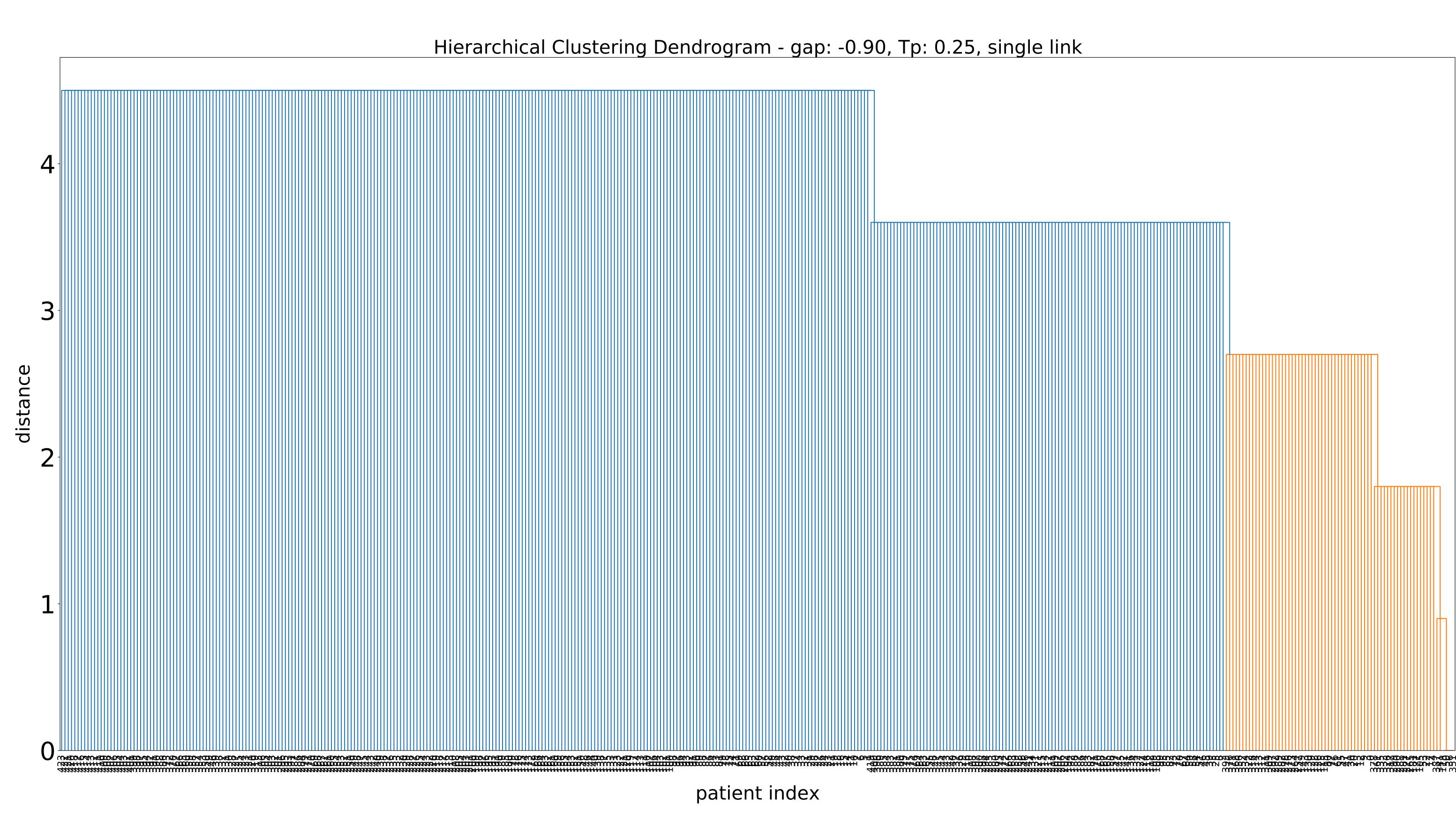
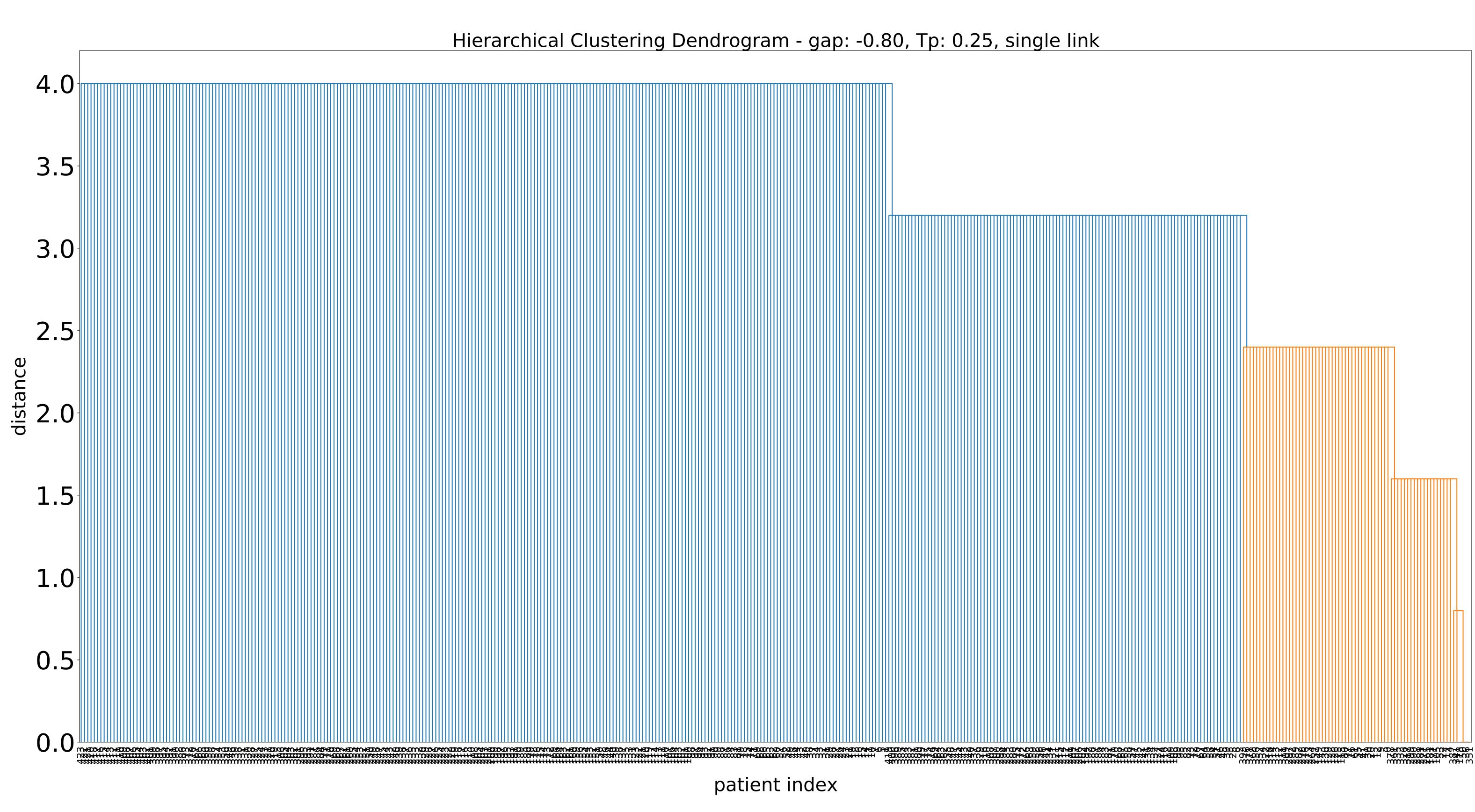


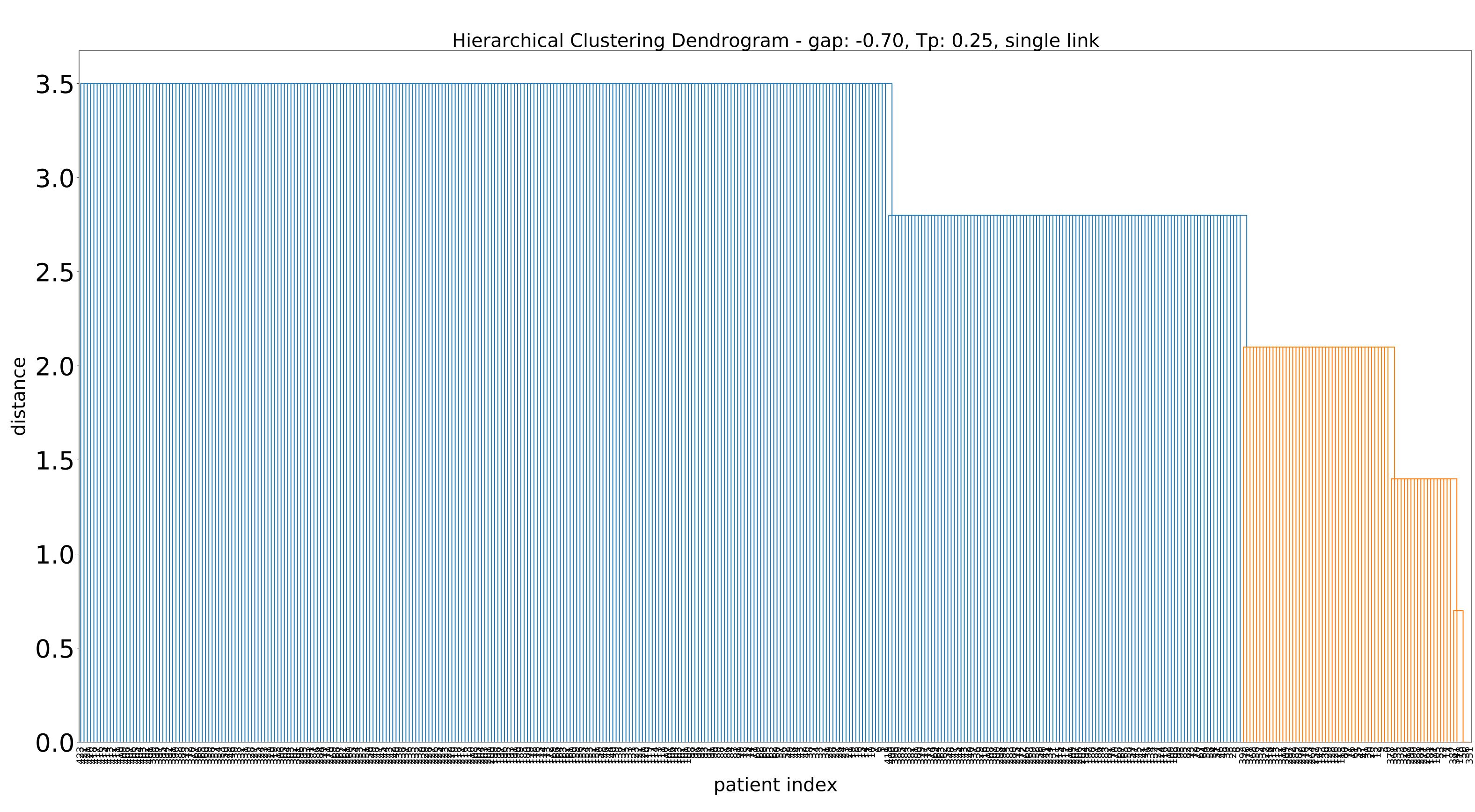
k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.533	0.455
3	1.0	1.0	1.0	1.0	0.003	1.0	1.0	0.016	1.0	0.0	1.0	1.0	2.0	0.689	0.455
4	1.0	1.0	1.0	1.0	0.004	1.0	1.0	0.025	1.0	0.0	1.0	1.0	1.999	0.767	0.455
5	1.0	1.0	1.0	1.0	0.006	1.0	1.0	0.033	1.0	0.0	1.0	1.0	1.999	0.813	0.455
6	1.0	1.0	1.0	1.0	0.007	1.0	1.0	0.041	1.0	0.0	1.0	1.0	1.999	0.844	0.455
7	1.0	1.0	1.0	1.0	0.008	1.0	1.0	0.05	1.0	0.0	1.0	1.0	1.998	0.867	0.455
8	1.0	1.0	1.0	1.0	0.01	1.0	1.0	0.058	1.0	0.0	1.0	1.0	1.998	0.883	0.455
9	1.0	1.0	1.0	1.0	0.011	1.0	1.0	0.066	1.0	0.0	1.0	1.0	1.998	0.896	0.455
10	1.0	1.0	1.0	1.0	0.013	1.0	1.0	0.075	1.0	0.0	1.0	1.0	1.997	0.907	0.455
11	1.0	1.0	1.0	1.0	0.014	1.0	1.0	0.083	1.0	0.0	1.0	1.0	1.997	0.915	0.455
12	1.0	1.0	1.0	1.0	0.015	1.0	1.0	0.091	1.0	0.0	1.0	1.0	1.997	0.922	0.455
13	1.0	1.0	1.0	1.0	0.017	1.0	1.0	0.101	1.0	0.0	1.0	1.0	1.996	0.928	0.455
14	1.0	1.0	1.0	1.0	0.018	1.0	1.0	0.109	1.0	0.0	1.0	1.0	1.996	0.933	0.455
15	1.0	1.0	1.0	1.0	0.02	1.0	1.0	0.118	1.0	0.0	1.0	1.0	1.996	0.938	0.455
16	1.0	1.0	1.0	1.0	0.021	1.0	1.0	0.126	1.0	0.0	1.0	1.0	1.995	0.942	0.455
17	1.0	1.0	1.0	1.0	0.023	1.0	1.0	0.135	1.0	0.0	1.0	1.0	1.995	0.945	0.455
18	1.0	1.0	1.0	1.0	0.024	1.0	1.0	0.144	1.0	0.0	1.0	1.0	1.995	0.948	0.455
19	1.0	1.0	1.0	1.0	0.026	1.0	1.0	0.152	1.0	0.0	1.0	1.0	1.994	0.951	0.455
20	1.0	1.0	1.0	1.0	0.027	1.0	1.0	0.161	1.0	0.0	1.0	1.0	1.994	0.953	0.455



