

# What is Asthma?

## Normal Airway



Healthy

## Asthmatic Airway



Chest Tightness

## Asthma Attack



Wheezing, Breathlessness, Coughing

**Asthma is a chronic inflammatory disorder of the airways**

Lining of the airways in the lung swell, airways narrow and reduce the flow of air into and out of the lungs. Increased mass of airway smooth muscle (ASM) obstructs the airways. Patients with severe asthma have often significantly impaired quality of life, are frequently absent from school or work, have decreased productivity, are at an increased risk of frequent hospitalisations and death.<sup>1</sup>

1. WHO, Asthma Fact sheet N°307, May 2011. Available at: <http://www.who.int/mediacentre/factsheets/fs307/en/index.html> (accessed August 2015)

# Asthma Prevalence<sup>1,2</sup>

## Worldwide



Today



2025

## In Europe, per year

**30 mio** asthma patients

**6 mio** severe asthma patients

**1 mio** patients cannot control asthma with medication alone

**> 800.000** Deaths

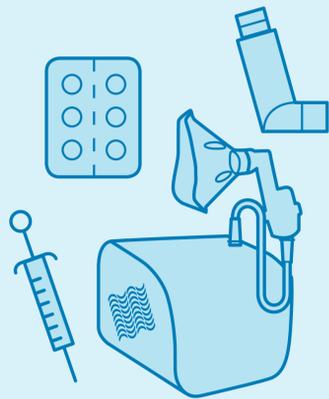
asthma-related occur in the uncontrolled group



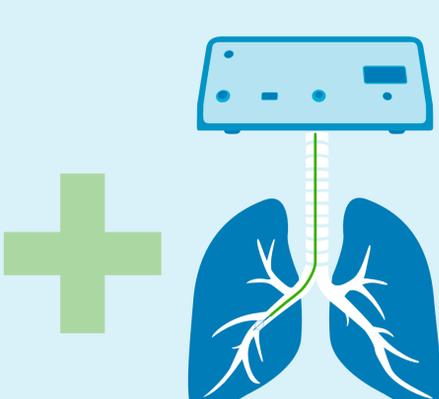
1. www.asthma.org.uk  
2. European Federation of Allergy and Airway Diseases Patients Association: Asthma. Available at: <http://www.efanet.org/get-advice/asthma> (accessed Oct 2015)

# Treatment Options

## Systemic and/or local medication

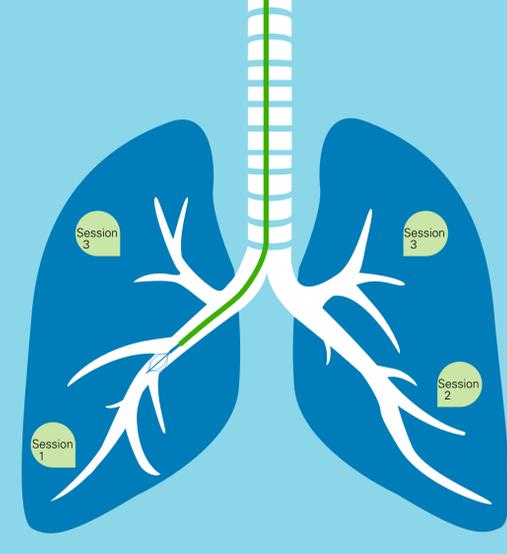


## Bronchial Thermoplasty

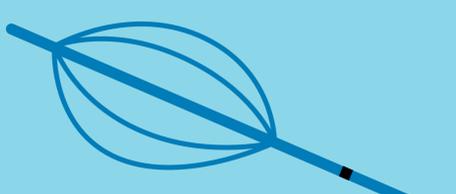


# What is Bronchial Thermoplasty?

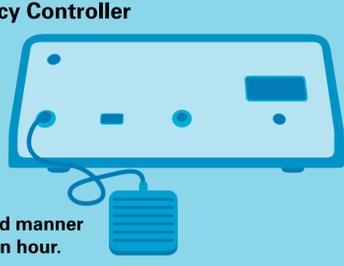
**Non-drug, minimal-invasive procedure for patients older than 18 years with severe asthma that is not well controlled on standard medication. It is designed to improve asthma control by reducing the mass of airway smooth muscle (ASM).**



### a. Bronchial Thermoplasty Catheter



### b. Radiofrequency Controller



**BT delivers thermal energy to the airway wall, heating the tissue in a controlled manner to reduce ASM. The procedure is performed in 3 sessions, each lasting about an hour.**

# Clinically proven safety and effectiveness for at least 5 years

**“Bronchial Thermoplasty may be considered for the treatment of adult patients who have poorly controlled asthma despite optimal therapy.” (Grade A)\***

\*British Thoracic Society guideline on the management of asthma. Published in October 2014, page 77.

## 2013 AIR2 Extension Study<sup>1</sup> (190 patients)

The post-approval AIR2 Trial 5-Year Extension Study (AIR2 Extension Study) was conducted to evaluate the sustained effectiveness of BT beyond 1 year, and the long-term safety of BT out to 5 years in BT-treated patients from the AIR2 Trial.



## 2010 AIR2 Study<sup>2</sup> (190 patients, Asthma Quality of Life Improvement)

In the Asthma Intervention Research 2 (AIR2) trial at 1 year, patients with severe asthma treated with BT showed significant improvement compared to sham controlled patients, including:



Additionally, in the Asthma Intervention Research 2 (AIR2) trial at 1 year, patients with severe asthma treated with BT showed significant improvement compared to sham controlled patients, including:



## 2007 AIR Study<sup>3</sup> (112 patients randomized, 109 treated)



## 2007 RISA Study<sup>4</sup> (15 patients)



**Reduction** in use of maintenance asthma medication

## 2006 Feasibility Study<sup>5</sup> (16 patients)



Resources:  
 1 AIR2 Extension Study: Wechsler M, et al, for the AIR2 Trial Study Group. J Allergy Clin Immunol. 2013;132:1295-1302.  
 2 AIR2: Castro M, Rubin AS, Laviolette M, et al. Effectiveness and safety of bronchial thermoplasty in the treatment of severe asthma: A multicenter, randomized, double-blind, sham-controlled clinical trial. Am J Respir Crit Care Med. 2010;181:116-24.  
 3 AIR: Cox G, Thomson NC, Rubin AS, et al. Asthma control during the year after bronchial thermoplasty. N Engl J Med. 2007;256:1327-37.  
 4 RISA: Pavedi D, Cox G, Thomson NC, et al. Safety and efficacy of bronchial thermoplasty in symptomatic, severe asthma. Am J Respir Crit Care Med. 2007;176:1185-91.  
 5 Feasibility Study: Cox G, Miller JD, McWilliams A, Fitzgerald JM, Lam S. Bronchial thermoplasty for asthma. Am J Respir Crit Care Med. 2006;173:965-9.