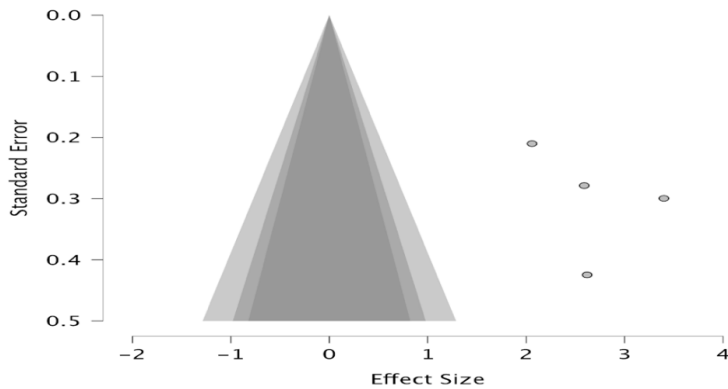


## Supplementary Figure 1: Funnel plot and Sensitivity analysis using Trim and Fill method

### 1. BNP

#### Funnel Plot ▼



#### Funnel Plot Asymmetry Tests ▼

##### Meta-Regression Test for Funnel Plot Asymmetry ▼

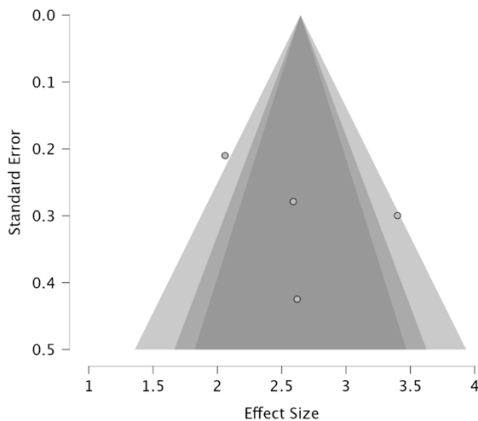
Estimates	Asymmetry Test		Estimate	Limit Estimate $\mu$	
	z	p		Lower 95% CI	Upper 95% CI
4	0.619	.536	1.878	-0.640	4.397

##### Weighted Regression Test for Funnel Plot Asymmetry

Estimates	Asymmetry Test			Estimate	Limit Estimate $\mu$	
	t	df	p		Lower 95% CI	Upper 95% CI
4	1.005	2	.421	1.328	-3.996	6.651

Visually, there is evidence of positive publication bias, However, meta-regression and Egger's test failed to show it statistically. Also, due to only 4 studies the power of these are low.

#### Trim and Fill



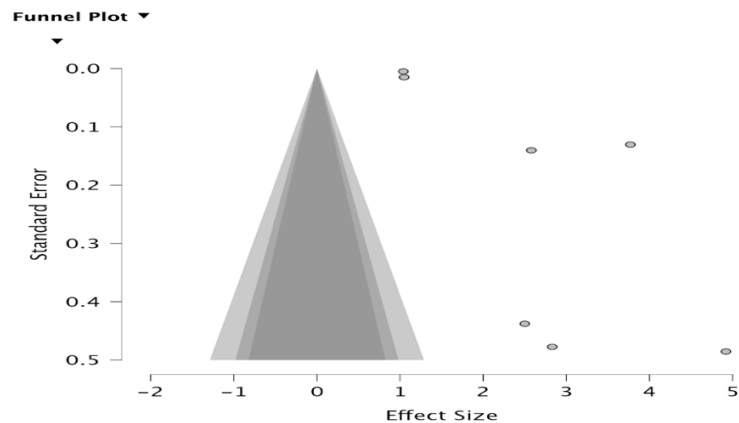
##### Trim and Fill Parameter Estimates

Estimates	Trim and Fill		Adjusted Estimate $\mu$				Adjusted Estimate $\tau$			
	Missing Estimates	Estimate	Lower 95% CI	Upper 95% CI	p	Estimate	Lower 95% CI	Upper 95% CI	p	
4	0	2.646	2.068	3.224	<.001	0.507	0.171	2.041	.004	

With trim and fill method of sensitivity analysis, no missing studies are suggested. The results suggest, statistically significant effect size (2.646). As shown, the dots are relatively balanced on both sides of the center and the "missing estimates" count is zero, there is no evidence of publication bias.

