



Dispersible Tablet Formulation

Scientists at Aston University have developed a novel oral disintegrating tablet formulation. This novel formulation offer significant improvements over current systems in terms of reduced manufacturing time, excipients used, drug loading and tablet performance. This new technology is likely to have wide application in the prescription and OTC drug markets, and offer opportunities for the life cycle management of existing drugs.

Highlights

- Novel oral dispersible tablet formulation
- Significantly reduced manufacturing time – cost-saving benefits
- No heat treatment required – suitable for heat sensitive drugs
- No animal products necessary – gelatine free
- Improved tablet performance
- Applicability across a wide range of drugs with different physicochemical properties (hydrophilic and hydrophobic)
- GRAS ingredients

Background

Pill-swallowing difficulty affects a significant proportion of people, and in particular affects geriatric and paediatric populations. In order to address this problem, orally disintegrating tablets (ODTs) have been developed, which are typically solid unit dosage forms that disintegrate or dissolve in the mouth without chewing or the necessity to add water. ODTs are also known as fast-dissolving or fast-melt tablets.

ODTs have many advantages over both solid and liquid dosage forms. Such tablets remain solid until administration. This aids the stability of the pharmaceutically active agent, the dose accuracy, and storage of the tablets. Upon contact of the tablet with the oral cavity, the tablets transform into a liquid within a short time period (typically less than 30 seconds after administration) which allows the pharmaceutically active agent to be easily swallowed/transferred transdermally to the patient.

The Technology

Scientists at Aston have developed an improved ODT formulation with significant advantages over existing systems. Significantly, tablets produced using the Aston formula have a reduced manufacturing time, are hard and do not easily fragment making them easier to store and transport, but still have a melt time of less than 30 seconds. They do not use animal products and all ingredients are generally regarded as safe.

Intellectual Property Protection

This technology is the subject of a UK priority patent application:

<i>Title</i>	<i>Pending Applications</i>	<i>Priority Claimed</i>	<i>Our Ref</i>
Dispersible Tablet	GB 0920041.1	November 16, 2009	PAT-2009-013

Further Information

Further information can be made available and commercial discussions commenced on entering into a non-disclosure agreement.

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