# Supplementary figures and tables.

## Figure legend:

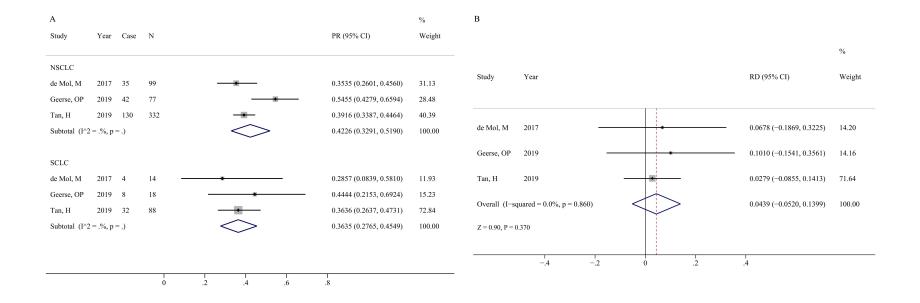
Figure S1. A. Forest plot for non-small cell lung cancer (NSCLC) VS. small cell lung cancer (SCLC). B. Forest plot for risk difference for NSCLC VS. SCLC. RD risk difference; PR positive rate; CI confidence interval.

Figure S2. Forest plot for clinical TNM stages. PR positive rate; CI confidence interval.

Figure S3. Forest plot for previous treatment methods. PR positive rate; CI confidence interval.

Figure S4. Forest plot for DT threshold. PR positive rate; CI confidence interval.

Figure S5. Forest plot for sample size. PR positive rate; CI confidence interval.



**Figure S1.** A. Forest plot for non-small cell lung cancer (NSCLC) VS. small cell lung cancer (SCLC). B. Forest plot for risk difference for NSCLC VS. SCLC. RD risk difference; PR positive rate; CI confidence interval.

Study	Year	Case	Ν		PR (95% CI)	Weight(%)
Stage I–II Geerse, OP	2019	12	26	•	0.4615 (0.2659, 0.6663)	100.00
Stage I–III Tan, H	2019	72	212		0.3396 (0.2762, 0.4076)	100.00
Stage III de Mol, M	2017	39	113		0.3451 (0.2582, 0.4404)	100.00
Stage IV						
Tan, H	2019	90	208	•	0.4327 (0.3644, 0.5030)	49.91
McFarland, DC	2019	39	109		0.3578 (0.2683, 0.4553)	27.08
Sherry, V	2017	41	92		0.4457 (0.3419, 0.5530)	23.01
Subtotal $(I^2 = .)$	%, p = .)			$\diamond$	0.4151 (0.3662, 0.4648)	100.00
Stage III–IV						
Geerse, OP	2019	34	61	•	0.5574 (0.4245, 0.6845)	100.00
			1 .2	I I .4 .6	Г .8	

Figure S2. Forest plot for clinical TNM stages. PR positive rate; CI confidence

interval.

Study	Year	Case	Ν						PR (95% CI)	Weight(%
Chemotherap	У									
de Mol, M	2017	5	9						• 0.5556 (0.2120, 0.8630)	17.14
Geerse, OP	2019	32	54				•	_	0.5926 (0.4503, 0.7243)	36.73
Tan, H	2019	136	349						0.3897 (0.3382, 0.4430)	46.13
Subtotal (I^2	e = .%, p =	= .)			<	$\sim$	>		0.4907 (0.3234, 0.6590)	100.00
Surgery and (	(neo) adju	vant che	motherapy							
de Mol, M	2017	5	14 —		•				0.3571 (0.1276, 0.6486)	100.00
Chemotherap	y and seq	uential/c	oncurrent F	adiother	rapy					
de Mol, M	2017	29	90		•				0.3222 (0.2275, 0.4290)	77.35
Geerse, OP	2019	11	26		•				0.4231 (0.2335, 0.6308)	22.65
Subtotal (I^2	2 = .%, p =	= .)		<	$\bigcirc$				0.3429 (0.2577, 0.4334)	100.00
Biological										
Geerse, OP	2019	8	17			•		-	0.4706 (0.2298, 0.7219)	100.00
No Chemothe	rany									
Tan, H	2019	26	71	_	•				0.3662 (0.2550, 0.4890)	100.00
				.2	.4		.6	.8		

Figure S3. Forest plot for previous treatment methods. PR positive rate; CI confidence interval.

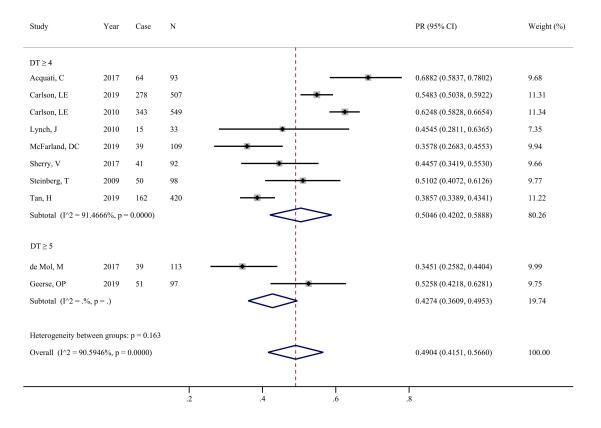


Figure S4. Forest plot for DT threshold. PR positive rate; CI confidence interval.

