

Figure S1: Subgroup analysis of Randomized Controlled Trials
[36,39,40,41,42,46,47,50,52,54,56,66,68,70,71]

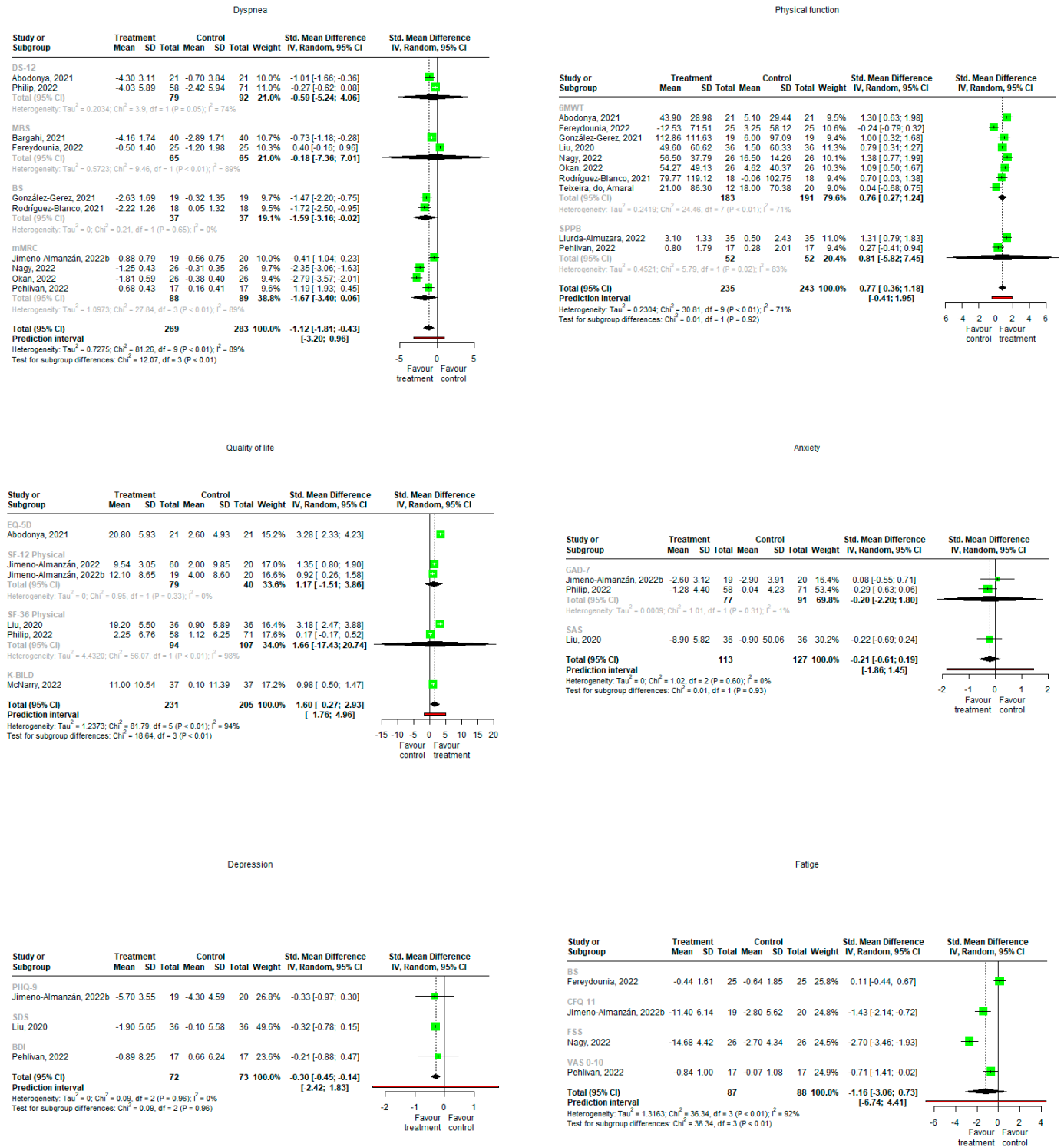


Figure S2: Subgroup analysis of Observational studies [43,44,53,57,59,60,61,63,64,67,69].

