# Supplementary Figure S1
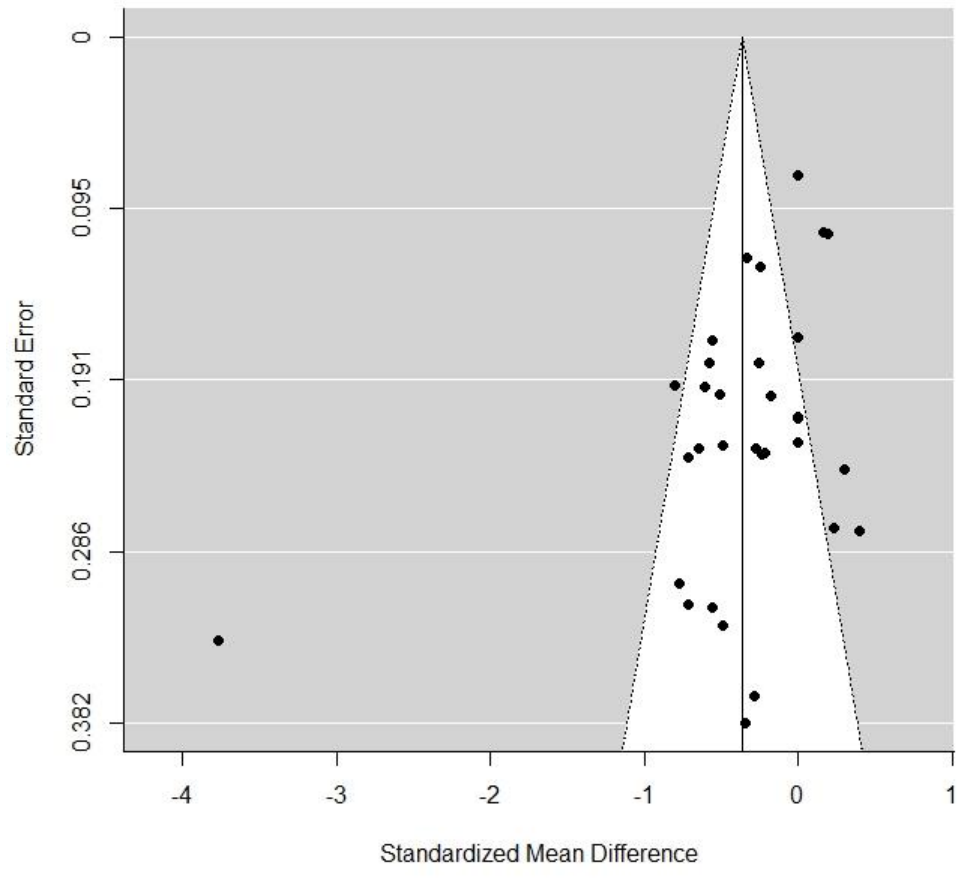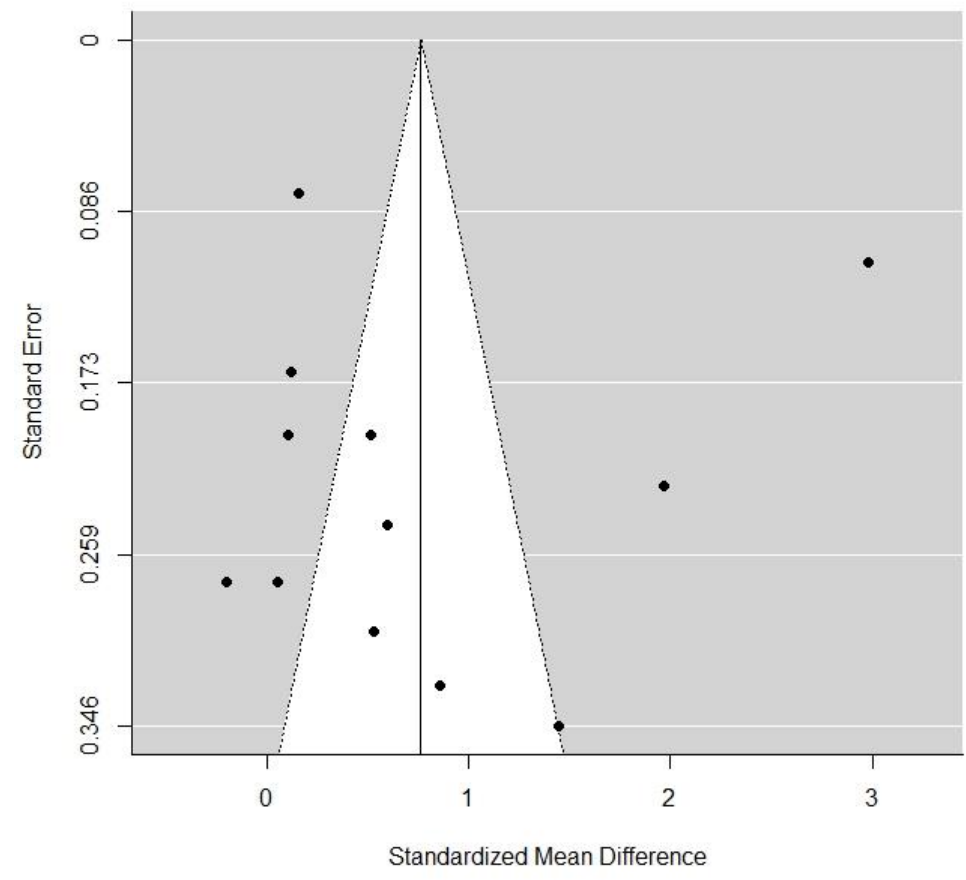
**A. Albumin**
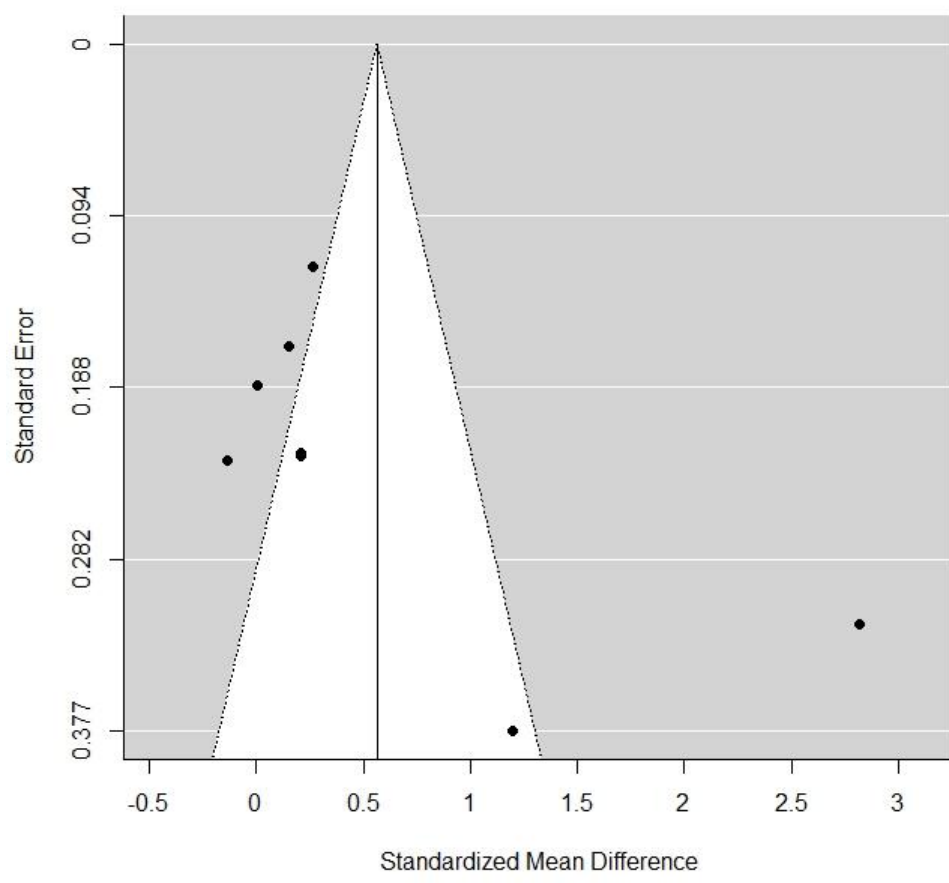


