

Dataset	10% CS						KMEANS	GT
	PCCC	PCCC-R	COPKM	CSC	DILS	LCC		
Appendicitis	544.2	544.2	–	726.0	553.7	621.5	451.8	612.9
Breast Cancer	12,185.0	12,185.0	–	16,686.3	12,214.6	13,499.0	11,595.7	12,214.6
Bupa	2,041.6	2,041.6	–	1,850.9	2,048.0	2,049.1	1,496.1	2,047.3
Circles	598.8	598.8	–	599.8	599.8	590.0	410.4	600.0
Ecoli	962.1	962.1	1,045.1	1,795.6	2,000.2	1,225.3	703.6	1,335.3
Glass	1,084.3	1,071.5	1,187.0	1,618.8	1,777.1	1,130.6	811.2	1,429.3
Haberman	889.4	889.4	889.4	870.2	893.2	910.4	701.4	891.4
Hayesroth	520.6	515.9	–	614.0	563.0	521.0	425.9	553.5
Heart	3,085.1	3,085.1	–	3,432.4	3,086.2	3,440.5	2,941.9	3,120.5
Ionosphere	10,944.9	10,944.9	–	11,332.8	11,021.0	11,131.9	9,086.0	10,971.5
Iris	146.2	146.2	156.1	437.0	147.4	146.2	141.2	167.9
Led7Digit	1,383.8	1,364.3	1,450.7	3,324.8	2,830.5	1,423.1	1,103.6	1,511.4
Monk2	2,382.7	2,382.7	2,382.7	2,382.6	2,384.1	2,488.1	2,306.5	2,384.3
Moons	322.1	322.1	–	322.9	322.1	313.2	249.7	322.9
Movement	11,688.3	11,542.3	12,515.9	30,041.1	22,619.6	12,121.3	10,433.8	19,779.5
Libras								
Newthyroid	536.0	536.0	536.0	969.2	1,025.5	589.2	462.3	550.9
Saheart	3,924.3	3,924.3	3,924.3	3,905.9	3,924.3	4,055.0	3,235.8	3,927.7
Sonar	11,873.8	11,873.8	–	12,166.3	11,923.6	12,232.8	10,649.6	11,962.9
Soybean	367.1	367.1	367.1	906.4	666.1	428.4	367.1	367.1
Spectfheart	11,210.5	11,210.5	–	11,042.8	11,281.3	11,189.0	8,983.9	11,268.3
Spiral	558.2	558.2	–	584.3	558.2	567.0	379.7	564.5
Tae	594.1	594.1	–	729.0	637.8	600.3	480.1	713.8
Vehicle	13,250.1	13,250.1	–	14,038.4	13,616.6	–	5,980.7	13,334.2
Wine	1,285.1	1,285.1	1,285.1	2,020.2	1,743.2	1,287.3	1,279.7	1,300.0
Zoo	553.1	553.1	579.9	1,067.5	1,152.1	574.4	527.2	579.6
Mean	3,717.3	3,709.9	–	4,938.6	4,383.6	–	3,008.2	4,100.5

Table W10: Minimum Inertia values of the PCCC and the PCCC-R algorithms and the four state-of-the-art algorithms (COPKM, CSC, DILS, LCC) for the constraint sets of size 10% CS. Lower values indicate more coherent clusters. The lowest values are stated in bold. The column KMEANS reports the minimum inertia value obtained with the k-means algorithm. The hyphen indicates that the respective algorithm returned no solution within the time limit of 1,800 seconds.