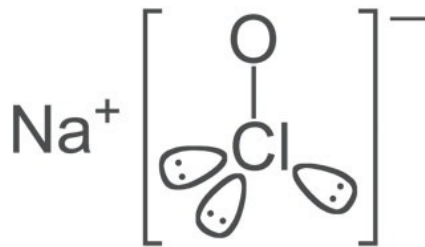


- This deck is intended for education of doctors and medical professionals
- Skin cleansing is an important first step in managing problem skin and scalp
- CLn offers a variety of skin cleansing products for normal, dry, oily, damaged and irritated skin
- CLn Acne cleanser is intended for treatment of acne
- The other CLn cleansers are not intended for treatment, prevention, cure or diagnosis of diseases
- CLn cleansers can be used as an alternative to bleach baths



Skin Cleansing with Sodium Hypochlorite Washes



Razor burn
Oily
Folliculitis
Ingrown hairs
Flaky
Skin Infection
Redness
Fungus
Athlete's foot
Ringworm
MRSA
Atopic dermatitis
Sensitive
Itchy skin
Eczema
Acne
Psoriasis
Dandruff
Staph
Radiation irritation



- Microbes and compromised skin lead to skin diseases in >100 million in the US:
 - Eczema / Atopic Dermatitis
 - Folliculitis and Acne
 - Body Odor and Athlete's Foot
 - Cellulitis & Impetigo
 - Skin infections also a risk of aesthetic and surgical procedures
- Antibiotic overuse leads to antimicrobial resistance and is a public health concern
- Often Rx products are used first while proper cleansing is ignored

The big idea; a sodium hypochlorite wash



Sodium Hypochlorite
+
Surfactants
+
“proprietary
technology”

Patented

US, EU, Australia, others



Bleach Baths (60-90 ppm)

- Anti-microbial
- Anti-inflammatory
- Effective
- Cumbersome
- Poor patient compliance
- Risks + do not use above neck

CLn®

- Anti-microbial
- Anti-inflammatory
- Effective
- Easy to use
- Good patient compliance
- Safe

Sodium hypochlorite via medicated baths (bleach baths) is:

- Bactericidal to staph, multiple microbes and used for staph decolonization protocols *
- Anti-inflammatory: modulate signaling proteins and inflammatory responses in the skin (reduced NF-kB)**
- Anti-aging: enhanced epidermal thickness and proliferation, comparable to juvenile skin (reduced p16)**
- Recommended for management of atopic dermatitis ***

Fritz SA, Camins BC, et al. Effectiveness of measures to eradicate Staphylococcus aureus carriage in patients with community-associated skin and soft-tissue infections: a randomized trial. *Infect Control Hosp Epidemiol*. 2011 Sep;32(9):872-80.
DOI: [10.1086/661285](https://doi.org/10.1086/661285)

**Thomas Leung, Lillian Zhang, et al *J Clin Invest*. 2013;123(12):5361-5370.
<https://www.jci.org/articles/view/70895>

*** Atopic dermatitis (eczema) guidelines: 2023 American Academy of Allergy, Asthma and Immunology/American College of Allergy, Asthma and Immunology Joint Task Force on Practice Parameters GRADE- and Institute of Medicine-based recommendations
[https://www.annallergy.org/article/S1081-1206\(23\)01455-2/fulltext](https://www.annallergy.org/article/S1081-1206(23)01455-2/fulltext)

2 CLn BodyWash Studies in AD with Staph colonization



- Reduced Staph Aureus colonization 100% to 64%
- 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 bleach baths 88%

View 1st Study

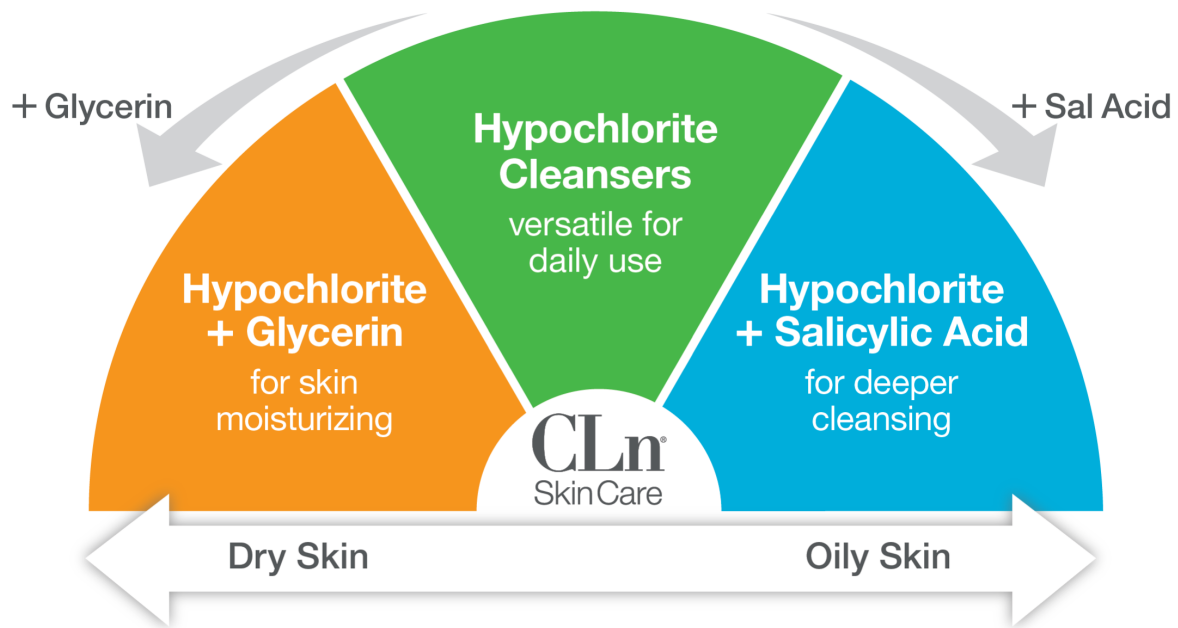
<https://onlinelibrary.wiley.com/doi/10.1111/pde.12150>

