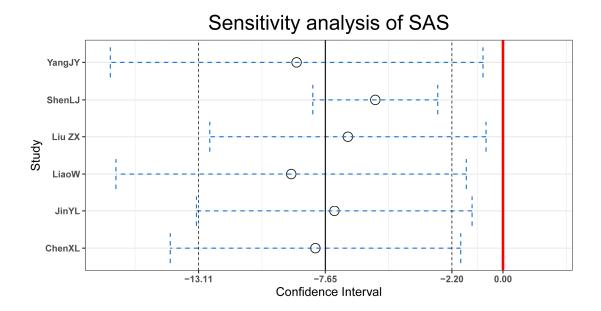
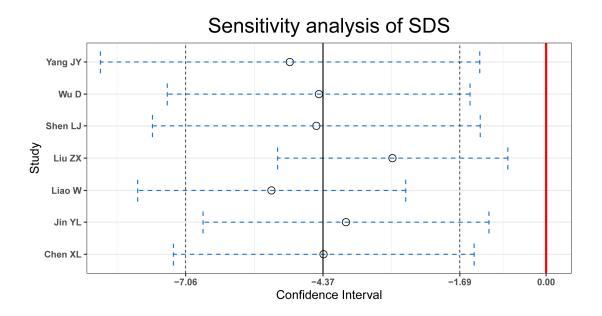
# **Supplemental Table 1. PubMed search strategy**

Database	#1	"Dyspepsia"[Mesh]
	#2	(((((((Dyspepsias[Title/Abstract]) OR (Indigestion[Title/Abstract])) OR
		(Indigestions[Title/Abstract])) OR (Functional dyspepsia[Title/Abstract])) OR (non-
		ulcer dyspepsia[Title/Abstract])) OR (postprandial distress syndrome[Title/Abstract]))
		OR (epigastric pain syndrome[Title/Abstract])
	#3	#1 OR #2
	#4	"Acupuncture"[Mesh]
	#5	((((((((((((((((((((((((((((((((((((((
		OR (Acupotomies[Title/Abstract])) OR (Pharmacopuncture
		Treatment[Title/Abstract])) OR (Needle[Title/Abstract])) OR
Pubmed		(Needling[Title/Abstract])) OR (electroacupuncture[Title/Abstract])) OR (electro-
		acupuncture[Title/Abstract])) OR (auricular acupuncture[Title/Abstract])) OR (Ear
		Acupuncture[Title/Abstract])) OR (warm needle[Title/Abstract])) OR
		(Moxibustion[Title/Abstract])) OR (Acupuncture Points[Title/Abstract])) OR
		(Acupuncture Therapy[Title/Abstract])
	#6	#4 OR #5
	#7	randomized controlled trial[Publication Type] OR randomized[Title/Abstract] OR
		placebo[Title/Abstract]
	#8	#3 AND #6 AND #7
	#1	'Dyspepsias':ab,ti OR 'Indigestion':ab,ti OR 'Indigestions':ab,ti OR 'Functional
		dyspepsia':ab,ti OR 'non-ulcer dyspepsia':ab,ti OR 'postprandial distress
		syndrome':ab,ti OR 'epigastric pain syndrome':ab,ti
	#2	'Pharmacoacupuncture':ab,ti OR 'Acupotomy':ab,ti OR 'Acupotomies':ab,ti OR
		'Pharmacopuncture Treatment':ab,ti OR 'Needle':ab,ti OR 'Needling':ab,ti OR
		'electroacupuncture':ab,ti OR 'electro-acupuncture':ab,ti OR 'auricular
<b>Embase</b>		acupuncture':ab,ti OR 'Acupunctures, Ear':ab,ti OR 'Ear Acupuncture':ab,ti OR 'warm
		needle':ab,ti OR 'Moxibustion':ab,ti OR 'Acupuncture Points':ab,ti OR 'Acupuncture
		Therapy':ab,ti
	#3	'randomized controlled trial':ab,ti OR 'randomized':ab,ti OR 'placebo':ab,ti OR
		'RCT':ab,ti
	#4	#1 AND #2 AND #3
	#1	TS=(Dyspepsia OR Dyspepsias OR Indigestion OR Indigestions OR Functional
		dyspepsia OR non-ulcer dyspepsia OR postprandial distress syndrome OR epigastric
		pain syndrome)
	#2	TS=(Acupuncture OR Pharmacoacupuncture OR Acupotomy OR Acupotomies OR
Web of		Pharmacopuncture Treatment OR Needle OR Needling OR electroacupuncture OR
science		electro-acupuncture OR auricular acupuncture OR Acupunctures, Ear OR Ear
		Acupuncture OR warm needle OR Moxibustion OR Acupuncture Points OR
		Acupuncture Therapy)
	#3	TS=(randomized controlled trial OR randomized OR placebo OR RCT)
	#4	#1 AND #2 AND #3
	#1	(Dyspepsias):ab,ti,kw OR (Indigestion):ab,ti,kw OR (Indigestions):ab,ti,kw OR
The		(Functional dyspepsia):ab,ti,kw OR (non-ulcer dyspepsia):ab,ti,kw OR (postprandial
Cochrane		distress syndrome):ab,ti,kw OR (epigastric pain syndrome):ab,ti,kw
library	#2	(Pharmacoacupuncture):ab,ti,kw OR(Acupotomy):ab,ti,kw OR (Acupotomies):ab,ti,kw
~ : wi j		OR(Pharmacopuncture Treatment):ab,ti,kw OR (Needle):ab,ti,kw
		ordinational Housing Housing of the Control of the