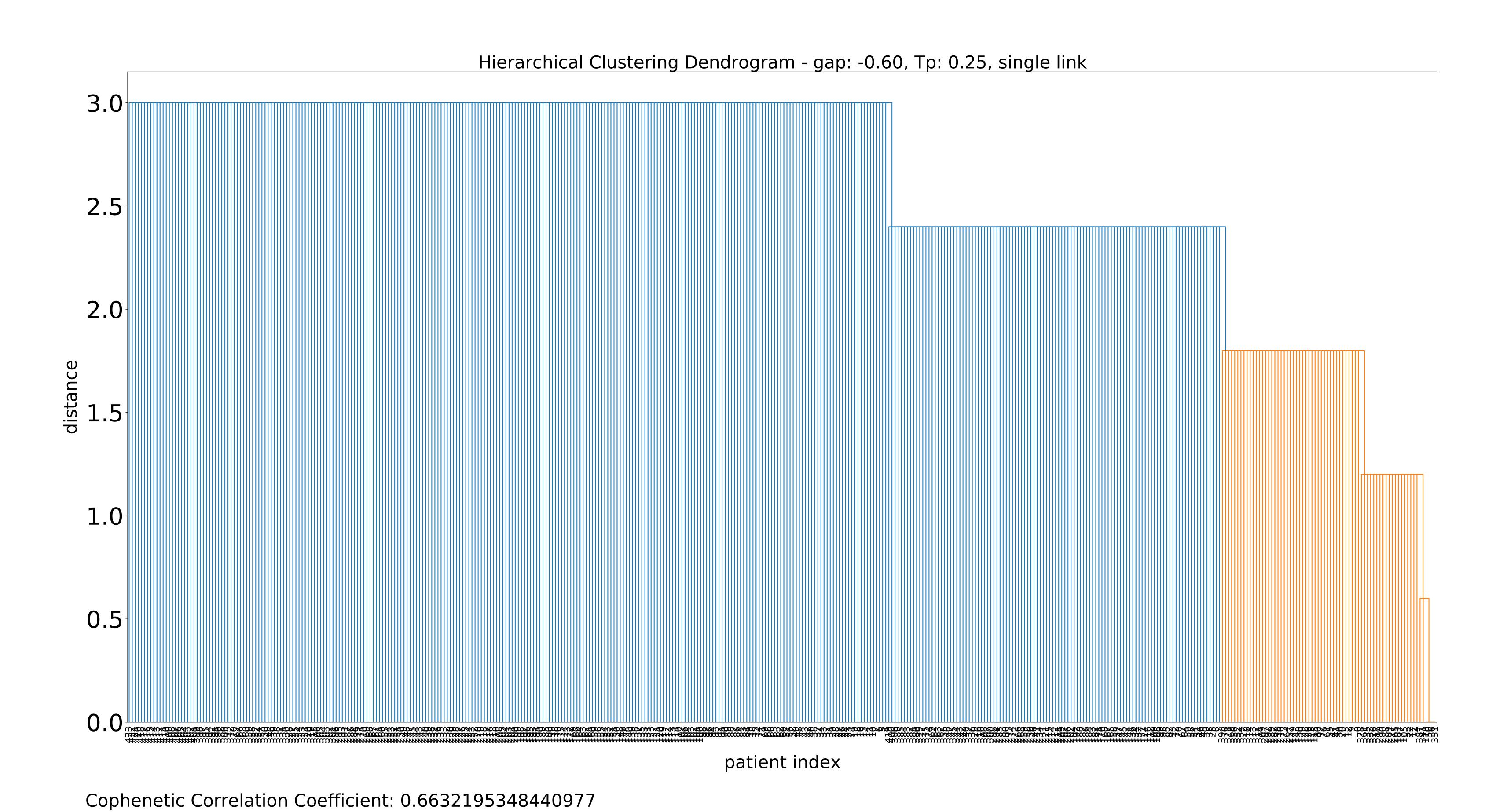
k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.533	0.455
3	1.0	1.0	1.0	1.0	0.003	1.0	1.0	0.016	1.0	0.0	1.0	1.0	2.0	0.689	0.455
4	1.0	1.0	1.0	1.0	0.004	1.0	1.0	0.025	1.0	0.0	1.0	1.0	1.999	0.767	0.455
5	1.0	1.0	1.0	1.0	0.005	1.0	1.0	0.033	1.0	0.0	1.0	1.0	1.999	0.813	0.455
6	1.0	1.0	1.0	1.0	0.007	1.0	1.0	0.041	1.0	0.0	1.0	1.0	1.999	0.844	0.455
7	1.0	1.0	1.0	1.0	0.008	1.0	1.0	0.05	1.0	0.0	1.0	1.0	1.998	0.867	0.455
8	1.0	1.0	1.0	1.0	0.01	1.0	1.0	0.058	1.0	0.0	1.0	1.0	1.998	0.883	0.455
9	1.0	1.0	1.0	1.0	0.011	1.0	1.0	0.066	1.0	0.0	1.0	1.0	1.998	0.896	0.455
10	1.0	1.0	1.0	1.0	0.013	1.0	1.0	0.075	1.0	0.0	1.0	1.0	1.997	0.907	0.455
11	1.0	1.0	1.0	1.0	0.014	1.0	1.0	0.083	1.0	0.0	1.0	1.0	1.997	0.915	0.455
12	1.0	1.0	1.0	1.0	0.015	1.0	1.0	0.092	1.0	0.0	1.0	1.0	1.997	0.922	0.455
13	1.0	1.0	1.0	1.0	0.017	1.0	1.0	0.1	1.0	0.0	1.0	1.0	1.996	0.928	0.455
14	1.0	1.0	1.0	1.0	0.018	1.0	1.0	0.109	1.0	0.0	1.0	1.0	1.996	0.933	0.455
15	1.0	1.0	1.0	1.0	0.02	1.0	1.0	0.117	1.0	0.0	1.0	1.0	1.996	0.938	0.455
16	1.0	1.0	1.0	1.0	0.021	1.0	1.0	0.126	1.0	0.0	1.0	1.0	1.995	0.942	0.455
17	1.0	1.0	1.0	1.0	0.023	1.0	1.0	0.135	1.0	0.0	1.0	1.0	1.995	0.945	0.455
18	1.0	1.0	1.0	1.0	0.024	1.0	1.0	0.143	1.0	0.0	1.0	1.0	1.995	0.948	0.455
19	1.0	1.0	1.0	1.0	0.026	1.0	1.0	0.152	1.0	0.0	1.0	1.0	1.994	0.951	0.455
20	1.0	1.0	1.0	1.0	0.027	1.0	1.0	0.162	1.0	0.0	1.0	1.0	1.994	0.953	0.455



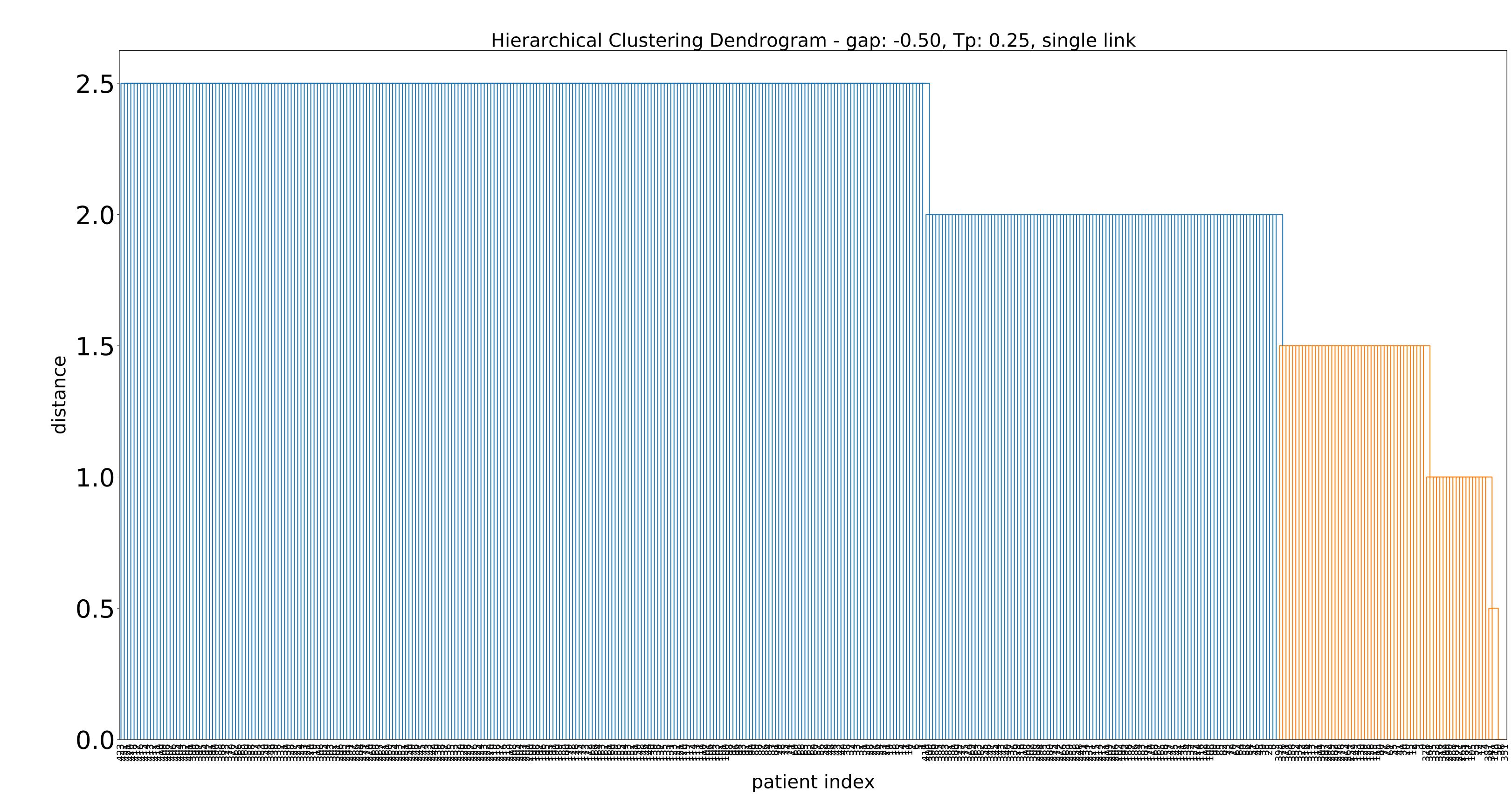
k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.533	0.455
3	1.0	1.0	1.0	1.0	0.003	1.0	1.0	0.017	1.0	0.0	1.0	1.0	2.0	0.689	0.455
4	1.0	1.0	1.0	1.0	0.004	1.0	1.0	0.025	1.0	0.0	1.0	1.0	1.999	0.767	0.455
5	1.0	1.0	1.0	1.0	0.006	1.0	1.0	0.033	1.0	0.0	1.0	1.0	1.999	0.813	0.455
6	1.0	1.0	1.0	1.0	0.007	1.0	1.0	0.042	1.0	0.0	1.0	1.0	1.999	0.844	0.455
7	1.0	1.0	1.0	1.0	0.008	1.0	1.0	0.05	1.0	0.0	1.0	1.0	1.998	0.867	0.455
8	1.0	1.0	1.0	1.0	0.01	1.0	1.0	0.058	1.0	0.0	1.0	1.0	1.998	0.883	0.455
9	1.0	1.0	1.0	1.0	0.011	1.0	1.0	0.067	1.0	0.0	1.0	1.0	1.998	0.896	0.455
10	1.0	1.0	1.0	1.0	0.013	1.0	1.0	0.075	1.0	0.0	1.0	1.0	1.997	0.907	0.455
11	1.0	1.0	1.0	1.0	0.014	1.0	1.0	0.083	1.0	0.0	1.0	1.0	1.997	0.915	0.455
12	1.0	1.0	1.0	1.0	0.015	1.0	1.0	0.091	1.0	0.0	1.0	1.0	1.997	0.922	0.455
13	1.0	1.0	1.0	1.0	0.017	1.0	1.0	0.1	1.0	0.0	1.0	1.0	1.996	0.928	0.455
14	1.0	1.0	1.0	1.0	0.018	1.0	1.0	0.109	1.0	0.0	1.0	1.0	1.996	0.933	0.455
15	1.0	1.0	1.0	1.0	0.02	1.0	1.0	0.118	1.0	0.0	1.0	1.0	1.996	0.938	0.455
16	1.0	1.0	1.0	1.0	0.021	1.0	1.0	0.126	1.0	0.0	1.0	1.0	1.995	0.942	0.455
17	1.0	1.0	1.0	1.0	0.023	1.0	1.0	0.135	1.0	0.0	1.0	1.0	1.995	0.945	0.455
18	1.0	1.0	1.0	1.0	0.024	1.0	1.0	0.144	1.0	0.0	1.0	1.0	1.995	0.948	0.455
19	1.0	1.0	1.0	1.0	0.026	1.0	1.0	0.152	1.0	0.0	1.0	1.0	1.994	0.951	0.455
20	1.0	1.0	1.0	1.0	0.027	1.0	1.0	0.161	1.0	0.0	1.0	1.0	1.994	0.953	0.455



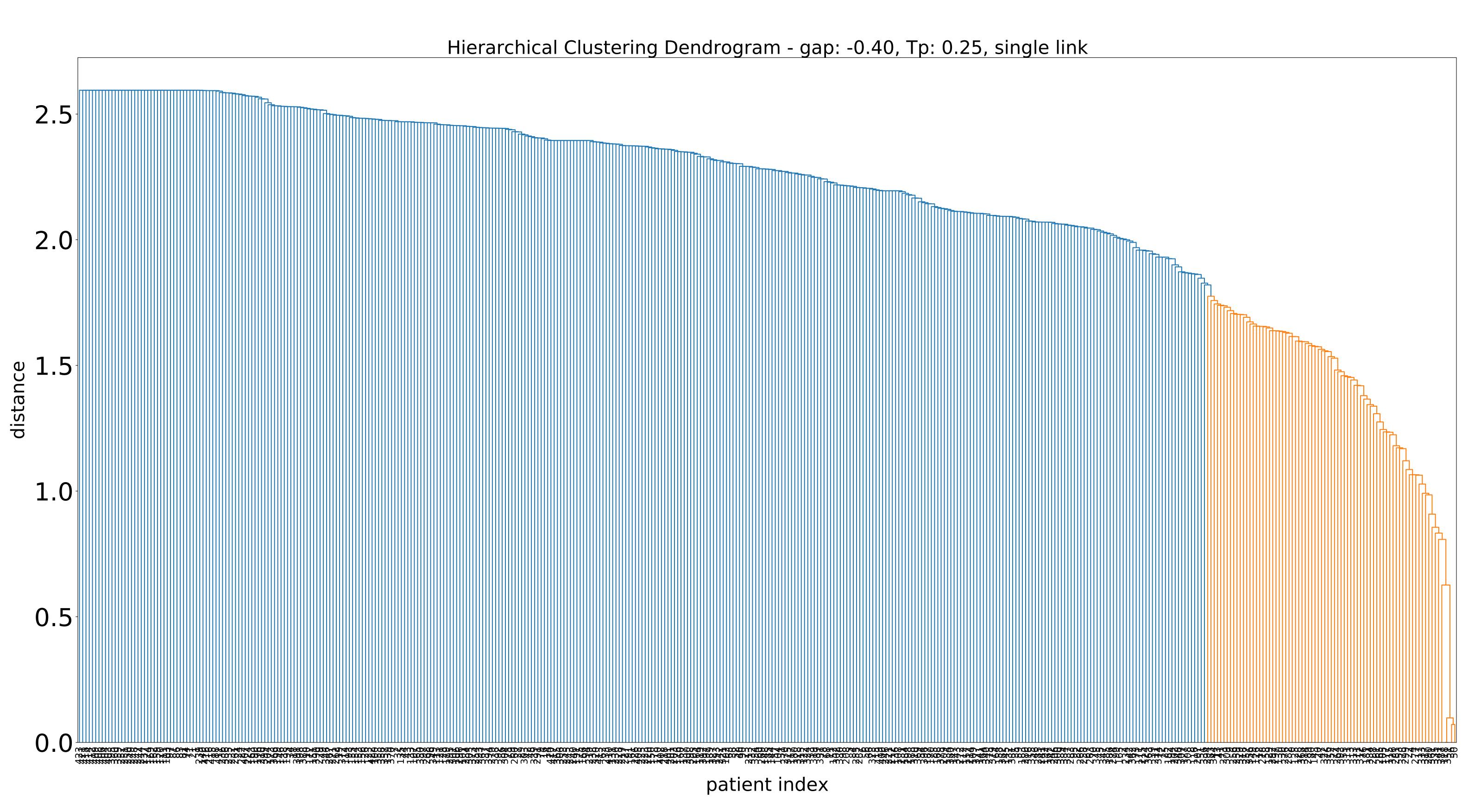
k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.533	0.455
3	1.0	1.0	1.0	1.0	0.003	1.0	1.0	0.016	1.0	0.0	1.0	1.0	2.0	0.689	0.455
4	1.0	1.0	1.0	1.0	0.004	1.0	1.0	0.025	1.0	0.0	1.0	1.0	1.999	0.767	0.455
5	1.0	1.0	1.0	1.0	0.006	1.0	1.0	0.033	1.0	0.0	1.0	1.0	1.999	0.813	0.455
6	1.0	1.0	1.0	1.0	0.007	1.0	1.0	0.041	1.0	0.0	1.0	1.0	1.999	0.844	0.455
7	1.0	1.0	1.0	1.0	0.008	1.0	1.0	0.05	1.0	0.0	1.0	1.0	1.998	0.867	0.455
8	1.0	1.0	1.0	1.0	0.01	1.0	1.0	0.058	1.0	0.0	1.0	1.0	1.998	0.883	0.455
9	1.0	1.0	1.0	1.0	0.011	1.0	1.0	0.067	1.0	0.0	1.0	1.0	1.998	0.896	0.455
10	1.0	1.0	1.0	1.0	0.013	1.0	1.0	0.075	1.0	0.0	1.0	1.0	1.997	0.907	0.455
11	1.0	1.0	1.0	1.0	0.014	1.0	1.0	0.084	1.0	0.0	1.0	1.0	1.997	0.915	0.455
12	1.0	1.0	1.0	1.0	0.015	1.0	1.0	0.092	1.0	0.0	1.0	1.0	1.997	0.922	0.455
13	1.0	1.0	1.0	1.0	0.017	1.0	1.0	0.1	1.0	0.0	1.0	1.0	1.996	0.928	0.455
14	1.0	1.0	1.0	1.0	0.018	1.0	1.0	0.109	1.0	0.0	1.0	1.0	1.996	0.933	0.455
15	1.0	1.0	1.0	1.0	0.02	1.0	1.0	0.118	1.0	0.0	1.0	1.0	1.996	0.938	0.455
16	1.0	1.0	1.0	1.0	0.021	1.0	1.0	0.126	1.0	0.0	1.0	1.0	1.995	0.942	0.455
17	1.0	1.0	1.0	1.0	0.023	1.0	1.0	0.135	1.0	0.0	1.0	1.0	1.995	0.945	0.455
18	1.0	1.0	1.0	1.0	0.024	1.0	1.0	0.144	1.0	0.0	1.0	1.0	1.995	0.948	0.455
19	1.0	1.0	1.0	1.0	0.026	1.0	1.0	0.153	1.0	0.0	1.0	1.0	1.994	0.951	0.455
20	1.0	1.0	1.0	1.0	0.027	1.0	1.0	0.161	1.0	0.0	1.0	1.0	1.994	0.953	0.455



