

Supplementary material: Tables S1 and S2; Figures S1-S3.

Table S1 Distribution of migrant workers in different administrative regions in Taiwan

Administrative regions	Numbers of migrant workers	Proportion ^a	Indonesia (N, %) ^b	Philippines (N, %)	Thailand (N, %)	Vietnam (N, %)
Taoyuan City	91,898	4.14%	11,935, 13%	30,705, 33%	16,998, 19%	32,260, 35%
Taichung City	78,423	2.80%	12,031, 15%	15,690, 20%	10,215, 13%	40,487, 52%
New Taipei City	56,041	1.40%	8,853, 16%	9,012, 16%	7,753, 14%	30,422, 54%
Tainan City	44,240	2.35%	6,128, 14%	13,945, 32%	5,335, 12%	18,832, 43%
Changhua County	43,969	3.44%	8,936, 20%	5,351, 12%	6,086, 14%	23,596, 54%
Kaohsiung City	38,815	1.40%	6,771, 17%	13,508, 35%	2,986, 8%	15,550, 40%
Hsinchu County	22,126	3.97%	1,246, 6%	13,016, 59%	1,983, 9%	5,881, 27%
Miaoli County	13,573	2.47%	1,854, 14%	5,709, 42%	1,730, 13%	4,280, 32%
Yunlin County	11,170	1.63%	1,901, 17%	1,456, 13%	1,546, 14%	6,267, 56%
Hsinchu City	10,488	2.35%	512, 5%	8,036, 77%	241, 2%	1,699, 16%
Pingtung County	7,533	0.91%	2,641, 35%	1,116, 15%	419, 6%	3,357, 45%
Yilan County	6,875	1.51%	2,101, 31%	1,603, 23%	603, 9%	2,568, 37%
Nantou County	6,722	1.35%	1,187, 18%	787, 12%	1,562, 23%	3,186, 47%
Chiayi County	6,545	1.29%	1,254, 19%	1,317, 20%	1,041, 16%	2,933, 45%
Taipei City	2,574	0.10%	501, 19%	135, 5%	785, 31%	1,153, 45%
Penghu County	2,307	2.21%	1,921, 83%	258, 11%	0, 0%	128, 6%
Keelung City	2,104	0.57%	692, 33%	429, 20%	240, 11%	743, 35%
Hualien County	1,869	0.57%	438, 23%	463, 25%	617, 33%	351, 19%
Chiayi City	732	0.27%	214, 29%	134, 18%	44, 6%	340, 46%
Taitung County	472	0.22%	271, 57%	32, 7%	0, 0%	169, 36%
Kinmen County	217	0.16%	32, 15%	0, 0%	101, 47%	84, 39%
Lienchiang County	60	0.46%	27, 45%	11, 18%	0, 0%	22, 37%

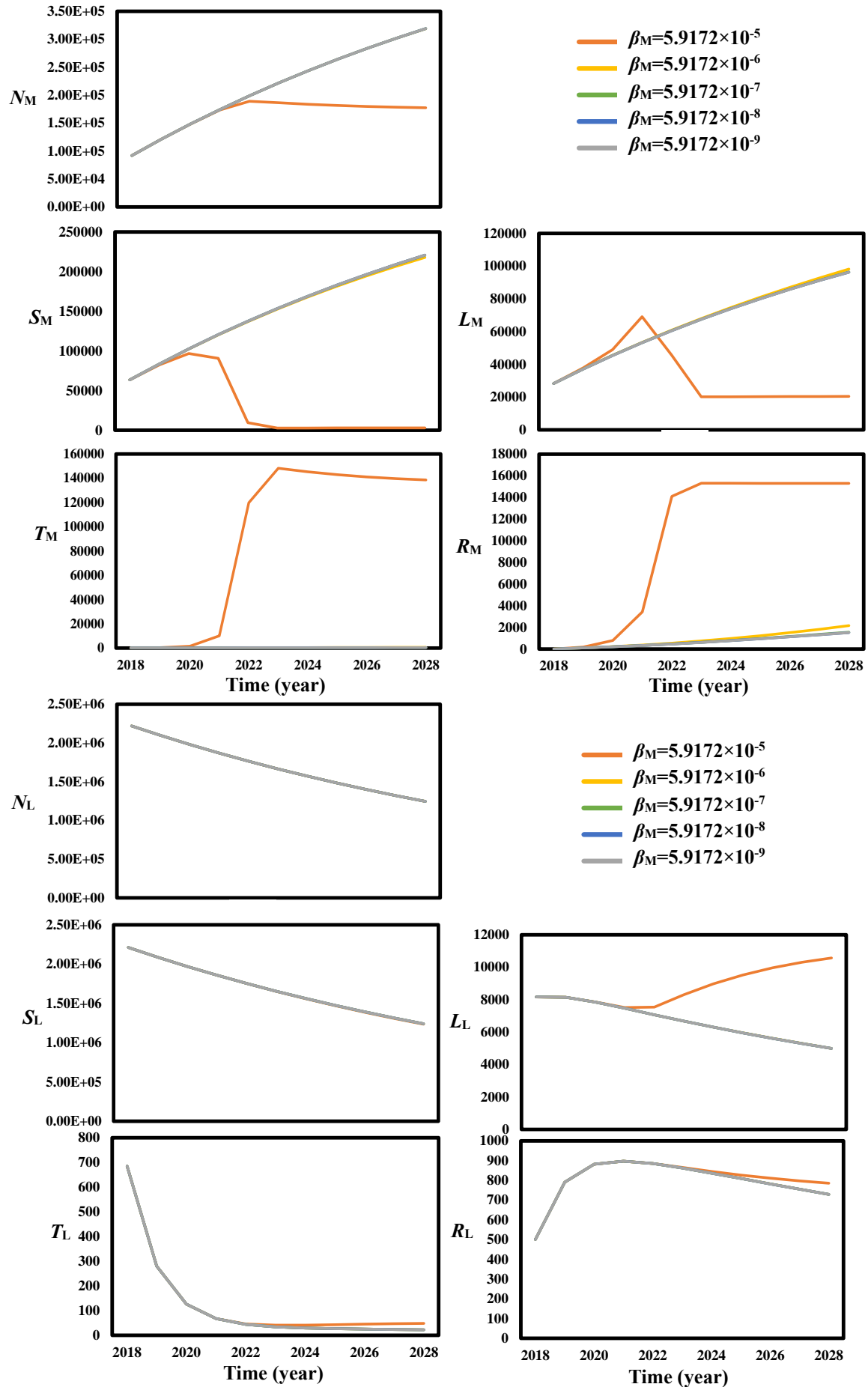
^a The proportion is defined as the number of migrant workers to total population size (migrant add local population) in specific administrative regions.