		OD (Margillian) and distance OD (11 advantages) and distance OD (11 advantages)
		OR(Needling):ab,ti,kw OR (electroacupuncture):ab,ti,kw OR(electro-
		acupuncture):ab,ti,kw OR (auricular acupuncture):ab,ti,kw OR(Acupunctures,
		Ear):ab,ti,kw OR (Ear Acupuncture):ab,ti,kw OR(warm needle):ab,ti,kw OR
		(Moxibustion):ab,ti,kw OR(Acupuncture Points):ab,ti,kw
	#3	(randomized controlled trial):ab,ti,kw OR(randomized):ab,ti,kw OR (placebo):ab,ti,kv
		OR(RCT):ab,ti,kw
	#4	# 1 AND #2 AND #3
	#1	篇关摘 = 消化不良 + 非溃疡性消化不良 + 非溃疡消化不良 + 功能性消化不良 + 餐后窘迫综合征 + 上腹疼痛综合征 + FD
CNKI	#2	篇关摘 =针灸 + 针刺 + 手针 + 体针 + 耳针 + 电针 + 火针 + 温针 + 艾灸 + 灸法 + 针 + 灸 + 穴 + 埋线
	#3	篇关摘 =随机对照实验 + 随机对照试验 + RCT + 随机对照 + 随机
	#4	#1 AND #2 AND #3
	#1	主题 = 消化不良 + 非溃疡性消化不良 + 非溃疡消化不良 + 功能性消化不良 + 餐后
	,,,,	窘迫综合征 + 上腹疼痛综合征 + FD
	#2	主题 =针灸 + 针刺 + 手针 + 体针 + 耳针 + 电针 + 火针 + 温针 + 艾灸 + 灸法
WanFang	π2	针 + 灸 + 穴 + 埋线
	#3	主题 = 随机对照实验 + 随机对照试验 + RCT + 随机对照 + 随机
	#4	主返 一週がら
	#1	题目或关键词 = 消化不良 OR 非溃疡性消化不良 OR 非溃疡消化不良 OR 功能性消化不良 OR 非溃疡消化不良 OR 功能性消化不良 OR 非溃疡消化不良 OR 功能性消化不良 OR TO
		化不良 OR 餐后窘迫综合征 OR 上腹疼痛综合征 OR FD
VIP	#2	题目或关键词=针灸 OR 针刺 OR 手针 OR 体针 OR 耳针 OR 电针 OR 火针 OR
		温针 OR 艾灸 OR 灸法 OR 针 OR 灸 OR 穴 OR 埋线
	#3	题目或关键词=随机对照实验 OR 随机对照试验 OR RCT OR 随机对照 OR 随机
	#4	#1 AND #2 AND #3
	#1	"消化不良"[不加权:扩展]
	#2	"功能性消化不良"[常用字段:智能] OR "非溃疡性消化不良"[常用字段:智能] OR "非溃疡
		消化不良"[常用字段:智能] OR "上腹疼痛综合征"[常用字段:智能] OR "餐后窘迫综合征
		"[常用字段:智能] OR "FD"[常用字段:智能]
	#3	(#2) OR (#1)
	#4	(((((((((((((((((((((((((((((((((((((
		OR "火针疗法"[不加权:扩展]) OR "灸法"[不加权:扩展]) OR "埋线"[不加权:扩展]) OR "疗
		位贴敷法"[不加权:扩展]) OR "耳穴贴压"[不加权:扩展]) OR "推拿"[不加权:扩展]) OR "转
		刺疗法"[不加权:扩展]
	#5	"针刺"[常用字段:智能] OR "电针"[常用字段:智能] OR "火针"[常用字段:智能] OR "温针
CBM		"[常用字段:智能] OR "艾灸"[常用字段:智能] OR "埋线"[常用字段:智能] OR "贴敷"[常用
		字段:智能] OR "耳穴"[常用字段:智能] OR "推拿"[常用字段:智能] OR "中医外治"[常用字
		段:智能]
	#6	(#5) OR (#4)
	#7	随机对照试验[不加权:扩展]
	#8	"随机对照试验"[常用字段:智能] OR "随机对照实验"[常用字段:智能] OR "随机对照研究
		"[常用字段:智能] OR "随机对照"[常用字段:智能] OR "随机"[常用字段:智能] OR
		"RCT"[常用字段:智能]
	#9	(#8) OR (#7)
	#10	(#9) AND (#6) AND (#3)



