

**S1 Figure.** Sensitivity analyses SMD of ferritin in all eligible ferritin case-control studies, the analysis was preformed using a random-effects model.

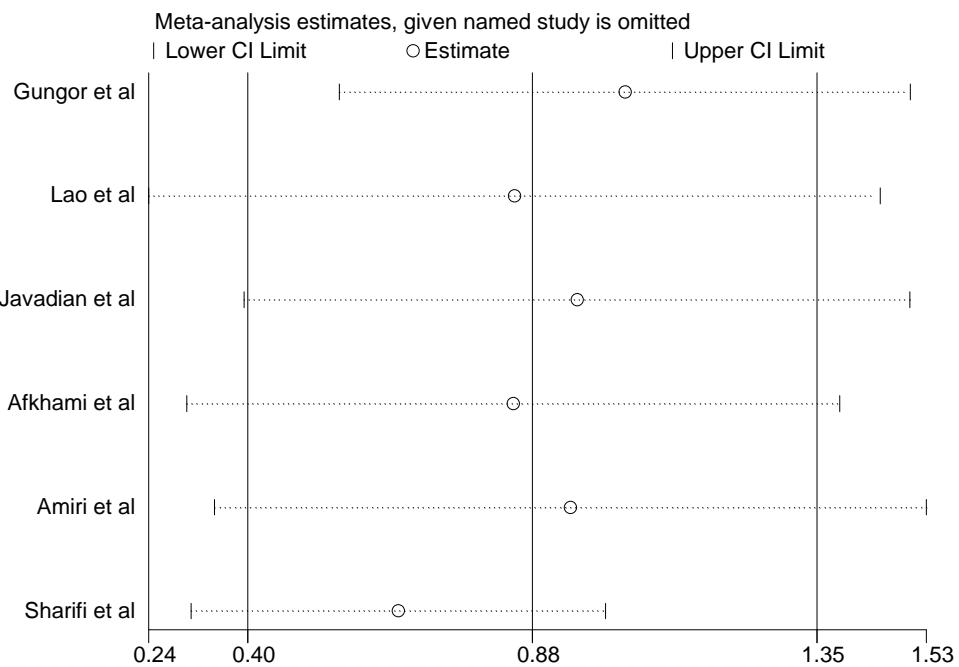


Figure 1. Begg's test for visual assessment of publication bias for six case-control studies of ferritin in meta-analysis ( $p=0.573$ ).

