

PROCESS + SPECTRUM

CATHETERS

COOK[®]
MEDICAL



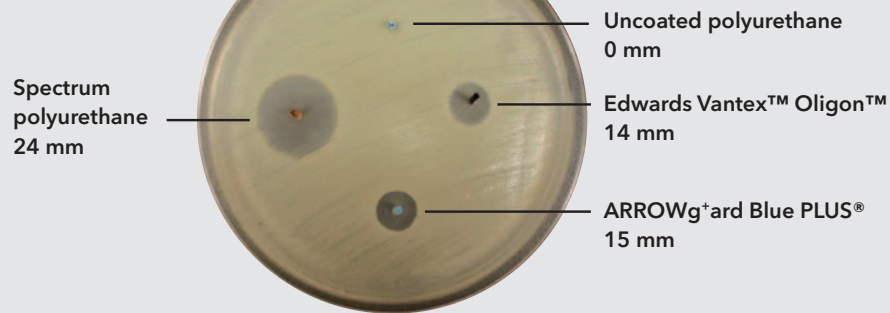
THE RIGHT COMBINATION

Minocycline+rifampin is proven to be the most synergistic combination of antibiotics in reducing infections through two distinct pathways, and has the ability to penetrate the biofilm that forms on all indwelling catheters.

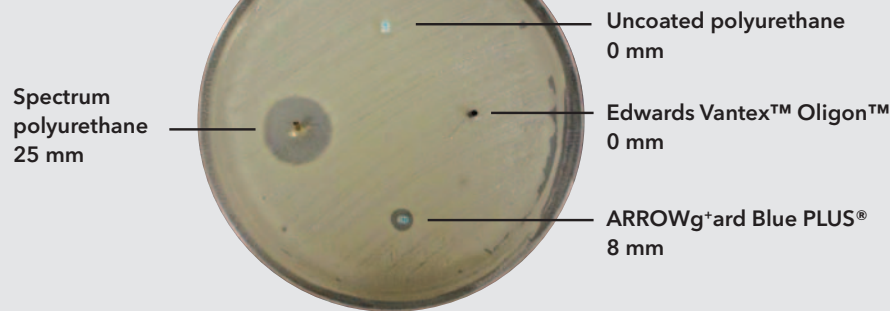
Zones of Inhibition¹

MRSA

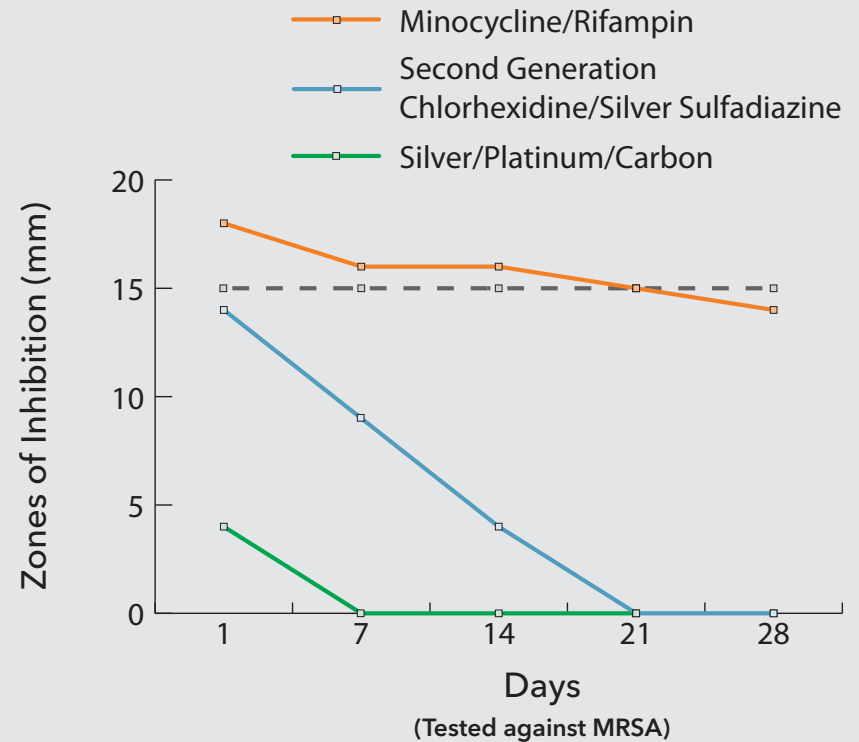
Baseline



9 Day Durability



Antimicrobial Durability of Minocycline+Rifampin vs. Second Generation Chlorhexidine/Silver Sulfadiazine and Silver/Platinum/Carbon²



