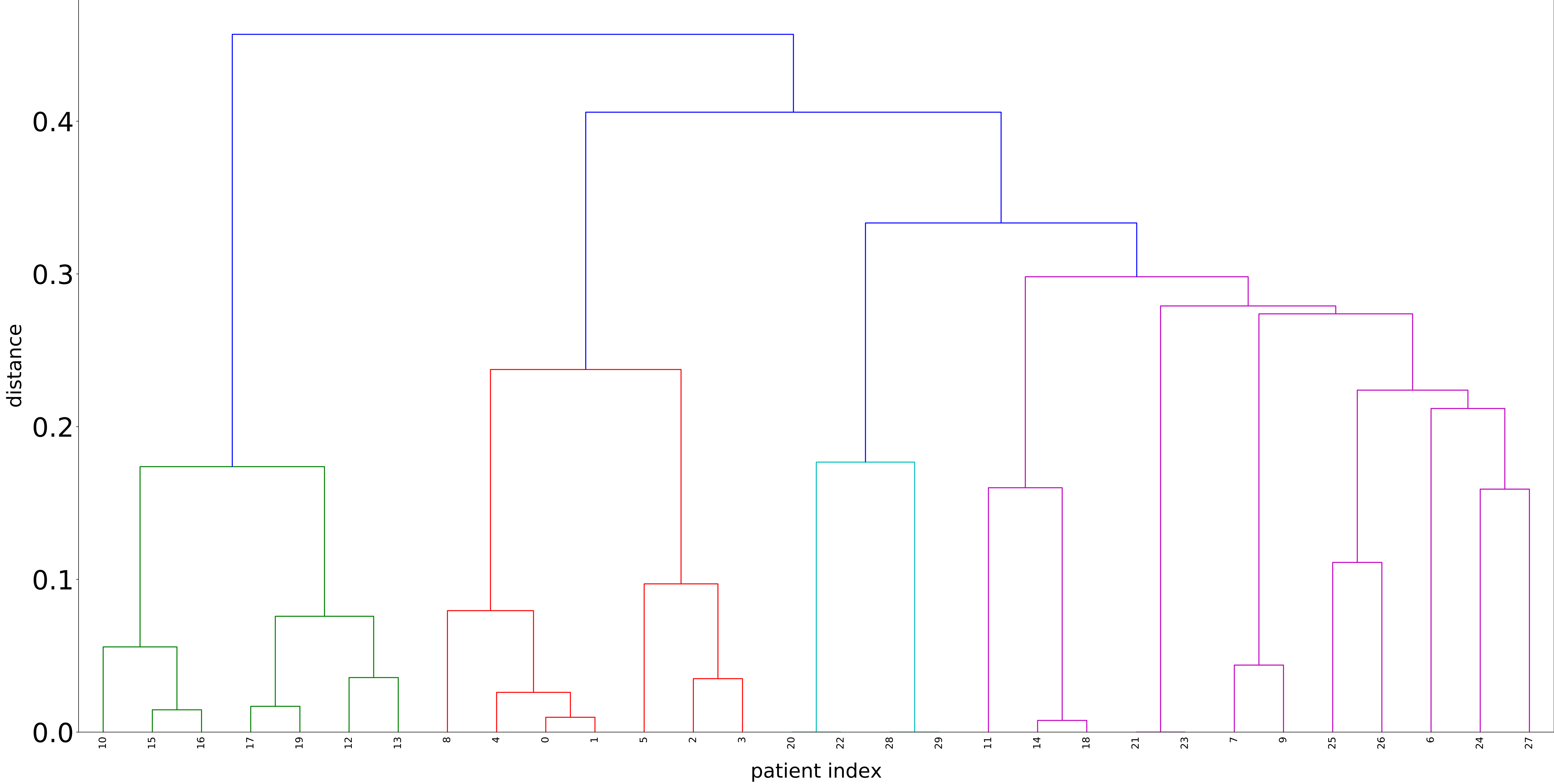


Hierarchical Clustering Dendrogram - gap: -0.40, Tp: 0.25, ward link

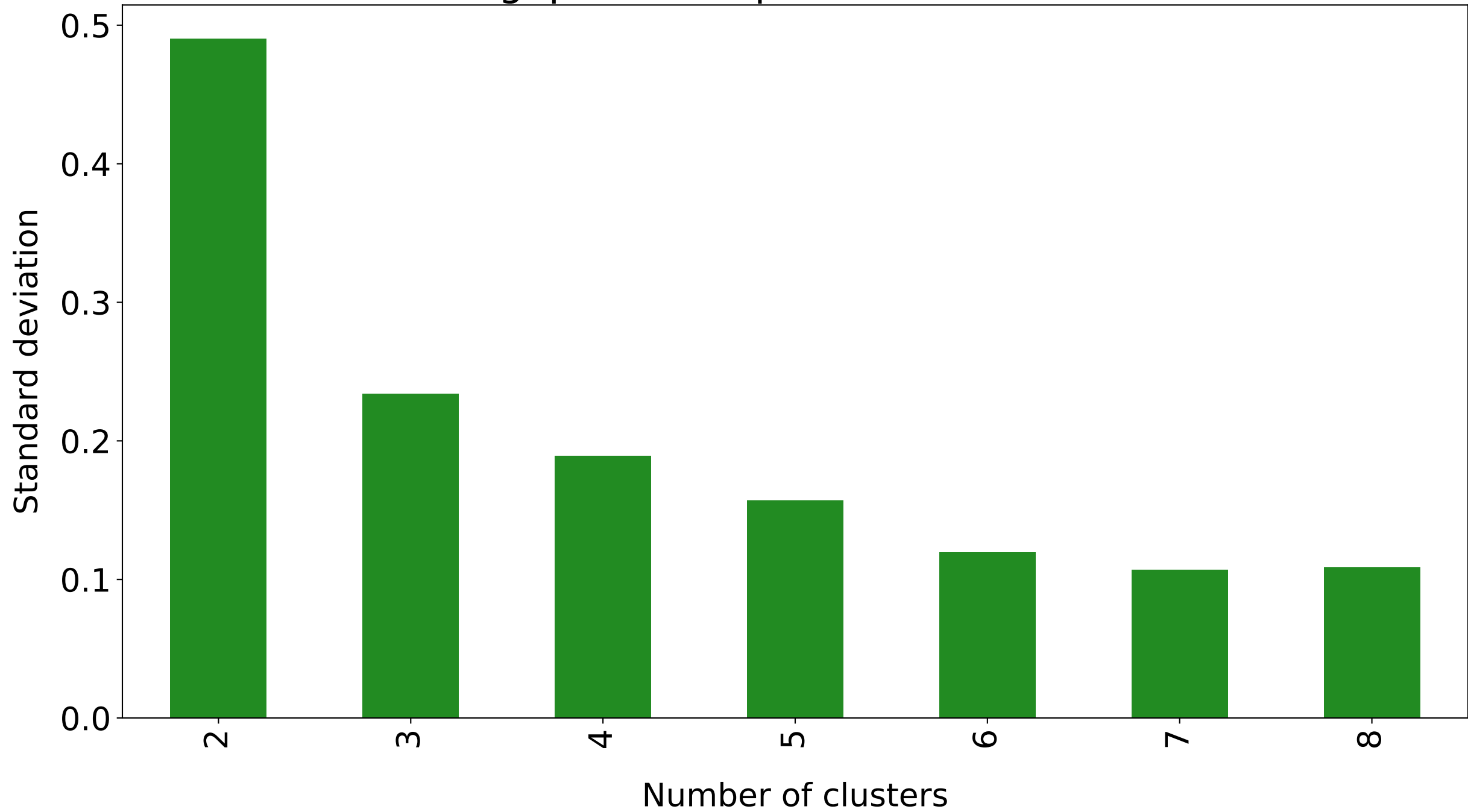


Cophenetic Correlation Coefficient: 0.797832016033

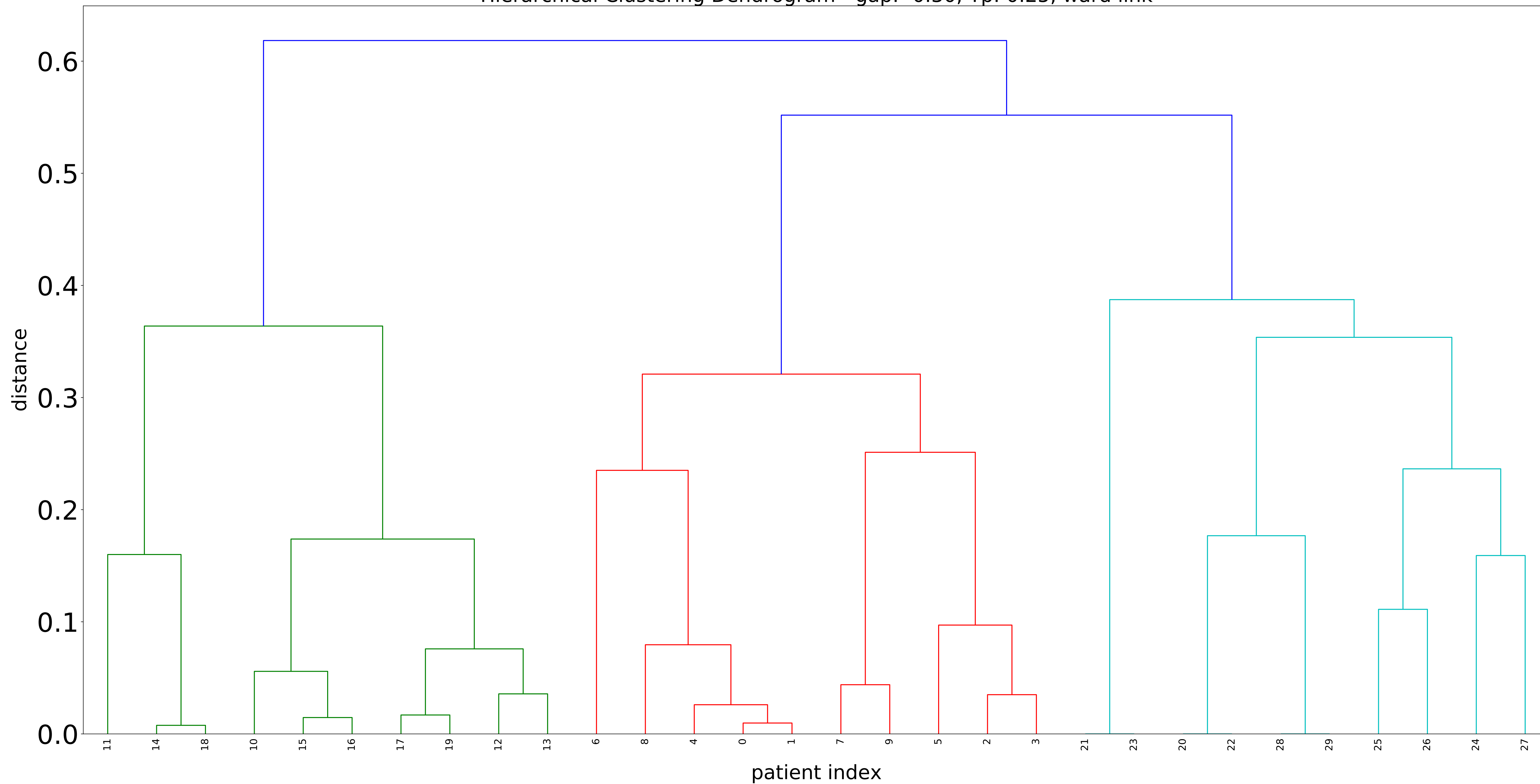
Average values of five clustering indices
gap: -0.40, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.85	0.679	0.882	0.829	0.68
3.0	0.916	0.822	0.891	0.829	0.816
4.0	0.916	0.783	0.841	0.749	0.773
5.0	0.926	0.766	0.813	0.703	0.756
6.0	0.943	0.789	0.824	0.711	0.756
7.0	0.959	0.827	0.853	0.751	0.779
8.0	0.965	0.828	0.849	0.747	0.818