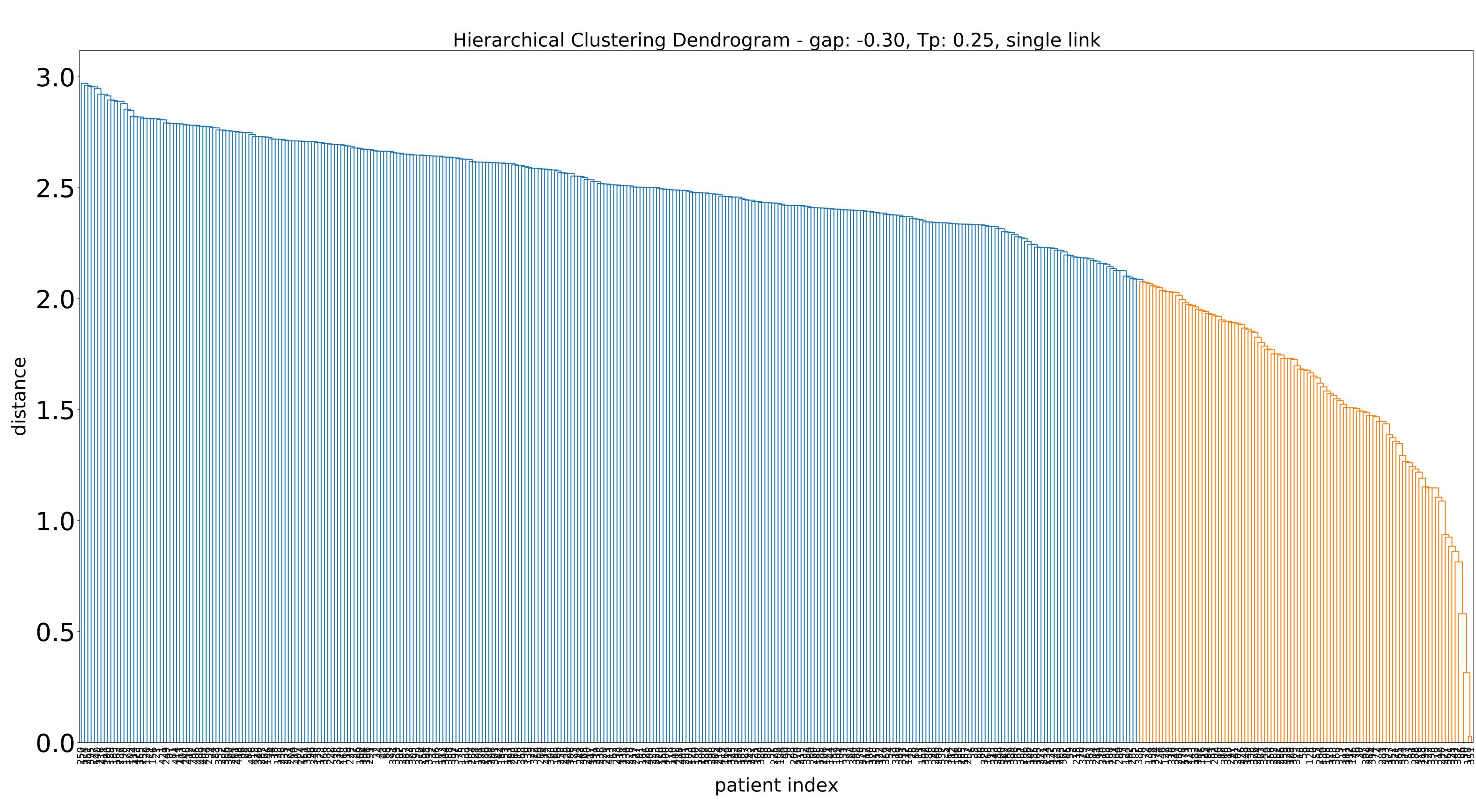
k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.533	0.455
3	1.0	1.0	1.0	1.0	0.003	1.0	1.0	0.017	1.0	0.0	1.0	1.0	2.0	0.689	0.455
4	1.0	1.0	1.0	1.0	0.004	1.0	1.0	0.025	1.0	0.0	1.0	1.0	1.999	0.767	0.455
5	1.0	1.0	1.0	1.0	0.006	1.0	1.0	0.033	1.0	0.0	1.0	1.0	1.999	0.813	0.455
6	1.0	1.0	1.0	1.0	0.007	1.0	1.0	0.041	1.0	0.0	1.0	1.0	1.999	0.844	0.455
7	1.0	1.0	1.0	1.0	0.008	1.0	1.0	0.05	1.0	0.0	1.0	1.0	1.998	0.867	0.455
8	1.0	1.0	1.0	1.0	0.01	1.0	1.0	0.058	1.0	0.0	1.0	1.0	1.998	0.883	0.455
9	1.0	1.0	1.0	1.0	0.011	1.0	1.0	0.066	1.0	0.0	1.0	1.0	1.998	0.896	0.455
10	1.0	1.0	1.0	1.0	0.013	1.0	1.0	0.075	1.0	0.0	1.0	1.0	1.997	0.907	0.455
11	1.0	1.0	1.0	1.0	0.014	1.0	1.0	0.083	1.0	0.0	1.0	1.0	1.997	0.915	0.455
12	1.0	1.0	1.0	1.0	0.015	1.0	1.0	0.092	1.0	0.0	1.0	1.0	1.997	0.922	0.455
13	1.0	1.0	1.0	1.0	0.017	1.0	1.0	0.1	1.0	0.0	1.0	1.0	1.996	0.928	0.455
14	1.0	1.0	1.0	1.0	0.018	1.0	1.0	0.108	1.0	0.0	1.0	1.0	1.996	0.933	0.455
15	1.0	1.0	1.0	1.0	0.02	1.0	1.0	0.117	1.0	0.0	1.0	1.0	1.996	0.938	0.455
16	1.0	1.0	1.0	1.0	0.021	1.0	1.0	0.126	1.0	0.0	1.0	1.0	1.995	0.942	0.455
17	1.0	1.0	1.0	1.0	0.023	1.0	1.0	0.135	1.0	0.0	1.0	1.0	1.995	0.945	0.455
18	1.0	1.0	1.0	1.0	0.024	1.0	1.0	0.143	1.0	0.0	1.0	1.0	1.995	0.948	0.455
19	1.0	1.0	1.0	1.0	0.026	1.0	1.0	0.152	1.0	0.0	1.0	1.0	1.994	0.951	0.455
20	1.0	1.0	1.0	1.0	0.027	1.0	1.0	0.161	1.0	0.0	1.0	1.0	1.994	0.953	0.455



k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.533	0.455
3	1.0	1.0	1.0	1.0	0.003	1.0	1.0	0.016	1.0	0.0	1.0	1.0	2.0	0.689	0.455
4	1.0	1.0	1.0	1.0	0.004	1.0	1.0	0.025	1.0	0.0	1.0	1.0	1.999	0.767	0.455
5	1.0	1.0	1.0	1.0	0.006	1.0	1.0	0.033	1.0	0.0	1.0	1.0	1.999	0.813	0.455
6	1.0	1.0	1.0	1.0	0.007	1.0	1.0	0.041	1.0	0.0	1.0	1.0	1.999	0.844	0.455
7	1.0	1.0	1.0	1.0	0.008	1.0	1.0	0.05	1.0	0.0	1.0	1.0	1.998	0.867	0.455
8	1.0	1.0	1.0	1.0	0.01	1.0	1.0	0.058	1.0	0.0	1.0	1.0	1.998	0.883	0.455
9	1.0	1.0	1.0	1.0	0.011	1.0	1.0	0.066	1.0	0.0	1.0	1.0	1.998	0.896	0.455
10	1.0	1.0	1.0	1.0	0.013	1.0	1.0	0.075	1.0	0.0	1.0	1.0	1.997	0.907	0.455
11	1.0	1.0	1.0	1.0	0.014	1.0	1.0	0.083	1.0	0.0	1.0	1.0	1.997	0.915	0.455
12	1.0	1.0	1.0	1.0	0.015	1.0	1.0	0.092	1.0	0.0	1.0	1.0	1.997	0.922	0.455
13	1.0	1.0	1.0	1.0	0.017	1.0	1.0	0.1	1.0	0.0	1.0	1.0	1.996	0.928	0.455
14	1.0	1.0	1.0	1.0	0.018	1.0	1.0	0.109	1.0	0.0	1.0	1.0	1.996	0.933	0.455
15	1.0	1.0	1.0	1.0	0.02	1.0	1.0	0.117	1.0	0.0	1.0	1.0	1.996	0.938	0.455
16	1.0	1.0	1.0	1.0	0.021	1.0	1.0	0.126	1.0	0.0	1.0	1.0	1.995	0.942	0.455
17	1.0	1.0	1.0	1.0	0.023	1.0	1.0	0.134	1.0	0.0	1.0	1.0	1.995	0.945	0.455
18	1.0	1.0	1.0	1.0	0.024	1.0	1.0	0.143	1.0	0.0	1.0	1.0	1.995	0.948	0.455
19	1.0	1.0	1.0	1.0	0.026	1.0	1.0	0.153	1.0	0.0	1.0	1.0	1.994	0.951	0.455
20	1.0	1.0	1.0	1.0	0.027	1.0	1.0	0.161	1.0	0.0	1.0	1.0	1.994	0.953	0.455

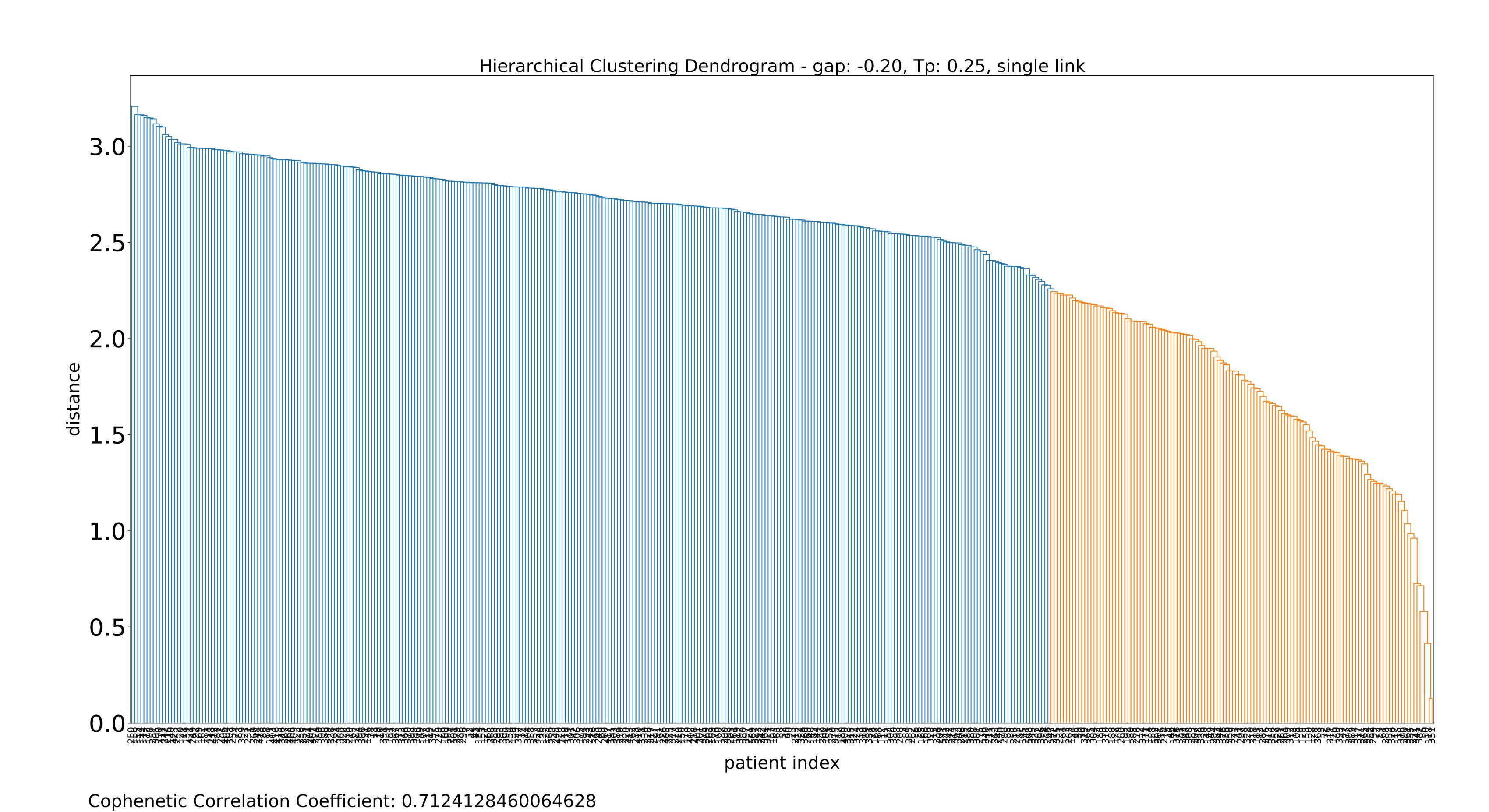


k	ΔR	FM		Δ\ <i>W</i>	VD	H	F	T VI	K	Phi	RT	55	CVNN	ς	Dunn
2	1.0	1.0	1 0	1 0	0.001	1.0	1 0	0.008	1 0	0.0	1.0	1.0	2.0	0.54	0.52
3	1.0	1.0	1.0	1.0	0.003	1.0	1.0	0.017	1.0	0.0	1.0	1.0	2.0	0.692	0.52
3	1.0	1.0	1.0	1.0	0.003	1.0	1.0	0.017	1.0	0.0	1.0	1.0	1.999	0.768	0.52
4	1.0	1.0	1.0	1.0		1.0	1.0		1.0	0.0	1.0	1.0	1.999		0.52
5	1.0	1.0	1.0	1.0	0.006	1.0	1.0	0.034	1.0	0.0	1.0	1.0	1.999	0.814	0.52
6	1.0	1.0	1.0	1.0	0.007	1.0	1.0	0.042	1.0	0.0	1.0	1.0	1.998	0.844	0.52
7	1.0	1.0	1.0	1.0	0.008	1.0	1.0	0.05	1.0	0.0	1.0	1.0	1.998	0.865	0.52
8	1.0	1.0	1.0	1.0	0.01	1.0	1.0	0.059	1.0	0.0	1.0	1.0	1.998	0.882	0.52
9	1.0	1.0	1.0	1.0	0.011	1.0	1.0	0.068	1.0	0.0	1.0	1.0	1.997	0.895	0.52
10	1.0	1.0	1.0	1.0	0.013	1.0	1.0	0.076	1.0	0.0	1.0	1.0	1.997	0.906	0.52
11	1.0	1.0	1.0	1.0	0.014	1.0	1.0	0.085	1.0	0.0	1.0	1.0	1.997	0.914	0.52
12	1.0	1.0	1.0	1.0	0.016	1.0	1.0	0.094	1.0	0.0	1.0	1.0	1.996	0.921	0.52
13	1.0	0.997	0.994	0.994	0.019	0.959	0.997	0.103	0.997	0.0	0.989	0.988	1.996	0.927	0.52
14	1.0	0.994	0.988	0.988	0.021	0.927	0.994	0.109	0.994	0.0	0.978	0.977	1.995	0.932	0.52
15	1.0	0.991	0.982	0.983	0.024	0.901	0.991	0.118	0.991	0.0	0.968	0.965	1.995	0.937	0.52
16	1.0	0.988	0.976	0.977	0.028	0.881	0.988	0.123	0.988	0.0	0.958	0.954	1.995	0.941	0.52
17	1.0	0.985	0.97	0.968	0.03	0.859	0.985	0.113	0.985	0.0	0.947	0.942	1.994	0.944	0.52
18	1.0	0.982	0.964	0.962	0.033	0.844	0.982	0.113	0.982	0.0	0.937	0.931	1.994	0.947	0.52
19	1.0	0.979	0.958	0.951	0.035	0.827	0.979	0.089	0.979	0.0	0.927	0.919	1.993	0.95	0.52
20	1.0	0.975	0.952	0.952	0.038	0.816	0.975	0.112	0.976	0.0	0.917	0.908	1.993	0.953	0.52