2. NT Pro BNP:

Funnel Plot



Funnel Plot Asymmetry Tests

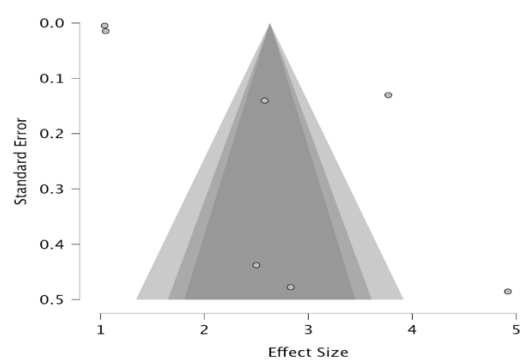
Meta-Regression Test for Funnel Plot Asymmetry					
Estimates	Asymmetry Test		Estimate	Limit Estimate $\mu$	
	z	p		Lower 95% CI	Upper 95% CI
7	20.13	< .001	0.991	0.980	1.001

Weighted Regression Test for Funnel Plot Asymmetry					
Estimates	Asymmetry Test			Limit Estimate $\mu$	
	t	df	p	Estimate	Upper 95% CI
7	2.898	5	.034	0.991	1.087

Rank Correlation Test for Funnel Plot Asymmetry		
Estimates	$r$	p
7	0.333	.381

This funnel plot suggests publication bias, and it was also noted to be statistically significant in the asymmetry tests.

Trim and Fill



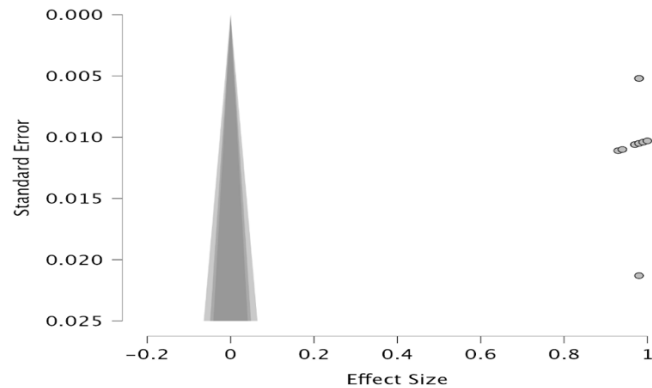
Trim and Fill Parameter Estimates									
Estimates	Trim and Fill		Adjusted Estimate $\mu$				Adjusted Estimate $r$		
	Missing Estimates	Estimate	Lower 95% CI	Upper 95% CI	p	Estimate	Lower 95% CI	Upper 95% CI	p
7	0	2.630	1.602	3.658	< .001	1.354	0.843	3.047	< .001

With trim and fill method of sensitivity analysis, no missing studies are suggested. Even though funnel plot suggests publication bias, the trim and fill sensitivity analysis suggests that the effect size is highly statistically significant (estimate of 2.63,  $p < 0.001$ ).

### 3. eGFR

#### Funnel Plot

##### Funnel Plot



#### Funnel Plot Asymmetry Tests

##### Meta-Regression Test for Funnel Plot Asymmetry

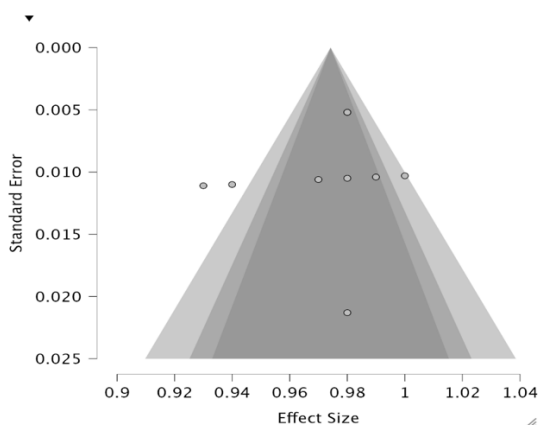
Estimates	Asymmetry Test		Limit Estimate $\mu$		
	z	p	Estimate	Lower 95% CI	Upper 95% CI
11	-0.650	.516	0.983	0.954	1.012

##### Weighted Regression Test for Funnel Plot Asymmetry

Estimates	Asymmetry Test			Limit Estimate $\mu$		
	t	df	p	Estimate	Lower 95% CI	Upper 95% CI
11	-1.006	9	.341	0.988	0.962	1.013

The funnel plot suggests positive bias, but both meta-regression and Egger's asymmetry test failed to show it statistically significant.

