

Supplementary file 1

Table S1. Search strategy for PubMed database

PubMed	("Stroke Volume"[Mesh] OR "Ventricular Dysfunction, Right"[Mesh] OR "Ventricular Dysfunction, Left"[Mesh] OR “ejection fraction” [tiab]) AND ("Thiamine"[Mesh] OR “thiamine”[tiab] OR “thiamin”[tiab] OR “ <i>vitamin b1</i> ”[tiab] OR “ <i>vitamin b 1</i> ”[tiab]) AND (“randomized”[tiab] OR “randomized”[tiab] OR “random”[tiab] OR “placebo”[tiab] OR “randomly”[tiab] OR “trial”[tiab] OR “RCT”[tiab] OR “intervention”[tiab] OR “clinical trial” [tiab] OR “cross over”[tiab] OR “cross-over”[tiab] OR “parallel”[tiab] OR "Clinical Trial"[Publication Type] OR "Controlled Clinical Trial"[Publication Type] OR "Randomized Controlled Trial"[Publication Type] OR "Randomized Controlled Trial"[tiab] OR "Cross-Over Studies"[MeSH Terms])
Scopus	((TITLE-ABS-KEY (<i>stroke</i> AND <i>volumes</i>) OR TITLE-ABS-KEY (<i>stroke</i> AND <i>volume</i>) OR TITLE-ABS-KEY (<i>ventricular</i> AND <i>end-systolic</i> AND <i>volume</i>) OR TITLE-ABS-KEY (<i>ventricular</i> AND <i>end-systolic</i> AND <i>volumes</i>) OR TITLE-ABS-KEY (<i>ventricular</i> AND <i>ejection</i> AND <i>fraction</i>) OR TITLE-ABS-KEY (<i>ejection</i> AND <i>fraction</i>) OR TITLE-ABS-KEY (<i>ventricular</i> AND <i>ejection</i> AND <i>fractions</i>) OR TITLE-ABS-KEY (<i>ventricular</i> AND <i>end</i> AND <i>diastolic</i> AND <i>volume</i>) OR TITLE-ABS-KEY (<i>ventricular</i> AND <i>end-diastolic</i> AND <i>volumes</i>) OR TITLE-ABS-KEY (<i>right</i> AND <i>ventricular</i> AND <i>dysfunction</i>) OR TITLE-ABS-KEY (<i>right</i> AND <i>ventricular</i> AND <i>dysfunctions</i>) OR TITLE-ABS-KEY (<i>left</i> AND <i>ventricular</i> AND <i>dysfunction</i>) OR TITLE-

	<p>ABS-KEY (<i>left</i> AND <i>ventricular</i> AND <i>dysfunctions</i>) OR TITLE-ABS-KEY (<i>ventricular</i> AND <i>end</i> AND <i>systolic</i> AND <i>volume</i>) OR TITLE-ABS-KEY (<i>ventricular</i> AND <i>end-diastolic</i> AND <i>volume</i>)) AND (TITLE-ABS-KEY (<i>thiamin</i>) OR TITLE-ABS-KEY (<i>vitamin</i> AND <i>b1</i>) OR TITLE-ABS-KEY (<i>aneurin</i>) OR TITLE-ABS-KEY (<i>vitamin</i> AND <i>b 1</i>) OR TITLE-ABS-KEY (<i>thiamine</i> AND <i>mononitrate</i>) OR TITLE-ABS-KEY (<i>thiamine</i>))) AND (TITLE-ABS-KEY (<i>randomized</i>) OR TITLE-ABS-KEY (<i>randomised</i>) OR TITLE-ABS-KEY (<i>random</i>) OR TITLE-ABS-KEY (<i>placebo</i>) OR TITLE-ABS-KEY (<i>randomly</i>) OR TITLE-ABS-KEY (<i>trial</i>) OR TITLE-ABS-KEY (<i>rct</i>) OR TITLE-ABS-KEY (<i>intervention</i>) OR TITLE-ABS-KEY (<i>clinical</i> AND <i>trial</i>) OR TITLE-ABS-KEY (<i>cross</i> AND <i>over</i>) OR TITLE-ABS-KEY (<i>cross-over</i>) OR TITLE-ABS-KEY (<i>parallel</i>) OR TITLE-ABS-KEY (<i>clinical</i> AND <i>trial</i>) OR TITLE-ABS-KEY (<i>controlled</i> AND <i>clinical</i> AND <i>trial</i>) OR TITLE-ABS-KEY (<i>randomized</i> AND <i>controlled</i> AND <i>trial</i>) OR TITLE-ABS-KEY (<i>randomized</i> AND <i>controlled</i> AND <i>trial</i>))</p>
WOS	<p>TS= (Stroke volume OR Stroke Volumes OR Ventricular End-Systolic Volume OR Ventricular End Systolic Volume OR Ventricular End-Systolic Volumes OR Ventricular Ejection Fraction OR Ventricular Ejection Fractions OR Ejection Fractions OR Ventricular End-Diastolic Volume OR Ventricular End Diastolic Volume OR Ventricular End-Diastolic Volumes OR Right Ventricular Dysfunction OR Right Ventricular Dysfunctions OR Left Ventricular Dysfunction OR Left Ventricular Dysfunctions)</p>

