

6<sup>th</sup> Edition of International Conference on  
**Pharmacognosy and  
Medicinal Plants****PERSPECTIVES ON DERMATOLOGICAL AND COSMECEUTICAL PROPERTIES  
OF COMPOUND K****En Hyung Kim**

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**G**insenosides are representative pharmaceutical compounds found in various forms in *Panax ginseng*, a traditional medicinal plant. There have been many reports describing the biological activities, including anti-inflammatory, anti-tumor, and anti-dementia effects, of several ginsenosides. The biological actions of these ginsenosides have been closely related to their biotransformations by intestinal microbiome. They are converted to their metabolites Rg2, Rg3, compound K, and others by human intestinal microflora following ingestion. The main functional component detected in mammalian blood or organs after oral administration of ginseng or ginsenosides is compound K. Compound K has been reported to exhibit diverse biological functions, including antitumor, antidiabetic, antiallergic, and anti-inflammatory effects *in vitro* and *in vivo*. Recently, antiaging effects of ginsenosides in human skin have been reported from clinical trial and *in vitro* model data. Ginsenosides have hence been proposed as promising natural cosmeceutical agents. We reviewed the biotransformation and delivery of compound K. Also biological effects of ginsenosides, especially compound K, on skin health and its potential use as cosmeceutical agents was studied.

**Recent Publications**

1. Kim E H (2017) Pruritic urticarial papules and plaques of pregnancy occurring postpartum treated with intramuscular injection of autologous whole blood. *Case Rep Dermatol.* 9(1):151–156.
2. Kim E H (2017) A case of facial partial unilateral lentiginosis treated with low-fluence 1,064 nm Q-switched neodymium-doped yttrium aluminum garnet laser. *Case Rep Dermatol.* 9(2):30–34.
3. Kim E H, Park M J, Park S and Lee E S (2015) Increased expression of the NLRP3 inflammasome components in patients with Behçet's disease. *J Inflamm (Lond).* 2(12):41.
4. Nam S W, Ko S Y, Lee Y K, Shin S M and Kim E H (2014) The incidence of birthmarks in Korean newborn infants. *Neonatal Med.* 21(3):151–157.
5. Lee J Y, Park J Y, Kim E H, Tak M J and Lee E S (2012) Simultaneous involvement of nervous and gastrointestinal systems in Behçet's disease. *Ann Dermatol.* 24(2):225.

**Biography**

En Hyung Kim finished her residency in Dermatology at Ajou University Hospital and is currently the Director of Department of Dermatology at Cheil General Hospital and Women's Healthcare Center. As a Scientist, she is interested in Skin Physiology and Inflammatory Mechanisms. As a Clinician, she makes effort to find new innovative ways to treat her patients effectively and safely.

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