Hierarchical Clustering Dendrogram - gap: -1.00, Tp: 0.25, single link
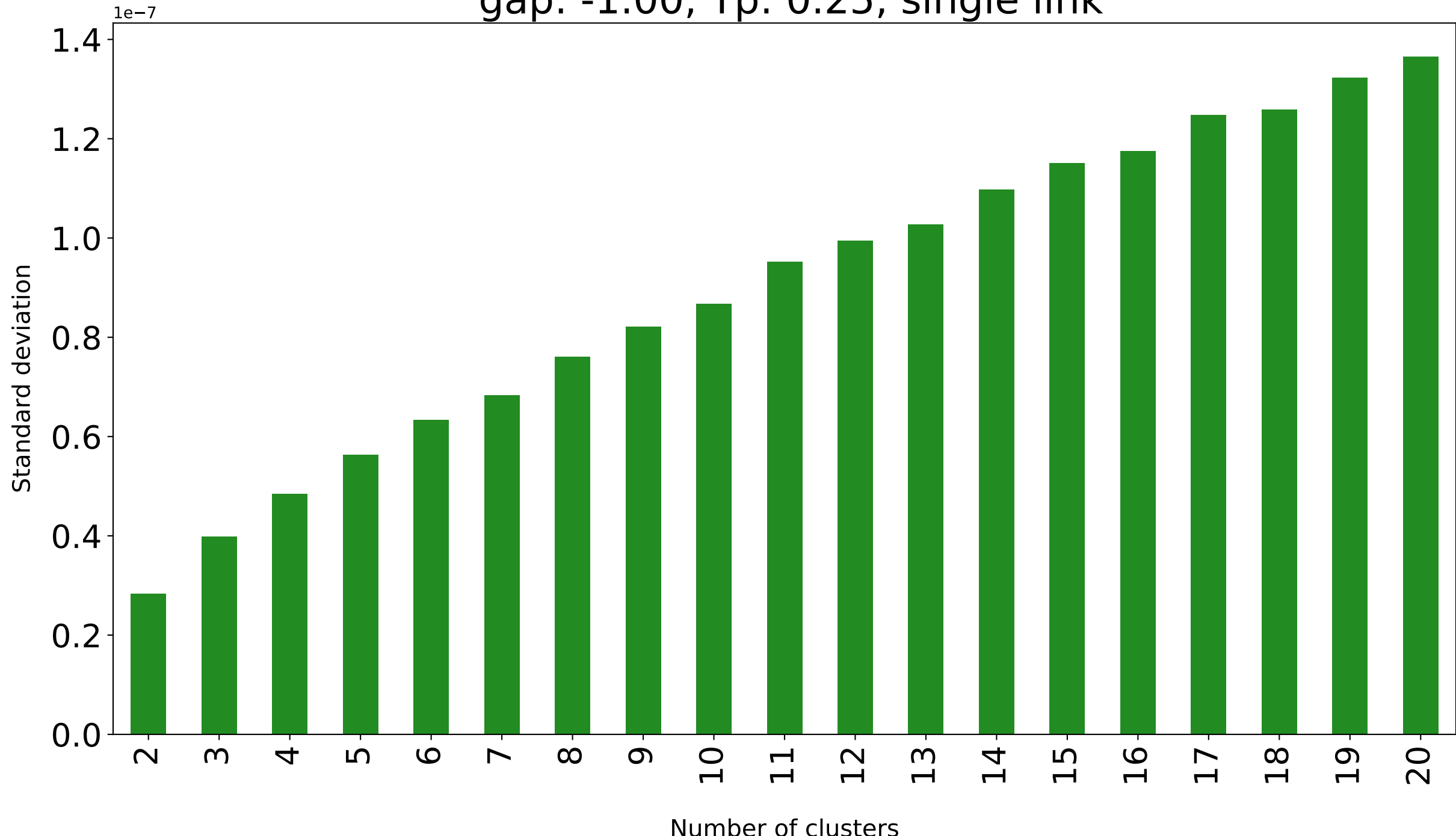
distance

patient index

Cophenetic Correlation Coefficient: 0.6632195348440978

Average values of five clustering indices
gap: -1.00, Tp: 0.25, single link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99908	0.99816	0.708	0.00046	0.708	0.99908	0.00077	0.99908	4e-05	0.99635	0.99635	2.0	0.53287	0.45455
3.0	1.0	0.99846	0.99693	0.7552	0.00077	0.82502	0.99846	-0.01639	0.99846	3e-05	0.99393	0.9939	2.0	0.68863	0.45455
4.0	1.0	0.99767	0.99535	0.75296	0.00116	0.84835	0.99767	-0.04801	0.99768	2e-05	0.99088	0.9908	2.0	0.76652	0.45455
5.0	1.0	0.99673	0.99347	0.73928	0.00162	0.84749	0.99672	-0.09231	0.99674	2e-05	0.98727	0.98709	2.0	0.81325	0.45455
6.0	1.0	0.99594	0.99191	0.74119	0.00201	0.85195	0.99593	-0.15593	0.99596	1e-05	0.98432	0.98403	2.0	0.8444	0.45455
7.0	1.0	0.99505	0.99014	0.73672	0.00244	0.85121	0.99504	-0.23219	0.99507	1e-05	0.98101	0.98056	2.0	0.86665	0.45455
8.0	1.0	0.99412	0.98829	0.73157	0.00289	0.84897	0.9941	-0.32223	0.99415	1e-05	0.97759	0.97696	2.0	0.88334	0.45455
9.0	1.0	0.99335	0.98677	0.73405	0.00326	0.8511	0.99332	-0.4346	0.99338	1e-05	0.97483	0.974	2.0	0.89632	0.45455
10.0	1.0	0.9925	0.98508	0.73302	0.00367	0.85133	0.99247	-0.55923	0.99254	1e-05	0.97179	0.97073	2.0	0.90671	0.45455
11.0	1.0	0.99169	0.98347	0.73332	0.00406	0.8517	0.99164	-0.70155	0.99173	1e-05	0.96894	0.96763	2.0	0.91521	0.45455
12.0	1.0	0.99096	0.98202	0.73593	0.00441	0.85377	0.99091	-0.86515	0.99101	1e-05	0.96643	0.96484	2.0	0.92229	0.45455
13.0	1.0	0.99024	0.98059	0.73827	0.00475	0.85568	0.99018	-1.04598	0.99029	1e-05	0.96399	0.96209	2.0	0.92828	0.45455
14.0	1.0	0.98952	0.97919	0.74051	0.00508	0.85709	0.98946	-1.24416	0.98959	1e-05	0.96163	0.95942	2.0	0.93341	0.45455
15.0	1.0	0.98874	0.97765	0.7408	0.00545	0.85752	0.98867	-1.45383	0.98882	0.0	0.95905	0.95648	2.0	0.93786	0.45455
16.0	1.0	0.98791	0.97599	0.73977	0.00584	0.85729	0.98782	-1.67528	0.988	0.0	0.9563	0.95333	2.0	0.94176	0.45455
17.0	1.0	0.98708	0.97437	0.73908	0.00622	0.8569	0.98698	-1.91358	0.98718	0.0	0.95363	0.95025	2.0	0.9452	0.45455
18.0	1.0	0.98604	0.97231	0.73435	0.0067	0.85444	0.98593	-2.14813	0.98616	0.0	0.95023	0.94636	2.0	0.94825	0.45455
19.0	1.0	0.98531	0.97088	0.73565	0.00704	0.85529	0.98519	-2.42819	0.98544	0.0	0.94798	0.94366	2.0	0.95098	0.45455
20.0	1.0	0.98446	0.9692	0.73471	0.00743	0.85488	0.98432	-2.71237	0.9846	0.0	0.94532	0.94051	2.0	0.95344	0.45455

Standard deviation of Adjusted Rand versus number of clusters
gap: -1.00, Tp: 0.25, single link

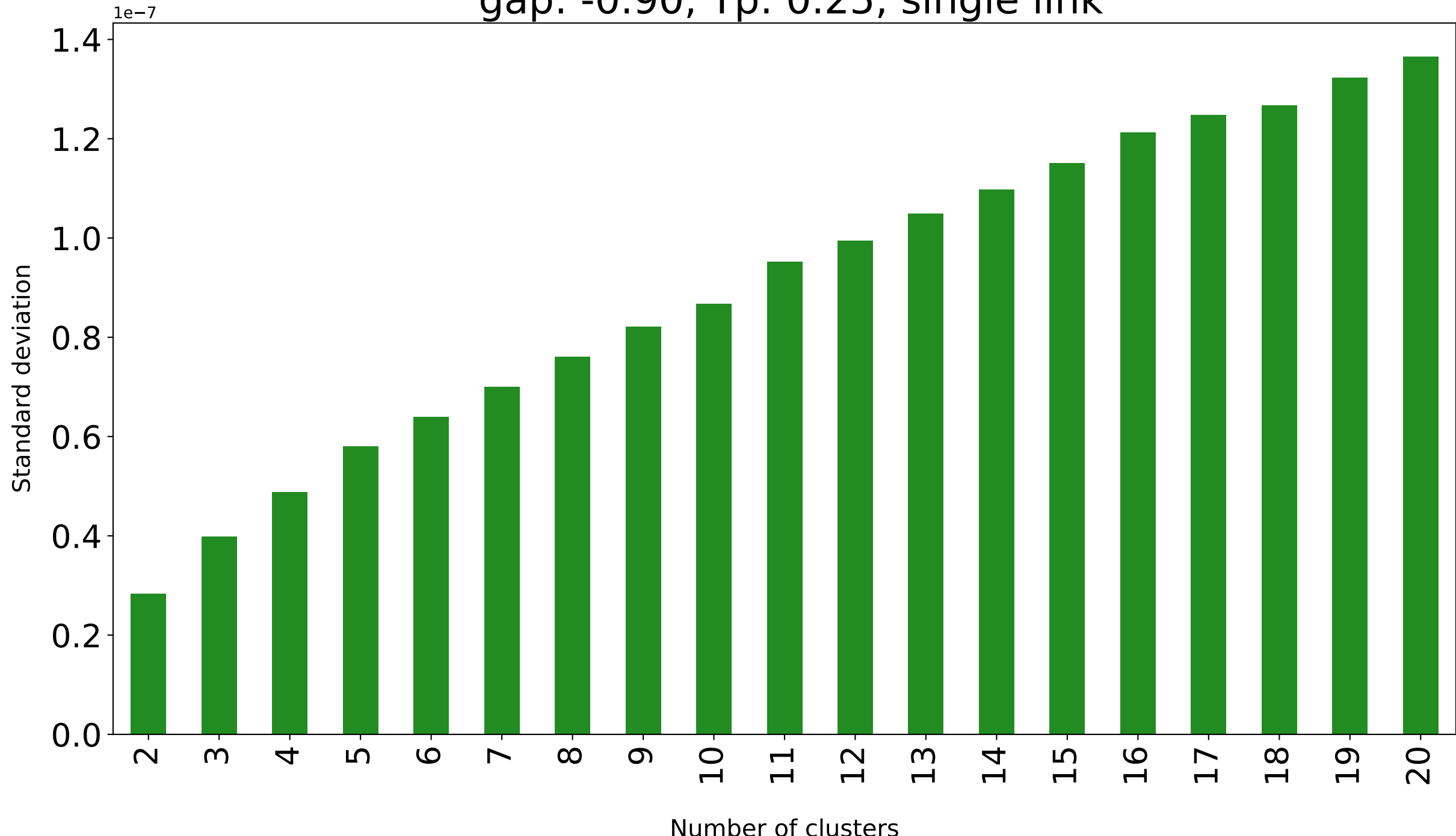Hierarchical Clustering Dendrogram - gap: -0.90, Tp: 0.25, single link

distance

patient index
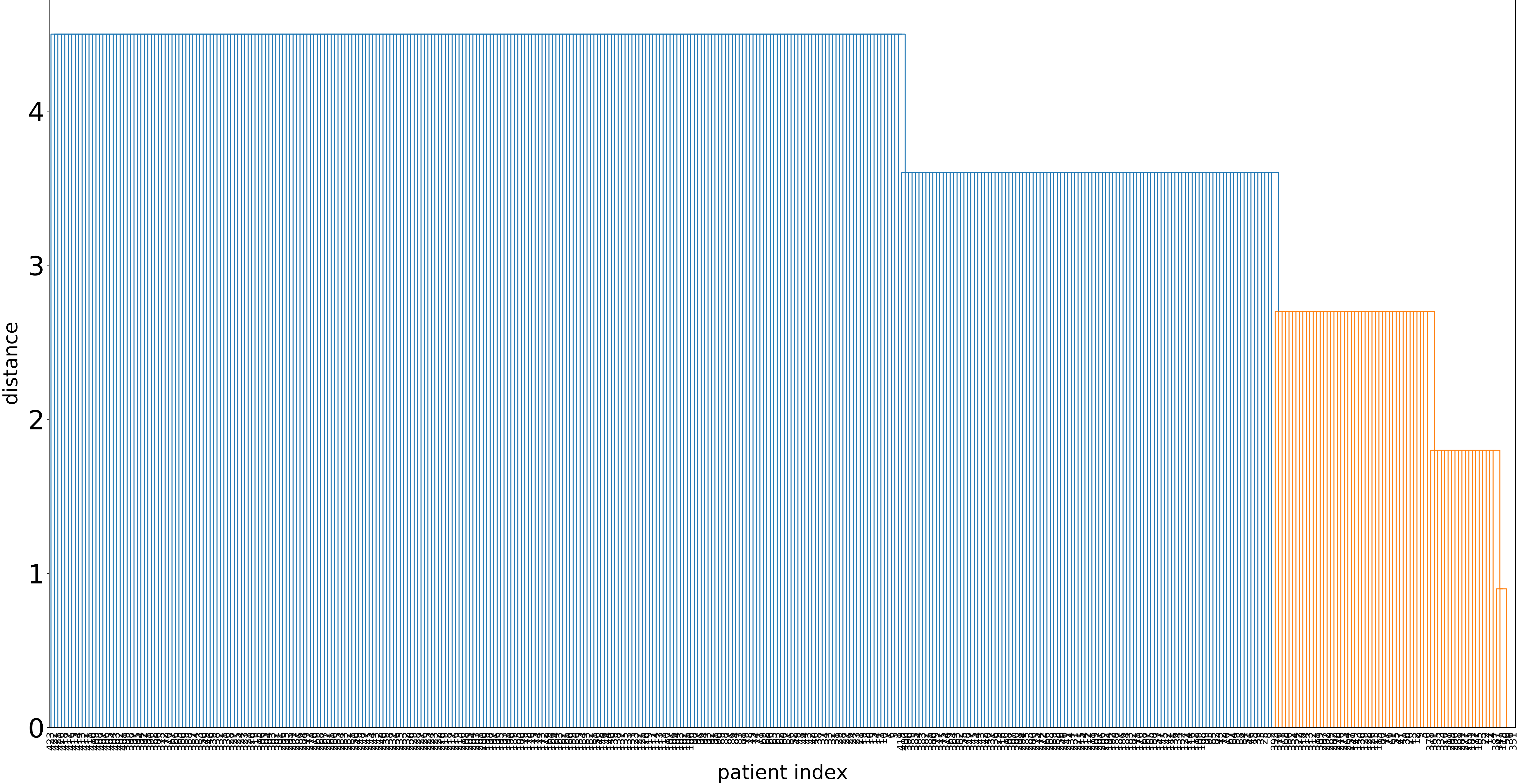
Cophenetic Correlation Coefficient: 0.6632195348440976

Average values of five 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
2.0	1.0	0.99914	0.99829	0.728	0.00043	0.728	0.99914	0.00053	0.99914	5e-05	0.9966	0.9966	2.0	0.53287	0.45455
3.0	1.0	0.99823	0.99647	0.71901	0.00088	0.80546	0.99823	-0.01388	0.99824	3e-05	0.99303	0.993	2.0	0.68863	0.45455
4.0	1.0	0.99748	0.99497	0.73283	0.00125	0.83613	0.99748	-0.0459	0.99749	2e-05	0.99014	0.99005	2.0	0.76652	0.45455
5.0	1.0	0.99656	0.99315	0.72622	0.0017	0.8387	0.99655	-0.09057	0.99657	2e-05	0.98663	0.98645	2.0	0.81325	0.45455
6.0	1.0	0.99571	0.99146	0.72665	0.00212	0.84188	0.9957	-0.15235	0.99573	1e-05	0.98344	0.98314	2.0	0.8444	0.45455
7.0	1.0	0.99488	0.98979	0.7273	0.00253	0.84517	0.99486	-0.23007	0.9949	1e-05	0.98033	0.97988	2.0	0.86665	0.45455
8.0	1.0	0.99408	0.98822	0.72976	0.00291	0.84843	0.99406	-0.32536	0.99411	1e-05	0.97744	0.9768	2.0	0.88334	0.45455
9.0	1.0	0.99321	0.98648	0.72836	0.00333	0.84842	0.99318	-0.4332	0.99324	1e-05	0.97429	0.97344	2.0	0.89632	0.45455
10.0	1.0	0.99241	0.9849	0.72977	0.00372	0.84995	0.99237	-0.56026	0.99245	1e-05	0.97145	0.97037	2.0	0.90671	0.45455
11.0	1.0	0.99169	0.98346	0.7332	0.00406	0.85234	0.99164	-0.70748	0.99173	1e-05	0.96893	0.96759	2.0	0.91521	0.45455
12.0	1.0	0.99084	0.98179	0.73252	0.00447	0.85209	0.99079	-0.86402	0.99089	1e-05	0.966	0.96438	2.0	0.92229	0.45455
13.0	1.0	0.98995	0.98003	0.73077	0.00489	0.85117	0.98989	-1.03361	0.99002	1e-05	0.96296	0.96103	2.0	0.92828	0.45455
14.0	1.0	0.98904	0.97822	0.72845	0.00532	0.85013	0.98896	-1.2167	0.98911	1e-05	0.95985	0.95756	2.0	0.93341	0.45455
15.0	1.0	0.98814	0.97645	0.7269	0.00574	0.84947	0.98805	-1.41696	0.98822	0.0	0.95685	0.95418	2.0	0.93786	0.45455
16.0	1.0	0.98715	0.9745	0.72355	0.00621	0.84752	0.98705	-1.62499	0.98725	0.0	0.95357	0.95049	2.0	0.94176	0.45455
17.0	1.0	0.98617	0.97256	0.72066	0.00667	0.84608	0.98605	-1.84892	0.98628	0.0	0.95035	0.94681	2.0	0.9452	0.45455
18.0	1.0	0.98538	0.97101	0.72189	0.00703	0.84708	0.98526	-2.1072	0.98551	0.0	0.94789	0.9439	2.0	0.94825	0.45455
19.0	1.0	0.98451	0.96929	0.72124	0.00743	0.84694	0.98437	-2.37252	0.98464	0.0	0.94513	0.94065	2.0	0.95098	0.45455
20.0	1.0	0.98357	0.96745	0.71969	0.00786	0.84621	0.98342	-2.64788	0.98373	0.0	0.94222	0.93721	2.0	0.95344	0.45455

Standard deviation of Adjusted Rand versus number of clusters
gap: -0.90, Tp: 0.25, single link

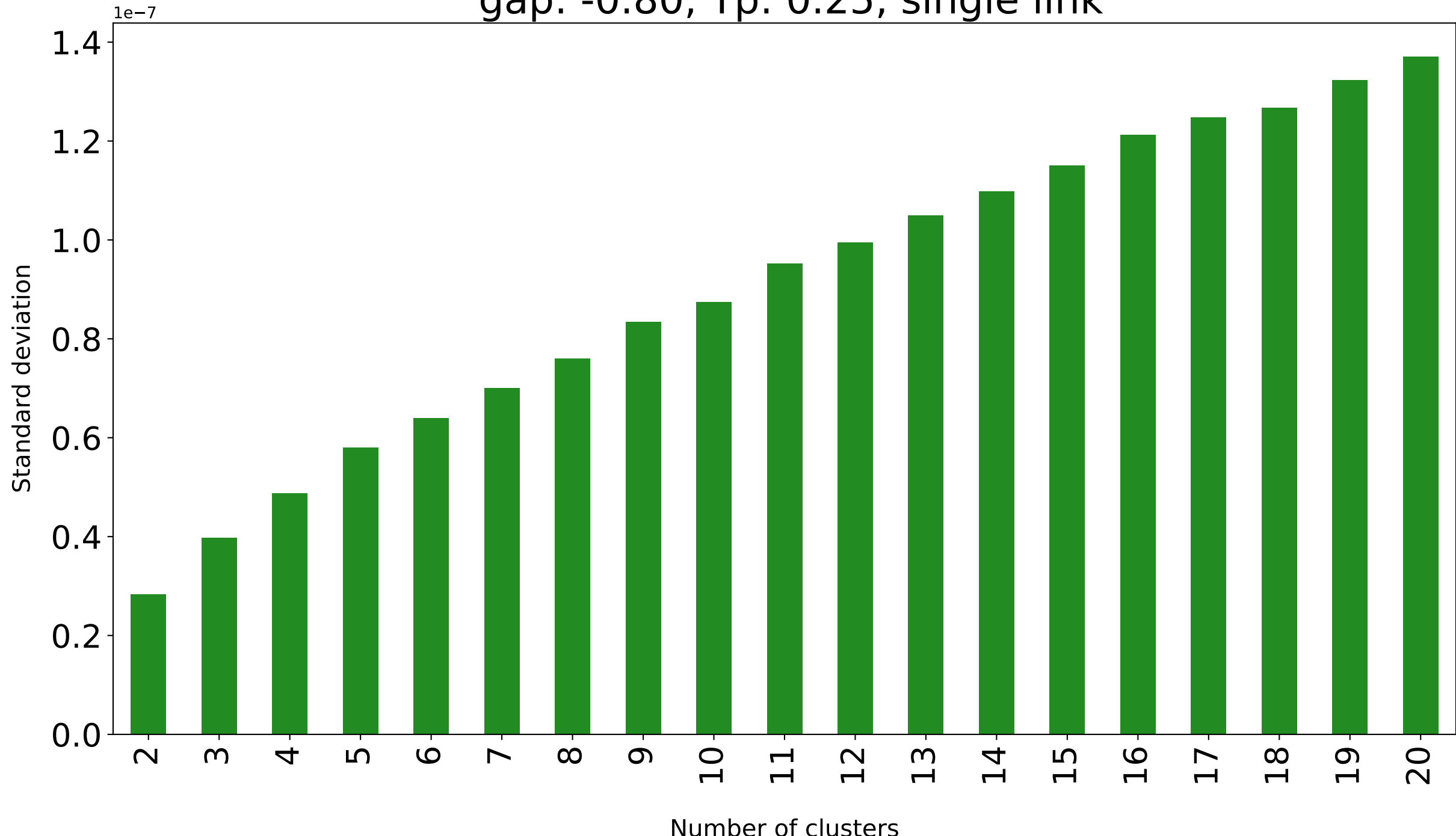Hierarchical Clustering Dendrogram - gap: -0.80, Tp: 0.25, single link

distance

patient index

Cophenetic Correlation Coefficient: 0.6632195348440978

Average values of five 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
2.0	1.0	0.99922	0.99844	0.752	0.00039	0.752	0.99922	0.00024	0.99922	5e-05	0.9969	0.9969	2.0	0.53287	0.45455
3.0	1.0	0.9985	0.997	0.76114	0.00075	0.83678	0.99849	-0.01606	0.9985	3e-05	0.99408	0.99405	2.0	0.68863	0.45455
4.0	1.0	0.9978	0.9956	0.76625	0.00109	0.86196	0.99779	-0.04909	0.9978	2e-05	0.99137	0.99128	2.0	0.76652	0.45455
5.0	1.0	0.9969	0.99382	0.75333	0.00153	0.85656	0.9969	-0.09457	0.99691	2e-05	0.98795	0.98778	2.0	0.81325	0.45455
6.0	1.0	0.99623	0.99249	0.75977	0.00186	0.86321	0.99622	-0.16142	0.99625	1e-05	0.98545	0.98517	2.0	0.8444	0.45455
7.0	1.0	0.99542	0.99088	0.75635	0.00226	0.86244	0.99541	-0.24042	0.99544	1e-05	0.98243	0.98201	2.0	0.86665	0.45455
8.0	1.0	0.99449	0.98903	0.7484	0.00271	0.85895	0.99447	-0.33077	0.99451	1e-05	0.979	0.9784	2.0	0.88334	0.45455
9.0	1.0	0.9936	0.98725	0.74375	0.00314	0.85669	0.99357	-0.43781	0.99362	1e-05	0.97575	0.97494	2.0	0.89632	0.45455
10.0	1.0	0.99275	0.98556	0.74166	0.00355	0.85634	0.99271	-0.56264	0.99278	1e-05	0.97271	0.97167	2.0	0.90671	0.45455
11.0	1.0	0.99205	0.98417	0.74473	0.00389	0.85862	0.992	-0.71155	0.99209	1e-05	0.97027	0.96899	2.0	0.91521	0.45455
12.0	1.0	0.99107	0.98225	0.73925	0.00435	0.85587	0.99102	-0.86056	0.99112	1e-05	0.96686	0.96527	2.0	0.92229	0.45455
13.0	1.0	0.99021	0.98054	0.7376	0.00476	0.85518	0.99015	-1.03205	0.99027	1e-05	0.9639	0.962	2.0	0.92828	0.45455
14.0	1.0	0.98938	0.9789	0.73698	0.00515	0.85519	0.98931	-1.22185	0.98945	1e-05	0.96111	0.95886	2.0	0.93341	0.45455
15.0	1.0	0.98867	0.97749	0.73897	0.00548	0.85663	0.98859	-1.43643	0.98874	0.0	0.95876	0.95617	2.0	0.93786	0.45455
16.0	1.0	0.98782	0.97581	0.73784	0.00588	0.85614	0.98773	-1.65673	0.98791	0.0	0.95597	0.95299	2.0	0.94176	0.45455
17.0	1.0	0.987	0.97421	0.73747	0.00626	0.85616	0.9869	-1.89612	0.9871	0.0	0.95334	0.94994	2.0	0.9452	0.45455
18.0	1.0	0.98616	0.97254	0.73652	0.00665	0.85585	0.98605	-2.14894	0.98627	0.0	0.95064	0.94678	2.0	0.94825	0.45455
19.0	1.0	0.98527	0.97079	0.73488	0.00706	0.85506	0.98515	-2.41356	0.9854	0.0	0.94782	0.94348	2.0	0.95098	0.45455
20.0	1.0	0.9843	0.96889	0.73208	0.0075	0.85334	0.98416	-2.68537	0.98445	0.0	0.94478	0.93994	2.0	0.95344	0.45455

Standard deviation of Adjusted Rand versus number of clusters
gap: -0.80, Tp: 0.25, single link

