



# METSAEMA

## *Mother's Companion*

AIProHealth Summer School 2024: Tartu Edition  
Delta Centre, University of Tartu  
12 - 16 August 2024  
Group 1 - Team Black

# Problem

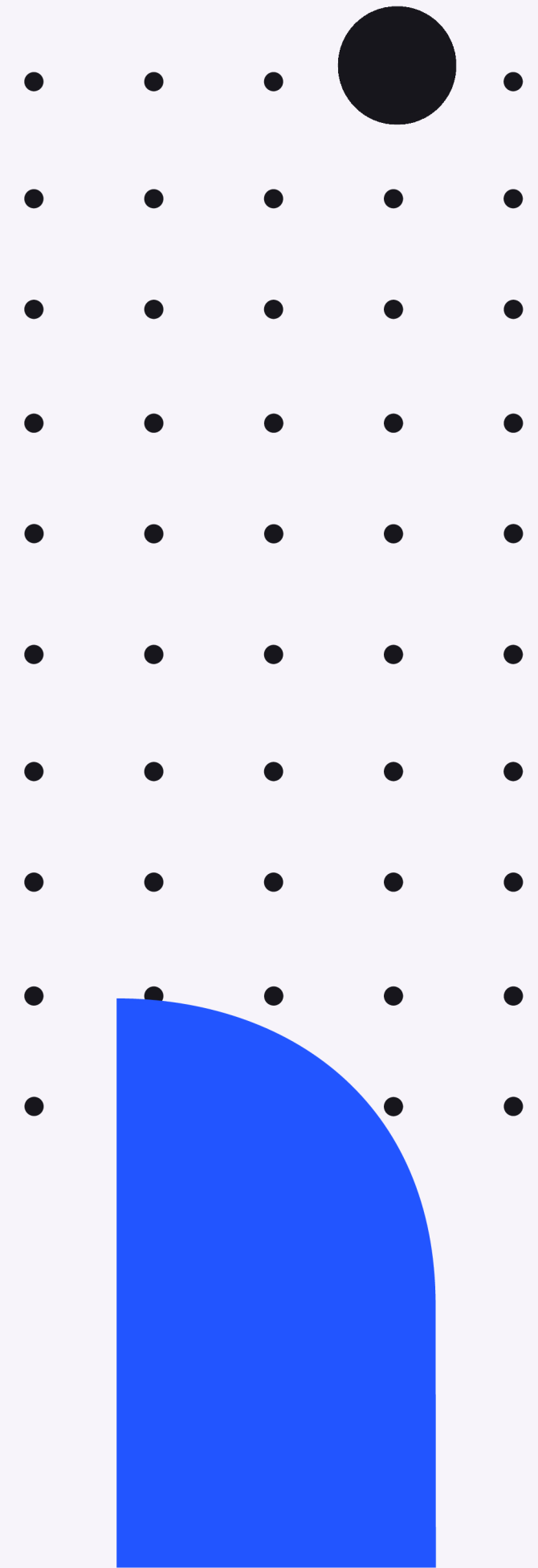
Preeclampsia (PE) remains a **leading cause** (2-8%) of pregnancy-related complications, with more than **50,000 maternal deaths** and over **500,000 fetal deaths** worldwide.

➔ **€9.1 million per annum**

National cost of PE treatment in Europe  
- SCOPE Study.

➔ **Late detection**

Non-severe PE often goes undetected until it escalates to a severe form and leads to multiple complications.



➔ **Early detection and intervention**

➔ **Personalised care**

➔ **Clinical decision support**

Our solution provides early detection and personalized management of non-severe PE through AI-powered real-time monitoring, enhancing maternal and fetal health outcomes while reducing complications and healthcare costs.



