# Figure E5 (A) Forest plots of inflammatory parameters in severe and non-severe patients of COVID-19 (1) CRP

Study	Total	Mean	Severe SD	Total	No Mean	n-severe SD	Standardised Mean Difference	SMD	95%-CI	Weight (fixed)	Weight (random)
Y.Ling 2020	21	54.56	54.4600	271	9.70	15.7900	-	2.14	[ 1.66; 2.62]	0.8%	1.5%
RC.Chen 2020	203	86.74	81.7400	345	29.39	41.3900	i i i i i i i i i i i i i i i i i i i		[ 0.78; 1.14]	5.6%	1.8%
YL.Zheng 2020	32	49.63	48.1100	67	12.93	18.4800	1		[0.72; 1.62]	0.9%	1.5%
J.Liu 2020 E.Wang 2020	13 14	64.07 123.00	36.7100 74.8800	27 14	23.75 25.06	42.4200 43.0000			[ 0.27; 1.67] [ 0.70; 2.42]	0.4% 0.2%	1.2% 1.1%
F.Wang 2020 F.Yang 2020	19	79.58	63.1200	33	13.37	15.3400			[0.99; 2.29]	0.2%	1.3%
B.Xu 2020	107	68.43	55.7200	80	12.23	16.7100	-		[0.97; 1.60]	1.8%	1.7%
TX.Xiang 2020	9	75.25	24.4500	40	41.23	23.2400		1.43	[0.65; 2.21]	0.3%	1.1%
G.Chen 2020	11	129.54	66.3300	10	55.29	90.0400			[0.00; 1.82]	0.2%	1.0%
PZ.Mo 2020	85 124	58.69 63.38	63.3500	70 352	26.88 18.15	28.0100	-		[0.30; 0.95]	1.8% 3.9%	1.7%
Y.Feng 2020 CM.Wu 2020	84	92.11	65.5100 85.2000	352 117		24.7100 38.3900	4		[ 0.92; 1.36] [ 0.70; 1.30]	3.9% 2.1%	1.8% 1.7%
QX.Cai 2020	45	35.90	30.4600	240	11.10	13.5900	<u>-</u>		[1.09; 1.77]	1.6%	1.7%
YJ.Chen 2020	36	66.18	19.4300	107	16.55	2.1100	-	5.01	[4.31; 5.71]	0.4%	1.2%
L.Cai 2020	48	46.44	58.3900	37	13.91	22.5200	-		[ 0.25; 1.14]	0.9%	1.6%
YL.Dong 2020	53	45.33	43.5100	94	13.73	16.8300	-		[0.71; 1.43]	1.4%	1.7%
MF.Han 2020 S.Kazancioglu 2020	32 35	43.01 86.50	42.6000 152.5900	122 85	13.28	16.8800 114.8600	-		[ 0.80; 1.62] [-0.15; 0.64]	1.1% 1.2%	1.6% 1.6%
Q.Li 2020	26	55.50	47.8400	296	10.81	14.9000	-		[ 1.84; 2.72]	1.0%	1.6%
DY.Liao 2020	231	60.26	56.9300	149	14.61				[0.76; 1.20]	3.9%	1.8%
YM.Lu 2020	9	94.60	84.9900	44	38.01	41.0300			[ 0.35; 1.85]	0.3%	1.2%
ZH.Lv 2020	239	54.00	53.4600	115		45.0800	=		[0.18; 0.63]	3.7%	1.8%
Y.Sun 2020 JH.Wang 2020	19 129	40.41 65.70	55.8000 79.4700	44 70	10.60 12.90	16.0000 21.3500	*		[ 0.33; 1.45] [ 0.50; 1.11]	0.6% 2.0%	1.4% 1.7%
JJ.Xie 2020	34	43.56	50.1500	22	30.08	34.5800			[-0.24; 0.84]	0.6%	1.4%
SQ.Xiong 2020	55	19.89	24.3600	61	15.12	15.5700	-		[-0.13; 0.60]	1.4%	1.6%
J.Yuan 2020	92	41.59	41.1600	122	14.86	16.9200	÷.		[ 0.61; 1.18]	2.3%	1.7%
QH.Zhang 2020	27	57.52	62.3000	47	13.59	19.8800			[0.56; 1.57]	0.7%	1.5%
D.Li 2020 J.Xu 2020	44 30	71.63 50.69	78.6800 17.6800	18 125	5.29 17.93	0.6400 9.6200			[ 0.41; 1.56] [ 2.30; 3.32]	0.6% 0.7%	1.4% 1.5%
ZL.Lu 2020	30 34	41.12	40.9400	67	18.53	28.4700			[ 2.30, 3.32]	1.0%	1.5%
YL.Wang 2020	8	12.65	25.8800	35	2.97	4.8900	-		[ 0.03; 1.61]	0.3%	1.1%
YL.Zhou 2020	5	4.84	6.7400	12	30.88	68.7700	-+	-0.42	[-1.47; 0.64]	0.2%	0.9%
