Subgroup analyses Forest plots

Glossary

Sev: Severe COVID-19 disease ARM/IVM: invasive mechanical ventilation ARDS: acute respiratory distress syndrome ICU: intensive care unit Sat <90%: oxygen saturation less than 90% OTHER: other severity definitions ALT: Alanine aminotransferase APTT: activated partial thromboplastin time APACHE: Acute Physiology And Chronic Health Evaluation II AST: Aspartate aminotransferase FDP: Fibrin Degradation Product NA: Not applicable PT: prothrombin time

Candidate variable: Smoking (Active, present smoker), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | : | Weigh 95%-CI (fixed | t Weight) (random) |
|--|--|---|---|--|---|--|
| Sev = ICU Huang C_JYH Qin X_SPH Yang L_YCPH Argenziano M_NYP/CUIMC Jun R_TH Kalligeros M_MC Fixed effect model Random effects model Heterogeneity: ¹² = 0%, ²² = 0, p = 0. Sev = PROGRESSION IN SEVER | | | 0.07 0.93 0.73 1.11 2.35 0.92 1.11 1.11 | [0.00; [0.34; [0.09; [0.79; [0.78; [0.42; [0.83; [0.83; | 37.56] 0.19 2.55] 2.57 6.05] 0.69 1.57] 21.19 7.07] 2.02] 4.19 1.48] 30.59 1.48] - | 6 3.1% 6 1.3% 6 5.0% 6 2.9% 6 3.7% |
| Sev = PROGRESSION IN SEVER Liu F_XH Liu W_MC Dong J_FMC Yan X_HNU Fixed effect model Random effects model Heterogenelty: I ² = 63%, τ ² = 0.9971 | -2.42 3.4001 2.66 0.7045 0.74 0.5286 0.22 0.6608 | | 0.09 14.28 2.10 1.24 2.84 2.83 | [0.00; [3.59; [0.75; [0.34; [1.42; [0.76; | 69.67] 0.19 56.80] 1.39 5.93] 2.49 4.54] 1.59 5.68] 5.29 10.52] - | 6 2.3% 6 3.0% 6 2.5% |
| Sev = CRITICAL (Severe ARDS : Mo P_ZH Wei-jie (G_NHC Chen Y_multioentrico- FCMCH Duan Q_WPH Liu T_UH Hu L_TH Li J_CHW Liu J_BDH FY_JH, SPHCC, TPH Fixed effect model Random effects model Heterogenetly: $l^2 = 1\%$, $\tau^2 = 0.0037$, | 0.52 0.8815 1.18 0.2769 1.17 1.2746 0.20 0.4670 2.67 3.1987 0.75 0.3817 -0.15 0.4735 1.03 1.0442 0.60 0.3857 | | 1.68 3.25 3.23 1.22 14.43 2.12 0.86 2.80 1.82 2.03 2.02 | [0.30; [1.89; [0.49; [0.49; [0.03; 7 [1.00; [0.34; [0.36; [1.48; [1.47; | 9.45] 0.85 5.59] 8.69 39.28] 0.49 3.04] 3.09 619.45] 0.19 4.48] 4.59 2.17] 2.99 3.88] 4.49 2.79] 25.39 2.79] - | 6 4.4% 6 1.0% 6 3.4% 6 0.2% 6 3.8% 6 3.3% 6 1.4% 6 3.8% |
| Sev = SEVERE (> 30 breathings Shi Yu_ZPV Jin-Jin Z_MC Han Y_RHWU Qi D_multicentrico Shi W_SPHCC Feng Z_TXH Ma K_YCH Tabata S_SDFCH Wang G_PHTCC Wang Y_ZH(Multicéntrico) Zhang H_ZH Jiancheng L_JH Kuang Y_MC Cao M_SPHCC Wang Y_CHW CM_FAHSYU Hongying S_FAHWMU/SAHWMU Xudan C_GEPH Zhang R_RH LIX_TH LIX_TH LIX_TH Fixed effect model Random effects model | 0.47 0.4710 1.11 0.7293 0.29 0.8266 2.67 0.3681 0.38 0.7120 -2.16 3.1968 0.97 0.8117 0.68 0.5448 -0.46 0.7206 -0.21 0.9332 -0.32 0.6281 -0.36 0.7726 -0.21 0.9332 -0.32 0.6281 1.53 1.1517 -0.03 0.4772 5.40 3.1972 -0.21 0.3271 2.17 1.0106 | | 1.60 3.04 1.33 14.46 1.47 0.65 1.97 0.63 0.04 1.44 0.81 0.83 0.04 1.44 0.81 0.97 - 221.25 0.83 0.97 - 221.25 0.81 0.97 - 221.25 0.81 0.97 - 221.25 1.80 0.97 - 221.25 1.80 0.97 - 221.25 0.81 0.81 0.81 0.97 0.81 0.97 0.81 0.97 0.81 0.97 0.81 0.97 0.81 0.97 0.81 0.97 0.81 0.97 0.81 0.97 0.81 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97 | [0.64; [0.73; [0.26; [7.03; [0.00; [0.54; [0.68; [0.14; [0.00; [0.35; [0.14]; [0.40; [0.40; [0.40; [0.40; [0.42; [1.64]; [1.21; [1.31; [1.04; | 4.04] 3.07 12.69] 1.27 6.74] 1.07 29.75] 4.87 5.93] 1.37 5.93] 1.37 12.99] 1.07 5.73] 2.27 2.86] 1.17 20.58] 0.17 1.589] 1.37 5.04] 0.87 5.04] 0.87 2.48] 1.77 7.76] 0.67 2.46] 2.97 15.68] 0.97 15.68] 0.97 15.68] 0.97 15.68] 0.97 15.68] 0.97 1.54] 2.97 1.54] 3.17 1.54] 3.17 1.55] 3.57] 3.57] 3.57] 3.57] 3.57] 3.57] 3.57] 3.57] 3.57] 3.57] 3.57] 3.57] 3.57] 3.57] 3. | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$ |
| Sev = IMV Xu Y_FAHG Liao Xuelian_MC Fixed effect model Random effects model Heterogeneity: 7 - 21%, x ² - 0.2977 | -0.35 0.8013 1.34 1.2750 | | 0.71 3.83 1.14 1.23 | [0.15; [0.32; [0.30; [0.26; | 3.39] 1.09 46.65] 0.49 4.31] 1.49 5.84] - | 6 1.0% |
| Sev = Critical WR_PHFC Fixed effect model Random effects model Heterogenetty: not applicable | 1.37 0.5661 | 441 | 3.93 3.93 3.93 | [1.30; [1.30; [1.30; | 11.93] 2.09 11.93] 2.09 11.93] - | |
| Sev = ARDS Dreher M_UHA Yu T_DPHNH Fixed effect model Random effects model Heterogeneity: $l^2 - 0\%$, $r^2 - 0$, $p - 0$. | -1.19 0.8730 -0.92 1.0963 | +++++++++++++++++++++++++++++++++++++++ | 0.30 0.40 0.34 0.34 | [0.05; [0.05; [0.09; [0.09; | 1.68] 0.93 3.41] 0.53 1.28] 1.49 1.28] - | 6 1.3% |
| Fixed effect model Random effects model Heterogeneity: $l^2 = 54\%$, $\tau^2 = 0.3656$ Residual heterogeneity: $l^2 = 50\%$, p | <i>p</i> < 0.01 | 0.001 0.1 1 10 1000 | 1.62 1.65 | [1.38; [1.25; | 1.89] 100.09 2.17] - | 6 - 100.0% |

Candidate variable: Smoking (Active, present smoker), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | Weight (fixed) | Weight (random) |
|---|------------------------------|--|---------|-----------------------------------|-------------------|--------------------|
| Sev = ARDS | | ļ | 2.44 | | 0.74 | 1.00 |
| Wu C_WJH Liu Y_CHW | 0.88 0.7448 | 1 | 2.41 | [0.56; 10.35] [0.17; 3.66] | 0.7% | 1.3% |
| Zhao W_BYH | 2.04 0.7681 | | 7.71 | [1.71; 34.76] | 0.7% | 1.2% |
| Fixed effect model | | 4 | 2.49 | [1.04; 5.92] | 2,1% | _ |
| Random effects model | | 4 | 2.46 | [0.69; 8.83] | | 3.7% |
| Helerogenetly: / ² = 54%, t ² = 0.6867,) | p = 0.11 | | | | | |
| Sev = CRITICAL (Severe ARDS 5 | | | 0.00 | 10.00. 44.401 | 0.05 | |
| Gao Y_FSH LI K_CMU | -0.07 1.2688 3.08 3.3421 | 11 | 0.93 | [0.08; 11.16] [0.03; 15214.47] | 0.2% | 0.6% |
| LIK_GMU | 0.00 1.4142 | | 1.00 | [0.03; 15214.47] | 0.2% | 0.5% |
| Liu Y_STP Mo P_ZH | 2.13 1.0995 | | 8.38 | [0.97; 72.30] | 0.3% | 0.7% |
| Wei-jie G_NHC | 1.56 0.4813 | 4 | 4.74 | [1.84; 12.16] | 1.7% | 2.0% |
| Chen X_GHCTC | 1.38 0.8077 | | 3.89 | [0.80; 18.94] | 0.6% | 1.1% |
| Chen Y_ multicentrico- FCMCH | 2.17 0.9043 | + | 8.75 | [1.49; 51.50] | 0.5% | 1.0% |
| Duan Q_WPH | 1.06 0.4700 | 1 | 2.89 | [1.15; 7.27] | 1.8% | 2.1% |
| Liu T_ UH Shijiao Y_HHMU | 2.35 3.2052 | 1 | - 10.48 | [0.02; 5603.29] [1.27; 13.94] | 0.0% | 0.1% |
| LIJCHW | 0.87 0.3573 | 1 | 2.39 | [1.19; 4.82] | 3.1% | 2.5% |
| Liu J_BDH | 3.21 3.3460 | - ÷ - | | 0.04; 17447.07] | 0.0% | 0.1% |
| Lei P_BH (Multicentrico) | 1.38 0.5184 | + | 3.96 | [1.44; 10.95] | 1.5% | 1.9% |
| FY_JH, SPHCC, TPH | 1.11 0.3764 | + | 3.02 | [1.45; 6.32] | 2.8% | 2.4% |
