

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

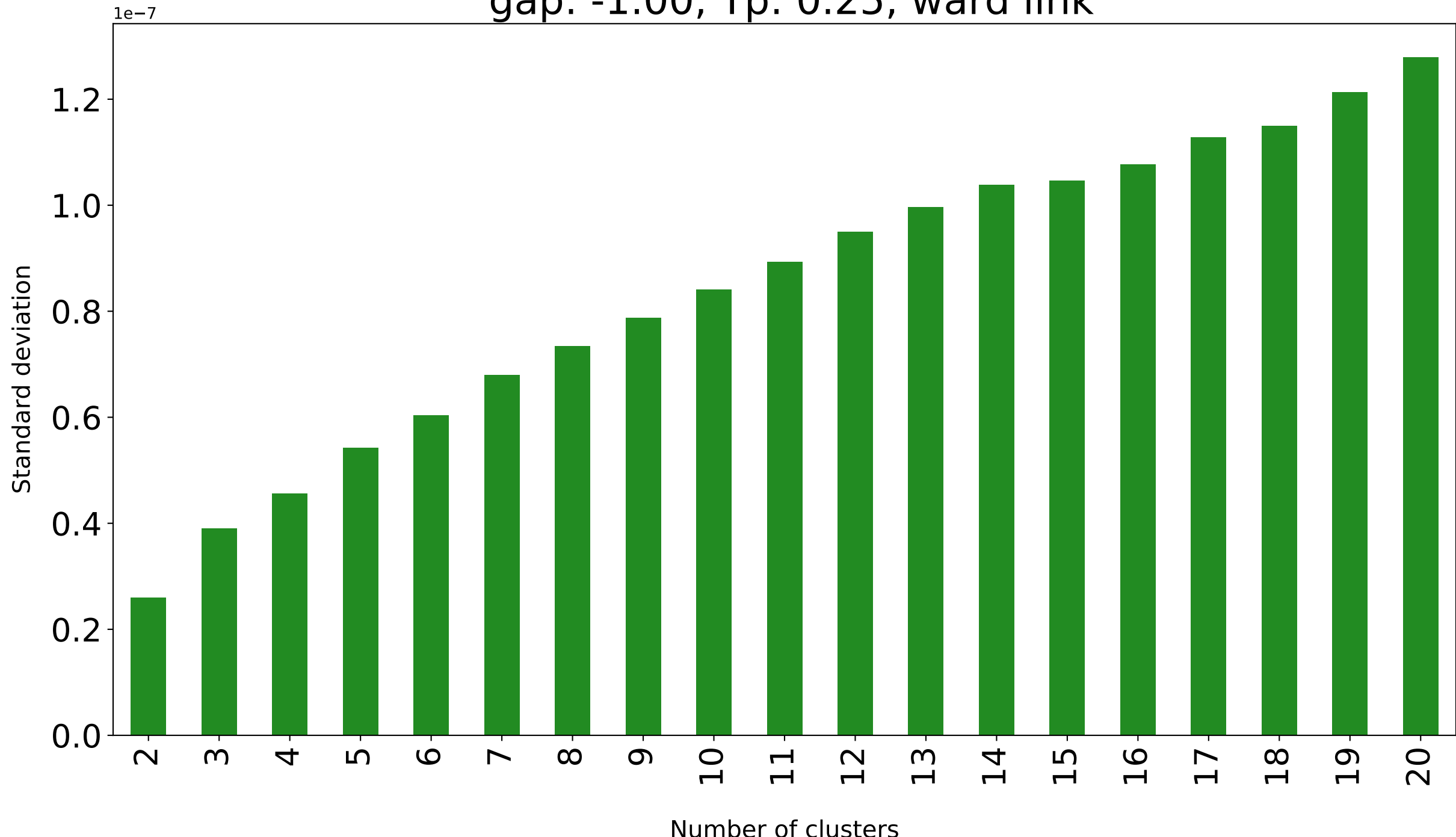


Cophenetic Correlation Coefficient: 0.6710981089235792

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

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99929	0.99859	0.776	0.00035	0.776	0.99929	-5e-05	0.9993	0.00489	0.9972	0.9972	2.0	0.53287	0.45455
3.0	1.0	0.99842	0.99685	0.74914	0.00079	0.82478	0.99842	-0.01495	0.99842	0.00295	0.99378	0.99375	2.0	0.68863	0.45455
4.0	1.0	0.99765	0.9953	0.75016	0.00117	0.85085	0.99764	-0.04674	0.99765	0.00211	0.99078	0.99069	2.0	0.76652	0.45455
5.0	1.0	0.99681	0.99365	0.74628	0.00158	0.85227	0.99681	-0.09344	0.99682	0.0016	0.98761	0.98743	2.0	0.81325	0.45455
6.0	1.0	0.99607	0.99216	0.7492	0.00194	0.85755	0.99606	-0.15817	0.99608	0.00129	0.98481	0.98452	2.0	0.8444	0.45455
7.0	1.0	0.99535	0.99072	0.75226	0.0023	0.8604	0.99533	-0.23993	0.99536	0.00108	0.98213	0.98171	2.0	0.86665	0.45455
8.0	1.0	0.99449	0.98903	0.74835	0.00271	0.85931	0.99447	-0.33316	0.99451	0.00093	0.97899	0.97839	2.0	0.88334	0.45455
9.0	1.0	0.99363	0.98732	0.74517	0.00313	0.85816	0.9936	-0.4419	0.99366	0.00082	0.97588	0.97507	2.0	0.89632	0.45455
10.0	1.0	0.99272	0.98551	0.74068	0.00357	0.85617	0.99268	-0.56358	0.99275	0.00074	0.9726	0.97155	2.0	0.90671	0.45455
11.0	1.0	0.99186	0.98381	0.73893	0.00397	0.8556	0.99182	-0.70395	0.99191	0.00067	0.9696	0.96828	2.0	0.91521	0.45455
12.0	1.0	0.99094	0.98199	0.73546	0.00442	0.85395	0.99089	-0.85594	0.99099	0.00061	0.96638	0.96476	2.0	0.92229	0.45455
13.0	1.0	0.99011	0.98033	0.73479	0.00481	0.8539	0.99005	-1.02905	0.99017	0.00056	0.96351	0.96159	2.0	0.92828	0.45455
14.0	1.0	0.98935	0.97885	0.73628	0.00516	0.85508	0.98929	-1.22435	0.98942	0.00052	0.96101	0.95874	2.0	0.93341	0.45455
15.0	1.0	0.98862	0.9774	0.73796	0.0055	0.85648	0.98855	-1.43791	0.9887	0.00049	0.9586	0.95597	2.0	0.93786	0.45455
16.0	1.0	0.98767	0.97552	0.73464	0.00595	0.85476	0.98758	-1.64958	0.98776	0.00046	0.95544	0.95239	2.0	0.94176	0.45455
17.0	1.0	0.98699	0.97417	0.73708	0.00626	0.85633	0.98689	-1.90035	0.98708	0.00043	0.95327	0.94983	2.0	0.9452	0.45455
18.0	1.0	0.98617	0.97255	0.73663	0.00664	0.85628	0.98606	-2.15561	0.98628	0.00041	0.95066	0.94677	2.0	0.94825	0.45455
19.0	1.0	0.98536	0.97096	0.73642	0.00701	0.85619	0.98524	-2.428	0.98548	0.00039	0.94813	0.94378	2.0	0.95098	0.45455
20.0	1.0	0.98453	0.96934	0.73591	0.00739	0.85592	0.9844	-2.71495	0.98467	0.00037	0.94558	0.94074	2.0	0.95344	0.45455

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



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

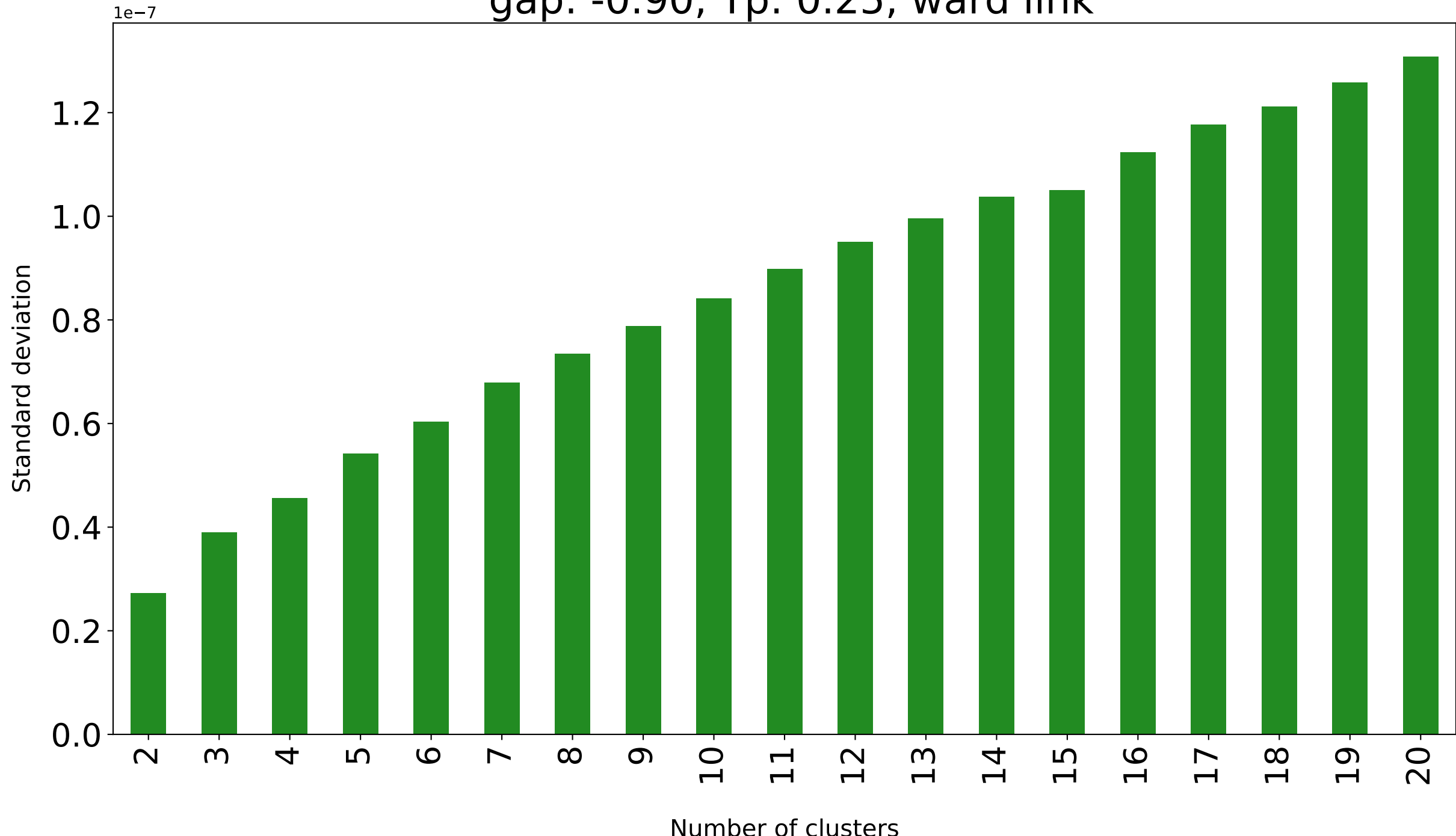


Cophenetic Correlation Coefficient: 0.6710981089235794

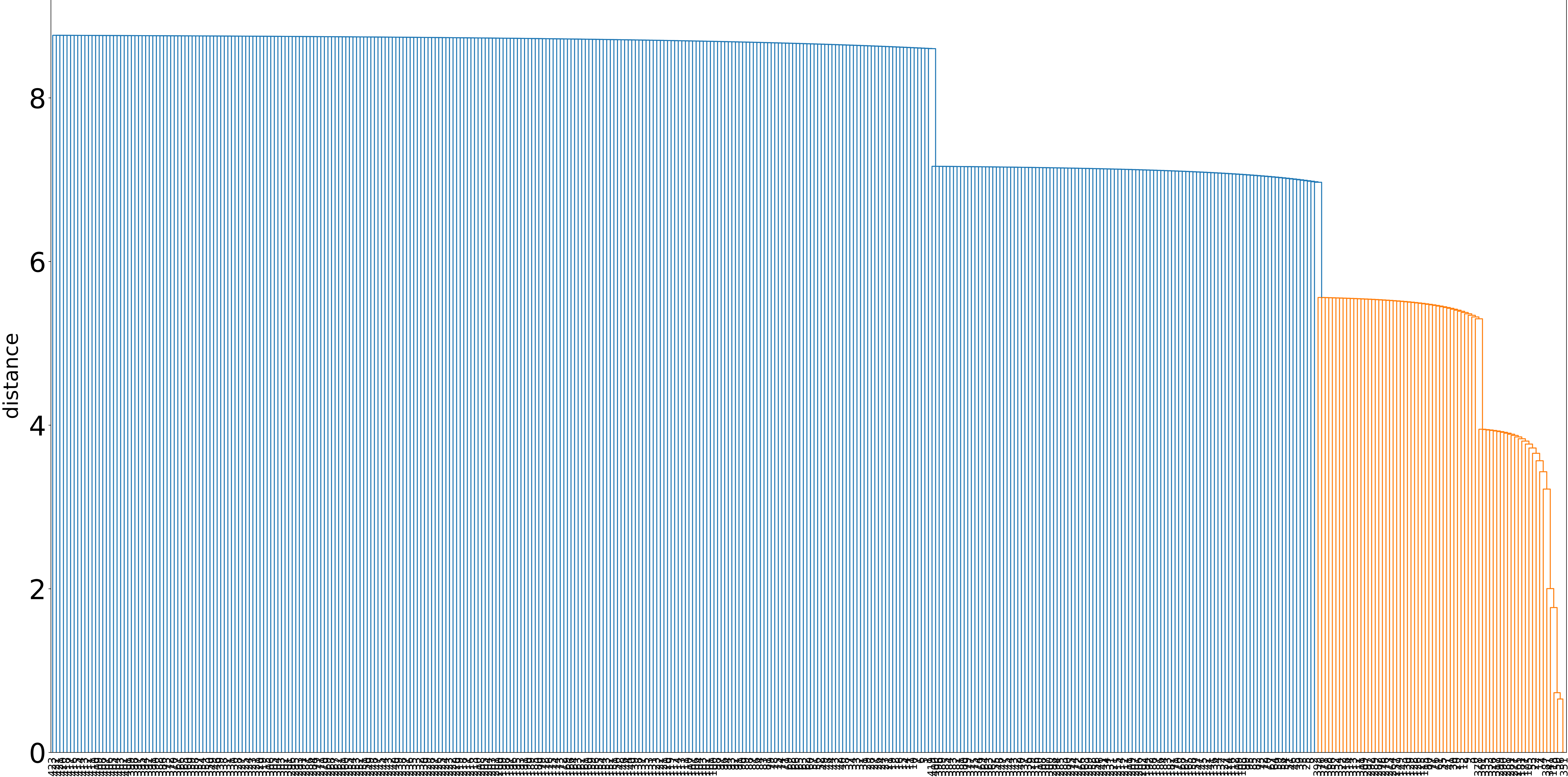
Average values of five clustering indices
gap: -0.90, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99919	0.99839	0.744	0.0004	0.744	0.99919	0.00033	0.99919	0.00469	0.9968	0.9968	2.0	0.53287	0.45455
3.0	1.0	0.99848	0.99697	0.75907	0.00075	0.84053	0.99848	-0.01606	0.99849	0.00303	0.99402	0.99399	2.0	0.68863	0.45455
4.0	1.0	0.99756	0.99512	0.74073	0.00121	0.84587	0.99755	-0.04556	0.99756	0.00211	0.99043	0.99033	2.0	0.76652	0.45455
5.0	1.0	0.99674	0.99349	0.74016	0.00162	0.85073	0.99673	-0.09246	0.99675	0.0016	0.98731	0.98712	2.0	0.81325	0.45455
6.0	1.0	0.9959	0.99183	0.73864	0.00203	0.85175	0.99589	-0.15472	0.99592	0.00129	0.98417	0.98386	2.0	0.8444	0.45455
7.0	1.0	0.99513	0.99029	0.74063	0.0024	0.85479	0.99511	-0.23469	0.99514	0.00108	0.9813	0.98084	2.0	0.86665	0.45455
8.0	1.0	0.99425	0.98854	0.73719	0.00283	0.85373	0.99423	-0.32676	0.99427	0.00093	0.97806	0.97742	2.0	0.88334	0.45455
9.0	1.0	0.99345	0.98696	0.73794	0.00321	0.85468	0.99342	-0.43811	0.99348	0.00082	0.9752	0.97435	2.0	0.89632	0.45455
10.0	1.0	0.99259	0.98525	0.73613	0.00363	0.8536	0.99255	-0.56218	0.99263	0.00073	0.97212	0.97106	2.0	0.90671	0.45455
11.0	1.0	0.99165	0.98338	0.73198	0.00408	0.85144	0.9916	-0.69748	0.99169	0.00067	0.96879	0.96745	2.0	0.91521	0.45455
12.0	1.0	0.99088	0.98186	0.73357	0.00445	0.85288	0.99083	-0.8587	0.99093	0.00061	0.96614	0.96451	2.0	0.92229	0.45455
13.0	1.0	0.99021	0.98053	0.7375	0.00476	0.85556	0.99015	-1.04289	0.99027	0.00056	0.96389	0.96197	2.0	0.92828	0.45455
14.0	1.0	0.98952	0.97917	0.74034	0.00508	0.85765	0.98945	-1.24293	0.98959	0.00052	0.96161	0.95936	2.0	0.93341	0.45455
15.0	1.0	0.98869	0.97753	0.73945	0.00547	0.85731	0.98861	-1.44859	0.98876	0.00049	0.95884	0.95622	2.0	0.93786	0.45455
16.0	1.0	0.98787	0.97591	0.73885	0.00586	0.85704	0.98778	-1.67106	0.98795	0.00046	0.95615	0.95315	2.0	0.94176	0.45455
17.0	1.0	0.98688	0.97397	0.73507	0.00631	0.85493	0.98678	-1.89555	0.98699	0.00043	0.95292	0.94948	2.0	0.9452	0.45455
18.0	1.0	0.98598	0.97218	0.73305	0.00674	0.85391	0.98586	-2.14216	0.98609	0.00041	0.94999	0.94608	2.0	0.94825	0.45455
19.0	1.0	0.98504	0.97033	0.73069	0.00717	0.85263	0.98491	-2.40146	0.98516	0.00039	0.947	0.9426	2.0	0.95098	0.45455
20.0	1.0	0.98429	0.96886	0.73177	0.00751	0.85337	0.98415	-2.69637	0.98443	0.00037	0.94472	0.93984	2.0	0.95344	0.45455

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



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



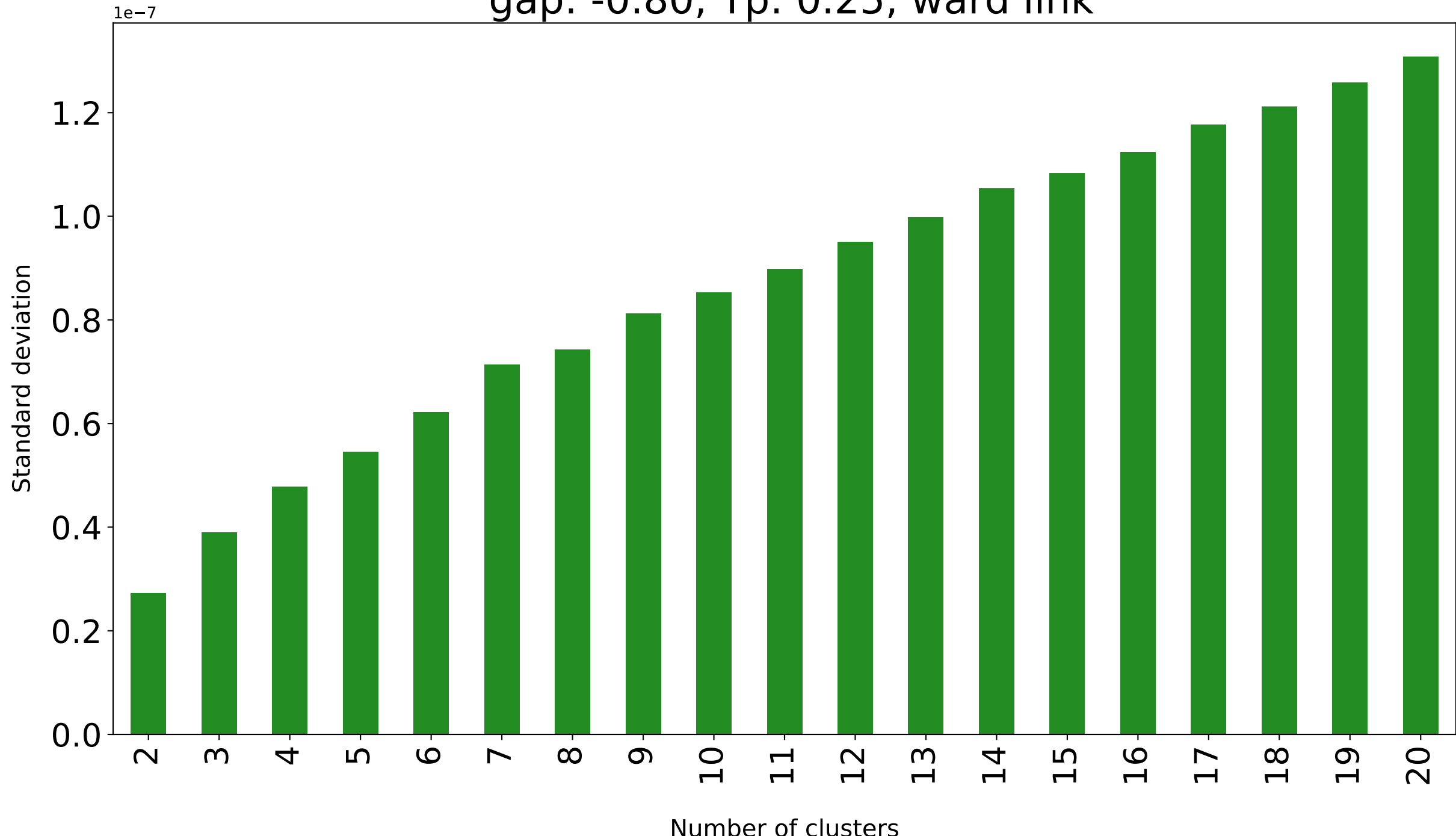
patient index

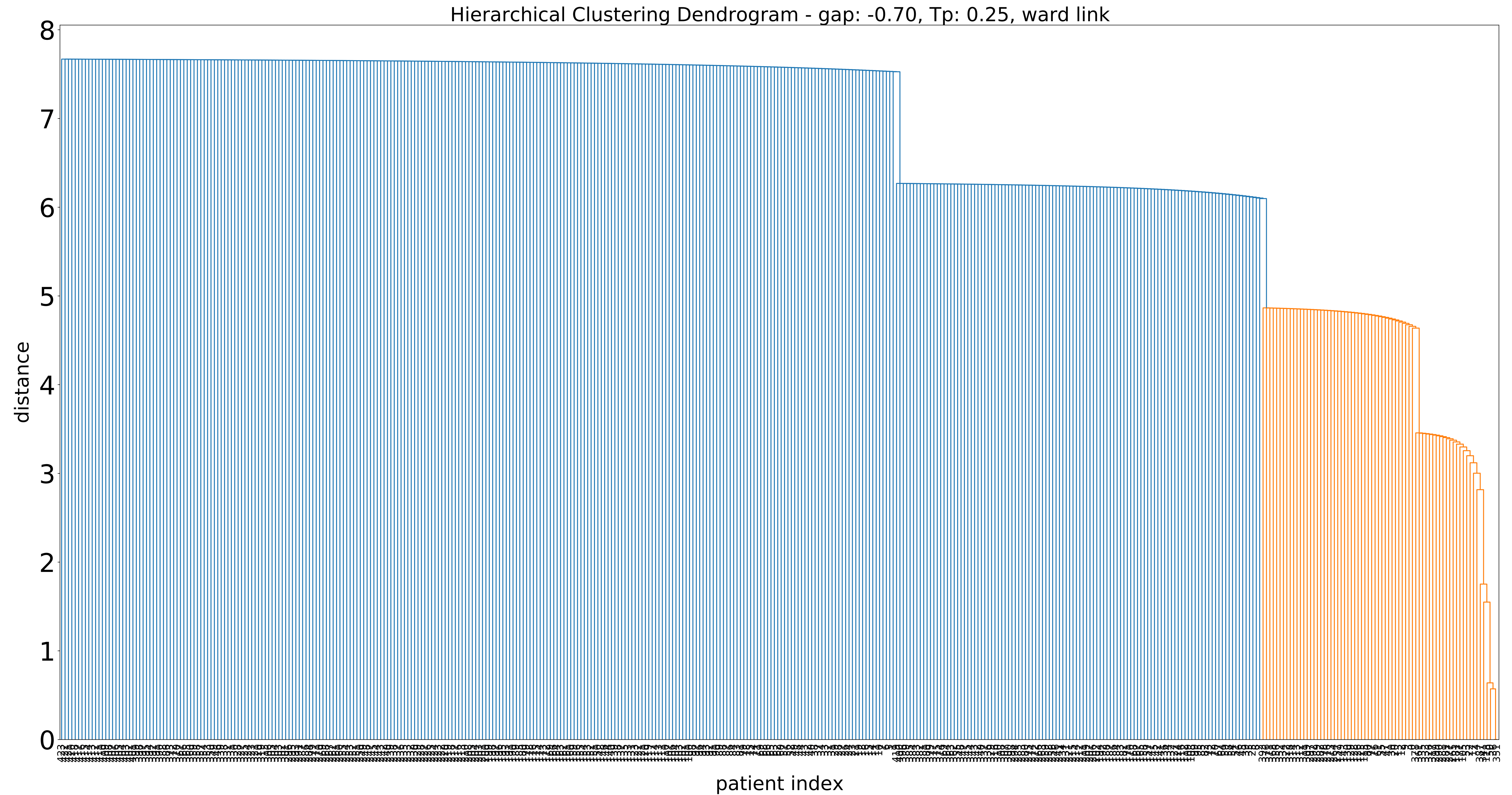
Cophenetic Correlation Coefficient: 0.6710981089235791

Average values of five clustering indices
gap: -0.80, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99919	0.99839	0.744	0.0004	0.744	0.99919	0.00033	0.99919	0.00469	0.9968	0.9968	2.0	0.53287	0.45455
3.0	1.0	0.9984	0.9968	0.74512	0.0008	0.82242	0.99839	-0.01521	0.9984	0.00295	0.99368	0.99365	2.0	0.68863	0.45455
4.0	1.0	0.99749	0.995	0.73414	0.00125	0.83753	0.99749	-0.04503	0.9975	0.00209	0.99019	0.99009	2.0	0.76652	0.45455
5.0	1.0	0.99665	0.99332	0.73317	0.00166	0.84442	0.99664	-0.09133	0.99666	0.0016	0.98697	0.98678	2.0	0.81325	0.45455
6.0	1.0	0.9959	0.99184	0.73873	0.00203	0.85045	0.99589	-0.15591	0.99592	0.00129	0.98418	0.98388	2.0	0.8444	0.45455
7.0	1.0	0.9949	0.98984	0.72869	0.00252	0.84542	0.99488	-0.22838	0.99492	0.00108	0.98043	0.97998	2.0	0.86665	0.45455
8.0	1.0	0.9941	0.98824	0.73036	0.00291	0.84833	0.99407	-0.32321	0.99412	0.00093	0.97749	0.97686	2.0	0.88334	0.45455
9.0	1.0	0.9932	0.98646	0.72792	0.00334	0.84746	0.99317	-0.42992	0.99323	0.00082	0.97425	0.9734	2.0	0.89632	0.45455
10.0	1.0	0.9924	0.98487	0.72936	0.00372	0.84932	0.99236	-0.55697	0.99244	0.00073	0.97141	0.97033	2.0	0.90671	0.45455
11.0	1.0	0.99153	0.98315	0.72829	0.00414	0.84939	0.99149	-0.69637	0.99158	0.00067	0.96835	0.967	2.0	0.91521	0.45455
12.0	1.0	0.99067	0.98145	0.72762	0.00455	0.84931	0.99062	-0.85202	0.99073	0.00061	0.96538	0.96373	2.0	0.92229	0.45455
13.0	1.0	0.98989	0.9799	0.72897	0.00492	0.85039	0.98983	-1.02833	0.98995	0.00056	0.96271	0.96076	2.0	0.92828	0.45455
14.0	1.0	0.9891	0.97834	0.72997	0.00529	0.85119	0.98903	-1.22066	0.98917	0.00052	0.96007	0.95778	2.0	0.93341	0.45455
15.0	1.0	0.9882	0.97657	0.72829	0.00571	0.85054	0.98812	-1.42098	0.98828	0.00049	0.95707	0.95439	2.0	0.93786	0.45455
16.0	1.0	0.98736	0.97491	0.72805	0.0061	0.85073	0.98727	-1.64201	0.98746	0.00046	0.95433	0.95124	2.0	0.94176	0.45455
17.0	1.0	0.98652	0.97325	0.72774	0.00649	0.85076	0.98642	-1.87875	0.98663	0.00043	0.95161	0.94809	2.0	0.9452	0.45455
18.0	1.0	0.98565	0.97154	0.72689	0.00689	0.85039	0.98553	-2.12875	0.98577	0.00041	0.94883	0.94486	2.0	0.94825	0.45455
19.0	1.0	0.98476	0.96979	0.72575	0.0073	0.8499	0.98463	-2.39298	0.98489	0.00039	0.94603	0.94156	2.0	0.95098	0.45455
20.0	1.0	0.98384	0.96798	0.72423	0.00772	0.84907	0.9837	-2.6699	0.98399	0.00037	0.94316	0.93818	2.0	0.95344	0.45455

