

Supplement A: Bivariate correlations of parameter change over time in the HIV-infected participants (final follow value up minus baseline value [delta value])

			Correlations						ΔMean		ΔeGFR
			Δhs-cTnT	ΔNT-proBNP	ΔsST2	ΔGalectin-3	ΔEthanol		arterial	ΔHeart rate	(ml/min/
			(ng/l)	P (ng/l)	(ng/ml)	(ng/ml)	(units/week)	ΔWeight (kg)	pressure	(beats/min)	1.73 m ²)
								(mmHg)			
Spearman's rho	Δhs-cTnT (ng/l)	Correlation Coefficient	1.000	.110	.140	.007	.006	-.113	-.261 [†]	-.005	-.108
		Sig. (2-tailed)	.	.357	.239	.951	.959	.342	.026	.965	.364
		N	73	72	73	73	73	73	73	73	73
ΔNT-proBNP (ng/l)	ΔNT-proBNP (ng/l)	Correlation Coefficient	.110	1.000	.076	.346 ^{**}	-.069	-.359 ^{**}	-.100	.049	-.066
		Sig. (2-tailed)	.357	.	.526	.003	.563	.002	.402	.682	.583
		N	72	72	72	72	72	72	72	72	72
ΔsST2 (ng/ml)	ΔsST2 (ng/ml)	Correlation Coefficient	.140	.076	1.000	.501 ^{**}	.143	-.315 ^{**}	-.193	.354 ^{**}	-.285 [†]
		Sig. (2-tailed)	.239	.526	.	.000	.226	.007	.101	.002	.015
		N	73	72	73	73	73	73	73	73	73
ΔGalectin-3 (ng/ml)	ΔGalectin-3 (ng/ml)	Correlation Coefficient	.007	.346 ^{**}	.501 ^{**}	1.000	.132	-.367 ^{**}	-.085	.446 ^{**}	-.135
		Sig. (2-tailed)	.951	.003	.000	.	.265	.001	.474	.000	.255
		N	73	72	73	73	73	73	73	73	73
ΔEthanol (units/week)	ΔEthanol (units/week)	Correlation Coefficient	.006	-.069	.143	.132	1.000	-.047	-.051	.018	-.026
		Sig. (2-tailed)	.959	.563	.226	.265	.	.690	.667	.877	.828
		N	73	72	73	73	73	73	73	73	73
ΔWeight (kg)	ΔWeight (kg)	Correlation Coefficient	-.113	-.359 ^{**}	-.315 ^{**}	-.367 ^{**}	-.047	1.000	.367 ^{**}	-.240 [†]	.193
		Sig. (2-tailed)	.342	.002	.007	.001	.690	.	.001	.041	.101
		N	73	72	73	73	73	73	73	73	73
ΔMean arterial pressure (mmHg)	ΔMean arterial pressure (mmHg)	Correlation Coefficient	-.261 [†]	-.100	-.193	-.085	-.051	.367 ^{**}	1.000	-.291 [†]	.354 ^{**}
		Sig. (2-tailed)	.026	.402	.101	.474	.667	.001	.	.013	.002
		N	73	72	73	73	73	73	73	73	73
ΔHeart rate (beats/min)	ΔHeart rate (beats/min)	Correlation Coefficient	-.005	.049	.354 ^{**}	.446 ^{**}	.018	-.240 [†]	-.291 [†]	1.000	-.128
		Sig. (2-tailed)	.965	.682	.002	.000	.877	.041	.013	.	.280
		N	73	72	73	73	73	73	73	73	73
ΔeGFR (ml/min/1.73m ²)	ΔeGFR (ml/min/1.73m ²)	Correlation Coefficient	-.108	-.066	-.285 [†]	-.135	-.026	.193	.354 ^{**}	-.128	1.000
		Sig. (2-tailed)	.364	.583	.015	.255	.828	.101	.002	.280	.
		N	73	72	73	73	73	73	73	73	73
ΔHIV viral load (log copies/ml)	ΔHIV viral load (log copies/ml)	Correlation Coefficient	.246 [†]	.278 [†]	.189	.321 ^{**}	.080	-.180	-.222	.248 [†]	-.011
		Sig. (2-tailed)	.036	.018	.109	.006	.504	.129	.059	.034	.924
		N	73	72	73	73	73	73	73	73	73
ΔCD4 count (cells/μl)	ΔCD4 count (cells/μl)	Correlation Coefficient	-.114	-.130	-.086	-.128	.008	.197	.059	-.378 ^{**}	.019
		Sig. (2-tailed)	.339	.275	.470	.280	.947	.095	.620	.001	.875
		N	73	72	73	73	73	73	73	73	73
ΔLV EF (%)	ΔLV EF (%)	Correlation Coefficient	-.062	-.129	-.194	-.193	.016	.063	.041	-.130	.143
		Sig. (2-tailed)	.604	.279	.100	.101	.893	.596	.728	.274	.228
		N	73	72	73	73	73	73	73	73	73
ΔLV EDV for height (ml/m)	ΔLV EDV for height (ml/m)	Correlation Coefficient	-.091	.224	-.375 ^{**}	-.322 ^{**}	.028	.322 ^{**}	.370 ^{**}	-.541 ^{**}	.261 [†]
		Sig. (2-tailed)	.445	.058	.001	.005	.813	.005	.001	.000	.026
		N	73	72	73	73	73	73	73	73	73

