Revolutionizing the Science of Antimicrobial Protection

The first Central Venous Catheter with an integrated antimicrobial material

Edwards Vantex Catheter with Oligon Agent
The Vantex Catheter with Oligon Agent: Providing broad antimicrobial protection

**Revolutionary antimicrobial material**

- Extruded from polyurethane, combined with the natural elements silver, carbon and platinum
- Releases silver ions from the device material, which kills colonizing bacteria on both inner and outer catheter surfaces
- Integral to the polymer of the catheter, the Oligon agent is not a coating that could wash away

![Cross section of catheter showing active release of silver ions from all catheter surfaces into the surrounding environment, providing antimicrobial protection](image)

**Superior Biocompatibility**¹

<table>
<thead>
<tr>
<th>Toxicity Response of Mice Exposed to CVC Extracts During the USP Mouse Systemic Test (extracted 70°C/24 hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vantex Central Venous Catheter with Oligon antimicrobial agent</td>
</tr>
<tr>
<td>Chlorhexidine and silver sulfadiazine coated</td>
</tr>
</tbody>
</table>

Choose superior biocompatibility. Small concentrations of silver have shown no detrimental effects on normal mammalian cells
Reduce the risk of vessel perforation using the soft tip with the Oligon agent.

Clinical Results

- Significantly reduced the catheter colonization rate in a prospective randomized trial at ten institutions versus a standard catheter²
- Reduced catheter-related infection rates by 48% in a second study when substituted for an alternative antimicrobial catheter³

Include traditional Edwards Lifesciences CVC benefits

- Allow easy CVC insertion with single-handed guidewire insertion device
- Infuse fluids up to 77% faster than with competing CVCs, due to optimized lumen and backform design¹
- Minimize needlestick risks with Interlink injection caps
- Optional heparin coating available

Provide broad-spectrum antimicrobial protection

- Protects against gram-negative and gram-positive bacteria — as well as fungi and resistant micro-organism strains — with the Oligon agent, silver
- Destroys bacteria, resulting in ≥ 3 log reduction of microorganisms within 48 hours

Minimum Inhibitory Concentrations⁴ (micrograms/milliliter)

<table>
<thead>
<tr>
<th>Species</th>
<th>Minimum inhibition (micrograms/milliliter)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>E. coli</strong></td>
<td>![Minimum Inhibitory Concentration]</td>
</tr>
<tr>
<td><strong>Pseudomonas aeruginosa</strong></td>
<td>![Minimum Inhibitory Concentration]</td>
</tr>
<tr>
<td><strong>Serratia</strong></td>
<td>![Minimum Inhibitory Concentration]</td>
</tr>
<tr>
<td><strong>S. aureus</strong></td>
<td>![Minimum Inhibitory Concentration]</td>
</tr>
<tr>
<td><strong>Streptococcus group D</strong></td>
<td>![Minimum Inhibitory Concentration]</td>
</tr>
</tbody>
</table>

Legend

- Silver ions
- Silver sulfadiazine
A family of venous access technologies

Edwards offers other members of the access family, including introducers and central venous catheters, as well as a full line of Edwards Swan-Ganz Catheters, disposable pressure transducers and a blood management protection system.

For additional information, call your Edwards representative at (800) 424-3278, or visit www.edwards.com for details.

The activity of the antimicrobial agent is localized at the catheter surfaces and is not intended for treatment of systemic infections. In vitro testing demonstrated that the Oligon agent provided broad spectrum effectiveness (≥3 log reduction from initial concentration within 48 hours) against the organisms tested: Staphylococcus aureus, Staphylococcus epidermidis, Klebsiella pneumoniae, Enterococcus faecalis, Candida albicans, Escherichia coli, Serratia marcescens, Acinetobacter calcoaceticus, Corynebacterium diphtheriae, Enterobacter aerogenes, GMRSA, Pseudomonas aeruginosa, Candida glabrata and VRE (Enterococcus faecium).

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Caution: Federal (USA) law restricts this device to sale by or on the order of a physician. See instructions for use for full prescribing information.

Edwards Lifesciences devices placed on the European market meeting the essential requirements referred to in Article 3 of the Medical Device Directive 93/42/EEC bear the CE marking of conformity.

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References
1. Data on file. Edwards Lifesciences LLC.