DSI™
An Affiliate of Harvard Bioscience, Inc.

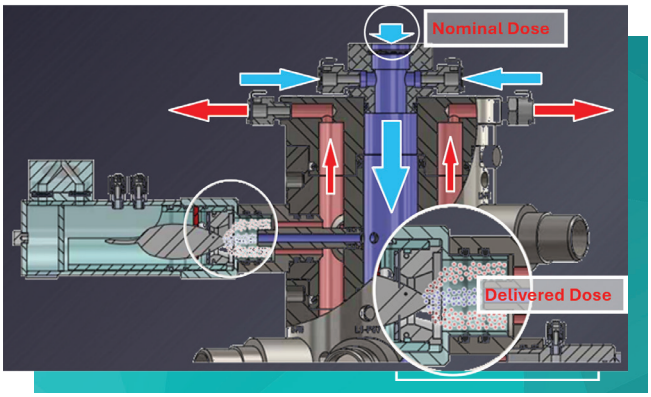
Reducing Compound Use with Higher Chamber Efficiency

Nose-Only inhalation systems are commonly used for pre-clinical aerosol exposure due to improved subject-to-subject uniformity (compared to whole-body exposure), human translation, and low side-effects. However, this method often requires high amounts of API to achieve dosage targets which can lead to excess costs. Inhalation system efficiency is the most important element in determining the amount of API needed. Efficiency is represented by the ratio of delivered dose to nominal dose (see chamber diagram below).

The DSI Buxco Inhalation system has been shown to offer significantly more efficiency than traditional platforms due to low dead-space, regulated environment, precise aerosol output control and interior chamber design.

While industry standards have hovered around 30% efficiency, DSI's system yields >70% within the most common configuration.

The increased efficiency has a direct correlation to API amount requirements, which correlates directly to lab cost savings:



API Amount (ml)	API $/ml	Potential Savings
10	$2,000	$10,000
30	$300	$3,000

Data Sciences International

119 14th St NW, Suite 100
St. Paul, MN 55112 U.S.A.
Tel: 651-481-7400
Fax: 651-481-7404

Sales: sales@datasci.com

Technical Support: support@datasci.com

Web: www.datasci.com

European Sales: sales@datasci.com

Asia Pacific Sales: sales@datasci.com