View 2nd Study

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

For speakers slide deck contact
Dr. Anwar dranwar@clnwash.com

- 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 Cutibacterium Acnes at 30 and 60 seconds
 - 98% kill rate of Staphylococcus Aureus at 2 minutes
 - 99.9% kill rate of Staphylococcus Aureus at 3 and 5 minutes
 - 99.9% kill rate of Coronavirus at 15 and 30 seconds (50% dilution)





Face Care

Acne

Eczema and Rash

General Cleansing

- HS
- Intertrigo
- Body odor

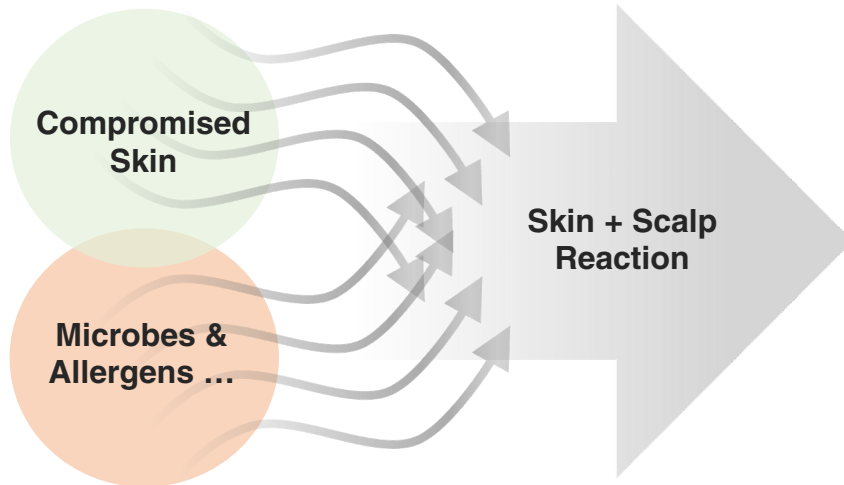
Itchy Scalp

- Seb derm
- Folliculitis
- Scalp psoriasis

Sports

- Folliculitis
- Skin infection

Microbes & Allergens Worsen Compromised Skin



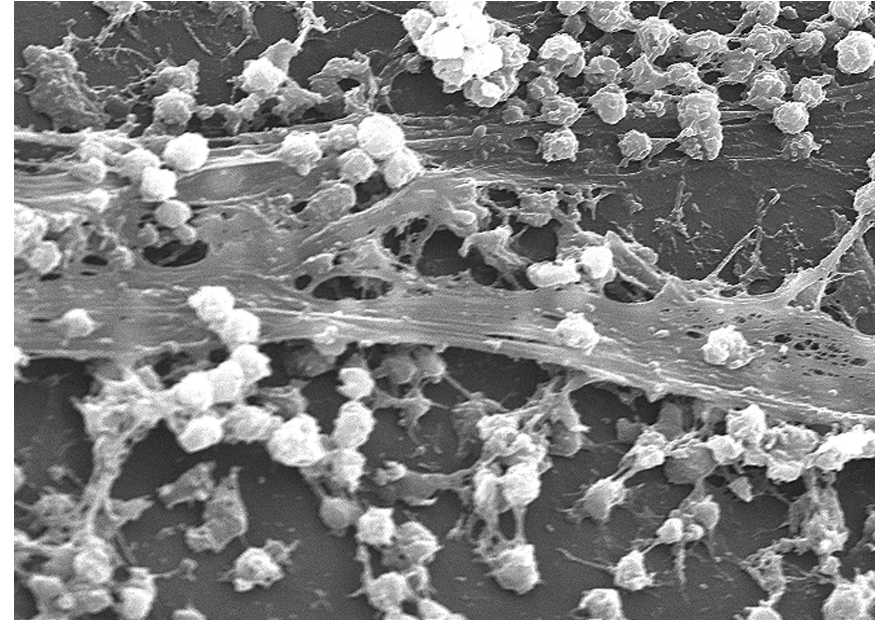
Staph
Strep
Cutibacterium Acnes
Malassezia
Biofilm

Cleansing for Eczema and Rash

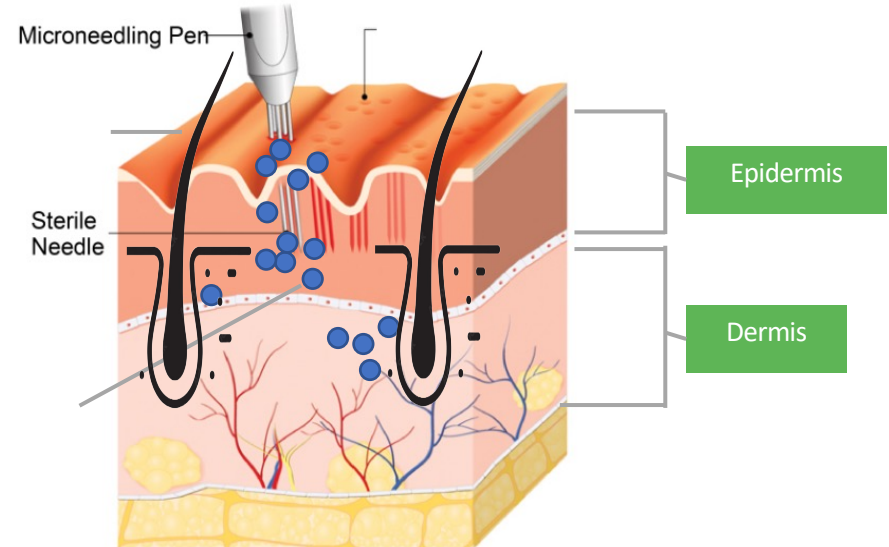




Work On a Clean Canvas



Non residue cleanser
Prep pre procedure
Avoid eyes



Acne and Folliculitis (back acne)







