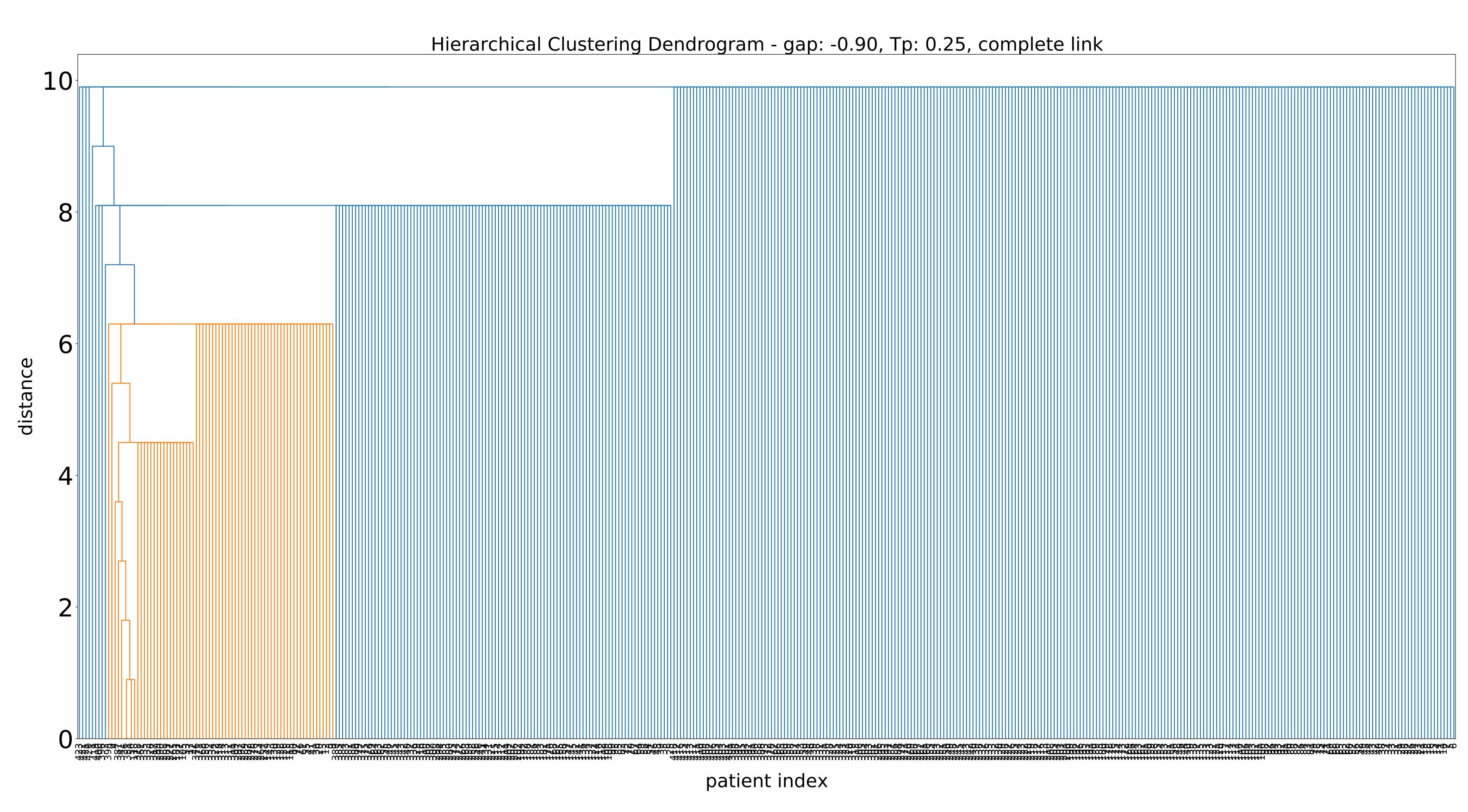
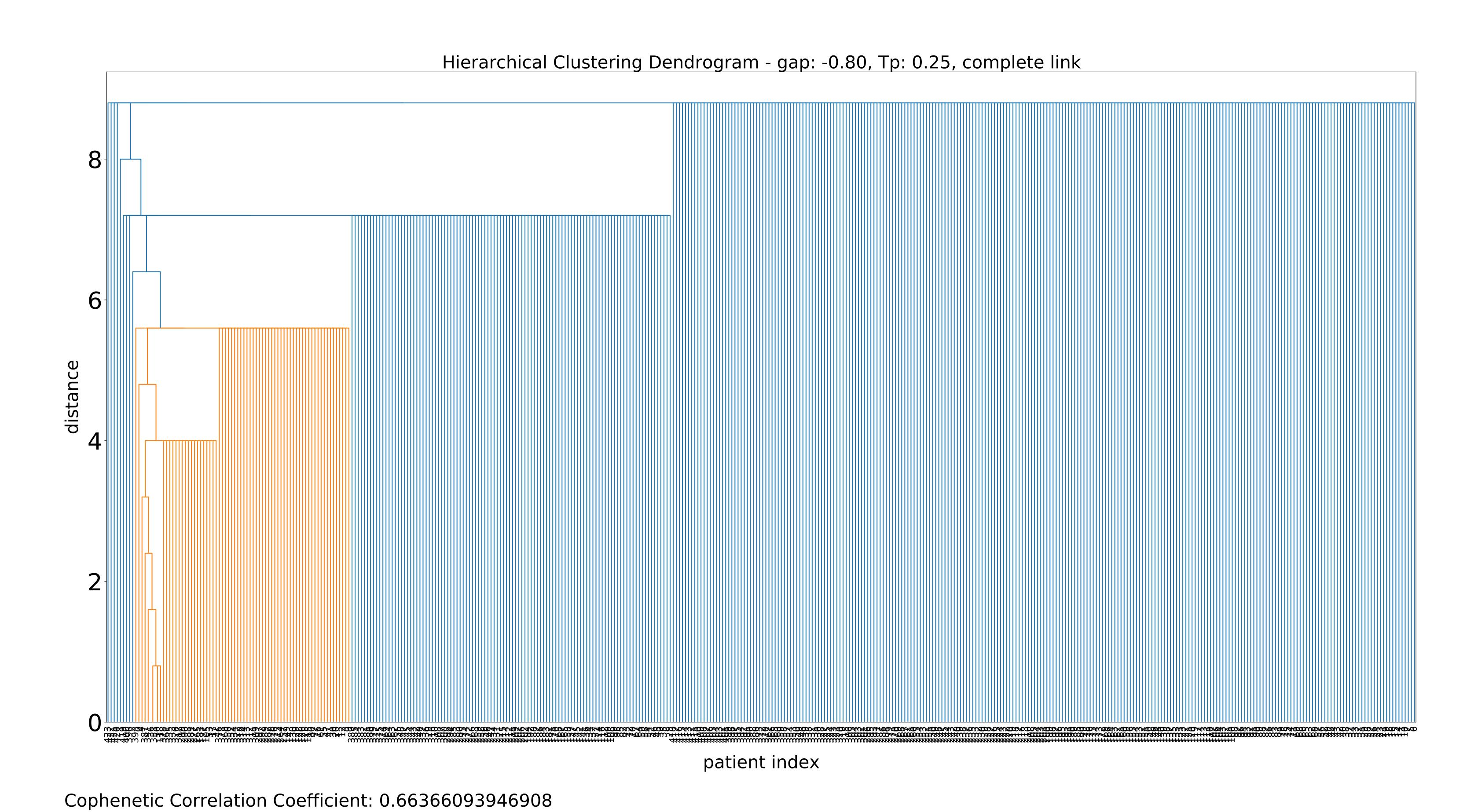


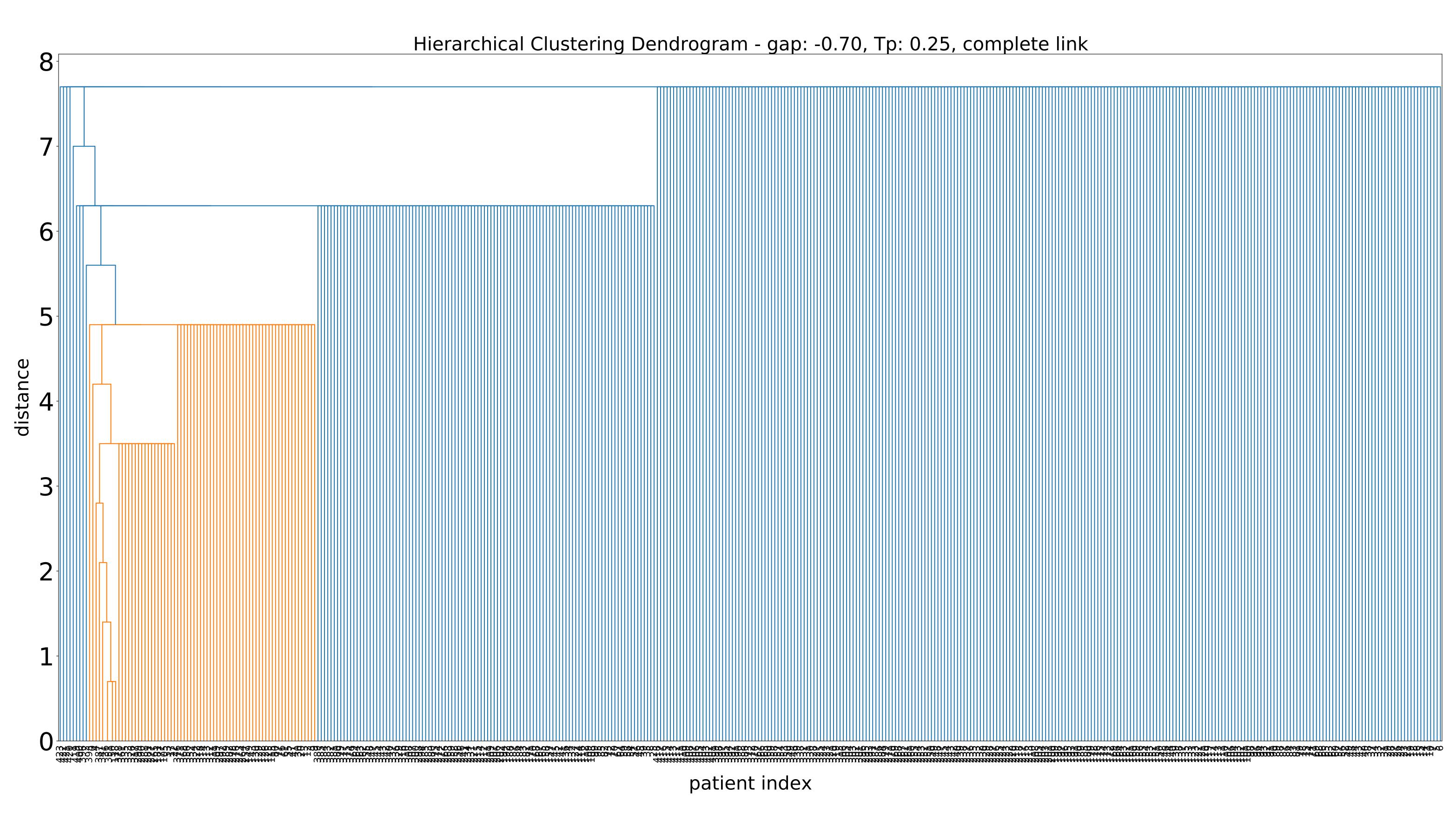
k	AR	FM	J	AW	VD	H	F	VI	Κ	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.006	1.0	1.0	0.029	1.0	0.0	1.0	1.0	1.978	0.533	0.455
3	1.0	1.0	1.0	1.0	0.013	1.0	1.0	0.061	1.0	0.0	1.0	1.0	1.978	0.689	0.455
4	1.0	1.0	1.0	1.0	0.019	1.0	1.0	0.088	1.0	0.0	1.0	1.0	1.978	0.767	0.455
5	1.0	1.0	1.0	1.0	0.026	1.0	1.0	0.12	1.0	0.0	1.0	1.0	1.977	0.813	0.455
6	1.0	0.668	0.475	0.024	0.244	0.009	0.644	0.407	0.693	0.0	0.341	0.311	2.0	0.671	0.455
7	1.0	0.66	0.469	0.019	0.248	0.008	0.638	0.419	0.682	0.0	0.341	0.306	1.999	0.718	0.455
8	1.0	0.651	0.461	0.022	0.254	0.01	0.631	0.428	0.67	0.0	0.341	0.3	1.999	0.753	0.455
9	1.0	0.641	0.454	0.024	0.261	0.012	0.624	0.434	0.659	0.0	0.341	0.294	1.998	0.781	0.455
10	1.0	0.632	0.446	0.025	0.267	0.014	0.617	0.441	0.647	0.0	0.341	0.287	1.998	0.803	0.455
11	1.0	0.623	0.439	0.026	0.273	0.015	0.61	0.441	0.636	0.0	0.341	0.282	1.997	0.821	0.455
12	1.0	0.614	0.432	0.024	0.278	0.014	0.603	0.446	0.625	0.0	0.341	0.276	1.996	0.836	0.455
13	1.0	0.605	0.425	0.022	0.284	0.014	0.596	0.433	0.615	0.0	0.341	0.27	1.996	0.848	0.455
14	1.0	0.595	0.417	0.022	0.29	0.015	0.588	0.424	0.603	0.0	0.341	0.263	1.995	0.859	0.455
15	1.0	0.587	0.409	0.021	0.296	0.015	0.581	0.417	0.593	0.0	0.341	0.257	1.994	0.868	0.455
16	1.0	0.577	0.401	0.021	0.302	0.016	0.572	0.415	0.582	0.0	0.341	0.251	1.994	0.877	0.455
17	1.0	0.57	0.395	0.02	0.306	0.015	0.566	0.388	0.573	0.0	0.341	0.246	1.993	0.884	0.455
18	1.0	0.559	0.385	0.02	0.313	0.016	0.556	0.369	0.562	0.0	0.341	0.239	1.992	0.89	0.455
19	1.0	0.552	0.379	0.019	0.317	0.016	0.55	0.343	0.554	0.0	0.341	0.234	1.992	0.896	0.455
20	1.0	0.542	0.37	0.018	0.324	0.016	0.54	0.327	0.543	0.0	0.341	0.227	1.991	0.901	0.455