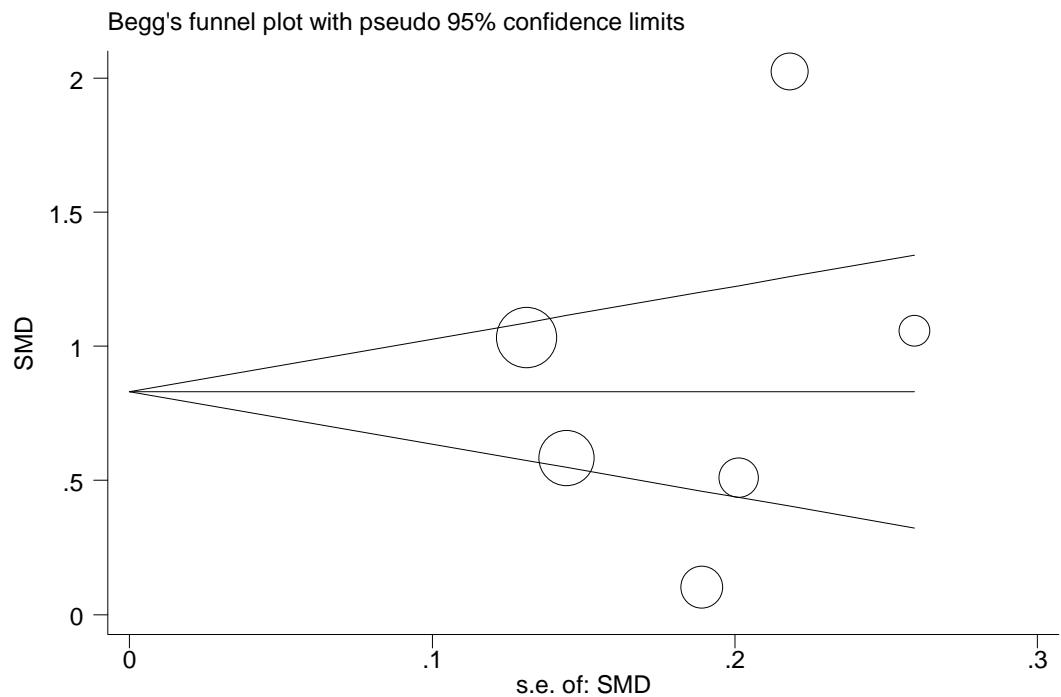


Figure 2. Egger's test for visual assessment of publication bias for six case-control studies of ferritin in meta-analysis ( $p=0.744$ ).

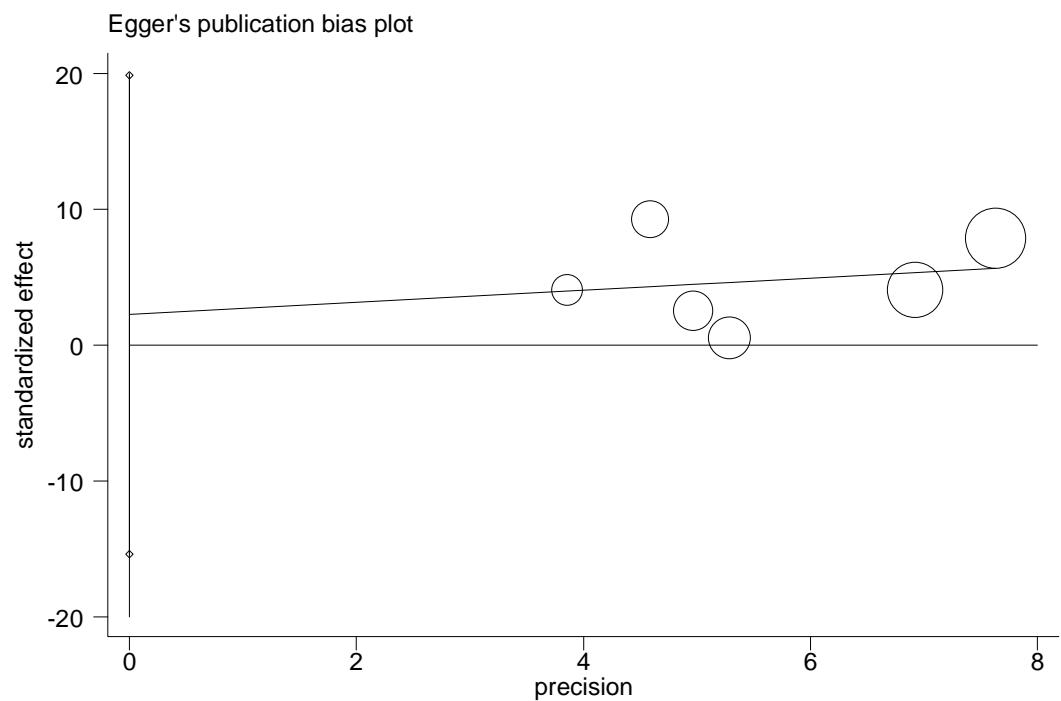


Figure 3. Begg's test for visual assessment of publication bias for four prospective cohort studies of ferritin in meta-analysis ( $p=1.000$ ).