CLnWash.com

Amazon

Walmart.com

Local Pharmacies

In Office Dispensing

Products



- For skin prone to eczema, dermatitis & rash
- Proprietary combination of
 - Sodium hypochlorite
 - Surfactants
- pH 7.8
- Gentle and does not impair skin barrier
- Non-residue cleanser
- Use daily head to toe
- Lather 2 minutes and rinse off in shower
- Available in 3.0, 3.4, 8 and 12 fl oz.
- *Can use as leave on in special cases

INGREDIENTS	FUNCTION
Water (Aqua)	Vehicle
Sodium Laureth Sulfate (SLES)	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	Bleach, very effective disinfectant against bacteria, preservative



1. Use hands to deliver / No wash cloth
2. May use on hair, face or body
3. Wet skin thoroughly, then turn water off
4. BodyWash and SportWash – lather for 2 minutes
5. Scrub nail beds
6. Rinse with lukewarm water
7. Apply moisturizer or other products as needed



- For skin prone to redness, acne, and folliculitis, odor
- Proprietary combination of
 - Sodium hypochlorite
 - Surfactants
- pH 7.8
- Use daily head to toe
- Gentle and does not impair skin barrier
- Non-residue cleanser
- Use within 30-60 minutes of exercise or activity
- Lather 2 minutes and rinse off in shower
- Available in 3.4 and 12 fl oz.
- *Can use as a leave on in special cases



- For normal to oily skin prone irritation, redness, folliculitis
- Proprietary combination of
 - Sodium hypochlorite
 - Salicylic acid
- pH 6.3
- Use daily in the shower
- Lather on skin for 1 minute and rinse off
- Available in 12 fl oz. for in office dispensing



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



- Synergies of a great cleanser with a safe, proven acne treatment
- Proprietary combination of
 - Sodium hypochlorite
 - Sal Acid 0.5%
- pH 7.3
- Non antibiotic alternative
- No sun sensitization
- Non-residue cleanser
- Does not discolor clothing
- Use once or twice daily
- Available in 3.4 fl oz.



- 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
- May alternate with CLn 2-in-1 Gentle Wash and Shampoo
- Available in 8 and 12 fl oz.



- For scalp prone to dryness, itching & flaking
- Proprietary combination of
 - Sodium hypochlorite
 - Glycerin
 - Conditioners
- No Salicylic Acid
- pH 6.0
- Available in 8 and 12 fl oz.
- Best way to use
 - As a shampoo use 1-3 x weekly
 - As a body wash – use 1-2 x daily



- For hair prone to damage and dryness
- Combination of
 - Hydrating Conditioners
 - Panthenol
 - Vitamin E
- Available in 6 fl oz.
- Best way to use
 - Use 1-2 times per week as a deep conditioner



- For skin prone to eczema, dermatitis, rosacea & acne
- Proprietary formulation with
 - Sodium hypochlorite
 - Glycerin
 - Moisturizers
 - Skin conditioners
- 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
- Helps strengthen 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.

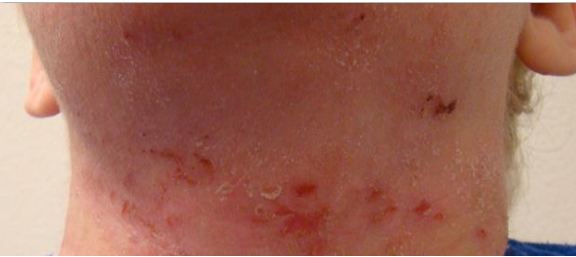
1. Huang JT, Abrams M, Tlougan B et al. Treatment of Staphylococcus aureus colonization in atopic dermatitis decreases disease severity. Pediatrics 2009;123:e808–e814.
VIEW: <https://www.ncbi.nlm.nih.gov/pubmed/19403473>
2. Leung T, Zhang L. , Wang J. et al. Topical hypochlorite ameliorates NF-κB–mediated skin diseases in mice. J Clin Invest. 2013;123(12):5361–5370.
VIEW: <https://m.jci.org/articles/view/70895>
3. Ryan C, Shaw RE, Cockerell CJ, et al. Novel sodium hypochlorite cleanser shows clinical response and excellent acceptability in the treatment of atopic dermatitis. Pediatric Dermatology 2013;30:308-315.
VIEW: <https://onlinelibrary.wiley.com/doi/full/10.1111/pde.12150>
4. Majewski, S, Bhattacharya, T, Asztalos, M, et al. Sodium hypochlorite body wash in the management of Staphylococcus aureus–colonized moderate-to-severe atopic dermatitis in infants, children, and adolescents. Pediatr Dermatol. 2019; 00: 1– 6.
VIEW : <https://onlinelibrary.wiley.com/doi/full/10.1111/pde.13842>
5. Mitchell et al, Bacterial Sport-Related Skin and Soft-Tissue Infections (SSTIs): An Ongoing Problem Among a Diverse Range of Athletes JBJs REVIEWS 2017;5(1):e4 ·
<http://dx.doi.org/10.2106/JBJs.RVW.16.00006>
VIEW: https://www.clnwash.com/pdf/Singleton_JBJsReviews.pdf
6. CLn BodyWash is effective in the management of Staph colonized AD patients. Pls: Drs. Hebert and Paller. UT Houston and Northwestern.
Bohaty et al. CLEAN Study: e-Poster 7728 March 2014 AAD
VIEW: <https://www.clnwash.com/pdf/BohatyTopMDPosterFinalUpdated03-03-2014.pdf>
7. Asztalos et al. Sodium Hypochlorite Body Wash As A Maintenance Intervention To Decrease Staphylococcus aureus Colonization In Pediatric Patients With Atopic Dermatitis. World Congress of Dermatology Presentation, June 2015.
VIEW: https://www.clnwash.com/pdf/WCD_Presentation_06-01-2015.pdf

