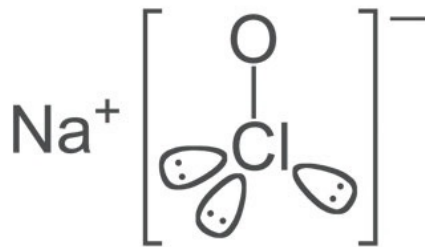




# CLn Research Summary



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



## *2 CLn 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 bleach baths 88%
- Reduced Staph aureus colonization 100% to 64%

### **View 1<sup>st</sup> Study**

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

### **View 2<sup>nd</sup> Study**

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

For speakers slide deck contact  
Dr. Anwar [dranwar@clnwash.com](mailto:dranwar@clnwash.com)

# The big idea; a sodium hypochlorite wash



Sodium Hypochlorite  
+  
Surfactants  
+  
“proprietary  
technology”

**Patented**

US, EU, Australia, others



## Bleach Baths

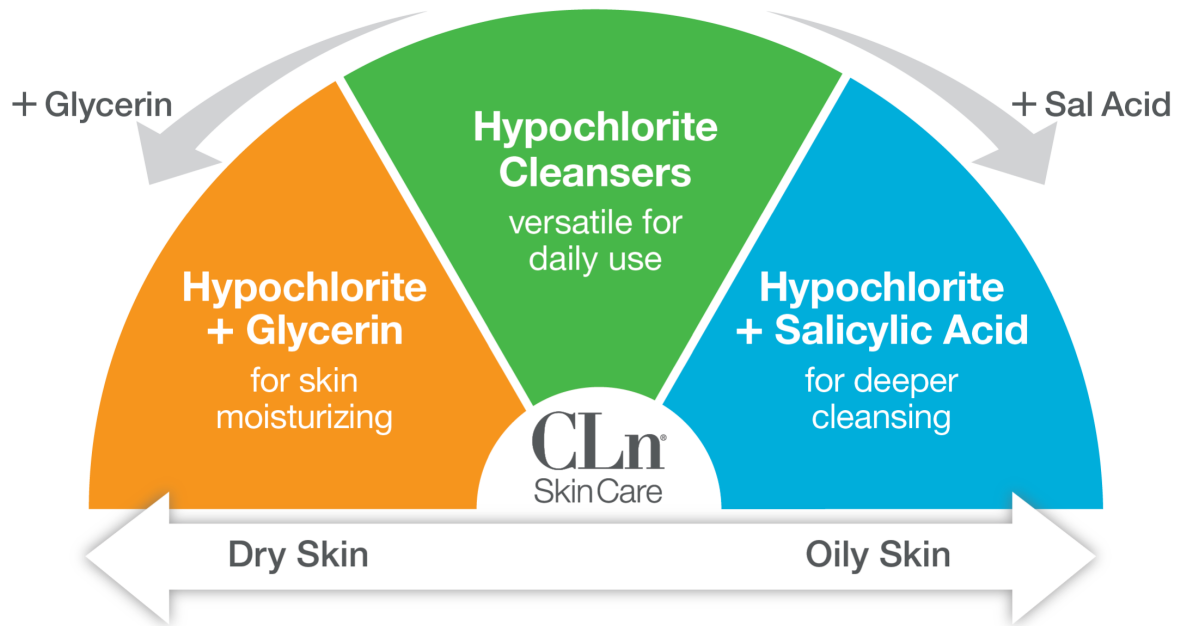
- Anti-microbial
- Anti-inflammatory
- Effective
- Cumbersome
- Poor patient compliance
- Risks + do not use above neck

## CLn®

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

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









10 y/o, on Cyclosporine



10 Weeks after CLn<sup>®</sup>

## Single Center, Feasibility Study

### Study Design

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



Fred Ghali, MD  
Pediatric  
Dermatologist

### Findings

- Significant eczema improvement
- 9/10 would recommend CLn<sup>®</sup> BodyWash over sodium hypochlorite baths