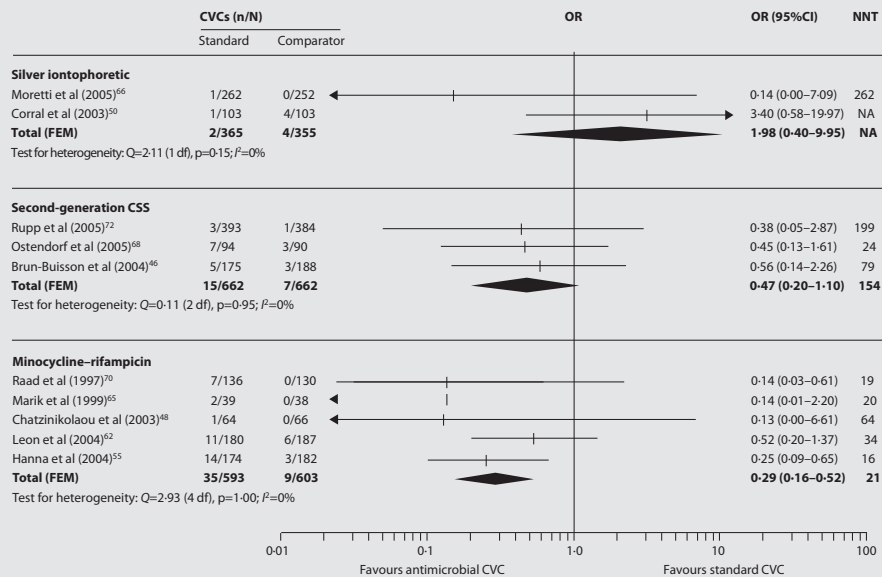
"Coated catheters [that can maintain an in vitro zone of inhibition] of ≥ 15 mm were highly predictive of in vivo efficacy."^{3, citing 4}



UNMATCHED EVIDENCE

In vitro studies show that our M+R catheters maintain an effective zone of inhibition for up to 21 days—longer than any other catheters. Over two decades of evidence, including more than 21 peer-reviewed studies and meta-analyses, prove M+R's ability to prevent bloodstream infections.

