

# B-Type Natriuretic Peptide (BNP)

## What is BNP and what does it do?

Peptide made in response to ventricular wall stretch which:

- ↑ natriuresis
- ↓ RAAS
- ↓ Sympathetic tone

## How does obesity affect BNP?

Obesity may result in *lower-than-expected* BNP values due to both:

- ↓ BNP synthesis
- ↑ BNP clearance

## What BNP cutoff should be used?

100pg/ml is >90% sensitive for diagnosis of heart failure if BMI < 35

50pg/ml is 90% sensitive for diagnosis of heart failure in BMI ≥ 35



1. Daniels LB, et al. How obesity affects the cut-points for B-type natriuretic peptide in the diagnosis of acute heart failure. *Am Heart J.* 2006 May;151(5):999-1005.
2. Maisel AS, et al. Rapid measurement of B-type natriuretic peptide in the emergency diagnosis of heart failure. *N Engl J Med.* 2002 Jul 18;347(3):161-7.