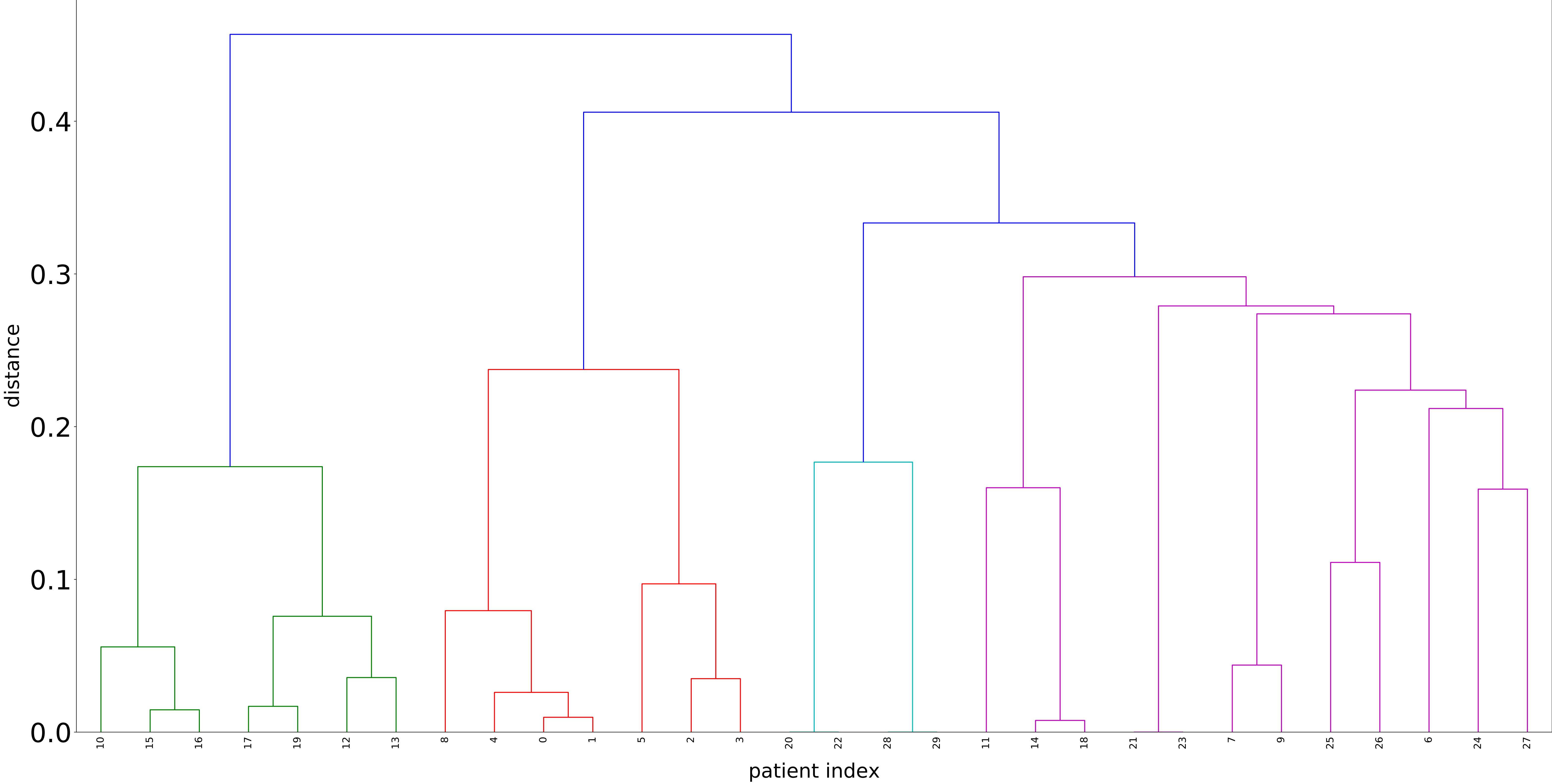


Hierarchical Clustering Dendrogram - gap: -0.40, Tp: 0.25, ward link

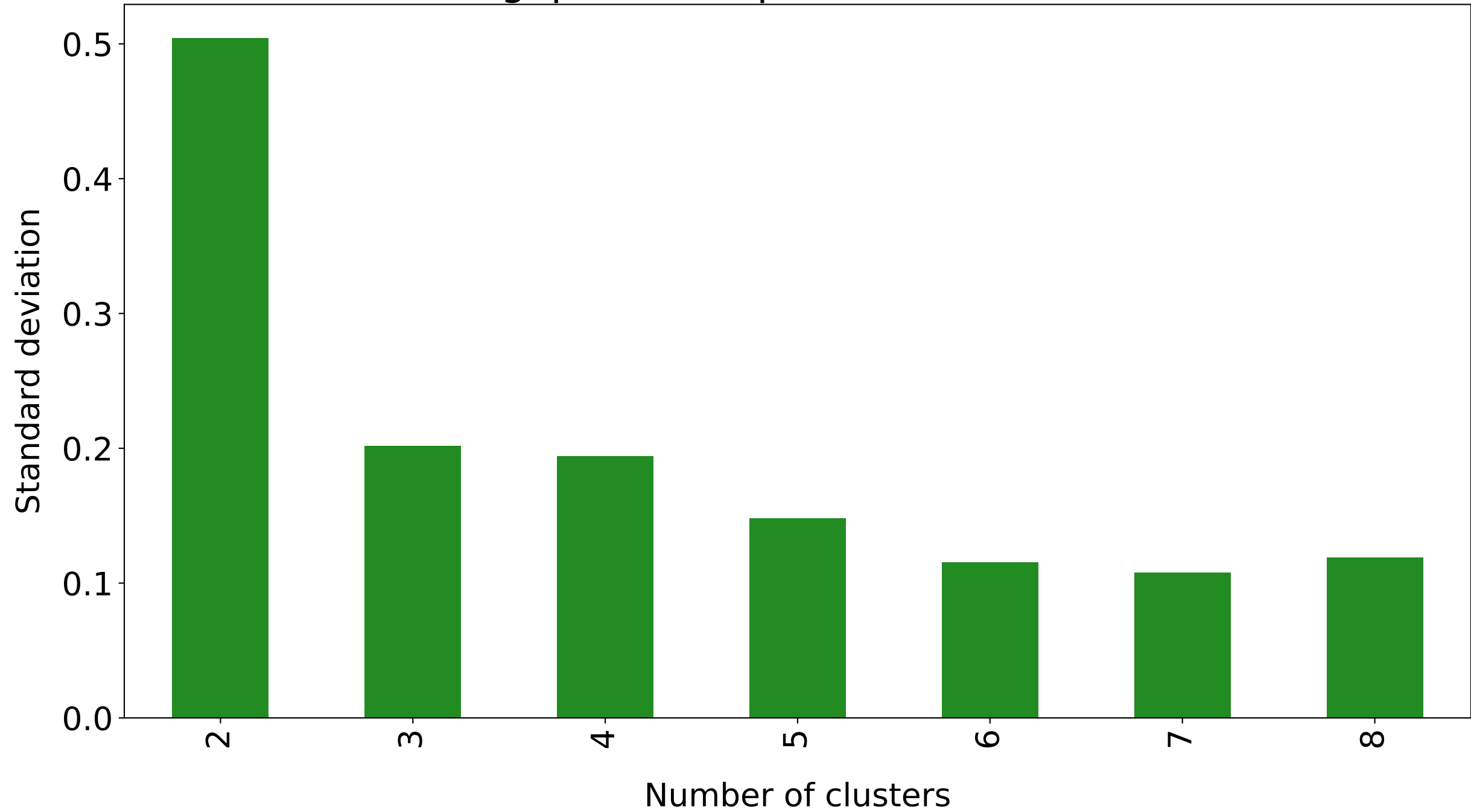


Cophenetic Correlation Coefficient: 0.797832016033

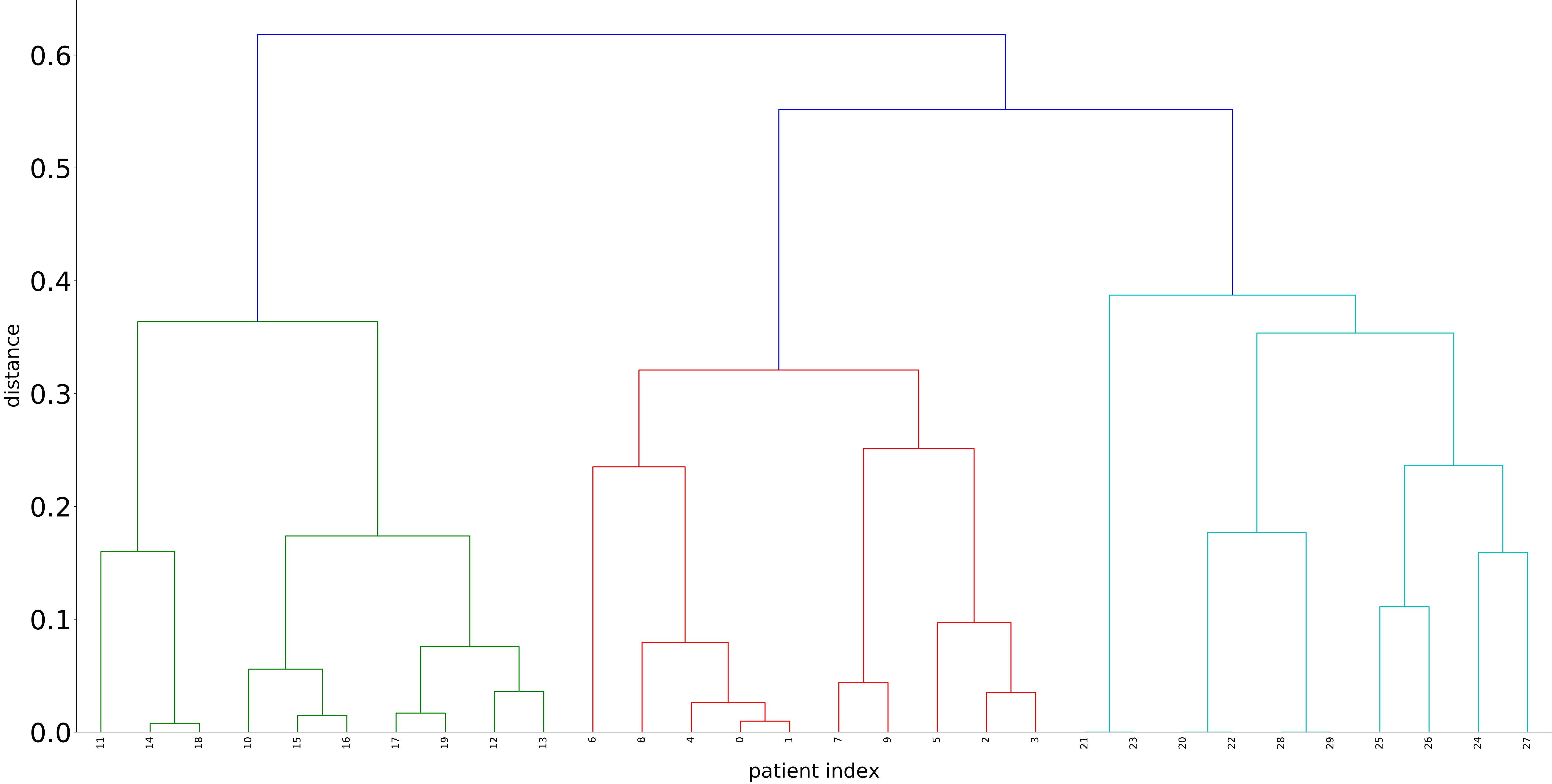
Average values of five clustering indices
gap: -0.40, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.831	0.638	0.866	0.806	0.637
3.0	0.932	0.854	0.909	0.853	0.842
4.0	0.907	0.762	0.826	0.727	0.747
5.0	0.915	0.734	0.788	0.666	0.724
6.0	0.94	0.78	0.817	0.7	0.748
7.0	0.959	0.826	0.852	0.75	0.784
8.0	0.962	0.813	0.835	0.729	0.806