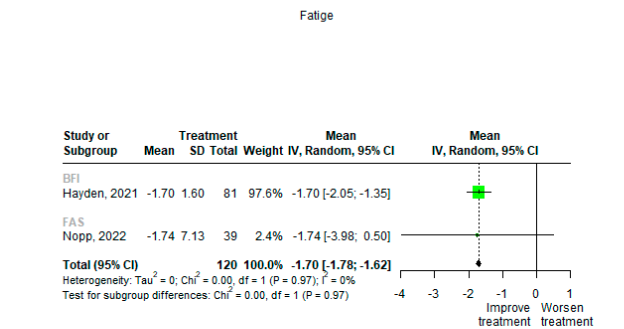
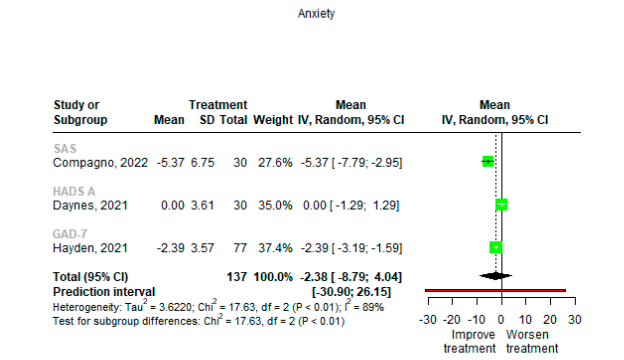
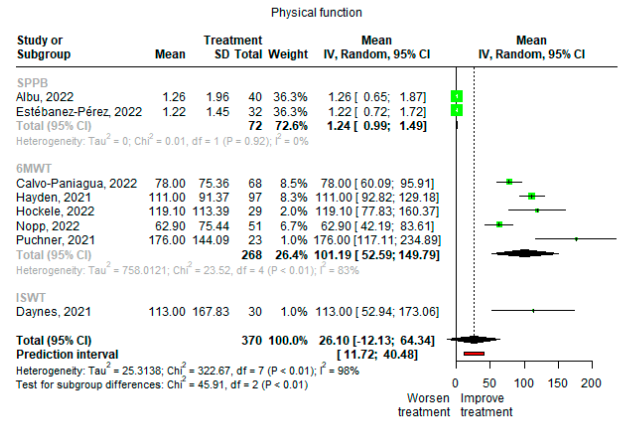
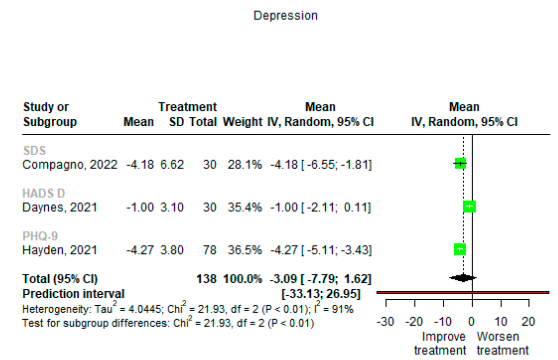
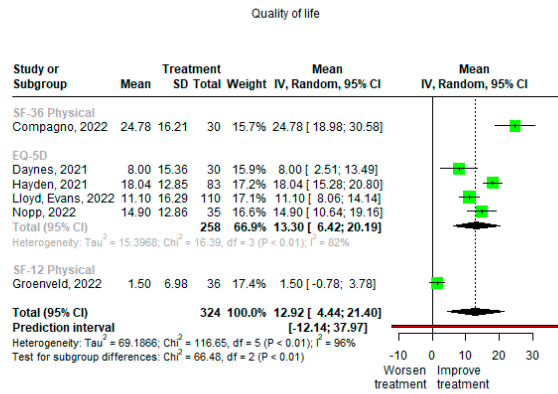
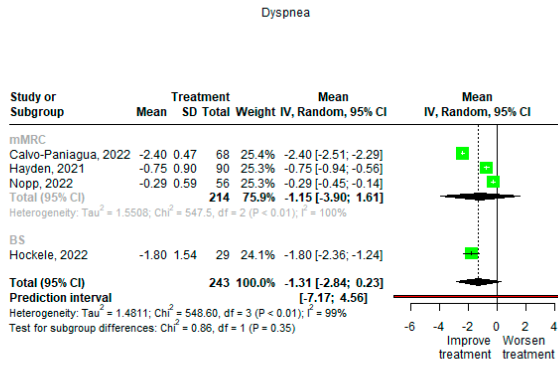


Figure S3: Outlier studies analysis for RCT [36,39,40,41,42,46,47,50,52,54,56,66,68,70,71].

