Response to Reviewers’ Comments

Dear Mr. Ryan Relox,

Thank you for processing our manuscript entitled “Aberrant GSTP1 promoter methylation is associated with increased risk and advanced stage of breast cancer: a meta-analysis of 19 case-control studies” (MS: 104372986170152). We have thoroughly revised our manuscript by addressing all of the points raised by the reviewers, and have highlighted all modifications in blue. Please find below our point-by-point responses to the reviewers’ comments.

Referee 1:

Comments. All responses should be included in the final version of the manuscript. Publication bias comments in the discussion should be extended; in the present version they are too generic. The origin of bias in the present meta-analysis should be discussed and, possibly, specific origins should be detected.

Response: Thank you for your comments. We have included all responses in this revised manuscript (newly included: seen in line 230-233, 236-238, 240-244). According to your suggestions, we extended the publication bias comments in
the Results and Discussion sections (Page 7, line 182 to 188; Page 10, line 276 to 277).

Visual inspection of the funnel plot in Figure 4 shows an asymmetry, which indicates the presence of publication bias in evaluating GSTP1 methylation and breast cancer risk. Egger's test also display statistical evidence of asymmetry (P=0.003). Then, the trim-and-fill method was applied to adjust this bias and calculate the number of unpublished studies that could lead to asymmetry (Figure 5). The estimated OR adjusted by trim-and-fill method was similar to the original estimate (OR=4.20, 95%CI=2.75-6.41), indicating that our analyses were reliable and robust.

Referee 2:

Comments. Discretionary Revisions

Response: Thank you for your comments.