

Tentech Product Lineup Introduction

Tentech Whole Lineup







2 Line HIFU



10PL

168 Cell Fractional IPL



10 CELL

3cm x 3cm Co2 Fractional Laser



ONE THERA

Long-pulse HIFU



TENHI

Needless Fractional & Thermal RF



Dr. O acle

Dr.Oracle LED Mask 4,474 LED Lights



10 mono

Mono Thread









TONE UP FILL

RHINO FILL

FINE FILL

VAGIFILL



Regevan C°

Growth Factor Cream



Regevan 5°

Growth Factor Spray



Regevan 71

71 Ingredient Rejuvenation Ampoule





Asymmetric Cog Thread



Dr. Oracle

New Concept A.I. LED Mask



1. About Dr. Oracle LED Mask



Introduction



Dr. Oracle LED Mask is a

Aasthetic Device focused on Skin Care.





Principle

LED(Light Emitting Diode)

When current flows, it emits blue, green, yellow, and red light.

When the light of certain wavelengths is applied to the skin, biochemical reactions in the cell promote collagen production, which helps skin regeneration, whitening, and anti-pimples.

History



Niels Ryberg Finsen (1860~1904) 1903 Nobel Prize in Physiology or Medicine.



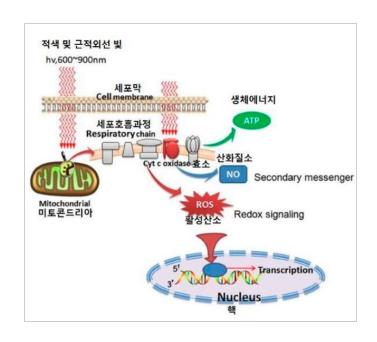
Treating tuberculosis cutis using the Carbon Arc Lamp



PBM (Photo Bio-Modulation)

When light is irradiated to the body, an enzyme called CCO in the mitochondria absorbs light and the bioenergy metabolism in the cells become active. The generation of ATP is activated, along with nitrogen oxides (Nitric Oxide, NO) and active oxygen. The nitrogen oxides produced then expand the veins to increase the circulation of the blood in the area where the light is split, and the nitrogen oxides and active oxygen also play an important role in helping the cell grow and differentiate. Light therapy is a treatment using principles that increase the overall metabolic activity of cells by light.

*Photobiomodulation (PBM) has been the main keyword of future treatment in MeSH (Medical Subject Heading) of the National Institutes of Health since 2016.



Efficacy

- Anti-inflammation
- Wound healing
- Antibiosis
- Local blood circulation improvement

- Pain reduction
- Anti-edema
- Immunity

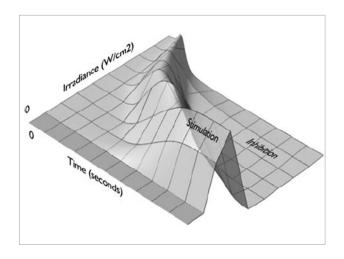


Thesis

Arndt-Schulz Law

Hugo Schulz published a paper that showed that low doses of various toxins have a stimulating effect on yeast metabolism when administered at low doses, and found the principle that weak stimuli slightly accelerate activity and stronger stimuli rather inhibit activity.

H. Schulz: *Zur Lehre von der Arzneiwirkung.* [Virchows] Archiv für pathologische Anatomie und Physiologie und für klinische Medizin, Berlin, 1887; 108: 423-445. Arndt-Schulz law.



No effect if irradiated light does not have sufficient illumination or the irradiation time is too short

Regeneration is suppressed if the illumination is too high or the irradiation time is too long.