| Zhou M_MC | 0.08 0.3945 | † 1 | 1.06 | [0.49; 2.30] | 2.6% | 2.3% |
| Wu J_TFAH Fixed effect model | 3.00 0.3919 | - | 20.10 | [9.33; 43.34] | 2.6% | 2.4% |
| Random effects model Heterogeneity: 1 ² = 57%, t ² = 0.4756, j | p = 0.01 | - | 3.78 | [2.29; 6.24] | | 21.4% |
| Sev = ICU | | | | | | |
| Huang C_JYH | 0.92 0.8981 | | 2.50 | [0.43; 14.54] | 0.5% | 1.0% |
| Wang D_ZH | 1.01 0.5000 | H | 2.76 | [1.03; 7.35] | 1.6% | 2.0% |
| Qin X_SPH Yang L_YCPH | -0.27 1.2444 -0.55 1.0686 | | 0.76 | [0.07; 8.76] [0.07; 4.67] | 0.3% | 0.6% |
| Lei S_RHZHTHC | 2.48 1.1547 | 1 | 12.00 | [1.25; 115.36] | 0.3% | 0.8% |
| Colombi D_GdSH | 1.31 0.3434 | 4 | 3.70 | [1.89; 7.25] | 3.4% | 2.6% |
| Argenziano M NYP/CUIMC | -0.06 0.2252 | 100 H | 0.94 | [0.60; 1.46] | 7.9% | 3.0% |
| Jun R_TH | 0.30 0.7088 | -+ | 1.34 | [0.34; 5.40] | 0.8% | 1.3% |
| Rentsch_CT | -0.31 0.3065 | +1 | 0.73 | [0.40; 1.33] | 4.3% | 2.7% |
| Zheng X_FAH | 1.06 1.2587 1.85 0.7117 | -1- | 2.90 | [0.25; 34.19] [1.58; 25.73] | 0.3% | 0.6% |
| Hu D_UH Kalligeros M_MC | 0.42 0.5560 | 1 | 1.52 | [0.51; 4.52] | 1.3% | 1.8% |
| Fixed effect model | 0.42 0.0000 | 02 | 1.42 | [1.09; 1.86] | 21.8% | 1.0 / |
| Random effects model | | 0 | 1.80 | [1.08; 2.99] | | 18.3% |
| Heterogeneity: $l^2 = 60\%$, $\tau^2 = 0.3778$, l | 0 = 0.01 | | | | | |
| Sev = PROGRESSION IN SEVERI | TY CATEGORY | | | | | |
| Liu F_XH | 2.42 3.4001 | | - 11.25 | [0.01; 8817.06] | 0.0% | 0.1% |
| Wang X_DFH | 1.56 0.5582 | 1 | 4.75 | [1.59; 14.18] | 1.3% | 1.8% |
| Yan X_HNU | 2.08 0.4623 1.06 0.2349 | 100 | 7.99 | [3.23; 19.77] [1.82; 4.57] | 1.9% | 2.1% |
| Zhang L_WUH Bi Q_STPH | 1.67 0.5187 | 1 | 5.30 | [1.82; 4.57] [1.92; 14.64] | 1.5% | 1.9% |
| Fixed effect model | | 5 | 3.87 | [2.70; 5.53] | 12.0% | |
| Random effects model | | 0 | 4.13 | [2.70: 6.33] | | 8.8% |
| Heterogeneity: $l^2 = 14\%$, $\tau^2 = 0.0367$, l | p = 0.33 | A.C | | | | |
| Sev = SEVERE (> 30 breathings (| OR Sat <90%) | - | | | | |
| Shi Yu_ZPV | 1.70 0.6461 | 1 | 5.47 | [1.54; 19.42] [0.42; 9.07] | 1.0% | 1.5% |
| Jin-Jin Z_MC Lu Jiatao_WHH | 0.67 0.7839 0.68 0.3941 | 11 | 1.90 | [0.91; 4.25] | 2.6% | 2.4% |
| Han Y RHWU | 1.48 1.1599 | | 4.40 | [0.45; 42.73] | 0.3% | 0.7% |
| Han Y_RHWU Liu Yo_SCH | 0.45 1.2903 | | 1.56 | [0.12; 19.60] | 0.2% | 0.6% |
| Shi W_ SPHCC | 1.49 0.5854 | | 4.45 | [1.41; 14.02] | 1.2% | 1.7% |
| Song CY_FAHZU | 1.15 1.1444 | -12- | 3.16 | [0.34; 29.75] | 0.3% | 0.7% |
| Sun F_ZHWU | 1.02 0.5885 | + | 2.77 | [0.87; 8.78] | 1.2% | 1.7% |
| Zhang G_ZHWU Zhou Y_CHW | 1.69 0.4671 | 1 | 5.40 | [2.16; 13.49] [1.33; 7.35] | 1.8% | 2.1% |
| Chen X FHC/LCH | 1.31 0.6077 | 1 | 3.71 | [1.33; 7.35] [1.13; 12.22] | 1.1% | 1.6% |
| Feng Z_TXH | 1.49 1.2568 | | 4.43 | [0.38; 52.00] | 0.3% | 0.6% |
| Ma K YCH | 0.82 0.9514 | -++- | 2.26 | [0.35; 14.58] | 0.4% | 0.9% |
| Wang G_PHTCC Wang Y_ZH(Multicéntrico) | 2.06 0.6973 | ÷ | 7.85 | [2.00; 30.80] | 0.8% | 1.49 |
| Wang Y_ZH(Multicentrico) | 1.62 0.6191 | 1 | 5.06 | [1.50; 17.03] | 1.0% | 1.6% |
| Wang Z_UH Zhang H_ZH | 2.26 0.8146 2.25 1.1010 | 1. | 9.63 | [1.95; 47.54] [1.10; 82.38] | 0.6% | 1.19 |
| Jiancheng L_JH | 2.36 3.2499 | | - 10.61 | [0.02; 6195.74] | 0.0% | 0.1% |
| CalQ_TPHS | 1.48 0.4278 | | 4.29 | [1.86; 9.93] | 2.2% | 2.2% |
| Cao M_SPHCC | 2.17 0.6481 | + | 8.78 | [2.46: 31.26] | 1.0% | 1.5% |
| FL_GHCTCPLA | 1,13 0.5076 | + | 3.09 | [1.14; 8.36] | 1.6% | 1.9% |
| JX_WFPH | 1.88 1.4712 | | 6.57 | [0.37; 117.48] | 0.2% | 0.4% |
| Colaneri M_PSM Hongying S_FAHWMU/SAHWMU | 0.88 0.7092 | . 11 | 2.40 | [0.60; 9.64] | 0.8% | 1.35 |
| Kin L CHWC/hospitales en Hunan | 199 0 7097 | - | 7.29 | [0.00; 42.57] [1.81; 29.30] | 0.0% | 1.39 |
| Kin L_CHWC/hospitales en Hunan Li J_CHW | 0.74 0.2874 | -2 | 2.10 | [1.20; 3.69] | 4.9% | 2.89 |
| MUC_TH | 0.58 0.1900 | | 1.79 | [1.23; 2.59] | 11.1% | 3.29 |
| Wan S TGCH | 3.00 0.8622 | | 20.00 | [3.69; 108.37] | 0.5% | 1.0% |
| Zhang R_RH | 1.46 0.7082 | | 4.30 | [1.07; 17.23] | 0.8% | 1.4% |
| Kie J_UHW | 1.14 0.7528 | 1 | 3.12 | [0.71; 13.63] | 0.7% | 1.3% |
| Yang A_ Zheng F_NHCFH | 2.28 0.6657 1.53 1.0215 | 1 | 9.75 | [2.64; 35.95] [0.62; 34.11] | 0.9% | 1.5% |
| Zheng F_NHCFH LIX_TH | 1.67 0.4585 | 5- | 4.61 | [2.15; 12.98] | | 2.1% |
| LIY_TH | -0.61 1.2390 | -+1 | 0.54 | [0.05; 6.14] | 0.3% | 0.6% |
| Fixed effect model | | | 3.10 | [2.57; 3.74] | 44.0% | |
| Random effects model Heterogenetly: / ² = 14%, x ² = 0.0541, j | 0 = 0.24 | | 3.47 | [2.78; 4.34] | | 46.0% |
| Sev = IMV | | | | | | |
| Xu Y_FAHG | 1.06 0.9252 | | 2.88 | [0.47; 17.63] | 0.5% | 0.9% |
| Liao Xuelian_MC | 2.69 0.9953 | + | 14.79 | | 0.4% | 0.8% |
| | -3.04 3.2368 | · | 0.05 | [0.00; 27.17] | 0.0% | 0.1% |
| Fixed effect model | | 1 | 5.01 | [1.37; 18.38] | 0.9% | |
| Random effects model Heterogeneity: 1 ² = 45%, t ² = 1.3187, j | p = 0.16 | | 4.16 | [0.57: 30.21] | | 1.9% |
| Fixed effect model | | The second s | 2.78 | [2.45; 3.14] | 100.01 | |
| | | 1.5 | | [2.43, 3.14] | 100.0% | |
| Random effects model | | ò | 3.34 | [2.72; 4.10] | | 100.0% |

Candidate variable: Cerebrovascular disease (History of stroke or CNS disease), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | Weight (fixed) | Weigl (randor |
|---|--------------|--|--------------|------------------------------|-------------------|------------------|
| Sev = CRITICAL (Severe ARDS S | | | _ | | _ | |
| Mo P_ZH | -2.32 1.2786 | | 0.10 | [0.01; 1.20] | 0.5% | 1.6 |
| Wei-jie G_NHC | 1.77 0.5981 | = - | 5.89 | [1.82; 19.03] | 2.4% | 3.8 |
| Chen X_GHCTC | 1.50 0.9281 | ++• | 4.46 | [0.72; 27.51] | 1.0% | 2.5 |
| Chen Y multicentrico- FCMCH | 1.17 1.2746 | | 3.23 | [0.27; 39.28] | 0.5% | 1.6 |
| Hul TH | -1.82 3 1916 | | 0.16 | 0.00; 84.20] | 0.1% | 0.3 |
| LI J CHW | 0.18 0.4593 | 1 | 1.20 | [0.49; 2.96] | 4.1% | 4.4 |
| | | | | | | |
| Lei P_BH (Multicéntrico) | -0.96 3.3417 | | 0.38 | [0.00; 266.75] | 0.1% | 0.3 |
| FY_JH, SPHCC, TPH | 1.74 0.5047 | * - | 5.69 | [2.12; 15.31] | 3.4% | 4.2 |
| Zhou M_MC | -0.17 0.3990 | | 0.84 | [0.38; 1.84] | 5.5% | 4.7 |
| Fixed effect model | | ¢ | 1.84 | [1.19; 2.84] | 17.7% | - |
| Random effects model Heterogeneity: I^2 = 61%, τ^2 = 0.7910, J | p < 0.01 | 4 0 0 | 1.86 | [0.80; 4.29] | | 23.5 |
| Sev = ICU | | | | | | |
| Wang D ZH | 3.01 1.0999 | | 20.20 | [2.34; 174.43] | 0.7% | 2.0 |
