



Respiratory Disease

Lumanity and the PHARMO Institute are partnering to deliver research insights in Respiratory Disease and Asthma

Disease & Treatment Characterization

- Patient demographics
- Diagnoses and symptoms
- Disease severity (i.e., GOLD status)
- Lung function results (e.g., FEV1, FVC, PEF)
- CCQ and ACQ scores
- Acute exacerbations
- Clinical characteristics (smoking, BMI)
- Comorbidities
- Medication use

Outcomes, Burden of Disease, & Healthcare Resource Utilization

- Drug utilization
 - Respiratory drug treatment (e.g., anticholinergics, corticosteroids, beta-2 agonists.
 - Adherence/persistence
 - Co-medication
- Moderate/severe exacerbations
- Healthcare resource utilization
 - Medication use
 - GP visits (including phone, email, home visits)
 - Hospitalizations
- Mortality

Data collection across multiple care settings

- Data sources are linked on a patient-level:
 - GP
 - Hospital
 - In- and out-patient pharmacy
 - Clinical laboratory
- Malignancy, pathology
- Social demographics
- Mother and Child linkage data



What makes us different



High patient counts in COPD & Asthma

>80.000 COPD

>200,000 Asthma

20-year average look-back



A unique, longitudinal, and clinically rich dataset

- 2002 onwards (20+ years)
- Ability to follow through multiple healthcare settings
- Data regularly updated and expanded to include new patients and follow-up information

About PHARMO



The PHARMO Institute is an independent, global leader in drug safety and outcomes research



The Netherlands has an excellent healthcare system and is a major hub for clinical trials



The **PHARMO Data Network** offers **multi-setting**, **longitudinal**, **clinically rich data** with exceptional curation and linkages to hospitals and national registers



Dutch data is **representative of Western Europe** and can be used in global studies as a **robust proxy** or complement to EU-5



As a founding member of SIGMA Consortium, we can access diverse sources of pan-European real world data (RWD) on >100 million patients



Our capabilities and experience enable us to deliver on a wide range of real world evidence (RWE) use cases



→ Why choose us?

Lumanity can be counted on for service and quality. We utilize proven processes supported by technologically advanced resources to produce high-quality services, with guaranteed satisfaction.