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

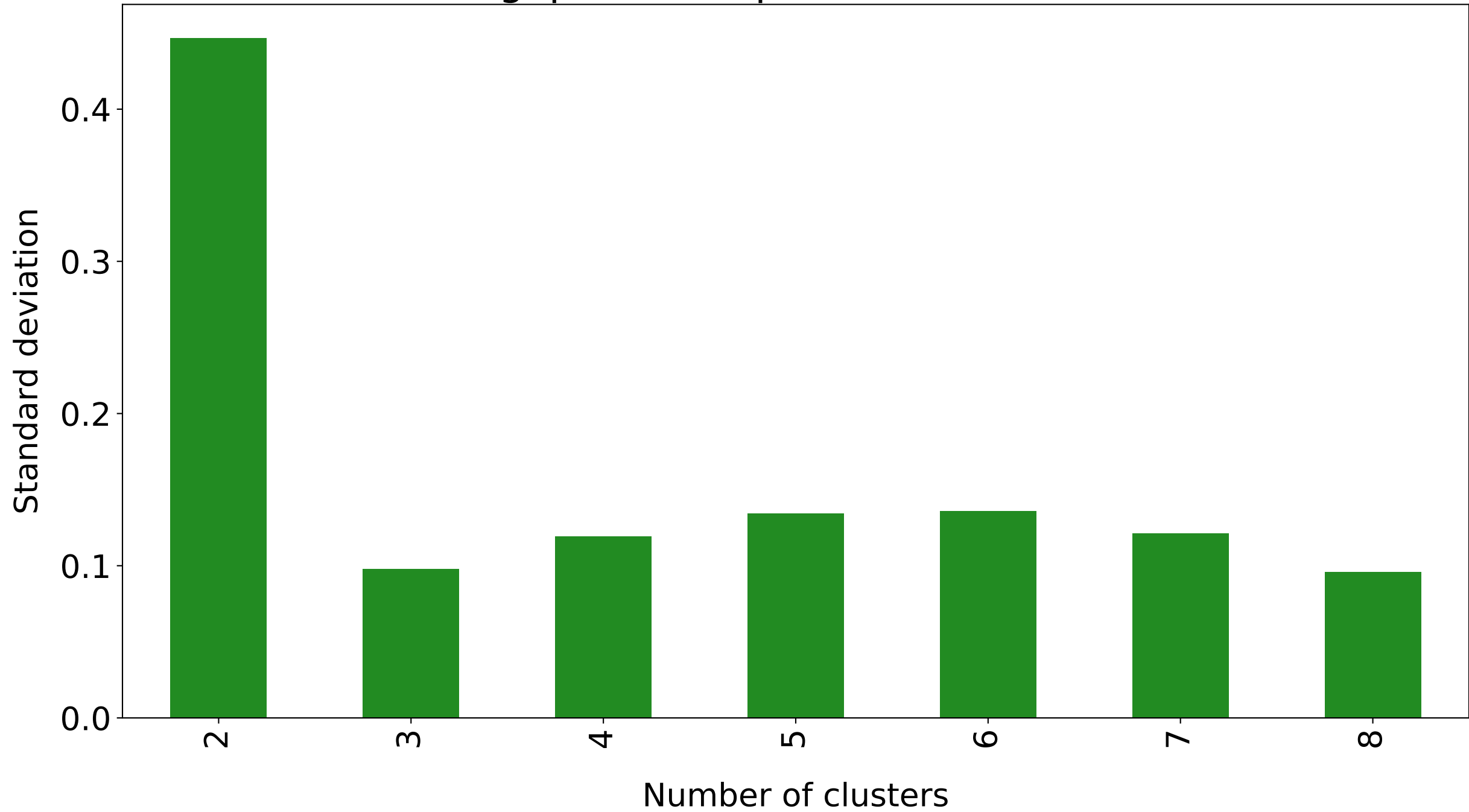


Cophenetic Correlation Coefficient: 0.88963630055

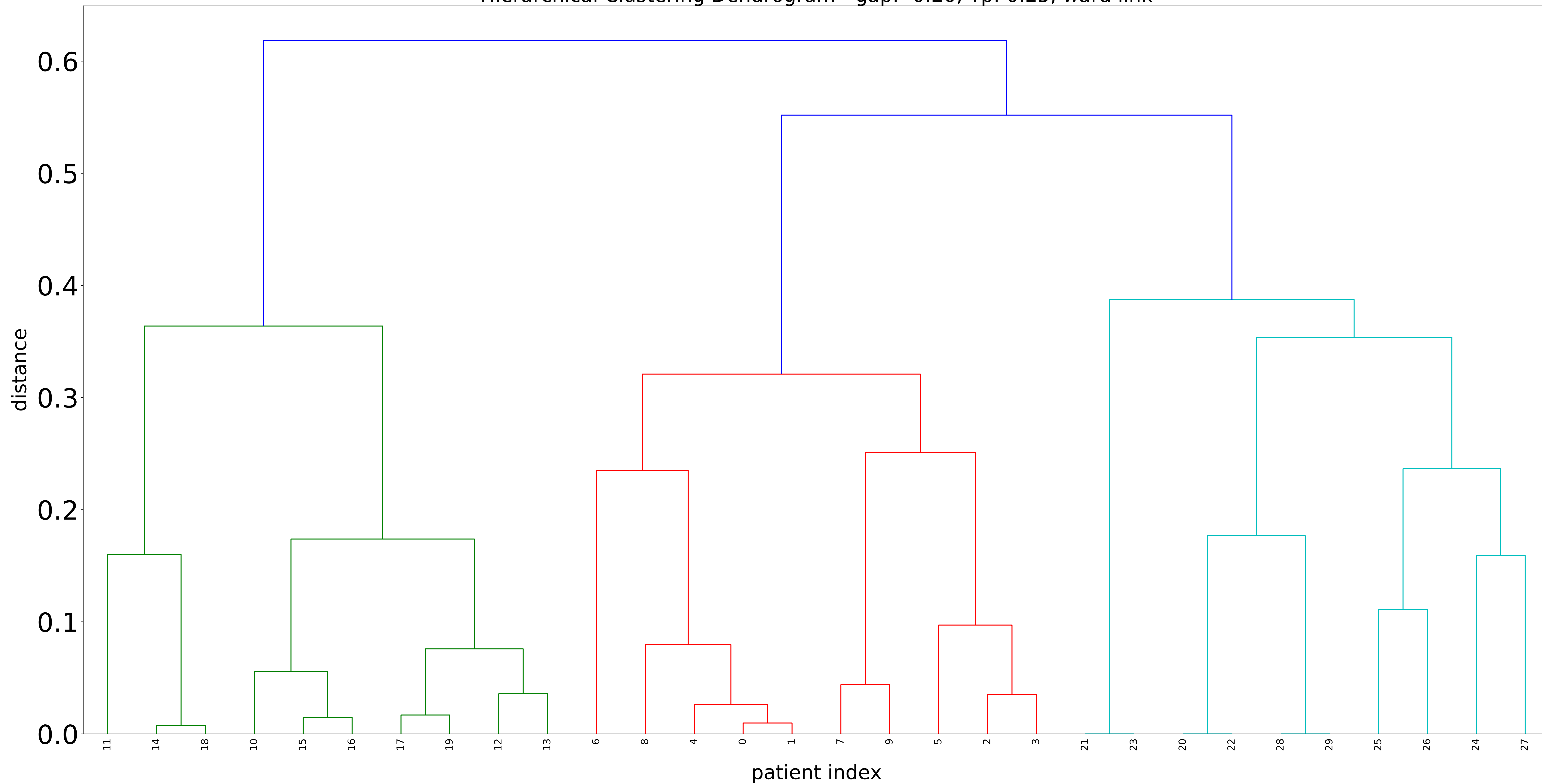
Average values of five clustering indices
gap: -0.30, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.804	0.607	0.82	0.743	0.609
3.0	0.977	0.946	0.963	0.936	0.95
4.0	0.949	0.868	0.904	0.834	0.826
5.0	0.931	0.798	0.844	0.74	0.752
6.0	0.941	0.8	0.84	0.734	0.743
7.0	0.966	0.855	0.876	0.793	0.876
8.0	0.965	0.833	0.854	0.752	0.844

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

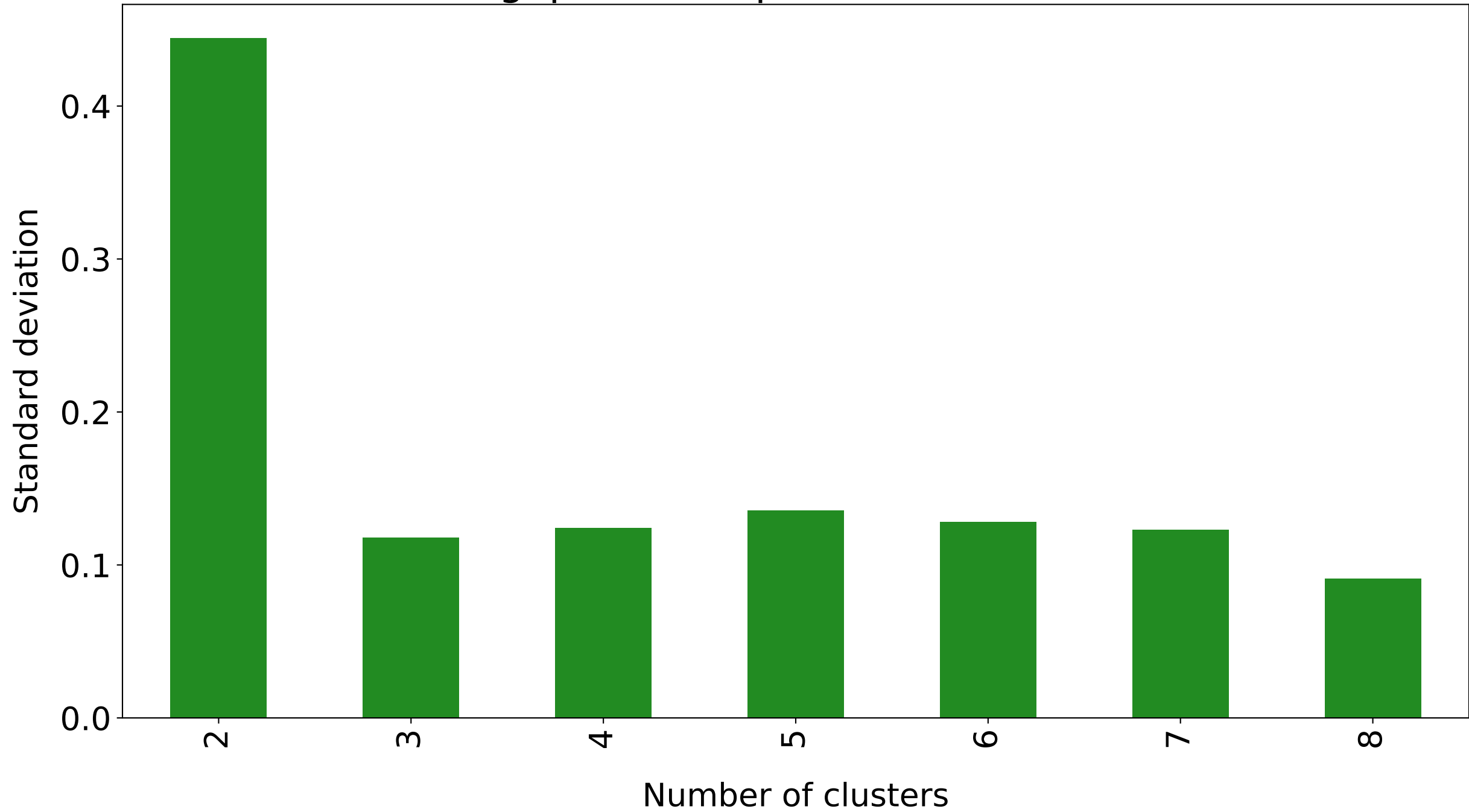


Cophenetic Correlation Coefficient: 0.88963630055

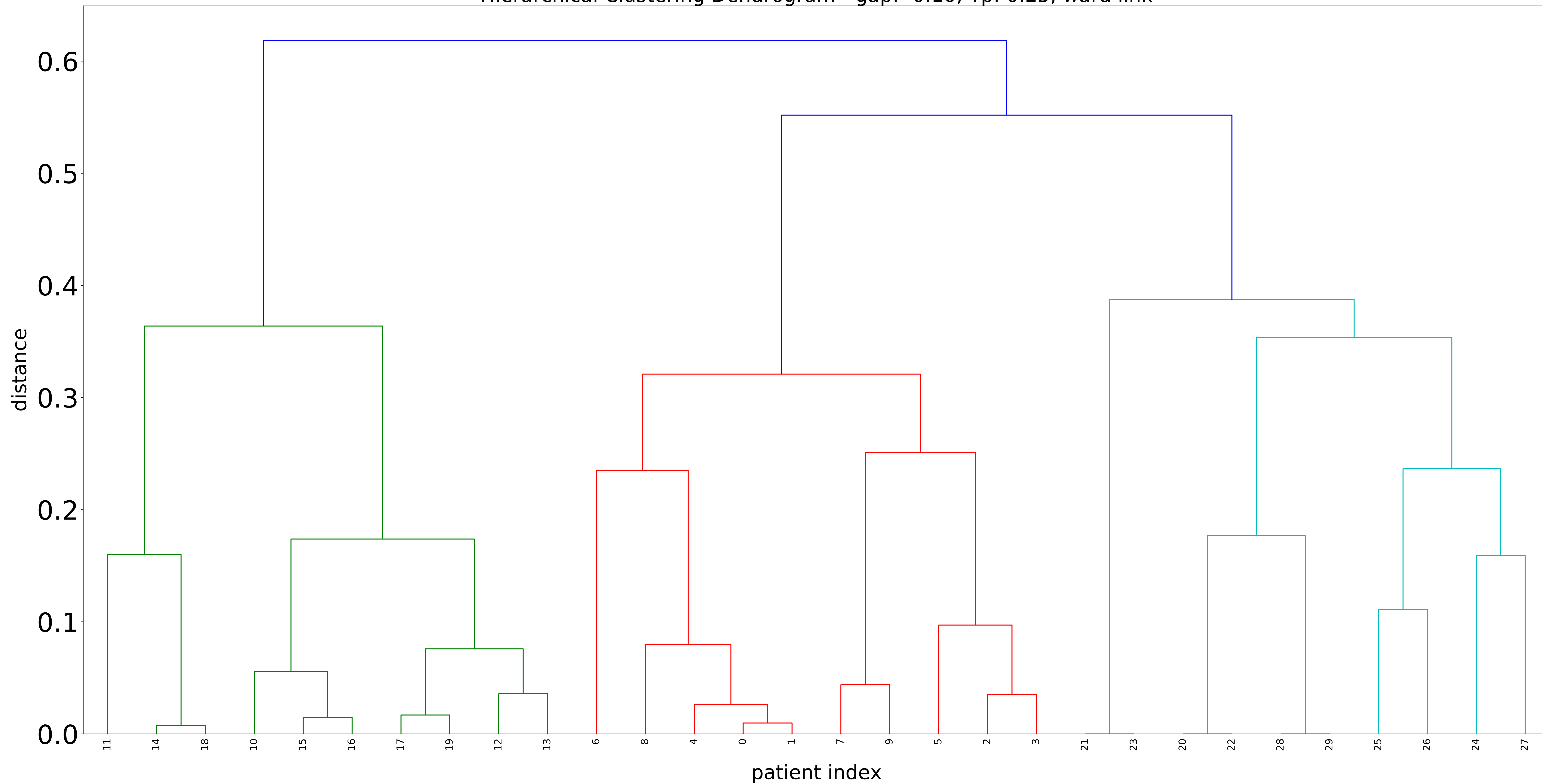
Average values of five clustering indices
gap: -0.20, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.797	0.593	0.815	0.734	0.596
3.0	0.97	0.93	0.952	0.918	0.933
4.0	0.95	0.872	0.907	0.84	0.834
5.0	0.93	0.793	0.84	0.734	0.744
6.0	0.942	0.803	0.843	0.736	0.746
7.0	0.964	0.845	0.867	0.779	0.862
8.0	0.967	0.841	0.861	0.763	0.852