**Our  
Solution**

# METSAEMA

## *Mother's Companion*

### Product Features

**Dashboard:** Displays critical health metrics at a glance.

**Alerts:** Real-time notifications for abnormal readings.

**History Tracking:** Comprehensive history of patient data for trend analysis.

**Reports:** AI-generated risk reports for informed decision-making.





# Target Market

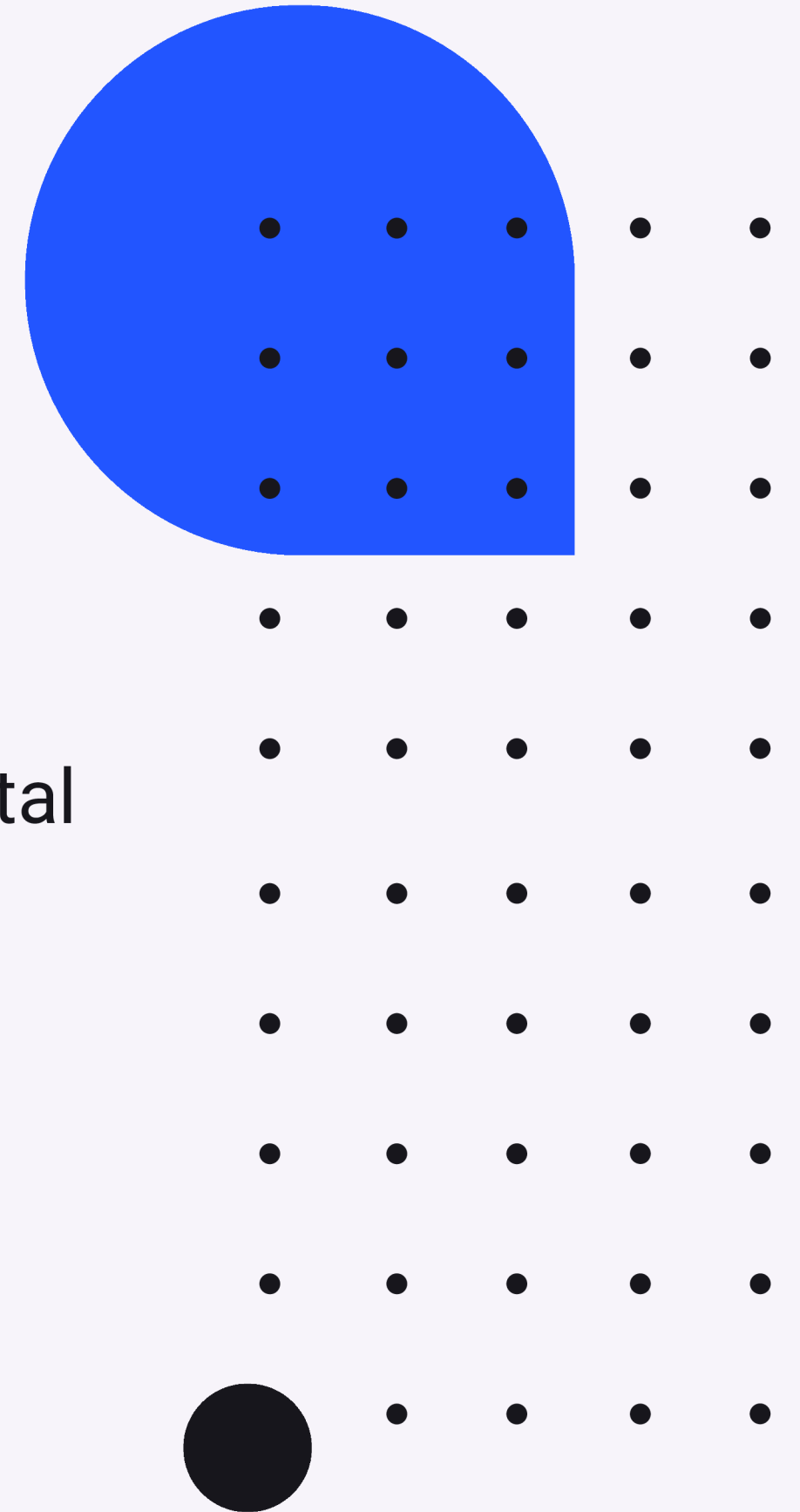
Healthcare providers, prenatal clinics and hospitals.