Appendix

Eczema Studies

Sports Skin Problems

Hidradenitis Suppurativa Study



10 y/o, on Cyclosporine



10 Weeks after CLn[®]

Single Center, Feasibility Study

Study Design

- 18 children and adolescents with moderate to severe eczema
- Staph culture positive
- No antibiotics used

Findings

- Significant eczema improvement
- 9/10 would recommend CLn[®] BodyWash over sodium hypochlorite baths



Fred Ghali, MD
Pediatric
Dermatologist

View Study

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



Baseline



8 Weeks

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

Sodium Hypochlorite Body Wash as a maintenance intervention to decrease Staphylococcus Aureus Colonization in Pediatric Patients with Atopic Dermatitis



Tanya Bhattacharya‡, BS, Benjamin R. Bohaty, MD†, Lina M. Rodriguez, MD‡, Kathryn C. Durham, MD†, Gil Abramovici, MD‡, Lori Asztalos, MD‡, Dennis P. West, PhD ‡, Adelaide A. Hebert, MD† *, Amy S. Paller, MD‡*

†Department Of Dermatology, The University Of Texas Health Science Center at Houston, Houston, Texas

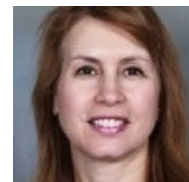
‡Department Of Dermatology, Northwestern University Feinberg School Of Medicine, Chicago, Illinois

*These Authors Contributed Equally To The Study

Dual Center: UT Houston and Northwestern University

Study Design

- 50 children and adolescents with moderate to severe eczema
- 6 week study
- Staph culture positive
- No antibiotics or medicated baths
- CLn BodyWash once daily



Adelaide A. Hebert MD
Professor of Dermatology & Pediatrics
The University of Texas Medical School, Houston



Amy S. Paller MD
Chair, Department of Dermatology
Feinberg School of Medicine
Northwestern University

Findings

- Dramatic improvement of EASI score (46% at 6 weeks)
- Reduced itching
- Improved quality of life for patient and parent
- Reduced staph colonization
- Reduced steroid usage
- CLn BodyWash preferred over sodium hypochlorite baths

View Study

<https://onlinelibrary.wiley.com/doi/full/10.1111/pde.13842>



12 yr. old - Baseline



2 Weeks



6 Weeks

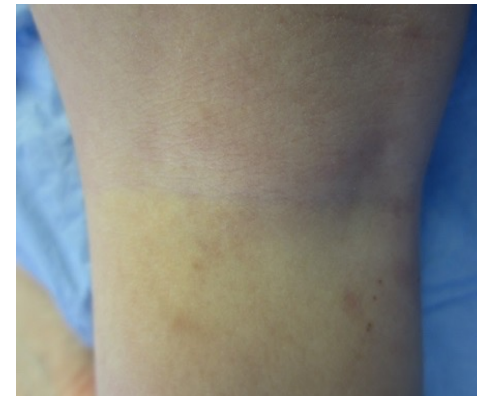
Staph colonization and eczema of the hand and popliteal fossa at baseline (A) and 6 weeks (B) post-treatment with sodium hypochlorite wash



(A) Baseline



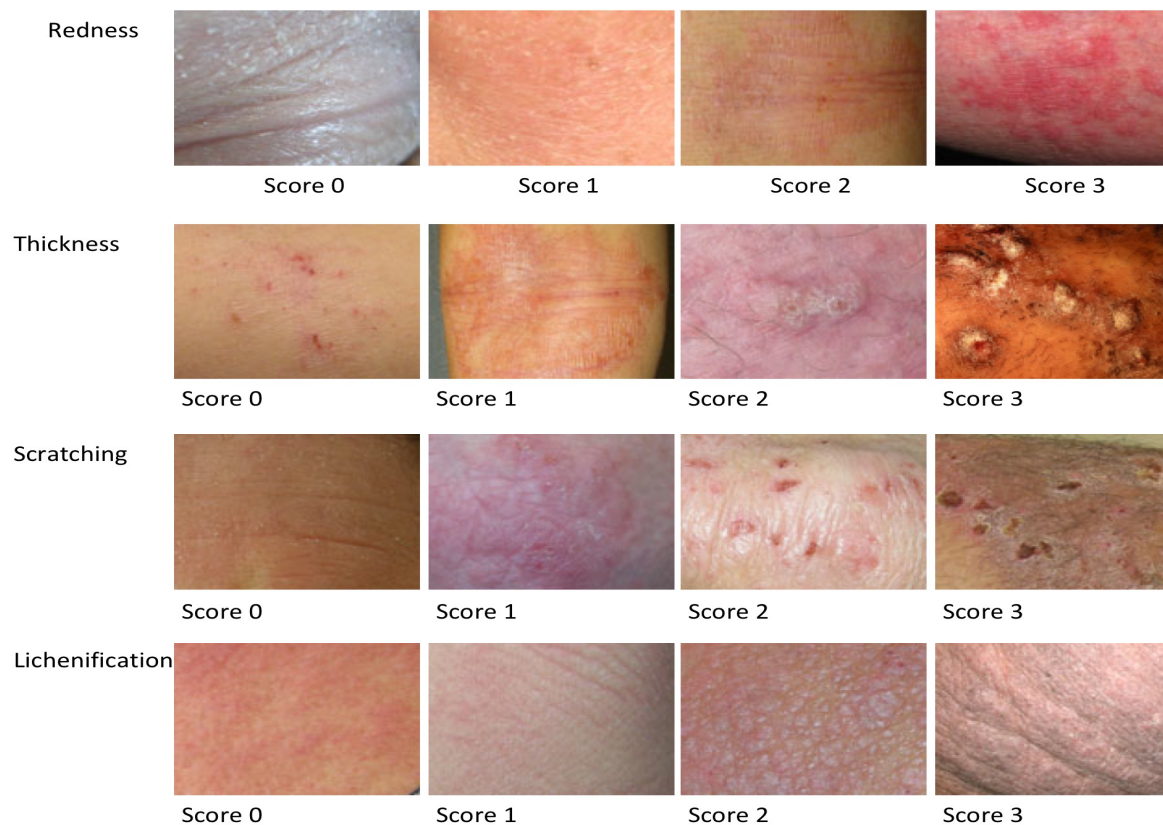
(B) 6 Weeks



Asztalos et al. Sodium Hypochlorite Body Wash As A Maintenance Intervention To Decrease Staphylococcus aureus Colonization In Pediatric Patients With Atopic Dermatitis. World Congress of Dermatology. June 2015.

