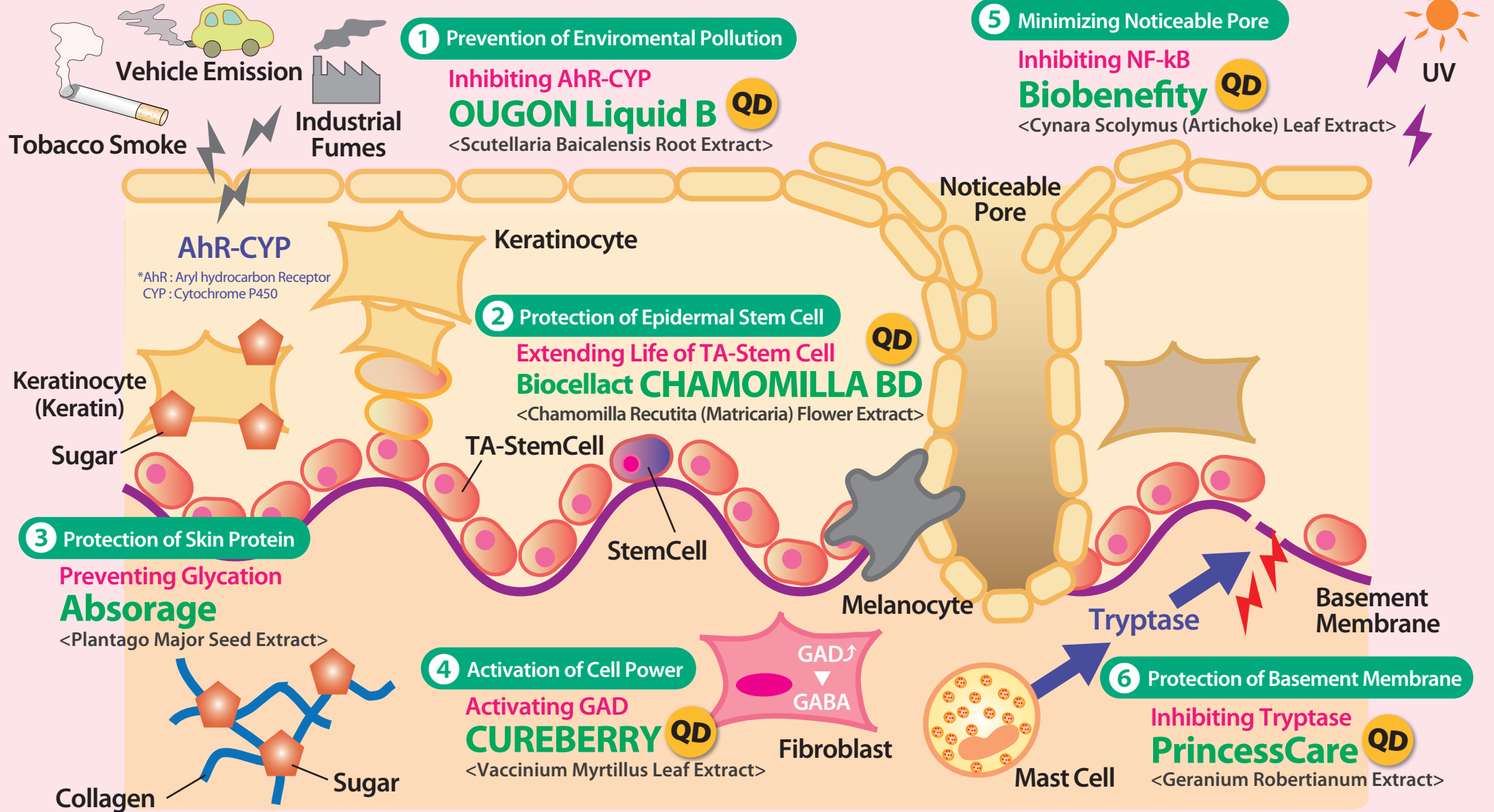


# New Anti-aging Targets



# 1 Prevention of Environmental Pollution

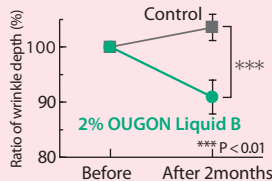
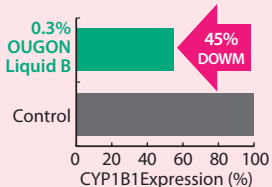


## OUGON Liquid B <Scutellaria Baicalensis Root Extract>

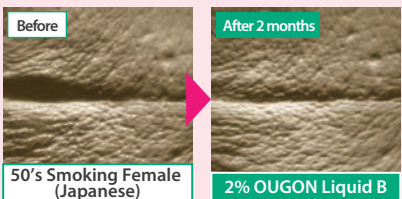


### Inhibiting AhR-CYP

Environmental pollution agents activate AhR and induce the expression of CYP1B1. AhR-CYP signal induces the expression of MMP-1, causing skin aging.



