

Activated Charcoal for Treating RA

Our ref no: 2460

Background

Inflammation is a protective response by the immune system to tissue damage and infection. However, in some circumstances the inflammatory response can damage the body. A significant inflammatory condition is rheumatoid arthritis (RA), which affects about 0.5-1% of the human population.

Current treatments for inflammatory conditions have a number of disadvantages, including expense and/or severe side effects. While the widely used treatment with steroids, for instance, can be effective there are a number of serious side effects.

New and alternative treatments currently used for RA are biologicals (e.g. antibodies and soluble receptors), disease modifying anti-rheumatic drugs (DMARDs) and non-steroidal anti-inflammatory drugs (NSAID's). However, also these drug classes suffer from disadvantages.

As a result of lack of efficacy, development of resistance, unacceptable side-effects and expense of these treatments and route of administration, it is hugely desirable to find alternative treatments for RA.

Technology

Professor Brian Foxwell of Imperial College London has identified anti-inflammatory indications as a second medical application for activated charcoal. Activated charcoal can be taken orally, it is inexpensive, and has a long shelf life and fewer side effects when compared to current treatments.

Application Features

The main application of the activated charcoal is the prevention and treatment of inflammatory arthritis or a related condition. It can also be administered in combination with a further anti-inflammatory agent.

Target Market

The key target market is the 'supplements' market in which the activated charcoal has the appeal of being natural, inexpensive, readily available and easy to use by the patient.

Development Stage

Imperial Innovations is seeking national patent protection in the major global markets.

Excellent in-vivo data has been obtained from experiments in the CIA model. Innovations are now seeking a partner to further test, develop and market the activated charcoal as a supplement for prevention and treatment of RA or other inflammatory disorders.

For further information on this technology please contact:

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About Imperial Innovations

Imperial Innovations is one of the UK's leading technology transfer and commercialisation companies. The company was founded in 1986 and its ordinary shares admitted to trading on the AIM Market of London Stock Exchange plc in July 2006, raising £25 million at an offer price of 365p and £1 million by means of a public offer. In November 2007, the company raised a further £30 million by means of a placing of new ordinary shares with investors.

The company's integrated approach encompasses the identification of ideas, protection of intellectual property, development and licensing of technology and formation, incubation and investment in technology businesses. A wide range of technologies are commercialised within the areas of healthcare, energy, environment and emerging technology trends.

Based at Imperial College London, the company has established equity holdings in 89 technology businesses and is managing 156 commercial agreements as of 31 July 2008. Imperial Innovations also commercialises technologies originating from outside Imperial College.

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About Imperial College

Consistently rated amongst the world's best universities, Imperial College London is a science-based institution with a reputation for excellence in teaching and research that attracts 12,000 students and 6,000 staff of the highest international quality. Innovative research at the College explores the interface between science, medicine, engineering and business, delivering practical solutions that improve quality of life and the environment - underpinned by a dynamic enterprise culture.

Since its foundation in 1907, Imperial's contributions to society have included the discovery of penicillin, the development of holography and the foundations of fibre optics. This commitment to the application of research for the benefit of all continues today, with current focuses including interdisciplinary collaborations to improve health in the UK and globally, tackle climate change and develop clean and sustainable sources of energy.

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