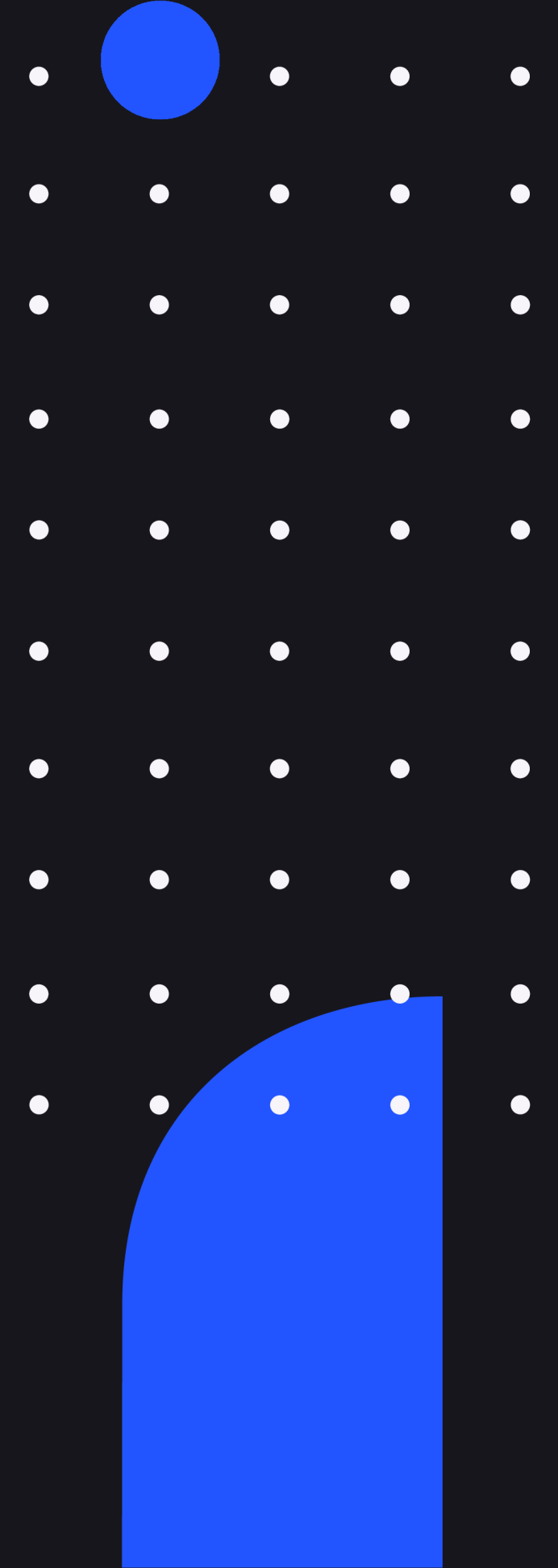
## 1. Primary Market

Healthcare providers include obstetricians, gynaecologists, prenatal clinics and hospitals specializing in maternal health.

## 2. Secondary Market

Consumer health markets, particularly women's health apps and wearable technology platforms cater to pregnant women.





# Market Size

- **\$50 billion in 2020**

Total available market includes prenatal care, maternal diagnostics and pregnancy management.