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

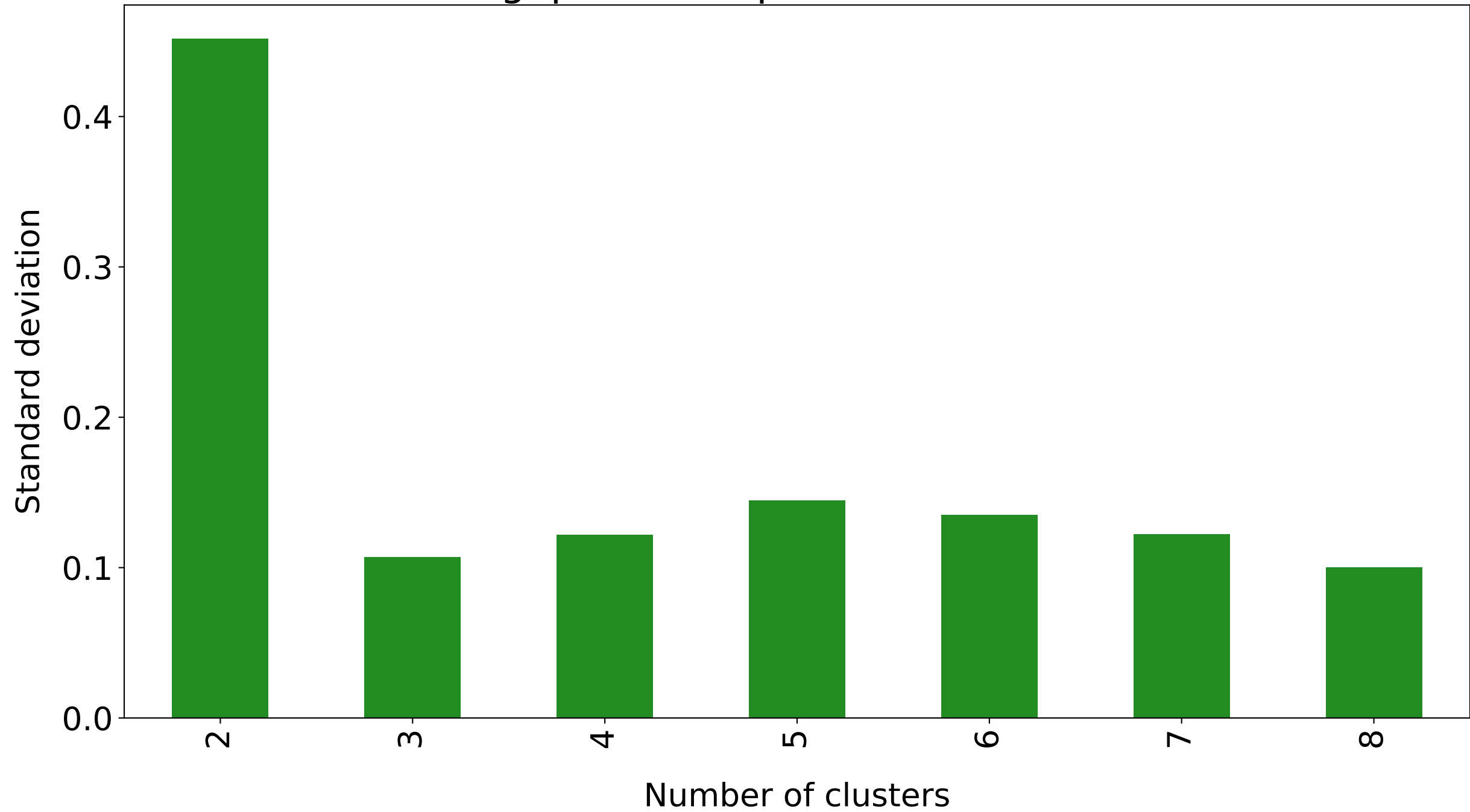


Cophenetic Correlation Coefficient: 0.88963630055

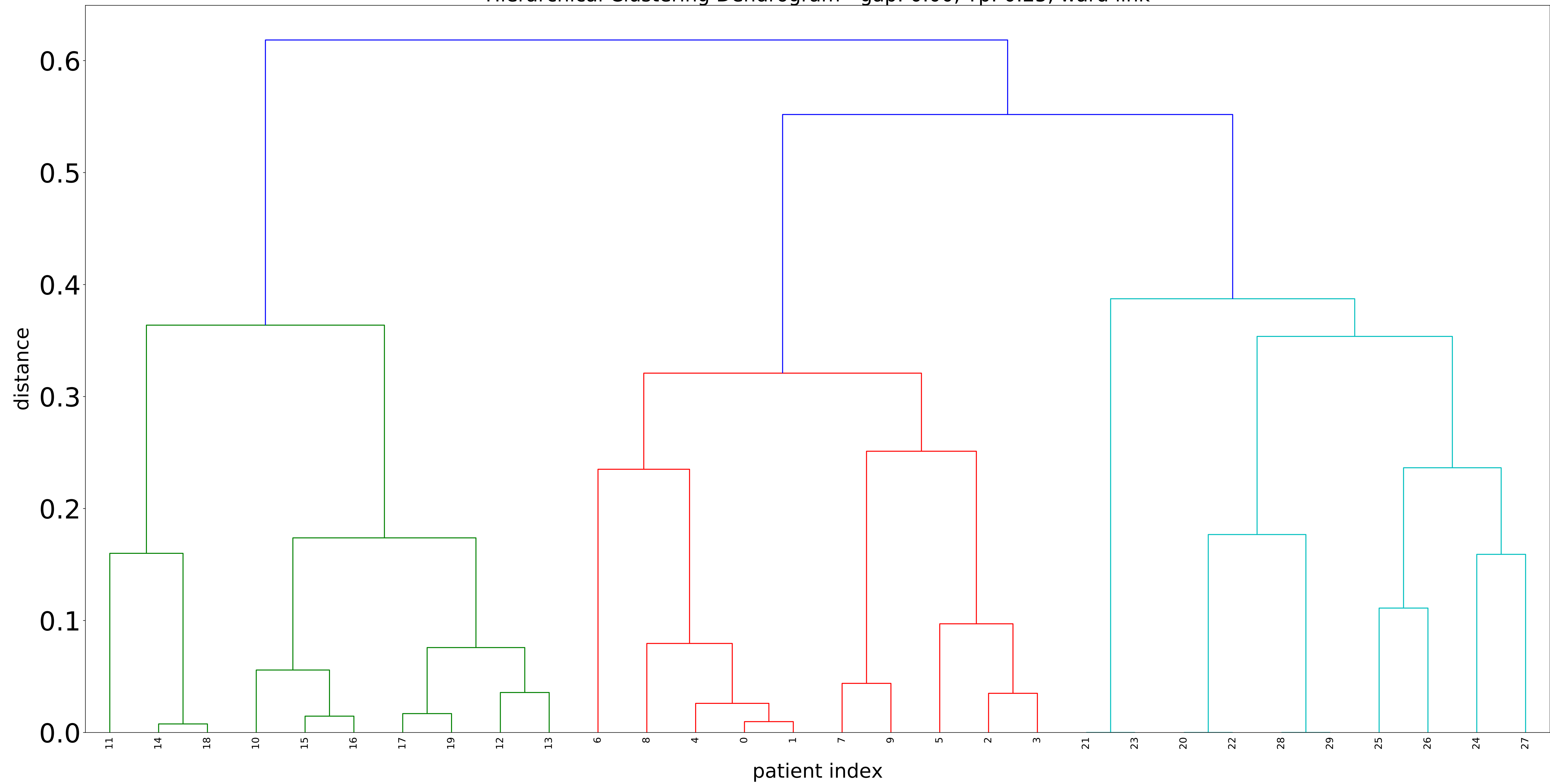
Average values of five clustering indices
gap: -0.10, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.789	0.575	0.806	0.724	0.579
3.0	0.974	0.941	0.959	0.93	0.945
4.0	0.951	0.873	0.908	0.841	0.834
5.0	0.931	0.797	0.843	0.741	0.755
6.0	0.945	0.812	0.849	0.748	0.761
7.0	0.962	0.838	0.861	0.769	0.861
8.0	0.965	0.834	0.855	0.755	0.847

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

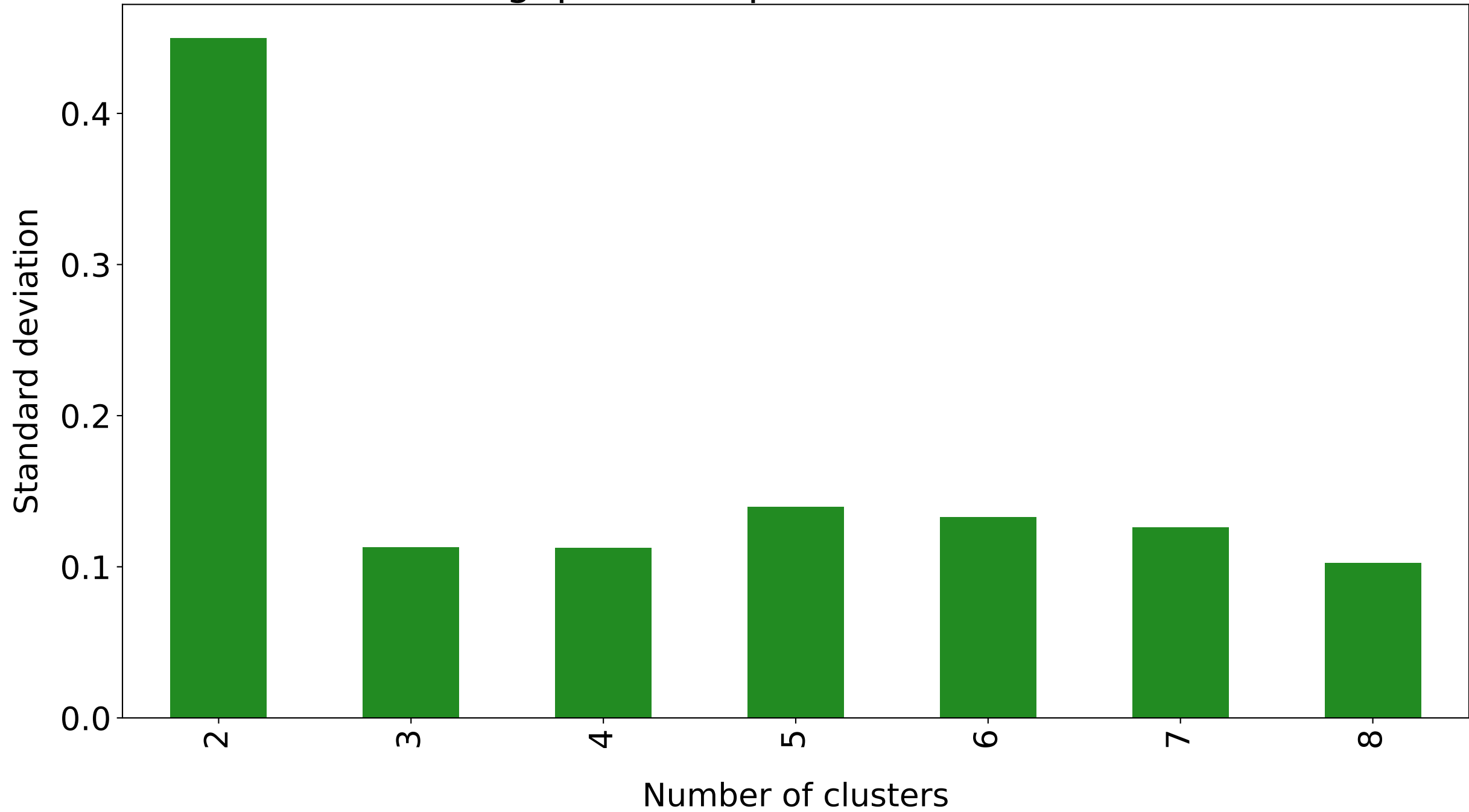


Cophenetic Correlation Coefficient: 0.88963630055

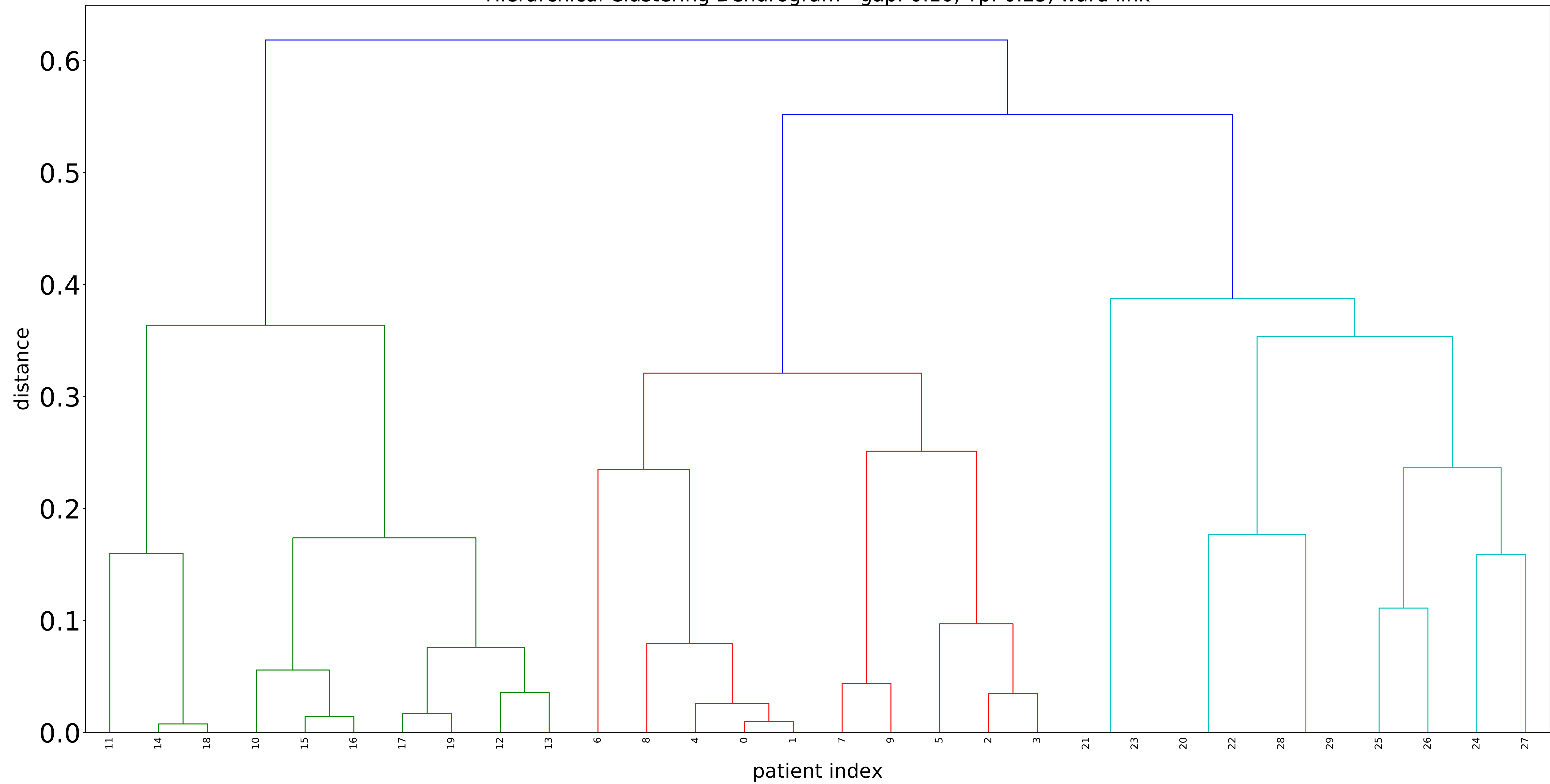
Average values of five clustering indices
gap: 0.00, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.805	0.608	0.822	0.746	0.611
3.0	0.97	0.931	0.953	0.919	0.934
4.0	0.956	0.886	0.917	0.855	0.849
5.0	0.929	0.791	0.839	0.733	0.749
6.0	0.938	0.79	0.831	0.72	0.735
7.0	0.961	0.836	0.859	0.767	0.859
8.0	0.964	0.826	0.848	0.745	0.84

