

# CardioNex AI

## Predicting what others miss

Multimodal artificial intelligence (AI) cardiovascular risk platform using routine computed tomography (CT) and electronic health record (EHR) data to forecast major adverse cardiovascular events (MACE).

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**THE THESIS:** Hospitals already collect the data. Current tools use only part of it. CardioNex AI turns the unused signal into longitudinal patient risk.

RETROSPECTIVE PERFORMANCE: Area under the receiver operating characteristic curve (AUROC), higher is better

**29-33%**

relative AUROC gain

vs baselines (e.g., coronary artery calcium (CAC))

**0.87-0.89**

MACE prediction 10-year AUROC

unimodal retrospective research cohorts

**0.65-0.70**

existing-tool AUROC

clinical scores and CAC benchmarks

**11 sites, 5 vendors**

**25.5K structured, 17.7K image**

multi-site, multi-vendor cohorts

### PROBLEM CURRENT TOOLS SEE ONLY PART OF THE PATIENT

Too little data in. Too much signal lost.

- **Pooled Cohort Equations (PCE)** and **Predicting Risk of Cardiovascular Disease EVENTS (PREVENT)** use a narrow set of clinical variables.
- **Coronary artery calcium (CAC)** compresses a rich CT scan into a single principal measurement.

**Result: predictive signal is discarded before modeling.**

### PRODUCT LEARN THE SIGNAL, THEN PREDICT

**CARDINAL** learns from the full routine non-contrast CT without a predefined biomarker bottleneck.

**MACE-Integrated** combines EHR data, risk scores, CAC, and CT-derived measures.

**Fusion** combines both streams for longitudinal prediction with an architecture scalable to domains such as oncology.

#### INPUTS

CT + EHR

#### AI ENGINE

Learn + fuse

#### OUTPUT

1, 3, 5, 10-year risk

### EVIDENCE & TRACTION

- Two manuscripts under peer review. **CARDINAL** is available as an arXiv preprint.
- Provisional patent applications filed; non-provisional filings in preparation.
- **NSF I-Corps National Teams award**, Fall 2026.
- Additional non-dilutive funding applications underway, including NIH R01 and Georgia Research Alliance programs.
- Active validation and pilot discussions in the United States and India.

### CUSTOMER & GO-TO-MARKET

Target customers include health systems, enterprise imaging/ **picture archiving and communication system (PACS)**, and EHR platforms. Clinicians are end users (validated via initial customer discovery).

#### UNITED STATES

Strategic partner hospitals for pilots and validation. Scale via health systems, imaging/ PACS, EHR, and enterprise partners.

#### INDIA

Specialty hospitals, cardiac/ oncology diagnostic networks, and government/ district hospitals via existing relationships.

**Middle East & Europe:** expand through strategic hospital partners.

### BUSINESS MODEL

**United States** Enterprise licensing/co-development with site or platform subscription plus usage/per-scan pricing.

**India** Direct hospital or diagnostic network subscription and usage-based pricing.

**Capital:** pre-incorporation and \$0 external equity raised. Seeking strategic pre-seed capital for validation, productization, regulatory planning, and market entry.

### STRATEGIC SUPPORT WE NEED NOW

- Additional healthcare industry experts to strengthen pricing, reimbursement, regulatory strategy, channels, and enterprise commercialization.
- **United States:** Strategic partner hospitals for pilots.
- **India:** Introductions to leadership at large hospitals, specialty/diagnostic networks, and government systems.
- **Middle East & Europe:** Introductions to leadership at large partner hospitals.
- **Enterprise partnerships:** Introductions to imaging, PACS, and EHR platform partners.

**VISION:** Become the predictive intelligence layer of the health system, using data hospitals already collect to forecast what is likely to happen next.

### FOUNDING TEAM

**Roy M. Gabriel**

Founder

PhD Candidate in machine learning. Founder of a prior profitable AI venture. BA, BS, and two MS degrees.

**Ali Adibi, PhD**

Co-Founder & Scientific Advisor

Georgia Tech Professor and Pettit Chair. 260+ peer-reviewed publications and \$40M+ in sponsored research.

**Deepak Adoni**

Co-Founder & Strategic Advisor

MediQlogix CEO. 20+ years in enterprise technology, with relationships spanning 80+ hospitals and 30 diagnostic centers.