Supplementary materials

Table S1   Quality assessment of the included studies

Author	Country	Selection	Comparability	Outcome	Total
Chinese CDC[51]	China	***	**	***	********
Miyashita et al.[52]	USA	****	*	**	*******
Goyal et al.[53]	USA	****	**	**	********
Baker et al.[54]	UK	****	**	**	********
Benelli et al.[55]	Italy	****	**	***	*********
Rossi et al.[56]	Italy	****	**	**	********
Nikpouraghdam et al.[57]	Iran	****	**	**	********
Borobia et al.[58]	Spain	****	**	***	*********
Vasco et al.[59]	Portugal	****	**	***	*********
Duanmu et al.[60]	USA	****	**	***	*********
Gold et al.[61]	USA	***	**	***	********
Sami et al.[62]	Iran	****	**	***	*********
Regina et al.[63]	Swiss	****	**	***	*********
Ji et al.[64]	Korea	****	**	***	*********
Joharatnam-Hogan et al.[65]	UK	***	*	**	******
Stroppa et al.[66]	Italy	**	*	***	******
Dai et al.[41]	China	***	**	***	********
Mehta et al.[67]	USA	****	**	**	********
Yang et al.[68]	China	***	**	**	*******

The maximal score of NOS is 9 stars: 4 stars for the selection process, 2 stars for comparability and 3 stars for outcome, with 6 stars or more indicating high quality.
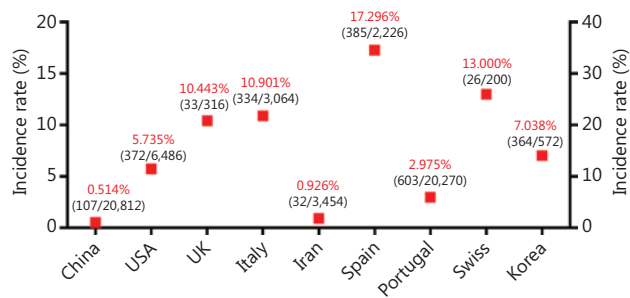

Figure S1   Incidence of cancer in COVID-19 patients among different countries.
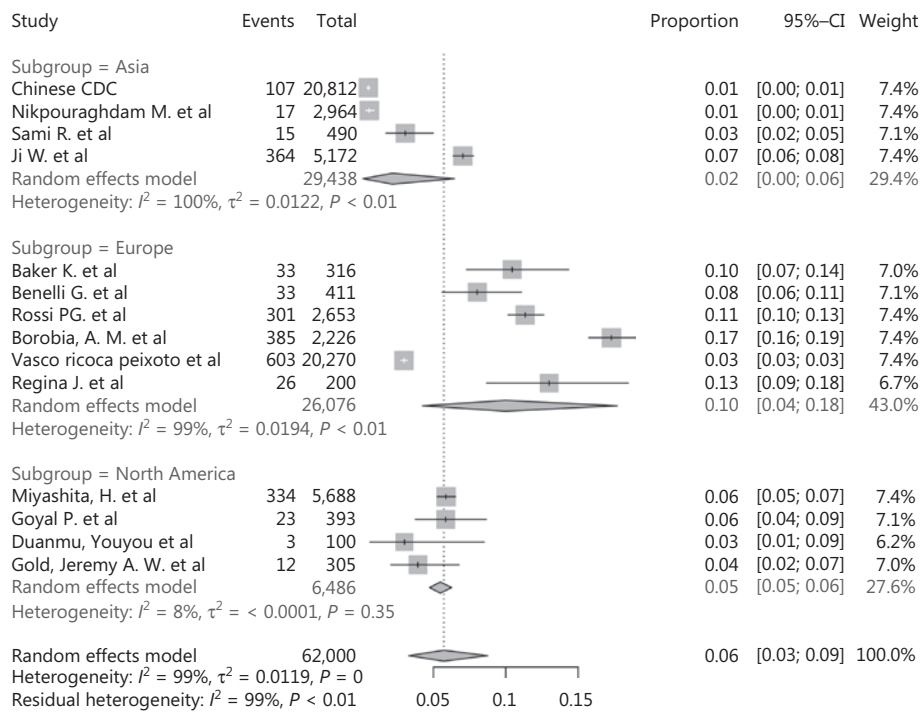
Study	Events	Total	Proportion	95%–CI	Weight
Subgroup = Asia					
Chinese CDC	107	20,812	0.01	[0.00; 0.01]	7.4%
Nikpouraghdam M. et al	17	2,964	0.01	[0.00; 0.01]	7.4%
Sami R. et al	15	490	0.03	[0.02; 0.05]	7.1%
Ji W. et al	364	5,172	0.07	[0.06; 0.08]	7.4%
Random effects model		29,438	0.02	[0.00; 0.06]	29.4%
Heterogeneity: $I^2 = 100\%$, $\tau^2 = 0.0122$, $P < 0.01$					
Subgroup = Europe					
Baker K. et al	33	316	0.10	[0.07; 0.14]	7.0%
Benelli G. et al	33	411	0.08	[0.06; 0.11]	7.1%
Rossi PG. et al	301	2,653	0.11	[0.10; 0.13]	7.4%
Borobia, A. M. et al	385	2,226	0.17	[0.16; 0.19]	7.4%
Vasco ricoca peixoto et al	603	20,270	0.03	[0.03; 0.03]	7.4%
Regina J. et al	26	200	0.13	[0.09; 0.18]	6.7%
Random effects model		26,076	0.10	[0.04; 0.18]	43.0%
Heterogeneity: $I^2 = 99\%$, $\tau^2 = 0.0194$, $P < 0.01$					
Subgroup = North America					
Miyashita, H. et al	334	5,688	0.06	[0.05; 0.07]	7.4%
Goyal P. et al	23	393	0.06	[0.04; 0.09]	7.1%
Duanmu, Youyou et al	3	100	0.03	[0.01; 0.09]	6.2%
Gold, Jeremy A. W. et al	12	305	0.04	[0.02; 0.07]	7.0%
Random effects model		6,486	0.05	[0.05; 0.06]	27.6%
Heterogeneity: $I^2 = 8\%$, $\tau^2 = < 0.0001$, $P = 0.35$					
Random effects model		62,000	0.06	[0.03; 0.09]	100.0%
Heterogeneity: $I^2 = 99\%$, $\tau^2 = 0.0119$, $P = 0$					
Residual heterogeneity: $I^2 = 99\%$, $P < 0.01$	0.05	0.1	0.15		