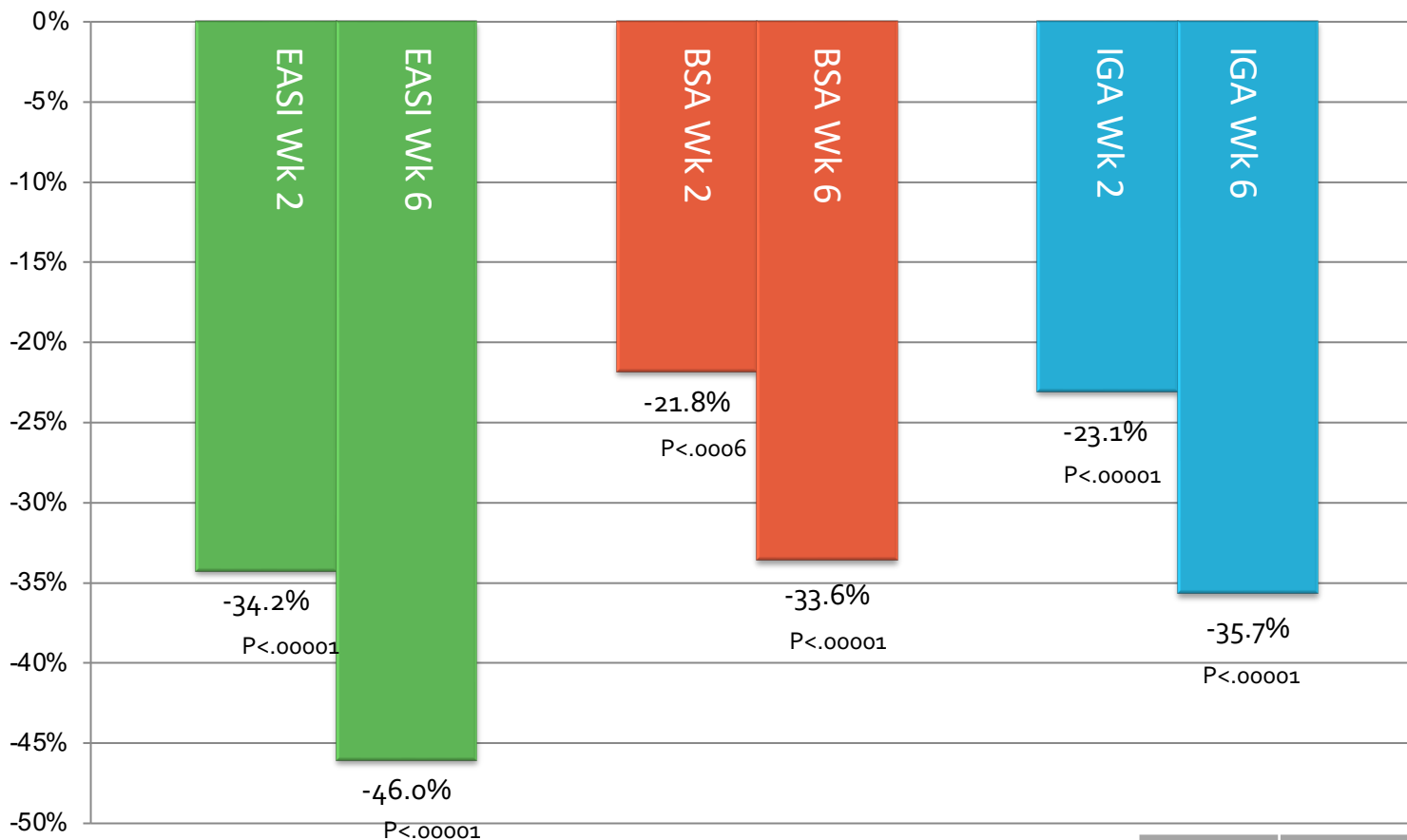
Eczema Area and Severity Index

EASI Score is a tool used to measure severity and extent of atopic dermatitis. It is a compilation of 4 body regions (head and neck, upper limbs, trunk and lower limbs) multiplied by the severity of four factors: Redness, Thickness, Scratching & Lichenification



