



PALINGEN[®]

CREAM

Palingenesis
from greek palin- "again"
and genesis "*creation, birth*"
or "*born again*"

THERAPEUTIC INNOVATION

IN TISSUE REGENERATION



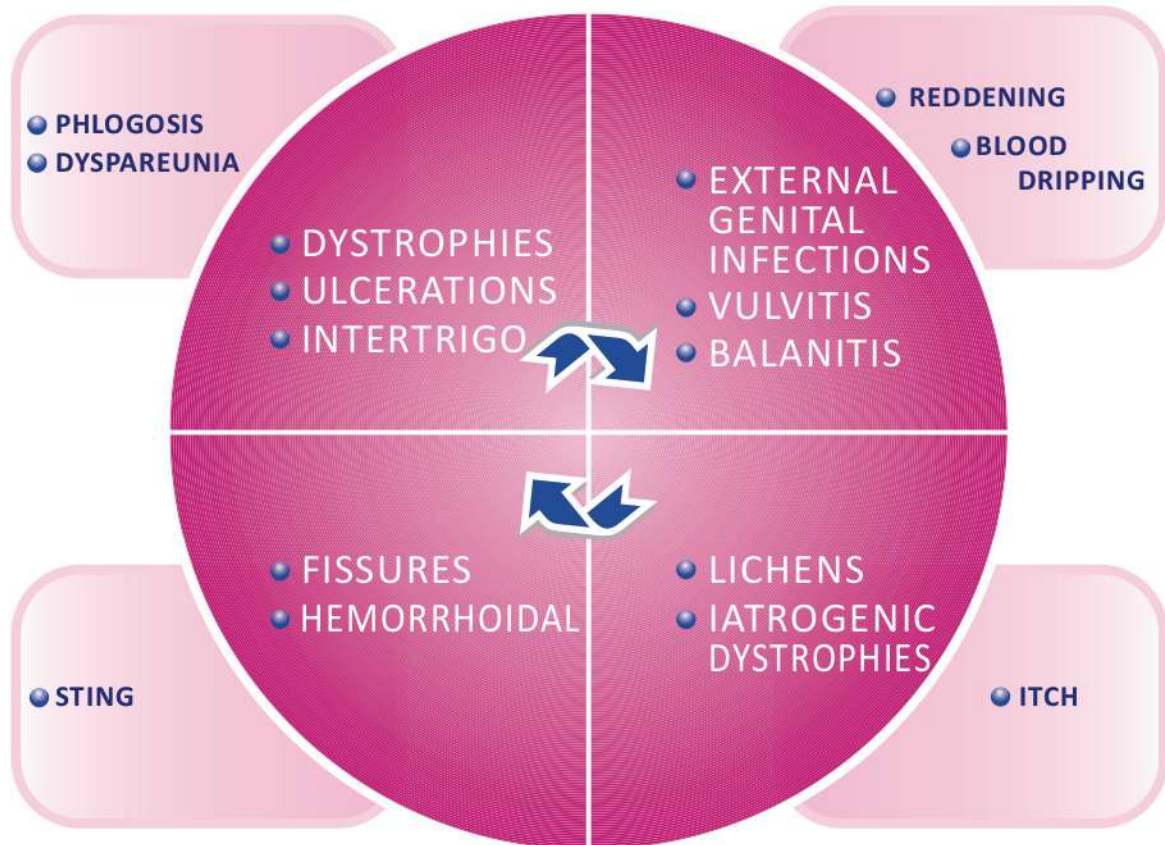
theWave
innovation group

PALINGEN[®] CREAM

in GYNECOLOGY

unique treatment in vaginal infections and tissue repair

DIAGNOSTIC PROCESS AND SYNTHESIS



The solution

PALINGEN[®] CREAM

PERFORMS A RATIONAL THERAPEUTIC PROCESS

Equisetum arvense	Azione emostatica e stimolante dei fibroblasti
Collagene idrolizzato + Prolina, Idrossiprolina, Arginina	Effetto barriera azione cicatrizzante riepitelizzante
Acido beta glicirretico	Azione antinfiammatoria (simil-cortisone)
Plantago - Aloe - Bisabolo	Azione antiarrossamento e lenitiva
Poliesametilenebiguanide + EDTA	Azione sinergica antimicrobica ad ampio spettro

