

# Technical Bulletin

Ref: **TB- 07005**

Issue date: **October 2007**

Product: INOmax<sup>™</sup> DS

Priority:

Affected parts: Ventilator Compatibility

Classification: Information

Subject: **INOmax DS and the Bronchotron-I High-Frequency/Conventional Transport Ventilator**

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The following information is provided to inform clinicians that the INOmax DS did not pass validation for use with the Percussionaire Bronchotron-I High-Frequency / Conventional Transport Ventilator.

The following issues were identified during validation testing.

## **1. Over Delivery of INOmax**

Due to bidirectional flow through the drive line of the Bronchotron-I ventilator, the Injector Module from the INOmax DS will signal for delivery of INOmax each time the ventilator flow moves forward and backward through the injector module resulting in over delivery.

## **2. Flow entrainment through the Failsafe one-way valve connected to the Phasitron**

During the positive pulse of the Phasitron, additional flow is entrained through the Failsafe valve during the positive (Inspiratory) pulse. The entrainment ratio through the valve will change depending on driving pressure, airway compliance and lung compliance. As a result of air entrainment and the ventilator settings, the set dose is diluted from 10 to 40%.

Additionally, inspiratory and expiratory gas mixing will dilute the monitored values giving a greater discrepancy between set and measured expiratory gas values.

Because of the dilution effect as well as inspiratory and expiratory gas mixing the INOmax DS did not deliver INOmax concentrations within its specifications when used with the Percussionaire Bronchotron-I High-Frequency / Conventional Transport Ventilator.