

Table D5: Population characteristics –CRT D harms

Author,Year Trial	Arm (arm name): n(%)	Female, n (%) Race, n(%)	Age (years) Mean, median, range	Ischemic cardiomyopathy, n (%)	Atrial fibrillation, n (%)	QRS interval, Mean, median, range	QRS morphology - LBBB, n(%) RBBB, n(%) IVCD, n(%) PBBBlock, n(%)	NYHA class, n(%)	LVEF, Mean, median, range, SD	Creatinine GFR
Duray,2008 ⁵²	Overall(Overall):79	F: 16(20) NR	Mean: 79 Med: NR Range: 35- 83 SD: 11	38(48)	NR	Mean: NR Med: NR Range: NR SD: NR	NR	I: NR(22) II: 28(NR) IV: NR(23NR)	Mean: NR Med: NR Range: NR SD: NR	Creat: NR GFR: NR
Abraham,2004 ³ 4	Arm 1(Control):101	F: 10(9.9) O:NR(59)	Mean: 63.1 Med: NR Range: NR SD: 12.1	59(58.4)	NR	Mean: 165 Med: NR Range: NR SD: 23	LBBB :NR RBBB: 21(20.8) IVCD: NR PBBBlock: NR	II: 101(100)	Mean: 24.6 Med: NR Range: NR SD: 6.7	Creat: NR GFR: NR
	Arm 2(CRT):85	F: 10(11.8) O:NR(47)	Mean: 63 Med: NR Range: NR SD: 12.8	47(56.3)	NR	Mean: 166 Med: NR Range: NR SD: 25	LBBB :NR RBBB: 10(11.8) IVCD: NR PBBBlock: NR	II: 85(100)	Mean: 24.4 Med: NR Range: NR SD: 6.6	Creat: NR GFR: NR
Auricchio,2014 ⁴ 5	Overall(All patients):521	F: 94(18) NR	Mean: 67.4 Med: NR Range: NR SD: 10.1	NR	107(20.5)	Mean: 155.3 Med: NR Range: NR SD: 26.6	LBBB :349(67) RBBB: 49(9.4) IVCD: 54(10.9) PBBBlock: 40(7.7)	I: 1(0.2) II: 31(6.1) III: 443(85) IV: 34(6.7)	Mean: 25.7 Med: NR Range: NR SD: 7.7	Creat: 1.4mg/dl GFR:
Bossard,2014 ⁴⁸	Overall(All patients):49	F: 11(22) O:NR(18)	Mean: 63 Med: NR Range: NR SD: 10	18(27)	NR	Mean: 161 Med: NR Range: NR SD: 26	LBBB :46(94) RBBB: NR IVCD: NR PBBBlock: NR	NR	Mean: NR Med: NR Range: NR SD: NR	Creat: NR GFR: NR

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Boven,2013 ⁴⁹	Overall(Total Study Population):54 3	F: 142(26) O:NR(294)	Mean: 64 Med: NR Range: NR SD: 11	294(54)	153(28)	Mean: NR Med: NR Range: NR SD: NR	LBBB :410(82) RBBB: 26(5.2) IVCD: 10(2) PBBBlock: 55(10)	I: 21(4.1) II: 178(35) III: 304(60) IV: 8(1.6)	Mean: 24 Med: NR Range: NR SD: 7.4	Creat: 115umol/L GFR: NRNR
Gasparini,2009 ⁵ ₃	Arm 1(Protect Group(Standar d CRT-D)):164	F: 38(23.2) NR	Mean: 64.2 Med: NR Range: NR SD: 11.7	NR	29(17.7)	Mean: 163 Med: NR Range: NR SD: NR	NR	NR	Mean: 24.6 Med: NR Range: NR SD: NR	Creat: NR GFR: NR
	Arm 2(Control CRT plus ICD)):160	F: 40(25) NR	Mean: 64.2 Med: NR Range: NR SD: 10.8	NR	23(14.4)	Mean: 160 Med: NR Range: NR SD: NR	NR	NR	Mean: 25.4 Med: NR Range: NR SD: NR	Creat: NR GFR: NR
Gillis,2014 ²⁴ RAFT Sub Study	Arm 1(ICD):904	F: 172(19) O:NR(587)	Mean: 66.2 Med: NR Range: NR SD: 9.4	587(64.9)	115(12.7)	Mean: 158.3 Med: NR Range: NR SD: 24	LBBB :643(71.1) RBBB: 93(10.3) IVCD: 101(11.2) PBBBlock: 67(7.4)	II: 730(80.8) III: 174(19.2)	Mean: NR Med: NR Range: NR SD: NR	Creat: NR GFR: NR
	Arm 2(ICD- CRT):894	F: 136(15.2) O:NR(614)	Mean: 66.1 Med: NR Range: NR SD: 9.3	614(68.7)	114(12.8)	Mean: 157 Med: NR Range: NR SD: 23.6	LBBB :652(72.9) RBBB: 68(7.6) IVCD: 106(11.9) PBBBlock: 68(7.6)	II: 708(79.2) III: 186(20.8)	Mean: NR Med: NR Range: NR SD: NR	Creat: NR GFR: NR