Y.Yang 2020	36	17.49	21.9400	14	20.09	17.3700	-+		[-0.74; 0.49]	0.5%	1.3%
L.Chen 2020	14 14	83.71	63.8100 46.9900	15 55	50.00 13.96	42.0000			[-0.14; 1.36] [ 1.94; 3.43]	0.3% 0.3%	1.2%
ZL.Wang 2020 C.Qin 2020	286	78.51 60.81	46.9900 61.3200	55 166	33.73	12.9900 38.5100			[ 0.31; 0.69]	0.3% 4.9%	1.2% 1.8%
T.Stachura 2021	47	97.36	103.6200	53	21.40	34.9800			[ 0.58; 1.42]	1.1%	1.6%
FE.Song 2021	107	41.75	37.0400	188	8.67	14.0300	-		[ 1.06; 1.58]	2.7%	1.8%
JC.Liu 2021	79	91.38	96.8800	43	28.85	46.2500	-		[ 0.37; 1.13]	1.3%	1.6%
W.Conca 2021	5	70.30	102.6000	29 9	13.53	14.3200			[0.42; 2.45]	0.2%	0.9%
PR.Tepasse 2021 L.García de Guadiana- Romualdo 2021	31 25	126.80 140.49	50.0000 95.9100	9 74	17.90 61.94	23.6000 66.5400			[ 1.42; 3.25] [ 0.56; 1.52]	0.2% 0.8%	1.0% 1.5%
Y.Zhao(b) 2021	74	41.22	57.2400	211	8.50	12.6100			[0.77; 1.33]	2.4%	1.7%
MS. Asghar 2021	61	173.70	105.2100	130	75.84	89.3000			[0.71; 1.35]	1.8%	1.7%
ZJ.Li 2021	90	102.15	98.2500	164	17.98	28.7200	-		[ 1.05; 1.62]	2.3%	1.7%
L.Quartuccio 2021	22	123.25	116.6100	45	34.35	44.0600	ningen state sta		[0.61; 1.71]	0.6%	1.4%
MM.Aly 2021 M.Betti 2021	311 82	61.88 102.50	35.5500 94.0300	185 89	26.49 44.36	37.0000 52.5200			[ 0.79; 1.17] [ 0.46; 1.08]	5.0% 1.9%	1.8% 1.7%
I.Cekerevac 2021	70	76.19	87.2800	57	53.35	73.3600	-		[-0.07; 0.63]	1.5%	1.7%
M.Eleni 2021	17	122.28	126.9200	68	51.75	63.8500			[ 0.33; 1.42]	0.6%	1.4%
RY.He 2021	69	42.21	46.1900	135	7.21	12.4400			[ 0.90; 1.53]	1.9%	1.7%
S. Karahan 2020 SH.Li 2020		1020.10	780.7000			595.0000			[0.69; 1.13]	3.8%	1.8%
N.Awano 2020	26 21	22.16 90.87	24.0800 69.9600	43 33	4.70 22.20	5.0600 25.5700			[ 0.61; 1.66] [ 0.80; 2.03]	0.7% 0.5%	1.5% 1.3%
ZY.Tao 2021	20	41.48	58.4000	202	2.12	1.1200	-		[1.77; 2.79]	0.7%	1.5%
JM. Urra 2020	27	152.00	90.0000		104.00	80.0000			[0.17; 1.00]	1.1%	1.6%
H.Wang 2020	24	40.36	47.9800	37	8.84	17.0600			[ 0.41; 1.49]	0.6%	1.4%
MS.Xue 2020			3406.6000			582.0000			[0.72; 1.30]	2.2%	1.7%
Z.Zhu 2020 S.Salto-Alejandre 2021	16 85	40.98 154.55	44.3900 139.3700	111 236	9.19 52.31	10.0700 64.8300			[ 1.18; 2.32] [ 0.86; 1.39]	0.6% 2.7%	1.4% 1.8%
S.Alhumaid 2021	205	22.60	24.2000	809	14.20	18.7000	+		[0.27; 0.58]	7.8%	1.8%
D.Akdogan 2021	57	46.40	39.3000	118	14.60	46.4000			[ 0.39; 1.04]	1.8%	1.7%
R.Gozalbo-Rovira 2020	24	105.16	214.3516	27	106.72	188.7836		-0.01	[-0.56; 0.54]	0.6%	1.4%
A.Kaal 2021	41	138.00	92.9572	101		65.4324			[0.44; 1.19]	1.3%	1.6%
J.Duan 2020	20	43.76	34.3074	328	10.16	14.1475	-		[ 1.63; 2.58]	0.8%	1.5%
Fixed effect model Random effects model	4124			7954					[ 0.91; 0.99] [ 0.96; 1.22]	100.0% 	 100.0%
Heterogeneity: $l^2 = 88\%$ , $\tau^2 = 0.2451$ , $p < 0$ .	01						-4 -2 0 2 4	1 4			