Figure S2 Forest plot for region subgroup analysis of the cancer incidence in COVID-19 patients.

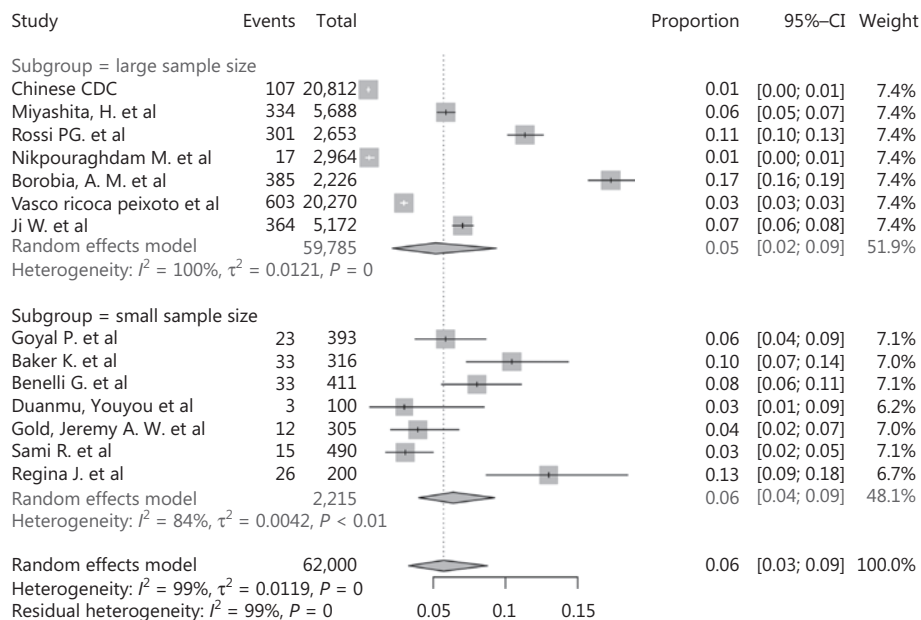| Study	Events	Total	Proportion	95%–CI	Weight
Subgroup = large sample size					
Chinese CDC	107	20,812	0.01	[0.00; 0.01]	7.4%
Miyashita, H. et al	334	5,688	0.06	[0.05; 0.07]	7.4%
Rossi PG. et al	301	2,653	0.11	[0.10; 0.13]	7.4%
Nikpouraghdam M. et al	17	2,964	0.01	[0.00; 0.01]	7.4%
Borobia, A. M. et al	385	2,226	0.17	[0.16; 0.19]	7.4%
Vasco ricoca peixoto et al	603	20,270	0.03	[0.03; 0.03]	7.4%
Ji W. et al	364	5,172	0.07	[0.06; 0.08]	7.4%
Random effects model		59,785	0.05	[0.02; 0.09]	51.9%
Heterogeneity: $I^2 = 100\%$, $\tau^2 = 0.0121$, $P = 0$					
Subgroup = small sample size					
Goyal P. et al	23	393	0.06	[0.04; 0.09]	7.1%
Baker K. et al	33	316	0.10	[0.07; 0.14]	7.0%
Benelli G. et al	33	411	0.08	[0.06; 0.11]	7.1%
Duanmu, Youyou et al	3	100	0.03	[0.01; 0.09]	6.2%
Gold, Jeremy A. W. et al	12	305	0.04	[0.02; 0.07]	7.0%
Sami R. et al	15	490	0.03	[0.02; 0.05]	7.1%
Regina J. et al	26	200	0.13	[0.09; 0.18]	6.7%
Random effects model		2,215	0.06	[0.04; 0.09]	48.1%
Heterogeneity: $I^2 = 84\%$, $\tau^2 = 0.0042$, $P < 0.01$					
Random effects model		62,000	0.06	[0.03; 0.09]	100.0%
Heterogeneity: $I^2 = 99\%$, $\tau^2 = 0.0119$, $P = 0$					
Residual heterogeneity: $I^2 = 99\%$, $P = 0$	0.05	0.1	0.15		

