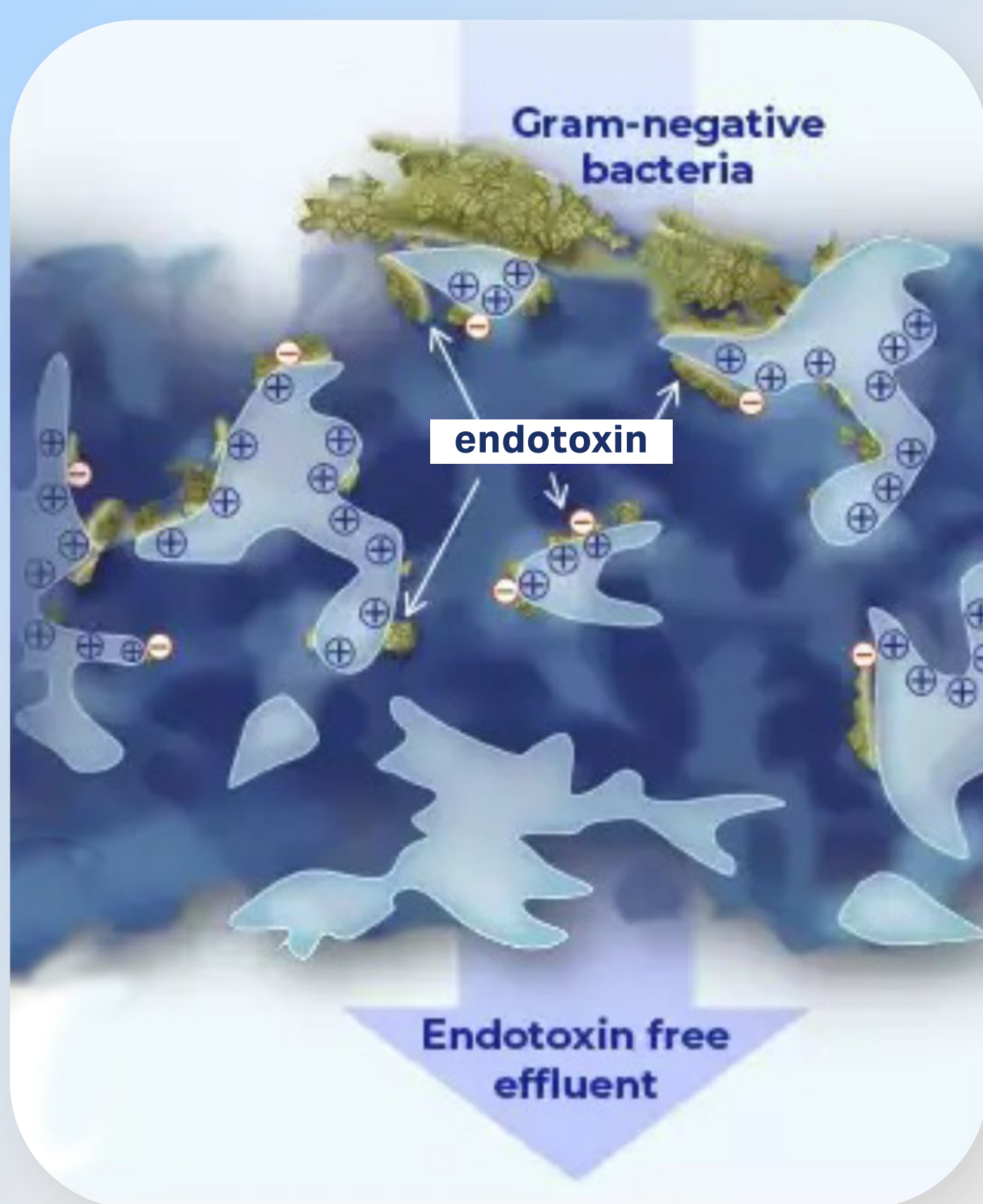


The Solution

Capturing endotoxin with our positively charged 0.2 µm IV in-line filters

Our positively charged 0.2 µm IV in-line filters retain negatively charged endotoxin.



We have manufactured positively charged, membrane-based intravenous filter products with a claim for the removal of bacteria and associated endotoxins up to 96 hours for the health care community for over four decades.

Endotoxin contains exposed phosphate groups. Generally, at pH values above pH 2, these phosphate groups are strongly negatively charged.

IV solutions have a pH value above this and our positively charged IV in-line filter therefore provide the opportunity for the removal of the negatively charged endotoxins.

Several studies have evaluated the endotoxin-retention properties of 0.2 µm filters during simulated clinical infusions. Those studies demonstrated that, distinct differences exist in the ability to retain endotoxins under those test conditions.¹⁻⁴

1. Baumgartner, T. G. et al. (1986). Bacterial endotoxin retention by inline intravenous filters. Am. J. Hosp. Pharm; 43:681-684
2. Horibe, K. et al. (1990). Evaluation of the endotoxin retention capabilities of inline intravenous filters. JPEN J. Parenter. Enteral. Nutr; 14: 56-59
3. Richards, C. & Grassby P. F. (1994). A comparison of the endotoxin-retentive abilities of two '96-h' in-line intravenous filters. J. Clin. Pharm. Ther; 19 (3): 199-202
4. Spielberg, R. & J. Martin. (1985). Evaluation of the endotoxin/bacterial retention of IV. filters during simulated extended infusions, p. 1001. In Technical note IV. Pall Biomedical Ltd., Portsmouth, United Kingdom