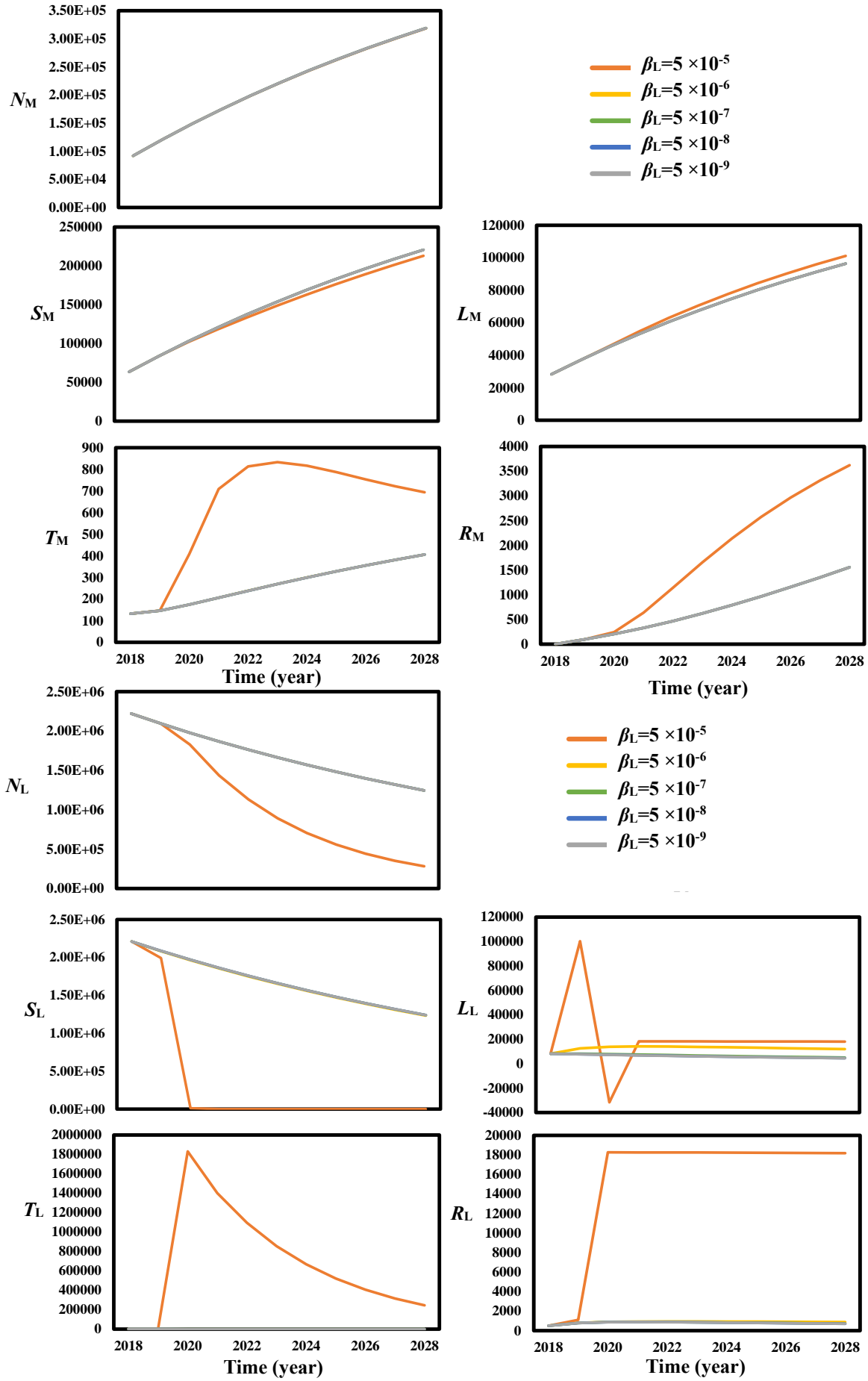
^b N and % indicated population size and percentage in specific administrative regions.