PALINGEN[®] CREAM associates a hydrolyzed collagen to a less hydrolyzed collagen quite comparable to collagen tissue counterpart more specific amino acids, in order to obtain a medium and short term effect optimizing the healing and repithelialization process more quickly and regular way



INTERTRIGINE

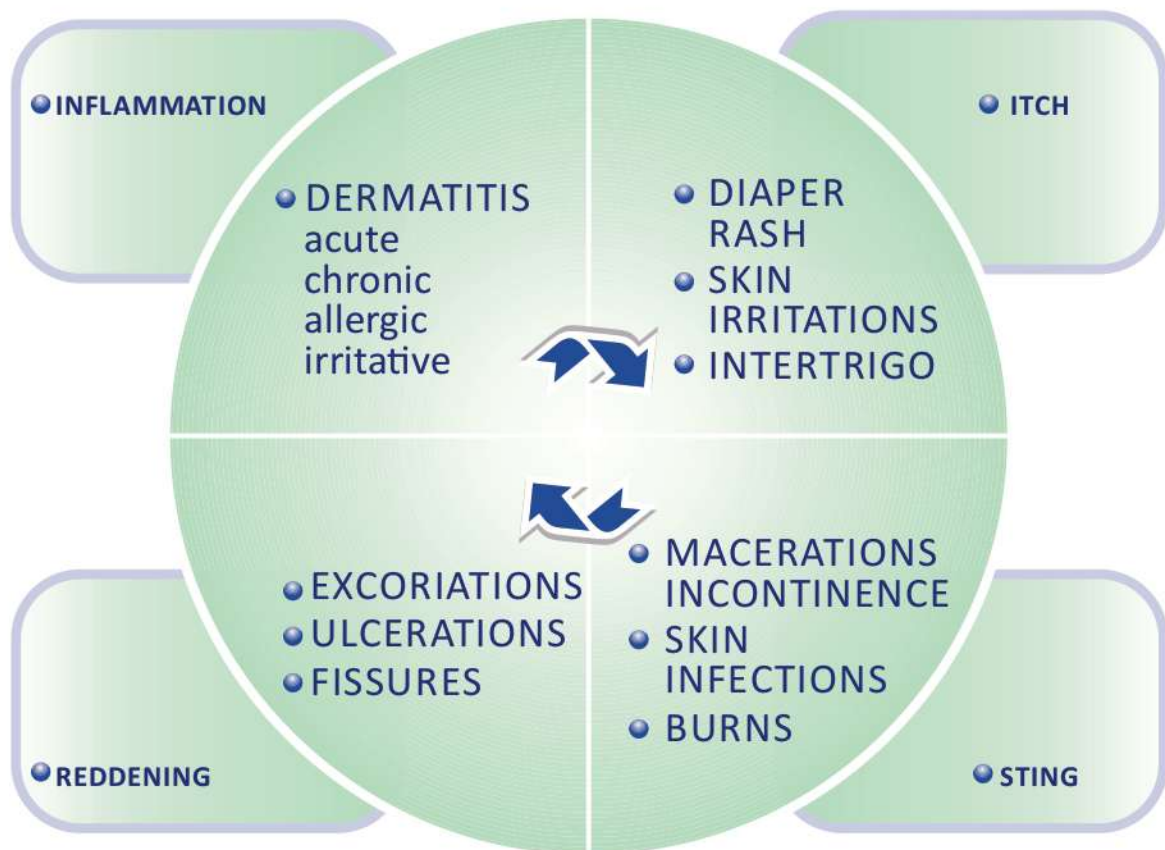
PALINGEN[®] CREAM
unique treatment complete resolving
with two daily applications



MEDICAL DEVICE CLASS III
CERTIFIED HIGHER INSTITUTE OF HEALTH

unique treatment for dermatitis - regeneration and tissue repair

DIAGNOSTIC PROCESS AND SYMPTOMS



The solution

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Collagene idrolizzato + Prolina, Idrossiprolina, Arginina	Effetto barriera biologica, stimolazione dei fibroblasti, crescita cellulare, emostatico, cicatrizzante e riepitelizzante
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PALINGEN[®] CREAM