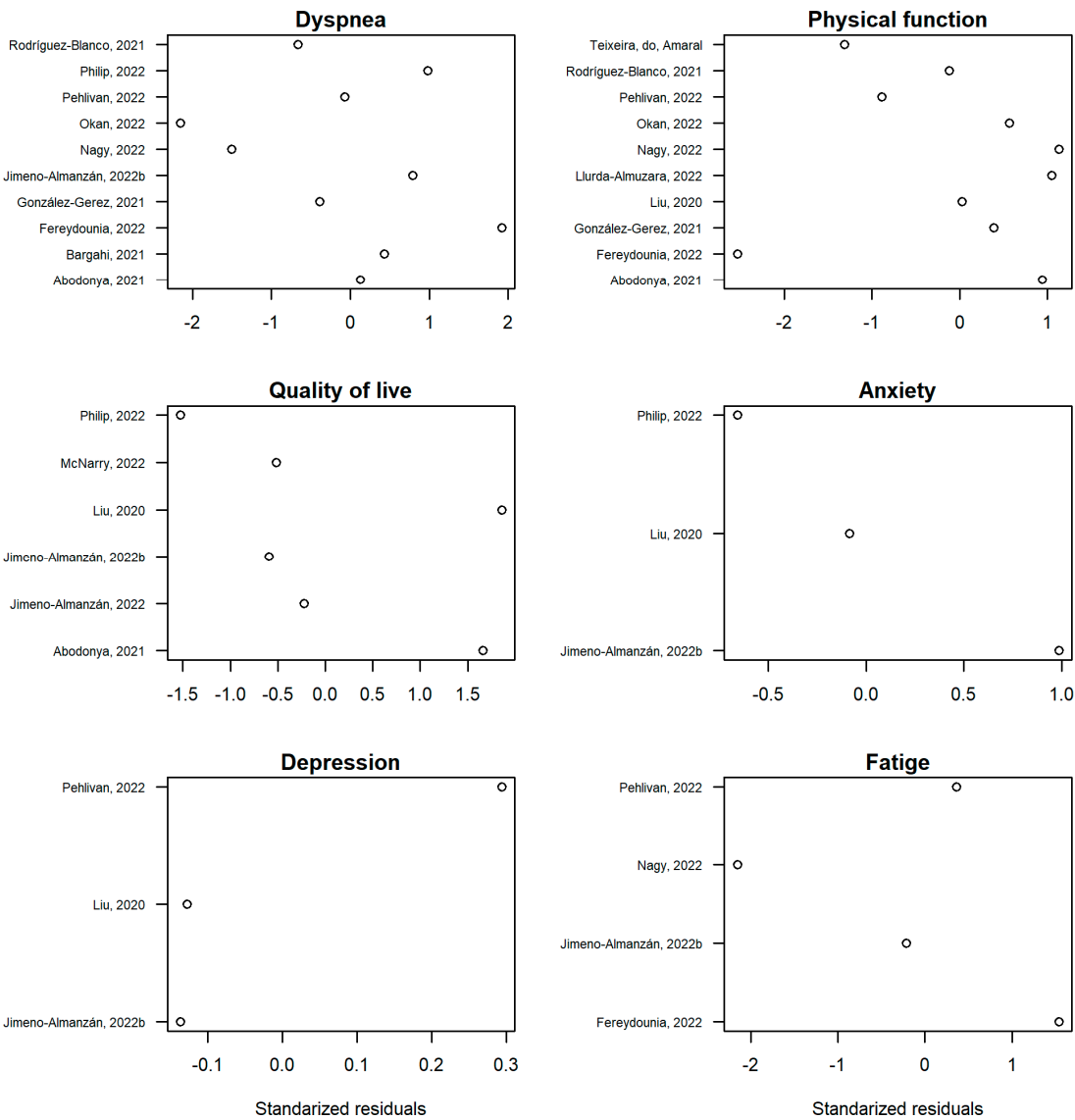


Figure S4: Outlier studies analysis for observational studies [43,44,53,57,59,60,61,63,64,67,69].

