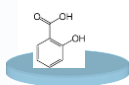
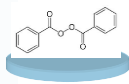
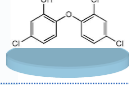




AC CARE1000

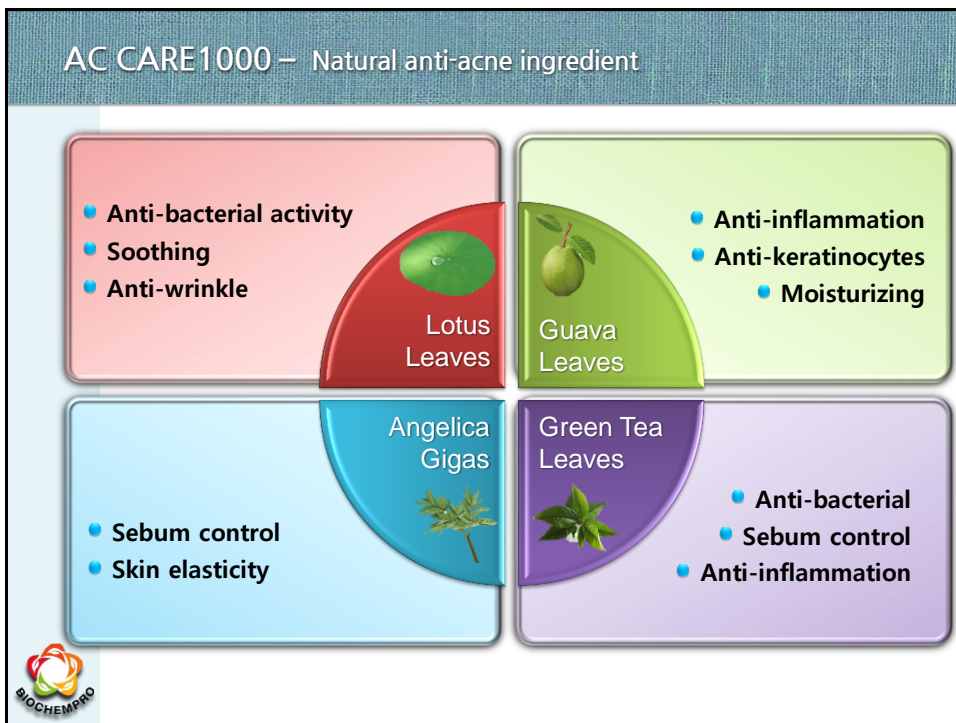
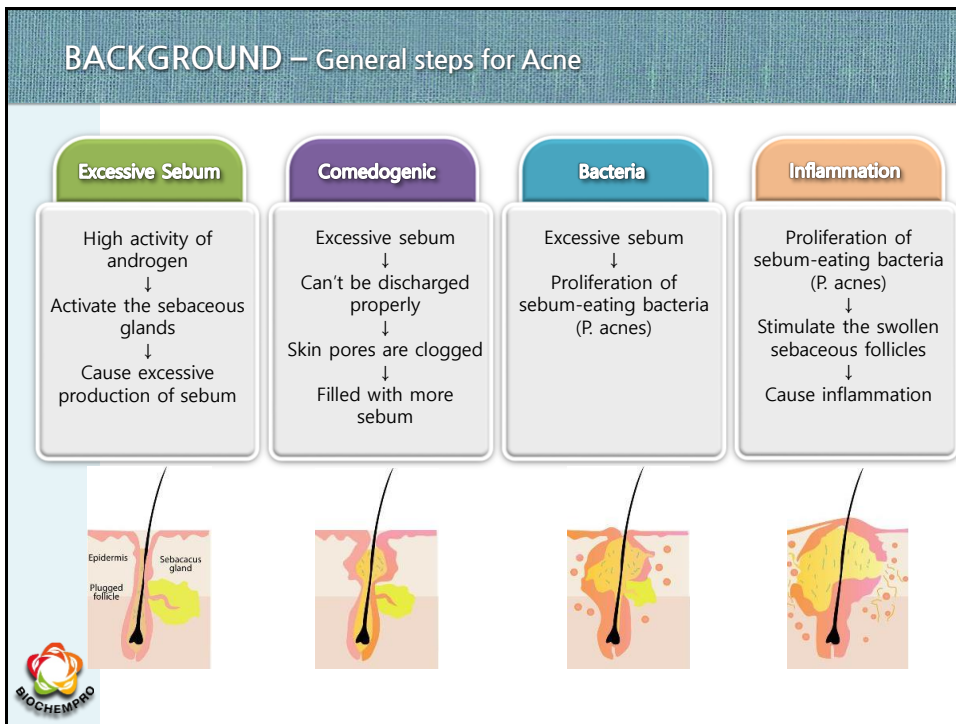
Natural Anti-Acne Ingredient with
Chemical Free / Water-Soluble / Safe