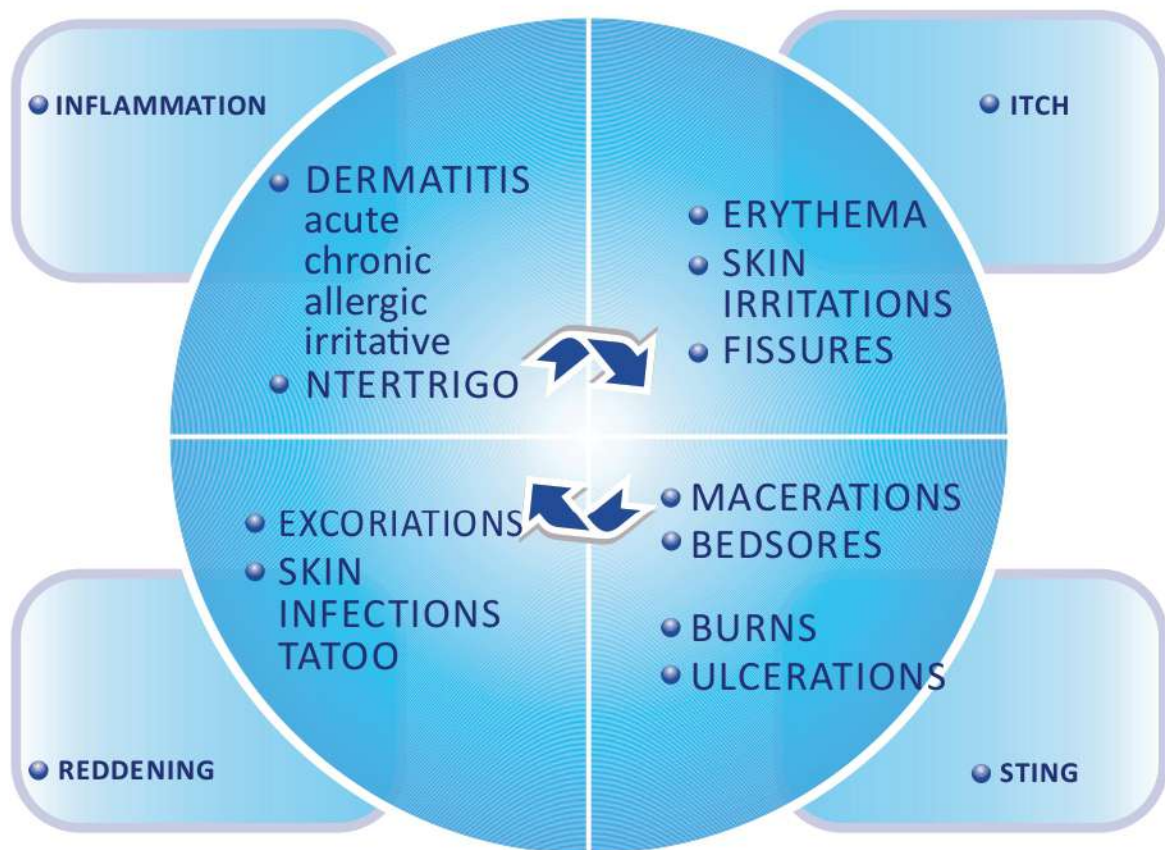
The most complete and adequate innovation for skin diseases to the pediatrician service.



MEDICAL DEVICE CLASS III
CERTIFIED HIGHER INSTITUTE OF HEALTH

Unique and comprehensive treatment in various skin diseases

DIAGNOSTIC PROCESS AND SYMPTOMS



DERMATITIS



EXCORIATION

The solution

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role of **PALINGEN[®] CREAM** in skin lesions

MECHANICAL ACTION

filling

replaces the missing tissue favoring the anchoring and orientation of the fibroblasts for the formation of new tissue

coverage

protects the wound from the external environment, while maintaining a moist environment and constant

ACTIVE BIOLOGICAL ACTION

hemostatic

activation of platelets and coagulation factors

stimulus

stimulates the proliferation of granulation tissue. active fibronectin, monocytes and native collagen formation

