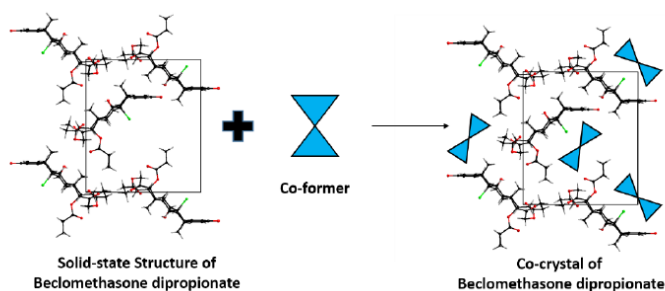


Co-Crystal Drugs - Beclomethasone

THE INVENTION

Beclomethasone is a corticosteroid which prevents the release of substances in the body that cause inflammation. It is primarily used to prevent and control symptoms (wheezing and shortness of breath) caused by asthma by inhalation. It can also be used as a cream or ointment for inflammatory skin disorders. The invention relates to the introduction of a guest molecule to the Beclomethasone, which alters its physical properties without interacting with or altering the active pharmaceutical ingredient (API).



NOVELTY

Creating co-crystal forms of drugs is relatively new and does not change the application or the chemical properties of the API. However, it enables pharmaceutical companies to create new and improved formulations for products, because:

- The API becomes soluble in water, which is safer for human consumption (reduces irritation and side effects) and the environment
- The API has increased solubility in media other than water
- Increased solubility leads to increased bioavailability, improving the effectiveness of the API
- Increased bioavailability of the API means less API is required to manufacture end product

APPLICATION FIELDS

The licensee can gain an edge over competing products by introducing new formulations for existing products which are safer and more effective.

If the licensee can show equivalence in the lab, additional FDA testing is not required to create new formulations and market new products. The University of Malta can provide data showing the difference in solubility between the pure API and the co-crystallised form. In addition, guest molecules are taken from list of chemicals 'generally regarded as safe for use in the body'.

The development was executed at and supported by the University of Malta, sole owner of the rights. The university's IP is managed by its Knowledge Transfer Office. Inquiries shall be submitted to knowledgetransfer@um.edu.mt, or further information may be obtained on +356 2340 3887.

IP STATUS

A patent application (no. GB 1604125.3) was filed in UK by the University of Malta in March 2016.

COMMERCIAL INTEREST

We are looking for potential licensees to license the rights to using beclomethasone in its co-crystal form. We are also interested in hearing from companies and researchers who would like to develop new crystal forms of drugs and other materials.

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