

# CINDERELLACARE<sup>®</sup>



*Midnight is the time when melanin stops its step.  
CinderellaCare keep the Cinderella Time for 24 hours.*

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 **PHARCOS**

**CinderellaCare was selected as Bronze at  
In-Cosmetics Asia 2014 innovation zone award !!!**



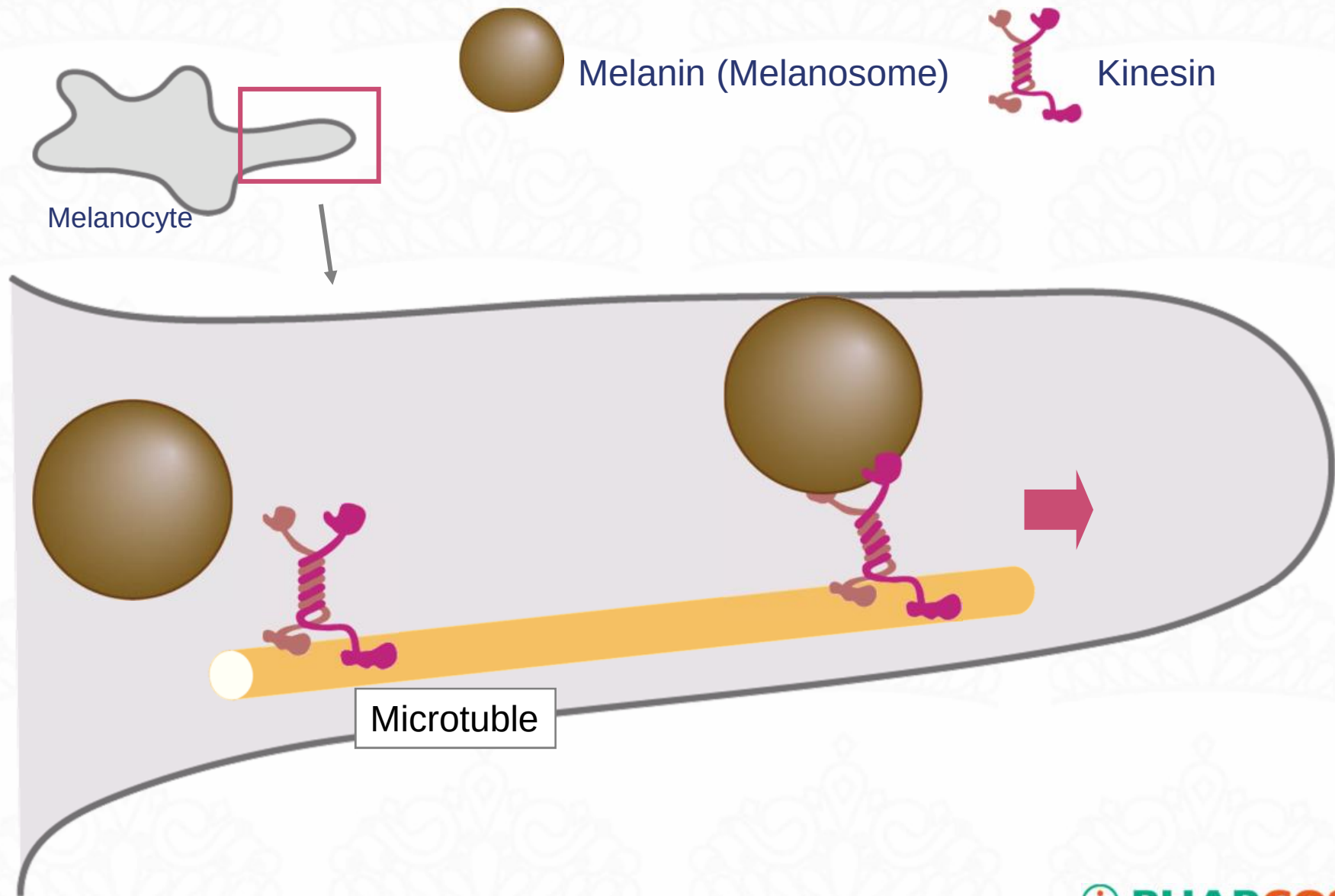
# *CinderellaCare*

***The whitening raw materials of the new mechanism to “stop the step of melanin”***

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*Keep the “Cinderella Time” all day long for snowy skin.*