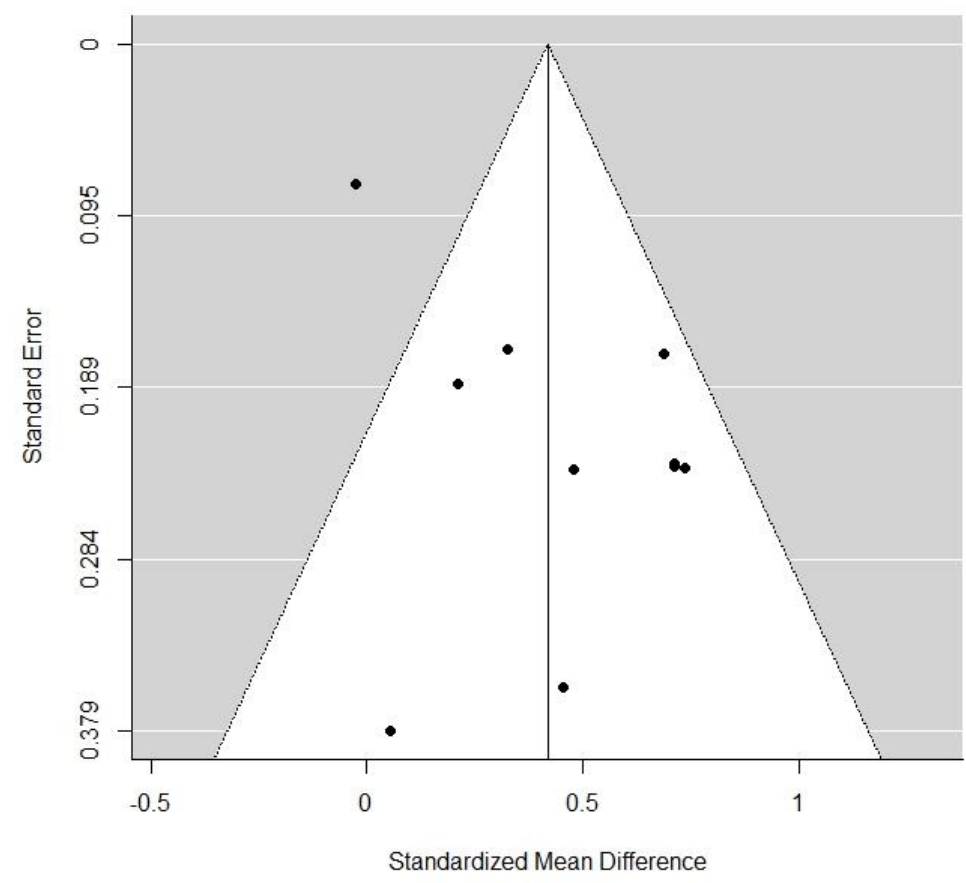Test of funnel plot asymmetry *P*=0.34

**B. CRP**



Test of funnel plot asymmetry *P*=0.25
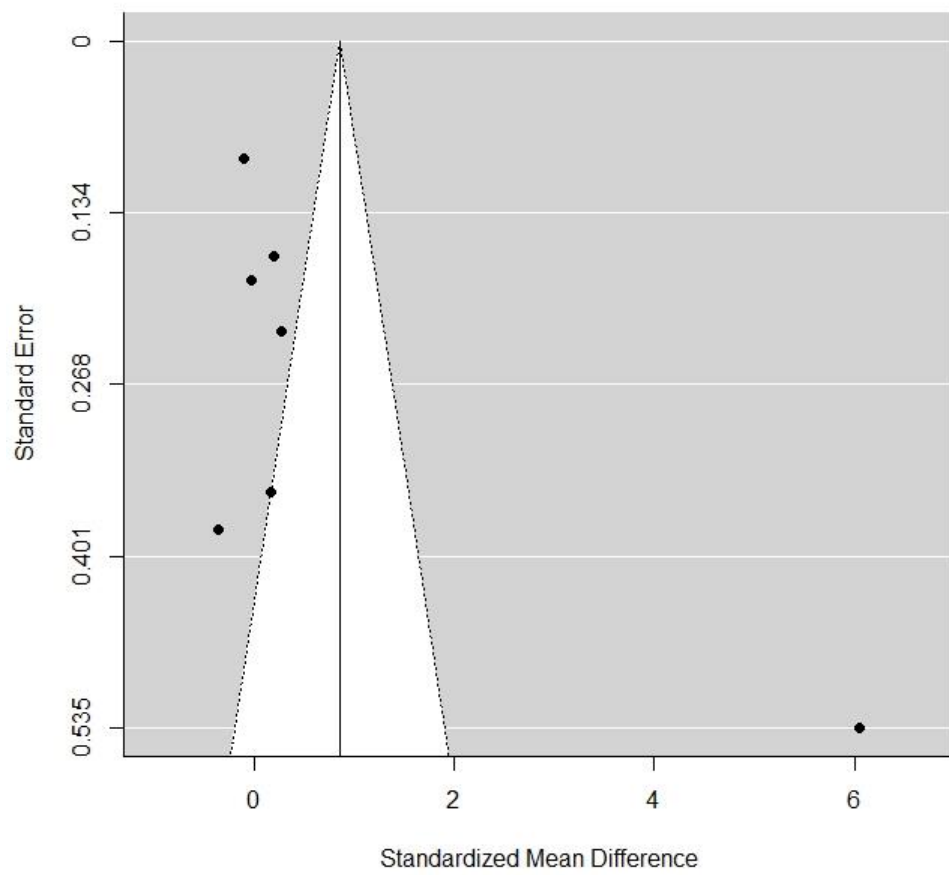
**C. hsCRP**



Test of funnel plot asymmetry *P*=0.28
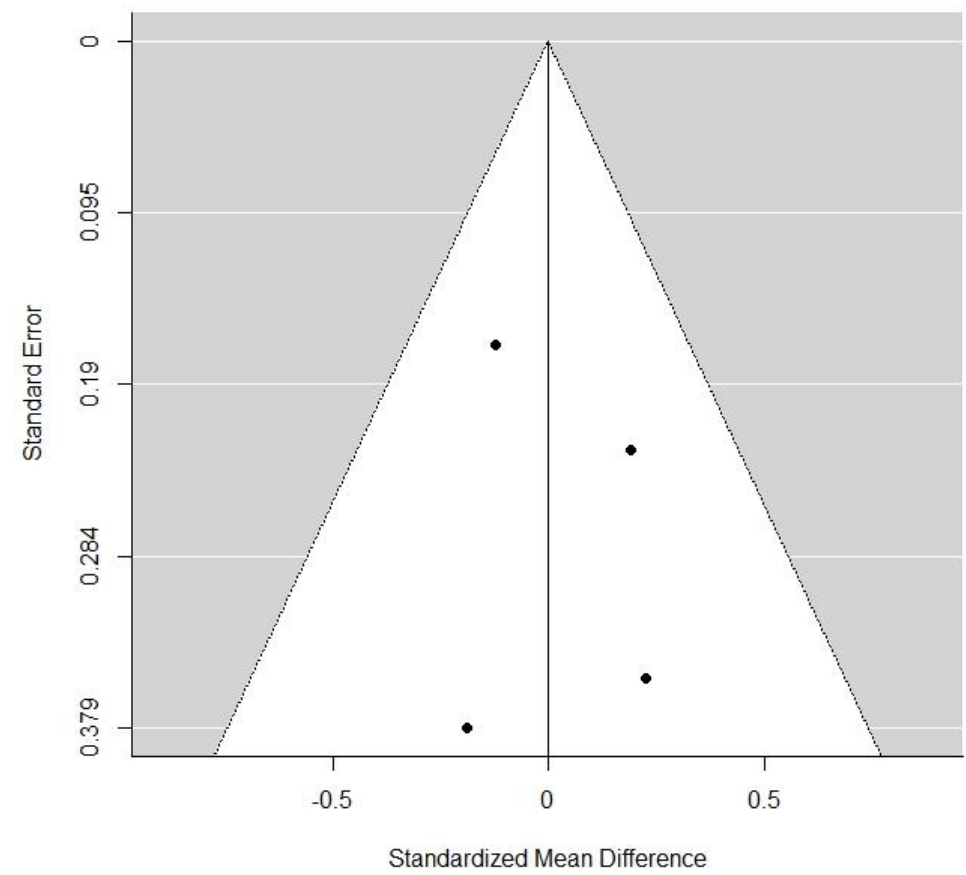
**D. IL-6**



Test of funnel plot asymmetry *P*=0.99

**E. TNF-α**



Test of funnel plot asymmetry *P*=0.38

**F. IL-1**



Test of funnel plot asymmetry *P*=0.99

**Supplementary Table S1. Underlying data used for comparisons of inflammatory biomarkers in CKD or ESKD samples with vs. without depression, presented as mean (SD)**