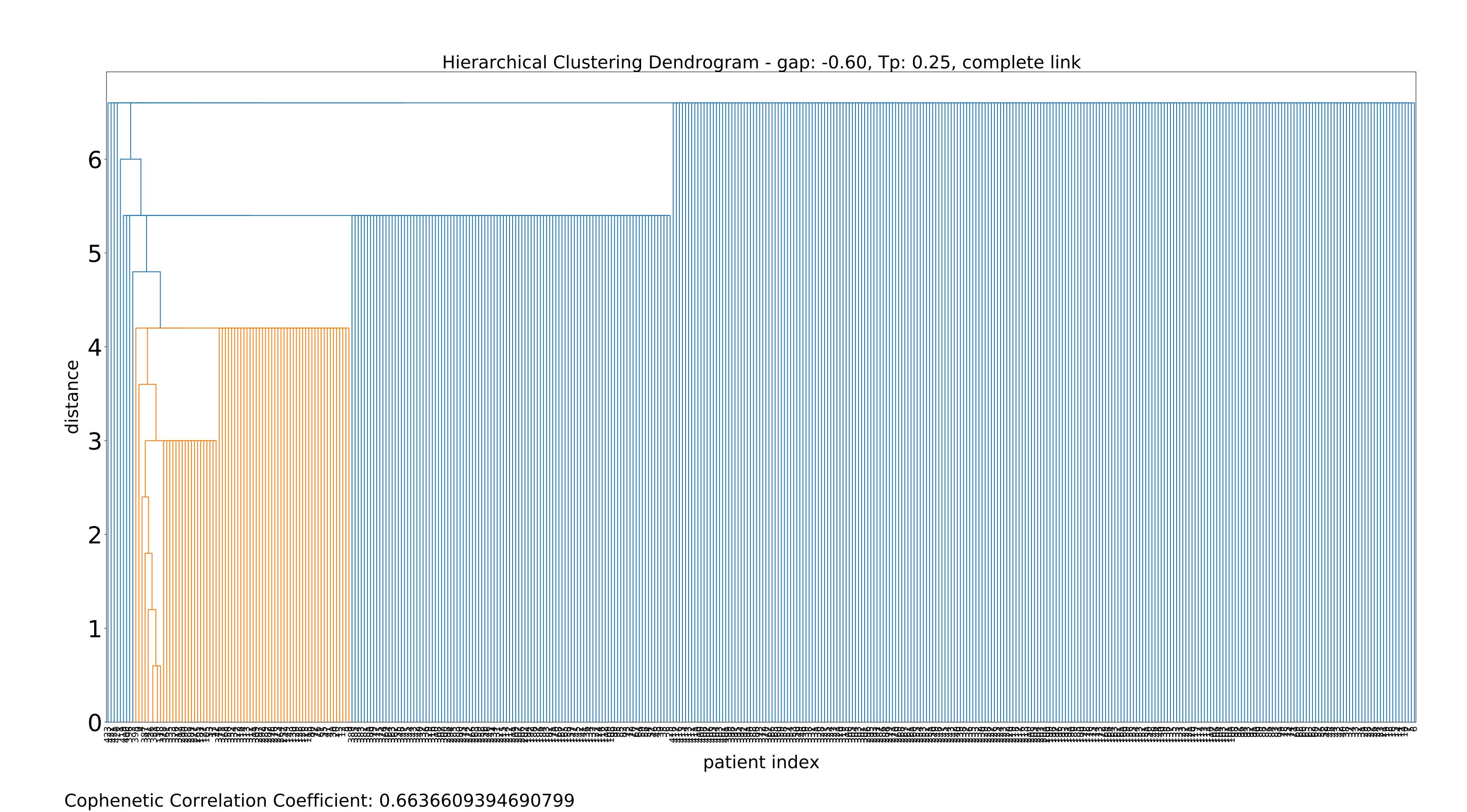
k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.007	1.0	1.0	0.031	1.0	0.0	1.0	1.0	1.978	0.533	0.455
3	1.0	1.0	1.0	1.0	0.013	1.0	1.0	0.059	1.0	0.0	1.0	1.0	1.978	0.689	0.455
4	1.0	1.0	1.0	1.0	0.019	1.0	1.0	0.088	1.0	0.0	1.0	1.0	1.978	0.767	0.455
5	1.0	1.0	1.0	1.0	0.026	1.0	1.0	0.119	1.0	0.0	1.0	1.0	1.977	0.813	0.455
6	1.0	0.667	0.474	0.021	0.244	0.008	0.643	0.412	0.692	0.0	0.341	0.311	2.0	0.671	0.455
7	1.0	0.66	0.469	0.021	0.249	0.009	0.638	0.422	0.682	0.0	0.341	0.306	1.999	0.718	0.455
8	1.0	0.65	0.461	0.023	0.255	0.011	0.631	0.432	0.67	0.0	0.341	0.299	1.999	0.753	0.455
9	1.0	0.642	0.454	0.024	0.26	0.012	0.625	0.437	0.659	0.0	0.341	0.294	1.998	0.781	0.455
10	1.0	0.632	0.447	0.025	0.267	0.014	0.617	0.444	0.647	0.0	0.341	0.288	1.998	0.803	0.455
11	1.0	0.623	0.44	0.024	0.273	0.014	0.611	0.449	0.636	0.0	0.341	0.282	1.997	0.821	0.455
12	1.0	0.614	0.432	0.024	0.279	0.015	0.603	0.439	0.625	0.0	0.341	0.275	1.996	0.836	0.455
13	1.0	0.605	0.425	0.023	0.284	0.015	0.596	0.429	0.614	0.0	0.341	0.269	1.996	0.848	0.455
14	1.0	0.595	0.416	0.022	0.291	0.015	0.588	0.437	0.603	0.0	0.341	0.263	1.995	0.859	0.455
15	1.0	0.586	0.409	0.021	0.296	0.015	0.581	0.419	0.592	0.0	0.341	0.257	1.994	0.868	0.455
16	1.0	0.578	0.402	0.021	0.302	0.015	0.573	0.415	0.583	0.0	0.341	0.251	1.994	0.877	0.455
17	1.0	0.569	0.394	0.02	0.307	0.016	0.566	0.386	0.573	0.0	0.341	0.246	1.993	0.884	0.455
18	1.0	0.56	0.386	0.02	0.313	0.016	0.557	0.374	0.562	0.0	0.341	0.239	1.992	0.89	0.455
19	1.0	0.55	0.378	0.019	0.319	0.016	0.548	0.352	0.552	0.0	0.341	0.233	1.992	0.896	0.455
20	1.0	0.542	0.37	0.018	0.324	0.016	0.54	0.314	0.543	0.0	0.341	0.227	1.991	0.901	0.455



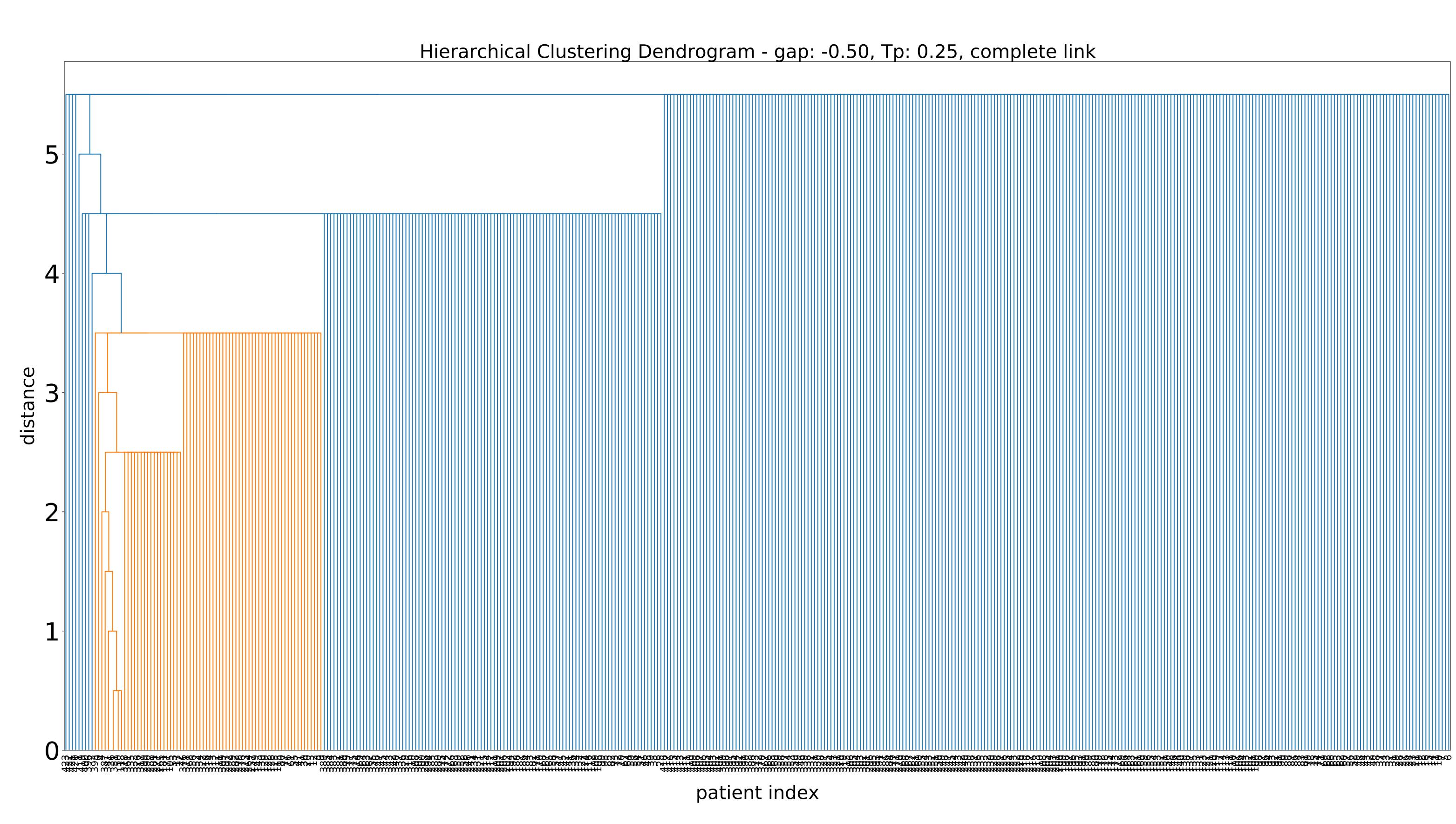
k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.006	1.0	1.0	0.029	1.0	0.0	1.0	1.0	1.978	0.533	0.455
3	1.0	1.0	1.0	1.0	0.013	1.0	1.0	0.059	1.0	0.0	1.0	1.0	1.978	0.689	0.455
4	1.0	1.0	1.0	1.0	0.02	1.0	1.0	0.09	1.0	0.0	1.0	1.0	1.978	0.767	0.455
5	1.0	1.0	1.0	1.0	0.026	1.0	1.0	0.12	1.0	0.0	1.0	1.0	1.977	0.813	0.455
6	1.0	0.668	0.475	0.021	0.243	0.008	0.644	0.407	0.693	0.0	0.341	0.311	2.0	0.671	0.455
7	1.0	0.659	0.468	0.02	0.249	0.008	0.638	0.422	0.681	0.0	0.341	0.306	1.999	0.718	0.455
8	1.0	0.65	0.461	0.025	0.256	0.012	0.631	0.434	0.669	0.0	0.341	0.299	1.999	0.753	0.455
9	1.0	0.641	0.454	0.024	0.261	0.012	0.624	0.433	0.659	0.0	0.341	0.294	1.998	0.781	0.455
10	1.0	0.632	0.447	0.025	0.267	0.014	0.617	0.441	0.647	0.0	0.341	0.288	1.998	0.803	0.455
11	1.0	0.623	0.439	0.024	0.272	0.014	0.61	0.436	0.636	0.0	0.341	0.282	1.997	0.821	0.455
12	1.0	0.613	0.431	0.023	0.279	0.014	0.603	0.443	0.624	0.0	0.341	0.275	1.996	0.836	0.455
13	1.0	0.606	0.425	0.023	0.283	0.014	0.596	0.425	0.615	0.0	0.341	0.27	1.996	0.848	0.455
14	1.0	0.596	0.417	0.022	0.29	0.015	0.588	0.429	0.604	0.0	0.341	0.263	1.995	0.859	0.455
15	1.0	0.586	0.409	0.021	0.296	0.015	0.58	0.43	0.592	0.0	0.341	0.257	1.994	0.868	0.455
16	1.0	0.58	0.403	0.021	0.3	0.015	0.575	0.398	0.585	0.0	0.341	0.253	1.994	0.877	0.455
17	1.0	0.568	0.394	0.02	0.307	0.016	0.565	0.398	0.572	0.0	0.341	0.245	1.993	0.884	0.455
18	1.0	0.56	0.387	0.02	0.313	0.016	0.558	0.372	0.563	0.0	0.341	0.24	1.992	0.89	0.455
19	1.0	0.551	0.378	0.019	0.318	0.016	0.549	0.345	0.552	0.0	0.341	0.233	1.992	0.896	0.455
20	1.0	0.542	0.371	0.019	0.324	0.016	0.541	0.336	0.543	0.0	0.341	0.228	1.991	0.901	0.455



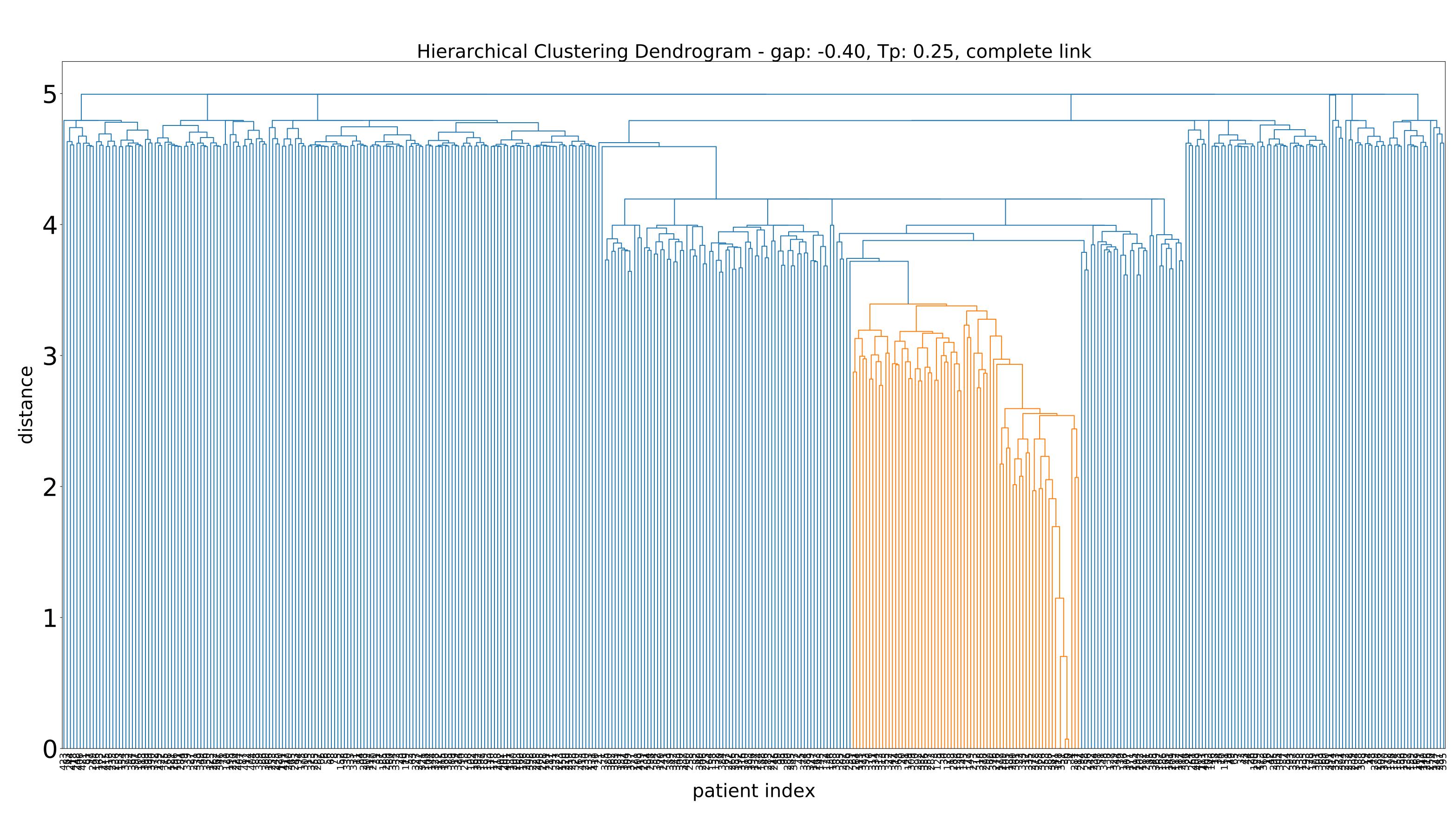
k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.006	1.0	1.0	0.03	1.0	0.0	1.0	1.0	1.978	0.533	0.455
3	1.0	1.0	1.0	1.0	0.013	1.0	1.0	0.06	1.0	0.0	1.0	1.0	1.978	0.689	0.455
4	1.0	1.0	1.0	1.0	0.019	1.0	1.0	0.088	1.0	0.0	1.0	1.0	1.978	0.767	0.455
5	1.0	1.0	1.0	1.0	0.026	1.0	1.0	0.12	1.0	0.0	1.0	1.0	1.977	0.813	0.455
6	1.0	0.668	0.475	0.022	0.243	0.008	0.644	0.405	0.693	0.0	0.341	0.312	2.0	0.671	0.455
7	1.0	0.66	0.469	0.019	0.248	0.008	0.638	0.421	0.682	0.0	0.341	0.306	1.999	0.718	0.455
8	1.0	0.65	0.461	0.023	0.255	0.011	0.631	0.427	0.67	0.0	0.341	0.3	1.999	0.753	0.455
9	1.0	0.642	0.454	0.025	0.261	0.013	0.625	0.435	0.659	0.0	0.341	0.294	1.998	0.781	0.455
10	1.0	0.633	0.447	0.026	0.267	0.014	0.618	0.439	0.648	0.0	0.341	0.288	1.998	0.803	0.455
11	1.0	0.623	0.439	0.026	0.273	0.015	0.61	0.443	0.636	0.0	0.341	0.281	1.997	0.821	0.455
12	1.0	0.614	0.432	0.023	0.278	0.014	0.603	0.441	0.624	0.0	0.341	0.275	1.996	0.836	0.455
13	1.0	0.606	0.425	0.022	0.283	0.014	0.597	0.44	0.615	0.0	0.341	0.27	1.996	0.848	0.455
14	1.0	0.596	0.417	0.022	0.29	0.015	0.589	0.434	0.604	0.0	0.341	0.264	1.995	0.859	0.455
15	1.0	0.588	0.41	0.022	0.295	0.015	0.582	0.423	0.594	0.0	0.341	0.258	1.994	0.868	0.455
16	1.0	0.576	0.4	0.02	0.302	0.015	0.572	0.412	0.581	0.0	0.341	0.25	1.994	0.877	0.455
17	1.0	0.57	0.395	0.02	0.306	0.016	0.566	0.397	0.573	0.0	0.341	0.246	1.993	0.884	0.455
18	1.0	0.56	0.386	0.02	0.313	0.016	0.557	0.374	0.562	0.0	0.341	0.239	1.992	0.89	0.455
19	1.0	0.551	0.378	0.02	0.319	0.016	0.549	0.353	0.553	0.0	0.341	0.233	1.992	0.896	0.455
20	1.0	0.543	0.371	0.018	0.323	0.016	0.541	0.315	0.544	0.0	0.341	0.228	1.991	0.901	0.455



