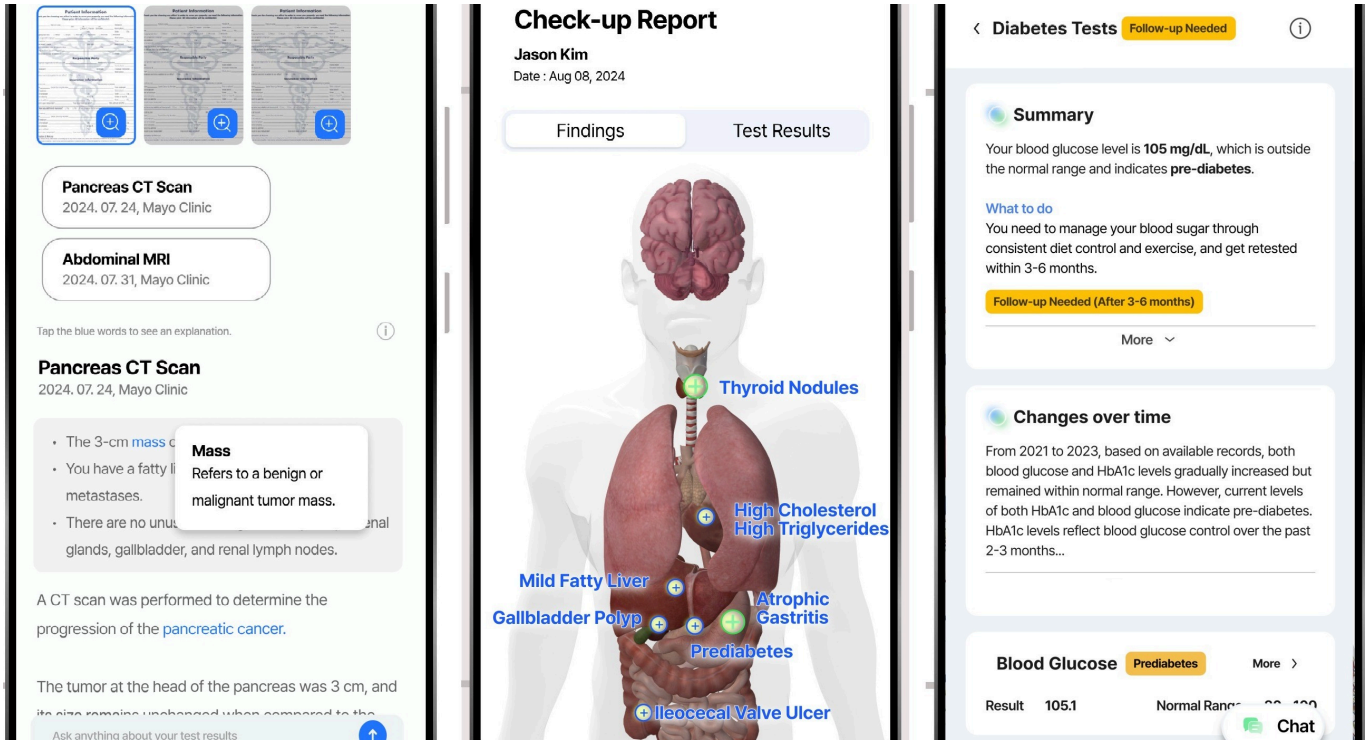
TECH OFFER

AI-Powered Personal Medical Assistant Platform for Enhanced Patient Experience



KEY INFORMATION

TECHNOLOGY CATEGORY:
Healthcare - Telehealth, Medical Software & Imaging
Healthcare - Pharmaceuticals & Therapeutics
Infocomm - Artificial Intelligence
Infocomm - Big Data, Data Analytics, Data Mining & Data Visualisation

TECHNOLOGY READINESS LEVEL (TRL): TRL9
COUNTRY: SOUTH KOREA
ID NUMBER: TO175436

OVERVIEW

This innovative technology addresses the critical challenge of complex medical information interpretation that patients face daily. The solution transforms healthcare delivery through artificial intelligence by providing hyper-personalized, patient-friendly care that makes medical data accessible and meaningful to patients. The platform empowers patients with AI agents that organize and decode complex medical information, delivering instant personalized answers through enterprise-grade medical chatbots and tailored tools with expert insights, functioning as an intuitive AI medical assistant throughout their care journey.