| Lei S RHZHTHC | 3.38 3.2602 | | 29.23 | [0.05; 17416.52] | 0.1% | 0.3 |
| Colombi D_GdSH | 0.69 0.3535 | L. | 2.00 | [1.00; 4.00] | 7.0% | 5.0 |
| Colombi D_GuSH | | <u> </u> | | | | 5.0 |
| Argenziano M_NYP/CUIMC | 0.06 0.2746 | | 1.06 | [0.62; 1.81] | 11.5% | |
| Zheng X_FAH | 0.32 1.4429 | | 1.38 | [0.08; 23.36] | 0.4% | 1.3 |
| Fixed effect model | | e; | 1.50 | [1.00; 2.27] | 19.7% | - |
| Random effects model | | \$ | 2.07 | [0.88; 4.88] | | 14.0 |
| Heterogeneity: I ² = 54%, τ ² = 0.3896, j | p = 0.07 | | | | | |
| Sev = SEVERE (> 30 breathings (| | | 0.00 | 10.00.00.000 | 0.00 | |
| Jin-Jin Z_MC | 1.06 1.2370 | _ _}` | 2.89 | [0.26; 32.68] | 0.6% | 1.7 |
| Lu Jiatao_WHH | 0.82 0.9200 | -14 | 2.28 | [0.38; 13.83] | 1.0% | 2.5 |
| Sun F ZHWU | -2.45 3.1961 | | 0.09 | [0.00; 45.56] | 0.1% | 0.3 |
| Zhang G_ZHWU | 2.32 0.6081 | | 10.13 | [3.07; 33.34] | 2.4% | 3.7 |
| Chen X_FHC/LCH | 1.10 0.7475 | <u>11-</u> | 3.01 | [0.70; 13.04] | 1.6% | 3.1 |
| | -0.08 3.3445 | | 0.93 | | 0.1% | 0.3 |
| Feng Z_TXH | | | | [0.00; 650.70] | | |
| Ma K_YCH | 1.24 1.0352 | - <u>+</u> # | 3.44 | [0.45; 26.20] | 0.8% | 2.1 |
| Wang G_PHTCC | 1.05 0.8852 | ++ | 2.87 | [0.51; 16.28] | 1.1% | 2.6 |
| Wang Y_ZH(Multicentrico) | 1.14 0.8150 | ++ | 3.13 | [0.63; 15.44] | 1.3% | 2.8 |
| Zhang H ZH | 0.53 0.9477 | _ _ _ . | 1.71 | [0.27; 10.94] | 1.0% | 2.4 |
| Jiancheng L_JH | -0.22 0.6753 | -44 | 0.80 | [0.21; 3.01] | 1.9% | 3.4 |
| Mingfeng H_SPH | -1.62 3.2505 | 1! | 0.20 | [0.00; 115.37] | 0.1% | 0.3 |
| | | | | | | |
| Wang Y_CHW | 0.38 0.7916 | - P - | 1.46 | [0.31; 6.88] | 1.4% | 2.9 |
| JX_WFPH | 3.94 3.3584 | - <u> </u> ; · | | [0.07; 37140.02] | 0.1% | 0.3 |
| Xin L_CHWC/hospitales en Hunan | 1.78 0.8810 | <u> </u> <u></u> <u>+</u> <u></u> | 5.92 | [1.05; 33.29] | 1.1% | 2.6 |
| Chen W YH | 4.29 3.3543 | | - 73.12 | [0.10; 52386.57] | 0.1% | 0.3 |
| Li J_CHW | 1.35 0.2992 | 1 | 3.86 | [2.15; 6.94] | 9.7% | 5.2 |
| YuC_TH | 0.25 0.2729 | 10 | 1.28 | [0.75; 2.19] | 11.7% | 5.3 |
| | | 10 | | | | |
| Wang L_SPH | -0.43 3.3468 | | 0.65 | [0.00; 458.56] | 0.1% | 0.3 |
| Zheng F_NHCFH | 0.39 1.1729 | - • | 1.47 | [0.15; 14.66] | 0.6% | 1.8 |
| Fixed effect model | | 4 | 2.36 | [1.74; 3.19] | 36.6% | |
| Random effects model Heterogeneity: $I^2 = 13\%$, $\tau^2 = 0.0861$, J | | ¢ | 2.46 | [1.69; 3.58] | | 44.2 |
| | p = 0.29 | | | | | |
| Sev = ARDS Liu Y_ CHW | 4.27 3.1946 | | 71.49 | [0.14; 37452.78] | 0.1% | 0.3 |
| Zhao W_BYH | 1.08 1.4389 | _ <u>_</u> | 2.95 | [0.18; 49.46] | 0.4% | 1.3 |
| Dreher M UHA | 0.43 0.8227 | <u>_</u> | 1.53 | [0.31; 7.69] | 1.3% | 2.8 |
| WangL RH | 1.49 0.9061 | <u> </u> | 4.44 | [0.75; 26.25] | 1.3% | 2.5 |
| | 1.49 0.8001 | L. | | | 2.9% | 2.0 |
| Fixed effect model | | Y | 2.81 | [0.95; 8.31] | 2.5% | _ |
| Random effects model | | P | 2.81 | [0.95; 8.31] | | 7.0 |
| Heterogeneity: I ² = 0%, τ ² = 0, p = 0.6 | 1 | | | | | |
| Sev = OTHER View S. beseiteles en Reijing | 2.00.2.0590 | | 40.40 | 0.00.00440.003 | 0.497 | |
| Ying S_hospitales en Beijing | 3.90 3.2569 | | | [0.08; 29110.25] | | 0.3 |
| Fixed effect model | | | | [0.08; 29110.25] | 0.1% | |
| Random effects model Heterogeneity: not applicable | | | 49.18 | [0.08; 29110.25] | | 0.3 |
| Sev = PROGRESSION IN SEVERI | TY CATEGORY | | | | | |
| Yan X_HNU | 1.46 0.8948 | <u>++-</u> | 4.32 | [0.75; 24.94] | 1.1% | 2.6 |
| Zhang L_WUH | 2.07 0.8076 | <u> </u> | 7.90 | | 1.3% | 2.0 |
| | | 1 | | | | |
| Bi Q_STPH | 2.22 0.2056 | | 9.23 | [6.17; 13.81] | | 5.6 |
| Fixed effect model | | • | 8.82 | [6.03; 12.92] | 23.0% | |
| Random effects model | | • | 8.82 | [6.03; 12.92] | | 11.1 |
| Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p = 0.7$ | 0 | | | - | | |
| include generation of the other of the other | | | | | | |
| Fixed effect model | | | 2.82 | [2.35; 3.38] | 100.0% | |
| Fixed effect model Random effects model | | • | 2.82 2.67 | [2.35; 3.38] [1.84; 3.87] | 100.0% | 100.0 |
| Fixed effect model | o < 0.01 | · · · · · · · · · · · · · · · · · · · | | | 100.0% | 100.0 |

Candidate variable: Arterial hypertension, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 9 | 5%-CI | Weight (fixed) | Weigt (randon |
|--|------------------------------|-------------------------------|-------|------------|---------|-------------------|------------------|
| Sev = ICU | | li I | | | | | |
| Huang C_JYH Wang D_ZH | -1.47 3.3503 | | 0.23 | [0.00; 1 | 164.05] | 0.2% | 0.25 |
| Wang D ZH | -2.66 3.2084 | | 0.07 | 00.01 | 37.57 | 0.2% | 0.25 |
| Qin X_SPH | 0.03 0.9398 | | 1.03 | [0.16; | 6.50] | 2.0% | 2.09 |
| Yang L_YCPH | -1.18 3.2506 | Îi | 0.31 | [0.00; 1 | | 0.2% | 0.2 |
| | | · [| | | | | |
| Colombi D_GdSH | 0.59 0.9224 | <u> </u> | 1.80 | [0.30; | 10.97] | 2.1% | 2.1 |
| Argenziano M_NYP/CUIMC | 0.52 0.5529 | + | 1.68 | [0.57; | 4.96] | 5.8% | 5.85 |
| Kalligeros M_MC | -0.19 3.2565 | | 0.83 | [0.00; 4 | | 0.2% | 0.25 |
| Fixed effect model | | * | 1.38 | [0.62; | 3.07] | 10.5% | - |
| Random effects model Heterogeneity: $l^2 = 0\%$, $\tau^2 = 0$, $p = 0$ | .95 | † | 1.38 | [0.62; | 3.07] | | 10.59 |
| Sev = CRITICAL (Severe ARDS | Shock or ARM) | | | | | | |
| Mo P_ZH | 0.75 0.8527 | -15 | 2.12 | [0.40; | 11.30] | 2.4% | 2.4 |
| Chen X_GHCTC | -0.54 1.1965 | | 0.58 | [0.06; | 6.09] | 1.2% | 1.2 |
| Chen Y multicentrico- FCMCH | 1.17 1.2746 | _ ! + | 3.23 | [0.27; | 39.28] | 1.1% | 1.1 |
| Duan Q_WPH | 0.50 1.4273 | | 1.65 | [0.10; | 27.09 | 0.9% | 0.95 |
| Liu T_ UH | 0.38 3.3491 | j | 1.46 | [0.00; 10 | | 0.2% | 0.2 |
| | | 1_ | | | | | |
| Shijiao Y_HHMU | 1.36 0.8395 | 1. | 3.91 | [0.75; | | 2.5% | 2.5 |
| Hu L_TH | -0.94 3.2228 | | 0.39 | [0.00; 2 | | 0.2% | 0.25 |
| Zhou M_MC | 1.24 1.1637 | - <u>+</u> ! | 3.44 | [0.35; | 33.66] | 1.3% | 1.35 |
| Wu J TFAH | 1.19 0.7753 | = | 3.27 | 0.72; | 14.96] | 2.9% | 2.95 |
| Fixed effect model | | -0 | 2.43 | [1.17: | 5.061 | 12.6% | _ |
| Random effects model | | 4 | 2.43 | 1.17: | 5.06] | | 12.6 |
| Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p = 0$ | 0.5 | 17 | 4.40 | fr.07 | 3.00] | | 12.0 |
| | | | | | | | |
| Sev = SEVERE (> 30 breathings Shi Yu_ZPV | OR Sat <90%) -0.12 0.7574 | - | 0.89 | [0.20; | 3.92] | 3.1% | 3.15 |
| Jin-Jin Z MC | 0.37 0.7289 | 1 | 1.44 | 0.35; | 6.031 | 3.3% | 3.3 |