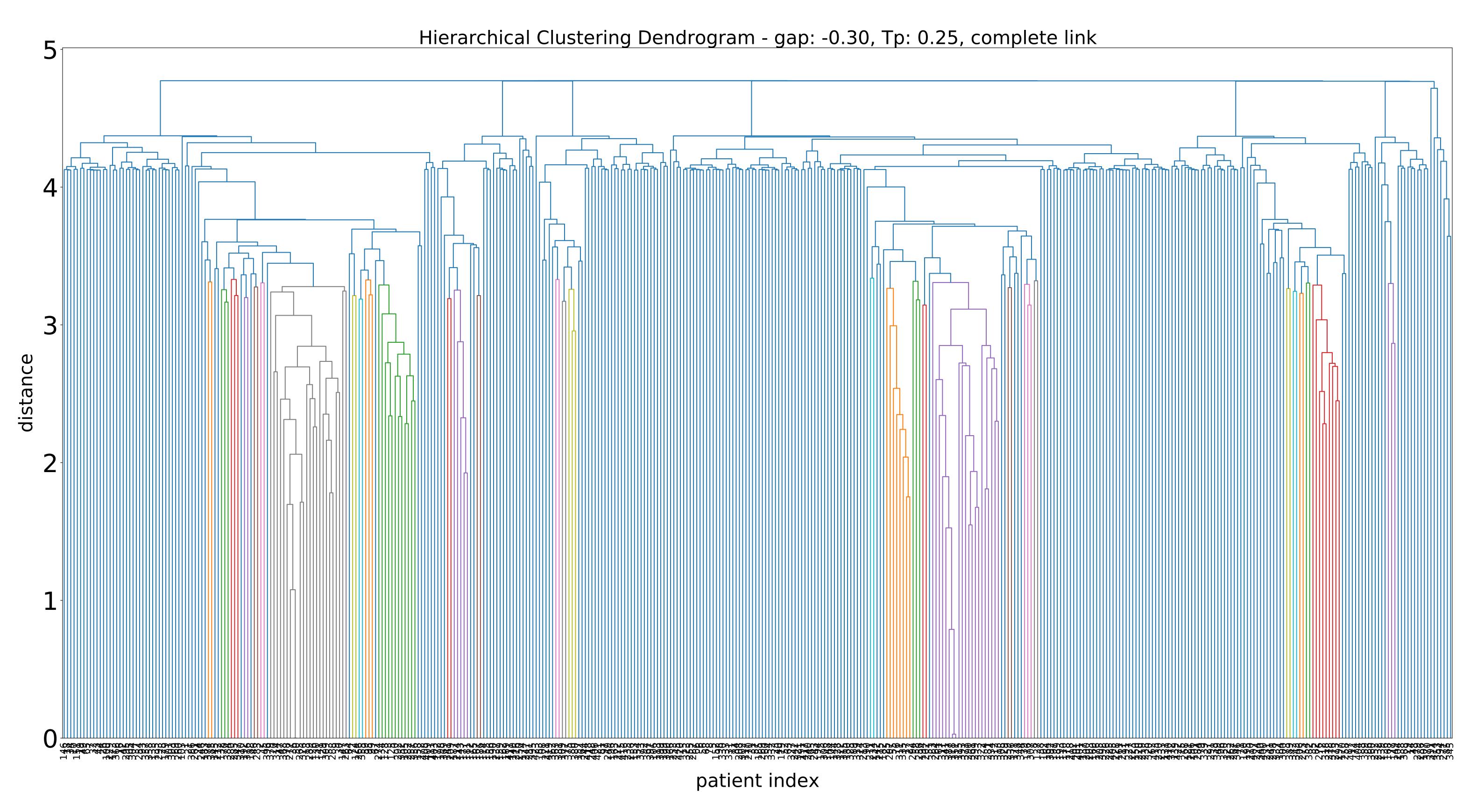
k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	1.0	1.0	1.0	0.006	1.0	1.0	0.03	1.0	0.0	1.0	1.0	1.978	0.533	0.455
3	1.0	1.0	1.0	1.0	0.013	1.0	1.0	0.06	1.0	0.0	1.0	1.0	1.978	0.689	0.455
4	1.0	1.0	1.0	1.0	0.02	1.0	1.0	0.09	1.0	0.0	1.0	1.0	1.978	0.767	0.455
5	1.0	1.0	1.0	1.0	0.026	1.0	1.0	0.119	1.0	0.0	1.0	1.0	1.977	0.813	0.455
6	1.0	0.669	0.475	0.022	0.243	0.008	0.644	0.405	0.694	0.0	0.341	0.312	2.0	0.671	0.455
7	1.0	0.659	0.468	0.019	0.248	0.008	0.638	0.418	0.682	0.0	0.341	0.306	1.999	0.718	0.455
8	1.0	0.65	0.461	0.024	0.255	0.011	0.631	0.434	0.67	0.0	0.341	0.3	1.999	0.753	0.455
9	1.0	0.642	0.454	0.024	0.26	0.012	0.625	0.431	0.659	0.0	0.341	0.294	1.998	0.781	0.455
10	1.0	0.632	0.446	0.026	0.268	0.014	0.617	0.45	0.647	0.0	0.341	0.287	1.998	0.803	0.455
11	1.0	0.622	0.438	0.025	0.274	0.015	0.609	0.449	0.635	0.0	0.341	0.281	1.997	0.821	0.455
12	1.0	0.615	0.432	0.023	0.278	0.014	0.604	0.438	0.626	0.0	0.341	0.276	1.996	0.836	0.455
13	1.0	0.605	0.424	0.023	0.284	0.015	0.596	0.435	0.614	0.0	0.341	0.269	1.996	0.848	0.455
14	1.0	0.596	0.417	0.022	0.291	0.015	0.588	0.439	0.603	0.0	0.341	0.263	1.995	0.859	0.455
15	1.0	0.587	0.409	0.022	0.296	0.015	0.581	0.429	0.593	0.0	0.341	0.257	1.994	0.868	0.455
16	1.0	0.578	0.402	0.021	0.301	0.015	0.574	0.401	0.583	0.0	0.341	0.252	1.994	0.877	0.455
17	1.0	0.569	0.394	0.02	0.307	0.015	0.565	0.403	0.572	0.0	0.341	0.245	1.993	0.884	0.455
18	1.0	0.56	0.386	0.02	0.312	0.016	0.557	0.352	0.563	0.0	0.341	0.24	1.992	0.89	0.455
19	1.0	0.551	0.379	0.019	0.318	0.016	0.549	0.353	0.553	0.0	0.341	0.234	1.992	0.896	0.455
20	1.0	0.541	0.37	0.018	0.324	0.016	0.54	0.334	0.543	0.0	0.341	0.227	1.991	0.901	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	0.007	1.0	1.0	0.03	1.0	0.0	1.0	1.0	1.978	0.533	0.455
3	1.0	1.0	1.0	1.0	0.013	1.0	1.0	0.06	1.0	0.0	1.0	1.0	1.978	0.689	0.455
4	1.0	1.0	1.0	1.0	0.02	1.0	1.0	0.09	1.0	0.0	1.0	1.0	1.978	0.767	0.455
5	1.0	1.0	1.0	1.0	0.027	1.0	1.0	0.121	1.0	0.0	1.0	1.0	1.977	0.813	0.455
6	1.0	0.669	0.475	0.021	0.243	0.008	0.644	0.406	0.694	0.0	0.341	0.312	2.0	0.671	0.455
7	1.0	0.66	0.469	0.018	0.248	0.008	0.638	0.417	0.682	0.0	0.341	0.306	1.999	0.718	0.455
8	1.0	0.651	0.462	0.023	0.254	0.01	0.632	0.43	0.671	0.0	0.341	0.3	1.999	0.753	0.455
9	1.0	0.641	0.454	0.026	0.261	0.013	0.624	0.438	0.658	0.0	0.341	0.293	1.998	0.781	0.455
10	1.0	0.632	0.446	0.027	0.267	0.014	0.617	0.441	0.647	0.0	0.341	0.287	1.998	0.803	0.455
11	1.0	0.625	0.441	0.025	0.272	0.014	0.612	0.443	0.638	0.0	0.341	0.282	1.997	0.821	0.455
12	1.0	0.614	0.432	0.024	0.278	0.014	0.604	0.44	0.626	0.0	0.341	0.276	1.996	0.836	0.455
13	1.0	0.605	0.424	0.022	0.284	0.014	0.596	0.437	0.614	0.0	0.341	0.269	1.996	0.848	0.455
14	1.0	0.596	0.417	0.022	0.29	0.015	0.589	0.426	0.604	0.0	0.341	0.264	1.995	0.859	0.455
15	1.0	0.587	0.409	0.022	0.296	0.015	0.581	0.414	0.593	0.0	0.341	0.257	1.994	0.868	0.455
16	1.0	0.578	0.402	0.021	0.302	0.016	0.573	0.418	0.583	0.0	0.341	0.251	1.994	0.877	0.455
17	1.0	0.569	0.394	0.02	0.307	0.016	0.565	0.4	0.572	0.0	0.341	0.245	1.993	0.884	0.455
18	1.0	0.559	0.386	0.02	0.313	0.016	0.557	0.377	0.562	0.0	0.341	0.239	1.992	0.89	0.455
19	1.0	0.551	0.379	0.019	0.318	0.016	0.549	0.35	0.553	0.0	0.341	0.234	1.992	0.896	0.455
20	1.0	0.541	0.37	0.018	0.324	0.016	0.54	0.326	0.542	0.0	0.341	0.227	1.991	0.901	0.455

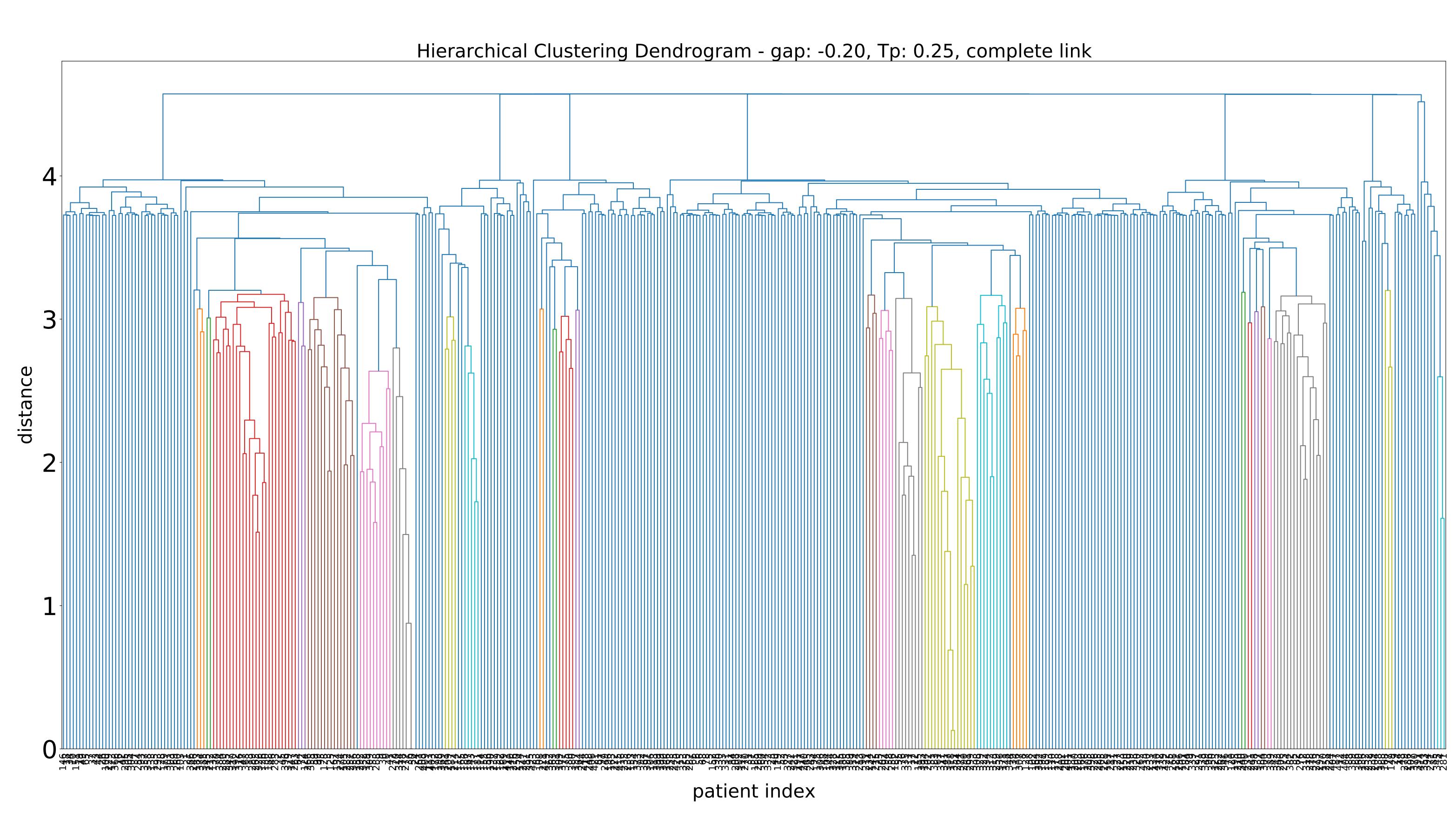


$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2	1.0	0.952								0.0			2.0		
5 1.0 0.503 0.315 -0.473 0.285 -0.21 0.479 0.699 0.527 -0.0 0.227 0.187 1.934 -0.037 0.44   6 1.0 0.499 0.3 -0.435 0.299 -0.224 0.462 0.716 0.497 -0.0 0.27 0.177 1.933 -0.045 0.44   7 1.0 0.456 0.285 -0.412 0.311 -0.241 0.444 0.734 0.468 -0.0 0.225 0.157 1.932 -0.045 0.44   8 1.0 0.434 0.277 -0.375 0.326 0.253 0.428 0.719 0.441 -0.0 0.225 0.157 1.932 -0.045 0.44   9 1.0 0.415 0.259 0.344 0.339 0.259 0.411 0.684 0.419 -0.0 0.225 0.149 1.931 0.189   11 1.0 0.372 0.229 0.295 0.367 -0.274 <th>3</th> <th>1.0</th> <th>0.86</th> <th></th> <th></th> <th></th> <th>0.0</th> <th></th> <th></th> <th></th> <th>0.0</th> <th></th> <th></th> <th></th> <th>0.008</th> <th></th>	3	1.0	0.86				0.0				0.0				0.008	
6	4	1.0				0.231					-0.0			1.954		0.44
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5	1.0		0.315		0.285					-0.0					0.44
8 1.0 0.434 0.272 -0.375 0.326 -0.253 0.428 0.719 0.441 -0.0 0.225 0.157 1.932 0.087 0.458   9 1.0 0.415 0.259 -0.344 0.339 0.259 0.411 0.684 0.441 -0.0 0.225 0.149 1.931 0.189 0.458   10 1.0 0.39 0.241 -0.319 0.355 -0.269 0.389 0.63 0.392 -0.0 0.222 0.137 1.93 0.164 0.458   11 1.0 0.372 0.229 -0.295 0.367 -0.274 0.372 0.55 0.373 -0.0 0.222 0.129 0.145 0.458   12 1.0 0.35 0.212 -0.276 0.381 -0.282 0.332 0.364 0.333 -0.0 0.219 0.119 1.926 0.129 0.458   13 1.0 0.333 0.199 -0.25 0.394 -0.282	6	1.0		0.3			-				-0.0		-			0.44
9 1.0 0.415 0.259 0.344 0.339 0.259 0.411 0.684 0.419 0.0 0.225 0.149 1.931 0.189 0.458 1.0 1.0 0.39 0.241 0.319 0.355 0.269 0.389 0.63 0.392 0.0 0.222 0.137 1.93 0.164 0.458 1.1 1.0 0.372 0.229 0.295 0.367 0.274 0.372 0.55 0.373 0.0 0.222 0.129 1.929 0.145 0.458 1.1 1.0 0.35 0.212 0.276 0.381 0.282 0.349 0.469 0.35 0.0 0.219 0.119 1.926 0.129 0.458 1.1 1.1 1.0 0.333 0.199 0.255 0.344 0.282 0.349 0.469 0.35 0.0 0.219 0.119 1.926 0.129 0.458 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.	7	1.0				0.311					-0.0					0.44
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	8	1.0				0.326					-0.0			1.932		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9	1.0				0.339					-0.0		0.149	1.931		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10	1.0	0.39								-0.0			1.55		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	11	1.0	0.372			0.367				0.373	-0.0					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	12	1.0	0.35			0.381					-0.0		0.119			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	13	1.0							0.364		-0.0			1.926		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	14	1.0				0.455			0.2		-0.0					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	15	1.0		0.119		0.468					-0.0					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	16	1.0		0.11		~					-0.0					
19 $1.0$ $0.151$ $0.074$ $-0.225$ $0.138$ $-1.261$ $0.138$ $0.138$ $0.138$ $0.138$ $0.138$ $0.138$	17	1.0									-0.0					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	18	1.0				0.51		0.15			-0.0					
	19	1.0									-0.0					0.458
20 $1.0$ $0.142$ $0.067$ $-0.203$ $0.159$ $-0.473$ $0.159$ $0.159$ $0.159$ $0.159$ $0.168$	20	1.0	0.142	0.067	-0.203	0.535	-0.473	0.126	-1.626	0.159	-0.0	0.133	0.035	1.884	0.199	0.458



