



THE NOVELTY STUDY

Identifying new dimensions in respiratory disease

NOVELTY Advanced Diagnostic Profilng (ADPro) sub-study

NOVELTYstudy.com

ADPro

Sub-study examining ventilation patterns and small airways dysfunction in patients with asthma and/or COPD

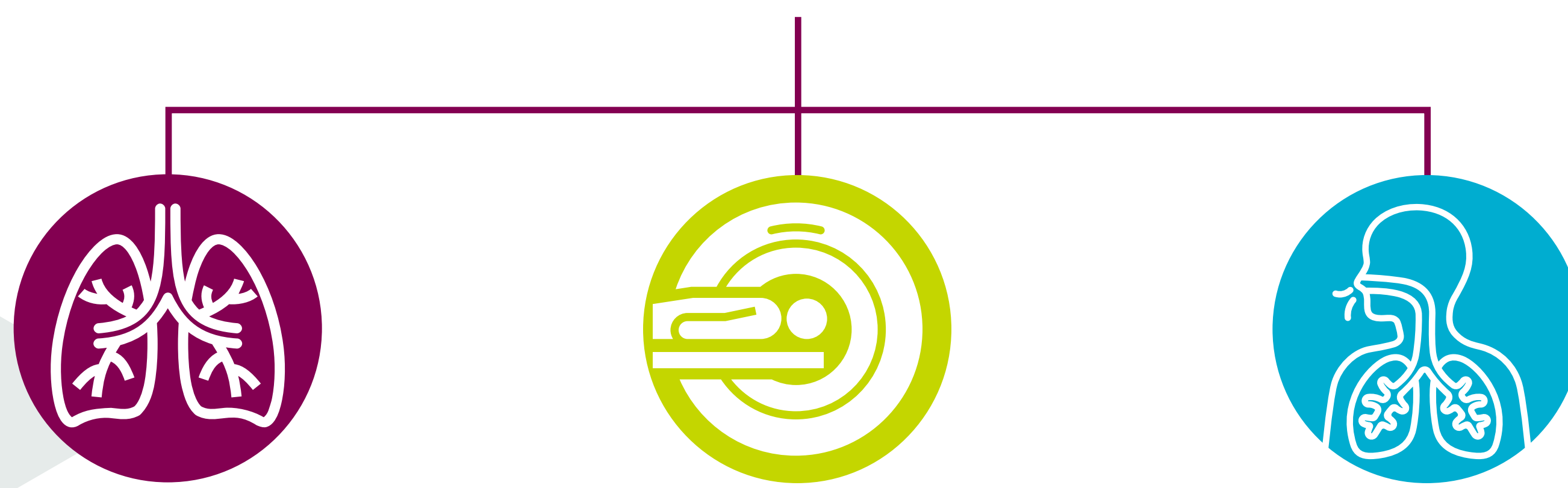
Aim

Precisely phenotype and endotype patients with physician-diagnosed asthma and/or COPD

Primary endpoint

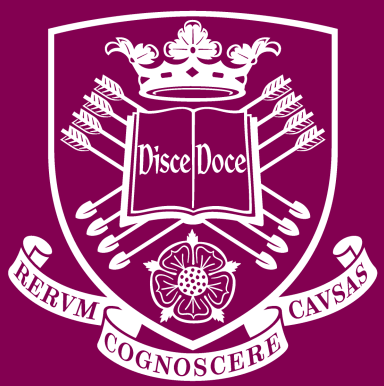
Distribution of whole lung morphology measurements assessed with MRI including ventilation, gas transfer and airway microstructural indices^a

ADPro combines the original NOVELTY protocol with **new imaging, physiological and metabolic** modalities. Procedures include **hyper-polarised gas MRI** and physiological measures, such as **body plethysmography** and **airways oscillometry**, and **breathomics** (Visit 2).



NOVELTY patients enrolled from selected primary care sites in the UK

In collaboration with



The University Of Sheffield.

POLARIS

Pulmonary, Lung and Respiratory Imaging
Sheffield

Polarised Imaging Systems

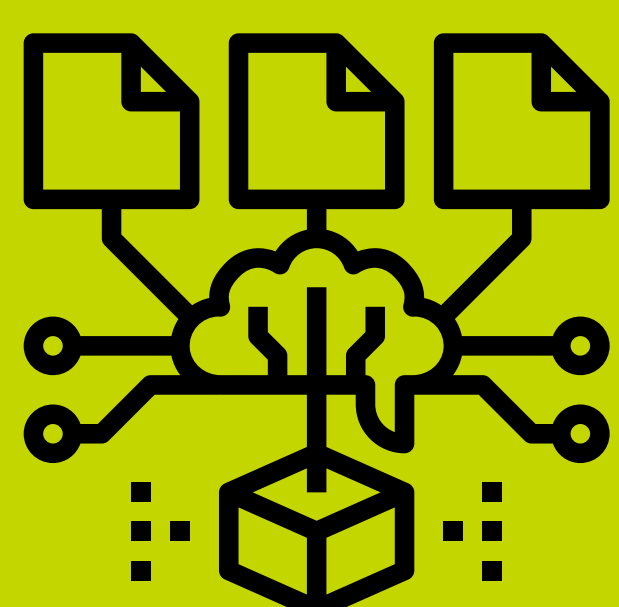


First patient was enrolled on **24 July 2020**



Visit 1: **164** NOVELTY patients completed

Visit 2: Started at the end of August 2021



The ADPro sub-study will allow more in-depth understanding of the varying patterns of ventilation heterogeneity and small airways dysfunction, and relate these to important clinical outcomes.



Clinically meaningful subtypes will help determine future patterns of disease and disease progression.

^aPercentage ventilated volume, ventilation, defect percentage and apparent diffusion coefficient.

ADPro, advanced diagnostic profiling; COPD, chronic obstructive pulmonary disease; MRI, magnetic resonance imaging; NOVELTY, NOVEL observational longiTudinal study.