| | 0.39 0.5018 | <u>c</u> | 1.48 | | | 7.0% | 7.0 |
| Lu Jiatao_WHH | | Ť | | [0.55; | 3.95] | | |
| Song CY_FAHZU | -1.48 1.1804 | <u>+</u> + | 0.23 | [0.02; | 2.30] | 1.3% | 1.3 |
| Sun F_ZHWU | 1.01 1.2439 | | 2.74 | [0.24; | 31.37] | 1.1% | 1.15 |
| Zhang G_ZHWU | 1.45 0.7804 | <u>i.</u> | 4.26 | 0.92; | 19.67 | 2.9% | 2.95 |
| Lei L_CUTGH | 4.19 3.3616 | | | [0.09; 479 | | 0.2% | 0.2 |
| | | | | | | | 2.9 |
| Chen X_FHC/LCH | -0.31 0.7760 | | 0.73 | [0.16; | 3.34] | 2.9% | |
| Feng Z_TXH | -1.57 3.2142 | | 0.21 | [0.00; 1 | | 0.2% | 0.2 |
| Ma K_YCH | 0.71 0.6877 | - e | 2.04 | [0.53; | 7.84] | 3.7% | 3.7 |
| Wang G_PHTCC | 0.65 0.6921 | - <u>lå-</u> - | 1.92 | 0.49 | 7.46] | 3.7% | 3.7 |
| Wang Y_ZH(Multicéntrico) | 1.69 1.2333 | <u></u> | 5.43 | [0.48; | 60.92] | 1.2% | 1.2 |
| Wang Z_UH | -0.85 3.3467 | . 1 | 0.43 | [0.00; 3 | | 0.2% | 0.2 |
| | -1.07 1.1819 | | 0.43 | 10.03 | 3.491 | 1.3% | 1.3 |
| Zhang H_ZH | | | | | | | |
| Jiancheng L_JH | 0.09 1.2397 | | 1.09 | [0.10; | 12.39] | 1.1% | 1.1 |
| Mingfeng H_SPH | 0.26 0.6984 | | 1.30 | [0.33; | 5.11] | 3.6% | 3.6 |
| Zeng G_TPHS | 0.55 1.2317 | <u>k</u> | 1.73 | [0.16; | 19.381 | 1.2% | 1.2 |
| CaiQ_TPHS | 0.57 0.4467 | 느 | 1.76 | [0.73; | 4.221 | 8.8% | 8.8 |
| | | . Ē | | | | 0.0% | 0.0 |
| Cao M_SPHCC | -1.87 3.1981 | | 0.15 | [0.00; | 81.40] | | |
| Colaneri M_PSM | 0.49 1.4494 | | 1.62 | [0.09; | 27.84] | 0.8% | 0.8 |
| Xin L_CHWC/hospitales en Huna | n 1.37 0.7808 | • - | 3.92 | [0.85; | 18.12] | 2.9% | 2.9 |
| YuC_TH | 0.25 0.3323 | | 1.28 | [0.67; | 2.45] | 15.9% | 15.9 |
| Zhang R_RH | 3.33 3.3401 | — II · · · · · · · | | [0.04; 194 | | 0.2% | 0.2 |
| Yang A_ | 0.29 0.6540 | <u> </u> | 1.33 | [0.37; | 4.801 | 4.1% | 4.1 |
| Zheng F_NHCFH | -2.22 3.2089 | | 0.11 | | 58.49] | 0.2% | 0.2 |
| | 2.22 3.2068 | | | | | 70.9% | 0.2 |
| Fixed effect model | | r i | 1.48 | [1.09; | 2.02] | 10.3% | - |
| Random effects model Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p = 0$ | 93 | î. | 1.48 | [1.09; | 2.02] | | 70.9 |
| | | | | | | | |
| Sev = OTHER Ying S_hospitales en Beijing | 3.90 3.2569 | _ | 49.18 | [0.08; 29] | 10.251 | 0.2% | 0.2 |
| Fixed effect model | | Li. | | [0.08; 291 | | 0.2% | - |
| Random effects model | | 1 | | [0.08; 291 | | U.Z. 70 | 0.2 |
| Kandom effects model Heterogeneity: not applicable | | | 47.10 | [0.00; 29] | 10.20] | | 0.2 |
| Sev = ARDS | | | | | | | |
| Dreher M UHA | -1.40 0.8608 | Hi | 0.25 | [0.05; | 1.33] | 2.4% | 2.4 |
| Fixed effect model | | | 0.25 | [0.05; | 1.33] | 2.4% | _ |
| | | | 0.25 | | 1.33] | a | 2.49 |
| Random effects model Heterogeneity: not applicable | | | 0.23 | [0.05; | 1.55 | | 2.4 |
| Sev = PROGRESSION IN SEVE | RITY CATEGORY | | | | | | |
| Zhang L WUH | 0.79 0.7136 | <u>_i_</u> | 2.20 | [0.54; | 8.92] | 3.5% | 3.5 |
| | 0.16 0.1130 | E. | 2.20 | | | | 3.0 |
| Fixed effect model | | 1 | | [0.54; | 8.92] | 3.5% | - |
| Random effects model | | P | 2.20 | [0.54; | 8.92] | | 3.5 |
| Heterogeneity: not applicable | | | | | | | |
| Fixed effect model | | 0 | 1.53 | [1.18; | | 100.0% | - |
| Random effects model | | 6 | 1.53 | [1.18; | 1.99] | | 100.0 |
| | | | | | | | |
| Heterogeneity: $l^2 = 0\%$, $\tau^2 = 0$, $p = 0$ Residual heterogeneity: $l^2 = 0\%$, $p = 0$ | .98 | 0.001 0.1 1 10 1000 | | • | | | |

Candidate variable: Chronic kidney disease, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | | Weigh (random) |
|---|--|------------|---------|------------------|---------|-------------------|
| Sev = CRITICAL (Severe ARDS | Shock or ARM) | | | | | |
| | -2.10 3.3169 - | | 0.12 | [0.00; 81.77] | 0.1% | 0.3% |
| Mo P_ZH | 0.52 0.8815 | 11 | 1.68 | [0.30; 9.45] | 1.8% | 3.1% |
| Wei-jie G_NHC | 1.66 0.8264 | | | [1.04; 26.58] | 2.1% | 3.39 |
| Chen Y multicentrico- FCMCH | | | | | 0.1% | 0.35 |
| | | | | 0.06; 20123.04] | | |
| Duan Q_WPH | 3.96 3.2204 | 10 NO | | [0.10; 29034.41] | 0.1% | 0.4% |
| Shijiao Y_HHMU | 3.52 3.3387 | | - 33.94 | [0.05; 23585.56] | 0.1% | 0.3% |
| Hu L_TH | -1.82 3.1916 - | • 11 | 0.16 | [0.00; 84.20] | 0.1% | 0.4% |
| FY JH, SPHCC, TPH | 0.67 1.1620 | | 1.95 | [0.20; 18.99] | 1.0% | 2.19 |
| Zhou M MC | 0.65 0.7402 | | 1.91 | [0.45; 8.15] | 2.6% | 3.8% |
| Wu J_TFAH | 0.48 0.9224 | | 1.61 | [0.26; 9.84] | 1.7% | 2.9% |
| Fixed effect model | U.TU U.CALT | 9 | 2.37 | | 9.8% | A.0 / |
| | | 1 | | | 3.078 | 40.00 |
| Random effects model Helerogeneity: 1 ² = 0%, t ² = 0, p = 0 | .83 | | 2.37 | [1.13; 4.97] | | 16.99 |
| Rev. = 1011 | | | | | | |
| Sev = ICU Wang D_ZH | 1.08 1.0195 | | 2.94 | [0.40; 21.69] | 1.4% | 2.5% |
| | -1.78 3.3404 - | | | | | 0.3% |
| | | | 0.17 | [0.00; 117.30] | 0.1% | |
| Yang L_YCPH | 2.53 1.2421 | | 12.59 | [1.10; 143.68] | 0.9% | 1.9% |
| Lei S_RHZHTHC | 2.61 3.3352 | 11 | | [0.02; 9366.23] | 0.1% | 0.3% |
| Colombi D_GdSH | 1.65 0.6640 | | 5.20 | [1.42; 19.11] | 3.2% | 4.2% |
| Argenziano M_NYP/CUIMC | -0.23 0.2292 | 100 | 0.79 | [0.51; 1.24] | 26.9% | 7.4% |
| | -0.69 0.3789 | | 0.50 | 0.24; 1.05] | 9.8% | 6.3% |
| | -0.30 0.6611 | | 0.74 | [0.20; 2.71] | 3.2% | 4.2% |
| Fixed effect model | and the second sec | A | 0.90 | [0.64; 1.27] | 45.7% | |
| | | E | | | 40.1 28 | 127.04 |
| Random effects model Helerogeneity: 7 ² = 58%, τ ² = 0.4953 | a, p = 0.02 | | 1.33 | [0.63; 2.81] | | 27.29 |
| | 00.0.1.00001 | | | | | |
| Sev = SEVERE (> 30 breathings | | 1 | | | 0.000 | |
| Shi Yu_ZPV | 1.30 0.8506 | | | [0.70; 19.52] | 2.0% | 3.25 |
| Jin-Jin Z_MC | 3.33 3.2490 | | - 27.82 | [0.05; 16215.51] | 0.1% | 0.3% |
| Sun F_ZHWU | 1.33 0.9393 | | 3.78 | [0.60; 23.81] | 1.6% | 2.8% |
| Zhang G_ZHWU | 2.80 1.1073 | 14 · · · | 16.50 | [1.88; 144.54] | 1.2% | 2.3% |
| Chen X FHC/LCH | 1.59 1.4228 | 11 | 4.90 | [0.30; 79.64] | 0.7% | 1.5% |
| | -1.05 3.3431 | | | [0.00; 245.33] | 0.1% | 0.3% |
| | 1.29 1.1637 | | 3.62 | [0.37; 35.38] | 1.0% | 2.15 |
| Wang Y_ZH(Multicentrico) | | 1. | | | | |
| Zhang H_ZH | 3.10 3.2539 | | | [0.04; 13044.30] | 0.1% | 0.3% |
| Zeng G_TPHS | 1.26 1.0086 | | 3.51 | [0.49; 25.37] | 1.4% | 2.6% |
| JX_WFPH | 4.10 3.3578 | | - 60.43 | [0.08; 43592.13] | 0.1% | 0.3% |
| LI J CHW | 2.04 0.4957 | | 7.72 | [2.92; 20.40] | 5.7% | 5.4% |
| | -0.15 0.3628 | + | 0.86 | [0.42; 1.76] | 10.7% | 6.4% |
| Xie J UHW | 0.89 0.7850 | | 2.44 | [0.52; 11.36] | 2.3% | 3.5% |