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

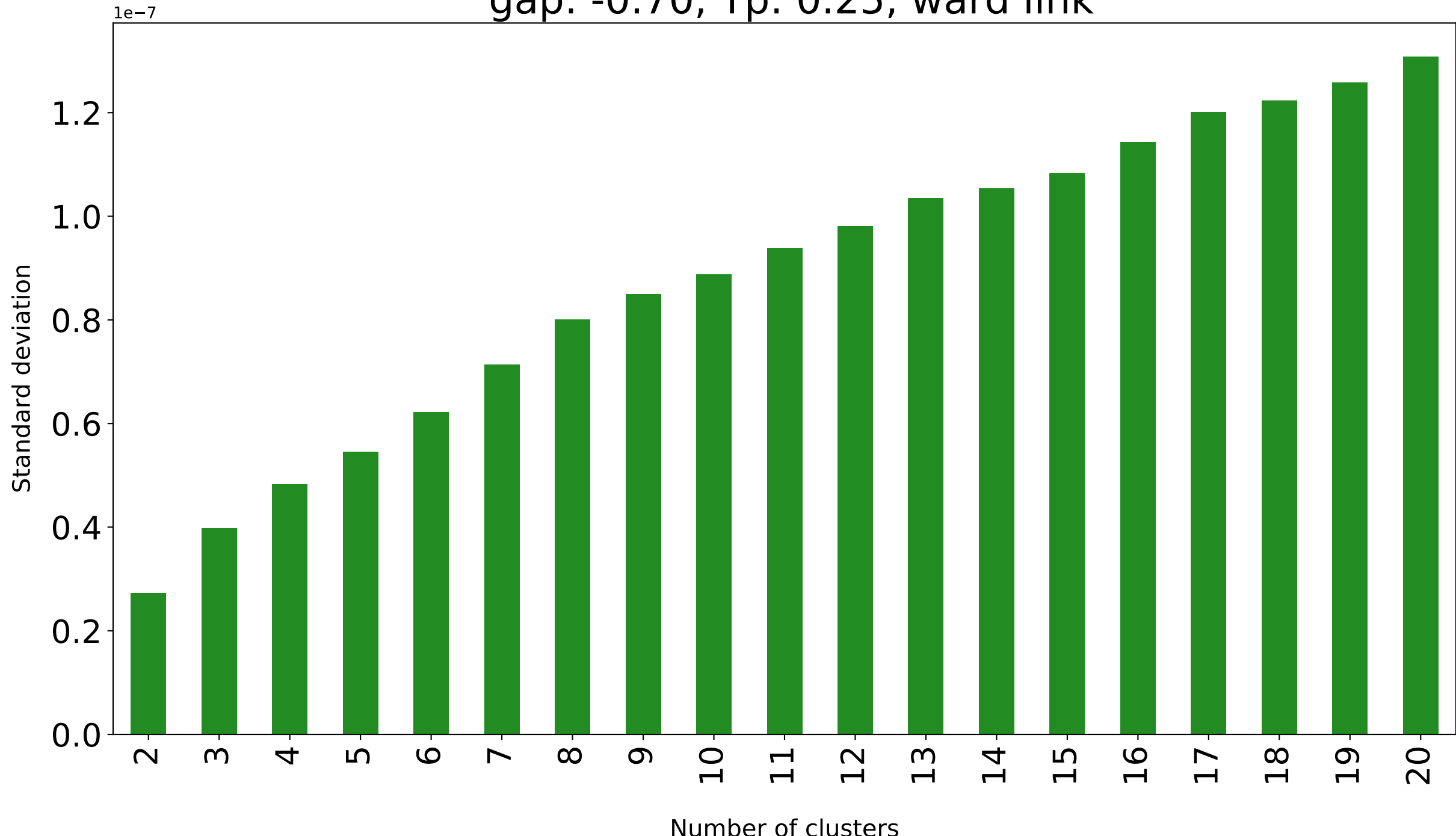




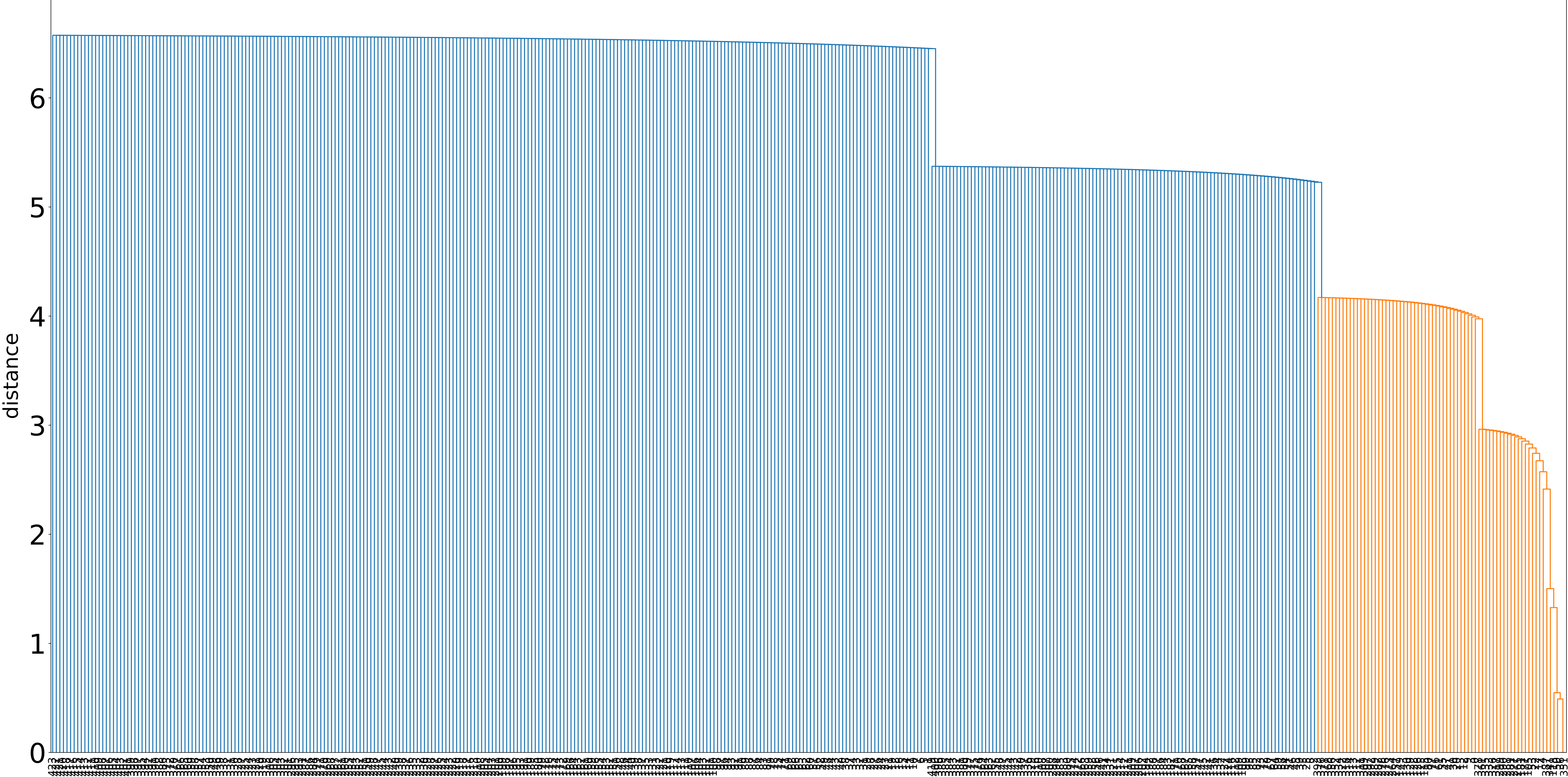
Average values of five clustering indices
gap: -0.70, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99931	0.99862	0.78	0.00035	0.78	0.99931	-0.0001	0.99931	0.00491	0.99725	0.99725	2.0	0.53287	0.45455
3.0	1.0	0.99851	0.99703	0.76324	0.00074	0.82974	0.99851	-0.01574	0.99851	0.00293	0.99413	0.9941	2.0	0.68863	0.45455
4.0	1.0	0.99781	0.99563	0.76772	0.00109	0.85716	0.99781	-0.04878	0.99782	0.00209	0.99143	0.99135	2.0	0.76652	0.45455
5.0	1.0	0.99692	0.99385	0.75434	0.00153	0.85863	0.99691	-0.09427	0.99692	0.0016	0.988	0.98783	2.0	0.81325	0.45455
6.0	1.0	0.99615	0.99231	0.75405	0.00191	0.86077	0.99613	-0.1584	0.99616	0.00129	0.9851	0.98481	2.0	0.8444	0.45455
7.0	1.0	0.99527	0.99058	0.74827	0.00233	0.85781	0.99525	-0.23523	0.99529	0.00108	0.98185	0.98142	2.0	0.86665	0.45455
8.0	1.0	0.99444	0.98893	0.74619	0.00274	0.85711	0.99442	-0.32937	0.99447	0.00093	0.97881	0.97822	2.0	0.88334	0.45455
9.0	1.0	0.99369	0.98743	0.74736	0.0031	0.85883	0.99366	-0.44257	0.99371	0.00082	0.97609	0.9753	2.0	0.89632	0.45455
10.0	1.0	0.99281	0.98569	0.74395	0.00352	0.85776	0.99277	-0.5662	0.99284	0.00074	0.97295	0.97192	2.0	0.90671	0.45455
11.0	1.0	0.99201	0.9841	0.74352	0.00391	0.85801	0.99197	-0.70948	0.99205	0.00067	0.97013	0.96885	2.0	0.91521	0.45455
12.0	1.0	0.99117	0.98245	0.74224	0.0043	0.85774	0.99112	-0.86708	0.99122	0.00061	0.96724	0.96567	2.0	0.92229	0.45455
13.0	1.0	0.99034	0.98079	0.74103	0.0047	0.85731	0.99028	-1.04037	0.9904	0.00056	0.96437	0.96249	2.0	0.92828	0.45455
14.0	1.0	0.98959	0.9793	0.742	0.00505	0.85839	0.98952	-1.23586	0.98965	0.00052	0.96185	0.95963	2.0	0.93341	0.45455
15.0	1.0	0.98895	0.97804	0.74539	0.00535	0.86068	0.98887	-1.45662	0.98902	0.00049	0.95978	0.95721	2.0	0.93786	0.45455
16.0	1.0	0.9881	0.97637	0.74386	0.00574	0.85986	0.98801	-1.67714	0.98818	0.00046	0.95699	0.95403	2.0	0.94176	0.45455
17.0	1.0	0.98733	0.97484	0.74394	0.0061	0.86003	0.98723	-1.92019	0.98742	0.00043	0.95449	0.95114	2.0	0.9452	0.45455
18.0	1.0	0.98639	0.973	0.74091	0.00653	0.85851	0.98628	-2.16471	0.9865	0.00041	0.95146	0.94764	2.0	0.94825	0.45455
19.0	1.0	0.98559	0.97142	0.74062	0.0069	0.85859	0.98547	-2.43859	0.98571	0.00039	0.94896	0.94466	2.0	0.95098	0.45455
20.0	1.0	0.98482	0.9699	0.74078	0.00725	0.85871	0.98469	-2.73119	0.98495	0.00037	0.94658	0.94181	2.0	0.95344	0.45455

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



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



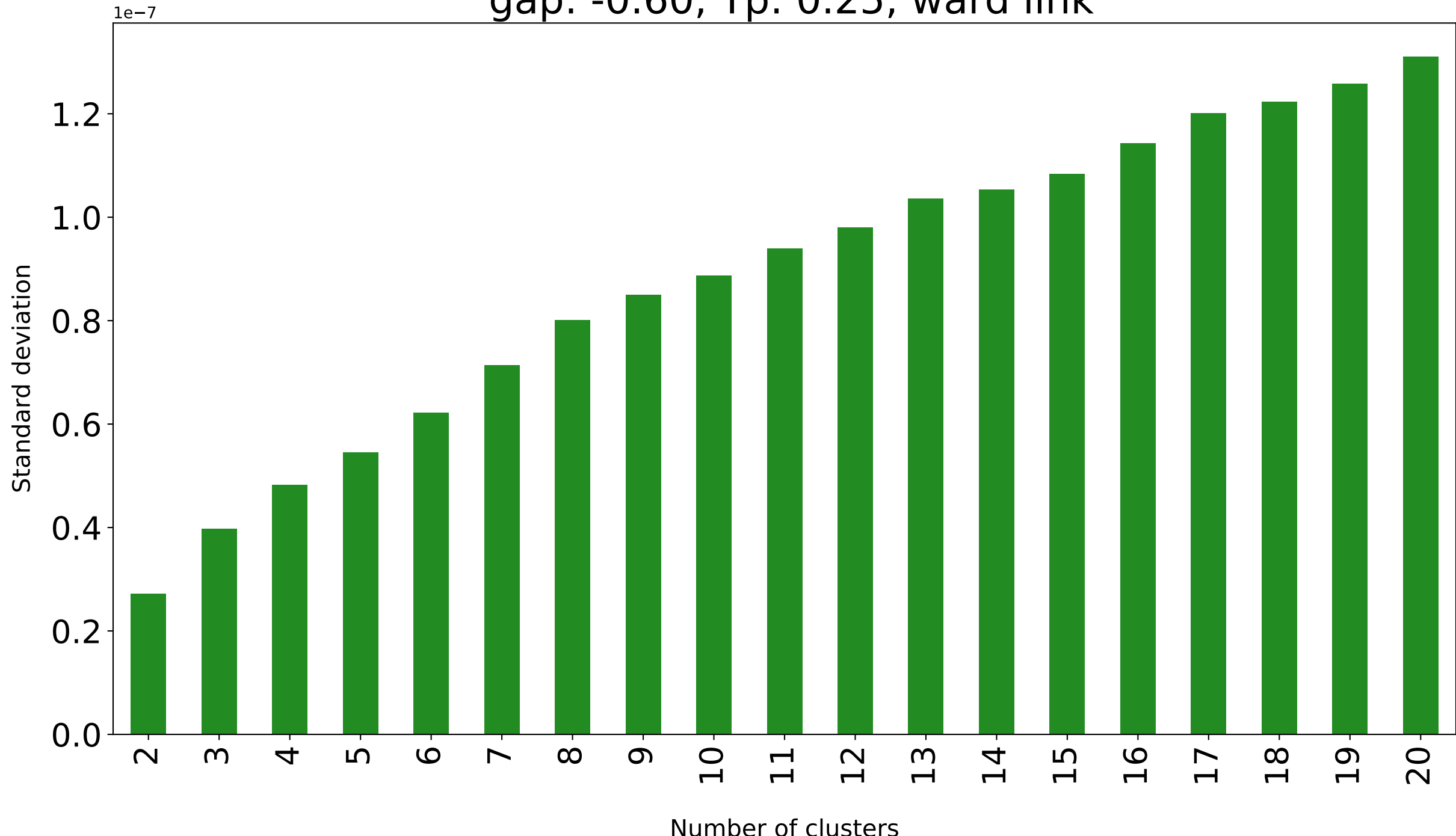
patient index

Cophenetic Correlation Coefficient: 0.6710981089235791

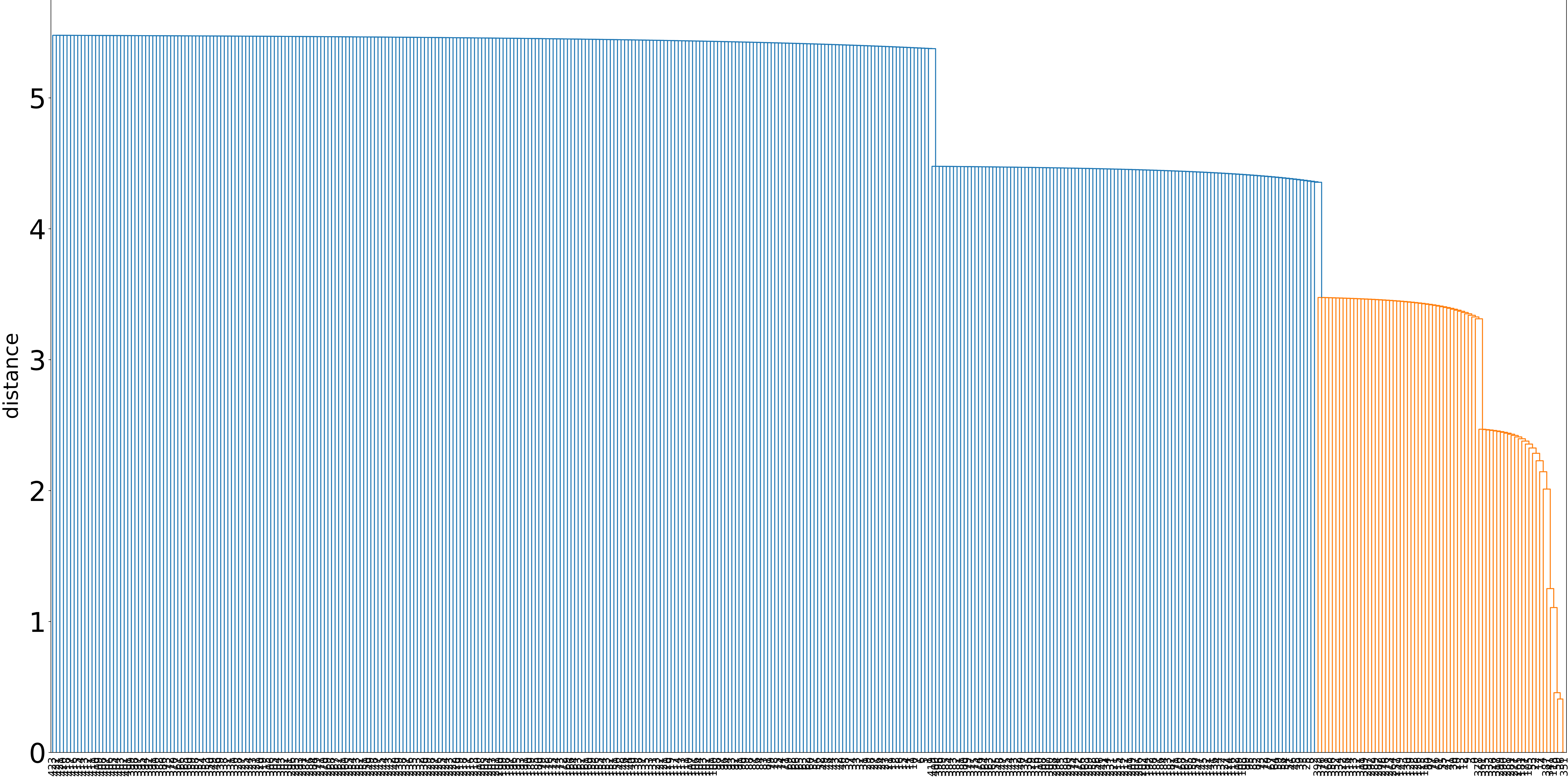
Average values of five clustering indices
gap: -0.60, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99927	0.99854	0.768	0.00036	0.768	0.99927	5e-05	0.99927	0.00484	0.9971	0.9971	2.0	0.53287	0.45455
3.0	1.0	0.9984	0.9968	0.74508	0.0008	0.82571	0.99839	-0.01483	0.9984	0.00298	0.99368	0.99365	2.0	0.68863	0.45455
4.0	1.0	0.99751	0.99502	0.73543	0.00124	0.83914	0.9975	-0.04484	0.99751	0.00209	0.99023	0.99014	2.0	0.76652	0.45455
5.0	1.0	0.99671	0.99344	0.73807	0.00163	0.84934	0.9967	-0.09223	0.99672	0.0016	0.98721	0.98702	2.0	0.81325	0.45455
6.0	1.0	0.9959	0.99183	0.73858	0.00203	0.85253	0.99589	-0.15516	0.99592	0.00129	0.98417	0.98386	2.0	0.8444	0.45455
7.0	1.0	0.99495	0.98994	0.73121	0.00249	0.84897	0.99493	-0.2293	0.99497	0.00108	0.98062	0.98015	2.0	0.86665	0.45455
8.0	1.0	0.99423	0.98851	0.73662	0.00284	0.85334	0.99421	-0.32759	0.99426	0.00093	0.97802	0.97737	2.0	0.88334	0.45455
9.0	1.0	0.99321	0.98648	0.72829	0.00333	0.8489	0.99318	-0.42879	0.99324	0.00082	0.97428	0.97342	2.0	0.89632	0.45455
10.0	1.0	0.99249	0.98504	0.73238	0.00368	0.8521	0.99245	-0.55968	0.99252	0.00073	0.97173	0.97063	2.0	0.90671	0.45455
11.0	1.0	0.99178	0.98365	0.73633	0.00401	0.85479	0.99174	-0.70839	0.99183	0.00067	0.96929	0.96795	2.0	0.91521	0.45455
12.0	1.0	0.99102	0.98213	0.73755	0.00438	0.85585	0.99097	-0.86972	0.99106	0.00061	0.96664	0.96501	2.0	0.92229	0.45455
13.0	1.0	0.99008	0.98027	0.73398	0.00482	0.85392	0.99002	-1.03604	0.99014	0.00056	0.9634	0.96145	2.0	0.92828	0.45455
14.0	1.0	0.98904	0.97823	0.72856	0.00531	0.85089	0.98897	-1.21086	0.98911	0.00052	0.95986	0.95754	2.0	0.93341	0.45455
15.0	1.0	0.98824	0.97663	0.72905	0.00569	0.85143	0.98816	-1.41816	0.98832	0.00049	0.95719	0.95449	2.0	0.93786	0.45455
16.0	1.0	0.98748	0.97514	0.7305	0.00604	0.85231	0.98739	-1.64565	0.98757	0.00046	0.95474	0.95166	2.0	0.94176	0.45455
17.0	1.0	0.9866	0.9734	0.7293	0.00645	0.8517	0.9865	-1.87903	0.9867	0.00043	0.95189	0.94838	2.0	0.9452	0.45455
18.0	1.0	0.98584	0.97192	0.73055	0.0068	0.85258	0.98573	-2.14009	0.98596	0.00041	0.94952	0.94558	2.0	0.94825	0.45455
19.0	1.0	0.98505	0.97035	0.73089	0.00716	0.85283	0.98492	-2.41353	0.98518	0.00039	0.94704	0.94263	2.0	0.95098	0.45455
20.0	1.0	0.9842	0.96868	0.73023	0.00755	0.85243	0.98405	-2.6975	0.98434	0.00037	0.9444	0.93951	2.0	0.95344	0.45455

