CARECOL Project

Original Use Case Name: Gastric Cancer and precancerous lesions

Practical example and challenges

- After lung, colon and liver cancer, stomach cancer ranks 4th among the deadliest cancers. Scientists assume one million new cases per year. National and international collaborations in the collection and evaluation of the symptoms of gastric cancer patients and precancerous lesions suspected of cancer could make a significant contribution to improving this problem. A harmonised, high-quality data pool would significantly improve research results and the quality of treatment for stomach cancer, while at the same time advancing health policy.
- There are currently no suitable high-quality data sets available internationally. Both research and thus also medical innovations or health policy efforts are currently limited to the use of locally generated data, i.e., incomplete data sets with limited significance. Scientific progress in this field is therefore currently being developed primarily through collaborations in specific projects.
- Combining data on lesions that precede tumour diseases, data from clinical work such as EMR (endoscopic resection procedures), diagnostic data, behavioural and epidemiological data and data from laboratory findings will provide a solid database for further clinical research, new, innovative diagnostic methods, better risk assessments and preventive measures.

High Level vision Data Ingestion Pipelines Data Sources Data

Graphic

What added value does the Gaia-X project offer?

- A major advantage of the Gaia-X data ecosystem for the project is the setting of specific standards, whether through the application of interoperable components, the savings of data origin and data exchange or clear regulations for data transfer. This simplifies the collaboration of all parties involved who provide their data and facilitates the exchange of data between the CARECOL platform and the users of the data packages.
- Gaia-X could provide free access to the CARECOL platform for many scientists. This would advance data-driven research in healthcare and at the same time offer the opportunity to monetise the results of research achieved. For example, the offer, analyses, findings, or selected data groups can be used economically. This would make the previous research work and the generated data valuable, while at the same time sustainably useful.
- Access to the Gaia-X data ecosystem with its numerous and diverse actors brings great potential to CARECOL. This is because it enables the project to expand its reach and offers the participants the opportunity to establish new business contacts and to expand the platform's network beyond their own domain.
- Another major advantage of Gaia-X is its visibility and perception in public. This means the possibility of opening new sources of financing for the project and of enabling follow-up projects in the future.

The German version is available <u>here</u>.

Affiliations

- acatech German Academy of Science and Engineering
- Stefano Sedola and Andrea Pescino StratejAI
- Marcis Leja Professor, Director of the Institute of Clinical and Preventive Medicine, University of Latvia.
- Microsoft as Associated Partner contact person: Ruthy Kaidar, Director for Healthcare, Central & Eastern Europe, Microsoft - <u>ruthykai@microsoft.com</u>