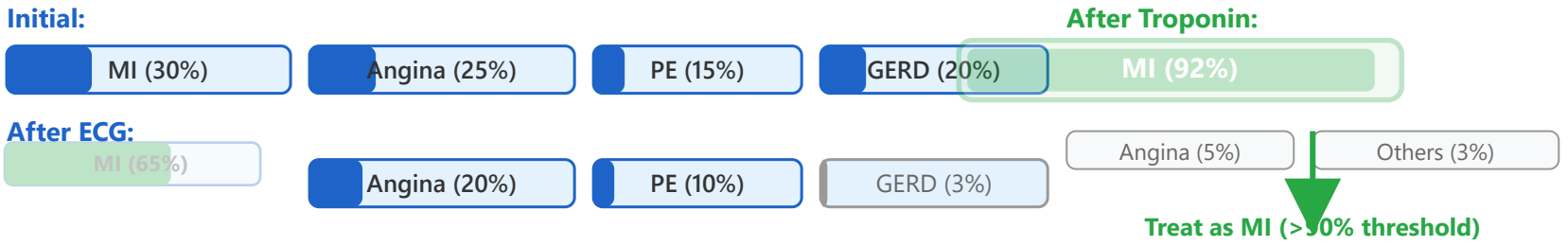
Differential Diagnosis Trees

Probabilistic Branching

- **Prior Probabilities:** Based on prevalence and risk factors
- **Likelihood Ratios:** Each test updates probabilities
- **Bayesian Updates:** Continuous refinement with new data
- **Threshold Decision:** Diagnostic certainty level to act

Example: Chest Pain Differential



Quantitative reasoning: Numbers guide clinical decisions