EaP regional intelligent data warehouse with tools for quantifying and assessing diffuse liver diseases

PROJECT AMBITIONS

Chronic diffuse liver diseases (DLD) play an important role in morbidity and mortality of the population of many economically developed countries, but also in developing and transition countries, including the EaP region (Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine).

The aim of the project is to formalize and integrate data and scientific knowledge from the fields of diagnostics and treatment of DLD (which at the moment are unstructured, fragmented and heterogeneous), into a unique informational space. Data and knowledge digital warehouse is used in order to allow the interoperability of the stored data contents and knowledge.

Being implemented, our project will allow:

- to aggregate a large number of DLD cases in a standardized manner;
- to define criteria based on non-invasive measurements and laboratory tests for quantifying and assessing DLD;
- to establish thresholds and endpoints for onset and all stages of DLD progress;
- to harmonize efforts of data stakeholders for in-depth DLD phenotyping;
- to promote clinically impactful new knowledge discovery and its translation into clinical practice.

IMPACT

Relevance of the assumed primary objective is enormous, as we have witnessed the wide spread of DLD in the whole EaP region, which predominantly affect people of working age, having a significant negative impact on social and economic development of the countries.

Correct and early assessment of liver diseases combined with appropriate management of pathologies can certainly increase the patients’ quality of life and its duration.

POTENTIAL BENEFICIARIES

- clinicians from imaging and therapy departments, from sections of hepatology and gastroenterology;
- policy makers, in charge of monitoring the general health status of the population, morbidity and mortality related to liver diseases;
- students from the medical universities (Departments of Internal Medicine and Gastroenterology);
- developers of information systems, intelligent systems, knowledge bases and medical databases from EaP region, EU and the rest of the world.

All data collected in the project are anonymous and will be used for scientific research purpose.