



This project is co-financed by the European Union
and the Republic of Türkiye



ICTürkiye2025
10 April, İstanbul

PRESENTER FULL NAME: CANSU KORKUT

ORGANIZATION: Tiga Information Technologies

WORKSHOP NAME: Digital and Smart Health

E-MAIL: cansu.korkut@tigahealth.com

Focusing on Healthcare IT
Providing Dedicated Solutions

Global Certificaitons

Patents & IPRs

CMMI L3

ISO 9001, ISO 27001

Industry & Academia

R&D Center and Studies

Research Labs in Universities

50+ Academicians

Locations

Türkiye, Saudi Arabia, Qatar,

United Kingdom, Estonia

Cooperations with 50+ countries



ICTürkiye2025
10 April, İstanbul

National Healthcare System of Türkiye

- **Public Hospitals**
- **University Hospitals**
- **Private Hospitals**
- **Family Physicians**
- **Private and Public Clinics**
- **Oral and Dental Centers**
- **Laboratories**
- **Vaccination Centers**



CENTRAL EXCHANGE HUB

- The backbone of all systems
- PHR collection in the entire country
- Integration of 80K healthcare institutions
- Real-time data collection and sharing
- Not only for Turkish citizens but also for residents and visitors
- Physician performance monitoring

Central e-Prescription System of Türkiye

A centralized system covering the prescribing processes and integrating the stakeholders



2.2 M+ Daily Prescriptions



55 K+ Total Integrated Facilities



225 K+ Physicians



30 K+ Pharmacies

With the e-Prescription system, Turkish MoH saves more than **6000 trees** from being cut in a year. All the fake prescriptions and report usage have ended.

-Turkish Ministry of Health

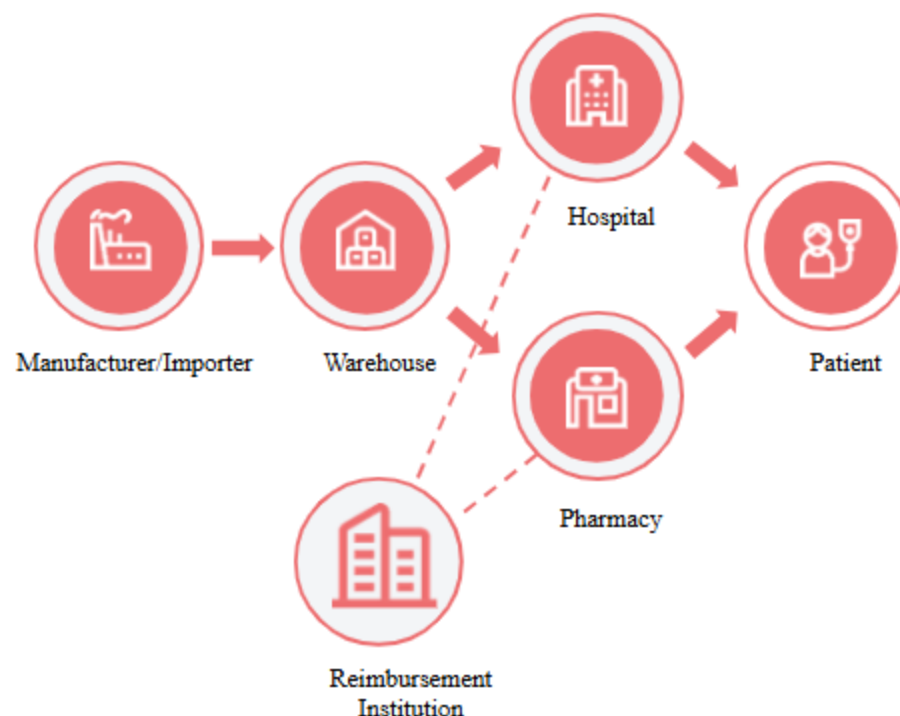
- Prevention of the use of fake prescriptions and report
- Prevention of the abuse of narcotic drugs
- Standard integration for large-scale health IT systems
- Code-specific prescription viewing
- Pharmacovigilance data for drug authorities
- EHR Security

Pharmaceutical Track & Trace System

- Box-level tracing
- End-to-end traceability
- Covering the whole country
- Prescribed & non-prescribed drugs
- Nutrition products & supplements
- GS1 compliant serialization
- Easy integration with all stakeholders