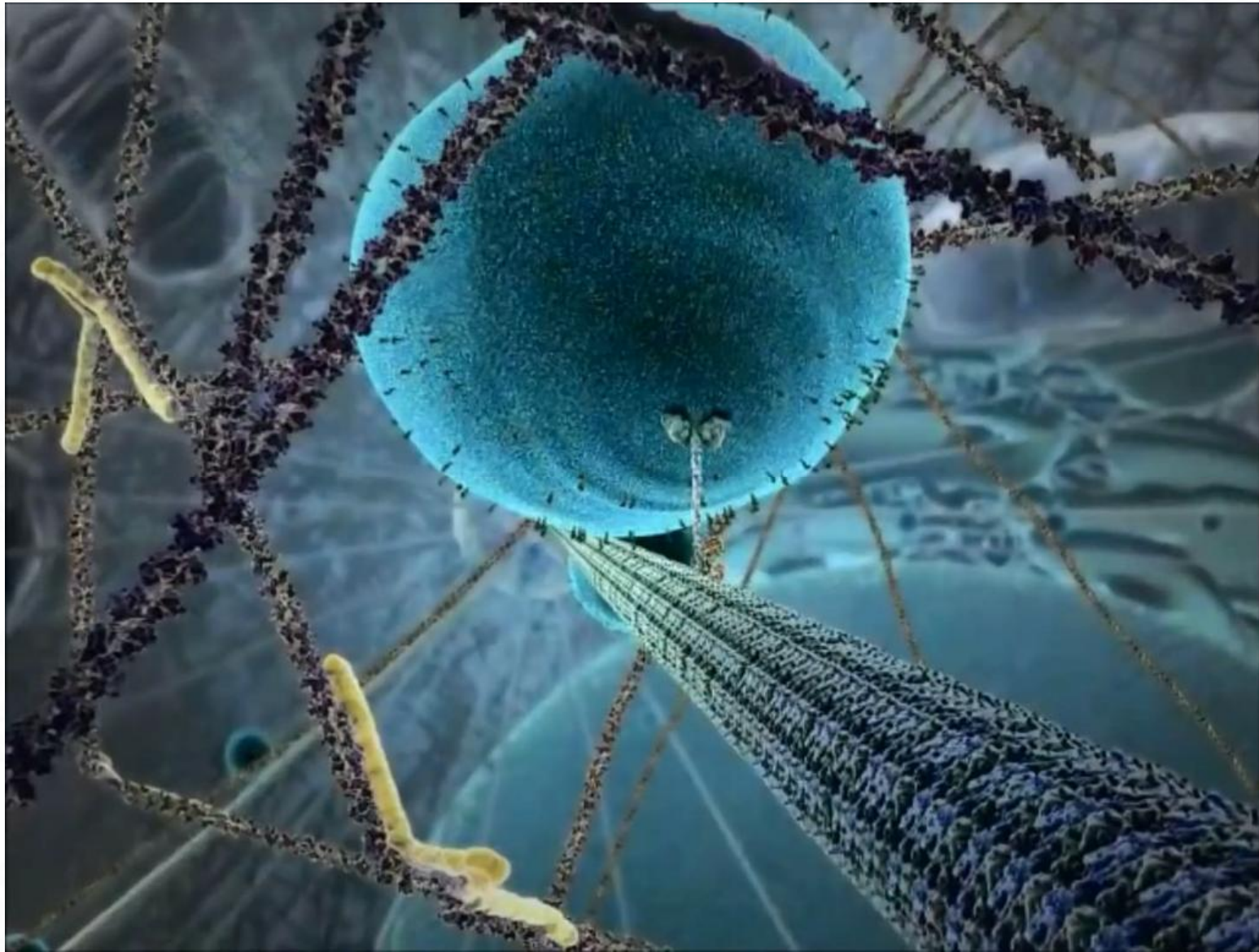
## A carrier of melanosome





# *Kinesin Carrying Melanin*

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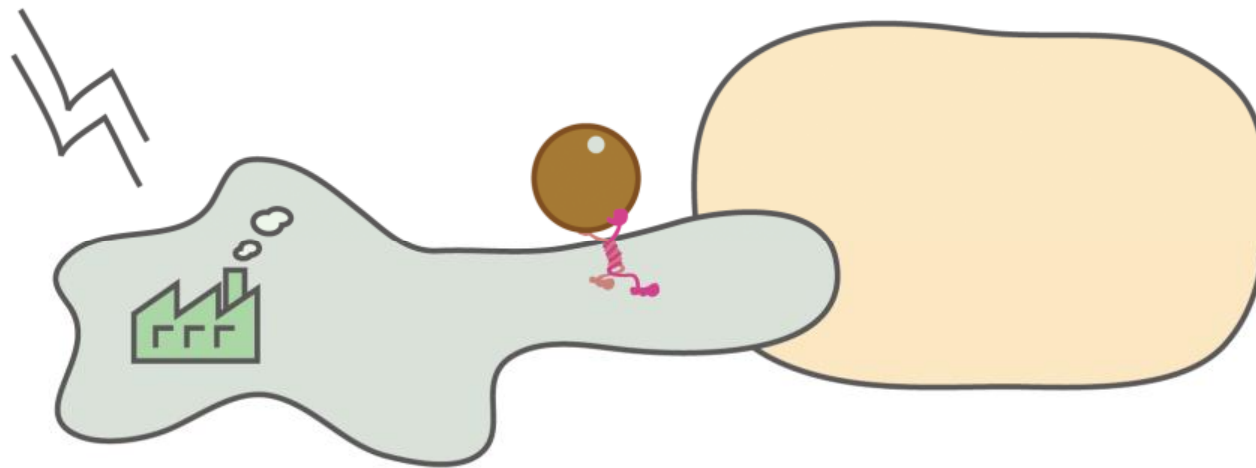


Referred from YouTube

<http://www.youtube.com/watch?v=uGK9CYetCvM&feature=related>

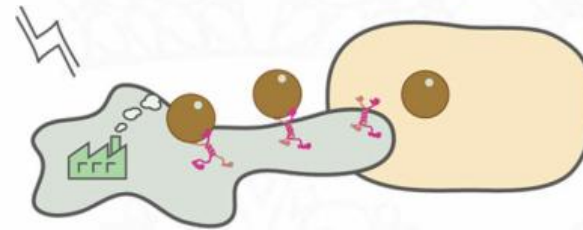
## ***Stop the melanosome walking***

Kinesin, “the melanin transporter” lifts melanosome and walks towards epidermal cells earnestly.



Then, if this bagman disappears, what occurs?

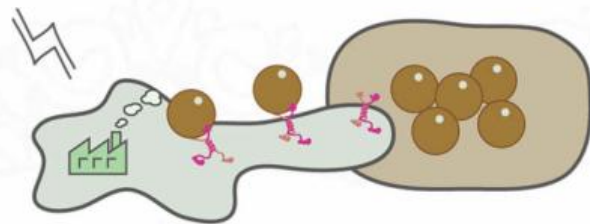
# **Stop the melanosome walking**



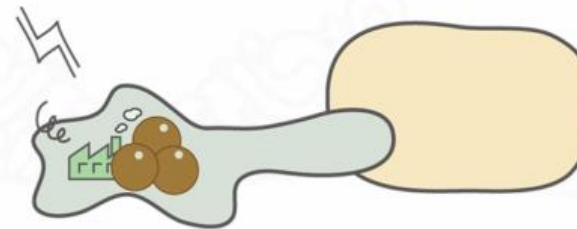
Melanocyte

Keratinocyte

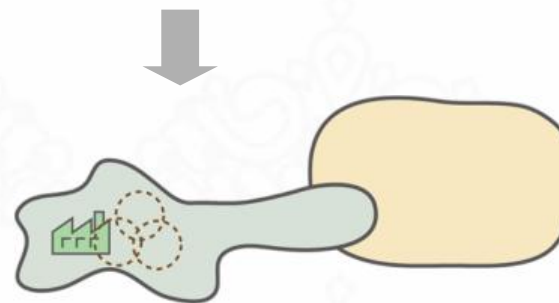
Because of the stimulation such as UV, the melanin made in melanocyte is carried to the keratinocytes by kinesin.



While stimulation continues, we continue making melanin in the melanocyte, and it is carried to the keratinocyte.



When the kinesin disappears, the melanin is stopped in melanocyte.



Because melanin accumulates, the amount of production of the melanin decreases.

The melanin which accumulated is digested before long.



# ***Material development to stop step of the melanin***

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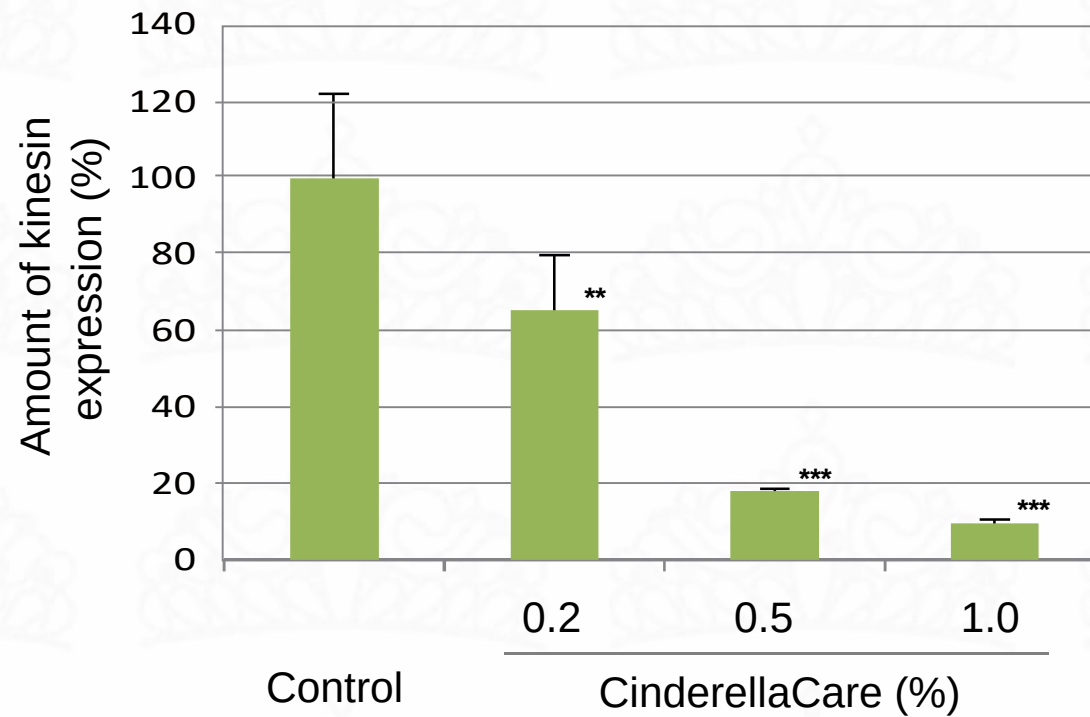
Wild Thyme (Thymus. Serpyllum)





# *Inhibition of kinesin expression*

Kinesin



\*\* p<0.05

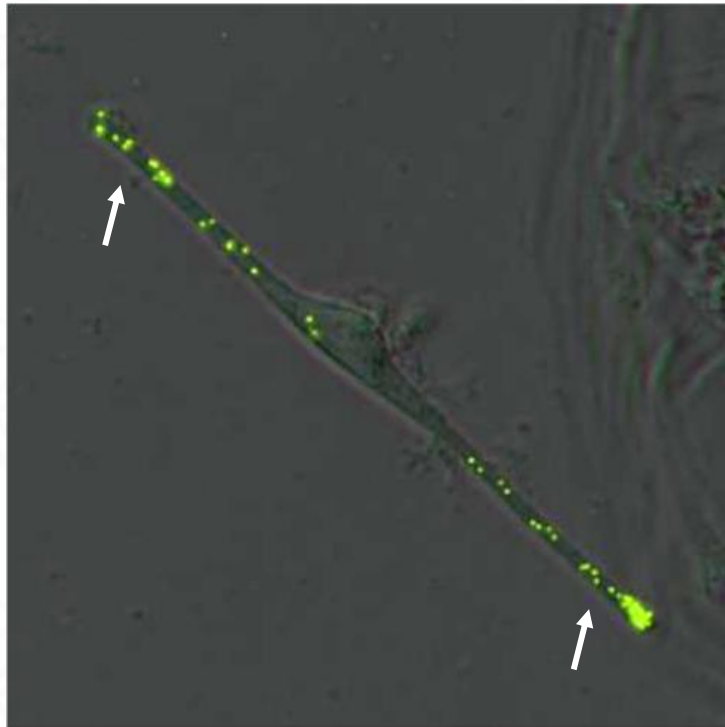
\*\*\* p<0.01



# Regulation of melanosomal localization

(fluorescence beads)

