

Supplementary Figure Legends

Supplementary Figure 1 – Proportion of males and females within tertiles of both non-indexed and indexed interventricular septum in diastole (IVSd)

Patients grouped into tertiles based on (a) IVSd when non-indexed, (b) IVSd indexed to body surface area (BSA) and (c) IVSd indexed to height and separated into males and females to determine the relative proportion of patients within each tertile.

Supplementary Table 1 – Echocardiographic findings at baseline in patients with ATTR-CM classified by genotype & subdivided by sex

Variables	Wild-type (n = 1095)			T60A (n = 206)			V122I (n = 431)			P-value
	Male (n = 1029)	Female (n = 66)	P-value	Male (n = 145)	Female (n = 61)	P-value	Male (n = 311)	Female (n = 120)		
IVSd (mm)	17.16 (2.34)	15.98 (2.44)	0.001	17.14 (2.76)	16.09 (3.30)	0.007	17.05 (2.16)	16.26 (2.41)		0.003
PWTd (mm)	16.50 (2.44)	16.02 (2.39)	0.150	16.66 (2.79)	15.75 (3.33)	0.075	16.60 (2.38)	15.95 (2.14)		0.007
LVM (g)	320.11 (83.19)	240.67 (90.94)	<0.001	324.24 (92.01)	252.50 (86.71)	<0.001	305.52 (82.30)	263.92 (69.99)		<0.001
LVEDD (mm)	44.04 (5.70)	38.89 (4.96)	<0.001	43.91 (5.78)	40.07 (4.84)	<0.001	42.74 (6.19)	40.29 (5.70)		<0.002
LVESD (mm)	33.35 (6.15)	28.69 (5.12)	<0.001	31.40 (6.20)	29.68 (5.38)	0.051	33.60 (6.64)	30.50 (5.56)		<0.001
MWT (mm)	16.66 (2.78)	15.19 (4.23)	0.001	16.43 (3.35)	15.65 (3.85)	0.011	16.66 (2.68)	15.97 (2.60)		0.027
RWT	0.77 (0.17)	0.84 (0.16)	0.008	0.77 (0.18)	0.80 (0.22)	0.939	0.80 (0.19)	0.81 (0.17)		0.653
LVEDV (ml)	80.75 (24.86)	52.35 (16.59)	<0.001	82.33 (28.13)	64.48 (21.43)	0.002	78.48 (29.26)	61.54 (22.14)		<0.001
LVESV (ml)	41.67 (17.10)	24.80 (11.59)	<0.001	41.26 (18.32)	30.72 (12.56)	<0.001	46.14 (22.79)	33.72 (16.59)		<0.001
SV (ml)	39.08 (13.15)	28.00 (8.87)	<0.001	41.05 (14.94)	33.76 (14.03)	0.046	32.40 (11.95)	27.82 (9.80)		0.003
EF (%)	49.04 (10.28)	53.07 (10.71)	0.011	51.35 (9.78)	51.44 (10.65)	0.655	42.77 (11.23)	46.32 (11.60)		0.004