2D Data Matrix Barcode



Commercial Products



REPUBLIC OF TÜRKİYE
MINISTRY OF HEALTH



Reçetem

وزارة الصحة العامة
Ministry of Public Health
دولة قطر - State of Qatar



QHIE-HUB

Qatar Health Information Exchange Hub

QPTTS

Qatar Pharmaceutical
Track and Trace System

الهيئة العامة للأدوية والدواء
Saudi Food & Drug Authority



Drug Track and Trace
System (RSD)

Teams' Expertises

- Pose Detection & Estimation
- Data Anonymization
- Medical Image Processing
- Synthetic Data Generation
- Large Language Models



6 EU Funded Projects

17 TÜBİTAK Funded Project



Edge Computing

Embedded Systems

Gamification

Mobile & Web Applications

Research Fields

Artificial Intelligence & Machine Learning

- Pose Detection and Estimation
- Large Language Models
- Generative AI



Human-Centered Computing & UX Research

- Medical Image Processing
- Edge Computing
- Embedded Systems



Cybersecurity & Data Privacy

- Data Anonymization
- Data Anomaly Detection
- Synthetic Data Generation



Data Analytics & Business Intelligence

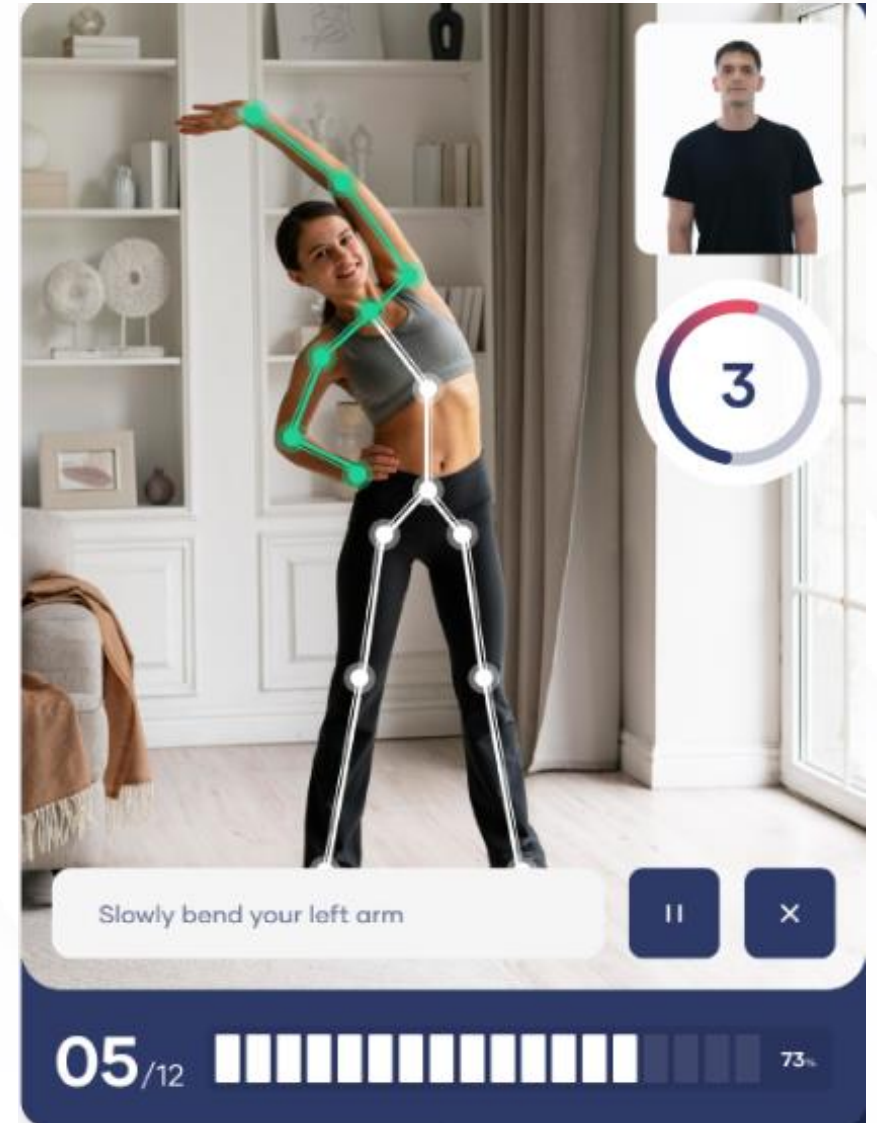
- Radar Signal Processing
- Business Intelligence Applications