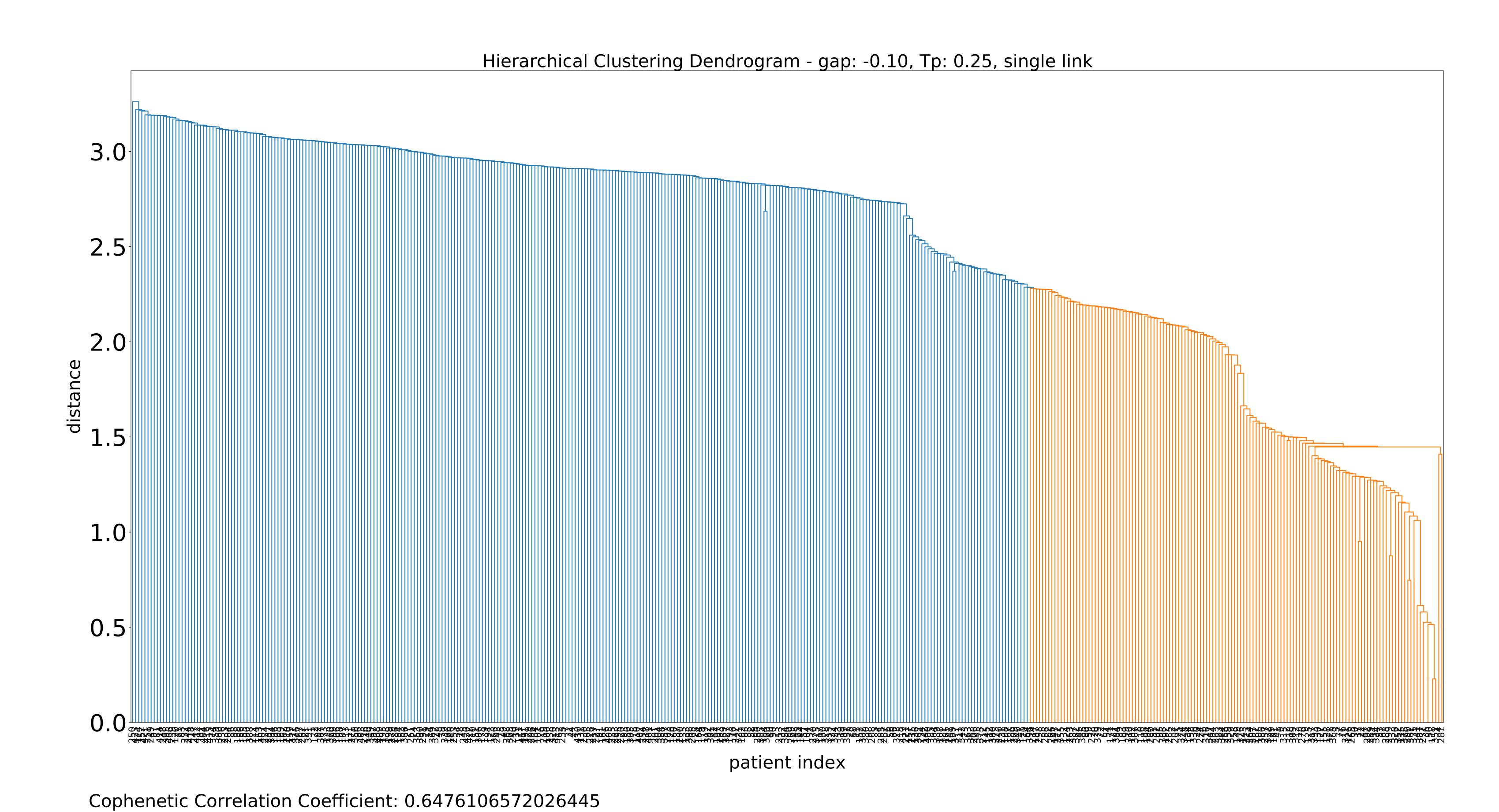
Average values of 15 clustering indices gap: -0.30, Tp: 0.25, single link

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7 1.0 0.986 0.972 0.97 0.986 0.97 0.986 0.97 0.986 0.97
0.96 0.983 0.96 0.983 0.96 0.983 0.985 0.985 0.985 0.985 0.985 0.985 0.985 0.985 0.985
9 1.0 0.983 0.966 0.962 0.019 0.737 0.983 0.961 0.983 0.961
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
11 1.0 0.977 0.954 0.956 0.977 0.956 0.977 0.956 0.977 0.960 0.977 0.960 0.977 0.960 0.977 0.960 0.977 0.960 0.977 0.960 0.977 0.978 0.979 0.079 0.079 0.079 0.079
12 1.0 0.974 0.948 0.942 0.949 0.949 0.949 0.949 0.951
13 1.0 0.971 0.942 0.939 0.971 0.942 0
14 1.0 0.968 0.93 0.93 0.93 0.93 0.698 0.93 0.698 0.93 0.698 0.698 0.693 0.693 0.698 0.693 0.698
15 1.0 0.964 0.93 0.965 $0.$
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
17 1.0 0.958 0.909 0.949
18 1.0 0.955 0.912 0.905 0.940 0.951 0.950 0.951
19 1.0 0.954 0.951 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
20 1.0 0.951 0.905



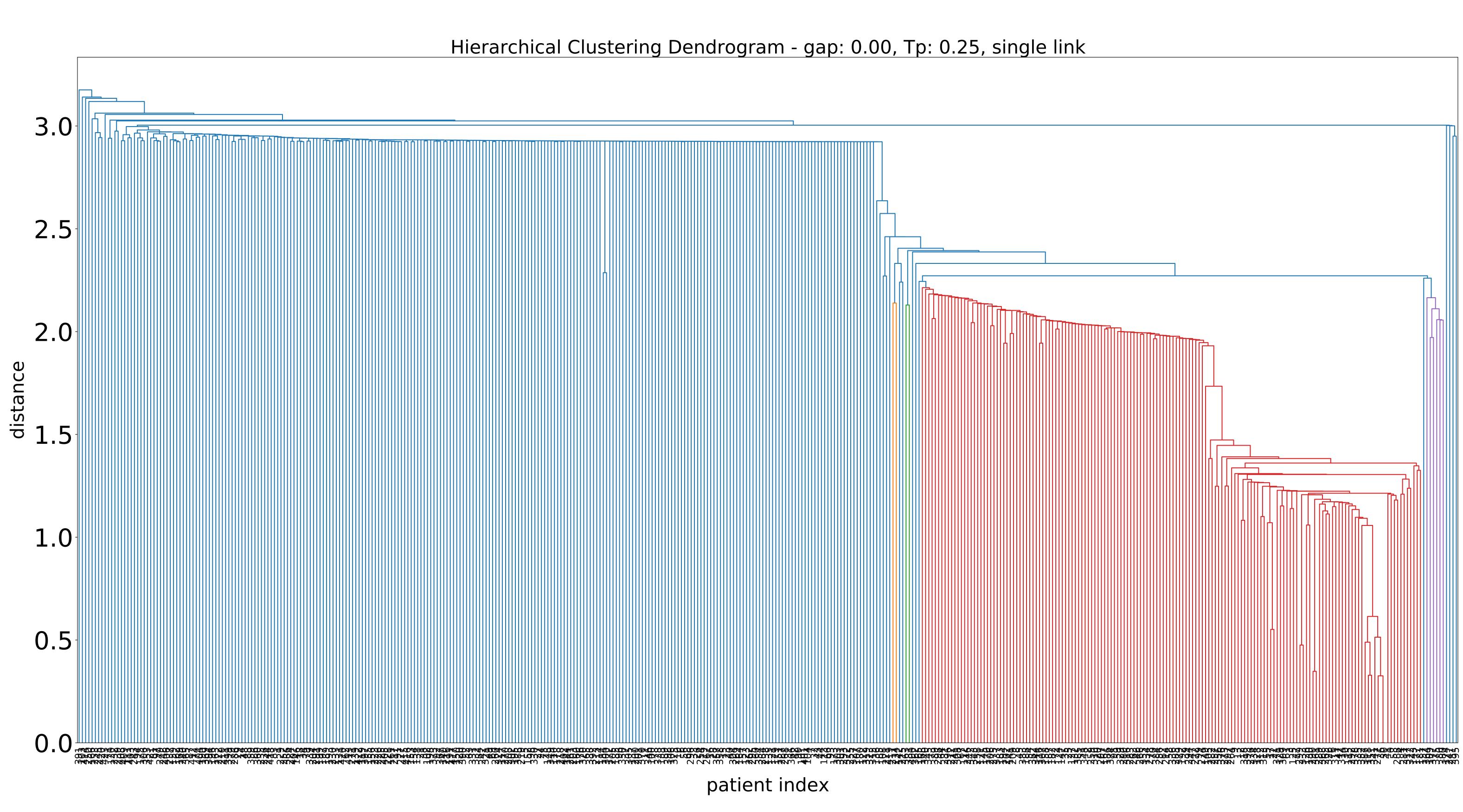
Average values of 15 clustering indices gap: -0.20, Tp: 0.25, single link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	0.997	0.995	0.997	0.003	0.706	0.997	0.016	0.997	0.0	0.989	0.989	2.0	0.549	0.701
3	1.0	0.994	0.989	0.982	0.005	0.698	0.994	0.032	0.994	0.0	0.978	0.978	2.0	0.69	0.692
4	1.0	0.992	0.983	0.983	0.008	0.698	0.992	0.048	0.992	0.0	0.968	0.967	1.999	0.768	0.692
5	1.0	0.989	0.978	0.98	0.011	0.699	0.989	0.065	0.989	0.0	0.958	0.957	1.999	0.814	0.691
6	1.0	0.986	0.972	0.976	0.014	0.694	0.986	0.08	0.986	0.0	0.947	0.946	1.998	0.845	0.689
7	1.0	0.983	0.966	0.967	0.017	0.691	0.983	0.093	0.983	0.0	0.937	0.935	1.998	0.867	0.688
8	1.0	0.98	0.961	0.958	0.019	0.686	0.98	0.104	0.98	0.0	0.927	0.924	1.998	0.884	0.687
9	1.0	0.977	0.955	0.958	0.022	0.684	0.977	0.119	0.977	0.0	0.917	0.914	1.997	0.897	0.682
10	1.0	0.977	0.955	0.956	0.023	0.704	0.977	0.122	0.977	0.0	0.917	0.913	1.997	0.907	0.679
11	1.0	0.974	0.949	0.947	0.026	0.697	0.974	0.128	0.974	0.0	0.907	0.902	1.996	0.915	0.678
12	1.0	0.974	0.948	0.945	0.028	0.715	0.974	0.127	0.974	0.0	0.907	0.902	1.996	0.922	0.669
13	1.0	0.971	0.942	0.943	0.03	0.708	0.97	0.138	0.971	0.0	0.898	0.891	1.995	0.928	0.667
14	1.0	0.968	0.936	0.933	0.033	0.7	0.967	0.136	0.968	0.0	0.888	0.88	1.995	0.933	0.664
15	1.0	0.964	0.93	0.926	0.036	0.695	0.964	0.136	0.965	0.0	0.879	0.87	1.994	0.938	0.664
16	1.0	0.964	0.93	0.926	0.037	0.707	0.964	0.123	0.965	0.0	0.879	0.869	1.994	0.941	0.66
17	1.0	0.961	0.924	0.921	0.04	0.7	0.96	0.132	0.961	0.0	0.87	0.858	1.993	0.944	0.659
18	1.0	0.958	0.918	0.909	0.042	0.692	0.957	0.103	0.958	0.0	0.861	0.848	1.993	0.946	0.659
19	1.0	0.954	0.911	0.901	0.045	0.686	0.954	0.096	0.955	0.0	0.852	0.837	1.992	0.949	0.659
20	1.0	0.951	0.905	0.888	0.048	0.679	0.95	0.062	0.951	0.0	0.843	0.826	1.992	0.952	0.655
	1.0	0.951	0.905	0.000	0.040	0.079	0.95	0.002	0.951	0.0	0.043	0.020	1.992	0.332	0.055



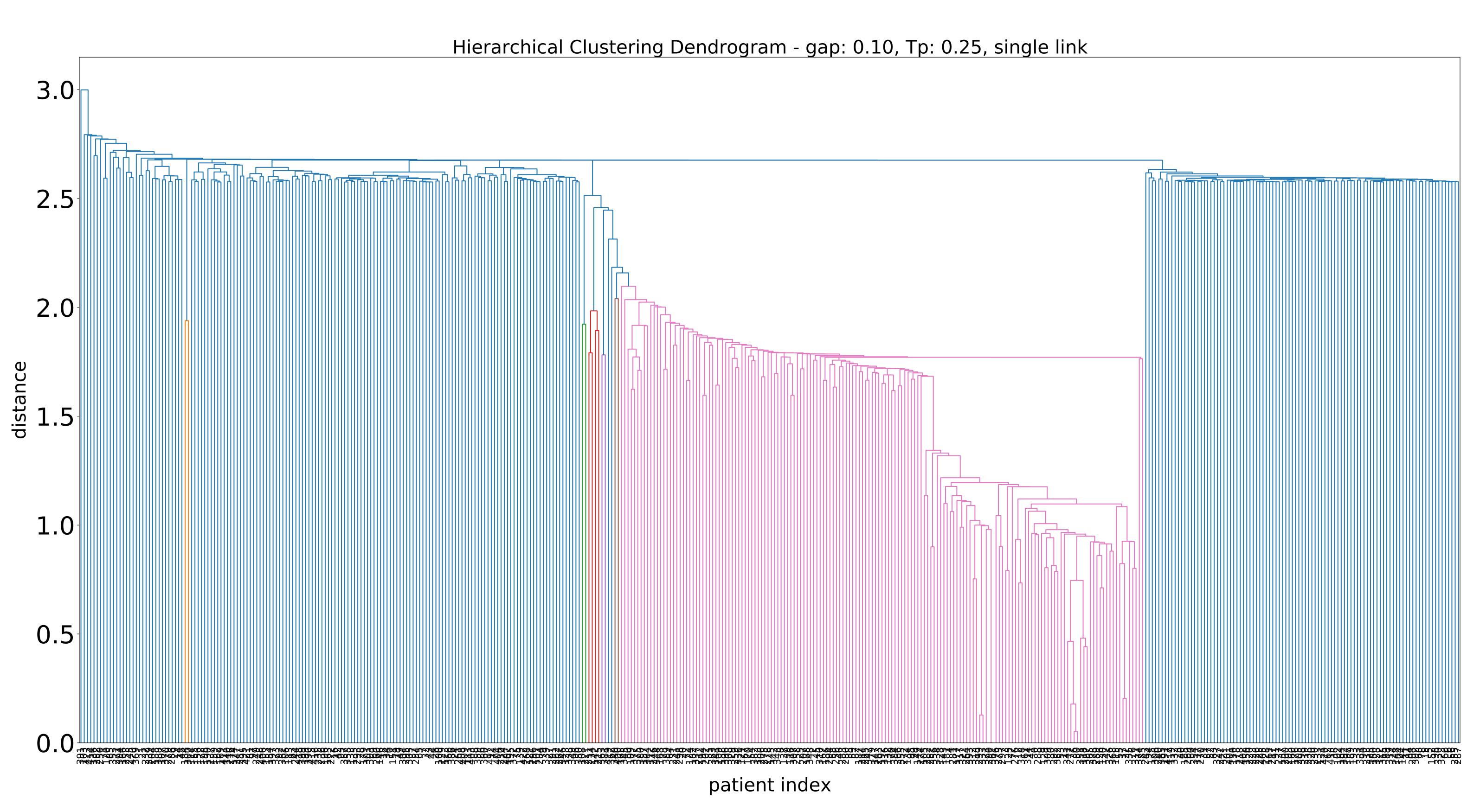
Average values of 15 clustering indices gap: -0.10, Tp: 0.25, single link

k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	0.997	0.995	0.997	0.003	0.705	0.997	0.016	0.997	0.0	0.989	0.989	2.0	0.552	0.746
3	1.0	0.997	0.994	0.989	0.004	0.813	0.997	0.024	0.997	0.0	0.989	0.989	2.0	0.691	0.736
4	1.0	0.994	0.989	0.989	0.007	0.771	0.994	0.041	0.994	0.0	0.978	0.978	1.999	0.768	0.736
5	1.0	0.992	0.983	0.984	0.01	0.749	0.992	0.056	0.992	0.0	0.968	0.967	1.998	0.811	0.735
6	1.0	0.992	0.983	0.984	0.011	0.784	0.992	0.064	0.992	0.0	0.968	0.967	1.998	0.841	0.73
7	1.0	0.989	0.978	0.978	0.014	0.764	0.989	0.077	0.989	0.0	0.958	0.956	1.998	0.864	0.73
8	1.0	0.986	0.972	0.971	0.017	0.75	0.986	0.09	0.986	0.0	0.947	0.945	1.997	0.881	0.73
9	1.0	0.983	0.966	0.964	0.019	0.737	0.983	0.101	0.983	0.0	0.937	0.934	1.997	0.894	0.729
10	1.0	0.98	0.96	0.962	0.022	0.729	0.98	0.115	0.98	0.0	0.927	0.923	1.996	0.905	0.729
11	1.0	0.98	0.96	0.958	0.024	0.747	0.98	0.114	0.98	0.0	0.927	0.923	1.996	0.913	0.729
12	1.0	0.977	0.954	0.952	0.026	0.737	0.976	0.122	0.977	0.0	0.917	0.912	1.995	0.921	0.728
13	1.0	0.977	0.954	0.947	0.028	0.75	0.976	0.115	0.977	0.0	0.917	0.912	1.995	0.927	0.727
14	1.0	0.976	0.953	0.95	0.029	0.763	0.976	0.121	0.977	0.0	0.917	0.911	1.994	0.932	0.727
15	1.0	0.973	0.947	0.946	0.032	0.753	0.973	0.127	0.974	0.0	0.907	0.9	1.994	0.936	0.725
16	1.0	0.97	0.941	0.932	0.034	0.742	0.97	0.106	0.97	0.0	0.898	0.889	1.993	0.938	0.724
17	1.0	0.967	0.935	0.933	0.038	0.736	0.966	0.122	0.967	0.0	0.888	0.878	1.993	0.942	0.723
18	1.0	0.964	0.929	0.925	0.04	0.726	0.963	0.12	0.964	0.0	0.879	0.867	1.992	0.945	0.723
19	1.0	0.96	0.923	0.926	0.043	0.722	0.96	0.133	0.961	0.0	0.87	0.856	1.992	0.948	0.722
20	1.0	0.957	0.916	0.916	0.046	0.713	0.956	0.115	0.958	0.0	0.861	0.846	1.991	0.951	0.721
	•	•	•	•				•	•	•					



