	20% CS						
Dataset	PCCC	PCCC-R	COPKM	CSC	DILS	LCC	KMEANS
Appendicitis	**0.0**	**0.0**	–	6.5	620.5	48.4	0.1
Breast Cancer	**0.0**	**0.0**	184.2	10.7	1,829.8	–	0.1
Bupa	**0.0**	**0.0**	134.0	4.7	1,818.1	6.6	0.1
Circles	**0.0**	**0.0**	98.7	4.6	1,809.1	–	0.1
Ecoli	**0.3**	0.9	–	3.9	1,811.7	1,370.7	0.1
Glass	**0.4**	0.8	–	7.5	1,379.3	1,146.4	0.1
Haberman	**0.0**	**0.0**	71.4	4.4	1,809.6	11.2	0.1
Hayesroth	**0.1**	0.2	–	3.0	964.8	77.1	0.1
Heart	**0.0**	**0.0**	65.8	7.5	1,812.5	8.2	0.1
Ionosphere	**0.1**	**0.1**	129.7	5.1	1,817.7	–	0.1
Iris	**0.2**	0.4	0.3	5.0	867.2	17.1	0.1
Led7Digit	**2.2**	5.5	–	5.5	1,811.1	1,855.5	0.1
Monk2	**0.1**	**0.1**	207.8	5.2	1,803.6	–	0.1
Moons	**0.0**	**0.0**	91.6	3.9	1,807.6	4.3	0.1
Movement Libras	10.2	32.1	–	**9.1**	1,820.3	1,819.7	0.2
Newthyroid	**0.1**	0.2	2.0	5.5	1,436.7	615.4	0.2
Saheart	**0.1**	**0.1**	220.6	7.6	1,808.1	–	0.2
Sonar	**0.0**	**0.0**	25.1	6.1	1,808.8	22.0	0.1
Soybean	**0.1**	0.2	0.2	3.0	262.6	29.8	0.2
Spectfheart	**0.0**	0.1	54.4	4.3	1,810.8	854.9	0.2
Spiral	**0.0**	**0.0**	–	4.0	1,811.8	9.1	0.2
Tae	**0.1**	0.2	–	5.5	881.6	792.4	0.1
Vehicle	**0.1**	**0.1**	370.0	16.6	1,861.9	–	0.1
Wine	**0.2**	0.4	0.8	1.8	1,189.3	739.5	0.1
Zoo	**0.3**	0.8	0.6	4.9	544.2	25.9	0.1
Sum	**14.7**	42.3	16,057.3*	145.8	37,198.5	20,254.0*	3.3

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

Table W24: 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 20% 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.