	N	73	73	73	73	72	72	72	73	68
ΔMean arterial pressure (mmHg)	Correlation Coefficient	-.222	.059	.041	.370**	-.055	.083	-.206	-.071	-.341**
	Sig. (2-tailed)	.059	.620	.728	.001	.646	.486	.082	.552	.004
	N	73	73	73	73	72	72	72	73	68
ΔHeart rate (beats/min)	Correlation Coefficient	.248*	-.378**	-.130	-.541**	-.173	-.385**	.469**	-.140	.062
	Sig. (2-tailed)	.034	.001	.274	.000	.146	.001	.000	.237	.614
	N	73	73	73	73	72	72	72	73	68
ΔeGFR (ml/min/1.73m ²)	Correlation Coefficient	-.011	.019	.143	.261*	.029	-.011	-.060	.106	-.052
	Sig. (2-tailed)	.924	.875	.228	.026	.810	.925	.620	.373	.672
	N	73	73	73	73	72	72	72	73	68
ΔHIV viral load (log copies/ml)	Correlation Coefficient	1.000	-.367**	-.231*	-.146	-.034	.054	.391**	.295*	.267*
	Sig. (2-tailed)	.	.001	.050	.217	.779	.654	.001	.011	.028
	N	73	73	73	73	72	72	72	73	68
ΔCD4 count (cells/μl)	Correlation Coefficient	-.367**	1.000	.107	.162	.232	.131	-.282*	-.049	-.033
	Sig. (2-tailed)	.001	.	.370	.172	.050	.271	.017	.678	.792
	N	73	73	73	73	72	72	72	73	68
ΔLV EF (%)	Correlation Coefficient	-.231*	.107	1.000	.023	-.133	.001	-.166	-.313**	.036
	Sig. (2-tailed)	.050	.370	.	.848	.266	.993	.163	.007	.773
	N	73	73	73	73	72	72	72	73	68
ΔLV EDV for height (ml/m)	Correlation Coefficient	-.146	.162	.023	1.000	.047	.181	-.139	.191	-.099
	Sig. (2-tailed)	.217	.172	.848	.	.697	.127	.244	.106	.420
	N	73	73	73	73	72	72	72	73	68
ΔSTIR SIR	Correlation Coefficient	-.034	.232	-.133	.047	1.000	.284*	-.020	.153	-.023
	Sig. (2-tailed)	.779	.050	.266	.697	.	.017	.868	.200	.851
	N	72	72	72	72	72	71	71	72	67
ΔEGE SIR	Correlation Coefficient	.054	.131	.001	.181	.284*	1.000	-.196	.026	.001
	Sig. (2-tailed)	.654	.271	.993	.127	.017	.	.101	.829	.995
	N	72	72	72	72	71	72	71	72	68
ΔGlobal native T1 (ms)	Correlation Coefficient	.391**	-.282*	-.166	-.139	-.020	-.196	1.000	.426**	.565**
	Sig. (2-tailed)	.001	.017	.163	.244	.868	.101	.	.000	.000
	N	72	72	72	72	71	71	72	72	68
ΔGlobal T2 (ms)	Correlation Coefficient	.295*	-.049	-.313**	.191	.153	.026	.426**	1.000	.343**
	Sig. (2-tailed)	.011	.678	.007	.106	.200	.829	.000	.	.004
	N	73	73	73	73	72	72	72	73	68
ΔGlobal ECV (ms)	Correlation Coefficient	.267*	-.033	.036	-.099	-.023	.001	.565**	.343**	1.000
	Sig. (2-tailed)	.028	.792	.773	.420	.851	.995	.000	.004	.
	N	68	68	68	68	67	68	68	68	68
ΔCD8 count (cells/μl)	Correlation Coefficient	.142	.256*	.069	.243*	-.007	.110	-.152	.020	-.232
	Sig. (2-tailed)	.232	.029	.561	.038	.953	.359	.204	.869	.057
	N	73	73	73	73	72	72	72	73	68
ΔCreatinine (μmol/l)	Correlation Coefficient	-.096	-.067	-.135	-.057	.006	-.015	-.071	.004	-.105
	Sig. (2-tailed)	.421	.579	.258	.633	.960	.904	.558	.976	.398
	N	72	72	72	72	71	71	71	72	67
Δhigh sensitivity CRP (mg/l)	Correlation Coefficient	.091	-.096	.034	-.178	-.114	-.178	.525**	.122	.334**
	Sig. (2-tailed)	.444	.419	.777	.132	.341	.135	.000	.304	.005
	N	73	73	73	73	72	72	72	73	68