Control



CinderellaCare 0.4%





# **Regulation of melanosomal localization**

(Melanosome)

Control



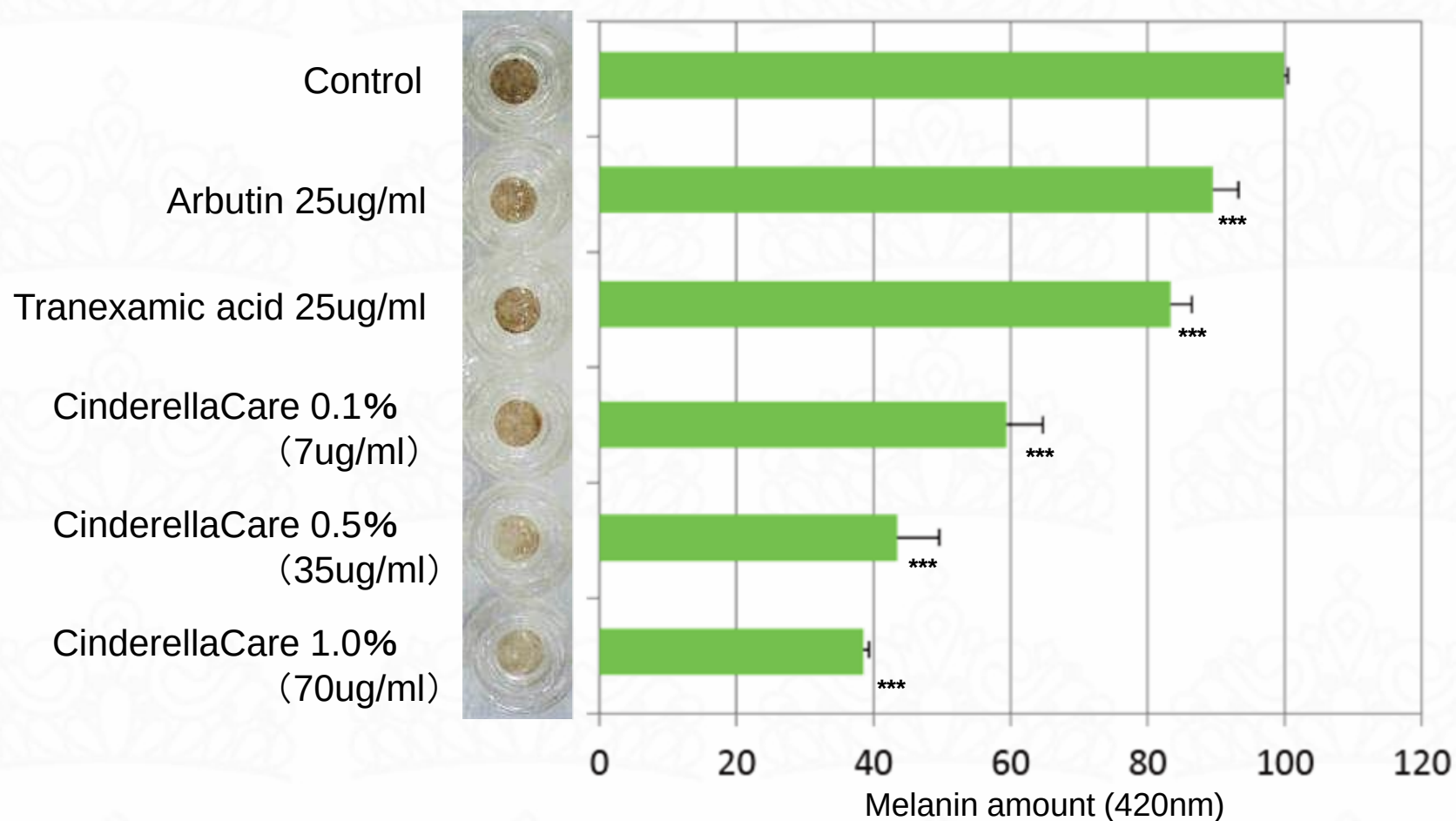
CinderellaCare 0.5%







## Whitening test by the 3D model skin

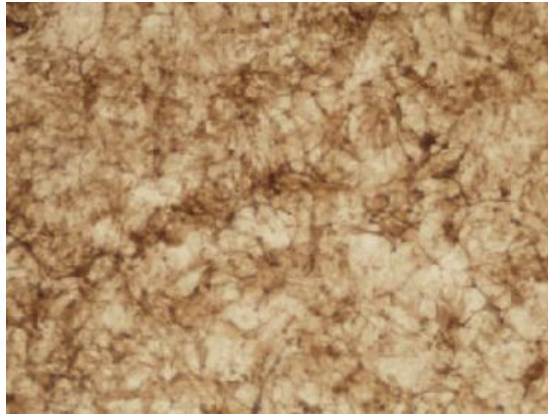


\*\*\* p<0.01

Total UVB: 20mJ /10days



## Whitening test by the 3D model skin



Control



Arbutin 25ug/ml



Tranexamic acid 25ug/ml



CinderellaCare 0.1%  
(7ug/ml)



CinderellaCare 0.5%  
(35ug/ml)



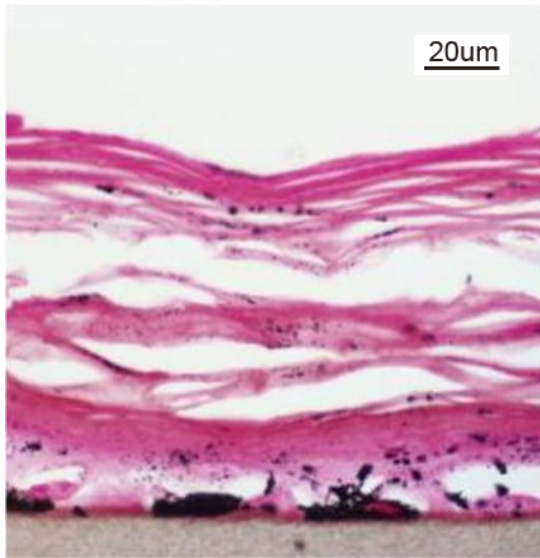
CinderellaCare 1.0%  
(70ug/ml)