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

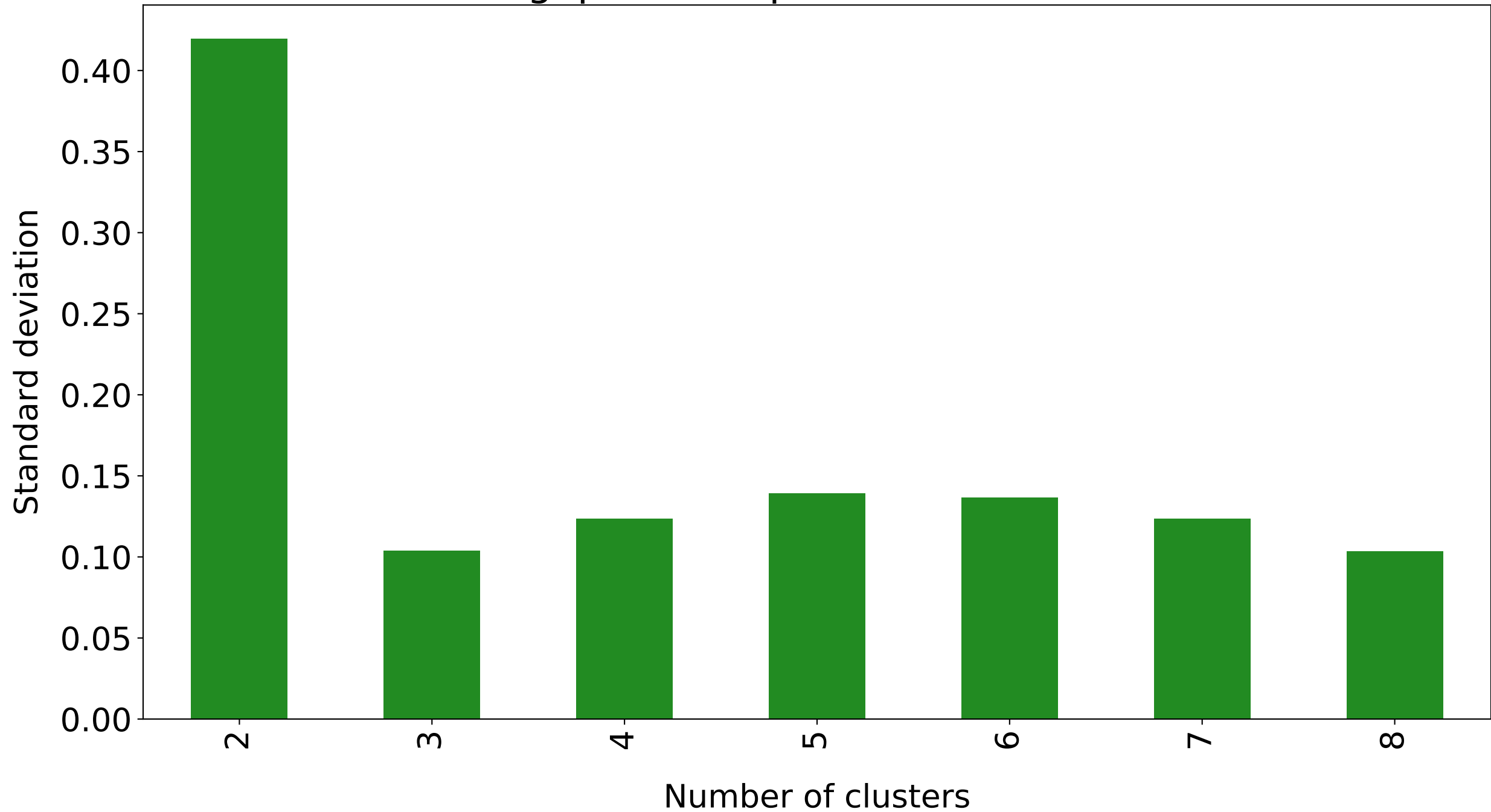


Cophenetic Correlation Coefficient: 0.88963630055

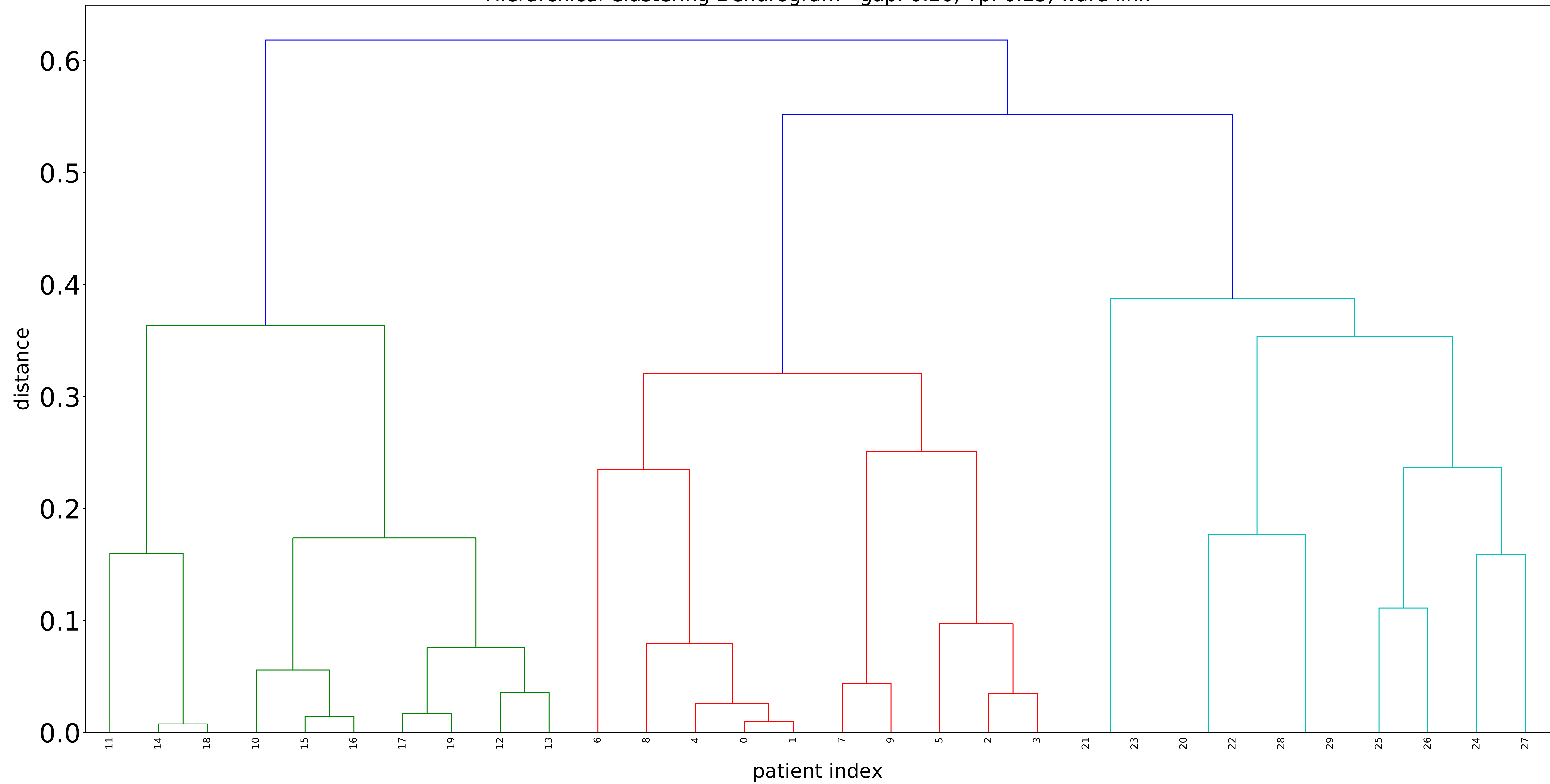
Average values of five clustering indices
gap: 0.10, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.846	0.691	0.859	0.797	0.695
3.0	0.974	0.941	0.96	0.93	0.944
4.0	0.952	0.877	0.911	0.846	0.838
5.0	0.934	0.807	0.851	0.752	0.764
6.0	0.943	0.804	0.842	0.738	0.753
7.0	0.962	0.839	0.862	0.771	0.861
8.0	0.964	0.829	0.851	0.749	0.84

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

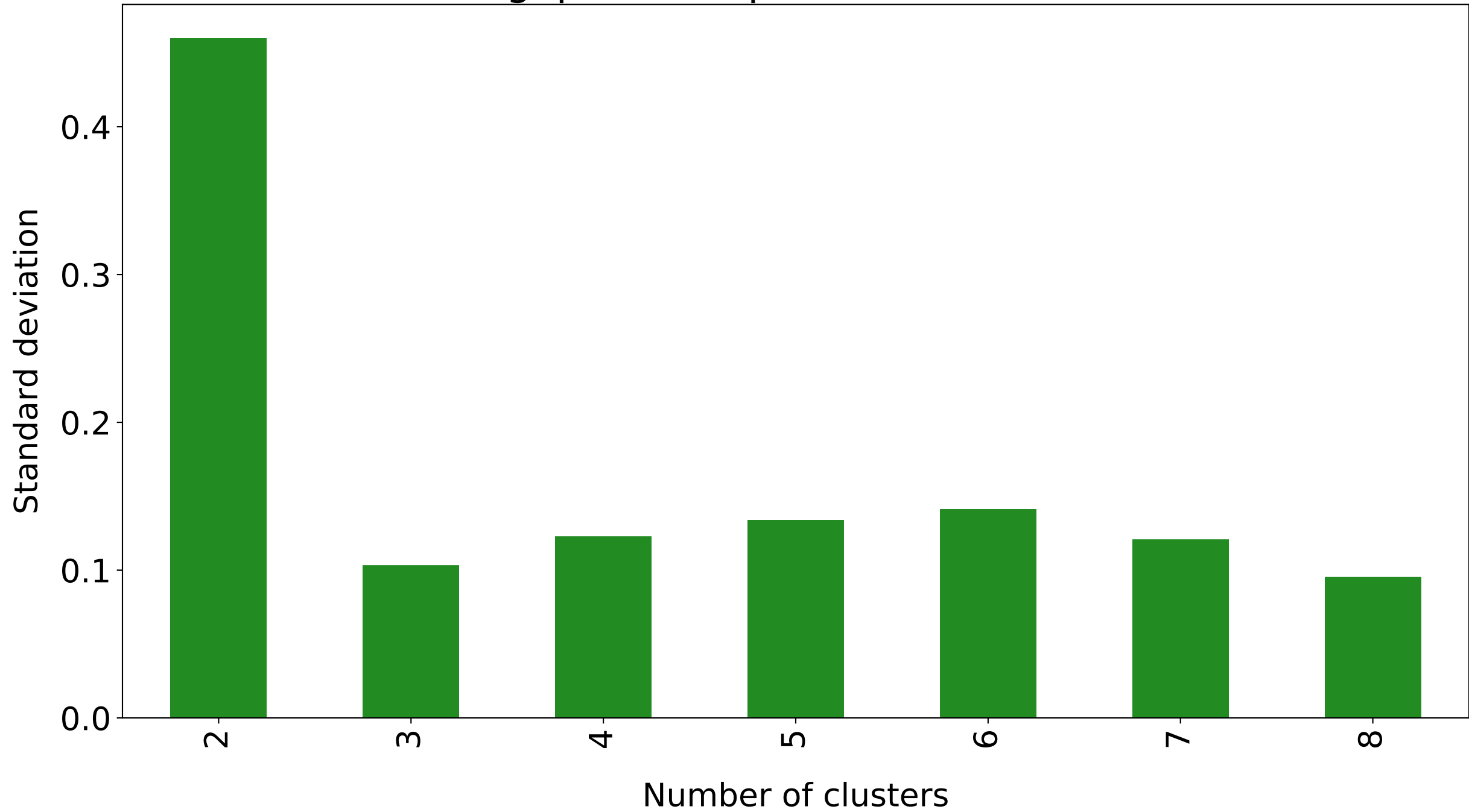


Cophenetic Correlation Coefficient: 0.88963630055

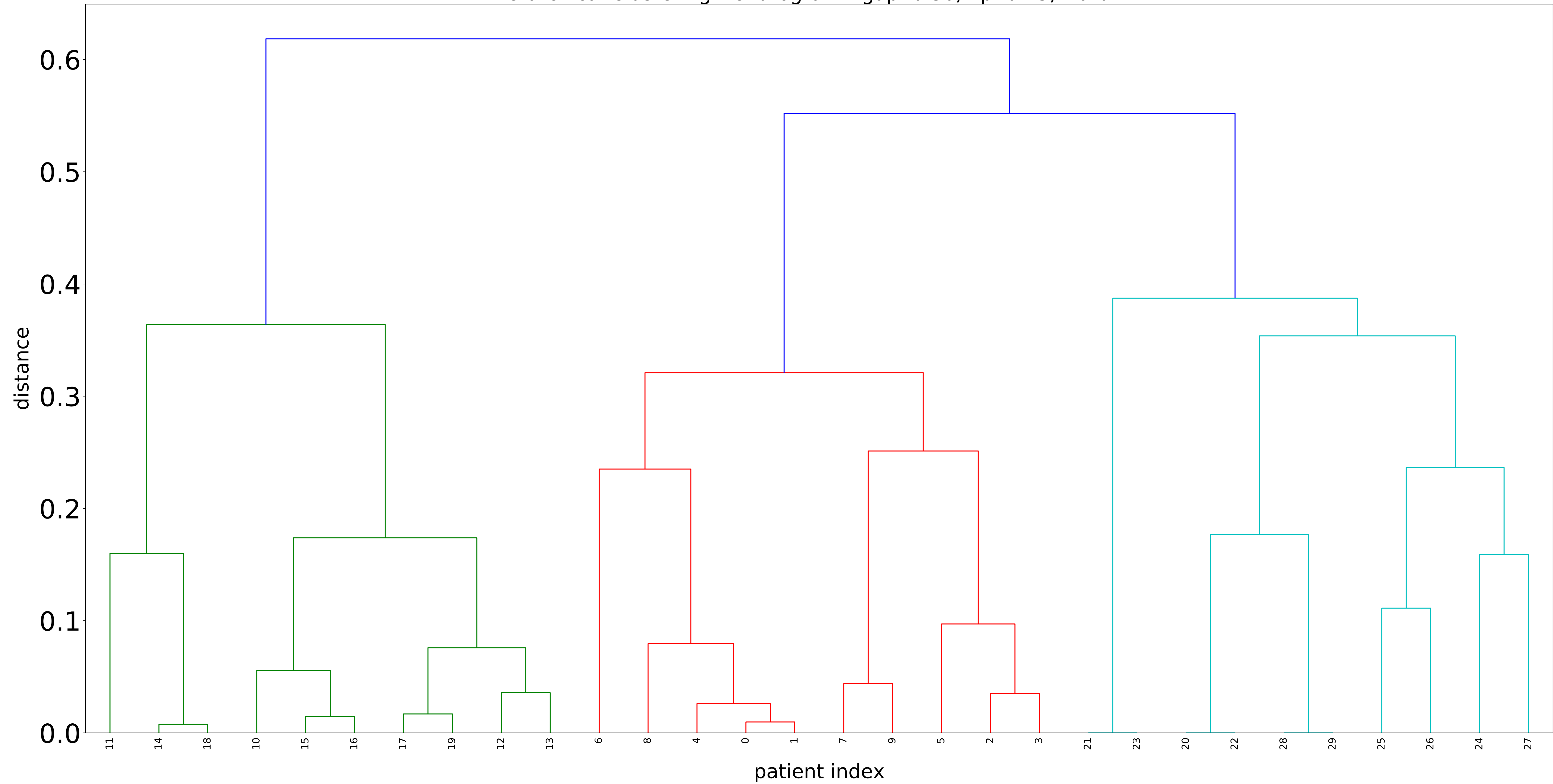
Average values of five clustering indices
gap: 0.20, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.803	0.604	0.821	0.746	0.607
3.0	0.977	0.946	0.963	0.937	0.949
4.0	0.958	0.89	0.92	0.862	0.858
5.0	0.932	0.799	0.844	0.741	0.759
6.0	0.947	0.819	0.854	0.758	0.773
7.0	0.962	0.838	0.86	0.768	0.862
8.0	0.965	0.829	0.851	0.747	0.845