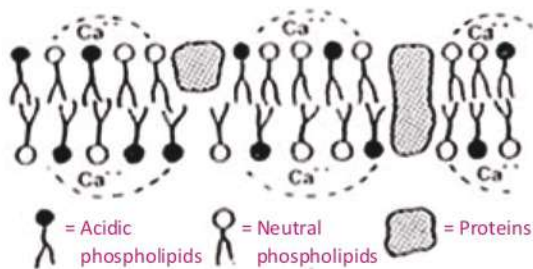
angiogenic

stimulates the formation of capillaries

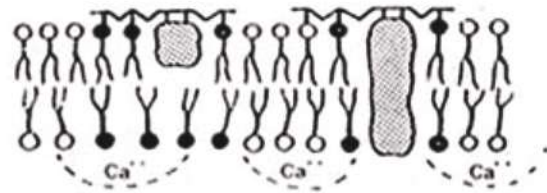
ANTIMICROBIAL ACTION

polyhexamethylene biguanide + EDTA: destabilizes the membranes of microorganisms

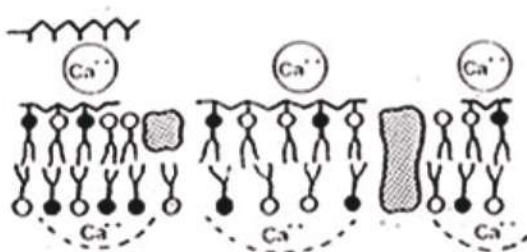
The PHMB-PG complexes are formed by electrostatic attraction between the positive charges of the groups of biguanite and the negative charges of the PG molecules. PHMB+EDTA=synergism of action, it reduces the M.I.C. increasing the effectiveness and tolerability.



A) bacterial cytoplasmic membrane stabilized by Ca^{++}



C) the polyhexanide induces a phase separation of the phospholipids that has repercussions on the integral membrane protein, due to an increase in the permeability, a stream of K^+ ions and a loss of the enzymatic functions



B) the polyhexanide has the cation surface and binds to fosfolipid



D) the stabilized areas take on a hexagonal shape



INTERTRIGO



VENOUS ULCER

ACTIVITY OF PALINGEN[®] CREAM ON MICROORGANISMS

ORGANISM	TYPE	RESULT
<i>Aeromonas caviae</i>	Gram-negative bacteria	no growth
<i>Aeromonas hydrophila</i>	Gram-negative bacteria	»
<i>Aspergillus niger</i>	fungus	»
<i>Bacillus cereus</i>	Gram-positive bacteria	»
<i>Bacillus licheniformis</i>	Gram-positive bacteria	»
<i>Bacillus subtilis</i>	Gram-positive bacteria	»
<i>Candida albicans</i>	yeast	»
<i>Candida glabrata</i>	yeast	»
<i>Candida tropicalis</i>	yeast	»
<i>Citrobacter amalonaticus</i>	Gram-negative bacteria	»
<i>Citrobacter freundii</i>	Gram-negative bacteria	»
<i>Corynebacterium species</i>	Gram-positive bacteria	»
<i>Enterobacter aerogenes</i>	Gram-negative bacteria	»
<i>Enterobacter agglomerans</i>	Gram-negative bacteria	»
<i>Enterobacter cloacae</i>	Gram-negative bacteria	»
<i>Enterococcus faecalis</i>(VRE)	Gram-positive bacteria	»
<i>Escherichia coli</i>	Gram-negative bacteria	»
<i>Gardnerella vaginalis</i>	Gram-positive bacteria	»
<i>Klebsiella pneumoniae</i>	Gram-negative bacteria	»
<i>Listeria monocytogenes</i>	Gram-positive bacteria	»
<i>Proteus mirabilis</i>	Gram-negative bacteria	»
<i>Proteus vulgaris</i>	Gram-negative bacteria	»
<i>Providencia alcalifaciens</i>	Gram-negative bacteria	»
<i>Providencia rettgeri</i>	Gram-negative bacteria	»
<i>Pseudomonas aeruginosa</i>	Gram-negative bacteria	»
<i>Pseudomonas luteola</i>	Gram-negative bacteria	»
<i>Pseudomonas stutzeri</i>	Gram-negative bacteria	»
<i>Saccharomyces cerevisiae</i>	yeast	»
<i>Serratia marcescens</i>	Gram-negative bacteria	»
<i>Streptococcus agalactiae</i>	Gram-positive bacteria	»
<i>Staphylococcus aureus</i>	Gram-positive bacteria	»
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<i>Stenotrophomonas maltophilia</i>	Gram-negative bacteria	»
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<i>Trichomonas vaginalis</i>	protozoo	»