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

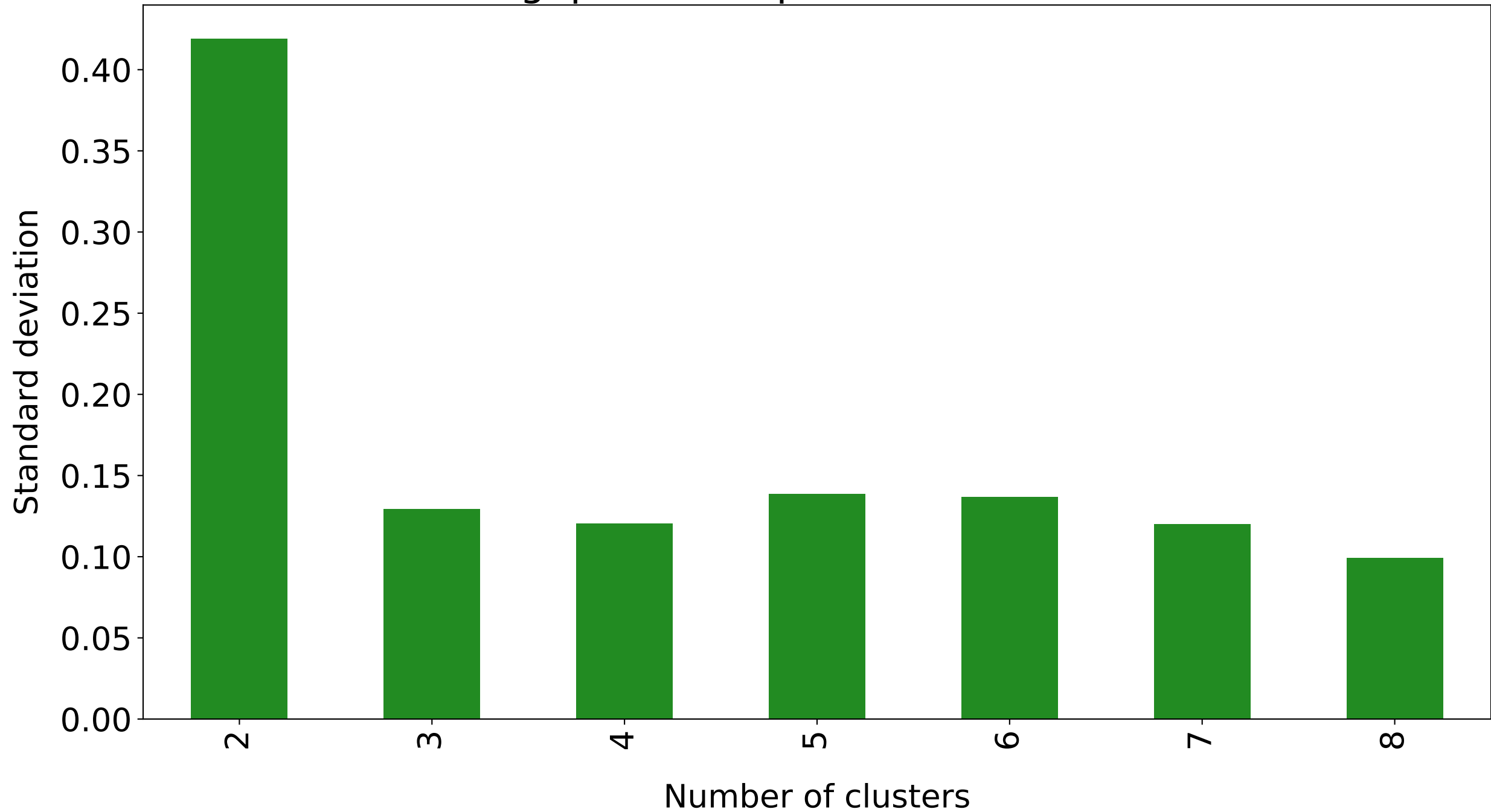


Cophenetic Correlation Coefficient: 0.88963630055

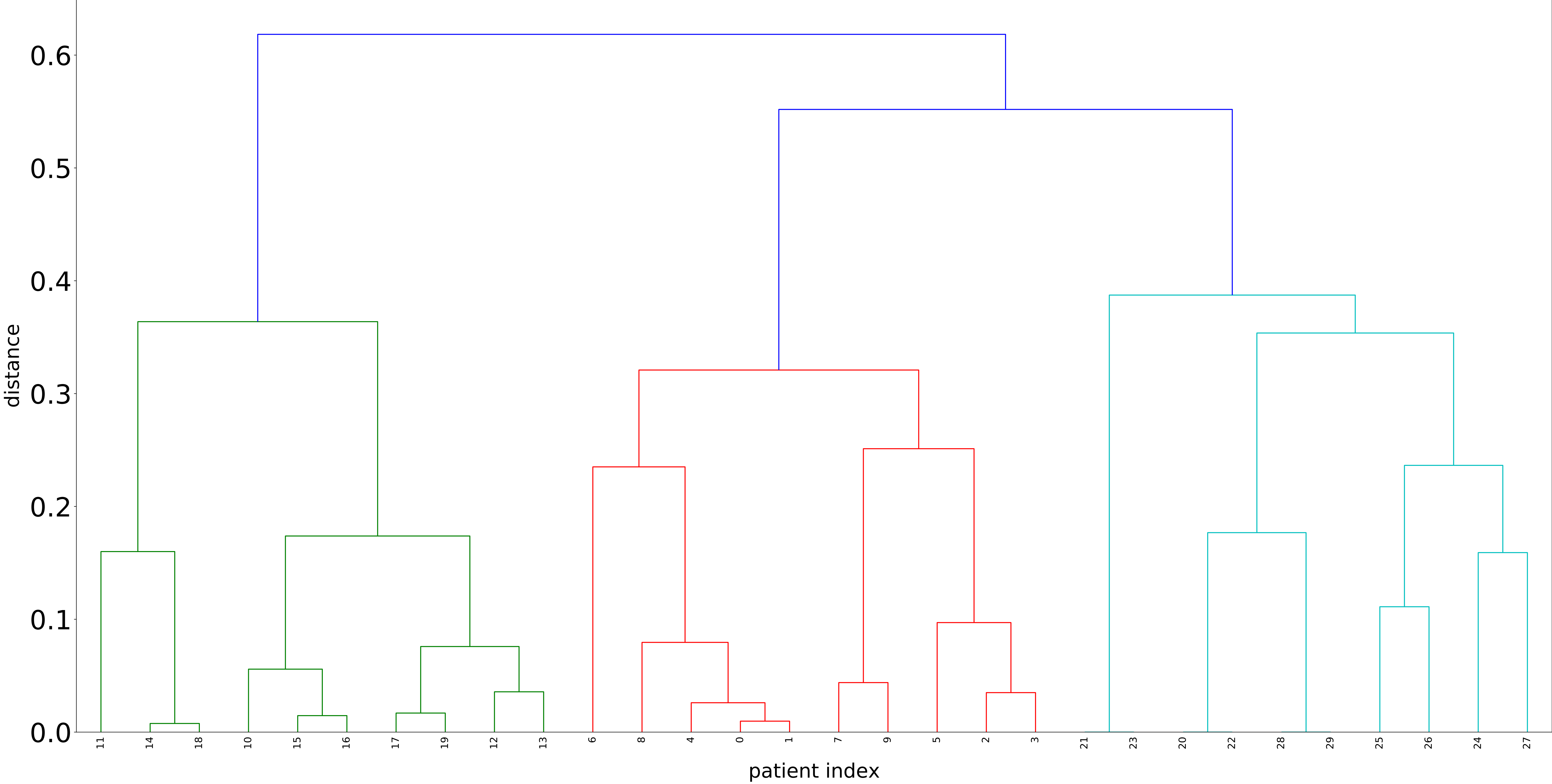
Average values of five clustering indices
gap: -0.30, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.844	0.687	0.857	0.794	0.691
3.0	0.966	0.922	0.947	0.91	0.926
4.0	0.953	0.879	0.912	0.848	0.843
5.0	0.934	0.805	0.849	0.749	0.762
6.0	0.944	0.81	0.847	0.746	0.76
7.0	0.961	0.837	0.86	0.768	0.862
8.0	0.964	0.829	0.85	0.748	0.843

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

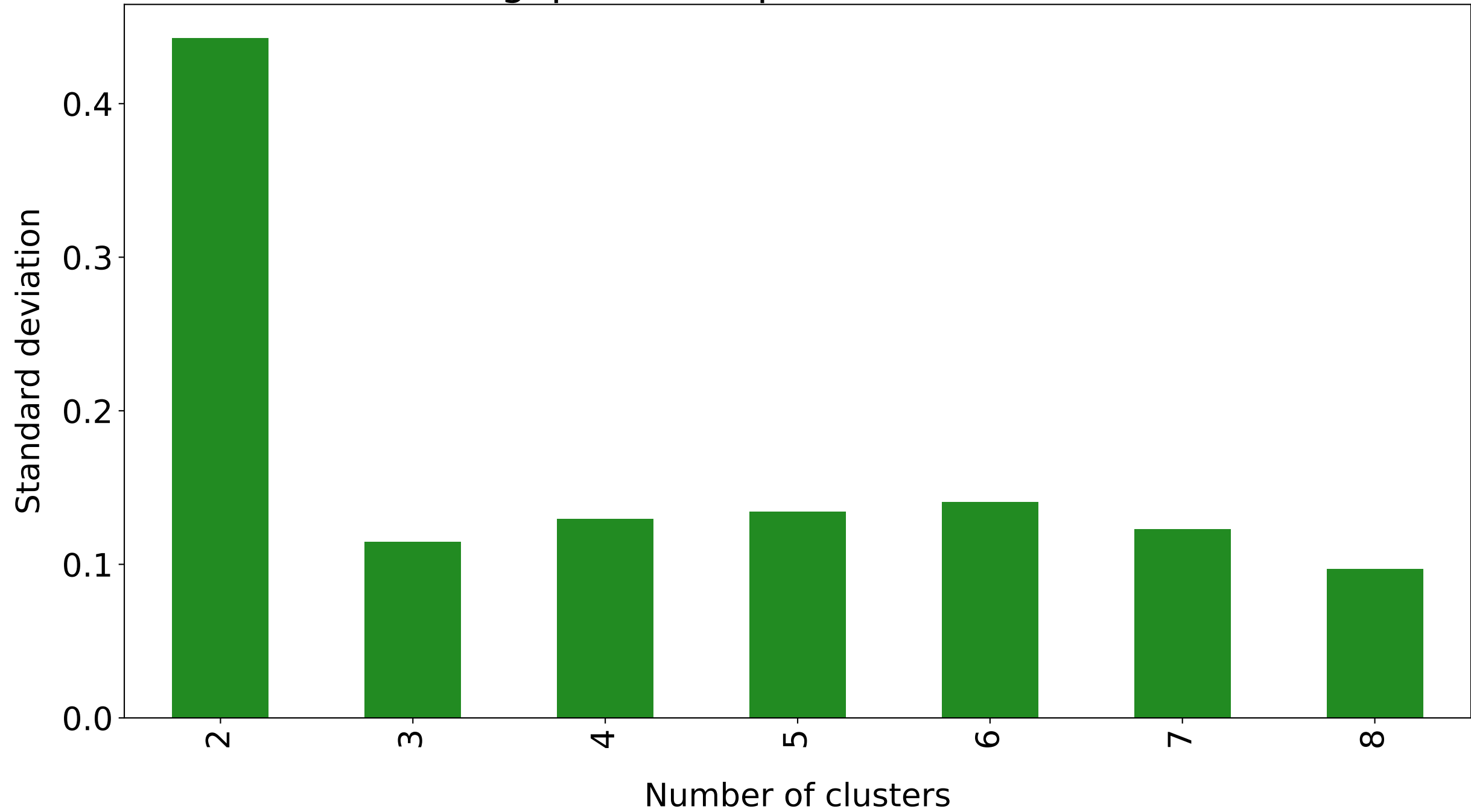


Cophenetic Correlation Coefficient: 0.88963630055

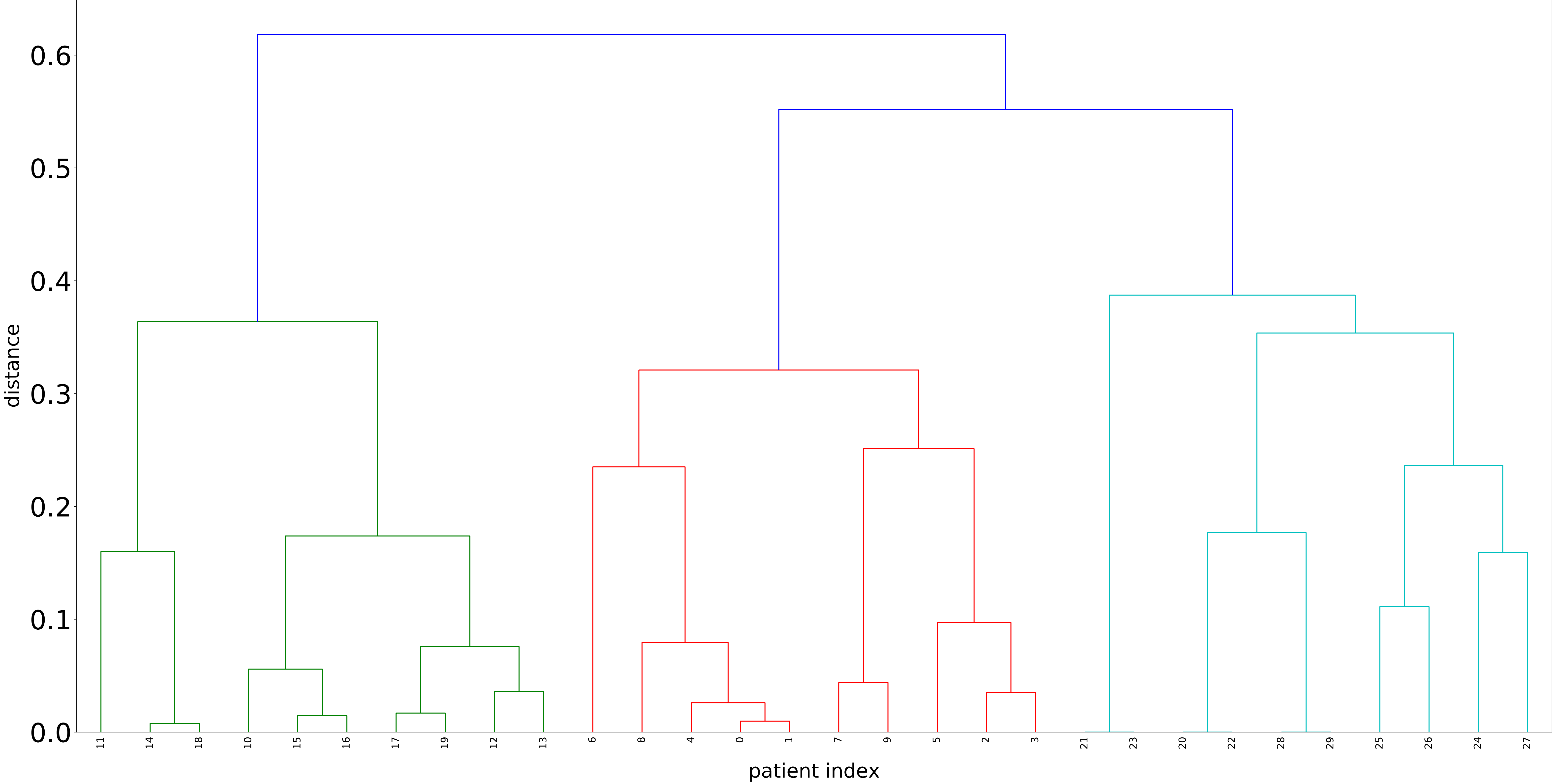
Average values of five clustering indices
gap: -0.20, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.801	0.601	0.817	0.738	0.603
3.0	0.968	0.926	0.949	0.913	0.93
4.0	0.946	0.862	0.9	0.828	0.82
5.0	0.932	0.799	0.845	0.741	0.75
6.0	0.94	0.797	0.837	0.731	0.742
7.0	0.962	0.838	0.861	0.77	0.859
8.0	0.965	0.835	0.856	0.756	0.853