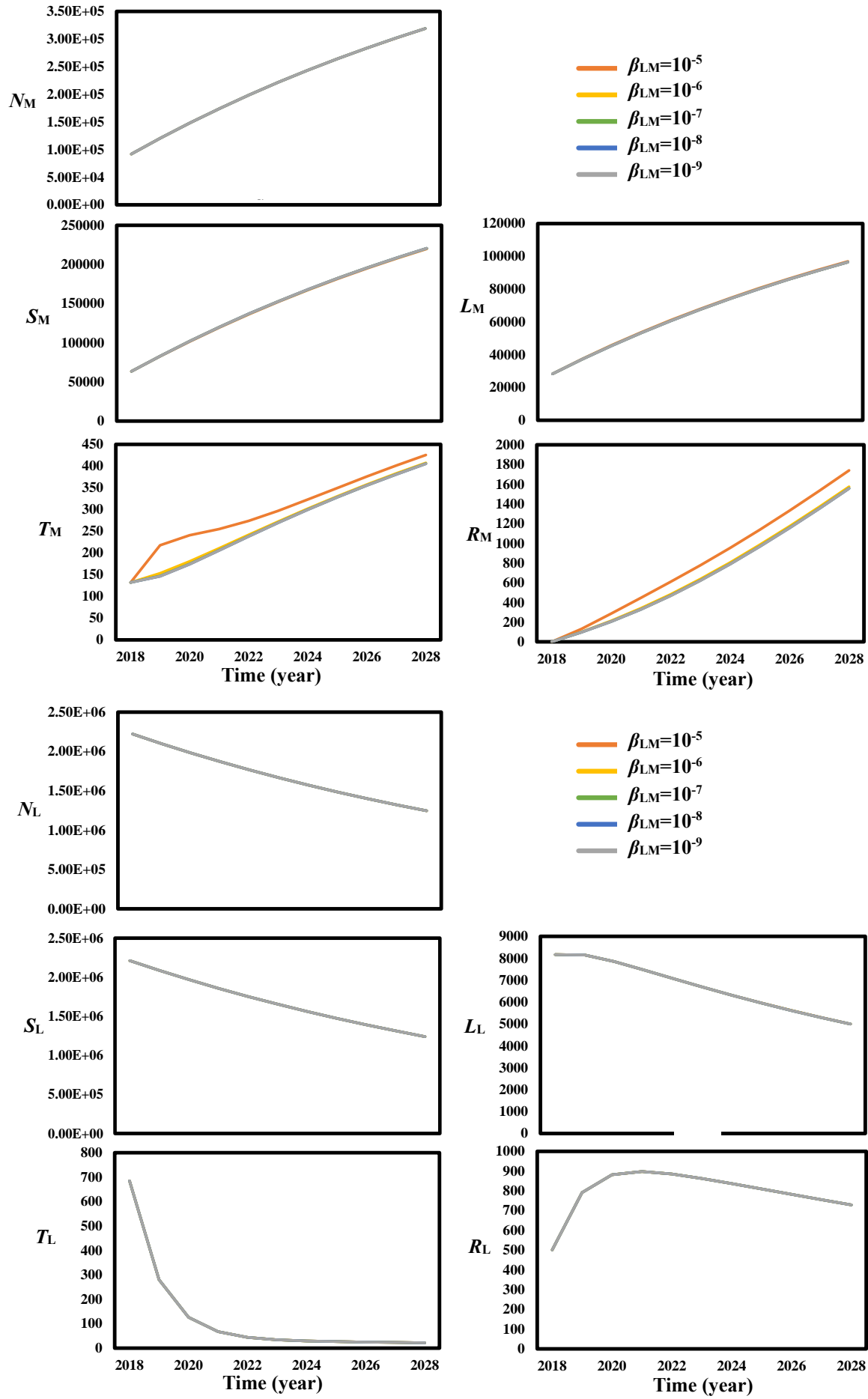
Table S2 Percentage of reduction in total number of latently infected (L) + infectious (T) individuals under different single, dual, and triple combinations control strategies in Taoyuan, Taichung, and New Taipei Cities in 2020 (two years projection) and 2023 (five years projection)

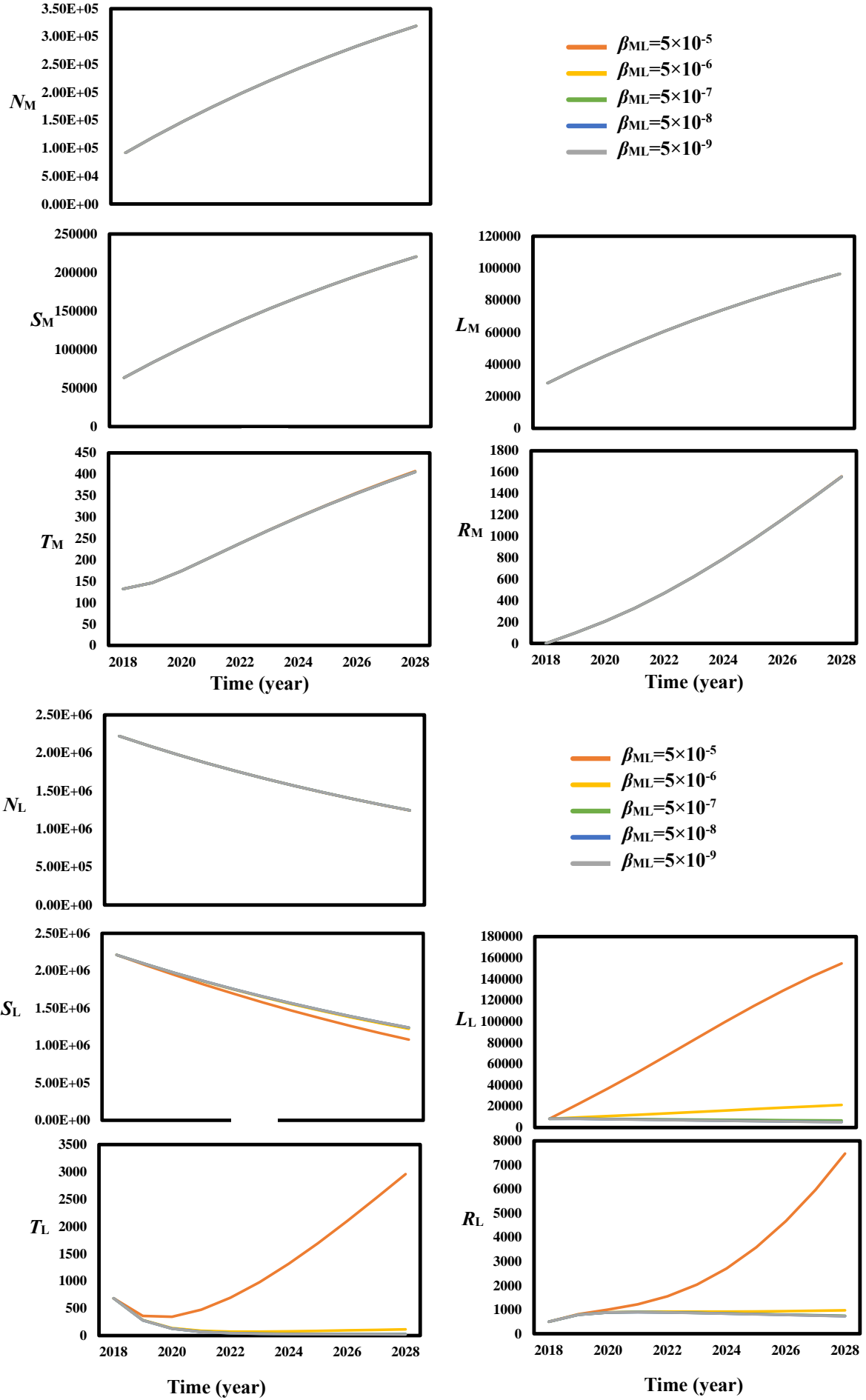
Projection	City	Single control strategies								
		Social distance control (u_1)								
		10%	20%	30%	40%	50%	60%	70%	80%	90%
2-yr	Taoyuan City	5.8%	11.3%	16.4%	21.3%	25.9%	30.3%	34.4%	38.3%	42.1%
	Taichung City	7.3%	14.1%	20.4%	26.3%	31.9%	37.0%	41.9%	46.4%	50.7%
	New Taipei City	10.9%	20.7%	29.5%	37.5%	44.7%	51.2%	57.2%	62.6%	67.6%
5-yr	Taoyuan City	18.1%	31.8%	42.4%	51.0%	58.1%	64.0%	68.9%	73.1%	76.7%
	Taichung City	24.2%	40.5%	52.2%	61.0%	68.0%	73.5%	78.0%	81.6%	84.7%
	New Taipei City	52.7%	72.2%	81.4%	86.8%	90.4%	92.8%	94.6%	96.0%	97.0%
		Early screening control (u_2)								
		10%	20%	30%	40%	50%	60%	70%	80%	90%
2-yr	Taoyuan City	3.8%	7.6%	11.3%	14.9%	18.4%	21.8%	25.2%	28.5%	31.7%
	Taichung City	4.6%	9.1%	13.5%	17.7%	21.8%	25.9%	29.7%	33.5%	37.2%