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



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



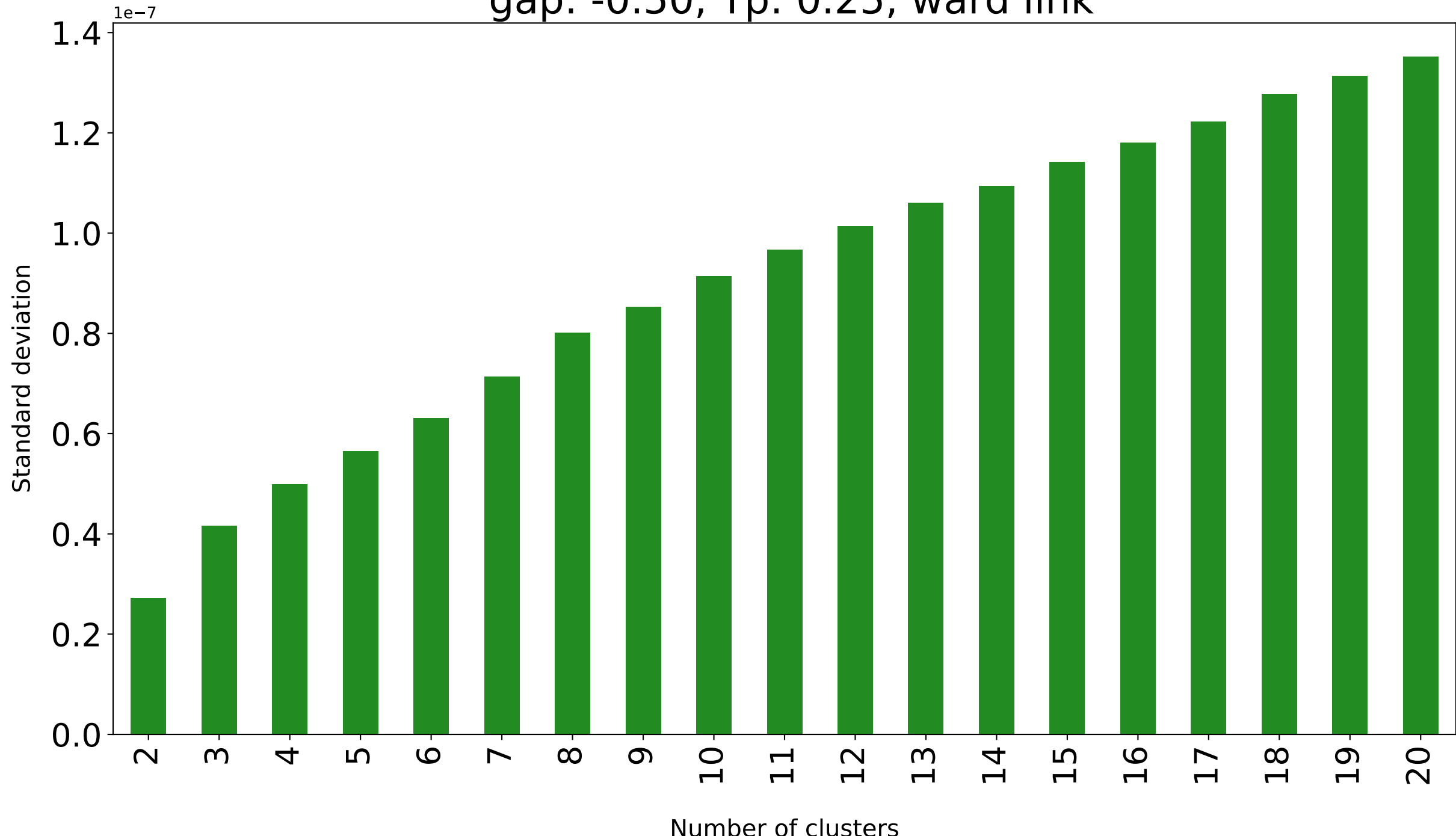
patient index

Cophenetic Correlation Coefficient: 0.6710981089235792

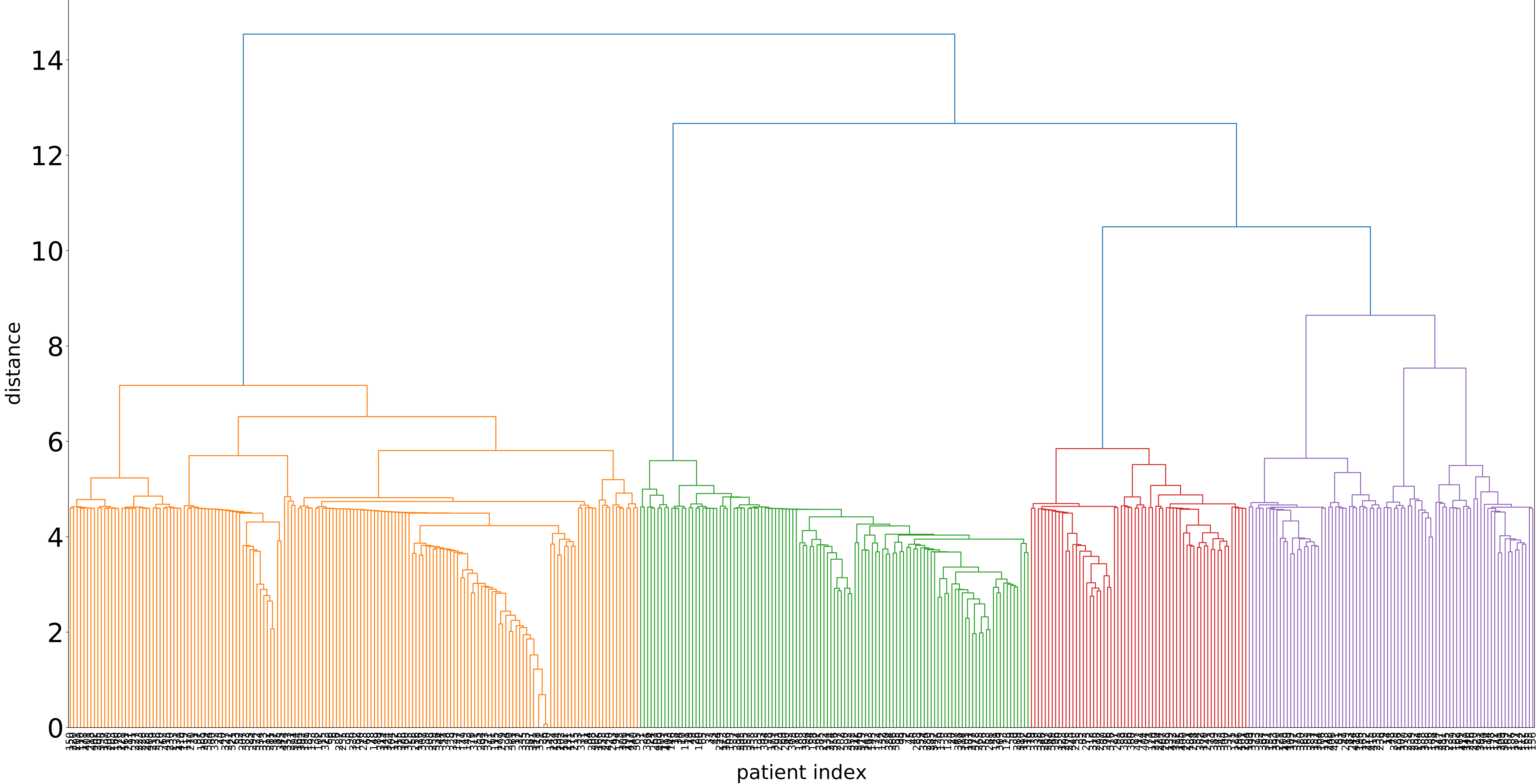
Average values of five clustering indices
gap: -0.50, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.99919	0.99839	0.744	0.0004	0.744	0.99919	0.00033	0.99919	0.00469	0.9968	0.9968	2.0	0.53287	0.45455
3.0	1.0	0.99828	0.99657	0.72717	0.00086	0.80031	0.99828	-0.01412	0.99829	0.00286	0.99323	0.9932	2.0	0.68863	0.45455
4.0	1.0	0.99751	0.99503	0.73556	0.00124	0.83472	0.9975	-0.04579	0.99751	0.00207	0.99024	0.99015	2.0	0.76652	0.45455
5.0	1.0	0.99687	0.99375	0.75039	0.00155	0.85262	0.99686	-0.0964	0.99688	0.00159	0.98781	0.98764	2.0	0.81325	0.45455
6.0	1.0	0.9961	0.99222	0.7509	0.00193	0.85768	0.99608	-0.16049	0.99611	0.00129	0.98491	0.98463	2.0	0.8444	0.45455
7.0	1.0	0.99528	0.9906	0.74891	0.00233	0.85827	0.99527	-0.23936	0.9953	0.00108	0.98189	0.98146	2.0	0.86665	0.45455
8.0	1.0	0.99448	0.989	0.74784	0.00272	0.85846	0.99446	-0.3345	0.9945	0.00093	0.97895	0.97835	2.0	0.88334	0.45455
9.0	1.0	0.99365	0.98735	0.74584	0.00312	0.85745	0.99362	-0.44434	0.99368	0.00082	0.97594	0.97515	2.0	0.89632	0.45455
10.0	1.0	0.99294	0.98595	0.74856	0.00346	0.85976	0.9929	-0.57621	0.99297	0.00074	0.97344	0.97243	2.0	0.90671	0.45455
11.0	1.0	0.99207	0.98423	0.74563	0.00387	0.85869	0.99203	-0.71605	0.99211	0.00067	0.97038	0.96911	2.0	0.91521	0.45455
12.0	1.0	0.991	0.9821	0.73708	0.00439	0.85415	0.99094	-0.85881	0.99105	0.00061	0.96658	0.965	2.0	0.92229	0.45455
13.0	1.0	0.99006	0.98024	0.73354	0.00484	0.85257	0.99	-1.0251	0.99012	0.00056	0.96334	0.96143	2.0	0.92828	0.45455
14.0	1.0	0.98918	0.9785	0.73194	0.00525	0.8521	0.98911	-1.21106	0.98925	0.00052	0.96036	0.9581	2.0	0.93341	0.45455
15.0	1.0	0.98829	0.97675	0.73045	0.00567	0.85147	0.98821	-1.41244	0.98838	0.00049	0.95741	0.95477	2.0	0.93786	0.45455
16.0	1.0	0.98764	0.97546	0.73398	0.00597	0.85382	0.98755	-1.64859	0.98773	0.00046	0.95532	0.95231	2.0	0.94176	0.45455
17.0	1.0	0.98682	0.97385	0.73385	0.00635	0.85396	0.98672	-1.88783	0.98693	0.00043	0.9527	0.94926	2.0	0.9452	0.45455
18.0	1.0	0.98613	0.9725	0.73609	0.00666	0.85541	0.98602	-2.15517	0.98625	0.00041	0.95056	0.94671	2.0	0.94825	0.45455
19.0	1.0	0.98522	0.9707	0.73402	0.00708	0.85438	0.98509	-2.41718	0.98535	0.00039	0.94765	0.94332	2.0	0.95098	0.45455
20.0	1.0	0.98447	0.96922	0.73491	0.00742	0.85506	0.98433	-2.71223	0.98461	0.00037	0.94537	0.94055	2.0	0.95344	0.45455

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



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



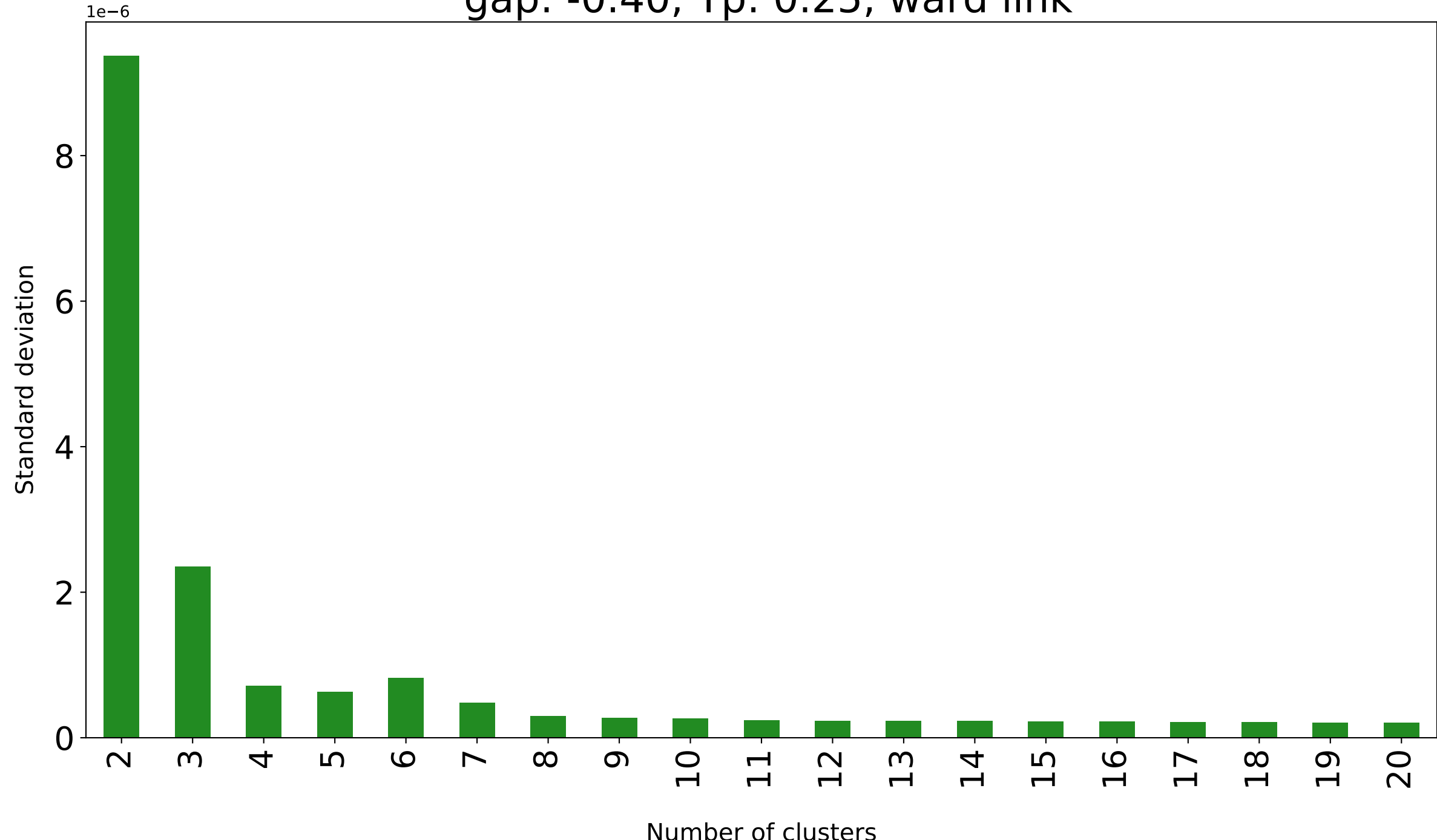
Cophenetic Correlation Coefficient: 0.1850183151298107

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

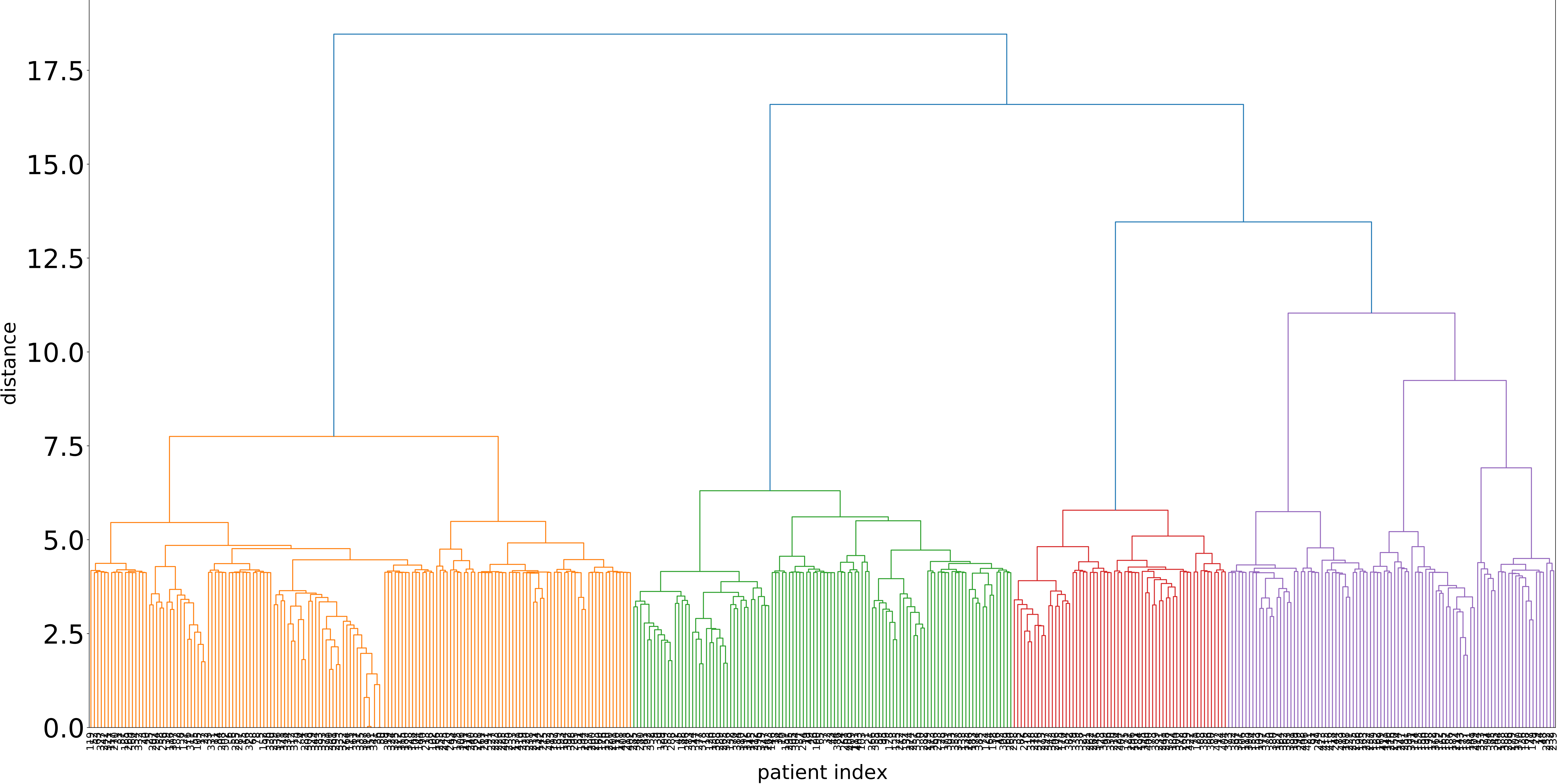
k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	0.99999	0.89927	0.83327	0.79805	0.06627	0.77633	0.89892	-0.062	0.89963	0.00012	0.82078	0.74107	1.30811	0.02538	0.21286
3.0	1.0	0.91152	0.8465	0.8667	0.05048	0.86468	0.91137	-0.6532	0.91167	0.00015	0.88973	0.7512	1.98973	0.0175	0.21286
4.0	1.0	0.91597	0.84934	0.88256	0.04194	0.8832	0.91588	-1.44554	0.91606	0.00017	0.91137	0.74876	2.0	0.01439	0.21286
5.0	1.0	0.91323	0.8448	0.88192	0.04399	0.88261	0.91303	-2.39758	0.91343	0.00018	0.91451	0.74235	2.0	0.0104	0.21286
6.0	1.0	0.87268	0.7831	0.79584	0.06278	0.83308	0.87085	-3.32648	0.87451	0.00018	0.88598	0.66575	2.0	0.00844	0.21286
7.0	1.0	0.87712	0.7873	0.82776	0.06243	0.84573	0.87679	-4.39936	0.87745	0.0002	0.90564	0.66207	2.0	-0.00025	0.21286
8.0	1.0	0.82515	0.70385	0.83571	0.09367	0.78703	0.82386	-5.19802	0.82644	0.00021	0.88099	0.54825	2.0	-0.00917	0.1972
9.0	1.0	0.79631	0.66247	0.80829	0.12285	0.75493	0.79468	-5.78401	0.79795	0.00021	0.86963	0.49954	2.0	-0.00748	0.1972
10.0	1.0	0.80432	0.67281	0.83421	0.12219	0.76752	0.80198	-7.17003	0.80668	0.00022	0.88086	0.51168	2.0	-0.02268	0.1972
11.0	1.0	0.80479	0.67445	0.8194	0.12368	0.76904	0.80325	-8.69929	0.80634	0.00023	0.88457	0.5133	2.0	-0.02586	0.1972
12.0	1.0	0.79978	0.66803	0.80629	0.1277	0.76461	0.79858	-10.07192	0.80099	0.00024	0.88609	0.50602	2.0	-0.02538	0.1972
13.0	1.0	0.80741	0.67799	0.83675	0.12795	0.77588	0.80529	-10.90343	0.80954	0.00025	0.89522	0.51839	2.0	-0.02803	0.1972
14.0	1.0	0.81681	0.69213	0.84222	0.12476	0.78769	0.81505	-12.29672	0.81859	0.00026	0.90278	0.53544	2.0	-0.02825	0.1972
15.0	1.0	0.81999	0.69712	0.84316	0.12153	0.79207	0.8184	-14.05658	0.8216	0.00027	0.90649	0.54156	2.0	-0.02786	0.1972
16.0	1.0	0.81884	0.69619	0.83332	0.12144	0.79115	0.81764	-15.48056	0.82004	0.00027	0.90753	0.54069	2.0	-0.02715	0.1972
17.0	1.0	0.81834	0.69565	0.82669	0.12148	0.79086	0.81737	-17.29093	0.8193	0.00027	0.90831	0.53984	2.0	-0.02797	0.20185
18.0	1.0	0.81828	0.69546	0.83079	0.12004	0.79143	0.81716	-18.68202	0.81939	0.00028	0.9099	0.53981	2.0	-0.03015	0.20185
19.0	1.0	0.81628	0.69266	0.82267	0.11897	0.7894	0.81535	-20.47652	0.81722	0.00028	0.90985	0.53623	2.0	-0.03175	0.20185
20.0	1.0	0.81306	0.68828	0.81326	0.11957	0.78594	0.8123	-22.31951	0.81382	0.00028	0.90918	0.53101	2.0	-0.03123	0.20185

Standard deviation of Adjusted Rand versus number of clusters

gap: -0.40, Tp: 0.25, ward link



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



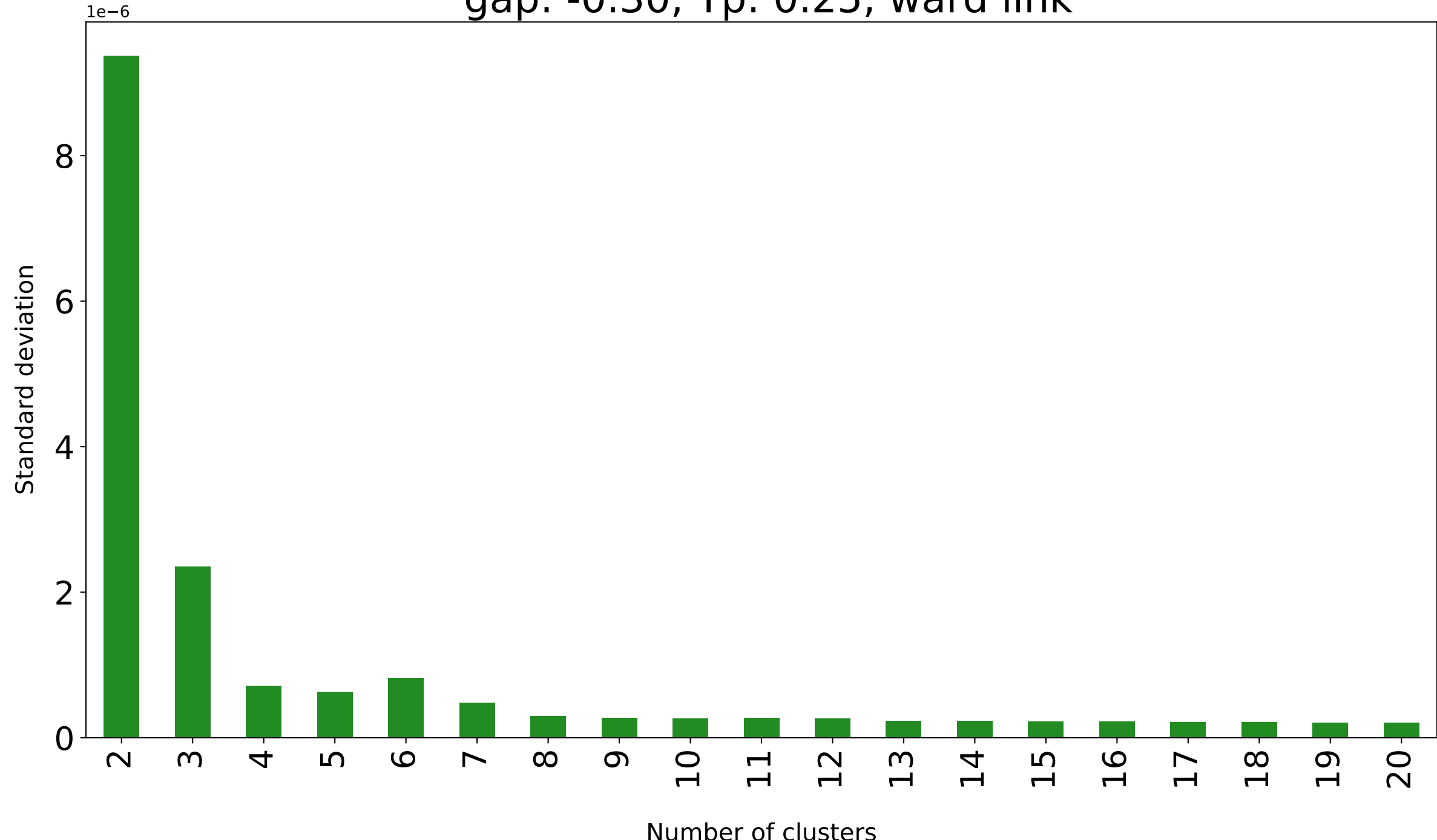
Cophenetic Correlation Coefficient: 0.3000630008429775

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

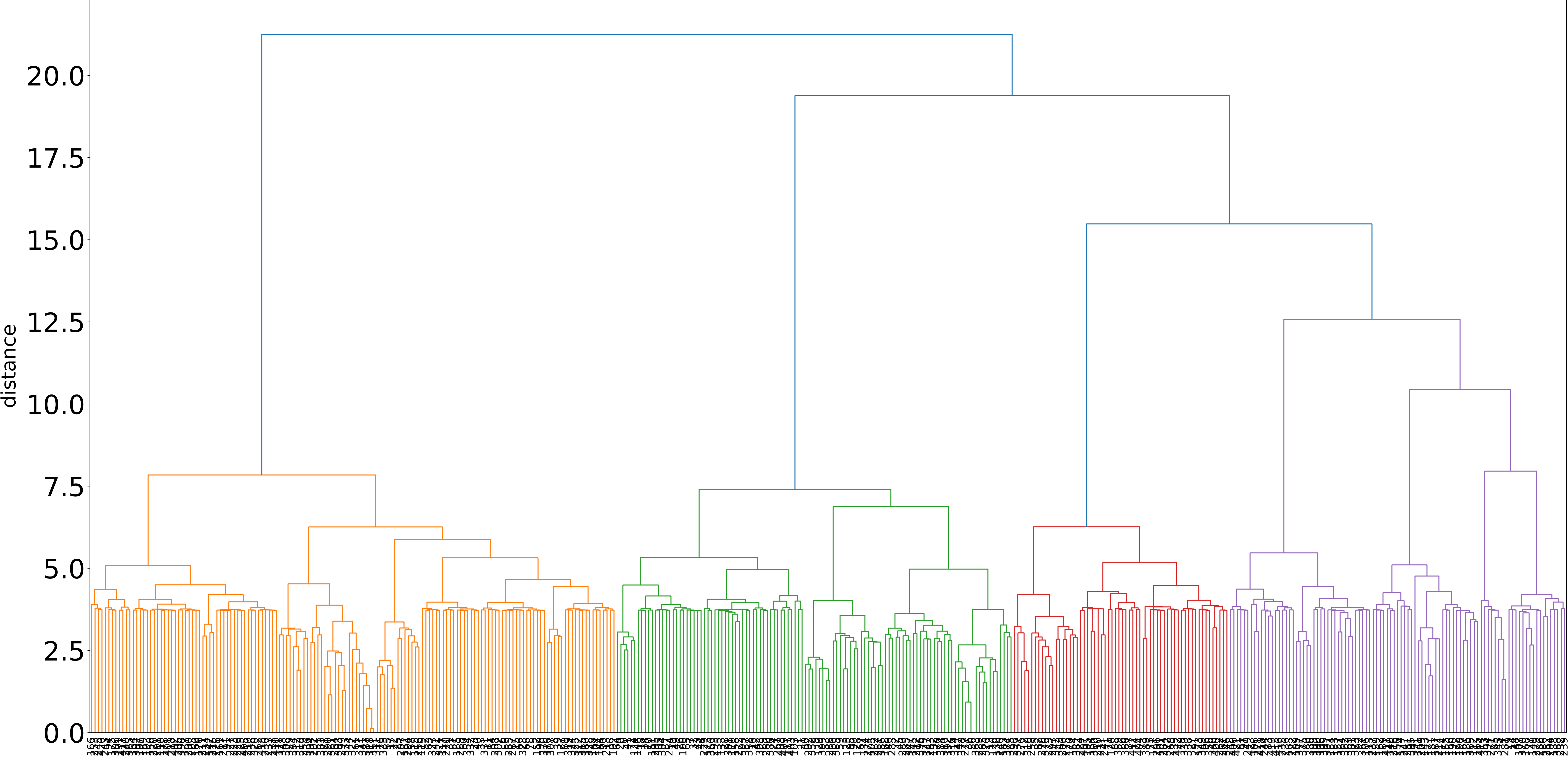
k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.96049	0.93189	0.92181	0.02504	0.91204	0.96043	-0.16246	0.96055	0.00014	0.92652	0.8861	1.08839	0.04788	0.19399
3.0	1.0	0.9689	0.94045	0.94905	0.01635	0.95299	0.9689	-0.80831	0.96891	0.00017	0.9591	0.89	1.65223	0.05102	0.194
4.0	1.0	0.96403	0.93141	0.94724	0.01748	0.9505	0.96402	-1.62902	0.96405	0.00019	0.96167	0.8743	1.75053	0.05451	0.194
5.0	1.0	0.96296	0.92938	0.94915	0.01819	0.95066	0.96292	-2.66422	0.96299	0.0002	0.96392	0.87076	1.92927	0.05589	0.194
6.0	1.0	0.96396	0.93116	0.95098	0.01806	0.95259	0.96387	-3.72779	0.96406	0.00021	0.96606	0.87383	1.92927	0.05832	0.19416
7.0	1.0	0.92925	0.86892	0.93397	0.03549	0.91353	0.92874	-4.82456	0.92976	0.00024	0.9494	0.77295	1.99825	0.03266	0.19416
8.0	1.0	0.93004	0.87077	0.91841	0.03531	0.91512	0.92974	-6.15728	0.93033	0.00025	0.9519	0.77606	2.0	0.03716	0.19416
9.0	1.0	0.84448	0.73318	0.84185	0.08669	0.81716	0.84357	-6.63149	0.84539	0.00025	0.91057	0.58544	2.0	0.00076	0.19416
10.0	1.0	0.80051	0.67159	0.78488	0.11899	0.76886	0.79977	-7.56656	0.80126	0.00026	0.89614	0.51321	2.0	-0.00017	0.19416
11.0	1.0	0.77693	0.64045	0.74209	0.12975	0.7438	0.77616	-9.03502	0.77771	0.00026	0.89078	0.47965	2.0	0.00057	0.19416
12.0	1.0	0.76415	0.62399	0.7287	0.12702	0.73242	0.76334	-10.06317	0.76497	0.00028	0.89391	0.46219	2.0	-0.00825	0.19416
13.0	1.0	0.75574	0.61192	0.70375	0.12452	0.7251	0.75471	-10.78462	0.75677	0.00029	0.89632	0.44846	2.0	-0.01531	0.19416
14.0	1.0	0.75344	0.60721	0.69252	0.12058	0.72487	0.75209	-12.56336	0.7548	0.00031	0.90177	0.4419	2.0	-0.01719	0.19416
15.0	1.0	0.79103	0.66071	0.76862	0.10992	0.76975	0.79037	-14.28017	0.79168	0.00036	0.9255	0.50323	2.0	-0.02145	0.19416
16.0	1.0	0.78702	0.65496	0.74849	0.11212	0.76661	0.78605	-16.42456	0.788	0.00037	0.92782	0.49703	2.0	-0.02118	0.20089
17.0	1.0	0.78409	0.65018	0.73169	0.11089	0.76461	0.7825	-18.1169	0.78569	0.00039	0.93017	0.492	2.0	-0.02121	0.20089
18.0	1.0	0.76819	0.62888	0.7224	0.12244	0.74854	0.76669	-19.61157	0.76969	0.0004	0.92935	0.46805	2.0	-0.02265	0.20089
19.0	1.0	0.73011	0.57706	0.72444	0.13844	0.70966	0.72904	-20.64182	0.73118	0.00042	0.9262	0.40939	2.0	-0.02645	0.20089
20.0	1.0	0.72841	0.57516	0.70602	0.13927	0.70836	0.72751	-22.92329	0.72932	0.00043	0.92755	0.40751	2.0	0.02515	0.21201