Total UVB : 20mJ /10days

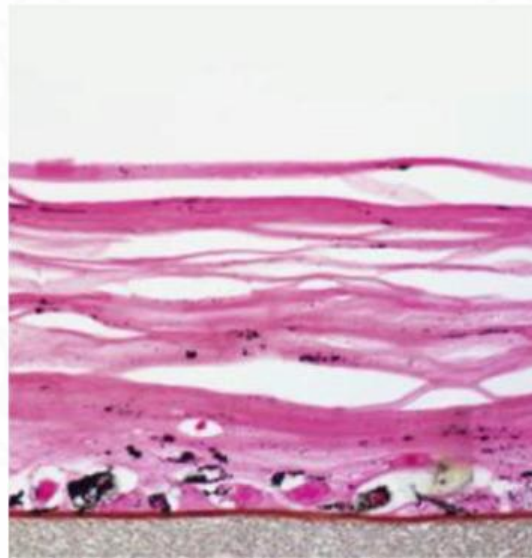


## *Whitening test by the 3D model skin ver.2*

Control



Arbutin 50ug/ml



CinderellaCare 1.0%



Total UVB : 30mJ /14days

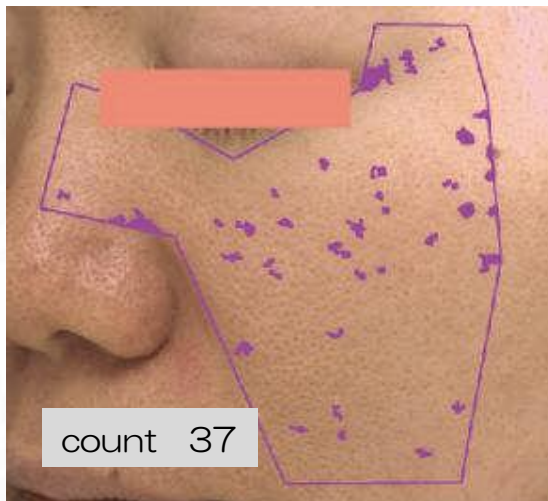




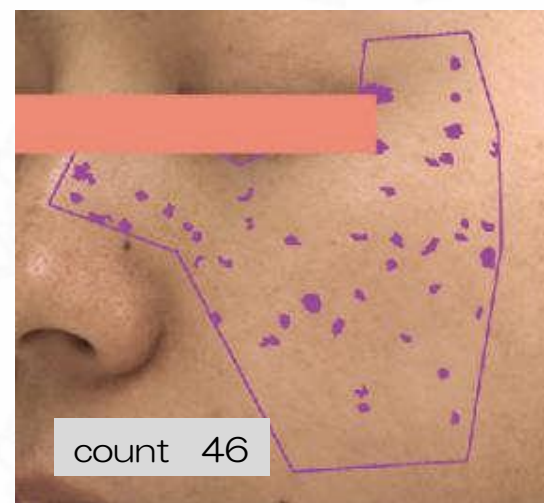
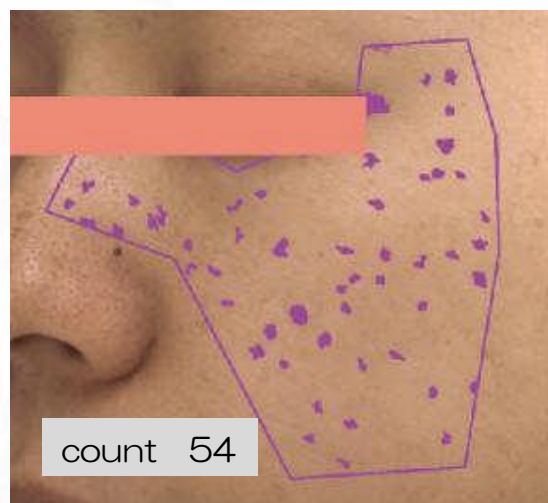
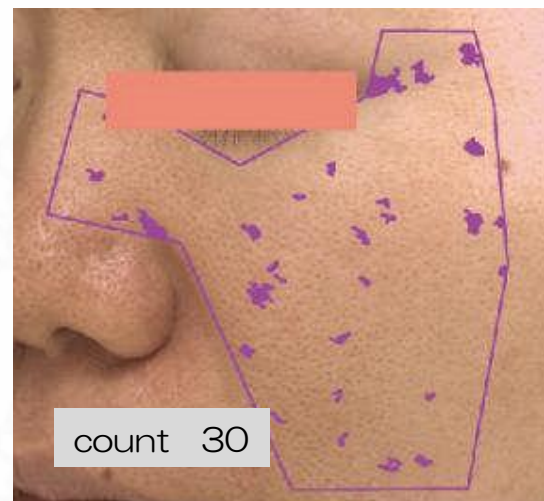
## *The whitening test in vivo* (number of spots)

CinderellaCare 1%

0w

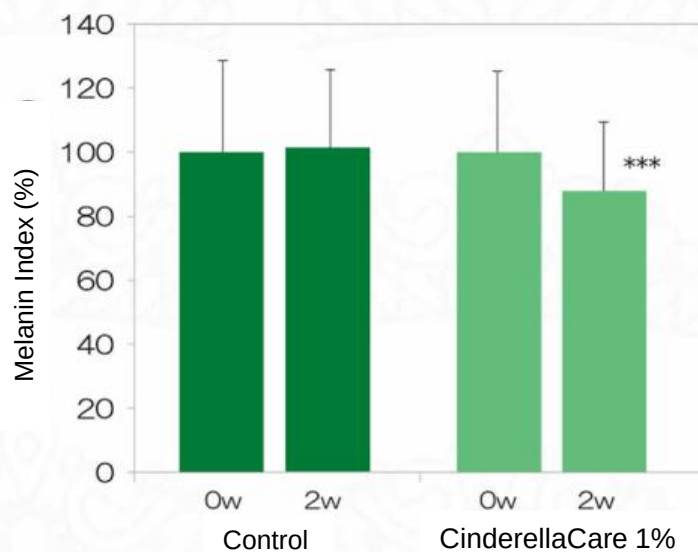
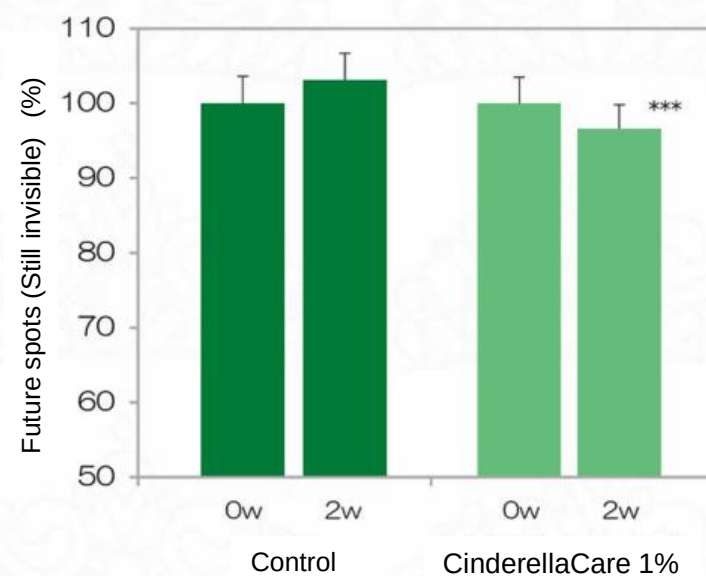
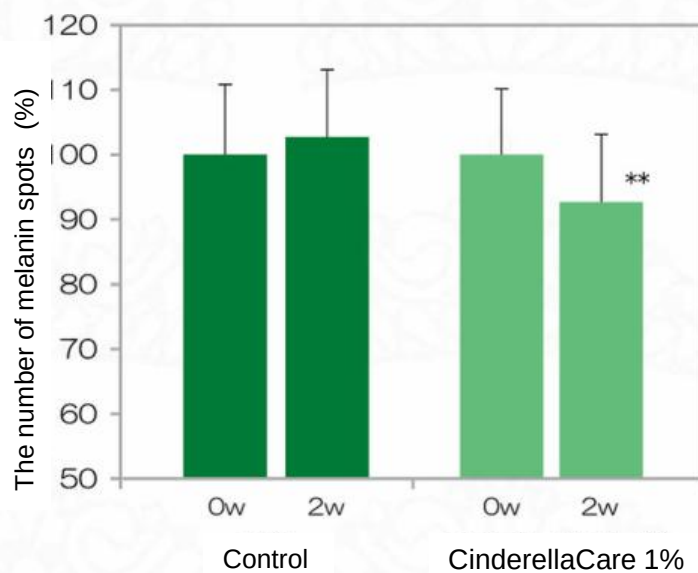