Results of Clinical Severity Scores

% Mean Reduction from Baseline



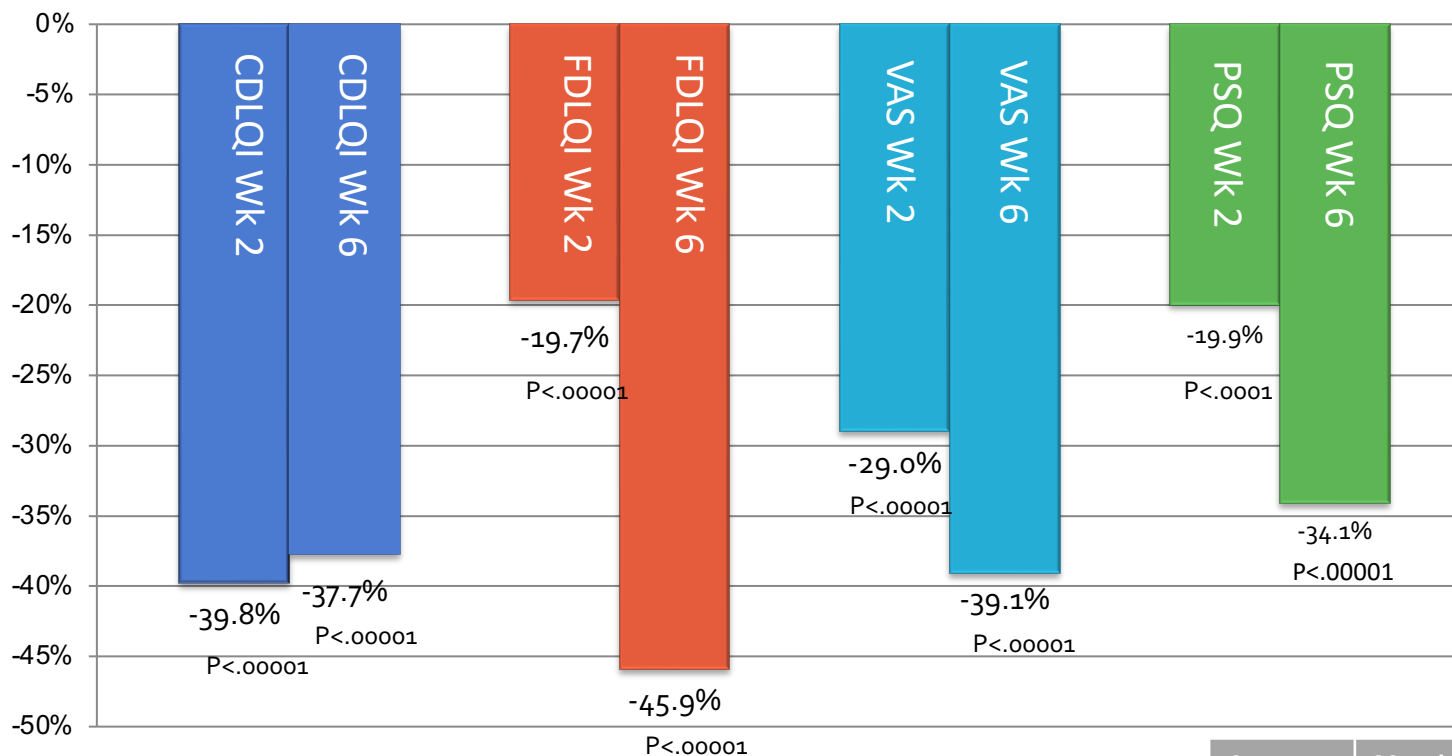
Percent mean decrease in EASI, BSA and IGA at 2 weeks and 6 weeks post-treatment with sodium hypochlorite wash.

Acronym	Meaning
EASI	Eczema Area & Severity Index
BSA	Body Surface Area
IGA	Investigator Global Assessment

Asztalos et al. Sodium Hypochlorite Body Wash As A Maintenance Intervention To Decrease Staphylococcus aureus Colonization In Pediatric Patients With Atopic Dermatitis. World Congress of Dermatology. June 2015.

Results of Clinical Severity Scores

% Mean Decrease in CDLQI, FDLQ, VAS and PSQ



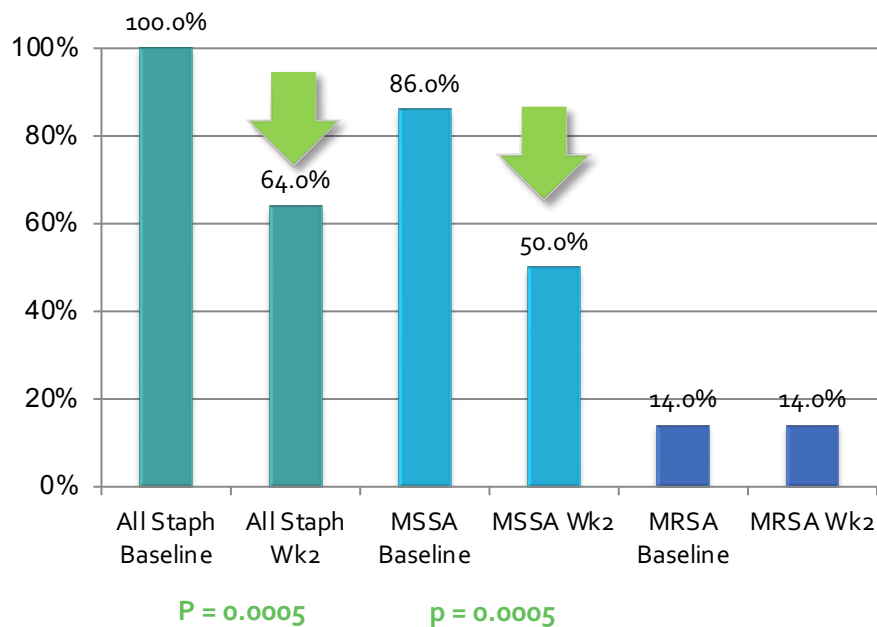
Acronym	Meaning
CDLQI	Children's Dermatology Life Quality Index
FDLQI	Family Dermatology Life Quality Index
VAS	Visual Analogue Scale
PSQ	Patient Satisfaction Questionnaire

Percent mean decrease in CDLQI, FDLQI, Pruritus VAS and PSQ at 2 weeks and 6 weeks post-treatment with sodium hypochlorite wash.

Asztalos et al. Sodium Hypochlorite Body Wash As A Maintenance Intervention To Decrease Staphylococcus aureus Colonization In Pediatric Patients With Atopic Dermatitis. World Congress of Dermatology. June 2015.