LA diameter (mm)	45.37 (5.79)	42.79 (5.30)	0.005	42.03 (5.99)	39.21 (5.96)	0.002	43.82 (5.72)	42.76 (5.75)	0.197
LAA (cm ²)	26.72 (5.68)	25.22 (4.61)	0.069	23.88 (5.01)	21.63 (4.57)	0.001	26.00 (5.39)	25.54 (4.92)	0.565
RAA (cm ²)	25.15 (6.30)	22.09 (6.85)	<0.001	21.45 (5.10)	16.68 (3.77)	<0.001	25.26 (6.78)	22.51 (5.41)	<0.001
E/A	2.09 (1.10)	1.85 (1.05)	0.307	1.62 (0.97)	1.59 (0.90)	0.892	2.49 (1.05)	2.26 (1.04)	0.071
E/e' average	16.72 (6.28)	21.54 (8.81)	<0.001	16.93 (7.28)	21.07 (8.72)	0.062	17.10 (5.79)	19.39 (7.26)	0.002
MAPSE (mm)	8.14 (2.56)	8.34 (2.50)	0.654	8.44 (2.55)	8.22 (2.59)	0.938	7.38 (2.28)	7.62 (2.46)	0.330
TAPSE (mm)	15.09 (4.91)	14.79 (5.60)	0.759	16.97 (4.69)	15.97 (4.16)	0.806	14.48 (4.59)	14.56 (4.78)	0.619
RV S' (cm/s)	10.21 (3.13)	10.42 (3.86)	0.423	10.61 (2.93)	10.05 (2.85)	0.725	9.66 (2.79)	9.91 (3.08)	0.289
PASP (mmHg)	37.57 (12.99)	34.36 (16.20)	0.043	30.17 (16.63)	30.65 (17.58)	0.687	39.96 (15.25)	42.21 (13.15)	0.304
TAPSE/PASP	0.66 (0.61)	0.59 (0.73)	0.613	0.66 (0.61)	0.59 (0.73)	0.613	0.43 (0.50)	0.39 (0.41)	0.400
GLS (%)	-11.04 (3.63)	-11.65 (4.13)	0.252	-11.63 (3.82)	-12.20 (3.89)	0.114	-9.35 (3.06)	-10.67 (3.80)	0.001
Significant MR	102 (10.0%)	8 (12.1%)	0.584	19 (13.1%)	6 (9.8%)	0.509	67 (21.5%)	34 (28.3%)	0.135
Significant TR	140 (13.7%)	14 (21.1%)	0.095	9 (6.2%)	8 (13.1%)	0.101	100 (32.2%)	37 (30.8%)	0.780

All *P*-values are adjusted for age. Data are presented as means (SD), with the exception of significant MR and TR which are presented as number (%). E/A – mitral inflow E/A ratio, EF – ejection fraction, GLS – global longitudinal strain, IVSd – interventricular systolic wall thickness in diastole, LA – left atrium, LAA – left atrial area, LVEDD – left ventricular end diastolic diameter, LVEDV – left ventricular end diastolic volume, LVESD – left ventricular end systolic diameter, LVESV – left ventricular end systolic volume, LVM – left ventricular mass, MAPSE – mitral annular plane systolic excursion, MR – mitral regurgitation, MWT – mean wall thickness, PASP – pulmonary artery systolic pressure, PWTd – posterior wall thickness in diastole, RAA – right atrial area, RV S' velocity – right ventricle systolic excursion velocity, SV – stroke volume, TAPSE – tricuspid annular plane systolic excursion, TAPSE/PASP – tricuspid annular plane systolic excursion to pulmonary artery systolic pressure ratio, TR – tricuspid regurgitation

Supplementary Table 2 – Echocardiographic findings at baseline indexed to body surface area and height, in patients with ATTR-CM classified by genotype and subdivided by sex

Variables	Wild-type (n = 1095)			T60A (n = 206)			V122I (n = 431)		
	Male (n = 1029)	Female (n = 66)	P-value	Male (n = 145)	Female (n = 61)	P-value	Male (n = 311)	Female (n = 120)	P-value
IVSd index to BSA (mm/m ²)	8.87 (1.53)	9.28 (2.37)	0.172	8.72 (2.03)	10.10 (2.15)	0.001	8.96 (1.35)	9.56 (1.92)	0.002
IVSd indexed for height (mm/m)	9.67 (1.66)	9.90 (2.41)	0.910	9.49 (2.10)	9.98 (2.03)	0.153	9.89 (1.53)	10.16 (2.06)	0.209
PWTd index to BSA (mm/m ²)	8.53 (1.54)	9.32 (2.33)	0.001	8.50 (2.05)	9.84 (1.98)	0.002	8.73 (1.45)	9.37 (1.72)	0.001
PWTd indexed for height (mm/m)	9.49 (1.69)	9.91 (2.40)	0.193	9.27 (2.14)	9.72 (1.92)	0.164	9.63 (1.65)	9.96 (1.91)	0.102
LVM index to BSA (g/m ²)	166.40 (41.75)	146.73 (49.63)	0.004	166.90 (47.47)	162.23 (50.91)	0.568	161.03 (37.61)	155.18 (40.64)	0.182