| Study | Albumin, g/dL | | CRP, mg/L | | hsCRP, mg/dL | | IL-6, pg/mL | | TNF-α, pg/mL | | IL-1, pg/mL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Depression | No depression | Depression | No depression | Depression | No depression | Depression | No depression | Depression | No depression | Depression | No depression |
| Dogan et al.[26] | 3.5 (0.6) | 3.9 (0.5) | 107 (46) | 45 (38) | | | | | | | | |
| Kalender et al.[27] | 3.48 (0.56) | 3.75 (0.51) | 15.2 (27.2) | 6.2 (12.9) | | | | | | | | |
| Micozkadioglu et al.[28] | 3.88 (0.42) | 3.95 (0.34) | 11.82 (18.85) | 10.00 (14.90) | | | | | | | | |
| Boulware et al.[29] | 3.6 (0.4) | 3.6 (0.4) | 94 (132) | 76 (108) | | | 7.1 (9.3) | 7.4 (11.8) | | | | |
| Kalender et al.[30] | | | | | 1.19 (1.08) | 0.44 (0.34) | 189.75 (76.48) | 165.15 (42.39) | 67.38 (71.97) | 60.80 (11.44) | 50.63 (12.91) | 48.09 (10.28) |
| Simic Ogrizovic et al.[9] | 3.54 (0.5) | 3.79 (0.36) | | | | | | | | | | |
| Hsu et al.[31] | 3.6 (0.5) | 3.9 (0.3) | 15.2 (23.5) | 7.0 (7.9) | | | | | | | | |
| Montinaro et al.[32] | 3.45 (0.32) | 3.56 (0.29) | | | | | | | | | | |
| Bossola et al.[33] | 4.0 (0.2) | 4.1 (0.2) | | | 6.8 (4.8) | 5.9 (3.7) | 4.2 (3.5) | 2.1 (2.1) | | | | |
| Ko et al.[34] | 3.6 (0.5) | 3.9 (0.4) | | | 6.7 (1.1) | 3.7 (1.0) | | | 3.7 (0.6) | 0.9 (0.2) | | |
| Gyamlani et al.[35] | 3.7 (0.5) | 3.6 (0.4) | 0.52 (0.96) | 0.49 (0.41) | | | | | | | | |
| Li et al.[36] | 3.663 (0.424) | 3.964 (0.511) | 21.89 (19.55) | 2.01 (1.89) | | | | | | | | |
| Hung et al.[37] | 3.7 (0.3) | 3.9 (0.4) | | | 0.74 (0.96) | 0.61 (0.73) | 8.00 (1.55) | 6.89 (1.65) | | | | |
| Chilcot et al.[38] | 3.46 (0.62) | 3.60 (0.51) | | | | | | | | | | |
| Bornivelli et al.[39] | 3.73 (0.38) | 3.90 (0.24) | 18.2 (17.3) | 8.3 (6) | | | | | | | | |
| Armaly et al.[40] | 3.69 (0.3) | 3.52 (0.7) | 76.3 (95.7) | 32.1 (49.8) | | | | | | | | |
| Kim et al.[41] | 3.7 (0.3) | 3.8 (0.4) | | | | | | | | | | |
| Cilan et al.[42] | | | | | | | 143.78 (85.84) | 139.09 (83.25) | 109.22 (260.15) | 214.94 (303.69) | 135.89 (171.46) | 177.00 (222.79) |
| Wang et al.[43] | 3.8 (0.4) | 3.8 (0.4) | 10.3 (25.6) | 8.3 (13.3) | | | 4.2 (4.9) | 3.1 (2.7) | 20.8 (93) | 9.5 (40) | 1.3 (1.1) | 1.4 (0.7) |
| Taraz et al.[44] | 4.5 (0.7) | 4.5 (0.6) | | | 5.26 (2.52) | 4.78 (1.87) | 7.3 (2.7) | 5.3 (2.9) | 10.9 (4.6) | 9.6 (4.7) | 11.3 (5.6) | 10.3 (4.4) |
| Su et al.[45] | 3.8 (0.3) | 3.9 (0.3) | | | 0.91 (1.38) | 0.58 (1.14) | | | | | | |

| Study | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Cilan et al.[46] | 3.40 (0.60) | 3.55 (0.48) | | | | | | | | |
| Preljevic et al.[47] | 3.79 (0.58) | 3.89 (0.41) | | | | | | | | |
| Nowak et al.[48] | | | 14.3 (1.3) | 11.1 (0.9) | | | | | | |
| Knuth et al.[49] | 3.8 (0.3) | 3.9 (0.5) | | | | | 1.9 (0.51) | 1.7 (0.3) | | |
| Fan et al.[50] | 3.7 (0.4) | 3.8 (0.4) | | | | | | | | |
| Loosman et al.[51] | 3.99 (0.51) | 3.99 (0.34) | | | | | | | | |
| Bossola et al.[52] | 3.9 (0.3) | 4.1 (0.2) | | | 10.0 (9.9) | 11.6 (16.5) | 4.9 (3.1) | 2.8 (1.8) | | |
| Ekramzadeh et al.[53] | 4.27 (0.06) | 4.52 (0.08) | | | | | | | | |
| Gok Oguz et al.[54] | 3.66 (0.45) | 3.85 (0.33) | | | | | | | | |
| Barros et al.[55] | 4.0 (0.4) | 4.0 (0.4) | | | | | | | | |
| Haverkamp et al.[56] | | | | | | | | | 20.6 (9) | 21.9 (14) |
| Jong et al.[57] | 3.7 (0.3) | 4.0 (0.4) | | | 1.34 (1.30) | 1.33 (1.28) | 3.0 (0.8) | 2.8 (1.0) | 0.82 (0.96) | 0.84 (0.96) |
| Chilcot et al.[58] | 3.93 (0.43) | 3.85 (0.42) | | | | | | | | |

**Note:** The units used to report inflammatory biomarkers varied by study but were converted to uniform units of measure to maintain consistency across studies for each biomarker.