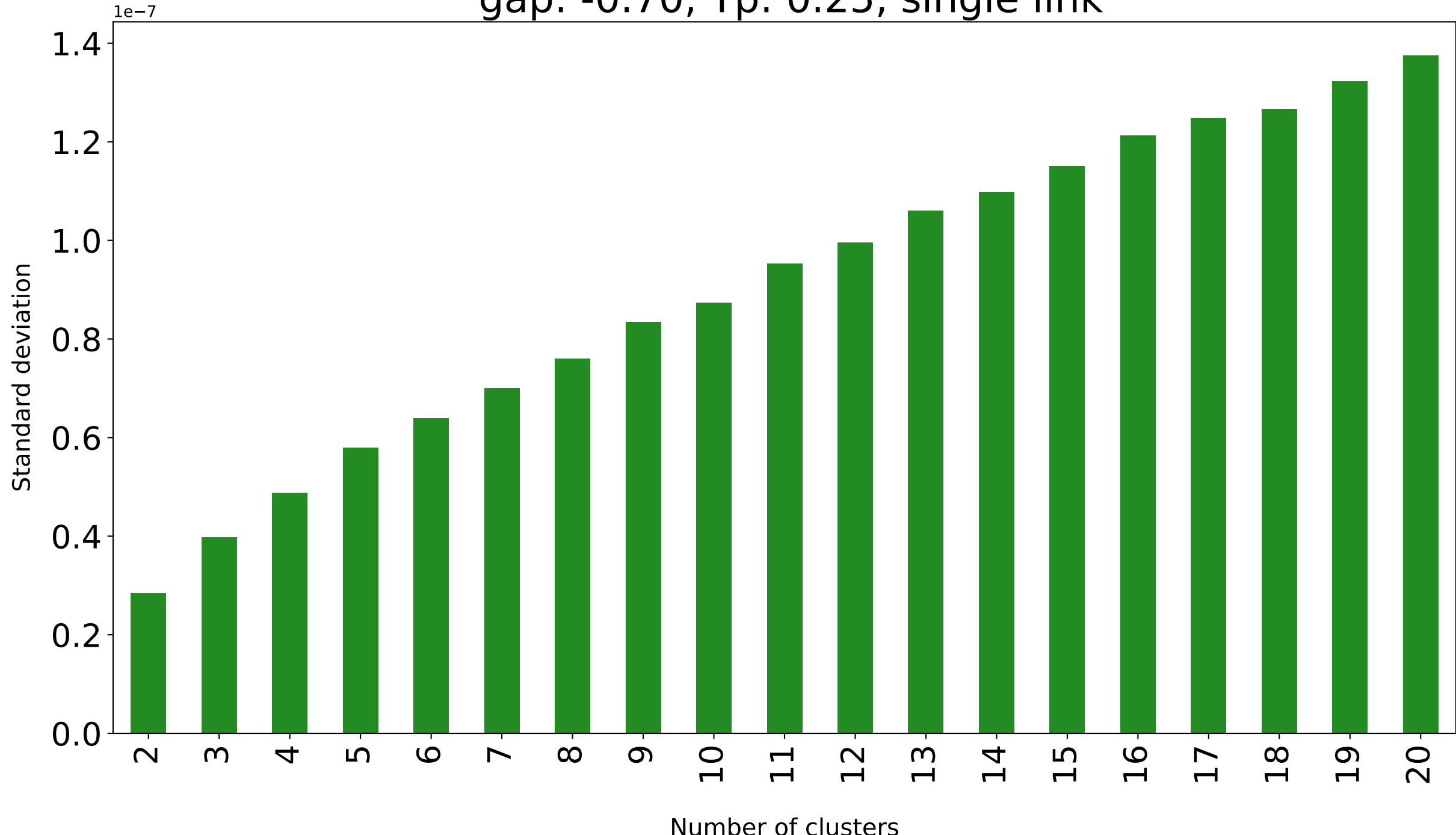Hierarchical Clustering Dendrogram - gap: -0.70, Tp: 0.25, single link

distance

patient index

Cophenetic Correlation Coefficient: 0.6632195348440978

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

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.9994	0.99879	0.808	0.0003	0.808	0.99939	-0.00043	0.9994	5e-05	0.9976	0.9976	2.0	0.53287	0.45455
3.0	1.0	0.99879	0.99758	0.80718	0.0006	0.87867	0.99879	-0.01798	0.99879	3e-05	0.99522	0.99519	2.0	0.68863	0.45455
4.0	1.0	0.99806	0.99613	0.79442	0.00096	0.87928	0.99806	-0.05086	0.99807	2e-05	0.99241	0.99233	2.0	0.76652	0.45455
5.0	1.0	0.9973	0.99461	0.78462	0.00134	0.87535	0.99729	-0.09926	0.9973	2e-05	0.98948	0.98933	2.0	0.81325	0.45455
6.0	1.0	0.99649	0.993	0.7759	0.00174	0.8736	0.99648	-0.16268	0.9965	1e-05	0.98643	0.98616	2.0	0.8444	0.45455
7.0	1.0	0.99555	0.99113	0.76304	0.00219	0.86709	0.99553	-0.23772	0.99556	1e-05	0.98291	0.9825	2.0	0.86665	0.45455
8.0	1.0	0.99455	0.98915	0.75119	0.00268	0.86153	0.99453	-0.32573	0.99457	1e-05	0.97923	0.97862	2.0	0.88334	0.45455
9.0	1.0	0.99372	0.9875	0.74875	0.00308	0.86041	0.99369	-0.43564	0.99375	1e-05	0.97622	0.97542	2.0	0.89632	0.45455
10.0	1.0	0.99292	0.98591	0.74793	0.00347	0.86068	0.99289	-0.56313	0.99296	1e-05	0.97337	0.97234	2.0	0.90671	0.45455
11.0	1.0	0.99211	0.9843	0.74675	0.00386	0.86009	0.99207	-0.70579	0.99215	1e-05	0.97051	0.96923	2.0	0.91521	0.45455
12.0	1.0	0.99134	0.98278	0.74711	0.00422	0.86047	0.99129	-0.86737	0.99139	1e-05	0.96786	0.96631	2.0	0.92229	0.45455
13.0	1.0	0.99051	0.98113	0.74554	0.00462	0.85969	0.99045	-1.04079	0.99056	1e-05	0.96499	0.96314	2.0	0.92828	0.45455
14.0	1.0	0.98972	0.97957	0.74525	0.00499	0.86002	0.98965	-1.23362	0.98978	1e-05	0.96233	0.96014	2.0	0.93341	0.45455
15.0	1.0	0.98874	0.97764	0.74074	0.00545	0.85771	0.98867	-1.42841	0.98882	0.0	0.95904	0.95646	2.0	0.93786	0.45455
16.0	1.0	0.98796	0.97609	0.74082	0.00581	0.85804	0.98787	-1.65416	0.98804	0.0	0.95648	0.9535	2.0	0.94176	0.45455
17.0	1.0	0.98718	0.97456	0.74106	0.00617	0.85836	0.98709	-1.89711	0.98728	0.0	0.95398	0.9506	2.0	0.9452	0.45455
18.0	1.0	0.98629	0.9728	0.73901	0.00658	0.85719	0.98618	-2.14516	0.9864	0.0	0.95111	0.94728	2.0	0.94825	0.45455
19.0	1.0	0.98529	0.97082	0.73519	0.00705	0.85503	0.98516	-2.39822	0.98541	0.0	0.94788	0.94356	2.0	0.95098	0.45455
20.0	1.0	0.98433	0.96895	0.73253	0.00749	0.85357	0.98419	-2.67142	0.98447	0.0	0.94487	0.94003	2.0	0.95344	0.45455

Standard deviation of Adjusted Rand versus number of clusters
gap: -0.70, Tp: 0.25, single link

Hierarchical Clustering Dendrogram - gap: -0.60, Tp: 0.25, single link
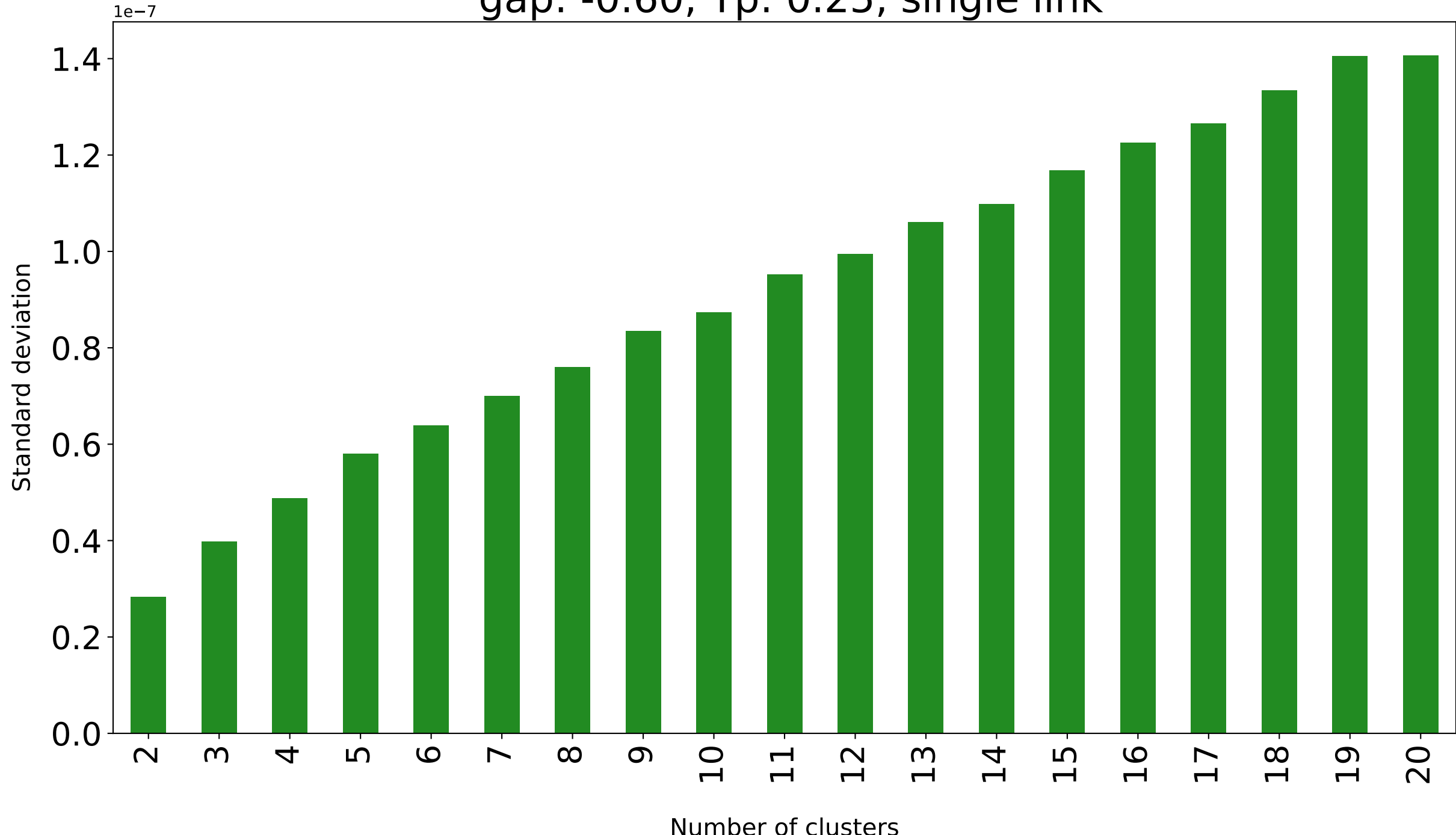
Cophenetic Correlation Coefficient: 0.6632195348440977

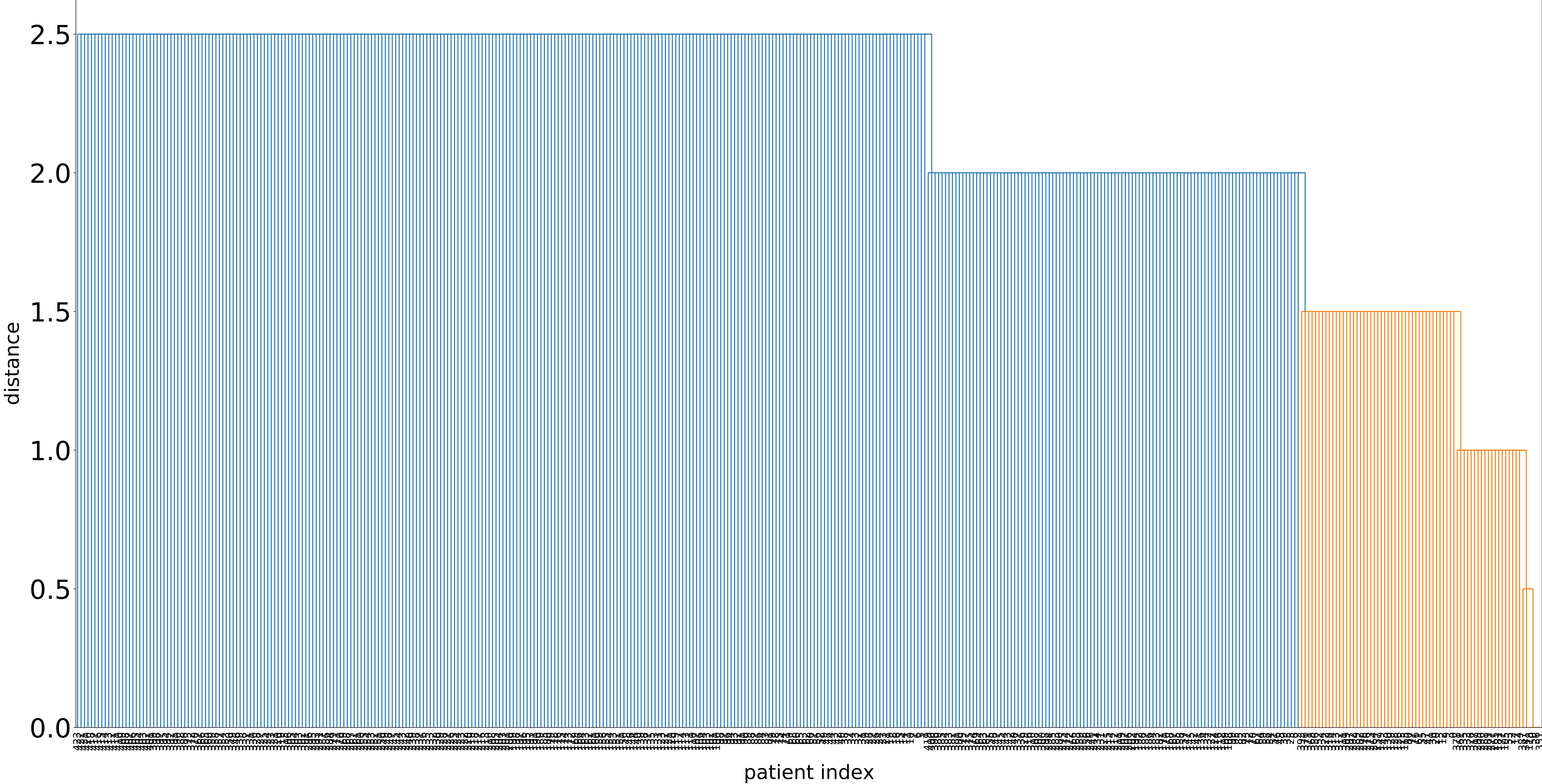## Average values of five clustering indices
gap: -0.60, Tp: 0.25, single link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99922	0.99844	0.752	0.00039	0.752	0.99922	0.00024	0.99922	5e-05	0.9969	0.9969	2.0	0.53287	0.45455
3.0	1.0	0.99837	0.99675	0.7411	0.00081	0.82006	0.99837	-0.01484	0.99837	3e-05	0.99358	0.99355	2.0	0.68863	0.45455
4.0	1.0	0.99754	0.9951	0.7395	0.00122	0.84205	0.99754	-0.04581	0.99755	2e-05	0.99038	0.99029	2.0	0.76652	0.45455
5.0	1.0	0.99664	0.99329	0.73216	0.00167	0.84475	0.99663	-0.09081	0.99665	2e-05	0.98692	0.98673	2.0	0.81325	0.45455
6.0	1.0	0.99575	0.99153	0.72906	0.0021	0.84459	0.99574	-0.15161	0.99577	1e-05	0.98359	0.98328	2.0	0.8444	0.45455
7.0	1.0	0.99489	0.98981	0.72792	0.00252	0.84608	0.99487	-0.22854	0.99491	1e-05	0.98038	0.97992	2.0	0.86665	0.45455
8.0	1.0	0.994	0.98804	0.72575	0.00296	0.8455	0.99397	-0.31992	0.99402	1e-05	0.97711	0.97647	2.0	0.88334	0.45455
9.0	1.0	0.99316	0.98639	0.72641	0.00336	0.84652	0.99313	-0.42936	0.99319	1e-05	0.9741	0.97326	2.0	0.89632	0.45455
10.0	1.0	0.99229	0.98465	0.72532	0.00378	0.84665	0.99225	-0.55256	0.99232	1e-05	0.97098	0.96989	2.0	0.90671	0.45455
11.0	1.0	0.99149	0.98308	0.72712	0.00416	0.84836	0.99145	-0.69613	0.99154	1e-05	0.96822	0.96687	2.0	0.91521	0.45455
12.0	1.0	0.9906	0.9813	0.72543	0.00458	0.84782	0.99054	-0.84939	0.99065	1e-05	0.9651	0.96345	2.0	0.92229	0.45455
13.0	1.0	0.98964	0.97942	0.7225	0.00504	0.84643	0.98958	-1.01451	0.98971	1e-05	0.96182	0.95984	2.0	0.92828	0.45455
14.0	1.0	0.98892	0.97799	0.7256	0.00538	0.84838	0.98885	-1.21129	0.98899	1e-05	0.95942	0.95712	2.0	0.93341	0.45455
15.0	1.0	0.98818	0.97653	0.72784	0.00572	0.84982	0.98809	-1.42348	0.98826	0.0	0.957	0.95435	2.0	0.93786	0.45455
16.0	1.0	0.98725	0.9747	0.72577	0.00616	0.84878	0.98716	-1.63694	0.98735	0.0	0.95394	0.95088	2.0	0.94176	0.45455
17.0	1.0	0.98652	0.97325	0.7277	0.0065	0.85016	0.98641	-1.88277	0.98662	0.0	0.9516	0.94813	2.0	0.9452	0.45455
18.0	1.0	0.98563	0.97151	0.72664	0.00691	0.84962	0.98551	-2.13153	0.98576	0.0	0.94878	0.94487	2.0	0.94825	0.45455
19.0	1.0	0.98467	0.96961	0.7242	0.00735	0.84822	0.98453	-2.38795	0.98481	0.0	0.94571	0.94131	2.0	0.95098	0.45455
20.0	1.0	0.98374	0.96778	0.72246	0.00778	0.84751	0.98358	-2.66344	0.98389	0.0	0.94279	0.93785	2.0	0.95344	0.45455

Standard deviation of Adjusted Rand versus number of clusters
gap: -0.60, Tp: 0.25, single link

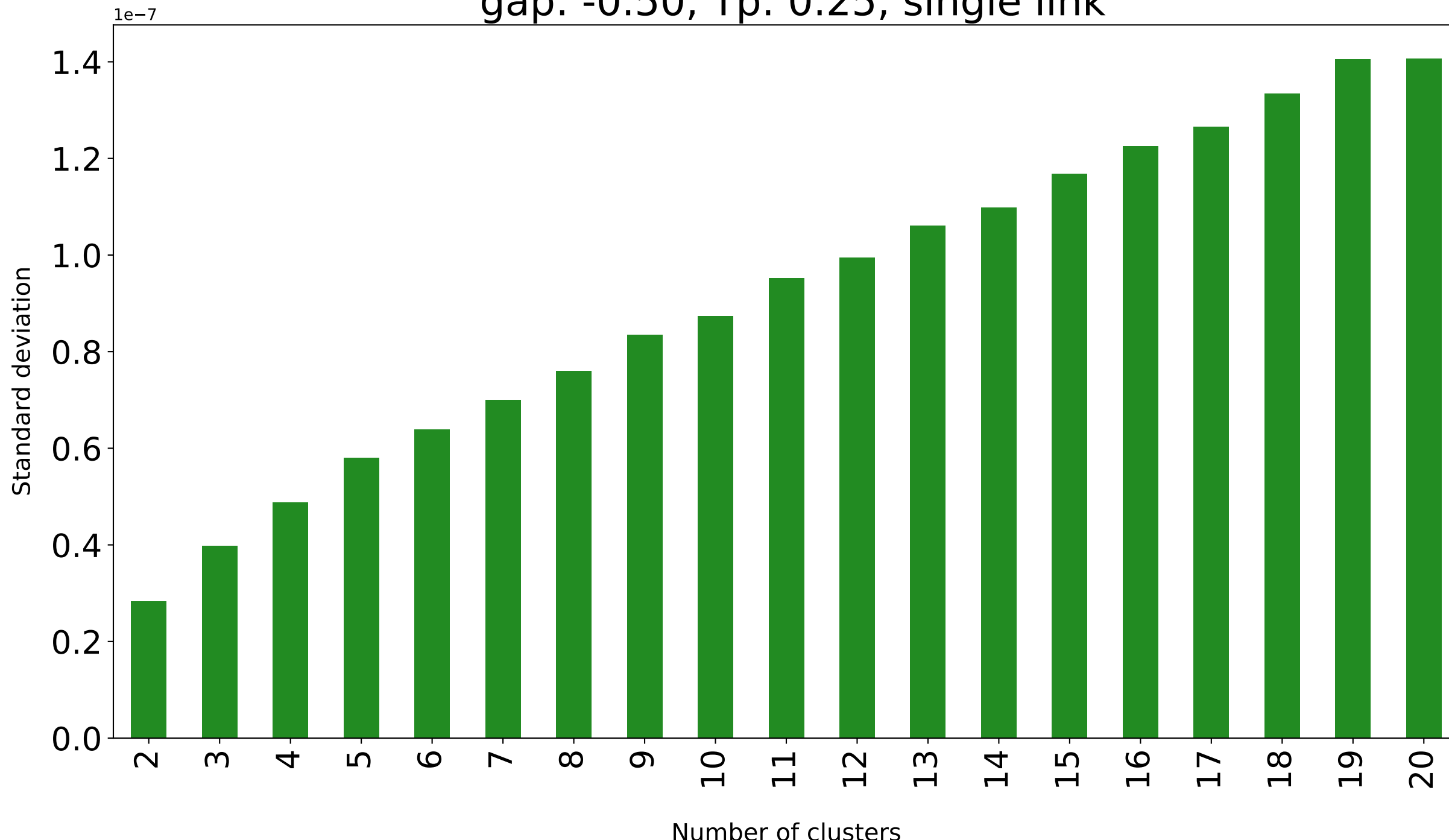Hierarchical Clustering Dendrogram - gap: -0.50, Tp: 0.25, single link

distance

patient index

Cophenetic Correlation Coefficient: 0.6632195348440978

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

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99928	0.99857	0.772	0.00036	0.772	0.99928	-0.0	0.99928	5e-05	0.99715	0.99715	2.0	0.53287	0.45455
3.0	1.0	0.99857	0.99715	0.77318	0.00071	0.84549	0.99857	-0.01647	0.99858	3e-05	0.99437	0.99435	2.0	0.68863	0.45455
4.0	1.0	0.99773	0.99548	0.75961	0.00113	0.85336	0.99773	-0.04742	0.99774	2e-05	0.99113	0.99104	2.0	0.76652	0.45455
5.0	1.0	0.99697	0.99395	0.75833	0.0015	0.86167	0.99696	-0.09553	0.99697	2e-05	0.9882	0.98802	2.0	0.81325	0.45455
6.0	1.0	0.99607	0.99216	0.74906	0.00194	0.85898	0.99606	-0.15628	0.99608	1e-05	0.9848	0.9845	2.0	0.8444	0.45455
7.0	1.0	0.9952	0.99044	0.7447	0.00236	0.85729	0.99519	-0.23347	0.99522	1e-05	0.98159	0.98114	2.0	0.86665	0.45455
8.0	1.0	0.99438	0.98879	0.74302	0.00277	0.85713	0.99435	-0.32757	0.9944	1e-05	0.97855	0.97792	2.0	0.88334	0.45455
9.0	1.0	0.99347	0.98699	0.73846	0.00321	0.85493	0.99344	-0.43395	0.99349	1e-05	0.97525	0.97441	2.0	0.89632	0.45455
10.0	1.0	0.99241	0.98489	0.7297	0.00372	0.85026	0.99237	-0.54849	0.99245	1e-05	0.97144	0.97035	2.0	0.90671	0.45455
11.0	1.0	0.99172	0.98353	0.73433	0.00404	0.85344	0.99168	-0.69784	0.99176	1e-05	0.96906	0.96771	2.0	0.91521	0.45455
12.0	1.0	0.99085	0.9818	0.73271	0.00446	0.85295	0.9908	-0.85286	0.9909	1e-05	0.96603	0.96438	2.0	0.92229	0.45455
13.0	1.0	0.98983	0.97979	0.72747	0.00494	0.85006	0.98977	-1.01391	0.98989	1e-05	0.96251	0.96052	2.0	0.92828	0.45455
14.0	1.0	0.98881	0.97777	0.7229	0.00543	0.8474	0.98874	-1.18946	0.98889	1e-05	0.95903	0.95667	2.0	0.93341	0.45455
15.0	1.0	0.98804	0.97625	0.72466	0.00579	0.84873	0.98796	-1.39958	0.98813	0.0	0.9565	0.95378	2.0	0.93786	0.45455
16.0	1.0	0.98708	0.97435	0.72195	0.00624	0.84725	0.98698	-1.60971	0.98717	0.0	0.9533	0.95016	2.0	0.94176	0.45455
17.0	1.0	0.98625	0.97272	0.72232	0.00662	0.84754	0.98614	-1.84737	0.98636	0.0	0.95065	0.94709	2.0	0.9452	0.45455
18.0	1.0	0.98528	0.9708	0.71985	0.00708	0.8461	0.98515	-2.08737	0.9854	0.0	0.94751	0.94348	2.0	0.94825	0.45455
19.0	1.0	0.98442	0.96911	0.71961	0.00747	0.84601	0.98428	-2.35389	0.98455	0.0	0.94481	0.94031	2.0	0.95098	0.45455
20.0	1.0	0.9835	0.9673	0.71838	0.00789	0.84539	0.98334	-2.63054	0.98365	0.0	0.94195	0.93693	2.0	0.95344	0.45455

Standard deviation of Adjusted Rand versus number of clusters
gap: -0.50, Tp: 0.25, single link

