

Supplementary

Table S1 Mean difference (95% CIs) of CRP and PCT

PCT (Right upper part)						
CRP (Left lower part)	XYP plus WM 3.80 (-2.20, 9.79) -1.05 (-5.30, 3.20) 0.44 (-3.75, 4.62) 3.21 (-1.12, 7.54)	1.76 (-2.05, 5.58) XBJ plus WM -4.84 (-9.07, -0.62) -3.36 (-7.65, 0.93) 1.24 (-0.17, 2.64)	2.42 (-1.15, 5.99) 0.66 (-0.69, 2.01) WM 1.48 (0.74, 2.23) -0.25 (-1.84, 1.34)	0.03 (-3.70, 3.75) -1.74 (-3.46, -0.01) -2.40 (-3.48, -1.32) -0.27 (-4.54, 3.99)	-0.65 (-2.89, 1.58) 1.99 (-1.83, 5.80) -1.31 (-3.09, 0.47) 1.09 (-1.00, 3.17)	RDN plus WM

The numbers in bold in the table indicate that there are statistically significant differences between this group and the RT group. CIs, confidence intervals; CRP, C-reactive protein; PCT, procalcitonin; WM, Western Medicine; XBJ, Xuebijing injection; RDN, injection; TRQ, Tanreqing injection; XYP, Xiyanping injection.

Table S2 Mean difference (95% CIs) of WBC and NE%

NE% (Right upper part)						
WBC (Left lower part)	XYP plus WM -0.42 (-2.17, 1.34) -1.92 (-3.64, -0.20) -1.04 (-2.80, 0.73) 0.45 (-0.45, 1.35)	-1.38 (-5.37, 2.61) XBJ plus WM -1.50 (-1.89, -1.12) -0.62 (-1.18, -0.07) -0.21 (-2.05, 1.64)	4.21 (0.85, 7.57) 5.59 (3.45, 7.73) WM 0.88 (0.47, 1.29) 1.95 (1.14, 2.76)	1.05 (-2.93, 5.02) 2.43 (-0.60, 5.46) -3.16 (-5.30, -1.03) TRQ plus WM 1.07 (0.17, 1.98)	-5.31(-10.54, -0.08) -3.93 (-8.48, 0.62) -9.52 (-13.53, -5.51) -6.36 (-10.90, -1.82) RDN plus WM	

The numbers in bold in the table indicate that there are statistically significant differences between this group and the WM group. CIs, confidence intervals; WBC, white blood cells; NE, neutrophils; WM, Western Medicine; XBJ, Xuebijing injection; RDN, injection; TRQ, Tanreqing injection; XYP, Xiyanping injection.

Table S3 Mean difference (95% CIs) of IL-6 and IL-8

IL-8 (Right upper part)						
IL-6 (Left lower part)	XYP plus WM 3.92 (0.63, 7.20) -1.71 (-4.05, 0.64) 0.25 (-1.95, 2.46) 4.51 (2.00, 7.02)	4.49 (-4.72, 13.70) XBJ plus WM -5.62 (-7.93, -3.32) -3.66 (-6.10, -1.22) 0.86 (-0.42, 2.15)	1.16 (-2.83, 5.14) -2.88 (-14.36, 8.60) WM 1.96 (1.16, 2.76) -1.10 (-2.61, 0.41)	-1.85 (-6.41, 2.70) 2.80 (-5.46, 11.05) 5.67 (-2.31, 13.65) TRQ plus WM -0.69 (-3.06, 1.68)	0.30 (-7.96, 8.56) -0.21 (-8.16, 7.74) -2.66 (-5.62, 10.95) -3.01 (-5.23, -0.79) RDN plus WM	

The numbers in bold in the table indicate that there are statistically significant differences between this group and the WM group. CIs, confidence intervals; IL-6, interleukin-6; IL-8, interleukin-8; WM, Western Medicine; XBJ, Xuebijing injection; RDN, injection; TRQ, Tanreqing injection; XYP, Xiyanping injection.

Table S4 Mean difference (95% CIs) of TNF- α

TNF- α	XYP plus WM	XBJ plus WM	WM	TRQ plus WM	RDN plus WM
4.09 (1.21, 6.98)		-5.59 (-7.65, -3.52)			
-1.50 (-3.51, 0.52)		-3.89 (-6.02, -1.77)	1.69 (1.21, 2.18)		
0.20 (-1.75, 2.15)			-0.68 (-1.64, 0.27)	-1.47 (-3.52, 0.59)	
4.21 (2.05, 6.37)	1.01 (0.19, 1.83)				

The numbers in bold in the table indicate that there are statistically significant differences between this group and the WM group. CIs, confidence intervals; TNF- α , tumor necrosis factor- α ; XYP, Xiyanping injection; WM, Western Medicine; XBJ, Xuebijing injection; RDN, injection; TRQ, Tanreqing injection.

Appendix 1: Search strategy of EMBASE.