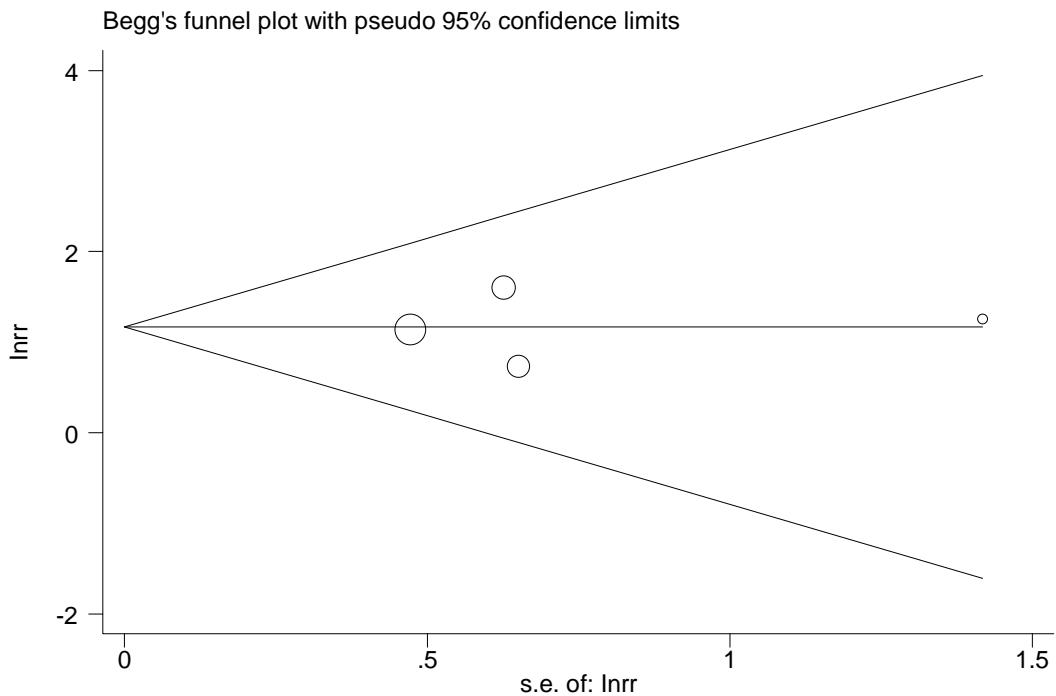


Figure 4. Egger's test for visual assessment of publication bias for six case-control studies of ferritin in meta-analysis ( $p=0.953$ ).