- **\$57 billion by 2027**

Projected with 2.5-3.0% compound annual growth rate (CAGR) growth

- **5-8% pregnancies worldwide**

Incidence of PE

# Biomarker-Based Diagnostics

Roche Diagnostics, Thermo  
Fisher Scientific, Parsagen  
Diagnostics

# Genomics and Predictive Diagnostics

Mirvie

# Indirect Competitors

# Imaging and Ultrasound

GE Healthcare, Philips  
Healthcare

# Pharmacological Interventions

AstraZeneca

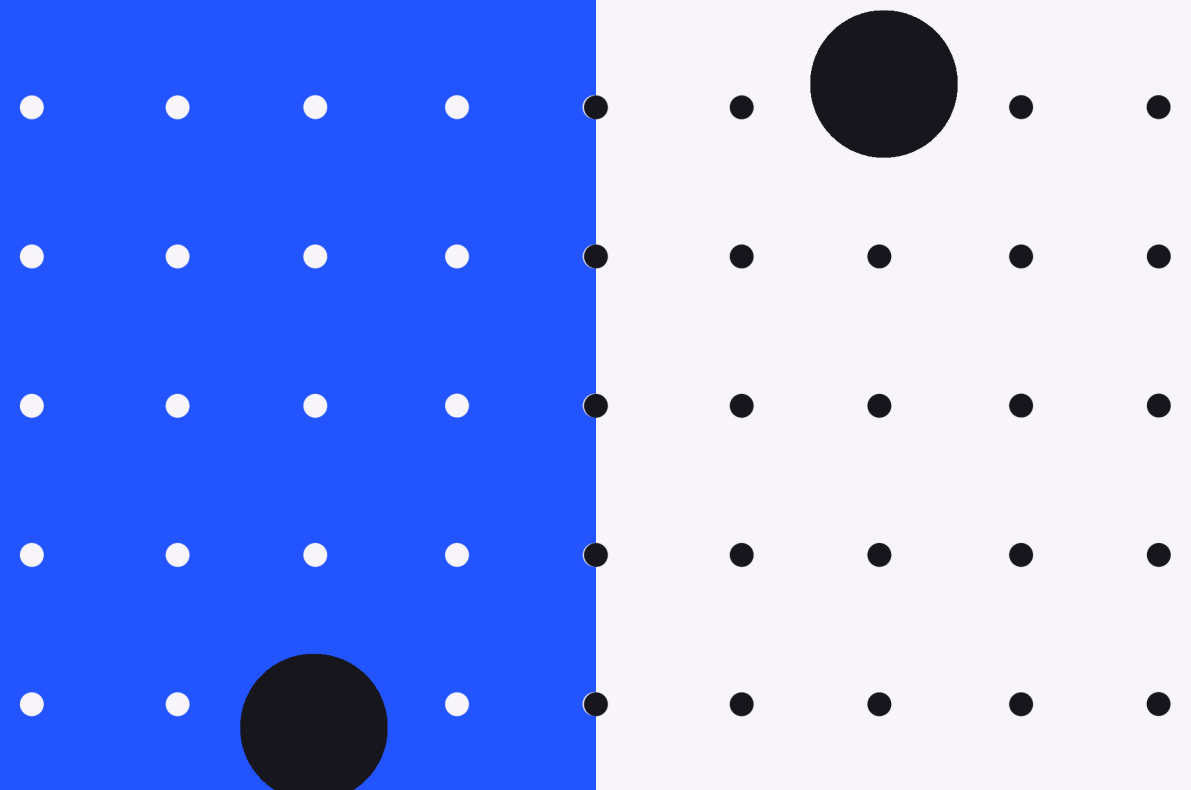
# Direct Competitors

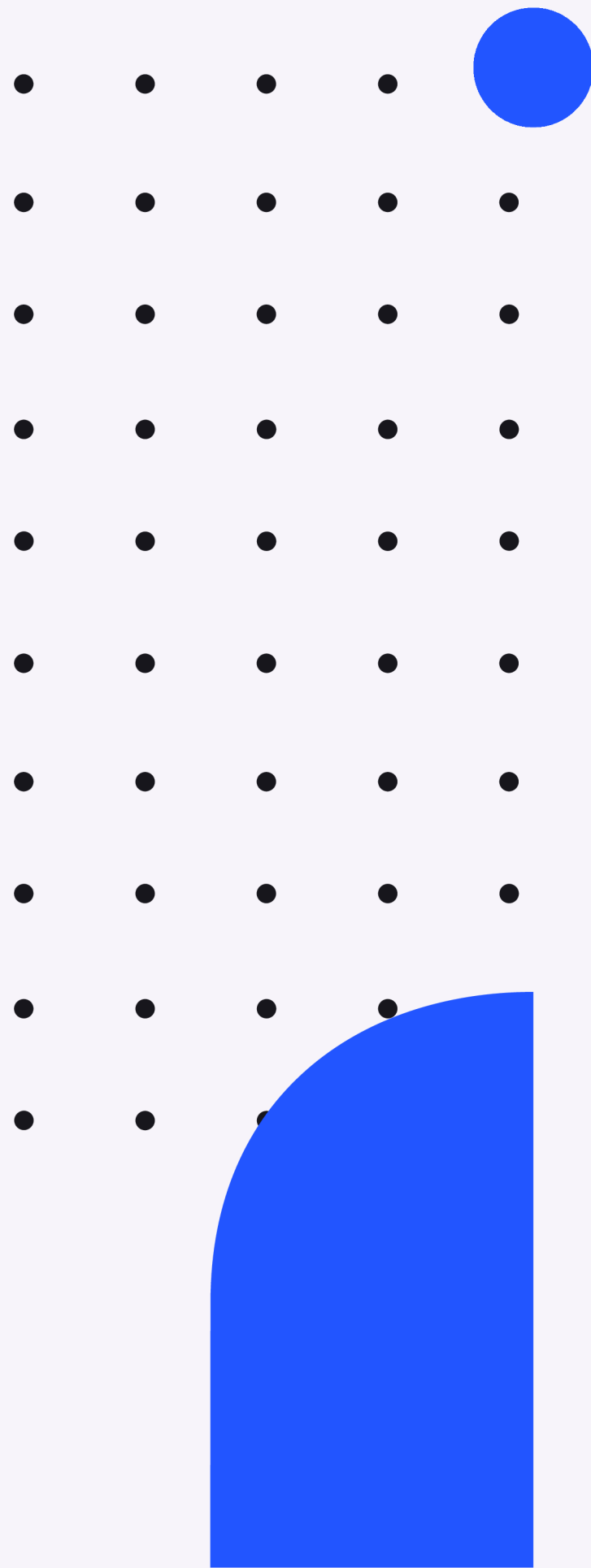
# Remote Monitoring and Digital Health

Babyscripts, Philips Healthcare

# AI and Machine Learning-Based Solutions

AI\_PREMie





