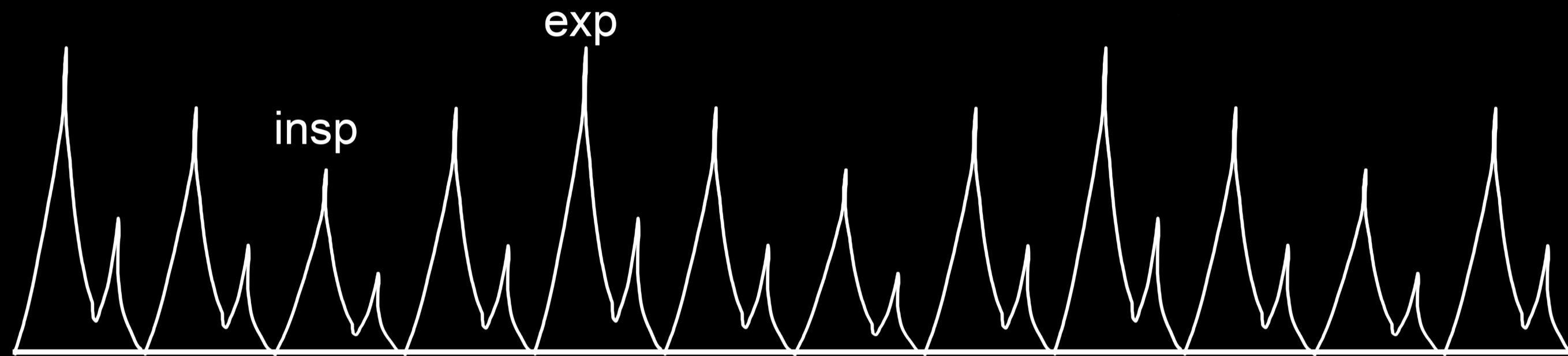
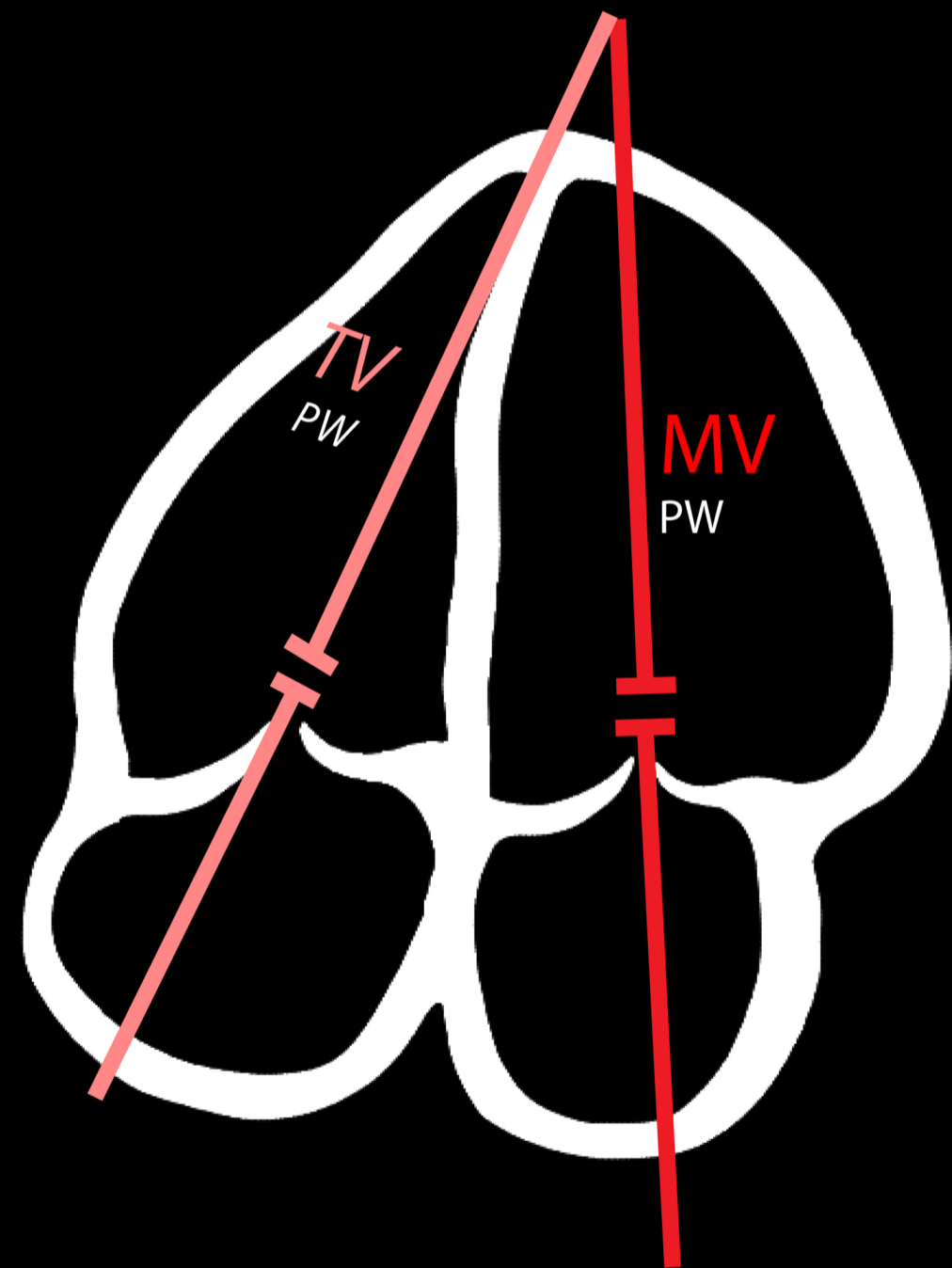