| LIX_TH | 0.45 0.6512 | 1 | 1.56 | [0.44; 5.60] | 3.3% | 4.3% |
| | 0.10 0.001L | 14 | | | 30.5% | 4.00 |
| Fixed effect model | | 1 | 2.43 | [1.59; 3.71] | 30.3% | |
| Random effects model | | 2 | 3.14 | [1.68; 5.87] | | 35.5% |
| Helerogeneity: $l^2 = 36\%$, $\tau^2 = 0.413$ | s, p = 0.09 | | | | | |
| Sev = ARDS | | | | | | |
| Liu Y_ CHW | 1.57 0.8159 | 1 | 4.80 | [0.97; 23.75] | 2.1% | 3.49 |
| Zhao W_BYH | 1.58 0.9541 | | 4.85 | [0.75; 31.49] | 1.6% | 2.85 |
| | -0.41 0.7188 | | 0.67 | [0.16; 2.73] | 2.7% | 3.9% |
| WangL_RH | -1.68 3.2101 - | + | 0.19 | [0.00; 100.19] | 0.1% | 0.4% |
| Fixed effect model | | - | 1.97 | [0.79; 4.90] | 6.5% | |
| Random effects model | | 6 | 2.06 | [0.58; 7.30] | | 10.4% |
| Heterogeneity: $l^2 = 39\%$, $\tau^2 = 0.6173$ | 3, p = 0.18 | | 2.00 | Feiner 1990] | | 10,000 |
| Sev = PROGRESSION IN SEVE | RITY CATEGORY | | | | | |
| Zhao W_SXH | 3.47 3.2501 | | 32.26 | 0.06; 18839.23] | 0.1% | 0.35 |
| | | | | | | |
| Chao C_NFHJCH | 2.77 3.3277 | | | [0.02; 10819.14] | 0.1% | 0.3% |
| Yan X_HNU | 1.02 1.1756 | 12 | 2.77 | [0.28; 27.72] | 1.0% | 2.19 |
| Zhang L_WUH | -0.37 0.5212 | | 0.69 | [0.25; 1.91] | 5.2% | 5.2% |
| BI Q_STPH | 3.47 3.3354 | | 31.99 | [0.05; 22083.43] | 0.1% | 0.3% |
| Fixed effect model | | 4 | 1.06 | [0.43; 2.61] | 6.6% | - |
| Random effects model | | 4 | 1.17 | [0.42; 3.25] | 0.000 | 8.39 |
| Heterogeneity: $l^2 = 4\%$, $\tau^2 = 0.0980$, | p = 0.38 | | | | | |
| Sev = IMV | | | | | | |
| Liao Xuelian_MC | 2.86 1.2803 | 1 | 17.50 | [1.42; 215.20] | 0.9% | 1.8% |
| | 2.00 1.2000 | | | | | 1.0 / |
| Fixed effect model | | | | [1.42; 215.20] | 0.9% | |
| Random effects model Helerogeneity: not applicable | | | 17.50 | [1.42; 215.20] | - | 1.89 |
| | | 10 mar - | 100 | | 5001010 | |
| Fixed effect model | | 0 | 1.46 | | 100.0% | 100 000 |
| Random effects model | | 0 | 2.21 | [1.51; 3.24] | | 100.09 |
| Heterogeneity: /2 = 42%, t2 = 0.4663 | | | | | | |

Candidate variable: Cancer (solid or active haematologic cancer), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | | (random |
|--|----------------|-----------------|---------|--------------------------------|-------------|------------|
| Sev = ICU | | П | | | | |
| Huang C JYH | -1.47 3.3503 - | | 0.23 | [0.00; 164.05] | 0.1% | 0.19 |
| Huang C_JYH Wang D_ZH | 0.69 0.6770 | ++- | 2.00 | [0.53; 7.54] | 2.5% | 2.79 |
| Din X_SPH | 0.44 1.4312 | I | 1.56 | [0.09; 25.76] | 0.6% | 0.69 |
| Yang L_YCPH | 0.69 1.1728 | | 2.00 | [0.20; 19.91] | 0.8% | 0.95 |
| Lei S_RHZHTHC | 0.63 0.7853 | 10 | 1.88 | 10.40; 8.741 | 1.9% | 2.09 |
| | | TL. | 3.50 | | 7.2% | 6.67 |
| Colombi D_GdSH | 1.25 0.4008 | 17- | | [1.60; 7.68] | | |
| Argenziano M_NYP/CUIMC | -0.12 0.3109 | | 0.89 | [0.48; 1.64] | 12.0% | 9.65 |
| Hu D_UH | -1.10 1.0820 | | 0.33 | [0.04; 2.78] | 1.0% | 1.15 |
| Calligeros M_MC | 1.08 0.7377 | ++ | 2.95 | [0.69; 12.51] | 2.1% | 2.39 |
| Fixed effect model | | 19 | 1.55 | [1.05; 2.31] | 28.2% | 1000-100 |
| Random effects model | | 4 | 1.64 | [0.97; 2.79] | | 25,99 |
| teterogeneity: 1 ² = 25%, 1 ² = 0.14 | 91, p = 0.22 | | | | | |
| Sev = CRITICAL (Severe ARD | | | 12/22 | 2012 - EUCH | | 100.31 |
| Liang W_MC | 1.38 0.4628 | | 3.99 | [1.61; 9.88] | 5.4% | 5.29 |
| No P_ZH | 0.75 0.8527 | -14 | 2.12 | [0.40; 11.30] | 1.6% | 1.79 |
| Nei-jie G_NHC | 0.54 1.0617 | - | 1.72 | [0.21; 13.80] | 1.0% | 1.19 |
| Chen X_GHCTC | 0.69 0.8796 | | 2.00 | [0.38; 11.21] | 1.5% | 1.65 |
| Chen Y_ multicentrico- FCMCH | | | | 0.02; 10822.26] | 0.1% | 0.15 |
| Duan Q_WPH | -0.21 1.2400 | | 0.81 | [0.07; 9.25] | 0.8% | 0.85 |
| | -1.81 0.8507 | | 0.16 | [0.03; 0.87] | 1.6% | 1.79 |
| Liu T_ UH | | | | | | |
| Shijiao Y_HHMU | -1.66 3.2498 - | | | [0.00; 110.96] | 0.1% | 0.19 |
| Hu L_TH | 1.86 0.9241 | + | 6.45 | [1.05; 39.46] | 1.4% | 1.59 |
| J_CHW | -0.25 0.5987 | | 0.78 | [0.24; 2.51] | 3.2% | 3.39 |
| ei P_BH (Multicéntrico) | 1.39 0.7522 | +in- | 4.00 | [0.92; 17.47] | 2.0% | 2.29 |
| FY_JH, SPHCC, TPH | 1.83 0.5928 | | 6.25 | [1.96; 19.98] | 3.3% | 3.49 |
| Zhou M_MC | 0.39 0.5231 | <u>U</u> - | 1.48 | [0.53; 4.13] | 4.2% | 4.29 |
| | 0.47 0.9224 | 0 | | | | |
| Nu J_TFAH | 0.47 0.8224 | | 1.60 | | 1.4% | 1.59 |
| Fixed effect model | | à | 2.08 | [1.39: 3.11] | 27.6% | |
| Random effects model leterogeneity: 1 ² = 39%, 1 ² = 0.39 | 34 0 = 0.07 | 1 | 1.94 | [1.12; 3.39] | | 28.69 |
| a Correlementary and | | | | | | |
| Sev = SEVERE (> 30 breathin | | | | | | 1000 |
| Shi Yu_ZPV | 1.82 0.9257 | | 6.17 | [1.01; 37.86] | 1.3% | 1.59 |
| Sun F_ZHWU | 0.61 0.8461 | | 1.85 | [0.35; 9.70] | 1.6% | 1.89 |
| Zhang G_ZHWU | 0.93 0.6898 | ++- | 2.53 | [0.65; 9.76] | 2.4% | 2.69 |
| ling L_WUH | -2.29 3.2623 | | 0.10 | [0.00; 60.55] | 0.1% | 0.19 |
| Bai X_WPH | 1.10 1.2377 | | 3.00 | [0.27; 33.94] | 0.8% | 0.89 |
| Chen X FHC/LCH | | | | [0.00; 146.37] | 0.1% | 0.12 |
| | -1.38 3.2481 | | | | | |
| la K_YCH | -1.05 3.3431 - | | | [0.00; 245.33] | 0.1% | 0.19 |
| Wang G_PHTCC | -1.24 3.2493 - | | 0.29 | [0.00; 168.40] | 0.1% | 0.19 |
| Wang Y_ZH(Multicéntrico) | 0.59 1.0898 | | 1.80 | [0.21; 15.22] | 1.0% | 1.15 |
| Wang Z_UH | 0.29 1.1956 | | 1.33 | 0.13; 13.89] | 0.8% | 0.95 |
| liancheng L_JH | 1.60 3.3387 | 17 17 | | 0.01; 3447.51] | 0.1% | 0.15 |
| nancheng L_JH | | | | | | |
| Mingfeng H_SPH | 2.09 1.2416 | | 8.07 | [0.71; 91.95] | 0.7% | 0.89 |
| Zeng G_TPHS | 1.25 1.4202 | | 3.48 | [0.22; 56.30] | 0.6% | 0.69 |
| CaiQ_TPHS | 1.45 1.0110 | | 4.25 | [0.59; 30.83] | 1.1% | 1.39 |
| Cao M_SPHCC | -1.44 3.2116 - | | 0.24 | [0.00; 127.92] | 0.1% | 0.19 |
| CM FAHSYU | 0.33 0.8981 | | 1.40 | [0.24; 8.11] | 1.4% | 1.69 |
| IX_WFPH | -1.22 3.2670 - | | | [0.00; 178.74] | 0.1% | 0.19 |
| Colaneri M_PSM | 3.10 1.6790 | | | 0.83; 596.34] | 0.4% | 0.59 |
| | | | | | | |
| Chen W_YH | -0.24 3.3522 | | | [0.00; 563.79] | 0.1% | 0.19 |
| J J_CHW | 1.10 0.6854 | | 3.01 | [0.78; 11.52] | 2.5% | 2.69 |
| J_CHW WC_TH | 0.70 0.4960 | 12 | 2.02 | [0.76; 5.34] | 4.7% | 4.69 |
| Wang L_SPH | -0.43 3.3468 - | | 0.65 | [0.00; 458.56] | 0.1% | 0.19 |
| Zhang R RH | 2.17 0.8668 | + | 8.80 | [1.61; 48.12] | 1.5% | 1.75 |
| Ge J_UHW | 0.16 0.9302 | | 1.17 | [0.19; 7.24] | 1.3% | 1.59 |
| JX_TH | 0.35 0.4238 | <u><u> </u></u> | 1.42 | [0.62; 3.25] | 6.4% | 6.09 |
| | 0.30 0.4230 | TI. | | | | 0.07 |