MobiThera

AI-driven telerehabilitation app for personalized exercise system

- Custom dataset
- Custom trained model
- No Extra Hardware (Works only with mobile cam)
- Real-Time Tracking
- Personalized Care Plans
- Progress Tracking
- Global Access to Experts



XRCycling

AI-powered personalized exercise bike gaming platform to combat obesity

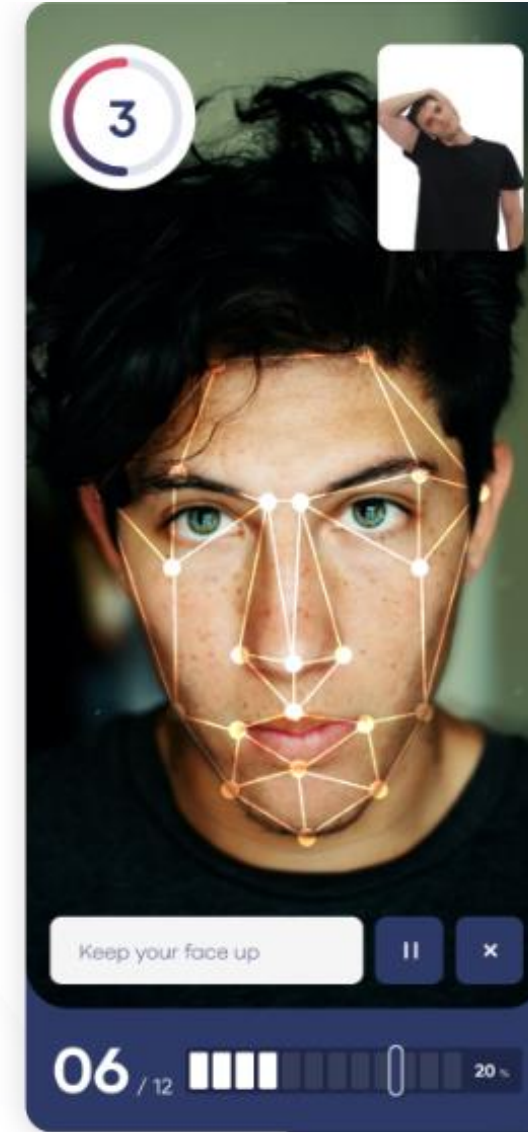
- Facial expression and fatigue analysis
- Integration of VR with Virtual Reality
- Integration of game scenarios with pedals
- Integration of EMG sensors
- Personalized exercise guidance with sports bot



NeckEx

Gamified Neck Exercise Platform

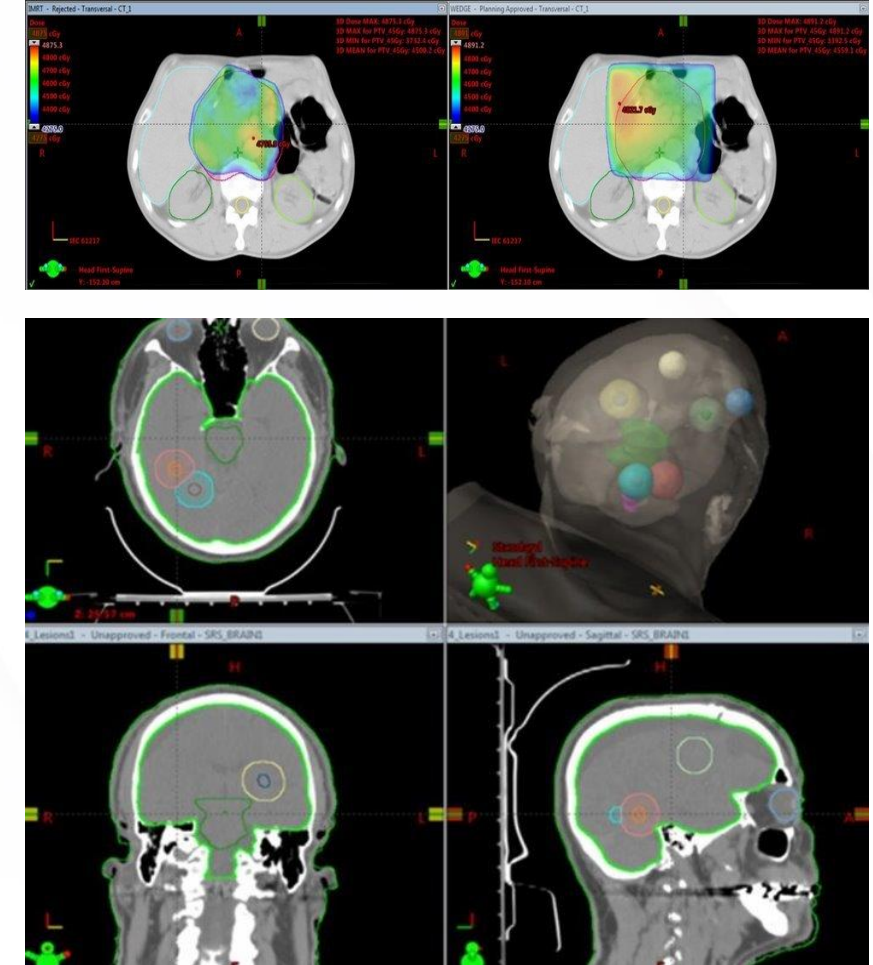
- Promptable Game Modelling
- Personalized exercise plans for neck disorders
- Remote support from experts
- Use with mobile devices, no extra sensors
- Adaptive Difficulty



