



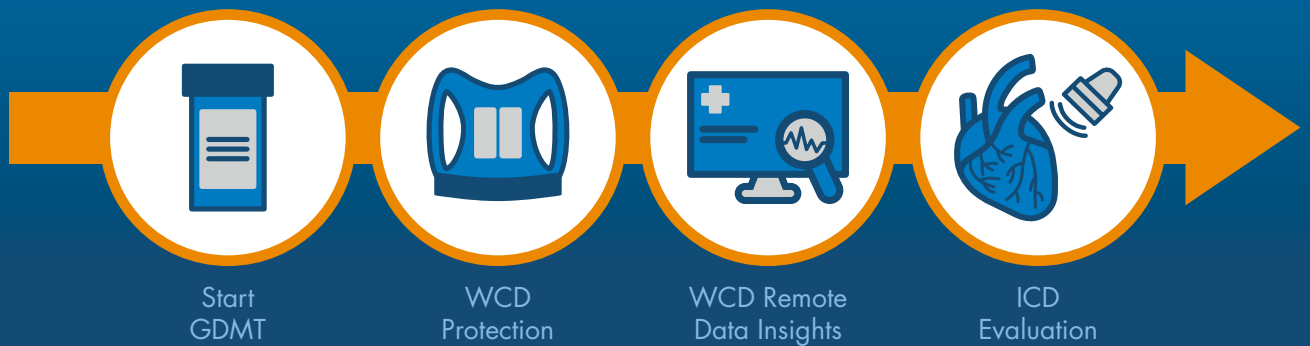
SCD accounts for 40–45% of all deaths in HFrEF patients¹

How do you manage SCD risk for your newly diagnosed HFrEF patients?

ZOLL® LifeVest®

SCD Management Continuum

For De Novo (Newly Diagnosed) HFrEF



Despite progress in pharmacological and device therapy, **SCD remains the most frequent cause of mortality** in patients with HFrEF¹

GDMT Takes Time

While new HF drug therapies, such as sacubitril/valsartan, have become increasingly effective, it still takes time for patients to reach optimal doses that can positively impact their SCD risk.

In the PARADIGM-HF trial, sacubitril/valsartan did not impart meaningful mortality benefit until patients tolerated a **6–8 week run-in period and 6 months of treatment**.²



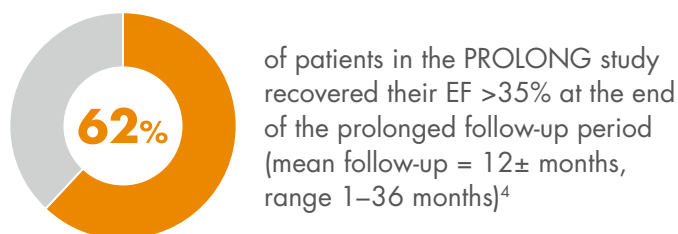
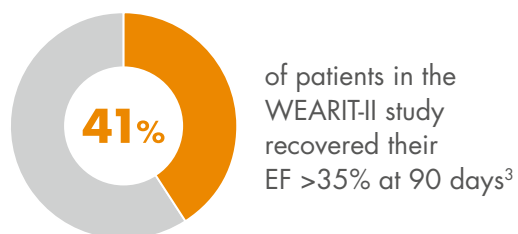
LifeVest provides protection during the period of greatest SCD risk while patients are being medically optimized and awaiting an ICD or reverse remodeling

De novo HFrEF patients – both ischemic and non-ischemic etiologies – are at increased SCD risk

LifeVest During Medical Optimization

Benefits of Prolonged Protection

A large number of de novo HFrEF patients recover their EF after initiation of HF therapy.



During prolonged protection with LifeVest, additional reverse remodeling has been achieved with intensified drug therapy, avoiding unnecessary ICD implantation.

Patient Insights

- ZOLL's online patient data management system provides clinicians with insight into a patient's health status and response to therapy during medical optimization, offering information that can be used to optimize their care.
- Patient information is trended over time, indicating when a change in status may require action.



ECG
Review



WalkTest™



Heart
Rate



Health
Survey



Activity



Body
Position



SCD Guidelines

for De Novo HFrEF patients

Shared Decision Making

Clinicians should adopt a shared decision-making approach in which treatment decisions are based not only on the best available evidence but also on the patients' health goals, preferences, and values. (COR 1)⁵

GDMT

Symptomatic heart failure patients (NYHA Class II–III) with an LVEF $\leq 35\%$ should be on **GDMT for at least 3 months** before being assessed for an ICD, provided they are expected to survive substantially longer than 1 year with good functional status. (COR I)⁶

WCD

In patients at an increased risk of SCD but who are not ineligible for an ICD, such as awaiting cardiac transplant, **having an LVEF of 35% or less and are within 40 days from an MI, or have newly diagnosed NICM, revascularization within the past 90 days, myocarditis or secondary cardiomyopathy or a systemic infection**, the wearable cardioverter defibrillator may be reasonable. (COR IIb)⁵

ICD

In patients with **LVEF of 35% or less that is due to ischemic heart disease who are at least 40 days post-MI and at least 90 days post-revascularization, and with NYHA Class II or III HF despite GDMT**, an ICD is recommended if meaningful survival of greater than 1 year is expected. (COR I)⁵

In **patients with NICM, HF with NYHA Class II–III symptoms and an LVEF of 35% or less, despite GDMT**, an ICD is recommended if meaningful survival of greater than 1 year is expected. (COR I)⁵

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- 1 Masarone DE, Limongelli G, Ammendola E, et al. Risk stratification of sudden cardiac death in patients with heart failure: An update. *J Clin Med*. 2018;7(11):436.
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- 4 Duncker D, Koenig T, Hohmann S, et al. Avoiding untimely implantable cardioverter/defibrillation implantation by intensified heart failure therapy optimization supported by the wearable cardioverter/defibrillator—The PROLONG Study. *J Am Heart Assoc*. 2016;7(1):1.
- 5 Al-Khatib SM, Stevenson WG, Ackerman MJ, et al. 2017AHA/ACC/HRS Guideline for management of patients with ventricular arrhythmias and the prevention of sudden cardiac death: A report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines and the Heart Rhythm Society. *Circulation* 2018;138(13):e272–e391.
- 6 Ponikowski P, Voors AA, Anker SD, et al. 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure. *Eur Heart J*. 2016;37(27):2129–2200.