Cardiac Tamponade

Mitral / Tricuspid Inflow Variation

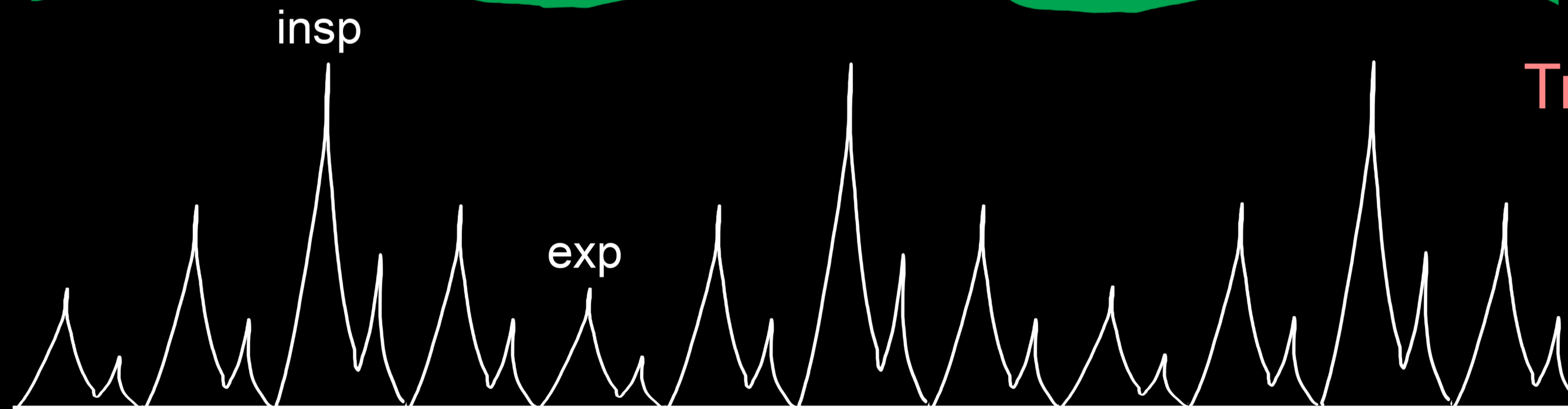
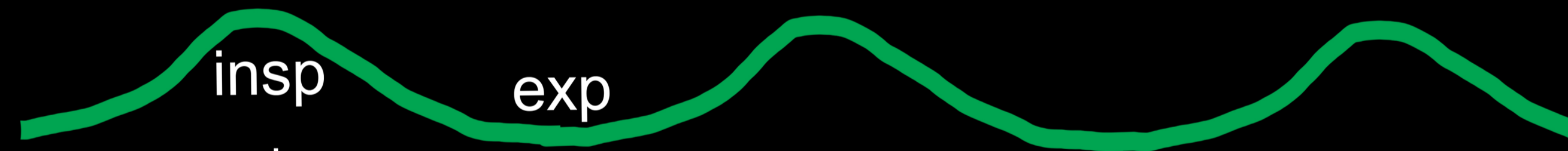
$$\text{Flow Variation} = \left(\frac{\text{exp} - \text{insp}}{\text{exp}} \right)$$



Mitral Valve

Mitral Flow Variation

Normal < 15%
Tamponade > 30%



Tricuspid Valve

Tricuspid Flow Variation

Normal < 25%
Tamponade > 60%