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

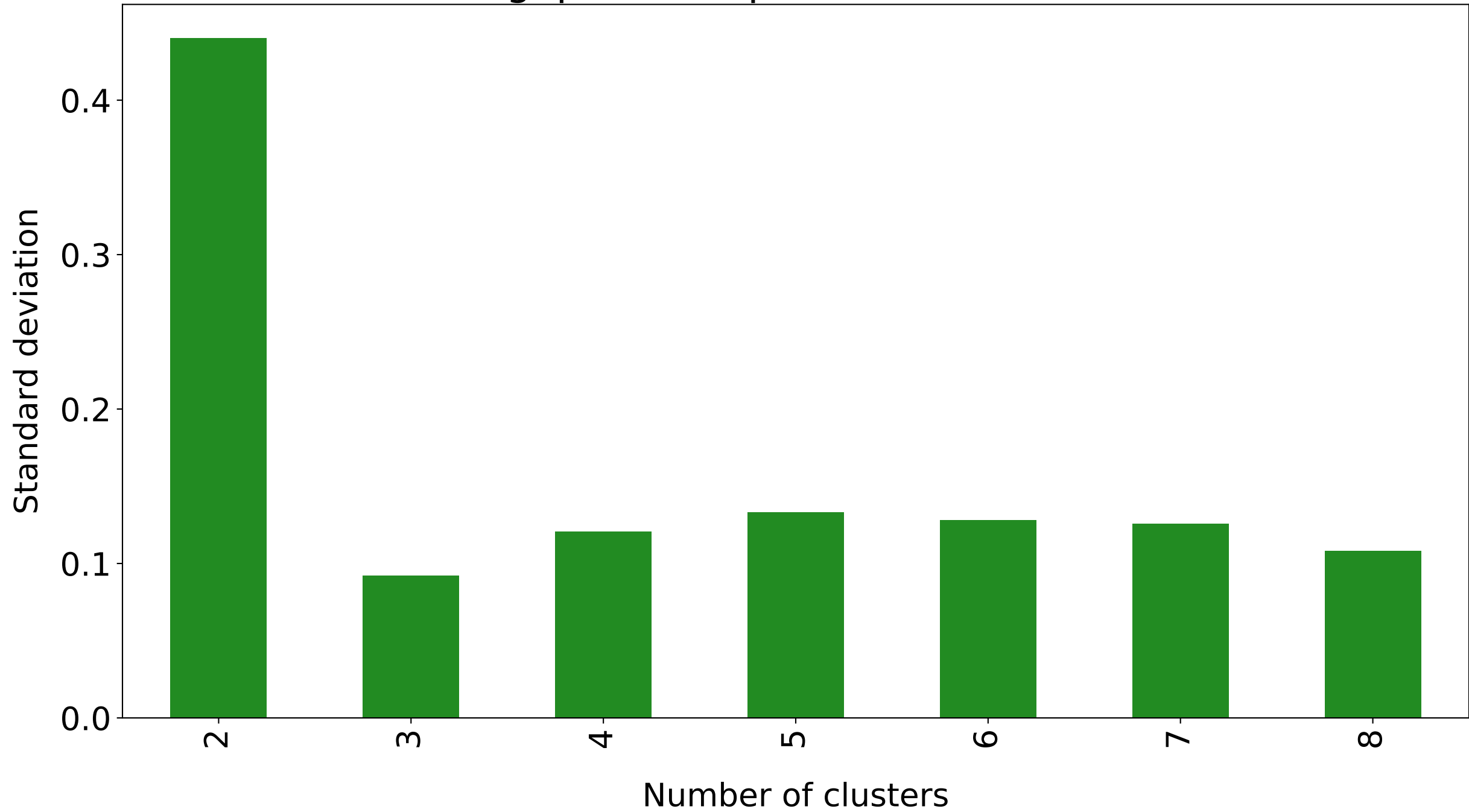


Cophenetic Correlation Coefficient: 0.88963630055

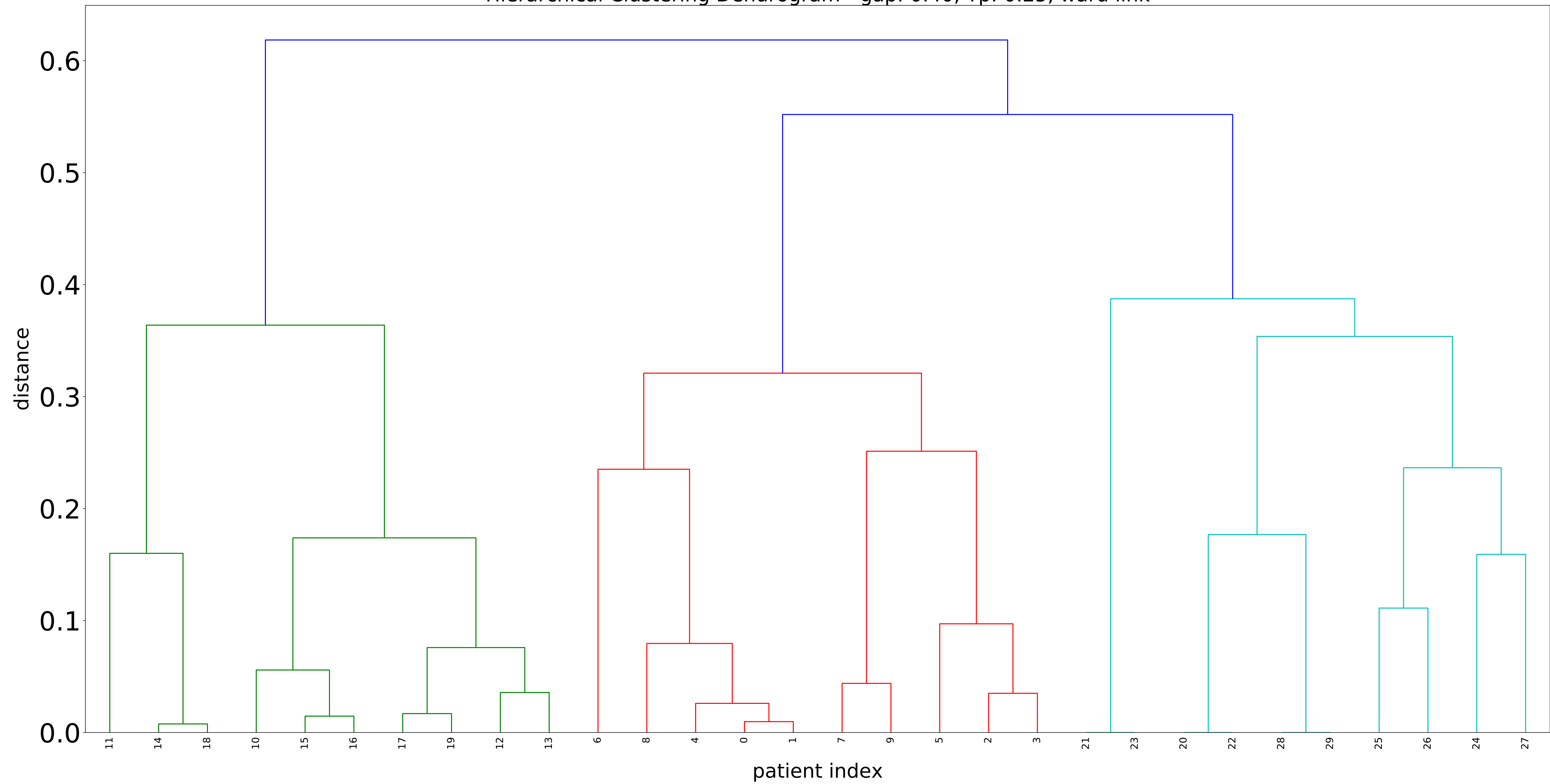
Average values of five clustering indices
gap: 0.30, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.815	0.629	0.831	0.757	0.633
3.0	0.978	0.949	0.965	0.938	0.951
4.0	0.951	0.874	0.908	0.841	0.834
5.0	0.931	0.795	0.841	0.736	0.751
6.0	0.942	0.802	0.841	0.734	0.749
7.0	0.962	0.839	0.862	0.772	0.858
8.0	0.965	0.832	0.853	0.754	0.84

