



angiomedix

# CHANGING THE WAY WE DIAGNOSE HEART DISEASE

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# Ischemic Heart Disease

## Prevalence: 250 million people worldwide

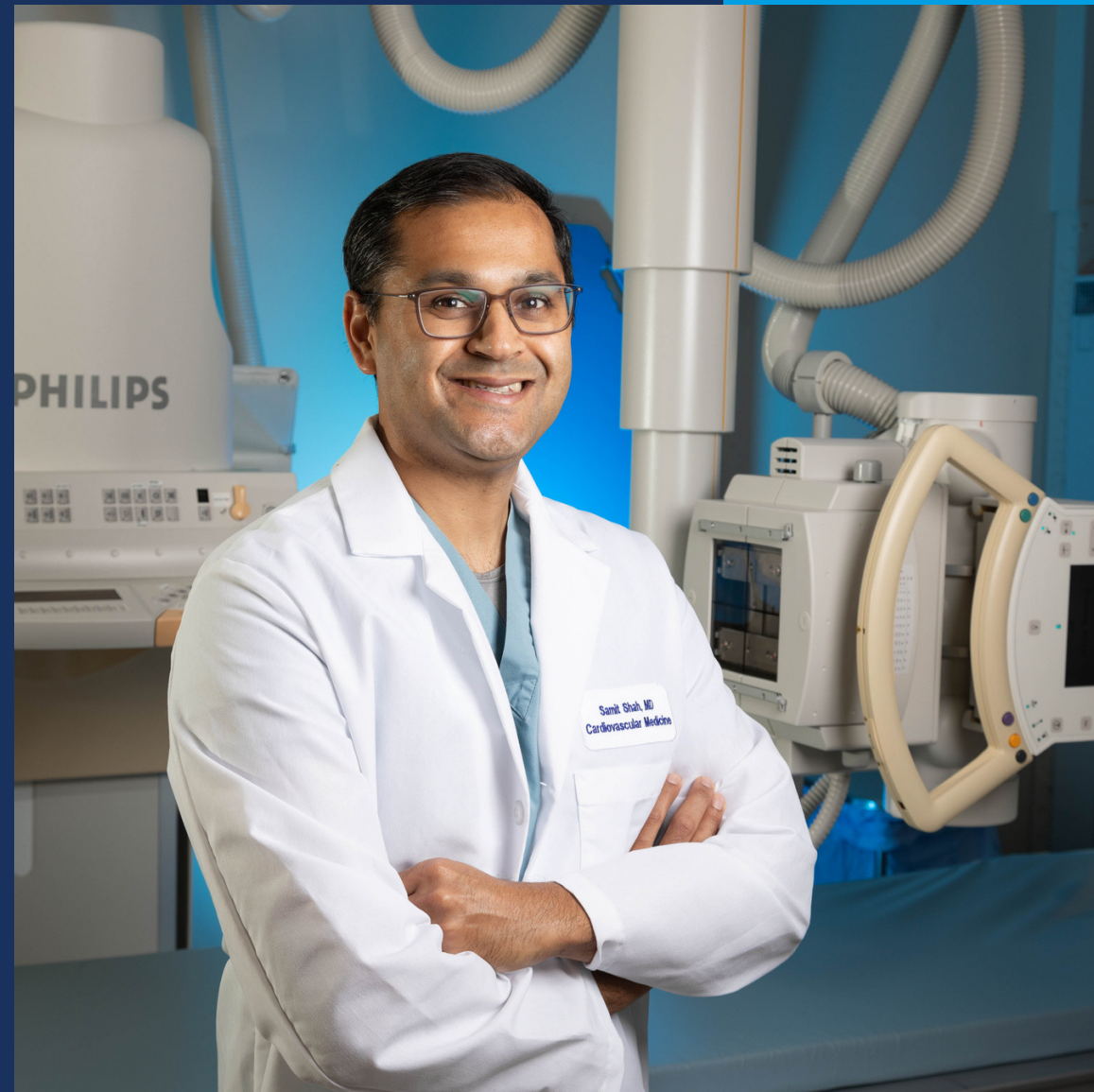
- Leading cause of death for women and men
- Includes **heart attacks** and **conditions that reduce blood flow to the heart**
- > \$80 billion of US healthcare costs / year

## Misdiagnosis

### Major problem for women

- Less likely to get an accurate diagnosis
- Less likely to get appropriate testing
- More likely to die from a heart attack





## Bio

### Samit Shah MD, PhD

Dr. Shah is an Interventional Cardiologist who specializes in the invasive evaluation of coronary artery disease, coronary physiology, and complex coronary interventions.