-4 -2 0 2 4 Favour Non-severe Favour Severe

(2) PCT											
			Severe			severe	Standardised Mean			Weight	
Study	Total	Mean	SD	Total	Mean	SD	Difference	SMD	95%-CI	(fixed)	(random)
Y.Ling 2020	21	0.36	0.6300	271	0.03	0.0200	18 -	1 98	[1.50; 2.45]	1.7%	2.7%
RC.Chen 2020	203		0.1000	345		0.0001	*		[-6.82; -5.98]	2.2%	2.7%
F.Wang 2020	14		2.4500	14		0.0200			[-0.09; 1.44]	0.7%	2.5%
F.Yang 2020	19		2.5700	33		0.0800			[0.20; 1.37]	1.1%	2.6%
B.Xu 2020	107		0.1700	80		0.0200	1:		[0.47; 1.07]	4.3%	2.7%
TX.Xiang 2020	9		0.1500	40		0.0300		1.75	[0.94; 2.55]	0.6%	2.5%
G.Chen 2020	11		0.5800	10		0.0200			[-0.12; 1.67]	0.5%	2.4%
PZ.Mo 2020	85		0.1000	70		0.0001			[0.35; 1.00]	3.6%	2.7%
Y.Feng 2020	124		0.1200	352		0.0300			[0.39; 0.81]	8.9%	2.7%
QX.Cai 2020	58		0.0400	240		0.0600	= 1		[-1.00; -0.41]	4.5%	2.7%
YJ.Chen 2020	36		1.5100	107		0.0200	-		[0.65; 1.44]	2.4%	2.7%
JX.Chen 2020	14		0.1800	279		0.0400			[1.45; 2.57]	1.2%	2.6%
MF.Han 2020	32		0.0500	122		0.0300	<u></u>		[-0.11; 0.67]	2.5%	2.7%
Q.Li 2020	26	0.29	0.4400	296	0.03	0.0200	-	2.08	[ 1.65; 2.52]	2.1%	2.7%
YM.Lu 2020	9	0.54	0.7900	44	0.14	0.3300		0.90	[0.17; 1.64]	0.7%	2.5%
ZH.Lv 2020	239	0.26	0.8700	115	0.11	0.3300	+	0.20	[-0.02; 0.43]	7.7%	2.7%
JH.Wang 2020	129	0.10	0.1500	70	0.00	0.0001	<u>i</u>		[0.52; 1.13]	4.2%	2.7%
JJ.Xie 2020	34	0.20	0.0200	22	0.13	0.0001		4.41	[3.41; 5.42]	0.4%	2.3%
QH.Zhang 2020	27	0.29	0.4300	47	0.05	0.0040		0.92	[0.42; 1.42]	1.6%	2.6%
D.Li 2020	44	0.35	0.4800	18	0.03	0.0200		0.78	[0.21; 1.34]	1.2%	2.6%
C.Qin 2020	286	0.10	0.1500	166	0.06	0.0400	+	0.33	[0.14; 0.52]	10.4%	2.7%
Y.Yang 2020	36	0.05	0.0400	14	0.04	0.0200		0.28	[-0.34; 0.90]	1.0%	2.6%
XH.Chen 2020	27	0.21	0.3600	21	0.04	0.0200		0.62	[0.03; 1.20]	1.1%	2.6%
ZL.Wang 2020	14	0.14	0.0200	55	0.14	0.0200		0.00	[-0.59; 0.59]	1.1%	2.6%
JT.Cao 2020	153	0.11	0.1300	91		0.0200		0.67	[0.41; 0.94]	5.4%	2.7%
Phil-Robin Tepasse 2021	31	0.72	0.4100	9	0.12	0.1000		1.60	[0.77; 2.43]	0.6%	2.5%
JS.Tang 2021	44		0.5900	56		0.1300	*	0.64	[ 0.24; 1.05]	2.3%	2.7%
T.Stachura 2021	47		0.1200	53	0.03	0.0150		0.99	[ 0.58; 1.41]	2.2%	2.7%
Judith Marín-Corral 2021	36		0.2300	13		0.0700		2.10	[ 1.33; 2.87]	0.7%	2.5%
JC.Liu 2021	79		0.1100	43		0.0001	*	0.56	[ 0.18; 0.94]	2.7%	2.7%
SQ.Xiong 2020	55		0.1300	61		0.0500	+	0.72	[ 0.34; 1.10]	2.7%	2.7%
Luis García de Guadiana- Romualdo 2021			0.4000	74		0.0800		0.94	[ 0.47; 1.41]	1.7%	2.7%
MS. Asghar 2021	61		1.5300	130		0.0300		0.95	[0.63; 1.27]	3.8%	2.7%
ZJ.Li 2021	90		0.3500	164		0.0400		1.09	[0.82; 1.36]	5.1%	2.7%
ZY.Tao 2021	20		0.1100	202		0.0300	-	1.15	[0.68; 1.63]	1.7%	2.7%
N.Awano 2020	21		0.7000	33		0.2600		1.42	[0.80; 2.03]	1.0%	2.6%
A.Kaal 2021	41		0.4686	101		0.1128	i <del>a</del>	1.04	[0.65; 1.42]	2.6%	2.7%
J.Duan 2020	20	0.06	0.0479	328	0.03	2.6000	1	0.01	[-0.44; 0.46]	1.9%	2.7%
Fixed effect model	2327			4189			0	0.54	[ 0.48; 0.60]	100.0%	
Random effects model	2521			4103			\v_: ♦		[0.36; 1.15]		100.0%
Hateregeneity $l^2 = 0.70$ $r^2 = 1.4514$ r < 0.04								1 0.75	[ 0.00, 1.15]		100.0 %

