Frontier II
CARDIAC RESYNCHRONISATION DEVICE

SOLUTIONS FOR YOUR MOST CHALLENGING HF PATIENTS

St. Jude Medical
The Growing Problem of AF/HF Comorbidity Management

Up to 50% of patients with HF will have paroxysmal or persistent AF

BiV Pacing Produces Significant Improvements in Patients with AF

Patients in the BiV group had an 86% improvement in the six-minute walk test compared to the RV group from pre-implant to six months.

The PAVE (Post AV Nodal Ablation Evaluation) clinical trial showed that biventricular pacing:

- Significantly improved cardiac function over RV pacing
- Significantly increased functional capacity
- Resulted in fewer hospitalizations and lower mortality
Management

Clinically Proven AF Suppression™ Algorithm
The Frontier™ II device is the only CRT-P with the clinically proven AF Suppression™ algorithm, which has been shown to reduce AF burden regardless of lead placement.\(^2,3\)

Advanced Diagnostics for Better Patient Management
A full suite of AF diagnostics for fast, accurate diagnosis:

- AT/AF Burden Trend
- AT/AF or AMS Log and Histogram
- AT/AF or AMS Stored EGM Triggers
- AF Suppression Histogram
- Far Field Protection

The latest technology to support ventricular rate control:

- AMS Base Rate
- Ventricular Triggered Modes

HF
HF Contributes to AF
- Increased filling pressures lead to atrial dilation
- Areas of slow conduction and increased triggered activity can lead to AF

AF
AF Contributes to HF
- Rapid ventricular response can lead to tachycardia-induced cardiomyopathy
- Loss of atrial output can reduce total cardiac output
- Irregular RR intervals lead to adverse hemodynamic consequences\(^6\)

Clinical Proof for the Suppression™ Algorithm

- Reduction in AF burden compared with R pacing alone.\(^2\)
- Reduction in AF burden with traditional atrial lead placement.\(^3\)
- Reduction in AF burden when the atrial lead was placed septally.\(^3\)
- 97% of patients tolerated the algorithm well.\(^4\)
- The AF Suppression algorithm can be safely used in HF patients.\(^5\)
**Easy Implant, Easy Follow-Up**

**The QuickSite™ Leads**

- 95.5% implant success rate
- <1% dislodgement rate
- Unipolar and bipolar versions available
- Over-the-wire or stylet-driven approach
- Compatible with Apeel™ CS delivery system

**Fast, Easy Follow-Up**

Faster clinical follow-ups and easier screen navigation are made possible by one touch access to and from the summary screen.

**Resynchronisation Without Compromise**

**BiV Therapy Assurance with Advanced Resynchronisation Technologies**

- Independently programmable RV and LV amplitudes and pulse widths
- Programmable V-V timing with an option to choose which chamber is paced first
- Negative AV/PV Hysteresis automatically monitors for intrinsic conduction and shortens the AV delay when needed
- DDT/R Modes trigger pacing to promote BiV pacing
- AMS Base Rate to allow increased rates during AT/AF and promote BiV pacing
An Advance in the Prevention and Treatment of AF and HF

“The combination of BiV pacing with the AF Suppression™ algorithm in the Frontier™ II device makes it possible for the first time to treat atrial fibrillation and heart failure with preventive care.”

— Dr. Stefan Waldhans

“The advanced diagnostic and therapeutic capabilities found in the Frontier™ II device give me considerable flexibility to optimize heart failure therapy without compromising size or longevity.”

— Dr. Reinhard C. Funck

Doctors Waldhans and Funck performed the first European implants of the Frontier™ II CRT-P
Complete Solutions for CRT Success

The Frontier™ II CRT-P, QuickSite™ lead and St. Jude Medical’s advanced delivery tools are part of a complete CRT solution designed to be all you need for faster, easier implantation and excellent patient care.

Apeel™ CS Catheter Delivery System
- Speeds coronary sinus access
- Make difficult cases easier with multiple curvature angles

Atlas™ + HF CRT-D
- World’s highest output cardiac resynchronisation therapy device
- Advanced Bi-V features
- Unmatched flexibility in DFT management

Frontier™ II CRT-P
- Latest advances in comorbidity management
- Designed to enhance patients’ lives while avoiding the deleterious effects of RV pacing

Epic™ + HF CRT-D
- World’s smallest 30J delivered CRT-D
- Advanced Bi-V features
- Unmatched flexibility in DFT management

QuickSite™ Leads
- Designed for faster, easier implantation and superior performance
- S-shaped distal tip for excellent stability

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3de Voogt W. Prevention of Atrial Fibrillation by Overdrive Atrial Septum Stimulation (OASES study). Presented at the Late Breaking Trials NASPE 2003.

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5Schuchert A, Paul V, Beulone M; Mabo P, CHU Rennes; Defaye P, CHU Grenoble; Loleelet RBlunet D, CH Cherboug; and the INOVA Study Group. Quality of Life in Permanently Paced AF Patients. The INOVA Study; Europace 2003 abstract.

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7Beau S et al. Initial Clinical Experience with the QuickSite™ Left Heart Lead for CRT. Journal of Cardiac Failure 2004; 10 (suppl.): S85 (abstract #250).