Rad-Thera

Automated tumor and organs-at-risk segmentation

- Accurate delineation of tumors and organs-at-risk
- Enhanced treatment planning with AI algorithms
- Dose optimization for precise radiation targeting and protection of healthy tissues
- Seamless Clinical Integration



DMEK - TRACK

AI-driven monitoring for DMEK surgery patients

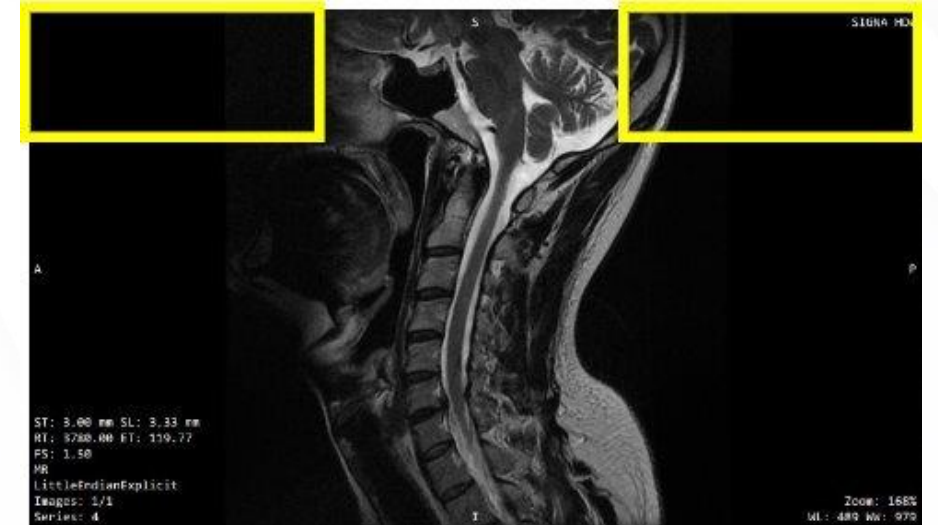
- Analyzes OCT & IVCN images for graft and cell health with AI
- Reduces unnecessary advanced exams
- Directs patients to advanced exams only when needed
- Trained and tested with real-world DMEK surgery patient data
- Custom dataset and segmentation