#### Trim and Fill



##### Trim and Fill Parameter Estimates

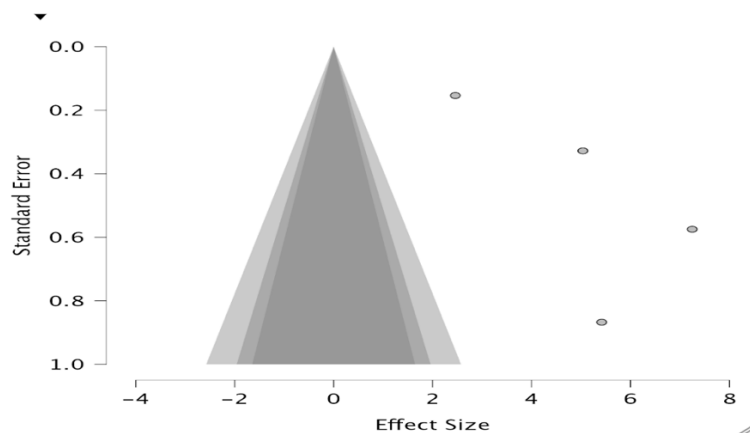
Trim and Fill		Adjusted Estimate $\mu$				Adjusted Estimate $\tau$			
Estimates	Missing Estimates	Estimate	Lower 95% CI	Upper 95% CI	p	Estimate	Lower 95% CI	Upper 95% CI	p
11	0	0.974	0.963	0.986	< .001	0.017	0.011	0.034	< .001

The trim and fill sensitivity analysis showed no missing studies. The effect estimate (0.974) is statistically significant. As shown, the dots are relatively balanced on both sides of the center and the "missing estimates" count is zero, there is no evidence of publication bias.

#### 4. Trop T

##### Funnel Plot ▼

##### Funnel Plot ▼



##### Funnel Plot Asymmetry Tests

###### Meta-Regression Test for Funnel Plot Asymmetry

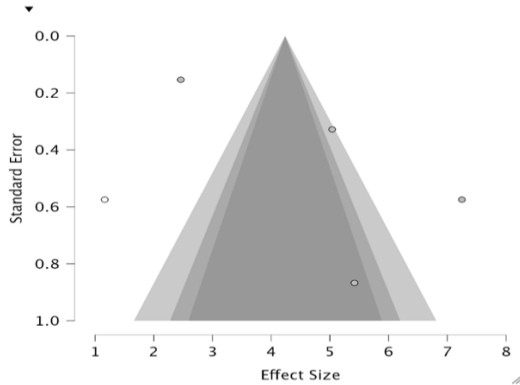
Estimates	Asymmetry Test		Limit Estimate $\mu$		
	z	p	Estimate	Lower 95% CI	Upper 95% CI
4	1.319	.187	2.913	-0.605	6.431

###### Weighted Regression Test for Funnel Plot Asymmetry

Estimates	Asymmetry Test			Limit Estimate $\mu$		
	t	df	p	Estimate	Lower 95% CI	Upper 95% CI
4	2.510	2	.129	1.381	-2.406	5.167

The funnel plot suggests publication bias visually, but when analyzed by meta-regression and Egger's test it failed to show any statistically significant bias.

#### Trim and Fill ▼



Trim and Fill Parameter Estimates

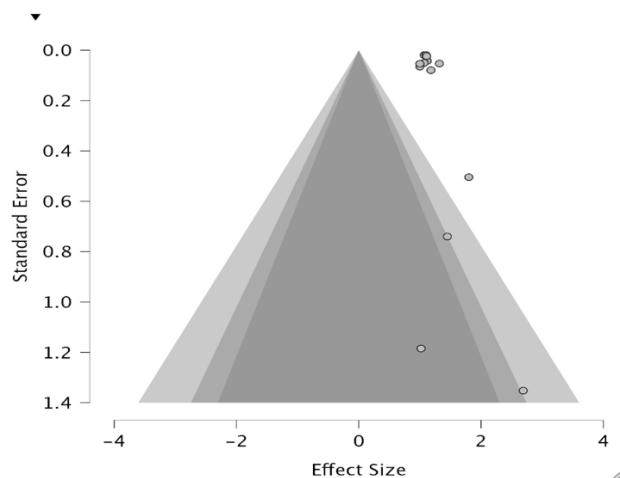
Estimates	Trim and Fill		Adjusted Estimate $\mu$			p	Adjusted Estimate $r$			
	Missing Estimates	Estimate	Lower 95% CI	Upper 95% CI			Estimate	Lower 95% CI	Upper 95% CI	p
4	1	4.238	2.105	6.372	< .001		2.372	1.353	6.975	< .001

The trim and fill method suggests there was one study likely missing. The true average effect size even after hypothetical missing study is added remains significant (4.238,  $p < 0.001$ ), suggesting effect size remains strong.