Supplemental Fig 1. Sensitivity analysis of SAS



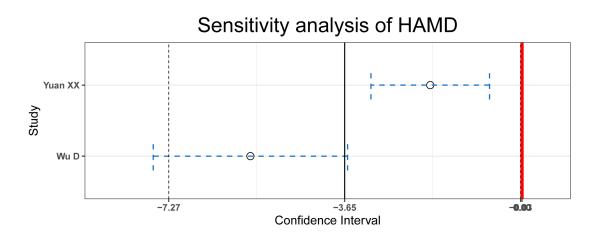
Supplemental Fig 2. Sensitivity analysis of SDS

# Sensitivity analysis of HAMA Yuan XX Du R

Supplemental Fig 3. Sensitivity analysis of HAMA

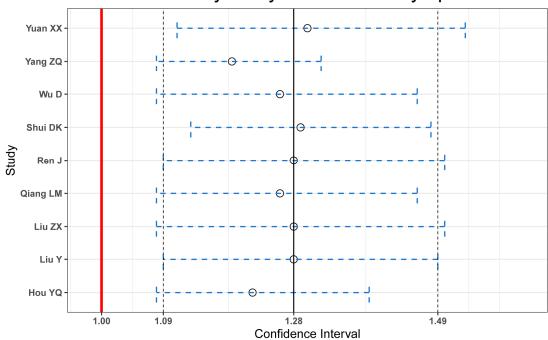
Confidence Interval

-1.80



Supplemental Fig 4. Sensitivity analysis of HAMD

# Sensitivity analysis of Global Symptom



# Supplemental Fig 5. Sensitivity analysis of Global Symptom

## ${\sf SAS}$ for anxiety and depression in functional dyspepsia

Patient or population: patients with anxiety and depression in functional dyspepsia Settings: Intervention: SAS

Outcomes	Illustrative Assumed risk Control	comparative risks* (95% CI) Corresponding risk SAS	Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
SAS_sub - Acupuncture vs. First-Line	Control	The mean sas_sub - acupuncture vs. first-line in the intervention groups was 8.89 lower (22.86 lower to 5.09 higher)		130 (2 studies)	⊕⊖⊝⊖ very low <sup>1,2,3,4</sup>	
SAS_sub - Acupuncture vs. First- line+Second-line		The mean sas_sub - acupuncture vs. first-line+second-line in the intervention groups was 6.49 lower (18.18 lower to 5.2 higher)		180 (2 studies)	⊕⊖⊝⊝ very low <sup>1,2,3,4</sup>	
SAS_sub - Acupuncture vs. Placebo Acupuncture		The mean sas_sub - acupuncture vs. placebo acupuncture in the intervention groups was 7.07 lower (11.03 to 3.1 lower)		83 (2 studies)	⊕⊖⊝⊖ very low <sup>2,3,5,6</sup>	

\*The basis for the assumed risk (e.g. the median control group risk across studies) is provided in footnotes. The corresponding risk (and its 95% confidence interval) is based on the assumed risk in the comparison group and the relative effect of the intervention (and its 95% CI).