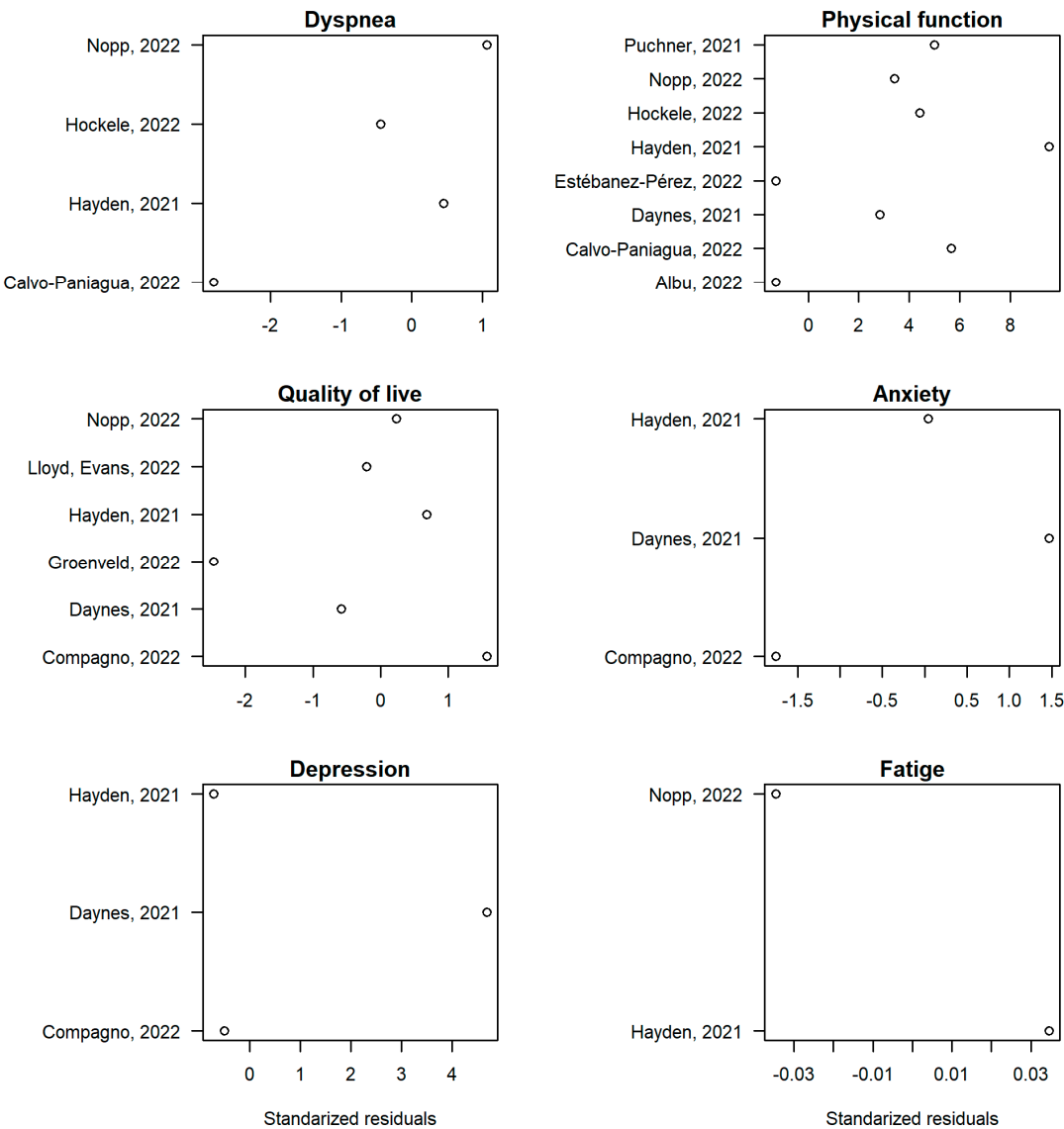


Figure S5: Leave-one-out analysis in RCT studies [36,39,40,41,42,46,47,50,52,54,56,66,68,70,71]

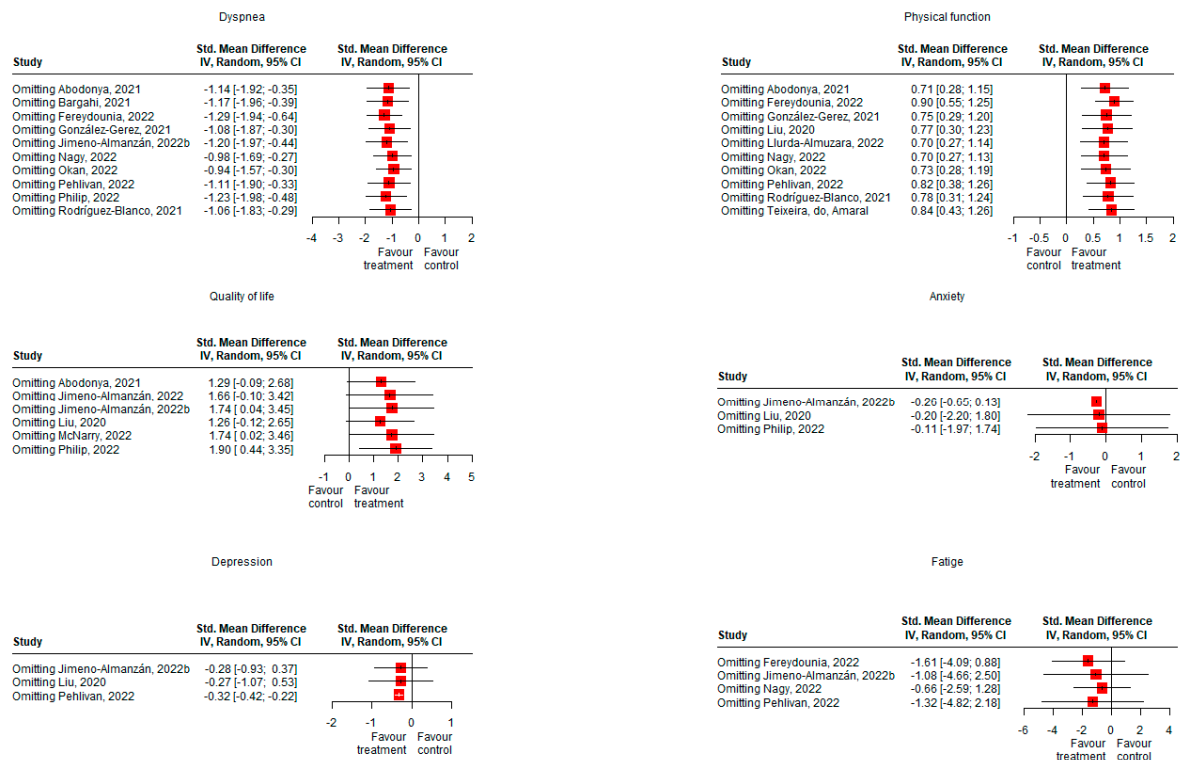


Figure S6: Leave-one-out analysis in observational studies [43,44,53,57,59,60,61,63,64,67,69].