	<p>TS= (Thiamine OR Thiamin OR Vitamin B1 OR Aneurin OR Vitamin B 1 OR Thiamine Mononitrate)</p> <p>TS= (randomized OR randomized OR random OR placebo OR randomly OR trial OR parallel OR RCT OR intervention OR clinical trial OR cross over OR cross-over OR Clinical Trial OR Controlled Clinical Trial OR Randomized Controlled Trial OR Randomized Controlled Trial)</p>
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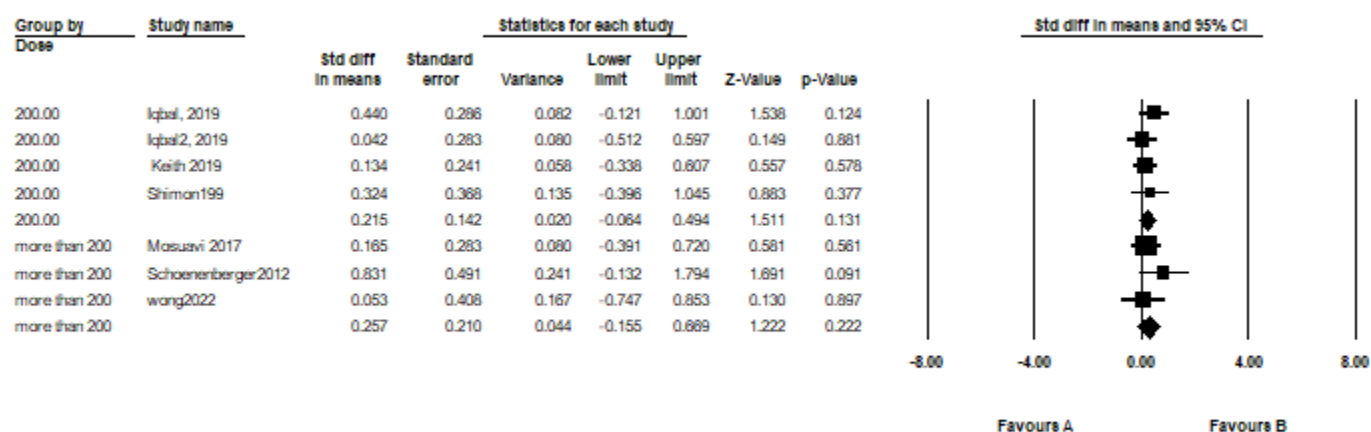
Table S2. POLIS (population, outcome, location, indicator, study design)

Topic	Thiamine supplementation and its effects on ejection fraction
Population	Human
Outcome	Ejection Fraction
Location	-
Indicator	Thiamine Supplementation
Study design	Trial

Table S3. Risk of bias assessment

First author and reference		Selection bias		Performance bias	Detection bias	Attrition bias	Reporting bias	Other bias	Overall quality
		Sequence generation	Allocation concealment	Blinding of participants	Blinding of outcomes assessment	Incomplete outcome data	Selective reporting	Other source of bias	
1	Shimon ²⁴	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk	-	Good
2	Schoenenberger ²²	Low risk	Low risk	Low risk	Low risk	Moderate (1/6)	Low risk	-	Good
3	Mousavi ²¹	Low risk	Low risk	Low risk	Low risk	Low risk	Low risk	-	Good
4	Keith ²³	Unclear risk	Unclear risk	Low risk	Low risk	Moderate(11% drop)	Low risk	-	Fair
5	Iqbal ²⁰	Low risk	Unclear risk	Low risk	Low risk	Low risk	Low risk	-	Fair
6	Wong, E. K. C ²⁷	Low risk	Unclear risk	Low risk	Low risk	Low risk	Low risk	-	Fair