| Fixed effect model Random effects model | | Ş | 2.24 | [1.52; 3.30] [1.52; 3.30] | 29.7% | 30.99 |
| teterogeneity: $l^2 = 0\%$, $\tau^2 = 0$, $p =$ | 0.97 | | | | | |
| Sev = OTHER | | | | | | |
| 2i Xiaolong_MC | 1.98 3.2709 | | | 0.01; 4403.39] | | 0.19 |
| ring S_hospitales en Beijing | 3.09 3.3450 | - | | 0.03; 15476.99] | 0.1% | 0.15 |
| Fixed effect model | | | | 0.13; 1219.69] | 0.2% | |
| Random effects model | | | | 0.13; 1219.69] | | 0.29 |
| tandom effects model leterogeneity: $t^2 = 0\%$, $\tau^2 = 0$, $p =$ | 0.81 | | 12.40 | | | - w.d.7 |
| | | | | | | |
| sev = IMV (u Y_FAHG | -0.50 1.2633 | | 0.61 | [0.05; 7.20] | 0.7% | 0.89 |
| fixed effect model | | - | 0.61 | [0.05; 7.20] | 0.7% | _ |
| landom effects model | | - | 0.61 | [0.05; 7.20] | | 0.89 |
| leterogeneity: not applicable | | | | and a start | | |
| Sev = ARDS | | | | | | |
| Sev = ARDS Zhao W BYH | -0.05 1.1851 | | 0.95 | 0.09; 9.67] | 0.8% | 0.9% |
| Dreher M UHA | 0.43 0.8227 | _ | 1.53 | 0.31; 7.69] | 1.7% | 1.95 |
| WangL RH | | | | | | |
| | 2.99 0.7372 | | 19.80 | [4.67; 83.97] | 2.1% | 2.39 |
| Fixed effect model Random effects model | | 2 | | [1.71; 12.02] [0.48; 24.46] | 4.7% | 5.09 |
| teterogeneity: $l^2 = 73\%$, $t^2 = 2.17$ | 33, p = 0.02 | | 2.76% | Ferant Taraol | | - a.d7 |
| Sev = PROGRESSION IN SEV | ERITY CATEGORY | | | | | |
| | | | 15.04 7 | 02-10010 141 | 0.49 | 0.40 |
| Chao C_NFHJCH | 2.77 3.3277 | | | 0.02; 10819.14] | 0.1% | 0.19 |
| | -0.86 3.2516 - | | 0.42 | [0.00; 246.66] | 0.1% | 0.19 |
| | 0.52 0.3943 | * | 1.68 | [0.78; 3.64] | 7.4% | 6.79 |
| Chang L_WUH | 1.69 0.9206 | | 5.42 | [0.89; 32.91] | 1.4% | 1.59 |
| Chang L_WUH | | | 2.02 | [1.00; 4.08] | 9.0% | |
| Chang L_WUH BI Q_STPH | 1.00 0.0200 | K 3 | | | - W. M. 201 | the second |
| Chang L_WUH BI Q_STPH Fixed effect model | 1.00 0.0200 | 2 | | | | |
| fan X_HNU Chang L_WUH BI Q_STPH Fixed effect model Random effects model telemonenty 1 ² - 0% x ² - 0, p - | | \$ | 2.02 | [1.00; 4.08] | | 8.5% |
| Dang L_WUH 8 Q_STPH Fixed effect model Landom effects model Leterogeneity: 1 ² = 0%, 1 ² = 0, p = | | 0-0 | 2.02 | [1.00; 4.08] | | 8.51 |
| Chang L_WUH N Q_STPH ixed effect model Candom effects model | | 0-0 | | [1.00; 4.08] | 100.0% | 8.59 |

Candidate variable: Chronic liver disease, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-C | Weight I (fixed) | Weigl (randon |
|--|---------------|--|---------|-----------------|---------------------|------------------|
| Sev = ICU | | | | | | |
| Huang C_JYH | -1.47 3.3503 | | 0.23 | [0.00; 164.05 | 0.2% | 0.2 |
| Wang D ZH | -2.66 3.2084 | | 0.07 | [0.00; 37.57 | | 0.2 |
| | | | | | | |
| Qin X_SPH | 0.03 0.9398 | -#- | 1.03 | [0.16; 6.50 | | 2.0 |
| Yang L_YCPH | -1.18 3.2506 | | 0.31 | [0.00; 179.33 | | 0.2 |
| Colombi D_GdSH | 0.59 0.9224 | _ <u> j</u> | 1.80 | [0.30; 10.97 | 1 2.1% | 2.1 |
| Argenziano M_NYP/CUIMC | 0.52 0.5529 | <u>_</u> | 1.68 | [0.57; 4.96 | | 5.8 |
| | | T | | | | |
| Kalligeros M_MC | -0.19 3.2565 | | 0.83 | [0.00; 489.51 | | 0.2 |
| Fixed effect model | | * | 1.38 | [0.62; 3.07 |] 10.5% | - |
| Random effects model | | \$ | 1.38 | [0.62; 3.07 | | 10.5 |
| Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p = 0.5$ | 95 | | | | | |
| Sev = CRITICAL (Severe ARDS \$ | Shock or ARM) | | | | | |
| Mo P_ZH | 0.75 0.8527 | | 2.12 | [0.40; 11.30 | 1 2.4% | 2.4 |
| | | Ĩ | | | | |
| Chen X_GHCTC | -0.54 1.1965 | | 0.58 | [0.06; 6.09 | | 1.2 |
| Chen Y_ multicentrico- FCMCH | 1.17 1.2746 | | 3.23 | [0.27; 39.28 | | 1.1 |
| Duan Q WPH | 0.50 1.4273 | i | 1.65 | [0.10; 27.09 | 0.9% | 0.9 |
| Liu T UH | 0.38 3.3491 | i | 1.46 | [0.00; 1032.44 | 0.2% | 0.2 |
| | | 1_ | | | | |
| Shijiao Y_HHMU | 1.36 0.8395 | ++ | 3.91 | [0.75; 20.26 | | 2.5 |
| Hu L_TH | -0.94 3.2228 | | 0.39 | [0.00; 215.88 |] 0.2% | 0.2 |
| Zhou M_MC | 1.24 1.1637 | _ <u>_</u> | 3.44 | [0.35; 33.66 | | 1.3 |
| | 1.19 0.7753 | _i_ | 3.27 | | | |
| Wu J_TFAH | 1.18 0.7753 | 1 | | | | 2.9 |
| Fixed effect model | | • | 2.43 | [1.17; 5.06 | | - |
| Random effects model | | 4 | 2.43 | [1.17; 5.06 | 1 | 12.6 |
| Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p = 0.9$ | 96 | Ĩ. | | 1 | | |
| Sev = SEVERE (> 30 breathings | OR Sat < 90% | | | | | |
| | | 11 | 0.00 | 10.00.000 | | |
| Shi Yu_ZPV | -0.12 0.7574 | | 0.89 | [0.20; 3.92 | | 3.1 |
| Jin-Jin Z MC | 0.37 0.7289 | - <u>¥-</u> | 1.44 | [0.35; 6.03 | 3.3% | 3.3 |
| | 0.39 0.5018 | <u><u>L</u></u> | 1.48 | 0.55; 3.95 | | 7.0 |
| Lu Jiatao_WHH | | T | | | | |
| Song CY_FAHZU | -1.48 1.1804 | <u>+</u> + <u>+</u> - | 0.23 | [0.02; 2.30 | | 1.3 |
| Sun F_ZHWU | 1.01 1.2439 | ! | 2.74 | [0.24; 31.37 | 1.1% | 1.1 |
| Zhang G_ZHWU | 1.45 0.7804 | | 4.26 | 0.92; 19.67 | | 2.9 |
| | | · · · | 4.20 | | | |
| Lei L_CUTGH | 4.19 3.3616 | | - 66.00 | [0.09; 47963.35 | 0.2% | 0.2 |
| Chen X_FHC/LCH | -0.31 0.7760 | | 0.73 | [0.16; 3.34 | 1 2.9% | 2.9 |
| | | . 11 | | | | |
| Feng Z_TXH Ma K_YCH | -1.57 3.2142 | | 0.21 | [0.00; 113.53 | | 0.2 |
| MaK YCH | 0.71 0.6877 | - a- - | 2.04 | [0.53; 7.84 | 3.7% | 3.7 |
| Wang G PHTCC | 0.65 0.6921 | <u></u> | 1.92 | 0.49; 7.46 | 3.7% | 3.7 |
| | | Γ. | | | | |
| Wang Y_ZH(Multicéntrico) | 1.69 1.2333 | | 5.43 | [0.48; 60.92 | | 1.2 |
| Wang Z_UH | -0.85 3.3467 | | 0.43 | [0.00; 302.53 | 0.2% | 0.2 |
| Zhang H_ZH | -1.07 1.1819 | | 0.34 | [0.03; 3.49 | 1.3% | 1.3 |
| Jiancheng L_JH | 0.09 1.2397 | ! | 1.09 | [0.10; 12.39 | | 1.1 |
| Januneng L_JH | | 1 | | | | |
| Mingfeng H_SPH | 0.26 0.6984 | | 1.30 | [0.33; 5.11 |] 3.6% | 3.6 |
| Zeng G_TPHS | 0.55 1.2317 | i | 1.73 | [0.16; 19.38 | 1.2% | 1.2 |
| CaiQ_TPHS | 0.57 0.4467 | <u>u</u> | 1.76 | [0.73; 4.22 | 8.8% | 8.8 |
| | | Ē | | | | |
| Cao M_SPHCC | -1.87 3.1981 | | 0.15 | [0.00; 81.40 | | 0.2 |
| Colaneri M_PSM | 0.49 1.4494 | | 1.62 | [0.09; 27.84 | 1 0.8% | 0.8 |
| Xin L_CHWC/hospitales en Hunar | 1 37 0 7909 | <u>li</u> | 3.92 | [0.85; 18.12 | | 2.9 |
| An L_OHWOmospitales en Hunar | 1.3/ 0./808 | Tim- | | | | |
| YuC_TH | 0.25 0.3323 | | 1.28 | [0.67; 2.45 | | 15.9 |
| Zhang R_RH | 3.33 3.3401 | <u> </u> | 27.93 | [0.04; 19462.06 | 0.2% | 0.2 |
| Yang A | 0.29 0.6540 | <u> </u> | 1.33 | [0.37; 4.80 | 4.1% | 4.1 |
| | | n fi | | | | |
| Zheng F_NHCFH | -2.22 3.2089 | | 0.11 | [0.00; 58.49 | | 0.2 |
| Fixed effect model | | k | 1.48 | [1.09; 2.02 | 70.9% | - |