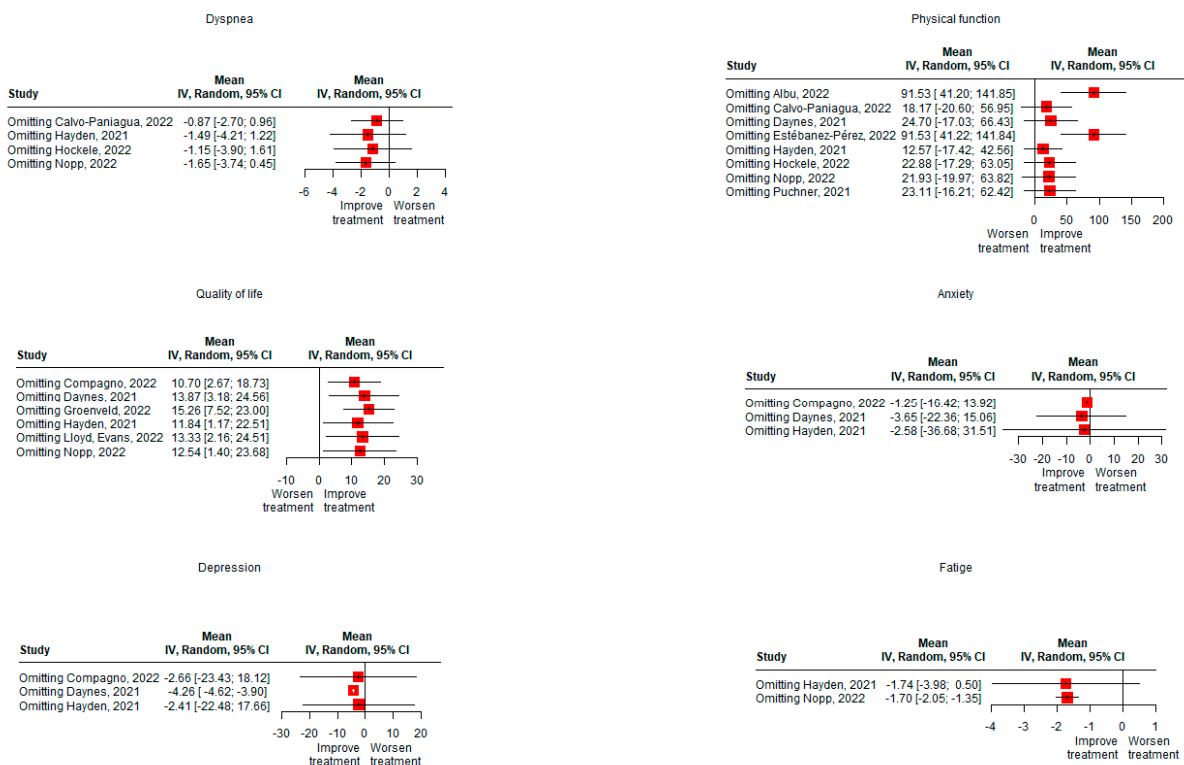


Figure S7: Baujat plot in RCT studies [36,39,40,41,42,46,47,50,52,54,56,66,68,70,71]