2w





# *The whitening test in vivo* (human)



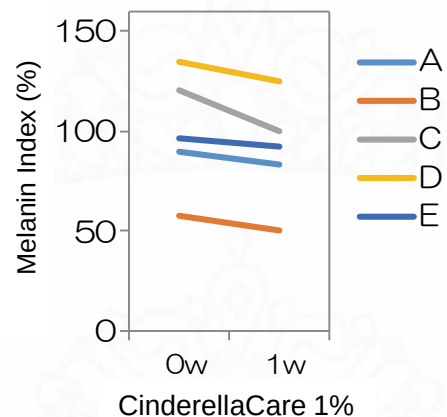
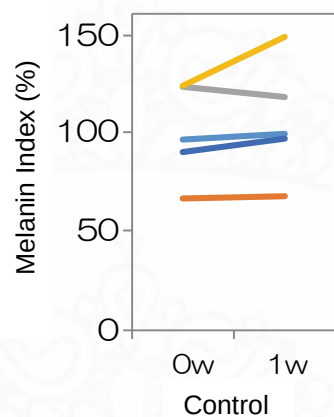
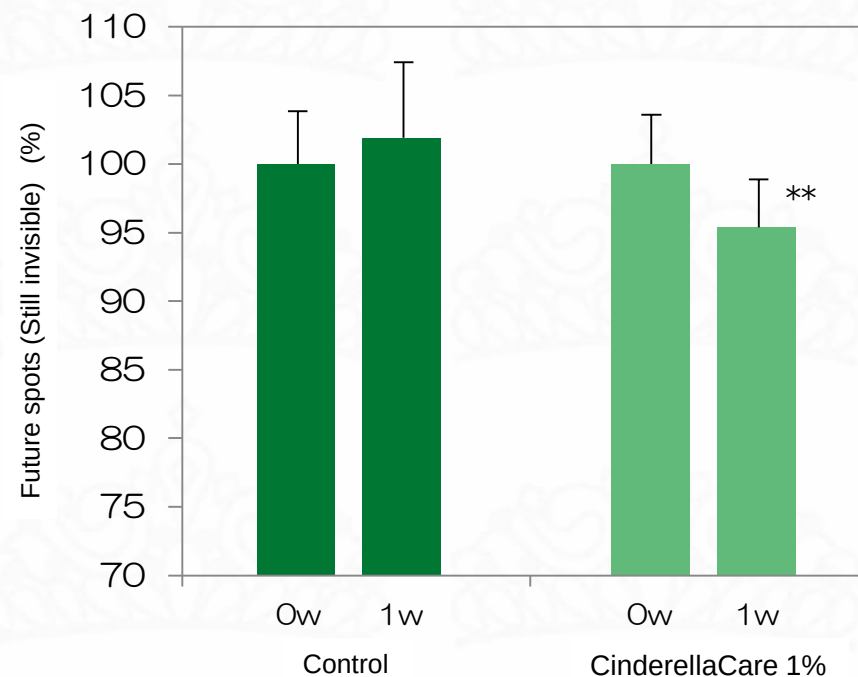
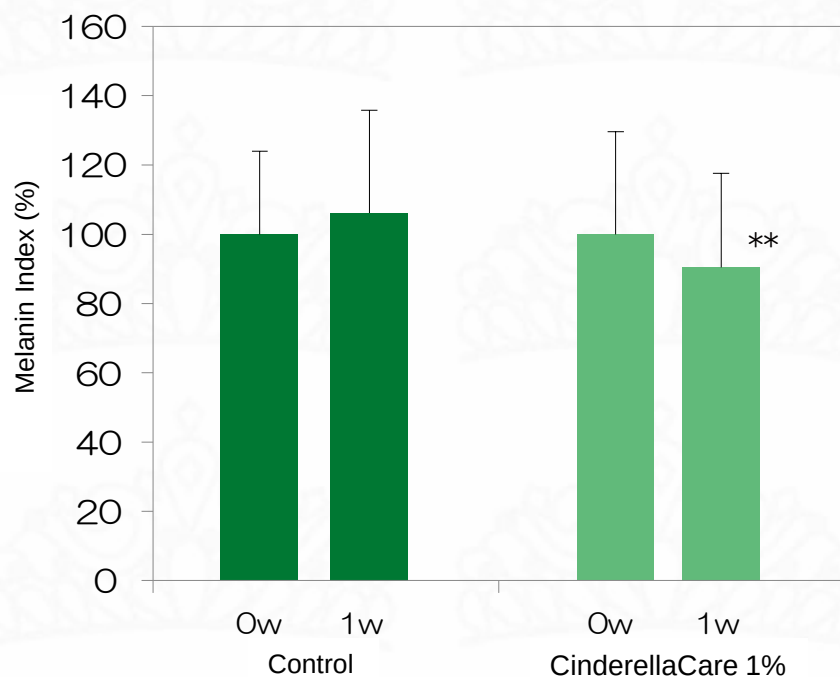
n=21

\*\* : p<0.05

\*\*\* : p<0.01



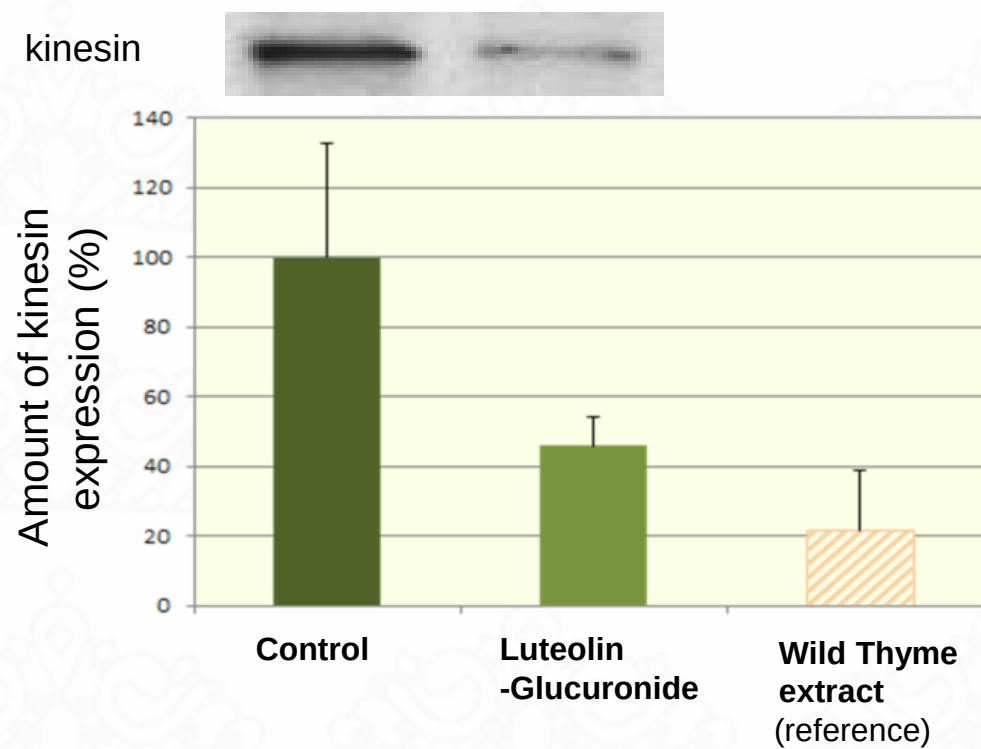
## The whitening test in vivo (short term)