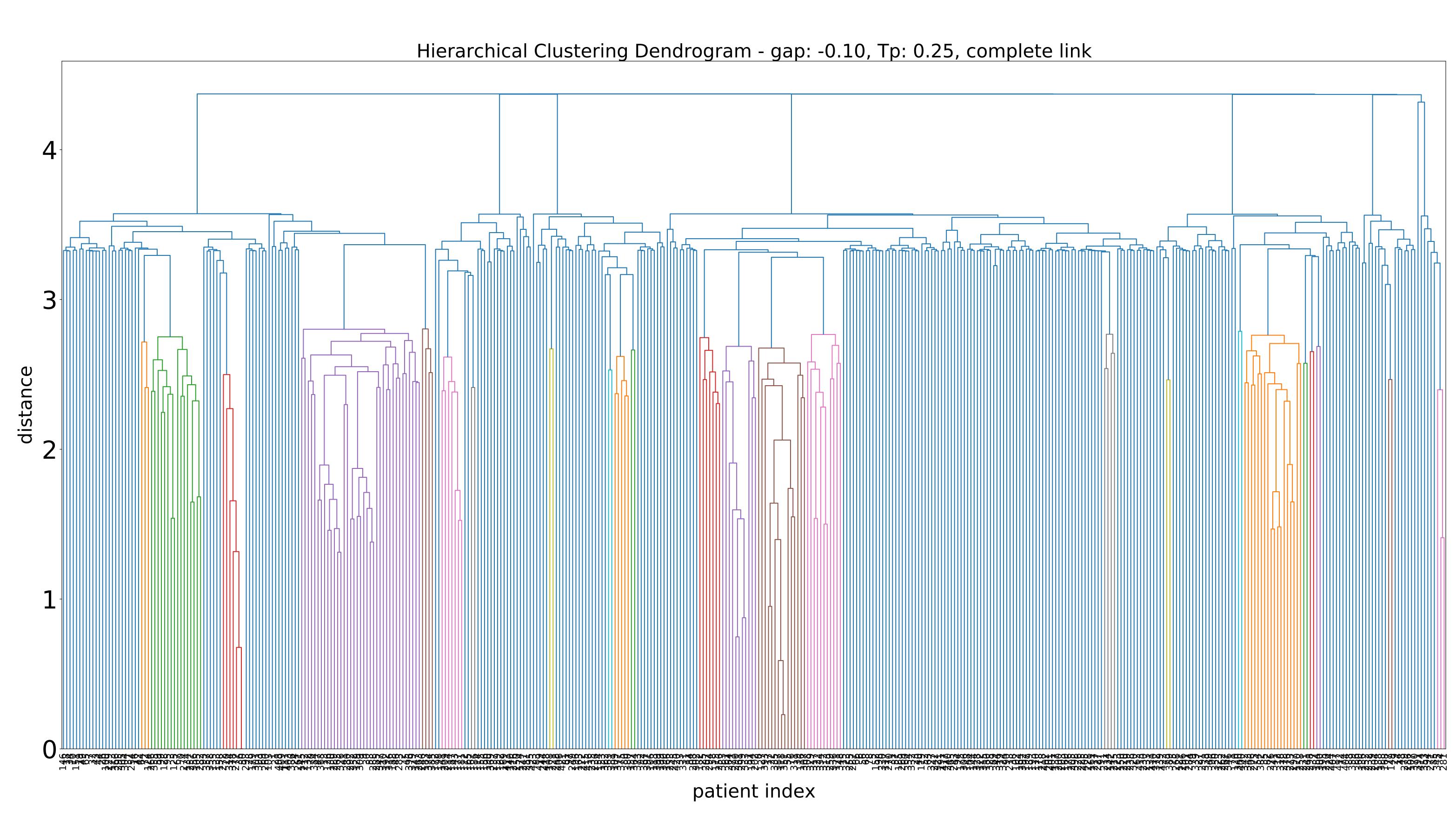
Cophenetic Correlation Coefficient: 0.4706882823180109

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	0.618	0.447	0.206	0.321	0.188	0.617	0.532	0.619	0.0	0.424	0.288	1.283	0.061	0.066
3	1.0	0.366	0.221	-0.1	0.475	-0.134	0.361	0.852	0.371	-0.0	0.275	0.124	1.825	0.047	0.066
4	1.0	0.192	0.099	-0.206	0.62	-0.4	0.179	1.122	0.207	-0.0	0.163	0.052	1.817	0.047	0.066
5	1.0	0.162	0.077	-0.165	0.648	-0.395	0.143	1.232	0.184	-0.0	0.157	0.04	1.899	0.058	0.066
6	1.0	0.135	0.059	-0.138	0.669	-0.398	0.112	1.318	0.164	-0.0	0.147	0.031	1.89	0.055	0.066
7	1.0	0.124	0.051	-0.115	0.683	-0.379	0.097	1.326	0.157	-0.0	0.146	0.026	1.924	0.055	0.067
8	1.0	0.114	0.045	-0.099	0.693	-0.36	0.086	1.301	0.153	-0.0	0.146	0.023	1.924	0.177	0.072
9	1.0	0.09	0.033	-0.095	0.705	-0.404	0.064	1.308	0.129	-0.0	0.123	0.017	1.924	0.125	0.072
10	1.0	0.082	0.028	-0.086	0.714	-0.399	0.055	1.219	0.123	-0.0	0.119	0.014	1.921	0.112	0.072
11	1.0	0.078	0.026	-0.077	0.72	-0.386	0.05	1.11	0.12	-0.0	0.119	0.013	1.921	0.193	0.072
12	1.0	0.073	0.023	-0.07	0.725	-0.373	0.046	0.944	0.118	-0.0	0.118	0.012	1.92	0.175	0.072
13	1.0	0.067	0.02	-0.065	0.726	-0.378	0.04	0.731	0.112	-0.0	0.112	0.01	1.917	0.16	0.072
14	1.0	0.064	0.019	-0.061	0.729	-0.368	0.037	0.495	0.111	-0.0	0.112	0.01	1.917	0.219	0.072
15	1.0	0.044	0.012	-0.062	0.771	-0.456	0.024	0.247	0.08	-0.0	0.079	0.006	1.898	0.201	0.072
16	1.0	0.042	0.011	-0.058	0.772	-0.445	0.022	-0.032	0.079	-0.0	0.079	0.006	1.898	0.251	0.072
17	1.0	0.04	0.01	-0.054	0.772	-0.436	0.021	-0.392	0.078	-0.0	0.079	0.005	1.898	0.236	0.072
18	1.0	0.039	0.01	-0.051	0.774	-0.425	0.019	-0.778	0.078	-0.0	0.079	0.005	1.897	0.279	0.072
19	1.0	0.037	0.009	-0.048	0.774	-0.421	0.018	-1.278	0.076	-0.0	0.077	0.005	1.894	0.263	0.072
20	1.0	0.036	0.009	-0.045	0.773	-0.412	0.017	-1.759	0.076	-0.0	0.077	0.004	1.894	0.301	0.072



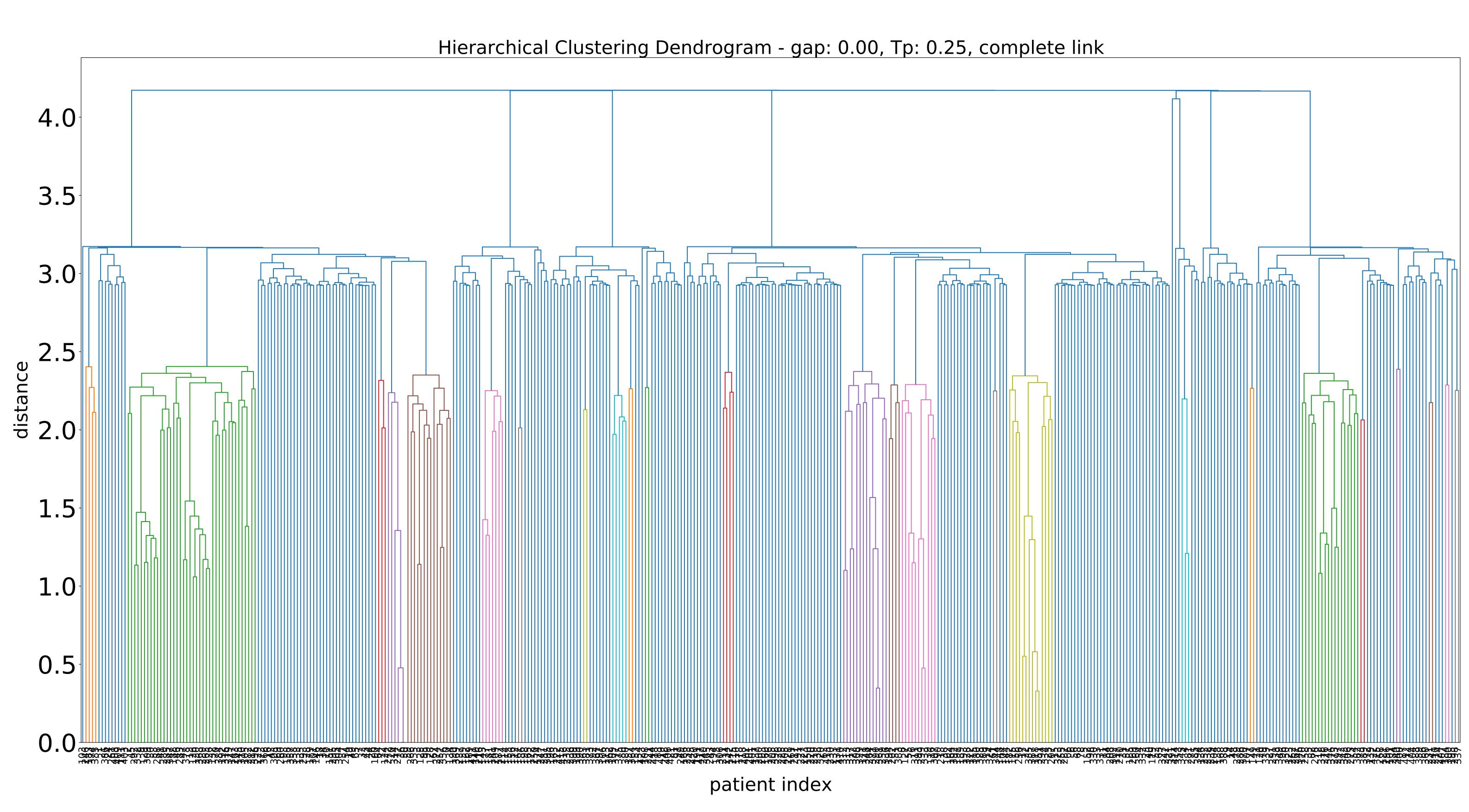
Cophenetic Correlation Coefficient: 0.5536209885632254

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2	1.0	0.62	0.449	0.207	0.319	0.187	0.619	0.53	0.621	0.0	0.424	0.29	1.103	0.087	0.091
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3	1.0	0.368				-0.133				-0.0			1.665		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4	1.0									-0.0					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	5	1.0									-0.0		0.04			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	6	1.0		0.059							-0.0			1.//9		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7	1.0			-0.117				1.326		-0.0			1.787		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	8	1.0			-0.1				1.3		-0.0			1.901		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9	1.0									-0.0			1.9		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10	1.0					-0.406				-0.0			1.897		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	11	1.0					-0.391				-0.0					
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	12	1.0									-0.0	0.116		1.896		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	13	1.0									-0.0			1.894		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	14	1.0									-0.0			1.894		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	15	1.0	0.043								-0.0					0.105
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	16	1.0		0.011			-0.451				-0.0			1.876		
19 $1.0$ $0.036$ $0.009$ $-0.048$ $0.775$ $-0.048$ $0.075$ $0.009$ $-0.048$ $0.075$ $0.009$	17	1.0		0.01		0.775					-0.0			1.876		
	18	1.0		0.01		0.776					-0.0			1.8/6		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	19	1.0									-0.0			1.873	0.232	
$\frac{1}{1}$	20	1.0	0.035	0.008	-0.046	0.775	-0.418	0.017	-1.749	0.074	-0.0	0.075	0.004	1.873	0.27	0.105



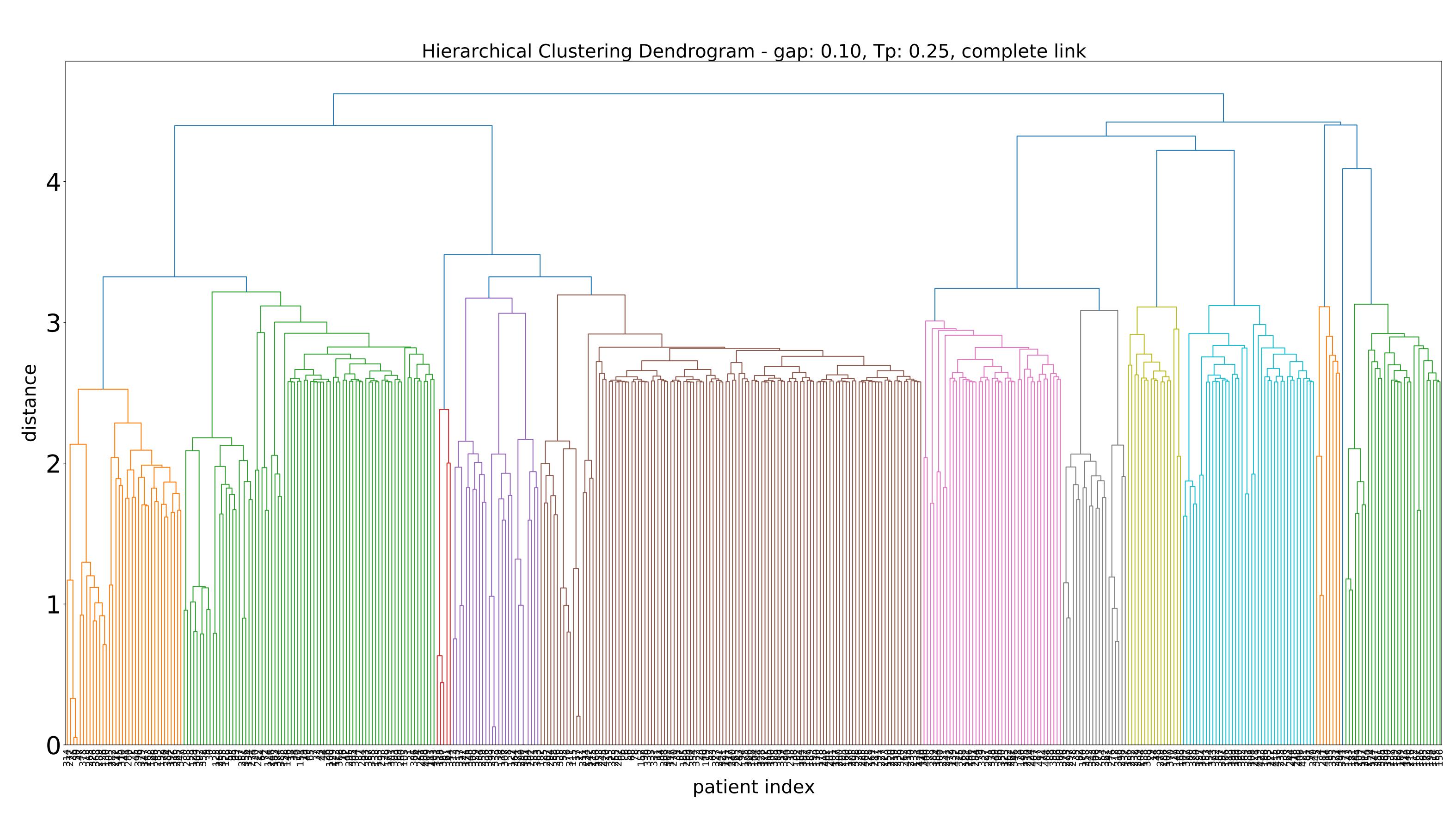
Cophenetic Correlation Coefficient: 0.6429182343820385