Correlations

			ΔCD8 count (cells/μl)	ΔCreatinine (μmol/l)	Δhigh sensitivity CRP (mg/l)
Spearman's rho	Δhs-cTnT (ng/l)	Correlation Coefficient	-.018	.148	.003
		Sig. (2-tailed)	.883	.213	.982
		N	73	72	73
	ΔNT-proBNP (ng/l)	Correlation Coefficient	.060	-.090	.243 [*]
		Sig. (2-tailed)	.619	.456	.040
		N	72	71	72
	ΔsST2 (ng/ml)	Correlation Coefficient	.065	.034	.182
		Sig. (2-tailed)	.586	.779	.124
		N	73	72	73
	ΔGalectin-3 (ng/ml)	Correlation Coefficient	.045	-.090	.348 ^{**}
		Sig. (2-tailed)	.703	.450	.003
		N	73	72	73
	ΔEthanol (units/week)	Correlation Coefficient	.135	-.145	-.045
		Sig. (2-tailed)	.256	.224	.703
		N	73	72	73
	ΔWeight (kg)	Correlation Coefficient	.077	.272 [*]	-.091
		Sig. (2-tailed)	.516	.021	.446
		N	73	72	73
	ΔMean arterial pressure (mmHg)	Correlation Coefficient	.272 [*]	-.138	-.138
		Sig. (2-tailed)	.020	.247	.245
		N	73	72	73
	ΔHeart rate (beats/min)	Correlation Coefficient	-.055	-.035	.338 ^{**}
		Sig. (2-tailed)	.646	.770	.003
		N	73	72	73
	ΔeGFR (ml/min/1.73m ²)	Correlation Coefficient	.151	-.731 ^{**}	-.053
		Sig. (2-tailed)	.203	.000	.658
		N	73	72	73
	ΔHIV viral load (log copies/ml)	Correlation Coefficient	.142	-.096	.091
		Sig. (2-tailed)	.232	.421	.444
		N	73	72	73
	ΔCD4 count (cells/μl)	Correlation Coefficient	.256 [*]	-.067	-.096
		Sig. (2-tailed)	.029	.579	.419
		N	73	72	73
	ΔLV EF (%)	Correlation Coefficient	.069	-.135	.034
		Sig. (2-tailed)	.561	.258	.777
		N	73	72	73
	ΔLV EDV for height (ml/m)	Correlation Coefficient	.243 [*]	-.057	-.178
		Sig. (2-tailed)	.038	.633	.132
		N	73	72	73
	ΔSTIR SIR	Correlation Coefficient	-.007	.006	-.114
		Sig. (2-tailed)	.953	.960	.341
		N	72	71	72

ΔEGE SIR	Correlation Coefficient	.110	-.015	-.178
	Sig. (2-tailed)	.359	.904	.135
	N	72	71	72
ΔGlobal native T1 (ms)	Correlation Coefficient	-.152	-.071	.525**
	Sig. (2-tailed)	.204	.558	.000
	N	72	71	72
ΔGlobal T2 (ms)	Correlation Coefficient	.020	.004	.122
	Sig. (2-tailed)	.869	.976	.304
	N	73	72	73
ΔGlobal ECV (ms)	Correlation Coefficient	-.232	-.105	.334**
	Sig. (2-tailed)	.057	.398	.005
	N	68	67	68
ΔCD8 count (cells/μl)	Correlation Coefficient	1.000	-.225	-.246*
	Sig. (2-tailed)	.	.057	.036
	N	73	72	73
ΔCreatinine (μmol/l)	Correlation Coefficient	-.225	1.000	.055
	Sig. (2-tailed)	.057	.	.646
	N	72	72	72
Δhigh sensitivity CRP (mg/l)	Correlation Coefficient	-.246*	.055	1.000
	Sig. (2-tailed)	.036	.646	.
	N	73	72	73