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



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

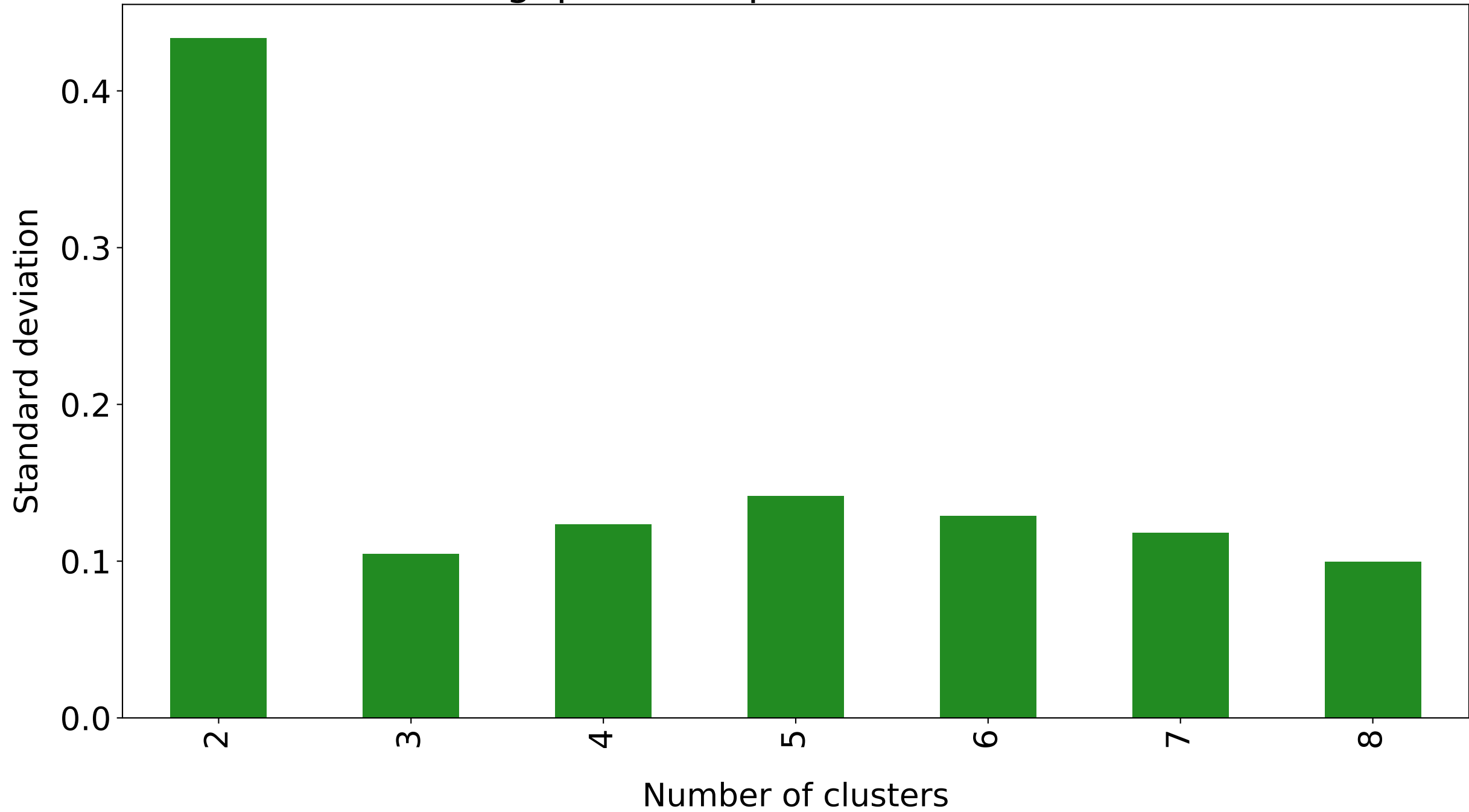


Cophenetic Correlation Coefficient: 0.88963630055

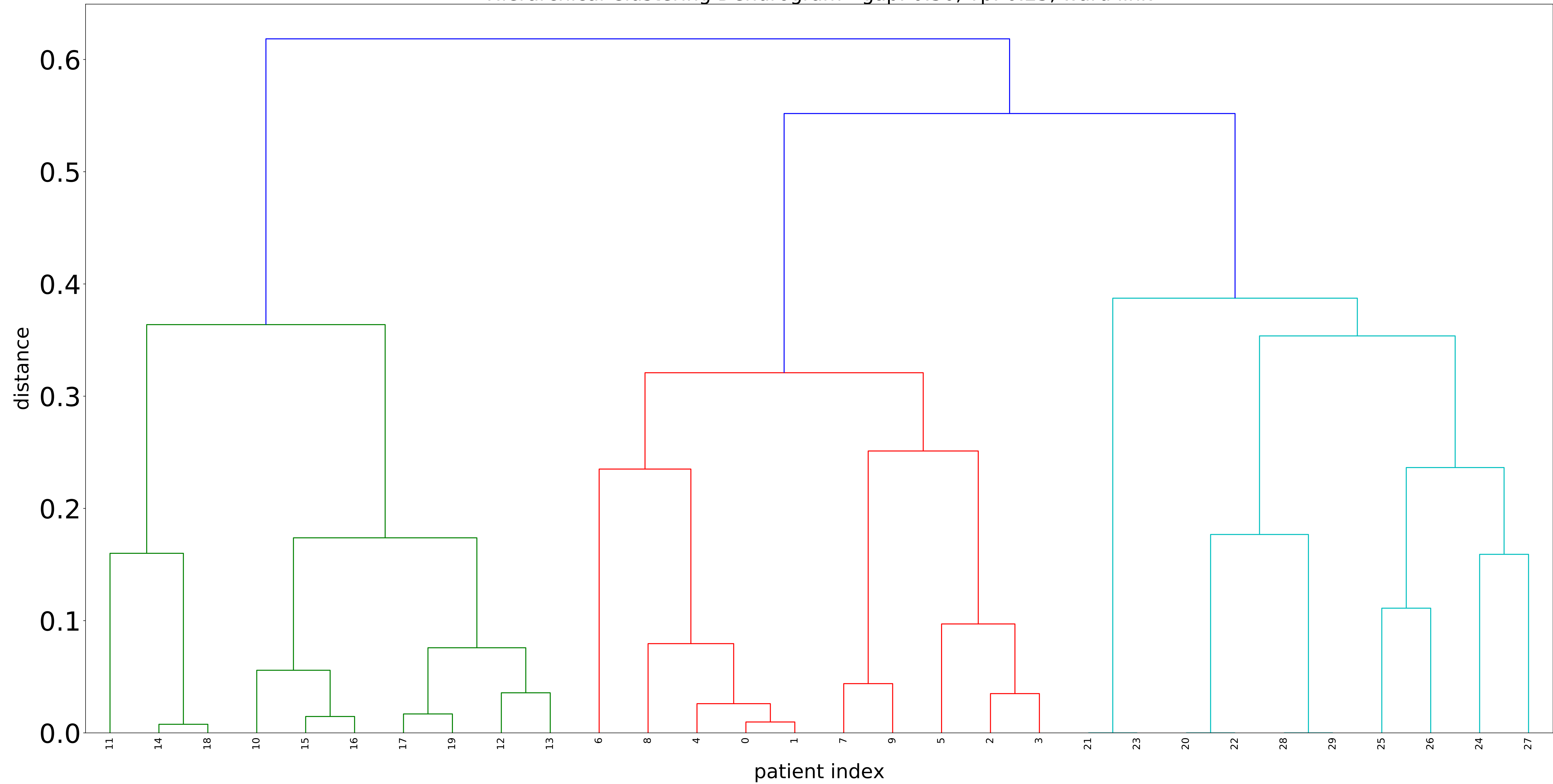
Average values of five clustering indices
gap: 0.40, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.823	0.644	0.837	0.766	0.648
3.0	0.972	0.935	0.956	0.923	0.939
4.0	0.946	0.861	0.899	0.826	0.82
5.0	0.93	0.793	0.84	0.735	0.749
6.0	0.942	0.801	0.839	0.733	0.749
7.0	0.963	0.844	0.867	0.777	0.866
8.0	0.966	0.84	0.86	0.762	0.85

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



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

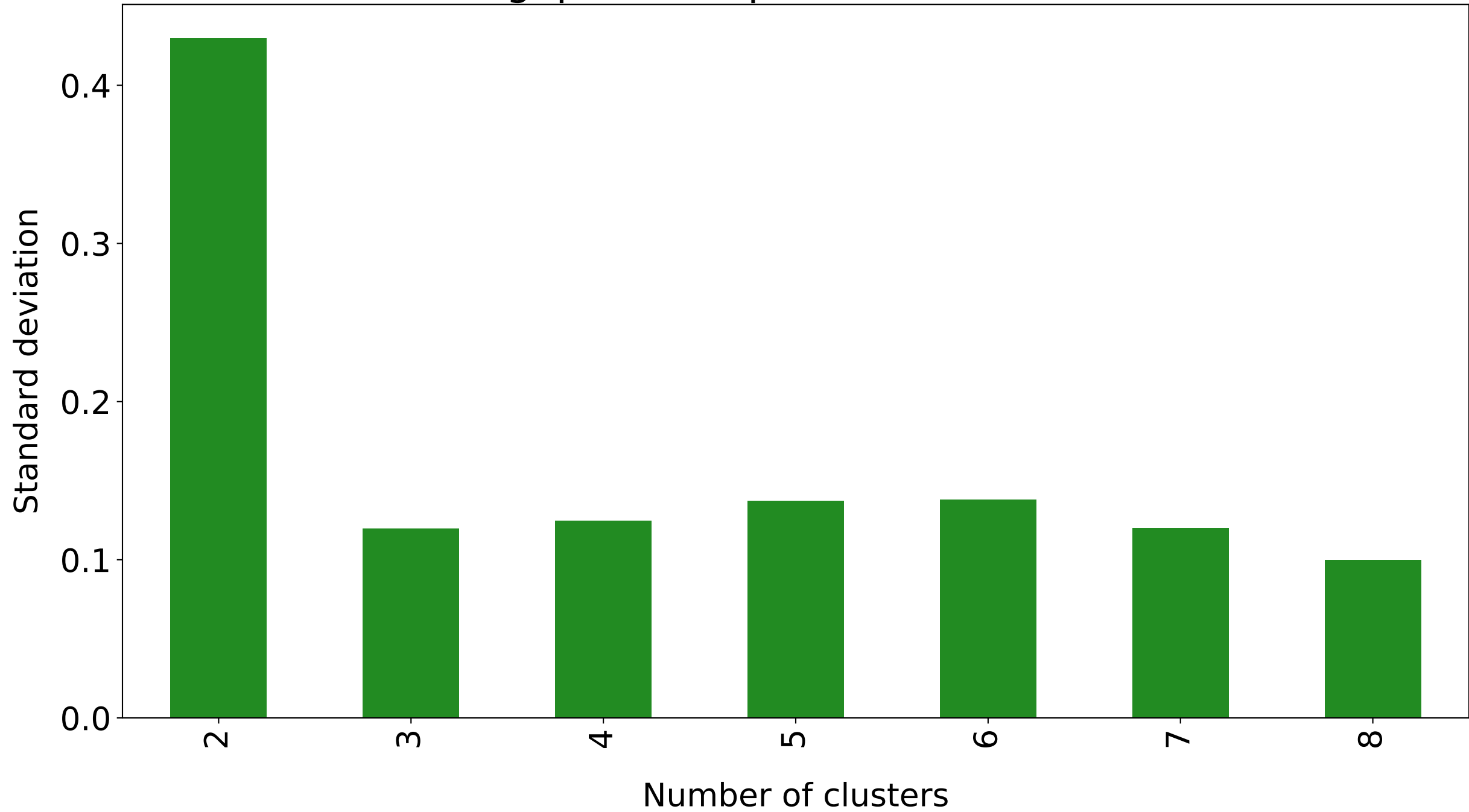


Cophenetic Correlation Coefficient: 0.88963630055

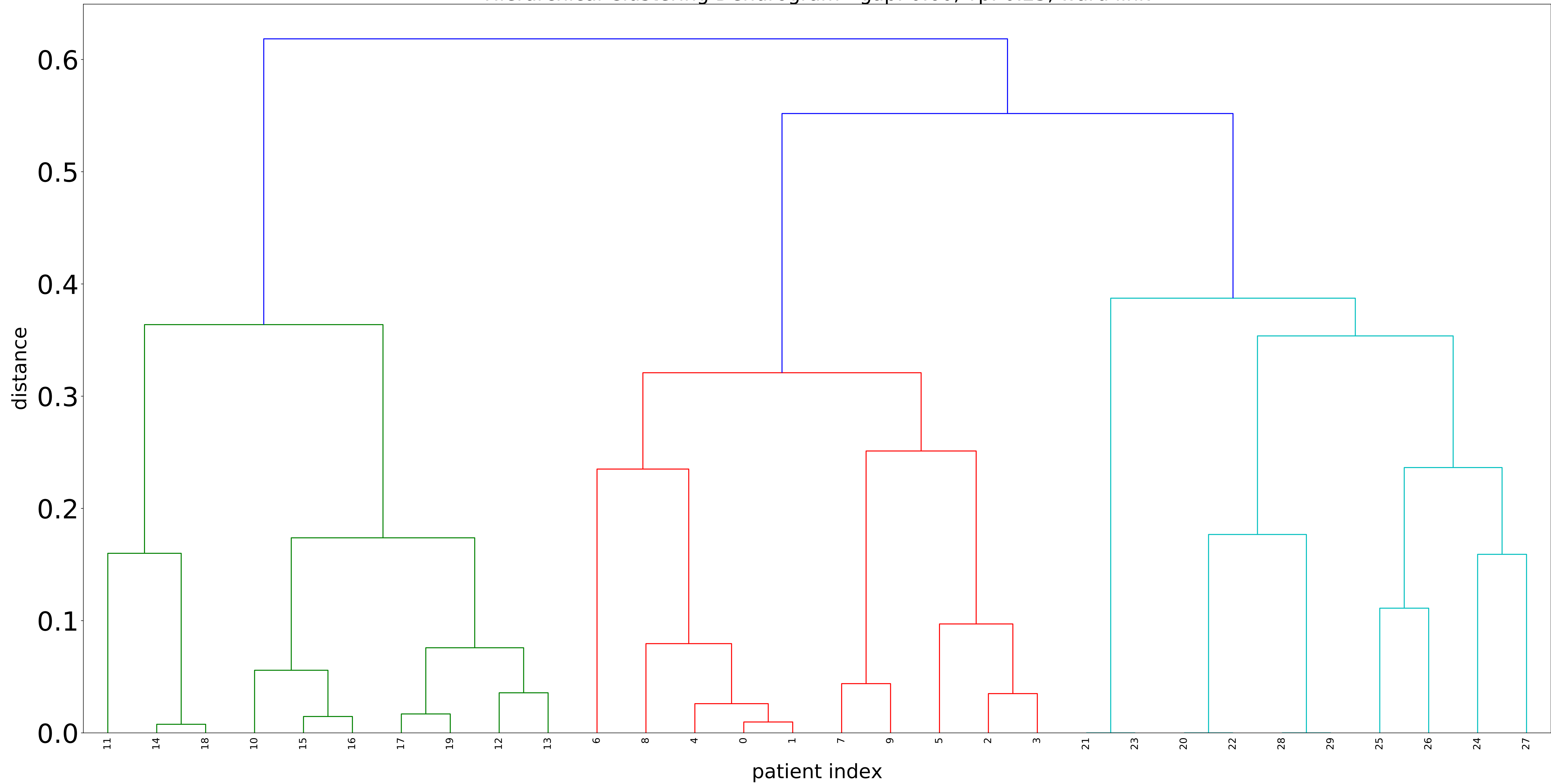
Average values of five clustering indices
gap: 0.50, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.842	0.683	0.855	0.793	0.686
3.0	0.97	0.931	0.953	0.92	0.935
4.0	0.953	0.878	0.911	0.847	0.843
5.0	0.936	0.809	0.852	0.753	0.768
6.0	0.95	0.83	0.863	0.772	0.788
7.0	0.962	0.838	0.861	0.769	0.863
8.0	0.965	0.832	0.853	0.752	0.847

