

Australian Bush Bioactives

Australian Indigenous native plant bioactive extracts and compounds with potent non-steroidal anti-inflammatory activity

Benefits

- Novel bioactives display non-steroidal anti-inflammatory activity
- Equivalent efficacy to corticosteroids
- Novel mechanism of action
- Safe, clear and odourless extract
- Socially, ethically and sustainable entrepreneurship project supporting Aboriginal homeland communities



Background

The significance of this project is the potential to develop a new topical, non-steroidal anti-inflammatory treatment for dermatitis and psoriasis. Compounds in development are unrelated to those in current clinical use, possibly with a novel mechanism of action and improved safety profile.

Topical steroids are widely used in the management of inflammatory skin conditions such as dermatitis and psoriasis. While topical steroids therapies are generally effective and well tolerated when used at low strengths and on a short-term basis, the need to use more potent steroids on a more long term-basis in more severe disease can have undesirable side effects.

The limitations of these therapies, particularly in terms of their side-effect profiles, has driven the ongoing search for new drug entities potentially with novel mechanisms of action and improved safety profiles.

Technology

Novel compounds of the clerodane furanoditerpenoid type have been extracted and isolated from the native Australian plant, *Dodonea polyandra*.

Using a well-established animal model of skin inflammation we have demonstrated compounds have anti-inflammatory activity.

This activity is comparable to that seen with commonly used steroidal anti-inflammatory agents (including hydrocortisone and betamethasone) in the same model.

In addition, initial work has indicated the compounds have a different mechanism of action from other commonly used non-steroidal anti-inflammatory agents.

Potential Markets

Compounds and/or botanical extracts can be used the following three markets:

1. Therapeutic anti-inflammatory
2. Complementary and alternative therapies
3. Natural personal care

IP Status

Patents for this technology have been granted in Australia, US, Japan and Europe.


Partnering Opportunities


We are seeking co-development partners and technology licensees for the development of therapeutic anti-inflammatory pharmaceuticals, complementary and alternative therapies and personal care products.

Our current focus is the development of topical formulations for treatment of dermatitis and psoriasis however compound could also be made available for testing on other animal models to interested parties.

Contact Us

UniSA Ventures
T: +61 8 8302 5300
E: unisaventures@unisa.edu.au

 @UniSAVentures

 [linkedin.com/company/unisaventures](https://www.linkedin.com/company/unisaventures)