

Novel Two-Lead Cardiac Resynchronization Therapy System Provides Equivalent CRT Responses with Less Complications than a Conventional Three-Lead System: Results from the QP ExCELS Lead Registry

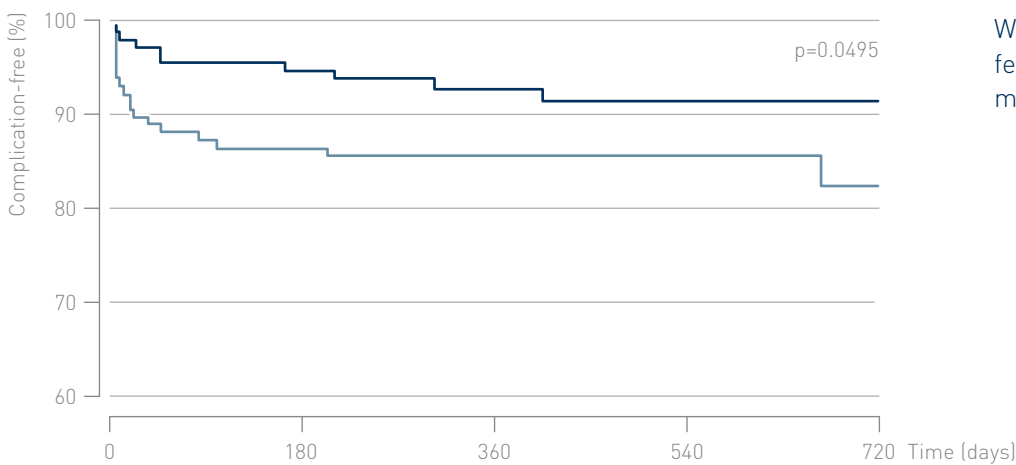
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Study Design & Characteristics

- Subanalysis of QP ExCELS (prospective, multi-center, observational international registry to evaluate the safety and efficacy of the Sentus QP LV lead in 1907 patients)
- Comparing complication rates and CRT response: two-lead CRT-DX vs. standard CRT-D system
- Including 240 de novo patients with standard CRT indication from 50 U.S. centers (120 pairs matched by gender, NYHA class, and heart failure etiology)

Significantly Lower Rate of Major Complications with CRT-DX

Freedom from primary endpoint major complications over total follow-up



Number remaining

120	110	79	39	9	● CRT-DX
120	103	75	46	13	● CRT-D

Clinical Relevance

- First study to compare major complications in CRT-DX systems with standard CRT-D systems in a multi-center, real-life registry
- The results show that the CRT-DX system can provide similar CRT responses and significantly fewer complications, indicating that the CRT-DX system is a capable alternative in patients without an atrial pacing indication.¹

Lead-Related Major Complications: Fewer Lead Dislodgements with CRT-DX and Similar Performance of RV Lead

Lead dislodgements	CRT-DX (n = 120)	CRT-D (n = 120)	P-value
RA	n/a	6, 5.0%	...
RV	3, 2.5%	2, 1.7%	0.8230
LV	5, 4.2%	8, 6.7%	0.4510

Fewer lead dislodgements with CRT-DX
Lower major complications with CRT-DX were primarily driven by reduced lead dislodgements.

RV lead-related	CRT-DX (n = 120)	CRT-D (n = 120)	P-value
Dislodgement	3, 2.5%	2, 1.7%	0.8230
Extracardiac stimulation	0, 0.0%	0, 0.0%	...

RV lead-related major complications:
No significant difference between DX and conventional ICD lead.

Similar CRT Responses Shown in LV Pacing and Clinical Outcome Parameters

Median LV pacing during CRT



No significant difference in median LV pacing between groups

Clinical outcome parameters	CRT-DX	CRT-D
NYHA class improvement ¹	43.3%	45.0%
Heart failure hospitalization	2.5%	2.5%
Daily patient activity	7.9%	8.6%
All-cause mortality	0.8%	1.7%

Clinical outcomes in the two groups were similar.

All values represent percentage of patients.

¹ Author's conclusion extracted from publication.
² Improvements at 6-month follow-up by at least 1 class.