PALINGEN[®] CREAM

Plays a role as an "actor" and not ordinary "spectator" in the context of tissue reparative processes, reproducing the biological effects conducive to tissue repair. Also it rids the main pathogens in skin diseases

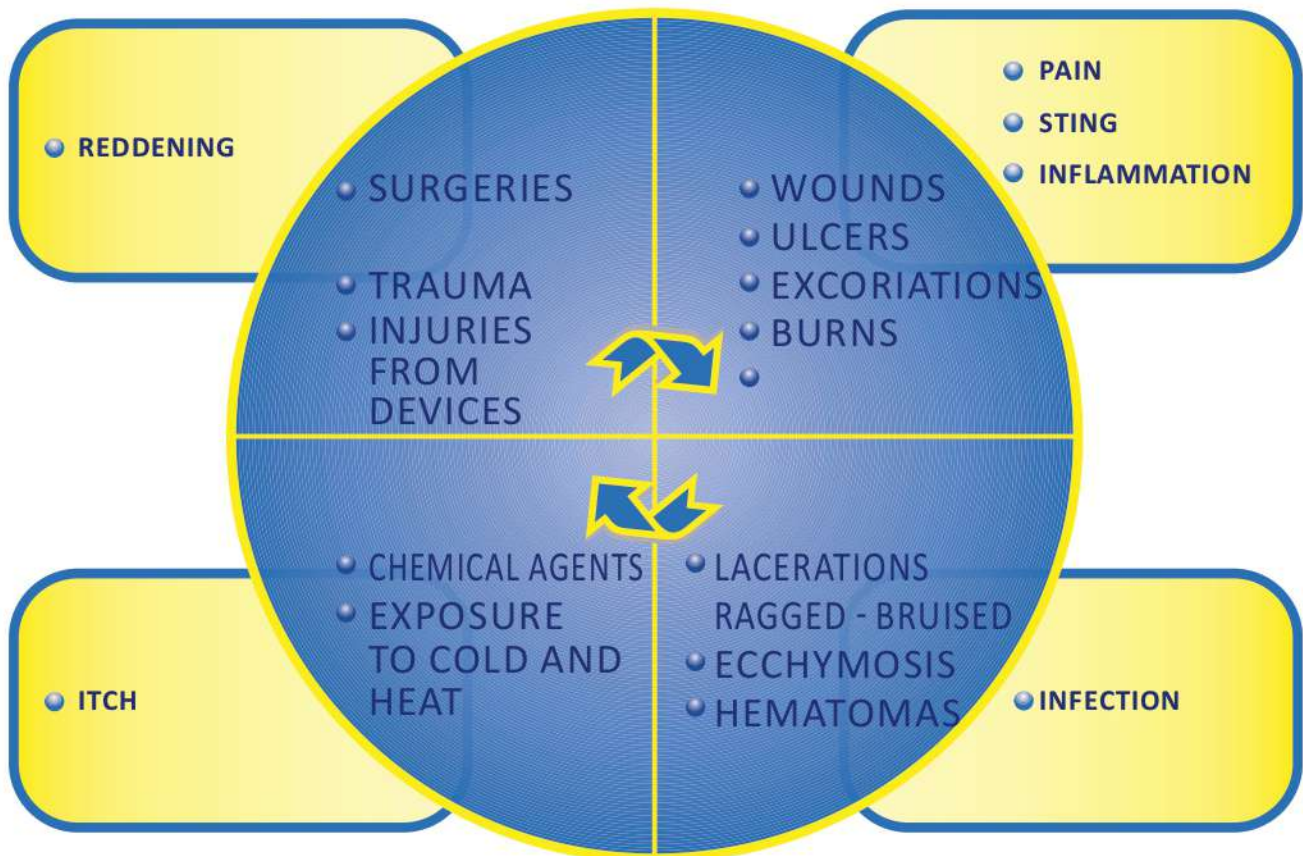
with

2 DAILY APPLICATIONS



Unique and comprehensive treatment in the regeneration and tissue repair

DIAGNOSTIC PROCESS AND SYMPTOMS



WOUND INFECTION



WOUND WITH SIGNS OF INFECTION

HEALING

Body's physiological response to acute or chronic injury
leading to complete healing