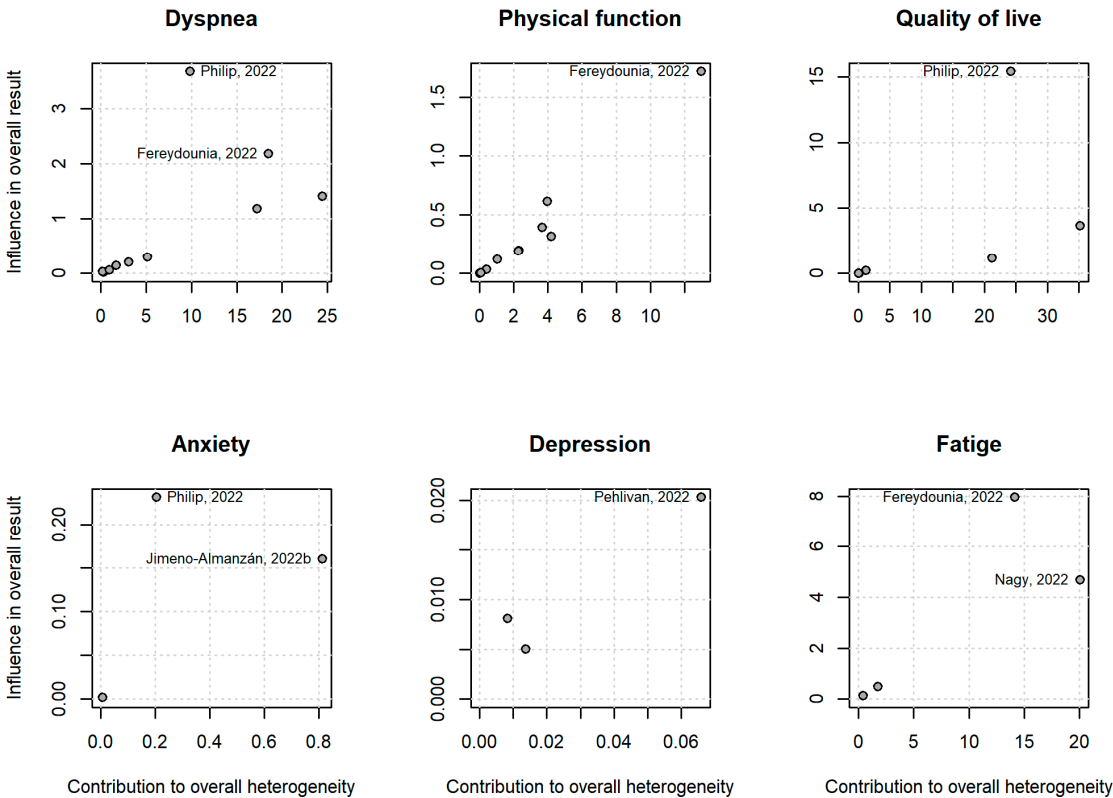


Figure S8: Baujat plot in observational studies [43,44,53,57,59,60,61,63,64,67,69].

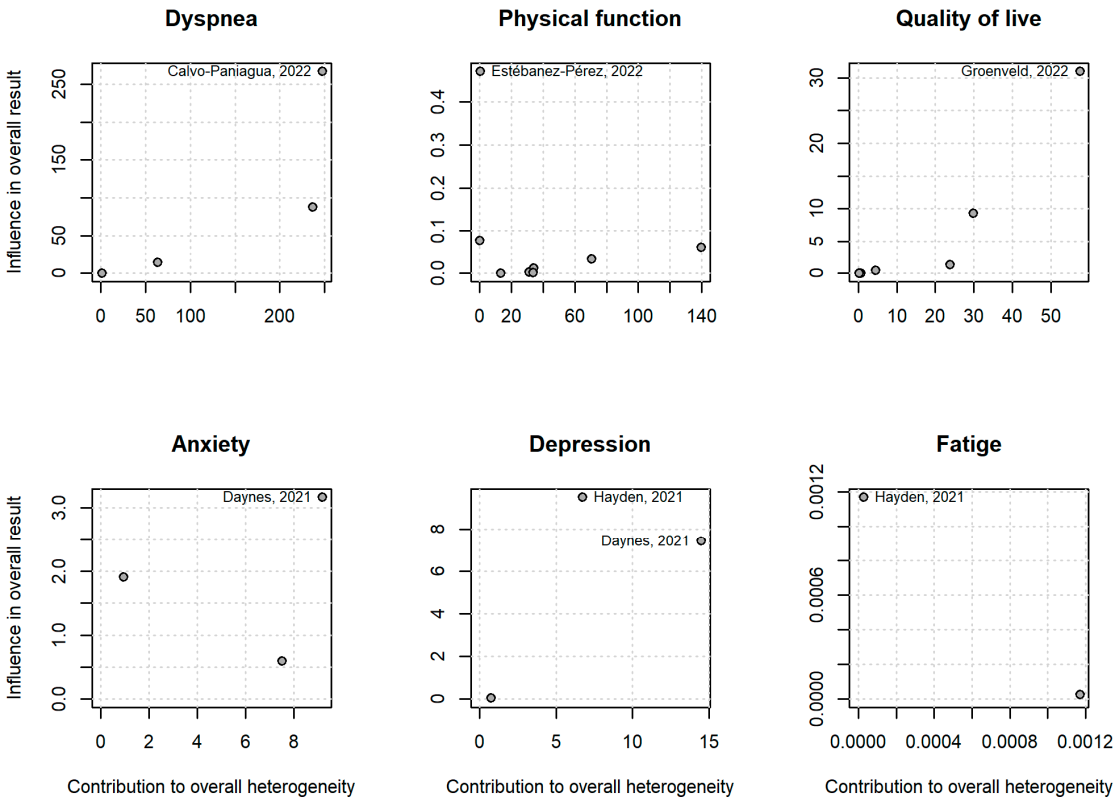


Figure S9: Funnel plot in RCT studies [36,39,40,41,42,46,47,50,52,54,56,66,68,70,71]