His scholarly work has focused on the outcomes of cardiovascular interventions and the invasive assessment of coronary physiology. He is the national principal investigator of the [DISCOVER INOCA multi-center registry](#) and the [Vahaticor SERRA-I A-Flux Coronary Sinus Reducer Early Feasibility Study](#) for coronary microvascular disease.

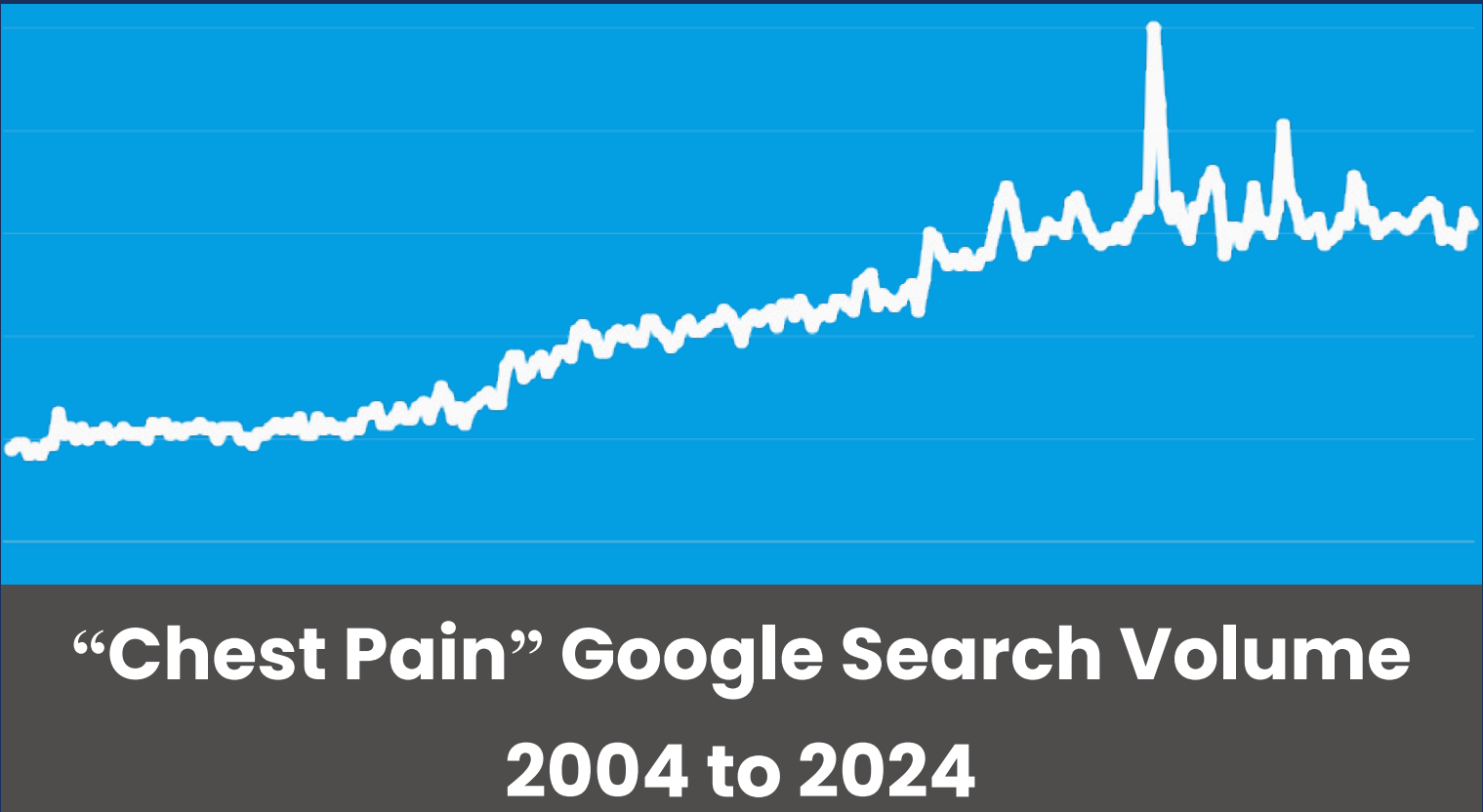
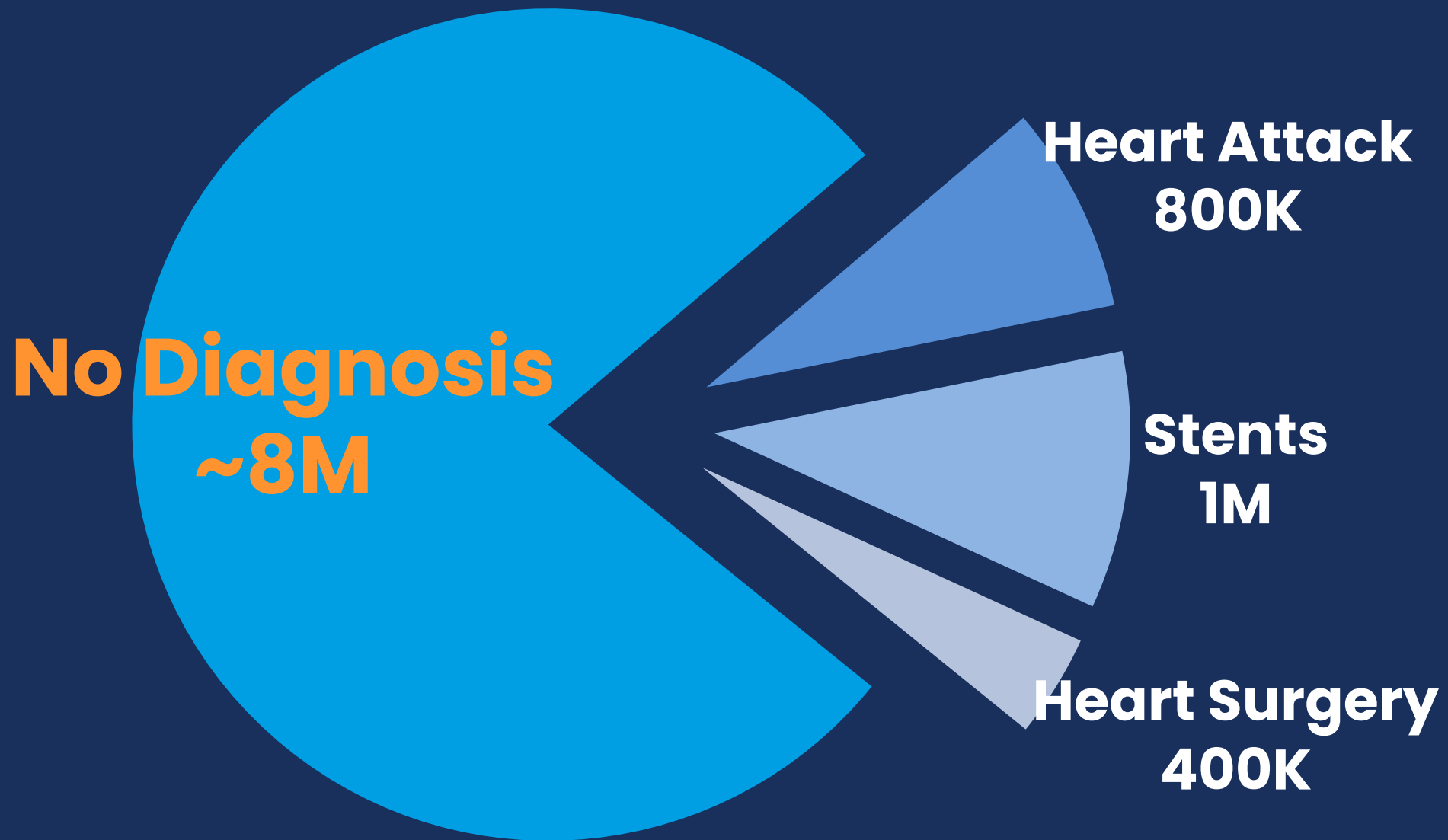
His research is supported by:



Women's  
Health  
Research  
at Yale

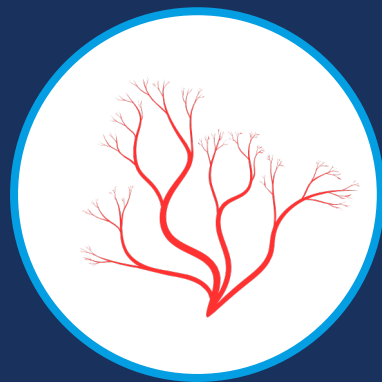


# Every year > 10 million people in the United States seek medical attention for chest pain

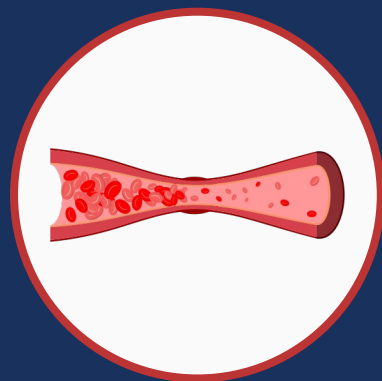


# Ischemia with Nonobstructive Coronary Arteries (INOCA)

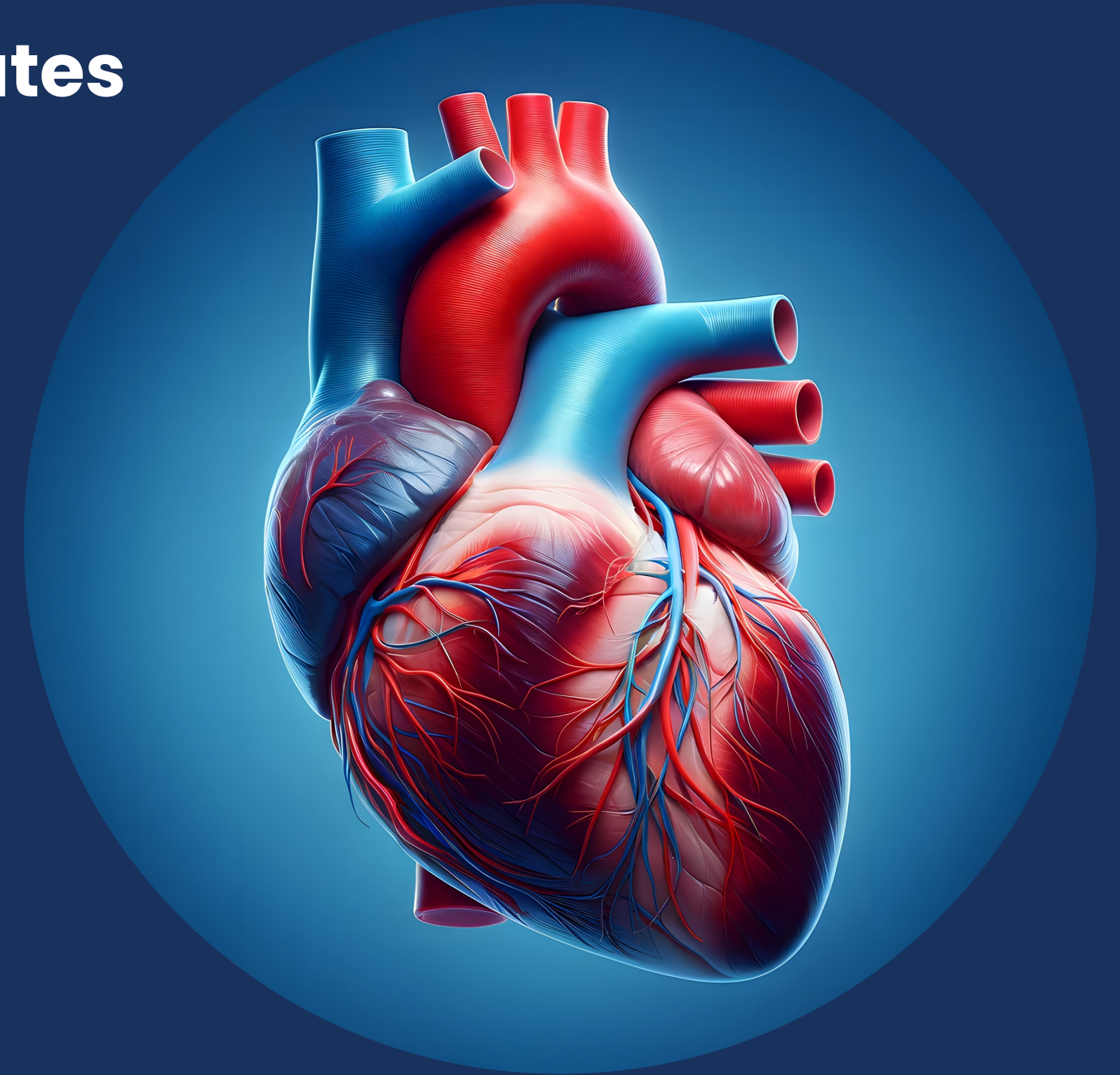
- **At least 3–4 million people** in the United States
- More common in women (> 70%)
- **Cannot be diagnosed with routine testing**