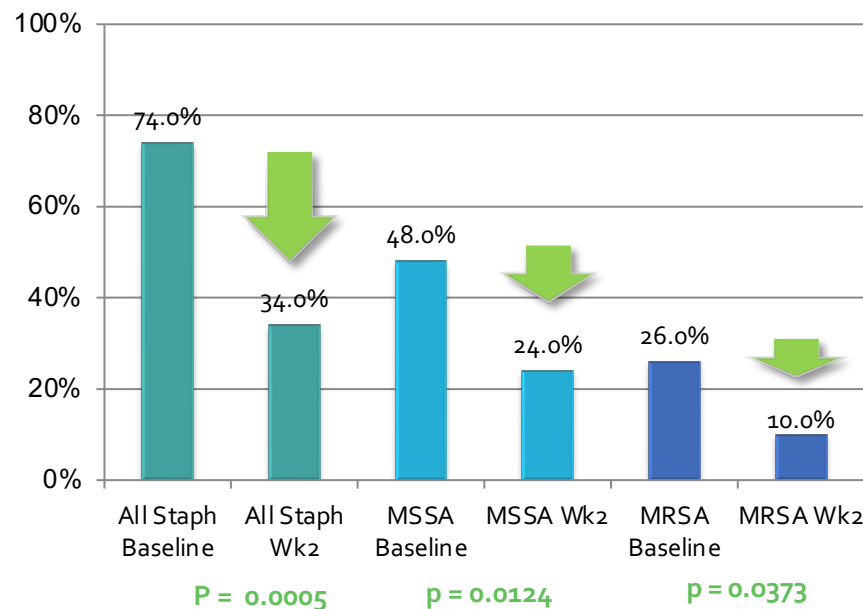
Results of *Staphylococcus Aureus* Colonization

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.

Asztalos et al. Sodium Hypochlorite Body Wash As A Maintenance Intervention To Decrease *Staphylococcus aureus* Colonization In Pediatric Patients With Atopic Dermatitis. World Congress of Dermatology. June 2015.

Sports & Skin Problems



- High rate of skin breakdown
- 29% of contact athletes can be colonized with MRSA
- High rate of staph infections
- High rate of fungal infections
- High rate of antibiotic use
- **Antibiotic resistance rising in sports**

Mitchell et al, Bacterial Sport-Related Skin and Soft-Tissue Infections (SSTIs): An Ongoing Problem Among a Diverse Range of Athletes
JBJS REVIEWS 2017;5(1):e4 · <http://dx.doi.org/10.2106/JBJS.RVW.16.00006>

- 377 Athletes at Vanderbilt Univ.
 - 224 in contact sports / 153 in non-contact sports
- Nasal and oropharyngeal swabs monthly
- Findings:
 - 62% Staph colonized
 - 29% of contact sport MRSA colonized
 - 23% of non-contact sports MRSA colonized
 - Football players are twice as likely to be colonized
 - Colonization more prevalent in the summer
 - 9 Skin and Soft Tissue Infections; 7 were MRSA

Summary:

Athletes MRSA colonized at higher rates than general population.

Jimenez-Truque, N. et al, Longitudinal Assessment of Colonization With Staphylococcus aureus in Healthy Collegiate Athletes Journal of the Pediatric Infectious Diseases Society, Vol. 5, No. 2, pp. 105–13, 2016. DOI:10.1093/jpids/piu108

View

NFL



Tampa Bay Buccaneers

- Carl Nicks
- Lawrence Tynes*
- Johnthan Banks



Cleveland Browns

- Joe Jurevicius
- Kellen Winslow, JR
- Ben Taylor
- LeCharles Bentley
- Brian Russell
- Braylon Edwards



Washington Redskins

- Brandon Noble*



St. Louis Rams

- 5 players



New York Giants

- Daniel Fells*



New England Patriots

- Tom Brady (2008)



Houston Texans

- JJ Watt (2015)

Key Players

NHL



Minnesota Wild

- Christian Folin
- Keith Ballard



St. Louis Blues

- Jori Lehtera
- Jake Allen
- Brian Elliott

MLB



Philadelphia Phillies

- Freddy Galvis



Chicago White Sox

- Álex Riós

NBA



Memphis Grizzlies

- Rudy Gay



Houston Rockets

- Shane Battier



Boston Celtics

- Paul Pierce
- Delonte West



Cleveland Cavaliers

- Drew Gooden



Denver Nuggets

- Kenyon Martin



LA Clippers

- Blake Griffin
- Chris Kaman



Phoenix Suns

- Grant Hill

*career ending infections

Hidradenitis Suppurativa cleansing with CLn BodyWash

Survey Study



CLn BodyWash

Survey Study Results

Numbers Recap

- ✓ Applications Completed: 232
- ✓ Baseline Surveys Completed: 164
- ✓ 2 Week Surveys Completed: 152
- ✓ 4 Week Surveys Completed: 145

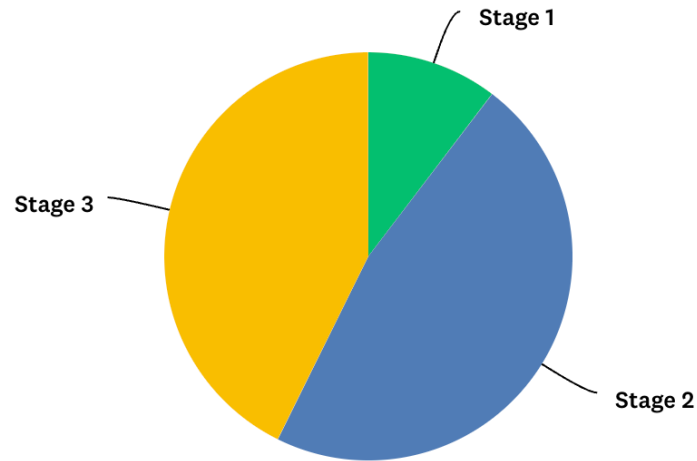
Total loss to attrition: 19

Participant years with HS

Years with HS	# of Participants
1 - 5 years	17
5 - 10 years	31
11 - 15 years	41
16 - 20 years	27
21 - 30 years	34
31+ years	14

Stage of HS

(on the worst part of the body)



ANSWER CHOICES	RESPONSES	
▼ Stage 1	10.37%	17
▼ Stage 2	46.95%	77
▼ Stage 3	42.68%	70
TOTAL		164

