Inspiro Medical
Novel Dry Powder Drug Delivery Solution

BACKGROUND
Pulmonary drug delivery devices to treat airway diseases include metered-dose inhalers (MDIs), dry powder inhalers (DPIs), and nebulizers. Despite the numerous aerosol delivery devices currently on the market, many are less than optimally effective in depositing the necessary medication. The optimal delivery device strives for the most efficient and effective deposition of aerosol medication and takes into account drug particle/droplet size, design of the delivery device, and the patient's ability to use and understand the device.

Unfortunately, MDIs require hand-breathing coordination, which often leads to less effective deposition of medication. DPIs rely on breath actuation for dose release and may require forceful inhalation. Many patients do not use the device properly because of complexity. With nebulizers' treatment time is relatively long, setup is cumbersome, and the apparatus is usually bulky and inconvenient.

The market requires an innovative aerosol delivery device that is convenient and easy to use; offers an effective deposition of medication; and is suitable for everybody, including children, the elderly, and the seriously ill.

THE SOLUTION
Inspiro leverages the advantages of existing aerosol delivery devices while improving on current drawbacks. Inspiro’s proprietary inhaler is the first device to combine an active dry powder fluidization mechanism that works with low inhalation flow rates with a unique real-time feedback control and data logger that indicates proper inhalation technique and follow-up. The result: A DPI inhaler that assures optimal drug delivery. Inspiro’s inhaler is suitable for everyone. Young children and the elderly especially will benefit from the advantages of Inspiro’s dry powder inhalation.

THE APPROACH TO MARKET
Inspiro seeks to partner with pharmaceutical companies active in the global respiratory market who require novel inhaled drug delivery designs to extend patent life of existing dry powdered medications or to bring new dry powdered formulations to market.

THE MARKET
Inspiro’s unique DPI device is suitable for the treatment of pulmonary diseases such as asthma and chronic obstructive pulmonary disease (COPD).

According to the World Health Organization,

- an estimated 300 million people worldwide suffer from asthma, with 250,000 annual deaths attributed to the disease, and
- COPD affects 210 million people worldwide and is projected to be the third leading cause of death by 2020.

FUNDING
Seeks $950,000 to complete device development and begin clinical trials.

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