### CI: Confidence interval;

Cit connoence interval;

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

 $^{\rm 2}$  No detailed description of random methods or allocation of hidden methods

Confidence interval is too wide

<sup>5</sup> Per-Protocol analysis <sup>6</sup> Publication Bias

<sup>1</sup> Blind method not described in detail

### SDS for anxiety and depression in functional dyspepsia

Patient or population: patients with anxiety and depression in functional dyspepsia

Outcomes	Illustrative	comparative risks* (95% CI)	Relative	No of	Quality of the	Comments
	Assumed	Corresponding risk	effect	Participants	evidence	
	risk		(95% CI)	(studies)	(GRADE)	
	Control	SDS				
SDS_sub - Acupuncture vs. First-Line		The mean sds_sub - acupuncture vs. first-line in the intervention		130	0000	
		groups was		(2 studies)	very low <sup>1,2,3</sup>	
		2.71 lower				
		(5.19 to 0.23 lower)				
SDS_sub - Acupuncture vs. First-		The mean sds_sub - acupuncture vs. first-line+second-line in the		180	<del>0</del> 000	
line+Second-line		intervention groups was		(2 studies)	very low 1,2,3,4	
		5.02 lower				
		(17.4 lower to 7.36 higher)				
SDS_sub - Acupuncture vs. Placebo		The mean sds_sub - acupuncture vs. placebo acupuncture in the		173	0000	
Acupuncture		intervention groups was		(3 studies)	low <sup>1,2,5</sup>	
		4.63 lower				
		(6.28 to 2.98 lower)				

<sup>\*</sup>The basis for the assumed risk (e.g. the median control group risk across studies) is provided in footnotes. The corresponding risk (and its 95% confidence interval) is based on the assumed risk in the comparison group and the relative effect of the intervention (and its 95% CI).

GRADE Working Group grades of evidence
High quality: Further research is very unlikely to change our confidence in the estimate of effect.
Moderate quality: Further research is kikely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate. Very low quality: We are very uncertain about the estimate.

## Supplemental Fig 7. GRADE assessment for the SDS

## HAMA for anxiety and depression in functional dyspepsia

Patient or population: patients with anxiety and depression in functional dyspepsia

Settings: Intervention: HAMA

Outcomes	Assumed Corresponding risk		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Control	HAMA				
HAMA_sub - Acupuncture vs. First-Line		The mean hama_sub - acupuncture vs. first-line in the intervention groups was 5.76 lower (10.18 to 1.35 lower)		158 (2 studies)	⊕⊝⊖⊝ very low <sup>1,2,3</sup>	
HAMA_sub - Acupuncture vs. Placebo Acupuncture		The mean hama_sub - acupuncture vs. placebo acupuncture in the intervention groups was 2.58 lower (4.33 to 0.33 lower)		90 (1 study)	⊕⊝⊝⊝ very low <sup>1,2,4</sup>	

The basis for the assumed risk (e.g. the median control group risk across studies) is provided in footnotes. The corresponding risk (and its 95% confidence interval) is based on the assumed risk in the comparison group and the relative effect of the intervention (and its 95% CI).

GRADE Working Group grades of evidence

High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

<sup>1</sup> Blind method not described in detail

 $<sup>^{2}</sup>$  No detailed description of random methods or allocation of hidden methods

<sup>3</sup> heterogeneity

<sup>&</sup>lt;sup>4</sup> Confidence interval is too wide

<sup>&</sup>lt;sup>5</sup> Per-Protocol analysis

<sup>1</sup> Blind method not described in detail

<sup>&</sup>lt;sup>2</sup> No detailed description of random methods or allocation of hidden methods

<sup>3</sup> heterogeneity

<sup>&</sup>lt;sup>4</sup> Imprecision due to less research

HAMD for anxiety and depression in functional dyspepsia

Patient or population: patients with anxiety and depression in functional dyspepsia