2	1 0	2 22 1					•	Y :	i Z	! !!!	• • • • • • • • • • • • • • • • • • • •	33	CVNN	9	Dunn
	1.0	0.621	0.45	0.208	0.318	0.187	0.62	0.529	0.623	0.0	0.424	0.291	1.048	0.115	0.118
3	1.0	0.367	0.222	-0.101	0.473	-0.133	0.362	0.851	0.373	-0.0	0.275	0.125	1.332	0.106	0.118
4	1.0	0.19	0.097	-0.209	0.624	-0.406	0.177	1.124	0.204	-0.0	0.161	0.051	1.29	0.109	0.118
5	1.0	0.16	0.075	-0.166	0.652	-0.4	0.14	1.234	0.181	-0.0	0.155	0.039	1.369	0.132	0.118
6	1.0	0.133	0.058	-0.14	0.671	-0.406	0.11	1.319	0.161	-0.0	0.144	0.03	1.583	0.129	0.118
7	1.0	0.121	0.05	-0.118	0.685	-0.388	0.095	1.326	0.154	-0.0	0.143	0.026	1.607	0.137	0.119
8	1.0	0.112	0.044	-0.101	0.696	-0.369	0.083	1.302	0.15	-0.0	0.143	0.022	1.873	0.249	0.144
9	1.0	0.087	0.032	-0.097	0.707	-0.418	0.061	1.306	0.124	-0.0	0.118	0.016	1.878	0.207	0.144
10	1.0	0.079	0.027	-0.088	0.718	-0.412	0.053	1.223	0.118	-0.0	0.115	0.014	1.875	0.185	0.144
11	1.0	0.075	0.025	-0.078	0.724	-0.397	0.048	1.107	0.117	-0.0	0.115	0.013	1.875	0.252	0.144
12	1.0	0.071	0.023	-0.071	0.728	-0.386	0.044	0.934	0.115	-0.0	0.114	0.011	1.875	0.224	0.144
13	1.0	0.064	0.019	-0.066	0.732	-0.39	0.038	0.74	0.108	-0.0	0.108	0.01	1.873	0.202	0.144
14	1.0	0.061	0.018	-0.061	0.733	-0.38	0.035	0.525	0.107	-0.0	0.107	0.009	1.873	0.259	0.144
15	1.0	0.038	0.01	-0.064	0.791	-0.496	0.02	0.276	0.07	-0.0	0.068	0.005	1.856	0.241	0.144
16	1.0	0.036	0.01	-0.06	0.791	-0.484	0.019	-0.037	0.069	-0.0	0.068	0.005	1.856	0.224	0.145
17	1.0	0.035	0.009	-0.056	0.791	-0.475	0.018	-0.378	0.068	-0.0	0.068	0.004	1.855	0.213	0.145
18	1.0	0.033	0.008	-0.053	0.792	-0.465	0.017	-0.748	0.068	-0.0	0.068	0.004	1.855	0.254	0.145
19	1.0	0.032	0.008	-0.049	0.792	-0.459	0.015	-1.257	0.066	-0.0	0.067	0.004	1.853	0.241	0.145
20	1.0	0.031	0.007	-0.047	0.791	-0.45	0.015	-1.749	0.066	-0.0	0.067	0.004	1.853	0.28	0.145



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

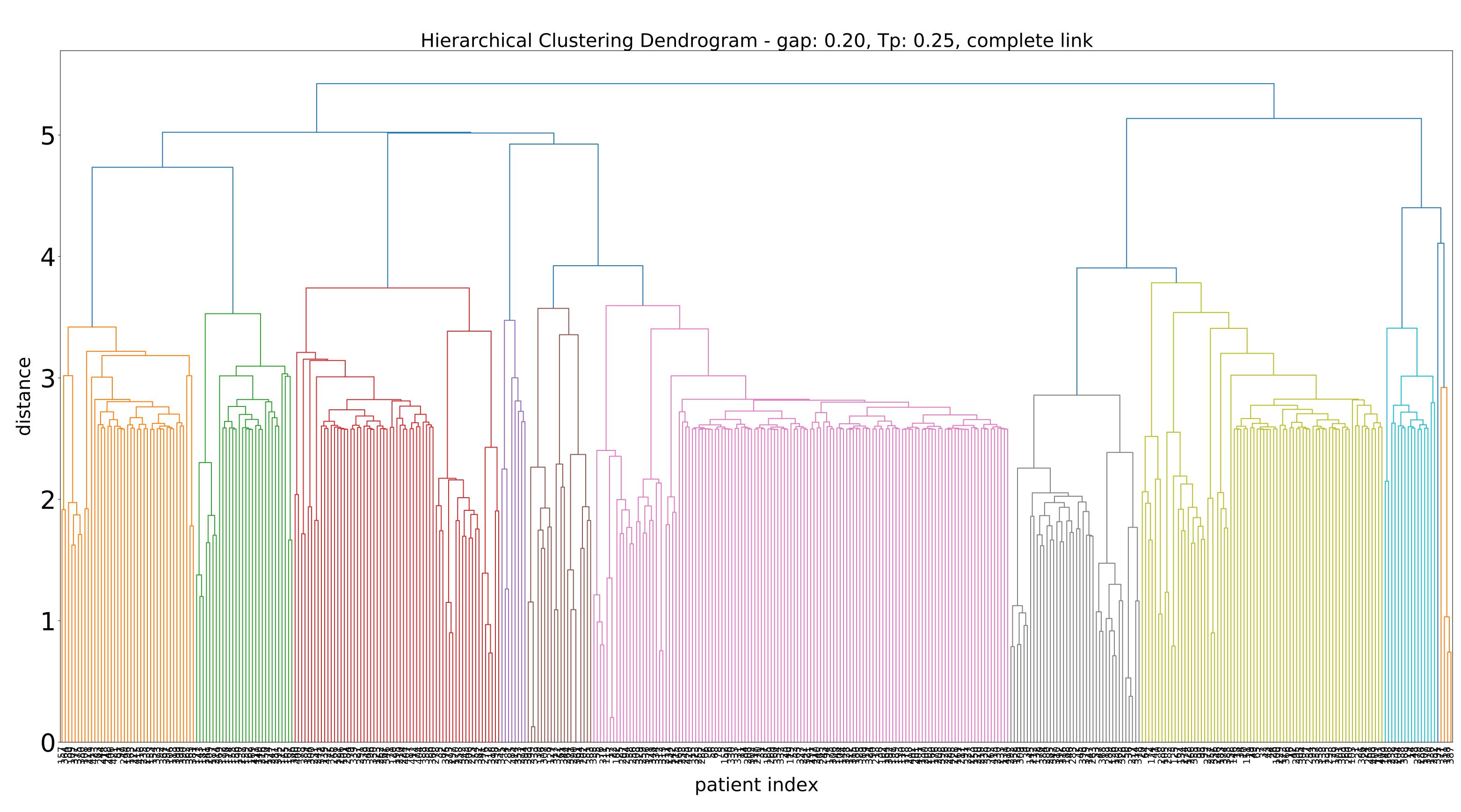
k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	0.616	0.445	0.205	0.326	0.188	0.615	0.534	0.617	0.0	0.424	0.286	1.016	0.144	0.123
3	1.0	0.366	0.221	-0.1	0.476	-0.133	0.361	0.852	0.372	-0.0	0.275	0.124	0.977	0.137	0.123
4	1.0	0.191	0.098	-0.21	0.622	-0.406	0.178	1.122	0.205	-0.0	0.161	0.051	0.955	0.139	0.123
5	1.0	0.16	0.076	-0.165	0.651	-0.4	0.141	1.234	0.182	-0.0	0.155	0.039	0.942	0.168	0.123
6	1.0	0.139	0.061	-0.135	0.672	-0.387	0.115	1.284	0.168	-0.0	0.151	0.032	1.078	0.164	0.123
7	1.0	0.121	0.05	-0.117	0.685	-0.388	0.095	1.328	0.154	-0.0	0.143	0.026	1.077	0.173	0.125
8	1.0	0.112	0.044	-0.101	0.695	-0.369	0.084	1.302	0.15	-0.0	0.143	0.022	1.842	0.281	0.162
9	1.0	0.104	0.038	-0.088	0.704	-0.355	0.074	1.253	0.146	-0.0	0.142	0.02	1.842	0.351	0.162
10	1.0	0.095	0.034	-0.08	0.712	-0.35	0.065	1.172	0.14	-0.0	0.138	0.017	1.84	0.309	0.162
11	1.0	0.089	0.03	-0.072	0.716	-0.34	0.058	1.057	0.137	-0.0	0.136	0.015	1.839	0.27	0.162
12	1.0	0.085	0.027	-0.065	0.719	-0.33	0.053	0.897	0.135	-0.0	0.136	0.014	1.839	0.239	0.162
13	1.0	0.08	0.025	-0.06	0.722	-0.321	0.049	0.745	0.132	-0.0	0.135	0.013	1.838	0.219	0.162
14	1.0	0.073	0.022	-0.057	0.725	-0.326	0.043	0.493	0.126	-0.0	0.128	0.011	1.836	0.203	0.162
15	1.0	0.068	0.019	-0.054	0.726	-0.329	0.038	0.211	0.12	-0.0	0.123	0.01	1.834	0.191	0.162
16	1.0	0.047	0.013	-0.056	0.761	-0.411	0.025	-0.073	0.089	-0.0	0.09	0.006	1.818	0.18	0.162
17	1.0	0.037	0.01	-0.055	0.776	-0.461	0.019	-0.499	0.072	-0.0	0.071	0.005	1.817	0.177	0.162
18	1.0	0.035	0.009	-0.052	0.778	-0.451	0.018	-0.887	0.071	-0.0	0.071	0.004	1.816	0.175	0.162
19	1.0	0.034	0.008	-0.049	0.779	-0.443	0.016	-1.305	0.071	-0.0	0.071	0.004	1.816	0.163	0.163
20	1.0	0.033	0.008	-0.046	0.779	-0.433	0.016	-1.803	0.07	-0.0	0.071	0.004	1.816	0.205	0.163
	•	-	•					•	•	-	·	•	•		



Cophenetic Correlation Coefficient: 0.7345821477507194

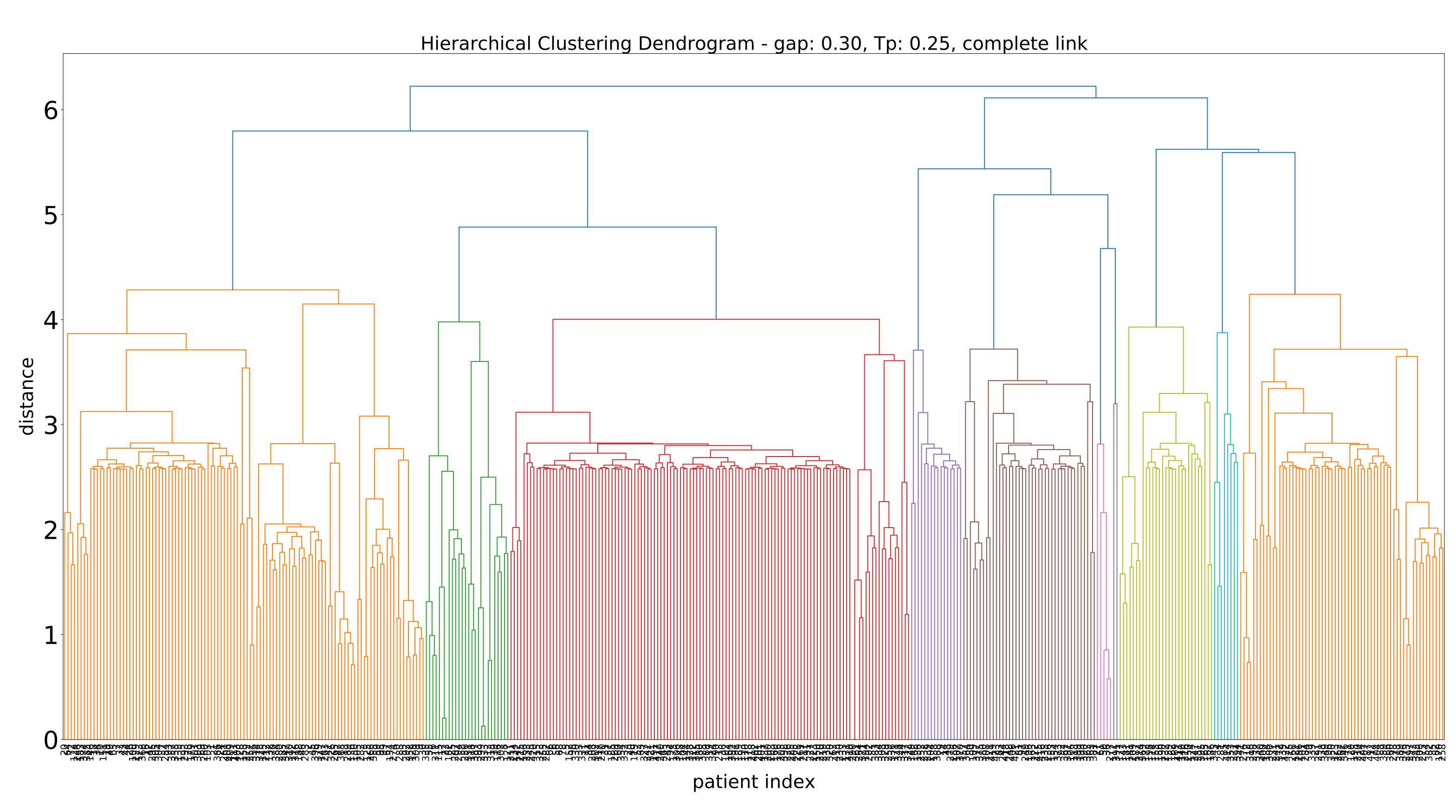
# Average values of 15 clustering indices gap: 0.10, Tp: 0.25, complete link

3	k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2	1.0	0.573	0.401	0.101	0.35	0.09	0.572	0.552	0.574	0.0	0.376	0.251		0.11	0.105
5 1.0 0.173 0.083 -0.154 0.551 -0.364 0.153 1.19 0.196 -0.0 0.168 0.043 0.948 0.195 0.108   6 1.0 0.135 0.06 -0.138 0.672 -0.399 0.113 1.295 0.164 -0.0 0.142 0.025 1.015 0.215 0.114   7 1.0 0.121 0.05 -0.117 0.686 -0.388 0.094 1.331 0.154 -0.0 0.143 0.025 1.215 0.215 0.114   8 1.0 0.112 0.043 -0.1 0.689 -0.389 0.083 1.306 0.15 -0.0 0.143 0.025 1.218 0.114   9 1.0 0.101 0.037 -0.089 0.708 -0.256 0.071 1.259 0.142 -0.0 0.138 0.019 1.343 0.014 1.014 1.014 1.014 1.014 1.014 1.014 1.014 1.014	3	1.0	0.433				0.0				0.0			1.03		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4	1.0									-0.0					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	5	1.0									-0.0					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	6	1.0		0.06							-0.0			0.936		0.11
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7	1.0			-0.117					0.154	-0.0	0.143		1.015		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	8	1.0			-0.1						-0.0					
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9	1.0									-0.0	0.138		1.837		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10	1.0									-0.0			1.829		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	11	1.0									-0.0			1.826		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	12	1.0							0.976		-0.0			1.822		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	13	1.0									-0.0			_		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	14	1.0									-0.0					
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	15	1.0									-0.0			1.808		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	16	1.0					-0.501				-0.0	0.064		1.807	0.201	0.149
19 $1.0$ $0.029$ $0.007$ $-0.05$ $0.014$ $-0.05$ $0.014$ $0.015$ $0.014$ $0.015$	17	1.0							-0.666		-0.0					
	18	1.0	0.03		-0.053						-0.0					0.15
-0.07 $-0.07$ $-0.0$	19	1.0									-0.0	0.061		1.803		
$\frac{1}{1}$	20	1.0	0.028	0.007	-0.047	0.781	-0.473	0.013	-2.061	0.061	-0.0	0.061	0.003	1.803	0.179	0.151