## 5. IVSd (Interventricular septal diameter)

#### Funnel Plot ▼

##### Funnel Plot ▼



#### Funnel Plot Asymmetry Tests

Meta-Regression Test for Funnel Plot Asymmetry

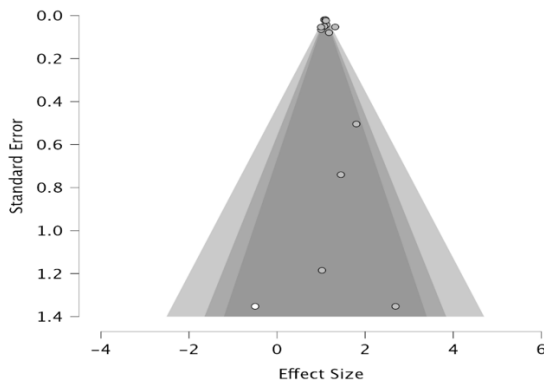
Estimates	Asymmetry Test		Limit Estimate $\mu$		
	z	p	Estimate	Lower 95% CI	Upper 95% CI
15	1.406	.160	1.065	0.998	1.131

Weighted Regression Test for Funnel Plot Asymmetry

Estimates	Asymmetry Test			Limit Estimate $\mu$		
	t	df	p	Estimate	Lower 95% CI	Upper 95% CI
15	0.811	13	.432	1.077	1.024	1.131

The funnel plot suggests there is publication bias, visually. But when analyzed using meta-regression and Egger's test no statistically significant publication bias noted.

#### Trim and Fill



Trim and Fill Parameter Estimates

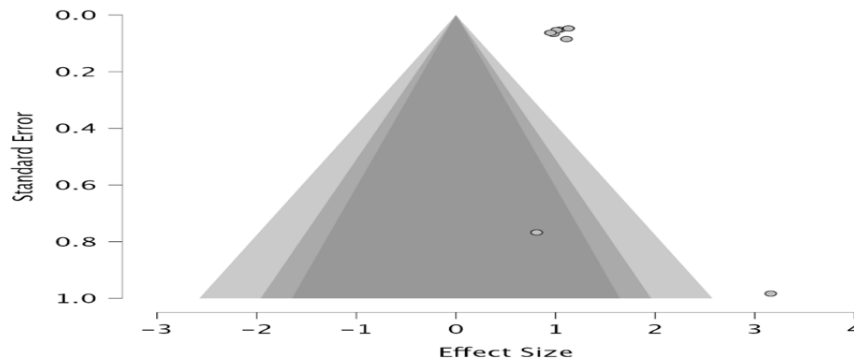
Estimates	Trim and Fill		Adjusted Estimate $\mu$				Adjusted Estimate $r$			
	Missing Estimates	Estimate	Lower 95% CI	Upper 95% CI	p		Estimate	Lower 95% CI	Upper 95% CI	p
15	1	1.096	1.047	1.144	< .001		0.068	0.030	0.218	.002

The trim and fill sensitivity analysis suggests that there may be 1 study missing. Despite that when this hypothetical study was added, the effect estimate (1.096) remained highly statistically significant ( $p < 0.001$ ).

## 6. PWT (posterior wall thickness)

#### Funnel Plot

##### Funnel Plot



#### Funnel Plot Asymmetry Tests

Meta-Regression Test for Funnel Plot Asymmetry

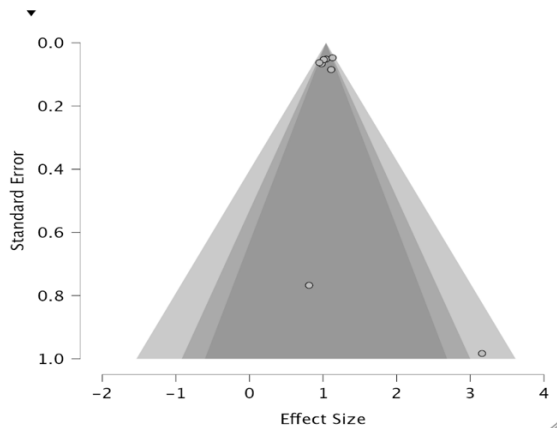
Estimates	Asymmetry Test		Limit Estimate $\mu$		
	z	p	Estimate	Lower 95% CI	Upper 95% CI
8	1.192	.233	0.987	0.880	1.094

