

# FINALIST IN THE BUSINESS IMPACT – ASPIRING CATEGORY

## Imperial Innovations/Imperial College London

### Circassia

Circassia develops treatments for common allergies, such as cats, house dust mites, and ragweed. The company's most advanced development programmes use its proprietary Toleromune technology. This novel approach is based on research undertaken at Imperial College London, and involves desensitising sufferers.

### Innovation

The company's Toleromune™ treatment differs from most traditional immunotherapeutic treatments which use the whole allergen, rather than the specifically selected sections which Circassia's technology uses. Use of the whole allergen is a high risk approach which can lead to serious side effects for patients.

The company has achieved positive results in the past two years, with a number of successful completions of clinical trials of a number of its leading products. These positive results have provided strong indicators to allow next stage development for its cat, house dust mite, grass and ragweed therapeutics.

### Knowledge transfer

Through a combination of in-house development and active in-licensing, Circassia has built a strong IP position in the field of immunotherapy comprising 14 patent families.

Imperial Innovations supports Circassia through a combination of technology transfer activities and investment – including seed funding later converted to equity. Circassia also spent time in 2006 in Imperial Innovations' Incubator facility which provides office space in central London for start-up companies, most of which are spinouts from Imperial Innovations.

Imperial Innovations played an important part in the technology transfer process that led to Circassia's development. Early patents to protect the new technology were prosecuted by Imperial Innovations before being transferred to Circassia, who began commercialising the technology, as well as developing further patents in-house.

### Impact

Circassia has raised £32.6 million to develop its novel allergy therapeutics. The company employs an outsourcing model for its drug discovery, and currently employs nine staff. In addition, as a result of this outsourcing model Circassia holds agreements with a number of companies worldwide, including Bachem, Pharm-olam, Cetero Research, Nova Laboratories and Tepnel.

The global allergy market is currently underserved, despite the huge numbers of sufferers worldwide. Estimates suggest that allergies affect 25% of the population in the US and Europe, and this figure continues to grow year on year. In the US alone, seasonal allergic rhinitis (hay fever) accounts for four million missed work days a year. The current market for immunotherapy is \$750 million a year, but estimates suggest that the direct medical expenditure attributable to allergic rhino-conjunctivitis (on products such as anti-histamines to alleviate symptoms) is around \$5 billion a year. Independent research estimates that the market for Circassia's four most advanced products could be worth \$2.7 billion a year in the US.

### Key points

- A huge, currently underserved global market
- Novel allergy therapeutics
- Positive results from phase II clinical trials
- £32.6 million development funding raised
- Company employs nine staff

### Primary team

Steve Harris, Chief Executive

Charles Swingland, Deputy Chairman and Head of Business Development

Rod Hafner, Senior VP R&D

Imperial Innovations Technology Transfer team, Imperial Innovations Investment team

