

Dataset	15% CS						KMEANS	GT
	PCCC	PCCC-R	COPKM	CSC	DILS	LCC		
Appendicitis	612.9	612.9	–	612.9	613.8	730.3	451.8	612.9
Breast Cancer	12,214.6	12,214.6	12,214.6	16,270.2	12,214.6	12,214.6	11,595.7	12,214.6
Bupa	2,047.3	2,047.3	2,047.3	1,818.8	2,047.3	–	1,496.1	2,047.3
Circles	600.0	600.0	600.0	600.0	600.0	600.0	410.4	600.0
Ecoli	1,027.7	1,027.7	–	1,661.7	1,853.7	1,032.2	703.6	1,335.3
Glass	1,266.5	1,266.2	–	1,571.1	1,690.4	1,283.0	811.2	1,429.3
Haberman	891.4	891.4	891.4	870.2	891.4	892.3	701.4	891.4
Hayesroth	553.1	553.1	–	624.8	602.6	575.7	425.9	553.5
Heart	3,120.5	3,120.5	3,120.5	3,107.3	3,120.5	3,169.0	2,941.9	3,120.5
Ionosphere	10,971.5	10,971.5	10,971.5	11,275.2	10,971.5	10,971.5	9,086.0	10,971.5
Iris	141.2	141.0	141.2	204.8	220.4	141.0	141.2	167.9
Led7Digit	1,449.4	1,449.4	–	3,271.0	2,912.9	–	1,103.6	1,511.4
Monk2	2,384.3	2,384.3	2,384.3	2,374.9	2,384.3	2,384.3	2,306.5	2,384.3
Moons	322.9	322.9	322.9	322.9	322.9	377.8	249.7	322.9
Movement Libras	15,614.0	15,591.8	17,765.9	29,485.0	26,427.9	15,601.2	10,433.8	19,779.5
Newthyroid	550.9	550.9	550.9	880.6	587.4	699.6	462.3	550.9
Saheart	3,927.7	3,927.7	3,927.7	3,824.2	3,927.7	–	3,235.8	3,927.7
Sonar	11,962.9	11,962.9	–	12,166.3	11,962.9	12,096.2	10,649.6	11,962.9
Soybean	367.1	367.1	367.1	852.0	520.6	367.1	367.1	367.1
Spectfheart	11,268.3	11,268.3	11,281.1	10,276.8	11,268.3	11,268.3	8,983.9	11,268.3
Spiral	564.5	564.5	–	563.3	564.5	564.6	379.7	564.5
Tae	684.3	684.3	–	706.9	692.6	699.6	480.1	713.8
Vehicle	13,334.2	13,334.2	13,334.2	13,156.4	13,452.4	–	5,980.7	13,334.2
Wine	1,285.1	1,285.1	1,285.1	1,653.0	1,677.0	1,319.0	1,279.7	1,300.0
Zoo	556.3	556.3	575.8	1,190.9	783.6	557.2	527.2	579.6
Mean	3,908.7	3,907.8	–	4,773.7	4,492.4	–	3,008.2	4,100.5

Table W15: 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 15% 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.