Standard deviation of Adjusted Rand versus number of clusters

gap: -0.30, Tp: 0.25, ward link



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



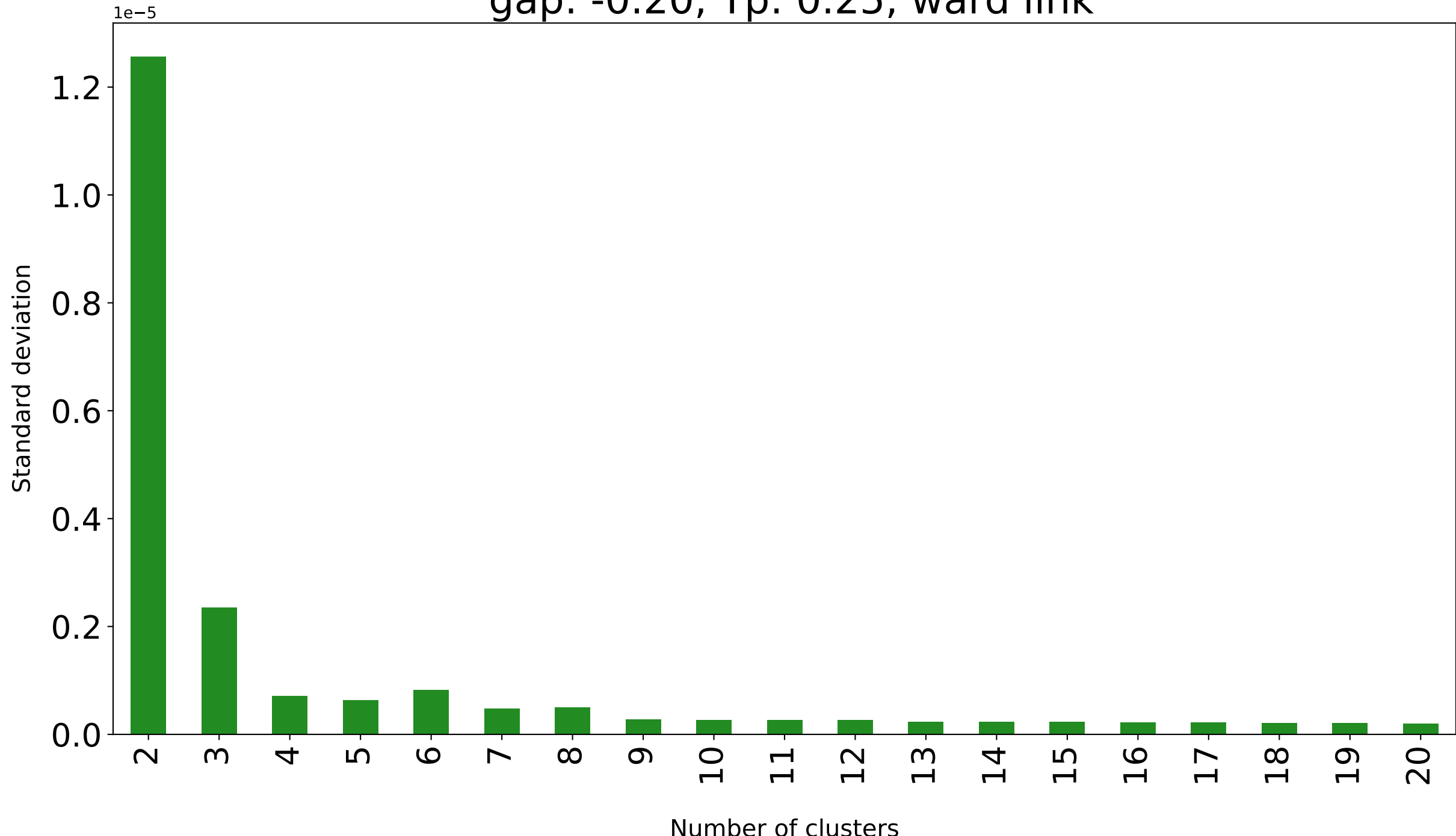
patient index

Cophenetic Correlation Coefficient: 0.424767302304496

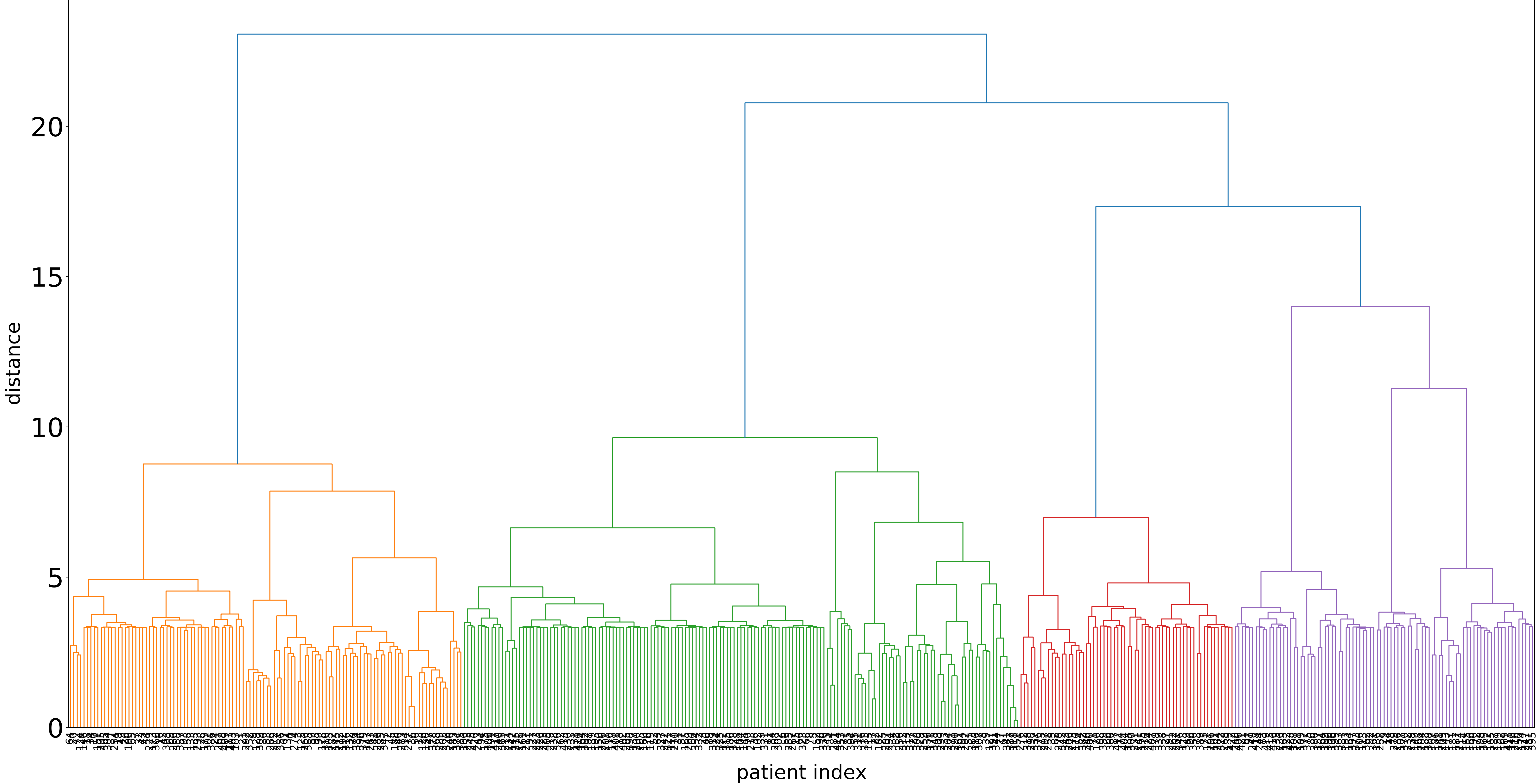
Average values of five clustering indices
gap: -0.20, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	0.99999	0.89121	0.84012	0.74669	0.08013	0.74772	0.89105	-0.05745	0.89137	0.00012	0.82489	0.78488	0.56484	0.07141	0.09069
3.0	1.0	0.9778	0.95731	0.96638	0.01098	0.96645	0.9778	-0.84771	0.9778	0.00017	0.97076	0.92044	1.28742	0.08085	0.09069
4.0	1.0	0.97318	0.94856	0.96669	0.01414	0.96316	0.97316	-1.68059	0.9732	0.00019	0.97147	0.90472	1.41581	0.08649	0.09069
5.0	1.0	0.97344	0.94898	0.97284	0.01632	0.96472	0.97338	-2.60565	0.9735	0.0002	0.97418	0.90549	1.75366	0.08943	0.09069
6.0	1.0	0.97678	0.95502	0.9791	0.01499	0.96956	0.97668	-3.52776	0.97688	0.00021	0.97817	0.9158	1.75366	0.0932	0.09077
7.0	1.0	0.90059	0.81865	0.80129	0.05716	0.87519	0.89659	-4.25161	0.90462	0.0002	0.91685	0.70767	1.77236	0.10384	0.09077
8.0	1.0	0.88332	0.79868	0.83218	0.06244	0.85943	0.88158	-5.42448	0.88506	0.00024	0.92321	0.686	1.97778	0.08244	0.09077
9.0	1.0	0.90511	0.82909	0.89776	0.05343	0.88954	0.9048	-6.42157	0.90542	0.00029	0.94785	0.71448	1.97778	0.04865	0.09077
10.0	1.0	0.87168	0.77657	0.83441	0.07231	0.85308	0.87103	-7.17701	0.87233	0.0003	0.9368	0.6451	1.97778	0.02917	0.09077
11.0	1.0	0.83386	0.71775	0.77499	0.0864	0.81223	0.83267	-8.27888	0.83506	0.00031	0.92545	0.56814	1.97778	0.02677	0.09077
12.0	1.0	0.87024	0.77291	0.8553	0.07356	0.85575	0.87009	-9.78438	0.87039	0.00037	0.94922	0.63561	1.97778	0.01222	0.09077
13.0	1.0	0.88892	0.8021	0.87742	0.06872	0.87757	0.8888	-11.10623	0.88903	0.00041	0.95967	0.67417	1.99643	0.0123	0.09077
14.0	1.0	0.85947	0.75596	0.83746	0.08868	0.84607	0.85932	-12.89053	0.85962	0.00042	0.95224	0.6124	1.99643	0.01261	0.09077
15.0	1.0	0.8241	0.70337	0.81166	0.10913	0.80877	0.82394	-13.34776	0.82426	0.00043	0.94515	0.54695	2.0	0.00692	0.09077
16.0	1.0	0.8109	0.68463	0.8084	0.11502	0.79583	0.81066	-14.58412	0.81114	0.00046	0.94566	0.52504	2.0	0.00105	0.09077
17.0	1.0	0.79607	0.66421	0.79358	0.12026	0.78103	0.79582	-16.33337	0.79632	0.00048	0.94545	0.50195	2.0	-0.00162	0.09077
18.0	1.0	0.78875	0.65448	0.77627	0.12292	0.77402	0.78855	-18.63995	0.78894	0.0005	0.9464	0.49139	2.0	-0.0025	0.09406
19.0	1.0	0.78965	0.65517	0.79125	0.12018	0.77613	0.78935	-20.7335	0.78995	0.00054	0.95036	0.49162	2.0	-0.00665	0.09406
20.0	1.0	0.79065	0.65561	0.80041	0.11826	0.778	0.79018	-21.80488	0.79111	0.00057	0.95325	0.49111	2.0	-0.01559	0.09406

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



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

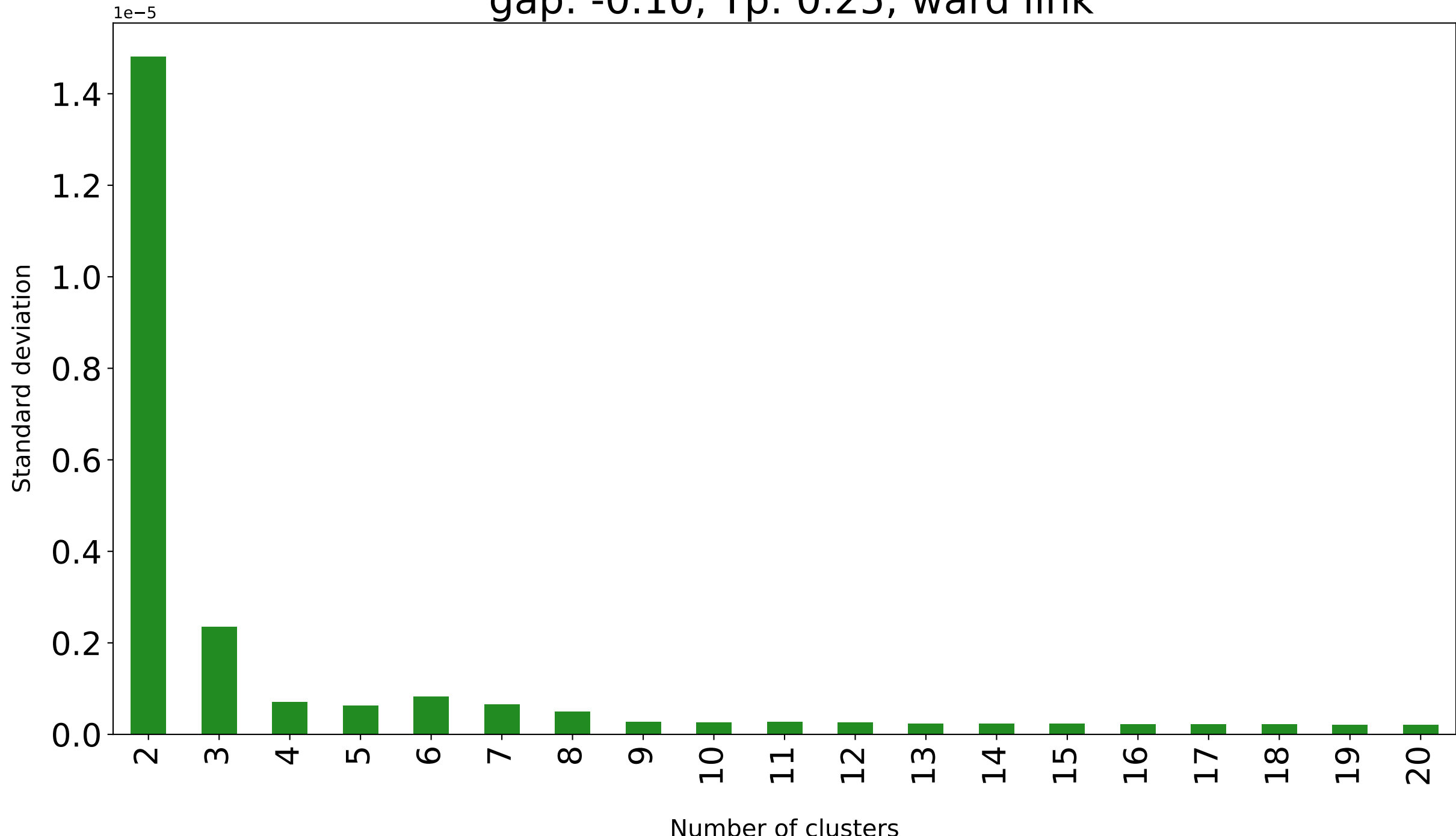


Cophenetic Correlation Coefficient: 0.5227147858640451

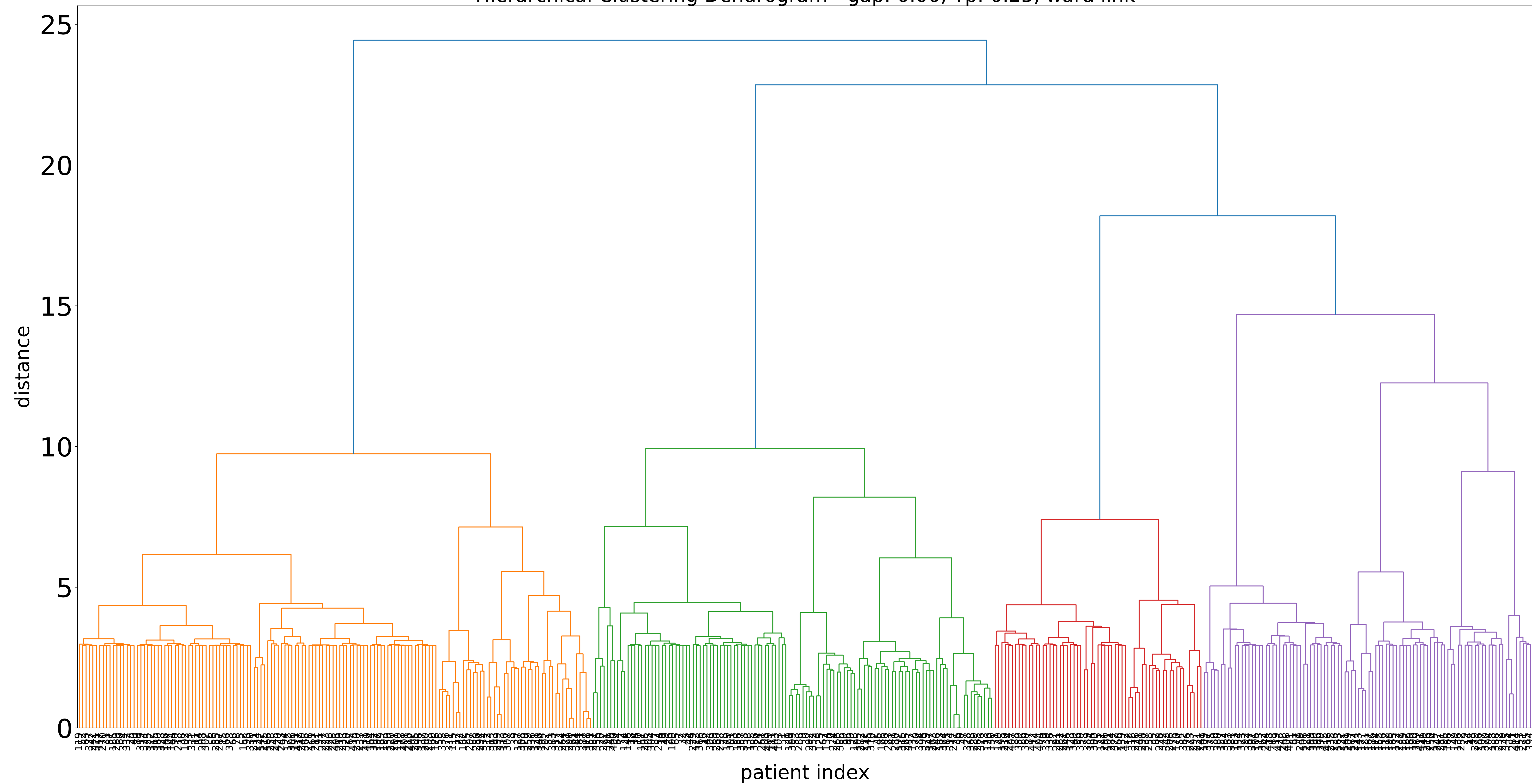
Average values of five clustering indices gap: -0.10, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	0.99999	0.83599	0.76475	0.61559	0.12445	0.61637	0.83542	-0.04965	0.83657	0.0001	0.74067	0.69845	0.09677	0.11457	0.11771
3.0	1.0	0.95894	0.92201	0.93773	0.02004	0.93795	0.95894	-0.80088	0.95894	0.00016	0.94636	0.858	0.77584	0.10556	0.11771
4.0	1.0	0.95927	0.92248	0.93424	0.02005	0.94375	0.95921	-1.63048	0.95933	0.00019	0.95619	0.85872	0.87816	0.11717	0.11774
5.0	1.0	0.96068	0.9249	0.93211	0.02108	0.94735	0.96053	-2.6656	0.96083	0.0002	0.9609	0.86284	0.95854	0.12661	0.11774
6.0	1.0	0.96171	0.92671	0.92451	0.02142	0.94945	0.96131	-3.72719	0.96211	0.0002	0.96308	0.86675	1.5125	0.14051	0.11774
7.0	1.0	0.89357	0.82096	0.88651	0.06067	0.86812	0.89289	-4.66988	0.89426	0.00022	0.92272	0.7257	1.9381	0.09647	0.1192
8.0	1.0	0.9142	0.84451	0.92916	0.0524	0.89823	0.91285	-5.76075	0.91557	0.00027	0.94636	0.74183	1.9381	0.08173	0.1192
9.0	1.0	0.9401	0.88936	0.93169	0.03992	0.92978	0.9399	-6.80251	0.94031	0.00029	0.96543	0.80797	1.9381	0.08288	0.12204
10.0	1.0	0.94326	0.89656	0.93751	0.03937	0.93431	0.94309	-7.55995	0.94343	0.00031	0.96974	0.8226	1.9381	0.07042	0.12204
11.0	1.0	0.92672	0.86884	0.91652	0.04964	0.91632	0.92623	-8.8653	0.92722	0.00033	0.96416	0.78136	1.9381	0.06868	0.12204
12.0	1.0	0.89039	0.80876	0.83896	0.06815	0.87678	0.88807	-10.16629	0.89274	0.00034	0.95117	0.69977	1.9381	0.07154	0.12271
13.0	1.0	0.92366	0.85993	0.92591	0.05018	0.91589	0.92325	-11.51466	0.92406	0.00043	0.97197	0.75977	2.0	0.06393	0.12271
14.0	1.0	0.91839	0.85026	0.9177	0.0591	0.9106	0.91829	-12.50508	0.91848	0.00045	0.97194	0.74274	2.0	0.05352	0.12271
15.0	1.0	0.92284	0.85794	0.91988	0.0599	0.9158	0.92276	-13.73287	0.92291	0.00047	0.97451	0.75451	2.0	0.05126	0.12514
16.0	1.0	0.90724	0.83176	0.89385	0.07035	0.89911	0.90709	-15.85285	0.90739	0.00048	0.97051	0.71608	2.0	0.05041	0.12514
17.0	1.0	0.89376	0.80979	0.88109	0.07664	0.88503	0.89352	-17.83031	0.89401	0.00049	0.96815	0.68519	2.0	0.04928	0.12514
18.0	1.0	0.86279	0.76092	0.86489	0.09173	0.85243	0.86234	-18.63293	0.86323	0.00051	0.96204	0.61949	2.0	0.04378	0.12514
19.0	1.0	0.83832	0.72493	0.84198	0.10131	0.82704	0.83779	-20.44935	0.83885	0.00053	0.95852	0.57552	2.0	0.04043	0.12514
20.0	1.0	0.83551	0.72032	0.81274	0.09794	0.82449	0.83502	-22.03163	0.83601	0.00055	0.95935	0.56897	2.0	0.04415	0.14409