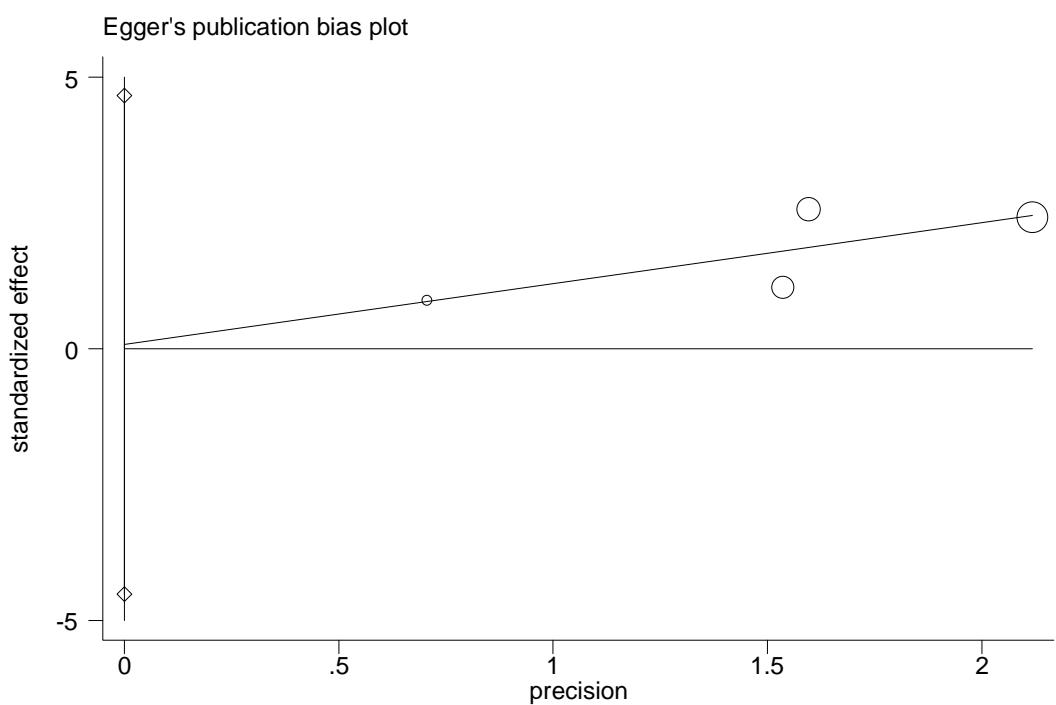


Figure 5. Begg's test for visual assessment of publication bias for three prospective cohort studies of dietary total iron in meta-analysis ( $p=0.117$ ).

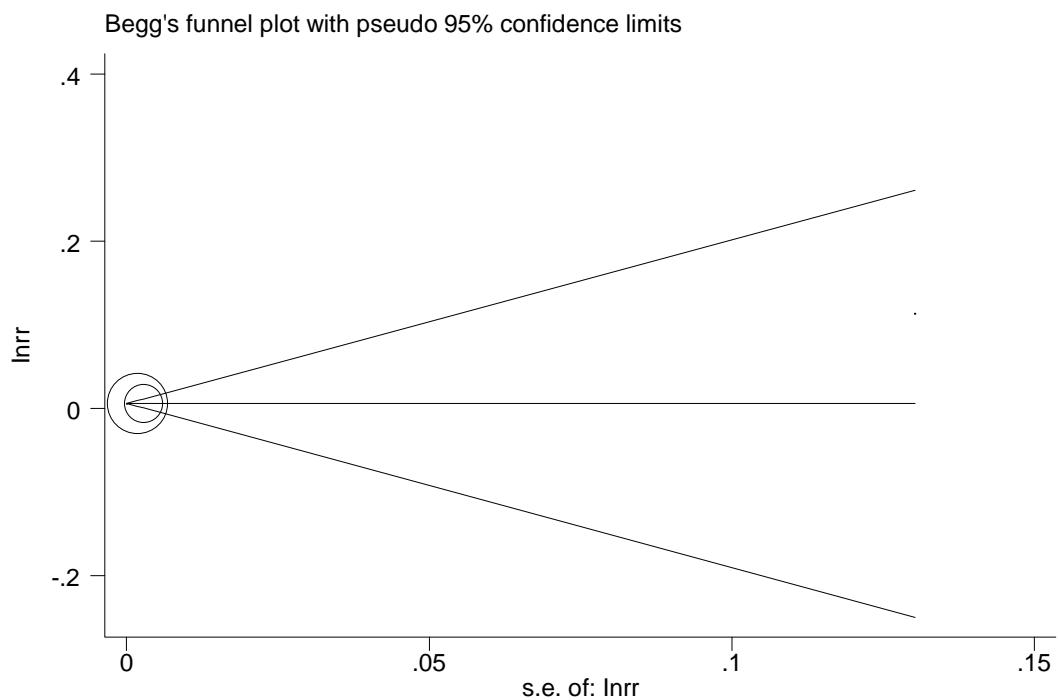
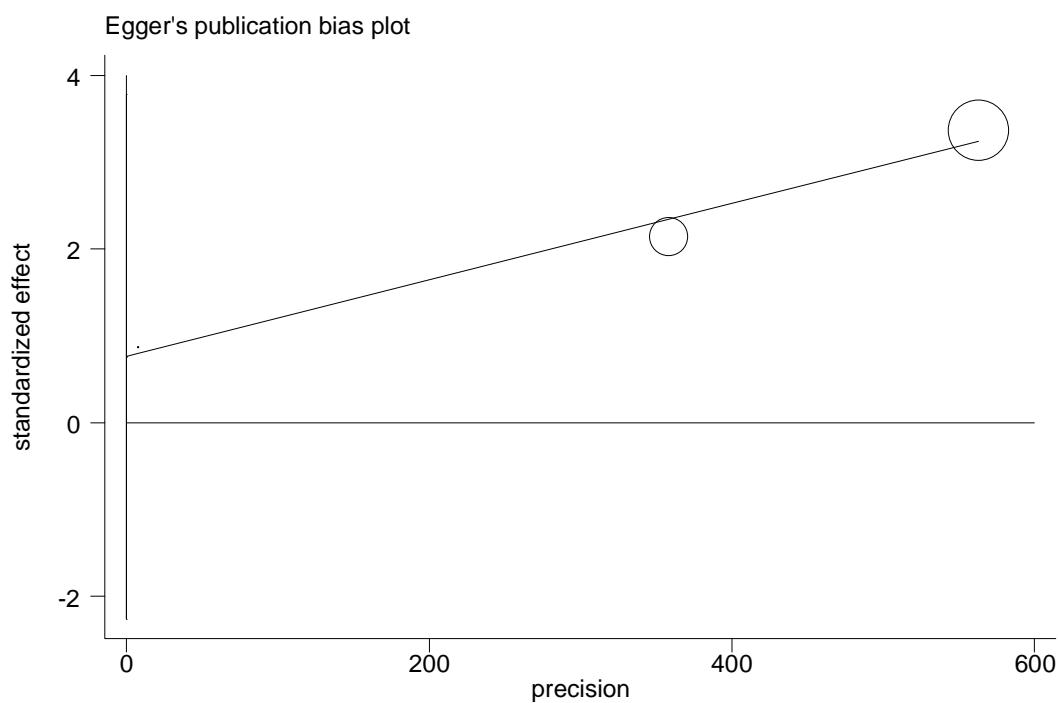