AUTONOMY

AI Based data anonymization for privacy

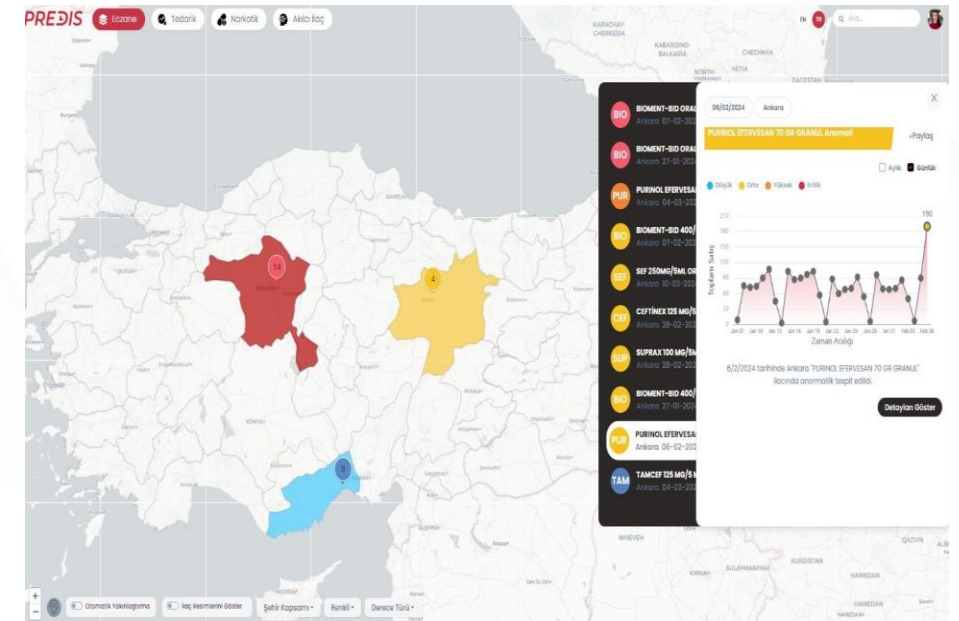
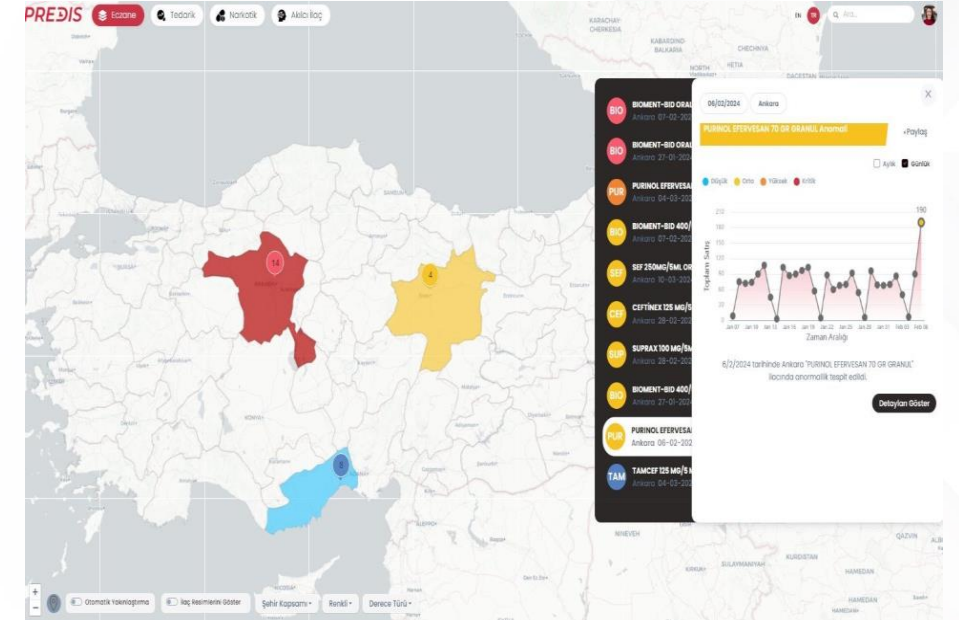
- Protects privacy, maintains data usability
- Uses AI to identify the most valuable representation of the dataset while preserving essential information
- Provides various statistical and AI based techniques to the user
- Ensures adherence to data protection laws (e.g., KVKK)



PREDIS

AI-driven drug sales anomaly tracking, predicting, and procurement management system

- Regional drug sale anomalies using ITS data with the early warning system
- Tracks the path of drug including production, sales, prescription, and deactivation
- Detected anomalies are grouped based on their risk
- Prediction of drug accessibility



PreCareAI

AI-powered platform for efficient patient assessments, appointments, and follow-ups

- Analyzes complaints and suggests clinics with AI Pre-assessment
- Matches patients with appropriate clinics, remote or physical
- Prepares referral for doctors
- Tracks patient progress, care, and satisfaction
- Reduces unnecessary visits



