

S1.1: Healthy cohort details with N=number of subjects, M=number of T1 maps, Nm=number of male subjects, Mm=number of male T1 maps, T1m=T1 time of male subjects [ms], am=age of male subjects [years], Nf=number of female subjects, Mf=number of female T1 maps, T1f=T1 time of female subjects [ms], af=age of female subjects [years], T1 values and age are given as mean±standard deviation, green denotes scanner-sequence-combinations represented in the training dataset

N=254 M=970	1.5T				3.0T						
	Philips Achieva [5.1.8.0]	Siemens Avanto [syngo MR B17]	Siemens AvantoFit [syngo MR D13B]	Siemens AvantoFit [syngo MR E11]	Philips Ingenia [5.1.8.2]	Philips Ingenia [5.4.0.0]	Philips Ingenia [5.4.0.1]	Siemens PrismaFit [syngo MR E11]	Siemens Skyra [syngo MR E11]	Siemens SkyraFit [syngo MR E11]	Siemens Verio [syngo MR B17]
MOLLI 3(3)3(3)5 b	N=16 M=16 Nm=8 Mm=8 T1m=976.07±27.25 am=24.88±3.98 Nf=8 Mf=8 T1f=1009.98±16.47 af=24.62±3.43		N=16 M=17 Nm=7 Mm=7 T1m=967.35±40.32 am=25.14±4.19 Nf=9 Mf=10 T1f=951.54±24.93 af=24.44±3.27		N=15 M=17 Nm=8 Mm=10 T1m=1118.68±85.44 am=24.88±3.98 Nf=7 Mf=7 T1f=1107.83±94.29 af=25.00±3.51						N=14 M=18 Nm=12 Mm=16 T1m=1239.78±18.15 am=31.50±6.85 Nf=2 Mf=2 T1f=1273.78±29.29 af=31.00±2.00
MOLLI 3(3)5 b									N=16 M=16 Nm=8 Mm=8 T1m=1054.72±44.71 am=25.00±3.94 Nf=8 Mf=8 T1f=1094.66±42.35 af=24.62±3.43		
MOLLI 4(1)3(1)2 b	N=16 M=16 Nm=8 Mm=8 T1m=931.07±26.66 am=24.88±3.98 Nf=8 Mf=8 T1f=933.28±32.50 af=24.62±3.43		N=16 M=32 Nm=7 Mm=14 T1m=931.84±36.48 am=25.14±4.19 Nf=9 Mf=18 T1f=928.80±29.56 af=24.44±3.27		N=9 M=9 Nm=4 Mm=4 T1m=1137.29±129.28 am=25.50±5.50 Nf=5 Mf=5 T1f=1155.10±34.22 af=25.40±3.20				N=16 M=17 Nm=8 Mm=9 T1m=1103.06±51.08 am=25.00±3.94 Nf=8 Mf=8 T1f=1188.99±81.84 af=24.62±3.43		
MOLLI 4(1)3(1)2 s	N=16 M=16 Nm=8 Mm=8 T1m=928.76±25.50 am=24.88±3.98 Nf=8 Mf=8 T1f=955.14±17.82 af=24.62±3.43				N=12 M=13 Nm=5 Mm=6 T1m=1173.27±64.45 am=25.20±4.96 Nf=7 Mf=7 T1f=1190.78±34.45 af=25.00±3.51						
MOLLI 5(3)3 b	N=16 M=16 Nm=8 Mm=8 T1m=994.97±27.72 am=24.88±3.98 Nf=8 Mf=8 T1f=1009.58±14.07 af=24.62±3.43	N=8 M=8 Nm=5 Mm=5 T1m=960.47±20.67 am=25.20±3.76 Nf=3 Mf=3 T1f=1027.73±72.36 af=36.00±13.74	N=44 M=62 Nm=20 Mm=28 T1m=998.41±38.24 am=37.20±16.14 Nf=24 Mf=34 T1f=1002.36±31.67 af=43.21±16.86	N=57 M=100 Nm=30 Mm=50 T1m=972.42±18.89 am=33.07±10.90 Nf=27 Mf=50 T1f=1015.45±28.44 af=36.56±12.89	N=15 M=30 Nm=8 Mm=17 T1m=1171.66±88.13 am=24.88±3.98 Nf=7 Mf=13 T1f=1240.45±23.86 af=25.00±3.51	N=15 M=15 Nm=7 Mm=7 T1m=1214.04±27.86 am=24.29±6.96 Nf=8 Mf=8 T1f=1243.49±17.87 af=24.50±3.46	N=2 M=2 Nm=1 Mm=1 T1m=1209.17±0.00 am=24.00±0.00 Nf=1 Mf=1 T1f=1231.24±0.00 af=24.00±0.00	N=17 M=78 Nm=10 Mm=50 T1m=1191.82±25.12 am=26.50±3.32 Nf=7 Mf=28 T1f=1217.93±35.03 af=25.57±8.43	N=16 M=32 Nm=8 Mm=16 T1m=1217.11±53.17 am=25.00±3.94 Nf=8 Mf=16 T1f=1267.37±41.26 af=24.62±3.43	N=21 M=74 Nm=14 Mm=43 T1m=1187.96±29.83 am=29.07±6.69 Nf=7 Mf=31 T1f=1226.43±26.89 af=25.57±8.43	N=93 M=172 Nm=44 Mm=72 T1m=1139.24±39.42 am=45.23±17.41 Nf=49 Mf=100 T1f=1167.97±34.79 af=45.29±16.77
MOLLI 5(3)3 s	N=16 M=32 Nm=8 Mm=16 T1m=982.84±25.58 am=24.88±3.98 Nf=8 Mf=16 T1f=1013.30±22.42 af=24.62±3.43				N=15 M=15 Nm=8 Mm=8 T1m=1195.00±99.65 am=24.88±3.98 Nf=7 Mf=7 T1f=1262.68±20.61 af=25.00±3.51						N=31 M=31 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=31 Mf=31 T1f=1084.04±41.49 af=30.81±5.32
SASHA	N=13 M=13 Nm=6 Mm=6 T1m=1023.18±96.71 am=23.17±1.07 Nf=7 Mf=7 T1f=1160.07±42.06 af=24.14±3.40		N=16 M=16 Nm=7 Mm=7 T1m=1212.80±35.72 am=25.14±4.19 Nf=9 Mf=9 T1f=1249.89±32.37 af=24.44±3.27	N=6 M=12 Nm=4 Mm=7 T1m=1140.82±30.06 am=28.25±3.27 Nf=2 Mf=5 T1f=1212.32±18.12 af=23.00±1.00	N=10 M=10 Nm=4 Mm=4 T1m=797.43±51.18 am=23.25±1.30 Nf=6 Mf=6 T1f=1184.99±175.16 af=25.17±3.76					N=17 M=56 Nm=10 Mm=32 T1m=1498.43±31.83 am=26.90±3.48 Nf=7 Mf=24 T1f=1536.87±47.16 af=25.57±8.43	
SASHA GRE				N=7 M=9 Nm=4 Mm=5 T1m=1124.40±41.99 am=28.00±4.06 Nf=3 Mf=4 T1f=1187.34±65.67 af=22.67±2.49							