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



Hierarchical Clustering Dendrogram - gap: 0.00, Tp: 0.25, ward link

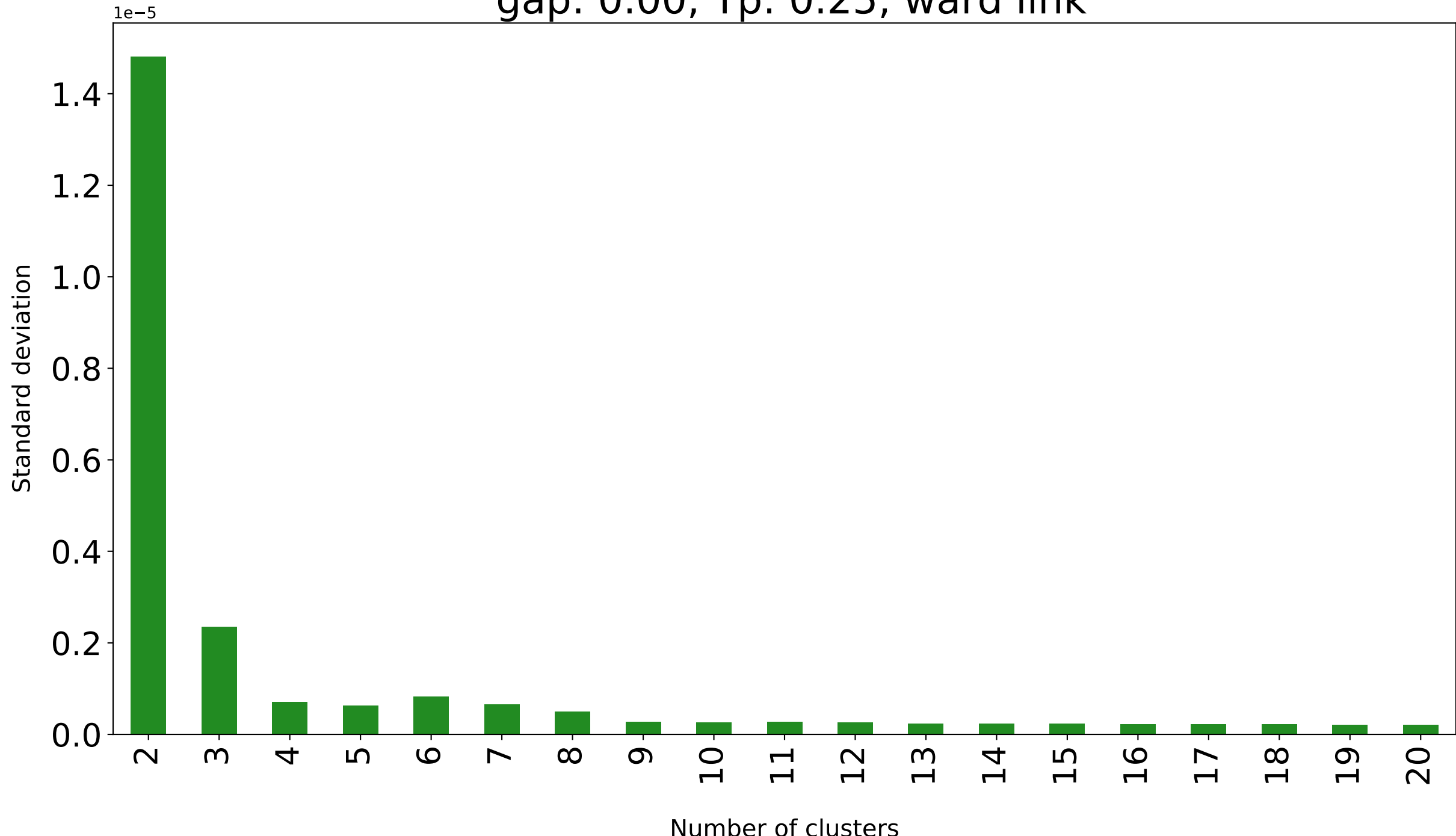


Cophenetic Correlation Coefficient: 0.6074444948287754

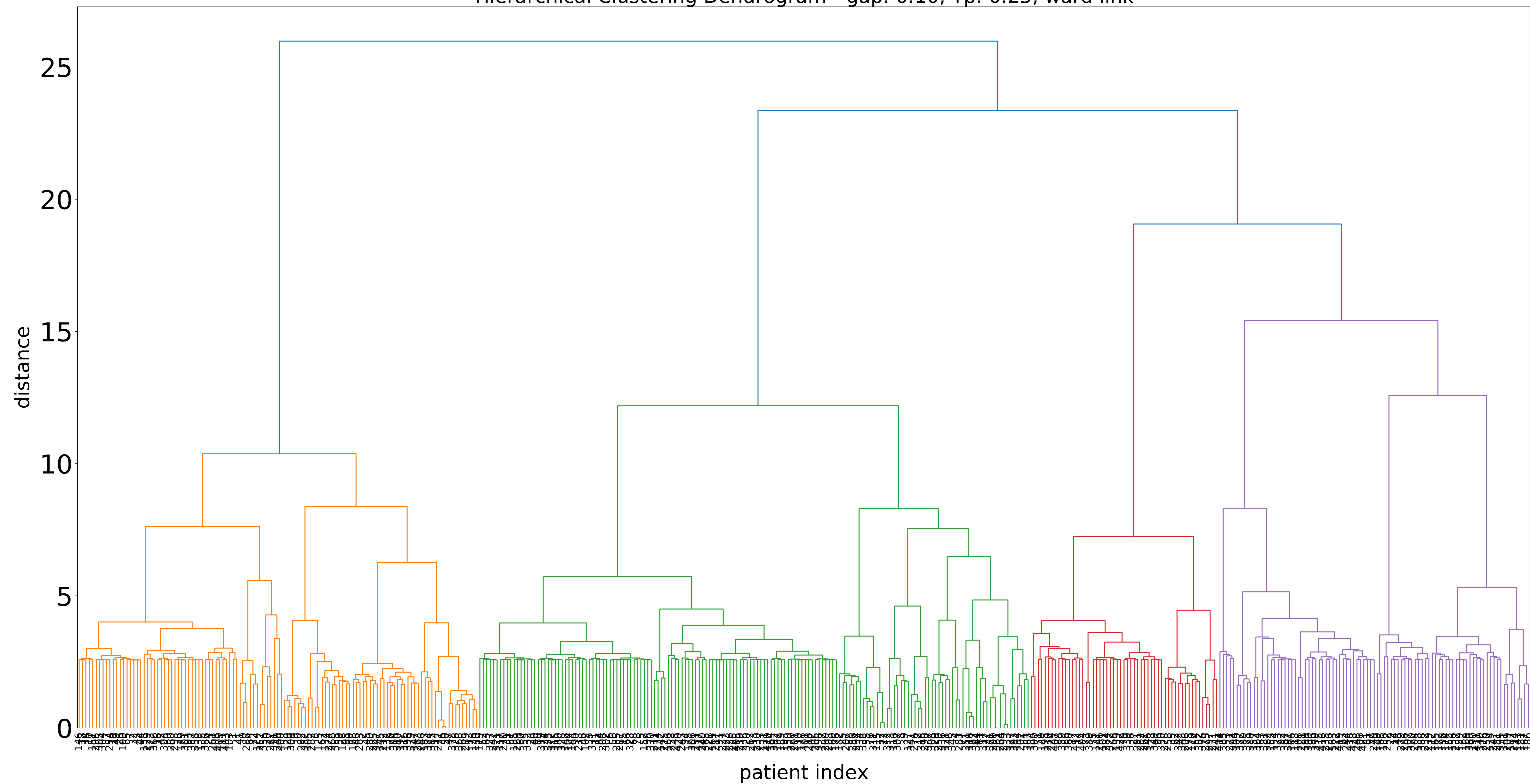
Average values of five clustering indices gap: 0.00, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	0.99998	0.69591	0.56558	0.29342	0.22923	0.29031	0.69531	0.23092	0.69651	5e-05	0.52287	0.4449	0.0365	0.11626	0.14731
3.0	1.0	0.951	0.90861	0.92952	0.02526	0.92597	0.95099	-0.7364	0.95101	0.00016	0.93684	0.83789	0.12739	0.13512	0.12315
4.0	1.0	0.94737	0.90213	0.93195	0.02945	0.92758	0.94731	-1.54938	0.94744	0.00018	0.9447	0.82753	0.18229	0.14855	0.12315
5.0	1.0	0.94616	0.89943	0.93874	0.03343	0.9283	0.94598	-2.41102	0.94633	0.0002	0.94798	0.8223	0.21818	0.15623	0.12315
6.0	1.0	0.94661	0.90088	0.92921	0.03354	0.93044	0.94628	-3.3085	0.94695	0.0002	0.9516	0.82659	0.42	0.16299	0.12315
7.0	1.0	0.81103	0.69177	0.74724	0.11055	0.76603	0.81036	-3.63621	0.8117	0.00019	0.8655	0.54778	1.09649	0.12747	0.12315
8.0	1.0	0.90788	0.83394	0.92568	0.06072	0.89124	0.90669	-5.39354	0.90907	0.00027	0.94422	0.72536	1.09649	0.10917	0.12315
9.0	1.0	0.92918	0.87011	0.91687	0.04852	0.91708	0.92896	-6.65723	0.9294	0.00029	0.95954	0.77681	1.09649	0.12678	0.12315
10.0	1.0	0.93327	0.87671	0.92418	0.04937	0.92265	0.93315	-7.33571	0.9334	0.00031	0.96404	0.78563	1.09649	0.11342	0.12315
11.0	1.0	0.92444	0.86085	0.92123	0.05931	0.91332	0.92433	-8.65125	0.92455	0.00032	0.96195	0.75951	1.09649	0.10763	0.12315
12.0	1.0	0.9368	0.88197	0.92529	0.05843	0.92796	0.93668	-10.20517	0.93692	0.00034	0.96942	0.79146	1.25	0.1008	0.15072
13.0	1.0	0.90191	0.82468	0.85532	0.07462	0.89011	0.89959	-11.52995	0.90425	0.00035	0.95708	0.71632	1.25	0.1066	0.15072
14.0	1.0	0.87959	0.78712	0.89608	0.08186	0.86747	0.87788	-12.55416	0.88131	0.00042	0.95575	0.6578	1.25	0.10049	0.15072
15.0	1.0	0.90796	0.83265	0.91068	0.06835	0.89945	0.90757	-13.82172	0.90835	0.00046	0.96909	0.71719	1.30435	0.09385	0.15072
16.0	1.0	0.91226	0.83957	0.91197	0.07086	0.90444	0.91212	-14.87925	0.91239	0.00047	0.97164	0.72597	1.30435	0.0924	0.15072
17.0	1.0	0.91577	0.84564	0.91521	0.06747	0.9085	0.9157	-17.06113	0.91583	0.00049	0.97358	0.73527	1.30435	0.08959	0.15072
18.0	1.0	0.91323	0.84134	0.91071	0.06926	0.90597	0.91314	-18.97318	0.91332	0.0005	0.97355	0.7289	1.30435	0.09516	0.15072
19.0	1.0	0.9069	0.83092	0.89476	0.07636	0.89933	0.90673	-21.03218	0.90708	0.00051	0.97231	0.71415	2.0	0.09528	0.15072
20.0	1.0	0.89107	0.80496	0.86461	0.08736	0.88253	0.8906	-22.08245	0.89155	0.00051	0.96857	0.6781	2.0	0.0976	0.15072

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



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

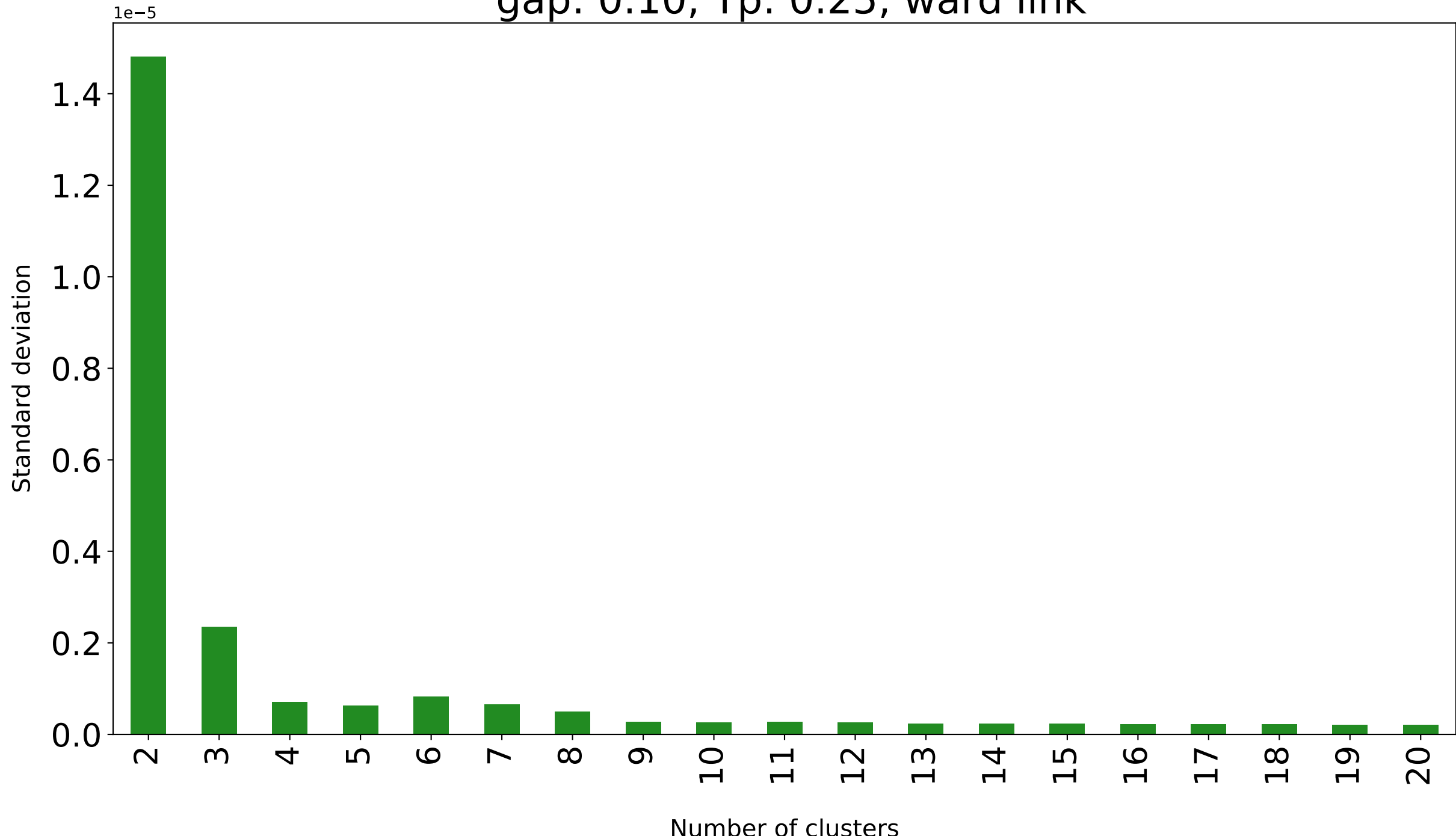


Cophenetic Correlation Coefficient: 0.6443940571372577

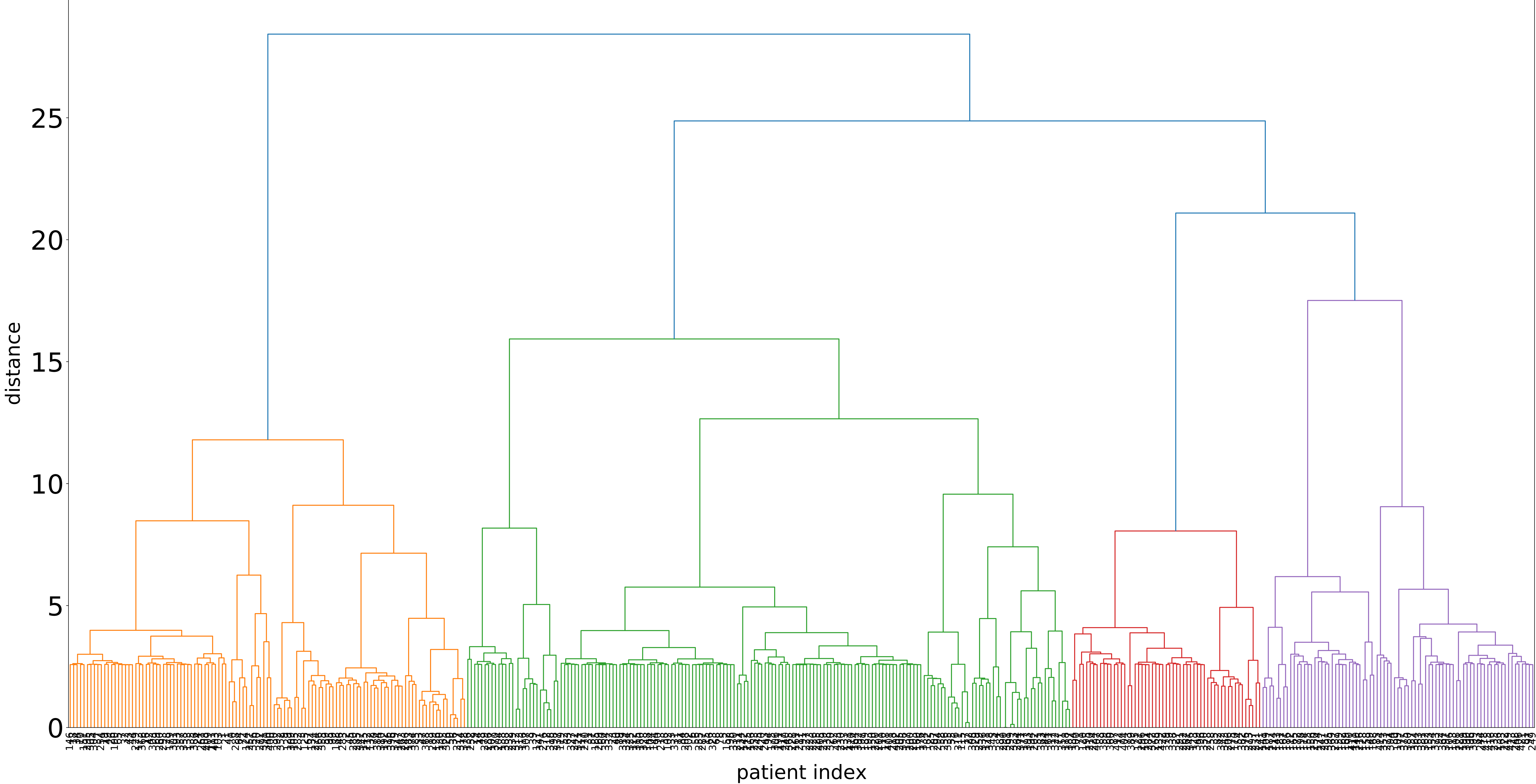
Average values of five clustering indices gap: 0.10, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	0.99999	0.92518	0.88259	0.82807	0.05357	0.823	0.92497	-0.14752	0.92539	0.00014	0.86774	0.82723	0.09121	0.16534	0.10083
3.0	1.0	0.91689	0.84964	0.87689	0.04291	0.87443	0.91687	-0.661	0.91691	0.00015	0.89511	0.74531	0.28767	0.1564	0.10562
4.0	1.0	0.91636	0.8493	0.86791	0.04834	0.88431	0.91619	-1.46521	0.91652	0.00017	0.91247	0.74633	0.38462	0.17492	0.10562
5.0	1.0	0.91141	0.84048	0.86231	0.05526	0.88162	0.91104	-2.32825	0.91177	0.00018	0.91505	0.73256	0.46667	0.18542	0.10562
6.0	1.0	0.9034	0.82663	0.83084	0.05857	0.87362	0.90202	-3.20432	0.90479	0.00019	0.91169	0.71462	0.63913	0.20993	0.10562
7.0	1.0	0.88022	0.7969	0.85252	0.07507	0.85215	0.87989	-4.30011	0.88054	0.00022	0.91475	0.68271	0.63913	0.17074	0.10562
8.0	1.0	0.87543	0.78112	0.87391	0.08202	0.85282	0.87468	-5.22742	0.87619	0.00026	0.92583	0.6481	0.86333	0.1535	0.10663
9.0	1.0	0.87607	0.78127	0.87049	0.08825	0.85525	0.8757	-5.89547	0.87644	0.00027	0.93101	0.64552	0.875	0.14073	0.10663
10.0	1.0	0.88728	0.79872	0.8614	0.08414	0.86925	0.88709	-7.58958	0.88747	0.00029	0.93965	0.66821	0.875	0.15678	0.10663
11.0	1.0	0.89338	0.80817	0.8647	0.08922	0.87737	0.89319	-8.8085	0.89356	0.0003	0.94576	0.68061	0.875	0.16295	0.10663
12.0	1.0	0.90315	0.82406	0.87637	0.09226	0.88949	0.90297	-9.46828	0.90332	0.00032	0.95314	0.70291	0.875	0.14926	0.10663
13.0	1.0	0.90971	0.8348	0.88419	0.09733	0.89747	0.90956	-10.70207	0.90985	0.00034	0.95771	0.71804	0.875	0.15007	0.10663
14.0	1.0	0.92167	0.8566	0.90651	0.09087	0.91186	0.92113	-12.4368	0.92222	0.00036	0.96541	0.75473	0.875	0.14537	0.10663
15.0	1.0	0.88234	0.79397	0.83282	0.11284	0.86908	0.87962	-13.52919	0.88508	0.00036	0.9516	0.67461	0.875	0.13828	0.10981
16.0	1.0	0.8397	0.72545	0.75218	0.11886	0.82323	0.83424	-14.69374	0.84521	0.00036	0.93804	0.58779	0.875	0.13699	0.10981
17.0	1.0	0.89221	0.80656	0.90828	0.09358	0.88279	0.89103	-16.02121	0.8934	0.00047	0.96516	0.68164	0.875	0.12882	0.10981
18.0	1.0	0.90259	0.8236	0.9004	0.08821	0.89433	0.90227	-17.20697	0.90292	0.00049	0.96981	0.70352	2.0	0.13256	0.13223
19.0	1.0	0.9093	0.8347	0.90583	0.0828	0.90184	0.90922	-19.46255	0.90938	0.00051	0.97278	0.71888	2.0	0.12793	0.13223
20.0	1.0	0.91407	0.84267	0.91333	0.08062	0.90719	0.91401	-21.46179	0.91414	0.00052	0.97483	0.73054	2.0	0.13248	0.13223

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



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

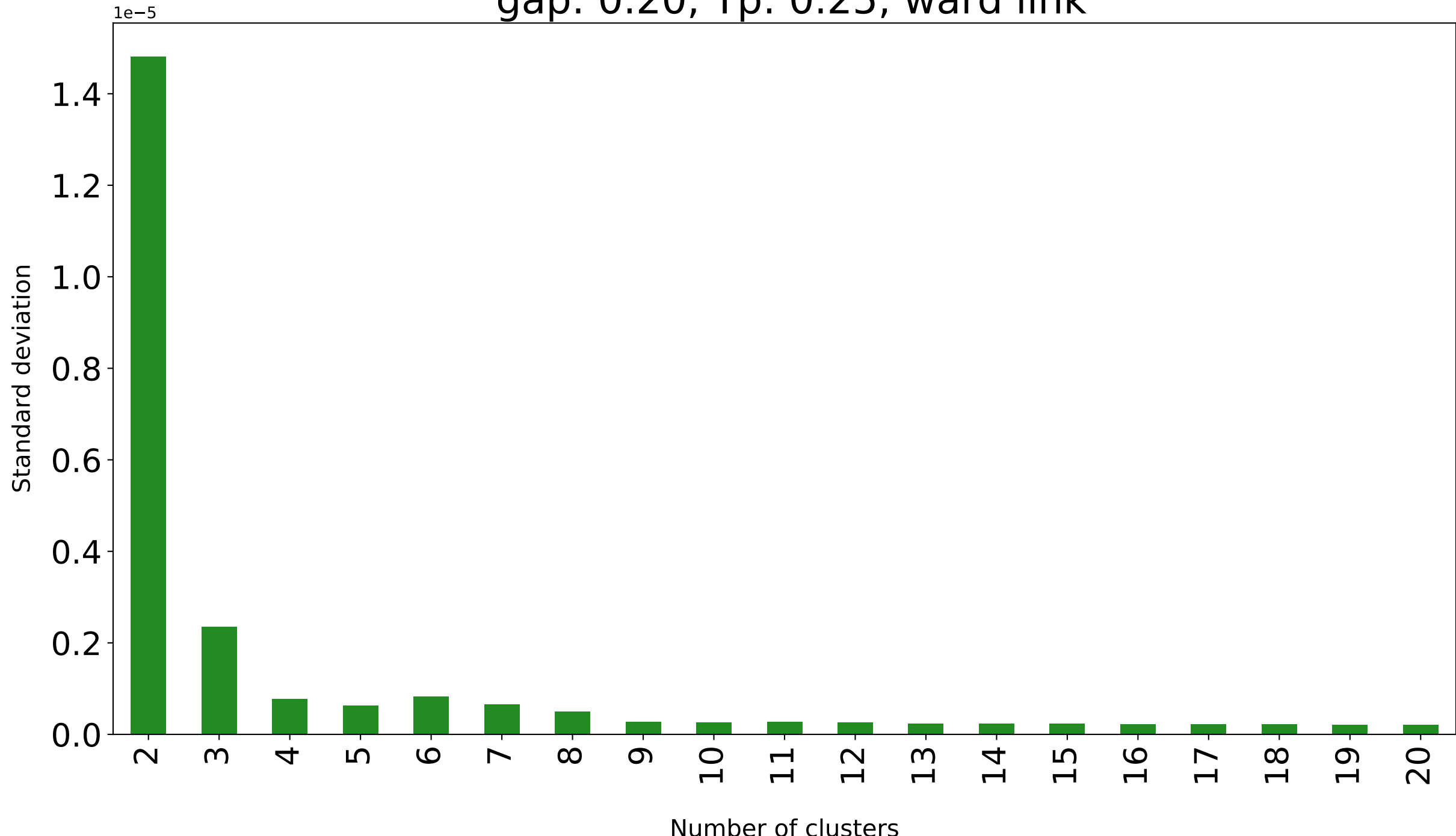


Cophenetic Correlation Coefficient: 0.6521323813451347

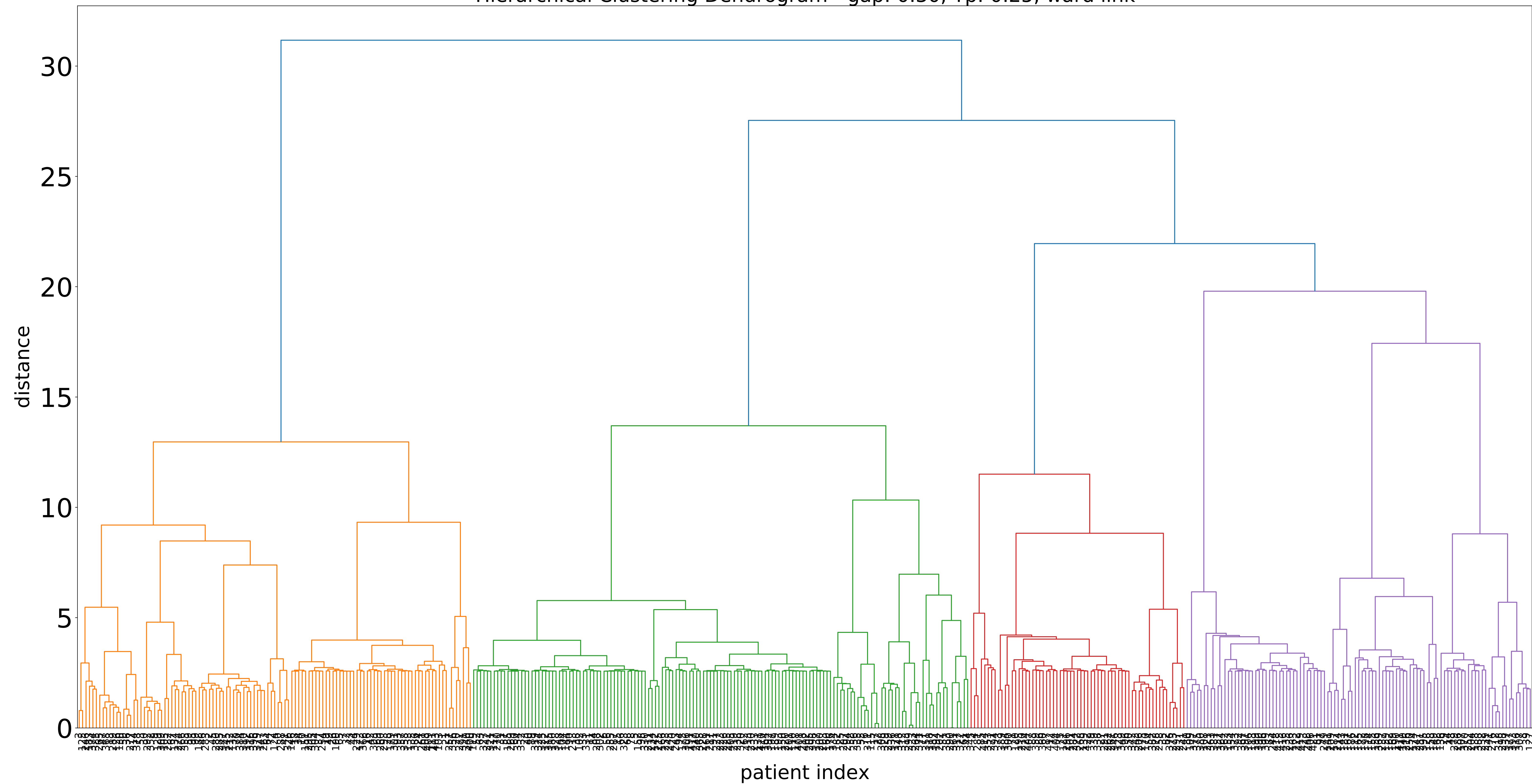
Average values of five clustering indices
gap: 0.20, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	0.99999	0.92174	0.87182	0.80588	0.05391	0.81291	0.92146	-0.12535	0.92201	0.00013	0.85392	0.80231	0.09061	0.17531	0.14127
3.0	1.0	0.8467	0.73772	0.76282	0.08219	0.76711	0.84664	-0.50692	0.84677	0.00013	0.81231	0.59023	0.26119	0.16132	0.15248
4.0	1.0	0.84583	0.73609	0.74971	0.08638	0.78526	0.84523	-1.19116	0.84642	0.00015	0.84043	0.58877	0.44304	0.18848	0.15248
5.0	1.0	0.84813	0.73843	0.74395	0.0901	0.7952	0.84668	-2.1221	0.84959	0.00016	0.85305	0.59202	0.63636	0.21598	0.15248
6.0	1.0	0.87357	0.77964	0.82539	0.08797	0.8372	0.87267	-3.05673	0.87448	0.00019	0.89281	0.64906	0.63636	0.19539	0.15248
7.0	1.0	0.8472	0.74552	0.82581	0.10557	0.81245	0.84673	-4.00413	0.84767	0.00021	0.89433	0.61315	0.63636	0.16677	0.15248
8.0	1.0	0.85723	0.75262	0.86523	0.10743	0.83198	0.85623	-4.97243	0.85824	0.00026	0.917	0.61048	0.63636	0.15286	0.15248
9.0	1.0	0.86809	0.76866	0.85732	0.11077	0.84632	0.86782	-6.04414	0.86836	0.00027	0.92786	0.62838	0.63636	0.16595	0.15248
10.0	1.0	0.87204	0.77442	0.86288	0.11309	0.85225	0.87184	-6.77873	0.87224	0.00029	0.93367	0.63502	0.63636	0.15867	0.15248
11.0	1.0	0.88236	0.79078	0.85946	0.10845	0.86488	0.88221	-8.46304	0.88251	0.0003	0.9409	0.65711	0.63636	0.17424	0.15248
12.0	1.0	0.89466	0.81054	0.87637	0.10907	0.87987	0.89456	-9.12778	0.89476	0.00032	0.94946	0.68424	0.63636	0.15797	0.15248
13.0	1.0	0.89982	0.81836	0.87108	0.10689	0.88623	0.89964	-10.46091	0.9	0.00033	0.95316	0.69428	0.63636	0.16611	0.15248
14.0	1.0	0.9225	0.85674	0.91234	0.09625	0.91247	0.92245	-12.1834	0.92255	0.00035	0.96512	0.7511	0.63636	0.16133	0.15248
15.0	1.0	0.9216	0.85532	0.90864	0.10484	0.91173	0.92149	-13.31165	0.92172	0.00036	0.96549	0.7492	0.63636	0.15637	0.16146
16.0	1.0	0.92765	0.867	0.91977	0.09381	0.91904	0.92713	-14.51787	0.92817	0.00038	0.96938	0.77081	0.63636	0.15443	0.16146
17.0	1.0	0.9009	0.82433	0.86327	0.10125	0.89003	0.89877	-15.68116	0.90306	0.00037	0.96018	0.71656	2.0	0.15855	0.19034
18.0	1.0	0.86358	0.76429	0.79417	0.11211	0.84977	0.85912	-17.71222	0.86811	0.00038	0.94799	0.63949	2.0	0.15442	0.19034
19.0	1.0	0.87078	0.77241	0.8967	0.10358	0.8597	0.86851	-18.87364	0.87308	0.00047	0.9585	0.63785	2.0	0.14351	0.19034
20.0	1.0	0.89276	0.80743	0.90239	0.09371	0.88404	0.89193	-20.97441	0.8936	0.0005	0.96776	0.68187	2.0	0.14782	0.19034