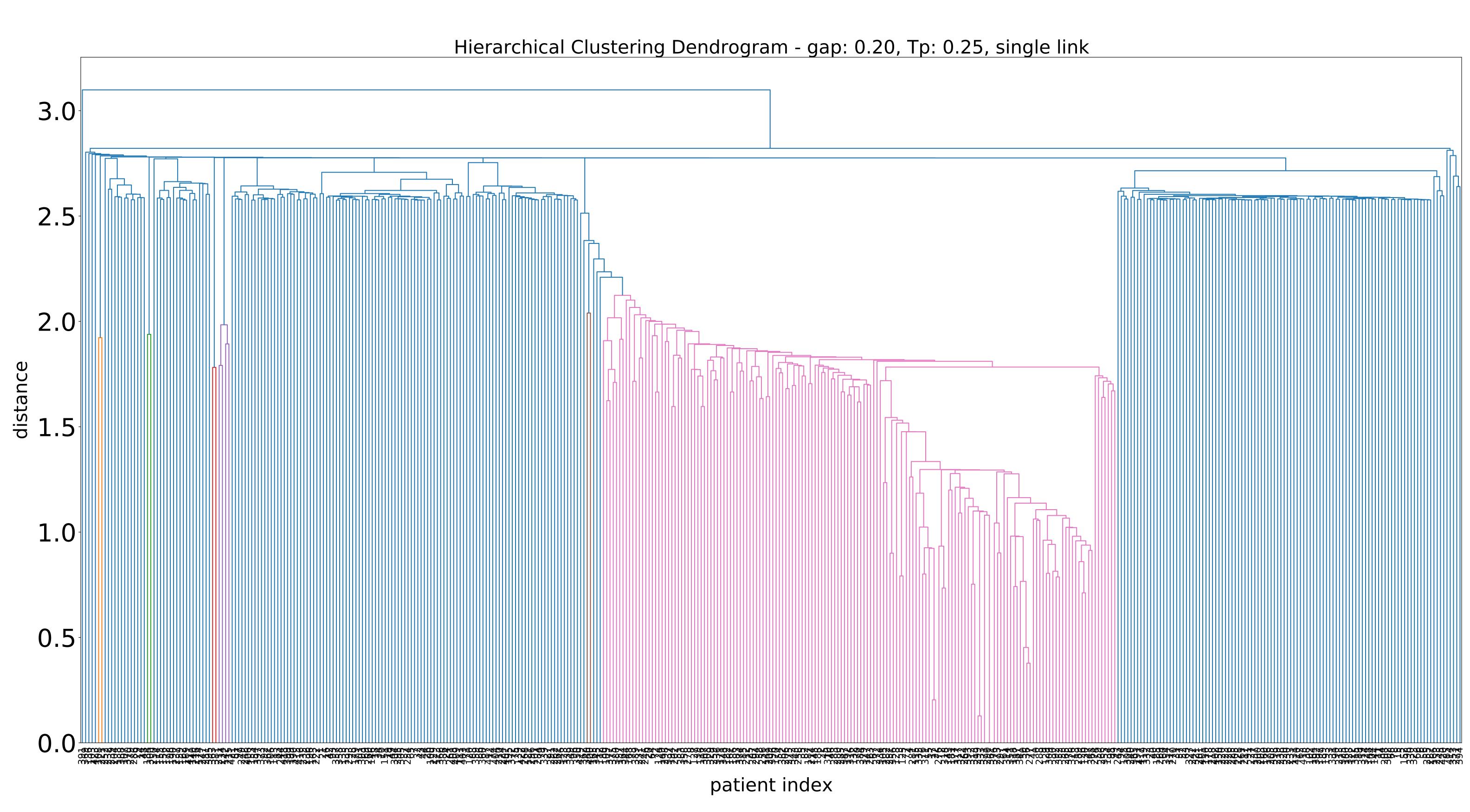
Average values of 15 clustering indices gap: 0.00, Tp: 0.25, single link

k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.548	0.761
3	1.0	0.997	0.994	0.991	0.004	0.814	0.997	0.024	0.997	0.0	0.989	0.989	2.0	0.677	0.753
4	1.0	0.997	0.994	0.995	0.006	0.864	0.997	0.033	0.997	0.0	0.989	0.989	1.999	0.756	0.751
5	1.0	0.994	0.989	0.987	0.008	0.811	0.994	0.048	0.994	0.0	0.978	0.978	1.998	0.802	0.748
6	1.0	0.986	0.972	0.971	0.014	0.694	0.986	0.074	0.986	0.0	0.947	0.946	1.998	0.685	0.734
7	1.0	0.986	0.972	0.972	0.015	0.725	0.986	0.081	0.986	0.0	0.947	0.946	1.998	0.727	0.733
8	1.0	0.986	0.972	0.968	0.017	0.749	0.986	0.088	0.986	0.0	0.947	0.945	1.998	0.743	0.728
9	1.0	0.98	0.96	0.955	0.021	0.71	0.98	0.103	0.98	0.0	0.927	0.924	1.997	0.686	0.726
10	1.0	0.974	0.949	0.949	0.025	0.679	0.974	0.121	0.974	0.0	0.908	0.903	1.996	0.641	0.725
11	1.0	0.965	0.932	0.928	0.03	0.635	0.965	0.134	0.966	0.0	0.879	0.873	1.993	0.586	0.72
12	1.0	0.965	0.932	0.922	0.032	0.652	0.965	0.131	0.966	0.0	0.879	0.872	1.993	0.619	0.72
13	1.0	0.965	0.931	0.937	0.033	0.672	0.964	0.149	0.965	0.0	0.879	0.871	1.993	0.648	0.719
14	1.0	0.962	0.925	0.921	0.036	0.665	0.961	0.137	0.962	0.0	0.87	0.861	1.992	0.606	0.719
15	1.0	0.949	0.902	0.896	0.043	0.616	0.949	0.139	0.95	0.0	0.834	0.822	1.992	0.568	0.715
16	1.0	0.949	0.902	0.897	0.044	0.627	0.948	0.137	0.95	0.0	0.834	0.821	1.992	0.643	0.713
17	1.0	0.946	0.896	0.88	0.046	0.621	0.945	0.102	0.947	0.0	0.825	0.811	1.991	0.664	0.712
18	1.0	0.933	0.873	0.854	0.053	0.579	0.932	0.097	0.935	0.0	0.792	0.774	1.988	0.63	0.712
19	1.0	0.933	0.872	0.85	0.054	0.587	0.932	0.059	0.934	0.0	0.792	0.773	1.988	0.649	0.712
20	1.0	0.932	0.871	0.853	0.056	0.6	0.931	0.049	0.934	0.0	0.792	0.771	1.988	0.665	0.711



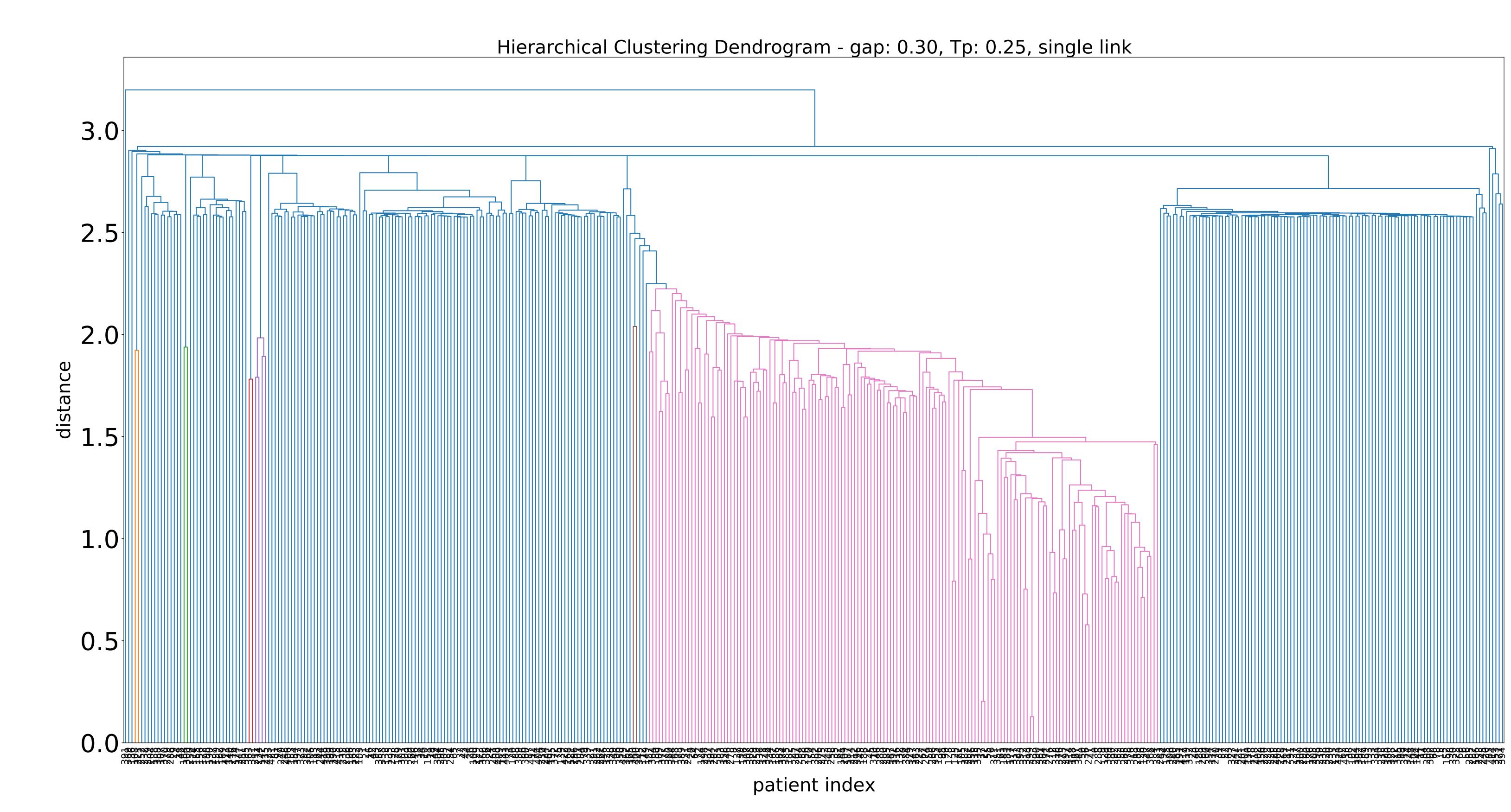
Average values of 15 clustering indices gap: 0.10, Tp: 0.25, single link

2	1 ^				* D	11	I	l vi	IX.	1111	17.1	JJ	CVNN	3	Dunn
<u> </u>	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.551	0.649
3	1.0	0.997	0.994	0.995	0.004	0.814	0.997	0.025	0.997	0.0	0.989	0.989	2.0	0.674	0.604
4	1.0	0.997	0.994	0.996	0.006	0.865	0.997	0.033	0.997	0.0	0.989	0.989	1.999	0.747	0.604
5	1.0	0.997	0.994	0.995	0.007	0.893	0.997	0.041	0.997	0.0	0.989	0.989	1.999	0.796	0.603
6	1.0	0.992	0.983	0.982	0.011	0.783	0.992	0.062	0.992	0.0	0.968	0.967	1.998	0.698	0.6
7	1.0	0.989	0.978	0.976	0.014	0.764	0.989	0.076	0.989	0.0	0.958	0.956	1.997	0.739	0.6
8	1.0	0.983	0.966	0.967	0.018	0.718	0.983	0.094	0.983	0.0	0.937	0.935	1.996	0.682	0.596
9	1.0	0.974	0.949	0.949	0.023	0.657	0.974	0.114	0.975	0.0	0.908	0.904	1.994	0.61	0.589
10	1.0	0.966	0.932	0.919	0.029	0.613	0.965	0.124	0.966	0.0	0.879	0.874	1.994	0.565	0.587
11	1.0	0.965	0.932	0.93	0.03	0.636	0.965	0.138	0.966	0.0	0.879	0.873	1.994	0.603	0.587
12	1.0	0.965	0.932	0.921	0.031	0.649	0.965	0.124	0.966	0.0	0.879	0.872	1.993	0.623	0.585
13	1.0	0.965	0.931	0.925	0.033	0.668	0.964	0.132	0.965	0.0	0.879	0.871	1.993	0.712	0.583
14	1.0	0.965	0.931	0.932	0.034	0.683	0.964	0.138	0.965	0.0	0.879	0.871	1.993	0.733	0.582
15	1.0	0.964	0.93	0.925	0.036	0.695	0.964	0.126	0.965	0.0	0.879	0.87	1.993	0.738	0.581
16	1.0	0.958	0.919	0.914	0.04	0.672	0.958	0.13	0.959	0.0	0.861	0.849	1.993	0.696	0.581
17	1.0	0.928	0.863	0.843	0.054	0.545	0.926	0.099	0.93	0.0	0.776	0.759	1.986	0.658	0.58
18	1.0	0.921	0.851	0.833	0.059	0.537	0.92	0.087	0.923	0.0	0.76	0.741	1.986	0.636	0.58
19	1.0	0.876	0.772	0.715	0.08	0.402	0.871	0.028	0.881	0.0	0.654	0.629	1.972	0.605	0.58
20	1.0	0.875	0.771	0.719	0.081	0.411	0.87	0.012	0.88	0.0	0.654	0.627	1.972	0.576	0.579



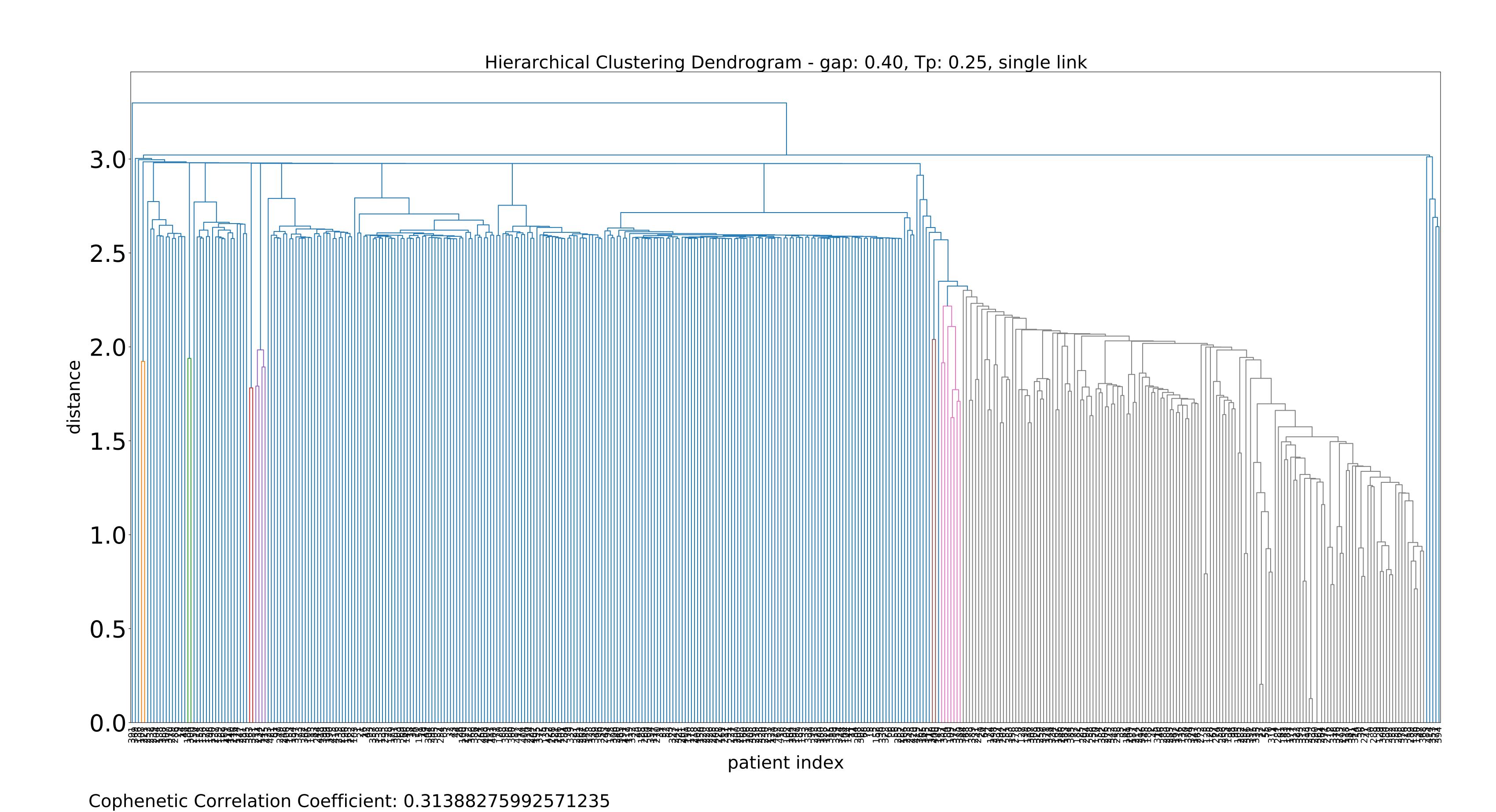
Average values of 15 clustering indices gap: 0.20, Tp: 0.25, single link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.55	0.571
3	1.0	0.992	0.984	0.984	0.007	0.623	0.992	0.037	0.992	0.0	0.968	0.968	1.997	0.472	0.52
4	1.0	0.992	0.983	0.99	0.008	0.701	0.992	0.048	0.992	0.0	0.968	0.967	1.997	0.526	0.518
5	1.0	0.992	0.983	0.987	0.01	0.749	0.992	0.055	0.992	0.0	0.968	0.967	1.996	0.61	0.517
6	1.0	0.989	0.978	0.982	0.013	0.738	0.989	0.071	0.989	0.0	0.958	0.956	1.996	0.666	0.516
7	1.0	0.986	0.972	0.967	0.015	0.723	0.986	0.081	0.986	0.0	0.947	0.946	1.996	0.709	0.515
8	1.0	0.986	0.972	0.969	0.016	0.748	0.986	0.087	0.986	0.0	0.947	0.945	1.995	0.745	0.514
9	1.0	0.986	0.972	0.97	0.018	0.771	0.986	0.093	0.986	0.0	0.947	0.945	1.995	0.772	0.514
10	1.0	0.98	0.96	0.963	0.022	0.731	0.98	0.113	0.98	0.0	0.927	0.923	1.994	0.73	0.514
11	1.0	0.948	0.9	0.893	0.038	0.54	0.947	0.142	0.949	0.0	0.827	0.818	1.988	0.673	0.513
12	1.0	0.942	0.888	0.88	0.042	0.53	0.941	0.149	0.943	0.0	0.809	0.799	1.987	0.651	0.513
13	1.0	0.896	0.805	0.771	0.065	0.383	0.892	0.177	0.9	0.0	0.689	0.673	1.973	0.605	0.519
14	1.0	0.892	0.799	0.761	0.067	0.386	0.888	0.163	0.896	0.0	0.682	0.665	1.972	0.591	0.519
15	1.0	0.88	0.777	0.718	0.074	0.362	0.875	0.14	0.884	0.0	0.655	0.636	1.972	0.571	0.519
16	1.0	0.829	0.694	0.579	0.098	0.258	0.819	0.115	0.838	0.0	0.554	0.532	1.953	0.537	0.518
17	1.0	0.712	0.525	0.17	0.153	0.058	0.689	0.022	0.736	0.0	0.379	0.356	1.927	0.509	0.518
18	1.0	0.624	0.418	-0.231	0.193	-0.071	0.59	-0.095	0.661	-0.0	0.285	0.264	1.888	0.483	0.518
19	1.0	0.423	0.223	-1.545	0.313	-0.341	0.365	-0.276	0.489	-0.0	0.139	0.126	1.841	0.458	0.518
20	1.0	0.418	0.222	-1.516	0.314	-0.351	0.363	-0.418	0.482	-0.0	0.138	0.125	1.841	0.482	0.518



