	15% CS						
Dataset	PCCC	PCCC-R	COPKM	CSC	DILS	LCC	KMEANS
Appendicitis	**0.1**	**0.1**	–	7.1	591.3	29.8	0.1
Breast Cancer	**0.0**	0.1	167.9	11.3	1,832.3	36.4	0.1
Bupa	**0.1**	**0.1**	46.8	6.1	1,809.4	–	0.1
Circles	**0.1**	**0.1**	30.2	7.0	1,777.4	1,880.8	0.1
Ecoli	**1.7**	3.3	–	6.2	1,809.3	266.3	0.1
Glass	**1.2**	2.7	–	7.6	1,118.8	617.0	0.1
Haberman	**0.0**	0.1	17.5	5.3	1,812.3	192.1	0.2
Hayesroth	**0.4**	0.8	–	3.5	881.9	70.9	0.1
Heart	**0.1**	0.2	20.1	2.4	1,774.1	577.9	0.1
Ionosphere	**0.0**	0.1	42.3	8.6	1,809.3	918.9	0.1
Iris	0.5	1.4	**0.1**	4.3	830.3	13.0	0.1
Led7Digit	4.9	14.3	–	**4.6**	1,823.1	–	0.1
Monk2	**0.0**	0.1	88.2	8.9	1,820.8	9.2	0.1
Moons	**0.0**	0.2	29.5	9.1	1,715.5	49.9	0.1
Movement Libras	7.4	16.9	25.5	**6.5**	1,802.1	1,732.8	0.2
Newthyroid	**0.2**	0.5	0.7	4.3	1,181.9	233.3	0.2
Saheart	**0.0**	0.1	87.5	6.4	1,806.8	–	0.1
Sonar	**0.1**	**0.1**	–	7.1	1,653.0	1,584.2	0.1
Soybean	**0.2**	0.7	**0.2**	1.2	256.6	20.7	0.1
Spectfheart	**0.1**	0.2	21.6	7.1	1,811.8	610.5	0.1
Spiral	**0.0**	0.1	–	8.2	1,780.2	105.7	0.0
Tae	**0.3**	1.2	–	3.4	773.7	88.2	0.1
Vehicle	**0.2**	0.5	295.9	14.3	1,852.7	–	0.1
Wine	0.6	1.5	**0.5**	7.3	1,061.3	70.5	0.1
Zoo	**0.5**	1.1	**0.5**	3.7	581.0	25.3	0.0
Sum	**18.7**	46.6	15,275.1*	161.4	35,966.8	16,333.5*	2.9

*Nan values (–) are replaced with 1,800 before computing the sum.

Table W19: Average running times (in seconds) 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. The lowest values are stated in bold. The column KMEANS reports the average running time of the unconstrained k-means algorithm. The hyphen indicates that the respective algorithm returned no solution within the time limit of 1,800 seconds.