Henry E. Choi
CMO
BIOCHEMPRO


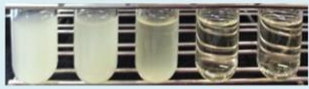


BACKGROUND – Anti-acne ingredients from the market

	Salicylic Acid	<ul style="list-style-type: none"> ● Synthetic chemical (2% dosage) ● Poor solubility ● Destabilization of cosmetic emulsions
	Benzoyl Peroxide	<ul style="list-style-type: none"> ● Synthetic chemical (2.5% dosage or higher) ● Poor solubility ● Drug & skin irritation
	Triclosan	<ul style="list-style-type: none"> ● Synthetic chemical (0.3% dosage) ● Extremely poor solubility in water ● Banned in many countries due to health effect
NEW	NEW INGREDIENT	<ul style="list-style-type: none"> ● Natural ingredient & water soluble ● Fast anti-bacterial effect ● Safe and no irritation 






MIC Comparison - AC CARE1000 vs Benzoyl Peroxide


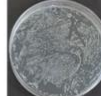

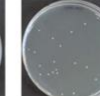
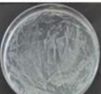
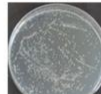
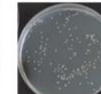
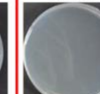



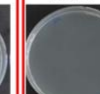
Bacteria	AC CARE1000 MIC (ppm)	Benzoyl Peroxide MIC (ppm)
<i>S. Aureus</i> (ATCC25923)	 Control 125 250 500 1000	 Control 100 500 1000 1500
<i>P. acnes</i> (ATCC11828)	 Control 125 250 500 1000 1500 2000 3000	 Control 100 500 1000 1500


MIC (Minimum Inhibitory Concentration) is defined as the lowest concentration of agent to inhibit the growth of certain microorganisms. (inoculated with 1×10^5 cells/ml at 37°C)

AC CARE1000 showed quite strong anti-bacterial activity against S. Aureus and P. acnes which is similar to Benzoyl Peroxide (a drug for acne treatment)