**Abbreviations:** CRP, C-reactive protein; hsCRP, high sensitivity C-reactive protein; IL, interleukin; TNF-α, tumor necrosis factor-α.
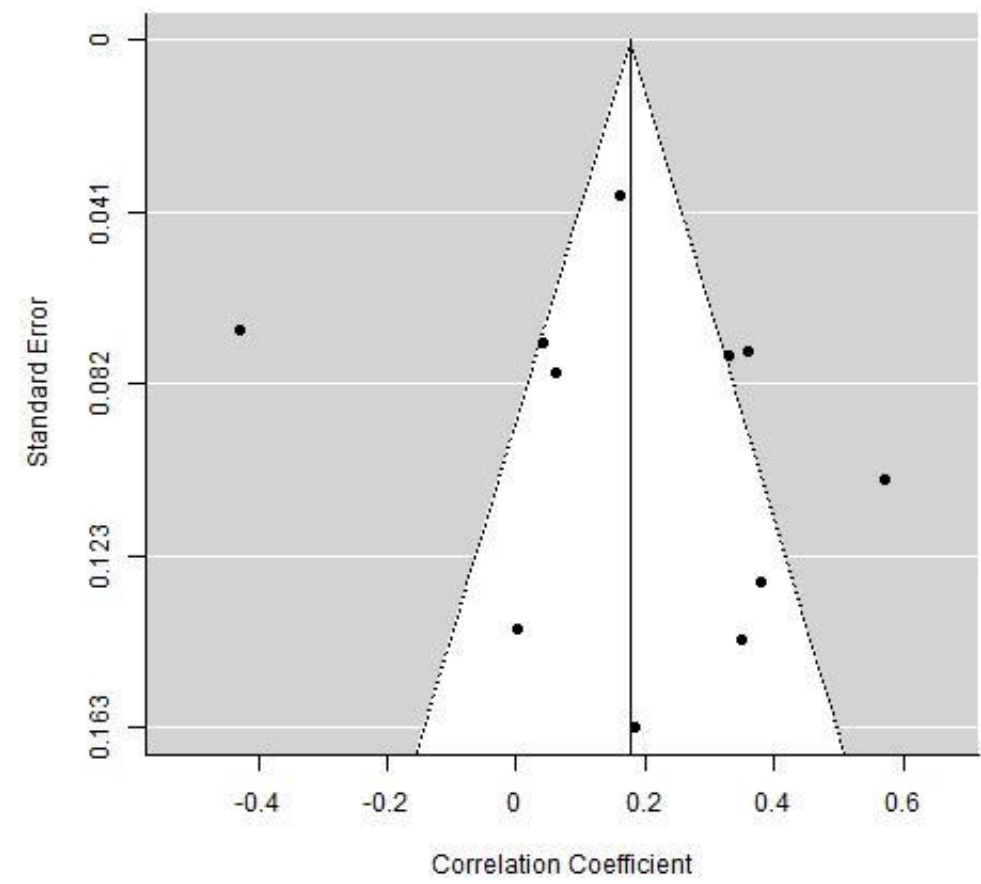
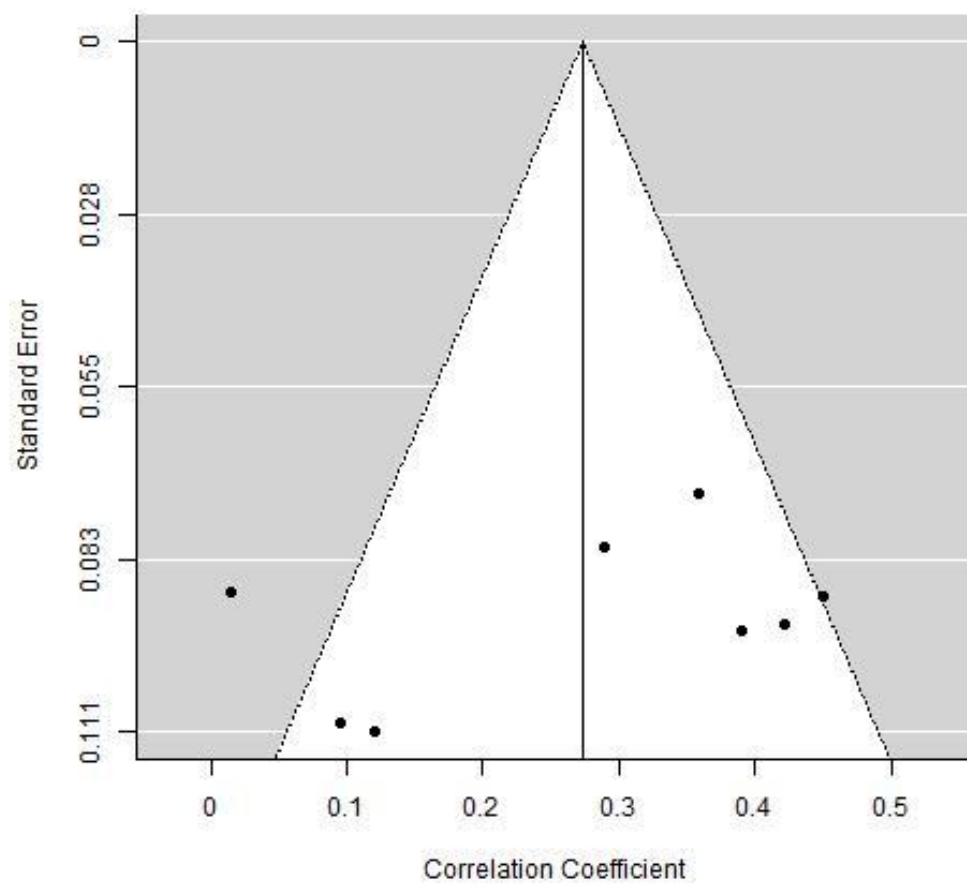# Supplementary Figure S2