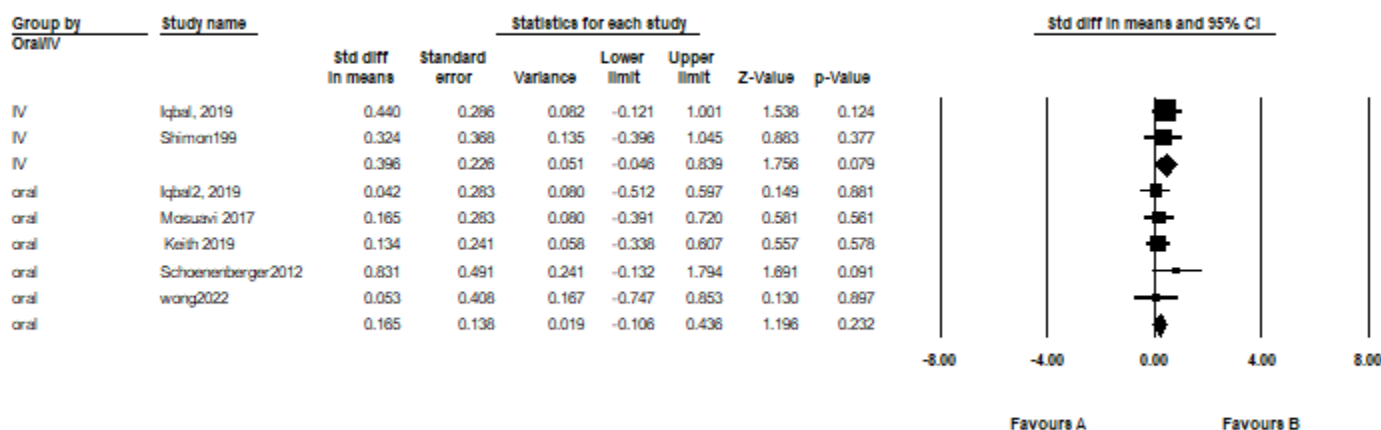
Meta Analysis



Meta Analysis

Figure S1. (B stands for treatment, and A for control)

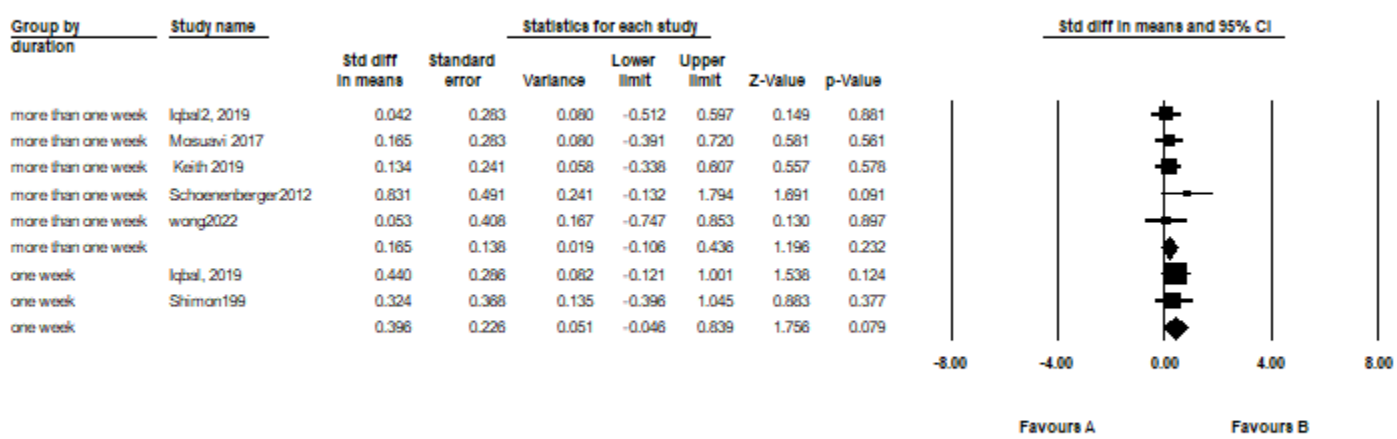
Meta Analysis



Meta Analysis

Figure S2. (B stands for treatment, and A for control)

Meta Analysis



Meta Analysis

Figure S3. (B stands for treatment, and A for control)