Product Specification

Technical Specification					
Number of LEDs	Face (Standard)	3,994			
	Head (Optional)	480 (216x2 LEDs : 633nm, 830nm) (48 LDs : 650nm)			
Wave- length	5 Types				
	Face	415, 590, 633, 830nm			
	Head	633, 650, 830nm			
Intensity	3.4– 30mW/ <i>cm</i> ²				
Treatment Time	4-20 min				
기타	Phone calls, music, and voice guidance available during treatment. App Control, Data Management, Voice Recognition.				
Weight	800g				





1) Uses 4,426 LEDs + 48 LDs

Dr. Pacle



Uses 5 effective wavelengths approved by the FDA

Compact LED placement promotes skin regeneration

Use optical lenses to maintain the same light output in high density condensing and irradiated areas



2) Select Effective Wavelengths



FACE 415mm, 590mm, 633mm, 830mm **HEAD** 633mm, 650mm, 830mm











650mm

830mm

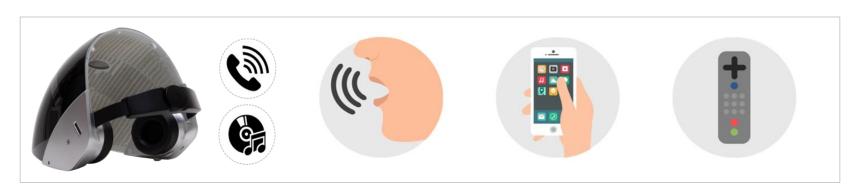


3) Maximum output $30 \text{mW}/cm^2$

When measuring the output with an effective distance of 2cm, the maximum output of a particular wavelength band is 30mW/cm2, which is **excellent compared to other products.**



4) Multiple Functions



Music Player Voice Recognition Dedicated Application

Remote Control



5) Dr. Oracle LED Mask Wavelengths

Wavelength Efficacy

(Based on the analysis of the content cited in the paper)

- •415 (Acne / Pore) Blue
- •590 (Pigmentation / Flushing / Wrinkle) Yellow
- •633 (Pigmentation / Wrinkle) Red
- •650 (Hair loss) Red
- •830 (Wrinkle / Anti-inflammation) No Color

Effect Ranking by Symptoms

(Based on the number of times cited in the paper)

•Aane / Pore: 415 • Flushing: 590

•Wrinkle: 830 633 590 •Anti-inflammation: 633 830

•Pigmentation: 633 590 •Hair loss: 650

6) Final Treatment Wavelength Combination

•415 + 633 (Acne) - Violet

•590 + 830 (Flushing / Wrinkle) - Yellow

•633 + 830 (Pigmentation / Wrinkle) - Red

•590 + 633 + 830 (Wrinkle) - Orange



Main Papers by Wavelength of LED Application

Acne 415 | Pore 415 | Wrinkle 830 | Pigmentation 633 | Flushing 590 | Anti-inflammation 633 | Hair loss 650

Acne: 415

Goldberg, D. J., & Russell, B. A. (2006). Combination blue (415 nm) and red (633 nm) LED phototherapy in the treatment of mild to severe acne vulgaris. Journal of Cosmetic and Laser Therapy, 8(2), 71-75. Tremblay, J. F., Sire, D. J., Lowe, N. J., & Moy, R. L. (2006). Light-emitting diode 415 nm in the treatment of inflammatory acne: An open-label, multicentric, pilot investigation. Journal of Cosmetic and Laser Therapy, 8(1), 31-33.

Lee, S. Y., You, C. E., & Park, M. Y. (2007). Blue and red light combination LED phototherapy for acne vulgaris in patients with skin phototype IV. Lasers in Surgery and Medicine: The Official Journal of the American Society for Laser Medicine and Surgery, 39(2), 180-188.

Pores: 415 (405~420nm+850~900nm)

Lask, G., Fournier, N., Trelles, M., Elman, M., Scheflan, M., Slatkine, M., ... & Harth, Y. (2005). The utilization of nonthermal blue (405–425 nm) and near infrared (850–890 nm) light in aesthetic dermatology and surgery—a multicenter study. Journal of Cosmetic and Laser Therapy, 7(3-4), 163-170.

Wrinkles: 830

Wunsch, A., & Matuschka, K. (2014). A controlled trial to determine the efficacy of red and near-infrared light treatment in patient satisfaction, reduction of fine lines, wrinkles, skin roughness, and intradermal collagen density increase. Photomedicine and laser surgery, 32(2), 93-100.

Lee, S. Y., Park, K. H., Choi, J. W., Kwon, J. K., Lee, D. R., Shin, M. S., ... & Park, M. Y. (2007). A prospective, randomized, placebo-controlled, double-blinded, and split-face clinical study on LED phototherapy for skin rejuvenation: clinical, profilometric, histologic, ultrastructural, and biochemical evaluations and comparison of three different treatment settings. Journal of Photochemistry and Photobiology B: Biology, 88(1), 51-67.