S1.2: Healthy train cohort (HTR) details with N=number of subjects, M=number of T1 maps, Nm=number of male subjects, Mm=number of male T1 maps, T1m=T1 time of male subjects [ms], am=age of male subjects [years], Nf=number of female subjects, Mf=number of female T1 maps, T1f=T1 time of female subjects [ms], af=age of female subjects [years], T1 values and age are given as mean±standard deviation, green denotes scanner-sequence-combinations represented in the training dataset

N=214 M=814	1.5T				3.0T						
	Philips Achieva [5.1.8.0]	Siemens Avanto [syngo MR B17]	Siemens AvantoFit [syngo MR D13B]	Siemens AvantoFit [syngo MR E11]	Philips Ingenia [5.1.8.2]	Philips Ingenia [5.4.0.0]	Philips Ingenia [5.4.0.1]	Siemens PrismaFit [syngo MR E11]	Siemens Skyra [syngo MR E11]	Siemens SkyraFit [syngo MR E11]	Siemens Verio [syngo MR B17]
MOLLI 3(3)3(3)5 b	N=14 M=14 Nm=8 Mm=8 T1m=976.07±27.25 am=24.88±3.98 Nf=6 Mf=6 T1f=1012.53±18.13 af=24.67±2.98		N=14 M=15 Nm=7 Mm=7 T1m=967.35±40.32 am=25.14±4.19 Nf=7 Mf=8 T1f=950.68±27.59 af=24.43±2.82		N=13 M=15 Nm=8 Mm=10 T1m=1118.68±85.44 am=24.88±3.98 Nf=5 Mf=5 T1f=1122.33±87.96 af=25.20±2.99						N=12 M=14 Nm=10 Mm=12 T1m=1235.09±15.08 am=29.40±2.37 Nf=2 Mf=2 T1f=1273.78±29.29 af=31.00±2.00
MOLLI 3(3)5 b									N=14 M=14 Nm=8 Mm=8 T1m=1054.72±44.71 am=25.00±3.94 Nf=6 Mf=6 T1f=1104.07±36.58 af=24.67±2.98		
MOLLI 4(1)3(1)2 b	N=14 M=14 Nm=8 Mm=8 T1m=931.07±26.66 am=24.88±3.98 Nf=6 Mf=6 T1f=934.18±33.13 af=24.67±2.98		N=14 M=28 Nm=7 Mm=14 T1m=931.84±36.48 am=25.14±4.19 Nf=7 Mf=14 T1f=934.00±28.67 af=24.43±2.82		N=8 M=8 Nm=4 Mm=4 T1m=1137.29±129.28 am=25.50±5.50 Nf=4 Mf=4 T1f=1153.09±38.00 af=24.50±2.96				N=14 M=15 Nm=8 Mm=9 T1m=1103.06±51.08 am=25.00±3.94 Nf=6 Mf=6 T1f=1206.16±80.18 af=24.67±2.98		
MOLLI 4(1)3(1)2 s	N=14 M=14 Nm=8 Mm=8 T1m=928.76±25.50 am=24.88±3.98 Nf=6 Mf=6 T1f=950.99±18.67 af=24.67±2.98				N=10 M=11 Nm=5 Mm=6 T1m=1173.27±64.45 am=25.20±4.96 Nf=5 Mf=5 T1f=1185.21±39.03 af=25.20±2.99						