Heterogeneity:  $l^2 = 97\%$ ,  $\tau^2 = 1.4514$ , p < 0.01

-6 -4 -2 0 2 4 6 Favour Non-severe Favour Severe

### Figure E5 (A) (Continued)

#### (3) ESR

Study	Total	Mean	Severe SD	Total	Non-severe Mean SD	Standardised Mean Difference	SMD	95%-CI	Weight (fixed)	Weight (random)
Y.Ling 2020	21		35.7800 23.6000		63.72 45.8400 28.60 24.0000			[-0.57; 0.32]	2.6% 0.9%	4.8% 3.7%
F.Wang 2020 TX.Xiang 2020			23.6000		41.23 23.2400			[-0.41; 1.09] [ 0.65; 2.21]	0.9%	3.7%
PZ.Mo 2020	-		26.4000		25.82 21.1900			[-0.07; 0.57]	0.8% 5.0%	5.2%
Y.Feng 2020			29.7000		52.91 41.6900			[-0.16; 0.25]	12.0%	5.5%
CM.Wu 2020			23.3800		50.83 18.2400	I.I.		[-0.10; 0.25]	6.4%	5.3%
QX.Cai 2020	58		25.0900		26.81 21.6300			[ 0.50; 1.09]	5.8%	5.3%
JX.Chen 2020	17		33.5500		18.67 17.7200			[ 1.41; 2.44]	1.9%	4.6%
YL.Dong 2020			32.7700		19.56 19.5800			[ 0.84; 1.57]	3.8%	5.1%
MF.Han 2020			28.8700		21.10 24.3800			[ 0.38; 1.18]	3.2%	5.0%
YM.Lu 2020			28,7700		64.77 35.7600			[-0.29; 1.16]	1.0%	3.8%
Y.Sun 2020	19	48.83	28.5600	44	21.52 20.7900			[ 0.58; 1.73]	1.5%	4.3%
QH.Zhang 2020	27	37.51	37.1900	47	26.83 27.5300		0.34	[-0.14; 0.81]	2.2%	4.7%
C.Qin 2020	286	37.86	30.5500	166	30.81 26.9200	-	0.24	[ 0.05; 0.43]	13.7%	5.5%
ZL.Wang 2020	14	35.82	18.1200	55	16.29 13.7000		1.32	[ 0.69; 1.95]	1.3%	4.2%
JC.Liu 2021	79	48.53	29.8300	43	47.30 25.1600	- <del> </del>	0.04	[-0.33; 0.41]	3.7%	5.1%
ZJ.Li 2021	90	39.24	35.5600	164	41.70 32.9100		-0.07	[-0.33; 0.18]	7.6%	5.4%
Z.Zhu 2020	16	84.74	36.7800	111	66.65 40.5600	+ <del>       </del>	0.45	[-0.08; 0.98]	1.8%	4.5%
S.Alhumaid 2021	205	54.30	38.7000	809	47.90 35.2000		0.18	[ 0.02; 0.33]	21.4%	5.6%
SH.Li 2020			26.6673		13.35 9.9705			[ 1.57; 2.80]	1.3%	4.2%
ZY.Tao 2021	20	46.07	40.4508	202	12.46 11.2001		2.09	[ 1.59; 2.59]	2.0%	4.6%
Fixed effect model	1288			3325		•	0.39	[ 0.32; 0.46]	100.0%	
Random effects model	-						0.68	[ 0.44; 0.93]		100.0%
Heterogeneity: $I^2 = 90\%$ , $\tau$	$2^{2} = 0.27$	751, p <	0.01							
						-2 -1 0 1 2				
					Fav	our Non-severe Favour Severe				

#### (4) SAA

Study	Total	Mean	Severe SD	Total	No Mean	n-severe SD	Standardised Mean Difference	SMD	95%-CI	Weight (fixed)	Weight (random)
RC.Chen 2020	203 1	199.32	67.3800	345	152.95	153.6300			[ 0.19; 0.53]	43.8%	12.8%
J.Liu 2020	13 5	553.77	252.7400	27	68.73	89.1500		- 2.97	[ 2.02; 3.92]	1.5%	7.9%
B.Xu 2020	107 2	269.18	79.5100	80	100.13	144.1300	-	1.51	[ 1.18; 1.83]	12.4%	12.1%
TX.Xiang 2020	9 1	191.90	96.1500	40	86.76	75.5800		1.30	[0.53; 2.07]	2.2%	9.2%
YL.Dong 2020	53 5	550.73	341.5400	94	148.53	243.8300	1 <del></del>	1.41	[ 1.04; 1.79]	9.5%	11.9%
MF.Han 2020	32 1	132.02	86.1400	122	90.45	120.6400		0.36	[-0.03; 0.75]	8.7%	11.8%
QH.Zhang 2020	27 1	108.75	90.4500	47	24.81	37.6000		1.34	[0.81; 1.86]	4.9%	10.9%
J.Xu 2020	30 1	137.00	70.2300	125	87.64	34.8500		1.12	[0.70; 1.54]	7.6%	11.6%
JC.Liu 2021	79 2	203.10	62.6000	43	139.45	180.4700		0.54	[ 0.16; 0.91]	9.4%	11.9%
Fixed effect model	553			923			\$		[ 0.67; 0.90]	100.0%	
Random effects mode								1.13	[ 0.71; 1.56]		100.0%
Heterogeneity: $I^2 = 91\%$ ,	$\tau^2 = 0.362$	22, p < (	0.01				1 1 1				
							-2 0 2				
						Favou	r Non-severe Favour Severe	£			

