

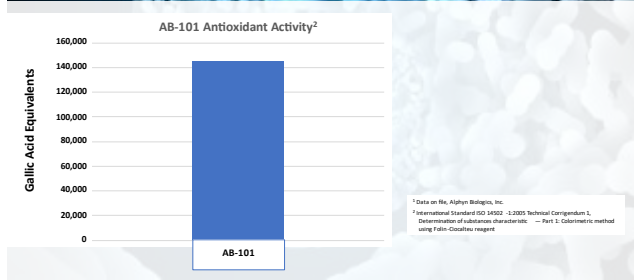
AB-101a

Phase 2a Clinical Trial Complete

Atopic Dermatitis

Anti-inflammatory and Safety Data

AB-101 High level of In vitro Antioxidant Activity Indicates Potential Anti-inflammatory Activity



AB-101: Strong Safety Package

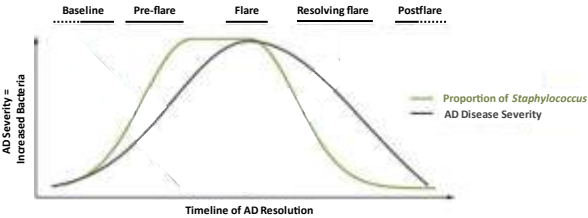
Test	AB-101 Result	Test	AB-101 Result
Mutagenicity ¹	Negative	Chronic Toxicity ¹	Negative
Carcinogenicity ¹	Negative	Cardiotoxicity ¹	Negative
Irritation ¹	Negative	Respiratory Toxicity ¹	Negative
Hypersensitivity ¹	Negative	Genotoxicity ¹	Negative
Photosensitivity ¹	Negative	Reproductive Toxicity ¹	Negative
Oral Pharmacokinetics ¹	Not Absorbed	In vitro Cytochrome P450 ¹	Negative
Oral Maximally Tolerated Dose ¹	Negative	Tissue Penetration ²	Minimal
Acute 30-day Toxicity ¹	Negative	Tissue Sequestration ²	Minimal with Excretion Profile

¹ Published data on file, Alphyx Biologics, Inc.
² Data on file, Alphyx Biologics, Inc.

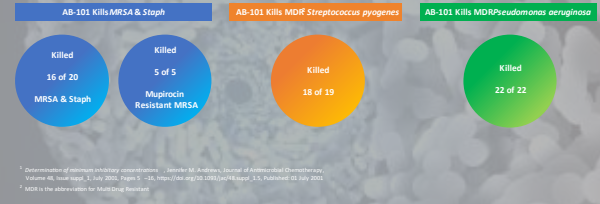
Anti-Bacterial Data

Bacteria on the Skin & Infection Delay or Prevent Resolution of AD²

"... [every AD sufferer] will experience ... infection."¹



AB-101 Shows Strong In-vitro Anti-bacterial Activity Against Common Skin Pathogens¹



Skin Penetration, Capture and Absorption Data

AB-101a Limited Skin Penetration & Capture

LogP Values and Drug Profile^{1,2} with AB-101 LogP Value³

LogP Value ^{1,2}	-1.0 to 2.0
LogP Drug Profile ^{1,2}	<ul style="list-style-type: none"> Limited permeability Poor lipid solubility Poor skin absorption and distribution Not captured in skin Metabolized or excreted
LogP AB-101 ³	-0.11

¹ Lipinski's Rule of Five: predicting the success of drug activity and oral pharmacokinetics. *Journal of Medicinal Chemistry*. 2001; 44(12):2177-2181.
² *Journal of Pharmaceutical Sciences*. 2015; 104(1):1-12.
³ Data on file, Alphyx Biologics, Inc.

AB-101a Negligible Absorption in In-vitro Cadaver Skin¹

AB-101a Drug Product Absorption in Intact Skin	AB-101 Bio-active 1 ²	AB-101 Bio-active 2 ²	AB-101 Bio-active 3 ²	AB-101 Bio-active 4 ²	AB-101 Bio-active 5 ²
Baseline	100.0%	100.0%	100.0%	100.0%	100.0%
Epidermis Amount	0.0%	0.0%	0.0%	0.0%	0.0%
Dermis Amount	0.8%	3.8%	1.8%	1.4%	1.3%
Transdermal Amount	0.0%	0.6%	0.7%	0.2%	0.1%

AB-101a Drug Product Absorption in Superficial Wounds	AB-101 Bio-active 1 ²	AB-101 Bio-active 2 ²	AB-101 Bio-active 3 ²	AB-101 Bio-active 4 ²	AB-101 Bio-active 5 ²
Baseline	100.0%	100.0%	100.0%	100.0%	100.0%
Epidermis Amount	0.0%	0.0%	0.0%	0.0%	0.0%
Dermis Amount	0.8%	3.8%	1.8%	1.4%	1.3%
Transdermal Amount	0.0%	0.6%	0.7%	0.2%	0.1%

¹ Data on file, Alphyx Biologics, Inc.
² AB-101 has multiple bioactive compounds; for this test, five were identified as representative for anti-inflammatory, anti-pruritic and anti-bacterial activity.



Improving
Therapy for Skin Diseases[®]

Gary Pekoe, PhD. Research funded by Alphyx Biologics