Due to tissue repair delays

SYSTEMIC FACTORS

- Nutritional
- Status immune
- Hypoxia
- Drugs

LOCAL FACTORS

- Presence of foreign bodies
- Infections by microorganisms often coming from the patient's skin

Main microorganisms responsible for infections

- ✓ Staphylococcus aureus (MRSA)
- ✓ Pseudomonas aeruginosa
- ✓ Streptococcus pyogenes
- ✓ Enterococcus faecalis (VRE)
- ✓ Candida albicans



**Biofilm producers 1000
times + resistant**



**Producers of proteolytic
enzymes and toxins**

The solution

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role of **PALINGEN[®] CREAM** in continuous solutions

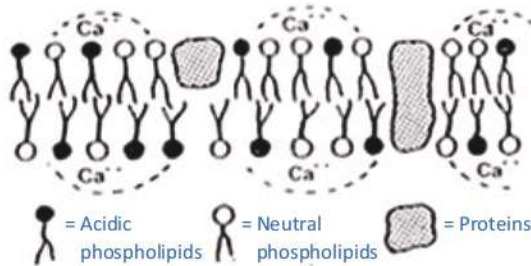
MECHANICAL ACTION	ACTIVE BIOLOGICAL ACTION
filling replaces the missing tissue favoring the anchoring and orientation of the fibroblasts for the formation of new tissue coverage protects the wound from the external environment, while maintaining a moist environment and constant	hemostatic activation of platelets and coagulation factors stimulus stimulates the proliferation of granulation tissue. active fibronectin, monocytes and native collagen formation angiogenic stimulates the formation of capillaries
ANTIMICROBIAL ACTION	
polyhexamethylene biguanide + EDTA: destabilizes the membranes of microorganisms	

PALINGEN[®] CREAM promotes neovascularization and with it an improved tissue transport satisfying the difficult problem of chronic wounds: hypoxia. Moreover, it shortens the healing time by intervening on the microorganisms that perpetuate an inflammatory reaction with delaying the same.

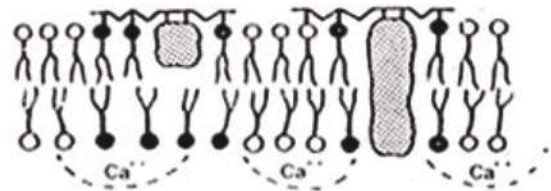
ANTIMICROBIAL ACTION OF PALINGEN[®] CREAM

ACTION MECHANISM OF PHMB

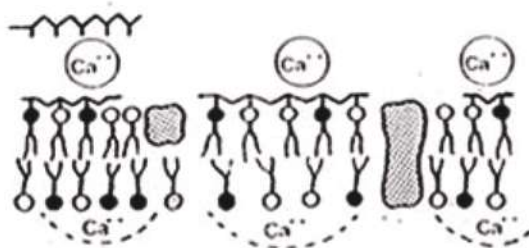
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BURN BEFORE TREATMENT