## A. Albumin
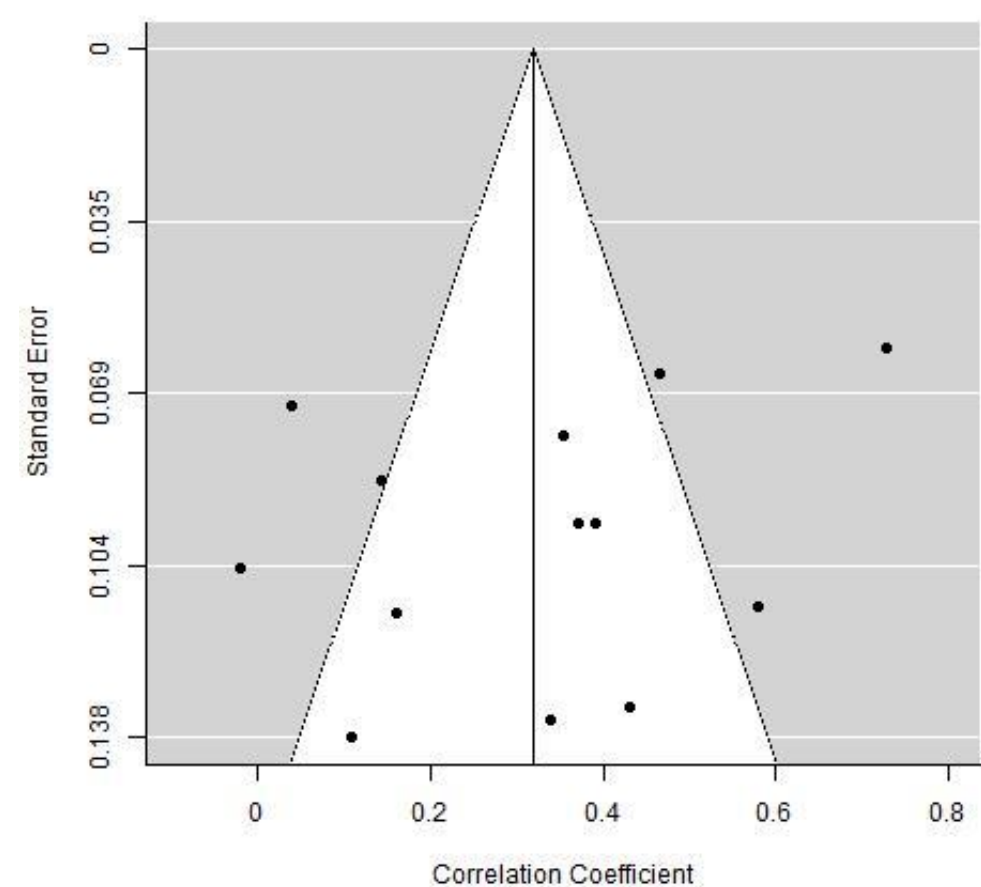


Test of funnel plot asymmetry *P*=0.87

## B. CRP



Test of funnel plot asymmetry *P*=0.35
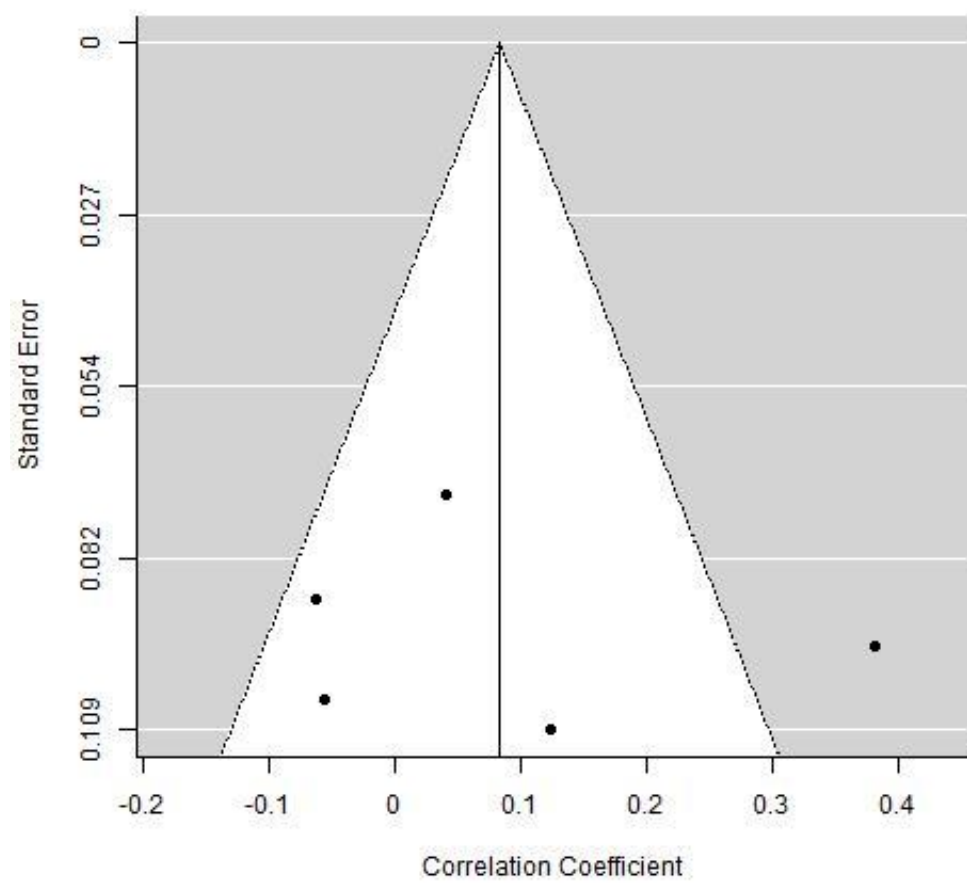
## C. hsCRP