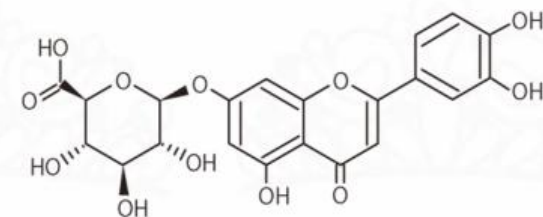
n=5

\*\* p<0.05

# Active compound



equivalent to 1% of products



Luteolin-7-O-Glucuronide



## *Is CinderellaCare Only For The Whitening?*

Factors Related Melanin Activities

**Whitening  
Spots**

**Dullness**

**Dark Circles**

**Pores**

**Anti-Aging**







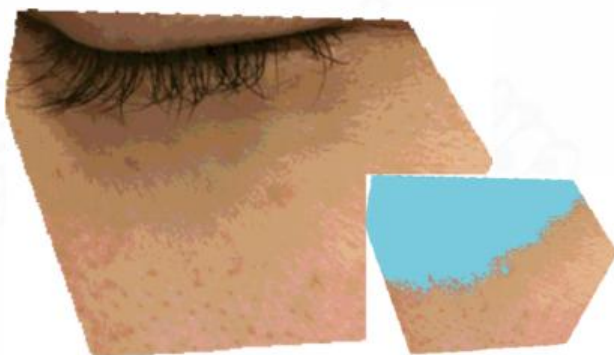
## ***Dark Eye Circles Improved***

**New  
Data!**

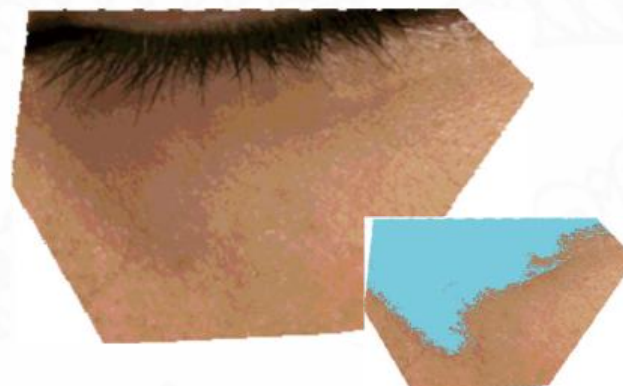
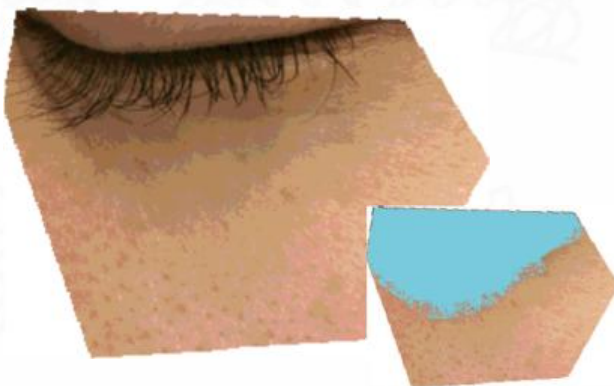
20's Woman

30's Man

0w



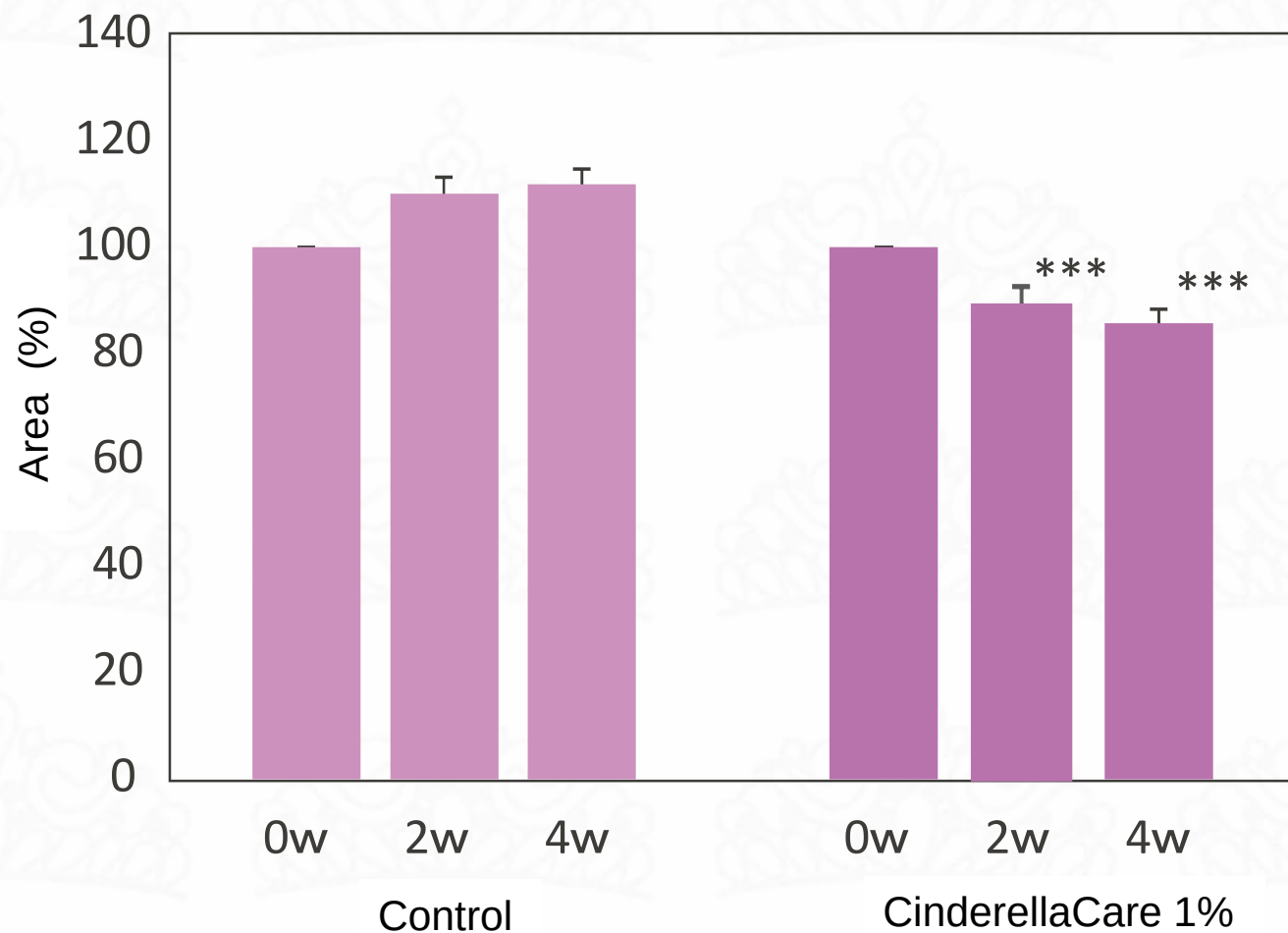
4w





## Improvement of Dark Eye Circles

New Data!



\*\*\*  $p < 0.01$

n=21



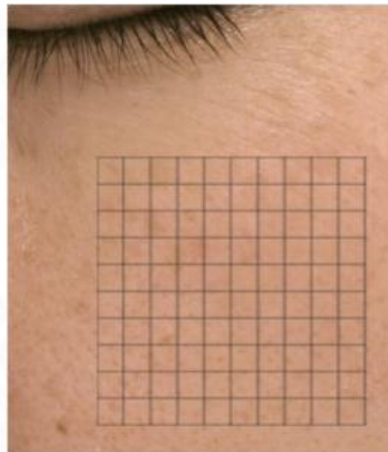
# Dullness (Visual Age) Improved

New Data!

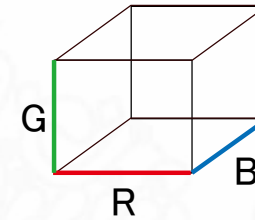
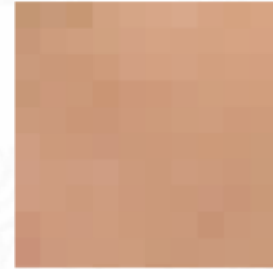
$$\text{Dullness} = \frac{R \cdot SD}{R \cdot Ave} \times \frac{G \cdot SD}{G \cdot Ave} \times \frac{B \cdot SD}{B \cdot Ave}$$

30's Woman

0w

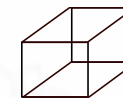
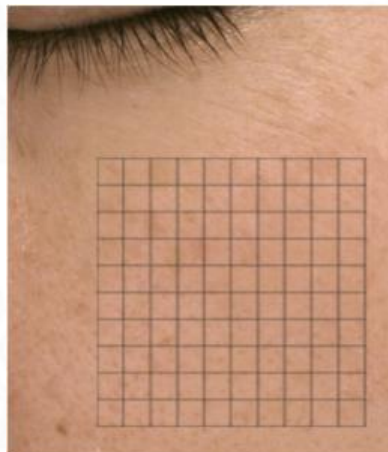


Divided cheek part (25mm x 25mm) to 100 squares. Equated each squares to calculate RGB.



