



## 24H™ 24 Hour Extended Release Tablet Technology

LATITUDE Pharmaceuticals Inc.'s **24H™** technology is a versatile oral drug delivery platform that provides the linear, extended release of water-soluble and water-insoluble drugs from tablets for up to 24 hours. The **24H™** formulation is being utilized in several commercially launched and clinical- stage products.



### Key Advantages and Properties of the 24H™ System

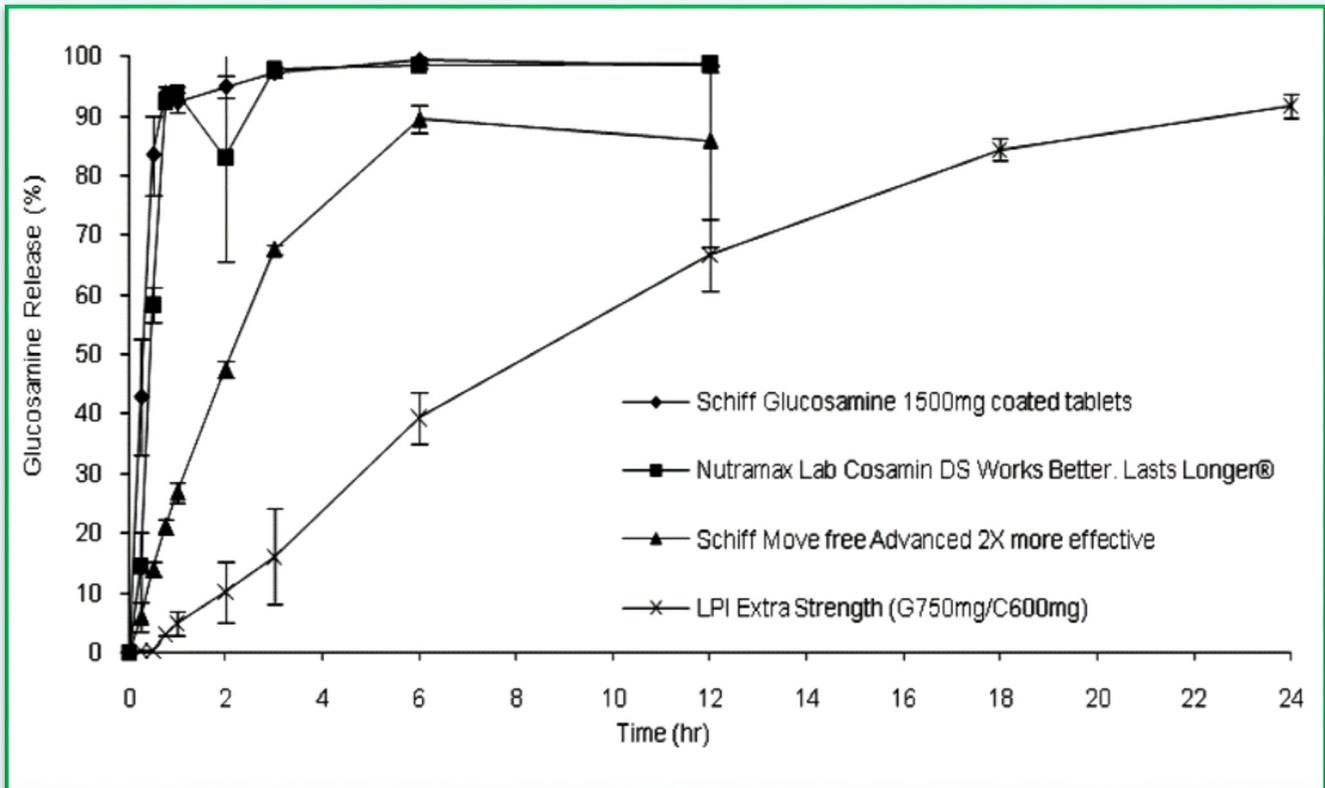
- Extended release for up to 24 hours
- Compatible with many different APIs, including highly water soluble compounds
- Up to 60-70% (w/w) drug loading
- Near zero-order release kinetics; low burst
- Simple and straightforward manufacturing
- Low cost of materials
- Components all GRAS listed and compendial grade (USP, NP, EP)
- *Patent pending*

### Case Study: 24H™-Based Glucosamine Extended Release Tablets

**PRODUCT OPPORTUNITY:** Glucosamine is widely used in North America as a dietary supplement for cartilage repair and maintenance. It is highly water soluble and known to have a short elimination half-life. A daily dose in a range of 500 mg to 1500 mg has been recommended.

Almost all currently available tablets of glucosamine are immediate release and release glucosamine rapidly over 1-2 hours, requiring 2-6 times-a-day dosing to maintain adequate levels. Glucosamine tablets are generally quite large, making them difficult to swallow, especially for the geriatric population.

**SOLUTION:** LATITUDE utilized the **24H™** System to develop a one-dose/day tablet with typical vitamin tablet dimensions that continually releases glucosamine and chondroitin over a 24 hour period with near-zero order kinetics. (*see graph*)



Near-zero order kinetics in vitro release profile of **24H™** glucosamine/chondroitin (LPI Extra Strength G750mg/C600mg) compared to other extended release glucosamine products

**Licensing and feasibility studies**

LATITUDE’s **24H™** technology is available to expand the product possibilities and intellectual property space for your compound. Please contact LATITUDE to discuss how the 24H™ technology may address the extended-release needs for your API. We recommend a quick turnaround, low cost feasibility study to explore the 24H™ potential for your compound.