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

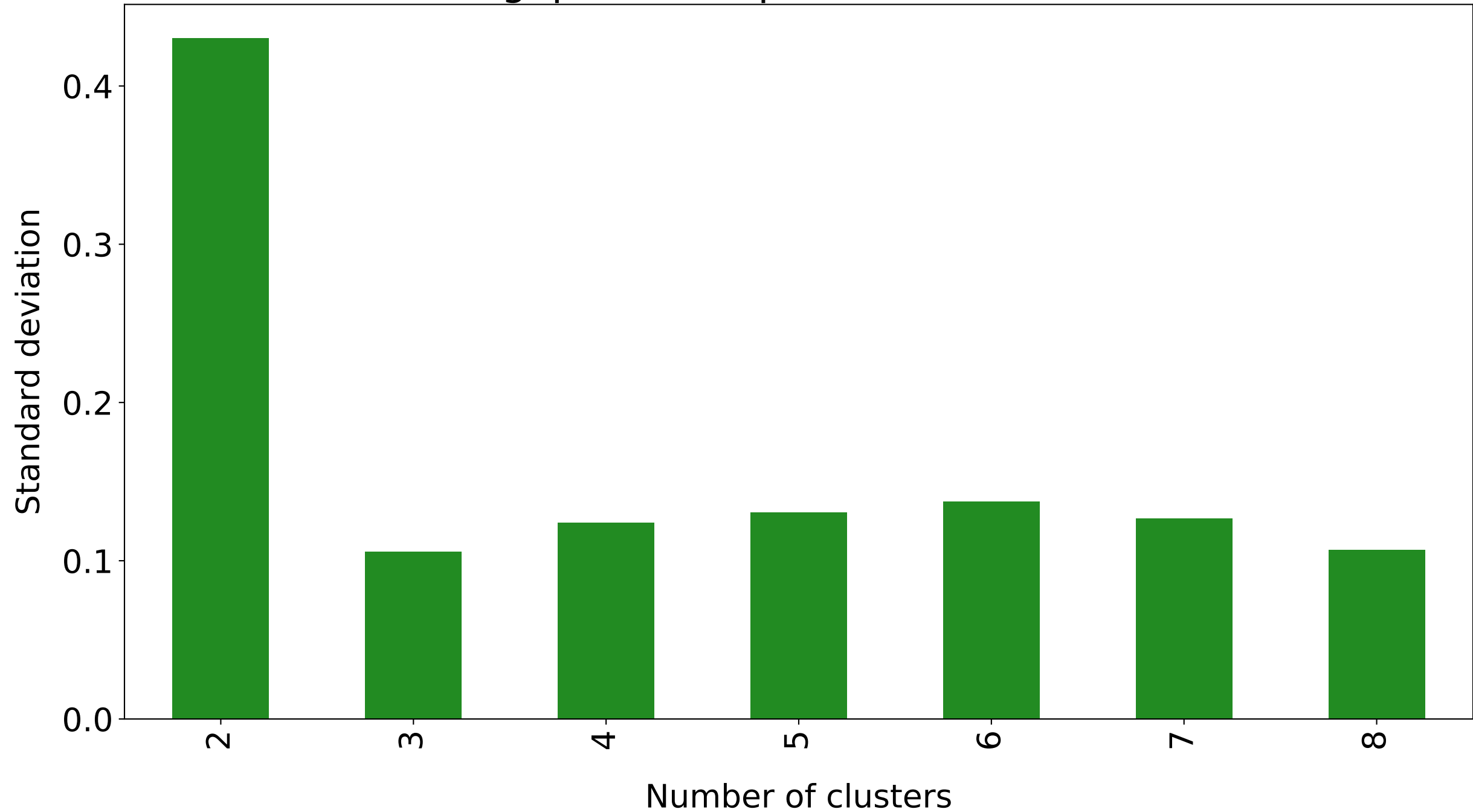


Cophenetic Correlation Coefficient: 0.88963630055

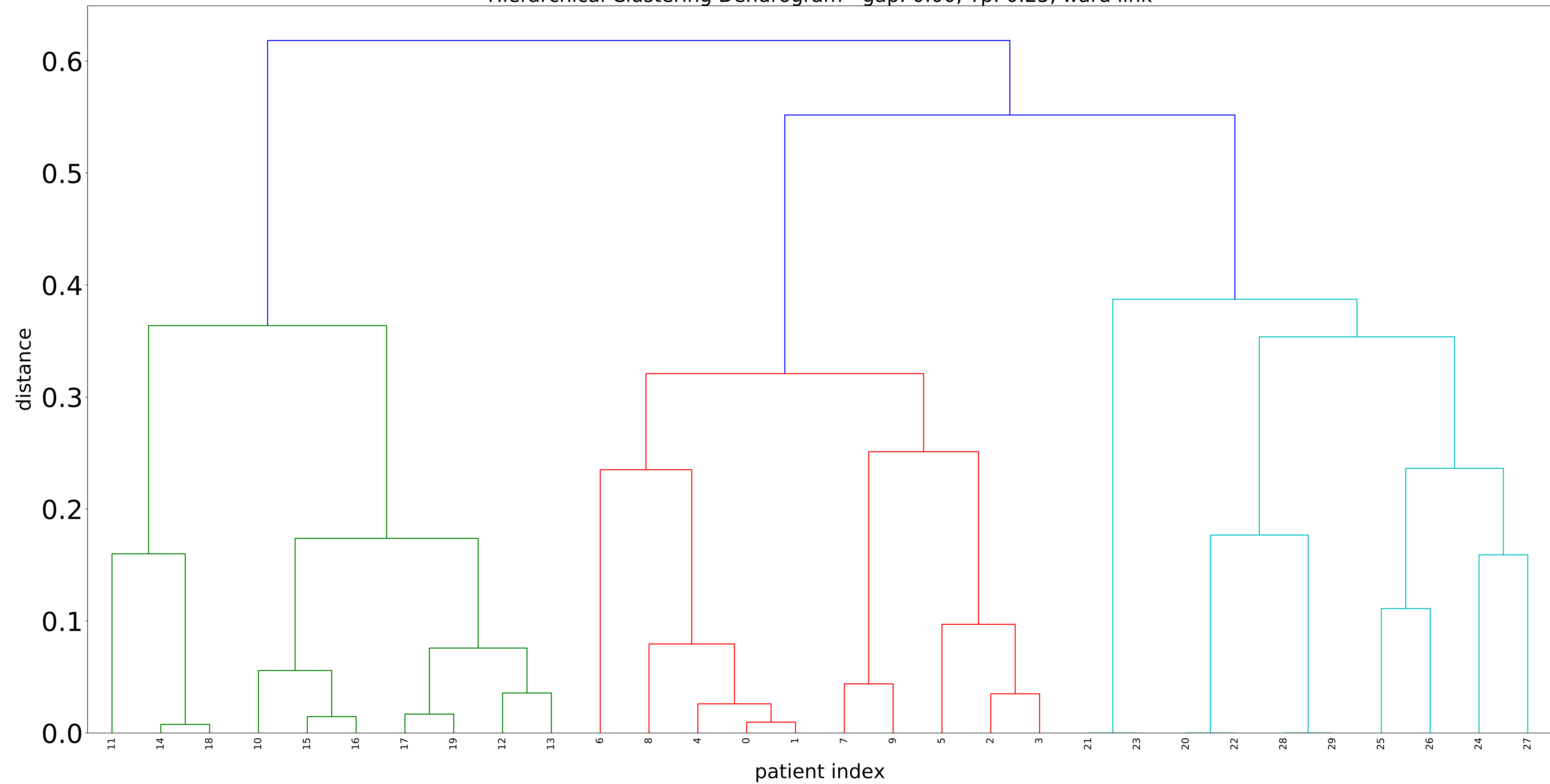
Average values of five clustering indices
gap: -0.10, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.831	0.66	0.844	0.776	0.662
3.0	0.976	0.945	0.963	0.936	0.949
4.0	0.955	0.883	0.915	0.853	0.847
5.0	0.935	0.808	0.851	0.752	0.771
6.0	0.942	0.802	0.84	0.736	0.751
7.0	0.961	0.834	0.858	0.765	0.858
8.0	0.963	0.825	0.847	0.743	0.834

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

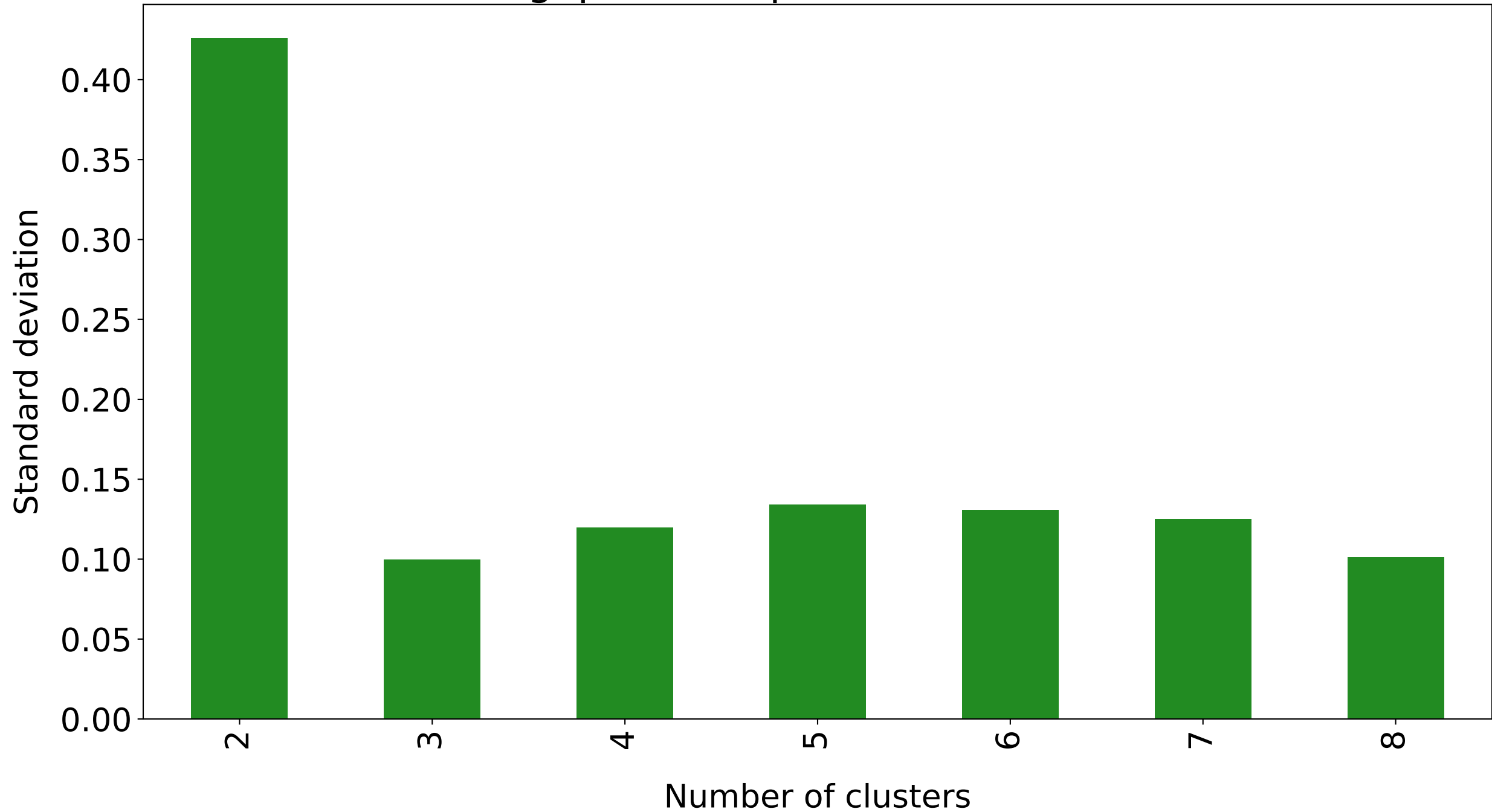


Cophenetic Correlation Coefficient: 0.88963630055

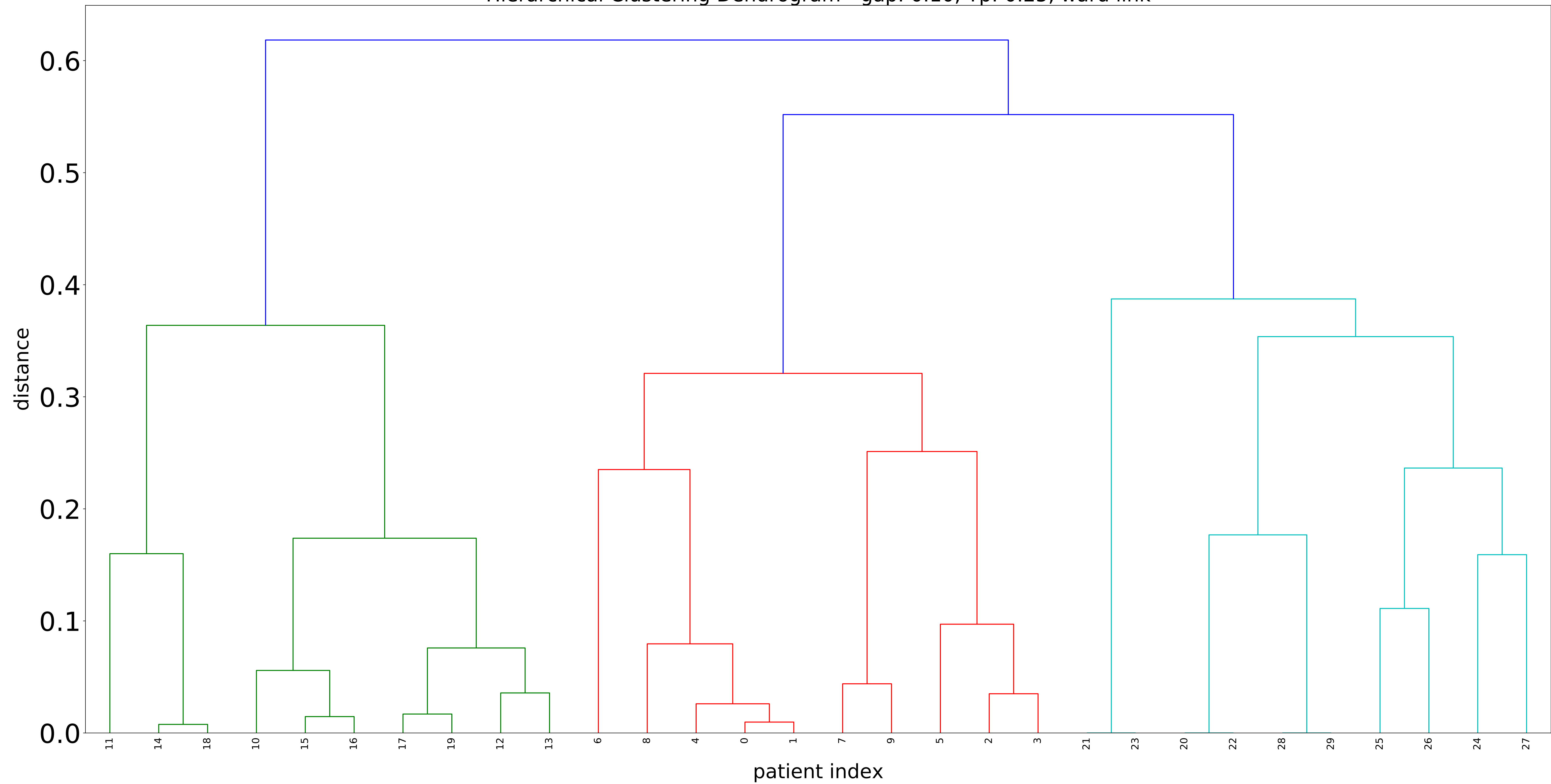
Average values of five clustering indices
gap: 0.00, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.839	0.676	0.852	0.787	0.68
3.0	0.977	0.947	0.964	0.937	0.951
4.0	0.951	0.873	0.908	0.84	0.831
5.0	0.932	0.8	0.846	0.743	0.755
6.0	0.946	0.818	0.854	0.754	0.765
7.0	0.964	0.847	0.869	0.782	0.869
8.0	0.966	0.836	0.857	0.758	0.845