Test of funnel plot asymmetry *P*=0.38

## D. IL-6



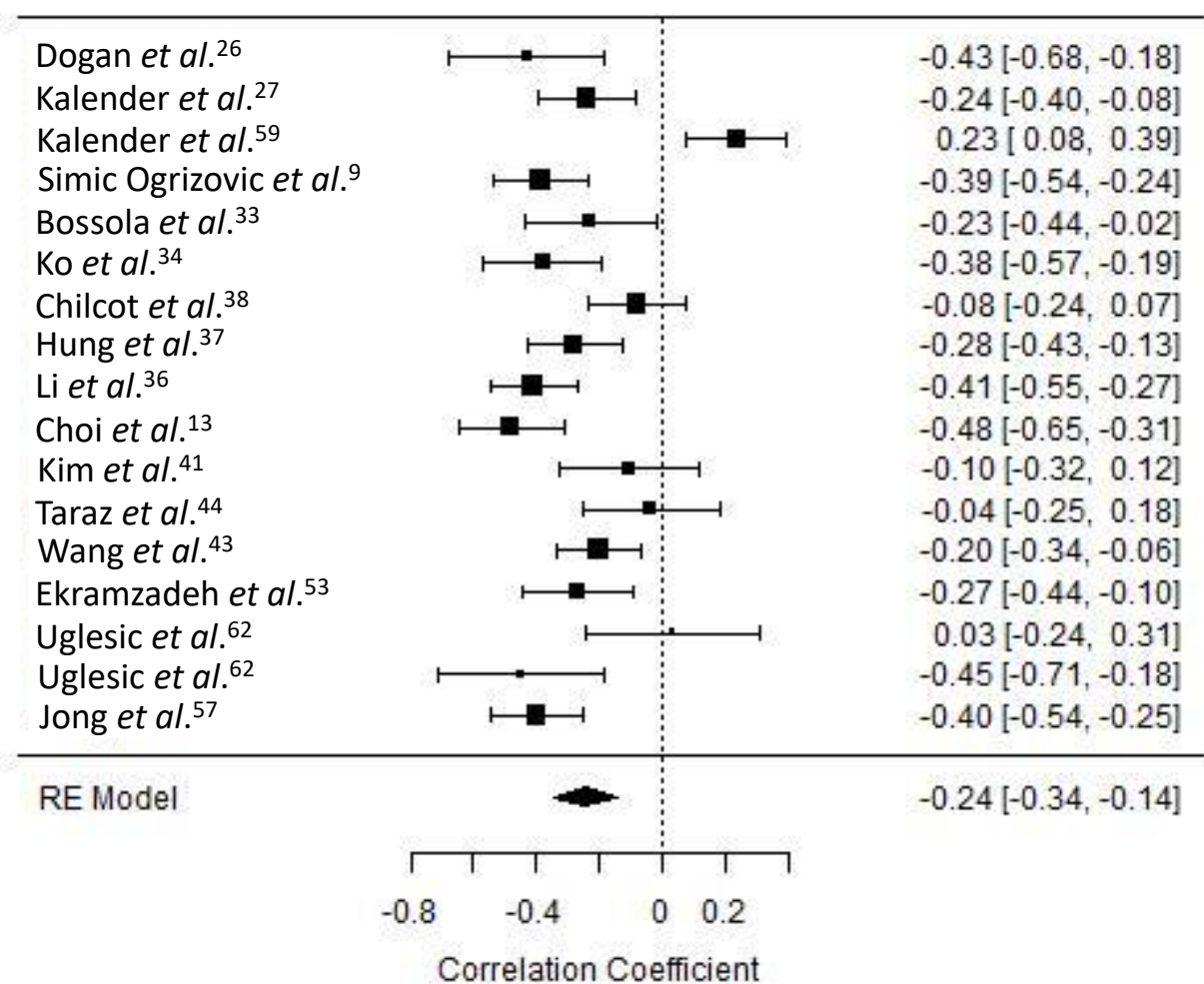Test of funnel plot asymmetry *P*=0.20
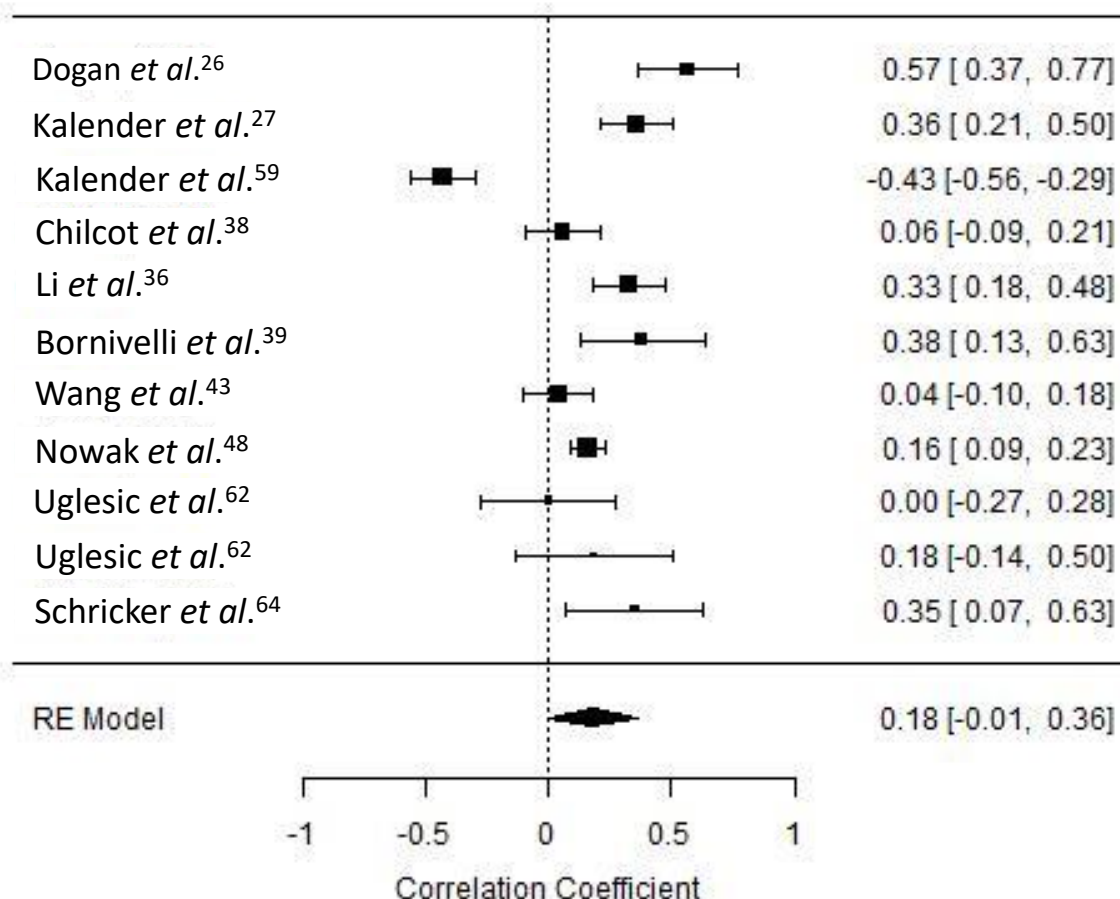
## E. TNF-α