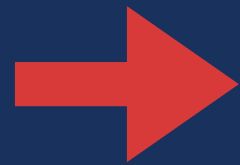
**Coronary Microvascular Disease (CMD)**



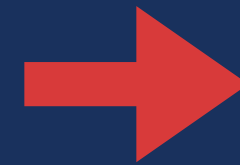
**Coronary Vasospasm**



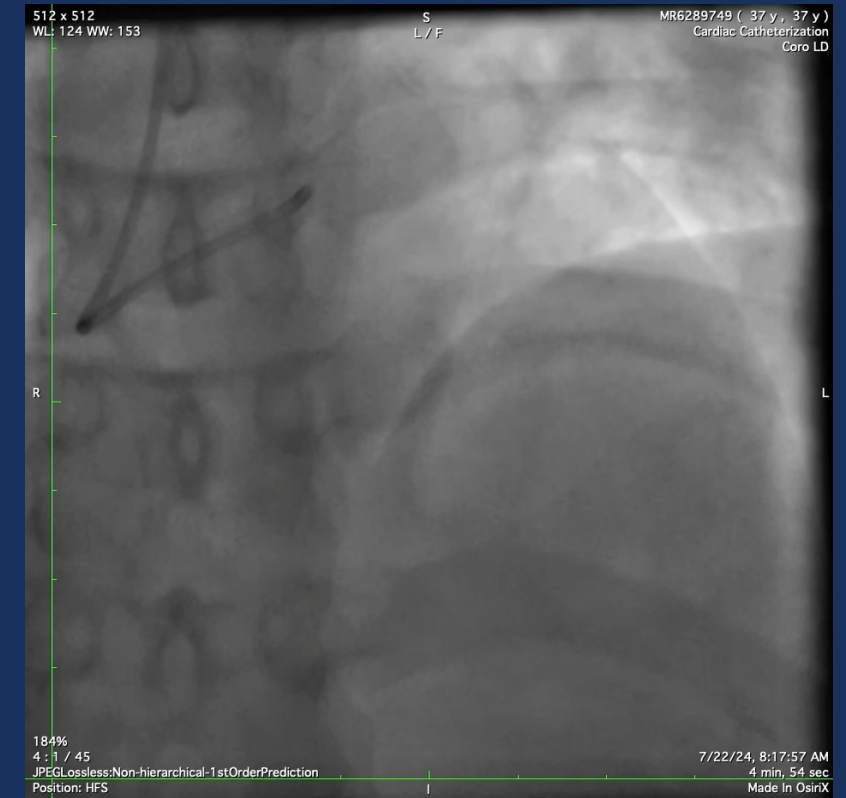
A 38-year-old woman goes to the ER with chest pain