| Random effects model | | ü | 1.48 | [1.09; 2.02 | | 70.9 |
| Random effects model Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p = 0.9$ | 93 | ľ | 1.46 | [1.00; 2.02 | 1 | 70.9 |
| | | | | | | |
| Sev = OTHER ring S_hospitales en Beijing | 3.90 3.2569 | | 49.18 | [0.08; 29110.25 | 0.2% | 0.2 |
| Fixed effect model | | 1 | | [0.08; 29110.25 | | |
| | | | 40.40 | [0.00, 23110.23 | J U.Z.70 | |
| Random effects model Heterogeneity: not applicable | | | 49.18 | [0.08; 29110.25 | I | 0.2 |
| | | l | | | | |
| Sev = ARDS | -1 40 0 9800 | | 0.25 | 10.05. 4.00 | 0 2494 | 2.4 |
| Dreher M_UHA | -1.40 0.8608 | | 0.25 | [0.05; 1.33 | | 2.4 |
| Fixed effect model | | \diamond | 0.25 | [0.05; 1.33 |] 2.4% | - |
| Random effects model | | | 0.25 | [0.05: 1.33 | | 2.4 |
| Heterogeneity: not applicable | | | 0.2.0 | [a.aa, 1.aa | | £.4 |
| Sev = PROGRESSION IN SEVER | ITV CATEGORY | | | | | |
| | 0.79 0.7136 | <u> </u> | 2.20 | [0.54; 8.92 |] 3.5% | 3.5 |
| | | Line and the second sec | 2.20 | [0.54; 8.92 | | |
| Zhang L_WUH | | | | | | 3.5 |
| Zhang L_WUH Fixed effect model | | <u> </u> | 2 20 | | | |
| Zhang L_WUH Fixed effect model Random effects model | | ► | 2.20 | [0.54; 8.92 | -1 | 0.0 |
| Zhang L_WUH Fixed effect model Random effects model Heterogeneity: not applicable | | > | | | - | 0.0 |
| Zhang L_WUH Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model | | ~ | 1.53 | [1.18; 1.99 |] 100.0% | _ |
| Zhang L_WUH Fixed effect model Random effects model | | | | |] 100.0% | 100.0 |

Candidate variable: Chronic gastric disease: History of peptic ulcer or gastritis, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE SOTE | Odds Ratio | OR | | Weight (fixed) (| Weight random) |
|--|---|----------------|---|---|------------------------|---|
| Zhen L_MC Bal X_WPH | -0.60 0.8549 0.88 0.4875 0.21 0.4888 -0.24 3.3522 - 0.24 0.2561 | | 2.40 1.24 0.79 [0 1.28 1.35 | [0.10; 2.94] [0.92; 6.25] [0.47; 3.22] 0.00; 563.79] [0.77; 2.11] [0.91; 1.99] [0.91; 1.99] | 12.8% 12.7% 0.3% | 4.2% 12.8% 12.7% 0.3% 46.4% |
| Sev = PROGRESSION I Zhao W_SXH Fixed effect model Random effects model Heterogeneity: not applicat | 1.64 1.1709 | SORY | 5.14 | 0.52; 51.03] 0.52; 51.03] 0.52; 51.03] | 2.2% | 2.2% |
| Sev = CRITICAL (Sever Hu L_TH L J CHW Let P_BH (Multoentrico) Fixed effect model Random effects model Heterogenetty: / ² = 0%, 7 ² . | 1.04 0.5955 0.76 0.4945 -2.47 3.2113 | RM) | 2.14 0.08 [2.29 | [0.88; 9.05] [0.81; 5.64] 0.00; 45.87] [1.09; 4.79] [1.09; 4.79] | | 8.6% 12.5% 0.3% 21.3% |
| Fixed effect model Random effects model Heterogeneity: / ² = 0%, 2 ² Residual heterogeneity: / ² | - 0, p - 0.60 | 1 0.1 1 10 100 | 1.55 | (1.10; 2.19) (1.10; 2.19) | | 100.0% |

Candidate variable: Tachypnea, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE SØTE | Odds Ratio | OR | | 95%-CI | Weight (fixed) | Weight (random) |
|--|--|---------------------|--------------------------------|---|-----------------------------------|--|--|
| Sev = ICU Huang C_JYH Fixed effect model Random effects model Heterogeneity: not applicable | 2.85 0.8642 | 4.4 | 17.33 17.33 17.33 | [3.19; [3.19; [3.19; | 94.29] 94.29] 94.29] | 1.3% 1.3% | 18.5% |
| Sev = PROGRESSION IN SEVER Liu W_MC Fixed effect model Random effects model Heterogeneity: not applicable | RITY CATEGORY 1.37 1.0871 | | 3.95 3.95 3.95 | [0.47; [0.47; [0.47; | 33.26] 33.26] 33.26] | 0.8% 0.8% | 16.2% |
| Sev = SEVERE (> 30 breathings Chen G TH Huang H_GEPH Colaneri M_PSM Hongying S_FAHWMU/SAHWMU Fixed effect model Random effects model Heterogenetit: I ² = 78%, τ ² = 3.1179 | 5.57 3.2495 4.06 1.1828 0.98 1.0172 J 0.18 0.1017 | | | [0.45; 15 [5.68; [0.36; [0.98; [1.03; [0.78; | 586.34j 19.63] | 0.1% 0.7% 1.0% 96.0% 97.7% | 4.5% 15.3% 16.9% 24.0% 60.8% |
| Sev = CRITICAL (Severe ARDS Liu J_BDH Fixed effect model Random effects model Heterogeneity: not applicable | Shock or ARM) 4.02 3.2581 | | 55.73 | [0.09; 3 [0.09; 33 [0.09; 33 | 3069.56 | 0.1% 0.1% | 4.5% |
| Fixed effect model Random effects model Heterogeneity: /² = 76%, t² = 2.4568 Residual heterogeneity: /² = 78%, p | | 0.001 0.1 1 10 1000 | 1.31 7.51 | [1.08; [1.66; | 1.60] 33.91] | 100.0% | 100.0% |

Candidate variable: Hypoxemia, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE SOTE | Odds Ratio | OR | | 95%-CI | Weight (fixed) (| Weight (random) |
|--|--|--------------|---|--------------------------------------|---|--------------------------------|---------------------------|
| Sev = PROGRESSION I Llu W_MC Fixed effect model Random effects model Heterogeneity: not applicat | 2.17 0.7720 | EGORY | 8.77 8.77 8.77 | [1.93; [1.93; [1.93; | 39.82] 39.82] 39.82] | 7.3% 7.3% — | 15.0% |
| Sev = CRITICAL (Seven U J CHW Fixed effect model Random effects model Heterogeneity: not applicat | 3.97 3.2074 | ARM) | 53.18 53.18 53.18 | 0.10; | 28570.94] 28570.94] 28570.94] | 0.4% 0.4% | 1.1% |
| Sev = SEVERE (> 30 br Ma K_YCH Zhang H_ZH LIX_TH Fixed effect model Random effects model Heterogeneity: 1 ² = 55%, t ² | 11.75 4.4794 5.60 3.1868 2.99 0.2410 | 50%) | - 127161.00 [270.28 19.86 20.67 172.80 | [0.52; 1 [12.38; [12.91; | 493285.87] 139450.37] 31.85] 33.09] 12775.71] | 0.2% 0.4% 75.0% 75.7% | 0.6% 1.1% 54.5% |
| Sev = IMV Xu Y_FAHG Fixed effect model Random effects model Heterogeneity: not applicat | 4.53 3.1992 | | 92.94 92.94 92.94 | 0.18; | 49135.11] 49135.11] 49135.11] | 0.4% 0.4% | 1.1% |
| Sev = ICU Yang L_YCPH Fixed effect model Random effects model Heterogeneity: not applicat | 3.64 0.5194 | * 0 0 | 38.18 38.18 38.18 | [13.80; [13.80; [13.80; | 105.67] 105.67] 105.67] | 16.2% 16.2% | 26.8% |
| Fixed effect model Random effects model Heterogeneity: <i>I</i> ² = 18%, τ ² Residual heterogeneity: <i>I</i> ² | | 0.001 1 1000 | 21.66 23.21 | [14.39; [12.07; | 32.61] 1 44.62] | 100.0% | 100.0% |

Candidate variable: Dyspnea, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE | seTE | Odds Ratio | OR | | Weigh 95%-CI (fixed | Weight (random) |
|---|---------------|-------------------|--|------------------|----------------------|--------------------------------|--------------------|
| Sev = ARDS Wu C_WJH | 1.45 | 0.3070 | ê. | 4.26 | [2.34; | 7.78] 2.8% | |
| Zhao W_BYH Dreher M_UHA | 1.41 | 0.5948 | 4 | 4.08 4.50 | [1.27; [1.37; | 13.10] 0.8% 14.78] 0.7% | 1.5% |
