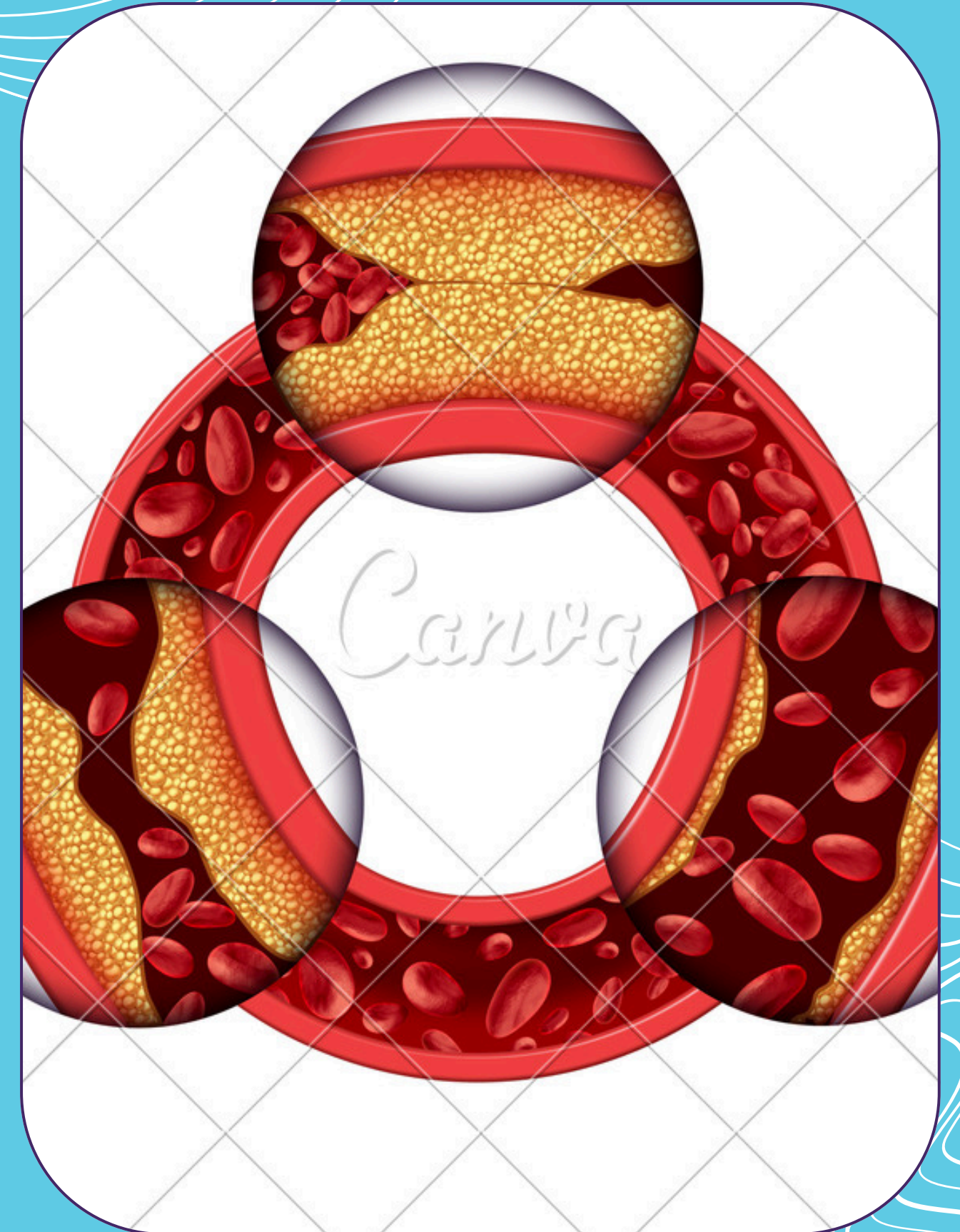# AI for Health: Predicting Heart Disease Risk

Heart Disease: A Global Crisis

Why Focus on Heart Disease?

- Leading global cause of death
- Early detection is key to prevention
- Supports SDG 3: Ensure healthy lives and promote well-being

Visual:

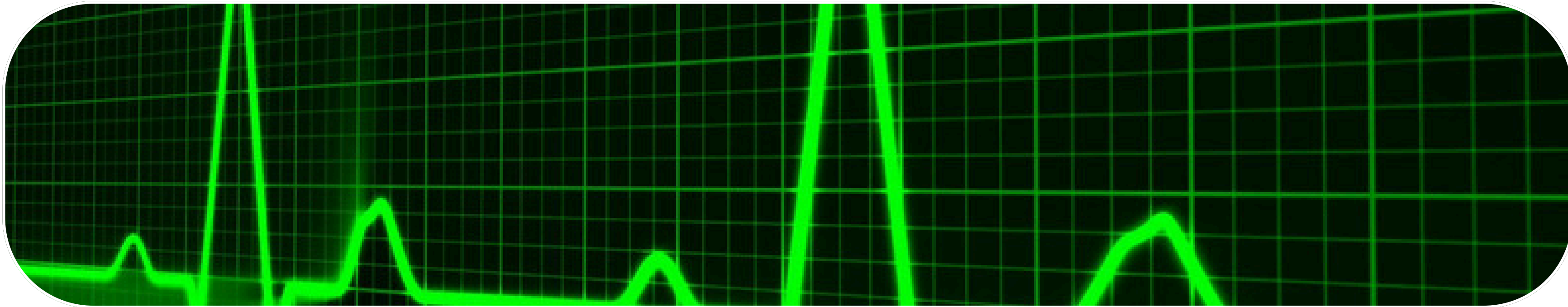- Infographic or chart showing heart disease prevalence globally

AI SOLUTION

- Supervised learning to predict heart disease risk

- Classify individuals based on health indicator

- Supports proactive healthcare

Visual:

- Flowchart of input → ML model → risk prediction

The Dataset and Tools

- Dataset: UCI Heart Disease
- Key Features: Age, cholesterol, blood pressure, etc.
- Tools: Python, Scikit-learn, Jupyter Notebook
Visual:
- Table snippet of dataset features + logos of Python, Jupyter, Scikit-learn

Model Training & Performance

- Model: Logistic Regression
- 80/20 train-test split
- Accuracy: ~85%
- Evaluated using precision, recall, F1-score

Visual:

- Bar chart of accuracy, precision, F1-score (sample values)

Bias and Fairness in AI

- Risk of biased predictions due to limited data diversity
- Predictions must not replace doctors
- Promote transparency and patient trust
- Visual:
- Icons showing balance scales, shield (privacy), diverse people

AI's Impact on Health

- AI supports early intervention
- Aligns with global health goals
- Promotes healthier lifestyles, reduces costs
- Heart + AI graphic or animated line chart showing "risk downtrend"