	New Taipei City	6.2%	12.1%	17.8%	23.3%	28.5%	33.5%	38.2%	42.8%	47.1%
5-yr	Taoyuan City	12.2%	22.9%	32.4%	40.8%	48.2%	54.8%	60.6%	65.8%	70.5%
	Taichung City	16.2%	29.5%	40.7%	50.0%	57.9%	64.6%	70.2%	75.0%	79.2%
	New Taipei City	32.5%	54.9%	68.7%	77.4%	83.4%	87.6%	90.6%	92.9%	94.7%
		DOTS control (u_3)								
		80%	85%	90%	95%					
2-yr	Taoyuan City	13.3%	13.9%	14.5%	15.1%					
	Taichung City	16.7%	17.5%	18.2%	18.9%					
	New Taipei City	22.7%	23.8%	24.8%	25.7%					
5-yr	Taoyuan City	40.9%	42.3%	43.5%	44.7%					
	Taichung City	50.3%	51.7%	53.0%	54.3%					
	New Taipei City	77.3%	78.4%	79.5%	80.5%					
Dual and triple combinations control strategies										
		u_1 (70%)+ u_2 (70%)		u_1 (70%)+ u_3 (85%)		u_2 (70%)+ u_3 (85%)		u_1 (70%)+ u_2 (70%)+ u_3 (85%)		
2-yr	Taoyuan City	39%		38%		31%		41%		
	Taichung City	47%		46%		37%		49%		
	New Taipei City	63%		62%		49%		66%		
5-yr	Taoyuan City	74%		73%		68%		76%		
	Taichung City	83%		82%		77%		84%		
	New Taipei City	96%		96%		94%		97%		

Figure S1 Sensitivity Analysis of four transmission rates (β_M , β_L , β_{LM} , β_{ML}) and reactivation rate (k) in Taoyuan City.