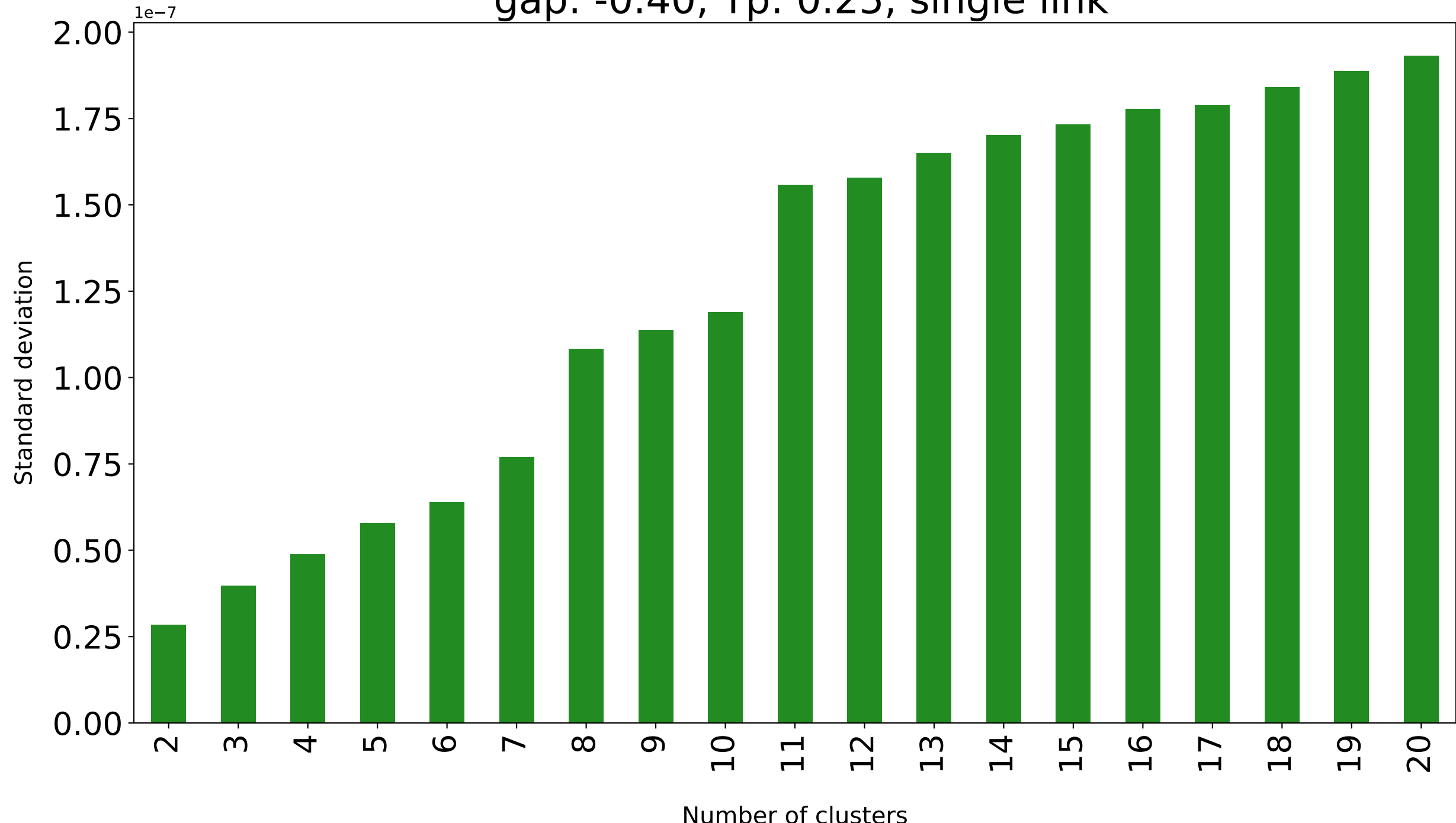Hierarchical Clustering Dendrogram - gap: -0.40, Tp: 0.25, single link

distance

patient index
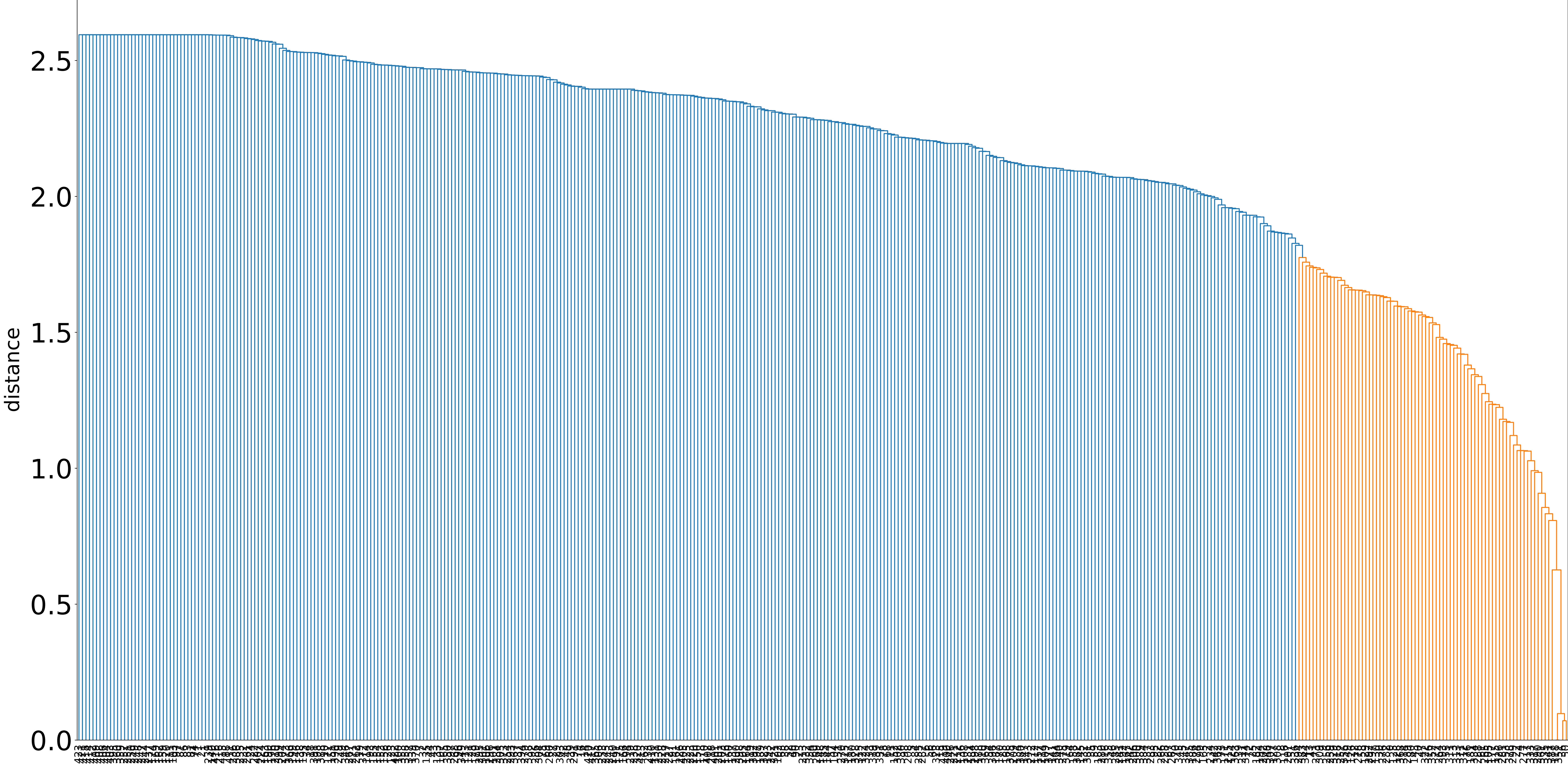
Cophenetic Correlation Coefficient: 0.6921369581078664

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

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99917	0.99834	0.736	0.00042	0.736	0.99917	0.00043	0.99917	5e-05	0.9967	0.9967	2.0	0.53974	0.51951
3.0	1.0	0.99827	0.99655	0.72504	0.00086	0.80899	0.99827	-0.01412	0.99827	3e-05	0.99318	0.99315	2.0	0.69239	0.51951
4.0	1.0	0.99733	0.99467	0.72332	0.00133	0.82891	0.99732	-0.04403	0.99733	2e-05	0.98954	0.98944	2.0	0.76811	0.51951
5.0	1.0	0.99636	0.99274	0.71691	0.00181	0.83266	0.99635	-0.08777	0.99637	2e-05	0.98584	0.98563	2.0	0.81437	0.51951
6.0	1.0	0.99565	0.99133	0.72808	0.00215	0.84178	0.99564	-0.15284	0.99566	1e-05	0.9832	0.98287	2.0	0.84443	0.51951
7.0	1.0	0.99378	0.98762	0.70066	0.00307	0.81313	0.99376	-0.21181	0.99379	1e-05	0.9762	0.97565	2.0	0.86507	0.51951
8.0	1.0	0.99182	0.98378	0.68121	0.00403	0.79019	0.9918	-0.28342	0.99184	1e-05	0.96909	0.96828	2.0	0.88197	0.51951
9.0	1.0	0.9909	0.98197	0.68425	0.00447	0.79558	0.99087	-0.38868	0.99093	1e-05	0.96585	0.96481	2.0	0.89512	0.51951
10.0	1.0	0.99016	0.98051	0.69359	0.00482	0.80454	0.99013	-0.51921	0.9902	1e-05	0.96331	0.962	2.0	0.90562	0.51951
11.0	1.0	0.98818	0.97667	0.67955	0.00577	0.78838	0.98814	-0.62774	0.98823	1e-05	0.95645	0.95479	2.0	0.91423	0.51951
12.0	1.0	0.98721	0.97476	0.68016	0.00623	0.79189	0.98716	-0.77587	0.98727	1e-05	0.95317	0.95116	2.0	0.92123	0.51951
13.0	1.0	0.98624	0.97285	0.68125	0.00669	0.79457	0.98618	-0.94049	0.9863	1e-05	0.94994	0.94756	2.0	0.92727	0.51951
14.0	1.0	0.98538	0.97116	0.6845	0.00709	0.79861	0.98531	-1.1276	0.98545	0.0	0.94714	0.94438	2.0	0.93249	0.51951
15.0	1.0	0.98446	0.96936	0.68566	0.00752	0.80122	0.98438	-1.3254	0.98454	0.0	0.94418	0.94099	2.0	0.93691	0.51951
16.0	1.0	0.98354	0.96756	0.68652	0.00795	0.80334	0.98344	-1.53845	0.98363	0.0	0.94125	0.93761	2.0	0.94088	0.51951
17.0	1.0	0.98255	0.96561	0.68589	0.00841	0.80444	0.98244	-1.76095	0.98265	0.0	0.9381	0.93396	2.0	0.94437	0.51951
18.0	1.0	0.98173	0.96402	0.6886	0.00878	0.80731	0.98161	-2.01538	0.98185	0.0	0.93563	0.93101	2.0	0.94748	0.51951
19.0	1.0	0.98096	0.96252	0.69182	0.00913	0.81038	0.98083	-2.29092	0.9811	0.0	0.93336	0.92824	2.0	0.95027	0.51951
20.0	1.0	0.98013	0.96089	0.6933	0.0095	0.81233	0.97998	-2.57379	0.98027	0.0	0.93089	0.92522	2.0	0.95276	0.51951

Standard deviation of Adjusted Rand versus number of clusters
gap: -0.40, Tp: 0.25, single link

Hierarchical Clustering Dendrogram - gap: -0.30, Tp: 0.25, single link
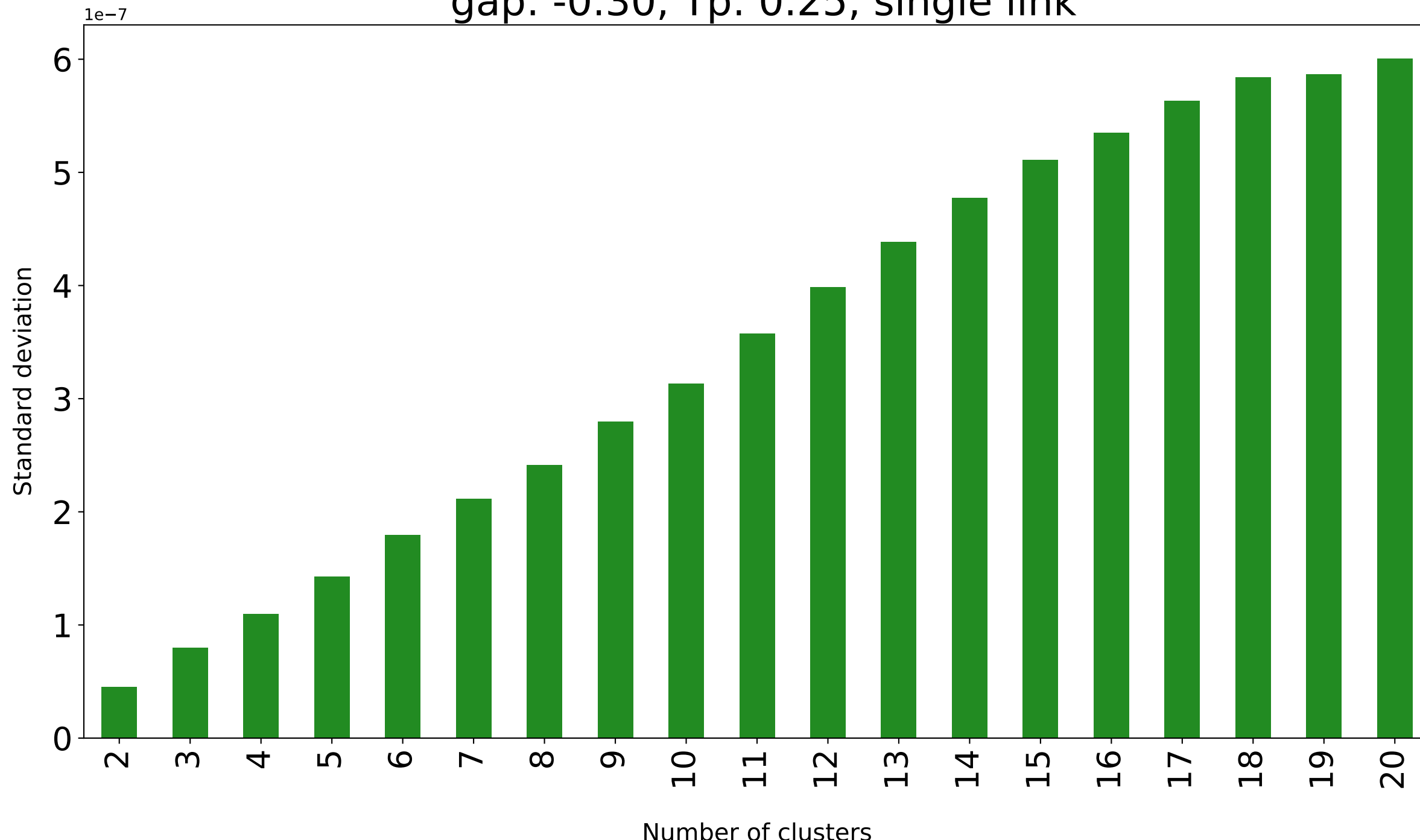
distance

patient index
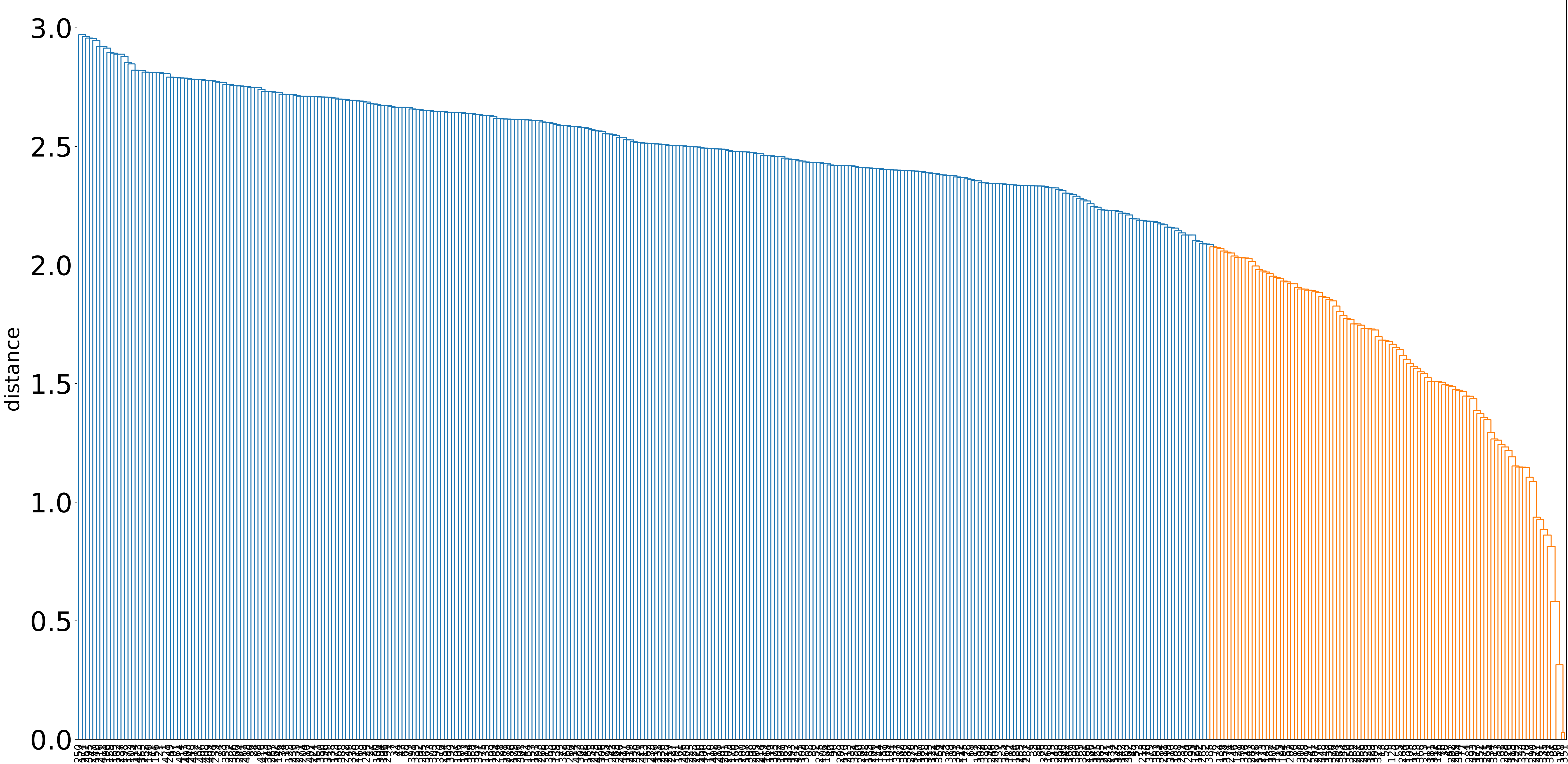
Cophenetic Correlation Coefficient: 0.7030374179789812

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

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99845	0.99691	0.64357	0.00077	0.64357	0.99845	0.00279	0.99845	4e-05	0.99388	0.99388	2.0	0.54634	0.62251
3.0	1.0	0.99689	0.99383	0.64047	0.00155	0.69856	0.99689	-0.00761	0.9969	2e-05	0.98789	0.98786	2.0	0.69609	0.62066
4.0	1.0	0.99538	0.99085	0.63861	0.0023	0.71827	0.99537	-0.03284	0.99538	2e-05	0.98218	0.98209	2.0	0.77159	0.61957
5.0	1.0	0.99372	0.9876	0.62707	0.00311	0.71588	0.99371	-0.07059	0.99373	1e-05	0.97606	0.97587	2.0	0.81721	0.61915
6.0	1.0	0.99221	0.98467	0.63338	0.00386	0.71923	0.9922	-0.12327	0.99222	1e-05	0.97065	0.97036	2.0	0.84722	0.61742
7.0	1.0	0.98935	0.97911	0.59646	0.00526	0.68207	0.98934	-0.16407	0.98937	1e-05	0.96032	0.95981	2.0	0.86805	0.61228
8.0	1.0	0.98676	0.97408	0.57254	0.00653	0.66093	0.98674	-0.21999	0.98678	1e-05	0.95116	0.95039	2.0	0.8846	0.61223
9.0	1.0	0.9848	0.97035	0.57007	0.00748	0.65926	0.98478	-0.31334	0.98483	1e-05	0.9446	0.94361	2.0	0.89726	0.61068
10.0	1.0	0.9833	0.96751	0.57466	0.0082	0.6668	0.98327	-0.40912	0.98333	1e-05	0.93975	0.93851	2.0	0.90717	0.60674
11.0	1.0	0.9827	0.96644	0.59423	0.00848	0.68876	0.98266	-0.54002	0.98274	1e-05	0.93828	0.93688	2.0	0.91563	0.60619
12.0	1.0	0.98176	0.96473	0.60526	0.00893	0.70089	0.98171	-0.68086	0.9818	0.0	0.93564	0.93405	2.0	0.92271	0.60532
13.0	1.0	0.98055	0.96253	0.61216	0.0095	0.70721	0.9805	-0.83536	0.98061	0.0	0.93215	0.9303	2.0	0.9287	0.60532
14.0	1.0	0.97902	0.95969	0.61272	0.01023	0.70863	0.97896	-0.99363	0.97908	0.0	0.92758	0.92542	2.0	0.93383	0.60334
15.0	1.0	0.97754	0.95695	0.61407	0.01093	0.71092	0.97747	-1.16911	0.97761	0.0	0.92322	0.92067	2.0	0.9378	0.59795
16.0	1.0	0.97646	0.95496	0.62037	0.01143	0.71714	0.97638	-1.37411	0.97654	0.0	0.9202	0.91722	2.0	0.94167	0.59671
17.0	1.0	0.97478	0.95183	0.61777	0.01222	0.71467	0.97469	-1.56235	0.97487	0.0	0.91521	0.91175	2.0	0.94416	0.59121
18.0	1.0	0.97368	0.94978	0.62241	0.01272	0.71921	0.97358	-1.79875	0.97378	0.0	0.91216	0.9082	2.0	0.94716	0.59083
19.0	1.0	0.97294	0.94835	0.62905	0.01304	0.72745	0.97283	-2.0373	0.97306	0.0	0.91013	0.90557	2.0	0.94973	0.59078
20.0	1.0	0.97174	0.94608	0.62986	0.01359	0.73026	0.97161	-2.28918	0.97186	0.0	0.90672	0.90152	2.0	0.95225	0.58961

Standard deviation of Adjusted Rand versus number of clusters
gap: -0.30, Tp: 0.25, single link

Hierarchical Clustering Dendrogram - gap: -0.20, Tp: 0.25, single link
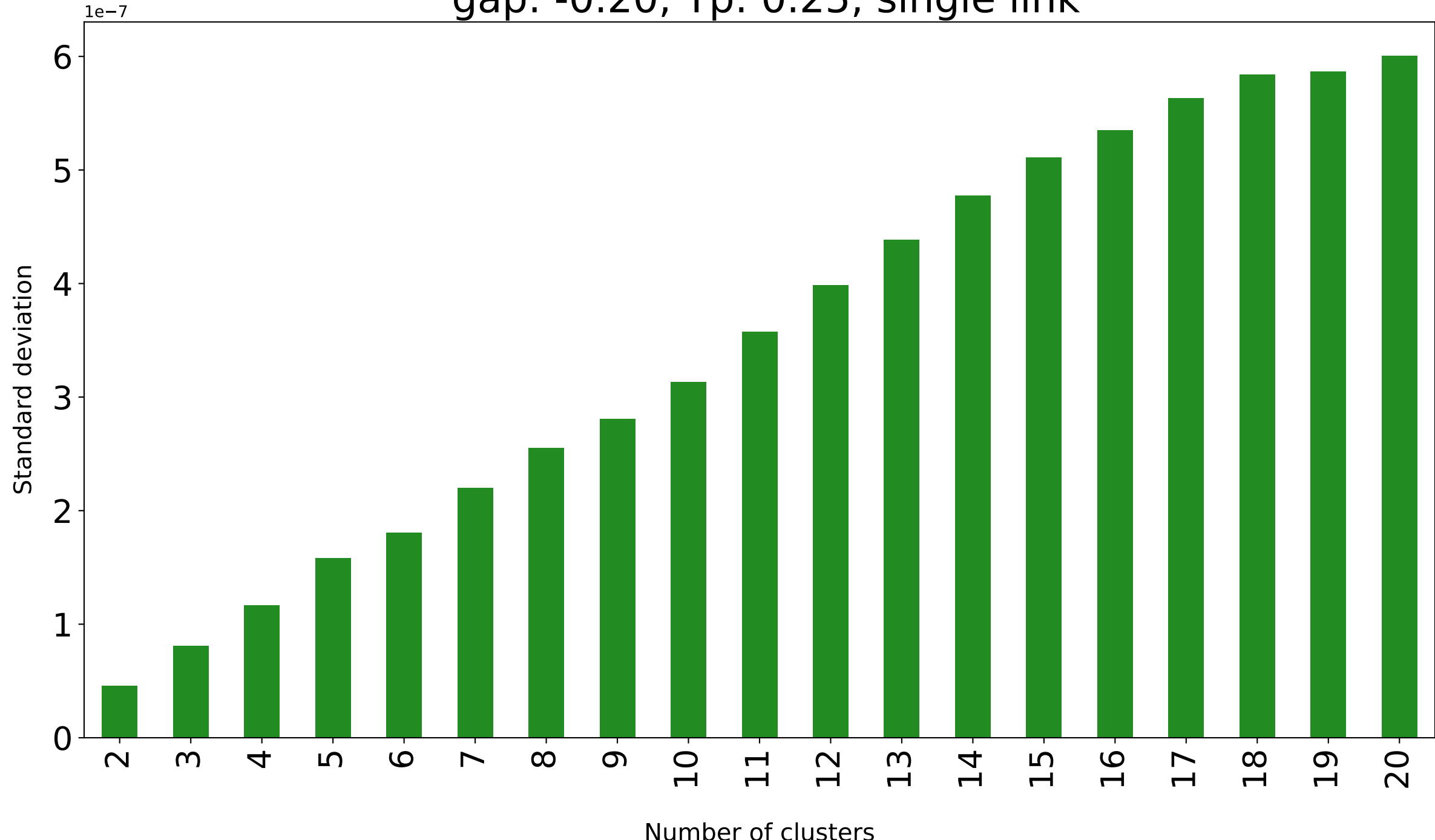
distance

patient index
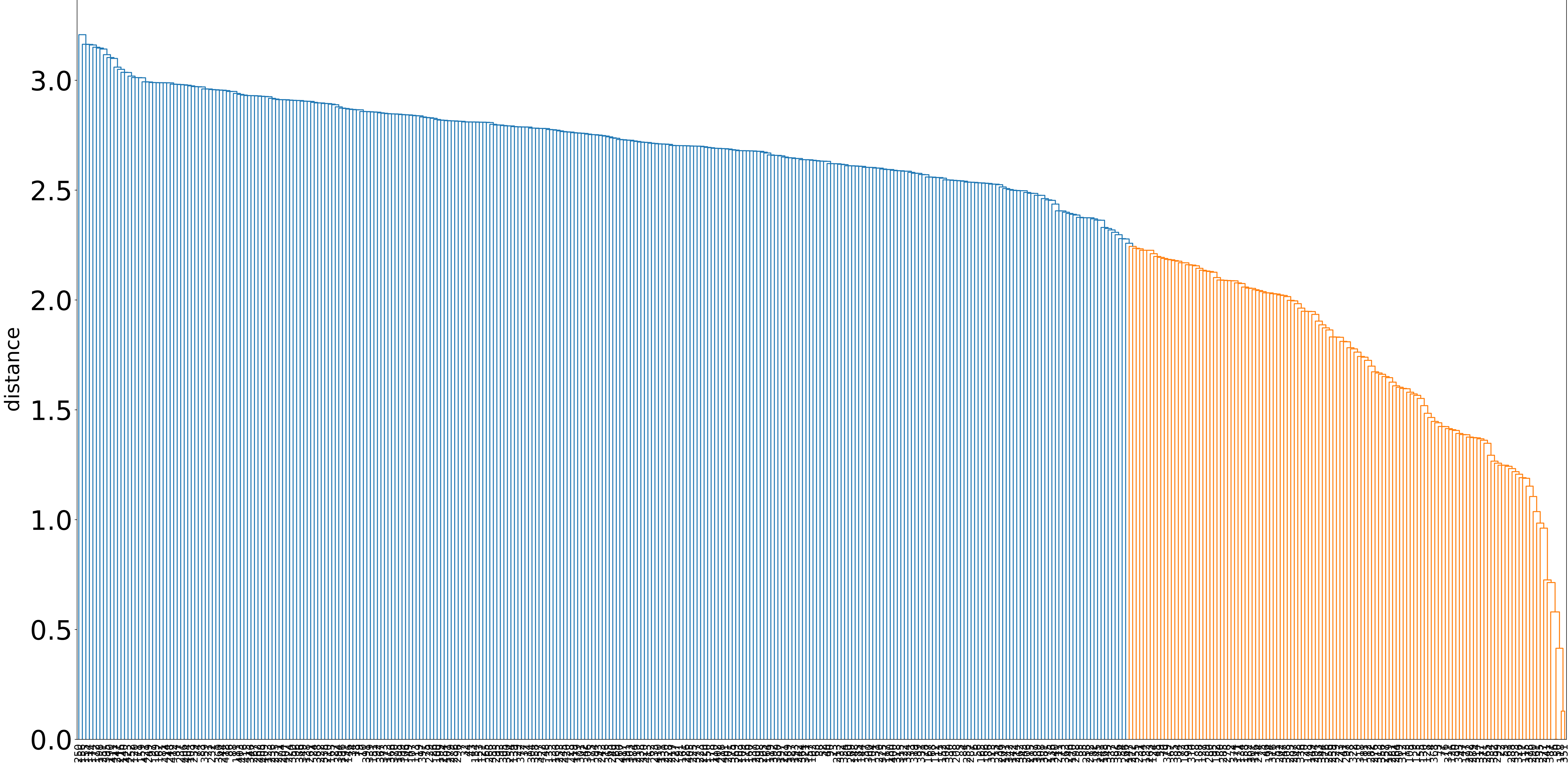
Cophenetic Correlation Coefficient: 0.7124128460064628

