

AstutePlus®

AstutePlus®
Advanced Antithrombogenic
Surface Active Therapeutic

AstutePlus® Advanced Antithrombogenic is a Surface Active Therapeutic that has been developed specifically for long-term, blood-contacting medical devices. The technology improves biocompatibility, enhances device performance and elevates therapeutic benefits.

Antithrombogenic Properties



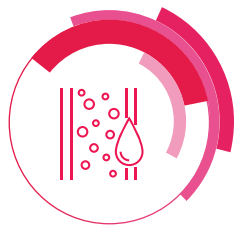
Deactivates
92% Of Platelets



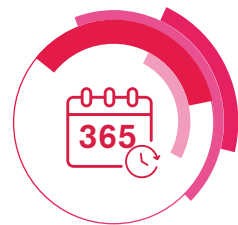
Reduces
98% Of Thrombus



Prevents Fibrin
Sheath Formation



Mimics Endothelial
Layer



Sustained
Efficacy For Years



Mechanically
& Chemically Stable



What is AstutePlus®?

AstutePlus® Advanced Antithrombogenic is a Surface Active Therapeutic for application onto long-term blood contacting medical devices. The technology provides a local effect on the device surface without being released. This ensures the activity is sustained for decades, whilst prohibiting any systemic effects within the patient.

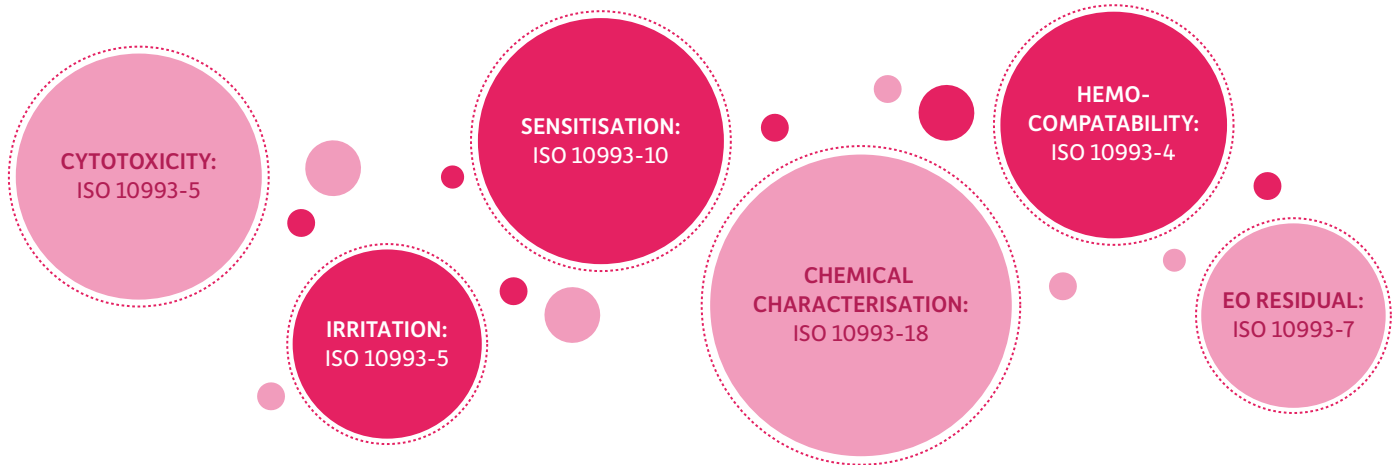
AstutePlus® technology combines both active and passive components to provide a multi-faceted solution. The active agents block the blood cascade mechanism, and deactivates platelets which reduces thrombus formation and prevents fibrin sheath formation. Additionally, passive non-thrombogenic elements hinders deposition and adhesion of blood components and proteins on the device surface. This combination prevents interaction between the blood and the devices and reduces known issues like thrombosis and fibrin sheath formation. This combination results in an implant which is actively shielded and protected for the lifetime of a patient.

AstutePlus® drastically improves biocompatibility, elevates antithrombogenic performance and advances the therapeutic benefits for the patient. This improves patient safety, enhances device performance and evolves the patient lifestyle with a long-term implant.



Biocompatibility Evaluation

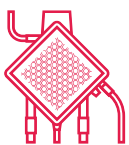
AstutePlus® Advanced Antithrombogenic Surface Active Therapeutic has been optimised from our technology platform. The legacy technology platform has been used for over 30 years on FDA-approved and CE-approved medical devices. The devices have continued to perform in the industry without any rejection or recall. The technology has been built on a platform which has been tested to ISO biocompatibility standards, including:



Clinical Applications

AstutePlus® Advanced Antithrombogenic Surface Active Therapeutic can be safely applied on to a wide range of medical device substrates, including polymers (e.g. polycarbonate and polyurethane), metals (e.g. nitinol and stainless steel), and woven & non-woven fabrics. The technology can be applied to a wide array of geometries and dimensions of varying medical components and devices, ranging from small implants with an inner diameter of less than 5 microns to large systems with a length of over 20 meters.

Device Applications Include:



Extracorporeal Oxygenators



Dialysis Catheters



Central Venous Catheters



Automatic Implantable Cardioverter-Defibrillators



Coronary Stents



Neurovascular Implants



Valve Replacements



Other Blood Contacting Devices