Topical Drugs To Reduce Excessive Hair Growth

Tech ID: 25323 / UC Case 2015-222-0

BACKGROUND

Excessive hair disorders (hypertrichosis, hirsutism) can have severe impact on an individual's self-esteem and ability to interact successfully in the workplace and social settings. Existing therapies, with a potential for long-term hair removal, include laser therapy and/or electrolysis. These require multiple courses, are expensive and may not be fully or permanently effective. While hirsutism may respond to medical/hormonal therapies, such as oral contraceptive pills (OCPs), glucocorticoids, or antiandrogens such as spironolactone, these often have adverse side effects such as fatigue, pain, weight gain, depression. Furthermore, many patients find that they still require laser or electrolysis in addition to medical therapy. Therefore there is a large unmet need for safe, simple and cost-effective treatments for hypertrichosis.

TECHNOLOGY DESCRIPTION

Scientists at the University of California, San Diego (UCSD) have developed a new topical use and dermal delivery of sulfonylureas to inhibit hair growth by targeting specific potassium-gated channels that are located in the skin. Since Cantu syndrome is a disorder with severe diffuse hypertrichosis that is caused by a mutation in the potassium-gated channel present in the skin, it can serve as a genetic model to determine the effectiveness of topical interventions to block potassium channel-mediated hair growth.

APPLICATIONS

The invention can potentially help not only the patients with Cantu syndrome, but also the large number of patients with other causes of hypertrichosis or hirsutism. It may be applied prophylactically to avoid excess hair growth secondary to some medications (e.g. diazoxide and cyclosporine).

RELATED MATERIALS


PATENT STATUS

Patent Pending