**Calculate the dispersion of the color with formula.**

4w

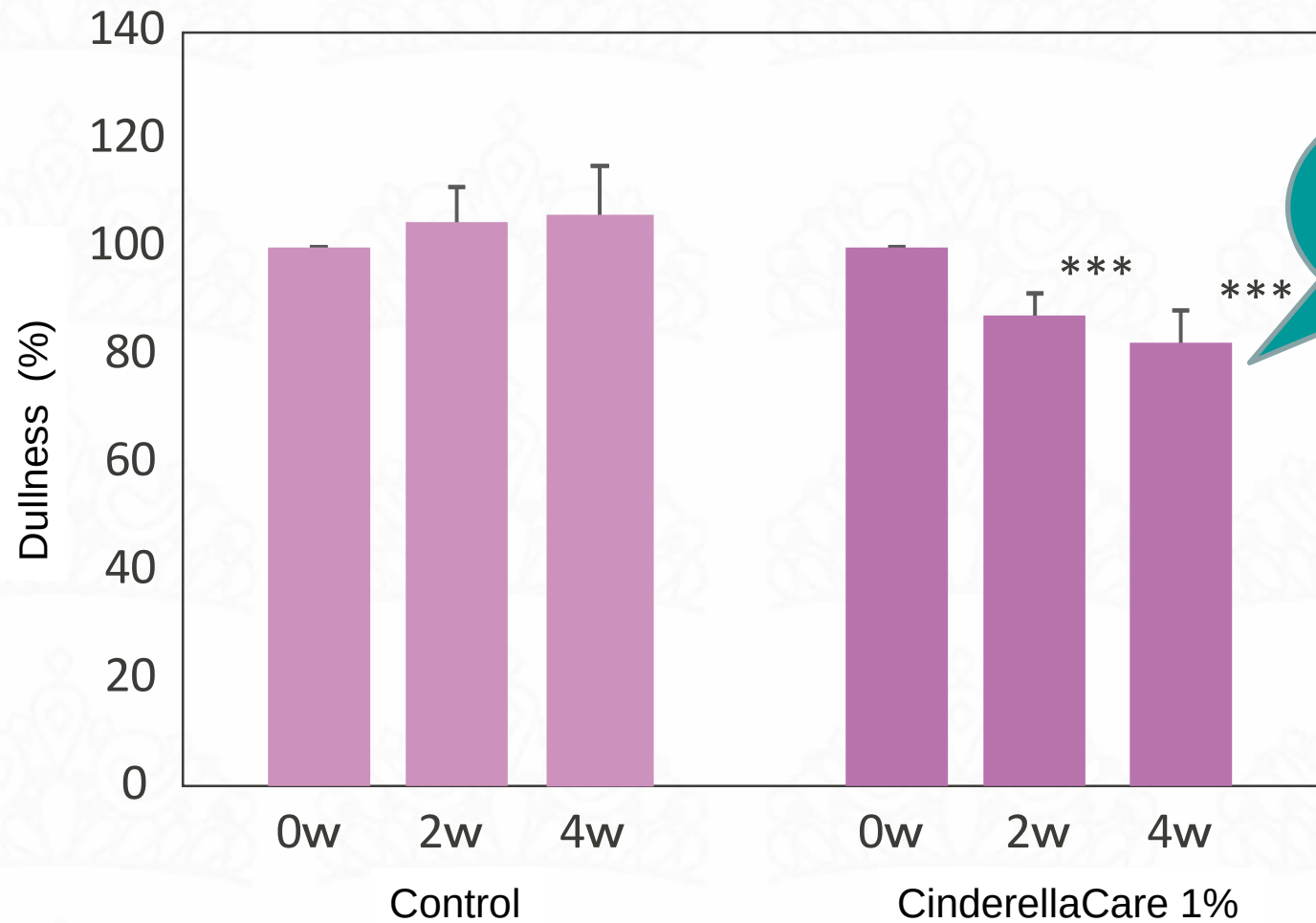


52.3% Decreased



## Improvement of Dullness

New  
Data!



Visual Age  
- 4.8 years  
old younger

\*\*\* p<0.01

n=18





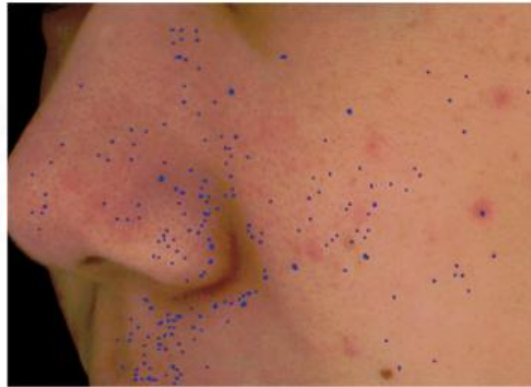
## ***Made Pores Less Noticeable***

**New  
Data!**

20's Woman

30's Woman

0w



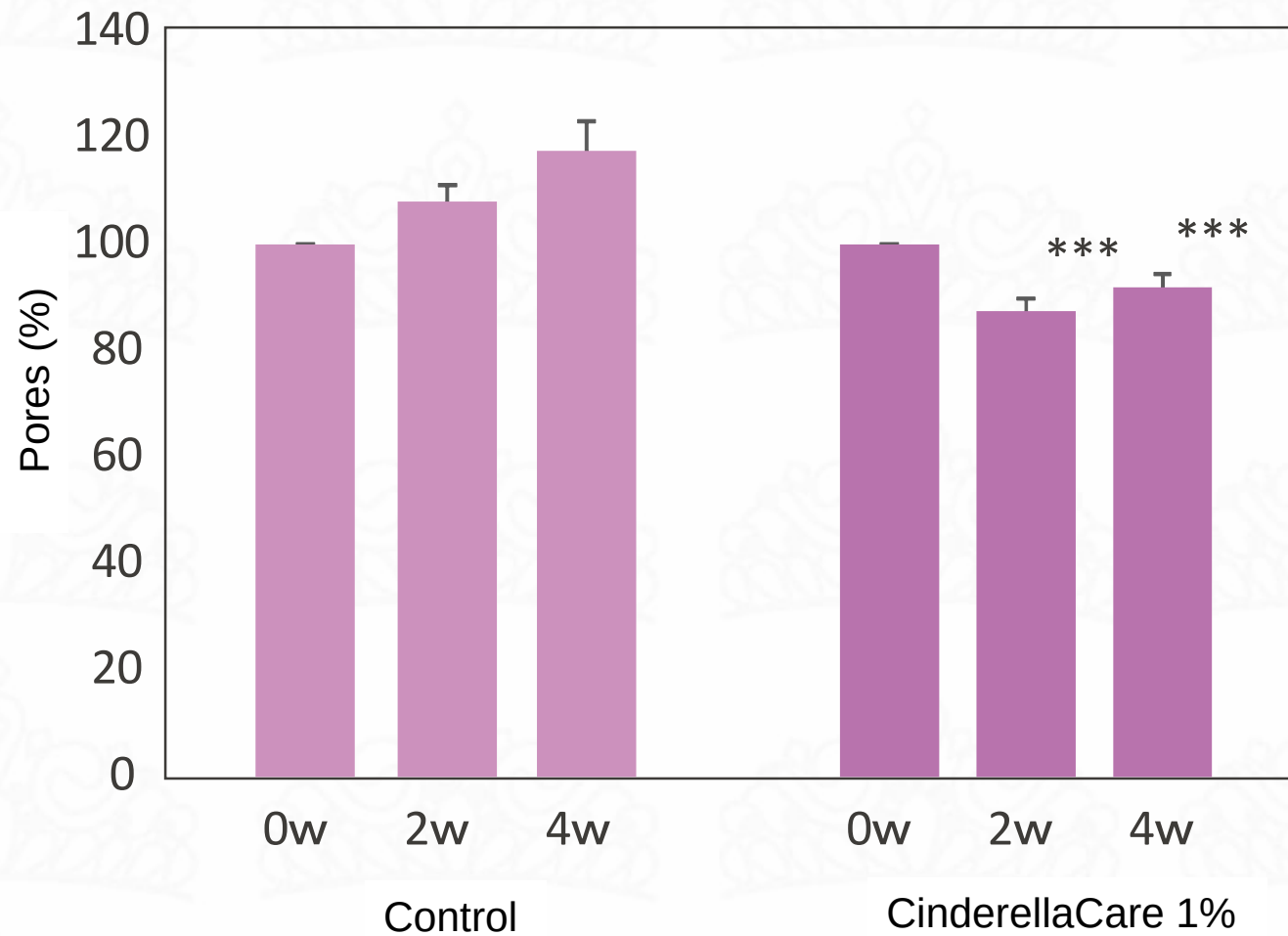
4w





## Improvement of Pores Appearance

New Data!