# Competitive Advantages



## Proactive Detection

Our AI-driven approach enables early intervention, reducing the risk of complications.

## Scalability

Capable of being integrated into various healthcare systems worldwide.

1

## Phase 1

Partner with leading hospitals and prenatal clinics for pilot programs.

2

## Phase 2

Expand through direct sales and partnerships with healthcare providers.

3

## Phase 3

Explore opportunities in consumer health and wellness markets.

4

## Regulatory Approvals Quality Assurance

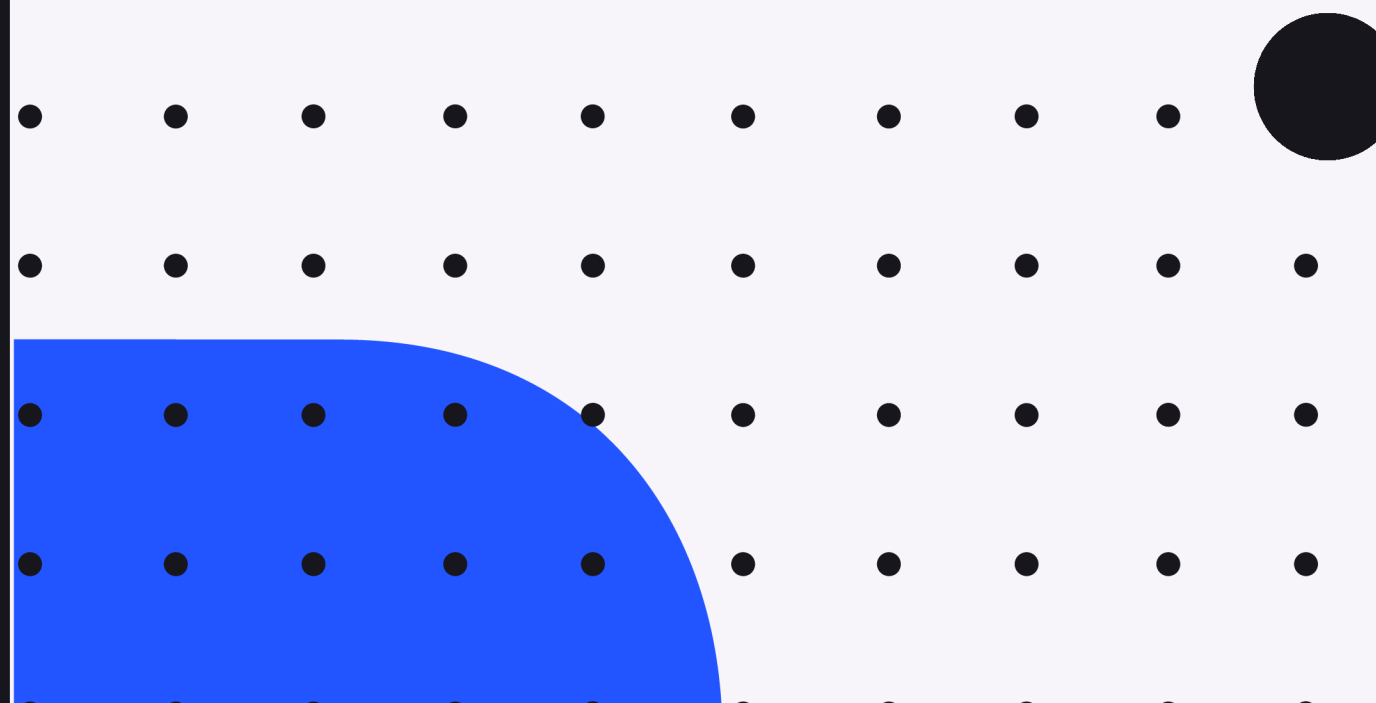
Medical Device Regulation, General Data Protection Regulation