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



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

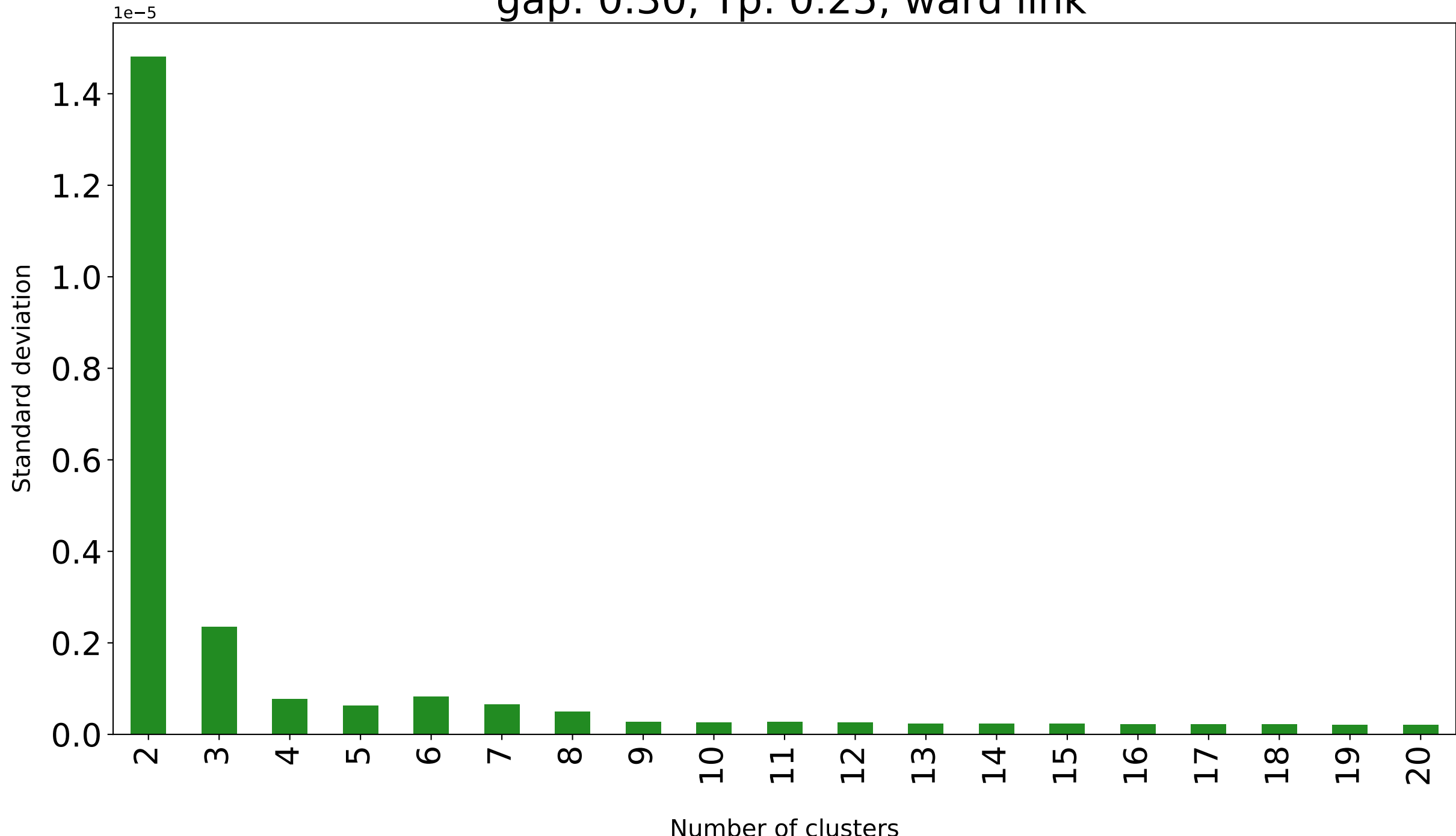


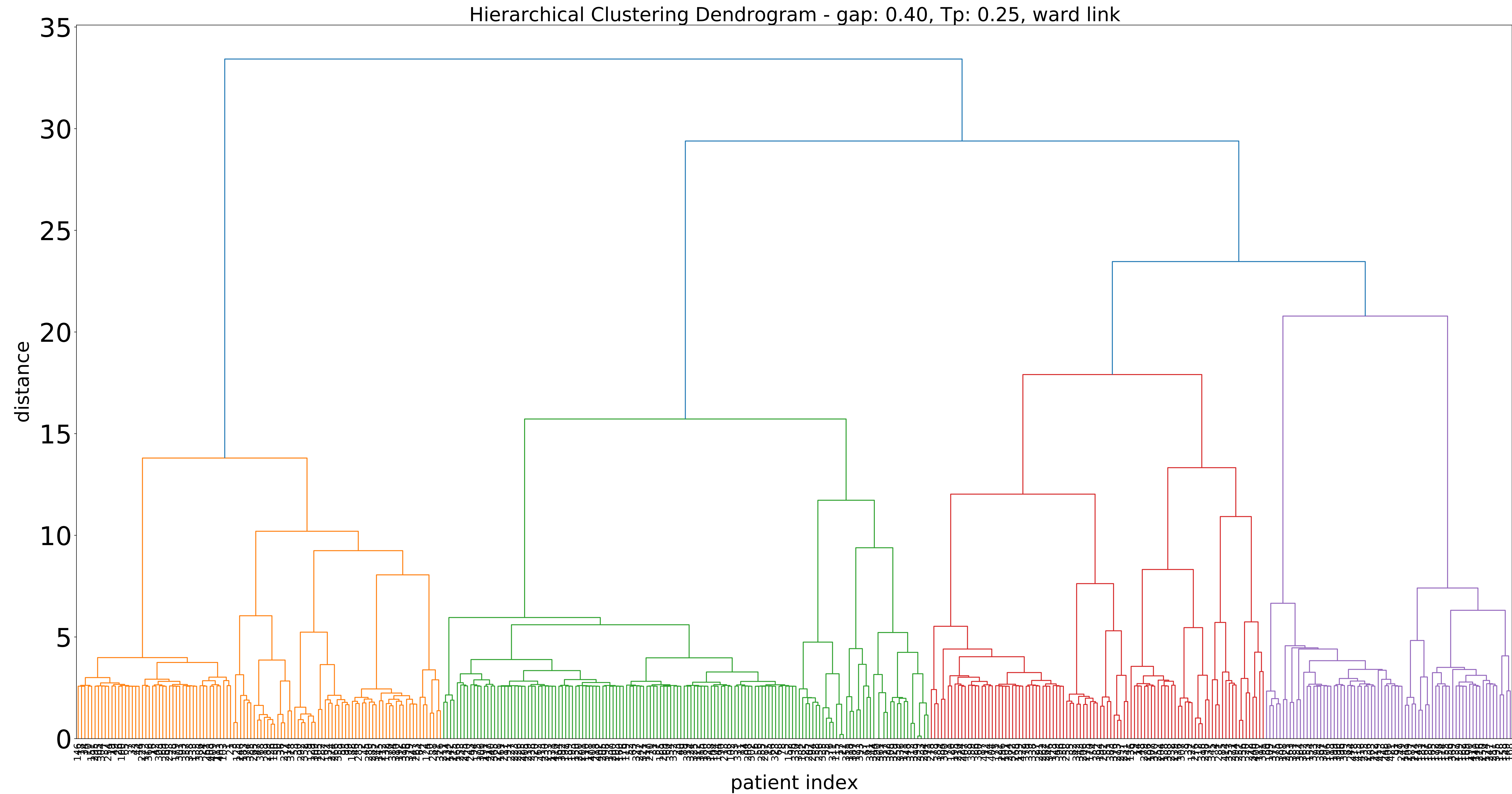
Cophenetic Correlation Coefficient: 0.6457931300621561

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

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	0.99999	0.91835	0.8649	0.79622	0.05577	0.80588	0.91798	-0.11672	0.91872	0.00013	0.84635	0.79062	0.06796	0.1857	0.17132
3.0	1.0	0.87665	0.78598	0.8143	0.06631	0.81314	0.8766	-0.54586	0.87671	0.00014	0.84823	0.65767	0.21341	0.17637	0.18434
4.0	1.0	0.85212	0.74639	0.81358	0.08957	0.79692	0.8519	-1.17195	0.85233	0.00016	0.85239	0.60267	0.34653	0.18208	0.18609
5.0	1.0	0.8635	0.76294	0.84335	0.09142	0.8197	0.86288	-2.08119	0.86412	0.00017	0.87564	0.62383	0.35	0.20046	0.18609
6.0	1.0	0.86025	0.75785	0.80058	0.09581	0.82081	0.85916	-3.07008	0.86135	0.00019	0.88337	0.61879	0.51852	0.21125	0.18993
7.0	1.0	0.84614	0.74108	0.81201	0.1076	0.81146	0.84566	-4.22327	0.84661	0.00021	0.89383	0.60291	0.51852	0.18324	0.18993
8.0	1.0	0.85314	0.74642	0.85269	0.11148	0.827	0.85238	-5.15058	0.85391	0.00025	0.91456	0.60194	0.51852	0.16851	0.19298
9.0	1.0	0.87469	0.77924	0.86128	0.10387	0.85379	0.8744	-5.92316	0.87498	0.00027	0.93077	0.64305	0.51852	0.17588	0.19298
10.0	1.0	0.88181	0.78991	0.85733	0.10289	0.86308	0.88158	-7.21203	0.88203	0.00029	0.9373	0.65619	0.51852	0.18653	0.20498
11.0	1.0	0.88938	0.80187	0.85588	0.10248	0.87264	0.88907	-8.49873	0.88969	0.0003	0.94331	0.67257	2.0	0.18128	0.20498
12.0	1.0	0.88531	0.79499	0.86096	0.11923	0.86907	0.88515	-9.15582	0.88546	0.00031	0.94462	0.66191	2.0	0.17597	0.20498
13.0	1.0	0.90303	0.82376	0.8903	0.10979	0.89003	0.90295	-10.76316	0.90311	0.00034	0.95516	0.70182	2.0	0.17015	0.20498
14.0	1.0	0.91699	0.84713	0.90045	0.09753	0.90614	0.91692	-12.16379	0.91706	0.00035	0.96233	0.73611	2.0	0.16873	0.20498
15.0	1.0	0.93357	0.8758	0.9316	0.08643	0.92522	0.93351	-13.28155	0.93364	0.00037	0.97074	0.78032	2.0	0.16332	0.20498
16.0	1.0	0.93848	0.88454	0.93458	0.08289	0.9309	0.93844	-13.92471	0.93853	0.00037	0.97334	0.79438	2.0	0.16427	0.20498
17.0	1.0	0.9406	0.88827	0.93686	0.08755	0.93342	0.94056	-15.85869	0.94064	0.00038	0.97469	0.8003	2.0	0.16245	0.23382
18.0	1.0	0.93523	0.87998	0.92618	0.08747	0.9278	0.93468	-17.89863	0.93578	0.00039	0.97337	0.79114	2.0	0.15854	0.23382
19.0	1.0	0.9219	0.85839	0.90189	0.0909	0.9135	0.92049	-19.67837	0.92333	0.00039	0.96923	0.76318	2.0	0.1631	0.23382
20.0	1.0	0.89485	0.81395	0.84475	0.09808	0.88426	0.89152	-21.41645	0.89823	0.00039	0.96001	0.70486	2.0	0.16951	0.26795

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



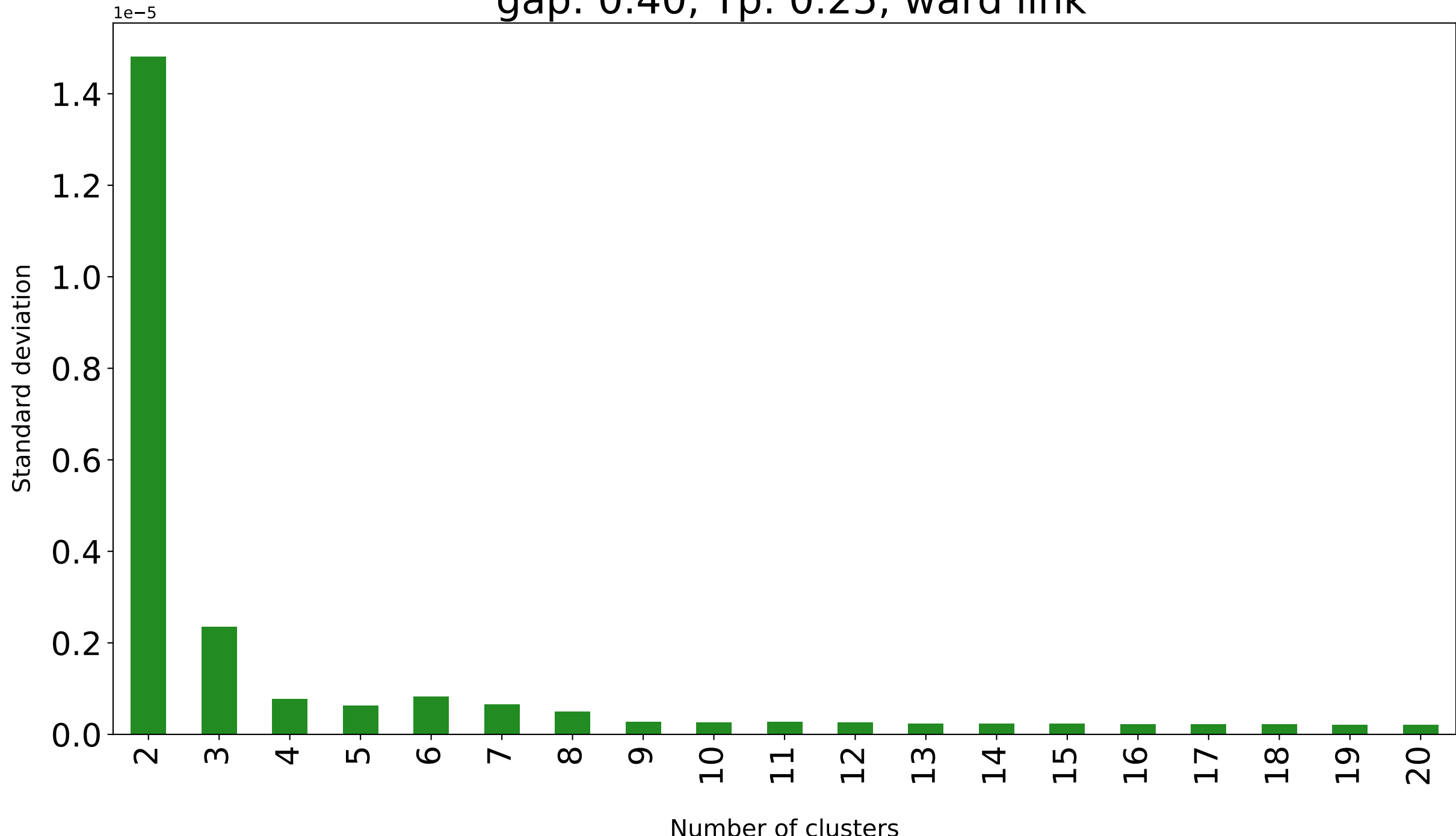


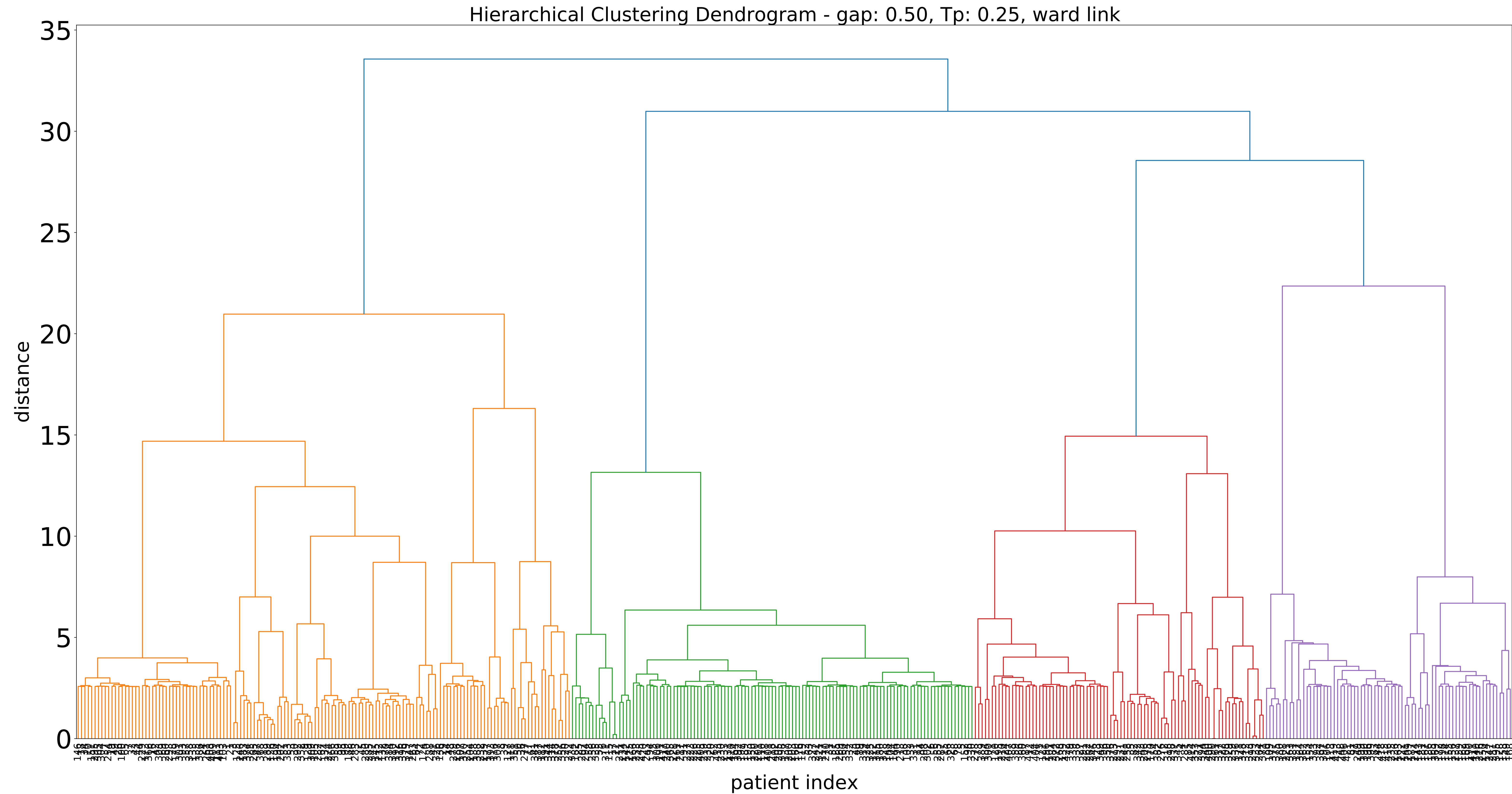
Cophenetic Correlation Coefficient: 0.6231327609033664

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

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	1.0	0.92776	0.87825	0.79625	0.04918	0.82274	0.92739	-0.14022	0.92814	0.00014	0.85838	0.8064	0.05063	0.20014	0.19452
3.0	1.0	0.86298	0.76433	0.78736	0.0738	0.79127	0.86291	-0.525	0.86306	0.00014	0.83086	0.62764	0.18605	0.18435	0.21071
4.0	1.0	0.83278	0.71613	0.79487	0.10455	0.77132	0.83244	-1.09362	0.83312	0.00015	0.83554	0.56256	0.29224	0.17841	0.21967
5.0	1.0	0.83472	0.71902	0.78124	0.10901	0.78036	0.83433	-2.01984	0.8351	0.00016	0.84905	0.56628	0.33333	0.2228	0.21967
6.0	1.0	0.84628	0.73624	0.79849	0.10911	0.80373	0.84533	-2.78737	0.84722	0.00018	0.87442	0.58955	0.4	0.19924	0.21967
7.0	1.0	0.84714	0.74136	0.83803	0.11359	0.81334	0.84652	-3.91673	0.84776	0.00022	0.89565	0.60102	0.4	0.17653	0.21967
8.0	1.0	0.84245	0.72992	0.85098	0.12182	0.81456	0.84147	-4.8236	0.84343	0.00025	0.90879	0.58079	0.4	0.16508	0.21967
9.0	1.0	0.86713	0.76725	0.86007	0.11421	0.84502	0.86677	-5.88831	0.86749	0.00027	0.9268	0.62685	1.0	0.15949	0.22306
10.0	1.0	0.86079	0.75694	0.85789	0.12769	0.83915	0.86043	-7.24441	0.86114	0.00028	0.9276	0.61243	1.0	0.1486	0.22306
11.0	1.0	0.87226	0.77454	0.86202	0.12044	0.85334	0.87207	-8.58006	0.87246	0.0003	0.93611	0.63476	1.0	0.16793	0.22385
12.0	1.0	0.88215	0.78999	0.85405	0.11366	0.86519	0.88194	-9.83499	0.88236	0.00031	0.9423	0.65527	1.33333	0.17888	0.23962
13.0	1.0	0.89906	0.81731	0.89097	0.11521	0.88539	0.89894	-10.71771	0.89917	0.00033	0.95295	0.69302	1.33333	0.17764	0.20702
14.0	1.0	0.90922	0.83397	0.89303	0.11043	0.89725	0.90913	-12.52131	0.90931	0.00034	0.95854	0.71657	2.0	0.18377	0.24126
15.0	1.0	0.92764	0.86537	0.92465	0.09917	0.91847	0.92757	-13.69926	0.92771	0.00036	0.96793	0.76383	2.0	0.17221	0.24126
16.0	1.0	0.93611	0.88024	0.93142	0.09101	0.92817	0.93606	-15.0312	0.93616	0.00037	0.97212	0.78725	2.0	0.17808	0.24126
17.0	1.0	0.94068	0.88842	0.93439	0.08764	0.93345	0.94063	-15.70529	0.94072	0.00038	0.97454	0.8006	2.0	0.17834	0.24126
18.0	1.0	0.93982	0.88695	0.92867	0.08861	0.93261	0.93977	-17.36177	0.93988	0.00038	0.97453	0.79842	2.0	0.17333	0.24126
19.0	1.0	0.94229	0.89135	0.93234	0.08442	0.93552	0.94221	-19.40909	0.94236	0.00039	0.97604	0.80567	2.0	0.16838	0.25454
20.0	1.0	0.94069	0.88906	0.92897	0.08379	0.93398	0.94031	-21.21228	0.94106	0.0004	0.97597	0.80398	2.0	0.17608	0.25454