Average values of five 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
2.0	1.0	0.99836	0.99674	0.62355	0.00082	0.62355	0.99836	0.0031	0.99836	4e-05	0.99353	0.99353	2.0	0.54929	0.70148
3.0	1.0	0.99572	0.99149	0.5518	0.00213	0.60322	0.99571	-0.00046	0.99572	2e-05	0.98331	0.98326	2.0	0.69037	0.69195
4.0	1.0	0.99335	0.98685	0.53763	0.0033	0.60159	0.99335	-0.015	0.99336	1e-05	0.97442	0.97429	2.0	0.7679	0.69178
5.0	1.0	0.9908	0.98188	0.5217	0.00456	0.59108	0.9908	-0.03855	0.99081	1e-05	0.96508	0.96485	2.0	0.81436	0.69125
6.0	1.0	0.98951	0.97937	0.54879	0.00519	0.62637	0.9895	-0.08299	0.98952	1e-05	0.96054	0.96014	2.0	0.84509	0.68898
7.0	1.0	0.98739	0.97529	0.55092	0.00623	0.62566	0.98738	-0.13709	0.98741	1e-05	0.95315	0.95258	2.0	0.86706	0.68817
8.0	1.0	0.98525	0.97119	0.54626	0.00727	0.62357	0.98523	-0.20553	0.98527	1e-05	0.94581	0.94503	2.0	0.8837	0.6872
9.0	1.0	0.98416	0.96911	0.56486	0.00779	0.64503	0.98414	-0.29728	0.98418	1e-05	0.94232	0.9413	2.0	0.89661	0.6816
10.0	1.0	0.98321	0.96734	0.58485	0.00824	0.66779	0.98319	-0.41169	0.98324	1e-05	0.93947	0.93817	2.0	0.90699	0.67874
11.0	1.0	0.98193	0.96493	0.59256	0.00885	0.67807	0.9819	-0.53457	0.98197	1e-05	0.93546	0.93388	2.0	0.91529	0.67783
12.0	1.0	0.98099	0.96313	0.60491	0.00929	0.69232	0.98095	-0.68552	0.98103	0.0	0.9326	0.93064	2.0	0.92232	0.66919
13.0	1.0	0.98038	0.96201	0.61862	0.00957	0.70867	0.98033	-0.85354	0.98043	0.0	0.931	0.92872	2.0	0.92831	0.66699
14.0	1.0	0.97924	0.95984	0.6224	0.0101	0.71506	0.97918	-1.03159	0.9793	0.0	0.92752	0.92483	2.0	0.93346	0.66402
15.0	1.0	0.97824	0.95796	0.62703	0.01057	0.72164	0.97817	-1.21251	0.9783	0.0	0.92464	0.92157	2.0	0.93794	0.66386
16.0	1.0	0.9777	0.95688	0.63524	0.0108	0.73306	0.97762	-1.42868	0.97778	0.0	0.92305	0.91945	2.0	0.94101	0.66024
17.0	1.0	0.97731	0.95612	0.64569	0.01096	0.74517	0.97722	-1.6612	0.9774	0.0	0.92211	0.91803	2.0	0.94403	0.6588
18.0	1.0	0.97653	0.95459	0.65035	0.0113	0.75191	0.97643	-1.89844	0.97664	0.0	0.91983	0.91518	2.0	0.94627	0.65875
19.0	1.0	0.97568	0.95295	0.65369	0.01169	0.75718	0.97556	-2.15391	0.97579	0.0	0.91743	0.91222	2.0	0.94912	0.65857
20.0	1.0	0.97427	0.95035	0.65246	0.01233	0.75638	0.97414	-2.40666	0.9744	0.0	0.9135	0.90777	2.0	0.95169	0.65457

Standard deviation of Adjusted Rand versus number of clusters
gap: -0.20, Tp: 0.25, single link

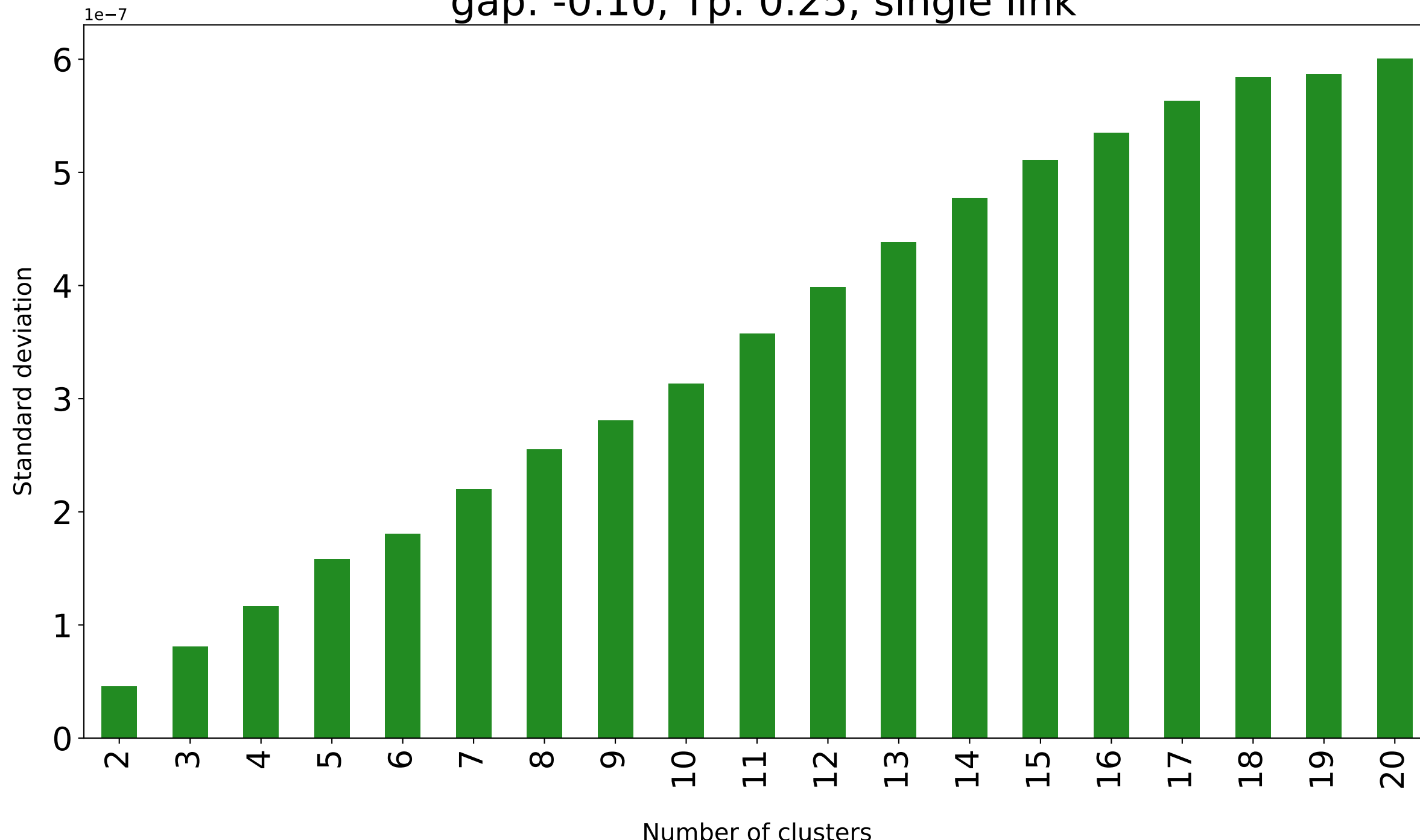Hierarchical Clustering Dendrogram - gap: -0.10, Tp: 0.25, single link

distance

patient index
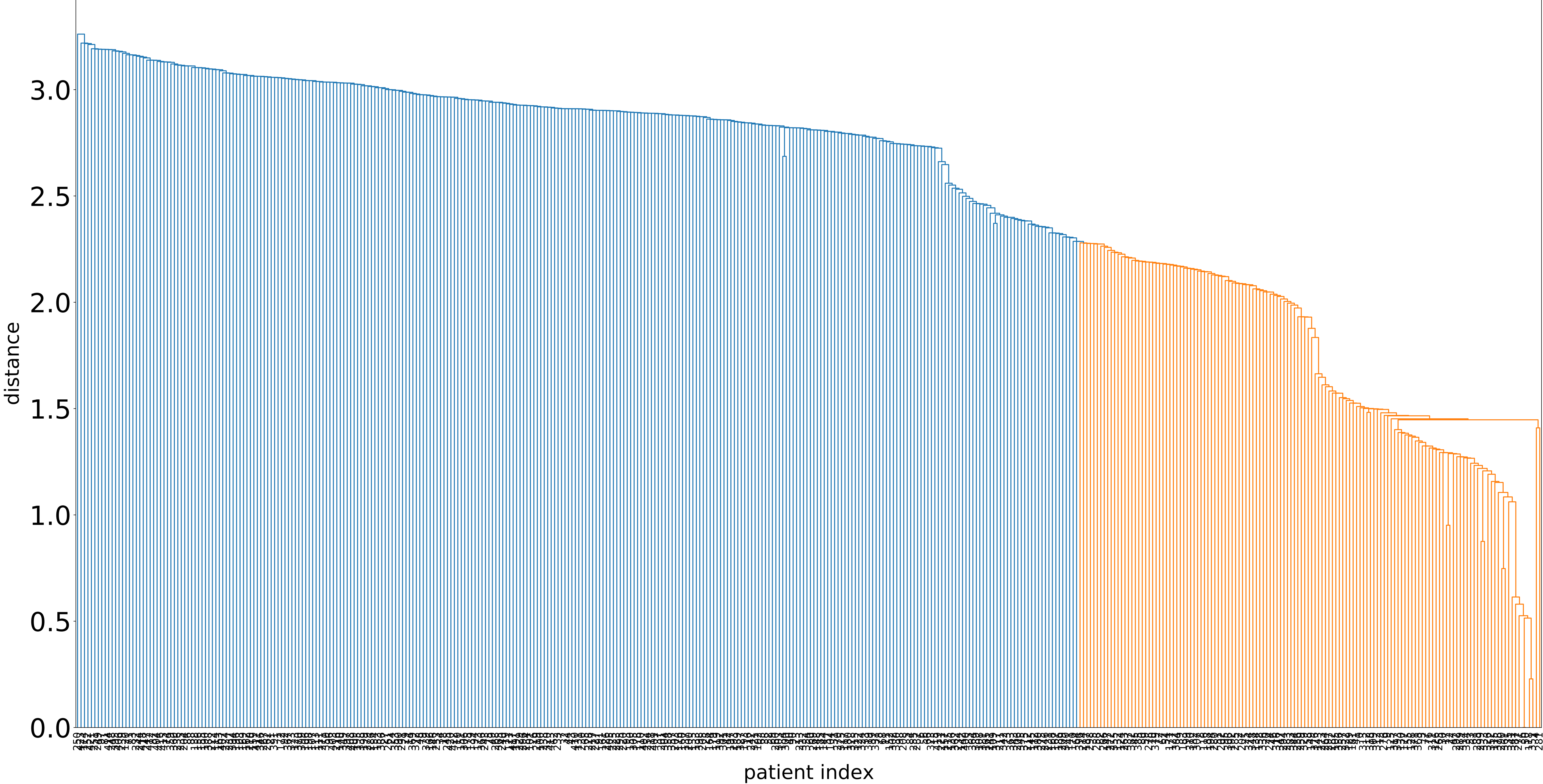
Cophenetic Correlation Coefficient: 0.6476106572026445

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

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99827	0.99656	0.57961	0.00086	0.57961	0.99827	0.00347	0.99827	4e-05	0.99318	0.99318	2.0	0.55222	0.74581
3.0	1.0	0.99636	0.99276	0.57407	0.00181	0.64797	0.99636	-0.00534	0.99636	2e-05	0.98577	0.98572	2.0	0.69116	0.73618
4.0	1.0	0.99514	0.99035	0.60173	0.00242	0.69651	0.99513	-0.02737	0.99514	2e-05	0.98116	0.98103	2.0	0.76754	0.73567
5.0	1.0	0.99326	0.98666	0.59727	0.00334	0.69397	0.99325	-0.06134	0.99327	1e-05	0.97417	0.97391	2.0	0.81051	0.73467
6.0	1.0	0.99101	0.98223	0.58201	0.00445	0.67634	0.99099	-0.10642	0.99102	1e-05	0.96584	0.96537	2.0	0.84147	0.73008
7.0	1.0	0.98969	0.97966	0.59551	0.00509	0.69307	0.98967	-0.16922	0.9897	1e-05	0.96119	0.96051	2.0	0.86416	0.72969
8.0	1.0	0.98803	0.97644	0.59539	0.00589	0.69378	0.98801	-0.23609	0.98805	1e-05	0.9554	0.95448	2.0	0.88117	0.72951
9.0	1.0	0.98661	0.97372	0.60248	0.00658	0.70033	0.98658	-0.32326	0.98664	1e-05	0.95062	0.94947	2.0	0.89445	0.72942
10.0	1.0	0.98574	0.97202	0.61439	0.00699	0.71611	0.9857	-0.43743	0.98577	1e-05	0.94777	0.94633	2.0	0.90507	0.72925
11.0	1.0	0.98519	0.97093	0.62981	0.00725	0.73569	0.98514	-0.58007	0.98523	1e-05	0.94603	0.94425	2.0	0.91336	0.72914
12.0	1.0	0.98486	0.97029	0.64684	0.00738	0.75436	0.98481	-0.73998	0.98492	1e-05	0.94514	0.94303	2.0	0.9206	0.7278
13.0	1.0	0.98382	0.96826	0.64989	0.00787	0.75858	0.98376	-0.90722	0.98388	1e-05	0.94172	0.93921	2.0	0.92676	0.72737
14.0	1.0	0.98342	0.96744	0.66201	0.00804	0.77253	0.98335	-1.09815	0.98349	0.0	0.94053	0.93758	2.0	0.93202	0.7267
15.0	1.0	0.98281	0.96623	0.6703	0.00832	0.78122	0.98273	-1.2936	0.98289	0.0	0.93867	0.93528	2.0	0.93611	0.72513
16.0	1.0	0.982	0.96464	0.67405	0.00869	0.78585	0.98191	-1.49241	0.98209	0.0	0.93616	0.93231	2.0	0.93849	0.72361
17.0	1.0	0.98088	0.96249	0.67358	0.00921	0.78654	0.98078	-1.69422	0.98099	0.0	0.93271	0.92835	2.0	0.94214	0.72346
18.0	1.0	0.98024	0.96122	0.67842	0.00949	0.7926	0.98013	-1.93846	0.98036	0.0	0.93083	0.92596	2.0	0.94534	0.72284
19.0	1.0	0.97946	0.95968	0.68169	0.00984	0.7964	0.97933	-2.19492	0.97959	0.0	0.9285	0.92308	2.0	0.94813	0.72198
20.0	1.0	0.97862	0.95803	0.68192	0.01022	0.79901	0.97848	-2.46322	0.97876	0.0	0.92601	0.92002	2.0	0.95074	0.72113

Standard deviation of Adjusted Rand versus number of clusters
gap: -0.10, Tp: 0.25, single link

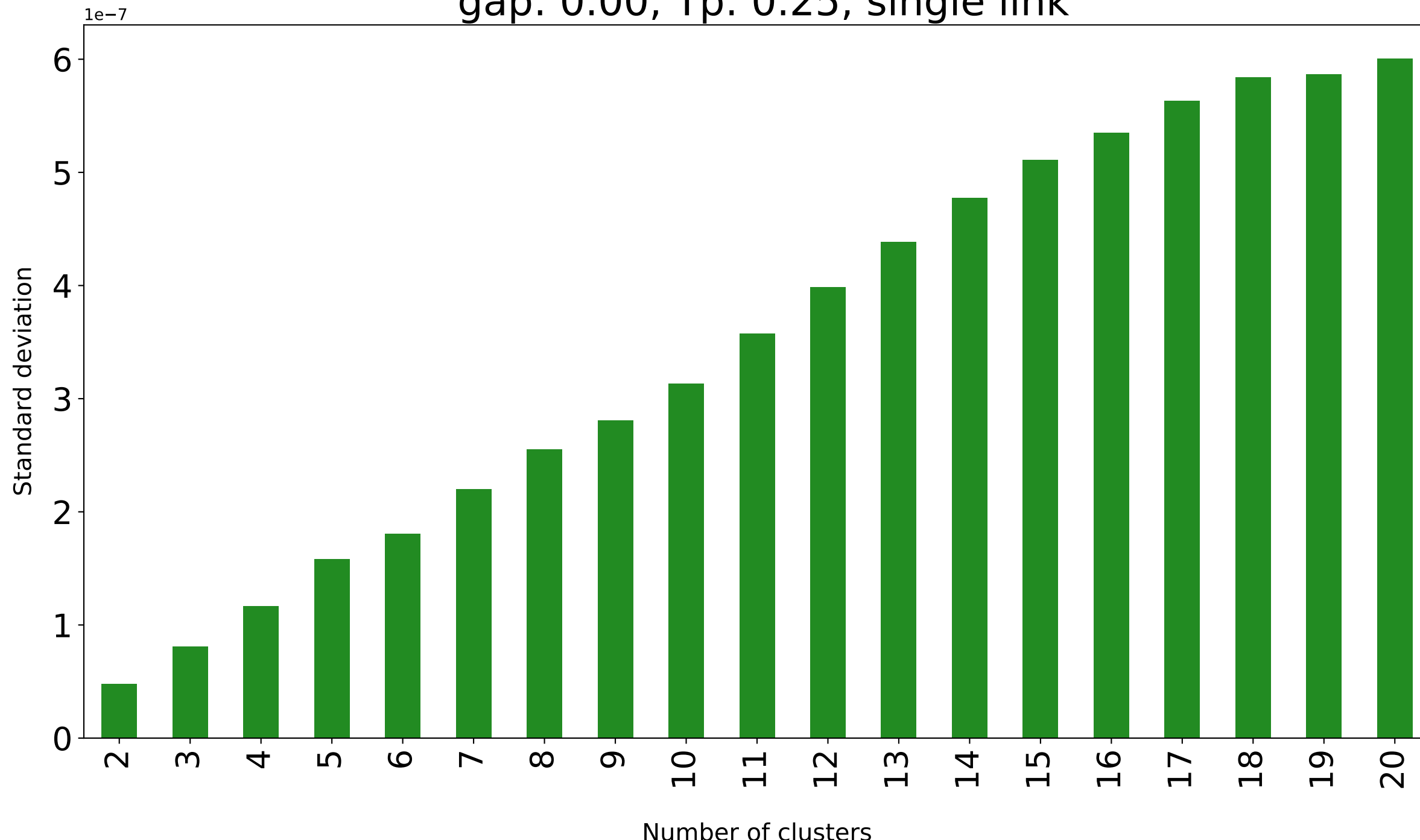Hierarchical Clustering Dendrogram - gap: 0.00, Tp: 0.25, single link
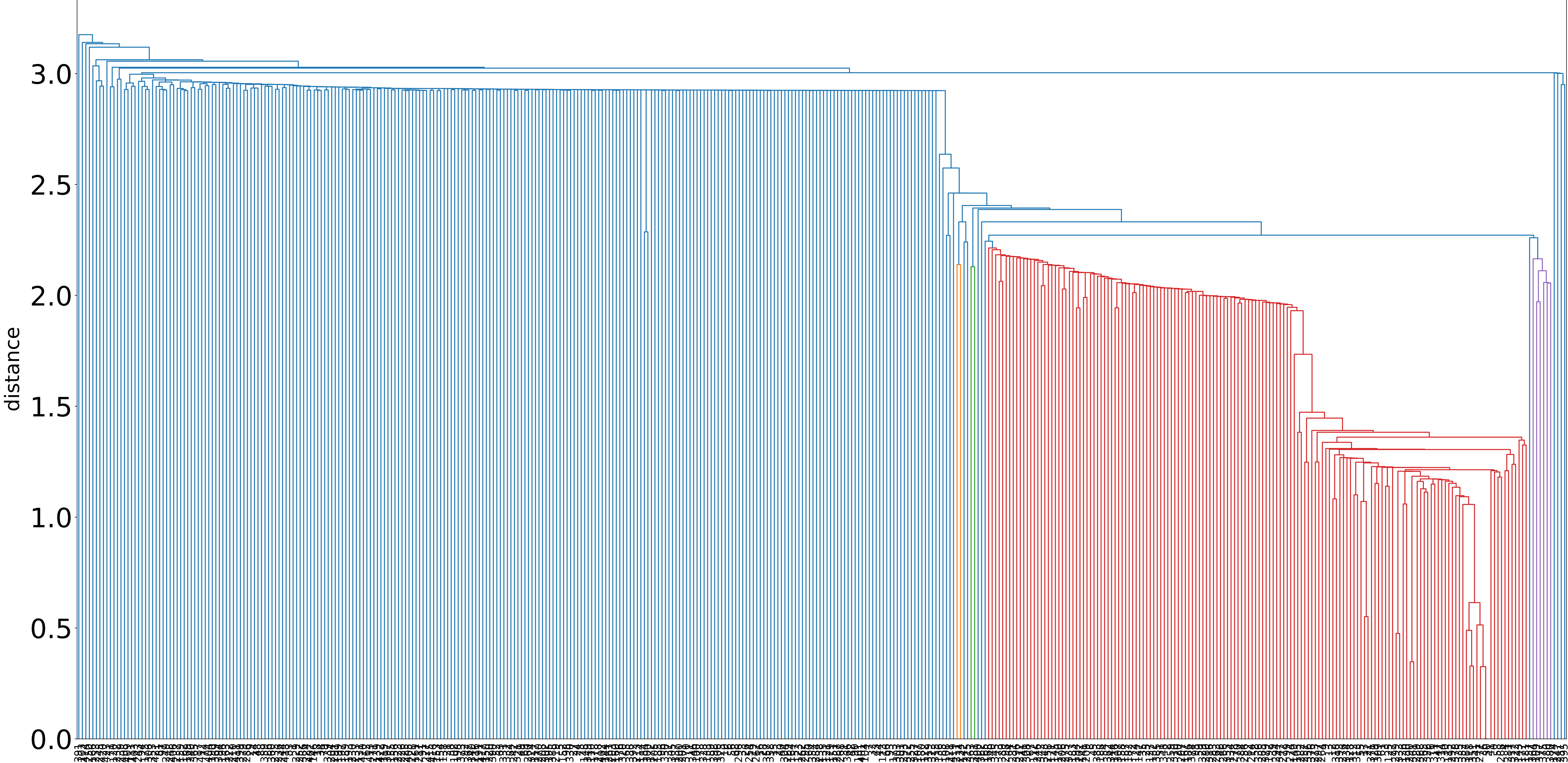
Cophenetic Correlation Coefficient: 0.4769504092054939