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

hs-cTnT = high sensitivity cardiac troponin T; NT-proBNP = N-terminal pro B-type natriuretic peptide; sST2 = soluble ST2; CRP = C-reactive protein; eGFR = estimated glomerular filtration rate; LA = left atrium; RA = right atrium; LV = left ventricle; EDV = end diastolic volume; STIR = short tau inversion recovery; SIR = skeletal muscle to myocardial signal intensity ratio; EGE = early gadolinium enhancement; RV = right ventricle; EF = ejection fraction; ECV = extracellular volume mapping

	Sig. (2-tailed)	.181	.000	.452	.001	.010	.000	.000	.001	.008	.006
	N	141	140	141	141	141	141	141	141	141	141

			Correlations										
			eGFR	Creatinine	LA area	RA area	LV mass for	LV EDV for	RV EDV for	LV EF	RV EF	Global	
			(ml/min/1.73	(μ mol/l)	(cm ²)	(cm ²)	height (g/m)	height	height	(%)	(%)	native T1	
			m ²	(μ mol/l)	(cm ²)	(cm ²)	height (g/m)	(ml/m)	(ml/m)	(%)	(%)	(ms)	
Spearman's rho	hs-cTnT (ng/l)	Correlation Coefficient	-.055	.357**	.123	.316**	.314**	.310**	.292**	-.122	-.104	-.288**	
		Sig. (2-tailed)	.510	.000	.140	.000	.000	.000	.000	.143	.212	.000	
		N	146	146	146	146	146	146	146	146	146	146	145
	NT-proBNP(ng/l)	Correlation Coefficient	.007	-.259**	.044	-.080	-.179 [†]	-.003	-.057	-.036	.076	.402**	
		Sig. (2-tailed)	.929	.002	.602	.338	.031	.974	.494	.669	.365	.000	
		N	145	145	145	145	145	145	145	145	145	144	
	sST2 (ng/ml)	Correlation Coefficient	-.100	.169 [†]	.151	.144	.303**	.253**	.272**	-.113	-.126	-.115	
		Sig. (2-tailed)	.230	.042	.069	.083	.000	.002	.001	.175	.129	.167	
		N	146	146	146	146	146	146	146	146	146	145	
Galectin-3 (ng/ml)	Correlation Coefficient	-.263**	.078	-.034	-.194 [†]	-.081	-.116	-.136	-.122	-.013	.245**		
	Sig. (2-tailed)	.001	.347	.685	.019	.329	.162	.102	.142	.880	.003		
	N	146	146	146	146	146	146	146	146	146	146	145	
Mean Arterial Pressure (mmHg)	Correlation Coefficient	.253**	.000	.205 [†]	.230**	.311**	.146	.172 [†]	.073	-.085	-.243**		
	Sig. (2-tailed)	.002	.999	.013	.005	.000	.078	.038	.384	.310	.003		
	N	146	146	146	146	146	146	146	146	146	146	145	
Weight (kg)	Correlation Coefficient	.461**	.275**	.383**	.497**	.382**	.313**	.301**	.025	.002	-.348**		
	Sig. (2-tailed)	.000	.001	.000	.000	.000	.000	.000	.767	.984	.000		
	N	146	146	146	146	146	146	146	146	146	146	145	
6-Minute walk test - distance (m)	Correlation Coefficient	-.056	.383**	.339**	.442**	.432**	.435**	.407**	-.124	-.098	-.401**		
	Sig. (2-tailed)	.502	.000	.000	.000	.000	.000	.000	.136	.238	.000		
	N	146	146	146	146	146	146	146	146	146	146	145	
High sensitivity CRP (mg/l)	Correlation Coefficient	-.069	-.050	-.021	-.012	.044	-.036	-.008	-.013	-.085	.266**		
	Sig. (2-tailed)	.408	.547	.801	.886	.595	.666	.928	.872	.309	.001		
	N	146	146	146	146	146	146	146	146	146	146	145	
CD4 count (cells/ μ l)	Correlation Coefficient	.108	.015	.210 [†]	.226**	.168 [†]	.165 [†]	.238**	.065	-.011	-.219**		
	Sig. (2-tailed)	.194	.861	.011	.006	.043	.046	.004	.436	.894	.008		
	N	146	146	146	146	146	146	146	146	146	146	145	
HIV viral load (log copies/ml)	Correlation Coefficient	.146	-.246**	-.209 [†]	-.159	-.026	-.163 [†]	-.125	-.016	-.099	.311**		
	Sig. (2-tailed)	.079	.003	.011	.055	.751	.049	.134	.846	.236	.000		
	N	146	146	146	146	146	146	146	146	146	146	145	