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Higgins,2003 ⁴⁰	Arm 1(CRT):245	F: 37(15) NR	Mean: 66 Med: NR Range: NR SD: 11	NR(67)	NR	Mean: 160 Med: NR Range: NR SD: 27	LBBB :NR(54) RBBB: NR(14) IVCD: NR PBBBlock: NR	II: NR(32) III: NR(60) IV: NR(8)	Mean: NR Med: NR Range: NR SD: NR	Creat: NR GFR: NR
	Arm 2(No CRT):245	F: 42(17) NR	Mean: 66 Med: NR Range: NR SD: 11	NR(71)	NR	Mean: 156 Med: NR Range: NR SD: 26	LBBB :NR(55) RBBB: NR(12) IVCD: NR PBBBlock: NR	II: NR(33) III: NR(57) IV: NR(10)	Mean: NR Med: NR Range: NR SD: NR	Creat: NR GFR: NR
Knight,2004 ⁵⁹	Overall(Overall):443	F: 75(17) NR	Mean: 66 Med: NR Range: NR SD: 11	NR	98(22)	Mean: 158 Med: NR Range: NR SD: 22	LBBB :253(57) RBBB: 58(13) IVCD: 133(30) PBBBlock: NR	II: 146(33) III: 257(58) IV: 40(9)	Mean: 21 Med: NR Range: NR SD: NR	Creat: NR GFR: NR
Landolina,2011 ⁶ 2	Overall(Overall):3253	F: 650(20) O:NR(1364)	Mean: 67 Med: NR Range: NR SD: 10	1364(42)	383(12)	Mean: 148 Med: NR Range: NR SD: 30	NR	NR	Mean: 27 Med: NR Range: NR SD: NR	Creat: NR GFR: NR
Moss,2009 ⁹ MADIT CRT	Arm 1(ICD):731	F: 178(24.4) W:90.7(56/ 724) AA:7.7(11/ 724)	Mean: 64 Med: NR Range: NR SD: 11	401(54.9)	90/717(12. 6)	Mean: NR Med: NR Range: NR SD: NR	LBBB :520/729(71.3) RBBB: 92/729(12.6) IVCD: NR PBBBlock: NR	NR	Mean: 24 Med: NR Range: NR SD: NR	Creat: 1.2mg/dl GFR: NR