MOLLI 5(3)3 b	N=14 M=14 Nm=8 Mm=8 T1m=994.97±27.72 am=24.88±3.98 Nf=6 Mf=6 T1f=1007.36±13.34 af=24.67±2.98	N=7 M=7 Nm=5 Mm=5 T1m=960.47±20.67 am=25.20±3.76 Nf=2 Mf=2 T1f=1056.52±73.27 af=42.50±12.50	N=37 M=52 Nm=17 Mm=25 T1m=1000.38±39.40 am=36.65±16.41 Nf=20 Mf=27 T1f=1002.97±32.88 af=44.05±16.57	N=47 M=82 Nm=24 Mm=43 T1m=972.15±19.59 am=32.08±9.73 Nf=23 Mf=39 T1f=1017.25±30.23 af=37.09±12.83	N=13 M=26 Nm=8 Mm=17 T1m=1171.66±88.13 am=24.88±3.98 Nf=5 Mf=9 T1f=1243.05±26.05 af=25.20±2.99	N=12 M=12 Nm=6 Mm=6 T1m=1210.95±28.96 am=24.83±7.38 Nf=6 Mf=6 T1f=1241.01±14.64 af=25.50±3.45	N=2 M=2 Nm=1 Mm=1 T1m=1209.17±0.00 am=24.00±0.00 Nf=1 Mf=1 T1f=1231.24±0.00 af=24.00±0.00	N=14 M=65 Nm=9 Mm=46 T1m=1191.67±26.06 am=26.11±3.28 Nf=5 Mf=19 T1f=1221.07±41.66 af=27.40±9.35	N=14 M=28 Nm=8 Mm=16 T1m=1217.11±53.17 am=25.00±3.94 Nf=6 Mf=12 T1f=1270.36±40.19 af=24.67±2.98	N=18 M=59 Nm=13 Mm=39 T1m=1189.87±26.89 am=29.00±6.94 Nf=5 Mf=20 T1f=1230.81±30.69 af=27.40±9.35	N=78 M=145 Nm=37 Mm=61 T1m=1135.78±39.99 am=44.86±17.38 Nf=41 Mf=84 T1f=1171.19±33.39 af=45.41±16.59
MOLLI 5(3)3 s	N=14 M=28 Nm=8 Mm=16 T1m=982.84±25.58 am=24.88±3.98 Nf=6 Mf=12 T1f=1010.58±24.83 af=24.67±2.98				N=13 M=13 Nm=8 Mm=8 T1m=1195.00±99.65 am=24.88±3.98 Nf=5 Mf=5 T1f=1259.32±20.85 af=25.20±2.99						N=26 M=26 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=26 Mf=26 T1f=1082.55±43.91 af=30.77±5.67
SASHA	N=11 M=11 Nm=6 Mm=6 T1m=1023.18±96.71 am=23.17±1.07 Nf=5 Mf=5 T1f=1163.70±48.50 af=24.00±2.83		N=14 M=14 Nm=7 Mm=7 T1m=1212.80±35.72 am=25.14±4.19 Nf=7 Mf=7 T1f=1257.09±32.95 af=24.43±2.82	N=5 M=9 Nm=4 Mm=7 T1m=1140.82±30.06 am=28.25±3.27 Nf=1 Mf=2 T1f=1228.91±0.70 af=24.00±0.00	N=8 M=8 Nm=4 Mm=4 T1m=797.43±51.18 am=23.25±1.30 Nf=4 Mf=4 T1f=1301.14±74.38 af=25.50±3.28					N=14 M=47 Nm=9 Mm=29 T1m=1494.84±29.79 am=26.56±3.50 Nf=5 Mf=18 T1f=1539.43±53.18 af=27.40±9.35	
SASHA GRE				N=4 M=4 Nm=3 Mm=3 T1m=1118.18±52.93 am=27.33±4.50 Nf=1 Mf=1 T1f=1251.05±0.00 af=26.00±0.00							