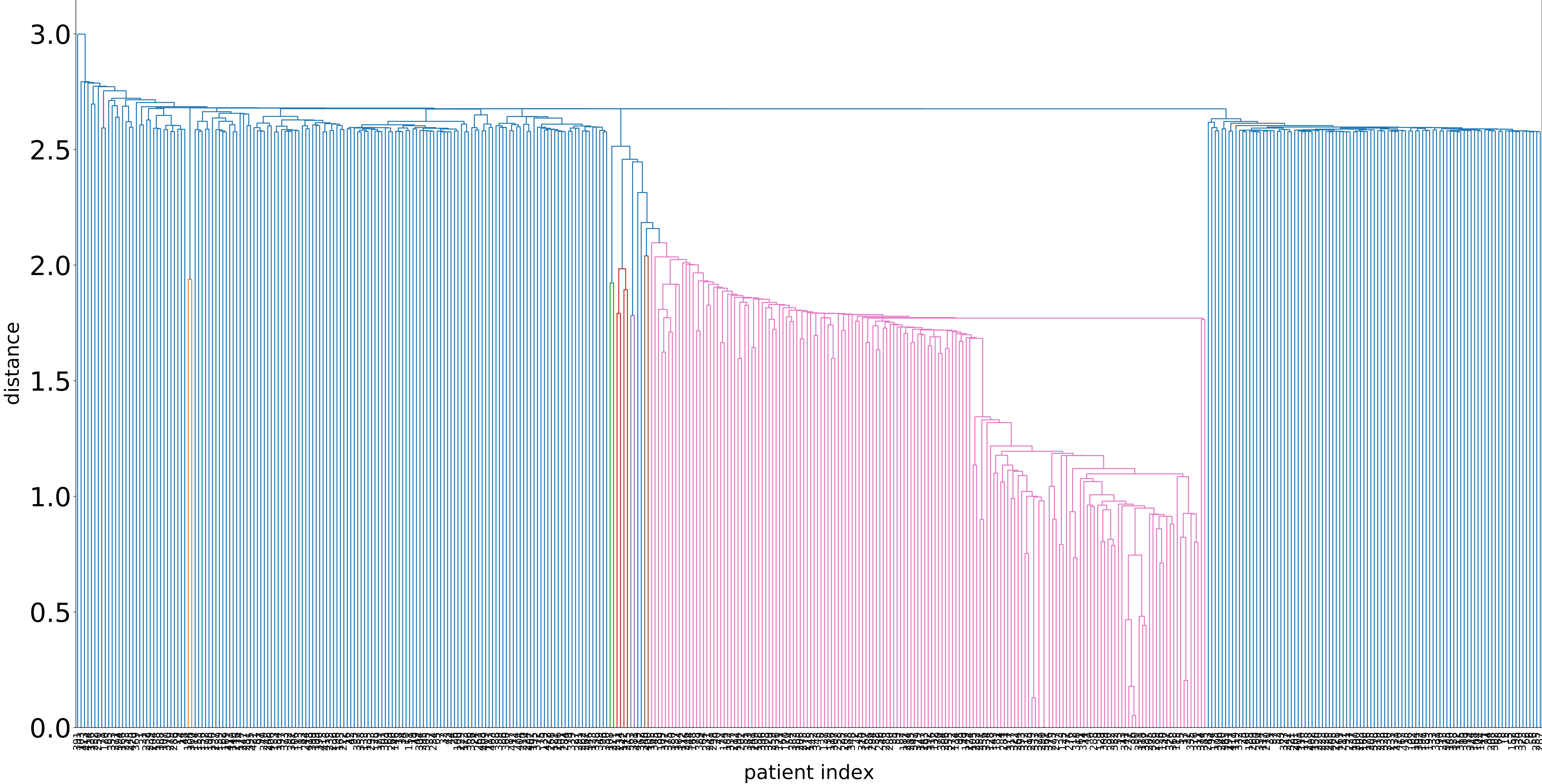# Average values of five clustering indices
gap: 0.00, Tp: 0.25, single link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99907	0.99815	0.74	0.00047	0.74	0.99907	0.00059	0.99907	5e-05	0.99634	0.99634	2.0	0.54785	0.76108
3.0	1.0	0.99721	0.99445	0.66818	0.00139	0.74642	0.9972	-0.0093	0.99722	3e-05	0.98912	0.98907	2.0	0.67705	0.75276
4.0	1.0	0.99577	0.99158	0.67739	0.00211	0.78557	0.99575	-0.04006	0.99578	2e-05	0.98362	0.98346	2.0	0.75648	0.75129
5.0	1.0	0.99298	0.98606	0.62247	0.00348	0.75382	0.99295	-0.07708	0.99302	1e-05	0.97315	0.97276	2.0	0.80179	0.74759
6.0	1.0	0.99068	0.98159	0.72433	0.00477	0.76892	0.99066	-0.19296	0.99071	1e-05	0.9651	0.96422	2.0	0.68497	0.73403
7.0	1.0	0.99106	0.9823	0.7372	0.00476	0.82021	0.99103	-0.33656	0.9911	1e-05	0.9667	0.96551	2.0	0.72741	0.73269
8.0	1.0	0.98897	0.97812	0.67092	0.0058	0.80385	0.98889	-0.3971	0.98904	1e-05	0.95908	0.95751	2.0	0.7428	0.72763
9.0	1.0	0.98674	0.97377	0.68448	0.00669	0.80383	0.98664	-0.55936	0.98683	1e-05	0.95166	0.94941	2.0	0.6859	0.7261
10.0	1.0	0.98535	0.97106	0.6982	0.00719	0.81326	0.98523	-0.76676	0.98547	0.0	0.94725	0.94431	2.0	0.64097	0.72519
11.0	1.0	0.98551	0.97149	0.77085	0.00787	0.84253	0.98542	-1.09195	0.9856	0.0	0.94895	0.94537	2.0	0.58644	0.72022
12.0	1.0	0.98269	0.9659	0.71651	0.00919	0.82772	0.98252	-1.24192	0.98286	0.0	0.9394	0.93495	2.0	0.61864	0.71983
13.0	1.0	0.97731	0.95533	0.64669	0.01136	0.7933	0.97699	-1.40675	0.97762	0.0	0.92144	0.91553	2.0	0.64824	0.71944
14.0	1.0	0.97702	0.95483	0.69626	0.01138	0.81552	0.97673	-1.89234	0.9773	0.0	0.92193	0.91462	2.0	0.60634	0.71858
15.0	1.0	0.97202	0.94546	0.70228	0.01373	0.79656	0.97175	-2.29458	0.97228	0.0	0.90765	0.89789	2.0	0.56843	0.71457
16.0	1.0	0.96766	0.93697	0.65459	0.01638	0.78179	0.9672	-2.56416	0.96812	0.0	0.89443	0.88292	2.0	0.6427	0.71329
17.0	1.0	0.96343	0.92888	0.63053	0.01836	0.76819	0.96285	-2.94685	0.96402	0.0	0.88225	0.86877	2.0	0.66372	0.71245
18.0	1.0	0.96397	0.93031	0.69723	0.01825	0.78984	0.9636	-3.72938	0.96435	0.0	0.8869	0.87144	2.0	0.63012	0.71226
19.0	1.0	0.96233	0.92697	0.67416	0.01931	0.7892	0.96182	-4.144	0.96284	0.0	0.88217	0.86546	2.0	0.64851	0.71151
20.0	1.0	0.96038	0.92307	0.65293	0.02042	0.78701	0.9597	-4.46967	0.96106	0.0	0.87666	0.8588	2.0	0.66475	0.71091

Standard deviation of Adjusted Rand versus number of clusters
gap: 0.00, Tp: 0.25, single link

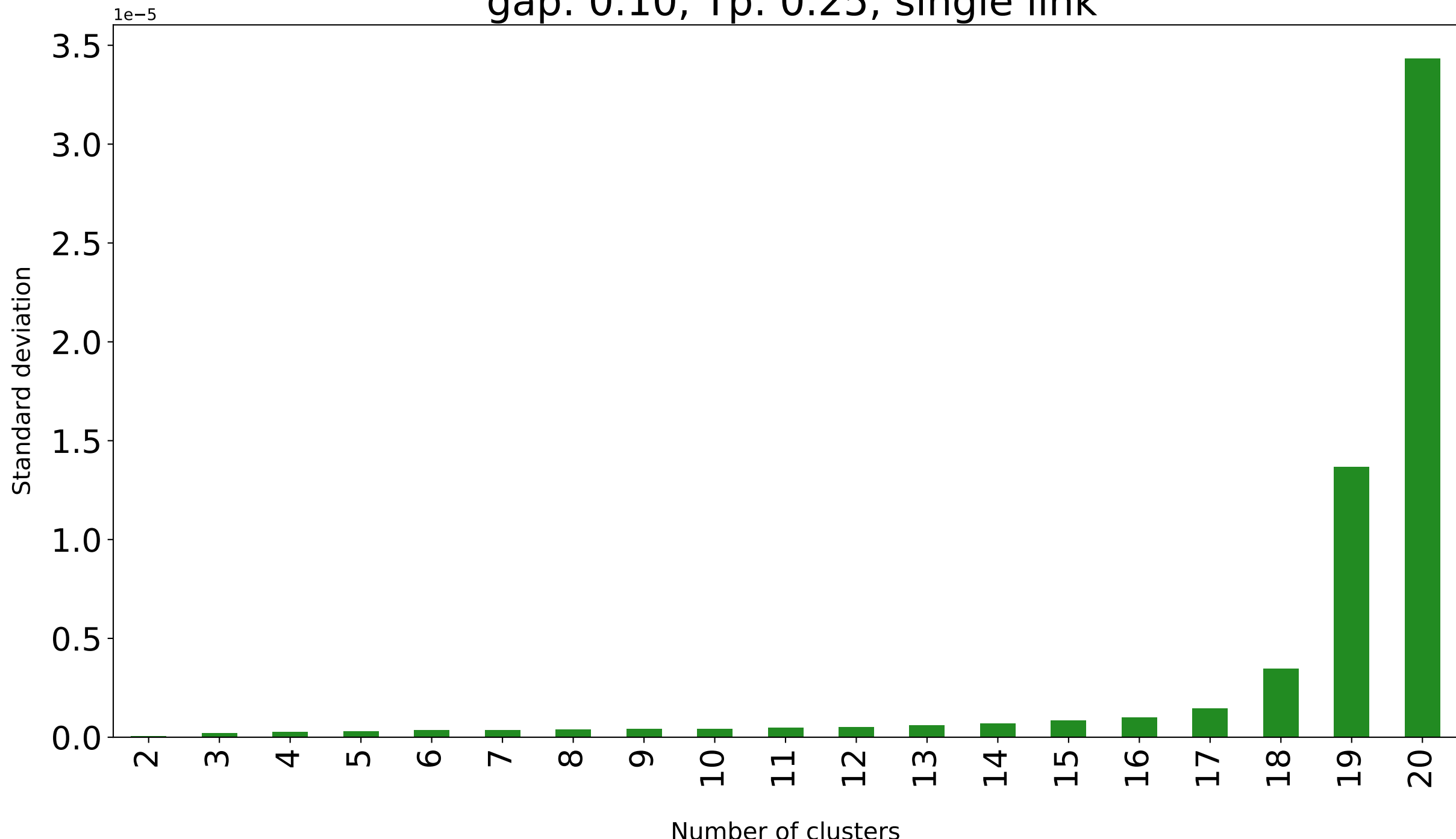Hierarchical Clustering Dendrogram - gap: 0.10, Tp: 0.25, single link

distance

patient index

Cophenetic Correlation Coefficient: 0.3975067141620936

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

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99882	0.99765	0.744	0.00059	0.744	0.99881	0.00114	0.99882	5e-05	0.99536	0.99536	2.0	0.55131	0.64862
3.0	1.0	0.99467	0.9895	0.61265	0.00267	0.68754	0.99463	-0.00292	0.99472	2e-05	0.97996	0.97985	2.0	0.67356	0.60413
4.0	1.0	0.99219	0.98462	0.62231	0.00392	0.71865	0.9921	-0.03356	0.99227	2e-05	0.97099	0.97073	2.0	0.74668	0.60352
5.0	1.0	0.98899	0.97832	0.5952	0.00555	0.72574	0.98885	-0.07702	0.98914	1e-05	0.95947	0.95886	2.0	0.79638	0.60281
6.0	1.0	0.98675	0.97395	0.63569	0.00678	0.75842	0.98654	-0.16624	0.98695	1e-05	0.95205	0.95092	2.0	0.69846	0.59991
7.0	1.0	0.9844	0.96932	0.60814	0.00777	0.75134	0.98416	-0.26278	0.98463	1e-05	0.9438	0.94219	2.0	0.73898	0.59958
8.0	1.0	0.98227	0.9652	0.61704	0.00876	0.75677	0.98201	-0.40969	0.98254	1e-05	0.93685	0.93454	2.0	0.68168	0.59571
9.0	1.0	0.9821	0.96502	0.70437	0.00942	0.7962	0.98189	-0.68976	0.98232	1e-05	0.93764	0.93441	2.0	0.61035	0.58874
10.0	1.0	0.98409	0.96893	0.79021	0.00883	0.8471	0.9839	-1.02941	0.98428	0.0	0.94556	0.94184	2.0	0.56454	0.58734
11.0	1.0	0.98146	0.96371	0.73796	0.00994	0.83681	0.98114	-1.11863	0.98178	0.0	0.93696	0.93239	2.0	0.60269	0.58667
12.0	1.0	0.97776	0.95651	0.7054	0.01183	0.81655	0.97735	-1.35191	0.97817	0.0	0.92508	0.91923	2.0	0.62335	0.58478
13.0	1.0	0.97103	0.94352	0.63686	0.01553	0.78168	0.97035	-1.48292	0.97172	0.0	0.90405	0.89645	2.0	0.71235	0.58333
14.0	1.0	0.96343	0.92894	0.57286	0.01916	0.74329	0.96242	-1.66101	0.96445	0.0	0.88074	0.87133	2.0	0.73301	0.58185
15.0	1.0	0.95219	0.90764	0.49929	0.02414	0.69326	0.95057	-1.77216	0.95381	0.0	0.84773	0.83589	2.0	0.73753	0.58137
16.0	1.0	0.94117	0.88732	0.46664	0.02901	0.65437	0.93907	-2.02862	0.94328	0.0	0.81813	0.80302	2.0	0.69559	0.58087
17.0	1.0	0.92882	0.8668	0.53817	0.03481	0.64903	0.92683	-3.09153	0.93083	0.0	0.79615	0.77235	2.0	0.65772	0.5799
18.0	1.0	0.91849	0.84835	0.51217	0.03979	0.64672	0.91523	-3.68819	0.92186	0.0	0.77521	0.74587	2.0	0.63614	0.57972
19.0	1.0	0.91883	0.85097	0.64706	0.0417	0.72503	0.91497	-5.61537	0.92293	0.0	0.79591	0.75505	2.0	0.60451	0.57955
20.0	0.99999	0.89156	0.80517	0.56925	0.05445	0.69626	0.88286	-6.2956	0.90096	0.0	0.74987	0.69781	2.0	0.57569	0.57917

Standard deviation of Adjusted Rand versus number of clusters
gap: 0.10, Tp: 0.25, single link

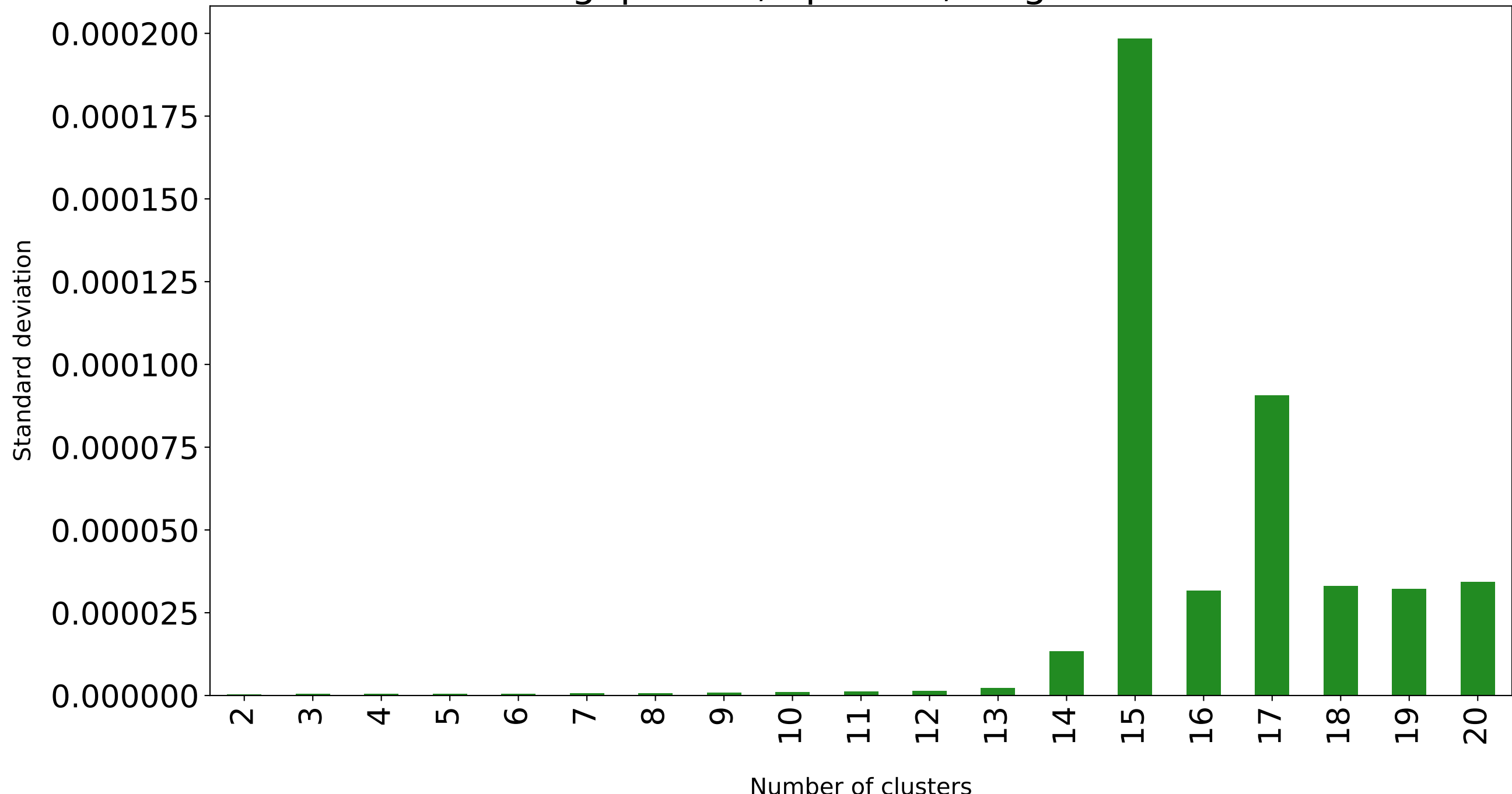Hierarchical Clustering Dendrogram - gap: 0.20, Tp: 0.25, single link

distance
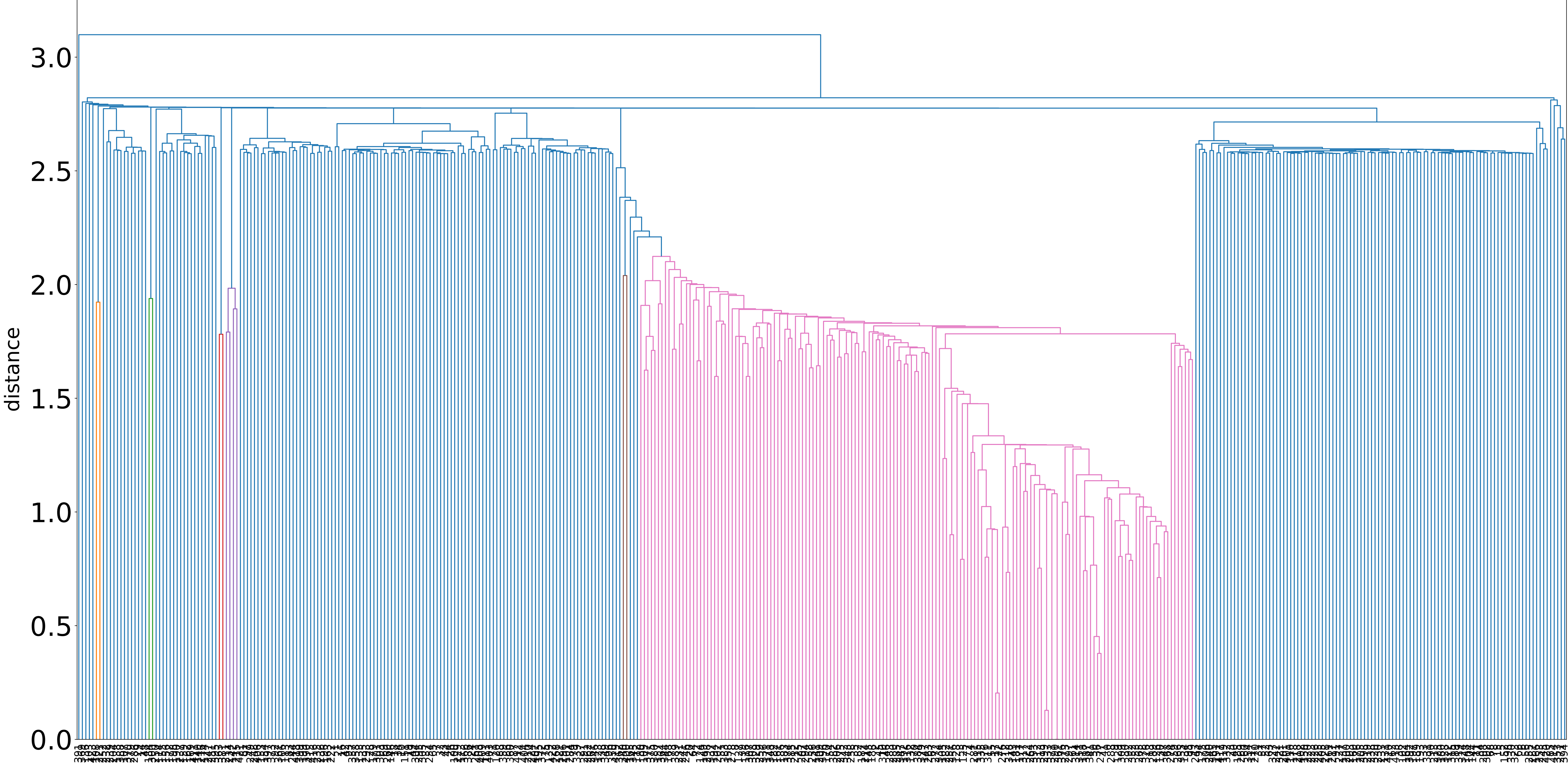
patient index

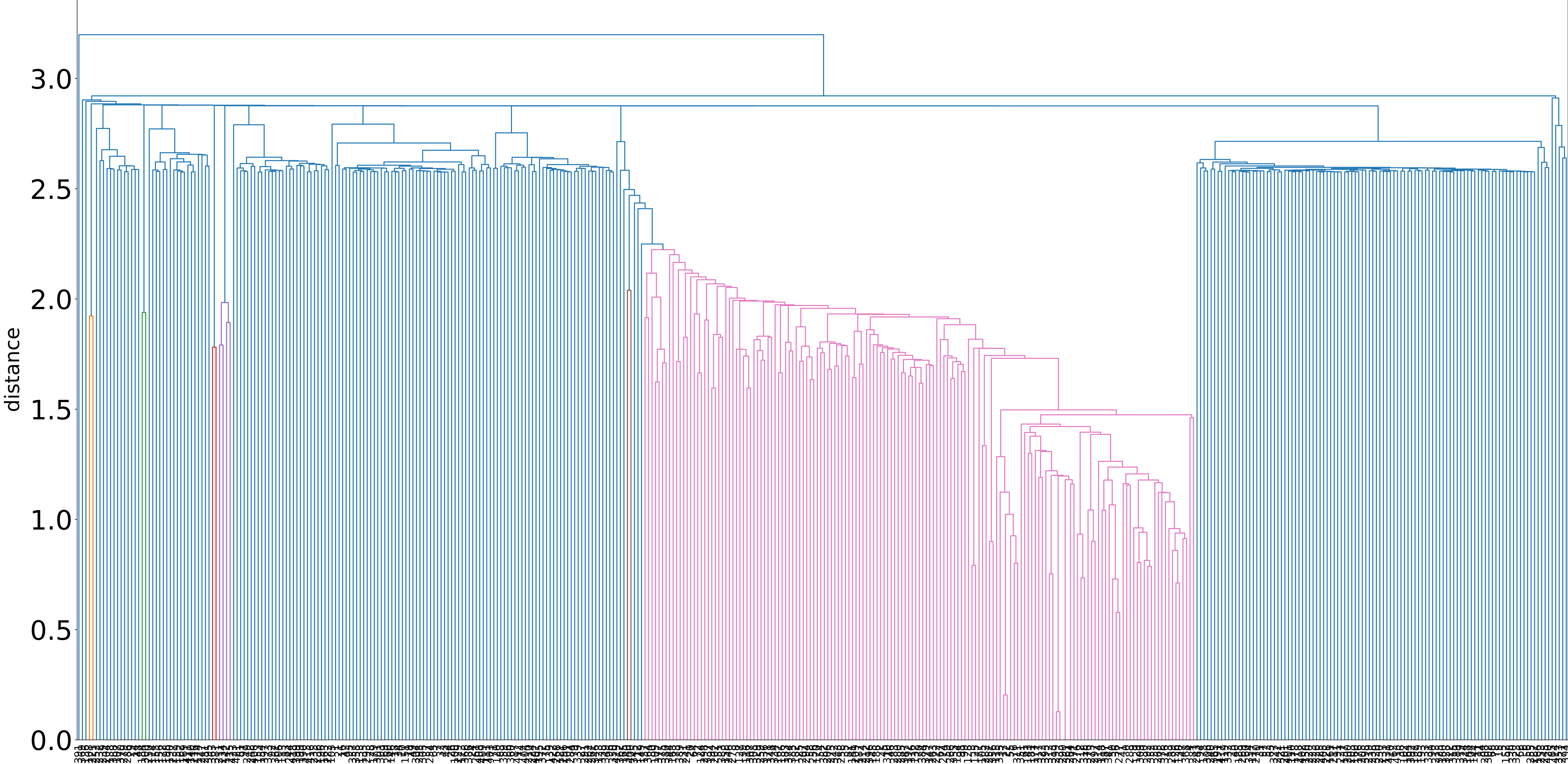Cophenetic Correlation Coefficient: 0.3483903997137967

Average values of five 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
2.0	1.0	0.99556	0.99124	0.69581	0.00224	0.6957	0.99551	0.00787	0.99561	4e-05	0.98324	0.98324	2.0	0.55039	0.57138
3.0	1.0	0.98749	0.9757	0.69337	0.00652	0.6824	0.98738	-0.01749	0.9876	1e-05	0.95512	0.9547	2.0	0.47207	0.52023
4.0	1.0	0.98588	0.97249	0.64722	0.00764	0.74529	0.98566	-0.05264	0.9861	1e-05	0.9499	0.94893	2.0	0.52646	0.51847
5.0	1.0	0.98383	0.96845	0.64519	0.00838	0.75238	0.98354	-0.12987	0.98412	1e-05	0.94306	0.94154	2.0	0.60969	0.51686
6.0	1.0	0.98074	0.96244	0.61586	0.01011	0.73805	0.98034	-0.18097	0.98113	1e-05	0.93284	0.93071	2.0	0.66563	0.51563
7.0	1.0	0.97484	0.9512	0.5748	0.01309	0.70673	0.97424	-0.23919	0.97545	1e-05	0.91423	0.91123	2.0	0.70929	0.51501
8.0	1.0	0.96922	0.94041	0.53458	0.01603	0.67687	0.96844	-0.35998	0.97	1e-05	0.89625	0.89231	2.0	0.74457	0.51449
9.0	1.0	0.95938	0.92167	0.45518	0.02074	0.63336	0.95807	-0.44927	0.9607	0.0	0.86604	0.86087	2.0	0.7719	0.51388
10.0	1.0	0.94963	0.90331	0.43106	0.02542	0.61099	0.94784	-0.60526	0.95143	0.0	0.838	0.83051	2.0	0.72984	0.51355
11.0	1.0	0.9411	0.88893	0.54891	0.0291	0.64007	0.93963	-1.35704	0.94258	0.0	0.82234	0.80756	2.0	0.67282	0.5127
12.0	1.0	0.92948	0.86768	0.5003	0.03446	0.63429	0.92715	-1.75545	0.93184	0.0	0.79471	0.77486	2.0	0.65093	0.51254
13.0	1.0	0.93168	0.87346	0.65981	0.03267	0.72412	0.92958	-2.99314	0.93383	0.0	0.81683	0.7875	2.0	0.60463	0.51894
14.0	1.0	0.9148	0.84433	0.61561	0.04123	0.72412	0.90949	-3.69452	0.92042	0.0	0.78926	0.7503	2.0	0.59076	0.51867
15.0	0.99997	0.87634	0.78041	0.53816	0.06	0.67708	0.86497	-4.42202	0.88865	0.0	0.72533	0.66951	2.0	0.5714	0.51853
16.0	1.0	0.84317	0.73101	0.59246	0.07579	0.68561	0.82535	-6.867	0.86288	0.0	0.70896	0.61765	2.0	0.53667	0.51846
17.0	1.0	0.79606	0.65363	0.5934	0.09478	0.64496	0.77528	-10.04499	0.81838	0.0	0.67747	0.51628	2.0	0.50867	0.51843
18.0	1.0	0.81704	0.67957	0.66985	0.08475	0.72357	0.79708	-14.12687	0.83783	0.0	0.74791	0.54611	2.0	0.48264	0.51842
19.0	1.00001	0.90995	0.84975	0.96837	0.0444	0.87291	0.89913	-19.85851	0.92163	0.0	0.8881	0.79645	2.0	0.45791	0.51835
20.0	1.0	0.95384	0.92088	0.9668	0.02364	0.9358	0.9494	-22.56978	0.95861	0.0	0.94592	0.8843	2.0	0.48246	0.51794

Standard deviation of Adjusted Rand versus number of clusters
gap: 0.20, Tp: 0.25, single link