#### (5) Ferritin

			Severe			on-severe	s	Standardised Mean			Weight	Weight
Study	Total	Mean	SD	Total	Mean	SD		Difference	SMD	95%-CI	(fixed)	(random)
RC.Chen 2020	203	1152.83	1027.0900	345	556.50	460.2700		1 <del>1</del>	0.82	[ 0.64; 1.00]	12.6%	5.3%
J.Liu 2020	13	1019.17	750.3200	27	353.90	271.8300		1	1.36	[ 0.63; 2.10]	0.8%	3.1%
F.Wang 2020	14	1725.55	859.9900	14	567.21	323.0700			— 1.73	[ 0.84; 2.62]	0.5%	2.5%
G.Chen 2020	11	1695.35	518.6100	10	665.07	850.7200			— 1.42	[ 0.44; 2.40]	0.4%	2.3%
CM.Wu 2020	84	1201.11	1096.5600	117	461.55	359.4800			0.97	[ 0.67; 1.27]	4.7%	4.9%
S.Kazancioglu 2020	35	668.08	1197.5000	85	316.85	616.7400			0.42	[ 0.02; 0.82]	2.6%	4.5%
DY.Liao 2020	231	817.10		149	161.37	189.1300			1.30		8.0%	5.2%
Y.Sun 2020			2611.7600	44		2073.7100			1.04		1.3%	3.7%
JH.Wang 2020		1057.41	713.5200	70	383.38	204.9800		-	1.14		4.2%	4.9%
C.Qin 2020	286	906.90	744.1200	166	556.04	404.8100		考		[ 0.35; 0.74]	10.8%	5.3%
P.Tepasse 2021	31	943.06	314.3200	9	436.74	406.7300		<u> </u>	- 1.48	1	0.6%	2.8%
T.Stachura 2021	47	786.18	689.0300	53	328.51	292.6200			0.88	,	2.4%	4.4%
JC.Liu 2021	79	962.66	571.4900	43	610.98	630.5200				[ 0.21; 0.97]	2.8%	4.6%
W.Conca 2021	5	258.00	184.0000	29	225.28	54.2900				[-0.57; 1.34]	0.4%	2.3%
L.García de Guadiana- Romualdo 2021	25	981.93	831.7100	74	575.81	669.8900				[ 0.10; 1.03]	1.9%	4.2%
MS. Asghar 2021	61	1083.73	835.7900	130	492.44	631.5100				[ 0.52; 1.15]	4.1%	4.8%
MM.Aly 2021	311	192.50	217.1700	185	223.40	254.0400		- <b>-</b>		[-0.32; 0.05]	12.3%	5.3%
M.Betti 2021		1021.16	700.8197	89	434.61	474.0684		-		[ 0.67; 1.30]	4.0%	4.8%
M.Eleni 2021			2029.0334	68	223.58	196.1675		1	1.19		1.3%	3.8%
SH.Li 2020	26	849.49	770.2152	43	243.36	242.3599				[ 0.65; 1.71]	1.5%	3.9%
N.Awano 2020	21	875.05	669.4183	33	299.66	299.6614		+ + + + + + + + + + + + + + + + + + + +		[ 0.59; 1.78]	1.2%	3.6%
S.Alhumaid 2021			5270.0000	809	502.90	860.5000				[ 0.30; 0.61]	17.1%	5.4%
A.Kaal 2021	41	815.49		101	538.93	418.1654				[ 0.17; 0.91]	3.0%	4.6%
R.Gozalbo-Rovira 2020	24	1342.37	2351.1696	27	1157.35	2167.8811			0.08	[-0.47; 0.63]	1.4%	3.8%
Fixed effect model	2000			2720				6	0.67	[ 0.61; 0.73]	100 0%	
Random effects model	2000									[ 0.63; 1.02]		100.0%
Heterogeneity: $l^2 = 86\%$ , $\tau^2 = 0.1696$ , $p < 0$ .	01								0.00	[ 0.00, 1.02]		.00.070
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							~	1 0 1 2				