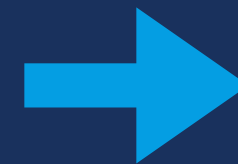
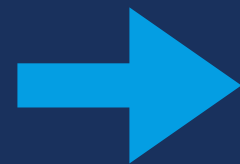
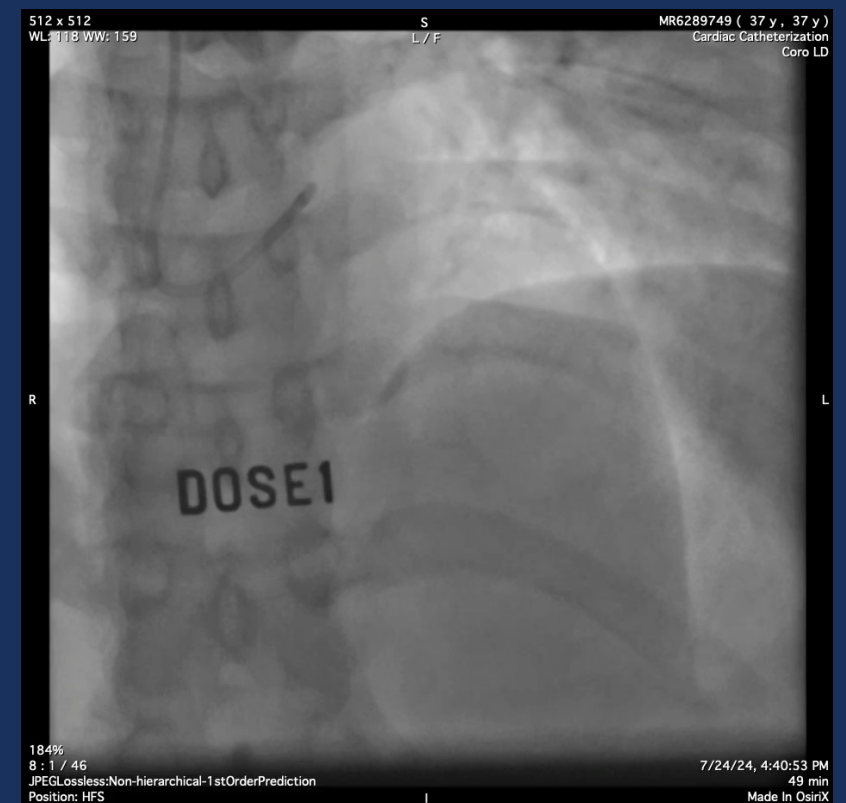
Urgent heart catheterization due to suspected heart attack



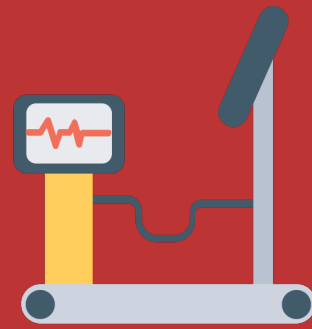
No blockages  
Ongoing chest pain



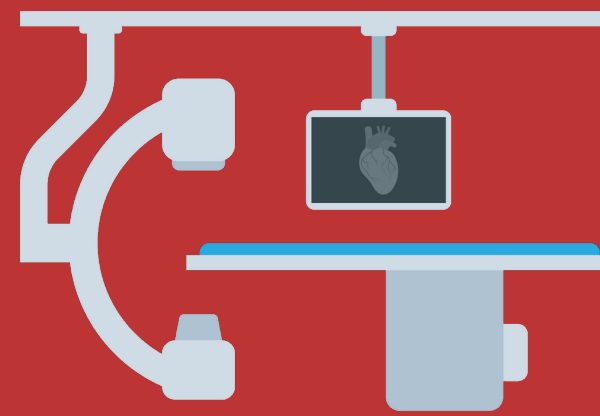
Coronary Vasospasm  
Complete relief with medication



## Coronary Angiography



EKG / Stress Test



Cardiac Catheterization



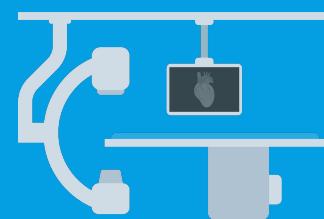
### No Diagnosis

- Repeat testing
- Ongoing symptoms
- Spend \$45,625 / patient
- Higher mortality