LVM indexed for height (mm/m)	185.13 (46.65)	157.39 (53.85)	<0.001	180.08 (56.77)	156.40 (7.59)	0.011	178.31 (45.57)	166.09 (45.91)	0.016
LVEDD index to BSA (mm/m ²)	22.75 (3.51)	22.61 (5.20)	0.807	22.53 (4.79)	25.31 (3.53)	<0.001	22.35 (3.72)	23.52 (4.25)	0.010
LVESD index to BSA (mm/m ²)	17.21 (3.46)	16.61 (4.34)	0.247	16.51 (4.42)	18.79 (3.78)	0.001	17.54 (3.80)	17.59 (4.12)	0.998
MWT index to BSA (mm/m ²)	8.70 (1.46)	9.31 (2.32)	0.010	8.69 (2.22)	9.97 (2.03)	0.005	8.84 (1.33)	9.47 (1.76)	0.001
MWT indexed for height (mm/m)	9.69 (1.56)	9.91 (2.38)	0.248	9.38 (2.10)	9.85 (1.94)	0.552	9.76 (1.51)	10.06 (1.93)	0.113
LVEDV index to BSA (ml/m ²)	41.19 (13.06)	30.26 (11.20)	<0.001	41.06 (15.77)	40.32 (12.30)	0.855	40.61 (14.69)	35.17 (13.47)	0.002
LVESV index to BSA (ml/m ²)	21.22 (8.89)	14.30 (7.37)	<0.001	20.66 (9.96)	19.34 (8.10)	0.546	23.85 (11.66)	19.14 (9.77)	<0.001
SV index to BSA (ml/m ²)	19.97 (6.82)	16.21 (5.98)	<0.001	20.56 (7.98)	20.97 (7.85)	0.335	16.79 (6.03)	16.04 (6.27)	0.456

LAA index to BSA (cm ² /m ²)	13.78 (3.14) 14.70 (4.06)	0.081	12.23 (3.27) 13.60 (2.75)	0.114	13.22 (3.75) 14.90 (3.86)	<0.001
RAA index to BSA (cm ² /m ²)	12.93 (3.35) 12.89 (4.85)	0.523	10.96 (3.01) 10.47 (2.23)	0.046	12.81 (4.22) 13.09 (3.74)	0.880

All *P*-values are adjusted for age. Data are presented as means (and standard deviation). BSA – body surface area, IVSd – interventricular systolic wall thickness in diastole, LAA – left atrial area, LVEDD – left ventricular end diastolic diameter, LVEDV – left ventricular end diastolic volume, LVESD – left ventricular end systolic diameter, LVESV – left ventricular end systolic volume, MWT – mean wall thickness, PWTd – posterior wall thickness in diastole, RAA – right atrial area, SV – stroke volume

Supplementary Table 3 – Regression coefficient representing the difference in means (males minus females) of echocardiographic variable at 1 year

Echocardiographic Variable	All patients (n=906; 116 females)		Wild-type (n=595; 26 females)		T60A (n=99; 29 females)		V122I (n=212; 61 females)	
	Regression Coefficient (95% CI)	P-value						
IVSd index to BSA	-0.20 (-0.33; -0.06)	<0.01	-0.01 (-0.25; 0.22)	0.92	-0.72 (-1.29; -0.14)	0.02	-0.09 (-0.26; 0.09)	0.34
PWTd index to BSA	-0.23 (-0.39; -0.06)	<0.01	-0.17 (-0.48; 0.13)	0.27	-0.45 (-1.03; 0.14)	0.14	-0.12 (-0.35; 0.11)	0.31
MWT index to BSA	-0.17 (-0.32; -0.02)	0.03	-0.05 (-0.34; 0.23)	0.71	-0.56 (-1.11; 0.002)	0.05	-0.06 (-0.22; 0.10)	0.45
RWT	-0.01 (-0.03; 0.01)	0.40	0 (-0.41; 0.42)	0.98	-0.01 (-0.06; 0.05)	0.84	-0.01 (-0.04; 0.03)	0.71
LVEDD index to BSA	-0.33 (-0.77; 0.10)	0.13	-0.40 (-1.20; 0.41)	0.34	-0.91 (-2.46; 0.63)	0.24	-0.22 (-0.83; 0.40)	0.49
LVESD index to BSA	-0.38 (-0.88; 0.12)	0.13	0.04 (-0.96; 1.04)	0.94	-0.63 (-2.20; 0.93)	0.42	-0.41 (-1.07; 0.25)	0.22