Figure S3 Forest plot for sample subgroup analysis of the cancer mortality in COVID-19 patients.
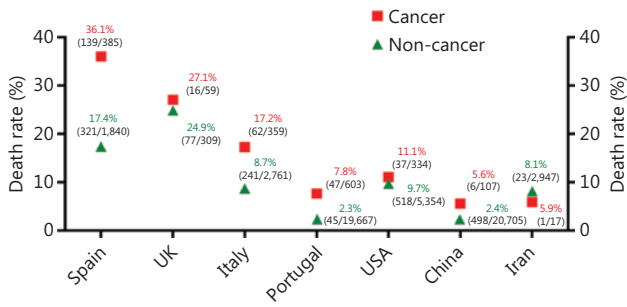
Figure S4 Comparison of mortalities between cancer and noncancer patients among patients with COVID-19 in different countries.
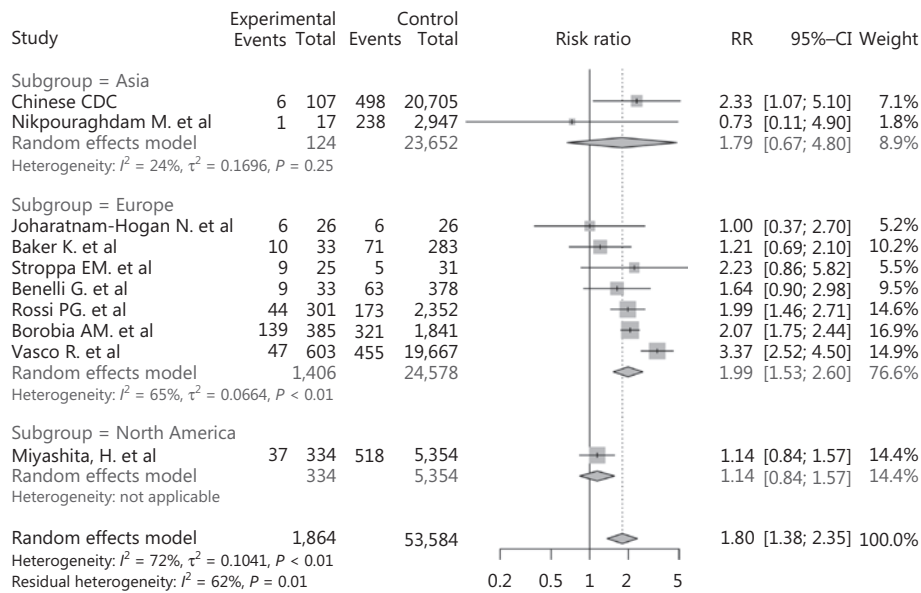

