

## **Platinum Sponsor Seminar**

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Balancing Patient Needs and Sustainability in Inhaled Therapies:

Looking Forward to the Next Generation of pMDIs

## Introduction

This presentation will review the need for more sustainable inhalers and the challenges associated with this aim, and present new options for novel propellants, devices, and components.

## Description

In 1956, 3M launched the first pressurized Metered Dose Inhaler (pMDI). Following the Montreal Protocol of 1987, 3M transitioned to HFA propellants, launching the first HFA-based pMDI in 1995. More recently, the drive to reduce the carbon footprint of inhalation products has led to the exploration of newer propellants, such as dimethyl ether, propane, butane, and HFA-152a, as well as other more novel approaches such as CO2. Significant resources are being invested in innovating next-generation pMDIs that will use novel propellants with a significantly lower Global Warming Potential (GWP). Well managed, stable patients should have a lower overall environmental impact, and to this end, other innovations in inhaled therapies, including enhanced digital devices, should also positively contribute to patient care and, thus, lower the carbon impact.

pMDIs continue to provide an efficacious and cost-effective treatment for pulmonary diseases. For many patients, there are clear clinical benefits of pMDIs over DPIs and SMIs, and disadvantages associated with switching devices. pMDIs, DPIs and SMIs all play an important role in patient care. A patient-centric approach is vital, including maintaining a diverse range of therapeutic choices. Hence it is imperative that the pMDI platform is taken forward with enhanced sustainability credentials in order to maintain patient choice and optimized clinical and health economic outcomes.

## **Outcome for Participants**

Attendees will leave the presentation with a better understanding of the challenges associated with formulating current and new APIs with novel propellants, and knowledge of the options available, along with ideas for more sustainable components and devices.