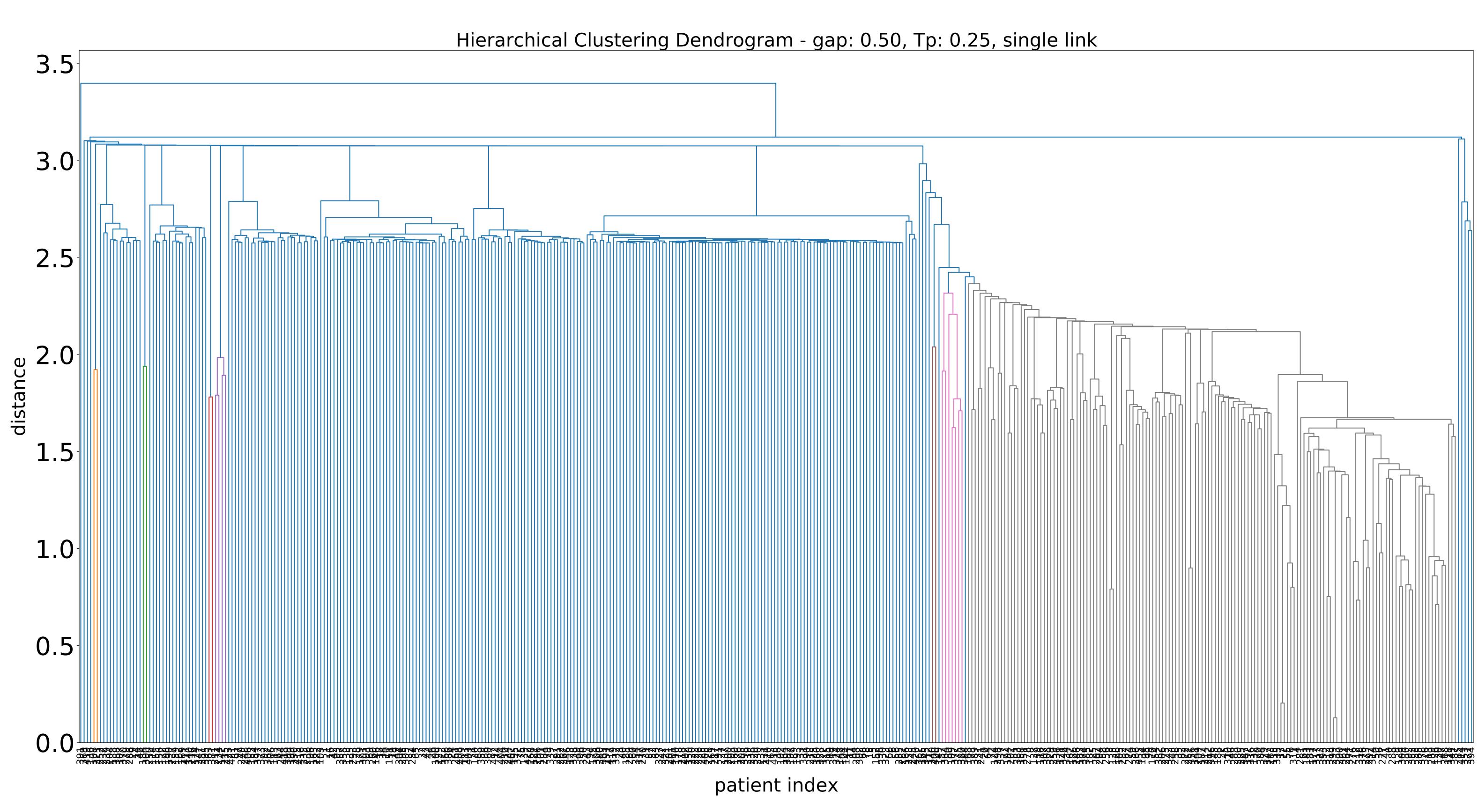
Average values of 15 clustering indices gap: 0.30, Tp: 0.25, single link

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	k	AR	FM	J	AW	VD	l H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
4 1.0 0.992 0.983 0.985 0.008 0.7 0.992 0.047 0.992 0.0 0.968 0.967 1.997 0.534 0.488 5 1.0 0.992 0.983 0.98 0.012 0.734 0.989 0.07 0.989 0.0 0.958 0.957 1.996 0.651 0.466 6 1.0 0.989 0.978 0.999 0.012 0.734 0.989 0.07 0.989 0.0 0.958 0.955 1.996 0.67 0.465 0.465 0.971 0.983 0.966 0.963 0.016 0.688 0.983 0.087 0.989 0.0 0.952 0.935 0.955 0.465 0.465 0.465 0.465 0.952 0.907 0.888 0.033 0.487 0.951 0.137 0.953 0.0 0.935 0.935 0.463 0.463 0.945 0.147 0.947 0.0 0.835 0.33 1.988 0.575 0.463 0.0	2	1.0	1.0	1.0	1.0		1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.55	
5 1.0 0.992 0.983 0.98 0.01 0.748 0.992 0.054 0.992 0.0 0.988 0.967 1.996 0.615 0.466 6 1.0 0.989 0.978 0.999 0.012 0.734 0.989 0.07 0.999 0.0 0.985 0.956 1.996 0.615 0.466 7 1.0 0.983 0.966 0.963 0.016 0.688 0.983 0.087 0.983 0.0 0.935 1.996 0.677 0.465 8 1.0 0.982 0.907 0.898 0.033 0.487 0.991 0.137 0.935 1.996 0.639 0.463 9 1.0 0.946 0.896 0.881 0.037 0.483 0.947 0.0 0.835 0.83 1.988 0.575 0.463 10 1.0 0.901 0.813 0.778 0.059 0.346 0.897 0.202 0.905 0.0 0.685 <td< th=""><th>3</th><th>1.0</th><th></th><th></th><th>0.99</th><th></th><th>0.626</th><th></th><th>0.037</th><th></th><th>0.0</th><th>0.968</th><th></th><th>1.997</th><th></th><th></th></td<>	3	1.0			0.99		0.626		0.037		0.0	0.968		1.997		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4	1.0		0.000	0.000	0.008	0.7				0.0			2.557		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5	1.0			0.98	0.01	0.748				0.0			1.996		
8 1.0 0.952 0.907 0.898 0.033 0.487 0.951 0.137 0.953 0.0 0.835 0.83 1.988 0.575 0.463 9 1.0 0.946 0.886 0.881 0.037 0.483 0.945 0.14 0.947 0.0 0.818 0.811 1.974 0.56 0.685 1.974 0.56 0.685 1.974 0.50 0.0 0.681 1.987 0.56 0.463 10 1.0 0.901 0.813 0.778 0.059 0.346 0.897 0.202 0.905 0.0 0.696 0.685 1.974 0.507 0.463 11 1.0 0.897 0.807 0.767 0.062 0.353 0.893 0.198 0.901 0.0 0.689 0.676 1.973 0.503 0.468 12 1.0 0.885 0.786 0.733 0.069 0.337 0.88 0.196 0.89 0.674 1.973 0.593	6	1.0			0.979		0.734			0.989	0.0	0.958			0.07	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7	1.0	0.983	0.966		0.016	0.688	0.983			0.0		0.935	1.995		0.464
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	8	1.0					0.487				0.0		0.83	1.988		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9	1.0					0.483		0.147		0.0			1.987	0.50	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10	1.0					0.346				0.0		0.000	1.974	0.00.	
13 1.0 0.835 0.703 0.601 0.093 0.242 0.826 0.214 0.845 0.0 0.56 0.542 1.953 0.45 0.467 14 1.0 0.719 0.531 0.165 0.149 0.05 0.694 0.188 0.744 0.0 0.38 0.362 1.927 0.431 0.467 15 1.0 0.633 0.423 -0.266 0.189 -0.061 0.595 0.159 0.673 -0.0 0.285 0.269 1.888 0.407 0.467 16 1.0 0.434 0.227 -1.615 0.311 -0.317 0.371 0.075 0.508 -0.0 0.139 0.128 1.842 0.341 0.454 17 1.0 0.43 0.226 -1.606 0.311 -0.33 0.369 -0.01 0.501 -0.0 0.139 0.127 1.842 0.44 0.454 18 1.0 0.426 0.225 -1.576 0.312	11	1.0					0.353			0.501	0.0			1.9/3		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	12	1.0					0.337		0.196	0.89	0.0	0.662		1.972	0.488	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	13	1.0			0.601		0.242		0.214		0.0	0.56		1.953	0.45	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	14	1.0					0.05		0.188		0.0	0.38		1.927		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	15	1.0			-0.226				0.159		-0.0	0.285		1.888		
18 1.0 0.426 0.25 -0.36 0.495 -0.161 0.495	16	1.0	0.434				-0.317		0.075		-0.0			_	0.383	
	17	1.0	0115				-0.33				-0.0	0.139				
	18	1.0			-1.576		-0.336				-0.0	0.139		1.842	U.	
	19	1.0	0.423	0.224		0.313	-0.345	0.366	-0.298	0.488	-0.0	0.139	0.126	1.842	0.467	0.453
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	20	1.0	0.419	0.222	-1.521	0.314	-0.352	0.364	-0.438	0.482	-0.0	0.138	0.125	1.842	0.49	0.451



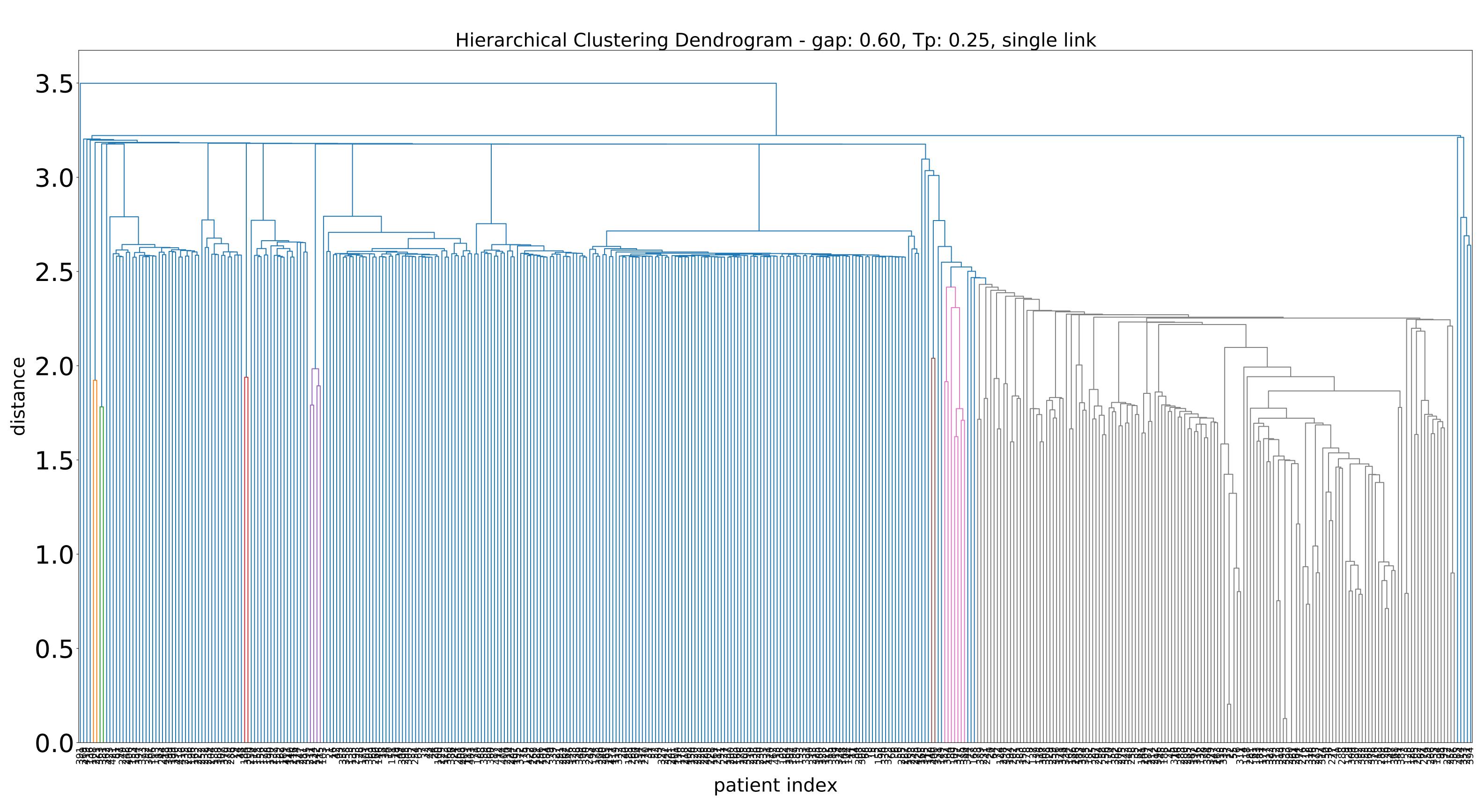
Average values of 15 clustering indices gap: 0.40, Tp: 0.25, single link

k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.549	0.47
3	1.0	0.992	0.984	0.982	0.007	0.624	0.992	0.037	0.992	0.0	0.968	0.968	1.997	0.488	0.43
4	1.0	0.992	0.983	0.986	0.008	0.7	0.992	0.047	0.992	0.0	0.968	0.967	1.997	0.541	0.429
5	1.0	0.992	0.983	0.983	0.01	0.748	0.992	0.054	0.992	0.0	0.968	0.967	1.996	0.62	0.428
6	1.0	0.989	0.978	0.982	0.012	0.736	0.989	0.07	0.989	0.0	0.958	0.956	1.996	0.674	0.427
7	1.0	0.983	0.966	0.967	0.016	0.689	0.983	0.089	0.983	0.0	0.937	0.935	1.994	0.647	0.425
8	1.0	0.952	0.907	0.894	0.033	0.485	0.951	0.135	0.953	0.0	0.835	0.83	1.988	0.585	0.424
9	1.0	0.946	0.896	0.892	0.037	0.488	0.945	0.152	0.947	0.0	0.818	0.811	1.987	0.572	0.424
10	1.0	0.901	0.813	0.774	0.059	0.345	0.897	0.2	0.905	0.0	0.696	0.685	1.973	0.518	0.428
11	1.0	0.897	0.807	0.754	0.062	0.349	0.893	0.187	0.901	0.0	0.689	0.676	1.972	0.516	0.428
12	1.0	0.885	0.786	0.739	0.069	0.338	0.88	0.201	0.89	0.0	0.662	0.647	1.972	0.501	0.428
13	1.0	0.835	0.703	0.585	0.092	0.235	0.826	0.203	0.845	0.0	0.56	0.542	1.953	0.463	0.428
14	1.0	0.719	0.531	0.188	0.149	0.057	0.693	0.212	0.745	0.0	0.38	0.361	1.928	0.445	0.428
15	1.0	0.633	0.424	-0.233	0.189	-0.064	0.595	0.151	0.673	-0.0	0.285	0.269	1.888	0.422	0.428
16	1.0	0.434	0.227	-1.61	0.311	-0.315	0.37	0.081	0.508	-0.0	0.139	0.128	1.843	0.399	0.428
17	1.0	0.43	0.227	-1.593	0.312	-0.327	0.369	-0.047	0.502	-0.0	0.139	0.128	1.84	0.434	0.419
18	1.0	0.426	0.225	-1.579	0.312	-0.337	0.367	-0.166	0.495	-0.0	0.139	0.127	1.841	0.456	0.402
19	1.0	0.422	0.224	-1.544	0.313	-0.344	0.365	-0.285	0.488	-0.0	0.139	0.126	1.841	0.48	0.401
20	1.0	0.418	0.222	-1.514	0.314	-0.35	0.363	-0.42	0.482	-0.0	0.139	0.125	1.841	0.502	0.401
	'	•						-			•	•			



