Depression is a common and serious comorbidity of cardiovascular disease (CVD) affecting one in three patients, among which women earlier and more frequently. Both diseases pose a significant economic burden to households, the health system and society.

The EU-funded TO_AITION project aims to understand CVD-depression co/multimorbidities, unwind causative mechanisms and biomarkers, and develop novel tools and research directions for improving the prevention, diagnosis and treatment of these highly prevalent and devastating conditions.

TO_AITION's main objective is to bridge the knowledge gap that drives CVD -depression comorbidity by integrating basic, preclinical and clinical research in order to identify the underlying immune-metabolic mechanisms that lead to these diseases.

Lodz, December 5, 2024	
Day I (13/2/2024)	
Time (CET)	**Subject**
11.00-11:10	**Welcome**
11:10-11:30	**TO_AITION Project: A high-dimensional approach for unwinding immune-metabolic causes of cardiovascular disease-depression multimorbidities**
11:30-11:50	**Prediction of depression and delirium among patients with cardiovascular disease scheduled for cardiac surgery using an AI-empowered pipeline**
11:50-12:15	**AI-based diagnosis and prognosis of CVD-depression comorbidities**
12:15-12:45	**Coffee Break**
12:45-13:15	**TO_AITION cloud platform**
13:15-13:45	**Testing of the TO_AITION cloud platform, usability assessment**
13:45-14:00	**Discussion**

Venue: Brain Laboratory Complex of the Medical University of Lodz, Czechosłowacka Street 4.