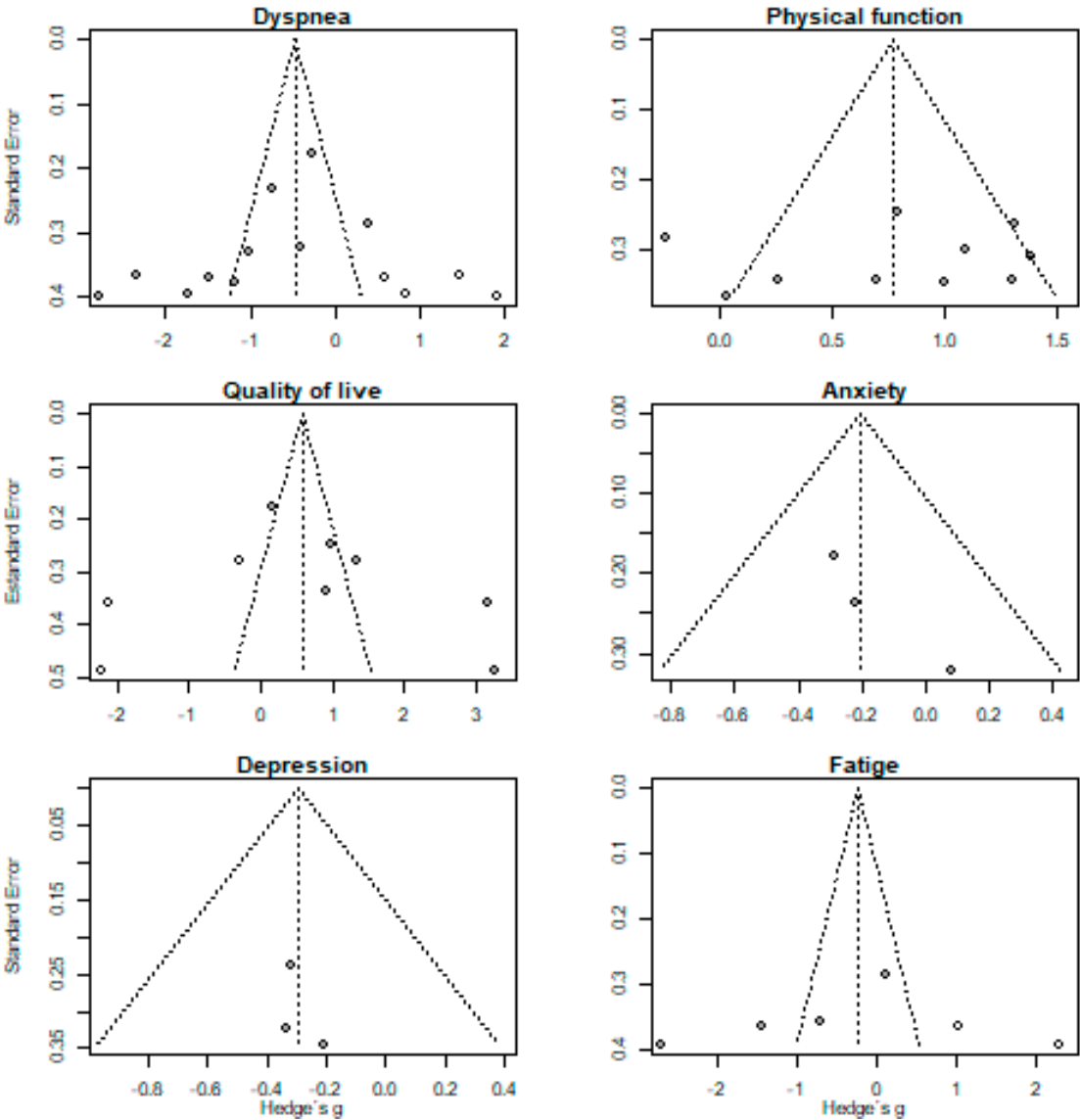


Figure S10: Funnel plot in observational studies [43,44,53,57,59,60,61,63,64,67,69].