### View Study

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





Baseline



8 Weeks

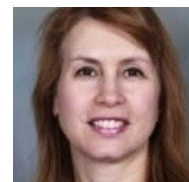
View Study <https://onlinelibrary.wiley.com/doi/10.1111/pde.12150>



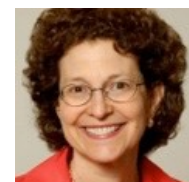
## Dual Center: UT Houston and Northwestern University

### 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

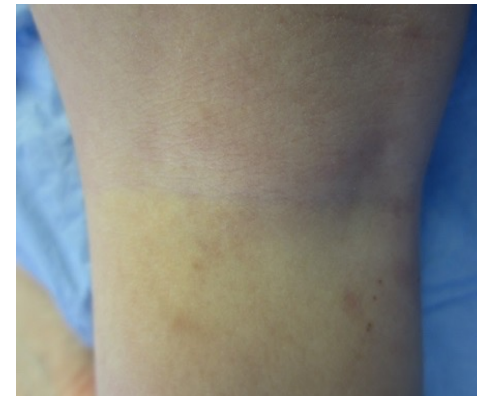
Staph colonization and eczema of the hand and popliteal fossa at baseline (A) and 6 weeks (B) post-treatment with sodium hypochlorite wash



