



CLn[®]
for Aesthetics

- Microbes and **compromised skin** lead to skin diseases in over 100 million in the US.
- Aesthetic and surgical procedures **compromise skin**:
 - Microdermabrasion
 - Micro needling
 - Laser Procedures
 - Injectables
 - Tattoo procedures
 - Plastic surgery
 - MOHS
 - Superficial Radiation Treatment
- Sterilization of the face is known to be challenging

Sodium hypochlorite via medicated baths (bleach baths) is:

- Anti-aging: enhanced epidermal thickness and proliferation, comparable to juvenile skin (reduced p16)*
- Anti-inflammatory: modulate signaling proteins and inflammatory responses in the skin (reduced nfKb)*
- Staph decolonization: sodium hypochlorite known to be bactericidal to staph and multiple microbes
- Anti-biofilm

CLn® Skin Care introduces therapeutic skin cleansers formulated with sodium hypochlorite.

*Thomas Leung, Lillian Zhang, et al J Clin Invest. 2013;123(12):5361-5370.

doi:10.1172/JCI70895

Huang JT, Abrams M, Paller AS, et al Pediatrics 2009;123(5):e808-14

INGREDIENTS	FUNCTION
Water (Aqua)	Vehicle
Sodium Laureth Sulfate	Anionic surfactant (thickener)
Cocamidopropyl Betaine	Amphoteric surfactant with acidic and basic groups in same molecule
Cocamide MEA	Non-ionic surfactant (chemical stability, mild on skin)
Disodium EDTA	Chelating agent, preservative, stabilizer
Sodium Hypochlorite	Anti-microbial, anti – inflammatory, anti-biofilm, preservative



- Epiocular™ tissue in-vitro toxicity testing showed ‘non-irritating’
- Patch testing showed no skin irritation or sensitization
- Meets the criteria for the US and European Pharmacopeia Antimicrobial Effectiveness Test
 - Test microorganisms used according to usp 51 test are
 - Staphylococcus aureus, E.coli, Ps.aeruginosa, Candida albicans and Aspergillus brasiliensis (Aspergillus niger)
 - With <10 viable count and a 4.2-5.0 log reduction by day 2
 - Gauges the level of biological activity possessed by the preservative system of a pharmaceutical product
- Kill Rates:
 - 99.9% kill rate of P. Acnes at 30 and 60 seconds
 - 98% kill rate of S. Aureus at 2 minutes
 - 99.9% kill rate of S. Aureus at 3 and 5 minutes
 - 99.9% kill rate of Coronavirus at 15 and 30 seconds (at 50% dilution)

Virus: Coronavirus strain 229E (ATCC #VR-740)

Host Cell Line: MRC-5 (ATCC #CCL-171)

Volume Plated per Well: 1.0 mL

Neutralizer: BBP++ with Sephadex Filtration

DILUTION (-LOG ₁₀)	TEST	
	15 seconds	30 seconds
-LOG ₁₀ REDUCTION	≥ 3.50	≥ 3.50
PERCENT REDUCTION	≥ 99.97	≥ 99.97



Study Conclusion:

Under the conditions of this evaluation Test Product, CLn BodyWash reduced the infectivity of Coronavirus by $\geq 3.50 \log_{10}$ ($\geq 99.97\%$) following a 15-second and 30-second exposure.

- Protocols - 2 options
 1. Wash skin pre-procedure
 2. Apply gel pre-procedure and wash or wipe off
- Post procedure daily gel cleanser
 - Lather 1-2 minutes & rinse off
- pH 7.8
- Available in 3.0, 3.4, 8 and 12 fl oz.



Other CLn Products

- Synergies of a great cleanser with a safe, proven acne treatment
- Proprietary combination of
 - Sodium hypochlorite
 - Sal Acid 0.5%
 - Surfactants
- Non antibiotic alternative
- Does not discolor clothing
- Use once or twice daily
- Available in 3.4 fl oz.



- For skin prone to eczema, dermatitis, rosacea & acne
- Proprietary formulation with
 - Sodium hypochlorite
 - Glycerin
 - Moisturizers
- No Salicylic Acid
- pH 6.0
- Daily use
- Available in 3.4 fl oz.



- Light and non-greasy
- No animal products
- Does not clog pores
- Reduces the appearance of redness and protects the skin's natural barrier
- Niacinamide and Ceramide Complex –
 - antioxidant
 - anti-inflammatory
- Does not contain sodium hypochlorite
- Apply morning and night as needed
- Available in 3.4 fl oz.