ISO 13485:2016 – Medical Devices Quality Management Systems

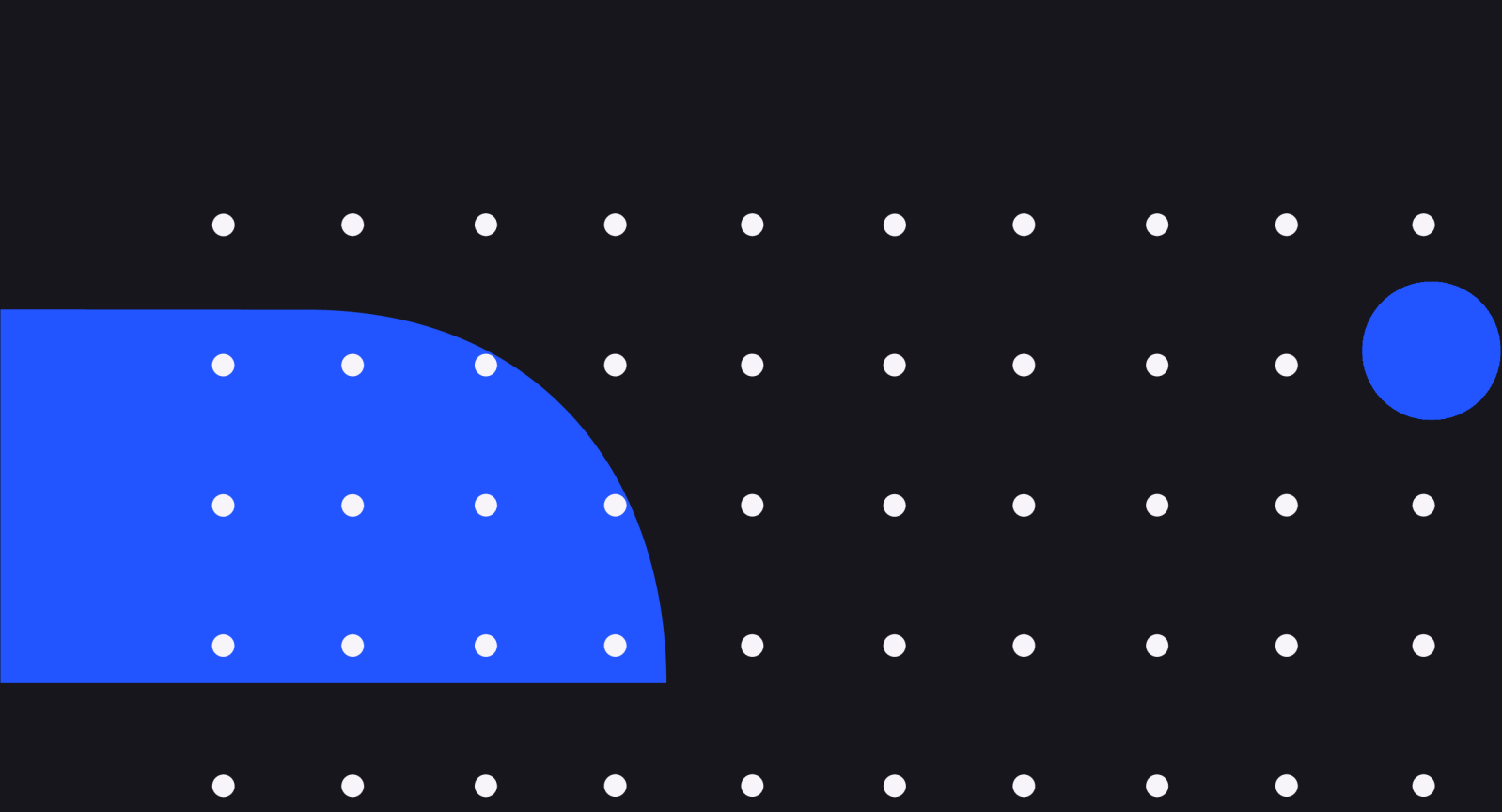
ISO 14971:2019 – Medical Devices Risk Management