Weighted Regression Test for Funnel Plot Asymmetry

Estimates	Asymmetry Test			Limit Estimate $\mu$		
	t	df	p	Estimate	Lower 95% CI	Upper 95% CI
8	0.740	6	.487	1.000	0.840	1.161

The funnel plot suggests there is publication bias, visually. But when analyzed statistically by meta-regression and Egger's test, no statistically significant publication bias noted.

#### Trim and Fill



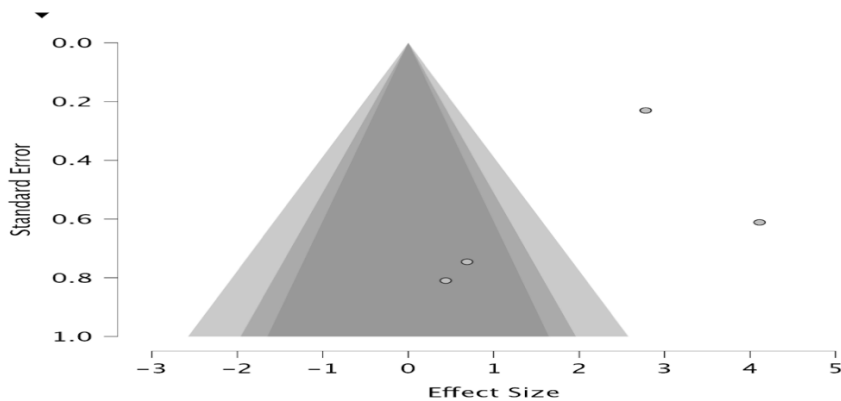
Trim and Fill Parameter Estimates

Estimates	Trim and Fill		Adjusted Estimate $\mu$			Adjusted Estimate $\tau$		
	Missing Estimates	Estimate	Lower 95% CI	Upper 95% CI	p	Estimate	Lower 95% CI	Upper 95% CI
8	0	1.040	0.982	1.098	< .001	0.043	0.000	1.260

The trim and fill method suggests no missing studies. The effect estimate (1.040) remains statistically significant. This suggests, no significant effect of visually apparent publication bias on the results.

## 7. LVEF

#### Funnel Plot



#### Funnel Plot Asymmetry Tests

Meta-Regression Test for Funnel Plot Asymmetry

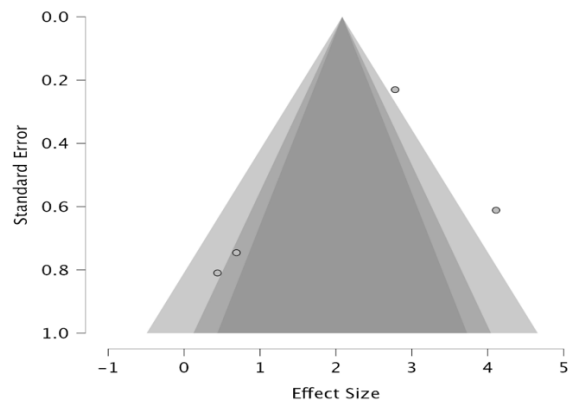
Estimates	Asymmetry Test		Limit Estimate $\mu$		
	z	p	Estimate	Lower 95% CI	Upper 95% CI
4	-0.944	.345	4.205	-0.546	8.955

Weighted Regression Test for Funnel Plot Asymmetry

Estimates	Asymmetry Test			Limit Estimate $\mu$		
	t	df	p	Estimate	Lower 95% CI	Upper 95% CI
4	-0.771	2	.521	3.352	-1.354	8.058

The funnel plot visually suggests publication bias with studies in center and two towards right side of funnel. But when analyzed by asymmetry test, no statistically significant publication bias noted.

