

# ApneaScreener | An Innovative Diagnostic and Monitoring Approach for Obstructive Sleep Apnea

**Purpose:** To transform the diagnosis of Obstructive Sleep Apnea (OSA) by replacing delayed, costly, and invasive polysomnography with a **fast, minimally invasive, blood-based diagnostic and monitoring tool** of OSA diagnosis.

**Mission:** To develop and validate the **first blood-based diagnostic test** for OSA, integrating molecular biomarkers, and machine learning to improve **early detection, treatment stratification, and disease monitoring**.

**Long term goal:** To establish ApneaScreener into healthcare systems, reducing diagnostic delays and enabling large-scale population screening.

## 1. Scientific & Clinical Validation

Achieved up to:

- > 95% accuracy
- > 95% specificity
- F1-score 0.95

## 2. Technology Development

- Prototype/MVP development (TRL 4 → TRL 6)

## 3. Regulatory & IP Strategy

- Patent
- IVDR (EU diagnostic regulation)
- Software + algorithm protection (copyright + trade secret)

## 4. Go-to-Market Strategy

B2B model:

- Hospitals
- Sleep clinics
- Diagnostic laboratories

## Impact

- Reduces OSA diagnosis delay (currently up to 2 years)
- Lowers cost vs. polysomnography (~ € 600/test → ~ € 200 screening approach)
- Enables scalable population screening
- Supports earlier intervention and reduced comorbidities