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



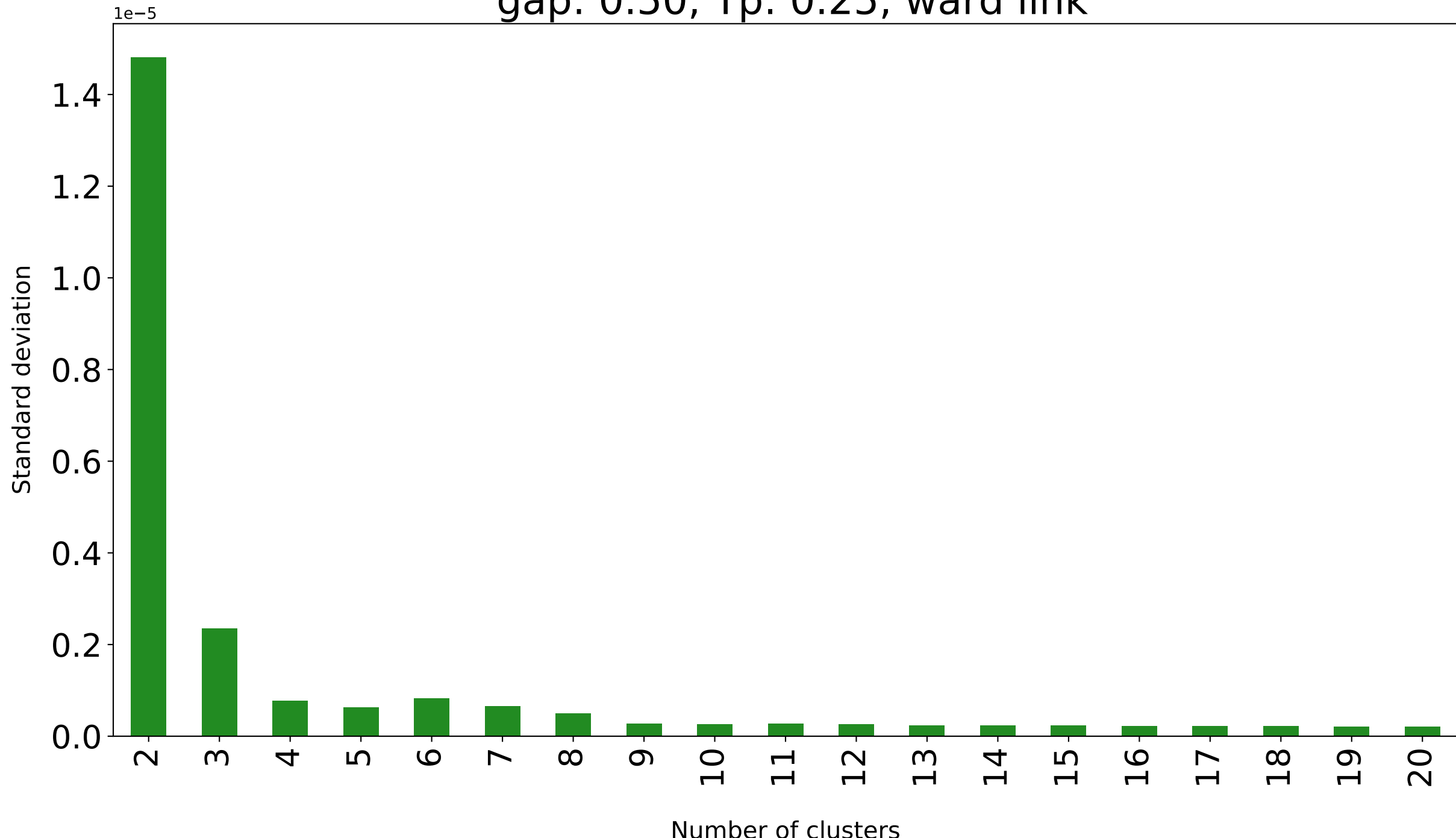


Cophenetic Correlation Coefficient: 0.6345468445636064

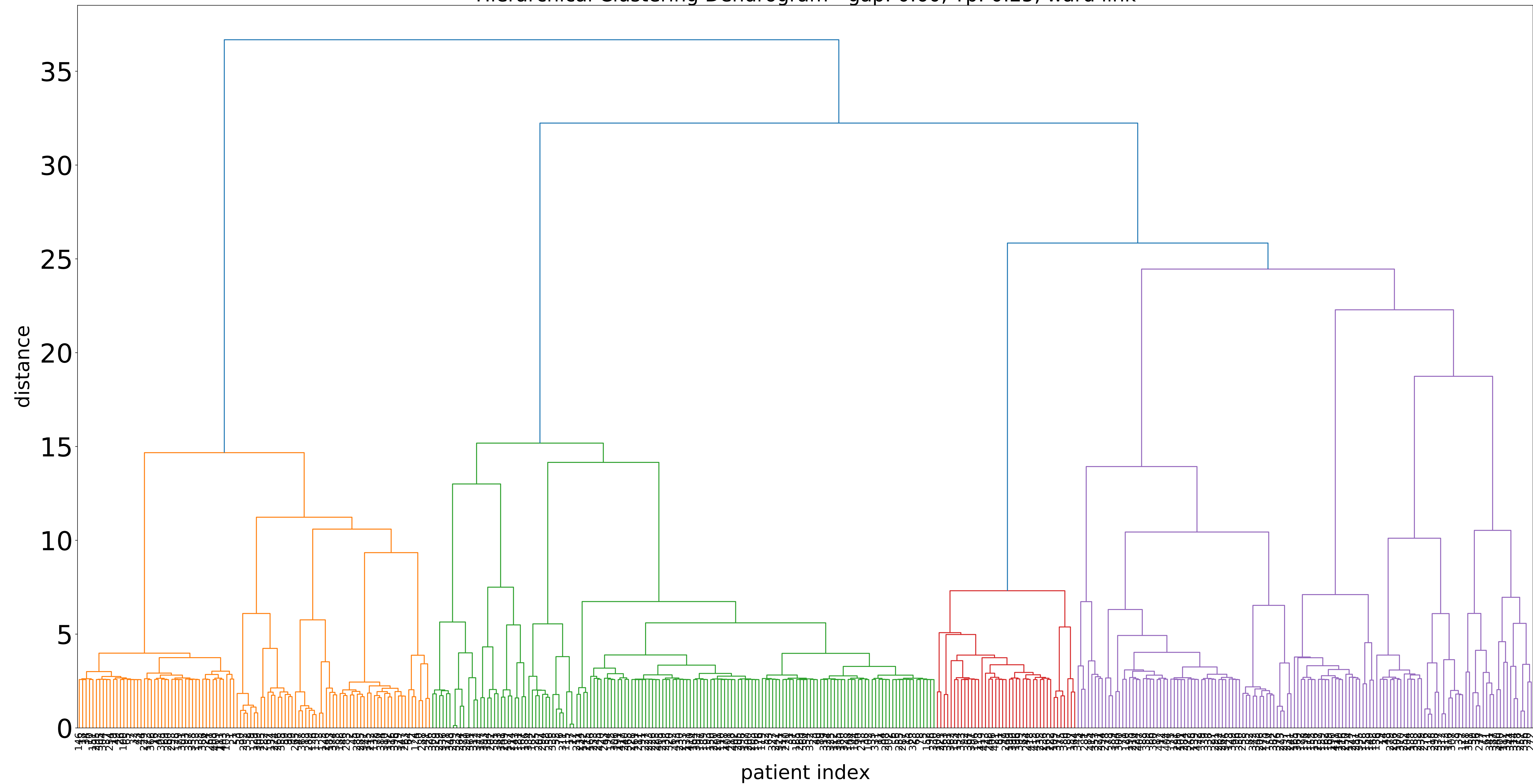
Average values of five clustering indices gap: 0.50, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	0.99999	0.85492	0.75306	0.73349	0.0963	0.66703	0.85396	0.04991	0.85587	0.00011	0.72472	0.6146	0.09247	0.14876	0.19581
3.0	1.0	0.77722	0.63921	0.66849	0.12628	0.66243	0.7771	-0.24216	0.77733	0.00012	0.739	0.47448	0.09247	0.16013	0.19581
4.0	1.0	0.76259	0.61905	0.68899	0.13651	0.67451	0.76234	-0.81772	0.76285	0.00013	0.77307	0.45227	0.18493	0.17927	0.19581
5.0	1.0	0.75083	0.60308	0.66077	0.14447	0.66841	0.75029	-1.67009	0.75137	0.00014	0.77964	0.43502	0.28125	0.22991	0.19581
6.0	1.0	0.78815	0.65222	0.75453	0.14238	0.73191	0.78722	-2.75435	0.78908	0.00017	0.83616	0.48816	0.57692	0.20436	0.18211
7.0	1.0	0.80106	0.67007	0.71828	0.14229	0.75395	0.79985	-3.84053	0.80228	0.00019	0.85749	0.50891	1.0	0.21627	0.20677
8.0	1.0	0.78877	0.65106	0.68565	0.15975	0.74623	0.78606	-4.59363	0.79149	0.00021	0.86477	0.4878	1.0	0.1988	0.20677
9.0	1.0	0.83184	0.71357	0.78219	0.13513	0.80262	0.83124	-5.80645	0.83245	0.00025	0.90476	0.55863	1.0	0.18114	0.20677
10.0	1.0	0.86875	0.76943	0.85263	0.12079	0.84799	0.86844	-7.37169	0.86906	0.00028	0.93064	0.62902	1.0	0.18839	0.20677
11.0	1.0	0.88026	0.78708	0.84773	0.11369	0.86203	0.87998	-8.7435	0.88054	0.0003	0.93852	0.65175	1.0	0.19898	0.20677
12.0	1.0	0.88818	0.80014	0.8672	0.12193	0.87223	0.88806	-9.53974	0.88831	0.00031	0.94568	0.66997	1.0	0.18124	0.20035
13.0	1.0	0.8957	0.81161	0.89326	0.11989	0.88171	0.89554	-10.75394	0.89586	0.00033	0.95177	0.68467	1.0	0.17879	0.20035
14.0	1.0	0.91843	0.84935	0.92704	0.10591	0.90797	0.9182	-11.92537	0.91866	0.00035	0.96344	0.73955	1.0	0.16739	0.20035
15.0	1.0	0.92927	0.86827	0.92953	0.09876	0.92036	0.92917	-13.57282	0.92936	0.00037	0.9688	0.76867	2.0	0.16793	0.23743
16.0	1.0	0.93806	0.88371	0.93517	0.09321	0.93042	0.93801	-14.27174	0.93811	0.00038	0.97315	0.79287	2.0	0.16843	0.23743
17.0	1.0	0.94372	0.89379	0.93735	0.08635	0.93689	0.94369	-15.5663	0.94375	0.00038	0.97593	0.80913	2.0	0.17738	0.23743
18.0	1.0	0.94496	0.89608	0.94024	0.08567	0.93842	0.94493	-17.58779	0.945	0.00039	0.97689	0.81305	2.0	0.17242	0.2493
19.0	1.0	0.94264	0.89194	0.93737	0.08709	0.93598	0.94259	-19.3176	0.94269	0.0004	0.9764	0.8064	2.0	0.18022	0.2493
20.0	1.0	0.94156	0.89004	0.93025	0.08944	0.93488	0.94149	-20.29156	0.94164	0.0004	0.97628	0.80351	2.0	0.18377	0.2493

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



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

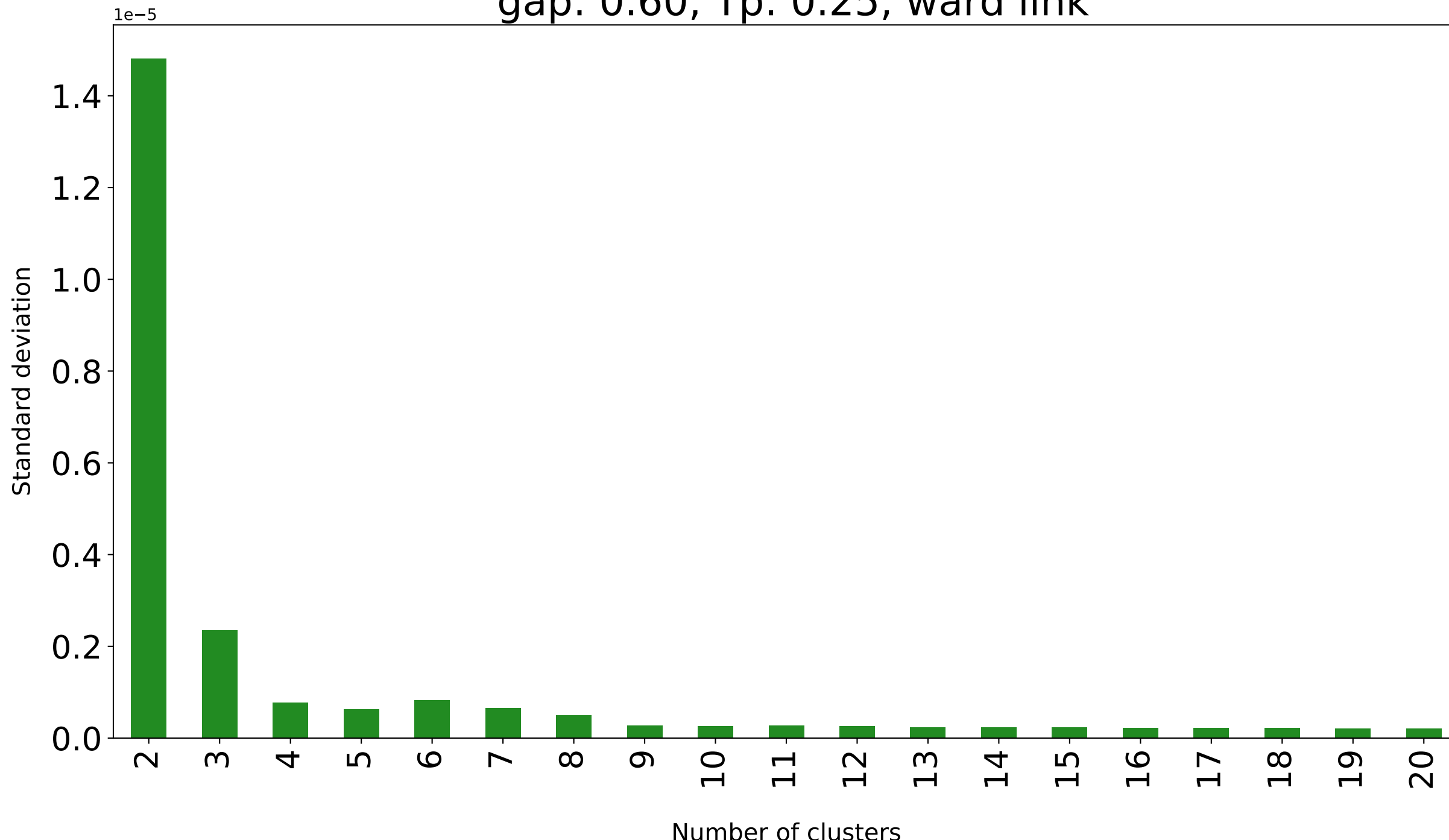


Cophenetic Correlation Coefficient: 0.6122170144326434

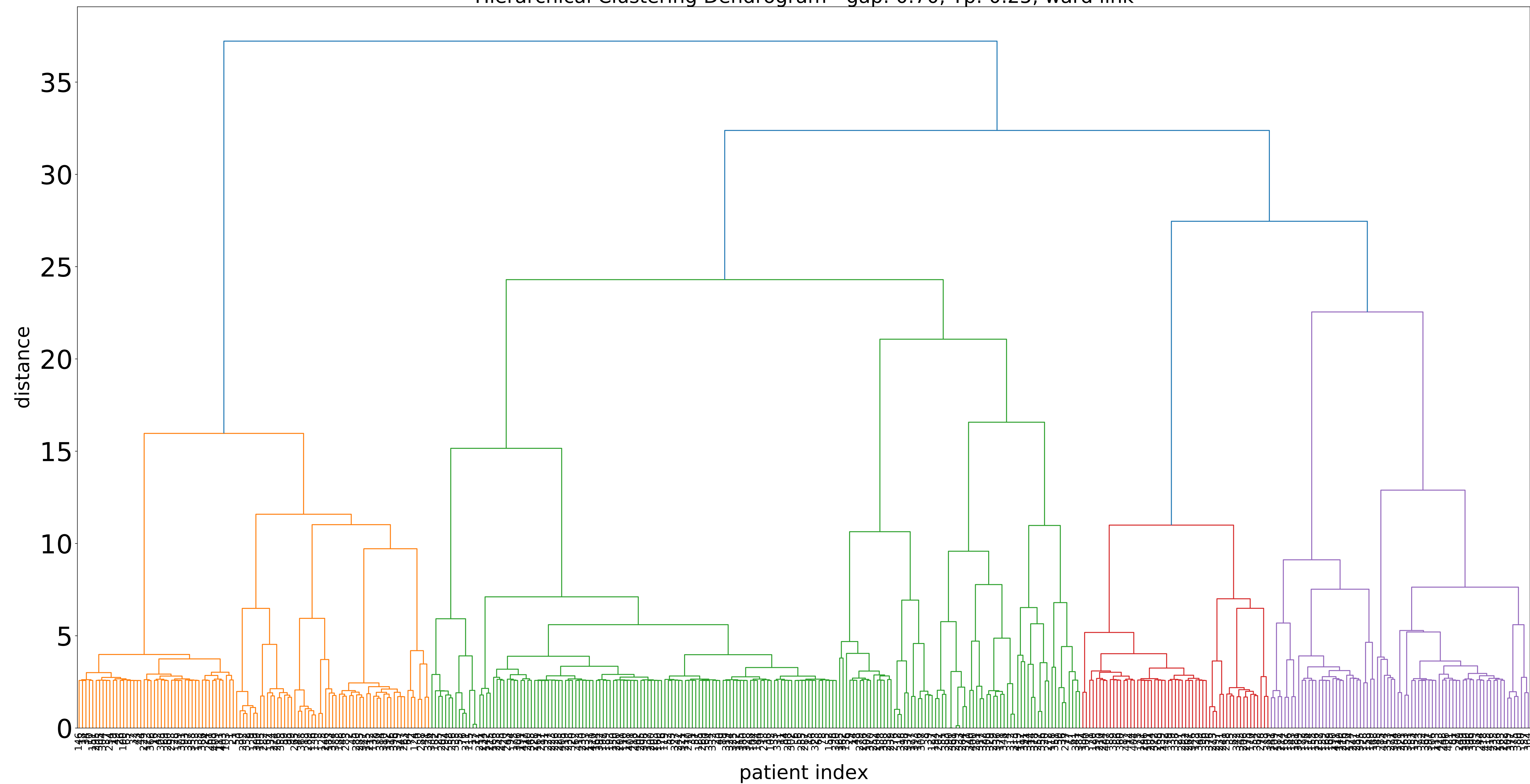
Average values of five clustering indices gap: 0.60, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	0.99999	0.88486	0.80624	0.66682	0.07869	0.71868	0.88383	-0.0594	0.88589	0.00012	0.77525	0.69948	0.0514	0.20968	0.16675
3.0	1.00001	0.76462	0.62237	0.6351	0.13401	0.64056	0.76446	-0.30028	0.76479	0.00011	0.72249	0.45613	0.22126	0.19097	0.16675
4.0	1.0	0.70593	0.54715	0.57879	0.19848	0.59086	0.70567	-0.76149	0.70619	0.00012	0.71661	0.37869	0.28947	0.22138	0.16675
5.0	1.0	0.77073	0.62858	0.71624	0.15564	0.69876	0.76993	-1.75375	0.77153	0.00015	0.80199	0.46168	0.47143	0.20946	0.16675
6.0	1.0	0.78553	0.64873	0.70081	0.14864	0.72654	0.78459	-2.77078	0.78647	0.00017	0.82995	0.48455	0.47826	0.22218	0.1962
7.0	1.0	0.7709	0.62651	0.64266	0.15698	0.71511	0.76745	-3.75276	0.77438	0.00018	0.83095	0.46128	1.1	0.22088	0.19633
8.0	1.0	0.77637	0.63503	0.67521	0.17842	0.73165	0.77408	-4.97953	0.77867	0.00021	0.85888	0.47045	1.1	0.19088	0.19896
9.0	1.0	0.80656	0.67731	0.75288	0.16018	0.77296	0.80604	-6.05274	0.80708	0.00024	0.89138	0.51549	1.1	0.1762	0.19896
10.0	1.0	0.85021	0.74105	0.83153	0.14143	0.82658	0.85	-7.62873	0.85041	0.00028	0.92157	0.59206	1.1	0.19061	0.19896
11.0	1.0	0.86888	0.76954	0.85051	0.1338	0.84917	0.86871	-8.2837	0.86905	0.00029	0.93371	0.62855	1.375	0.19547	0.19896
12.0	1.0	0.87516	0.77909	0.84657	0.13021	0.85704	0.87496	-9.96026	0.87536	0.0003	0.93858	0.64082	1.375	0.195	0.19896
13.0	1.0	0.88837	0.80025	0.87331	0.12857	0.87304	0.88825	-11.0857	0.88849	0.00032	0.94749	0.66969	1.375	0.1873	0.19896
14.0	1.0	0.89545	0.81151	0.87998	0.12589	0.88166	0.89537	-11.9061	0.89553	0.00034	0.95241	0.68489	1.375	0.18615	0.19322
15.0	1.0	0.90061	0.81966	0.87695	0.12152	0.88777	0.9005	-13.47983	0.90073	0.00034	0.95545	0.69589	2.0	0.18408	0.24066
16.0	1.0	0.92736	0.86487	0.92745	0.10626	0.91837	0.92729	-15.25445	0.92744	0.00037	0.96848	0.76303	2.0	0.18293	0.24066
17.0	1.0	0.94031	0.88763	0.94143	0.09241	0.93307	0.94025	-16.65409	0.94037	0.00038	0.97449	0.79902	2.0	0.18944	0.24066
18.0	1.0	0.94601	0.89795	0.94614	0.08754	0.93959	0.94597	-17.36413	0.94606	0.00039	0.97728	0.81616	2.0	0.18803	0.24066
19.0	1.0	0.94664	0.89915	0.94074	0.08438	0.94037	0.9466	-19.34776	0.94668	0.00039	0.9778	0.81828	2.0	0.18196	0.24066
20.0	1.0	0.9452	0.89659	0.94342	0.0853	0.93893	0.94514	-21.16775	0.94527	0.0004	0.97772	0.81423	2.0	0.18013	0.24066

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



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

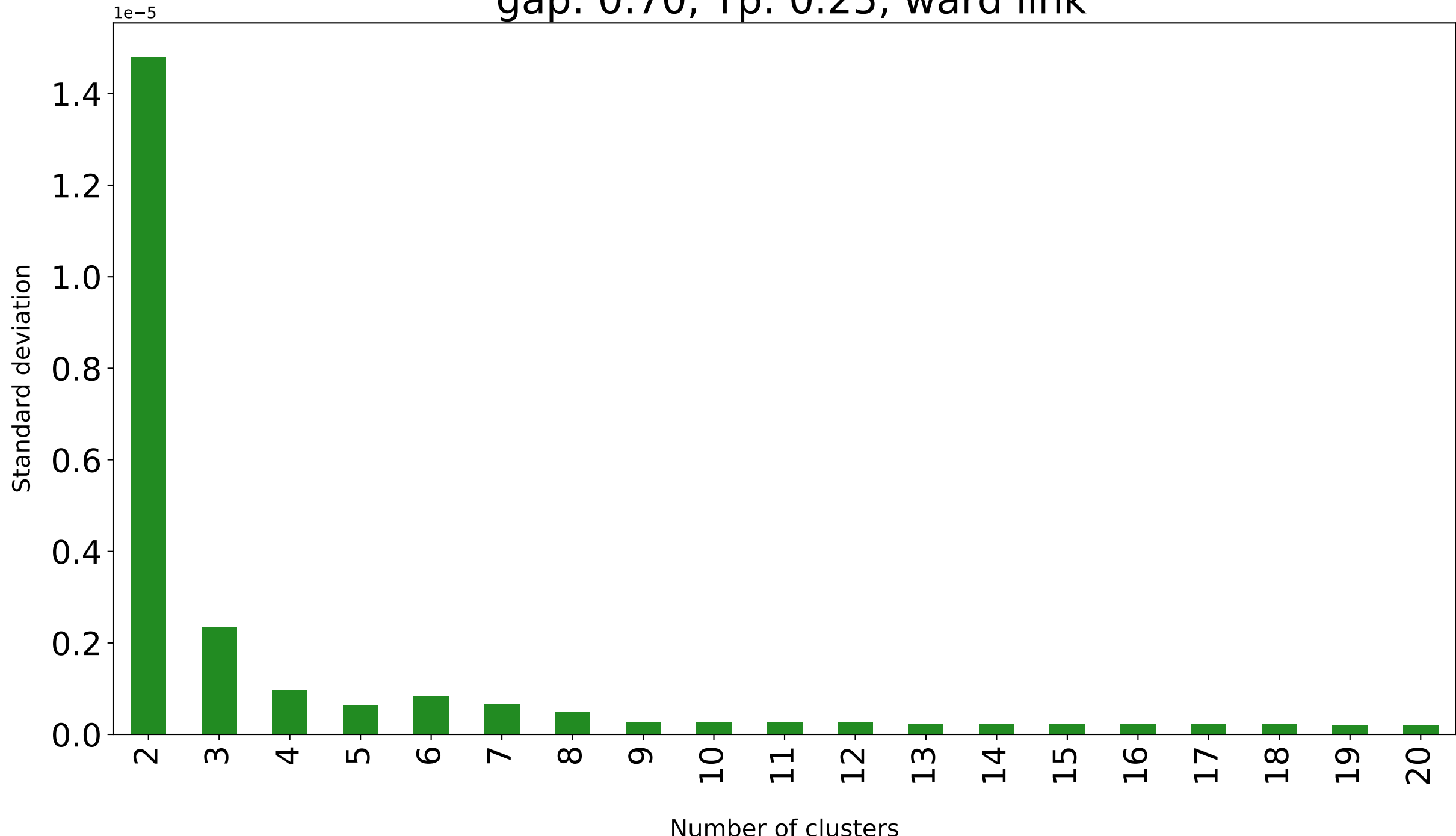


Cophenetic Correlation Coefficient: 0.61481513535827

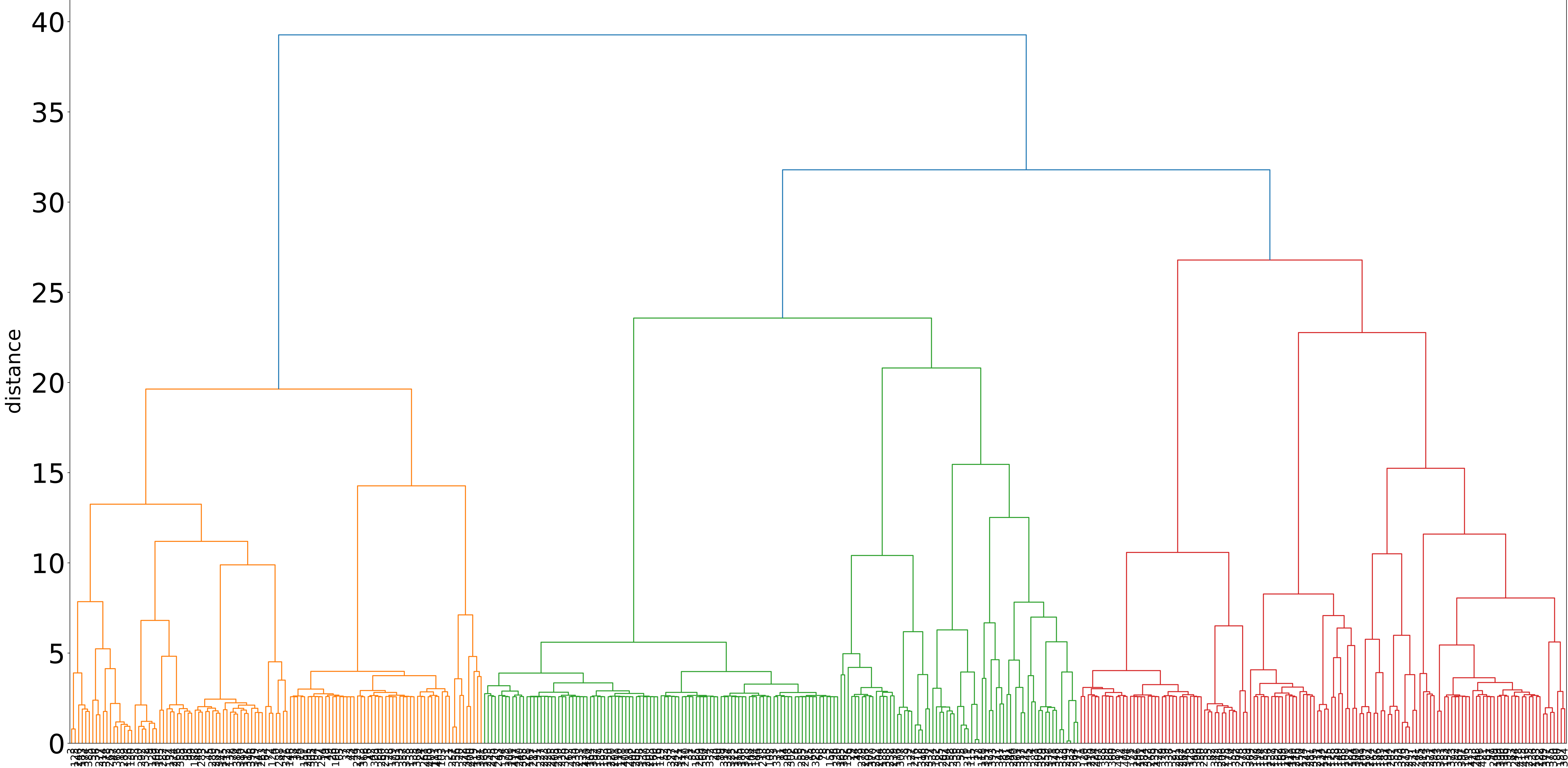
Average values of five clustering indices gap: 0.70, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	0.99999	0.88883	0.81528	0.68396	0.07642	0.72629	0.88797	-0.06512	0.88968	0.00012	0.78517	0.71537	0.03738	0.20724	0.16675
3.0	1.0	0.79491	0.66498	0.66857	0.11526	0.68474	0.79466	-0.3697	0.79517	0.00012	0.75231	0.50598	0.12632	0.18492	0.18867
4.0	1.0	0.78176	0.64633	0.64687	0.12519	0.69323	0.78056	-0.97393	0.78297	0.00013	0.77638	0.48576	0.12632	0.21821	0.18867
5.0	1.0	0.77249	0.63049	0.75939	0.16281	0.70661	0.7707	-1.56845	0.77429	0.00016	0.81266	0.46542	0.33803	0.18399	0.18867
6.0	1.0	0.802	0.67192	0.77136	0.13843	0.75239	0.80125	-2.77179	0.80275	0.00018	0.85265	0.51103	0.33803	0.21306	0.18867
7.0	1.0	0.81873	0.69688	0.76947	0.13505	0.77892	0.81805	-3.69768	0.81941	0.00021	0.87734	0.54218	0.42857	0.20532	0.19903
8.0	1.0	0.7968	0.6623	0.69964	0.1563	0.75673	0.79462	-4.58003	0.799	0.00021	0.87216	0.49966	1.05263	0.19443	0.19984
9.0	1.0	0.83063	0.71261	0.78471	0.13404	0.8016	0.83023	-5.71443	0.83104	0.00025	0.90545	0.55839	1.05263	0.18145	0.19984
10.0	1.0	0.87154	0.77432	0.8597	0.11948	0.85163	0.87133	-7.15189	0.87175	0.00029	0.93336	0.63626	1.05263	0.19592	0.19984
11.0	1.0	0.88172	0.78971	0.85794	0.11465	0.86414	0.88155	-8.83521	0.88189	0.0003	0.94056	0.65559	1.05263	0.21049	0.19984
12.0	1.0	0.89473	0.81057	0.88427	0.11367	0.87995	0.89461	-9.92902	0.89486	0.00032	0.94944	0.68416	1.05263	0.20093	0.19984
13.0	1.0	0.89879	0.81715	0.88789	0.11397	0.88512	0.89869	-10.65313	0.89889	0.00033	0.95294	0.69329	1.05263	0.19704	0.19445
14.0	1.0	0.90724	0.8305	0.91383	0.11096	0.8954	0.90701	-12.32563	0.90746	0.00035	0.95871	0.71163	1.05263	0.19092	0.19445
15.0	1.0	0.91811	0.8491	0.91664	0.10396	0.90787	0.91802	-13.98791	0.91821	0.00036	0.96418	0.73932	2.0	0.18835	0.2335
16.0	1.0	0.93109	0.87152	0.93066	0.0926	0.92267	0.93101	-15.44083	0.93117	0.00037	0.97039	0.7738	2.0	0.19334	0.2335
17.0	1.0	0.9386	0.88474	0.93622	0.08767	0.93125	0.93855	-16.14524	0.93865	0.00038	0.97405	0.79468	2.0	0.19014	0.2335
18.0	1.0	0.94248	0.89171	0.93886	0.08895	0.93572	0.94245	-17.56076	0.94252	0.00039	0.97609	0.80605	2.0	0.19027	0.2335
19.0	1.0	0.94612	0.89825	0.94434	0.08542	0.93992	0.94607	-19.70117	0.94618	0.0004	0.978	0.81692	2.0	0.18848	0.2383
20.0	1.0	0.9431	0.89281	0.93304	0.08761	0.93665	0.94303	-21.55228	0.94317	0.0004	0.97707	0.80804	2.0	0.19134	0.2383