### Trim and Fill



Trim and Fill Parameter Estimates

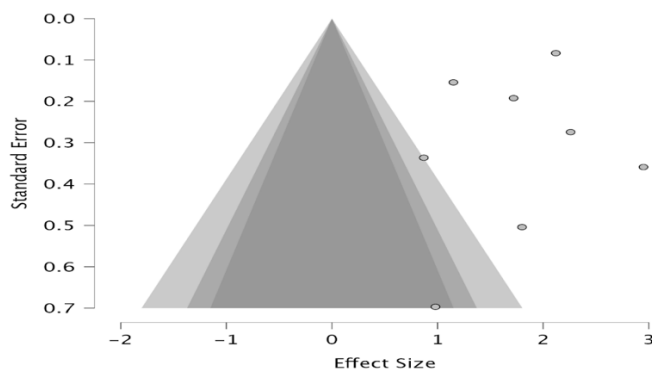
Estimates	Trim and Fill		Adjusted Estimate $\mu$			Adjusted Estimate $\tau$				
	Missing Estimates		Estimate	Lower 95% CI	Upper 95% CI	p	Estimate	Lower 95% CI	Upper 95% CI	p
4	0		2.083	0.404	3.762	.015	1.595	0.725	6.497	< .001

The trim and fill sensitivity analysis suggested no missing studies. It showed that the effect estimate (2.083) remained highly statistically significant ( $p < 0.015$ ) and hence, no publication bias.

## 8. NYHA

### Funnel Plot

#### Funnel Plot



#### Funnel Plot Asymmetry Tests

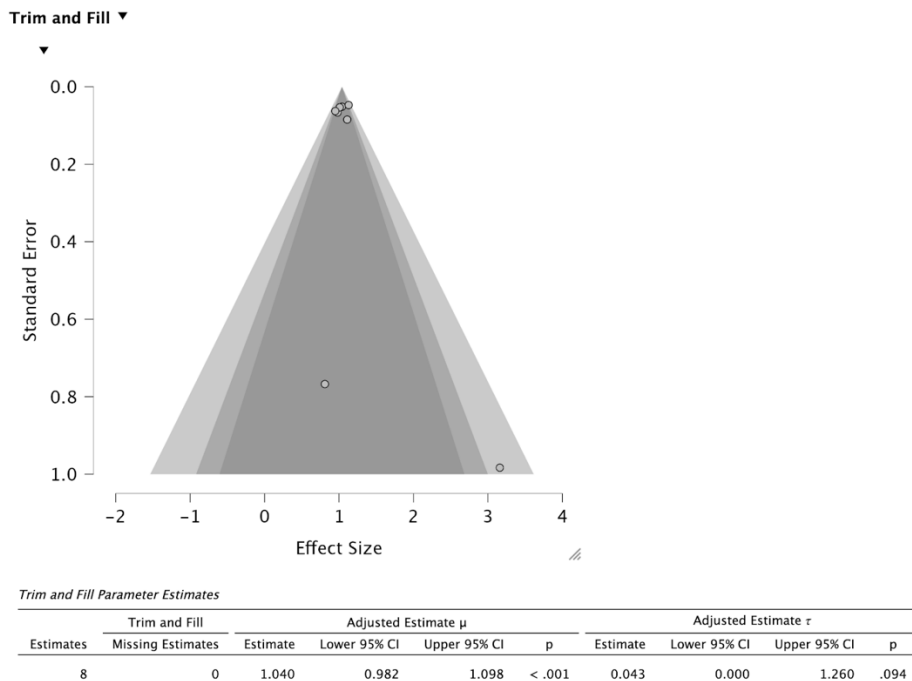
Meta-Regression Test for Funnel Plot Asymmetry

Estimates	Asymmetry Test		Limit Estimate $\mu$		
	z	p	Estimate	Lower 95% CI	Upper 95% CI
8	-0.398	.691	1.943	0.930	2.955

Weighted Regression Test for Funnel Plot Asymmetry

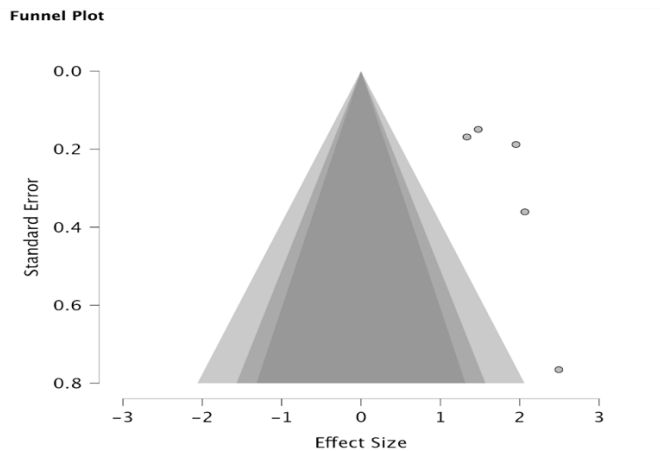
Estimates	Asymmetry Test			Limit Estimate $\mu$		
	t	df	p	Estimate	Lower 95% CI	Upper 95% CI
8	-0.648	6	.541	2.055	1.279	2.830

Visually, funnel plot suggests publication bias. But when analyzed by meta-regression and Egger's asymmetry test no statistically significant publication bias noted.