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

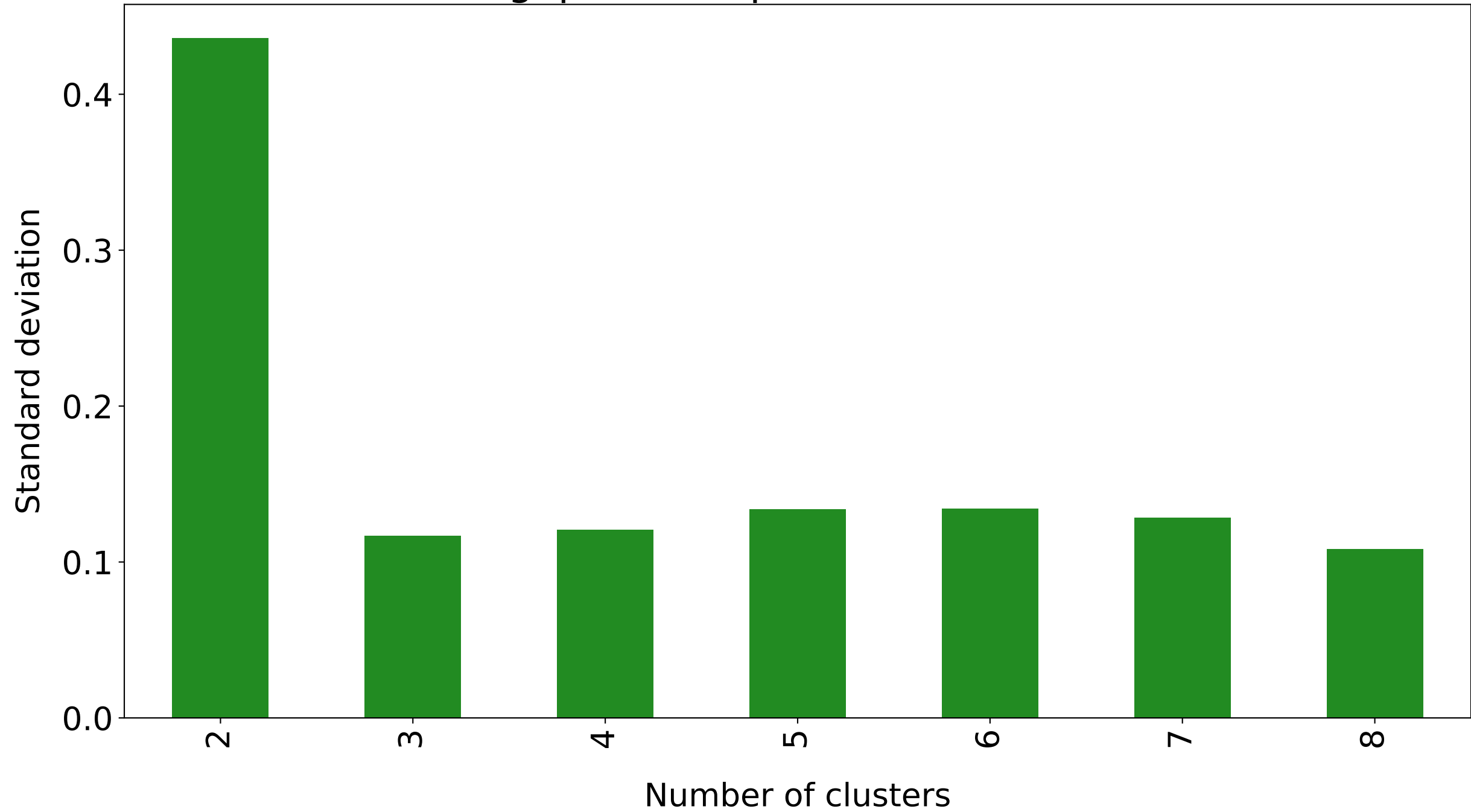


Cophenetic Correlation Coefficient: 0.88963630055

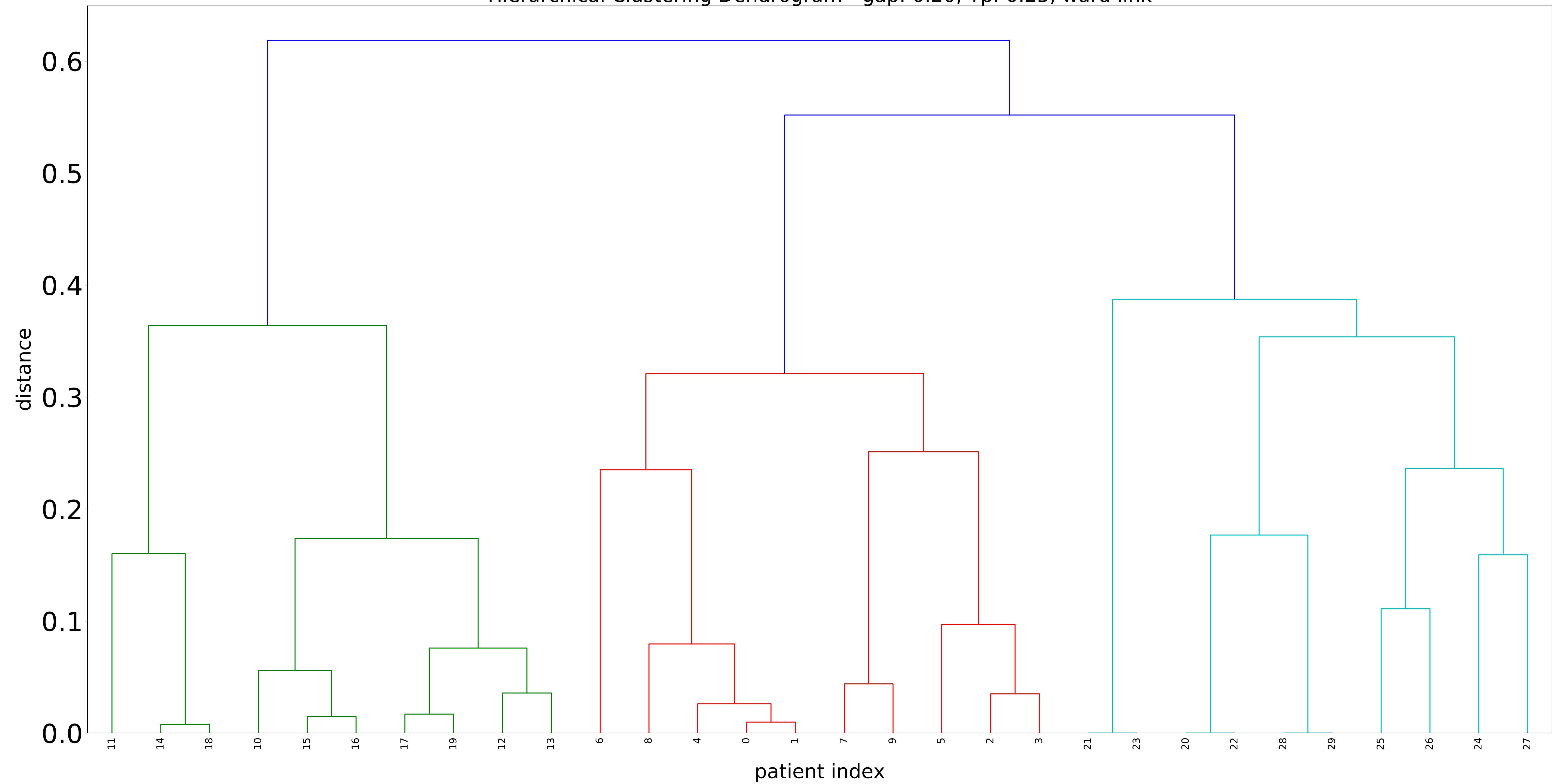
Average values of five clustering indices
gap: 0.10, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.818	0.634	0.832	0.759	0.636
3.0	0.975	0.942	0.961	0.934	0.946
4.0	0.95	0.87	0.906	0.837	0.83
5.0	0.932	0.798	0.844	0.74	0.752
6.0	0.94	0.795	0.835	0.726	0.74
7.0	0.963	0.841	0.863	0.774	0.863
8.0	0.964	0.827	0.848	0.746	0.838

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

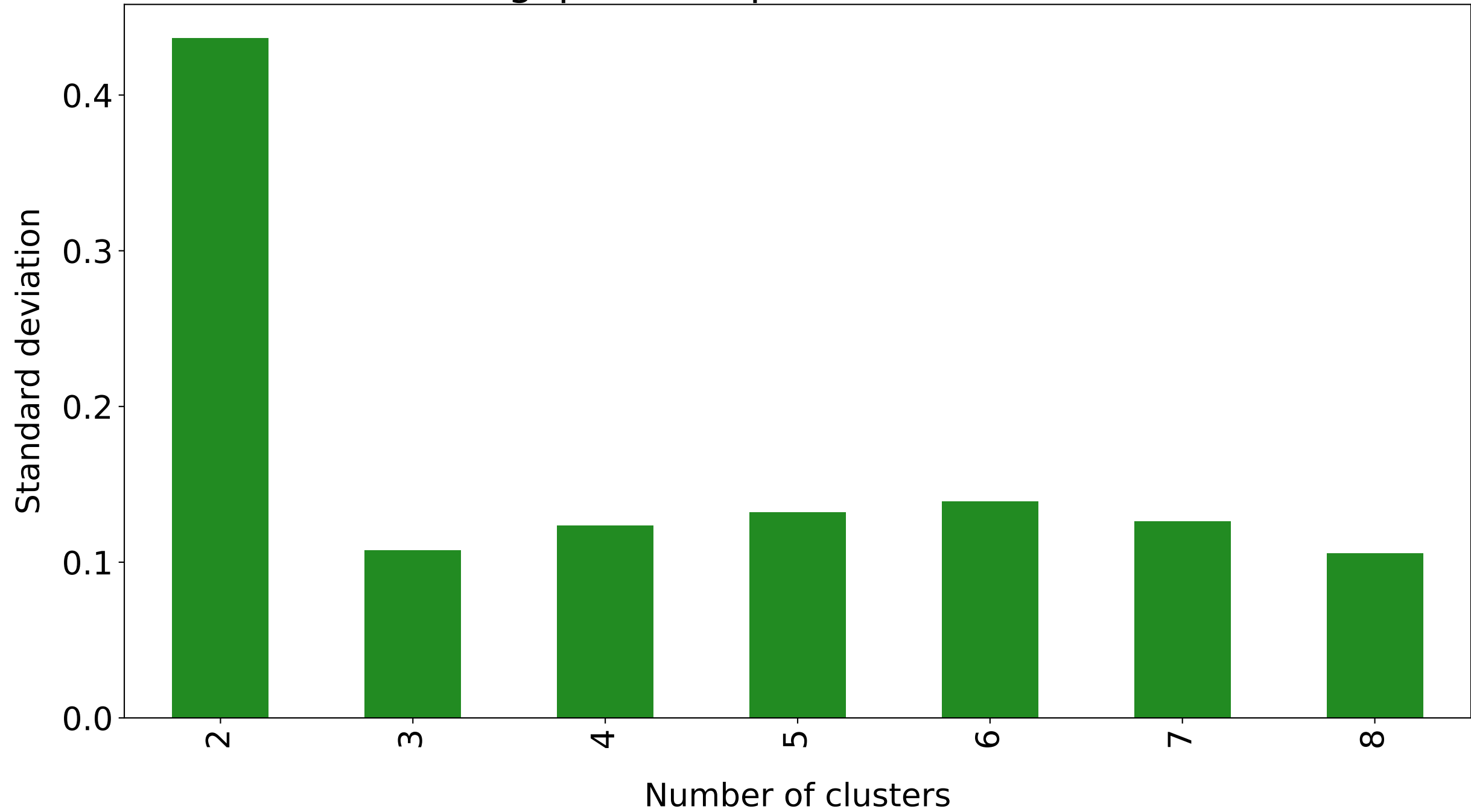


Cophenetic Correlation Coefficient: 0.88963630055

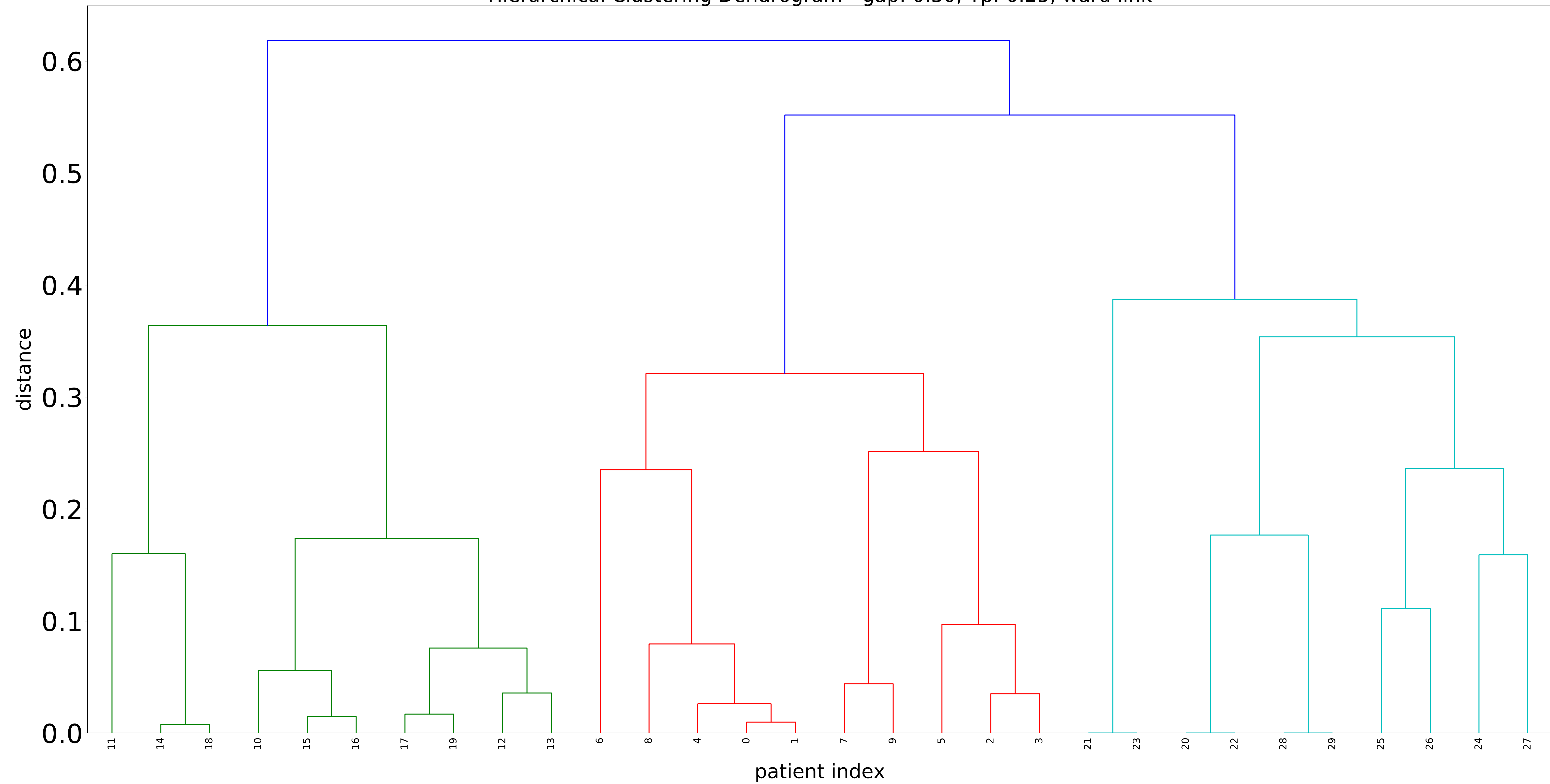
Average values of five clustering indices
gap: 0.20, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.817	0.633	0.832	0.759	0.637
3.0	0.974	0.94	0.959	0.93	0.944
4.0	0.95	0.872	0.907	0.84	0.832
5.0	0.935	0.808	0.851	0.751	0.764
6.0	0.941	0.802	0.841	0.737	0.75
7.0	0.961	0.835	0.859	0.767	0.86
8.0	0.964	0.83	0.851	0.75	0.841