Meta-analyses Comparing Antimicrobial CVCs⁵

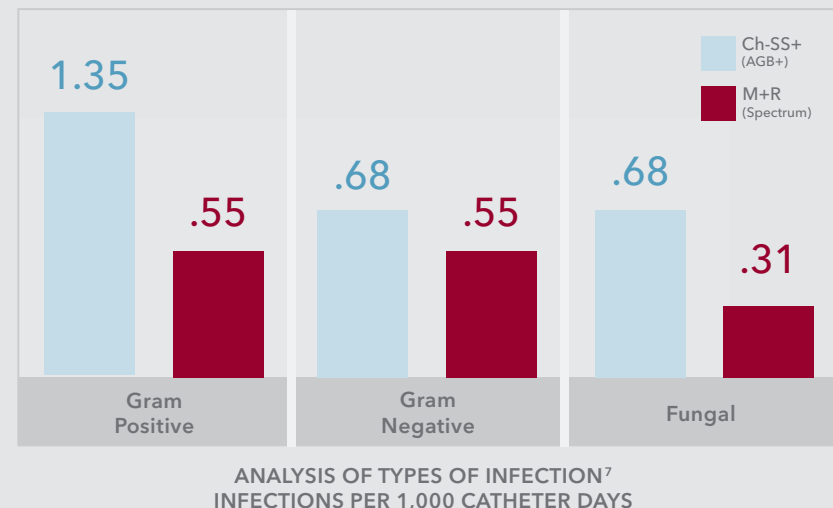
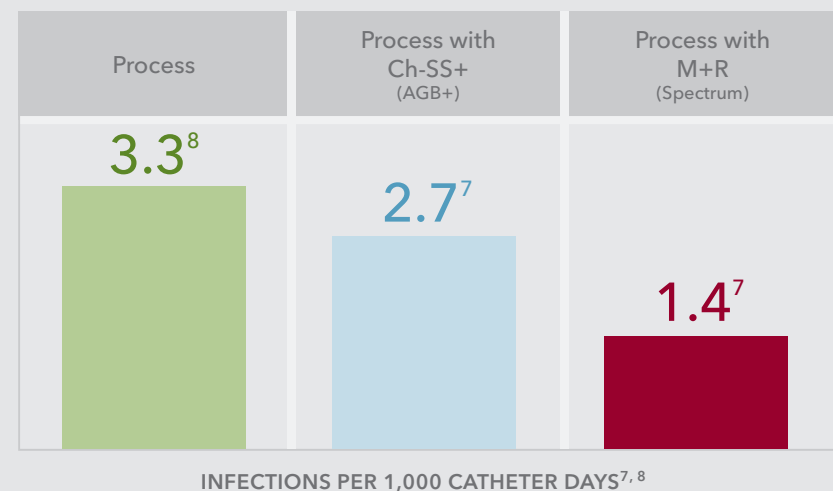


CRBSI in trials comparing antimicrobial CVCs with standard CVCs

Within each subgroup, the studies are ordered by increasing mean catheter indwell duration. The vertical line represents the null hypothesis of no difference between test and control groups. Odds ratios (ORs) and 95% CIs are shown. Black diamonds indicate the pooled ORs (95% CIs). Results of the Peto fixed-effects model (FEM) are quoted unless substantial heterogeneity is present, in which case the results of the DerSimonian-Laird random-effects model (REM) are stated. NNT=number needed to treat (the expected number of people who need to receive the antimicrobial rather than the standard CVC for one additional person to avoid CRBSI). NA=not applicable (if the estimated OR is ≥ 1.0).

"In our pooled analyses, neither silver-alloy-coated, silver-iontophoretic, nor silver-impregnated CVCs showed any significant reduction in colonisation or CRBSI by comparison with standard CVCs."⁶