#### -2 -1 0 1 2 Favour Non-severe Favour Severe

### Figure E5 (B) Forest plots of inflammatory parameters in non-survivors and survivors of COVID-19

(1) CRP

Chudu	Tetal		-survivors	Tatal		Survivors SD	Standardised Mean	CMD	05% 01	Weight	
Study	Total	Mean	SD	Total	Mean	50	Difference	SMD	95%-CI	(fixed)	(random)
RC.Chen 2020	103	108.16	78.4200	445	36.00	49.4700	-	1.29	[ 1.06; 1.51]	2.4%	2.2%
YL.Yan 2020	39	118.86	97.4400	9	21.55			1.06		0.2%	1.3%
RH.Du 2020	21	75.83	53.7400	158	49.45			0.49		0.6%	1.8%
TL.Chen 2020	19	146.60	217.8600	36	71.15	115.0400		0.47	[-0.09; 1.03]	0.4%	1.6%
T.Chen 2020	113	117.04	74.5700	161	30.45	35.2300	-	1.57	[1.30; 1.85]	1.6%	2.1%
L.Wang 2020	65	116.93	97.4200	274	46.76	51.1900	11 14	1.12	[0.83; 1.40]	1.5%	2.1%
DJ.Altschul 2020	621	13.55	13.8900	1733	9.27	6.8000		0.46	[0.37; 0.56]	14.3%	2.3%
F.Ciceri 2020	95	133.75	120.4500	290	74.61	62.5800	+ + - - - -	0.73	[0.49; 0.97]	2.2%	2.2%
XB.Feng 2020	20	100.95	35.7700	94	49.36	51.8800	- 17	1.03	[ 0.53; 1.54]	0.5%	1.7%
Y.Huang 2020	15	97.58	47.8500	136	20.01	37.4700		2.00	[ 1.42; 2.58]	0.4%	1.6%
J.Zhang 2021	26	123.71	139.8500	182				1.10		0.7%	1.9%
LK. Xiong 2021	85	100.37	91.1800	105	20.82		+	1.20	[ 0.89; 1.51]	1.3%	2.1%
ZG.Wang 2021	56	4.63	3.5800	100	0.66	1.1300	-+-	1.70	[ 1.32; 2.08]	0.9%	1.9%
FF.Sai 2021	15	53.26	38.6900	32		31.5100	- <del>)</del>	0.88		0.3%	1.5%
WD.Qin 2021	23	101.08	71.2700	239			1	1.44		0.6%	1.8%
OM.Peiro 2021	37	137.76	100.2600	159				0.66		0.9%	2.0%
YJ.Lu 2021	40	119.61	97.7300	37	56.58	46.2700	-+-		[ 0.34; 1.27]	0.6%	1.8%
G.Li 2021	95	95.50	96.3600	116	41.40			0.72		1.6%	2.1%
L.García de Guadiana- Romualdo 2021		170.40	149.1000	85		71.6400			[ 0.60; 1.78]	0.4%	1.6%
P.Sinha 2020	17	256.76	71.1400			140.2700			[-0.36; 0.92]	0.3%	1.5%
Y.Zhao 2020	125	81.91	70.1600	414	17.21				[1.39; 1.84]	2.5%	2.2%
B.Xu 2020	28	88.48	54.5400	117			· · · · · · · · · · · · · · · · · · ·		[1.15; 2.05]	0.6%	1.8%
CM.Wu 2020	44	98.95	88.4800	40					[-0.11; 0.75]	0.7%	1.9%
Z.Wang 2020	116	103.93	86.2500	177	19.75				[1.18; 1.70]	1.8%	2.1%
Y.Jiang 2020	72	93.97	59.4600	143		58.4900			[0.58; 1.17]	1.4%	2.1%
H.Huang 2020	10 8	86.45 184.80	77.2300	40					[0.66; 2.16]	0.2%	1.3%
R.Zayat 2021 CT.Yang 2021	58	113.90	108.7400 77.8000	145		139.9500 45.3000			[-1.22; 0.70] [1.10; 1.77]	0.1%	1.0% 2.0%
MS. Asghar 2021	50 44	196.45	98.3700	145	82.07		+	1.43		1.0%	2.0%
R.Scotto 2021	15	137.20	200.0000	147	33.50			0.75		0.2%	1.4%
E.Sozio 2021	28	128.53	100.3800	83				0.98	[0.53; 1.43]	0.2%	1.4%
G.Açiksari 2021	36	119.76	53.1200	187	46.30		<u> </u>	1.30		0.9%	2.0%
A.Capdevila-Reniu 2021	53	164.00	114.0000	106	78.00			1.03		1.0%	2.0%
M.Elhadi 2021	281	101.03	58.4100	184	40.23	27.8200		1.25	[1.04; 1.45]	3.0%	2.2%
M.Eleni 2021	9	162.75	158.3200	76	54.09		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.43		0.2%	1.4%
S.Karahan 2020	69	108.70	78.3000	80	62.40		-1	0.62		1.1%	2.0%
A.López- Escobar 2021	321	139.98	119.8900	1767		69.7400			[ 0.83; 1.08]	8.2%	2.3%
G.Montrucchio 2021	31	145.50	103.7000	26		105.3000			[-0.24; 0.81]	0.4%	1.7%
S.Nakamura 2020	11	147.03	166.2600	21	23.11			1.20		0.2%	1.3%
SA. Namendys-Silva 2020	85	1000.78	1390.6700	79	230.13	140.5700	-	0.76	[0.44; 1.08]	1.2%	2.0%
IH.Özdemir 2021	55	902.32	787.1600	295	240.21	278.6200	-	1.64	[1.33; 1.96]	1.3%	2.1%
JG.Park 2020	70	15.31	13.1700	219	11.34	12.2400	-	0.32	[0.05; 0.59]	1.7%	2.1%
M.Provencio 2021	133	742.00	828.0000	239	454.00	644.0000	-	0.40	[0.19; 0.62]	2.7%	2.2%
MC.Viana-Llamas 2021	128		102.5000	481	94.40	86.0300	+	0.49	[ 0.29; 0.68]	3.2%	2.2%
J.Wang 2020	16	67.37	10.3800	103	49.50	3.9100		3.41	[ 2.72; 4.09]	0.3%	1.4%
J.Zhang 2020	18	81.39	33.5700	93		14.5800	+	3.69	[2.98; 4.40]	0.2%	1.4%
S.Ahmad 2021	40	168.10	106.7275	346	58.65	83.5998	-	1.27		1.1%	2.0%
O.Albalawi 2021	26	125.80	76.8000	93	65.60	76.7000	+	0.78	[ 0.33; 1.23]	0.6%	1.8%
J.Berenguer 2020	1131	98.21	96.4935	2904	52.05		-	0.65		24.9%	2.3%
R.Chinnadurai 2020	86	128.28	88.2178	129	98.79	92.2176		0.32		1.6%	2.1%
A.d'Arminio Monforte 2020	174	89.49	53.2251	367	51.29	47.9299	*	0.77		3.5%	2.2%
KY.Li 2020	15		94.0578	87	37.52			0.97		0.4%	1.6%
T.Li 2021	9	112.49	60.3529	63	7.27	12.6703		- 4.40	[ 3.39; 5.42]	0.1%	1.0%
G.Aksel 2021	32	12.08	8.0552	136	3.38	4.7056	-	1.58	[ 1.16; 2.00]	0.7%	1.9%
Fixed effect model Random effects model	4896			13828					[0.80; 0.87] [0.95; 1.21]	100.0%	100.0%
Heterogeneity: $l^2 = 91\%$ , $\tau^2 = 0.1951$ , $p < 0.1951$	.01							1.00	[0.95, 1.21]		100.0 %
- All and a second a							-4 -2 0 2 4				

