

**Supplementary Table S2: Quality assessment of included studies using the modified ‘Q-Genie’ assessment tool**

Study	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	Total score
Severino et al., 2014 [24]	6	4	5	6	4	4	5	5	4	5	6	56
Scicluna et al., 2015 [27]	6	4	5	5	4	4	5	4	4	5	6	52
Esquerdo et al., 2017 [29]	6	5	6	6	3	3	4	6	4	5	6	54
Burnham et al., 2017 [28]	6	5	5	5	3	3	5	6	5	5	6	53
Khan et al., 2021 [30]	6	4	5	5	3	4	5	4	5	5	5	52

#1: Rationale for study; #2: Selection and definition of outcome of interest; #3: Selection and comparability of comparison group; #4: Technical classification of the exposure; #5: Non-technical classification of the exposure; #6: Other sources of bias; #7: Sample size and power; #8: A priori planning of analyses; #9: Statistical methods and control for confounding; #10: Testing of assumptions and inferences for gene expression analyses; #11: Appropriateness of inferences drawn from results.