The trim and fill sensitivity analysis suggests no missing studies. The effect estimate remains statistically significant and robust (estimate = 1.040,  $p = < 0.001$ ) with very less heterogeneity, suggesting publication bias is not present.

## 9. Gillmore stage 3 vs 1



#### Funnel Plot Asymmetry Tests

*Meta-Regression Test for Funnel Plot Asymmetry*

Estimates	Asymmetry Test		Limit Estimate $\mu$		
	z	p	Estimate	Lower 95% CI	Upper 95% CI
5	1.636	.102	1.256	0.700	1.811

*Weighted Regression Test for Funnel Plot Asymmetry*

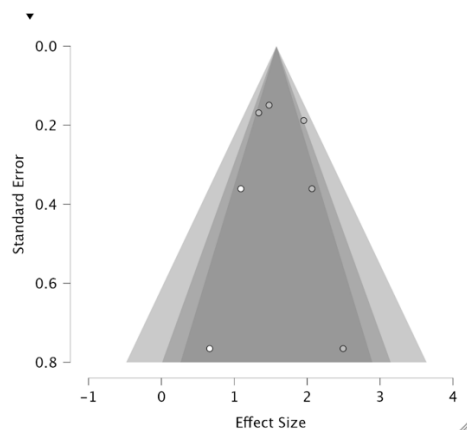
Estimates	Asymmetry Test			Limit Estimate $\mu$		
	t	df	p	Estimate	Lower 95% CI	Upper 95% CI
5	1.476	3	.237	1.199	0.241	2.157

*Rank Correlation Test for Funnel Plot Asymmetry*

Estimates	$\tau$	p
5	0.200	.817

The funnel plot visual assessment suggests publication bias. But when further analyzed with asymmetry test it was not statistically significant.

#### Trim and Fill ▼



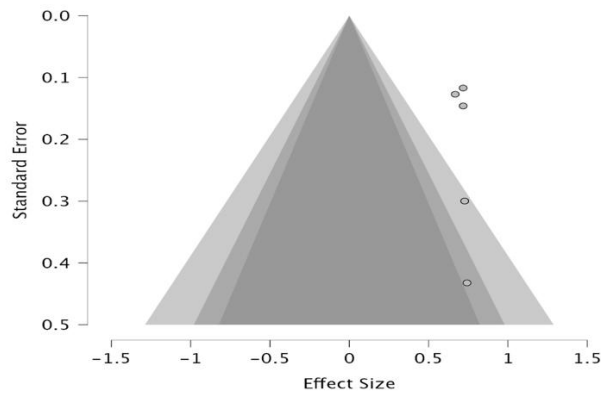
*Trim and Fill Parameter Estimates*

Estimates	Trim and Fill		Adjusted Estimate $\mu$			Adjusted Estimate $\tau$		
	Missing Estimates	Estimate	Lower 95% CI	Upper 95% CI	p	Estimate	Lower 95% CI	Upper 95% CI
5	2	1.578	1.278	1.878	< .001	0.269	0.000	1.222

The trim and fill method sensitivity analysis suggests there may be 2 studies missing. Even when these hypothetical studies were added the effect estimate (1.578) remained highly statistically significant.