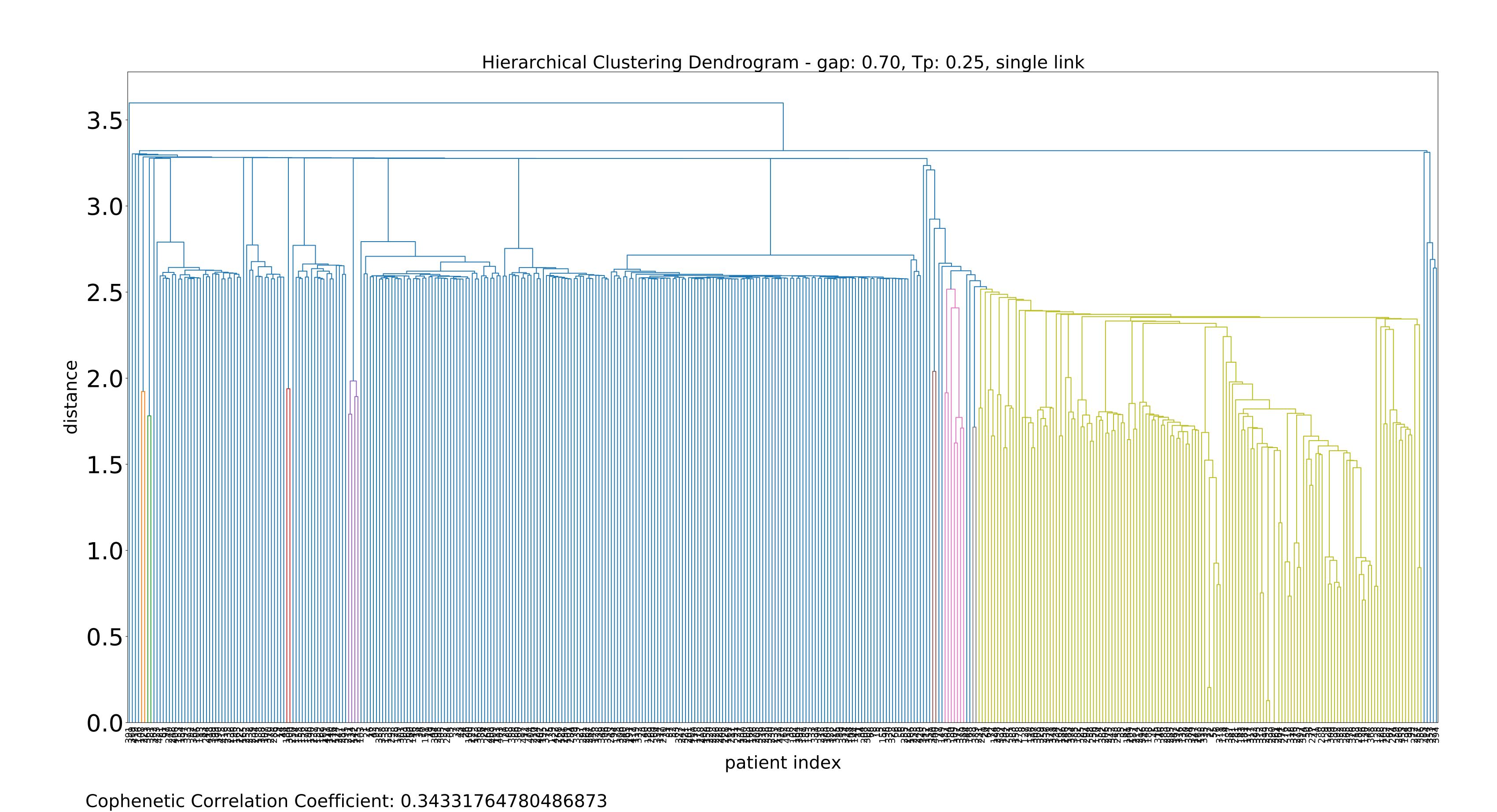
Average values of 15 clustering indices gap: 0.50, Tp: 0.25, single link

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0.548 0.434 0.494 0.399 0.547 0.398 0.625 0.397 0.687 0.396
4 1.0 0.992 0.983 0.979 0.008 0.697 0.992 0.046 0.992 0.0 0.968 0.967 1.997 5 1.0 0.992 0.983 0.975 0.01 0.746 0.992 0.053 0.968 0.967 1.996 6 1.0 0.992 0.983 0.985 0.011 0.784 0.992 0.062 0.992 0.0 0.968 0.967 1.995	0.547 0.398 0.625 0.397
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0.625 0.397
6 1.0 0.992 0.983 0.985 0.011 0.784 0.992 0.062 0.992 0.060 1.995	
	0.687 0.396
7 1.0 0.989 0.978 0.981 0.014 0.766 0.989 0.989 0.956 1.995	
	0.722 0.396
8 1.0 0.983 0.966 0.961 0.018 0.715 0.983 0.983 0.937 0.935 1.993	0.693 0.394
9 1.0 0.952 0.906 0.839 0.034 0.51 0.953 0.953 0.829 1.987	0.635 0.394
10 1.0 0.946 0.895 0.886 0.506 0.945 0.947 0.0 0.818 0.81 1.986	0.622 0.394
11 1.0 0.9 0.812 0.773 0.061 0.896 0.19 0.904 0.0 0.696 0.696 1.972	0.571 0.397
12 1.0 0.896 0.806 0.753 0.064 0.365 0.892 0.17 0.9 0.689 0.675 1.971	0.568 0.397
13 1.0 0.884 0.784 0.739 0.879 0.879 0.889 0.662 0.645 1.971	0.55 0.397
14 1.0 0.834 0.702 0.58 0.094 0.242 0.825 0.161 0.844 0.0 0.56 0.541 1.951	0.513 0.397
15 1.0 0.716 0.529 0.177 0.151 0.057 0.692 0.149 0.742 0.0 0.38 0.36 1.927	0.494 0.397
16 1.0 0.63 0.421 -0.212 0.191 -0.06 0.593 0.699 -0.0 0.285 0.267 1.886	0.472 0.397
17 1.0 0.43 0.226 -1.591 0.312 -0.326 0.369 -0.046 0.502 -0.0 0.139 0.128 1.841	0.448 0.397
18 1.0 0.425 0.223 -1.592 0.313 -0.38 0.365 -0.167 0.494 -0.0 0.138 0.126 1.839	0.478 0.385
19 1.0 0.418 0.22 -1.583 0.316 -0.35 0.361 -0.3 0.484 -0.0 0.136 1.836	0.505 0.373
20 1.0 0.412 0.217 -1.573 0.318 -0.361 0.475 -0.0 0.135 0.122 1.833	0.53 0.366



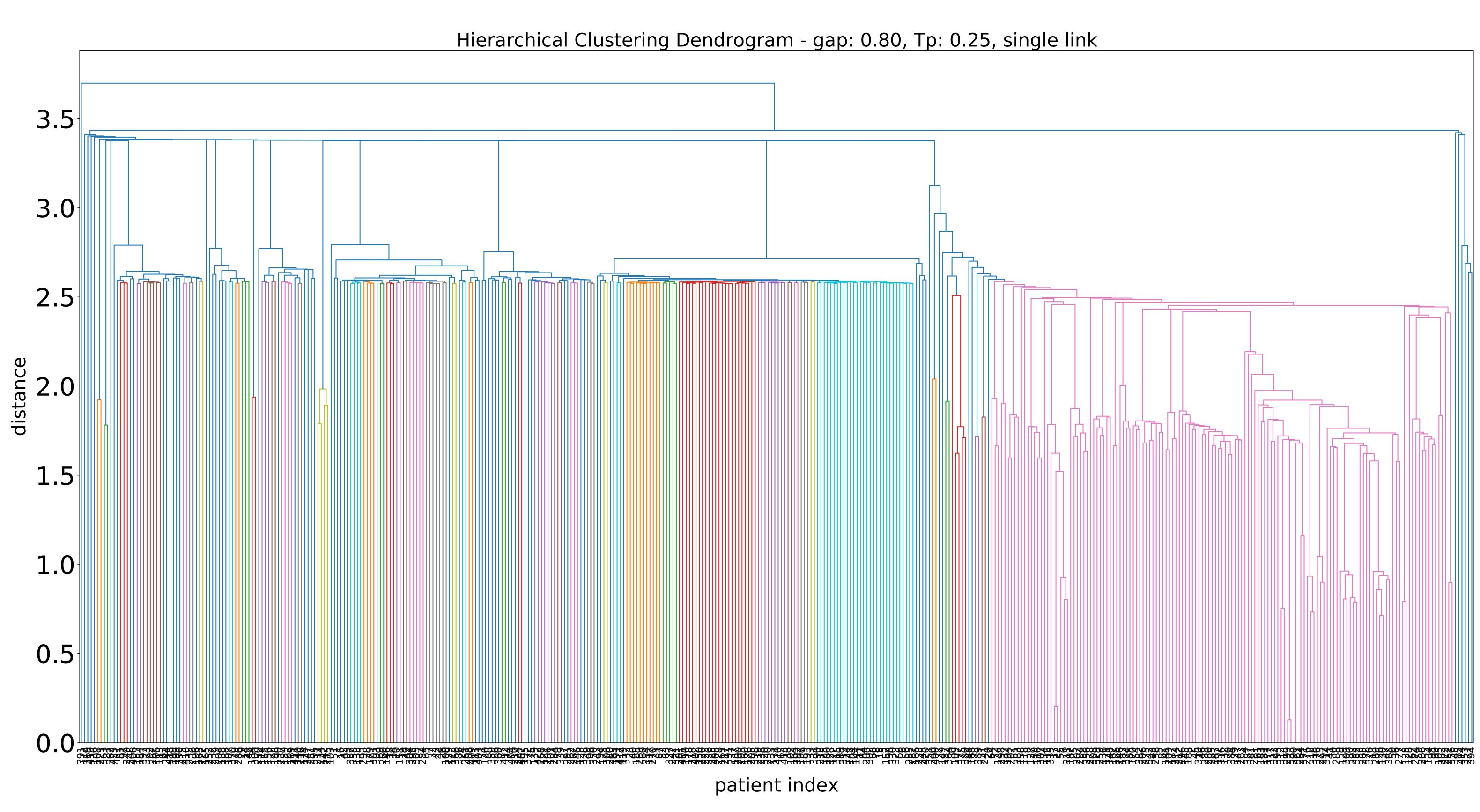
Average values of 15 clustering indices gap: 0.60, Tp: 0.25, single link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.545	0.41
3	1.0	0.992	0.984	0.988	0.007	0.626	0.992	0.037	0.992	0.0	0.968	0.968	1.997	0.495	0.378
4	1.0	0.992	0.983	0.987	0.008	0.699	0.992	0.047	0.992	0.0	0.968	0.967	1.997	0.552	0.377
5	1.0	0.992	0.983	0.985	0.01	0.748	0.992	0.054	0.992	0.0	0.968	0.967	1.996	0.629	0.376
6	1.0	0.992	0.983	0.985	0.011	0.784	0.992	0.062	0.992	0.0	0.968	0.967	1.995	0.69	0.375
7	1.0	0.989	0.978	0.98	0.014	0.766	0.989	0.077	0.989	0.0	0.958	0.956	1.995	0.726	0.375
8	1.0	0.983	0.966	0.97	0.018	0.719	0.983	0.097	0.983	0.0	0.937	0.935	1.993	0.699	0.374
9	1.0	0.93	0.865	0.837	0.045	0.415	0.928	0.152	0.932	0.0	0.771	0.763	1.978	0.633	0.373
10	1.0	0.898	0.809	0.767	0.061	0.339	0.894	0.187	0.902	0.0	0.69	0.679	1.971	0.589	0.373
11	1.0	0.892	0.797	0.747	0.065	0.338	0.887	0.186	0.896	0.0	0.676	0.663	1.969	0.583	0.373
12	1.0	0.846	0.72	0.609	0.087	0.241	0.837	0.202	0.854	0.0	0.578	0.562	1.953	0.545	0.377
13	1.0	0.844	0.718	0.621	0.088	0.255	0.836	0.189	0.853	0.0	0.577	0.56	1.953	0.538	0.377
14	1.0	0.831	0.697	0.591	0.095	0.244	0.822	0.187	0.841	0.0	0.555	0.535	1.952	0.525	0.377
15	1.0	0.83	0.696	0.579	0.097	0.248	0.821	0.145	0.84	0.0	0.554	0.533	1.952	0.556	0.377
16	1.0	0.711	0.524	0.153	0.153	0.05	0.687	0.075	0.736	0.0	0.376	0.355	1.929	0.537	0.377
17	1.0	0.624	0.416	-0.222	0.194	-0.065	0.588	0.018	0.663	-0.0	0.282	0.263	1.89	0.515	0.377
18	1.0	0.424	0.223	-1.589	0.314	-0.338	0.365	-0.161	0.493	-0.0	0.138	0.126	1.844	0.491	0.377
19	1.0	0.418	0.22	-1.583	0.316	-0.349	0.361	-0.289	0.485	-0.0	0.136	0.124	1.842	0.518	0.367
20	1.0	0.412	0.217	-1.579	0.318	-0.362	0.357	-0.444	0.476	-0.0	0.135	0.122	1.838	0.542	0.36
	•	•	•			•	•	•	•	•	•				