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

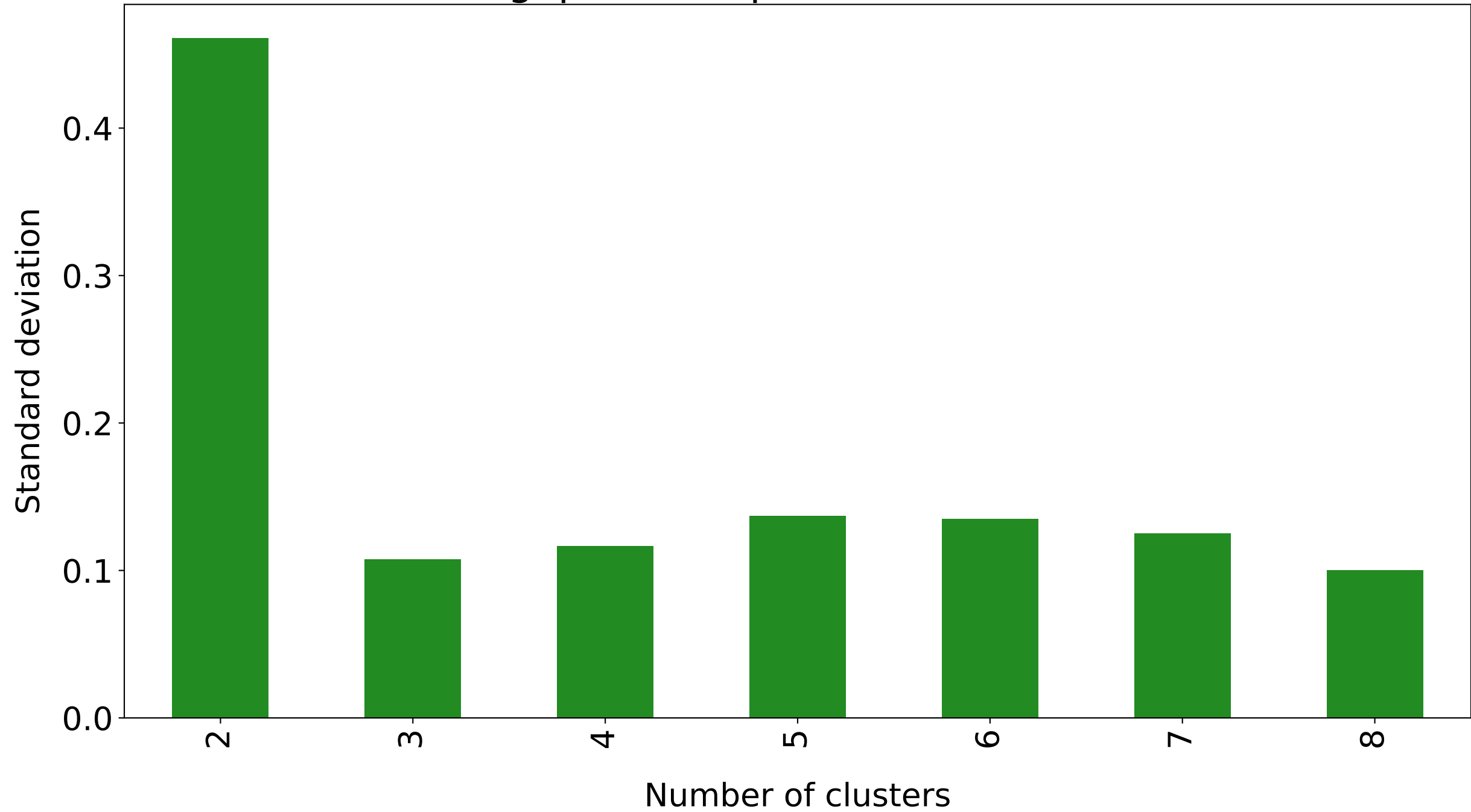


Cophenetic Correlation Coefficient: 0.88963630055

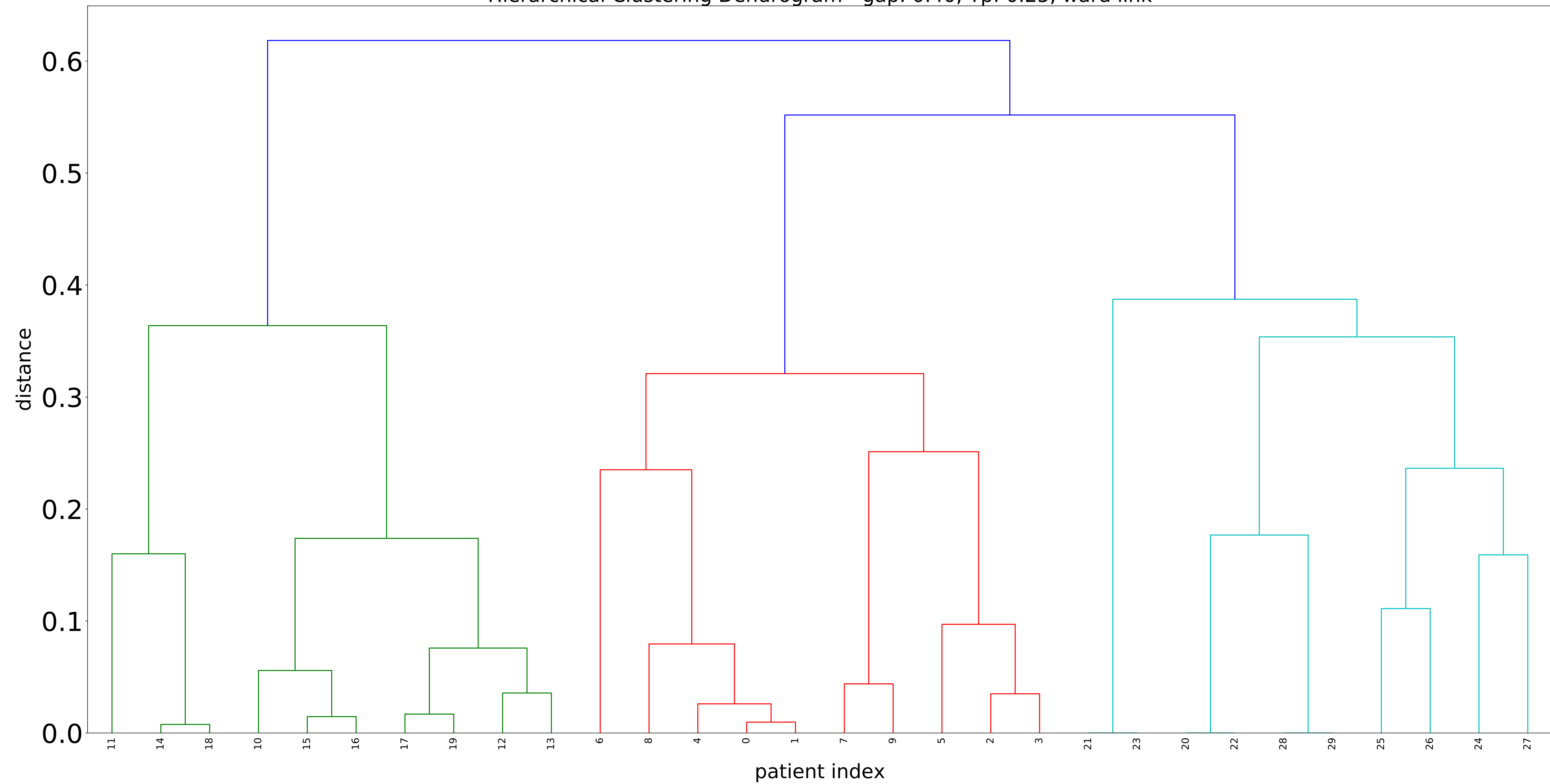
Average values of five clustering indices
gap: 0.30, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.804	0.605	0.821	0.747	0.606
3.0	0.973	0.937	0.957	0.925	0.941
4.0	0.957	0.889	0.919	0.86	0.856
5.0	0.928	0.786	0.834	0.727	0.745
6.0	0.945	0.811	0.848	0.746	0.762
7.0	0.961	0.832	0.856	0.762	0.86
8.0	0.963	0.82	0.842	0.736	0.836