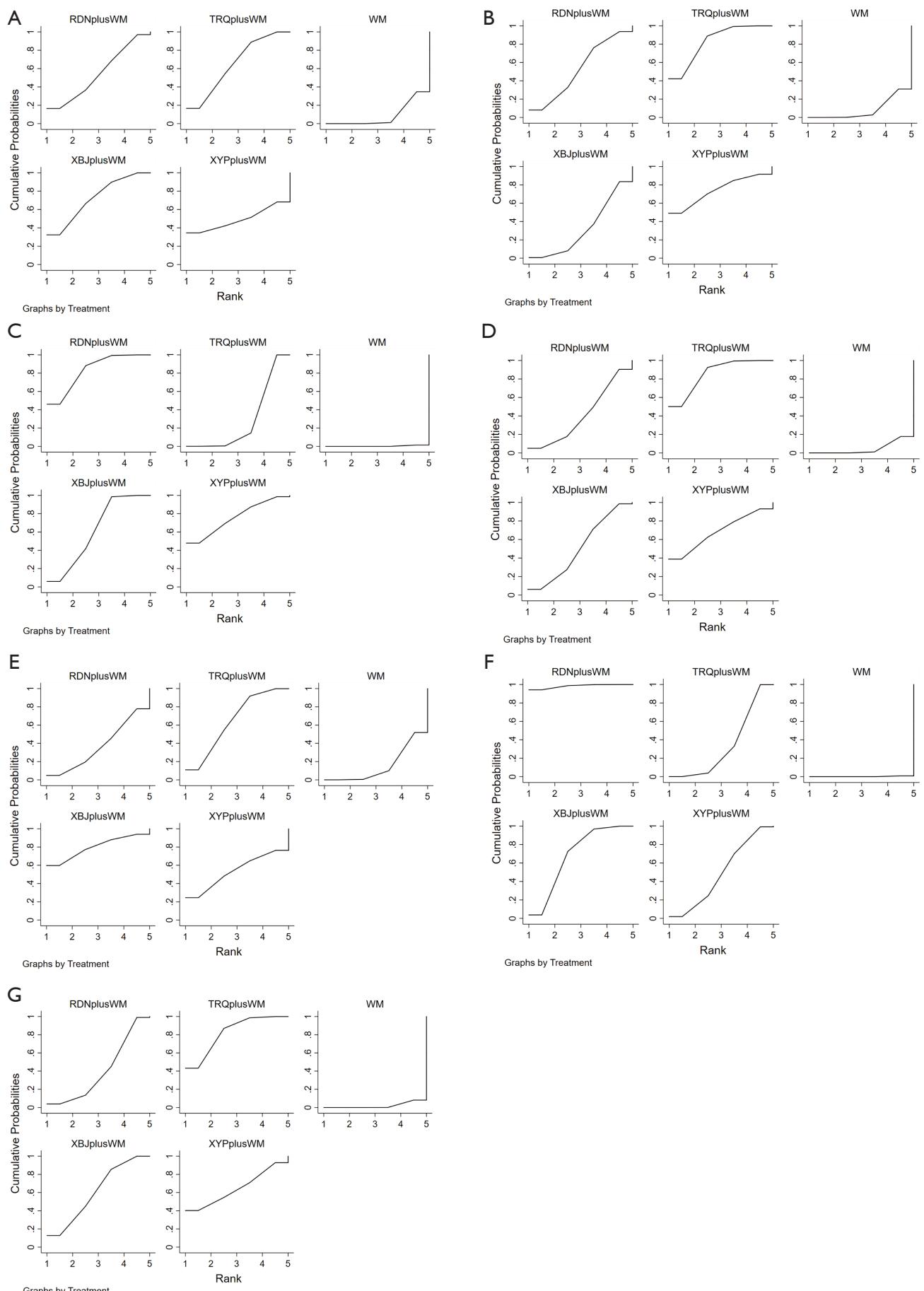
#1 'pulmonary disease, chronic obstructive': ab, ti
#2 'bronchitis, chronic': ab, ti OR emphysema: ab, ti
#3 copd: ab, ti
#4 'chronic obstructive pulmonary': ab, ti
#5 coad: ab, ti
#6 'chronic obstructive airway': ab, ti
#7 'chronic obstructive lung': ab, ti
#8 'chronic obstructive bronchopulmonary': ab, ti
#9 'chronic obstructive respiratory': ab, ti
#10 'chronic airflow obstruction': ab, ti
#11 'chronic airflow obstructive': ab, ti
#12 'chronic bronchitis': ab, ti
#13 'pulmonary emphysema': ab, ti
#14 'lung emphysema': ab, ti
#15 'chronic airflow limitation': ab, ti
#16 'reduning injection': ab, ti
#17 'tanreqing injection': ab, ti
#18 'xuebijng injection': ab, ti
#19 'xiyanping injection': ab, ti
#20 'randomized controlled trial': ab, ti
#21 'controlled clinical trial': ab, ti
#22 randomized: ab, ti
#23 randomly: ab, ti
#24 #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15
#25 #16 OR #17 OR #18 OR #19
#26 #20 OR #21 OR #22 OR #23
#27 #24 AND #25 AND #26