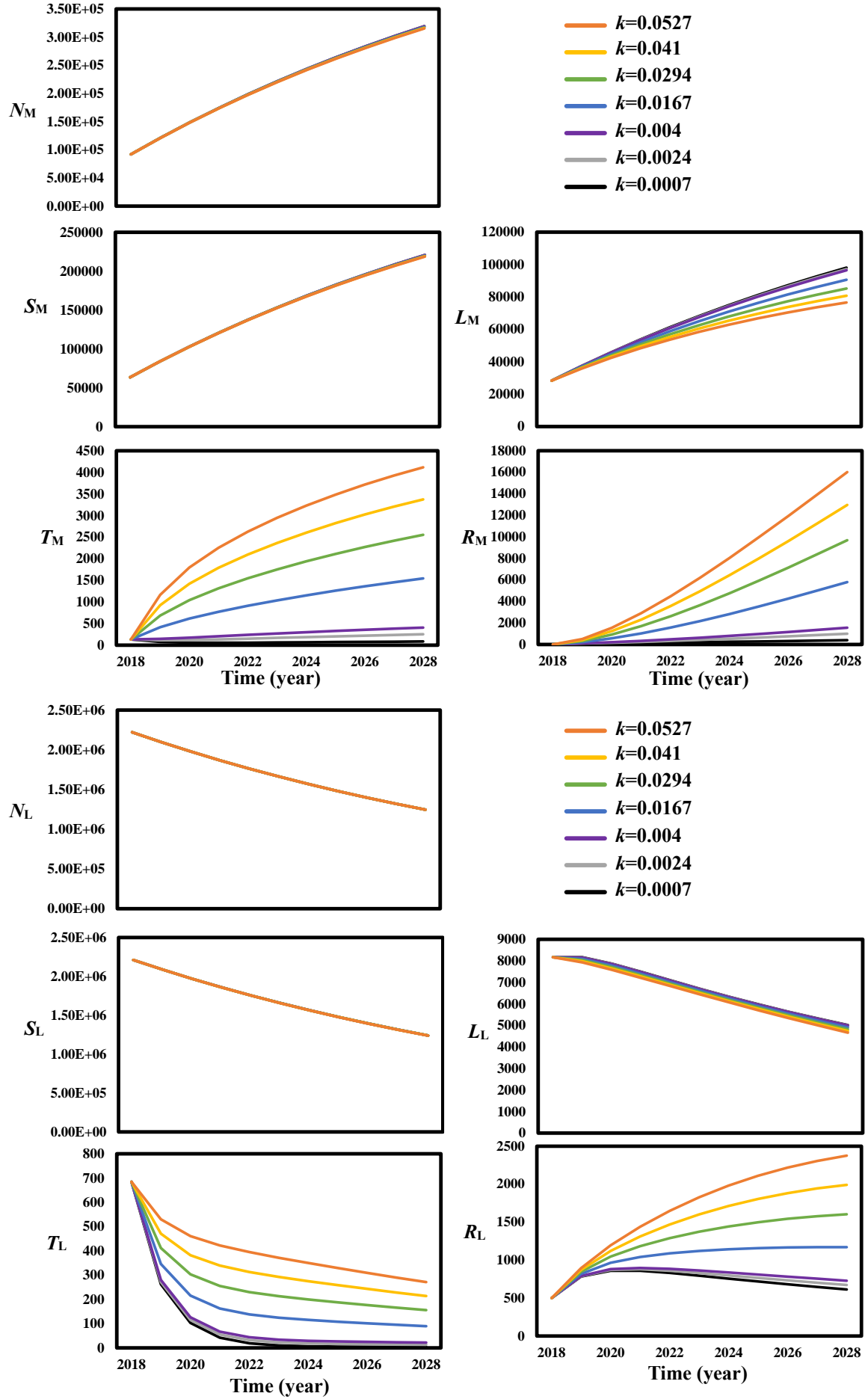
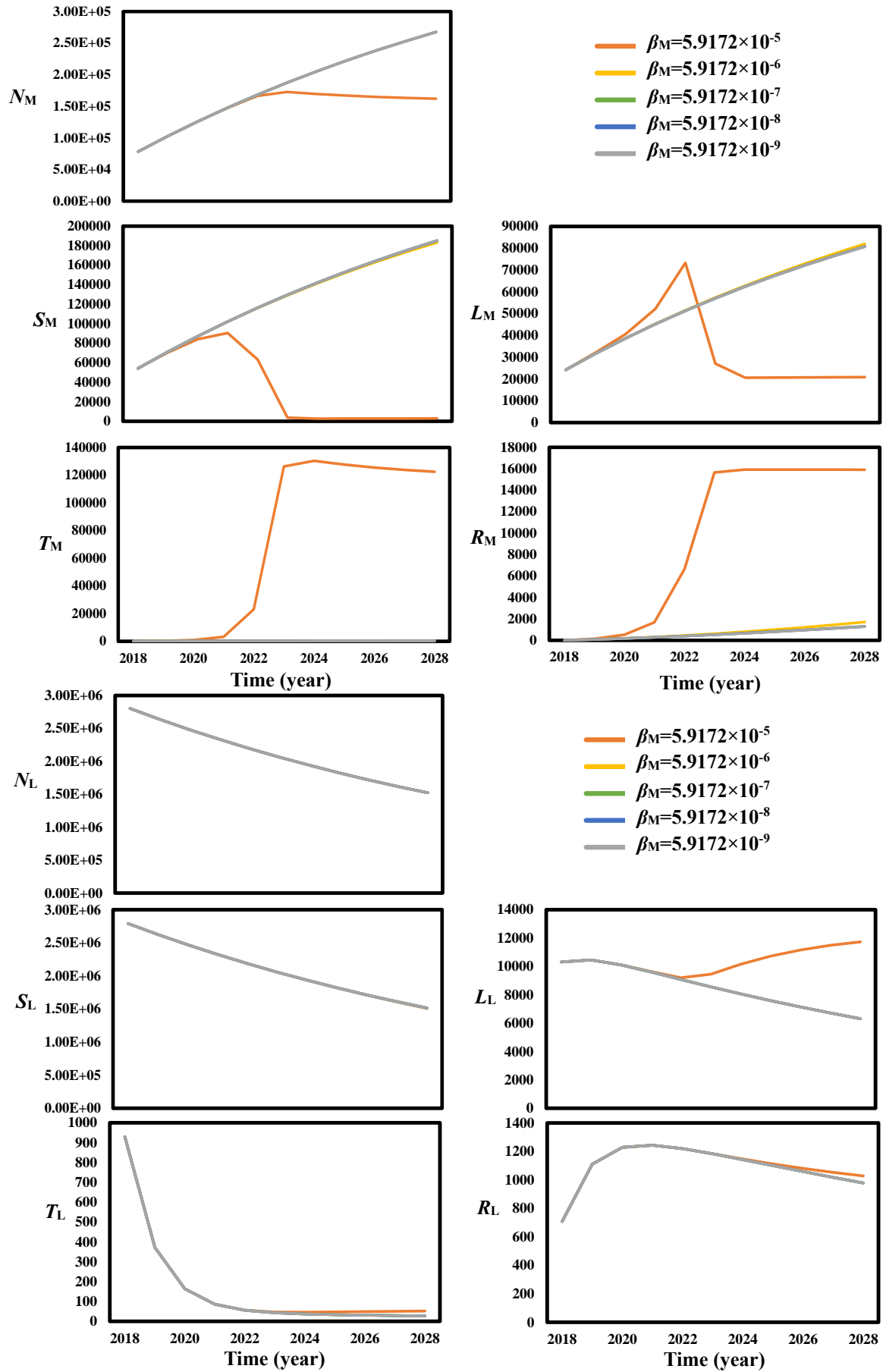
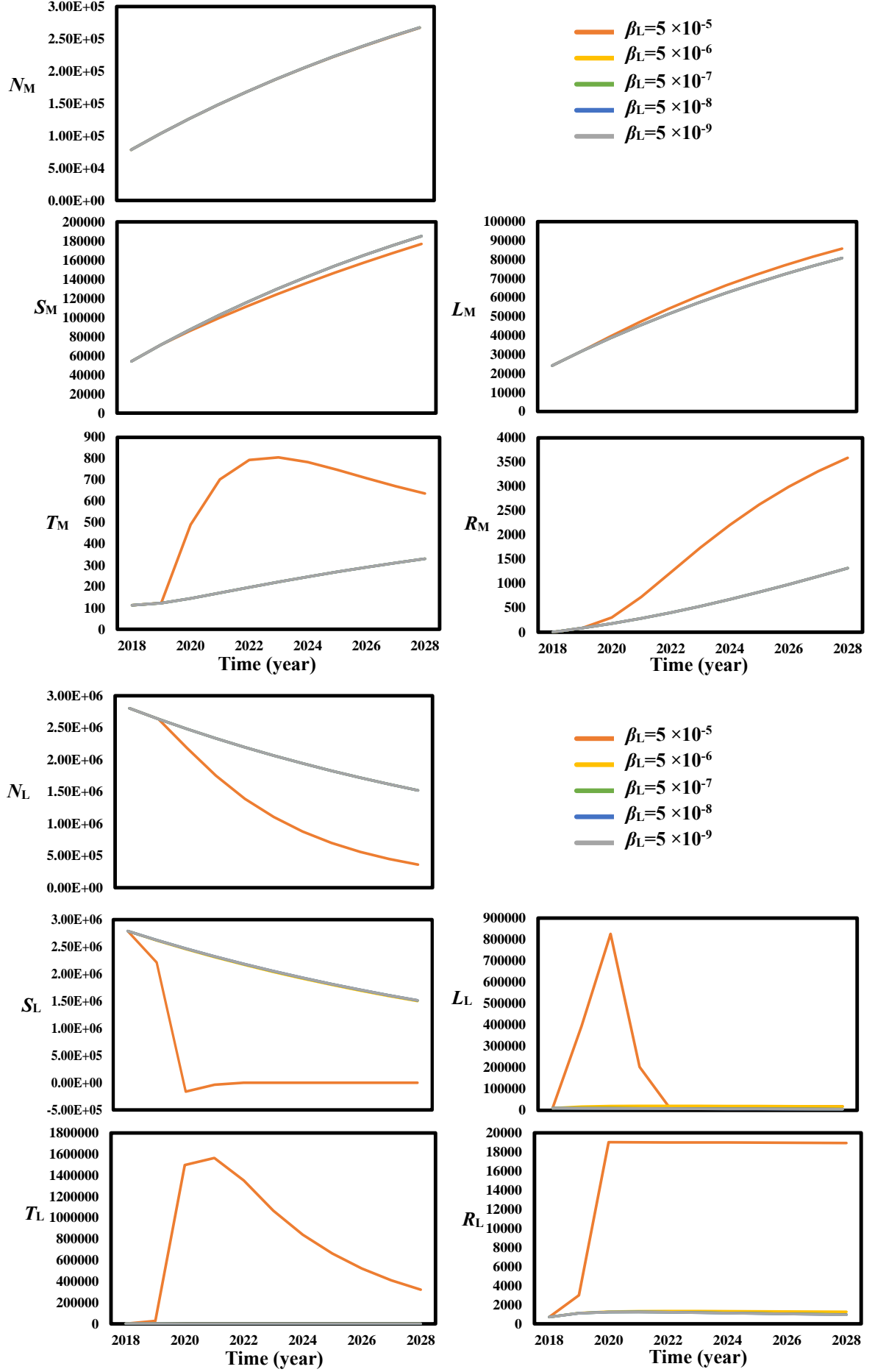