The technology bridges the gap between complex medical terminology and patient comprehension, significantly reducing the time required to interpret and understand medical information. The AI medical assistant platform has processed over 600,000 patient-uploaded medical documents and supports more than 120,000 registered patients (70%+ cancer patients) and

caregivers, demonstrating substantial market adoption. This solution provides comprehensive end-to-end healthcare support, seamlessly connecting the entire patient journey from screening to follow-up care through integrated data synchronization and HIPAA-compliant infrastructure.

The technology owner is seeking collaborations with:

- Hospital systems (EMR, HER vendors) for integrated deployment.
- Telemedicine platforms requiring AI-powered patient support.
- Pharmaceutical companies developing digital therapeutics.
- Medical device manufacturers seeking patient education integration.
- Healthcare insurance providers implementing value-based care programs.
- Healthcare technology accelerators and innovation hub.

TECHNOLOGY FEATURES & SPECIFICATIONS

The platform architecture consists of **three integrated components**: an **AI-powered patient application**, an **Enterprise medical documentation system**, and a **Comprehensive analytics platform.**

Core technical specifications include:

1. **AI Processing Engine:** Advanced natural language processing algorithms specifically trained on medical terminology and clinical protocols, enabling accurate interpretation of complex medical document including lab reports, imaging results, and treatment plans.
2. **Enterprise Integration Suite:** HIPAA-compliant API framework supporting seamless integration with Electronic Health Record (EHR) systems, hospital information systems, and clinical workflow management platforms.
3. **Automated Documentation System:** Machine learning-powered transcription and summarization capabilities that generate structured medical reports from clinical interactions, reducing documentation burden on healthcare providers.
4. **Personalization Engine:** Adaptive algorithms that learn individual patient preferences and medical histories to deliver tailored health recommendations, medication reminders and treatment guidance.
5. **Multi-Platform Deployment:** Cloud-native architecture supporting web, mobile, and tablet interfaces with off-line capability for areas with limited connectivity.

POTENTIAL APPLICATIONS

1. **Hospital Systems:** Enterprise deployment for patient education, discharge planning, and follow-up care coordination. Integration with existing clinical workflows to enhance patient satisfaction scores and reduce readmission rates.
2. **Chronic Disease Management:** Specialized applications for oncology, diabetes, cardiovascular disease, and other chronic conditions requiring ongoing patient education and monitoring.
3. **Telemedicine Platforms:** AI-powered patient preparation and post-consultation support, enhancing remote care delivery effectiveness.
4. **Pharmaceutical Industry:** Full-cycle patient journey analysis, Patient engagement tools for clinical trials, medication adherence programs, and post-market surveillance studies.
5. **Insurance Healthcare:** Population health management solutions, preventive care programs, and risk stratification tools for value-based care models.
6. **Global Health Application:** Scalable solutions for underserved markets where healthcare provider access is limited, enabling patients to better understand and manage their health conditions independently.

MARKET TRENDS & OPPORTUNITIES

The global AI in healthcare market is projected to reach USD 102 billon by 2028, with patient engagement solutions representing a rapidly growing segment. Increasing healthcare consumerization, regulatory support for digital therapeutics, and growing emphasis on patient-centered care models create substantial market opportunities.

UNIQUE VALUE PROPOSITION

Clinical-Grade Accuracy: Unlike general health applications, the platform provides medical domain-optimized AI with clinical data organization capabilities, ensuring accurate interpretation of complex medical information.

Proven Market Adoption: Demonstrated user base of over 120,000 patients with substantial document processing volume validates real-world effectiveness and user acceptance.

Comprehensive Patient Journey Coverage: End-to-end solution spanning screening, diagnosis, treatment, and follow-up care through integrated data synchronization across healthcare providers.

Enterprise-Ready Integration: HIPPAA-compliant infrastructure with proven deployment in major healthcare systems, addressing security and regulatory requirements essential for healthcare adoption.

Specialized Medical Focus: Domain-specific optimization for healthcare applications, contrasting with generic AI assistants that lack medical terminology understanding and clinical workflow integration.

Scalable Global Deployment: Cloud-native architecture supporting international expansion with localization capabilities for different healthcare systems and regulatory environments.