Sig. (2-tailed)	.418	.000	.069	.000	.002	.003	.001	.783	.232	.000
N	141	141	141	141	141	141	141	141	141	141

Correlations

			Global T2 (ms)	Global ECV (ms)
Spearman's rho	hs-cTnT (ng/l)	Correlation Coefficient	-.053	-.113
		Sig. (2-tailed)	.528	.181
		N	146	141
	NT-proBNP(ng/l)	Correlation Coefficient	.465**	.440**
		Sig. (2-tailed)	.000	.000
		N	145	140
	sST2 (ng/ml)	Correlation Coefficient	-.016	.064
		Sig. (2-tailed)	.847	.452
		N	146	141
	Galectin-3 (ng/ml)	Correlation Coefficient	.290**	.274**
		Sig. (2-tailed)	.000	.001
		N	146	141
	Mean Arterial Pressure (mmHg)	Correlation Coefficient	-.244**	-.216*
		Sig. (2-tailed)	.003	.010
		N	146	141
	Weight (kg)	Correlation Coefficient	-.285**	-.385**
		Sig. (2-tailed)	.000	.000
		N	146	141
	6-Minute walk test - distance (m)	Correlation Coefficient	-.252**	-.421**
		Sig. (2-tailed)	.002	.000
		N	146	141
High sensitivity CRP (mg/l)	Correlation Coefficient	.154	.274**	
	Sig. (2-tailed)	.064	.001	
	N	146	141	
CD4 count (cells/ μ l)	Correlation Coefficient	-.209*	-.221**	
	Sig. (2-tailed)	.011	.008	
	N	146	141	
HIV viral load (log copies/ml)	Correlation Coefficient	.126	.232**	
	Sig. (2-tailed)	.129	.006	
	N	146	141	
Absolute eGFR (ml/min/1.73m ²)	Correlation Coefficient	-.160	-.069	
	Sig. (2-tailed)	.054	.418	
	N	146	141	
Creatinine (μ mol/l)	Correlation Coefficient	-.181*	-.407**	
	Sig. (2-tailed)	.029	.000	
	N	146	141	
LA area (cm2)	Correlation Coefficient	.096	-.154	
	Sig. (2-tailed)	.249	.069	
	N	146	141	
RA area (cm2)	Correlation Coefficient	-.166*	-.383**	
	Sig. (2-tailed)	.046	.000	

	N	146	141
LV mass for height (g/m)	Correlation Coefficient	-.165*	-.255**
	Sig. (2-tailed)	.046	.002
	N	146	141
LV EDV for height (ml/m)	Correlation Coefficient	-.023	-.250**
	Sig. (2-tailed)	.782	.003
	N	146	141
RV EDV for height (ml/m)	Correlation Coefficient	-.109	-.277**
	Sig. (2-tailed)	.189	.001
	N	146	141
LV EF (%)	Correlation Coefficient	-.151	.023
	Sig. (2-tailed)	.070	.783
	N	146	141
RV EF (%)	Correlation Coefficient	.042	.101
	Sig. (2-tailed)	.611	.232
	N	146	141
Global T1 Time Average (ms)	Correlation Coefficient	.522**	.732**
	Sig. (2-tailed)	.000	.000
	N	145	141
Global T2 average (ms)	Correlation Coefficient	1.000	.579**
	Sig. (2-tailed)	.	.000
	N	146	141
Global ECV average (ms)	Correlation Coefficient	.579**	1.000
	Sig. (2-tailed)	.000	.
	N	141	141

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

hs-cTnT = high sensitivity cardiac troponin T; NT-proBNP = N-terminal pro B-type natriuretic peptide; sST2 = soluble ST2; CRP = C-reactive protein; eGFR = estimated glomerular filtration rate; LA = left atrium;

RA = right atrium; LV = left ventricle; EDV = end diastolic volume; RV = right ventricle; EF = ejection fraction; ECV = extracellular volume mapping