Compound for the Prevention Of Rosacea Inflammation

Tech ID: 23458 / UC Case 2013-153-0

BACKGROUND

Rosacea is a chronic skin condition characterized by recurrent episodes of flushing, erythema, vasodilation, telangiectasia, edema, papules, pustules, hyperplasia, fibroplasia, itching, burning, pain, and skin tightness. Symptoms of rosacea are exacerbated by sun exposure, hot weather, immersion in hot water, high humidity, sweating, exercise, emotional stress, and spicy food. The skin condition usually begins between the ages of 30 to 50 and occurs more frequently in women than men. An estimated 16 million people are affected by rosacea inflammation in the United States. Oral and topical antibiotics are usually the first line of treatments prescribed for rosacea patients. However, they can cause serious side effects in some patients and do not address the underlying condition. Topical application of steroids may also help alleviate the symptoms, but it can also aggravate the condition. In addition, long term treatments can be inconvenient, lasting for as long as two years.

TECHNOLOGY DESCRIPTION

Previously an increase in the number of mast cells has been associated with rosacea in patients. Building on this knowledge, UC San Diego researchers have found that a compound that is traditionally used to treat allergic disorders has the ability to block the activation of mast cells and in turn prevent the induction of skin rosacea.

APPLICATIONS

A topical application has the potential to be developed from this invention for rosacea patients.

STATE OF DEVELOPMENT

UCSD researchers have not only validated the efficacy of this compound in a murine model, but also have delineated its mechanism of action.

INTELLECTUAL PROPERTY INFO

This technology is available for licensing.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	9,801,848	10/31/2017	2013-153

Additional Patent Pending

RELATED MATERIALS

- Mast cells are key mediators of cathelicidin-initiated skin inflammation in rosacea. Muto Y, Wang Z, Vanderberghe M, Two A, Gallo RL, Di Nardo A. J Invest Dermatol. 2014 Nov;134(11):2728-36. doi: 10.1038/jid.2014.222. Epub 2014 May 20. PMID: 24844861

CONTACT

University of California, San Diego
Office of Innovation and Commercialization
innovation@ucsd.edu
tel: 858.534.5815.

OTHER INFORMATION

KEYWORDS

rosacea, skin, inflammation

CATEGORIZED AS

- **Medical**
  - Disease: Autoimmune and Inflammation
  - Disease: Dermatology

RELATED CASES

2013-153-0