- For skin prone to infection, acne, and folliculitis
- Proprietary combination of
 - Sodium hypochlorite
 - Surfactants
- pH 7.8
- Can be used as leave on
- Use daily head to toe
- Available in 3.4 and 12 fl oz.
- No residual cleanser
- Use within 30-60 minutes of exercise or activity
- Lather 2 minutes or may leave on before shower



- For normal to oily scalp prone to folliculitis, dermatitis & dandruff
- Proprietary combination of
 - Sodium hypochlorite
 - Salicylic acid
 - Glycerin
 - Conditioners
- pH 6.3
- 1-3 x weekly use or as directed
- Available in 8 and 12 fl oz.



- Gently cleanses and soothes hands prone to infection, itching and dryness
- Proprietary combination of
 - Sodium hypochlorite
 - Glycerin
 - Surfactants
- pH 6.0
- Gentle on skin for frequent use
- Available in 8 fl oz.



Research Background

2 Studies in AD with Staph colonization



- EASI score improvement 46%
- Reduced itching 39%
- Reduced corticosteroid usage 37%
- Improved quality of life for child 38%
- Improved quality of life for parent 46%
- CLn preferred over medicated baths 88%
- Reduced Staph Aureus colonization 100% to 64%

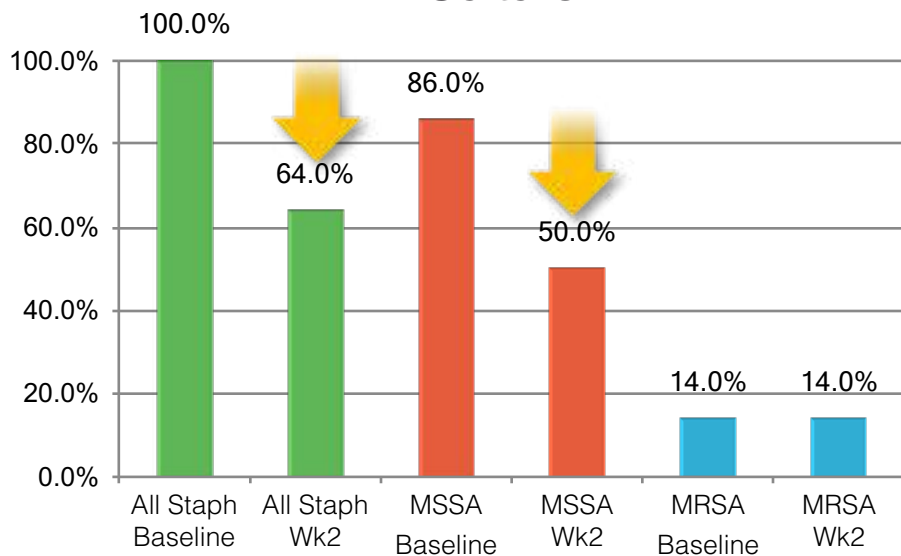
View 1st Study

<https://onlinelibrary.wiley.com/doi/10.1111/pde.12150>

View 2nd Study

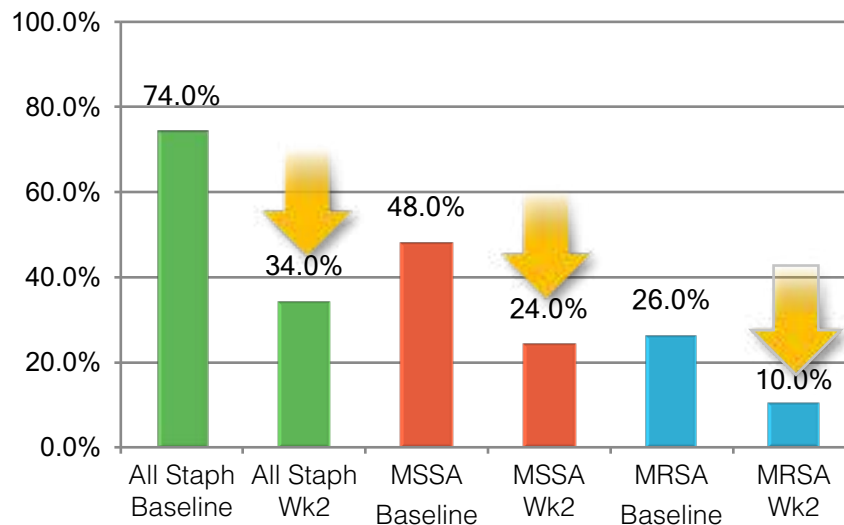
<https://doi.org/10.1111/pde.13842>

Percent Subjects with Positive Culture



Percent of patients who tested positive for the presence of *Staphylococcus aureus* during bacterial culture of lesion swab at baseline and 2 weeks.

Percent Subjects with Positive PCR



Percent of patients who tested positive for the presence of *Staphylococcus aureus* during PCR analysis of lesion swab at baseline and 2 weeks.

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