-4 -2 0 2 4 Favour Survivors Favour Non-survivors

### (2) PCT

Study		Non-s Mean	urvivors SD	Total	Survivors Mean SD		dised Mean erence	SMD	95%-CI	Weight (fixed)	Weight (random)
RC.Chen 2020	103	0.19	0.1900	445	0.06 0.0140			1.56	[ 1.33; 1.80]	3.2%	3.7%
F.Zhou 2020	54	0.24	0.3000	137	0.10 0.0001			0.88	[0.55; 1.20]	1.6%	3.4%
YL.Yan 2020	39	0.57	0.8000	9	0.05 0.0400		<u> </u>	0.70	[-0.04; 1.44]	0.3%	2.3%
RH.Du 2020	21	0.24	0.3180	158	0.10 0.1500			0.79	[0.32; 1.25]	0.8%	3.1%
TL.Chen 2020	19	3.22	6.4000	36	0.38 0.7700		-+	0.74	[0.17; 1.31]	0.5%	2.7%
L.Wang 2020	65	0.50	0.7700	274	0.08 0.0600		; ; ;	1.23	[0.95; 1.52]	2.1%	3.5%
DJ.Altschul 2020	621	1.64	2.4500	1733	0.27 0.3000		÷.	1.07	[ 0.97; 1.16]	18.8%	3.9%
F.Ciceri 2020	56	1.91	2.7000	169	0.50 0.3800			1.02	[ 0.70; 1.33]	1.7%	3.5%
Y.Huang 2020	15	0.20	0.1200	136	0.07 0.0400			2.44	[ 1.84; 3.05]	0.5%	2.6%
J.Zhang 2021	26	0.45	0.7100	182	0.13 0.0700		<u>}</u> +	1.25	[ 0.82; 1.67]	1.0%	3.2%
LK. Xiong 2021	85	0.17	0.0800	105	0.22 0.0800				[-0.88; -0.29]	2.1%	3.5%
ZG.Wang 2021	56	0.42	0.4900	100	0.05 0.0150		<del>3 + -</del>	1.26	[ 0.90; 1.61]	1.4%	3.4%
FF.Sai 2021	15	1.05	1.3300	32	0.23 0.2500			1.05	[ 0.39; 1.70]	0.4%	2.5%
YJ.Lu 2021	40	0.33	0.3500	37	0.06 0.0800			1.03	[ 0.56; 1.51]	0.8%	3.0%
G.Li 2021	95	0.19	0.2100	116	0.06 0.0300			0.91	[ 0.62; 1.19]	2.2%	3.5%
L.García de Guadiana- Romualdo 2021		0.51	0.8600	85	0.10 0.1000		- <del></del>	1.24	[ 0.65; 1.83]	0.5%	2.7%
P.Sinha 2020	17	3.36	5.0000	22	1.49 2.0600		++-;		[-0.14; 1.15]	0.4%	2.5%
Y.Zhao 2020	125	0.44	0.6300	414	0.07 0.0700		<del>;=</del>	1.20	[ 0.98; 1.41]	3.9%	3.7%
B.Xu 2020	28	0.26	0.3200	117	0.04 0.0400		3	1.52	[ 1.07; 1.97]	0.9%	3.1%
Z.Wang 2020	116	0.28	0.3400	177	0.05 0.0300		1 +	1.07	[0.82; 1.32]	2.8%	3.6%
Y.Jiang 2020	72	0.23	0.2600	143	0.07 0.0500		+	1.02	[ 0.73; 1.32]	2.0%	3.5%
R.Zayat 2021	8	7.15	3.2600	9	1.50 1.8700		+ +	2.05	[0.82; 3.29]	0.1%	1.3%
MS. Asghar 2021	44	0.91	1.5000	147	0.31 0.5900		;	0.68	[0.33; 1.02]	1.5%	3.4%
E.Sozio 2021	28	0.32	0.2300	83	0.07 0.0900		1 1	1.79	[ 1.30; 2.28]	0.7%	3.0%
G.Montrucchio 2021	26		10.3000	31	1.37 3.4800			0.47		0.6%	2.9%
J.Wang 2020	16	0.20	0.2400	103	0.07 0.1000		$\rightarrow$	1.02	[ 0.48; 1.56]	0.6%	2.8%
M.Elhadi 2021	281	0.50	0.3000	184	0.06 0.0400		+	1.87	[ 1.65; 2.09]	3.6%	3.7%
H.Arikan 2021	225	0.95	1.1640	353	0.38 0.5060		- <u>+</u>	0.69	[0.52; 0.86]	5.9%	3.8%
J.Berenguer 2020	1131	0.30	0.3414		0.10 0.0816		+	1.02	[0.94; 1.09]	33.6%	3.9%
A.d'Arminio Monforte 2020	174	1.14	1.7268	367	0.15 0.1786		+	1.00		4.8%	3.7%
KY.Li 2020	15	0.31	0.3926	87	4.34 1.7339		2		[-3.12; -1.82]	0.4%	2.5%
T.Li 2021	9	0.28	0.2886	63	0.06 0.0152			2.21	[ 1.42; 3.00]	0.3%	2.1%
Fixed effect model	3639			8958				1.03	[ 0.99; 1.07]	100.0%	
Random effects model							\$	1.00	[ 0.83; 1.17]		100.0%
Heterogeneity: $I^2 = 92\%$ , $\tau^2 = 0.1951$ , $p < 0$	.01								· -		
						-3 -2 -1	0 1 2 3				
					F	avour Survivors	Favour Non-su	irvivors			