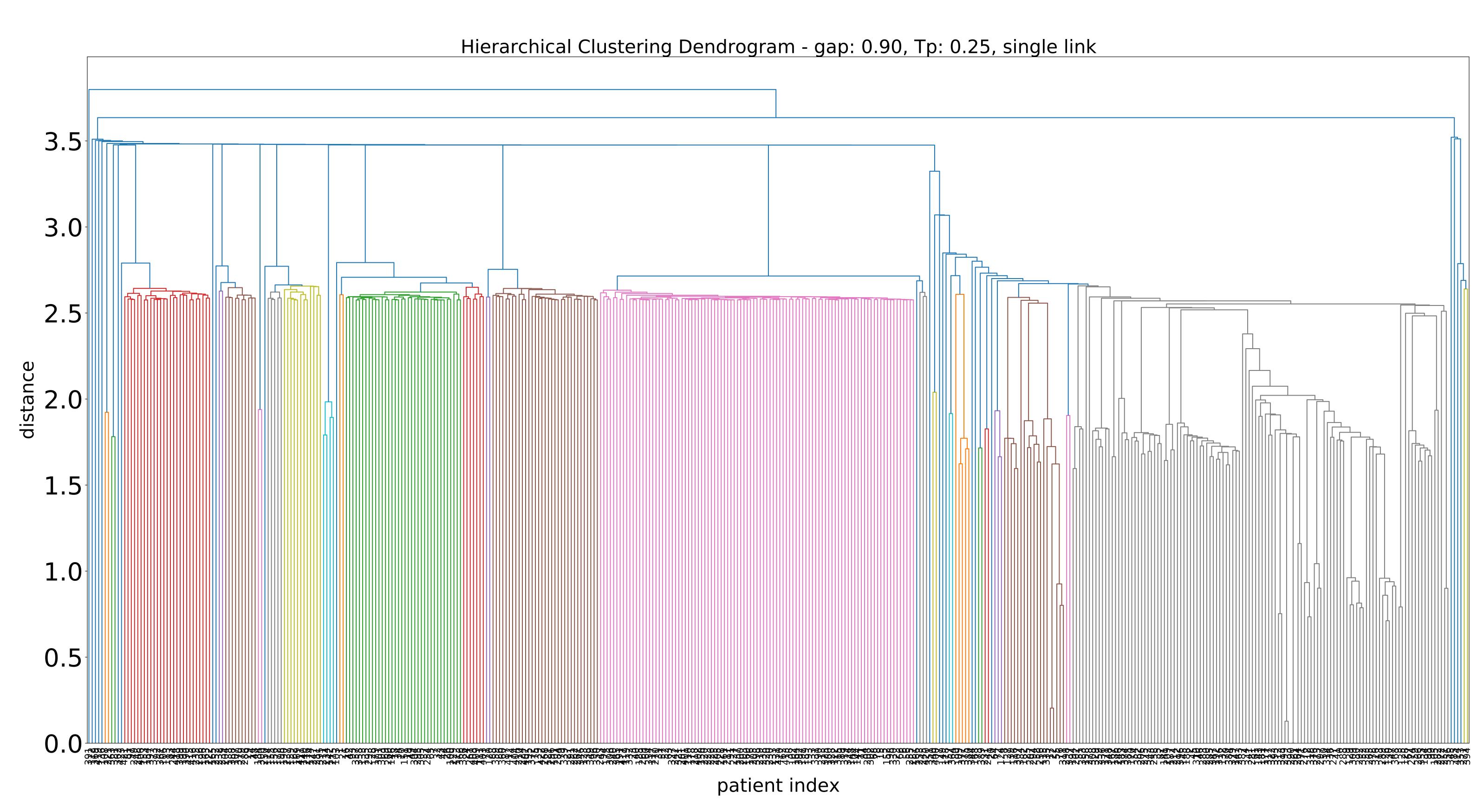
Average values of 15 clustering indices gap: 0.70, Tp: 0.25, single link

k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.54	0.394
3	1.0	0.992	0.984	0.987	0.007	0.625	0.992	0.037	0.992	0.0	0.968	0.968	1.997	0.49	0.364
4	1.0	0.992	0.983	0.986	0.008	0.701	0.992	0.047	0.992	0.0	0.968	0.967	1.997	0.556	0.363
5	1.0	0.992	0.983	0.983	0.01	0.749	0.992	0.055	0.992	0.0	0.968	0.967	1.996	0.633	0.362
6	1.0	0.992	0.983	0.983	0.011	0.783	0.992	0.061	0.992	0.0	0.968	0.967	1.996	0.693	0.362
7	1.0	0.989	0.978	0.978	0.014	0.765	0.989	0.076	0.989	0.0	0.958	0.956	1.995	0.729	0.361
8	1.0	0.983	0.966	0.964	0.018	0.717	0.983	0.093	0.983	0.0	0.937	0.935	1.993	0.703	0.36
9	1.0	0.93	0.865	0.843	0.045	0.417	0.928	0.155	0.932	0.0	0.771	0.763	1.98	0.639	0.36
10	1.0	0.927	0.86	0.832	0.047	0.424	0.924	0.152	0.929	0.0	0.763	0.754	1.979	0.675	0.36
11	1.0	0.895	0.803	0.748	0.063	0.341	0.891	0.175	0.899	0.0	0.683	0.67	1.972	0.634	0.36
12	1.0	0.888	0.791	0.741	0.068	0.345	0.884	0.18	0.893	0.0	0.669	0.655	1.971	0.624	0.359
13	1.0	0.841	0.713	0.61	0.09	0.25	0.833	0.192	0.85	0.0	0.572	0.554	1.955	0.589	0.371
14	1.0	0.84	0.712	0.606	0.091	0.258	0.832	0.165	0.849	0.0	0.571	0.552	1.955	0.58	0.371
15	1.0	0.827	0.691	0.571	0.098	0.244	0.817	0.146	0.837	0.0	0.549	0.528	1.954	0.567	0.371
16	1.0	0.826	0.69	0.571	0.099	0.25	0.816	0.107	0.836	0.0	0.549	0.526	1.954	0.594	0.371
17	1.0	0.707	0.518	0.145	0.155	0.049	0.683	0.024	0.732	0.0	0.372	0.35	1.934	0.575	0.371
18	1.0	0.619	0.412	-0.251	0.195	-0.076	0.583	-0.094	0.657	-0.0	0.28	0.259	1.896	0.553	0.371
19	1.0	0.418	0.22	-1.585	0.316	-0.35	0.361	-0.297	0.485	-0.0	0.136	0.124	1.845	0.53	0.371
20	1.0	0.412	0.217	-1.581	0.317	-0.363	0.357	-0.462	0.475	-0.0	0.135	0.122	1.842	0.553	0.367
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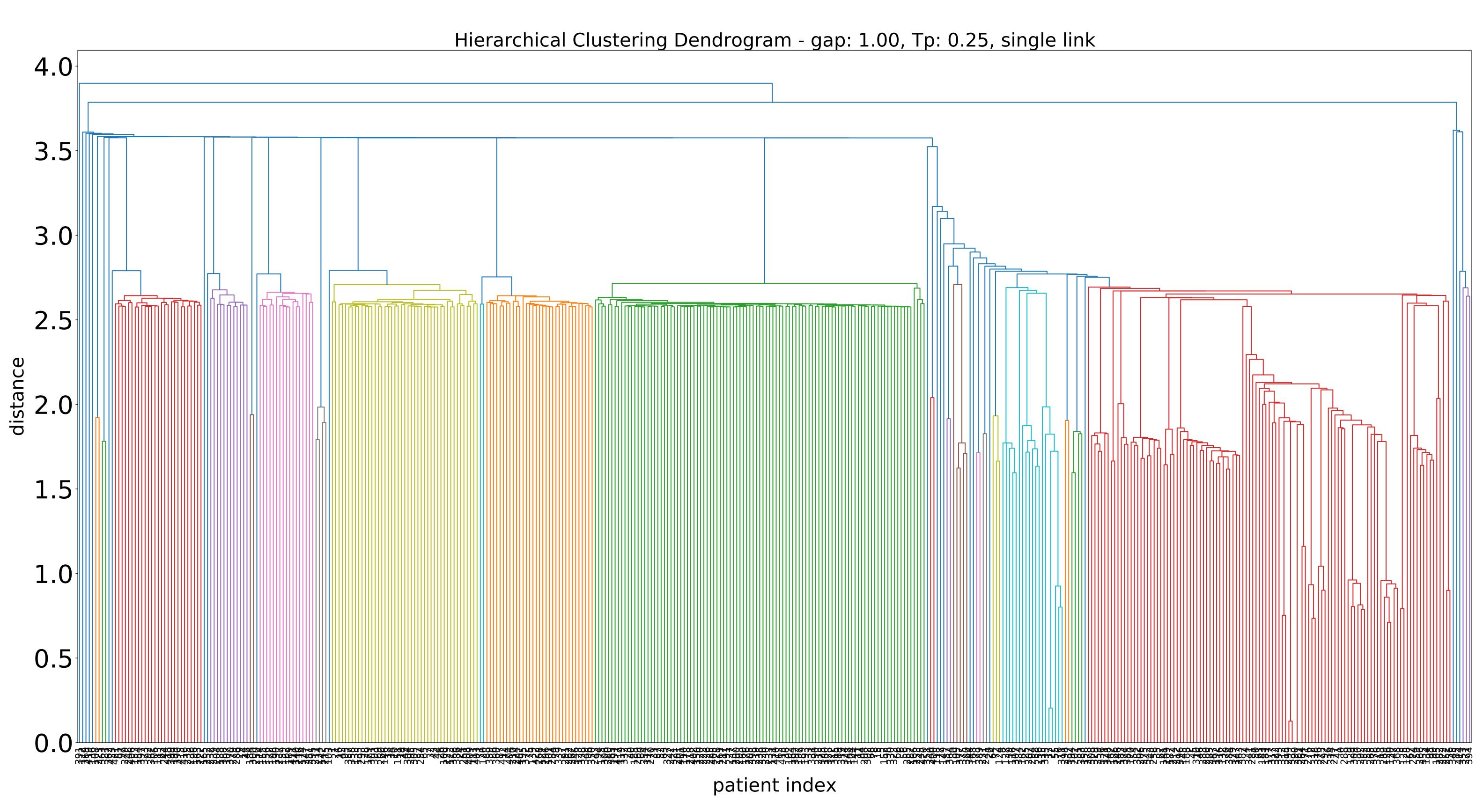
Average values of 15 clustering indices gap: 0.80, Tp: 0.25, single link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.536	0.38
3	1.0	0.989	0.978	0.977	0.008	0.566	0.989	0.042	0.989	0.0	0.958	0.957	1.996	0.477	0.353
4	1.0	0.989	0.978	0.979	0.01	0.646	0.989	0.053	0.989	0.0	0.958	0.957	1.996	0.545	0.352
5	1.0	0.989	0.978	0.974	0.011	0.695	0.989	0.061	0.989	0.0	0.958	0.957	1.996	0.64	0.351
6	1.0	0.986	0.972	0.971	0.014	0.693	0.986	0.076	0.986	0.0	0.947	0.946	1.995	0.697	0.351
7	1.0	0.986	0.972	0.968	0.015	0.722	0.986	0.082	0.986	0.0	0.947	0.946	1.995	0.74	0.35
8	1.0	0.986	0.972	0.971	0.017	0.751	0.986	0.089	0.986	0.0	0.947	0.945	1.994	0.772	0.35
9	1.0	0.983	0.966	0.966	0.019	0.739	0.983	0.101	0.983	0.0	0.937	0.934	1.993	0.791	0.349
10	1.0	0.977	0.955	0.953	0.024	0.705	0.977	0.117	0.977	0.0	0.917	0.913	1.992	0.764	0.348
11	1.0	0.923	0.853	0.831	0.05	0.435	0.921	0.157	0.925	0.0	0.755	0.744	1.979	0.709	0.348
12	1.0	0.92	0.848	0.82	0.053	0.437	0.917	0.151	0.922	0.0	0.748	0.735	1.978	0.733	0.348
13	1.0	0.887	0.79	0.748	0.069	0.359	0.883	0.169	0.892	0.0	0.669	0.653	1.972	0.696	0.348
14	1.0	0.881	0.779	0.724	0.073	0.354	0.876	0.151	0.886	0.0	0.656	0.638	1.97	0.683	0.348
15	1.0	0.833	0.701	0.579	0.095	0.251	0.824	0.131	0.843	0.0	0.56	0.54	1.955	0.651	0.366
16	1.0	0.832	0.699	0.586	0.097	0.263	0.823	0.109	0.841	0.0	0.56	0.538	1.956	0.641	0.366
17	1.0	0.819	0.679	0.556	0.103	0.248	0.809	0.085	0.829	0.0	0.538	0.514	1.955	0.627	0.366
18	1.0	0.817	0.677	0.539	0.104	0.248	0.808	0.013	0.827	0.0	0.538	0.512	1.955	0.648	0.366
19	1.0	0.696	0.507	0.115	0.16	0.041	0.673	-0.135	0.721	0.0	0.365	0.34	1.935	0.628	0.366
20	1.0	0.608	0.402	-0.28	0.2	-0.089	0.573	-0.289	0.644	-0.0	0.274	0.251	1.898	0.608	0.366



Average values of 15 clustering indices gap: 0.90, Tp: 0.25, single link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.532	0.368
3	1.0	0.989	0.978	0.973	0.008	0.565	0.989	0.042	0.989	0.0	0.958	0.957	1.997	0.472	0.352
4	1.0	0.989	0.978	0.967	0.01	0.638	0.989	0.051	0.989	0.0	0.958	0.957	1.997	0.546	0.341
5	1.0	0.989	0.978	0.979	0.011	0.696	0.989	0.062	0.989	0.0	0.958	0.957	1.997	0.643	0.34
6	1.0	0.986	0.972	0.967	0.014	0.69	0.986	0.075	0.986	0.0	0.947	0.946	1.996	0.7	0.34
7	1.0	0.986	0.972	0.972	0.015	0.724	0.986	0.083	0.986	0.0	0.947	0.946	1.995	0.743	0.339
8	1.0	0.986	0.972	0.967	0.017	0.749	0.986	0.086	0.986	0.0	0.947	0.945	1.994	0.774	0.339
9	1.0	0.983	0.966	0.963	0.019	0.737	0.983	0.099	0.983	0.0	0.937	0.934	1.994	0.794	0.339
10	1.0	0.977	0.955	0.95	0.024	0.704	0.977	0.112	0.977	0.0	0.917	0.913	1.992	0.766	0.338
11	1.0	0.923	0.854	0.83	0.05	0.433	0.921	0.156	0.926	0.0	0.755	0.744	1.98	0.714	0.337
12	1.0	0.92	0.847	0.831	0.053	0.443	0.917	0.162	0.922	0.0	0.748	0.735	1.98	0.737	0.337
13	1.0	0.887	0.79	0.733	0.069	0.355	0.883	0.153	0.892	0.0	0.669	0.653	1.974	0.701	0.337
14	1.0	0.881	0.779	0.73	0.073	0.356	0.876	0.159	0.886	0.0	0.656	0.638	1.973	0.688	0.337
15	1.0	0.833	0.701	0.598	0.095	0.258	0.824	0.153	0.843	0.0	0.56	0.54	1.959	0.658	0.361
16	1.0	0.832	0.699	0.581	0.096	0.26	0.823	0.1	0.841	0.0	0.56	0.538	1.959	0.649	0.361
17	1.0	0.819	0.679	0.555	0.103	0.248	0.809	0.079	0.829	0.0	0.538	0.514	1.958	0.635	0.361
18	1.0	0.817	0.677	0.545	0.104	0.25	0.808	0.022	0.827	0.0	0.538	0.512	1.958	0.656	0.361
19	1.0	0.696	0.506	0.127	0.161	0.045	0.672	-0.114	0.721	0.0	0.365	0.339	1.94	0.637	0.361
20	1.0	0.607	0.401	-0.273	0.201	-0.087	0.573	-0.273	0.644	-0.0	0.274	0.251	1.905	0.617	0.361
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Average values of 15 clustering indices gap: 1.00, Tp: 0.25, single link

		FM	l l	Avv	٧٥	П	Г	VI	N	PIII	KI	33	CVNN)	Dunn
2	1.0	1.0	1.0	1.0	0.001	1.0	1.0	0.008	1.0	0.0	1.0	1.0	2.0	0.527	0.357
3	1.0	0.989	0.978	0.979	0.008	0.565	0.989	0.042	0.989	0.0	0.958	0.957	1.997	0.467	0.347
4	1.0	0.989	0.978	0.98	0.01	0.645	0.989	0.053	0.989	0.0	0.958	0.957	1.997	0.546	0.332
5	1.0	0.989	0.978	0.977	0.011	0.695	0.989	0.062	0.989	0.0	0.958	0.957	1.997	0.647	0.331
6	1.0	0.986	0.972	0.973	0.014	0.692	0.986	0.076	0.986	0.0	0.947	0.946	1.996	0.703	0.33
7	1.0	0.986	0.972	0.973	0.015	0.725	0.986	0.083	0.986	0.0	0.947	0.946	1.995	0.745	0.33
8	1.0	0.986	0.972	0.97	0.016	0.748	0.986	0.086	0.986	0.0	0.947	0.945	1.995	0.776	0.33
9	1.0	0.983	0.966	0.963	0.019	0.738	0.983	0.1	0.983	0.0	0.937	0.934	1.994	0.796	0.329
10	1.0	0.977	0.955	0.948	0.023	0.702	0.977	0.111	0.977	0.0	0.917	0.913	1.993	0.768	0.328
11	1.0	0.923	0.853	0.831	0.05	0.434	0.921	0.156	0.925	0.0	0.755	0.744	1.982	0.718	0.328
12	1.0	0.92	0.847	0.831	0.053	0.444	0.917	0.163	0.922	0.0	0.748	0.735	1.981	0.74	0.328
13	1.0	0.887	0.79	0.744	0.069	0.358	0.883	0.163	0.892	0.0	0.669	0.653	1.976	0.706	0.328
14	1.0	0.881	0.779	0.726	0.073	0.356	0.876	0.151	0.886	0.0	0.656	0.638	1.975	0.692	0.328
15	1.0	0.833	0.701	0.586	0.095	0.254	0.824	0.137	0.843	0.0	0.56	0.54	1.962	0.664	0.354
16	1.0	0.832	0.699	0.587	0.096	0.263	0.823	0.104	0.841	0.0	0.56	0.538	1.962	0.656	0.354
17	1.0	0.819	0.679	0.542	0.103	0.242	0.809	0.059	0.829	0.0	0.538	0.514	1.961	0.643	0.354
18	1.0	0.817	0.677	0.539	0.104	0.249	0.808	0.009	0.827	0.0	0.538	0.512	1.961	0.663	0.354
19	1.0	0.697	0.507	0.121	0.16	0.042	0.673	-0.114	0.721	0.0	0.365	0.34	1.945	0.645	0.354
20	1.0	0.608	0.402	-0.289	0.2	-0.092	0.574	-0.303	0.644	-0.0	0.274	0.252	1.911	0.626	0.354