Appendix 2: Node-splitting for Outcomes

	P value (CRP)	P value (PCT)	P value (WBC)	P value (IL-6)	P value (IL-8)	P value (TNF- α)
A C	0.991	0.995	0.986	0.997	0.996	0.999
B C	0.458	0.999	0.993	0.156	0.263	0.155
B D	0.173	/	/	0.143	0.341	0.116
B E	0.878	/	/	0.807	0.996	0.953
C D	0.547	0.746	0.618	0.558	0.603	0.850
C E	0.891	0.386	0.907	0.202	/	0.056
D E	0.813	0.673	0.732	0.070	/	0.064

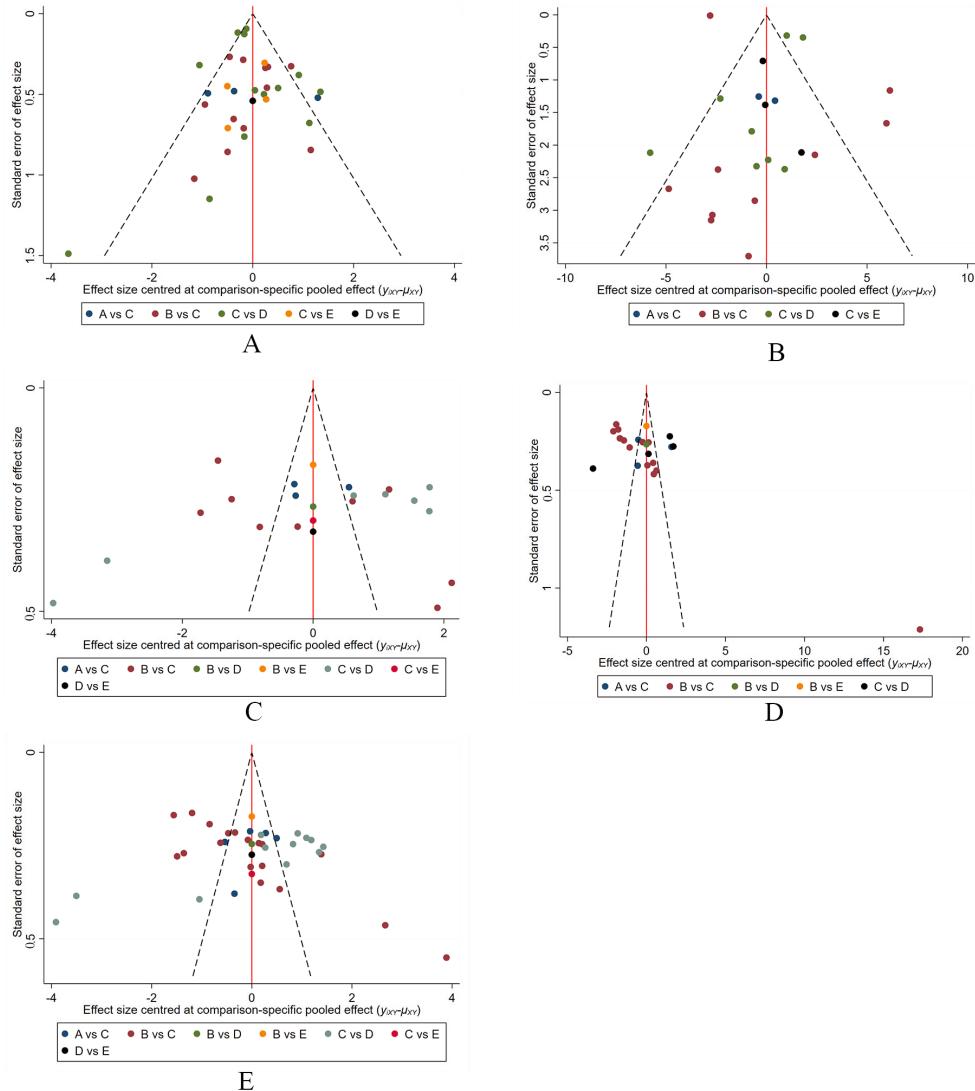
Note: A: Reduning injection plus WM; B: Tanreqing injection plus WM; C: WM; D: Xuebijng injection plus WM; E: Xiyanping injection plus WM. WM: Western Medicine.

Appendix 3: The figure of the cumulative probabilities for outcomes



Note: A, CRP; B, PCT; C, WBC; D, NE%; E, IL-6; F, IL-8; G, TNF- α . RDN, Reduning injection; WM, Western Medicine; XYP, Xiyanping injection; TRQ, Tanreqing injection; XBJ, Xuebijing injection; CRP, C-reactive protein; PCT, procalcitonin; WBC, white blood cells; NE, neutrophils; IL-6, interleukin-6; IL-8, interleukin-8; TNF- α , tumor necrosis factor- α .

Appendix 4: Funnel plots of outcomes.



Note: A, WBC; B, NE%; C, IL-6; D, IL-8. E, TNF- α . A, Reduning injection plus Western Medicine; B, Tanreqing injection plus Western Medicine; C, Western Medicine; D, Xuebijing injection plus Western Medicine; E, Xiyantping injection plus Western Medicine; WBC, white blood cells; NE, neutrophils; IL-6, interleukin-6; IL-8, interleukin-8; TNF- α , tumor necrosis factor- α .