion, conformability and elasticity (Figure 1). The material also has sealing qualities. TenaTac has been used in a diverse range of procedures including thoracic, abdominal and neurosurgery. A paper documenting real world clinical evaluations has been published². A UK company, Selentus Science, has developed the product and it is distributed by P3 Medical.



Figure 1 TenaTac has over 1000 miniature columns conferring adhesive, conforming and elastic properties.

The benefits of the product include:

- ❖ Adhesion to prevent displacement, thereby reducing the risk of post-operative complications
- ❖ Adhesion combined with conformability, elasticity & sealing. This has been successfully exploited in the control of persistent air leaks in MIS thoracic surgery
- ❖ Safety – made from gelatin which has a 50 year history of safe use and without the addition of chemically reactive substances or blood derived active ingredients such as thrombin
- ❖ Swift degradation – porcine implantation studies demonstrated a 14 day absorption profile that is faster than many haemostats³
- ❖ Cost – the patented technology replaces expensive active ingredients and hence the product is available at a lower price compared to haemostats with active substances

References:

1. www.tenatac.com

2. M. Grosheva, M. Liese, T. Menovsky, R. Rasschaert, D. Galun, N. Maric, P.D. Hayes, I. van Herzeele, Assessment of the efficacy of a novel adhesive haemostat using real world, case series data collection, International Journal of Surgery Open, Volume 60,2023.

3. Nichols B, Zbozien R, Nichols A, Hunter J, Hayes PD. Physical Modification of a Gelatin Sponge Creates a Very Adhesive, Rapidly Absorbable, Blood- Free Hemostat. World J Surg Surgical Res. 2023; 6: 1500.