BURN AFTER TREATMENT

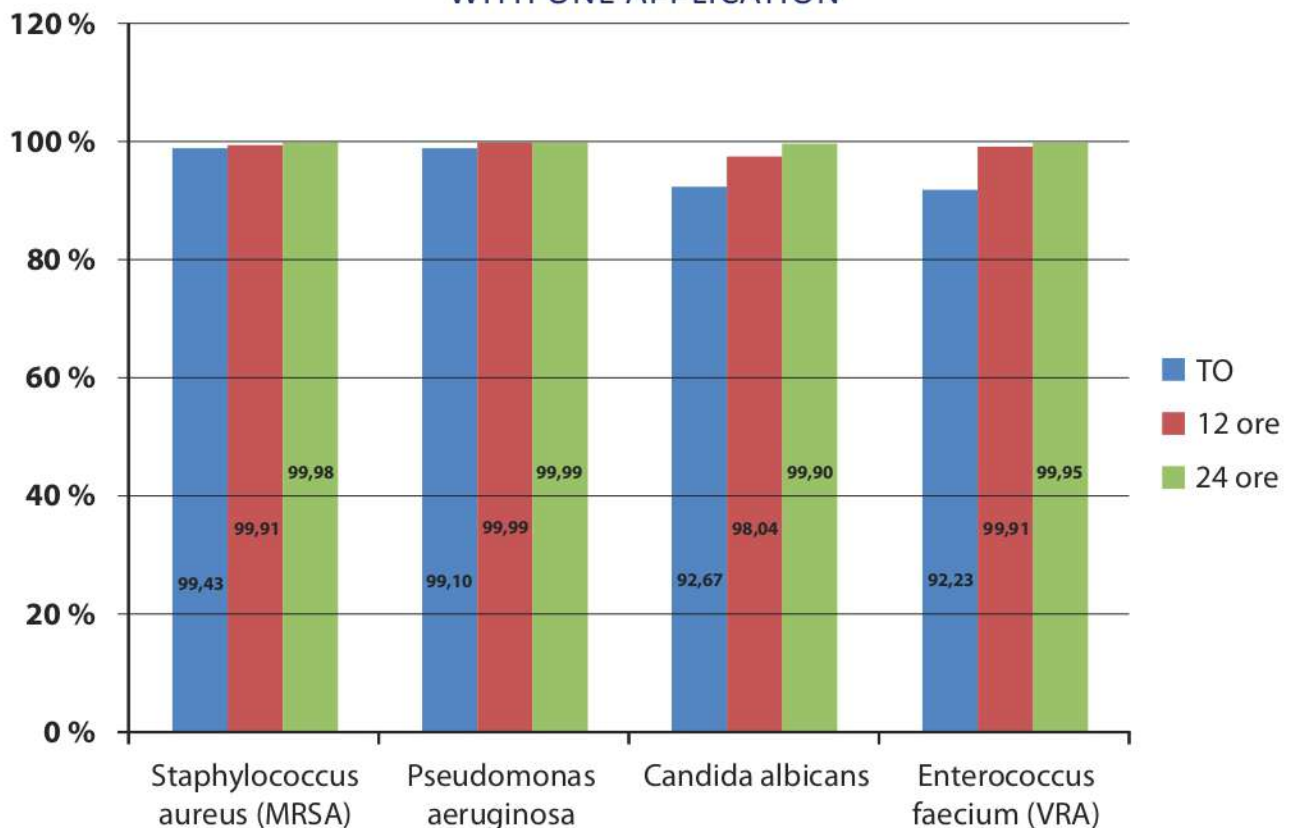
EVALUATION OF PALINGEN[®] CREAM WITH ONLY ONE APPLICATION

study carried out by EUROFINS | BIOLAB s.r.l. - Milano

COUNTING OF LIVING MICROORGANISMS (ufc/g o ufc/ml)

CONTACT TIME	Staphylococcus aureus (MRSA)	Pseudomonas aeruginosa	Candida albicans	Enterococcus faecium (VRA)
inoculum	3.8E+06 = (100%) viventi	4,2E+06 = (100%) viventi	1,5E+06 = (100%) viventi	2,2E+06 = (100%) viventi
time 0	2,2E+04 = (0,57%) viventi attività antimicrobica = (99,43%)	3,8E+04 = (0,90%) viventi attività antimicrobica = (99,10%)	1,1E+04 = (0,73%) viventi attività antimicrobica = (99,27%)	1,7E+04 = (0,77%) viventi attività antimicrobica = (92,23%)
12 hours	3,3E+03 = (0,086%) viventi attività antimicrobica = (99,91%)	2,5E+02 = (0,00595%) viventi attività antimicrobica = (99,994%)	3,3E+03 = (0,22%) viventi attività antimicrobica = (99,78%)	2,0E+03 = (0,090%) viventi attività antimicrobica = (99,91%)
24 hours	6,2E+02 = (0,016%) viventi attività antimicrobica = (99,98%)	8,0E+01 = (0,0019%) viventi attività antimicrobica = (99,998%)	1,5E+03 = (0,10%) viventi attività antimicrobica = (99,90%)	1,1E+03 = (0,05%) viventi attività antimicrobica = (99,95%)

EFFECTIVENESS OF PALINGEN[®] CREAM WITH ONE APPLICATION



ACTIVITIES OF PALINGEN[®] CREAM ON MICROORGANISMS

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not ordinary "spectator" in
the context of tissue repara-
tive processes, accelerating
time to healing, preventing
infection and scarring by mo-
dulating

with

**2 DAILY
APPLICATIONS**

