

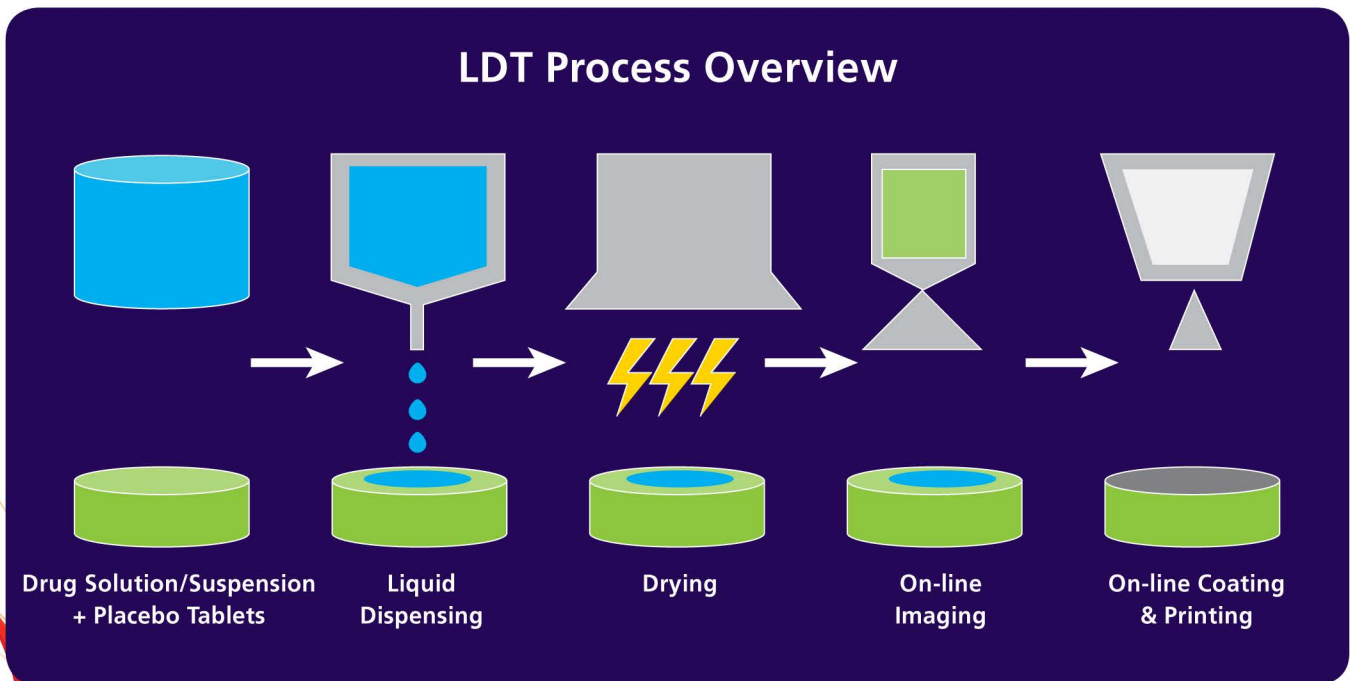
# Liquid Dispensing Technology (LDT)

- Understand** the potential of a highly capable process for difficult-to-manufacture tablets
- Develop** high quality tablets of high potency compounds safely and reproducibly
- Deliver** high potency products rapidly to the clinic and to the market from a novel manufacturing process

Reproducible Low Dose Manufacturing  
Highly Potent Compound Manufacturing in a Respirator Free Environment



LDT is a novel manufacturing platform technology developed by GlaxoSmithKline to aid in the rapid development and manufacture of low-dose and/or highly potent products. Drug product is prepared in a liquid form and then applied to placebo tablets. The solution preparation significantly reduces the potential risk for operator exposure and eliminates or minimizes the need for extensive and costly containment facilities. LDT is for use with immediate release products and suitable for doses in the range of 1 microgram to 5 milligrams.



*Together we can make life better.*

# Liquid Dispensing Technology (LDT)

## R&D Benefits

- Provides unparalleled dose reproducibility & potential for 100% Real-Time-Release.
- Enhances stability by reducing excipient interactions.
- Accelerates development - formulation prototypes can be ready in a matter of weeks.
- Novel dosage form providing competitive advantage.
- Scale-independent process – reduces technology transfer complexity & risk.

Compared to conventional tablet processing, LDT can get your product into the clinic faster, allowing you to avoid investment in the costly facilities and equipment needed to make low dose, highly potent products.

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## Commercial Manufacturing Benefits

- Continuous processing (24/7) of product up to 2 million tablets/day.
- Reduces process complexity - single machine process.
- Facilitates 100% Real-Time-Release of product.
- Robust, industrial process.
- Fully enables Quality-by-Design (QbD) through the use of Process Analytical Technologies (PAT).
- GMP manufacturing facility supplying product to Europe, US, Japan and ROW.

Struggling to supply a difficult-to-make, low-dose tablet? Consider LDT, a technology designed to manufacture these products with unprecedented quality. The technology has on-line dose measurement of EVERY tablet manufactured and tablet defects are rejected automatically. Highly potent agents can be manufactured in a respirator free environment within a conventional manufacturing space, protecting workers and reducing costs.

Your Phase III, Launch and Commercial volume requirements, up to 2 million tablets/day, can all be met.

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