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

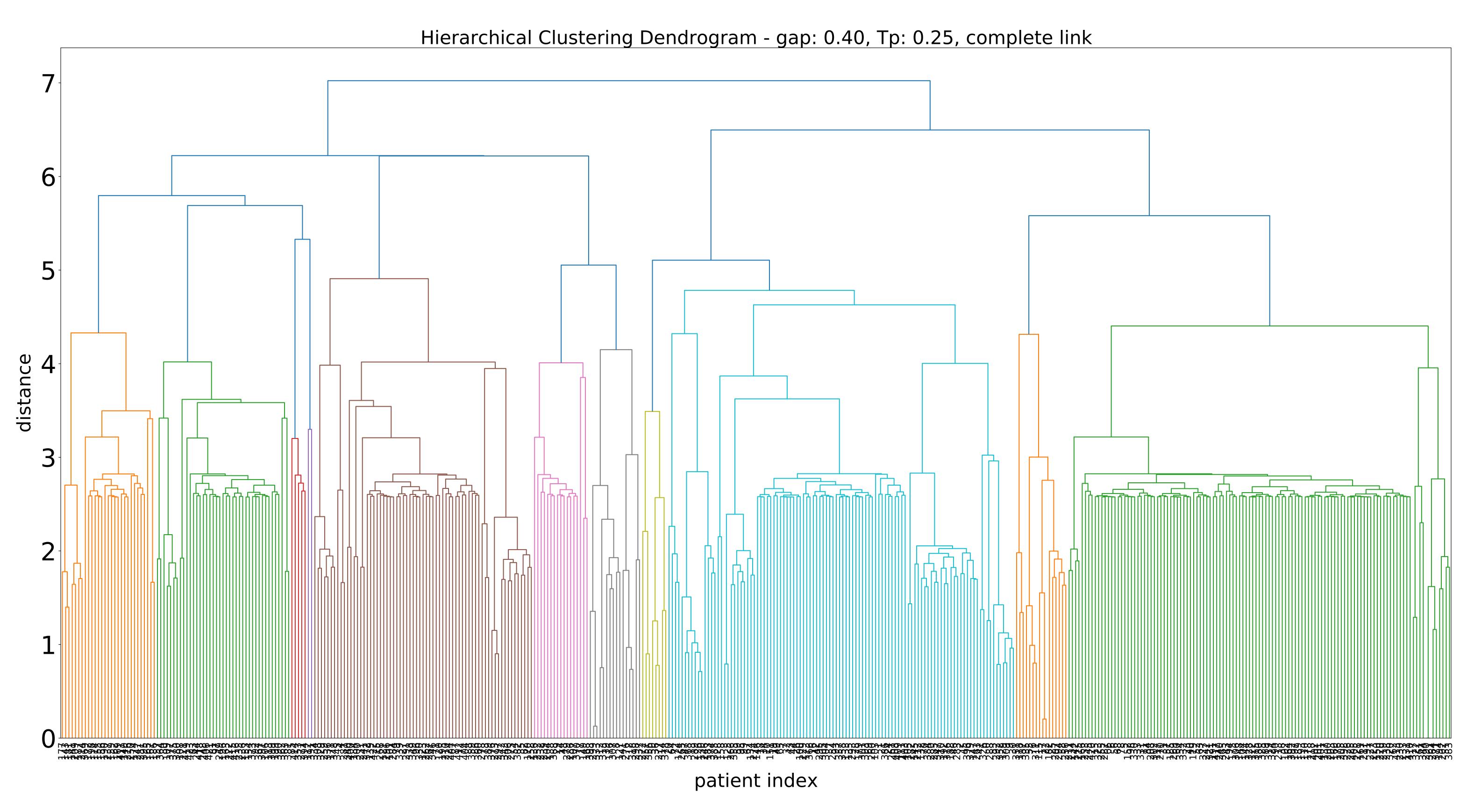
k	AR	FM	J	AW	VD	H	F	VI	Κ	Phi	RT	SS	CVNN	S	Dunn
2	1.0	0.588	0.415	0.13	0.337	0.115	0.586	0.544	0.589	0.0	0.388	0.262	1.01	0.157	0.149
3	1.0	0.466	0.3	0.05	0.427	0.063	0.461	0.771	0.47	0.0	0.363	0.177	1.184	0.181	0.153
4	1.0	0.271	0.147	-0.12	0.547	-0.213	0.256	1.033	0.287	-0.0	0.236	0.079	1.109	0.177	0.153
5	1.0	0.16	0.075	-0.164	0.649	-0.399	0.14	1.235	0.182	-0.0	0.155	0.039	1.031	0.197	0.156
6	1.0	0.136	0.059	-0.137	0.675	-0.397	0.112	1.293	0.164	-0.0	0.147	0.031	1.015	0.202	0.162
7	1.0	0.119	0.049	-0.118	0.688	-0.393	0.093	1.331	0.152	-0.0	0.14	0.025	0.995	0.221	0.174
8	1.0	0.11	0.043	-0.102	0.697	-0.376	0.082	1.313	0.147	-0.0	0.14	0.022	1.204	0.228	0.186
9	1.0	0.102	0.038	-0.088	0.706	-0.359	0.073	1.255	0.144	-0.0	0.14	0.019	1.804	0.329	0.195
10	1.0	0.083	0.029	-0.085	0.726	-0.395	0.056	1.21	0.124	-0.0	0.121	0.015	1.796	0.274	0.196
11	1.0	0.065	0.021	-0.083	0.741	-0.443	0.041	1.113	0.102	-0.0	0.099	0.011	1.786	0.262	0.202
12	1.0	0.059	0.018	-0.076	0.745	-0.441	0.036	0.954	0.097	-0.0	0.095	0.009	1.784	0.253	0.205
13	1.0	0.053	0.016	-0.071	0.749	-0.445	0.031	0.734	0.091	-0.0	0.089	0.008	1.779	0.249	0.213
14	1.0	0.044	0.013	-0.068	0.765	-0.474	0.025	0.491	0.079	-0.0	0.078	0.006	1.768	0.248	0.214
15	1.0	0.042	0.012	-0.063	0.766	-0.464	0.023	0.197	0.078	-0.0	0.077	0.006	1.768	0.238	0.217
16	1.0	0.038	0.01	-0.059	0.769	-0.473	0.02	-0.173	0.072	-0.0	0.072	0.005	1.764	0.236	0.217
17	1.0	0.036	0.009	-0.056	0.77	-0.466	0.018	-0.604	0.071	-0.0	0.07	0.005	1.762	0.233	0.221
18	1.0	0.035	0.009	-0.052	0.771	-0.456	0.017	-0.979	0.07	-0.0	0.07	0.004	1.762	0.234	0.224
19	1.0	0.033	0.008	-0.049	0.772	-0.449	0.016	-1.449	0.069	-0.0	0.07	0.004	1.76	0.226	0.225
20	1.0	0.032	0.008	-0.046	0.771	-0.44	0.015	-1.998	0.069	-0.0	0.069	0.004	1.76	0.224	0.225



Cophenetic Correlation Coefficient: 0.7341554163827297

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

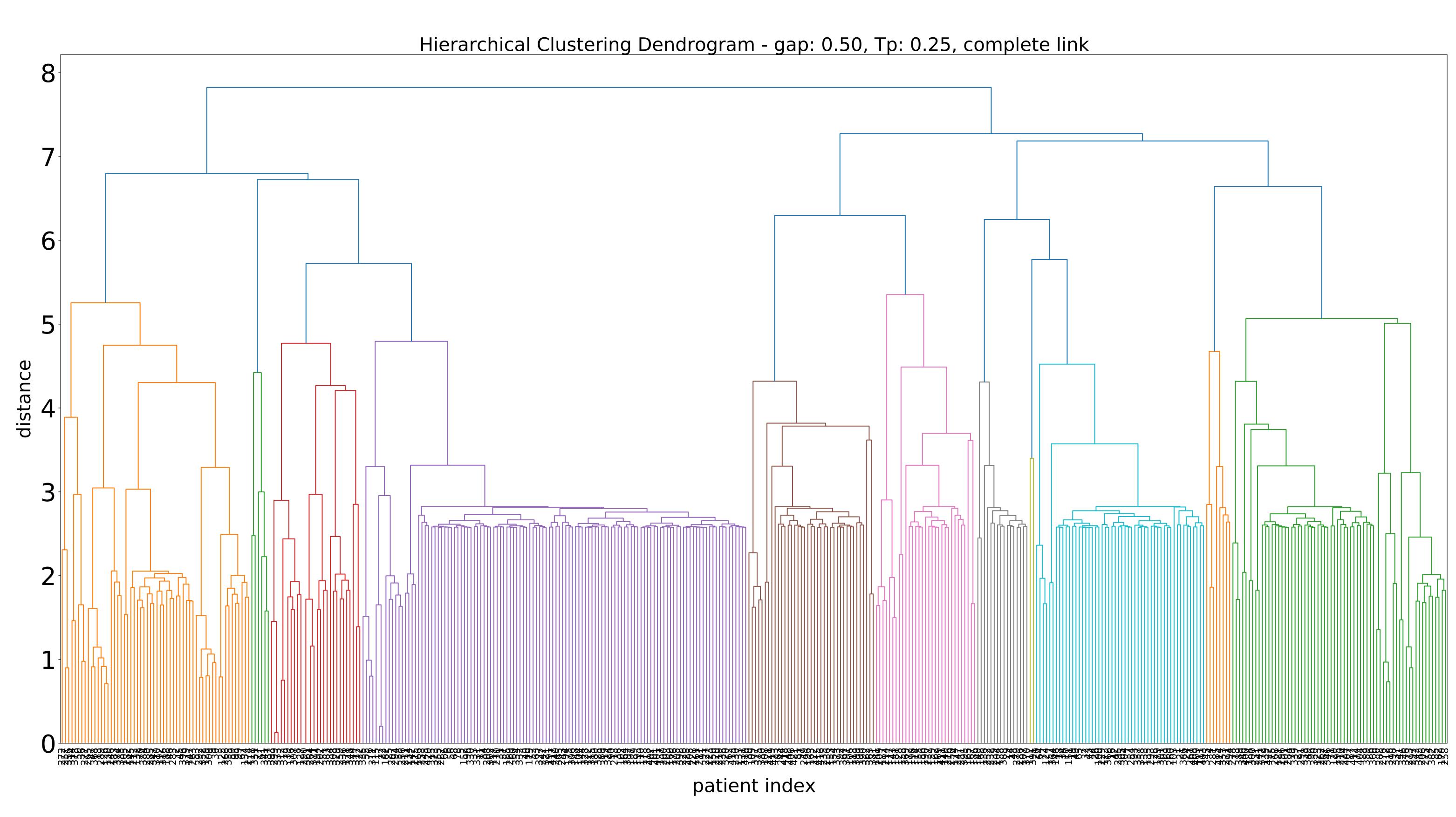
k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	0.565	0.393	0.086	0.36	0.078	0.563	0.557	0.566	0.0	0.37	0.245	1.061	0.121	0.193
3	1.0	0.414	0.257	-0.026	0.445	-0.035	0.408	0.825	0.419	-0.0	0.318	0.148	1.125	0.136	0.184
4	1.0	0.191	0.098	-0.206	0.626	-0.403	0.178	1.122	0.205	-0.0	0.162	0.051	1.024	0.177	0.19
5	1.0	0.152	0.071	-0.171	0.653	-0.421	0.133	1.25	0.173	-0.0	0.147	0.037	0.99	0.212	0.191
6	1.0	0.133	0.058	-0.14	0.674	-0.406	0.11	1.305	0.161	-0.0	0.144	0.03	0.983	0.221	0.196
7	1.0	0.118	0.049	-0.119	0.687	-0.397	0.093	1.334	0.151	-0.0	0.14	0.025	0.979	0.235	0.205
8	1.0	0.108	0.042	-0.102	0.697	-0.381	0.08	1.314	0.145	-0.0	0.138	0.021	1.379	0.228	0.218
9	1.0	0.083	0.03	-0.099	0.728	-0.433	0.058	1.317	0.118	-0.0	0.113	0.015	1.36	0.205	0.228
10	1.0	0.078	0.027	-0.088	0.731	-0.418	0.052	1.218	0.116	-0.0	0.113	0.014	1.788	0.207	0.249
11	1.0	0.059	0.019	-0.085	0.749	-0.471	0.037	1.155	0.093	-0.0	0.09	0.01	1.771	0.191	0.251
12	1.0	0.055	0.017	-0.078	0.753	-0.465	0.033	0.981	0.09	-0.0	0.088	0.008	1.768	0.182	0.257
13	1.0	0.049	0.015	-0.072	0.755	-0.468	0.029	0.756	0.084	-0.0	0.083	0.007	1.767	0.184	0.266
14	1.0	0.04	0.011	-0.069	0.774	-0.503	0.022	0.521	0.071	-0.0	0.07	0.006	1.75	0.177	0.268
15	1.0	0.038	0.01	-0.064	0.776	-0.496	0.02	0.176	0.07	-0.0	0.068	0.005	1.749	0.183	0.271
16	1.0	0.036	0.009	-0.06	0.776	-0.488	0.019	-0.207	0.068	-0.0	0.067	0.005	1.748	0.188	0.275
17	1.0	0.035	0.009	-0.056	0.776	-0.477	0.018	-0.536	0.068	-0.0	0.067	0.004	1.747	0.193	0.276
18	1.0	0.033	0.008	-0.053	0.778	-0.473	0.016	-0.948	0.066	-0.0	0.066	0.004	1.745	0.2	0.287
19	1.0	0.031	0.008	-0.05	0.778	-0.465	0.015	-1.447	0.065	-0.0	0.065	0.004	1.743	0.193	0.287
20	1.0	0.029	0.007	-0.047	0.78	-0.472	0.013	-2.022	0.061	-0.0	0.061	0.003	1.736	0.189	0.287
	-	-	•			•	•	-	•	•	<del>.</del>	•	<u>.</u>		



Cophenetic Correlation Coefficient: 0.6871868097142786

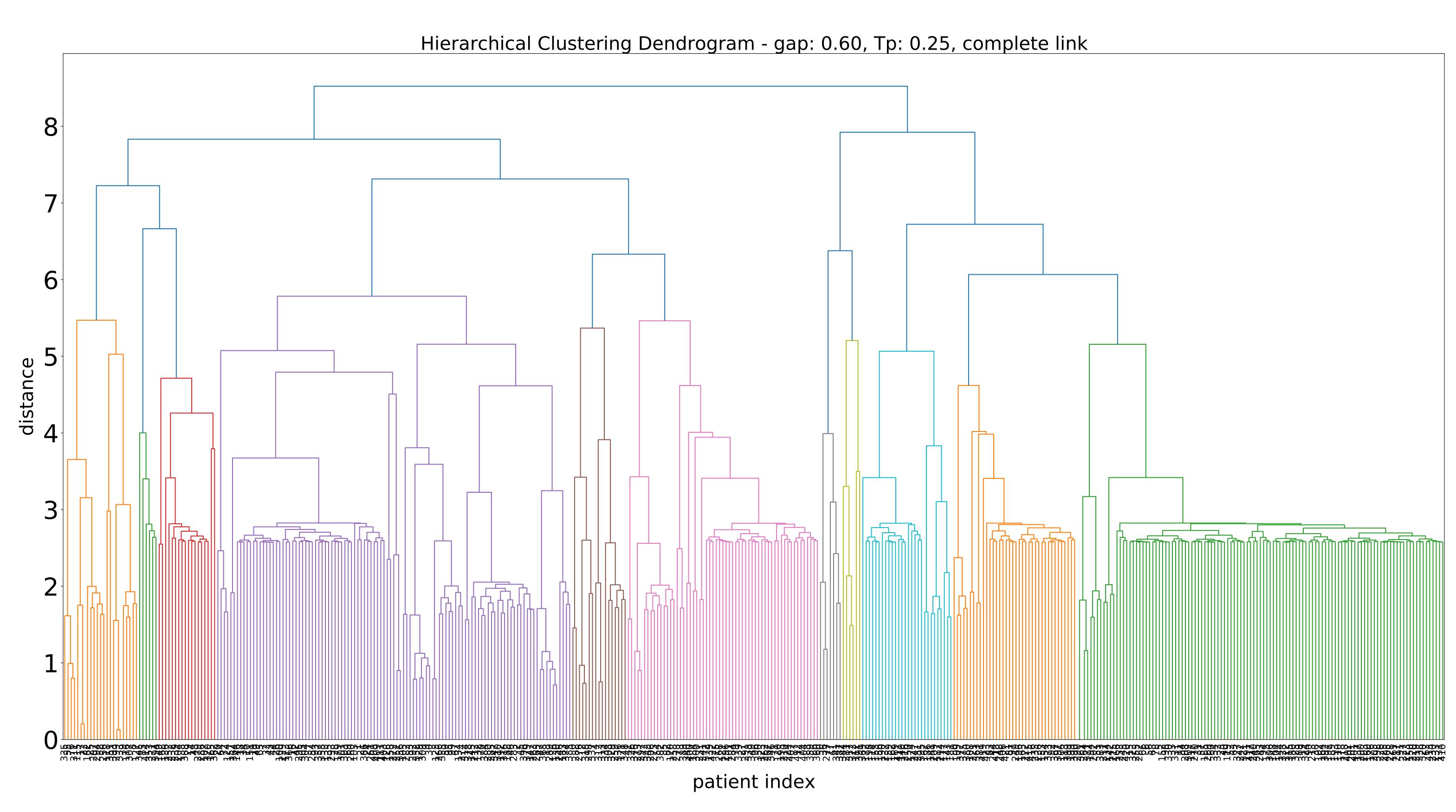
# Average values of 15 clustering indices gap: 0.40, Tp: 0.25, complete link