Figure S5 Forest plot for region subgroup analysis of the cancer mortality in COVID-19 patients.
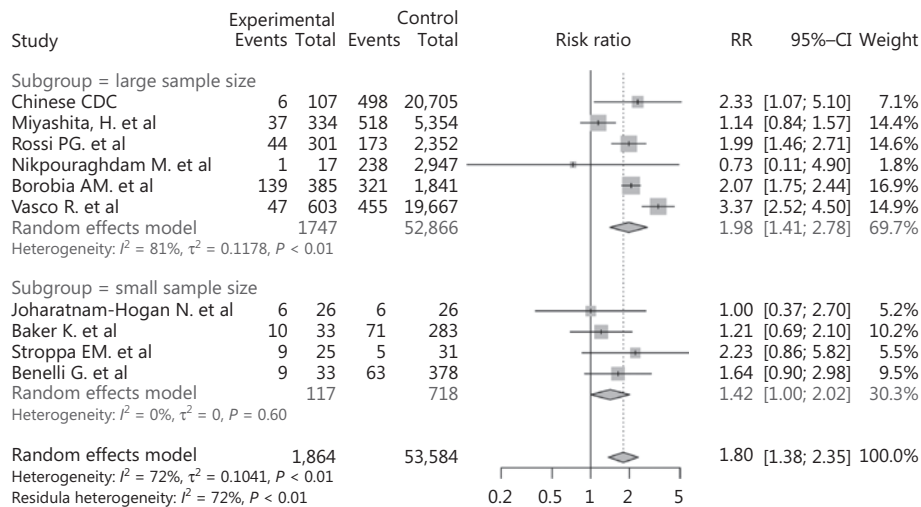

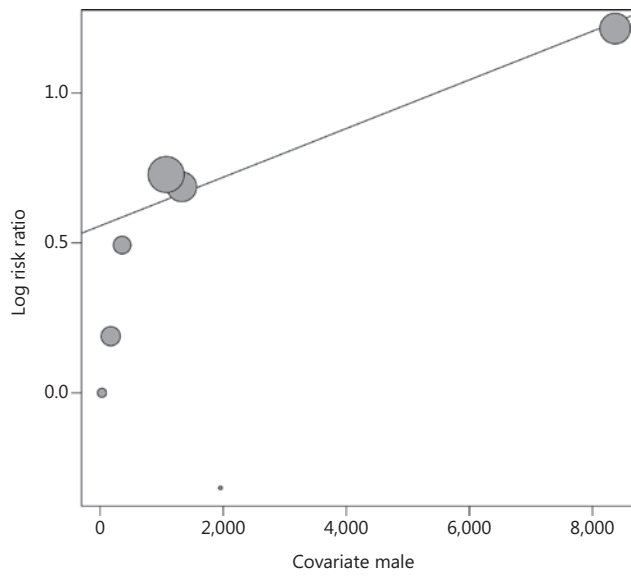**Figure S6** Forest plot for sample size subgroup analysis of the cancer mortality in COVID-19 patients.

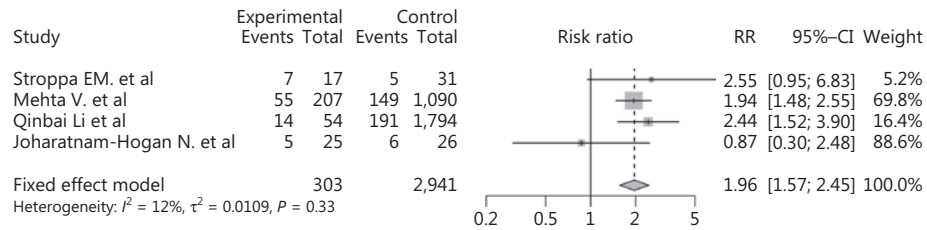**Figure S7** Meta-regression between sex and cancer mortality in COVID-19 patients.

Figure S8 Forest plot showing the mortality of non-lung cancer patients *vs*. non-cancer patients in the COVID-19 population.