Pigmentation: 633

Mpofana, N., & Ramhurry, C. (2014). An Investigation into the effectiveness of light emitting diodes on treating melasma on skin type VI. American Journal of Dermatology and Venereology.

Flushing: 590 (Both papers laser-induced flushing)

Wanitphakdeedecha, R., lamphonrat, T., Phothong, W., Eimpunth, S., & Manuskiatti, W. (2019). Local and systemic effects of low-level light therapy with light-emitting diodes to improve erythema after fractional ablative skin resurfacing: A controlled study. Lasers in medical science, 34(2), 343-351.

Weiss, R. A., McDaniel, D. H., Ge

Irritation: 633

Hamblin, M. R. (2017). Mechanisms and applications of the anti-inflammatory effects of photobiomodulation. AIMS biophysics, 4(3), 337. Goldberg, D. J., & Russell, B. A. (2006). Combination blue (415 nm) and red (633 nm) LED phototherapy in the treatment of mild to severe acne vulgaris. Journal of Cosmetic and Laser Therapy, 8(2), 71-75.

Hair loss: 650

Kim, H., Choi, J. W., Kim, J. Y., Shin, J. W., Lee, S. J., & Huh, C. H. (2013). Low-level light therapy for androgenetic alopecia: A 24-week, randomized, double-blind, sham device–controlled multicenter trial. Dermatologic Surgery, 39(8), 1177-1183.

Gupta, A. K., & Daigle, D. (2014). The use of low-level light therapy in the treatment of androgenetic alopecia and female pattern hair loss. Journal of dermatological treatment, 25(2), 162-163.



7) Uses DOS-PAW Program That Categorizes 64 skin types

Checks the skin type results of the DOS-PAW program in 1 minute

and applies the treatment selected by wavelength

D(Dry) is a moisture indicator that measures how much moisture is in your skin.

O(Oil) is an oil indicator that measures the level of oliness in the skin.

(S) Sensitive is a sensitivity indicator that measures how sensitive myskin is to external stimuli.

(P)Pigment is a pigmentation indicator that measures skin pigmentation.

A(Acne) is an acne indicator that measures skin trouble.

W(Wrinkle) is a wrinkle indicator that measures how much winkles are on myskin.

	D		D	S	P	a Ca		W
	DOS	DDs	DoS	Dos	dos	d0s	dos	dos
PAW	DOS	DOs	DoS	Dos	dos	dOs	doS	dos
	PAW							
PAW	DOS							
	PAW							
PaW	Dos							
	PaW							
Paw	DOS							
	Paw							
pAW	DOS							
	pAW							
pAw	003							
	pAw							
paW	DOS							
	West							
paw	DOS							
	paw							



8) Ergonomic design

- * **Comfortable** like wearing a headset due to lightweight
- * Fixed band structure makes easy to wear **regardless of face size**
- * Relieves congestion (Comfort Gap) due to gap(about 2cm) between LED lights and face
- * Comfort Gap space allows use of **Mask packs & Ampoules** resulting in Synergy Effect







4. Comparison of other products



Product Specifications Comparison

Product Name	Dr. Oracle	C product	P product	
LED quantity	3,996 (face) / 480 (head)	1026	160	
Wavelength	5 Wavelengths Face: 415, 590, 633, 830nm Head: 633, 650, 830nm	3 wavelengths (blue/red/infrared light)	2 wavelength(red/infrared light)	
Control Methods	Mobile Application Remote Control	Mask Touch Mobile Application	Controller	
Treatment part	Face(T-zone)/Neck/Scalp/Eyes	Face / Neck (No LED around Eyes/Lips/Nose)	Face (No LED around Eyes/Lips/Nose)	
Treatment time	4-20 min	Standard 20 min., Fast Mode 9 min.	Standard 9 min.	
Phone Call Function	Phone Call Available during the treatment	No	No	
Music Play	Listening to music during the treatment	No	No	
Voice guidance	Voice guidance	No	No	
Mobile Application	Yes Control, Database Management, Music Play, Etc.	Yes (Control and Database Management)	No	



THANK YOU

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