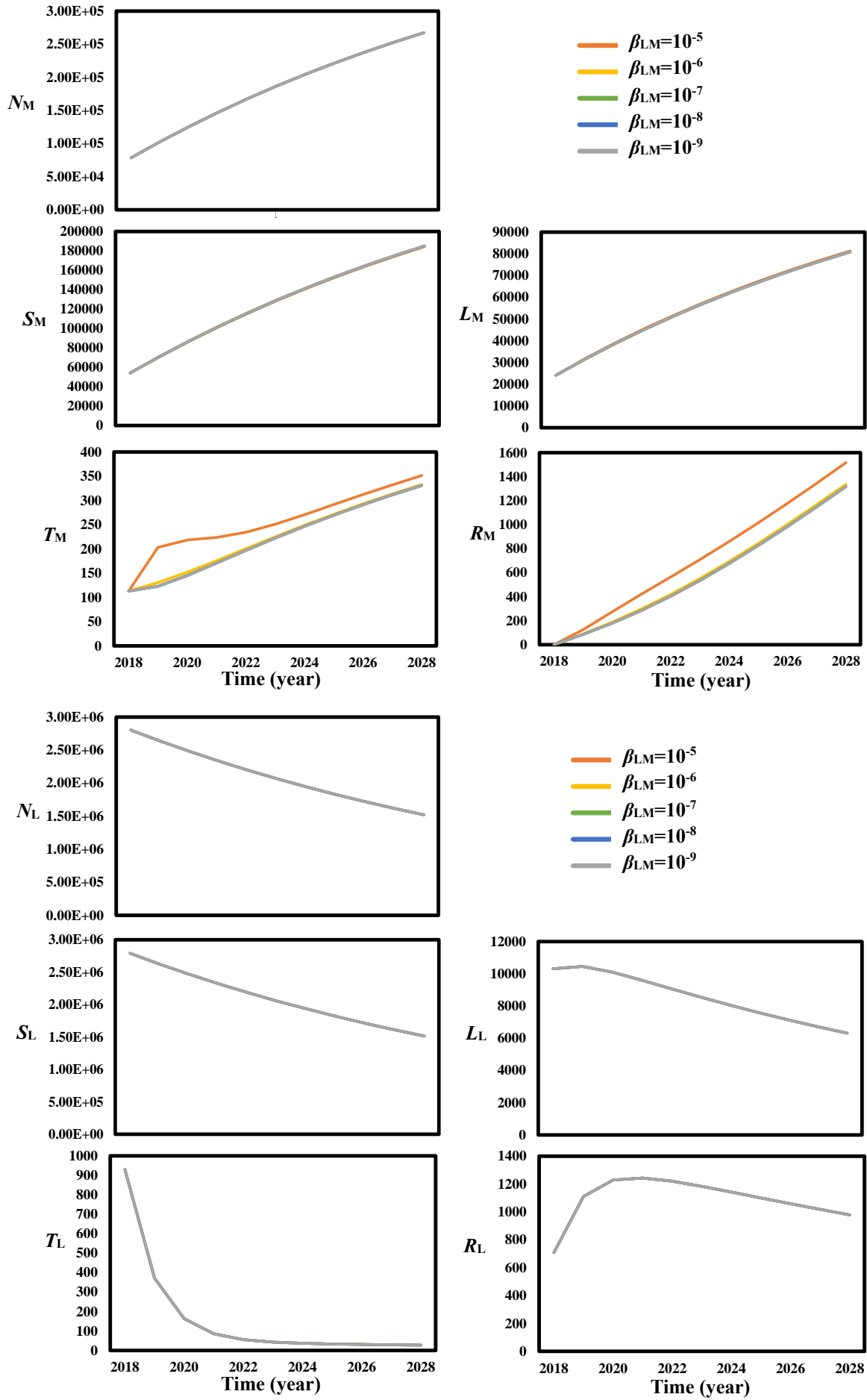
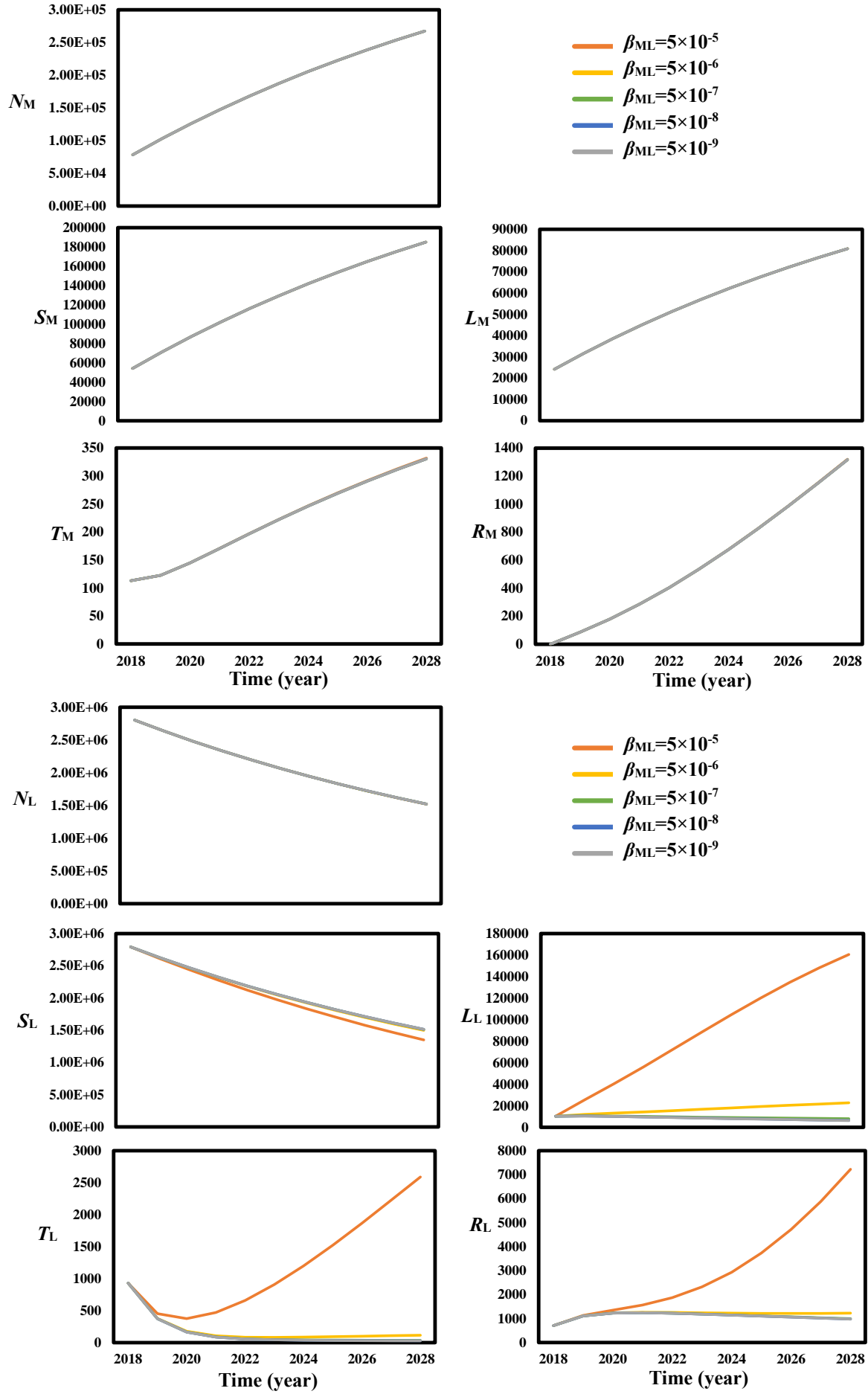


Figure S2 Sensitivity Analysis of four transmission rates (β_M , β_L , β_{LM} , β_{ML}) and reactivation rate (k) in Taichung City.