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

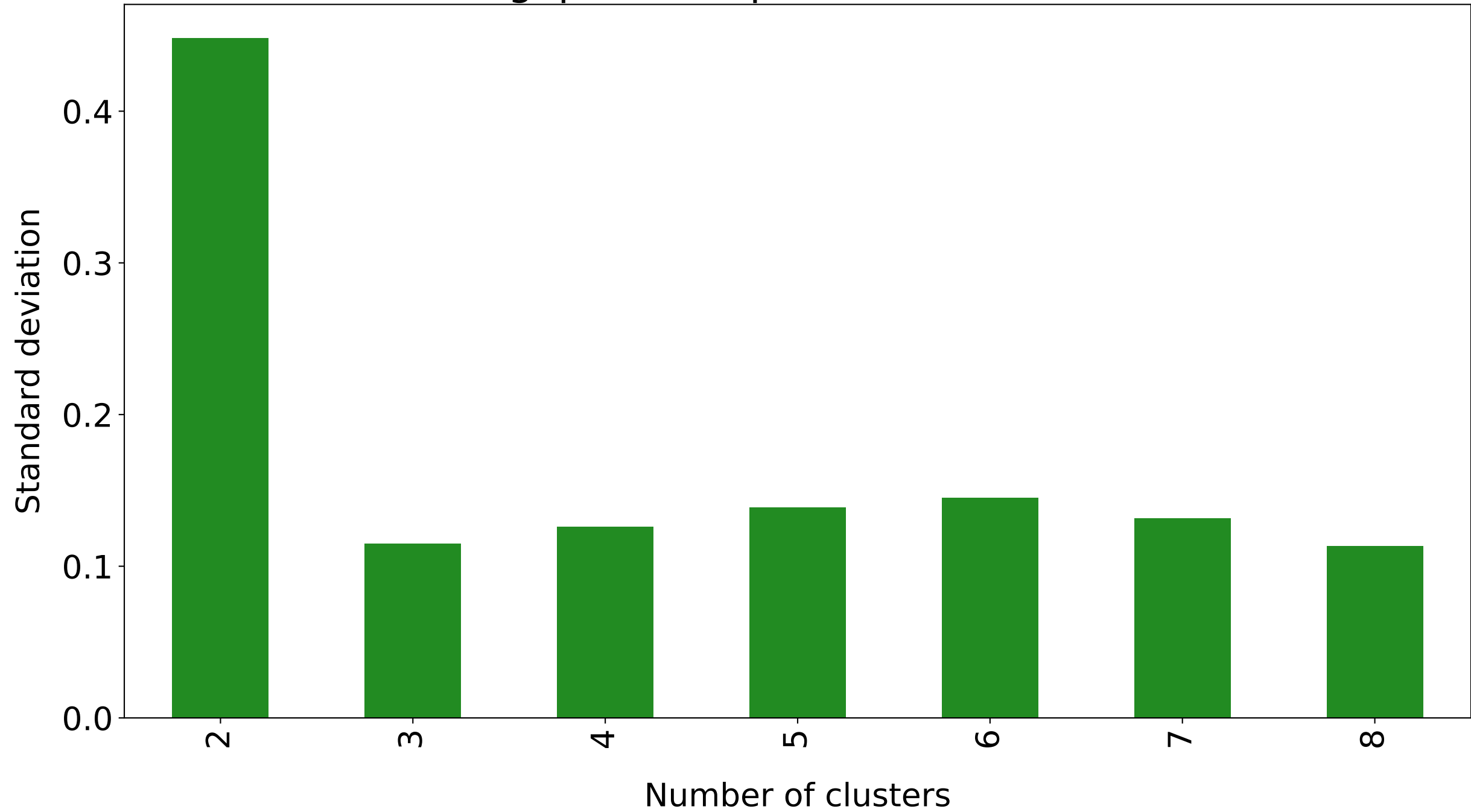


Cophenetic Correlation Coefficient: 0.88963630055

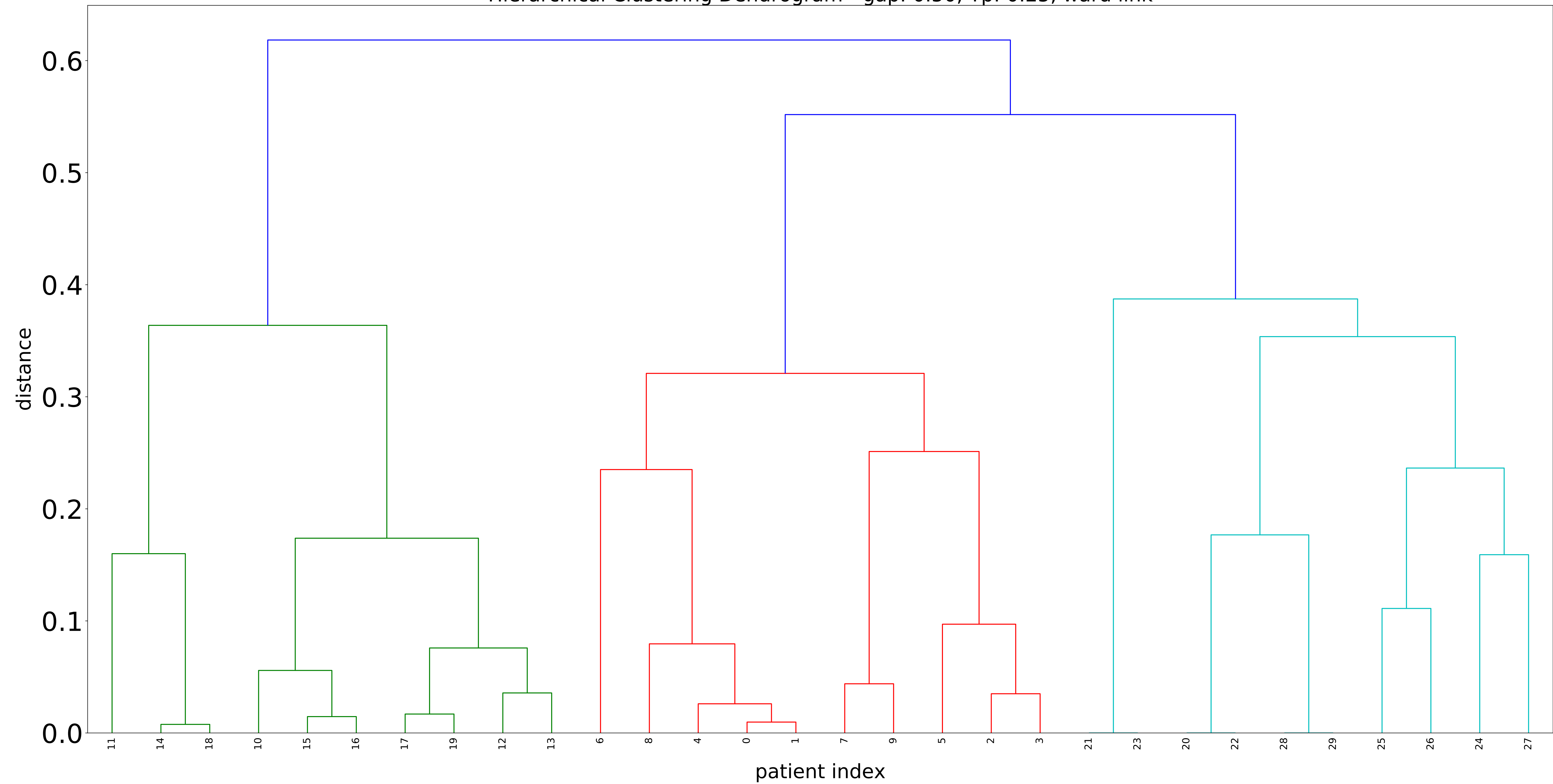
Average values of five clustering indices
gap: 0.40, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.788	0.575	0.805	0.722	0.578
3.0	0.972	0.935	0.956	0.924	0.939
4.0	0.954	0.881	0.913	0.851	0.847
5.0	0.932	0.799	0.844	0.742	0.763
6.0	0.942	0.805	0.843	0.741	0.757
7.0	0.961	0.831	0.855	0.762	0.857
8.0	0.963	0.821	0.843	0.74	0.836

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

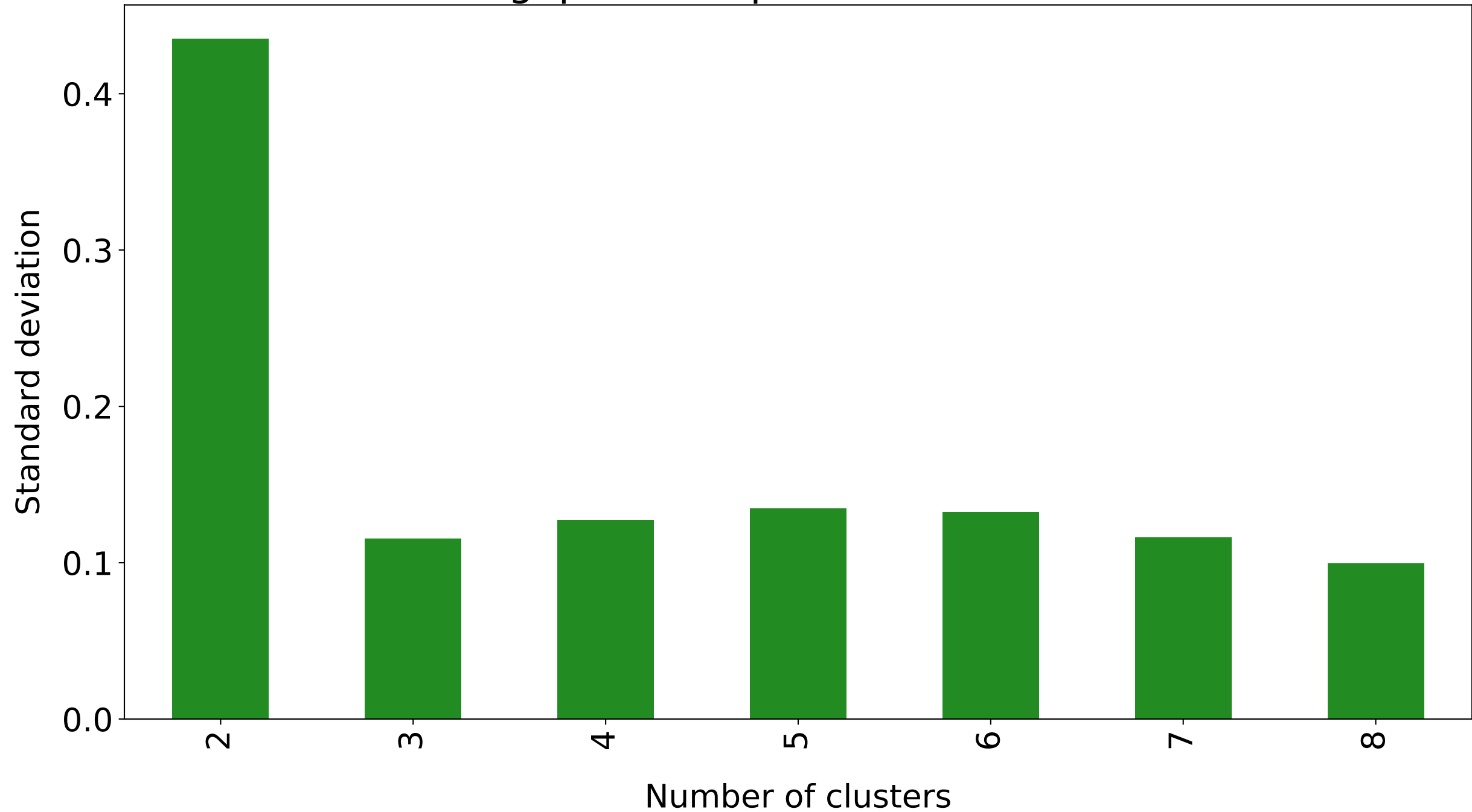


Cophenetic Correlation Coefficient: 0.88963630055

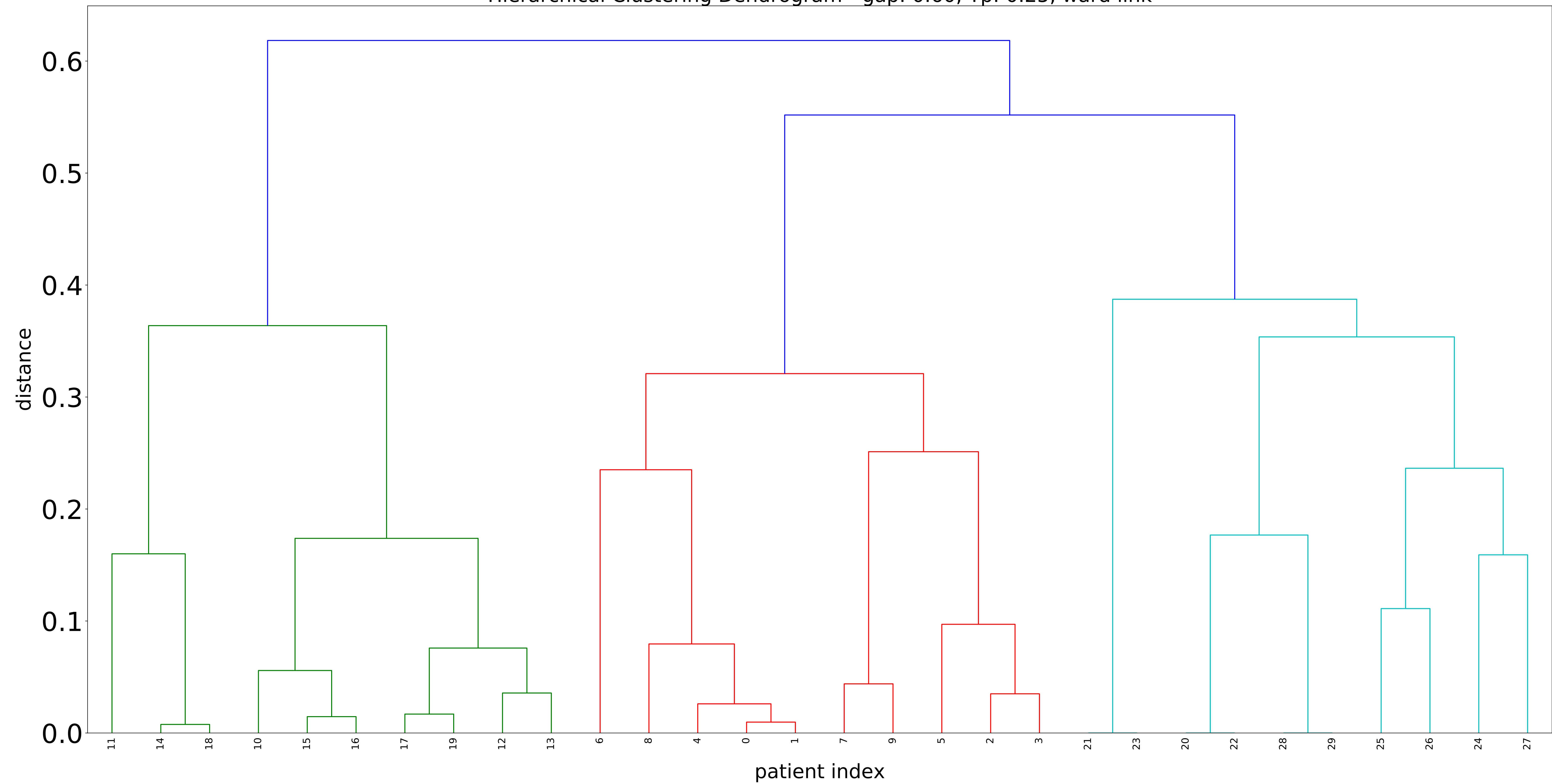
Average values of five clustering indices
gap: 0.50, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.818	0.634	0.833	0.76	0.639
3.0	0.971	0.934	0.955	0.923	0.938
4.0	0.95	0.872	0.907	0.84	0.834
5.0	0.937	0.813	0.855	0.758	0.773
6.0	0.946	0.817	0.853	0.754	0.769
7.0	0.965	0.853	0.873	0.788	0.872
8.0	0.967	0.841	0.861	0.765	0.849