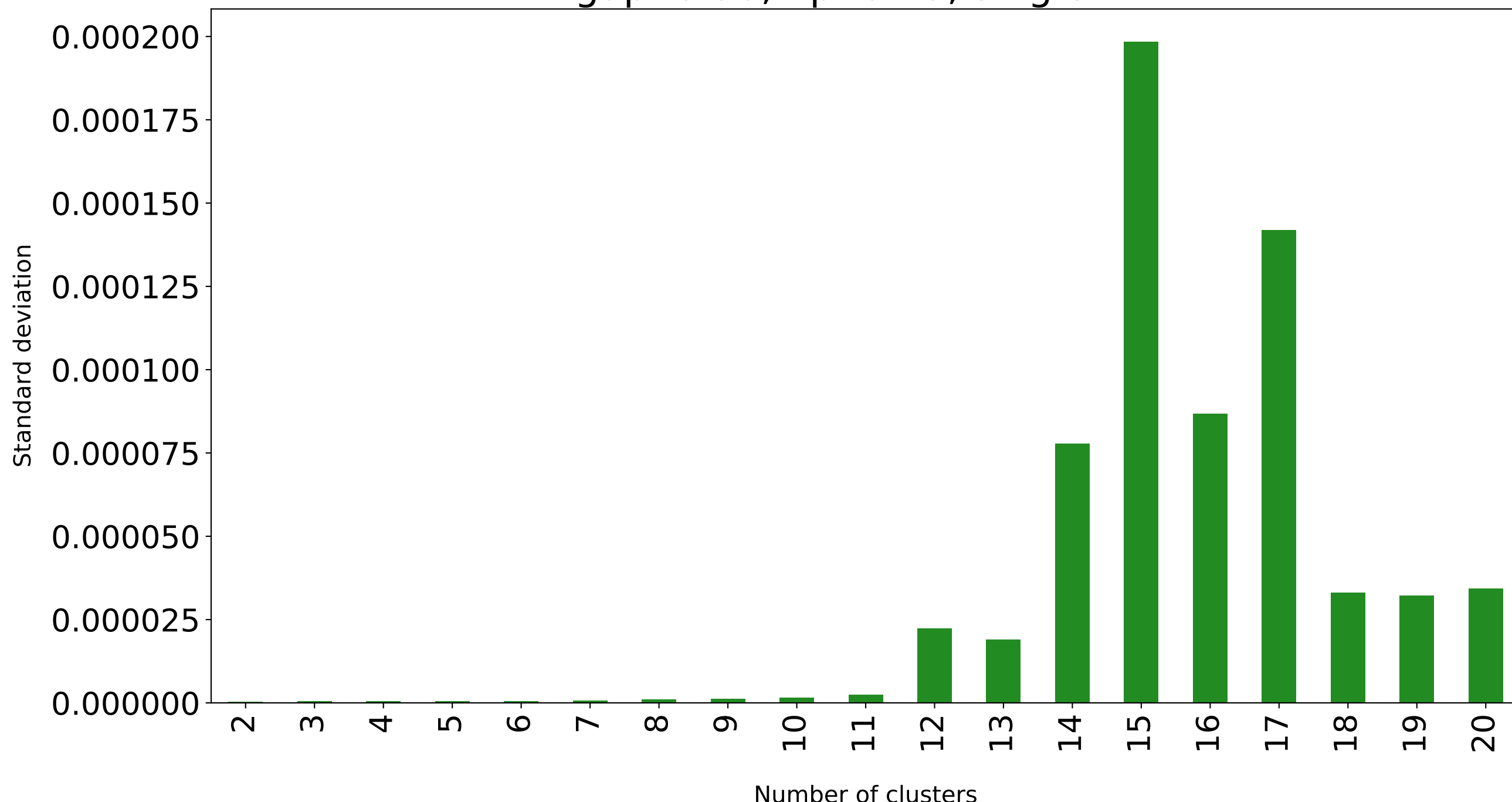Hierarchical Clustering Dendrogram - gap: 0.30, Tp: 0.25, single link

Cophenetic Correlation Coefficient: 0.32370854148513306

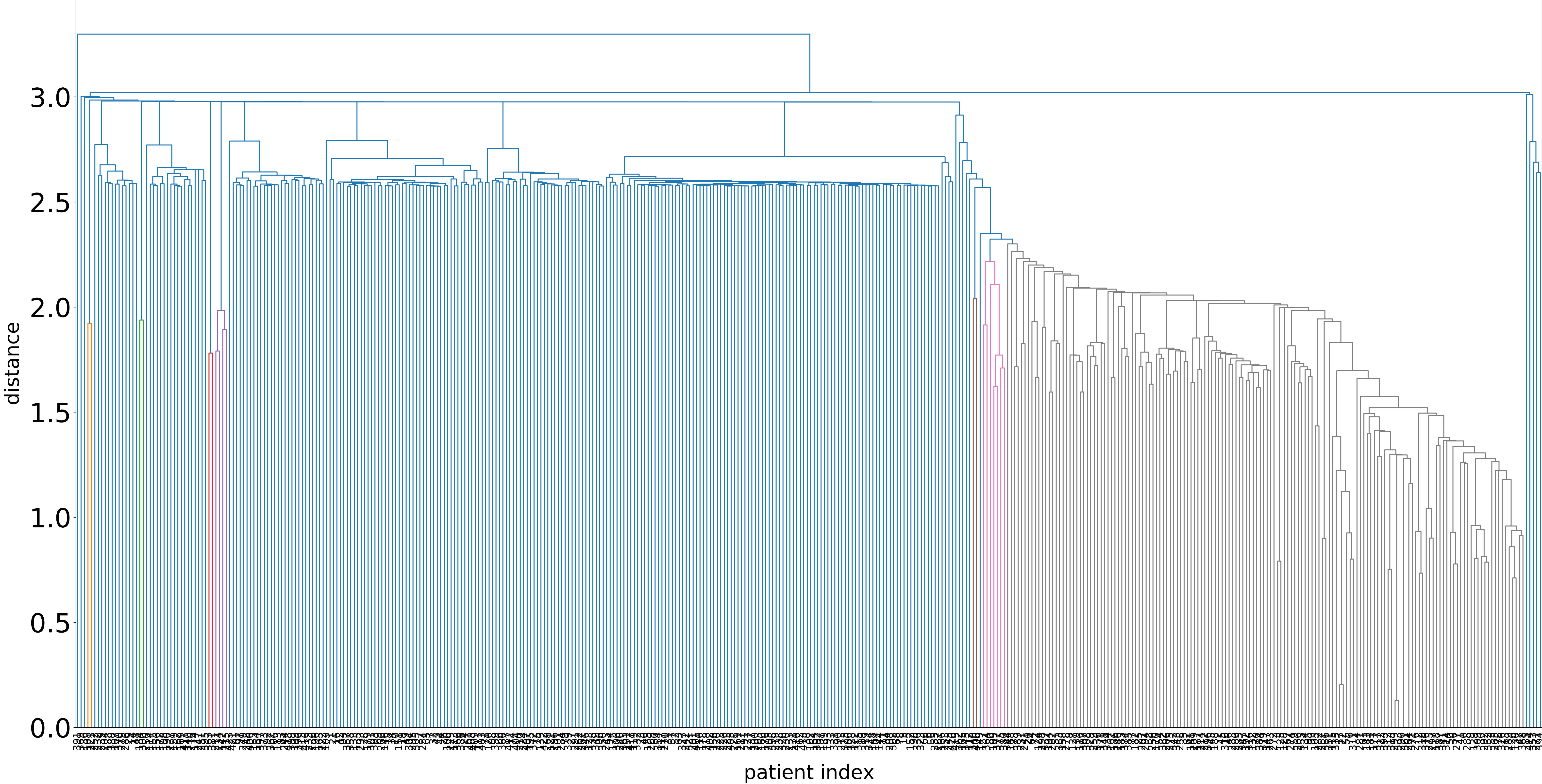## Average values of five clustering indices
gap: 0.30, Tp: 0.25, single link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99579	0.99168	0.71184	0.00212	0.71174	0.99575	0.00737	0.99584	4e-05	0.98404	0.98404	2.0	0.54958	0.514
3.0	1.0	0.98479	0.97051	0.64424	0.00781	0.64998	0.98468	-0.01081	0.9849	1e-05	0.94562	0.9451	2.0	0.48032	0.46943
4.0	1.0	0.9835	0.96786	0.60281	0.0087	0.70638	0.98327	-0.04397	0.98372	1e-05	0.94134	0.9403	2.0	0.53378	0.46789
5.0	1.0	0.98126	0.96338	0.59268	0.00962	0.71589	0.98096	-0.12297	0.98157	1e-05	0.93358	0.93183	2.0	0.61516	0.46648
6.0	1.0	0.9763	0.95375	0.55044	0.01208	0.69654	0.9758	-0.17796	0.97679	1e-05	0.91737	0.91476	2.0	0.66971	0.46541
7.0	1.0	0.96428	0.93093	0.48533	0.01808	0.63306	0.96336	-0.25356	0.9652	0.0	0.88007	0.87558	2.0	0.63916	0.46361
8.0	1.0	0.95339	0.91221	0.61769	0.02302	0.64837	0.9526	-0.70473	0.95418	0.0	0.85532	0.8461	2.0	0.57504	0.46286
9.0	1.0	0.94075	0.88878	0.54178	0.02899	0.63169	0.93938	-0.97971	0.94214	0.0	0.8221	0.80789	2.0	0.56014	0.46273
10.0	1.0	0.93603	0.88259	0.68113	0.03048	0.69568	0.93496	-1.78574	0.9371	0.0	0.82381	0.80217	2.0	0.50661	0.46774
11.0	1.0	0.93165	0.87425	0.65417	0.0325	0.72448	0.92959	-2.40286	0.93376	0.0	0.81869	0.79053	2.0	0.50337	0.4675
12.0	0.99999	0.9108	0.83831	0.60272	0.0425	0.7086	0.90575	-3.04742	0.9162	0.0	0.78162	0.74134	2.0	0.4876	0.46738
13.0	1.0	0.89644	0.8157	0.69905	0.0478	0.74911	0.88896	-5.05274	0.90448	0.0	0.78238	0.71656	2.0	0.44961	0.46732
14.0	0.99999	0.83469	0.71675	0.68388	0.07411	0.67714	0.82337	-7.39135	0.84669	0.0	0.71512	0.58677	2.0	0.43068	0.46729
15.0	1.0	0.84632	0.73083	0.75106	0.06959	0.75706	0.83068	-10.89286	0.86258	0.0	0.77777	0.61513	2.0	0.40686	0.46728
16.0	1.0	0.89711	0.82974	0.96782	0.04955	0.85333	0.88438	-15.53205	0.91094	0.0	0.86981	0.7729	2.0	0.38338	0.46723
17.0	1.00001	0.95012	0.9163	0.97207	0.0242	0.92956	0.94474	-18.03658	0.95595	0.0	0.93942	0.88269	2.0	0.41082	0.45379
18.0	1.0	0.97488	0.95632	0.9739	0.01251	0.96532	0.9729	-20.18218	0.97702	0.0	0.9717	0.93275	2.0	0.44007	0.45334
19.0	1.0	0.98376	0.97009	0.97281	0.00828	0.97831	0.98303	-21.9756	0.98453	0.0	0.98346	0.94858	2.0	0.46742	0.4528
20.0	1.0	0.98574	0.9725	0.96881	0.00736	0.98134	0.98544	-23.53346	0.98604	0.0	0.98646	0.94912	2.0	0.49003	0.45062

Standard deviation of Adjusted Rand versus number of clusters
gap: 0.30, Tp: 0.25, single link

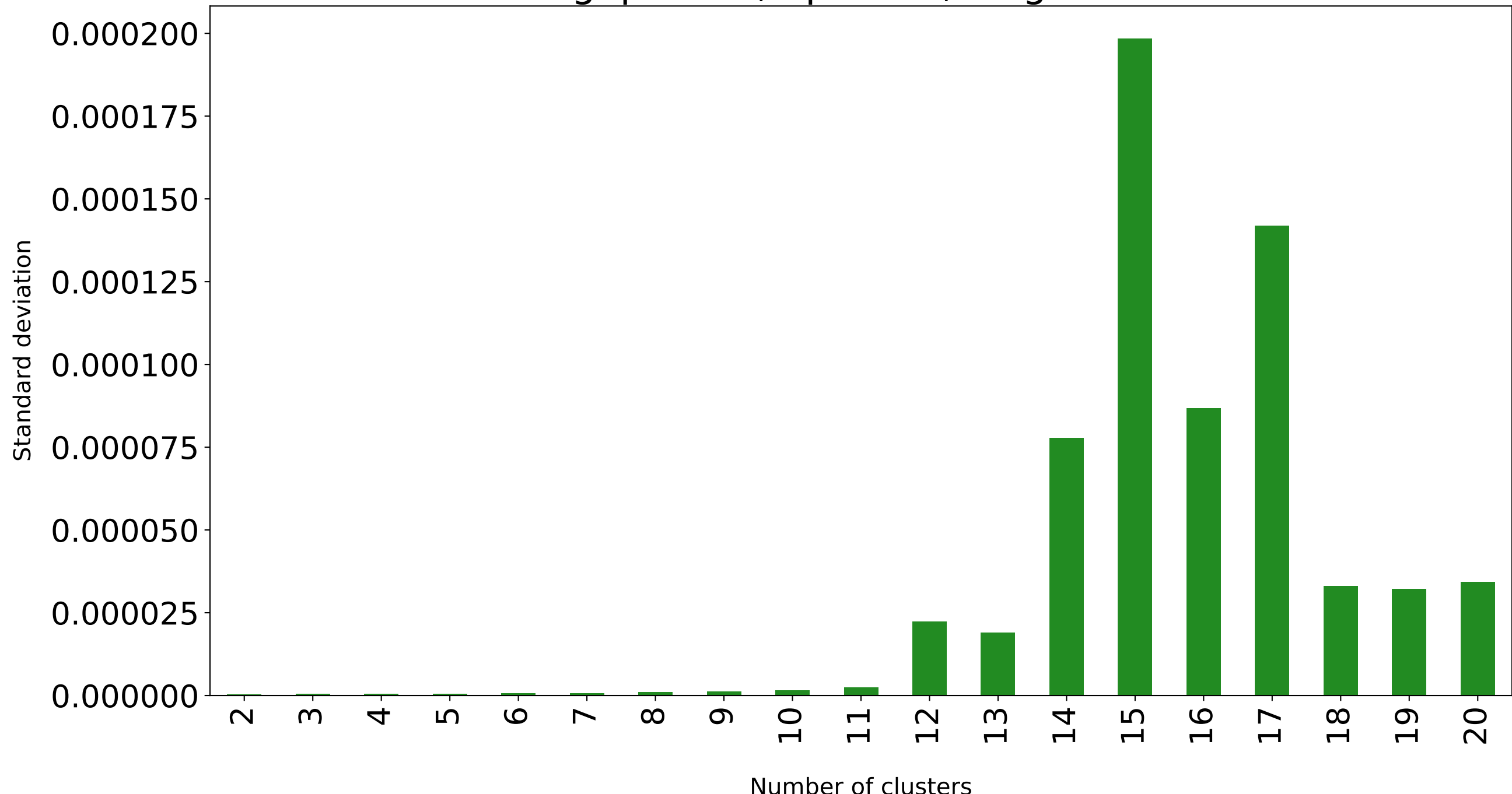Hierarchical Clustering Dendrogram - gap: 0.40, Tp: 0.25, single link

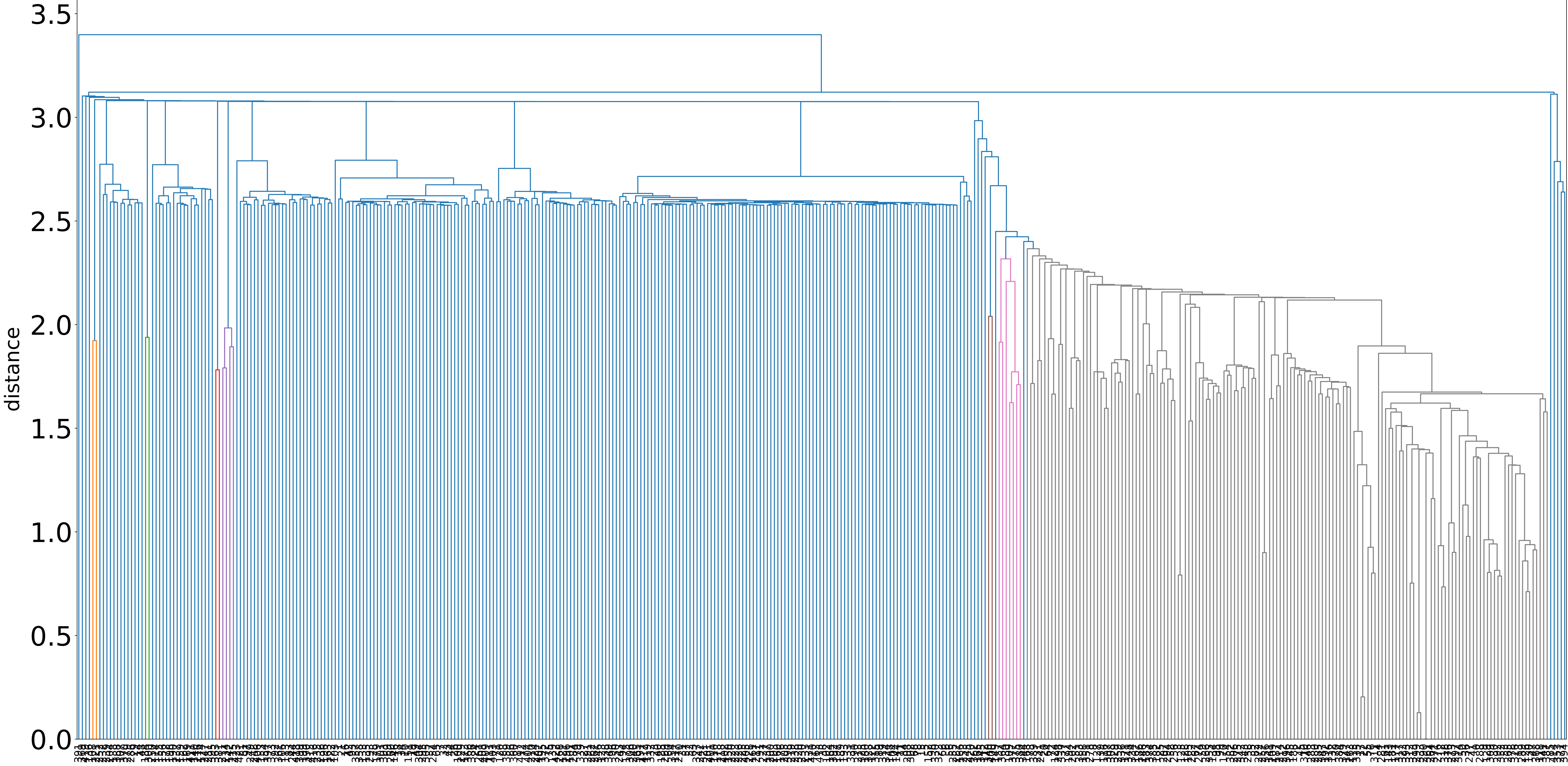Cophenetic Correlation Coefficient: 0.31388275992571235

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

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99584	0.99178	0.6798	0.00209	0.67966	0.9958	0.00752	0.99588	4e-05	0.98421	0.98421	2.0	0.54886	0.46969
3.0	1.0	0.98685	0.97452	0.68198	0.00677	0.68893	0.98675	-0.02007	0.98694	1e-05	0.95304	0.9526	2.0	0.4876	0.43019
4.0	1.0	0.98528	0.97127	0.63219	0.00779	0.74017	0.98509	-0.05475	0.98546	1e-05	0.94744	0.94636	2.0	0.54064	0.42883
5.0	1.0	0.98287	0.96649	0.62012	0.00876	0.73942	0.9826	-0.13246	0.98313	1e-05	0.93918	0.93747	2.0	0.6203	0.42759
6.0	1.0	0.97424	0.94986	0.53762	0.01314	0.68721	0.97364	-0.17701	0.97485	1e-05	0.91114	0.90827	2.0	0.67356	0.42664
7.0	1.0	0.96427	0.93088	0.48489	0.01802	0.63263	0.96338	-0.25626	0.96516	0.0	0.87981	0.87524	2.0	0.64662	0.42504
8.0	1.0	0.95079	0.90761	0.59582	0.02429	0.62583	0.95006	-0.67452	0.95153	0.0	0.84773	0.83853	2.0	0.58477	0.42438
9.0	1.0	0.94052	0.88844	0.54239	0.02902	0.62989	0.93925	-0.98427	0.9418	0.0	0.82145	0.80721	2.0	0.57215	0.42426
10.0	1.0	0.93993	0.88944	0.69651	0.02859	0.70823	0.93915	-1.82729	0.94072	0.0	0.83284	0.81198	2.0	0.51796	0.42832
11.0	1.0	0.93819	0.8855	0.67828	0.02938	0.74859	0.93662	-2.49284	0.93977	0.0	0.83376	0.80664	2.0	0.51638	0.42811
12.0	1.0	0.91703	0.84727	0.61701	0.03894	0.71984	0.91336	-3.10168	0.92079	0.0	0.79051	0.75006	2.0	0.5008	0.428
13.0	1.0	0.89756	0.81612	0.70981	0.04678	0.74277	0.89132	-4.9583	0.90416	0.0	0.77903	0.71214	2.0	0.46335	0.42794
14.0	1.0	0.8325	0.71188	0.6976	0.07484	0.66768	0.82133	-7.16174	0.84427	0.0	0.70611	0.5772	2.0	0.44502	0.42792
15.0	1.0	0.83783	0.7159	0.75636	0.07274	0.73896	0.82173	-10.56356	0.85456	0.0	0.76054	0.59256	2.0	0.42233	0.42791
16.0	1.0	0.87443	0.79169	0.96042	0.05943	0.82219	0.85907	-15.09988	0.89102	0.0	0.8425	0.72135	2.0	0.39913	0.42786
17.0	1.00001	0.93695	0.89277	0.96695	0.02886	0.91266	0.93065	-18.12085	0.94367	0.0	0.92626	0.84737	2.0	0.43387	0.41893
18.0	1.0	0.97349	0.95236	0.96716	0.01173	0.96429	0.97184	-20.29651	0.97523	0.0	0.97198	0.92251	2.0	0.45567	0.40159
19.0	1.0	0.98155	0.96498	0.96336	0.00788	0.97583	0.98102	-22.065	0.98211	0.0	0.98237	0.93687	2.0	0.47995	0.40119
20.0	1.0	0.9822	0.9653	0.95876	0.00742	0.97703	0.98189	-23.67692	0.98252	0.0	0.98377	0.93515	2.0	0.50246	0.40072

Standard deviation of Adjusted Rand versus number of clusters
gap: 0.40, Tp: 0.25, single link

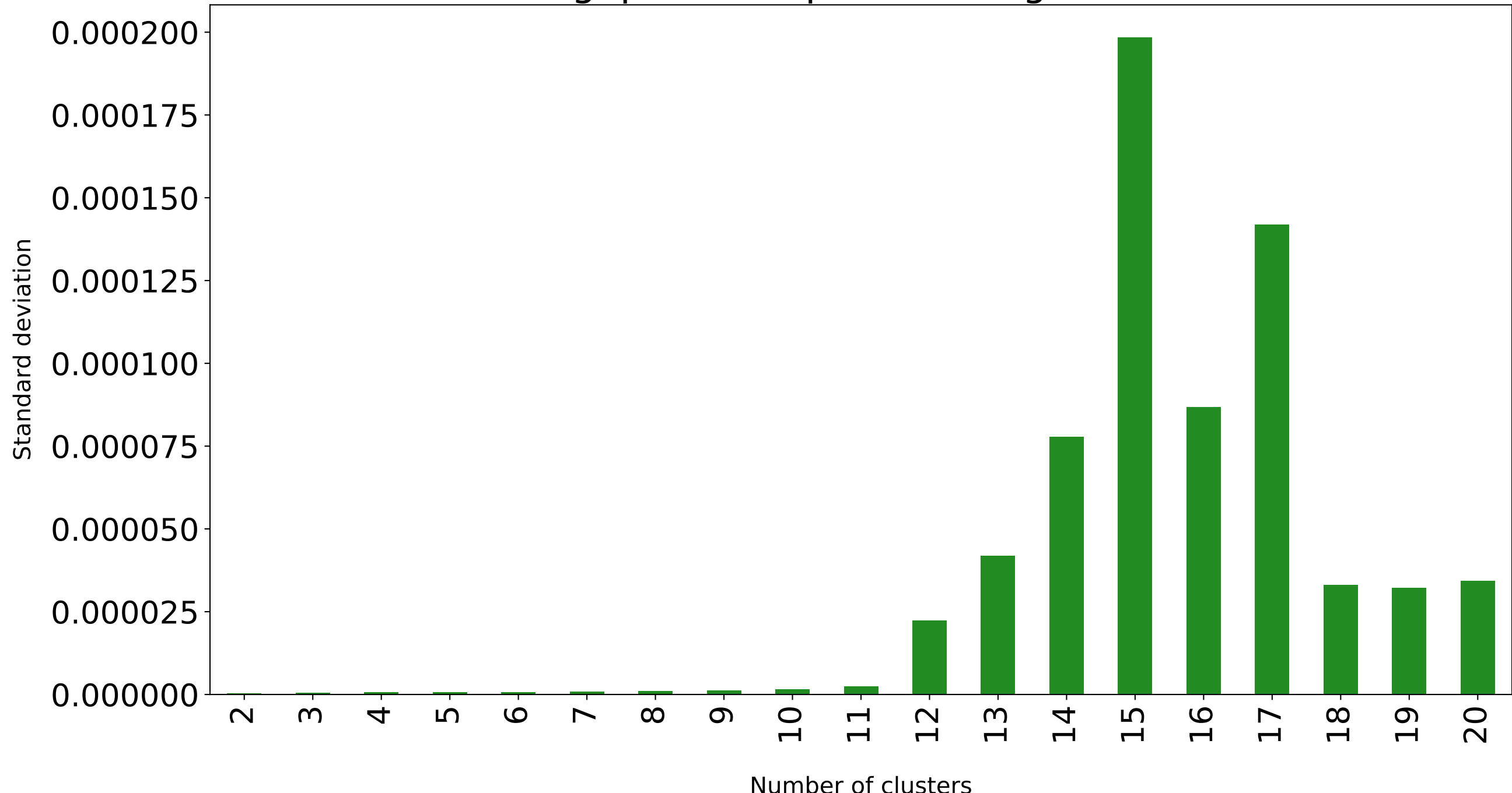Hierarchical Clustering Dendrogram - gap: 0.50, Tp: 0.25, single link

patient index

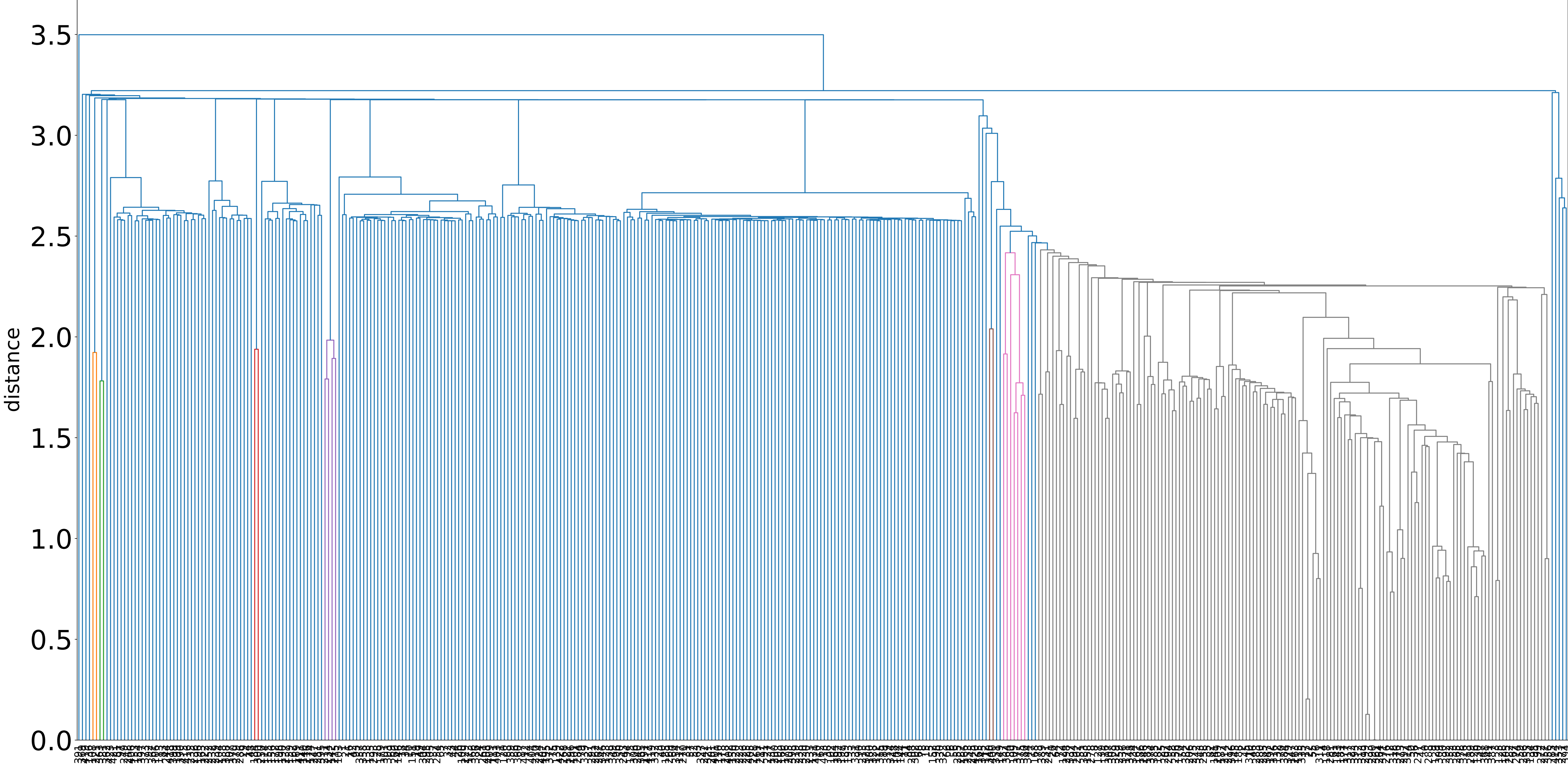Cophenetic Correlation Coefficient: 0.31694265502854563