(A) Baseline



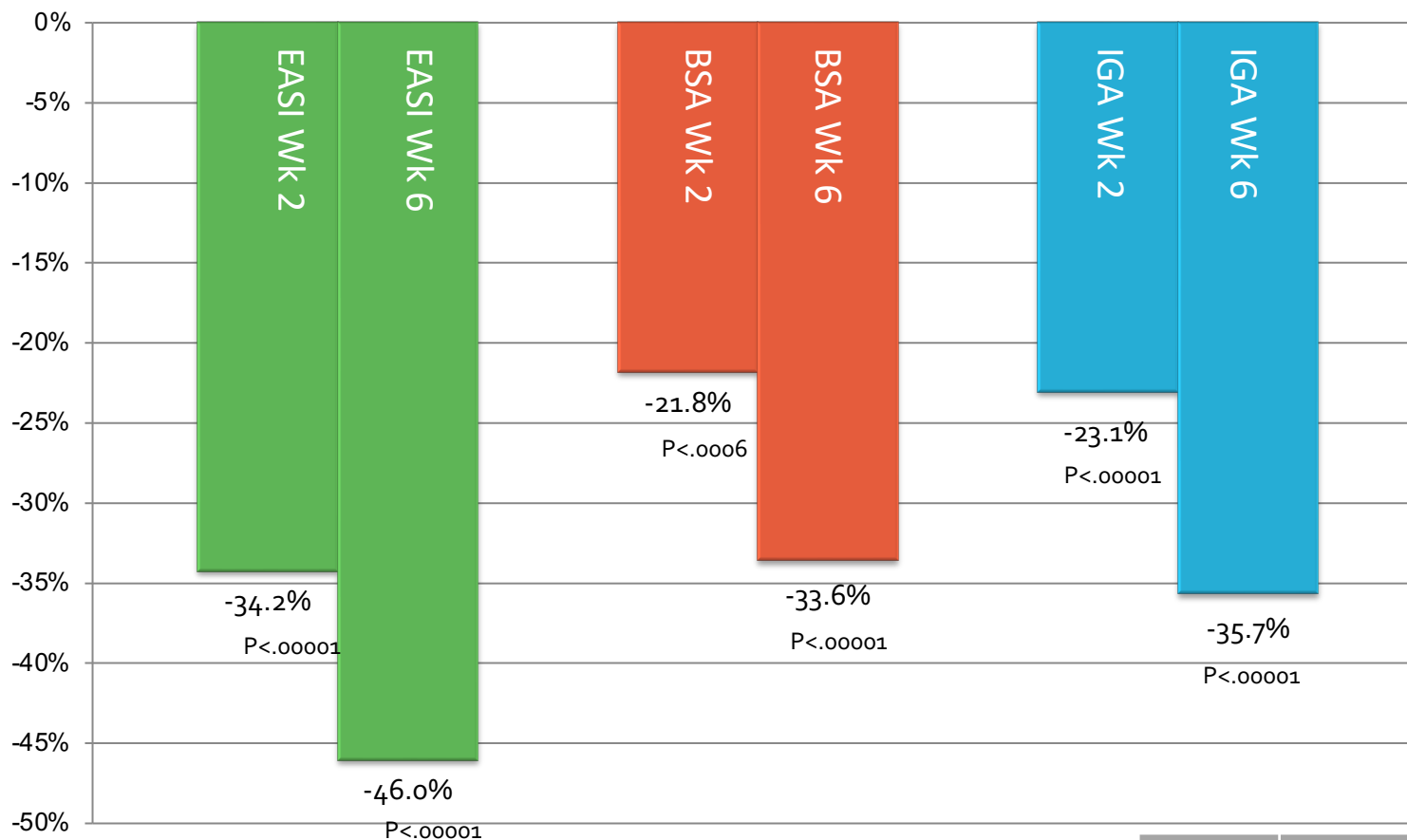
(B) 6 Weeks



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.

# Results of Clinical Severity Scores

## % Mean Reduction from Baseline



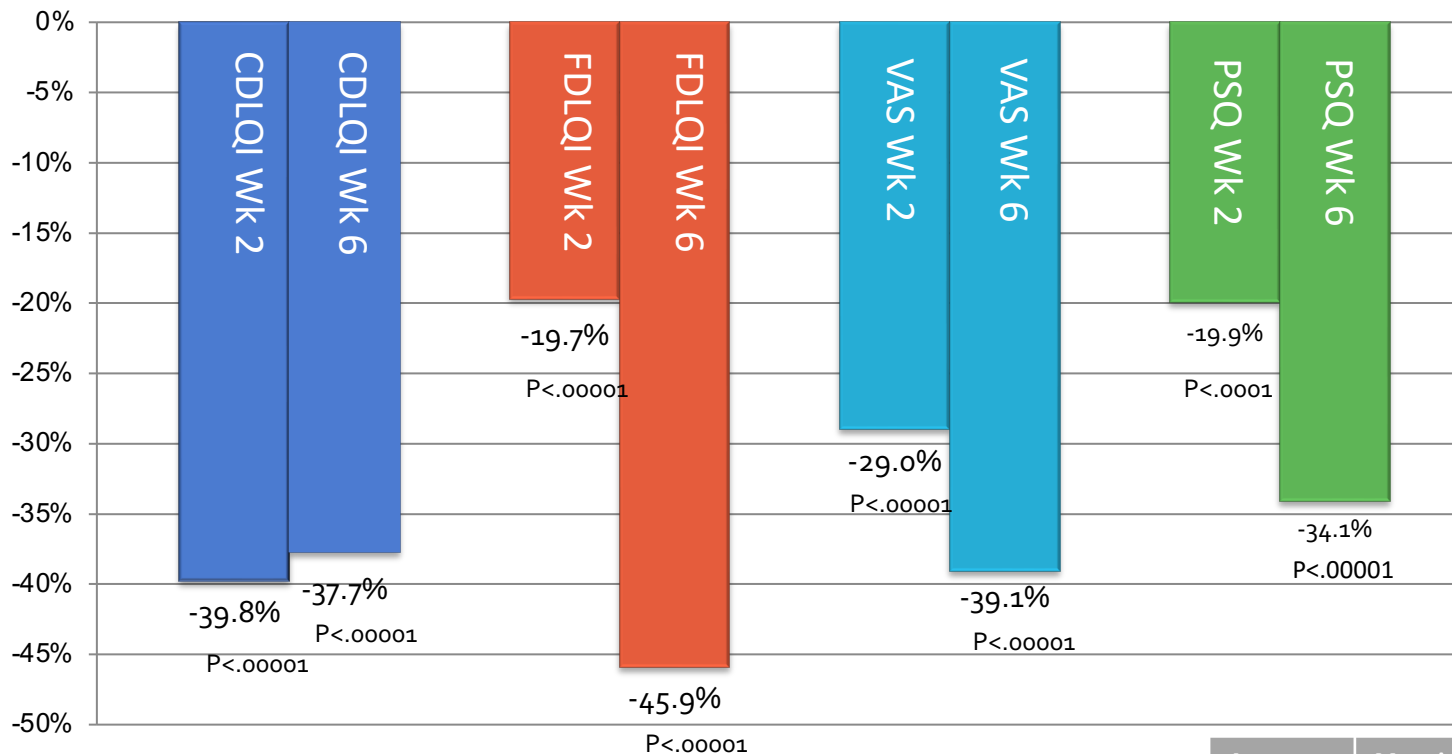
Percent mean decrease in EASI, BSA and IGA at 2 weeks and 6 weeks post-treatment with sodium hypochlorite wash.