## 10. Gillmore stage 2 vs 1

**Funnel Plot**



**Funnel Plot Asymmetry Tests**

*Meta-Regression Test for Funnel Plot Asymmetry*

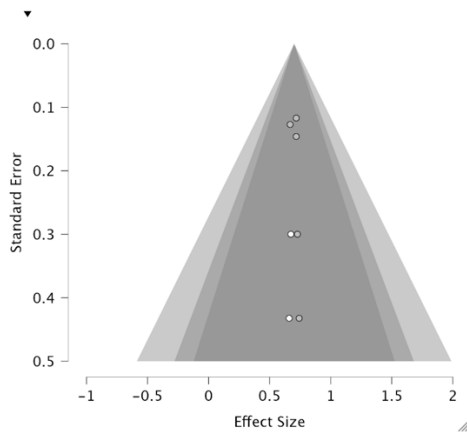
Estimates	Asymmetry Test		Estimate	Limit Estimate $\mu$	
	z	p		Lower 95% CI	Upper 95% CI
5	0.126	.900	0.683	0.332	1.034

*Weighted Regression Test for Funnel Plot Asymmetry*

Estimates	Asymmetry Test			Estimate	Limit Estimate $\mu$	
	t	df	p		Lower 95% CI	Upper 95% CI
5	0.682	3	.544	0.683	0.578	0.788

The funnel plot suggests publication bias, visually. But when analyzed further with meta-regression and egger's test, no statistically significant publication bias noted.

**Trim and Fill ▼**



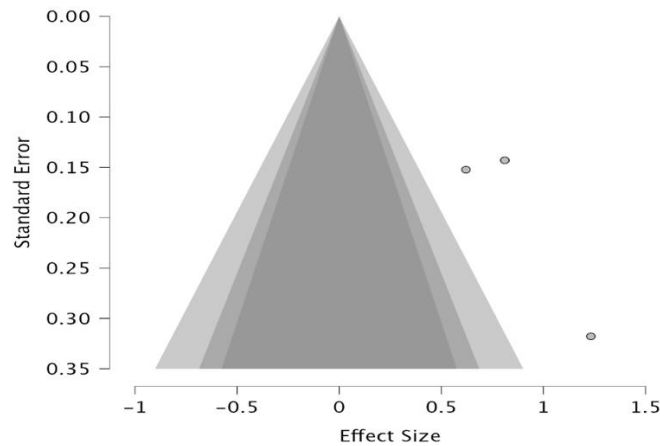
*Trim and Fill Parameter Estimates*

Estimates	Trim and Fill		Adjusted Estimate $\mu$				Adjusted Estimate $r$			
	Missing Estimates	Estimate	Lower 95% CI	Upper 95% CI	p		Estimate	Lower 95% CI	Upper 95% CI	p
5	2	0.701	0.567	0.835	< .001		0.000	0.000	0.000	1.000

The trim and fill method sensitivity analysis suggests there may be 2 studies missing. Even when these hypothetical studies were added the effect estimate (0.567) remained highly statistically significant ( $p < 0.001$ ).

## 11. Gillmore stage 3 vs 2

### Funnel Plot



### Funnel Plot Asymmetry Tests

#### Meta-Regression Test for Funnel Plot Asymmetry

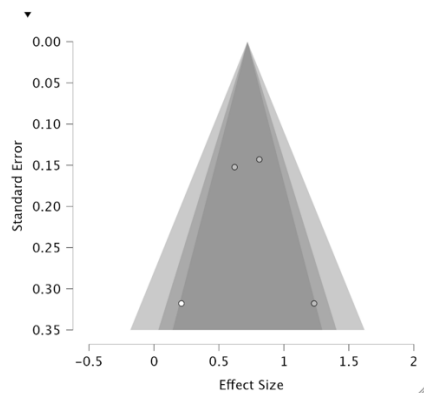
Estimates	Asymmetry Test		Estimate	Limit Estimate $\mu$	
	z	p		Lower 95% CI	Upper 95% CI
3	1.431	.152	0.307	-0.364	0.977

#### Weighted Regression Test for Funnel Plot Asymmetry

Estimates	Asymmetry Test			Estimate	Limit Estimate $\mu$	
	t	df	p		Lower 95% CI	Upper 95% CI
3	1.386	1	.398	0.309	-4.124	4.743

The funnel plot suggests publication bias, visually. But when analyzed further with meta-regression and egger's test, no statistically significant publication bias noted.

### Trim and Fill ▼



#### Trim and Fill Parameter Estimates

Estimates	Trim and Fill		Adjusted Estimate $\mu$			p	Adjusted Estimate $r$			p
	Missing Estimates	Estimate	Lower 95% CI	Upper 95% CI			Lower 95% CI	Upper 95% CI		
3	1	0.719	0.461	0.978	<.001	0.162	0.000	1.551	.112	

The trim and fill method sensitivity analysis suggests there may be 1 study missing. Even when this hypothetical study was added the effect estimate (0.719) remained highly statistically significant ( $p < 0.001$ ).