\*\* p<0.05

\*\*\* p<0.01

n=21

# *CinderellaCare*

***Control of circadian rhythm  
related melanin production.***

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## *What is the “Cinderella Time” ?*

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“Enemy of the beauty is sleep shortage”

Many women have felt that it is good condition with the skin in the morning when they slept well.

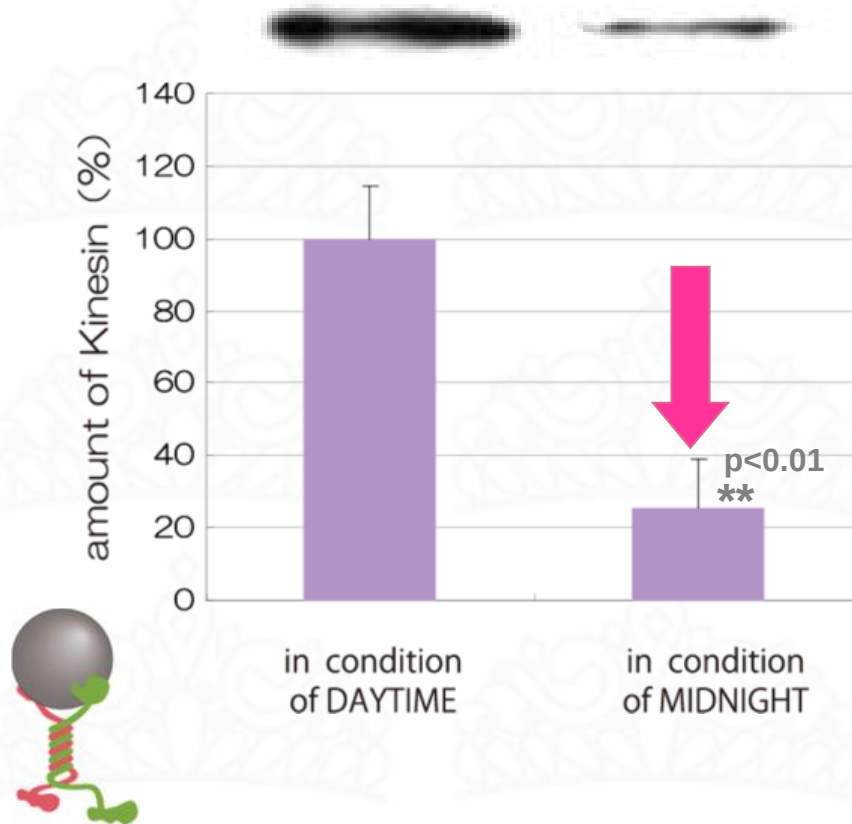
The relations of sleep and the skin are deeply.  
It may be said that the healthy skin is made by enough sleep.

We call the midnight period (from 0:00 am to 2:00 am) as “Cinderella Time” because it is the time skin returning to its perfect condition.





## *whitening effect only in the midnight*



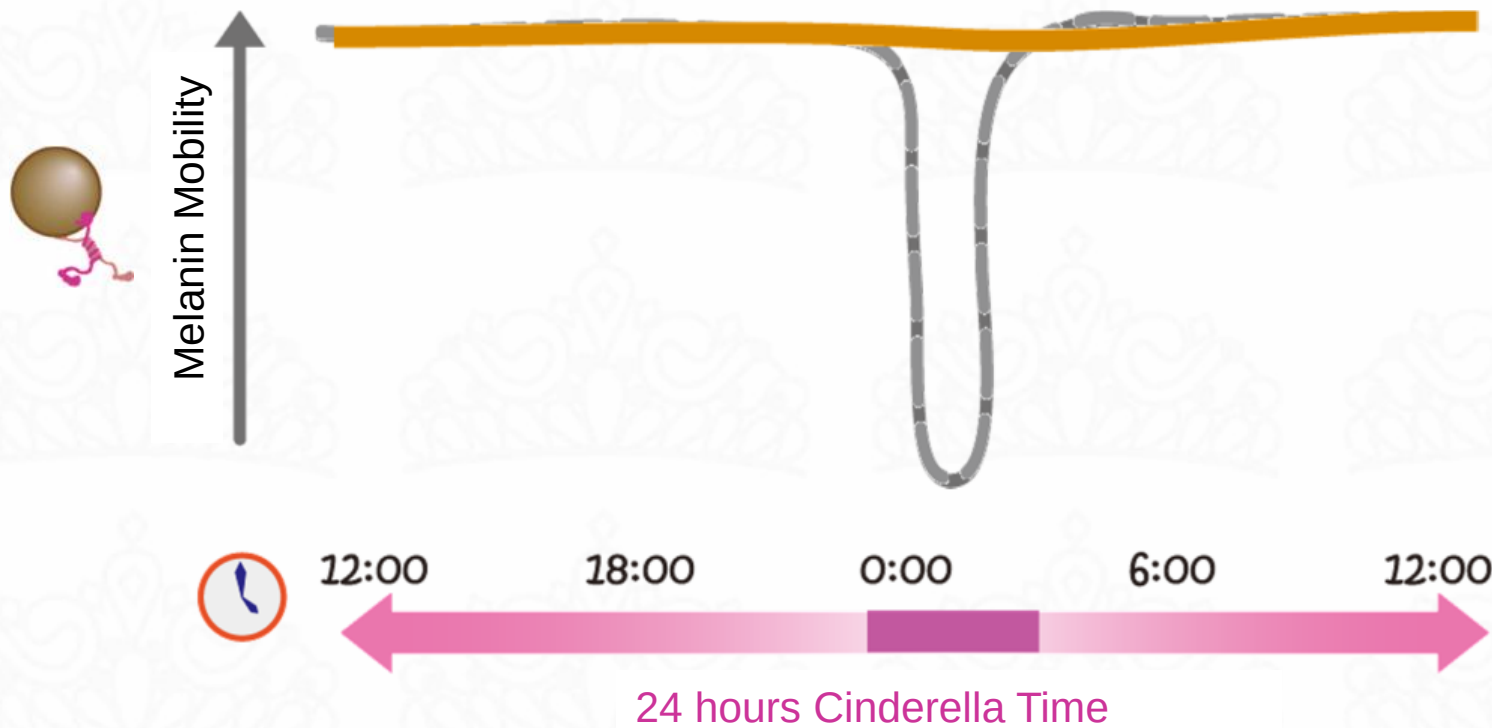
As for the cells which we cultured under conditions of the midnight, expression of the kinesin was inhibited.

**The CinderellaTime to make beautiful skin was time for whitening too.**





## Extension of Cinderella Time





## Conclusion



- There is a motor protein called “Kinesin” in Melanocyte.
- Whitening effect by inhibiting the activity of Kinesin.
- Very new innovative mechanism for whitening effect.
- Not only for the whitening, but also for the **anti-aging**.
- Cinderella Time = Less activity time of Kinesin  
“**Time for Whitening**”
- Extend precious Cinderella time.



## Product information

| Product Specification  |                                                                                                                    |
|------------------------|--------------------------------------------------------------------------------------------------------------------|
| Description            | Light yellowish brown to brown liquid or light greenish brown to greenish brown liquid, having characteristic odor |
| Identification         | Flavonoid, Luteolin glycoside                                                                                      |
| Purity                 | Heavy metals 20ppm max., Arsenic 2ppm max.                                                                         |
| Residue on evaporation | 0.3 ~ 1.2 w/v %                                                                                                    |
| INCI                   | Butylene Glycol, Water, Thymus Serpillum Extract                                                                   |
| IECIC 2014             | 丁二醇, 水, 欧百里香 (THYMUS SERPILLUM) 提取物                                                                                |
| Composition            | Butylene Glycol (50.00%), Water (49.25%), Thymus Serpillum Extract (0.75%)                                         |