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		O:1.5(401)								
	Arm 2(CRT- D):1089	F: 275(25.3) W:90.4(87/ 1083) AA:8(17/10 83) O:1.6(598)	Mean: 65 Med: NR Range: NR SD: 11	598(55)	118/1063(1 1.1)	Mean: NR Med: NR Range: NR SD: NR	LBBB :761/1088(69. 9) RBBB: 136/1088(12. 5) IVCD: NR PBBBlock: NR	NR	Mean: 24 Med: NR Range: NR SD: NR	Creat: 1.2mg/dl GFR: NR
Nian- Sang,2010 ⁶⁷	Overall(Overall (CRT_D)):54	F: 19(35) O:NR(14)	Mean: NR Med: NR Range: NR SD: NR	14(26)	NR	Mean: 125.2 Med: NR Range: NR SD: NR	NR	NR	Mean: 32.1 Med: NR Range: NR SD: NR	Creat: NR GFR: NR
Ouellet,2012 ¹⁶ MADIT CRT Sub Study	Arm 1(ICD):731	F: 178(24.4) W:90.7(56/ 724) AA:7.7(11/ 724) O:1.5	Mean: 64 Med: NR Range: NR SD: 11	NR	NR	Mean: NR Med: NR Range: NR SD: NR	LBBB :520/729(71.3) RBBB: 92/729(12.6) IVCD: NR PBBBlock: NR	NR	Mean: 24 Med: NR Range: NR SD: NR	Creat: 1.2mg/dl GFR: NR
	Arm 2(CRT- D):1089	F: 275(25.3) W:90.4(87/ 1083) AA:8(17/10 83) O:1.6	Mean: 65 Med: NR Range: NR SD: 11	NR	NR	Mean: NR Med: NR Range: NR SD: NR	LBBB :761/1088(69. 9) RBBB: 136/1088(12. 5) IVCD: NR PBBBlock: NR	NR	Mean: 24 Med: NR Range: NR SD: NR	Creat: 1.2mg/dl GFR: NR

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Strimel, 2011 ⁷⁸	Overall():84	F: 21(25) O:(66)	Mean: 82.68 Med: NR Range: NR SD:	66(78.6)	NR	Mean: Med: Range: SD:	NR	I: 6(7.1) II: 33(39.3) III: 41(48.8) IV: 4(4.8)	Mean: 28.1 Med: NR Range: NR NR SD: 6.6	Creat: NR GFR: NR
Theuns,2005 ⁸¹	Arm 1(Primary prophylaxis):3 8	F: 12(32) NR	Mean: 60 Med: NR Range: NR SD: 9	NR	9(24)	Mean: NR Med: NR Range: NR SD: NR	NR	II: 4(11) III: 34(89)	Mean: 24 Med: NR Range: NR SD: 10	Creat: NR GFR: NR
	Arm 2(Secondary prophylaxis):4 8	F: 8(17) NR	Mean: 63 Med: NR Range: NR SD: 11	NR	14(29)	Mean: NR Med: NR Range: NR SD: NR	NR	II: 18(38) III: 30(62)	Mean: 23 Med: NR Range: NR SD: 8	Creat: NR GFR: NR
	Overall(Total): 86	F: 20(23) NR	Mean: 61 Med: NR Range: NR SD: 10	NR	23(27)	Mean: NR Med: NR Range: NR SD: NR	NR	II: 22(26) III: 64(74)	Mean: 23 Med: NR Range: NR SD: 8	Creat: NR GFR: NR
Boven,2013 ⁵⁰	Arm 1(Functional Nonrespon- ders):100	F: 26(25) NR	Mean: NR Med: 70 Range: NR SD: NR	59(59)	28(28)	Mean: NR Med: NR Range: NR SD: NR	LBBB :61(62) RBBB: 7(7.1) IVCD: 11(11) PBBBlock: 16(16)	I: 6(7.5) II: 30(38) III: 40(50) IV: 4(5)	Mean: 20 Med: NR Range: NR SD: NR	Creat: 110 GFR: NR
	Arm 2(Functional Responders):4 2	F: 16(38) NR	Mean: NR Med: 68 Range: NR SD: NR	16(38)	9(21)	Mean: NR Med: NR Range: NR SD: NR	LBBB :37(93) RBBB: 0(0) IVCD: 1(2.5) PBBBlock: 2(5)	I: 9(25) II: 15(42) III: 12(33) IV: 0(0)	Mean: 23 Med: NR Range: NR SD: NR	Creat: 92 GFR: NR
	Overall(Total): 142	F: 42(30) NR	Mean: NR Med: 69 Range: NR SD: NR	75(53)	37(26)	Mean: NR Med: NR Range: NR SD: NR	LBBB :98(71) RBBB: 7(5.1) IVCD: 12(8.7) PBBBlock:	I: 15(13) II: 45(39) III: 52(45) IV: 4(3.4)	Mean: 20 Med: NR Range: NR SD: NR	Creat: 105 GFR: NR

