

CRT: Strong Support from Clinical Trials

Sinus rhythm

LVEF ≤ 0.35

Ischemic or nonischemic cardiomyopathy

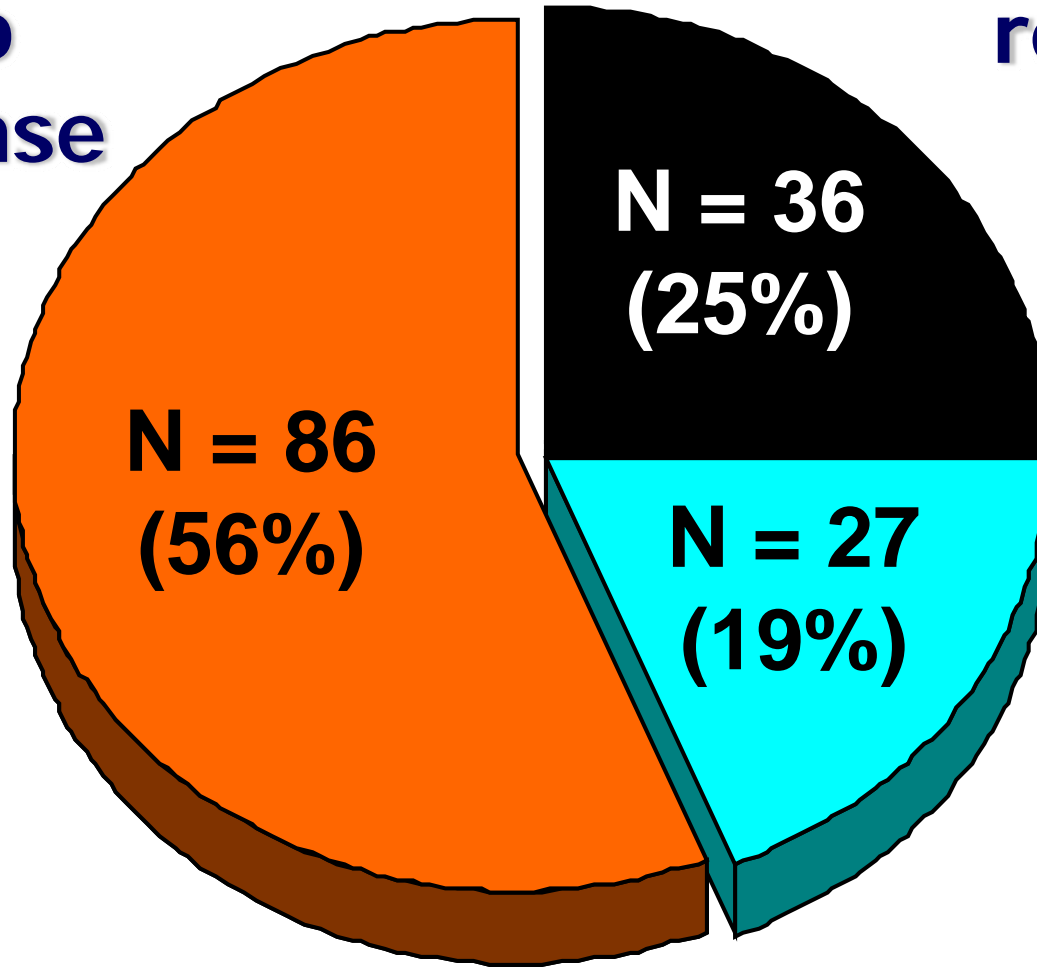
QRS complex duration ≥ 120 ms

NYHA functional class III or IV

Maximal pharmacological therapy for heart failure

**Clinical and
echo
response**

**No
response**



**Clinical or
echo
response**

Can We Predict Responders?

- clinical factors
- QRS complex
- hemodynamic changes
- mechanical dyssynchrony
- lead placement
- other factors

Dyssynchrony

- **Common**
 - 20-70% of patients with systolic heart failure
- **Negative impact**
 - Reduced ejection volume
 - Increased energetic cost
 - Development of arrhythmias
 - Mitral regurgitation
 - Heart Failure Progression

Unanswered Questions

Efficacy of CRT

- Chronic AF
- Narrow QRS
- NYHA II

Where are we headed ?

Comprehensive pre-implant assessment

- Dyssynchrony
- Target veins
- Optimal pacing site
 - Latest mechanical activation
 - Viability