In the trial for smoker or passive smoker, OUGON Liquid B recovered wrinkles.



OUAGON Liquid B inhibited CYP1B1 expression induced by tobacco smoke as environmental stress.

# 4 Activation of Cell Power

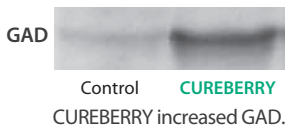


## CUREBERRY <Vaccinium Myrtillus Leaf Extract>

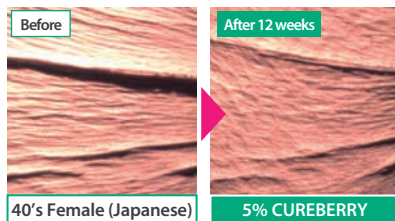
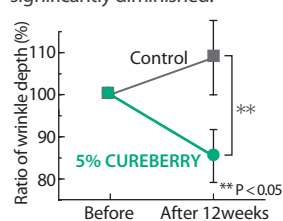


### Activating GAD

GABA enhances the dermal fibroblasts activity as well as mental healing effect. GABA is produced with Glutamic acid decarboxylase (GAD).



After the application of lotion containing 5% of CUREBERRY for 12 weeks, the wrinkle significantly diminished.



# 2 Protection of Epidermal Stem Cell

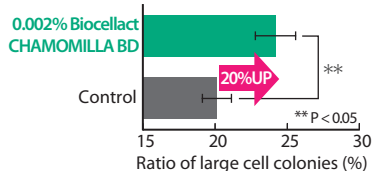


## Biocellact CHAMOMILLA BD <Chamomilla Recutita (Matricaria) Flower Extract>



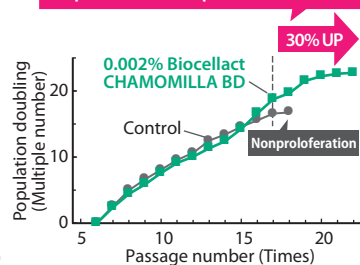
### Extending Life of TA-Stem Cell

Epidermal fresh cells are supplied by TA (Transit Amplifying)-stem cell, the original source of cells. TA-stem cell loses proliferative capacity by aging and the skin becomes senescent.



Biocellact CHAMOMILLA BD inhibited cell senescent by stress.

The period of the cell proliferation extends



Biocellact CHAMOMILLA BD prevents skin aging by extending the life span of TA-stem cells.

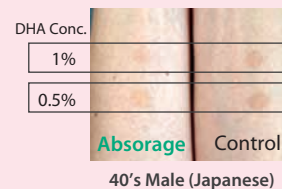
# 3 Protection of Skin Protein

## Absorage <Plantago Major Seed Extract>



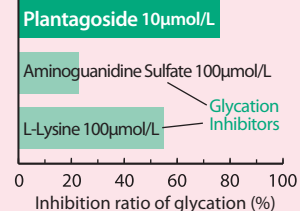
### Preventing Glycation

Glycation of proteins in the skin causes aging of the skin such as loss in clarity, lowering of elasticity or resiliency and wrinkles.



Dihydroxyacetone(DHA) solution stains the skin by glycation. Absorage prevented skin browning by glycation of skin protein.

Equivalent to Absorage 0.93%



Plantagoside, the active compound of Absorage, prevented glycation of keratinocyte protein.

# 5 Minimizing Noticeable Pore



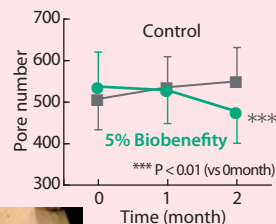
## Biobenefit <Cynara Scolymus (Artichoke) Leaf Extract>



### Inhibiting NF-kB

NF-kB activation causes hyperproliferation of keratinocytes enlarging pores and increases in the melanin production causing darkening of pores.

Biobenefit minimized noticeable pores through NF-kB inhibition.



Noticeable pores indicated red dots are decreased.

# 6 Protection of Basement Membrane

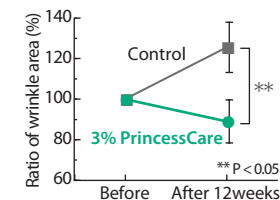


## PrincessCare <Geranium Robertianum Extract>

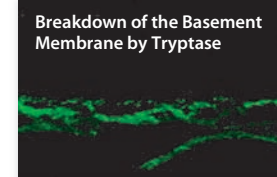


### Inhibiting Trypsase

PrincessCare inhibits trypsin activity and prevent extracellular matrix degradation as well as basement membrane damage leading to perfect anti-photoaging care.



After the application of 3% PrincessCare solution for 12 weeks, the wrinkle significantly diminished.



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