S1.3: Healthy test cohort (HTE) details with N=number of subjects, M=number of T1 maps, Nm=number of male subjects, Mm=number of male T1 maps, T1m=T1 time of male subjects [ms], am=age of male subjects [years], Nf=number of female subjects, Mf=number of female T1 maps, T1f=T1 time of female subjects [ms], af=age of female subjects [years], T1 values and age are given as mean±standard deviation, green denotes scanner-sequence-combinations represented in the training dataset

N=40 M=156	1.5T				3.0T						
	Philips Achieva [5.1.8.0]	Siemens Avanto [syngo MR B17]	Siemens AvantoFit [syngo MR D13B]	Siemens AvantoFit [syngo MR E11]	Philips Ingenia [5.1.8.2]	Philips Ingenia [5.4.0.0]	Philips Ingenia [5.4.0.1]	Siemens PrismaFit [syngo MR E11]	Siemens Skyra [syngo MR E11]	Siemens SkyraFit [syngo MR E11]	Siemens Verio [syngo MR B17]
MOLLI 3(3)3(3)5 b	N=2 M=2 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=2 T1f=1002.34±4.57 af=24.50±4.50		N=2 M=2 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=2 T1f=955.00±6.88 af=24.50±4.50		N=2 M=2 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=2 T1f=1071.57±99.65 af=24.50±4.50						N=2 M=4 Nm=2 Mm=4 T1m=1253.86±19.29 am=42.00±11.00 Nf=0 Mf=0 T1f=0.00±0.00 af=0.00±0.00
MOLLI 3(3)5 b									N=2 M=2 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=2 T1f=1066.44±45.80 af=24.50±4.50		
MOLLI 4(1)3(1)2 b	N=2 M=2 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=2 T1f=930.57±30.40 af=24.50±4.50		N=2 M=4 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=4 T1f=910.63±25.09 af=24.50±4.50		N=1 M=1 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=1 Mf=1 T1f=1163.15±0.00 af=29.00±0.00				N=2 M=2 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=2 T1f=1137.49±62.97 af=24.50±4.50		
MOLLI 4(1)3(1)2 s	N=2 M=2 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=2 T1f=967.59±4.28 af=24.50±4.50				N=2 M=2 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=2 T1f=1204.71±8.58 af=24.50±4.50						
MOLLI 5(3)3 b	N=2 M=2 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=2 T1f=1016.23±14.11 af=24.50±4.50	N=1 M=1 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=1 Mf=1 T1f=970.15±0.00 af=23.00±0.00	N=7 M=10 Nm=3 Mm=3 T1m=982.06±20.32 am=40.33±14.08 Nf=4 Mf=7 T1f=1000.00±26.39 af=39.00±17.65	N=10 M=18 Nm=6 Mm=7 T1m=974.08±13.63 am=37.00±14.01 Nf=4 Mf=11 T1f=1009.06±19.58 af=33.50±12.84	N=2 M=4 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=4 T1f=1234.62±16.57 af=24.50±4.50	N=3 M=3 Nm=1 Mm=1 T1m=1232.59±0.00 am=21.00±0.00 Nf=2 Mf=2 T1f=1250.95±23.68 af=21.50±0.50		N=3 M=13 Nm=1 Mm=4 T1m=1193.51±8.64 am=30.00±0.00 Nf=2 Mf=9 T1f=1211.32±9.44 af=21.00±1.00	N=2 M=4 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=4 T1f=1258.41±43.10 af=24.50±4.50	N=3 M=15 Nm=1 Mm=4 T1m=1169.37±46.19 am=30.00±0.00 Nf=2 Mf=11 T1f=1218.46±15.07 af=21.00±1.00	N=15 M=27 Nm=7 Mm=11 T1m=1158.42±29.43 am=47.14±17.45 Nf=8 Mf=16 T1f=1151.09±37.02 af=44.62±17.63
MOLLI 5(3)3 s	N=2 M=4 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=4 T1f=1021.46±8.42 af=24.50±4.50				N=2 M=2 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=2 T1f=1271.09±17.32 af=24.50±4.50						N=5 M=5 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=5 Mf=5 T1f=1091.83±24.00 af=31.00±2.97
SASHA	N=2 M=2 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=2 T1f=1151.00±13.94 af=24.50±4.50		N=2 M=2 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=2 T1f=1224.67±9.95 af=24.50±4.50	N=1 M=3 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=1 Mf=3 T1f=1201.27±15.53 af=22.00±0.00	N=2 M=2 Nm=0 Mm=0 T1m=0.00±0.00 am=0.00±0.00 Nf=2 Mf=2 T1f=952.68±5.23 af=24.50±4.50					N=3 M=9 Nm=1 Mm=3 T1m=1533.18±29.97 am=30.00±0.00 Nf=2 Mf=6 T1f=1529.20±18.18 af=21.00±1.00	
SASHA GRE				N=3 M=5 Nm=1 Mm=2 T1m=1133.72±7.73 am=30.00±0.00 Nf=2 Mf=3 T1f=1166.10±62.82 af=21.00±1.00							

