**Local Methacholine Challenge (Canine Airway).**

**Treatment Effect**: Bronchial Thermoplasty?

What is the excess airway smooth muscle (ASM) present in the airways and limit its ability to contract and narrow the airways.

**Conventional therapy**.

**Asthma patients**, over the age of 18, whose asthma is not well controlled despite **conventional therapy**.

**Bronchial Thermoplasty**: BT, airway on the right is not treated with BT. BT treated airway on the left remains open.

**Benefits of BT**:

- Reduces bronchoconstriction
- Improves asthma quality of life
- Reduces asthma exacerbations

**Persistent effects observed up to 2 years**.

- 32% reduction in asthma attacks
- 84% reduction in emergency room visits from respiratory symptoms
- 66% reduction in days lost from work, school and other daily activities due to asthma

**Stable safety profile observed up to 5 years**.

**Stable safety profile observed up to 2 years**.

**Bronchial Thermoplasty: A New Procedure for Severe Asthma**
Bronchial Thermoplasty:

**The Procedure**

Treatment is performed by a trained physician over three procedures, each scheduled approximately three weeks apart and treating a different section of the lung. Each procedure takes approximately 45-60 minutes and patients should be monitored post procedure in the same way as they would be following other bronchoscopy procedures.

**Bronchial Thermoplasty (BT) delivered by the Alair™ System**

Bronchial Thermoplasty (BT) delivered by the Alair™ System is a non-drug procedure for long lasting control of severe asthma in adults over the age of 18. The Alair System is a means to deliver thermal energy to the airway via a bronchoscope to reduce airway smooth muscle.

**It is comprised of two primary components:**

1. **Alair Catheter**
   - A single-use device designed to be delivered through the working channel of a standard bronchoscope:
     - Expandable electrode array with four 5mm electrodes that deliver RF energy
     - Requires a minimum 2.0mm working channel diameter bronchoscope, and maximum 5.0mm outer diameter

2. **Alair Radiofrequency (RF) Controller**
   - Designed with proprietary control parameters and algorithms to deliver the correct intensity and duration of thermal energy sufficient to reduce excess ASM, while limiting long-term impact to surrounding tissues.

**Bronchial Thermoplasty complements current drug therapy**

Bronchial Thermoplasty complements asthma maintenance medications by providing long lasting asthma control and improving asthma-related quality of life of patients with severe asthma. It will not replace daily asthma medications and patients will continue to be monitored on their daily asthma medications by their asthma care physicians.

**Bronchial Thermoplasty complements asthma maintenance medications**

Bronchial Thermoplasty complements asthma maintenance medications by providing long lasting asthma control and improving asthma-related quality of life of patients with severe asthma. It will not replace daily asthma medications and patients will continue to be monitored on their daily asthma medications by their asthma care physicians.

**Severe Asthma**

The Unmet Need

32 million* in Europe have asthma
6 million* of these have severe asthma

1.2 million* of adults with severe asthma have uncontrolled asthma and respond poorly to treatment.

46% of patients with severe asthma cause increased burden on healthcare budgets and hospitalizations
80% of asthma deaths occur in patients with poorly controlled severe disease
50% of direct and indirect asthma costs are attributable to severe asthma.

**Bronchial Thermoplasty (BT): Targeting the Unmet Need**

Patients with severe asthma experience a poor quality of life and account for a substantial portion of the overall economic burden of asthma given frequent physician/ER visits, hospitalizations and lost time from work.

Alternatives are needed to better control asthma symptoms since 20% of patients with severe asthma cannot gain control despite high intensity treatment with existing options.

Existing Drug Therapies | Severity of Asthma
--- | ---
Oral Corticosteroids +/- Antileukotriene treatment | Severe
Medium or high-dose ICS +/- LABA +/- Leukotriene modifier +/- sustained release theophylline | Severe
Low-dose ICS + Long acting Beta2 agonist/AI4E + Medium dose ICS or Low dose ICS + Leukotriene modifier | Moderate
Low-dose Inhaled Corticosteroids (ICS) Leukotriene modifier | Moderate
Short-acting Beta2-agonists (SABA) | Mild

**Alair Catheter**

A single-use device designed to be delivered through the working channel of a standard bronchoscope:

- Expandable electrode array with four 5mm electrodes that deliver RF energy
- Requires a minimum 2.0mm working channel diameter bronchoscope, and maximum 5.0mm outer diameter

**Alair Radiofrequency (RF) Controller**

Designed with proprietary control parameters and algorithms to deliver the correct intensity and duration of thermal energy sufficient to reduce excess ASM, while limiting long-term impact to surrounding tissues.

**Severe Asthma**

The Unmet Need

32 million* in Europe have asthma
6 million* of these have severe asthma

1.2 million* of adults with severe asthma have uncontrolled asthma and respond poorly to treatment.

46% of patients with severe asthma cause increased burden on healthcare budgets and hospitalizations
80% of asthma deaths occur in patients with poorly controlled severe disease
50% of direct and indirect asthma costs are attributable to severe asthma.

**Bronchial Thermoplasty (BT): Targeting the Unmet Need**

Patients with severe asthma experience a poor quality of life and account for a substantial portion of the overall economic burden of asthma given frequent physician/ER visits, hospitalizations and lost time from work.

Alternatives are needed to better control asthma symptoms since 20% of patients with severe asthma cannot gain control despite high intensity treatment with existing options.

Existing Drug Therapies | Severity of Asthma
--- | ---
Oral Corticosteroids +/- Antileukotriene treatment | Severe
Medium or high-dose ICS +/- LABA +/- Leukotriene modifier +/- sustained release theophylline | Severe
Low-dose ICS + Long acting Beta2 agonist/AI4E + Medium dose ICS or Low dose ICS + Leukotriene modifier | Moderate
Low-dose Inhaled Corticosteroids (ICS) Leukotriene modifier | Moderate
Short-acting Beta2-agonists (SABA) | Mild

**Alair Catheter**

A single-use device designed to be delivered through the working channel of a standard bronchoscope:

- Expandable electrode array with four 5mm electrodes that deliver RF energy
- Requires a minimum 2.0mm working channel diameter bronchoscope, and maximum 5.0mm outer diameter

**Alair Radiofrequency (RF) Controller**

Designed with proprietary control parameters and algorithms to deliver the correct intensity and duration of thermal energy sufficient to reduce excess ASM, while limiting long-term impact to surrounding tissues.