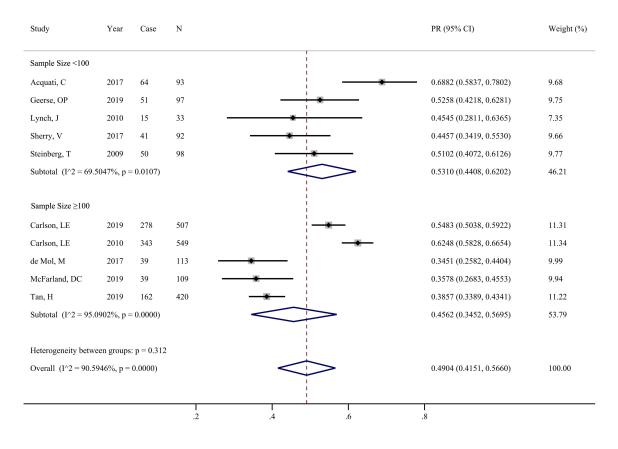


Figure S5. Forest plot for sample size. PR positive rate; CI confidence interval.

Table S1 Selection strategy in PubMed (The retrieval time: 20211231)	Table S1	Selection strategy	in PubMed	(The retrieval time:	20211231)
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Search	Query	Items found
#1	(Psychological[All Fields]AND distress[All Fields])OR(Distress[All Fields]AND ("thermometers"[MeSH Terms])OR"thermometers"[All Fields]OR "thermometer"[All Fields]))OR(psychosocial[All Fields] AND problems[All Fields])OR	71146
#2	("lung neoplasms"[MeSH Terms] OR ("lung"[All Fields] AND "neoplasms"[All Fields]) OR "lung neoplasms"[All Fields] OR ("lung"[All Fields] AND "cancer"[All Fields]) OR "lung cancer"[All Fields])	386772
#3	#1 AND #2	615

#### Table S2 Selection strategy in Embase

Search	Query	Items found
#1	(psychological AND ('distress'/exp OR distress) OR 'distress'('distress') OR 'distress'('distress') OR 'distress'thermometer'/exp OR 'distress'OR 'distress'(OR 'distress')OR 'distress')(('psychosocial'/exp OR psychosocial' AND problems))OR 'distress')(OR 'distress')	62069
#2	('lung cancer'/exp OR 'lung cancer' OR 'lung neoplasms'/exp OR 'lung neoplasms' OR 'lung neoplasm'/exp OR 'lung neoplasm')	450344
#3	#1 AND #2	929

## Table S3 Selection strategy in PsycINFO

Search	Query	Items found
#1	(Psychological distress) OR ("Distress Thermometer") OR (psychosocial problems))	24532
#2	("lung cancer" OR "lung neoplasms" OR "lung neoplasm")	3120
#3	#1 AND #2	96

#### Table S4 Selection strategy in The cochrane library

Search	Query	Items found
#1	MeSH descriptor: [Thermometers] explode all trees	91

Search	Query									
#2	(Distress):ti,ab,kw (Word variations have been searched)									
#3	#1 AND #2	2								
#4	(Psychological distress OR Distress Thermometer OR psychosocial problems):ti,ab,kw (Word variations have been searched)	11704								
#5	#3 OR #4	11704								
#6	MeSH descriptor: [Lung Neoplasms] explode all trees	8309								
#7	("lung cancer" OR "lung neoplasms" OR "lung neoplasm"):ti,ab,kw (Word variations have been searched)	22947								
#8	#6 OR #7	23250								
#9	#5 AND #8	182								
#10	#9 in Trials	178								

Study	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6	Item	Item	Item 9	Overall
							7	8		
Acquati, C 2017	Low	Low	Unclear	Low	Low	Low	Low	Low	Unclear	Low
Carlson, LE 2019	Unclear	Low	Unclear	Low	Low	Low	Low	Low	Low	Low
Carlson, LE 2010	Unclear	Unclear	Unclear	Unclear	Low	Low	Low	Low	Low	Unclear
de Mol, M 2017	Unclear	Unclear	Unclear	Low	Low	Low	Low	Low	Low	Low
Geerse, OP 2019	Low	Low	Unclear	Low	Low	Low	Low	Low	Low	Low
Lynch, J 2010	Low	Unclear	Unclear	Low	Low	Low	Low	Low	Low	Low
McFarland, DC 2019	Unclear	Unclear	Unclear	Low	Low	Low	Low	Low	Low	Low
Sherry, V 2017	Unclear	Unclear	Unclear	Low	Low	Low	Low	Low	Low	Unclear
Steinberg, T 2009	Unclear	Low	Unclear	Unclear	Low	Low	Low	Low	Low	Unclear
Tan, H 2019	Low	Low	Unclear	Low	Low	Low	Low	Low	Low	Low

#### Table S5 Risk of bias in the included studies.

Item 1, Was the sample frame appropriate to address the target population?

Item 2, Were study participants sampled in an appropriate way?

Item 3, Was the sample size adequate?

Item 4, Were the study subjects and the setting described in detail?

Item 5, Was the data analysis conducted with sufficient coverage of the identified sample?

Item 6, Were valid methods used for the identification of the condition?

Item 7, Was the condition measured in a standard, reliable way for all participants?

Item 8, Was there appropriate statistical analysis?

Item 9, Was the response rate adequate, and if not, was the low response rate managed appropriately?