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



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



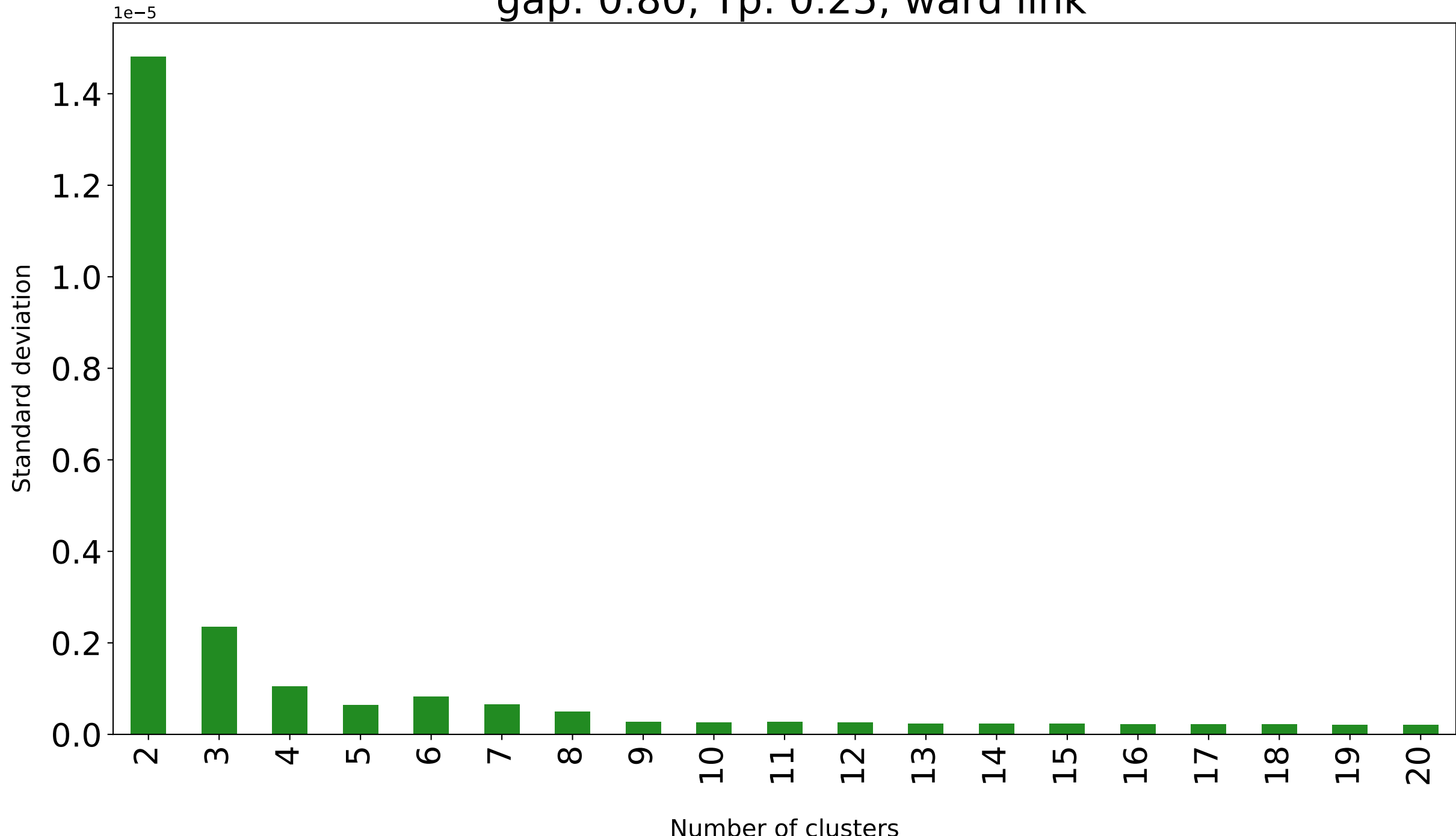
patient index

Cophenetic Correlation Coefficient: 0.5974043453956946

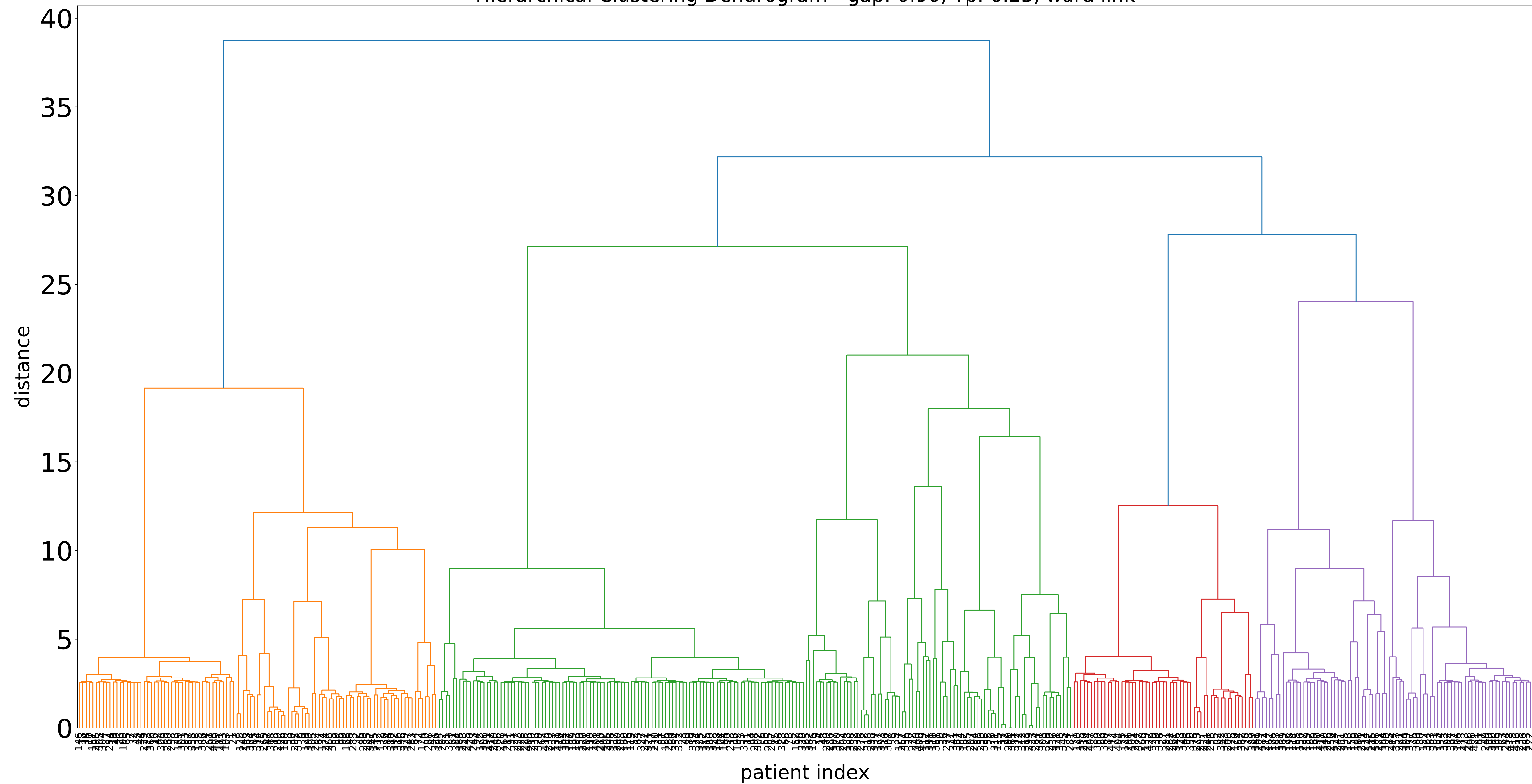
Average values of five clustering indices gap: 0.80, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	0.99999	0.90228	0.83438	0.76894	0.06584	0.76583	0.90183	-0.05968	0.90272	0.00013	0.8102	0.73795	0.10256	0.19597	0.19395
3.0	1.0	0.79318	0.66404	0.69041	0.11777	0.68518	0.79304	-0.34049	0.79332	0.00012	0.75541	0.50654	0.14201	0.17357	0.22736
4.0	1.0	0.77629	0.64098	0.66532	0.13426	0.68796	0.77586	-0.94886	0.77672	0.00013	0.77724	0.4808	0.14201	0.20324	0.22736
5.0	1.0	0.75487	0.60992	0.71222	0.16565	0.68467	0.75391	-1.61558	0.75583	0.00016	0.8032	0.4452	0.35294	0.17426	0.22736
6.0	1.0	0.77717	0.64101	0.7271	0.16249	0.72283	0.7767	-2.78223	0.77764	0.00018	0.8401	0.47967	0.35294	0.19082	0.22736
7.0	1.0	0.78551	0.65106	0.71837	0.15649	0.73947	0.78472	-3.77473	0.78631	0.0002	0.85901	0.49016	0.46154	0.19227	0.22736
8.0	1.0	0.79455	0.66127	0.78178	0.156	0.75885	0.79398	-4.71121	0.79512	0.00024	0.88505	0.49809	0.46154	0.19125	0.22736
9.0	1.0	0.80786	0.67928	0.77914	0.15348	0.77656	0.80762	-5.8354	0.8081	0.00025	0.89783	0.5172	0.46154	0.20799	0.22736
10.0	1.0	0.83938	0.72475	0.81776	0.1391	0.81496	0.83924	-7.40667	0.83953	0.00028	0.91868	0.57126	0.46154	0.19888	0.22736
11.0	1.0	0.85311	0.74531	0.83117	0.1343	0.83177	0.85298	-8.81876	0.85324	0.0003	0.92818	0.59704	2.0	0.19149	0.22736
12.0	1.0	0.85922	0.7548	0.85529	0.14046	0.84002	0.859	-9.61383	0.85943	0.00031	0.93457	0.60976	2.0	0.1945	0.19134
13.0	1.0	0.86335	0.76114	0.85009	0.13823	0.84522	0.86323	-11.09551	0.86347	0.00032	0.938	0.61771	2.0	0.1961	0.23097
14.0	1.0	0.86978	0.77099	0.8515	0.13429	0.85298	0.86966	-12.9077	0.86989	0.00033	0.94223	0.63047	2.0	0.21045	0.23097
15.0	1.0	0.88154	0.78937	0.87429	0.12687	0.86688	0.88142	-14.09704	0.88166	0.00035	0.94914	0.65487	2.0	0.19945	0.23097
16.0	1.0	0.89962	0.81822	0.90715	0.11417	0.8877	0.89936	-15.89852	0.89988	0.00037	0.9581	0.6948	2.0	0.19329	0.23097
17.0	1.0	0.90767	0.83177	0.90998	0.10427	0.89686	0.90751	-17.87047	0.90783	0.00038	0.96194	0.71451	2.0	0.1921	0.23097
18.0	1.0	0.91853	0.85013	0.922	0.09382	0.90918	0.91838	-19.33	0.91868	0.00039	0.96692	0.74191	2.0	0.19803	0.23097
19.0	1.0	0.92546	0.86215	0.92791	0.08882	0.91707	0.92534	-20.10503	0.92559	0.0004	0.97024	0.76049	2.0	0.19542	0.23097
20.0	1.0	0.93438	0.87723	0.9421	0.08739	0.92719	0.93422	-22.18594	0.93455	0.00041	0.97429	0.78308	2.0	0.1889	0.23097

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



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

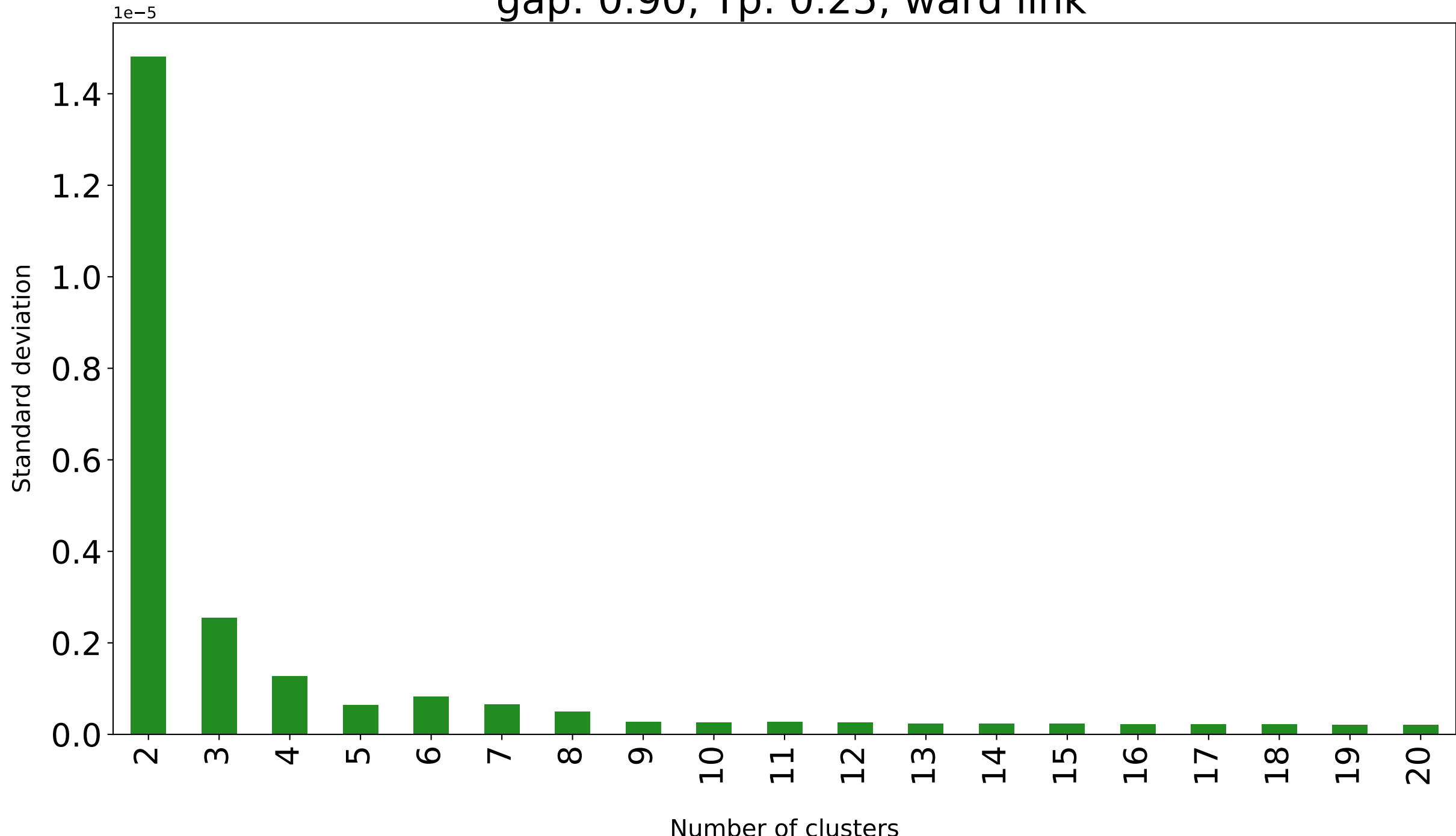


Cophenetic Correlation Coefficient: 0.584622149912175

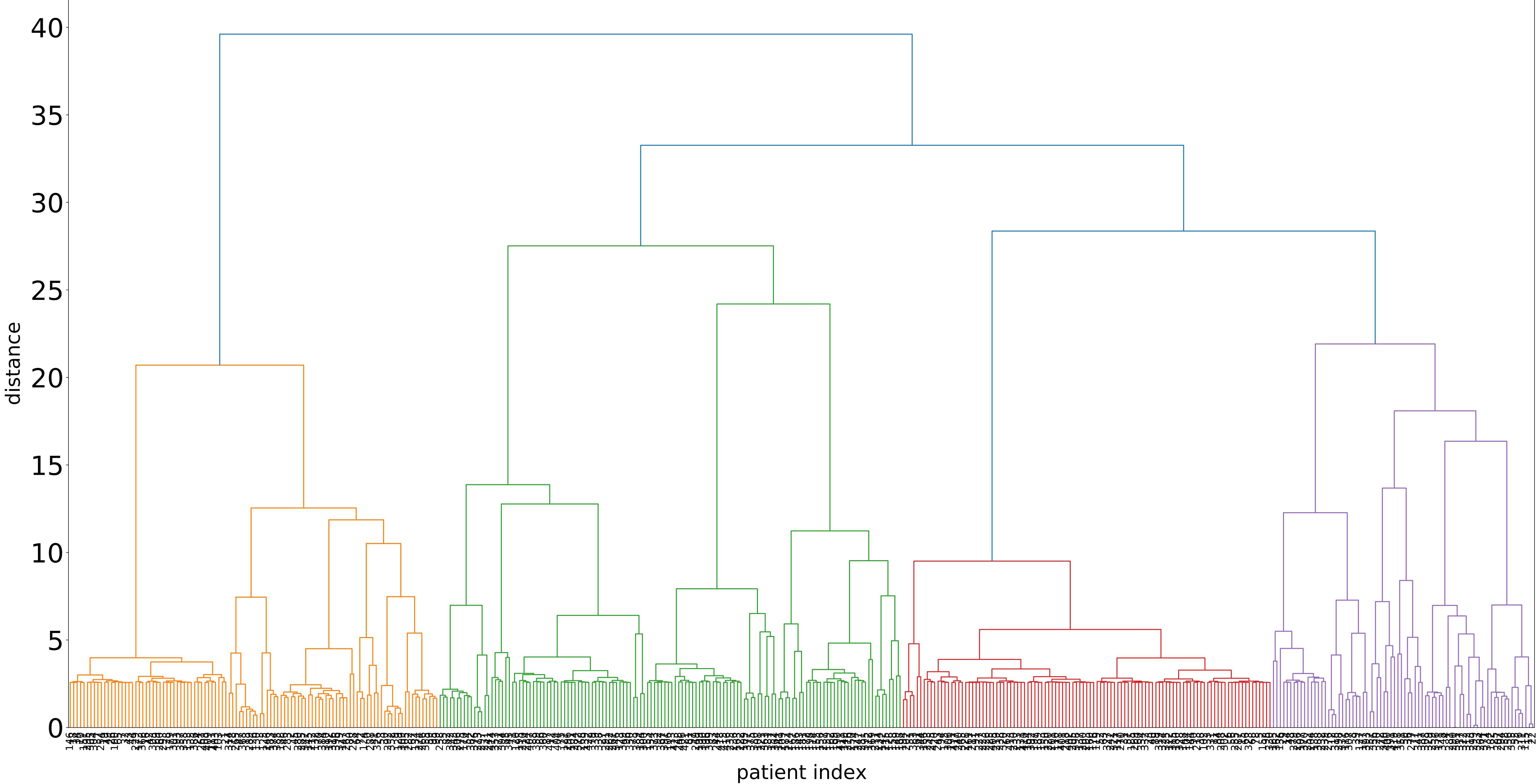
Average values of five clustering indices gap: 0.90, Tp: 0.25, ward link

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	0.99999	0.90418	0.83919	0.73136	0.06645	0.76563	0.90339	-0.0883	0.90496	0.00013	0.81317	0.74896	0.03762	0.20437	0.17799
3.0	1.0	0.79762	0.67022	0.67973	0.11489	0.68919	0.79739	-0.38069	0.79785	0.00012	0.75652	0.51411	0.19459	0.17941	0.19145
4.0	1.0	0.76945	0.63375	0.63613	0.13346	0.67709	0.76845	-0.96708	0.77046	0.00013	0.76907	0.47628	0.19459	0.2102	0.19145
5.0	1.0	0.79119	0.65919	0.75706	0.14042	0.7339	0.79055	-1.75276	0.79184	0.00017	0.83552	0.49934	0.46154	0.17594	0.19145
6.0	1.0	0.79834	0.6696	0.75238	0.13883	0.75065	0.79805	-2.87893	0.79862	0.00019	0.85758	0.51115	0.46154	0.19976	0.19145
7.0	1.0	0.80104	0.67189	0.73929	0.14072	0.76031	0.80034	-3.80173	0.80173	0.00021	0.8732	0.51322	0.64286	0.1904	0.1897
8.0	1.0	0.82186	0.69997	0.80539	0.12804	0.79093	0.82151	-4.76137	0.82221	0.00025	0.89983	0.54301	0.64286	0.19438	0.1897
9.0	1.0	0.84517	0.73378	0.82074	0.12464	0.82008	0.84496	-6.03394	0.84537	0.00027	0.91726	0.5834	1.05882	0.17844	0.21064
10.0	1.0	0.85186	0.74371	0.81544	0.12073	0.82888	0.85156	-7.11661	0.85216	0.00028	0.92338	0.59602	1.05882	0.21097	0.21064
11.0	1.0	0.85379	0.74562	0.79815	0.1187	0.83192	0.85305	-8.5381	0.85454	0.00029	0.92611	0.59782	2.0	0.21753	0.24806
12.0	1.0	0.85168	0.74224	0.80191	0.12138	0.83066	0.85112	-9.9974	0.85224	0.0003	0.92855	0.5927	2.0	0.21264	0.24806
13.0	1.0	0.86221	0.75859	0.82588	0.12169	0.84367	0.86192	-10.8419	0.86249	0.00032	0.93656	0.6134	2.0	0.20651	0.22893
14.0	1.0	0.87016	0.77052	0.8295	0.1146	0.8532	0.86977	-12.15137	0.87056	0.00033	0.94144	0.62858	2.0	0.20754	0.22893
15.0	1.0	0.87917	0.78448	0.83596	0.10794	0.86377	0.87866	-14.01009	0.87968	0.00034	0.94643	0.64723	2.0	0.21915	0.22893
16.0	1.0	0.89266	0.80658	0.86089	0.09899	0.87946	0.89238	-15.18768	0.89294	0.00036	0.95389	0.67782	2.0	0.21481	0.22893
17.0	1.0	0.90127	0.82087	0.87375	0.09338	0.88941	0.90104	-17.29283	0.9015	0.00037	0.9584	0.69837	2.0	0.21541	0.23964
18.0	1.0	0.90653	0.82954	0.87783	0.0887	0.89551	0.90628	-18.01489	0.90678	0.00037	0.96117	0.71088	2.0	0.21092	0.23964
19.0	1.0	0.93521	0.87912	0.93389	0.0835	0.9279	0.93512	-20.03899	0.9353	0.0004	0.97406	0.78691	2.0	0.20316	0.23964
20.0	1.0	0.94327	0.89309	0.94738	0.08015	0.93704	0.94315	-22.14478	0.94338	0.00041	0.97774	0.80865	2.0	0.19783	0.23964

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



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



Cophenetic Correlation Coefficient: 0.5779002217677486

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

k	AR	FM	J	AW	VD	H	F	VI	K	Phi	RT	SS	CVNN	S	Dunn
2.0	0.99999	0.89567	0.82598	0.71799	0.07247	0.74735	0.89497	-0.06084	0.89639	0.00012	0.79936	0.72998	0.09969	0.20192	0.17737
3.0	1.00001	0.79028	0.66111	0.67282	0.12215	0.67703	0.78986	-0.34665	0.7907	0.00012	0.74842	0.50453	0.17486	0.18017	0.21189
4.0	1.0	0.73175	0.5833	0.66327	0.18011	0.63419	0.73118	-0.73661	0.73234	0.00013	0.75145	0.42029	0.49123	0.15054	0.21189
5.0	1.0	0.78943	0.65618	0.75329	0.14069	0.7324	0.78899	-1.7242	0.78988	0.00017	0.83586	0.4944	0.49123	0.16979	0.21189
6.0	1.0	0.7856	0.65146	0.73011	0.14857	0.73491	0.78529	-2.80978	0.78591	0.00019	0.84906	0.48956	0.49123	0.2052	0.21189
7.0	1.0	0.79047	0.6565	0.71445	0.1465	0.74779	0.78954	-3.77329	0.79139	0.00021	0.86702	0.49496	0.57143	0.19679	0.21005
8.0	1.0	0.82989	0.71153	0.80383	0.12123	0.80065	0.82969	-4.86642	0.83008	0.00025	0.90505	0.55634	0.57143	0.20512	0.21005
9.0	1.0	0.84807	0.73792	0.81466	0.11916	0.82358	0.84789	-6.09177	0.84826	0.00027	0.91907	0.58811	1.66667	0.19058	0.21005
10.0	1.0	0.8513	0.74232	0.80639	0.11813	0.82829	0.85092	-7.13052	0.85168	0.00028	0.92313	0.59344	1.66667	0.22402	0.21005
11.0	1.0	0.85191	0.74321	0.81145	0.12013	0.83038	0.85155	-8.58446	0.85227	0.00029	0.92732	0.59446	1.66667	0.2262	0.21005
12.0	1.0	0.85564	0.748	0.79898	0.11667	0.83531	0.85484	-10.02522	0.85644	0.0003	0.93051	0.60017	2.0	0.23058	0.245
13.0	1.0	0.85848	0.75181	0.79714	0.11514	0.83919	0.85744	-11.67711	0.85953	0.00031	0.93343	0.60481	2.0	0.23571	0.245
14.0	1.0	0.8682	0.76732	0.82387	0.11736	0.85107	0.8677	-12.52155	0.86869	0.00033	0.94079	0.62442	2.0	0.22894	0.22709
15.0	1.0	0.87534	0.77803	0.82793	0.11075	0.85958	0.87472	-13.85366	0.87596	0.00034	0.94505	0.63809	2.0	0.22993	0.22709
16.0	1.0	0.89111	0.80386	0.85921	0.10288	0.87788	0.89083	-14.8874	0.89139	0.00036	0.9537	0.67359	2.0	0.22296	0.22709
17.0	1.0	0.89823	0.81547	0.86859	0.09823	0.88616	0.89797	-16.98852	0.8985	0.00037	0.95756	0.68985	2.0	0.2241	0.2402
18.0	1.0	0.90471	0.82603	0.87161	0.09336	0.89362	0.90438	-17.91138	0.90504	0.00038	0.96082	0.70493	2.0	0.22257	0.2402
19.0	1.0	0.91129	0.83704	0.87895	0.08882	0.90117	0.91096	-20.06109	0.91161	0.00039	0.9641	0.72102	2.0	0.2181	0.2402
20.0	1.0	0.9423	0.89135	0.93711	0.08313	0.936	0.94224	-22.12193	0.94236	0.00041	0.97753	0.8055	2.0	0.21111	0.2402

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