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



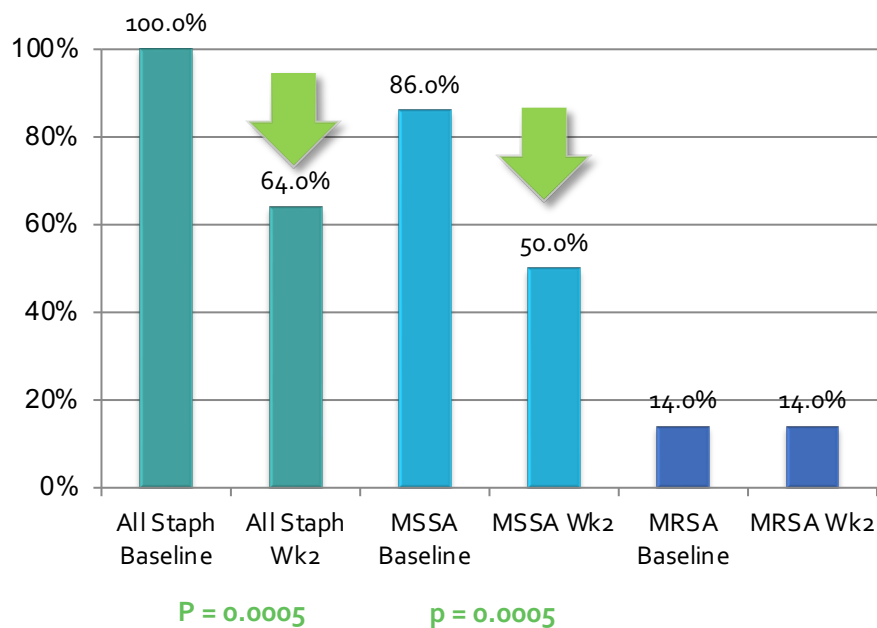
Acronym	Meaning
CDLQI	Children's Dermatology Life Quality Index
FDLQI	Family Dermatology Life Quality Index
VAS	Visual Analogue Scale
PSQ	Patient Satisfaction Questionnaire

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.

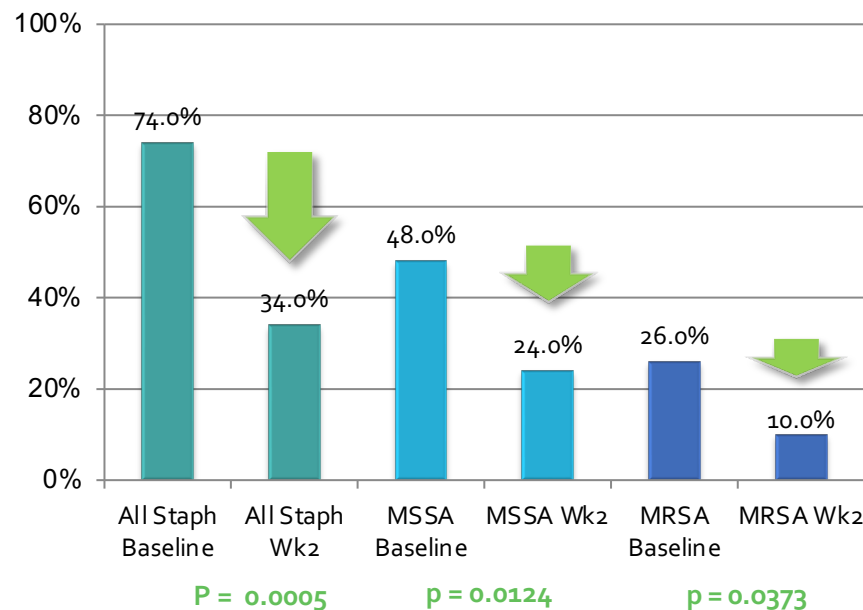
# Results of *Staphylococcus Aureus* Colonization