## Our Method: Coronary Function Testing



1



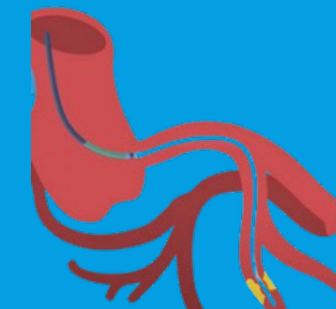
Cardiac Catheterization

2



Acetylcholine Testing

3



Microvascular Testing



### Diagnosis

- Targeted therapy
- Improved symptoms
- Save \$23,793 / patient
- Better prognosis
- Class I Guideline Rec

# Our Solution: **AngioView**



## 1 Drug: **Acetylcholine Chloride**

- Used to test the endothelium (or lining) of coronary arteries
- **Stable for 28 days** at room temperature
- No formulation available for cardiovascular use (off label)
- Solves a major bottleneck that limits coronary function testing

## 2 Device: **Slow Inject Syringe**

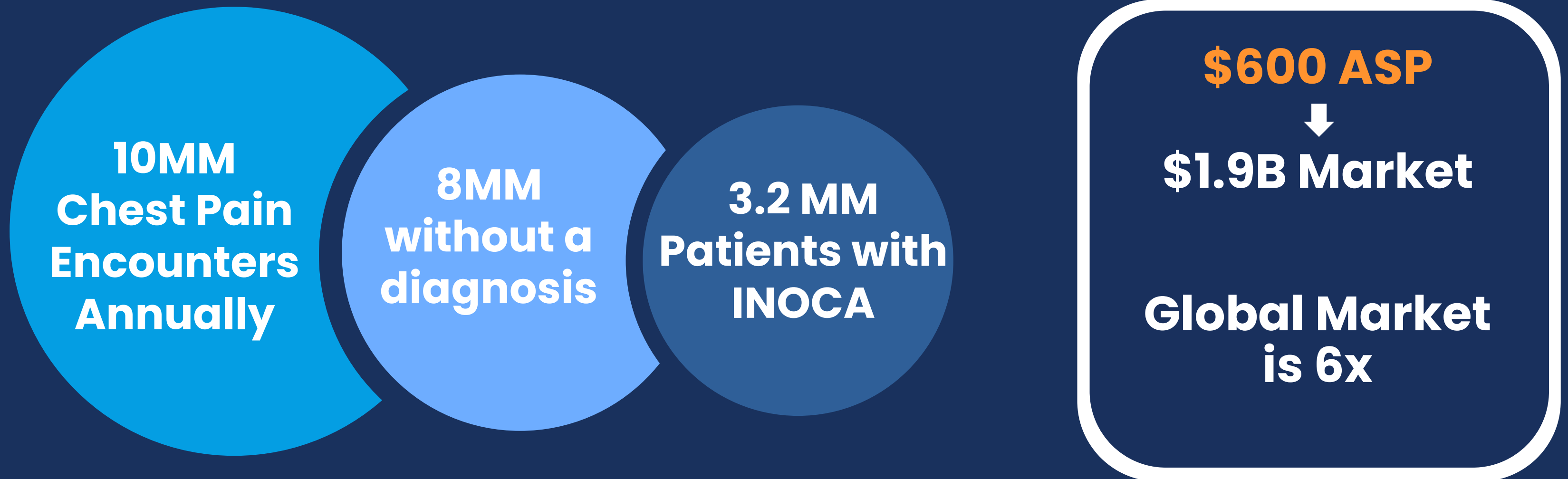
- **Rapid injection** of acetylcholine chloride **can cause arrhythmias**
- **Slow injection is safe** and can be **performed routinely**
- Injected through standard coronary artery catheters