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

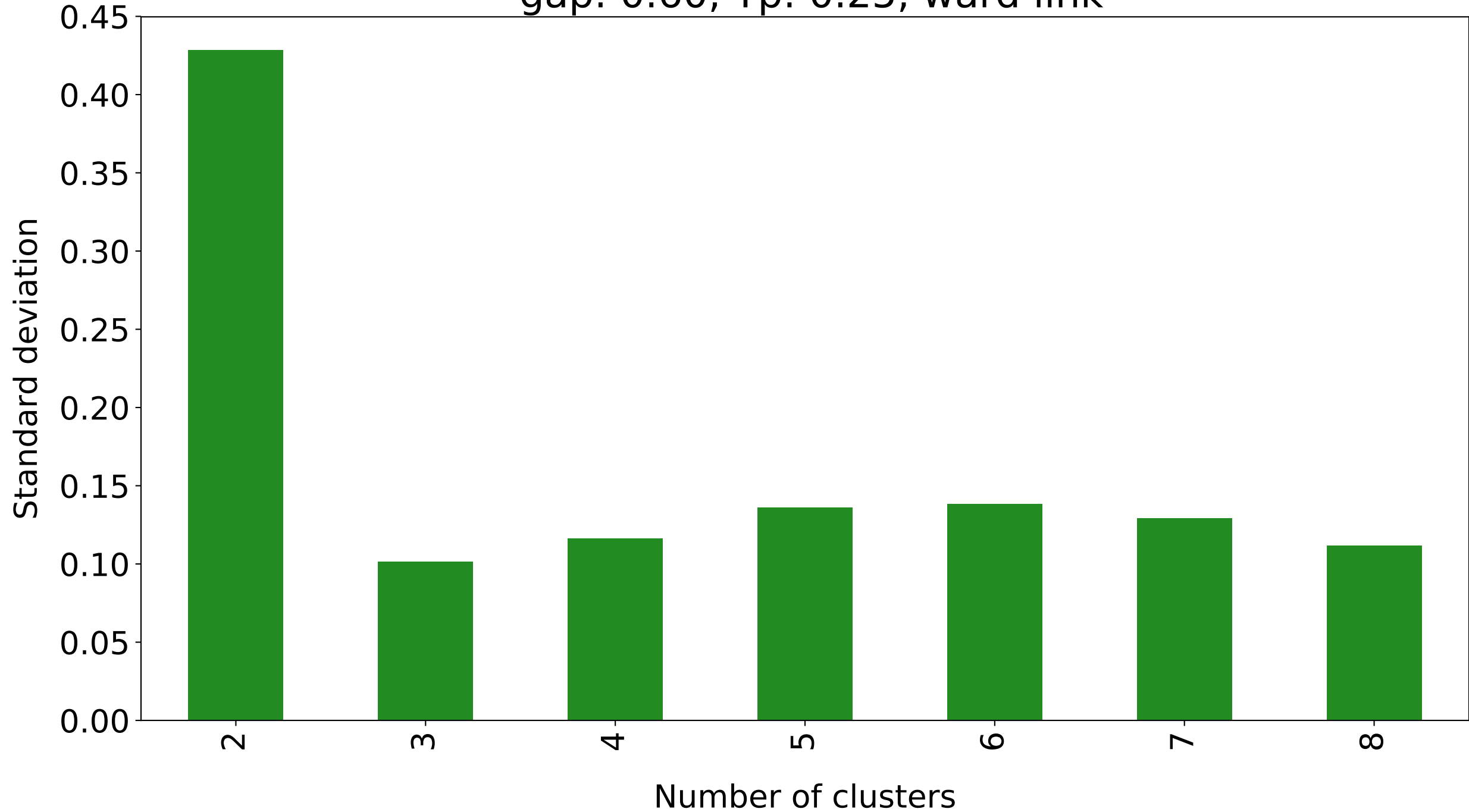


Cophenetic Correlation Coefficient: 0.88963630055

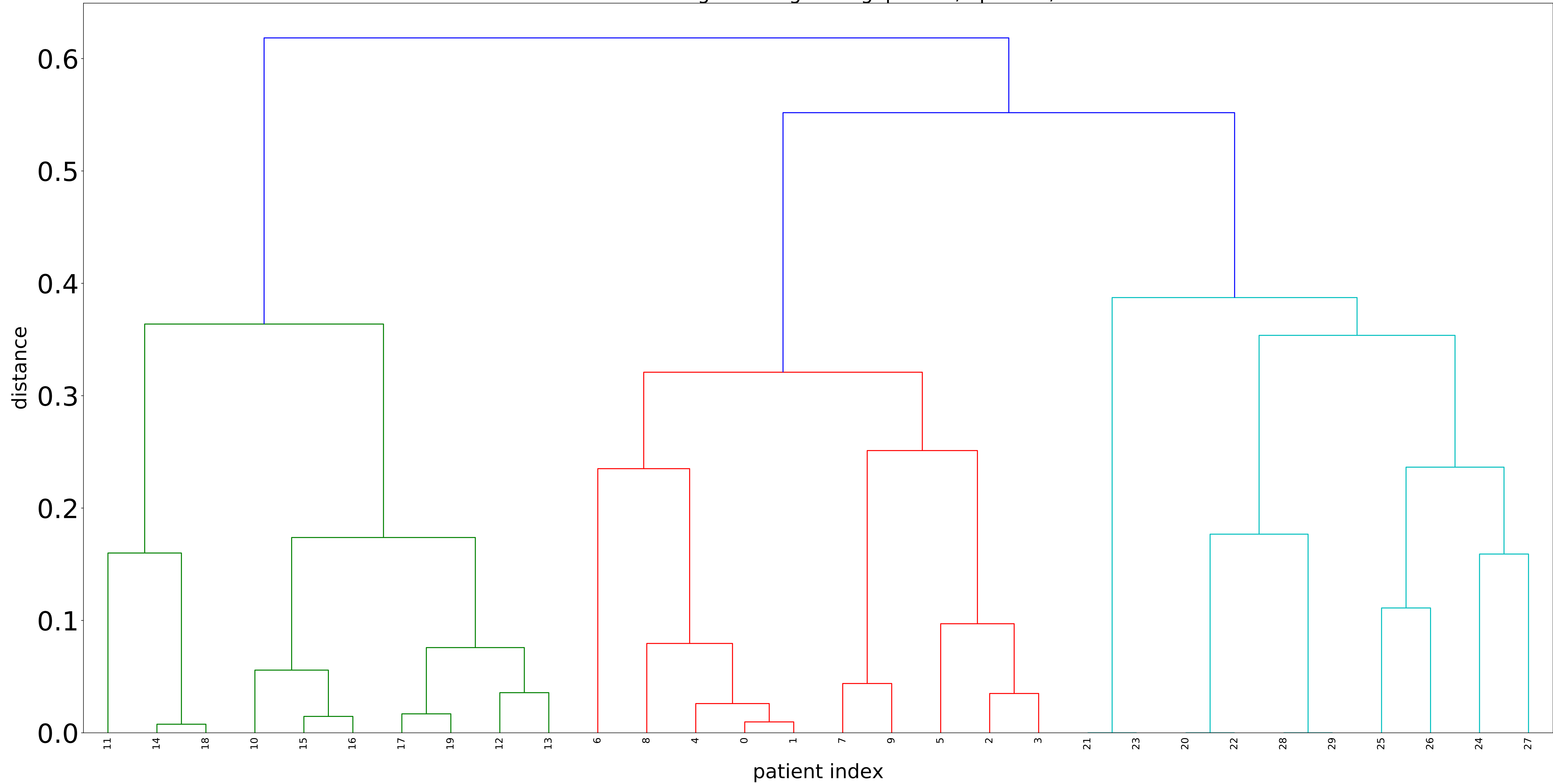
Average values of five clustering indices
gap: 0.60, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.824	0.647	0.838	0.766	0.651
3.0	0.973	0.938	0.957	0.926	0.943
4.0	0.948	0.866	0.902	0.83	0.822
5.0	0.932	0.801	0.846	0.743	0.76
6.0	0.946	0.817	0.854	0.756	0.765
7.0	0.962	0.84	0.863	0.773	0.863
8.0	0.963	0.824	0.846	0.743	0.836

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

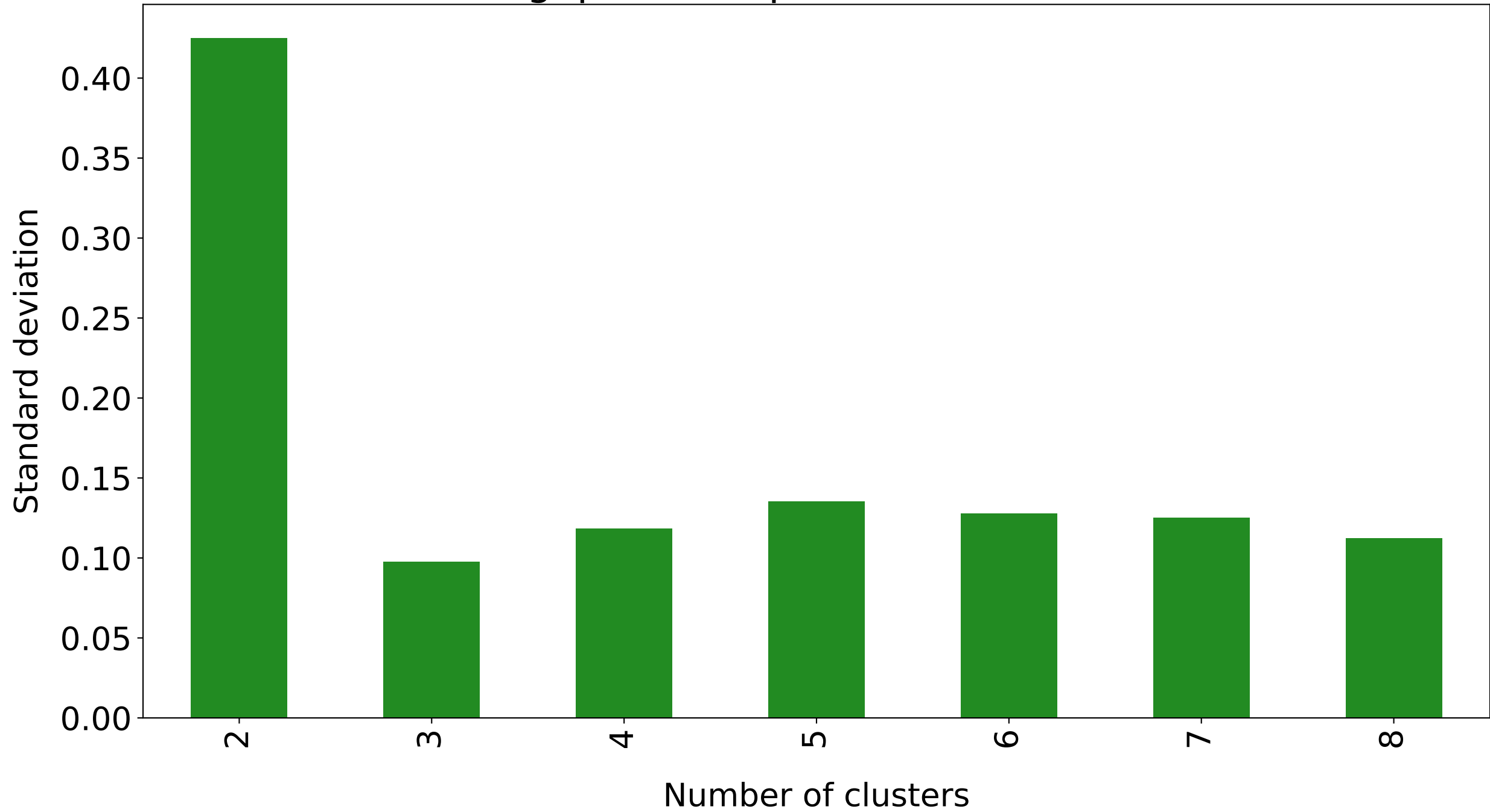


Cophenetic Correlation Coefficient: 0.88963630055

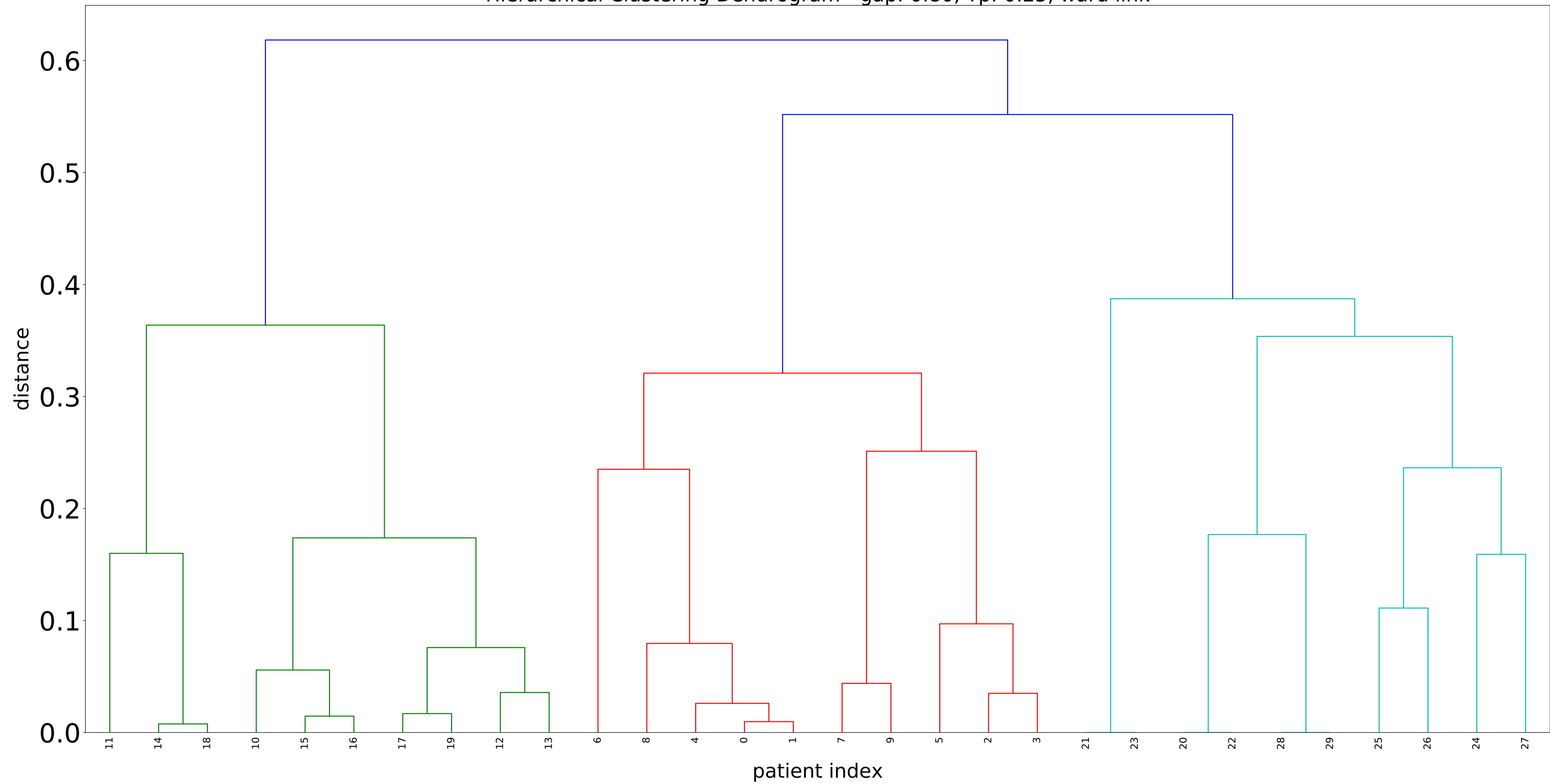
Average values of five clustering indices
gap: 0.70, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.824	0.646	0.838	0.765	0.648
3.0	0.971	0.932	0.954	0.919	0.936
4.0	0.947	0.865	0.902	0.83	0.821
5.0	0.927	0.783	0.833	0.723	0.734
6.0	0.94	0.796	0.836	0.726	0.738
7.0	0.961	0.835	0.858	0.766	0.858
8.0	0.963	0.827	0.849	0.749	0.836

