SEFAR MEDIFAB® Fabrics are Low Protein Binding (LPB)

Protein adsorption to surfaces in medical devices may be critical. Therefore, the SEFAR MEDIFAB® polyester and polyamide product line was evaluated for protein adsorption. Following qualitative pre-studies, a quantitative study for the protein binding capacity of SEFAR MEDIFAB® fabrics was conducted. Selected, representative fabrics were submerged in a BSA solution – Bovine Serum Albumin is a lead protein in blood – and the adsorption of protein was determined. The results of this study show that the fabrics do not adsorb protein (BSA) in detectable amounts.

Conclusion
SEFAR MEDIFAB® fabrics can be considered as Low Protein Binding (LPB).

Low protein binding
The Sefar healthcare brochure «Safety Filters & Spreading Media» references this study in section «SEFAR MEDIFAB® Tests» on the last page.

Lowest protein adsorption
The results of the study on SEFAR MEDIFAB® fabrics can be compared to test results of commercial polyamide membranes which are marketed as low biomolecule binding.

Background
Protein adsorption to surfaces may have following negative effects:
– Fouling: Formation of bio films
– Dose reduction: Non-specific binding of proteins from drugs
– Loss of proteins from circulating blood