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							18(13)			
Kuhlkamp, 2002 ⁶¹	Overall	F: 7(9) NR	Mean: 63.8 Med: Range:41- 79 SD: 8.8	NR	5(6)	Mean: NR Med: NR Range: NR SD: NR	NR	I: 26(32) II: 48(59) III: 7(9) IV: NR	Mean: 25 Med: NR Range: NR SD: 7	Creat: NR GFR: NR
Vado,2014 ⁸²	Overall(Overall):45	F: 11(45)	Mean: 70.3 Med: NR Range: NR SD: 9	15(33)	NR	Mean: 155 Med: NR Range: NR SD: 29.7	LBBB: 25(55) RBBB: NR IVCD: 17(38) PBBBlock: 3(7)	NR	Mean: 27.1 Med: NR Range: NR SD: 5.1	Creat: NR GFR: NR
Ruwald,2014 ¹⁸	Arm 1(LVEF <=35%):103	F: 19(103)	Mean: 63 Med: NR Range: NR SD: 12	63(61)	NR	Mean: 157 Med: NR Range: NR SD: 21	LBBB: 64(62) RBBB: 15(15) IVCD: 24(23) PBBBlock: NR(NR)	NR	Mean: 27.6 Med: NR Range: NR SD: 3.1	Creat: 1.24mg/dl GFR: NR
	Arm 2(LVEF 36-50%):594	F: 136(594)	Mean: 65 Med: NR Range: NR SD: 11	335(56)	NR	Mean: 159 Med: NR Range: NR SD: 20	LBBB: 421(71) RBBB: 65(11) IVCD: 107(18) PBBBlock: NR(NR)	NR	Mean: 29.5 Med: NR Range: NR SD: 3	Creat: 1.16mg/dl GFR: NR
	Arm 3(LVEF >50%):55	F: 30(55)	Mean: 64 Med: NR Range: NR SD: 9	14(25)	NR	Mean: 159 Med: NR Range: NR SD: 17	LBBB: 49(89) RBBB: 3(5) IVCD: 3(5) PBBBlock: NR(NR)	NR	Mean: 33.1 Med: NR Range: NR SD: 3.3	Creat: 1.09mg/dl GFR: NR

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Haugaa,2014 ⁵⁶	Arm 1(Patients without arrhythmia):22 7	F: 62(227)	Mean: 65 Med: NR Range: NR SD: 12	133(59)	NR	Mean: 160 Med: NR Range: NR SD: 28	NR	NR	Mean: 25 Med: NR Range: NR SD: 6	Creat: NRNR GFR: NRNR
	Arm 2(Patients with arrhythmia):39	F: 6(39)	Mean: 66 Med: NR Range: NR SD: 9	26(67)	NR	Mean: 155 Med: NR Range: NR SD: 26	NR	NR	Mean: 23 Med: NR Range: NR SD: 6	Creat: NR GFR: NR
Masoudi,2014 ⁶⁵	Arm 1(ICD):3545	F: 990(3545)	Mean: 74.9 Med: NR Range: NR SD: 6	2513(70.9)	1164(32.8)	Mean: 149 Med: NR Range: NR SD: 23.1	LBBB: 1864(52.6) RBBB: 617(17.4) IVCD: 503(14.2) PBBBlock: NR(NR)	I: 103(2.9) II: 1041(29.4) III: 2321(65.5) IV: 80(2.3)	Mean: 25 Med: NR Range: NR SD: 6	Creat: 1.4mg/dl GFR: 59.6ML/MI N/1.73M2
	Arm 2(CRTD):3545	F: 993(3545)	Mean: 74.6 Med: NR Range: NR SD: 6	2419(68.2)	1101(31.1)	Mean: 149 Med: NR Range: NR SD: 19.6	LBBB: 1906(53.8) RBBB: 594(16.8) IVCD: 485(13.7) PBBBlock: NR(NR)	I: 97(2.7) II: 1056(29.8) III: 2283(64.4) IV: 109(3.1)	Mean: 25 Med: NR Range: NR SD: 6	Creat: 1.4mg/dl GFR: 59.5ML/MI N/1.73M2
Gopalamurugan ,2014 ⁵⁴	Arm 1(CRT- D):117	F: 37(117)	Mean: 66 Med: NR Range: NR SD: 11	49(42)	NR	Mean: NR Med: NR Range: NR SD: NR	NR	NR	Mean: 24.5 Med: NR Range: NR SD: 8.2	Creat: NR GFR: NR