Test of funnel plot asymmetry *P*=0.23

**Supplementary Figure S3.** Correlations of depressive symptoms, taken continuously, with **(A)** albumin, **(B)** CRP, **(C)** hsCRP, **(D)** IL-6, and **(E)** TNF-α.
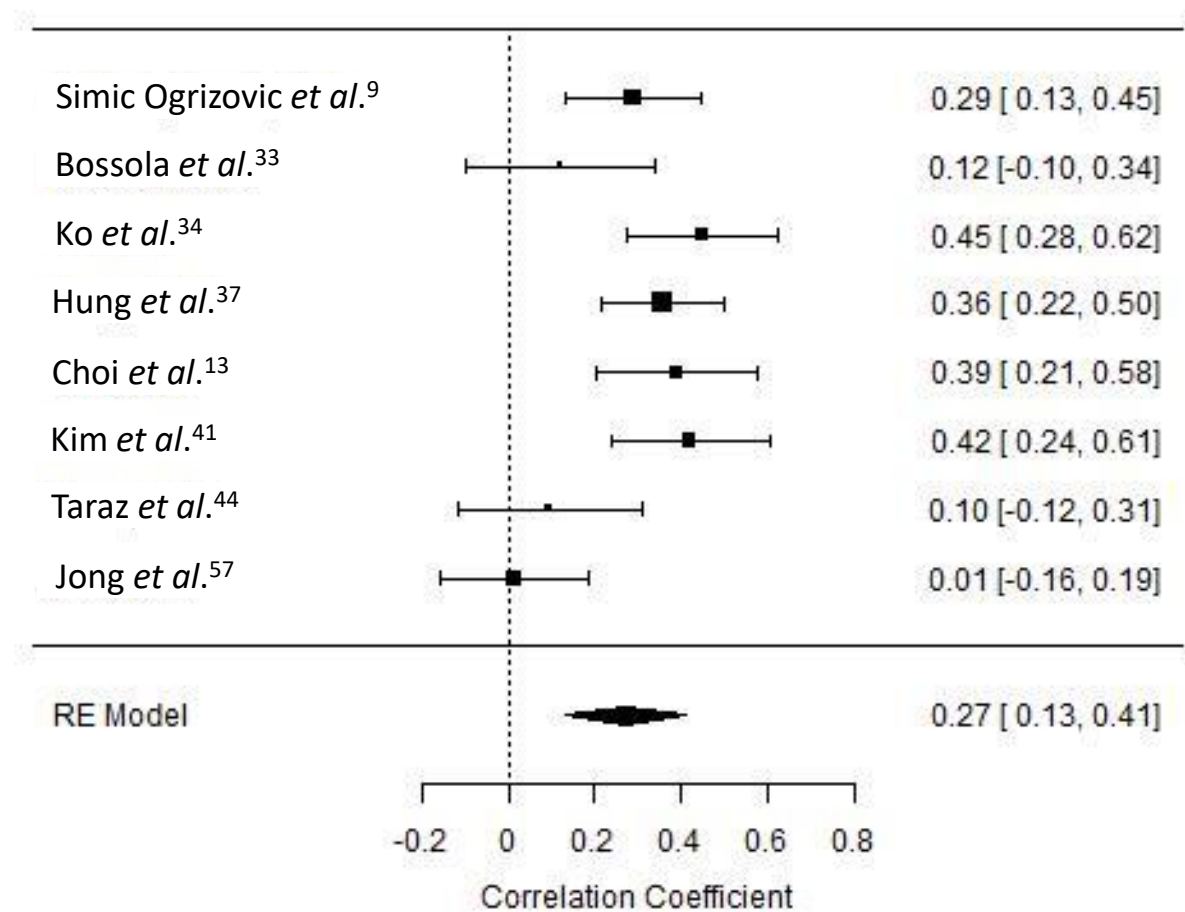
**Supplementary Table S2. Underlying data used for correlations of depression severity with inflammatory biomarkers in CKD and ESKD patients, presented as Spearman or Pearson rho**

| | Albumin | CRP | hsCRP | IL-6 | TNF-α |
|---|---|---|---|---|---|
| Dogan et al.[26] | -0.43 | 0.57 | | | |
| Kalender et al.[27] | -0.241 | 0.358 | | | |
| Kalender et al.[59] | 0.234 | -0.428 | | | |
| Dervisoglu et al.[60] | | | | -0.02 | -0.055 |
| Simic Ogrizovic et al.[9] | -0.388 | | 0.29 | 0.353 | |
| Bossola et al.[33] | -0.23 | | 0.12 | 0.39 | |
| Ko et al.[34] | -0.38 | | 0.45 | | 0.38 |
| Sonikian et al.[61] | | | | 0.34 | |
| Chilcot et al.[38] | -0.081 | 0.06 | | | |
| Hung et al.[37] | -0.281 | | 0.358 | 0.466 | |
| Li et al.[36] | -0.409 | 0.33 | | | |
| Choi et al.[13] | -0.48 | | 0.391 | | |
| Kim et al.[41] | -0.104 | | 0.422 | | |
| Taraz et al.[44] | -0.037 | | 0.096 | 0.370 | 0.123 |
| Bornivelli et al.[39] | | 0.38 | | | |
| Wang et al.[43] | -0.20 | 0.04 | | 0.04 | 0.04 |
| Nowak et al.[48] | | 0.162 | | | |
| Knuth et al.[49] | | | | 0.16 | |
| Ekramzadeh et al.[53] | -0.27 | | | | |
| Uglešić et al.,[62] HD patients | 0.031 | 0.003 | | 0.109 | |
| Uglešić et al.,[62] PD patients | -0.447 | 0.183 | | 0.58 | |
| Jong et al.[57] | -0.399 | | 0.015 | 0.143 | -0.063 |
| Zhao et al.[63] | | | | 0.727 | |
| Schricker et al.[64] | | 0.35 | | 0.43 | |

**Abbreviations:** CRP, C-reactive protein; hsCRP, high sensitivity C-reactive protein; IL, interleukin; TNF-α, tumor necrosis factor-α.