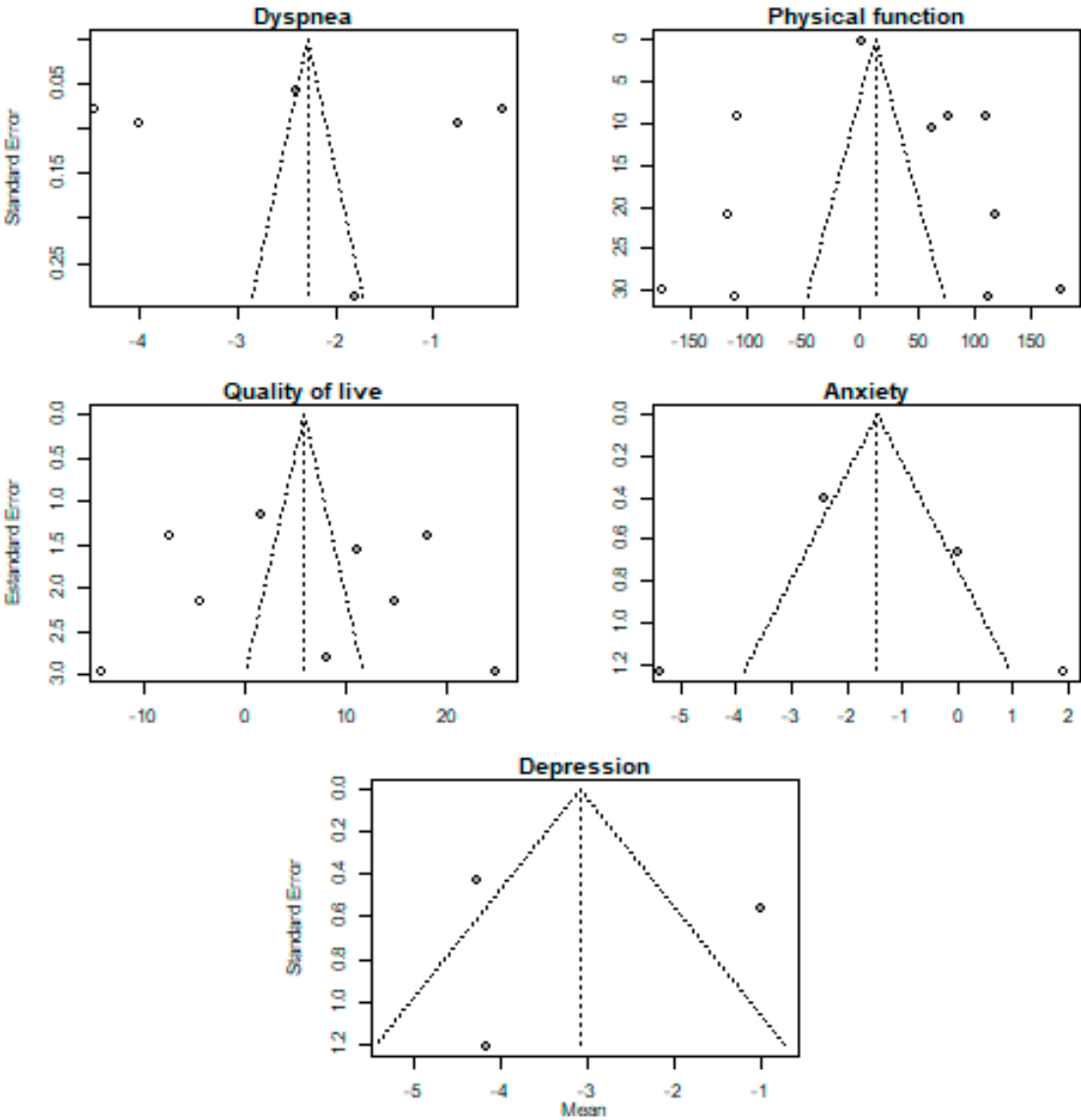


Table S2: Begg and Egger test for publication bias in included studies [36,39-44,46,47,50,52-54,56,57,59-61,63,64,66-71]

RCTs	Begg test	Egger test
Dyspnea	Kendall's $\tau=-0.689$, $p=0.005$	$t(8)=-2.802$, $p=0.023$
Physical function	Kendall's $\tau=-0.289$, $p=0.291$	$t(8)=-0.473$, $p=0.649$
Quality of live	Kendall's $\tau=0.6$, $p=0.136$	$t(4)=3.405$, $p=0.027$
Anxiety	Kendall's $\tau=1$, $p=0.333$	$t(1)=3.2$, $p=0.193$
Depression	Kendall's $\tau=0.333$, $p=>0.999$	$t(1)=0.688$, $p=0.616$
Fatigue	Kendall's $\tau=-1$, $p=0.083$	$t(2)=-3.144$, $p=0.088$
Observational studies		
Dyspnea	Kendall's $\tau=0$, $p=>0.999$	$t(2)=-0.316$, $p=0.782$
Physical function	Kendall's $\tau=0.071$, $p=0.905$	$t(6)=6.107$, $p=0.001$
Quality of live	Kendall's $\tau=0.2$, $p=0.719$	$t(4)=1.14$, $p=0.318$
Anxiety	Kendall's $\tau=-0.333$, $p=>0.999$	$t(1)=-0.967$, $p=0.511$
Depression	Kendall's $\tau=0.333$, $p=>0.999$	$t(1)=-0.305$, $p=0.811$
Fatigue	Kendall's $\tau=-1$, $p=>0.999$	

$t(df)$: t statistic (degrees of freedom).
Significant if $p<0.05$ (shown in red).