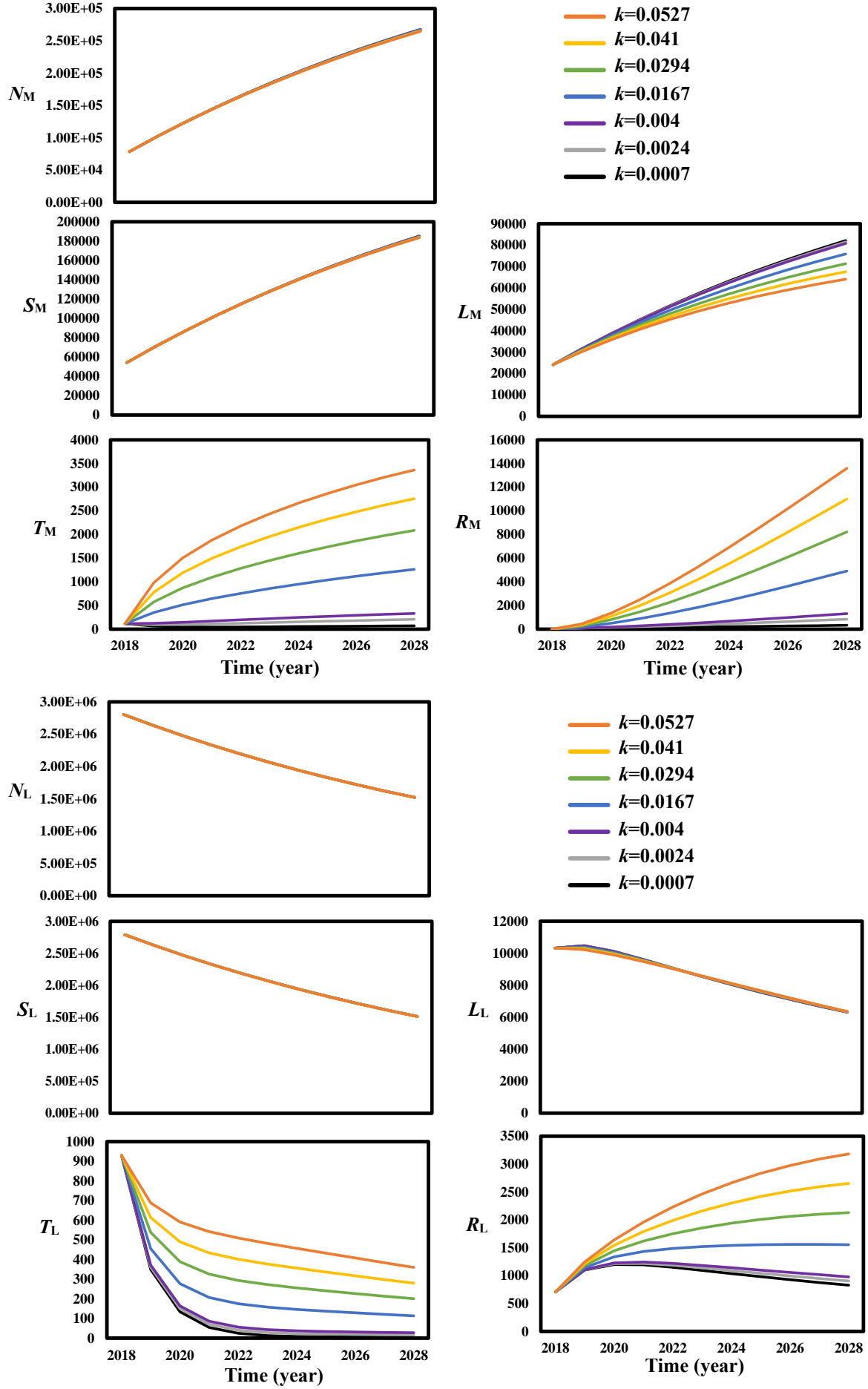


Figure S3 Sensitivity Analysis of four transmission rates (β_M , β_L , β_{LM} , β_{ML}) and reactivation rate (k) in New Taipei City.