Baseline Study Results

Baseline Symptoms

On a scale of 0-5; 0 being no symptoms to 5 being the worst symptoms

	0	1	2	3	4	5	WEIGHTED AVERAGE
Swelling	1.22% 2	2.44% 4	12.80% 21	25.00% 41	34.76% 57	23.78% 39	4.61
Pain	3.68% 6	4.91% 8	12.27% 20	25.77% 42	20.86% 34	32.52% 53	4.53
Redness	1.83% 3	7.93% 13	11.59% 19	36.59% 60	23.17% 38	18.90% 31	4.28
Drainage	5.49% 9	10.37% 17	17.07% 28	23.17% 38	18.29% 30	25.61% 42	4.15
Itching	8.54% 14	9.15% 15	16.46% 27	22.56% 37	21.95% 36	21.34% 35	4.04
Odor	16.46% 27	16.46% 27	17.68% 29	15.24% 25	14.02% 23	20.12% 33	3.54

2 Week Study Results

Symptoms after 2 weeks

0 being no symptoms to 5 being the worst symptoms

	0	1	2	3	4	5	WEIGHTED AVERAGE
Redness	12.50% 19	16.45% 25	29.61% 45	26.97% 41	10.53% 16	3.95% 6	3.18
Swelling	13.25% 20	16.56% 25	29.14% 44	24.50% 37	12.58% 19	3.97% 6	3.19
Pain	18.42% 28	17.76% 27	20.39% 31	21.05% 32	17.11% 26	5.26% 8	3.16
Drainage	24.34% 37	17.76% 27	21.71% 33	15.13% 23	13.82% 21	7.24% 11	2.98
Itching	26.32% 40	21.05% 32	22.37% 34	11.84% 18	12.50% 19	5.92% 9	2.81
Odor	37.50% 57	20.39% 31	15.13% 23	15.79% 24	7.24% 11	3.95% 6	2.47

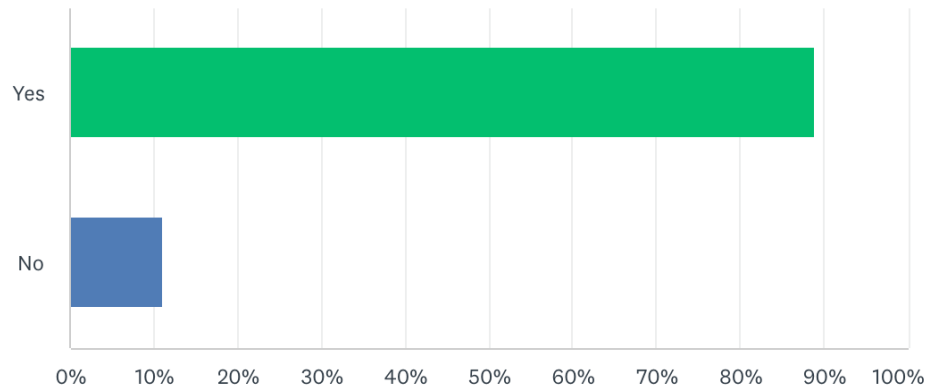
Decrease in the number of flares after 2 weeks

Yes	44.74%
<hr/>	
No	55.26%

Decrease in the duration of flares after 2 weeks

Yes	53.29%
<hr/>	
No	46.71%

Would you recommend CLn?



ANSWER CHOICES	RESPONSES
Yes	88.82% 135
No	11.18% 17
TOTAL	152

Dab Method

- ✔ 75% of participants tried the 'Dab method'
- ✔ 64% said the method had an impact on their flares
- ✔ 85% said they will continue using the dab method
- ✔ 90% said they would recommend the method to others

Reduction in symptoms when using the “dab” method

▼	Redness	54.55%
▼	Swelling	67.13%
▼	Pain	45.45%
▼	Itching	44.06%
▼	Odor	39.16%

4 Week Study Results

Symptom rating after 4 weeks

	0	1	2	3	4	5	WEIGHTED AVERAGE
▼ Redness	16.55% 24	26.90% 39	30.34% 44	19.31% 28	2.76% 4	4.14% 6	2.77
▼ Swelling	13.89% 20	29.86% 43	26.39% 38	20.83% 30	4.86% 7	4.17% 6	2.85
▼ Pain	22.76% 33	32.41% 47	19.31% 28	15.86% 23	4.83% 7	4.83% 7	2.62
▼ Drainage	24.83% 36	25.52% 37	16.55% 24	22.07% 32	4.14% 6	6.90% 10	2.76
▼ Itching	28.28% 41	21.38% 31	21.38% 31	13.79% 20	10.34% 15	4.83% 7	2.71
▼ Odor	40.69% 59	24.83% 36	11.72% 17	15.86% 23	4.83% 7	2.07% 3	2.26

Decrease in number of flares after 4 weeks

Yes	63.45%
<hr/>	
No	36.55%

Decrease in duration of flares after 4 weeks

Yes	62.07%
<hr/>	
No	37.93%

Dab Method

- ✓ 66% of participants tried the 'Dab method'
- ✓ 67% said the method had an impact on their flares
- ✓ 77% said they will continue using the dab method
- ✓ 86% said they would recommend the method to others

Symptom reduction with the “dab” method

Percentage reporting a decrease

Redness	54.55%
Swelling	67.13%
Pain	45.45%
Itching	44.06%
Odor	39.16%

Overall symptom reduction (weighted average)

Symptom	Baseline	2 Weeks	4 Weeks	Reduction
Swelling	4.61	3.19	2.95	1.66
Pain	4.53	3.16	2.62	1.91
Redness	4.28	3.18	2.77	1.51
Drainage	4.15	2.98	2.76	1.39
Itching	4.04	2.81	2.71	1.33
Odor	3.54	2.47	2.26	1.28

Decrease in number of flares

2 weeks - 44%

4 weeks - 63%

Decrease in length of flares

2 weeks - 53%

4 weeks - 62%

63%

saw a reduction in the number of flares

62%

saw a reduction in the duration of flares

90%

would Recommend
CLn BodyWash
for HS