## 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.

- 50 patients
- No antibiotics or hypochlorite baths
- Excellent safety
- Eczema improvement with excellent efficacy
- Reduced itching
- Improved quality of life for child and parent
- Reduced Staph colonization
- Reduced corticosteroid usage
- CLn BodyWash preferred over sodium hypochlorite baths

1. 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.

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

# Hidradenitis Suppurativa cleansing with CLn BodyWash

*Survey Study*

*Publication submission pending*





# CLn BodyWash

## Survey Study Results

# Numbers Recap

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

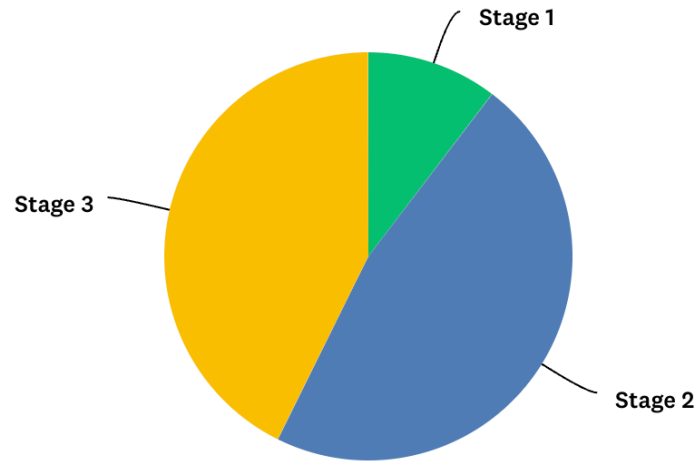
Total loss to attrition: 19

## 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
<b>TOTAL</b>		<b>164</b>

# 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

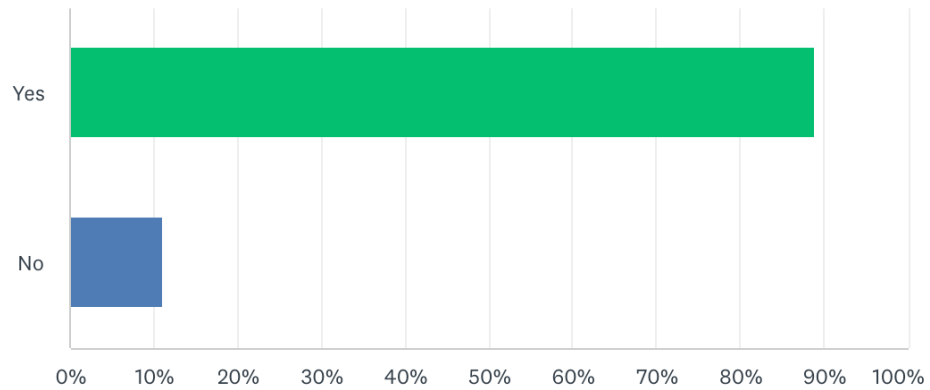
Decrease in the number of flares after 2 weeks

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
<b>TOTAL</b>	<b>152</b>

## 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

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. 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>

6. 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](https://www.clnwash.com/pdf/WCD_Presentation_06-01-2015.pdf)