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

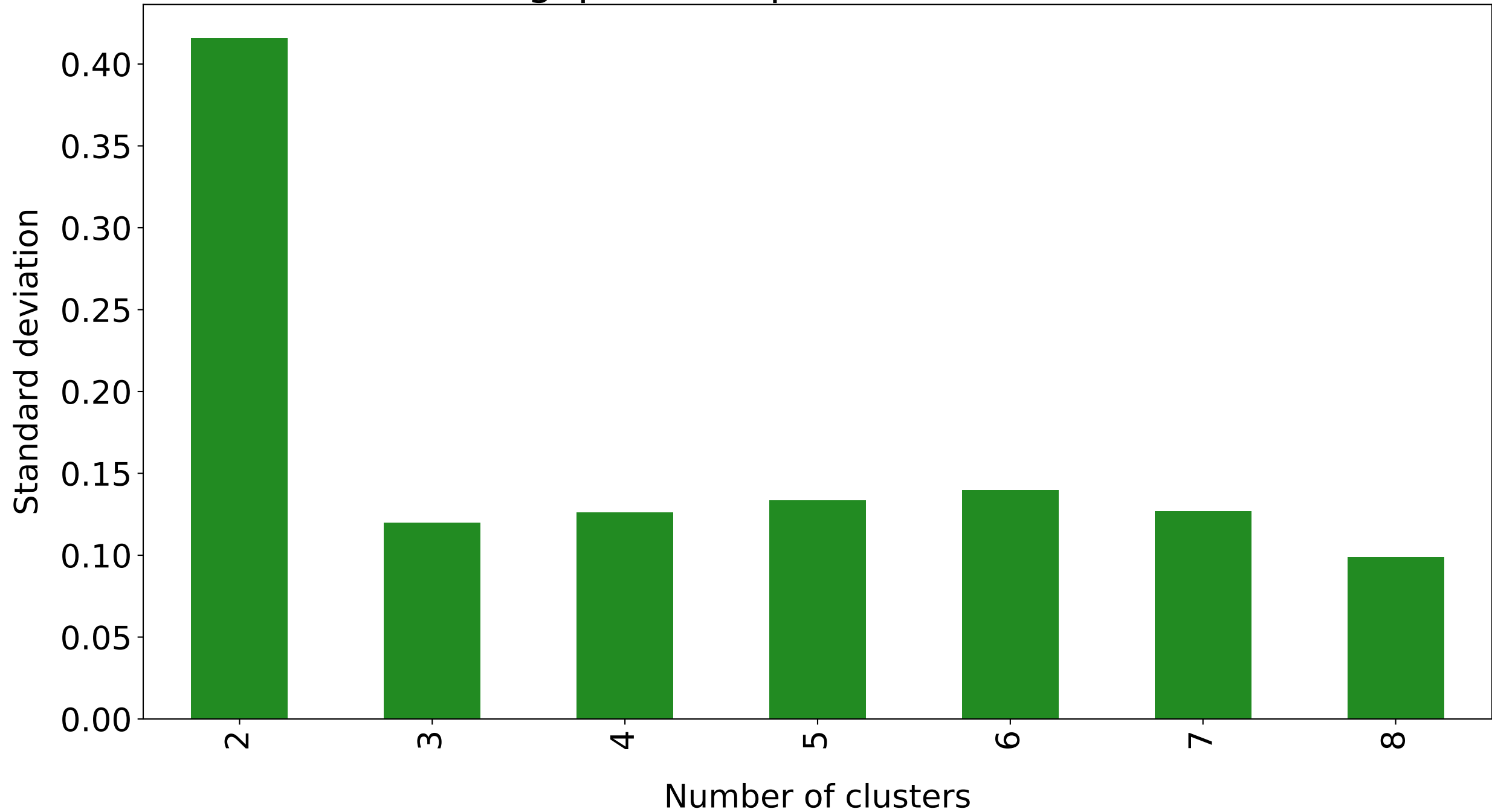


Cophenetic Correlation Coefficient: 0.88963630055

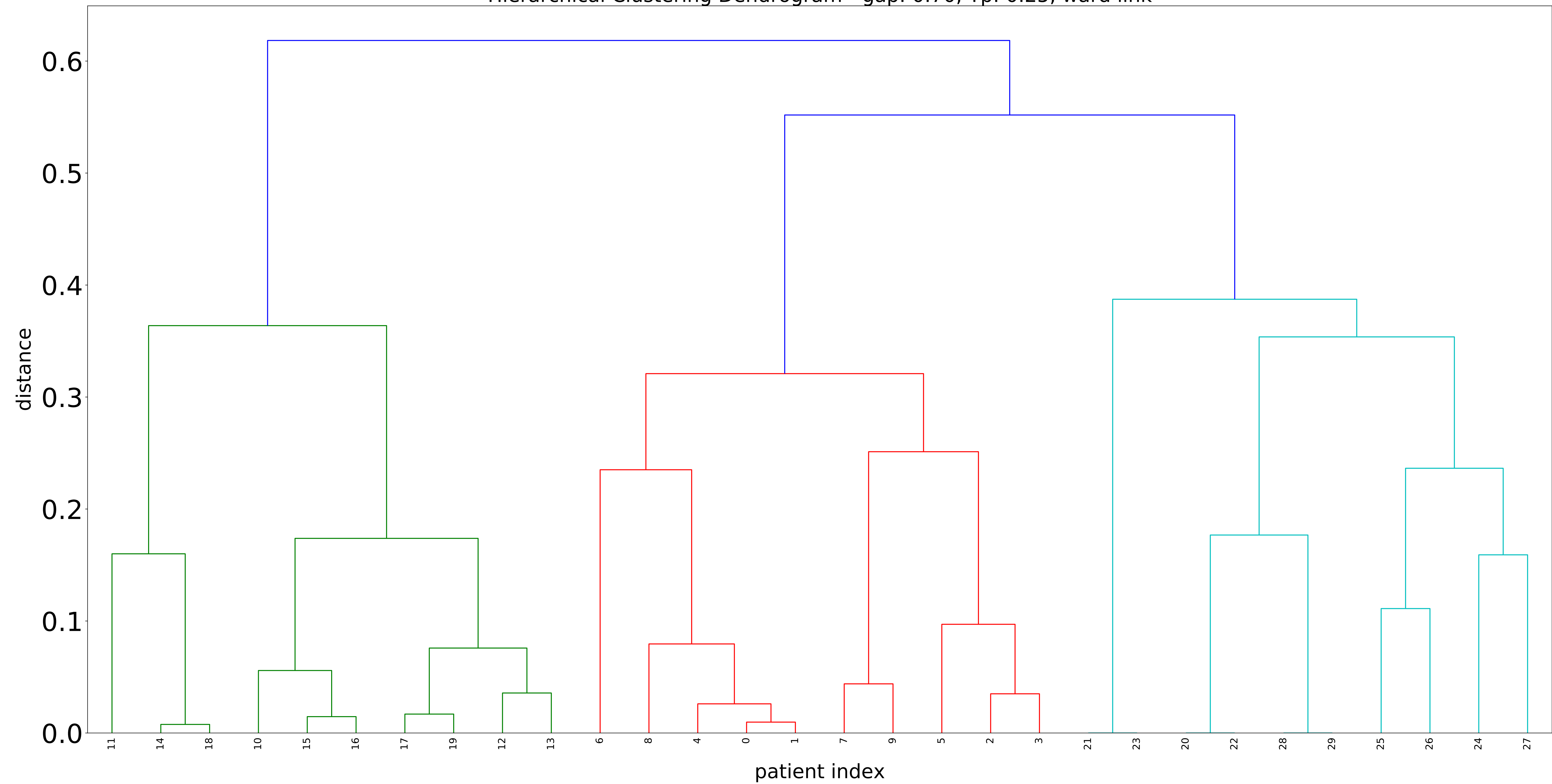
Average values of five clustering indices
gap: 0.60, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.847	0.693	0.859	0.797	0.699
3.0	0.97	0.931	0.953	0.92	0.935
4.0	0.954	0.882	0.914	0.852	0.846
5.0	0.935	0.806	0.85	0.75	0.766
6.0	0.944	0.811	0.847	0.747	0.764
7.0	0.962	0.84	0.863	0.773	0.865
8.0	0.963	0.825	0.847	0.742	0.838

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

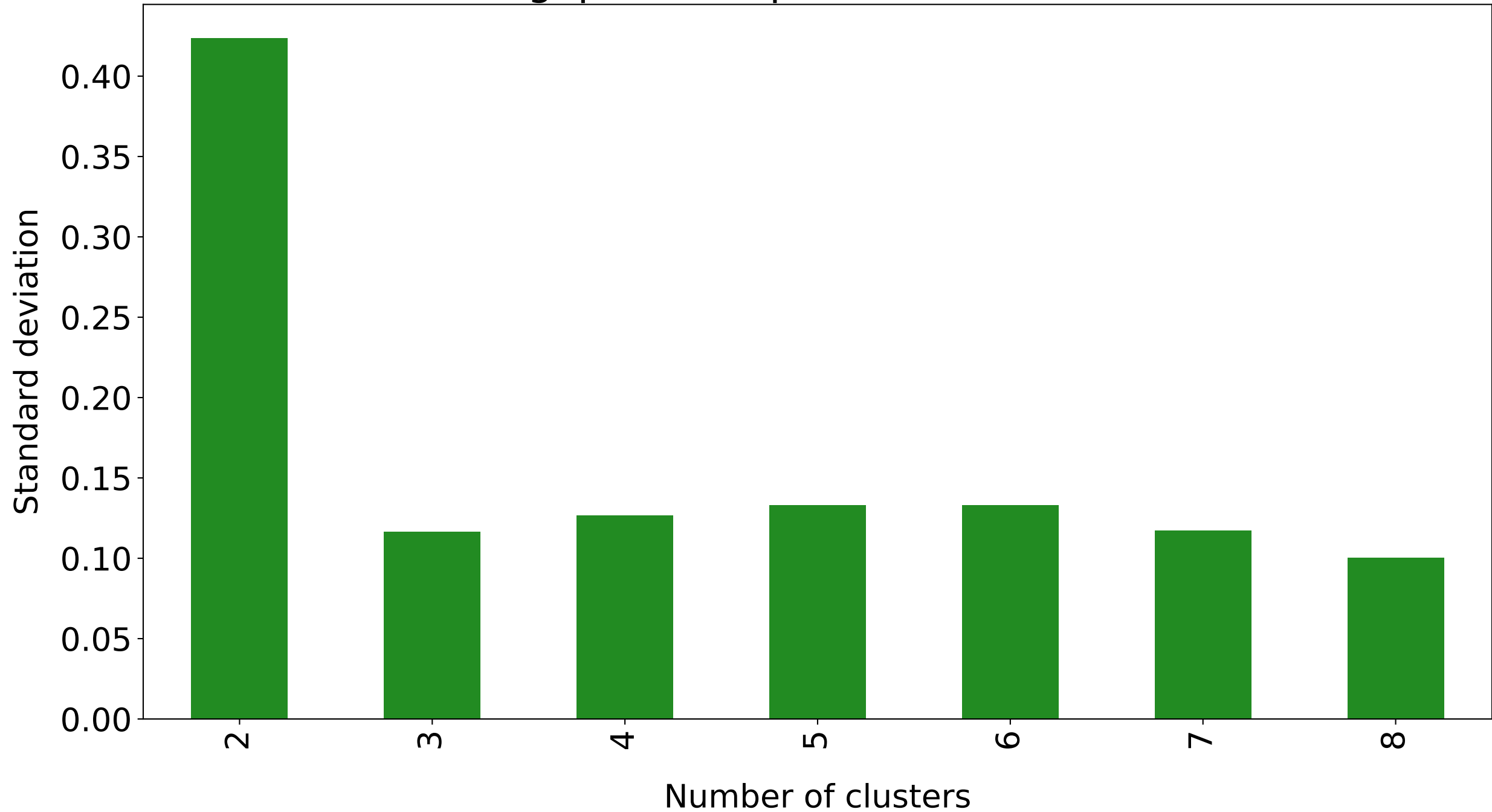


Cophenetic Correlation Coefficient: 0.88963630055

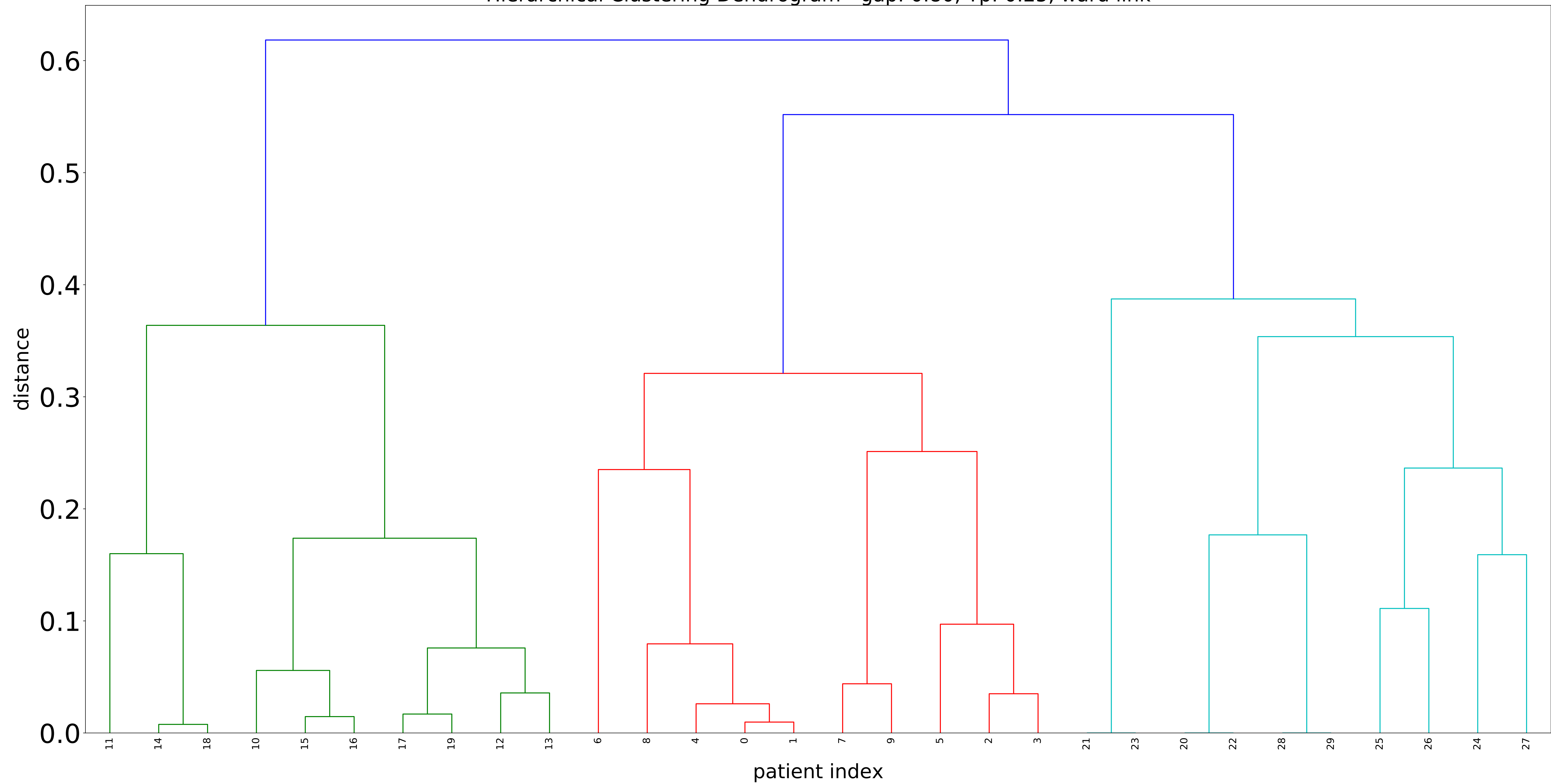
Average values of five clustering indices
gap: 0.70, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.84	0.678	0.853	0.788	0.682
3.0	0.97	0.931	0.953	0.92	0.935
4.0	0.947	0.864	0.901	0.831	0.826
5.0	0.927	0.784	0.832	0.723	0.741
6.0	0.942	0.803	0.842	0.736	0.75
7.0	0.963	0.844	0.866	0.776	0.867
8.0	0.964	0.827	0.849	0.746	0.837