Figure 6. Egger's test for visual assessment of publication bias for three prospective cohort studies of dietary total iron in meta-analysis ( $p=0.192$ ).



**S1 Table.1.** Result of quality assessment of prospective cohort studies

Study	Selection				Comparability	Outcome			Total points
	1) Representativeness of export cohort	2) Selection of the non exposed cohort	3) Ascertainment of exposure	4) No outcome at start		1) Comparability of the design or analysis	1) Outcome assessment	2) Follow up length	
Behboudi-Gandevani, S (2013)	1	1	1	1	2	1	1	1	9
Bowers, K (2011)	0	1	1	1	2	1	1	1	8
Helin, A (2012)	1	1	1	1	2	1	1	1	9
Tarim, E. (2004)	0	0	0	1	1	1	1	1	5
Zein, S (2015)	1	1	1	1	2	1	1	1	9
Qiu, C (2011)	1	1	1	1	2	1	1	1	9
Soubasi, V. (2010)	1	1	1	1	1	1	1	1	8
Chen, X.(2006)	1	1	1	1	1	1	1	1	8

**S1 Table.2.** Result of quality assessment of case-control studies

Study	Selection				Comparability	Exposure			Total points
	1) Is the case definition adequate?	2) Representativeness of the cases	3) Selection of Controls	4) Definition of Controls		1) Comparability of cases and controls	1) Ascertainment of exposure	2) Same method of ascertainment for cases and controls	
Derbent. AU (2013)	1	1	0	1	0	1	1	1	6
Sharifi. F (2010)	1	1	1	1	2	1	1	1	9
Gungor. ES (2007)	1	1	0	1	0	1	1	1	6
Afkhami-Ardekani, M (2009)	1	1	0	1	1.5	1	1	0	6.5
Lao. TT (2001)	1	1	0	1	0.5	1	1	1	6.5
Javadian. P (2011)	1	1	0	1	1.5	1	1	1	7.5
Amiri. FN (2013)	1	1	0	1	1	1	1	0	6