							_							_	
k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	0.552	0.38	0.051	0.371	0.045	0.55	0.561	0.553	0.0	0.354	0.235	1.068	0.12	0.2
3	1.0	0.282	0.161	-0.226	0.565	-0.315	0.276	0.91	0.287	-0.0	0.203	0.087	1.012	0.19	0.208
4	1.0	0.181	0.092	-0.218	0.642	-0.43	0.168	1.133	0.195	-0.0	0.153	0.048	0.934	0.185	0.209
5	1.0	0.141	0.066	-0.181	0.67	-0.453	0.123	1.264	0.161	-0.0	0.136	0.034	0.945	0.195	0.224
6	1.0	0.119	0.052	-0.148	0.689	-0.448	0.098	1.344	0.145	-0.0	0.129	0.026	0.924	0.218	0.228
7	1.0	0.108	0.044	-0.124	0.703	-0.428	0.084	1.36	0.139	-0.0	0.128	0.022	1.079	0.209	0.232
8	1.0	0.089	0.034	-0.114	0.723	-0.452	0.065	1.374	0.121	-0.0	0.113	0.017	1.062	0.208	0.243
9	1.0	0.083	0.03	-0.099	0.729	-0.433	0.058	1.315	0.119	-0.0	0.113	0.015	1.776	0.215	0.254
10	1.0	0.074	0.025	-0.09	0.738	-0.435	0.049	1.242	0.111	-0.0	0.107	0.013	1.77	0.216	0.242
11	1.0	0.068	0.022	-0.081	0.742	-0.425	0.044	1.1	0.107	-0.0	0.105	0.011	1.766	0.216	0.249
12	1.0	0.063	0.02	-0.074	0.746	-0.424	0.038	0.936	0.102	-0.0	0.1	0.01	1.759	0.205	0.255
13	1.0	0.055	0.016	-0.07	0.753	-0.439	0.032	0.711	0.093	-0.0	0.091	0.008	1.751	0.186	0.255
14	1.0	0.044	0.013	-0.068	0.763	-0.475	0.025	0.478	0.079	-0.0	0.077	0.006	1.736	0.186	0.268
15	1.0	0.038	0.01	-0.064	0.775	-0.493	0.021	0.16	0.07	-0.0	0.069	0.005	1.718	0.179	0.273
16	1.0	0.036	0.01	-0.06	0.776	-0.486	0.019	-0.188	0.069	-0.0	0.068	0.005	1.716	0.186	0.273
17	1.0	0.034	0.009	-0.056	0.777	-0.476	0.018	-0.567	0.068	-0.0	0.068	0.004	1.715	0.196	0.274
18	1.0	0.034	0.008	-0.052	0.776	-0.466	0.017	-1.065	0.068	-0.0	0.067	0.004	1.715	0.206	0.284
19	1.0	0.032	0.008	-0.05	0.776	-0.458	0.016	-1.482	0.067	-0.0	0.067	0.004	1.715	0.213	0.294
20	1.0	0.031	0.007	-0.047	0.777	-0.451	0.015	-2.021	0.066	-0.0	0.066	0.004	1.712	0.208	0.294



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

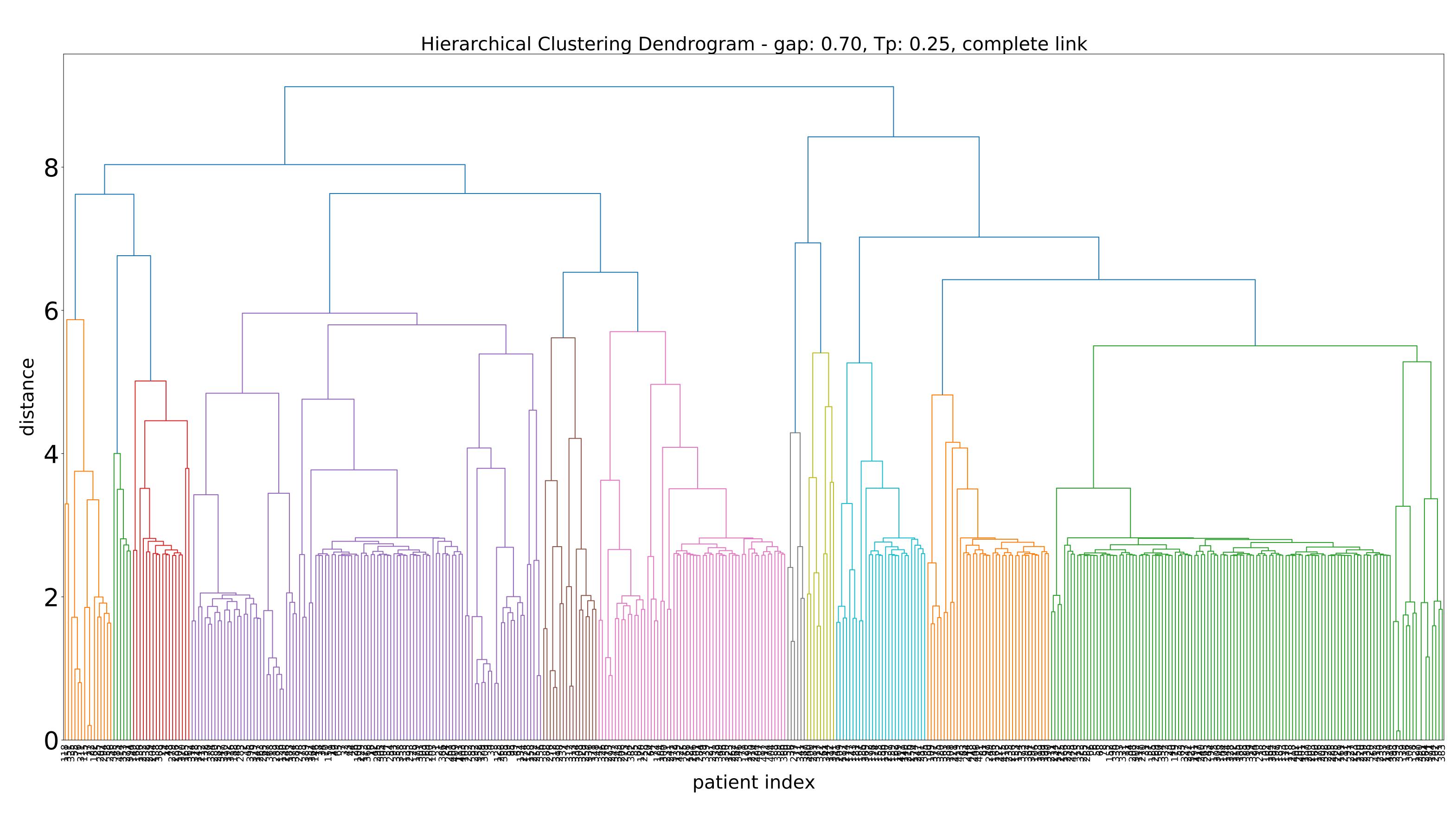
k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	0.527	0.357	-0.002	0.415	-0.001	0.525	0.572	0.529	-0.0	0.333	0.217	1.047	0.138	0.176
3	1.0	0.34	0.201	-0.137	0.507	-0.186	0.335	0.867	0.345	-0.0	0.253	0.112	1.026	0.15	0.178
4	1.0	0.242	0.128	-0.154	0.554	-0.282	0.227	1.077	0.257	-0.0	0.208	0.069	0.982	0.174	0.188
5	1.0	0.14	0.065	-0.18	0.653	-0.453	0.122	1.273	0.16	-0.0	0.136	0.034	0.912	0.171	0.19
6	1.0	0.12	0.052	-0.149	0.68	-0.447	0.099	1.332	0.146	-0.0	0.129	0.027	1.144	0.202	0.193
7	1.0	0.107	0.044	-0.126	0.692	-0.434	0.084	1.343	0.138	-0.0	0.126	0.022	1.134	0.213	0.203
8	1.0	0.094	0.036	-0.111	0.703	-0.432	0.07	1.361	0.128	-0.0	0.12	0.018	1.11	0.234	0.205
9	1.0	0.083	0.03	-0.098	0.712	-0.431	0.058	1.326	0.119	-0.0	0.114	0.015	1.09	0.249	0.222
10	1.0	0.078	0.027	-0.088	0.717	-0.417	0.052	1.235	0.117	-0.0	0.113	0.014	1.754	0.231	0.224
11	1.0	0.058	0.019	-0.085	0.751	-0.477	0.037	1.153	0.092	-0.0	0.089	0.009	1.726	0.201	0.239
12	1.0	0.054	0.017	-0.078	0.755	-0.467	0.033	0.988	0.09	-0.0	0.087	0.009	1.724	0.211	0.244
13	1.0	0.05	0.015	-0.072	0.757	-0.462	0.029	0.775	0.086	-0.0	0.085	0.008	1.721	0.204	0.253
14	1.0	0.045	0.013	-0.067	0.761	-0.471	0.025	0.496	0.08	-0.0	0.078	0.006	1.709	0.199	0.256
15	1.0	0.043	0.012	-0.063	0.762	-0.462	0.023	0.198	0.078	-0.0	0.077	0.006	1.708	0.2	0.267
16	1.0	0.035	0.009	-0.06	0.777	-0.491	0.019	-0.161	0.068	-0.0	0.067	0.005	1.686	0.21	0.268
17	1.0	0.033	0.009	-0.056	0.777	-0.484	0.017	-0.552	0.066	-0.0	0.065	0.004	1.683	0.209	0.27
18	1.0	0.031	0.008	-0.053	0.779	-0.484	0.015	-1.022	0.063	-0.0	0.063	0.004	1.679	0.202	0.274
19	1.0	0.03	0.007	-0.05	0.778	-0.474	0.015	-1.484	0.063	-0.0	0.063	0.004	1.678	0.207	0.283
20	1.0	0.029	0.007	-0.047	0.78	-0.47	0.013	-1.958	0.062	-0.0	0.061	0.003	1.676	0.212	0.285
	-	•	•	•		•	•	•	-	-	-	•			



Cophenetic Correlation Coefficient: 0.6332444160071892

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

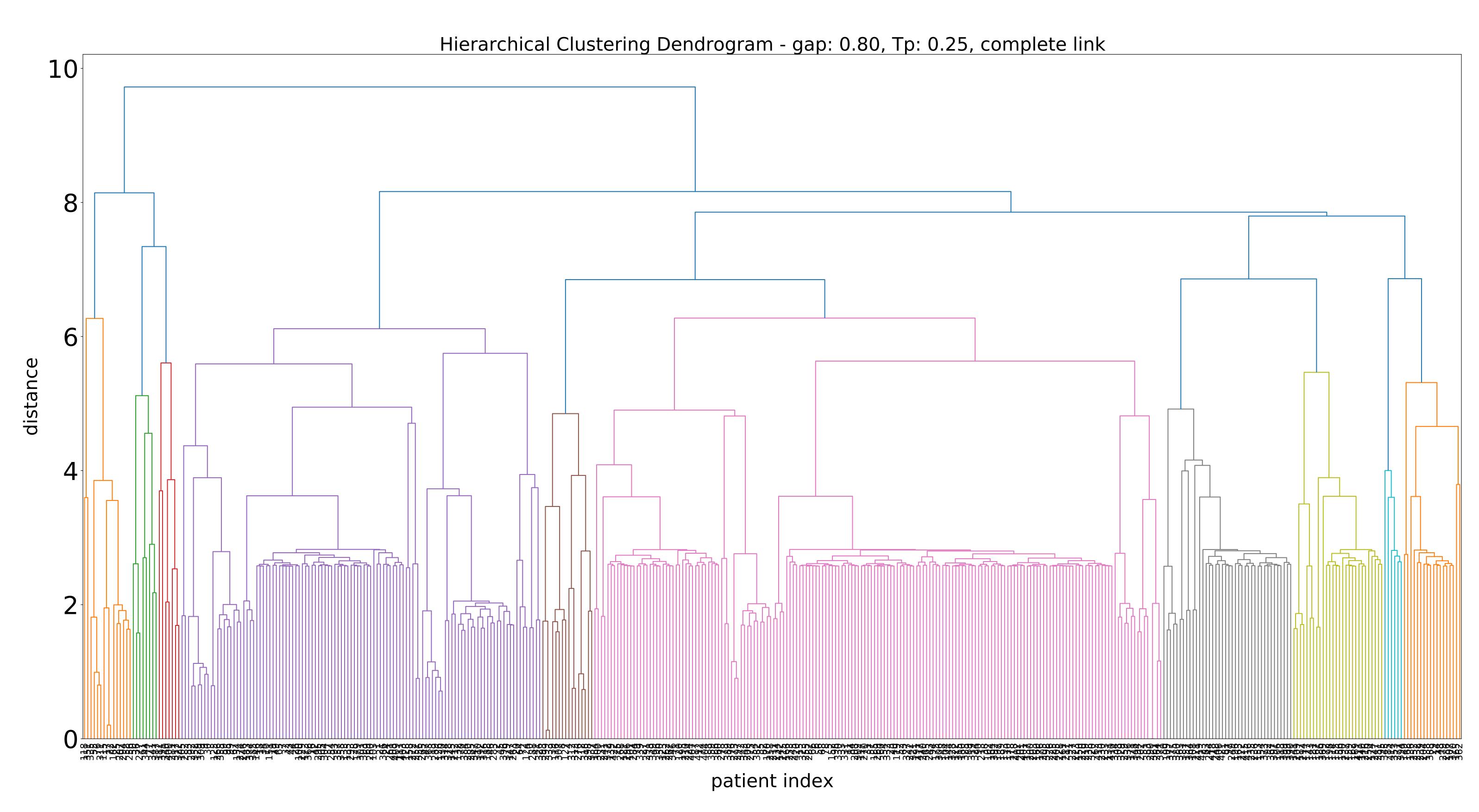
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2	1.0		0.365		0.393	0.013	0.534	0.568	0.538	0.0		0.224	1.043	0.124	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3	1.0		0.256					0.787		-0.0	0.318		1.144		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4	1.0					-0.218		1.02		-0.0			1.201		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	5	1.0		0.08			-0.375				-0.0			1.122		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	6	1.0	0.147	0.065		0.658	-0.364		1.282	0.177	-0.0	0.159		1.193	0.185	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7	1.0			-0.124	0.701	-0.425			· · · · · · · · · · · · · · · · · · ·	-0.0	0.129	0.023			0.207
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	8	1.0			-0.106	0.71	-0.406				-0.0	0.129	0.02			0.216
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9	1.0					-0.39		1.275		-0.0	0.128		1.476		0.218
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10	1.0					0.555				-0.0	0.12		1.47		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	11	1.0							1.105		-0.0	0.1		1.389		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	12	1.0			-0.08			0.03	I	0.081	-0.0	I I	0.008	1.358		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	13	1.0								0.08	-0.0					
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	14	1.0									-0.0					0.257
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	15	1.0	0.04	0.011					0.166		-0.0		0.006	1.346	0.218	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	16	1.0		0.01					I		-0.0			1.6/9	0.219	
19 $1.0$ $0.007$ $-0.05$ $0.007$ $-0.05$ $0.004$ $0.007$ $0.004$ $0.007$ $0.004$ $0.007$ $0.007$ $0.007$ $0.007$ $0.007$ $0.007$ $0.007$ $0.007$ $0.007$ $0.007$ $0.007$ $0.007$	17	1.0					· · · · · · · · · · · · · · · · · · ·				-0.0				0.22	
	18	1.0		0.008	-0.053	0.779	-0.48				-0.0	I I		1.655	0.209	
0.000 = 0.00	19	1.0	0.03			0.779	-0.477				-0.0	I I				
$\begin{bmatrix} 20 & 1.0 & 0.005 & 0.007 & 0.005 &$	20	1.0	0.029	0.007	-0.047	0.779	-0.472	0.013	-2.135	0.061	-0.0	0.061	0.003	1.648	0.216	0.275