AISYM4MED

Secure, privacy-compliant platform

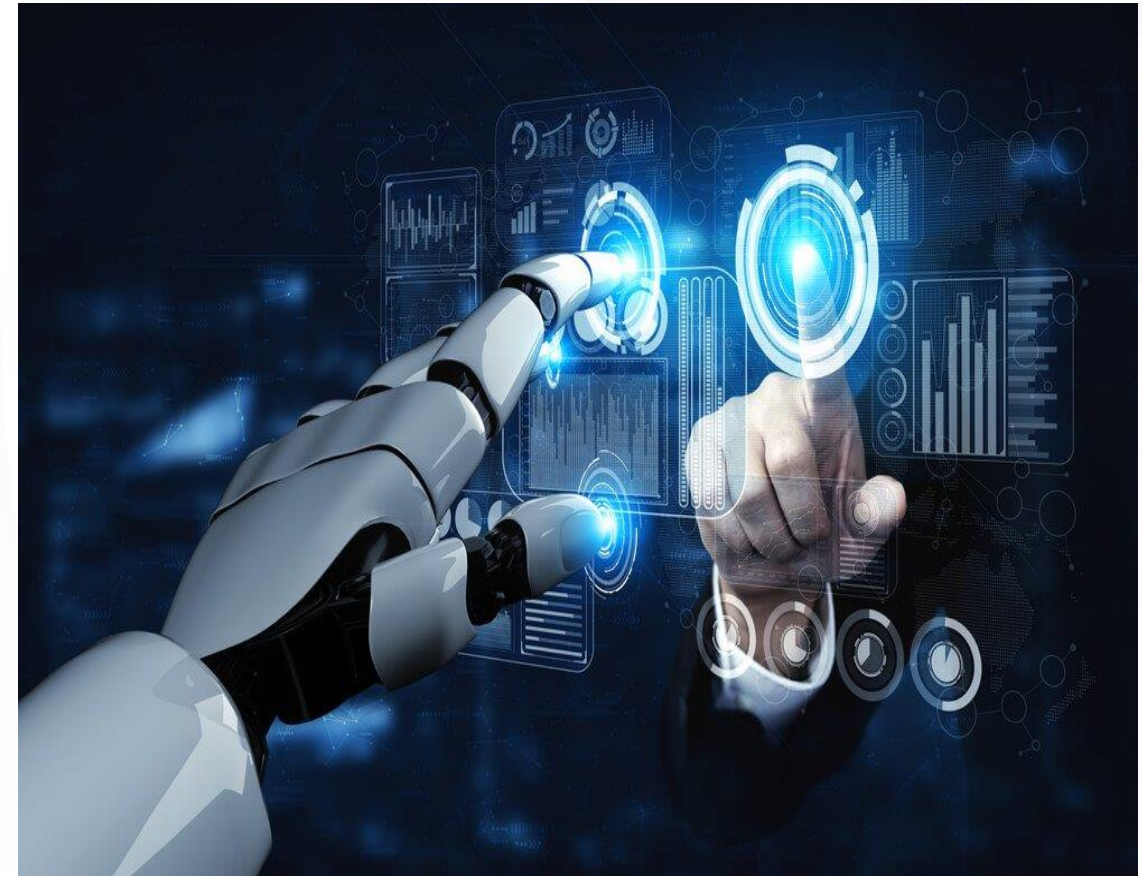
- Anonymization, GDPR compliance
- Synthetic Data Generation
- Federated Architecture, Cross-border data analysis
- Robustness evaluation with real/synthetic data
- Benefits for researchers, patients, and healthcare systems



HIVEMIND

AI-Driven, Responsible Software
Engineering for the Entire Lifecycle

- Enhances all SDLC stages
- Adaptive LLM agents for specific roles
- Supports smart system specification and agile modeling
- Design-by-contract programming for code alignment
- Automates vulnerability assessment and self-repair
- Integrates RAG and Human-in-the-loop for learning
- Focus on responsible AI and ethical practices



PREDIS

Call Topic: HORIZON-HLTH-2025-01-DISEASE-04: Leveraging artificial intelligence for pandemic preparedness and response

Deadline Dates: 18 September 2025

- ☐ An LLM-based study on early detection of drug abnormalities and future diseases

PreCareAI

Call Topic: HORIZON-HLTH-2025-01-CARE-01: End user-driven application of Generative Artificial Intelligence models in healthcare

Deadline Dates: 18 September 2025

- Leveraging Generative AI to assess patient complaints, match them with suitable clinics, generate referrals, and track progress, reducing unnecessary visits and improving healthcare efficiency



CANSU KORKUT
TÜRKİYE

Gmail

cansu.korkut@tigahealth.com

Phone

+90 552 946 8652

+90 312 473 8287

LinkedIn

Cansu Korkut -

<https://www.linkedin.com/in/cansu-k-65981020a/>