## Figure E5 (B) (Continued)

#### (3) ESR

	Non-survivo	rs Survivors	Standardised Mean			Weight	Weight
Study	Total Mean S	D Total Mean SD	Difference	SMD	95%-CI	(fixed)	(random)
YL.Yan 2020	39 44.29 47.48	9 28.58 40.4100		- 0.33	[-0.39; 1.06]	3.6%	6.5%
TL.Chen 2020	19 50.40 69.68	36 50.00 64.0900		0.01	[-0.55; 0.56]	6.2%	9.7%
T.Chen 2020	113 40.72 31.76	0 161 29.68 21.8400		0.42	[0.17; 0.66]	32.4%	22.3%
J.Zhang 2021	26 44.22 59.61	0 182 45.20 36.9900		-0.02	[-0.44; 0.39]	11.3%	14.2%
YJ.Lu 2021	40 37.00 26.14	0 37 42.17 39.3300		-0.15	[-0.60; 0.29]	9.6%	12.9%
CM.Wu 2020	44 57.02 25.29	40 54.01 23.0700		0.12	[-0.31; 0.55]	10.4%	13.6%
JG.Park 2020	70 53.82 22.71	0 219 57.35 27.6100		-0.13	[-0.40; 0.14]	26.4%	20.8%
Fixed effect model	351	684		0 11	[-0.03; 0.25]	100.0%	
Random effects mode		004			[-0.13; 0.29]		100.0%
Heterogeneity: $I^2 = 48\%$ ,	•			7 0.00	[ 0.15, 0.25]		100.078
			-1 -0.5 0 0.5	1			
		F	avour Survivors Favour Non-	survivors			

#### (4) Ferritin

Study	Total		-survivors SD	Total	Mean	Survivors SD		lean SMI	) 95%-CI	Weight (fixed)	Weight (random)
RC.Chen 2020	103	1341.65	947.7000	445	611.70	496.6100	1 :	1.2	0 [0.98; 1.43]	3.4%	4.8%
F.Zhou 2020	54		968.1300	137	566.14	492.6300		<u>−</u> + 1.2		1.5%	4.2%
YL.Yan 2020	39		1237.6000	9	503.08	492.7100	· _ '	1.1		0.3%	2.3%
T.Chen 2020		1529.09	991.8000	161	542.38	453.6000		<b>→</b> 1.3		2.4%	4.6%
DJ.Altschul 2020	621		1009.0500	1733	829.90	860.6300		0.4		20.2%	5.2%
F.Ciceri 2020	54		1910.9700		1202.17	869.8200		- 0.5		1.8%	4.4%
XB.Feng 2020	20		334.5000	94	364.15	227.2900		<u> </u>		0.6%	3.3%
H.Yang 2020	13		1307.2900	81	729.37	586,7800	· _ '	- 0.6		0.5%	3.0%
J.Zhang 2021	26	2169.29	1807.4200	182	745.08	660.5900		<u> </u>	1 1.17 2.05	0.9%	3.7%
YJ.Lu 2021	40	1951.54	1628.5900	37	1025.25	949.3800		- 0.6	3 0.22 1.14	0.8%	3.6%
L.García de Guadiana- Romualdo 2021	14	895.95	800.6800	85	645.92	754.1500	÷	- 0.3	3 [-0.24; 0.89]	0.5%	3.1%
P.Sinha 2020	17	1838.94	2001.5500	22	943.44	975.5500		- 0.5	3 [-0.07; 1.23]	0.4%	2.8%
CM.Wu 2020	44	1226.28	1104.0200	40	1063.41	1259.6900	-+	0.1	1 [-0.29; 0.57]	0.9%	3.8%
MS. Asghar 2021	44	1074.52	787.9400	147	575.79	712.2200		- 0.6	3 [0.34; 1.02]	1.5%	4.2%
A.Capdevila-Reniu 2021	53	971.00	1313.0000	106	551.00	490.0000	;	0.4	9 [0.15; 0.82]	1.6%	4.2%
M.Eleni 2021	9	1269.53	2463.1000	76	288.17	292.4500	+	1.2	0 [0.48; 1.91]	0.3%	2.5%
M.Elhadi 2021	281	1795.58	1116.1000	184	660.93	362.6200		<del></del> 1.2		4.2%	4.9%
S.Nakamura 2020	11	1209.69	1084.2200	21	370.14	447.0500		1.1	3 [0.34; 1.92]	0.3%	2.2%
SA. Namendys-Silva 2020	85	1052.31	687.0300	79	839.71	452.3300		0.3	6 [0.05; 0.67]	1.8%	4.4%
JG.Park 2020	70			219	566.50	472.3800		- 0.5		2.3%	4.5%
MC.Viana-Llamas 2021	128		1031.7300	481	645.71	705.2600		0.4		4.5%	4.9%
S.Ahmad 2021	43		639.4160	621	369.73	360.6736		• 0.9		1.8%	4.4%
H.Arikan 2021	225		508.8562	353	349.38	368.4634		0.5		6.0%	5.0%
J.Berenguer 2020	1131	962.18	942.6670	2904	713.92		+		2 [0.25; 0.39]	36.3%	5.2%
A.d'Arminio Monforte 2020	174	789.48	737.0785	367	445.79	428.6898		0.6	3 [0.44; 0.81]	5.1%	4.9%
Fixed effect model	3412			8766			6		5 [0.51; 0.59]	100.0%	
Random effects model								> 0.7	3 [0.62; 0.93]		100.0%
Heterogeneity: $I^2 = 90\%$ , $\tau^2 = 0.1185$ , $p < 0.1185$	.01							1 1			
							-2 -1 0	1 2			
						F	avour Survivors Favo	ur Non-survivo	rs		