

**Table 1** Configuration used in Exp.1-4 with 80-20 ratio training-test random data samples for real data

	Training	Test
Exp-1.	A03, A04, A05, A07, A08, A09, A10, A11, P09, P10, P12, P13, P14, P15, P17, P19, P20, P21, P22, P23, Y07, Y09, Y10, Y11, Y12, Y13, Y14, Y15, Y16, Y17, Y18, Y19, Y20, Y22, Y23	A01, A02, P05, P06, P07, P08, Y01, Y03, Y04, Y06
Exp-2.	A01, A02, A05, A07, A08, A09, A10, A11, P05, P06, P07, P08, P14, P15, P17, P19, P20, P21, P22, P23, Y01, Y03, Y04, Y06, Y12, Y13, Y14, Y15, Y16, Y17, Y18, Y19, Y20, Y22, Y23	A03, A04, P09, P10, P12, P13, Y07, Y09, Y10, Y11
Exp-3.	A01, A02, A03, A04, A05, A07, A08, A09, A10, A11, P05, P06, P07, P08, P09, P10, P12, P13, P20, P21, P22, P23, Y01, Y03, Y04, Y06, Y07, Y09, Y10, Y11, Y16, Y17, Y18, Y19, Y20, Y22, Y23	A05, A07, P14, P15, P17, P19, Y12, Y13, Y14, Y15
Exp-4.	A01, A02, A03, A04, A05, A07, A08, A09, A10, A11, P05, P06, P07, P08, P09, P10, P12, P13, P14, P15, P17, P19, Y01, Y03, Y04, Y06, Y07, Y09, Y10, Y11, Y12, Y13, Y14, Y15, Y20, Y22, Y23	A08, A09, P20, P21, P22, P23, Y16, Y17, Y18, Y19

**Table 2** Classification accuracy for Exp.1 with 80-20 ratio training-test random data samples on real data

		Test	
		Real data	Real data + Synthesized data
Training	Real data	90.00 %	96.67 %
	Real data + Synthesized data	94.08 %	98.33 %

**Table 3** Classification accuracy for Exp.2 with 80-20 ratio training-test random data samples on real data

		Test	
		Real data	Real data + Synthesized data
Training	Real data	90.00 %	100 %
	Real data + Synthesized data	90.00 %	100 %

**Table 4** Classification accuracy for Exp.3 with 80-20 ratio training-test random data samples on real data

		Test	
		Real data	Real data + Synthesized data
Training	Real data	70.00 %	90.00 %
	Real data + Synthesized data	98.00 %	100 %

**Table 5** Classification accuracy for Exp.4 with 80-20 ratio training-test random data samples on real data

		Test	
		Real data	Real data + Synthesized data
Training	Real data	80.00 %	96.67 %
	Real data + Synthesized data	90.00 %	100 %