Time-Kill Study on S. aureus by AC CARE1000

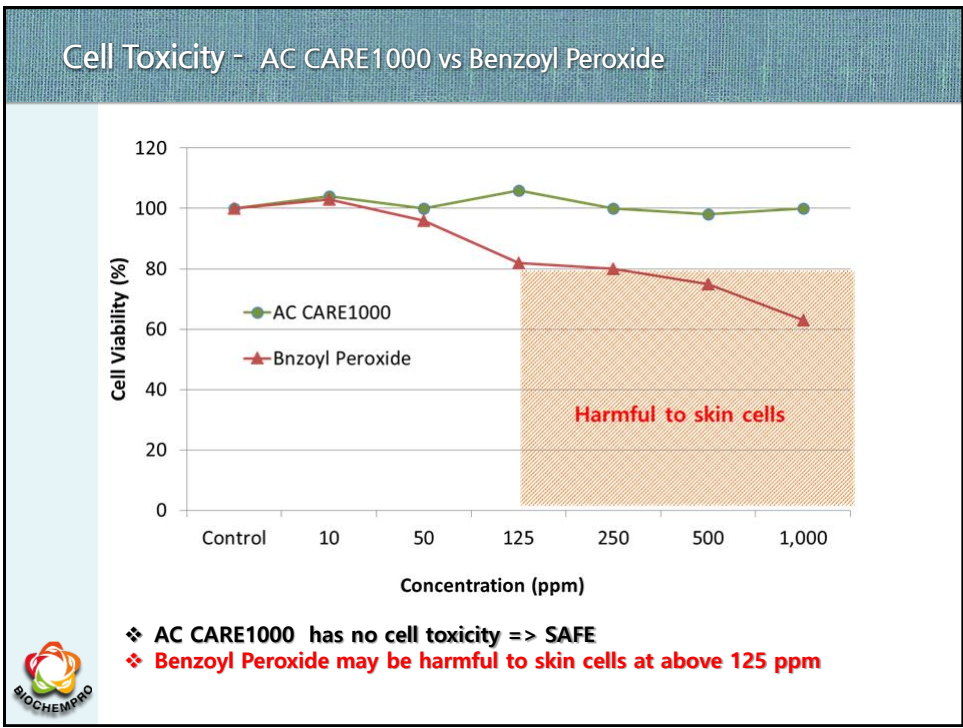
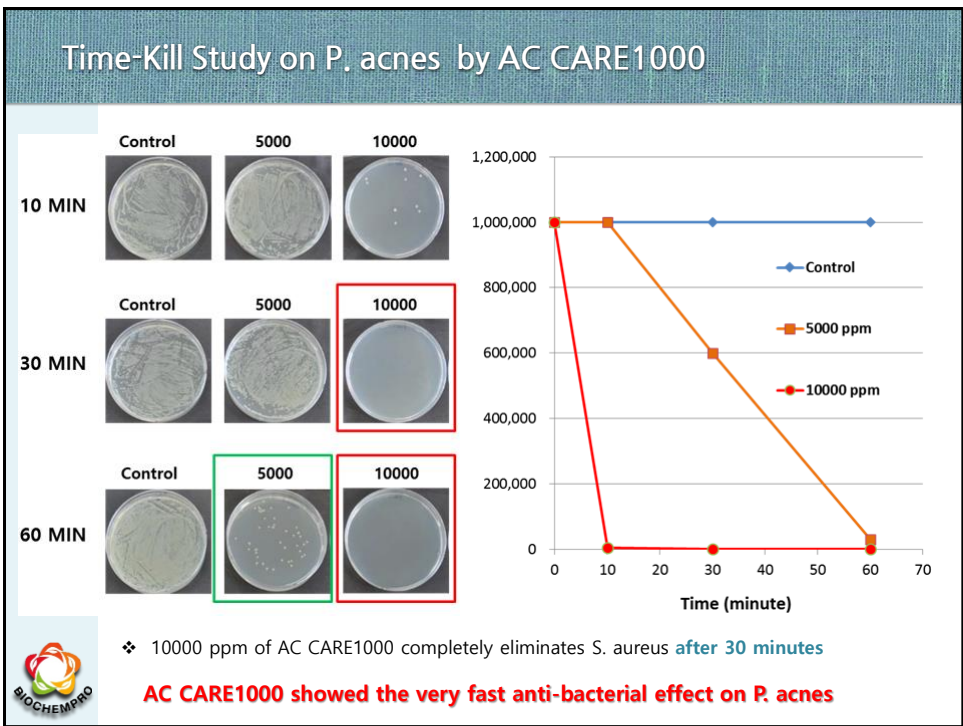
	Control	5000	10000	20000	
10 MIN					Test Method) 10^6 cells/ml of S. aureus was incubated at 37°C for different time with 5000, 10000, or 20000 ppm AC CARE1000 Take 0.1ml of culture solution to the agar media to observe the colonies if any
30 MIN					
60 MIN					



❖ 10000 ppm of AC CARE1000 completely eliminates S. aureus after 60 minutes

AC CARE1000 showed the very fast anti-bacterial effect on S. aureus






Primary Human Patch Test - AC CARE1000 vs Benzoyl Peroxide

No	Name (Sex & Age)	AC CARE1000			Control	Benzoyl Peroxide	
		0.50%	2.50%	5%		0.50%	2.50%
1	Kim S.H. (F, 29)						
		-	-	-	-	-	++
2	Shin, S.H. (F, 27)						
		-	-	-	-	-	+
3	Yoon S.B. (F, 28)						
		-	-	-	-	-	++

❖ **AC CARE1000 did not show any irritation => SAFE at 5%**
 ❖ **Benzoyl Peroxide caused irritation and itching at 2.5%**



AC CARE1000 - Summary

100% Natural	<ul style="list-style-type: none"> • mixture of various natural extracts from Lotus leaf, Green tea, Guava leaf, and Angelica
Total Acne-care	<ul style="list-style-type: none"> • Strong anti-bacterial effect similar to Benzoyl Peroxide • Fast-killing of <i>S. aureus</i> and <i>P. acne</i> • Sebum control and anti-inflammation
Good Safety	<ul style="list-style-type: none"> • No cell toxicity • No skin irritation by human patch test (up to 5%)
Easy Formulation	<ul style="list-style-type: none"> • Recommendation dosage : 2~5% • Completely water-soluble • Good stability and compatibility