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

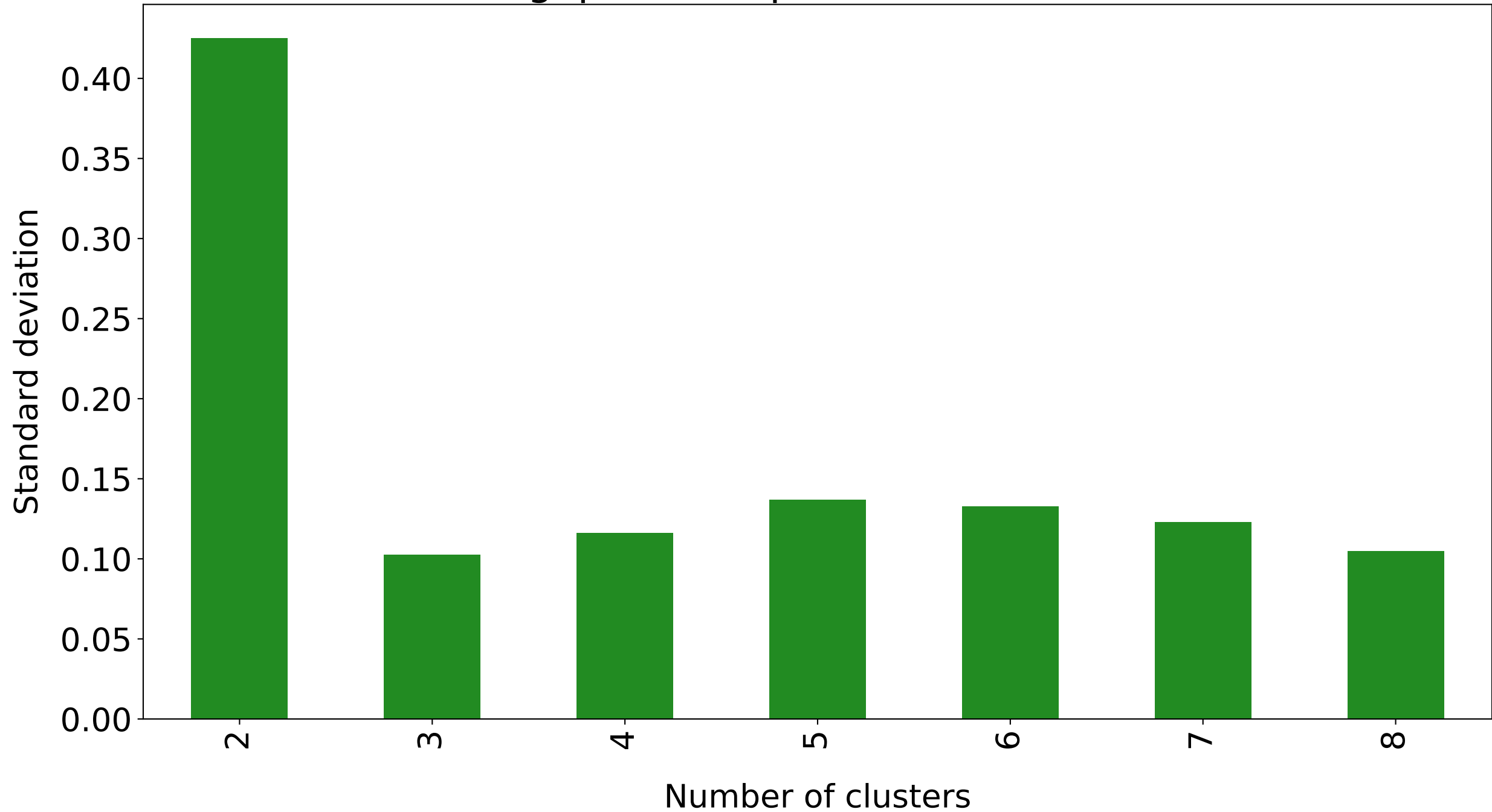


Cophenetic Correlation Coefficient: 0.88963630055

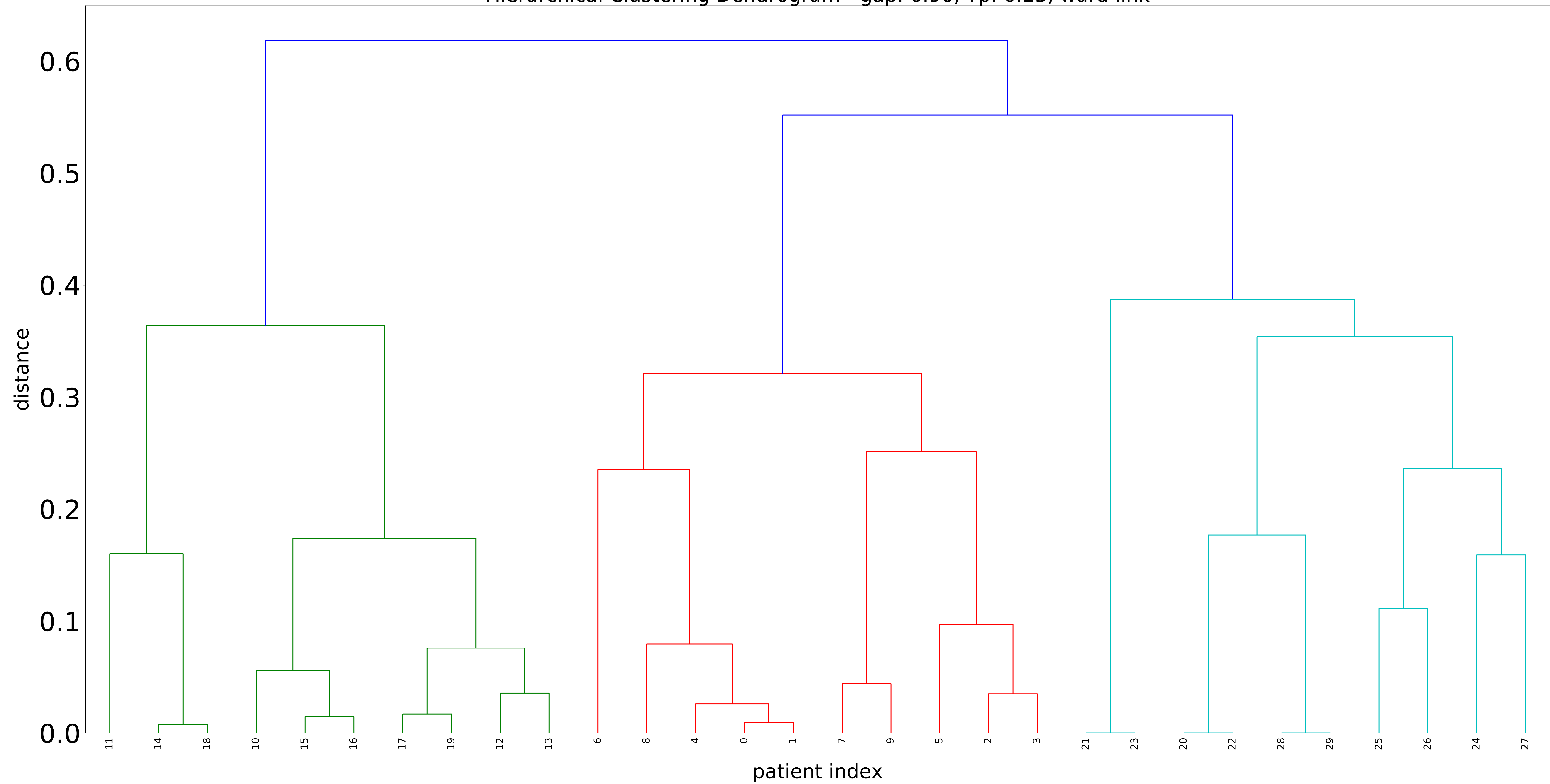
Average values of five clustering indices
gap: 0.80, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.828	0.655	0.842	0.772	0.659
3.0	0.976	0.944	0.961	0.934	0.947
4.0	0.954	0.883	0.915	0.852	0.846
5.0	0.931	0.797	0.843	0.74	0.754
6.0	0.946	0.817	0.854	0.754	0.762
7.0	0.963	0.842	0.865	0.776	0.864
8.0	0.966	0.837	0.857	0.76	0.844

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

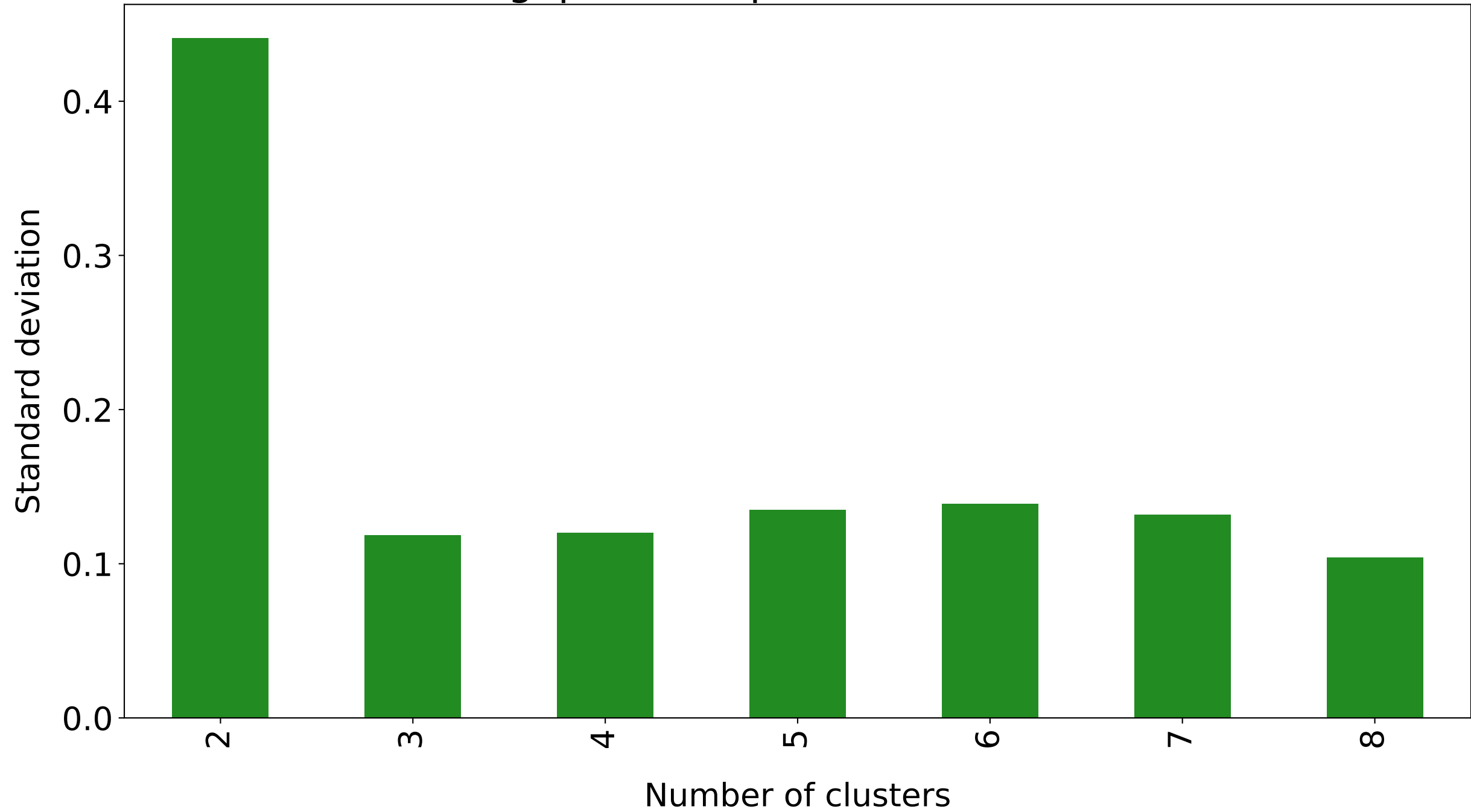


Cophenetic Correlation Coefficient: 0.88963630055

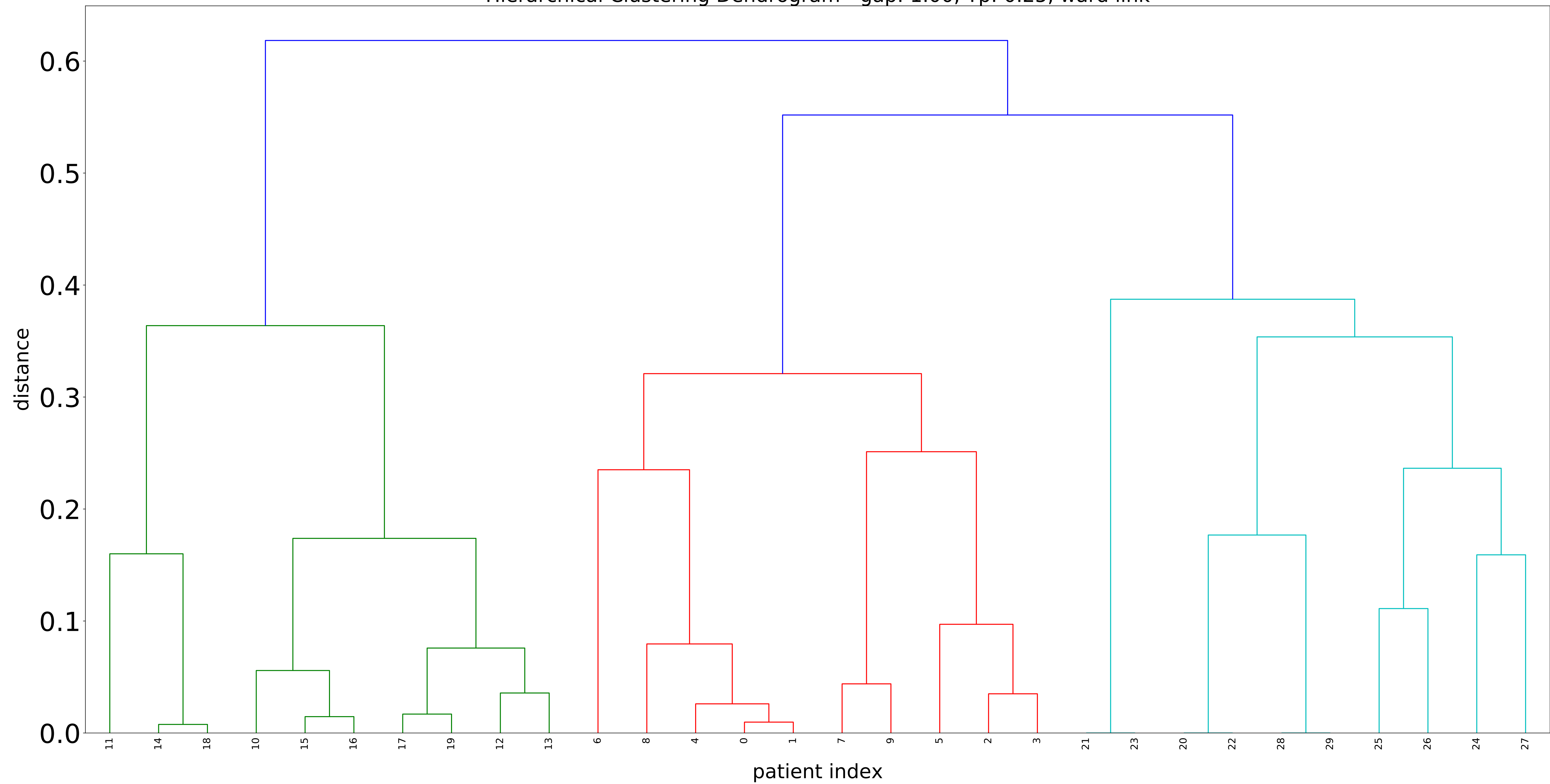
Average values of five clustering indices
gap: 0.90, Tp: 0.25, ward link

k	Rand	Adjusted Rand	Fowlkes and Mallows	Jaccard	Adjusted Wallace
2.0	0.82	0.639	0.835	0.764	0.642
3.0	0.97	0.931	0.953	0.92	0.933
4.0	0.954	0.881	0.914	0.85	0.843
5.0	0.935	0.808	0.851	0.752	0.77
6.0	0.947	0.821	0.856	0.761	0.775
7.0	0.962	0.839	0.862	0.773	0.865
8.0	0.964	0.83	0.851	0.75	0.842

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	0.833	0.666	0.846	0.777	0.669
3.0	0.971	0.934	0.955	0.923	0.937
4.0	0.951	0.874	0.909	0.841	0.834
5.0	0.935	0.807	0.851	0.751	0.761
6.0	0.943	0.807	0.845	0.743	0.755
7.0	0.965	0.853	0.874	0.789	0.871
8.0	0.969	0.851	0.87	0.78	0.86

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