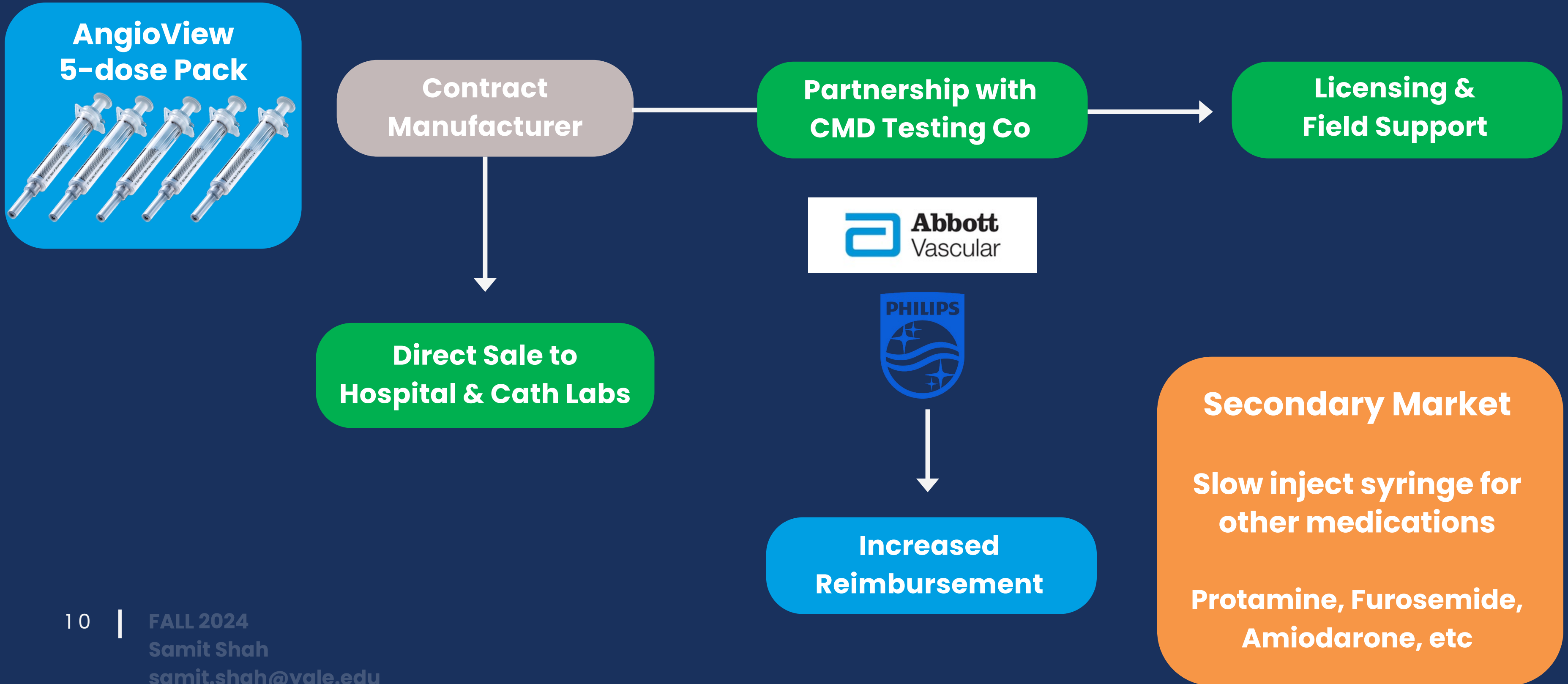


# Market Opportunity (United States)

- › 10 MM people in the U.S. are evaluated for chest pain each year
  - ~40% of patients with unexplained symptoms may have **INOCA**



# Go to Market Strategy



# Key Advantages



**AngioView**

- **SAFE: Tested in > 13,000 patients**
- **Shelf stable** for 28 days
- Apply for **new procedure reimbursement**

## IP Strategy

### Patents Filed/Pending

- 1 Acetylcholine chloride formulation and use
- 2 Slow Injection Syringe (2 Designs)

### Market Exclusivity

- 3 FDA New Chemical Entity (NCE)
  - Up to 5 years

## Competition



### Miochol Eye Drops

- Off label
- Time / labor for compounding
- No reimbursement



### Non-invasive Tests

- Detect ischemia
- Complimentary test (needs AngioView for diagnosis)



### Invasive Tests

- Pairs with AngioView
- Complimentary technology (microvascular test)

# Use of Proceeds / Development Roadmap

**Our Ask:** Pre-seed funding for drug optimization and FDA application



• **2023 Q4**

Provisional Patent filed for Acetylcholine formulation

• **2025 Q1**

Prototype and file provisional patent for **AngioView Syringe**

• **2025 Q1**

Formulation & Stability testing for acetylcholine chloride

• **2025 Q3**

- Regulatory Filing
- **Fee waiver eligible**
- 2025 Q2 FDA 505(b)(2) New Drug Application (new indication of an existing drug)

• **2026 Q1**

Market launch for **AngioView**