Intervention: HAMD

Outcomes	Illustrative Assumed risk Control	comparative risks* (95% CI) Corresponding risk HAMD	Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
HAMD_sub - Acupuncture vs. First-Line		The mean hamd_sub - acupuncture vs. first-line in the intervention groups was 5.59 lower (7.59 to 3.59 lower)		63 (1 study)	⊕⊖⊝⊝ very low <sup>1,2,3</sup>	
HAMD_sub - Acupuncture vs. Placebo Acupuncture		The mean hamd_sub - acupuncture vs. placebo acupuncture in the intervention groups was 1.89 lower (3.11 to 0.67 lower)		90 (1 study)	⊕⊕⊝⊝ low <sup>1,3</sup>	

The basis for the assumed risk (e.g. the median control group risk across studies) is provided in footnotes. The corresponding risk (and its 95% confidence interval) is based on the assumed risk in the comparison group and the relative effect of the intervention (and its 95% CI).

GRADE Working Group grades of evidence
High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

# Supplemental Fig 9. GRADE assessment for the HAMD

## HADS for anxiety and depression in functional dyspepsia

Patient or population: patients with anxiety and depression in functional dyspepsia

Outcomes	Illustrative con Assumed risk Control	nparative risks* (95% CI) Corresponding risk HADS	Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
HADS		The mean hads in the intervention groups was 1 lower (2.65 lower to 0.65 higher)		278 (1 study)	⊕⊕⊕⊝ moderate <sup>1</sup>	

<sup>\*</sup>The basis for the assumed risk (e.g. the median control group risk across studies) is provided in footnotes. The corresponding risk (and its 95% confidence interval) is based on the assumed risk in the comparison group and the relative effect of the intervention (and its 95% CI).

GRADE Working Group grades of evidence
High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

<sup>1</sup> Imprecision due to less research

Supplemental Fig 10. GRADE assessment for the HADS

<sup>&</sup>lt;sup>2</sup> No detailed description of random methods or allocation of hidden methods

<sup>&</sup>lt;sup>3</sup> Imprecision due to less research

## Efficiency for anxiety and depression in functional dyspepsia

Patient or population: patients with anxiety and depression in functional dyspepsia Settings: Intervention: Efficiency

Outcomes	Illustrative com Assumed risk Control	parative risks* (95% CI) Corresponding risk Efficiency	Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence Comments (GRADE)		
Efficiency_sub - Acupuncture vs. First-Line	Study population		RR 1.11	335	0000		
	804 per 1000	892 per 1000 (820 to 972)	(1.02 to 1.21)	(5 studies)	low <sup>1,2</sup>		
	Moderate						
	820 per 1000	910 per 1000 (836 to 992)					
Efficiency_sub - Acupuncture vs. First-line+Second-	Study population		RR 1.24	100	0000 is		
line	760 per 1000	942 per 1000 (790 to 1000)	(1.04 to 1.47) (1 study)	(1 study)	very low <sup>1,2,3</sup>		
	Moderate						
	760 per 1000	942 per 1000 (790 to 1000)					
Efficiency_sub - Acupuncture vs. Placebo	Study population		RR 1.72	208	⊕⊖⊝⊖ 1245		
Acupuncture	524 per 1000	902 per 1000 (598 to 1000)	(1.14 to 2.61) (3	(3 studies)	very low <sup>1,2,4,5</sup>		
	Moderate						
	433 per 1000	745 per 1000 (494 to 1000)					

The basis for the assumed risk (e.g. the median control group risk across studies) is provided in footnotes. The corresponding risk (and its 95% confidence interval) is based on the assumed risk in the comparison group and the relative effect of the intervention (and its 95% CI).

CR. Commence interval, NR. Posk ratio.

GRADE Working Group grades of evidence
High quality: Further research is very unlikely to change our confidence in the estimate of effect.

Moderate quality: Further research is kiely to have an important impact on our confidence in the estimate of effect and may change the estimate.

Low quality: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

Very low quality: We are very uncertain about the estimate.

Supplemental Fig 11. GRADE assessment for the Global Symptom

<sup>1</sup> Blind method not described in detail

 $<sup>^{\</sup>rm 2}$  No detailed description of random methods or allocation of hidden methods

<sup>3</sup> Imprecision due to less research

<sup>&</sup>lt;sup>4</sup> Per-Protocol analysis

<sup>&</sup>lt;sup>5</sup> heterogeneity