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	Arm 2(ICD):63	F: 10(63)	Mean: 65.3 Med: NR Range: NR SD: 13	38(60)	NR	Mean: NR Med: NR Range: NR SD: NR	NR	NR	Mean: 27.7 Med: NR Range: NR SD: 7.2	Creat: NR GFR: NR
Jamerson,2014 ¹⁵	Arm 1(Males):1346	F: 0(1346)	Mean: 64.6 Med: Range: SD: 10.7	NR(NR)	NR	Mean: 158.2 Med: NR Range: NR SD: 20.5	LBBB: 876(65) RBBB: NR(NR) IVCD: NR(NR) PBBBlock: NR(NR)	NR	Mean: 23.9 Med: NR Range: NR SD: 5.2	Creat: 1.22mg/dl GFR: NR
	Arm 2(Females):44 4	F: 444(444)	Mean: 63.9 Med: Range: SD: 10.7	NR(NR)	NR	Mean: 157.7 Med: NR Range: NR SD: 17.4	LBBB: 388(87) RBBB: NR(NR) IVCD: NR(NR) PBBBlock: NR(NR)	NR	Mean: 23.4 Med: NR Range: NR SD: 5.4	Creat: 1mg/dl GFR: NR
Wollmann,2014 ⁸⁵	Overall(All Patients):246	F: 54(246)	Mean: 63.5 Med: NR Range: NR SD: 13.3	92(37)	91(37)	Mean: 134.3 Med: NR Range: NR SD: 32.6	NR	I: 19(8) II: 92(37) III: 105(43) IV: 3(1)	Mean: 31.2 Med: NR Range: NR SD: 12.1	Creat: NR GFR: NR
	Arm 1(DR- ICD):114	F: 22(114)	Mean: 61.4 Med: NR Range: NR SD: 14	49(43)	36(32)	Mean: 112.8 Med: NR Range: NR SD: 24.3	NR	I: 15(13) II: 49(43) III: 25(22) IV: 0(0)	Mean: 35.4 Med: NR Range: NR SD: 14.8	Creat: NR GFR: NR

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	Arm 2(CTR- D):132	F: 32(132)	Mean: 65.4 Med: NR Range: NR SD: 12.5	43(33)	55(42)	Mean: 154.4 Med: NR Range: NR SD: 25.8	NR	I: 4(3) II: 43(33) III: 80(61) IV: 3(2)	Mean: 27.3 Med: NR Range: NR SD: 7.1	Creat: NR GFR: NR
Ricci,2014 ⁶⁹	Overall(Overall):1404	F: 286(1404)	Mean: 67 Med: NR Range: NR SD: 10	741(53)	362(26)	Mean: 149 Med: NR Range: NR SD: 31	NR	I: NR(NR) II: 534(38) III: 842(60) IV: 28(2)	Mean: 27 Med: NR Range: NR SD: 6	Creat: NR GFR: NR

F-Female, W-White, AA-African American, O-Others, NR-Not Reported, SD-Standard Deviation, Med-Median, n-Number, LBBB-Left Bundle Branch Block, RBBB-Right, Bundle Branch Block, IVCD-Intra Ventricular Conduction Delay, PBBBlock-Paced Bundle Branch Block, NYHA-New York Heart Association, LVEF-Left Ventricular Ejection Fraction, GFR-Glomerular Filtration Rate