

# Long-Term Impact of CCM<sup>®</sup> Therapy on Heart Failure Symptoms and Quality of Life

Durability of cardiac contractility modulation (CCM<sup>®</sup>) efficacy in heart failure patients with reduced or mildly-reduced ejection fractions

– Dr. Rami Kahwash

## CCM<sup>®</sup> Post-Approval Study

NCT03970343



**494**

Patients NYHA III, LVEF 25-45%



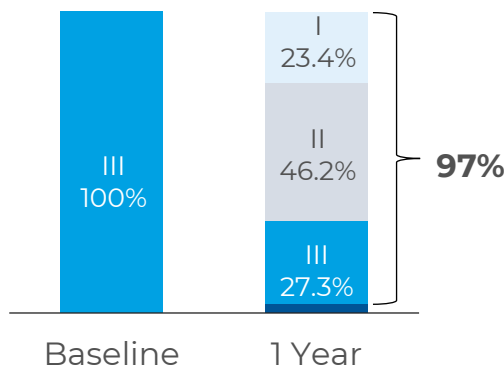
**48**

US sites

## 1 year after CCM<sup>®</sup>

### NYHA

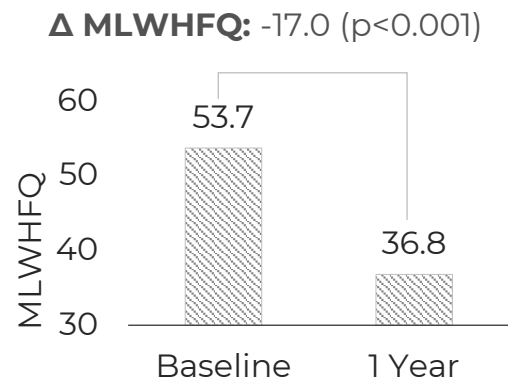
**97%** of patients improved or stabilized



Improvements consistent across all sub-groups (see back for details)

### MLWHFQ

**17pts** Improvement (p<0.001)



Improvements consistent across all sub-groups (see back for details)



Female had significantly greater response

## Subgroup analysis

### NYHA

Subgroup	Mean Change (95%CI)	P-value
Age < 65		0.748
Age ≥ 65		
No Diabetes		0.962
Diabetes		
QRS < 150ms		0.573
QRS ≥ 150ms		
Ischemic		0.425
Non-Ischemic		
Female		0.969
Male		
No LBBB		0.268
LBBB		
LVEF ≤ 35%		0.219
LVEF > 35%		
HF Diagnosed ≤ 18 months		0.540
HF Diagnosed > 18 months		
No Atrial Fibrillation		0.638
Atrial Fibrillation		



Improvements consistent across all sub-groups

### MLWHFQ

Subgroup	Mean Change (95%CI)	P-value
Age < 65		0.342
Age ≥ 65		
No Diabetes		0.315
Diabetes		
QRS < 150ms		0.430
QRS ≥ 150ms		
Ischemic		0.731
Non-Ischemic		
Female		0.006
Male		
No LBBB		0.074
LBBB		
LVEF ≤ 35%		0.284
LVEF > 35%		
HF Diagnosed ≤ 18 months		0.194
HF Diagnosed > 18 months		
No Atrial Fibrillation		0.819
Atrial Fibrillation		



Improvements consistent across all sub-groups



Female had significantly greater response

CCM® is FDA-indicated to improve functional status, quality of life, and 6-minute hall walk distance in NYHA Class III heart failure patients with LVEF 25–45%, who remain symptomatic on GDMT and are not receiving CRT. CCM is not for everyone. For additional information, please visit: <https://impulse-dynamics.com/us-technical-documents/>.