LVEDV index to BSA	3.37 (1.12; 5.63)	<0.01	4.43 (0.003; 8.86)	0.05	0.52 (-5.76; 6.79)	0.87	0.84 (-2.33; 4.01)	0.60
LVESV index to BSA	1.65 (0.22; 3.07)	0.02	3.15 (0.44; 5.86)	0.02	0.13 (-3.38; 3.63)	0.94	0.70 (-1.74; 3.13)	0.57
SV index to BSA	1.69 (0.42; 2.95)	<0.01	1.65 (-0.90; 4.21)	0.21	1.73 (-1.56; 5.03)	0.30	-0.31 (-1.83; 1.20)	0.69
EF (%)	-0.81 (-2.58; 0.96)	0.37	-3.44 (-6.95; 0.06)	0.05	0.90 (-3.58; 5.38)	0.69	-2.00 (-4.74; 0.73)	0.15
LAD	2.23 (1.29; 3.16)	<0.001	0.85 (-0.99; 2.70)	0.36	3.28 (0.83; 5.74)	<0.01	2.23 (0.80; 3.65)	0.002
LAA 4ch index to BSA	-0.24 (-0.71; 0.22)	0.30	-0.69 (-1.60; 0.21)	0.13	0.54 (-0.69; 1.76)	0.39	-0.49 (-1.19; 0.21)	0.17
RAA 4ch index to BSA	0.14 (-0.35; 0.63)	0.57	0.54 (-0.42; 1.50)	0.27	0.18 (-0.78; 1.14)	0.72	0.37 (-0.49; 1.23)	0.40
E/A Ratio	-0.01 (-0.23; 0.22)	0.96	0.16 (-0.27; 0.60)	0.46	0.26 (-0.30; 0.82)	0.35	-0.17 (-0.50; 0.15)	0.30
E/e' average	-0.59 (-1.69; 0.50)	0.29	-1.49 (-3.71; 0.74)	0.19	3.33 (0.49; 6.17)	0.02	-1.07 (-2.48; 0.34)	0.14
MAPSE	0.40 (-0.06; 0.86)	0.09	0.10 (-0.78; 0.98)	0.82	0.58 (-0.64; 1.80)	0.35	-0.11 (-0.81; 0.58)	0.75
TAPSE	-0.06 (-0.84; 0.71)	0.88	-0.76 (-2.24; 0.71)	0.31	1.02 (-0.87; 2.91)	0.29	-0.42 (-1.70; 0.85)	0.51
S' tricuspid	0.003 (-0.53; 0.54)	0.99	0.02 (-1.02; 1.06)	0.97	-0.13 (-1.49; 1.23)	0.85	-0.27 (-1.05; 0.51)	0.50

TR Gradient	-2.49 (-4.40; -0.49)	0.02	-3.39 (-7.26; 0.48)	0.09	-1.92 (-6.19; 2.36)	0.37	-2.44 (-5.91; 1.04)	0.17
PASP	-2.89 (-5.26; -0.52)	0.02	-3.53 (-8.27; 1.20)	0.14	-1.94 (-6.59; 2.72)	0.41	-2.40 (-6.45; 1.66)	0.25
GLS	0.25 (-0.35; 0.85)	0.41	0.34 (-0.89; 1.57)	0.59	-0.48 (-1.90; 0.93)	0.50	1.20 (0.39; 2.02)	0.004