First Trial of Second Generation AGB+[®] and Spectrum, Partially Funded by CDC⁷

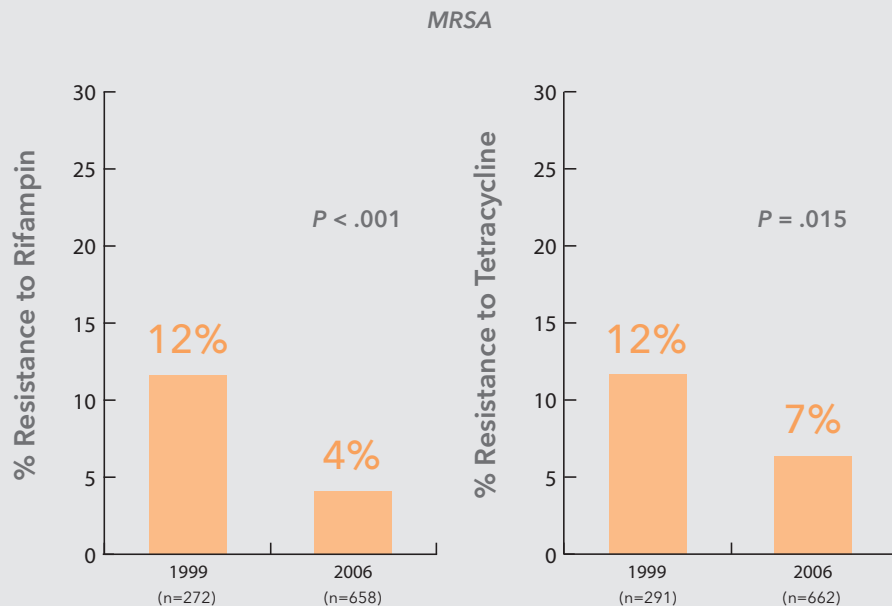




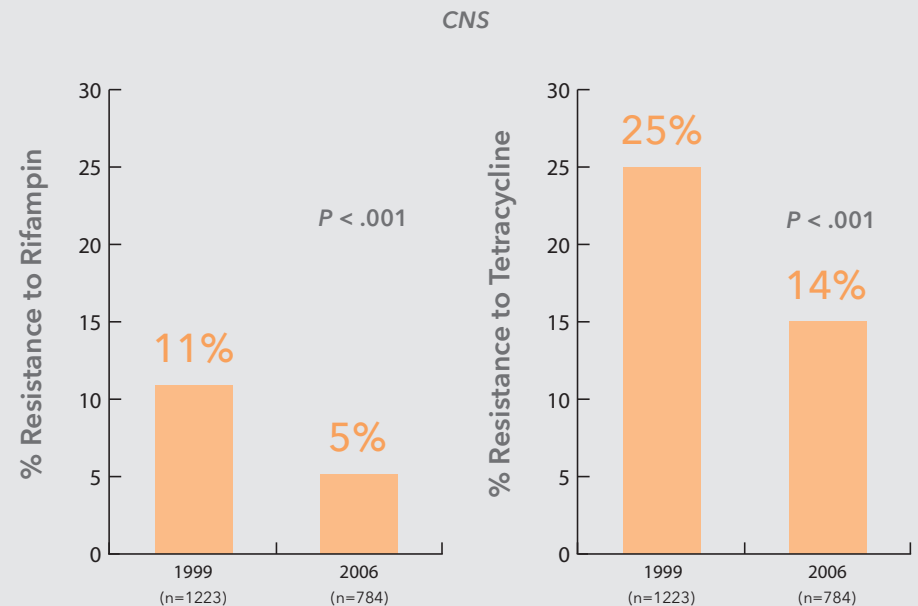
DECREASED RESISTANCE

More than 10 years of clinical use has shown no evidence that M+R catheters lead to bacterial resistance, and a seven year study of over 500,000 catheter days confirms these results.⁹ Data indicate that facilities using M+R catheters have a decreased need for systemic antibiotic use.¹⁰

MRSA: Decrease in Resistance After > 500,000 Catheter Days of Antibiotic Catheter (M+R) Use¹¹



CNS: Decrease in Resistance After > 500,000 Catheter Days of Antibiotic Catheter (M+R) Use¹¹



"M/R CVC use is not associated with long term increased staphylococcal resistance to tetracyclines and rifampin; however, it represents a crucial strategy to significantly decrease CRBSI in critically ill cancer patients."⁹



WORTH SWITCHING

In a challenging clinical environment, a hospital that switches to an M+R impregnated catheter can expect to see a decrease in CRBSI rates, attributable mortality and CRBSI-related costs. What might not be so apparent is that high-performing hospitals can switch to Spectrum to drive incremental improvement in CRBSI rates and still achieve substantial reductions in mortality and cost.

Net Reduction of CRBSI/1,000 Catheter Days	Number Needed to Treat to Prevent One CRBSI	Savings per Patient	Number Needed to Treat to Save One Life
5.0	40	\$300.00	267
4.0	50	\$240.00	333
3.0	67	\$180.00	444
2.0	100	\$120.00	667
1.5	133	\$90.00	889
1.0	200	\$60.00	1,333
0.5	400	\$30.00	2,667

Assumptions: 5 catheter days per patient, 1 catheter per patient, \$12,000 incremental cost to treat CRBSI, CRBSI mortality rate of 15%

References

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Dr. Raad is the co-inventor of the synergistic pairing of the antibiotics minocycline and rifampin that are impregnated within the catheter material of the Cook Spectrum® catheter. His institution receives a royalty payment based upon Cook's license to use this patented technology.



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