S1.4: Patients with hypertrophic cardiomyopathy cohort (HCM) details with N=number of subjects, M=number of T1 maps, Nm=number of male subjects, Mm=number of male T1 maps, T1m=T1 time of male subjects [ms], am=age of male subjects [years], Nf=number of female subjects, Mf=number of female T1 maps, T1f=T1 time of female subjects [ms], af=age of female subjects [years], T1 values and age are given as mean±standard deviation, green denotes scanner-sequence-combinations represented in the training dataset

[illegible]

S1.5: Patients with amyloidosis cohort (AMY) details with N=number of subjects, M=number of T1 maps, Nm=number of male subjects, Mm=number of male T1 maps, T1m=T1 time of male subjects [ms], am=age of male subjects [years], Nf=number of female subjects, Mf=number of female T1 maps, T1f=T1 time of female subjects [ms], af=age of female subjects [years], T1 values and age are given as mean±standard deviation, green denotes scanner-sequence-combinations represented in the training dataset

N=24 M=24	1.5T				3.0T						
	Philips Achieva [5.1.8.0]	Siemens Avanto [syngo MR B17]	Siemens AvantoFit [syngo MR D13B]	Siemens AvantoFit [syngo MR E11]	Philips Ingenia [5.1.8.2]	Philips Ingenia [5.4.0.0]	Philips Ingenia [5.4.0.1]	Siemens PrismaFit [syngo MR E11]	Siemens Skyra [syngo MR E11]	Siemens SkyraFit [syngo MR E11]	Siemens Verio [syngo MR B17]
MOLLI 3(3)3(3)5 b											
MOLLI 3(3)5 b											
MOLLI 4(1)3(1)2 b											
MOLLI 4(1)3(1)2 s											
MOLLI 5(3)3 b		N=1 M=1 Nm=1 Mm=1 T1m=1014.78±0.00 am=61.00±0.00 Nf=0 Mf=0 T1f=0.00±0.00 af=0.00±0.00	N=13 M=13 Nm=10 Mm=10 T1m=1133.85±31.72 am=75.20±6.82 Nf=3 Mf=3 T1f=1067.37±90.41 af=73.33±0.94	N=7 M=7 Nm=7 Mm=7 T1m=1108.40±42.22 am=73.71±10.31 Nf=0 Mf=0 T1f=0.00±0.00 af=0.00±0.00							
MOLLI 5(3)3 s		N=2 M=2 Nm=1 Mm=1 T1m=1061.38±0.00 am=74.00±0.00 Nf=1 Mf=1 T1f=1155.21±0.00 af=58.00±0.00									
SASHA											
SASHA GRE				N=1 M=1 Nm=1 Mm=1 T1m=1310.68±0.00 am=82.00±0.00 Nf=0 Mf=0 T1f=0.00±0.00 af=0.00±0.00							