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

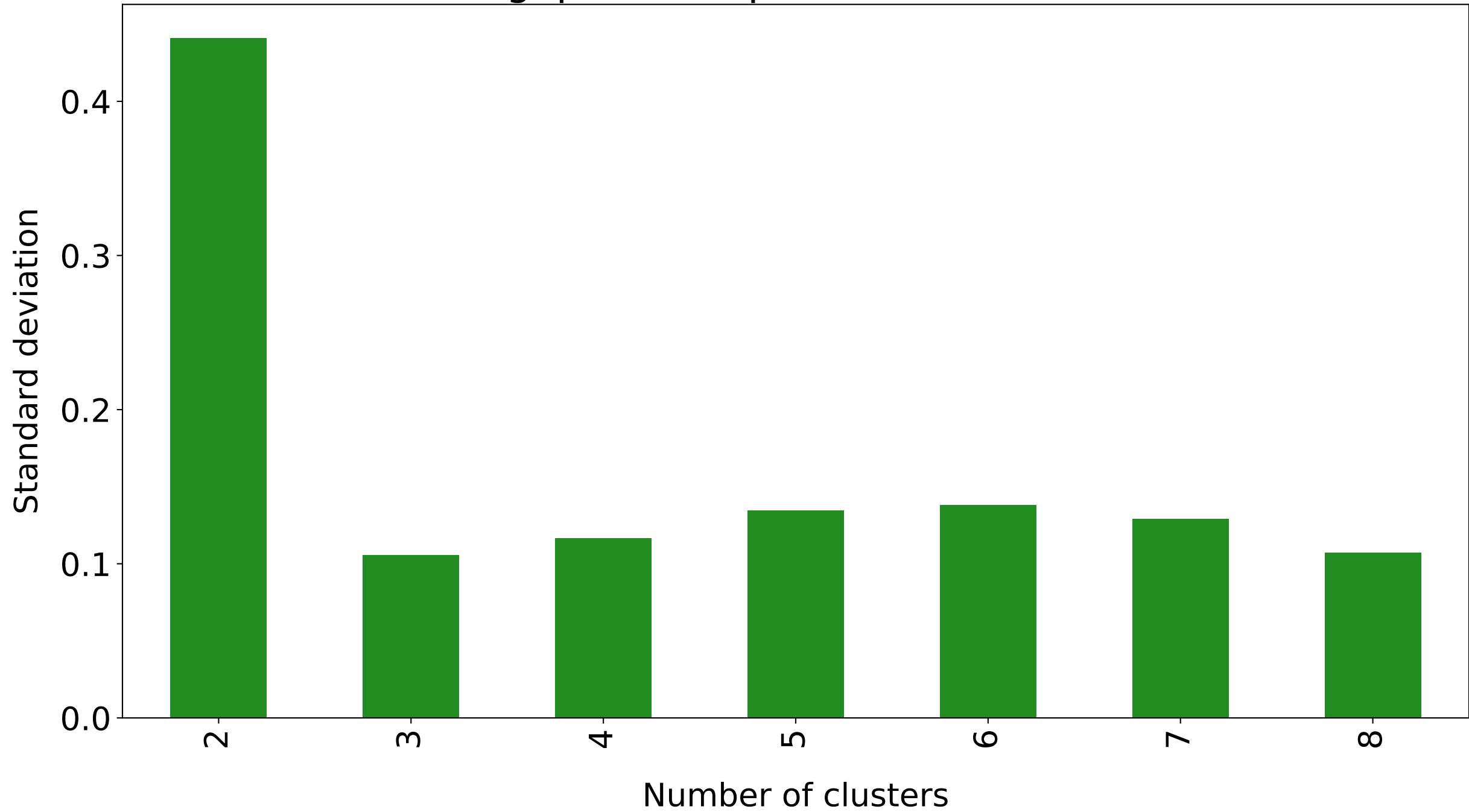


Cophenetic Correlation Coefficient: 0.88963630055

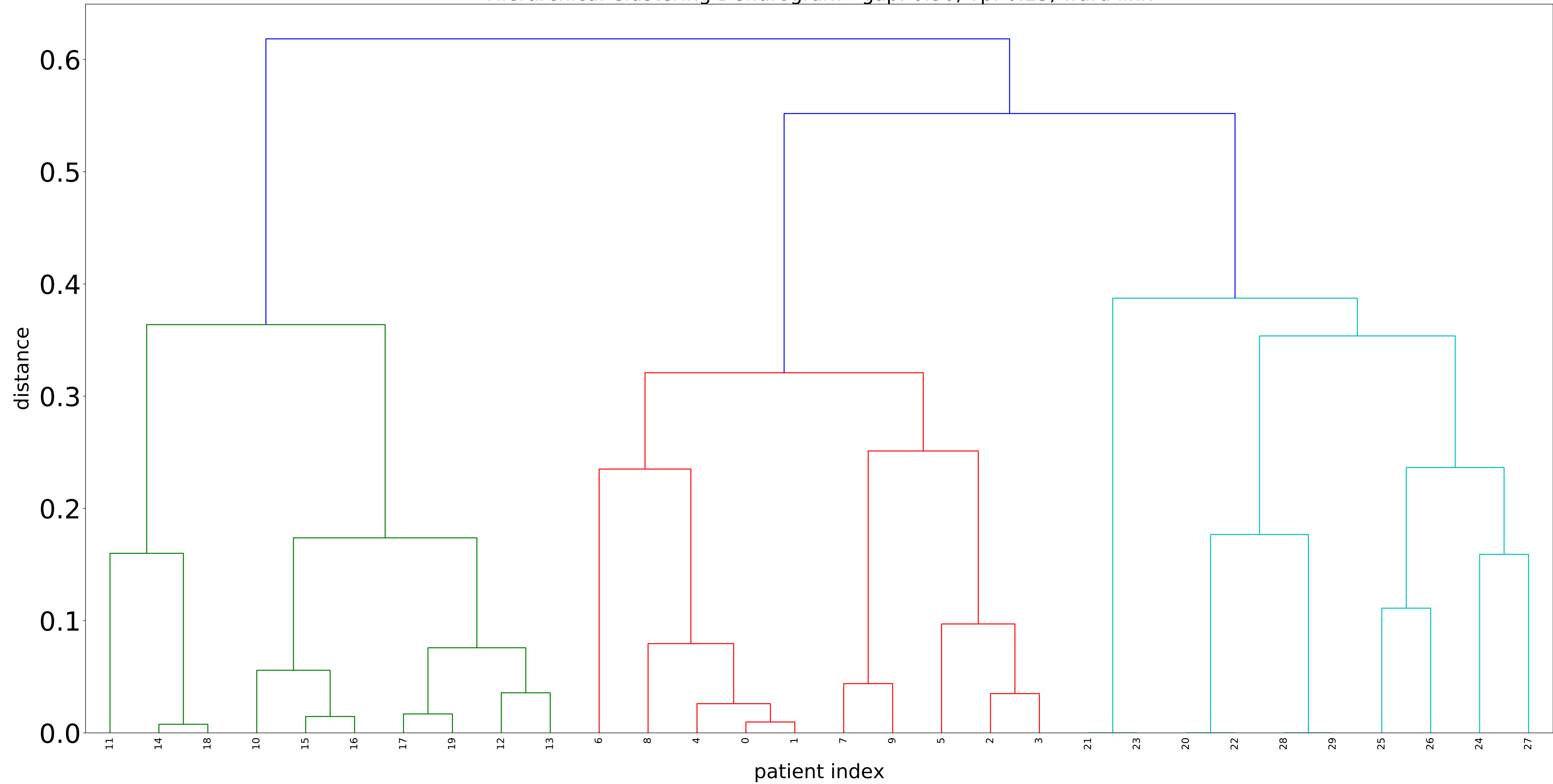
Average values of five clustering indices
gap: 0.80, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.8	0.599	0.816	0.736	0.604
3.0	0.973	0.937	0.957	0.926	0.941
4.0	0.951	0.873	0.907	0.839	0.831
5.0	0.933	0.801	0.846	0.743	0.759
6.0	0.945	0.813	0.85	0.75	0.763
7.0	0.964	0.845	0.867	0.78	0.866
8.0	0.963	0.821	0.843	0.738	0.832

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

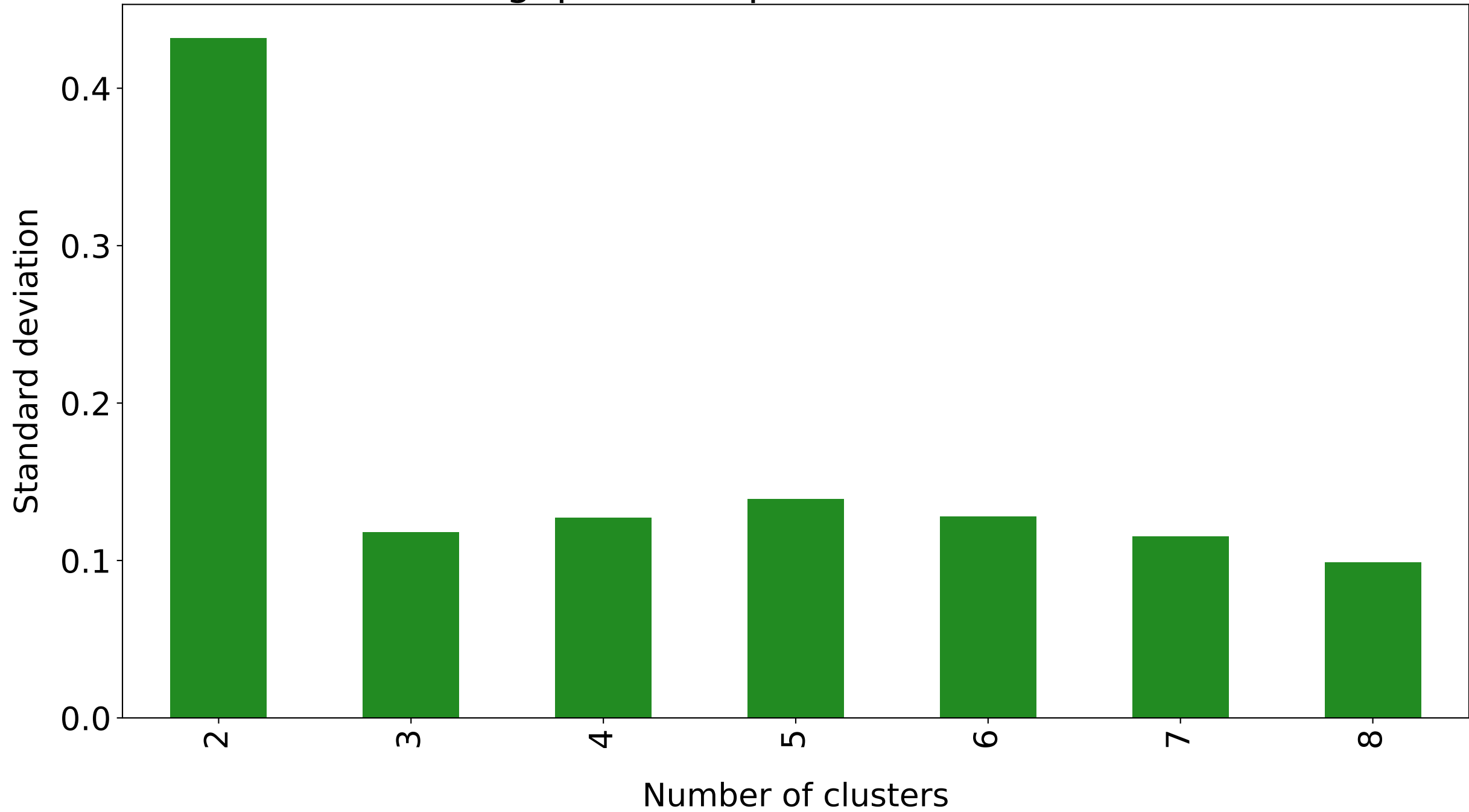


Cophenetic Correlation Coefficient: 0.88963630055

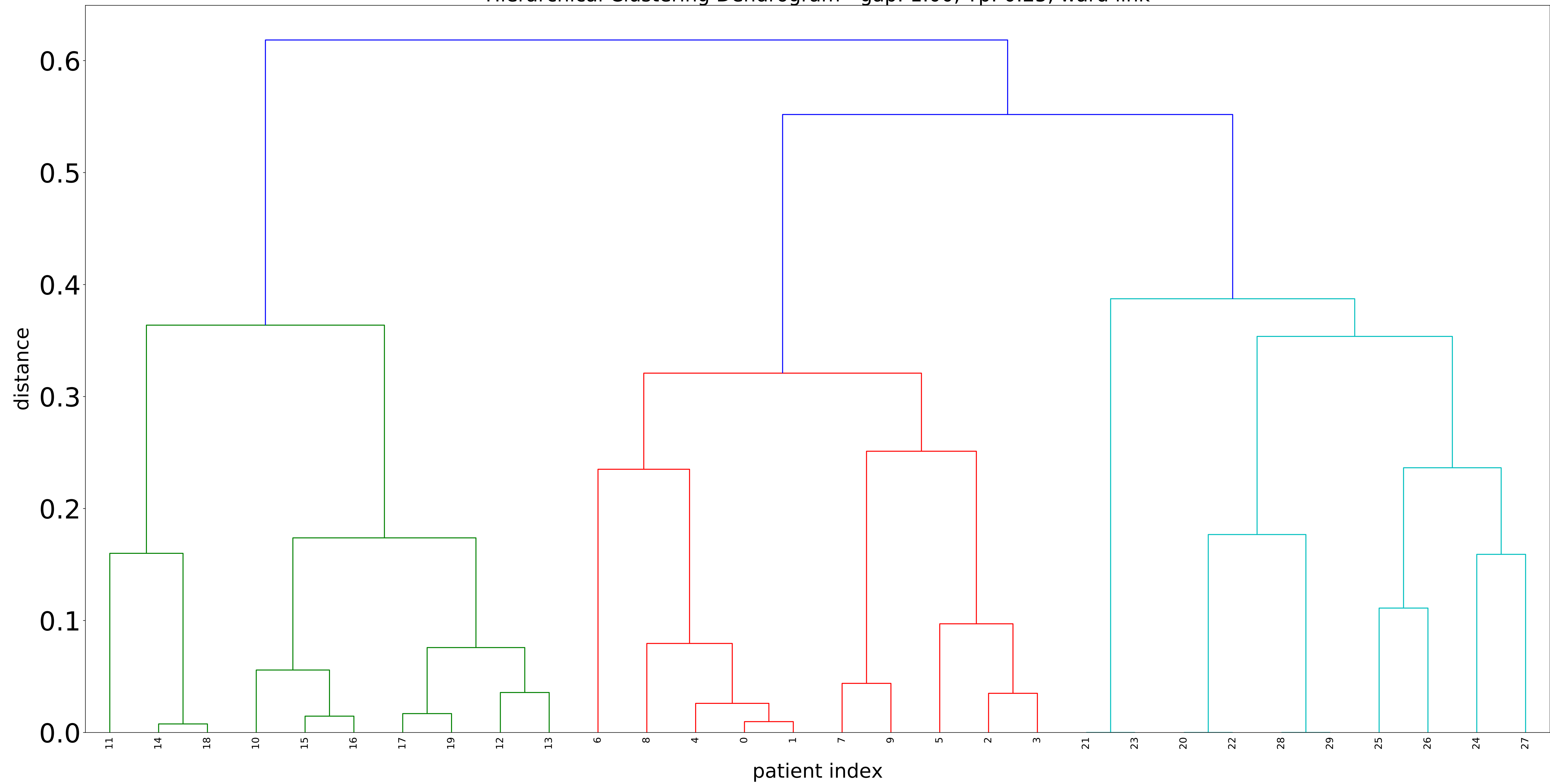
Average values of five clustering indices
gap: 0.90, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.831	0.661	0.845	0.778	0.664
3.0	0.973	0.937	0.957	0.928	0.941
4.0	0.95	0.872	0.907	0.84	0.834
5.0	0.937	0.813	0.855	0.759	0.773
6.0	0.944	0.807	0.844	0.739	0.757
7.0	0.964	0.849	0.871	0.783	0.873
8.0	0.965	0.83	0.852	0.75	0.838

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: 0.88963630055

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

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.825	0.649	0.84	0.77	0.654
3.0	0.968	0.925	0.949	0.912	0.929
4.0	0.95	0.872	0.907	0.839	0.832
5.0	0.931	0.796	0.842	0.74	0.754
6.0	0.948	0.821	0.856	0.758	0.772
7.0	0.963	0.842	0.865	0.775	0.866
8.0	0.964	0.829	0.851	0.748	0.845

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

