Table S1 Quality assessment of included studies by Jadad quality scale

Studies	Items				total score
	Randomization	Concealment of allocation	Double blinding	Withdrawals and dropouts	
Pimentel 2019	2	2	2	0	6
Nanni 2019	2	1	0	1	4
Li 2019	2	2	2	1	7
Arrieta 2019	2	1	0	1	4
Marrone 2018	1	1	1	0	3
Zhao 2017	1	1	0	1	3
Sayed 2015	1	1	0	1	3
Kordes 2015	2	2	2	1	7
Reni 2016	2	1	1	1	5
Kim 2019	2	2	2	0	6
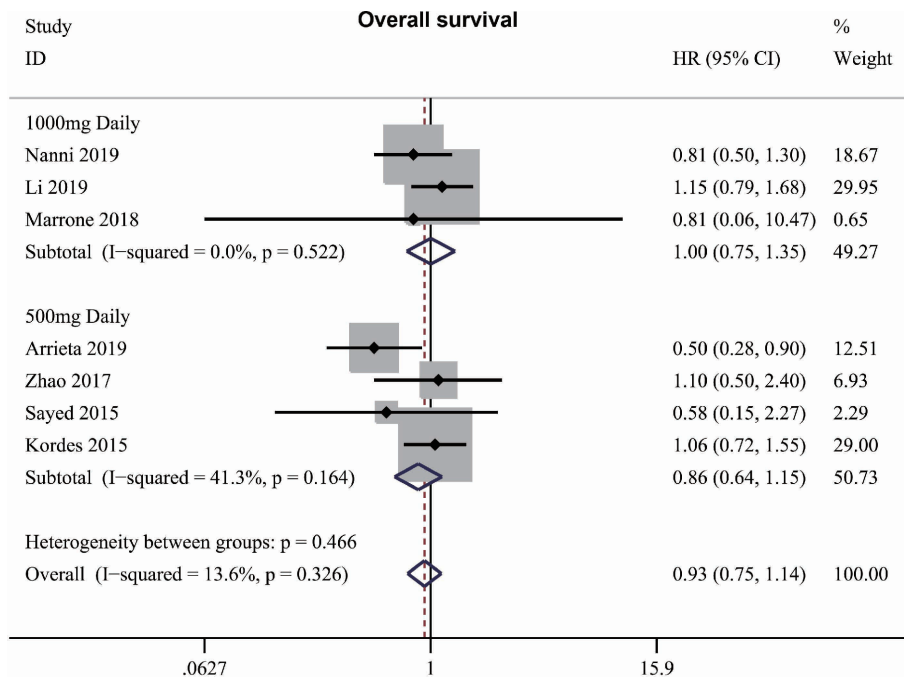
Figure S1 Subgroup analysis of metformin plus standard treatment on overall survival based on metformin doses. HR, hazard ratio.
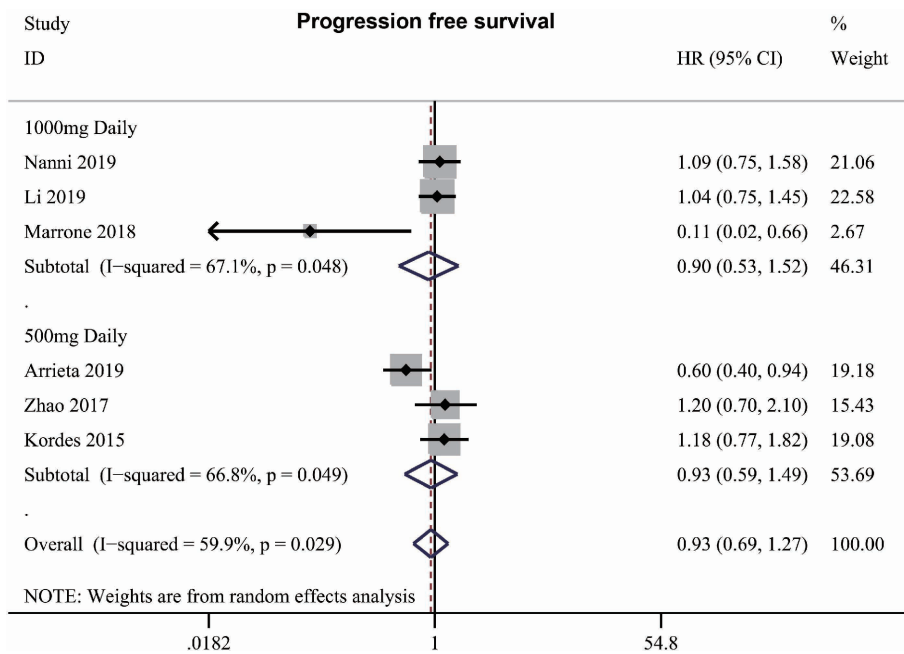
Figure S2 Subgroup analysis of metformin plus standard treatment on progression free survival based on metformin doses. HR, hazard ratio.
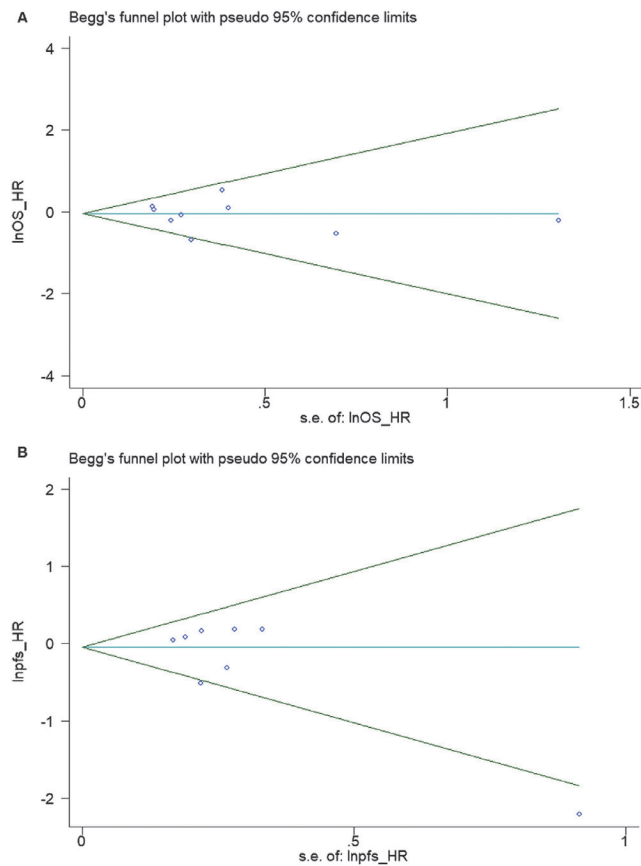
Figure S3 Results of publication bias analysis.