Certofix® protect More certainty, more safety, more success

Highly effective, long-term protection against catheter infection



Central Venous Catheters



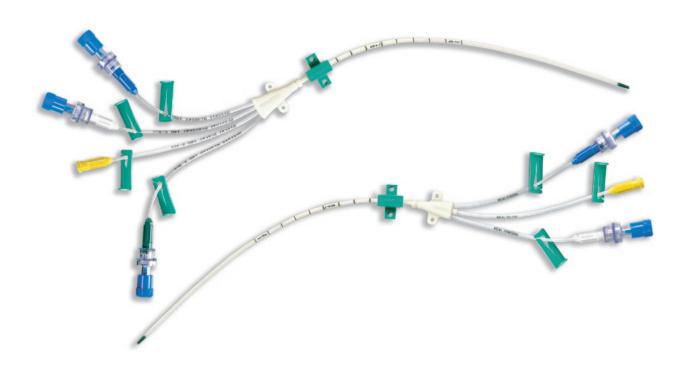


We help you ...

Patients in a critical condition often suffer from immune system deficiencies. Their susceptibility to infection increases. When invasive critical care procedures must be employed – such as the placement of a central venous catheter – these patients are particularly at risk. Based on an entirely new concept, B. Braun's Certofix® protect catheter provides crucial support for your critical care endeavors. The new infection-inhibition approach places no strain on the patient's system and continues to function effectively throughout the whole treatment period.







Easy recognition – The green slide clamps show you it's Certofix® protect

... to reduce the risk of bloodstream infections

2 in 1 – Combined anti-pathogenic and anti-thrombogenic effect

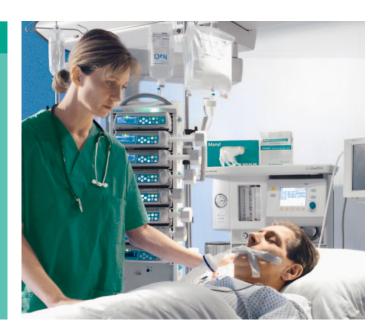
The Certofix® protect catheter brings together all the essential features to reduce the rate of complications in critically ill patients.

The Certofix® protect catheter features the total range of benefits provided by B. Braun's Seldinger catheters:

- A safe and reliable catheter system with the Certofix® kink-proof guidewire – even in highly difficult situations
- Positive and immediate catheter placement verification supported by the new standard of intravascular ECG monitoring
- Needle-free catheter use with the Safsite® valve system

User benefits

- No active agents are released thus avoiding adverse systemic reactions
- Hydrophilic catheter surface results in proven reduction in thrombosis formation
- The same superior flexibility as other Certofix® catheters
- Total catheter coverage from tip to hub



A safe and reliable catheter system

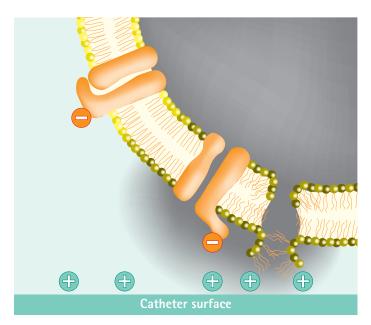
... establishing a higher standard ...

Infection inhibition - How it works ...

 At the moment of attempted micro-organism colonization, Certofix® protect's hydrophilic, highly polarized catheter surface causes the destruction of the lipid bilayer in the colonizing cell. Bacterial colonization and proliferation are effectively inhibited.

Catheter material and active agent

- Proven polyurethane material with chemically bonded biguanide for long-lasting polarization of the catheter surface
- The catheter is coated its entire length from tip to hub
- The active agent biguanide can not be flushed out from the catheter – it remains chemically bonded to the polyurethane material of the catheter
- Biguanide has been in use for many years and is thoroughly tested in clinical settings



Interaction of a microorganism with the catheter surface $% \left(1\right) =\left(1\right) \left(1\right) \left($

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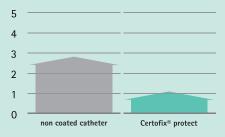
$$CH_{3}$$

Polyhexanide methacrylate



... in critical care

Comparison of traditional central venous catheters with the new Certofix® protect

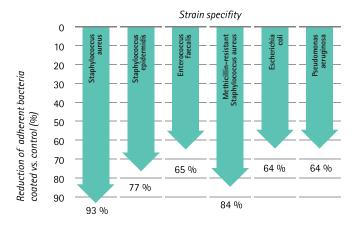


Excellent hemocompatibility

Certofix® protect provides additional protection for the critically ill patient:

- Catheter surface is anti-thrombogenic
- Thrombin formation is noticeably discouraged through the inhibition of TAT-complex formation (thrombin-antithrombin III)

Efficacy spectrum of Certofix® protect



Efficacy spectrum

- Gram-positive bacteria
- MSRA (methicillin-resistant Staphylococcus aureus)
- Gram-negative bacteria, e. g. Pseudimonas aeruginosa, Escherichia coli

Long-term protection

Even after weeks, the Certofix® protect catheter material exhibits an effective level of protection against catheter colonization.

Long-term antibacterial efficacy



Excellent long term antibacterial effect: Constant efficacy over several weeks.

Product Specifications

Product Type	Puncture needle	Catheter diameter in F	Catheter length in cm	Lumen in G	Code No. (REF)
Mono V 320	V	5	20	16	4160266P
Mono V 330	V	5	30	16	4160290P
Mono V 420	V	6	20	14	4160320P
Mono V 430	V	6	30	14	4160789P
Duo V 715	V	7	15	D16/P16	4166159P
Duo V 720	V	7	20	D16/P16	4161211P
Duo V 730	V	7	30	D16/P16	4161319P
Duo HF V 720	V	7	20	D14/P18	4168534P
Trio V 715	V	7	15	D16/M18/P18	4162153P
Trio V 720	V	7	20	D16/M18/P18	4163214P
Trio V 730	V	7	30	D16/M18/P18	4163311P
Trio HF V 1220	V	12	20	D16/M12/P12	4160622P
Quattro V 815	V	8	15	D14/M ₁ 18/M ₂ 18/P16	4167767P
Quattro V 820	V	8	20	D14/M ₁ 18/M ₂ 18/P16	4167775P
Quattro V 830	V	8	30	D14/M ₁ 18/M ₂ 18/P16	4167783P
Quinto V 1220	V	12	20	D16/M ₁ 18/M ₂ 18/M ₃ 18/P12	4166868P
Universal adapter	For ECG lead controlled CVC placement				4150228

legend V: Valve needle All V-Sets available with kink-proof guide wire.