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

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99481	0.98978	0.67579	0.00263	0.67563	0.99473	0.00924	0.99488	4e-05	0.98064	0.98064	2.0	0.54821	0.43444
3.0	1.0	0.98277	0.96679	0.61967	0.00884	0.61601	0.98261	-0.00554	0.98293	1e-05	0.93937	0.93889	2.0	0.49414	0.39898
4.0	1.0	0.97874	0.95892	0.5623	0.01125	0.67161	0.97833	-0.03521	0.97914	1e-05	0.92658	0.92527	2.0	0.5471	0.39776
5.0	1.0	0.97723	0.95584	0.57287	0.01182	0.69348	0.97672	-0.11289	0.97773	1e-05	0.92163	0.91958	2.0	0.62515	0.39665
6.0	1.0	0.97403	0.94968	0.56143	0.01318	0.69194	0.97342	-0.20999	0.97465	1e-05	0.91138	0.90872	2.0	0.68661	0.39628
7.0	1.0	0.96667	0.93551	0.50833	0.01691	0.66388	0.96572	-0.27816	0.96763	1e-05	0.88815	0.88418	2.0	0.72245	0.39579
8.0	1.0	0.95488	0.91333	0.46155	0.02274	0.6228	0.95338	-0.38333	0.95638	0.0	0.85342	0.84733	2.0	0.69285	0.39435
9.0	1.0	0.94298	0.89306	0.56269	0.02799	0.62272	0.94179	-0.91353	0.94419	0.0	0.82738	0.81508	2.0	0.63542	0.39376
10.0	1.0	0.93204	0.87303	0.51092	0.03306	0.62481	0.93017	-1.26895	0.93392	0.0	0.8012	0.78385	2.0	0.62191	0.39365
11.0	1.0	0.9357	0.88037	0.67721	0.0307	0.72301	0.93421	-2.31082	0.9372	0.0	0.82335	0.79632	2.0	0.57134	0.39703
12.0	1.0	0.92769	0.86549	0.6414	0.03448	0.7365	0.92477	-2.96122	0.93067	0.0	0.81013	0.77569	2.0	0.56763	0.39684
13.0	0.99999	0.90424	0.82608	0.59405	0.04551	0.71434	0.89777	-3.63467	0.91106	0.0	0.77144	0.72521	2.0	0.55039	0.39674
14.0	1.0	0.87828	0.78558	0.66288	0.05684	0.72342	0.8679	-5.69445	0.88959	0.0	0.75417	0.67767	2.0	0.51303	0.39669
15.0	0.99999	0.81997	0.69265	0.65914	0.08113	0.66123	0.80549	-8.23512	0.83539	0.0	0.69849	0.55924	2.0	0.494	0.39667
16.0	1.0	0.83497	0.71186	0.72794	0.07399	0.741	0.81814	-11.92847	0.85249	0.0	0.76471	0.58957	2.0	0.47151	0.39666
17.0	1.00001	0.88582	0.81138	0.94954	0.05336	0.83824	0.87257	-16.80838	0.90018	0.0	0.85914	0.74533	2.0	0.44792	0.39662
18.0	1.0	0.93668	0.89215	0.95309	0.02788	0.91246	0.93083	-19.67572	0.94293	0.0	0.92749	0.84303	2.0	0.47825	0.38477
19.0	1.0	0.96856	0.94371	0.95752	0.01257	0.95792	0.96674	-22.00978	0.97049	0.0	0.96763	0.90806	2.0	0.50537	0.3735
20.0	1.0	0.97573	0.95466	0.95772	0.00936	0.96835	0.97499	-23.80296	0.9765	0.0	0.9772	0.92034	2.0	0.52991	0.36561

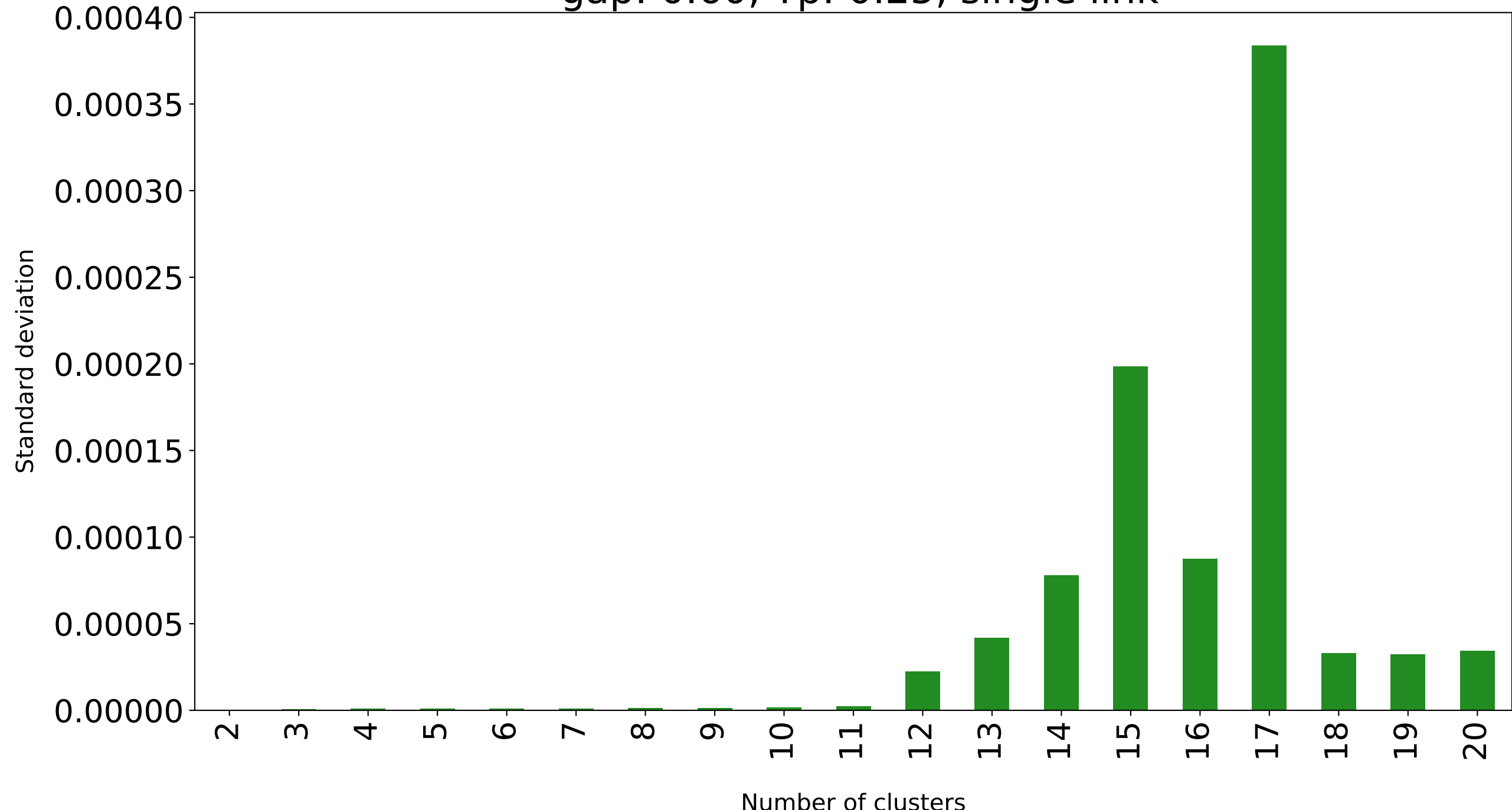Hierarchical Clustering Dendrogram - gap: 0.60, Tp: 0.25, single link

patient index
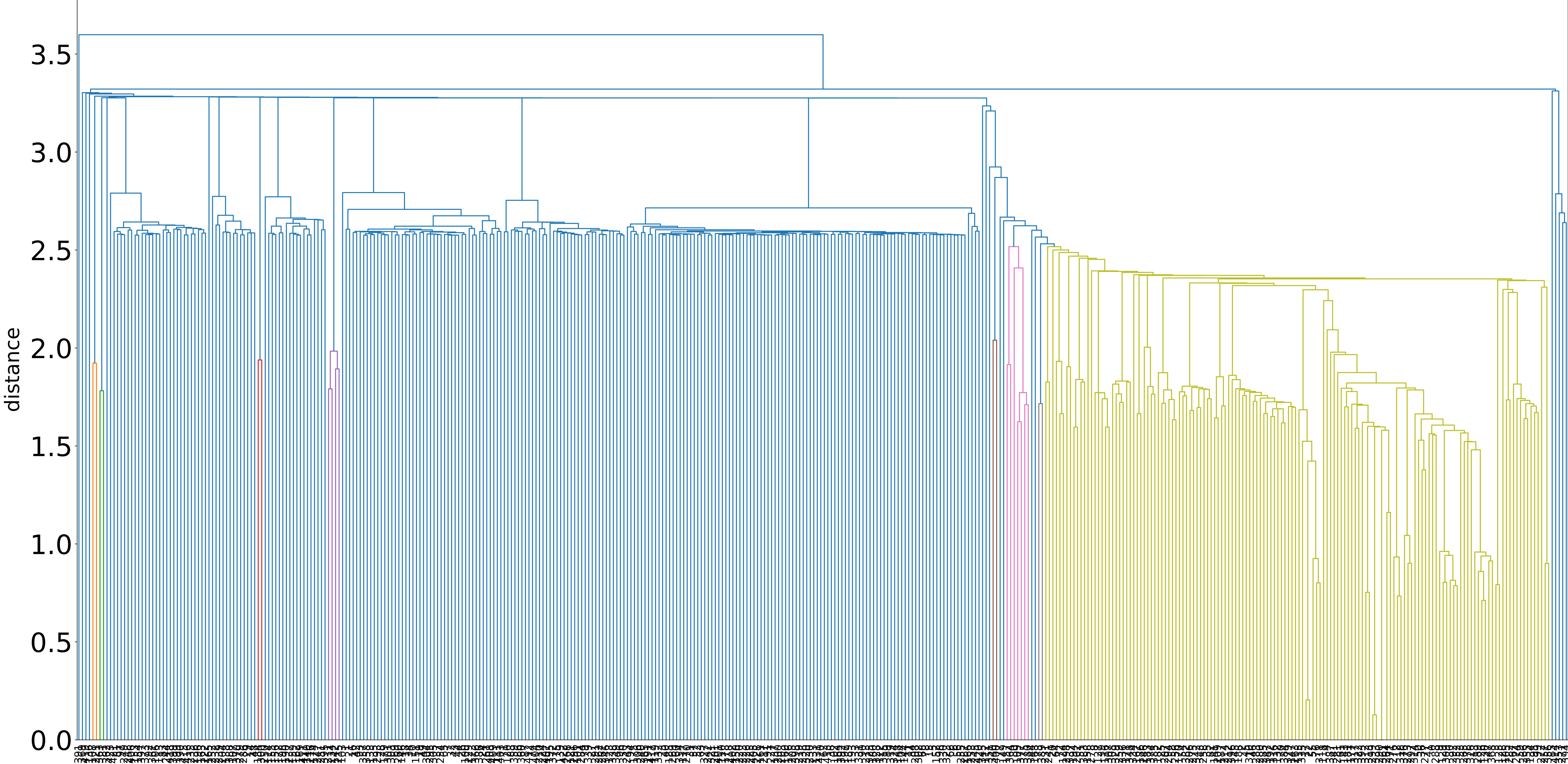
Cophenetic Correlation Coefficient: 0.32358844856525515

Average values of five 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
2.0	1.0	0.99579	0.99168	0.73189	0.00213	0.73182	0.99574	0.00708	0.99584	5e-05	0.98411	0.98411	2.0	0.54497	0.4105
3.0	1.0	0.97909	0.95992	0.57663	0.01074	0.57417	0.97881	0.0029	0.97936	1e-05	0.92793	0.92738	2.0	0.49454	0.37795
4.0	1.0	0.9734	0.94928	0.53559	0.01408	0.63522	0.97269	-0.02434	0.97411	1e-05	0.91181	0.91037	2.0	0.55209	0.37683
5.0	1.0	0.9695	0.94169	0.52881	0.01586	0.64815	0.96852	-0.09789	0.97049	1e-05	0.89982	0.89737	2.0	0.62946	0.3758
6.0	1.0	0.96567	0.93424	0.52043	0.01758	0.65071	0.96448	-0.19478	0.96687	1e-05	0.88793	0.88454	2.0	0.69025	0.37547
7.0	1.0	0.95996	0.92332	0.49683	0.02048	0.64802	0.95845	-0.27043	0.96148	0.0	0.87076	0.8662	2.0	0.7258	0.37502
8.0	1.0	0.94604	0.89699	0.42767	0.02758	0.59093	0.94389	-0.36301	0.94821	0.0	0.82919	0.82198	2.0	0.69901	0.3737
9.0	1.0	0.92869	0.8684	0.5992	0.03568	0.59273	0.92764	-1.26332	0.92974	0.0	0.79502	0.77607	2.0	0.63286	0.37338
10.0	1.0	0.93878	0.8865	0.75565	0.02977	0.72599	0.93781	-2.26995	0.93976	0.0	0.83153	0.80554	2.0	0.58939	0.37316
11.0	1.0	0.94521	0.89732	0.74683	0.02615	0.78528	0.94434	-3.11025	0.94608	0.0	0.85236	0.82107	2.0	0.58277	0.37306
12.0	1.0	0.95966	0.92379	0.89927	0.01966	0.8661	0.95874	-4.47668	0.96058	0.0	0.89597	0.86683	2.0	0.54504	0.37725
13.0	1.0	0.96153	0.92722	0.86778	0.01823	0.88753	0.96027	-5.3649	0.9628	0.0	0.90551	0.87389	2.0	0.5378	0.37708
14.0	1.0	0.93943	0.88844	0.80923	0.0278	0.85368	0.93566	-6.20936	0.94339	0.0	0.86733	0.81863	2.0	0.52479	0.37699
15.0	1.0	0.89302	0.81101	0.67001	0.05034	0.78301	0.88208	-7.01515	0.90501	0.0	0.79268	0.7174	2.0	0.55637	0.37694
16.0	1.0	0.82677	0.70117	0.66133	0.07682	0.68147	0.81377	-9.3883	0.84062	0.0	0.71217	0.56292	2.0	0.53699	0.37692
17.0	0.99999	0.82249	0.69028	0.70008	0.07913	0.7258	0.80512	-13.0487	0.84056	0.0	0.75262	0.55689	2.0	0.51481	0.37692
18.0	1.0	0.87699	0.79659	0.94211	0.05728	0.82702	0.86339	-18.09097	0.89163	0.0	0.8519	0.72346	2.0	0.49116	0.37688
19.0	1.0	0.93908	0.89744	0.94894	0.02692	0.91563	0.93367	-21.20658	0.9449	0.0	0.93099	0.85104	2.0	0.51762	0.36747
20.0	1.0	0.96155	0.93263	0.95229	0.01593	0.94812	0.95909	-23.41803	0.96418	0.0	0.95981	0.89336	2.0	0.54155	0.36021

Hierarchical Clustering Dendrogram - gap: 0.70, Tp: 0.25, single link

Cophenetic Correlation Coefficient: 0.34331764780486873

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

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99429	0.98883	0.71989	0.00291	0.71981	0.99418	0.00939	0.99441	5e-05	0.97926	0.97926	2.0	0.54014	0.39446
3.0	1.0	0.97224	0.94728	0.55484	0.01432	0.56276	0.97166	0.0111	0.97282	1e-05	0.90775	0.90698	2.0	0.48971	0.36405
4.0	1.0	0.96228	0.92802	0.44693	0.01982	0.56018	0.96105	-0.0064	0.96351	1e-05	0.8765	0.87424	2.0	0.55615	0.36301
5.0	1.0	0.95797	0.91986	0.45301	0.02186	0.58994	0.95642	-0.0811	0.95953	1e-05	0.86438	0.86107	2.0	0.63347	0.36205
6.0	1.0	0.95288	0.91017	0.434	0.0243	0.58698	0.95102	-0.17219	0.95475	0.0	0.84942	0.84492	2.0	0.69348	0.36173
7.0	1.0	0.94482	0.89474	0.38923	0.02842	0.56544	0.94255	-0.23635	0.94711	0.0	0.82481	0.81873	2.0	0.72929	0.36132
8.0	1.0	0.93298	0.87254	0.35207	0.03465	0.53412	0.93006	-0.33305	0.93592	0.0	0.79131	0.78247	2.0	0.70316	0.36008
9.0	1.0	0.93202	0.87443	0.61015	0.03434	0.62711	0.931	-1.35314	0.93304	0.0	0.80568	0.78589	2.0	0.63929	0.35978
10.0	1.0	0.93706	0.88261	0.61721	0.0313	0.69766	0.93593	-1.93067	0.9382	0.0	0.82233	0.79767	2.0	0.6745	0.35966
11.0	1.0	0.94439	0.89593	0.74902	0.02692	0.77899	0.94359	-2.96969	0.94519	0.0	0.84959	0.81888	2.0	0.63403	0.35958
12.0	1.0	0.9449	0.89603	0.73233	0.02602	0.80459	0.94387	-3.7455	0.94594	0.0	0.85412	0.81794	2.0	0.62421	0.35948
13.0	1.0	0.96587	0.93506	0.90207	0.01657	0.89517	0.96524	-5.29969	0.96651	0.0	0.91367	0.88467	2.0	0.58872	0.37149
14.0	1.0	0.95606	0.91709	0.83958	0.02045	0.88201	0.9543	-6.07992	0.95785	0.0	0.89603	0.85808	2.0	0.58039	0.37132
15.0	1.0	0.92919	0.87076	0.76576	0.03283	0.84086	0.92403	-7.01411	0.93471	0.0	0.85123	0.7934	2.0	0.56691	0.37123
16.0	1.0	0.87977	0.7881	0.63354	0.05618	0.76469	0.86691	-7.7704	0.89376	0.0	0.77194	0.68745	2.0	0.59403	0.37119
17.0	1.0	0.81679	0.68579	0.632	0.08248	0.68274	0.8	-10.61178	0.83479	0.0	0.70992	0.55024	2.0	0.57463	0.37117
18.0	0.99987	0.8135	0.67497	0.66273	0.08357	0.72027	0.79429	-14.47305	0.83352	0.0	0.74949	0.53875	2.0	0.55302	0.37117
19.0	1.0	0.89149	0.82047	0.94205	0.04974	0.84812	0.87992	-19.88547	0.90394	0.0	0.87103	0.75404	2.0	0.53005	0.37113
20.0	1.0	0.94052	0.89807	0.9444	0.02538	0.91861	0.93575	-22.87065	0.94563	0.0	0.93469	0.84766	2.0	0.55336	0.36654

Standard deviation of Adjusted Rand versus number of clusters
gap: 0.70, Tp: 0.25, single link

