Ensight–AI

AI-Enabled ECG Insights for Cardiovascular Disease Diagnosis

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The Need for Easier and Accessible Cardiovascular Diagnostics

Current Paradigm
Resource-intensive Cardiac Imaging

Diagnosis
Patients with Undiagnosed Disease

Treatment Monitoring
Therapy with Mandated Cardiac Monitoring

Minority of Patients have Access and Diagnosed

Majority of Patients do not have Access and Diagnosed

Stakeholder Challenges
(Pharma/Healthcare)

1. Fewer Patients Available for Novel Drugs/Therapies
2. Reduced Uptake of Therapies requiring Expensive Monitoring

Large increase in cost of therapy
ENSIGHT-AI: AI-enhanced detection of heart disease from ECG Images and wearables

Electrical conduction measurable in 3D

12-lead ECG

Wearable ECG

Note: Apple watch over-checks for heart attacks.
Our Solution: Designing AI to Learn from ECGs What Previously Required Advanced Cardiac Imaging

Combined imaging and ECG data

Proprietary Deep Learning Algorithms

Learning Cardiac Imaging Signatures on ECG images & Signals

Identifies and localizes cardiac dysfunction*

12-lead ECG Images

Wearable derived ECGs

*Pending patents, applications in Sangha V, Khera R Nature Communications 2022; Sangha V, Khera R medRxiv 2022; Khunte A, Sangha V, Khera R medRxiv 2022
Benefits of an ECG Powered Solution

- Low Cost
- Globally Available as Standard Images
- Expanding Access with Wearables
- Detecting Disease Not Discernable to Humans
Our Capacity: seamless workflow and broadly accessible approach to complex CVD diagnosis

System-level Screening

Patient-level Screening

Connect to ECG Storage Repository

Identification of at-risk Patients at Scale

Upload Image

Scan Image

Upload or Scan ECG Image

Diagnosis

Left Ventricular Systolic Dysfunction
Probability: 92.3%

Patient Information
ECG Reading
Physician Information

Add Notes
Download Diagnostic Report
Patient Referral

*Pending patents, applications in Sangha V, Khera R. Nature Communications 2022; Sangha V, Khera R. medRxiv 2022
Significant unmet medical need in highly prevalent disease category with active investment

<table>
<thead>
<tr>
<th>Global CVD Therapeutics Market by 2026</th>
<th>Individuals with Disease in Active Development Domains</th>
<th>Percent of Participants without Timely Diagnosis</th>
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<tbody>
<tr>
<td>$64B</td>
<td>18.5 Million</td>
<td>70%</td>
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Total Addressable Market is Anyone With

(1) ECG in Health Setting
(2) Wearable with ECG
# 12-month Roadmap for Product Suite: Primed for Exponential Growth

<table>
<thead>
<tr>
<th>Program</th>
<th>Development</th>
<th>Preclinical</th>
<th>Clinical</th>
<th>FDA Review</th>
<th>Launch</th>
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<tbody>
<tr>
<td>Reduced Ejection Fraction</td>
<td>Top Pharma</td>
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<td>Breakthrough Device</td>
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<td>Severe Aortic Stenosis</td>
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<td>Hypertrophic Cardiomyopathy</td>
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<td>SMART-HEART Screen (Multiple abnormalities)</td>
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<td>Amyloidosis</td>
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<tr>
<td>Other Programs</td>
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Robust IP portfolio will protect around image-based AI-ECG analysis as an approach
Phased Go-To-Market approach encompasses Pharma partnerships and point-of-care applications for EACH PRODUCT

For EACH AI-ECG Application

Health system-level diagnostics → Point-of-care clinician diagnostics → Consumer-facing wearable product

**Product lifecycle**

- **Pharma Partnerships for Trial/Tx screen – $5–10m**
- **Pharmacotherapy paired CV monitoring – $10–$20m**
- **Clinical AI-ECG CV diagnostic tools – $50–$100m/yr**
- **Enhanced community screen for CV disease >$100m/yr**

Early pharma-driven applications to enhance diagnosis/monitoring & product visibility (Existing partnerships + Interest)

Direct assistive/augmentative clinical diagnostic tool – payer-funded (New CPT codes)

Future direction driven by interest from Pharma partners (Prototype under development with BMS)
Competitive Landscape: Overview of Key Competitors

- anumana
- iz.ai
- TEMPUS
Our Distinguishing Features and Key Advantages

Direct ECG–Image based Inference*

Broad suite of Individual Products (at par or exceeds competition)

Diverse patient populations

Clinically rigorous and robust models

Global interoperability ● Infinitely scalable ● Versatile deployment

Existing Relationship with Bristol–Myers Squibb
Our current focus:
A push to accelerate regulatory approval for SMART-LV product

Target Product: SMART-LV*
ECG Image-Based LV ejection fraction model
• 5% adult prevalence, 7 in 8 undiagnosed
• Active area of therapeutic development

1. Contract with Prominent Regulatory Consulting Team
2. Large Independent Validation Studies
3. Business plan with broader product strategy

*SMartphone-adaptable Artificial Intelligence for PRediction and DeTection of Left Ventricular Systolic Dysfunction
Awards and Successes

Elizabeth–Barrett Connor Award
National award for Scientific Excellence

Blavatnik Award
$300K in non-dilutive capital from Yale

Rita Wilson Prize
$10K Award from Yale
Our Ask

• **Partnership**: Investors & partners with strong interest in transformative health technology

• **Resources**: Roadmap for multiple products to market in the next 12 months. Following needed in 12–18 months:
  - Regulatory team
  - Executive and business team
  - Software team

Resources needed: $4–5m

Awards through Yale $310K
Thank you

ENSIGHT Ai

The Future of Cardiovascular Diagnostics

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SMART-LV
(Fully functional demo)