Each regression coefficient, derived from multivariable linear regression analysis is adjusted for the baseline value of the variable and age. Sex is coded as male = 1 and females = 0 so that positive regression coefficient indicates that at 1 year, the mean value of the relevant variable was higher in males than in females. Negative regression coefficient indicates that at 1 year, the mean value of the relevant variable was higher in females than in males. BSA – body surface area, E/A – mitral inflow E/A ratio, EF – ejection fraction, GLS – global longitudinal strain, IVSd – interventricular systolic wall thickness in diastole, LAD – left atrial diameter, LAA – left atrial area, LVEDD – left ventricular end diastolic diameter, LVEDV – left ventricular end diastolic volume, LVESD – left ventricular end systolic diameter, LVESV – left ventricular end systolic volume, MAPSE – mitral annular plane systolic excursion, MR – mitral regurgitation, MWT – mean wall thickness, PASP – pulmonary artery systolic pressure, PWTd – posterior wall thickness in diastole, RAA – right atrial area, RV S' velocity – right ventricle systolic excursion velocity, SV – stroke volume, TAPSE – tricuspid annular plane systolic excursion, TAPSE/PASP – tricuspid annular plane systolic excursion to pulmonary artery systolic pressure ratio, TR – tricuspid regurgitation

Supplementary Table 4 – Hazard ratio (HR) with 95% confidence interval (CI) comparing the hazard of death in males and females

Echocardiographic variable as covariate	All patients (n=906; 116 females)		Wild-type (n=595; 26 females)		T60A (n=99; 29 females)		V122I (n=212; 61 females)	
	HR (95% CI)	P-value	HR (95% CI)	P-value	HR (95% CI)	P-value	HR (95% CI)	P-value
IVSd index to BSA	0.91 (0.70-1.17)	0.45	1.10 (0.64-1.87)	0.74	0.68 (0.39-1.18)	0.17	0.91 (0.70-1.67)	0.45
RWT	0.90 (0.70-1.16)	0.41	1.10 (0.64-1.87)	0.74	0.66 (0.38-1.14)	0.14	0.90 (0.70-1.16)	0.41
SV index to BSA	0.98 (0.75-1.27)	0.87	1.11 (0.65-1.90)	0.70	0.81 (0.44-1.48)	0.49	0.98 (0.75-1.27)	0.87
EF (%)	0.93 (0.72-1.20)	0.57	1.08 (0.63-1.85)	0.78	0.69 (0.39-1.22)	0.20	0.93 (0.72-1.20)	0.57
LAA 4ch index to BSA	0.94 (0.72-1.21)	0.62	1.11 (0.65-1.89)	0.71	0.59 (0.32-1.08)	0.09	0.94 (0.72-1.21)	0.62
RAA 4ch index to BSA	0.87 (0.67-1.12)	0.29	1.04 (0.61-1.78)	0.88	0.68 (0.38-1.22)	0.19	0.87 (0.67-1.13)	0.29
E/A Ratio	0.96 (0.68-1.35)	0.81	1.24 (0.58-2.67)	0.58	0.79 (0.40-1.56)	0.49	0.96 (0.68-1.35)	0.81
E/e' average	1.05 (0.79-1.40)	0.71	1.29 (0.71-2.35)	0.41	0.69 (0.35-1.37)	0.29	1.05 (0.79-1.40)	0.71
MAPSE	0.93 (0.71-1.22)	0.61	1.10 (0.65-1.89)	0.72	0.71 (0.40-1.28)	0.26	0.93 (0.71-1.22)	0.61
TAPSE	0.93 (0.72-1.22)	0.61	1.10 (0.64-1.88)	0.73	0.69 (0.39-1.23)	0.21	0.93 (0.72-1.22)	0.61
MR change – absolute	0.92 (0.71-1.18)	0.51	1.11 (0.65-1.89)	0.71	0.61 (0.34-1.11)	0.10	0.92 (0.71-1.18)	0.51