# Go-To-Market Strategy







# Financial Outlook

1

## Revenue Streams

Subscription-based model for healthcare providers, licensing fees, and data analytics services.

2

## Projected Revenue

Estimated to reach \$X million by Year 3.

3

## Revenue Expected

Within 18-24 months post-launch.





# Ethics Consideration

## Bias and Fairness

- Ensuring diverse and representative data during model training and regularly auditing the AI for biases can help address this issue.

## Informed Consent

- Providing clear, understandable information to patients about AI usage and obtaining explicit consent is necessary.

## Transparency and Explainability

- Developing AI models with explainable outputs and offering clear explanations for recommendations can enhance trust and understanding.

## Over-reliance on Technology

- Ensuring that AI is used as a support tool, rather than replacing human decision-making, and encouraging critical evaluation of AI outputs by clinicians.

# Risk

## Liability and Accountability

Clear guidelines on using AI recommendations and maintaining human oversight in clinical decision-making can help manage liability.

## Clinical Integration and Adoption

Engaging clinicians during the design and development, offering training and demonstrating the product’s clinical benefits can encourage adoption.

## Accuracy and Reliability of AI Model

Validation and continuous training of the AI model using diverse datasets are essential to improve accuracy and reliability.

## Data Privacy and Security

Implementing strong encryption, secure data storage, and strict access controls, along with compliance with regulations like GDPR and HIPAA, is crucial.





# Risk Mitigation Strategy



1

**Regulatory and Compliance Risks:** Ensure strict adherence to healthcare regulations and data privacy laws.

2

**Market Adoption and Competition:** Stay ahead of the curve by continuously innovating and adapting to market changes.

3

**Algorithm Accuracy and Bias:** Continuously validate and refine the AI algorithm to minimize bias and errors.

4

**Data Security and Privacy:** Implement robust cybersecurity measures to protect sensitive patient data.



# METSAEMA

## ***Mother's Companion***

We are revolutionising maternal health  
with AI-powered solutions for early  
detection of non-severe preeclampsia.



Invest in our AI-powered solution for  
early detection and management of  
preeclampsia.

Partner with us to improve maternal  
health outcomes and reduce healthcare  
costs.

Contact us to learn more about our  
product and how it can benefit your  
patients.

Join us in revolutionising maternal  
healthcare through innovation and  
technology.







# Meet The Team





# Contact Us

Group 1 - Team Black

AIProHealth Summer School 2024: Tartu Edition

University of Tartu, Estonia