Cophenetic Correlation Coefficient: 0.6307419544840157

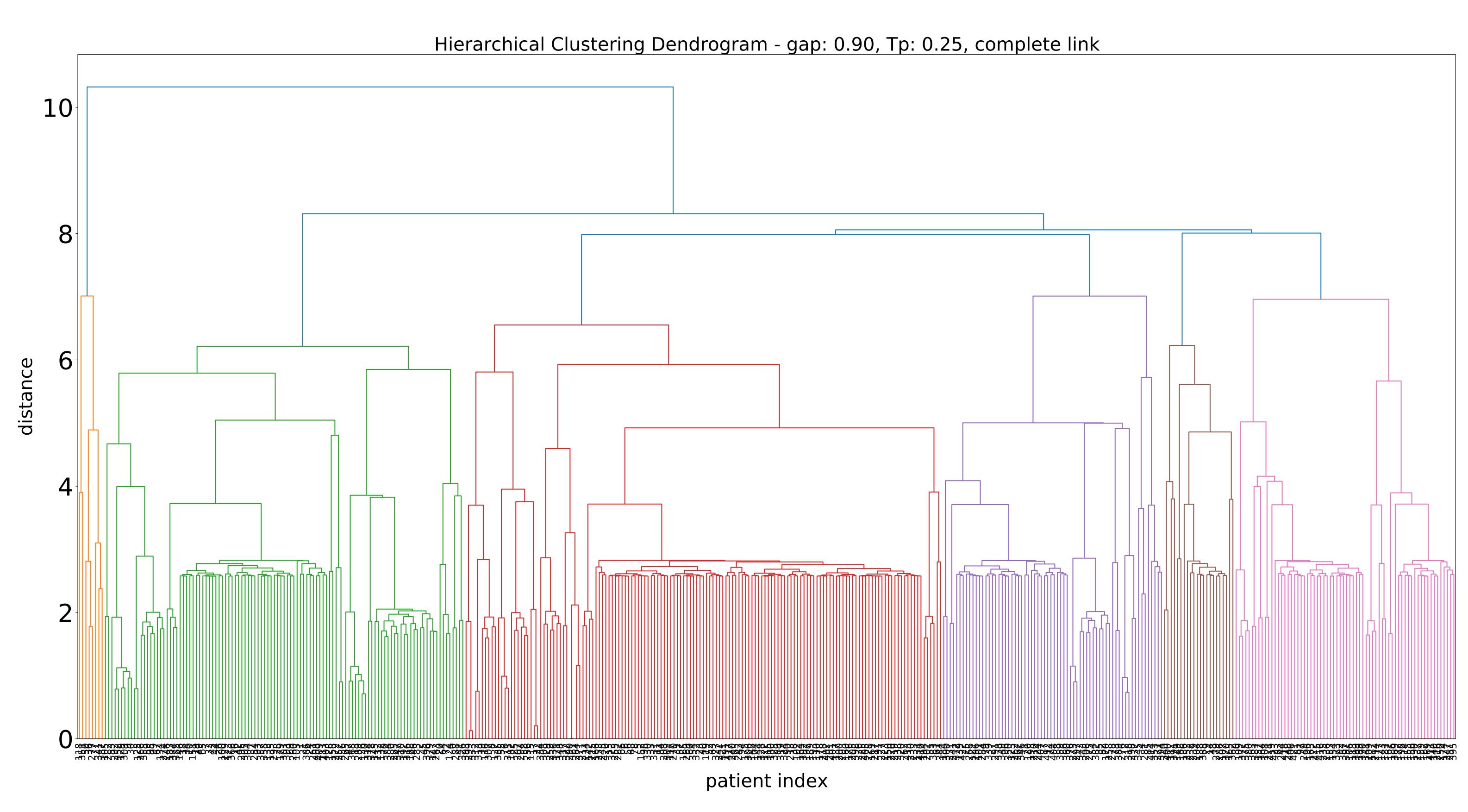
# Average values of 15 clustering indices gap: 0.70, Tp: 0.25, complete link

k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	0.528	0.357	0.005	0.408	0.004	0.526	0.574	0.529	0.0	0.335	0.218	1.025	0.126	0.19
3	1.0	0.408	0.253	-0.038	0.491	-0.05	0.403	0.791	0.413	-0.0	0.311	0.145	1.059	0.154	0.199
4	1.0	0.278	0.151	-0.113	0.577	-0.2	0.262	1.009	0.294	-0.0	0.241	0.082	1.117	0.126	0.21
5	1.0	0.176	0.084	-0.151	0.628	-0.356	0.155	1.206	0.199	-0.0	0.171	0.044	1.044	0.159	0.194
6	1.0	0.155	0.069	-0.124	0.649	-0.342	0.129	1.27	0.185	-0.0	0.168	0.036	1.053	0.197	0.211
7	1.0	0.115	0.047	-0.12	0.694	-0.407	0.089	1.347	0.147	-0.0	0.135	0.024	1.005	0.205	0.213
8	1.0	0.106	0.041	-0.104	0.703	-0.39	0.079	1.328	0.142	-0.0	0.135	0.021	1.005	0.221	0.219
9	1.0	0.098	0.036	-0.091	0.711	-0.374	0.07	1.272	0.139	-0.0	0.134	0.018	1.003	0.247	0.227
10	1.0	0.087	0.03	-0.083	0.717	-0.379	0.059	1.189	0.129	-0.0	0.126	0.015	0.997	0.23	0.23
11	1.0	0.068	0.022	-0.082	0.74	-0.429	0.044	1.092	0.107	-0.0	0.104	0.011	0.917	0.23	0.248
12	1.0	0.055	0.017	-0.078	0.753	-0.465	0.033	0.946	0.09	-0.0	0.088	0.009	0.896	0.216	0.252
13	1.0	0.052	0.016	-0.071	0.756	-0.453	0.031	0.729	0.089	-0.0	0.087	0.008	1.71	0.216	0.255
14	1.0	0.045	0.013	-0.068	0.76	-0.473	0.025	0.434	0.079	-0.0	0.078	0.006	1.692	0.211	0.26
15	1.0	0.04	0.011	-0.063	0.763	-0.476	0.022	0.137	0.074	-0.0	0.074	0.006	1.682	0.215	0.264
16	1.0	0.039	0.01	-0.059	0.764	-0.467	0.02	-0.217	0.074	-0.0	0.073	0.005	1.68	0.226	0.269
17	1.0	0.032	0.008	-0.057	0.778	-0.498	0.016	-0.645	0.063	-0.0	0.062	0.004	1.646	0.217	0.274
18	1.0	0.031	0.008	-0.053	0.779	-0.487	0.015	-1.101	0.063	-0.0	0.062	0.004	1.646	0.212	0.275
19	1.0	0.03	0.007	-0.05	0.78	-0.48	0.014	-1.619	0.062	-0.0	0.061	0.004	1.644	0.2	0.28
20	1.0	0.029	0.007	-0.047	0.78	-0.471	0.013	-2.144	0.061	-0.0	0.061	0.003	1.643	0.201	0.281
	•	-	•	•		•		•	-	•		•	<u>.                                      </u>		



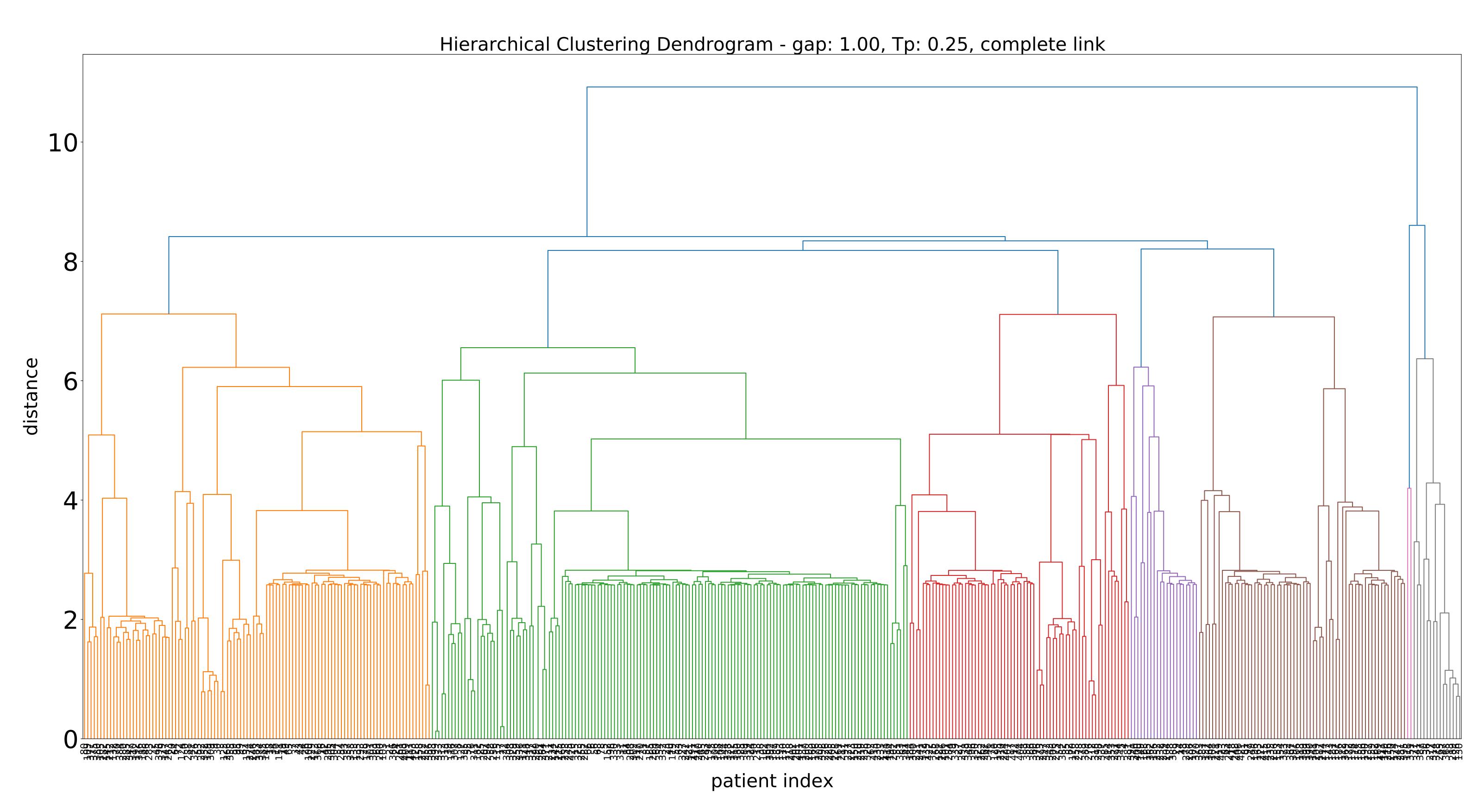
# Average values of 15 clustering indices gap: 0.80, Tp: 0.25, complete link

		FΜ	l l	AW	٧٥	П	Г	Į VI		PIII		55	CVNN	5	Dunn
2	1.0	0.874	0.776	0.744	0.218	0.721	0.874	0.389	0.874	0.0	0.76	0.634	1.037	0.131	0.213
3	1.0	0.439	0.278	0.009	0.436	0.012	0.435	0.796	0.444	0.0	0.339	0.162	0.966	0.162	0.213
4	1.0	0.377	0.221	0.004	0.486	0.006	0.361	0.928	0.393	0.0	0.336	0.124	1.075	0.211	0.221
5	1.0	0.2	0.098	-0.129	0.61	-0.292	0.178	1.17	0.225	-0.0	0.196	0.051	0.98	0.191	0.223
6	1.0	0.171	0.078	-0.112	0.629	-0.298	0.144	1.246	0.203	-0.0	0.186	0.04	0.964	0.196	0.237
7	1.0	0.156	0.066	-0.093	0.645	-0.282	0.124	1.255	0.195	-0.0	0.185	0.034	0.974	0.209	0.253
8	1.0	0.144	0.058	-0.081	0.655	-0.269	0.11	1.232	0.189	-0.0	0.185	0.03	0.999	0.242	0.253
9	1.0	0.131	0.05	-0.074	0.661	-0.27	0.095	1.201	0.179	-0.0	0.178	0.026	0.988	0.256	0.254
10	1.0	0.107	0.038	-0.073	0.686	-0.309	0.073	1.129	0.155	-0.0	0.155	0.019	0.967	0.241	0.27
11	1.0	0.069	0.023	-0.081	0.737	-0.422	0.044	1.095	0.108	-0.0	0.106	0.011	0.878	0.237	0.271
12	1.0	0.066	0.021	-0.073	0.743	-0.408	0.04	0.919	0.107	-0.0	0.106	0.01	1.692	0.236	0.277
13	1.0	0.052	0.015	-0.071	0.756	-0.456	0.03	0.728	0.088	-0.0	0.086	0.008	1.665	0.23	0.29
14	1.0	0.048	0.014	-0.066	0.758	-0.45	0.027	0.453	0.085	-0.0	0.085	0.007	1.662	0.234	0.281
15	1.0	0.04	0.011	-0.063	0.772	-0.476	0.022	0.145	0.074	-0.0	0.074	0.006	1.64	0.22	0.282
16	1.0	0.039	0.01	-0.059	0.772	-0.464	0.021	-0.184	0.074	-0.0	0.074	0.005	1.639	0.216	0.283
17	1.0	0.034	0.009	-0.056	0.778	-0.483	0.017	-0.657	0.066	-0.0	0.066	0.004	1.618	0.216	0.289
18	1.0	0.032	0.008	-0.053	0.778	-0.477	0.016	-1.092	0.065	-0.0	0.065	0.004	1.615	0.224	0.297
19	1.0	0.031	0.008	-0.05	0.778	-0.468	0.015	-1.601	0.065	-0.0	0.064	0.004	1.614	0.228	0.309
20	1.0	0.03	0.007	-0.047	0.778	-0.459	0.014	-2.034	0.064	-0.0	0.064	0.004	1.614	0.225	0.32



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

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	k	AR	FM	J	AW	VD	Н	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2	1.0	0.966	0.935	0.933	0.181	0.922	0.966	0.309	0.966	0.0	0.928	0.878	1.0	0.342	0.221
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3	1.0					0.146				0.0					0.228
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	4	1.0									-0.0			0.878		0.229
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	5	1.0							1.128		-0.0		0.00-			0.23
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	6	1.0							1.3		-0.0		0.03	0.953		0.262
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7	1.0			-0.117	0.688	-0.383				-0.0			1.751		0.262
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	8	1.0	0.111		-0.1	0.7					-0.0					0.264
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9	1.0	0.1		-0.09						-0.0	0.136				0.28
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	10	1.0									-0.0					0.289
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	11	1.0									-0.0					0.289
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	12	1.0									-0.0					0.298
15 1.0 0.044 0.012 -0.062 0.767 -0.455 0.024 0.079 0.079 0.079	13	1.0					-				-0.0	0.082				0.302
	14	1.0									-0.0	0.08				0.289
	15	1.0								0.08	-0.0					0.29
	16	1.0									-0.0					0.294
	17	1.0									-0.0					0.297
	18	1.0									-0.0	0.07				0.299
	19	1.0					I I				-0.0	0.07				0.333
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	20	1.0	0.032	0.008	-0.046	0.773	-0.445	0.015	-1.974	0.068	-0.0	0.068	0.004	1.612	0.232	0.335



# Average values of 15 clustering indices gap: 1.00, Tp: 0.25, complete link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2	1.0	0.933	0.874	0.865	0.197	0.849	0.933	0.343	0.933	0.0	0.863	0.777	1.065	0.271	0.207
3	1.0	0.904	0.824	0.812	0.283	0.844	0.903	0.517	0.904	0.0	0.862	0.701	2.0	0.3	0.212
4	1.0	0.431	0.263	0.072	0.463	0.11	0.416	0.871	0.446	0.0	0.39	0.151	1.941	0.241	0.213
5	1.0	0.234	0.118	-0.099	0.58	-0.211	0.211	1.109	0.26	-0.0	0.23	0.063	1.858	0.227	0.217
6	1.0	0.202	0.094	-0.086	0.602	-0.216	0.172	1.188	0.238	-0.0	0.221	0.049	1.849	0.23	0.218
7	1.0	0.118	0.049	-0.118	0.69	-0.395	0.093	1.324	0.151	-0.0	0.14	0.025	1.757	0.238	0.25
8	1.0	0.098	0.038	-0.109	0.702	-0.417	0.073	1.343	0.133	-0.0	0.125	0.019	1.745	0.214	0.25
9	1.0	0.09	0.033	-0.096	0.709	-0.407	0.063	1.285	0.127	-0.0	0.122	0.017	1.736	0.22	0.252
10	1.0	0.081	0.028	-0.087	0.714	-0.406	0.054	1.216	0.12	-0.0	0.117	0.014	1.718	0.235	0.272
11	1.0	0.062	0.02	-0.084	0.744	-0.458	0.039	1.129	0.097	-0.0	0.094	0.01	1.68	0.223	0.28
12	1.0	0.058	0.018	-0.076	0.748	-0.444	0.036	0.968	0.096	-0.0	0.094	0.009	1.68	0.219	0.286
13	1.0	0.056	0.017	-0.07	0.75	-0.431	0.033	0.741	0.095	-0.0	0.094	0.008	1.678	0.219	0.286
14	1.0	0.051	0.015	-0.065	0.753	-0.434	0.029	0.474	0.09	-0.0	0.089	0.007	1.668	0.219	0.29
15	1.0	0.043	0.012	-0.062	0.768	-0.457	0.024	0.207	0.079	-0.0	0.079	0.006	1.64	0.219	0.296
16	1.0	0.041	0.011	-0.058	0.767	-0.45	0.022	-0.156	0.078	-0.0	0.078	0.006	1.638	0.227	0.301
17	1.0	0.04	0.01	-0.055	0.769	-0.44	0.02	-0.459	0.077	-0.0	0.078	0.005	1.637	0.236	0.301
18	1.0	0.038	0.01	-0.051	0.769	-0.429	0.019	-0.874	0.077	-0.0	0.077	0.005	1.636	0.234	0.302
19	1.0	0.034	0.008	-0.049	0.773	-0.446	0.016	-1.437	0.07	-0.0	0.07	0.004	1.618	0.237	0.303
20	1.0	0.032	0.008	-0.046	0.772	-0.44	0.015	-2.005	0.069	-0.0	0.069	0.004	1.614	0.244	0.346
	•	•	•	· · · · · · · · · · · · · · · · · · ·					•			•	•		