





**Supplementary Figure 1.** Pleural effusion levels of diagnostic biomarkers in metastatic adenocarcinoma patients. Levels of Galectin-1, HGF, Mesothelin, MMP-7, Osteopontin, shed SDC-1, TIMP-1, VEGF are significantly higher in pleural effusion from metastatic adenocarcinoma (AD) patients ( $n = 36$ ) comparing with benign (BE) patients ( $n = 40$ ) (A–H). (I). NRG1- $\beta$ 1 has significantly lower level in AD patients comparing with BE. Significance was assessed by two-tailed  $t$ -test at  $p \leq 0.05$ .