Independent Laboratory Tests

Virus	Study Type	Performance
Human Hepatitis C (BVDV surrogate)	Clinical	>99.99% reduction within 30 seconds
Human Immunodeficiency (HIV-1/Mn)	*In-vitro*	>93.94% reduction within 30 seconds >99.99% reduction within 2.5 minutes
Human Influenza A H1N1 (ATCC #VR-1520)	*In-vitro*	>99.99% reduction within 30 seconds
Avian Influenza H3N2 A/turkey/OH/31053/04 (AI CAD Program, University of Maryland)	*In-vitro*	>99.99% reduction within 30 seconds
Herpes Simplex type 1 (HSV-1)	*In-vitro*	>68.74% reduction within 30 seconds

The solution in MyClyns™ is cleared as a 510(k) medical device for wound cleansing, but is not an approved drug for use in the treatment of disease. The following test results were obtained from BioScience Laboratories Inc., an independent laboratory in Bozeman, MT, and are provided for educational purposes only:

Bacteria — The solution in MyClyns showed a >99.99% *in-vitro* reduction in as little as 15 seconds:

- ***Acinetobacter baumannii (ATCC #19003)***
- ***Acinetobacter baumannii (Clinical Isolate: BSLI #061901Ab3)***
- *Bacteroides fragilis (ATCC #43858)*
- *Bacteroides fragilis (Clinical Isolate: BSLI #061901Bf6)*
- ***Clostridium difficile C-diff (ATCC #9689)***
- *Enterobacter aerogenes (ATCC #29007)*
- *Enterobacter aeruginosa (Clinical Isolate: BSLI #042905Ea)*
- *Enterococcus faecalis (ATCC #29212)*
- *Enterococcus faecalis (Clinical Isolate: BSLI #061901Efs2)*
- ***Enterococcus faecium VRE, MDR (ATCC #51559)***
- *Enterococcus faecium (Clinical Isolate: BSLI #061901Efm1)*
- *Escherichia coli (ATCC #11229)*
- *Escherichia coli (Clinical Isolate: BSLI #042905Ec1)*
- *Escherichia coli (Clinical Isolate: BSLI #042905Ec2)*
- *Escherichia coli (ATCC #25922)*
- *Haemophilus influenzae (ATCC #8149)*
- *Haemophilus influenzae (Clinical Isolate: BSLI #072605Hi)*
- *Klebsiella oxytoca MDR (ATCC #15764)*
- *Klebsiella oxytoca (Clinical Isolate: BSLI #061901Ko1)*
- *Klebsiella pneumoniae subsp. ozaenae (ATCC #29019)*
- *Klebsiella pneumoniae (Clinical Isolate: BSLI #061901Kpn2)*
- *Micrococcus luteus (ATCC #7468)*
- *Micrococcus luteus (Clinical Isolate: BSLI #061901M12)*
- ***Neisseria gonorrhoeae (ATCC #19424)***
- ***Neisseria meningitidis (ATCC #13102)***
- *Proteus mirabilis (ATCC #7002)*
- *Proteus mirabilis (Clinical Isolate: BSLI #061901Pm2)*
- *Pseudomonas aeruginosa (ATCC #15442)*
- *Pseudomonas aeruginosa (Clinical Isolate: BSLI #072605Pa)*
- *Pseudomonas aeruginosa (ATCC #27853)*
- *Pseudomonas aeruginosa (Clinical Isolate: BSLI #061901Pa2)*
- *Serratia marcescens (ATCC #14756)*
- *Serratia marcescens (Clinical Isolate: BSLI #042905Sm)*
- *Staphylococcus aureus aureus (ATCC #6538)*
- ***Staphylococcus aureus MRSA (ATCC #700698)***
- ***Staphylococcus aureus VRSA (BSLI #062707NARSAVRSal)***
- *Staphylococcus aureus (Clinical Isolate: BSLI #061901Sa1)*
- *Staphylococcus aureus (ATCC #29213)*
- *Staphylococcus aureus (Clinical Isolate: BSLI #061901Sa2)*
- *Staphylococcus epidermidis (ATCC #12228)*
- *Staphylococcus epidermidis (Clinical Isolate: BSLI #072605Se)*
- *Staphylococcus haemolyticus (ATCC #29970)*
- *Staphylococcus haemolyticus (Clinical Isolate: BSLI #042905Sha)*
- *Staphylococcus hominis (ATCC #27844)*
- *Staphylococcus hominis (Clinical Isolate: BSLI #042905Sho)*
- *Staphylococcus saprophyticus (ATCC #35552)*
- *Staphylococcus saprophyticus (Clinical Isolate: BSLI #042905Ss)*
- *Streptococcus pneumoniae (ATCC #33400)*
- *Streptococcus pneumoniae (Clinical Isolate: BSLI #072605Spn1)*
- *Streptococcus pyogenes (ATCC #19615)*
- *Streptococcus pyogenes (Clinical Isolate: BSLI #061901Spy7)*

Spores

Clostridium difficile (ATCC #700057)
>99.7% reduction in after 30 seconds in *in-vitro* testing

Bacillus atrophaeus (Anthrax surrogate)
>99.99% reduction after 2 minutes in *in-vitro* testing

Mycobacteria

Mycobacterium bovis – cause of tuberculosis

The solution in MyClyns demonstrated a >99.9% *in-vitro* reduction in 60 seconds

Fungus

Candida albicans (ATCC #10231)

Candida albicans (Clinical Isolate: BSLI #042905Ca)

The solution in MyClyns demonstrated a >99.99% *in-vitro* reduction in as little as 15 seconds

Other testing

The solution in MyClyns was also tested using an in-vitro ocular tissue model which has been correlated with animal eye studies against Staphylococcus aureus aureus (MRSA) (ATCC #33592,). The solution showed a 99.4% reduction in as little as fifteen seconds.

The solution in MyClyns was also tested using the standard OTC clinical (human) monograph test: Healthcare Personnel Handwash (HCPHW) using *Serratia marcescens*. The solution showed immediate efficacy after one application (>99% bacterial reduction) and met the first reduction criteria for the HCPHW test.

VRE= Vancomycin-Resistant Enterococcus
MDR= Multi-Drug Resistant