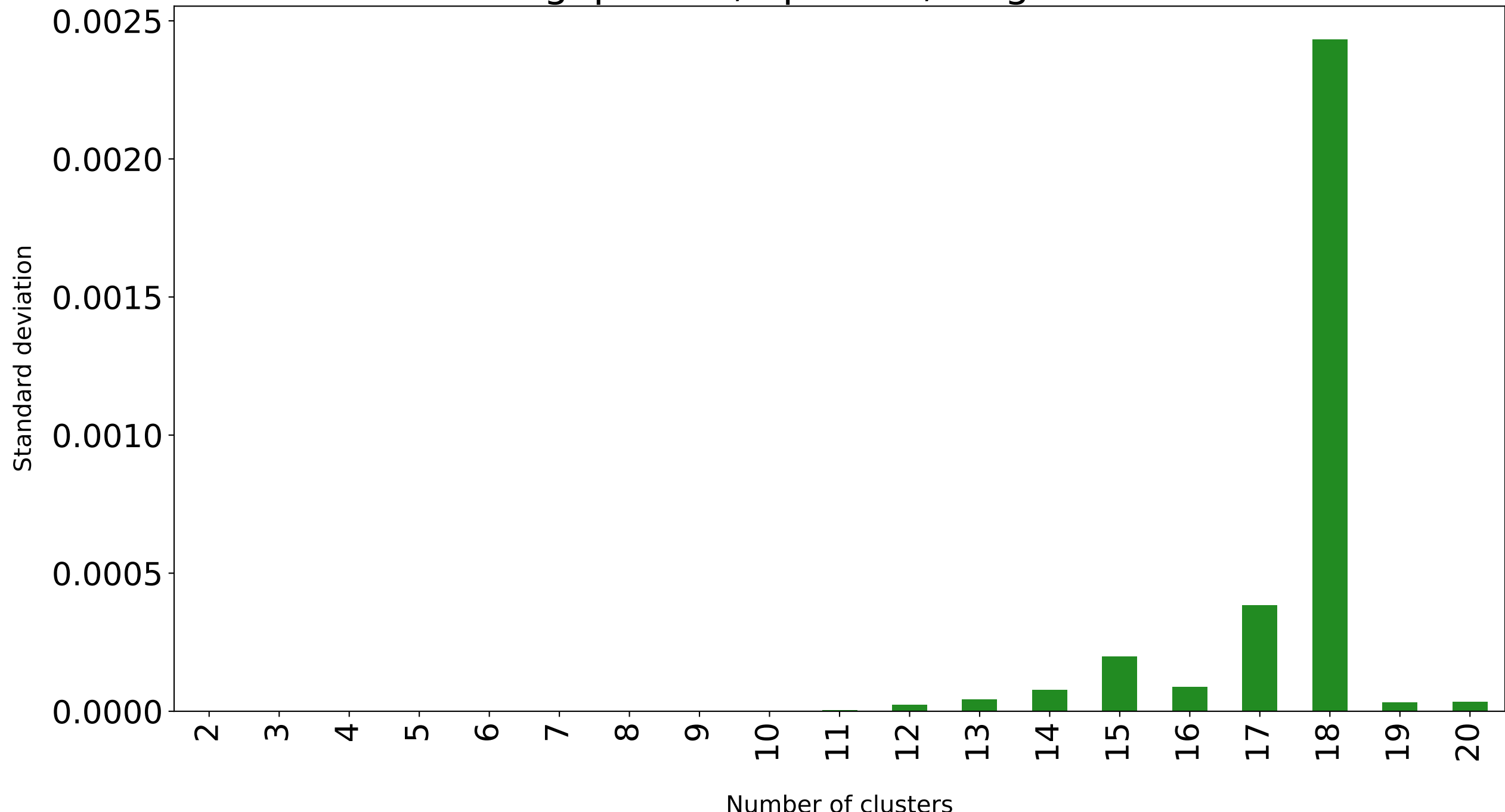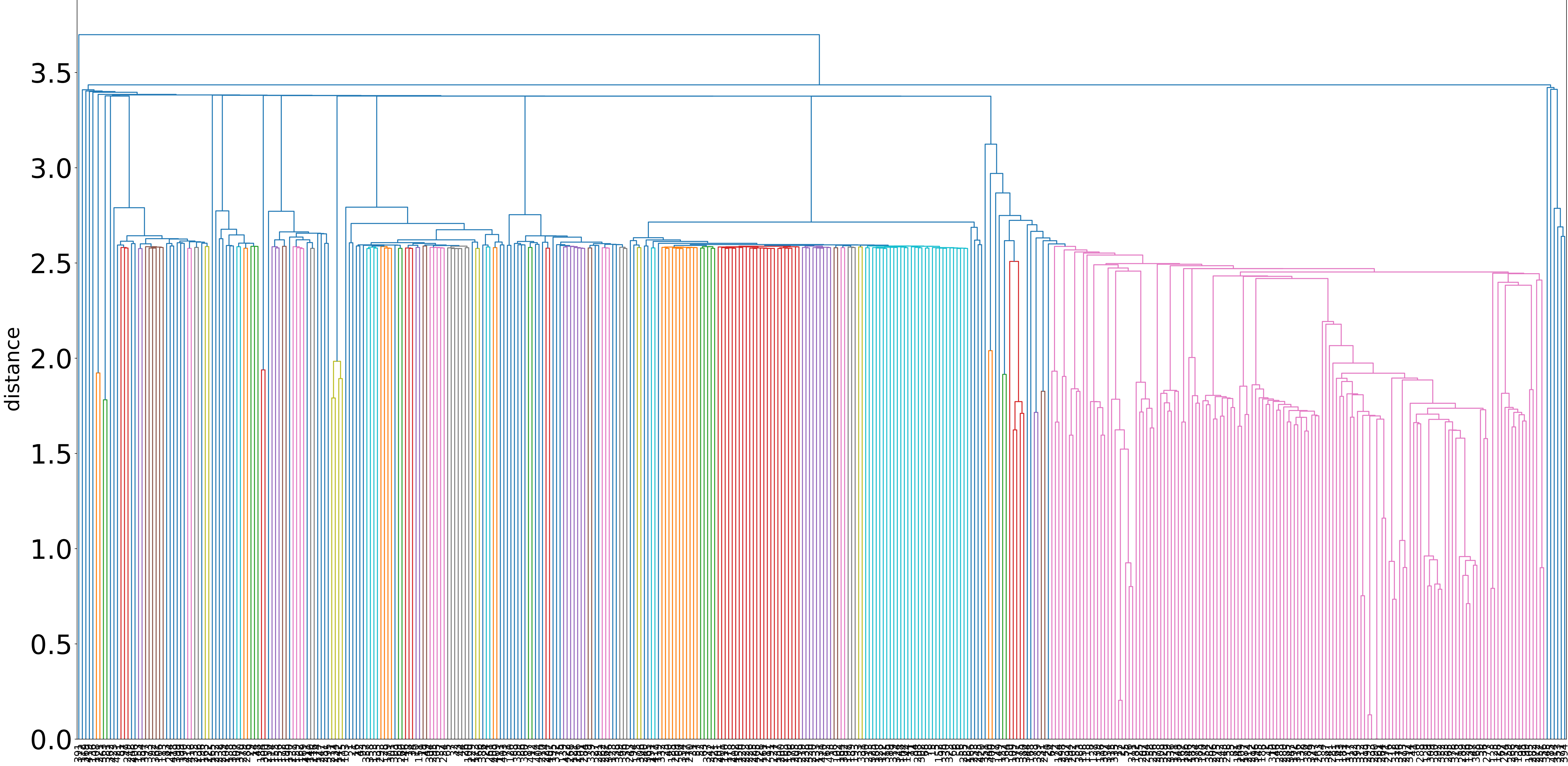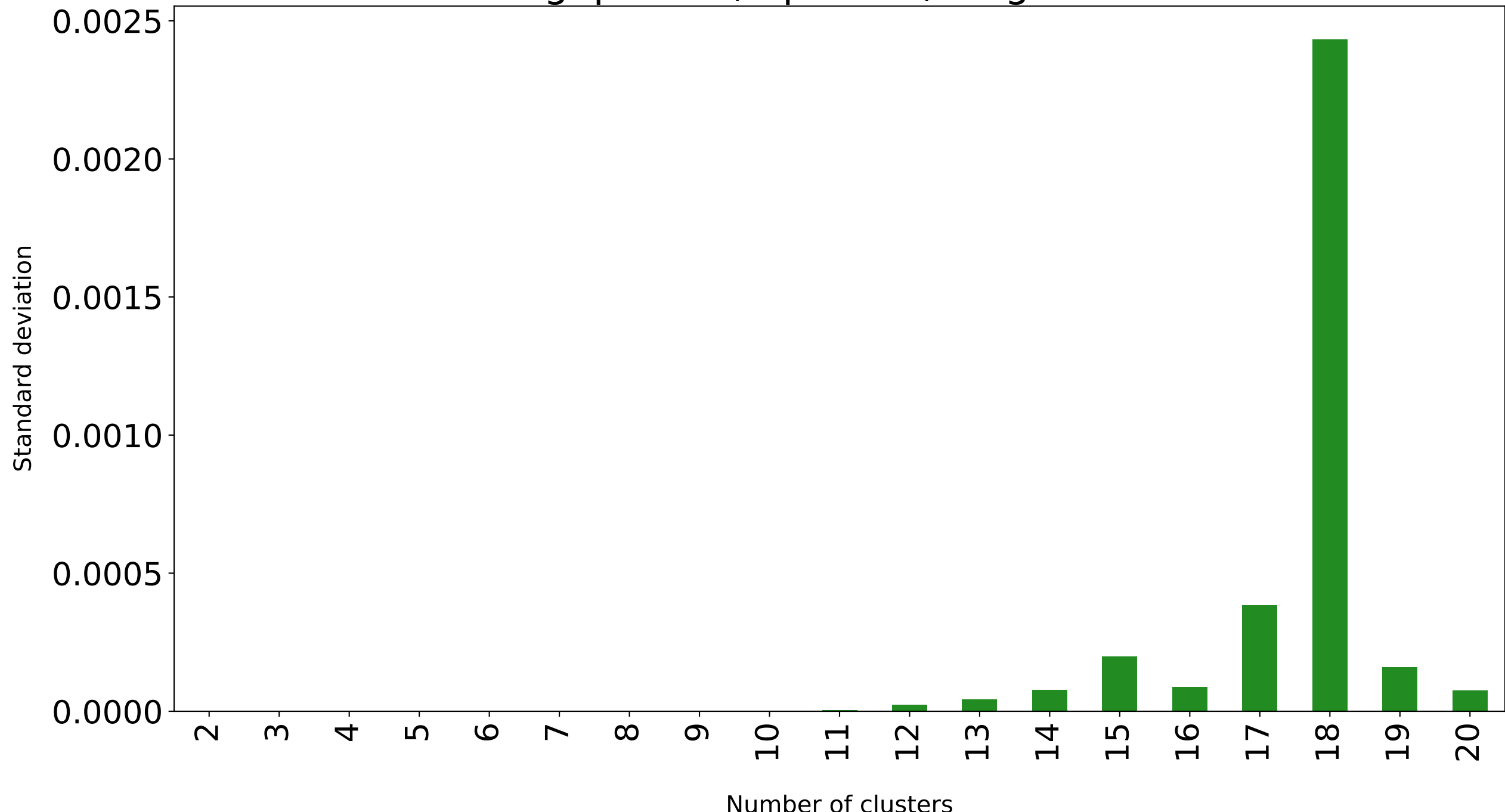Hierarchical Clustering Dendrogram - gap: 0.80, Tp: 0.25, single link
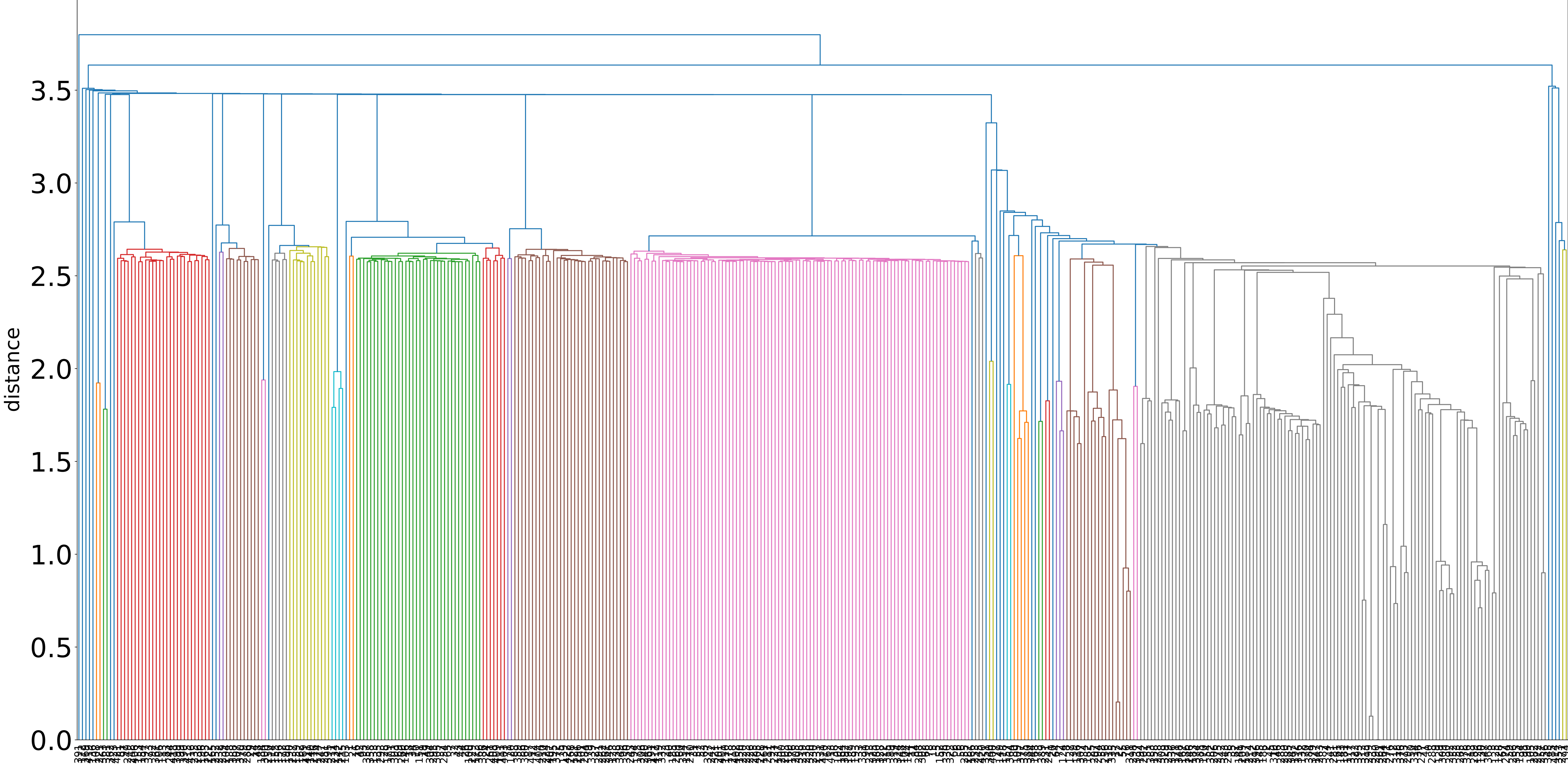
Cophenetic Correlation Coefficient: 0.368659329793999

Average values of five 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
2.0	1.0	0.99359	0.9875	0.70387	0.00329	0.70379	0.99343	0.01038	0.99374	4e-05	0.97709	0.97709	2.0	0.53586	0.3804
3.0	1.0	0.97108	0.94523	0.55251	0.01494	0.53471	0.97056	0.0134	0.9716	1e-05	0.90424	0.90341	2.0	0.47706	0.3533
4.0	1.0	0.96076	0.92583	0.4872	0.0206	0.57806	0.95951	-0.0363	0.96202	1e-05	0.87438	0.87209	2.0	0.54501	0.35187
5.0	1.0	0.95582	0.91634	0.46256	0.02331	0.60034	0.95404	-0.07459	0.95761	1e-05	0.86045	0.8572	2.0	0.6399	0.35089
6.0	1.0	0.95444	0.91358	0.4706	0.02367	0.60962	0.95258	-0.1335	0.95631	1e-05	0.85635	0.85223	2.0	0.69702	0.35066
7.0	1.0	0.95024	0.90553	0.46059	0.02555	0.60775	0.94814	-0.24492	0.95237	0.0	0.84391	0.83869	2.0	0.74018	0.34999
8.0	1.0	0.94564	0.89667	0.438	0.02779	0.60299	0.94327	-0.37357	0.94802	0.0	0.83018	0.82366	2.0	0.77172	0.3497
9.0	1.0	0.93434	0.8752	0.37184	0.0335	0.56154	0.93136	-0.46907	0.93734	0.0	0.79655	0.78778	2.0	0.7914	0.3493
10.0	1.0	0.92214	0.85222	0.31969	0.03991	0.52574	0.91853	-0.61388	0.92579	0.0	0.76208	0.74977	2.0	0.76423	0.34815
11.0	1.0	0.94317	0.89372	0.66039	0.02863	0.72858	0.94214	-2.29385	0.94421	0.0	0.83916	0.81602	2.0	0.70924	0.34787
12.0	1.0	0.94103	0.88844	0.63793	0.02892	0.74676	0.93966	-2.833	0.9424	0.0	0.83425	0.80517	2.0	0.73261	0.34776
13.0	1.0	0.94776	0.90155	0.74953	0.02496	0.80962	0.9468	-4.08152	0.94872	0.0	0.86086	0.82766	2.0	0.69572	0.34767
14.0	1.0	0.94082	0.88823	0.71455	0.02797	0.80584	0.93919	-4.80596	0.94247	0.0	0.84697	0.80578	2.0	0.68298	0.34759
15.0	1.0	0.9593	0.924	0.86932	0.01998	0.88939	0.9575	-6.59074	0.96122	0.0	0.90435	0.87033	2.0	0.65078	0.36622
16.0	1.0	0.93983	0.88922	0.7907	0.02799	0.85504	0.93595	-7.31218	0.944	0.0	0.86799	0.81887	2.0	0.64091	0.36606
17.0	0.99999	0.90209	0.82429	0.69268	0.04513	0.79724	0.89337	-8.31729	0.91145	0.0	0.80634	0.73093	2.0	0.62669	0.36598
18.0	0.99999	0.83241	0.71272	0.54131	0.07969	0.6987	0.81107	-9.05463	0.85604	0.0	0.70531	0.59768	2.0	0.64764	0.36594
19.0	1.00001	0.77491	0.61967	0.54037	0.10253	0.63544	0.75033	-12.55998	0.80146	0.0	0.6675	0.47541	2.0	0.62841	0.36592
20.0	1.0	0.79183	0.63916	0.60238	0.09377	0.69786	0.76902	-16.92803	0.81567	0.0	0.73297	0.49499	2.0	0.60756	0.36591

Hierarchical Clustering Dendrogram - gap: 0.90, Tp: 0.25, single link

patient index

Cophenetic Correlation Coefficient: 0.3917847895577007

Average values of five 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
2.0	1.0	0.99361	0.98748	0.54739	0.00325	0.54733	0.9935	0.01215	0.99373	3e-05	0.97657	0.97657	2.0	0.53162	0.36798
3.0	1.0	0.97057	0.94413	0.5122	0.01497	0.50329	0.97004	0.01532	0.9711	1e-05	0.9019	0.90099	2.0	0.47202	0.35214
4.0	1.0	0.96193	0.92795	0.49927	0.02016	0.60941	0.96067	-0.04533	0.9632	1e-05	0.87811	0.87571	2.0	0.54559	0.34111
5.0	1.0	0.95549	0.91511	0.42977	0.02396	0.59676	0.95372	-0.07806	0.95727	1e-05	0.85708	0.85334	2.0	0.64334	0.34018
6.0	1.0	0.95045	0.90565	0.41539	0.02609	0.57702	0.94842	-0.12272	0.95249	0.0	0.8424	0.83767	2.0	0.70007	0.34002
7.0	1.0	0.94682	0.89894	0.4117	0.02764	0.57241	0.94462	-0.22609	0.94903	0.0	0.83241	0.82679	2.0	0.7428	0.33934
8.0	1.0	0.94167	0.88917	0.39073	0.02994	0.56206	0.93916	-0.3518	0.9442	0.0	0.81745	0.81059	2.0	0.77391	0.33906
9.0	1.0	0.93109	0.86912	0.34016	0.03521	0.53282	0.92797	-0.44453	0.93423	0.0	0.7865	0.77746	2.0	0.79386	0.33869
10.0	1.0	0.92007	0.84886	0.31669	0.04078	0.50927	0.91627	-0.57699	0.9239	0.0	0.75759	0.7457	2.0	0.76638	0.3376
11.0	1.0	0.91936	0.85243	0.55471	0.04013	0.5988	0.91807	-1.86712	0.92066	0.0	0.77734	0.75225	2.0	0.7138	0.33734
12.0	1.0	0.92398	0.85921	0.57	0.0376	0.66092	0.92226	-2.49549	0.92572	0.0	0.79169	0.76135	2.0	0.73661	0.33723
13.0	1.0	0.93012	0.871	0.69013	0.0338	0.73969	0.92873	-3.69883	0.93157	0.0	0.8184	0.78044	2.0	0.70114	0.33715
14.0	1.0	0.93218	0.87401	0.69336	0.03229	0.77258	0.93035	-4.55158	0.93408	0.0	0.82773	0.78534	2.0	0.68794	0.33707
15.0	1.0	0.94994	0.90663	0.84917	0.0243	0.86312	0.94775	-6.35385	0.95226	0.0	0.88232	0.84169	2.0	0.65772	0.36139
16.0	1.0	0.93552	0.88258	0.78817	0.03094	0.84849	0.93079	-7.21046	0.94067	0.0	0.8616	0.81133	2.0	0.64864	0.36124
17.0	1.0	0.90658	0.83557	0.72809	0.04458	0.80999	0.89715	-8.21797	0.91701	0.0	0.82046	0.75265	2.0	0.63517	0.36116
18.0	1.0	0.86559	0.76972	0.63047	0.06464	0.75323	0.84878	-9.00605	0.88441	0.0	0.76114	0.67323	2.0	0.65582	0.36112
19.0	0.99998	0.80928	0.67562	0.62738	0.08588	0.6718	0.79156	-12.12667	0.82838	0.0	0.70316	0.54128	2.0	0.63704	0.3611
20.0	1.0	0.81785	0.68425	0.68575	0.08096	0.72132	0.79944	-16.22338	0.83708	0.0	0.75147	0.5532	2.0	0.61693	0.3611

Standard deviation of Adjusted Rand versus number of clusters
gap: 0.90, Tp: 0.25, single link

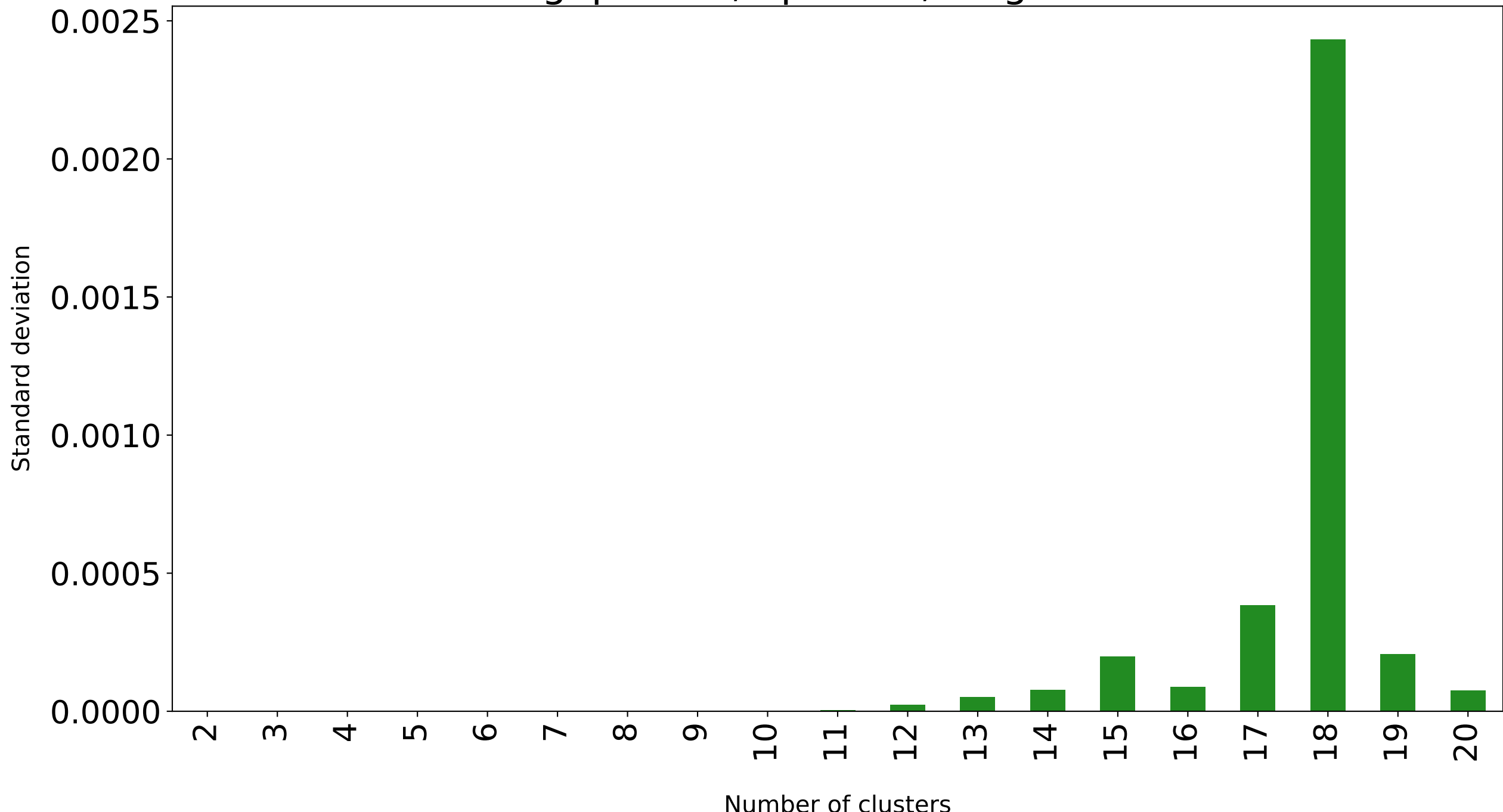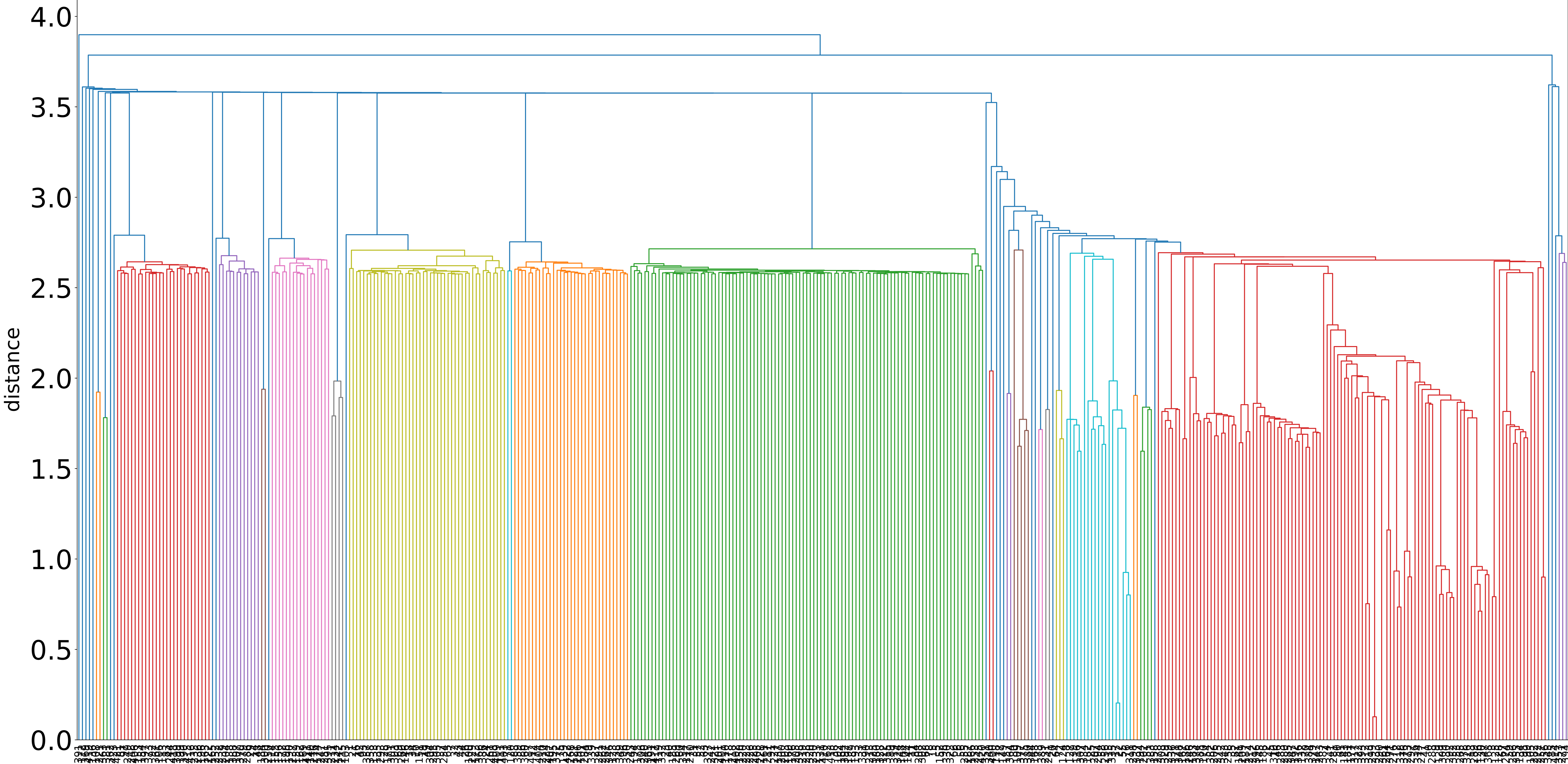Hierarchical Clustering Dendrogram - gap: 1.00, Tp: 0.25, single link

Cophenetic Correlation Coefficient: 0.4055809499175132

Average values of five clustering indices
gap: 1.00, Tp: 0.25, single link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99596	0.99199	0.60341	0.00203	0.60326	0.99594	0.00827	0.99598	4e-05	0.98442	0.98442	2.0	0.52743	0.35692
3.0	1.0	0.98639	0.9737	0.69541	0.00691	0.68814	0.98626	-0.02579	0.98653	1e-05	0.95198	0.95146	2.0	0.46696	0.3466
4.0	1.0	0.97244	0.94693	0.54572	0.01494	0.65927	0.97155	-0.06918	0.97335	1e-05	0.90816	0.90577	2.0	0.54597	0.33153
5.0	1.0	0.95915	0.92188	0.46307	0.02211	0.62482	0.95746	-0.08463	0.96085	1e-05	0.86851	0.86483	2.0	0.6465	0.33065
6.0	1.0	0.95238	0.90923	0.4336	0.02518	0.59437	0.9504	-0.12645	0.95437	1e-05	0.8484	0.8437	2.0	0.70289	0.3305
7.0	1.0	0.94649	0.8984	0.41649	0.02774	0.57705	0.94417	-0.22524	0.94883	0.0	0.83221	0.82648	2.0	0.74521	0.32985
8.0	1.0	0.93943	0.88497	0.37996	0.03106	0.55531	0.93677	-0.34927	0.94212	0.0	0.81108	0.80386	2.0	0.77592	0.32959
9.0	1.0	0.93081	0.86879	0.34687	0.03535	0.53877	0.92758	-0.44494	0.93407	0.0	0.78681	0.77776	2.0	0.79614	0.32924
10.0	1.0	0.92017	0.849	0.31494	0.04082	0.51453	0.91636	-0.58269	0.92402	0.0	0.75799	0.74591	2.0	0.76839	0.32821
11.0	1.0	0.92564	0.86345	0.58077	0.03703	0.63892	0.92437	-2.01402	0.92691	0.0	0.79476	0.76985	2.0	0.71802	0.32796
12.0	1.0	0.92524	0.86177	0.57265	0.03693	0.67051	0.92367	-2.53758	0.92682	0.0	0.79603	0.76605	2.0	0.74029	0.32786
13.0	1.0	0.93581	0.8808	0.7031	0.03098	0.76142	0.9347	-3.84369	0.93692	0.0	0.83183	0.79567	2.0	0.70611	0.32779
14.0	1.0	0.93547	0.8792	0.6935	0.03056	0.78256	0.93402	-4.66675	0.93694	0.0	0.83401	0.79203	2.0	0.69248	0.32771
15.0	1.0	0.9545	0.91418	0.85539	0.02208	0.87325	0.95295	-6.43303	0.95607	0.0	0.89077	0.85211	2.0	0.66413	0.35389
16.0	1.0	0.93853	0.88752	0.7892	0.02918	0.8563	0.93419	-7.29695	0.94319	0.0	0.86766	0.81862	2.0	0.65581	0.35374
17.0	1.0	0.89836	0.82052	0.69854	0.04801	0.79578	0.88811	-8.24725	0.9096	0.0	0.80497	0.73084	2.0	0.64288	0.35367
18.0	1.0	0.83955	0.72668	0.56724	0.07736	0.71292	0.81858	-9.0108	0.86298	0.0	0.72002	0.61874	2.0	0.66329	0.35363
19.0	0.99997	0.77956	0.62743	0.56531	0.10001	0.63066	0.75741	-12.07455	0.80349	0.0	0.66558	0.48156	2.0	0.64498	0.35361
20.0	1.0	0.80033	0.65384	0.64205	0.08912	0.70196	0.77978	-16.39674	0.8218	0.0	0.73515	0.51146	2.0	0.62559	0.35361

Standard deviation of Adjusted Rand versus number of clusters
gap: 1.00, Tp: 0.25, single link