MR change by ≥ 2 grades	0.92 (0.71-1.18) 0.51	1.05 (0.62-1.80) 0.85	0.66 (0.37-1.15) 0.14	0.92 (0.71-1.18) 0.51
AR change – absolute	0.92 (0.71-1.19) 0.54	1.10 (0.65-1.89) 0.72	0.67 (0.38-1.17) 0.16	0.92 (0.71-1.19) 0.54
AR change by ≥ 1 grade	0.92 (0.72-1.19) 0.54	1.11 (0.65-1.89) 0.71	0.68 (0.39-1.19) 0.17	0.92 (0.72-1.19) 0.54
AR change by ≥ 2 grades	0.93 (0.72-1.19) 0.55	1.11 (0.65-1.91) 0.70	0.68 (0.39-1.21) 0.19	0.93 (0.72-1.19) 0.55
TR change – absolute	0.92 (0.72-1.19) 0.54	1.10 (0.65-1.89) 0.72	0.62 (0.36-1.10) 0.10	0.92 (0.72-1.19) 0.54
TR change by ≥ 1 grade	0.92 (0.72-1.19) 0.54	1.10 (0.64-1.88) 0.73	0.68 (0.39-1.20) 0.18	0.92 (0.72-1.19) 0.54
PASP	1.04 (0.77-1.40) 0.82	0.97 (0.54-1.74) 0.91	0.69 (0.33-1.44) 0.32	1.04 (0.77-1.40) 0.82
GLS	0.91 (0.70-1.19) 0.50	1.12 (0.64-1.95) 0.70	0.67 (0.37-1.21) 0.18	0.91 (0.70-1.19) 0.50

Each hazard ratio derived from a multivariable cox proportional hazards regression analysis which adjusts for the change in the relevant echocardiographic variable from baseline to 1 year. Sex coded as male = 1 and female = 0 such that a Hazard Ratio of 1.10 indicates that the hazard of death is 1.10 times greater in males compared to female. AR – aortic regurgitation, BSA – body surface area, E/A – mitral inflow E:A ratio, EF – ejection fraction, GLS – global longitudinal strain, IVSd – interventricular systolic wall thickness in diastole, LAA – left atrial area, MAPSE – mitral annular plane systolic excursion, MR – mitral regurgitation, PASP – pulmonary artery systolic pressure, RAA – right atrial

area, RV S' velocity – right ventricle systolic excursion velocity, RWT – relative wall thickness, SV – stroke volume, TAPSE – tricuspid annular plane systolic excursion.

Supplementary table A – Multivariable linear regression analysis of interventricular septum in diastole (IVSd) indexed to height

Comparison	Regression coefficient	SE	P value
Sex (males vs female*)	0.3339	0.1099	0.002
Genotype (wild-type vs V122I)	0.0228	0.0881	0.796
Genotype (T60A vs wild-type*)	0.2500	0.1193	0.036
Genotype (T60A vs V122I*)	0.2728	0.1290	0.035

The regression coefficient represents the estimated difference in means between the two groups. Sex and genotype are coded such that a coefficient >0 indicates that the mean IVSd indexed to height was higher in the second variable compared to the first variable and when adjusted for other variables in the model. *Significant comparator. BSA – body surface area, IVSd – interventricular septum in diastole. SE – standard error

Supplementary table B – Multivariable linear regression analysis of interventricular septum in diastole (IVSd) indexed to body surface area (BSA)

Comparison	Regression coefficient	SE	P value
Sex (male vs female*)	0.7712	0.1237	<0.001
Genotype (wild-type vs V122I)	0.0751	0.9917	0.449
Genotype (T60A vs V122I)	0.0130	0.1452	0.929
Genotype (T60A vs wild-type)	0.0621	0.1346	0.644

The regression coefficient represents the estimated difference in means between the two groups. Sex and genotype are coded such that a positive coefficient >0 indicates that the mean IVSd indexed to BSA was higher in the second variable compared to the first variable and when adjusted for other variables in the model. *Significant comparator. BSA – body surface area, IVSd – interventricular septum in diastole, SE – standard error

Supplementary Figure 1 – Proportion of males and females within tertiles of both non-indexed and indexed interventricular septum in diastole (IVSd)

