

Excellence in Chemistry

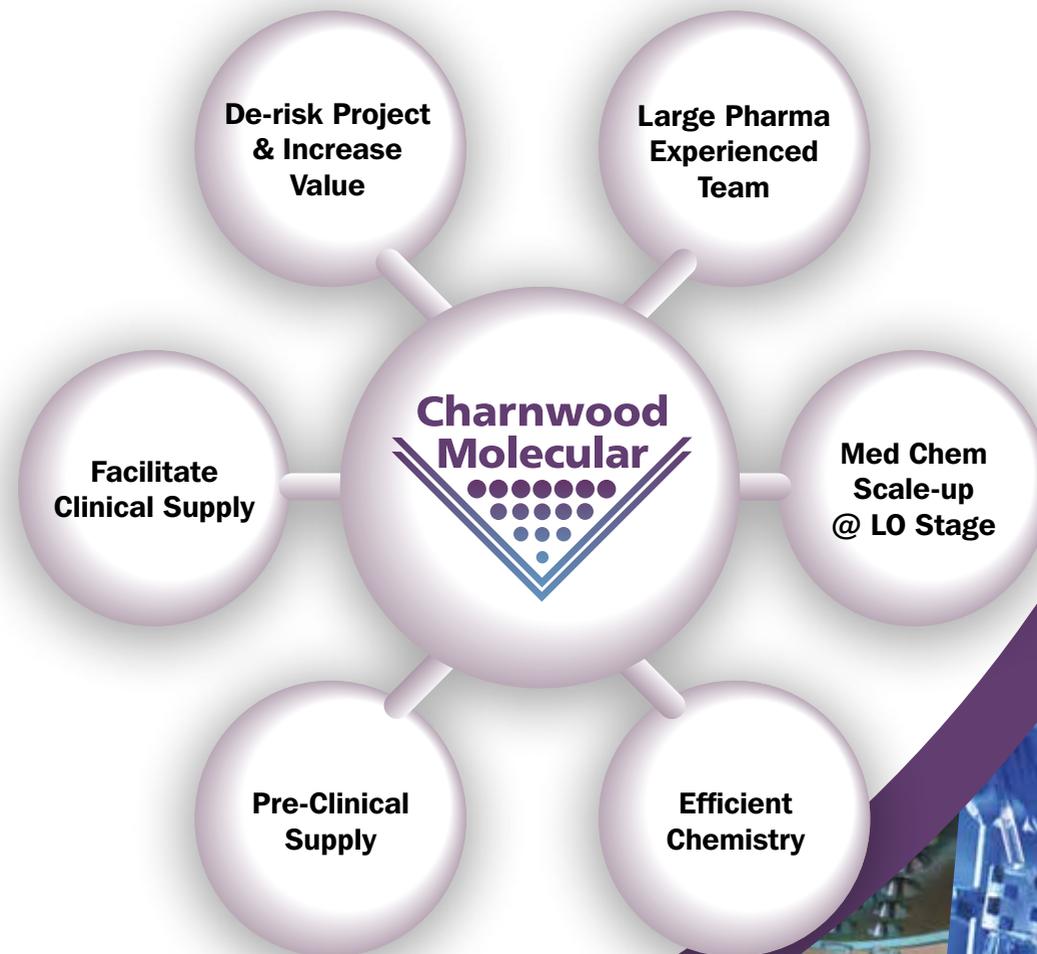
Charnwood Molecular Ltd is a leading UK-based CRO providing Drug Discovery and early Development services to a wide range of international clients. Founded in 1998, we now support the drug discovery activities of a variety of organisations from virtual start-ups to large Pharmaceutical companies. We offer a flexible service from single-compound synthesis to full management of Medicinal Chemistry projects.

**Charnwood Molecular Ltd**

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## Chemical Development Expertise



## Think ahead to Chemical Development: ensure pre-clinical supply, speed up & reduce costs of clinical supply

Charnwood Molecular's PR&D team has over 100 years of combined large pharma experience. It provides excellence in pre-clinical Process Chemistry R&D.

Pre-clinical non-GMP supply (up to 0.5 Kg)

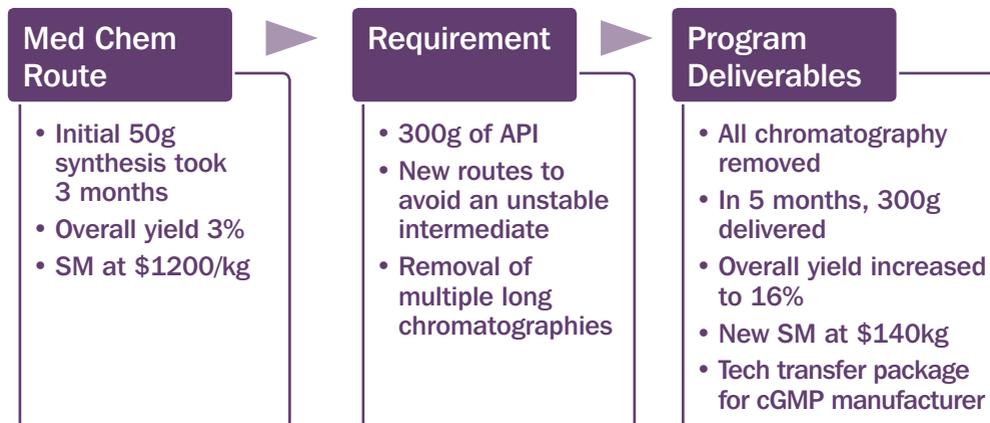
Process Chemistry R&D to access efficient chemistry (High yields, robust, fast throughput)

Enhancement of Out-licensing offering (including methods & samples)

Increased value, de-risked project, API supply ensured

Excellent Technology Transfer to cGMP Scale-up

## A Recent Case Study from our PR&D Group



### The Chemical Development & Medicinal Chemistry Interface

As most development activities are dependent on an adequate supply of API, it is important to keep the Chemical Development activities a phase ahead of the requirements of other departments. Although initial quantities of the API provide the fuel for the Development engine, ultimately, it is the quality of the manufacturing process that will be the most valuable output from the PR&D effort.

Chemistry problems are solved more efficiently and economically in the laboratory rather than on plant, where costs increase 15-fold.

Effective PR&D saves time and costs in New Product Development. Inefficient chemistry can cost a project up to 18 months in time, negatively impacting New Product Value (NPV) by up to 30%.

The 20-50 kg campaign is often the real rate-limiting delivery stage, with a major impact on NPV. This needs to be considered early and Charnwood Molecular's PR&D group can help you do this.

Contact us to discuss your strategy with our Chemical Development Experts

Reference: The Handbook of Medicinal Chemistry, Andrew Davis and Simon Ward Ed, Chapter 23, 592-602 (2015)