| Fixed effect model | | | è | 4.27 | [2.62; | 6.95] 4.3% | |
| Random effects model Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p = 0.9$ | 9 | | en eller og en | 4.27 | [2.62; | 6.95] | 4.9% |
| Sev = ICU Huang C_JYH Wang D_ZH | 3.02 | 1.1145 | and at | 20.40 | [2.30; | 181.26] 0.2% | |
| Wang D_ZH Qin X_SPH | 1.98 7.50 | 0.4273 3.1907 | £ | 7.25 1815.75 | [3.14; [3.49; 9 | 16.76] 1.5% 43956.15] 0.0% | |
| Yang L_YCPH Lei S_RHZHTHC | 4.30 | 0.5807 | + | 73.63 | [23.59; [0.79; | 229.82] 0.8% 13.381 0.5% | |
| Colombi D_GdSH | 0.64 | 0.2803 | 1 | 1.90 | [1.10; | 3.29 3.4% | 2.0% |
| Chen J_FAH Argenziano M_NYP/CUIMC | 2.67 | 3.2586 0.1827 | | 14.44 0.83 | [0.02; [0.58; | 8576.37] 0.0% 1.18] 8.0% | 0.1% |
| Zheng X_FAH Fixed effect model | 0.67 | 1.1880 | - | 1.96 1.80 | [0.19; [1.38; | 20.07] 0.2% 2.35] 14.6% | 0.7% |
| Random effects model Heterogeneity: I^2 = 90%, τ^2 = 2.0862, | p < 0.01 | | n na | 6.00 | [1.90; | 18.89] | 10.5% |
| Sev = CRITICAL (Severe ARDS S Li K_CMU | | r ARM) 0.8463 | | 10.89 | [2.07; | 57.20] 0.4% | 1.1% |
| Mo P_ZH | -0.42 | 0.5168 | -F | 0.66 | [0.24; | 1.82] 1.0% | 1.6% |
| Peng YD_WU Wei-jie G_NHC | 0.69 | 0.7224 0.2591 | in the second se | 1.98 5.93 | [0.48; [3.57; | 8.18] 0.5% 9.85] 4.0% | |
| Chen Y_multicentrico- FCMCH Chu J_TH | 1.63 | 0.7325 | _ | 5.10 0.13 | [1.21; [0.02; | 21.43] 0.5% 0.91] 0.3% | 1.3% |
| Duan Q WPH | 0.22 | 0.7889 | + | 1.24 | 0.27; | 5.84] 0.4% 9.021 0.6% | 1.2% |
| Liu T_UH Ying W_MC | 2.26 | 0.5869 | - | 9.60 | [3.04; | 30.33 0.8% | 1.5% |
| Shijiao Y_HHMU Hu L_TH | 2.35 1.20 | 0.8602 0.5597 | ÷ | 10.48 3.32 | [1.94; [1.11; | 56.59] 0.4% 9.93] 0.9% | |
| Liu J_BDH Xu Y_GH | 4.51 1.99 | 3.2309 1.3623 | <u>+</u> | 91.14 7.33 | [0.16; [0.51; | 51268.97] 0.0% 105.91] 0.1% | 0.1% |
| FY_JH, SPHCC, TPH | 2.46 | 0.2891 | | 11.73 | [6.66; | 20.68] 3.2% | 2.0% |
| Zhou M_MC Fixed effect model | 0.68 | 0.3026 | | 1.97 4.15 | [1.09; [3.22; | 3.57] 2.9% 5.35] 15.9% | 2.0% |
| Random effects model Heterogeneity: I^2 = 75%, τ^2 = 0.8218, | p < 0.01 | | . | 3.38 | [1.89; | 6.07] | 19.5% |
| Sev = PROGRESSION IN SEVER | | TEGORY 10.5597 | | - 900 | 0.00; 87632 | 52695.66] 0.0% | 0.0% |
| Zhao W_SXH Chao C_NFHJCH | 2.70 | 3.3387 | | 14.93 | [0.02; [0.51; | 10376.38] 0.0% 9.06] 0.5% | 0.1% |
| Wang X_DFH | 0.73 | 0.2234 | | 2.07 | [1.33; | 3.20] 5.3% | 2.1% |
| Yan X_HNU Zhang L_WUH | 2.56 0.75 | 0.4816 0.1928 | | 12.92 2.11 | [5.03; [1.45; | 33.21] 1.2% 3.08] 7.2% | 1.7% |
| BiQ_STPH Jia M_RHWU | 2.05 | 0.6082 | 5 | 7.76 | [2.36; [1.35; | 25.55] 0.7% 41.72] 0.3% | 1.5% |
| Fixed effect model | 2.01 | 0.0750 | ě. | 2.64 | [2.04; | 3.42] 15.3% | |
| Random effects model Heterogeneity: $I^2 = 62\%$, $\tau^2 = 0.3062$, | p = 0.01 | | sta forse verse verse | 3.80 | [2.12; | 6.81] | 9.8% |
| Sev = SEVERE (> 30 breathings | OR Sat | <90%) | | | | | |
| Young BE_MC Jin-Jin Z_MC | 0.79 | 1.5135 0.3840 | | 2.20 | [0.11; [0.92; | 42.73] 0.1% 4.13] 1.8% | |
| Lu Jiatao_WHH | 0.38 | 0.3402 | | 1.46 | 0.75; | 2.84] 2.3% 5.58] 0.6% | 1.9% |
| Han Y_ RHWU Liu Yo_SCH | 3.83 | 1.1910 | Ť. | 46.00 | [4.46; | 474.81] 0.2% | 0.7% |
| Qi D_multicentrico Zhang G_ZHWU | 1.33 | 0.3644 | ÷. | 3.78 8.27 | [1.85; [4.19; | 7.73] 2.0% 16.32] 2.2% | 1.9% |
| Zhen L_MC Tian S_57 hospitales | 1.65 3.54 | 0.3294 | <u>.</u> | 5.23 34.35 | [2.74; | 9.97] 2.5% 125.50] 0.6% | 1.9% |
| Lei L_CUTGH | 3.85 | 1.1799 | F | 46.80 | [4.63; | 472.73] 0.2% | 0.7% |
| Jing L_WUH Chen G_TH | -1.50 9.29 | 3.3505 4.4936 | | 0.22 10791.00 | [0.00; [1.61; 721 | 158.04] 0.0% 07467.02] 0.0% | |
| Bai X_WPH Chen X_FHC/LCH | 1.40 1.88 | 0.4403 0.3794 | 4 | 4.06 6.57 | [1.71; [3.12; | 9.62] 1.4% 13.82] 1.9% | |
| Ma K_YCH | 0.49 | 1.2525 | 5 | 1.63 | [0.14] | 19.00] 0.2% | 0.7% |
| Wang G_PHTCC Wang Y_ZH(Multicéntrico) | 2.35 1.69 | 0.4894 0.5164 | a the star | 10.45 5.44 | [4.01; [1.98; | 27.28] 1.1% 14.97] 1.0% | |
| Wang Z_UH Zhang H_ZH | 1.17 2.30 | 0.6216 0.6397 | t. | 3.23 9.96 | [0.96; [2.84; | 10.93] 0.7% 34.91] 0.7% | 1.4% |
| Jiancheng L_JH Cao M_SPHCC | 1.03 3.24 | 0.3935 | lá tr | 2.80 25.52 | [1.29; [6.55; | 6.05] 1.7% 99.49] 0.6% | 1.8% |
| Wang Y_CHW | 0.46 | 0.4211 | 15. Te | 1.58 | [0.69; | 3.62] 1.5% | 1.8% |
| CM_FAHSYU FL_GHCTCPLA | 7.77 2.04 | 3.1932 0.7393 | | 2373.43 7.70 | [1.81; | 40057.68] 0.0% 32.81] 0.5% | |
| JX_WFPH MY_multicenter 43 hosp | 7.07 | 3.2374 0.2821 | 2 | 1170.67 5.83 | [2.05; 0 [3.35; | 66974.12 0.0% 10.14 3.4% | |
| Colaneri M_PSM | 0.07 | 0.7357 0.3783 | | 1.08 | [0.25; | 4.55] 0.5% 14.98] 1.9% | |
| Xin L_CHWC/hospitales en Hunan Chen W_YH | 5.75 | 3.2445 | 14 | 314.17 | [3.40; [0.54; 1 | 81487.08 0.0% | 0.1% |
| Minhua Y_ZHWU Xie H_WJH | | 3.2050 0.4738 | | 1796.00 1.50 | [3.36; 9 [0.59; | 60262.37] 0.0% 3.80] 1.2% | |
| YuC_TH Zhang R RH | | 0.2431 0.7987 | Ű. | 1.34 31.10 | [0.83; [6.50; | 2.16] 4.5% 148.80] 0.4% | |
| Yang J WUH | 0.83 | 0.5407 | 1 | 2.29 | [0.79; | 6.60] 0.9% | 1.6% |
| Xie J_UHW ZhangX_MC | 2.20 | 0.3640 0.7201 | - | 2.70 9.02 | [1.32; [2.20; | 5.51] 2.0% 37.00] 0.5% | 1.3% |
| Zheng F_NHCFH LiX_TH | | 0.4886 | ar and a second se | 3.58 4.16 | [1.37; [2.90; | 9.33] 1.1% 5.97] 7.8% | |
| Li Y_TH Fixed effect model | | 1.2076 | | 2.67 | [0.25; [3.34; | 28.44] 0.2% | 0.7% |
| Random effects model Heterogeneity: $l^2 = 68\%$, $\tau^2 = 0.4797$, | p < 0.01 | | | 4.61 | [3.44; [3.41; | 4.47] 48.2% 6.23] | 50.7% |
| Sev = IMV | | | | | | | |
| Xu Y_FAHG Liao Xuelian MC | | 0.6550 0.7362 | 14 - 41 | 2.36 0.95 | [0.65; [0.23; | 8.51] 0.6% 4.04] 0.5% | |
| Fixed effect model Random effects model | 0.00 | 2.1002 | ų, | 1.58 | [0.61; | 4.13] 1.1% | |
| Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p = 0.3$ | 6 | | <u>↓</u> | 1.36 | [0.01; | 4.10] | 2.070 |
| Sev = OTHER Wentao X_IDH | | 0.7958 | | 0.71 | [0.15; | 3.39] 0.4% | |
| Ying S_hospitales en Beijing Fixed effect model | 3.87 | 1.1110 | <u> </u> | 47.78 2.97 | [5.41; [0.84; | 421.61] 0.2% 10.55] 0.6% | |
| Random effects model Heterogeneity: 1 ² = 89%, τ ² = 7.9040, | 0<00 | | - | 5.44 | [0.09; | 333.84] | 1.9% |
| Fixed effect model | | | | 3.28 | [2.96; | 3.62] 100.0% | |
| Random effects model Heterogeneity: $l^2 = 76\%$, $\tau^2 = 0.6653$, | 0 - 0 0 | | r that | 4.23 | [3.33; | 5.38] | 100.0% |
| Residual heterogeneity: 1 ² = 75%, p < | 0.01 | | 0.001 1 1000 | | | | |

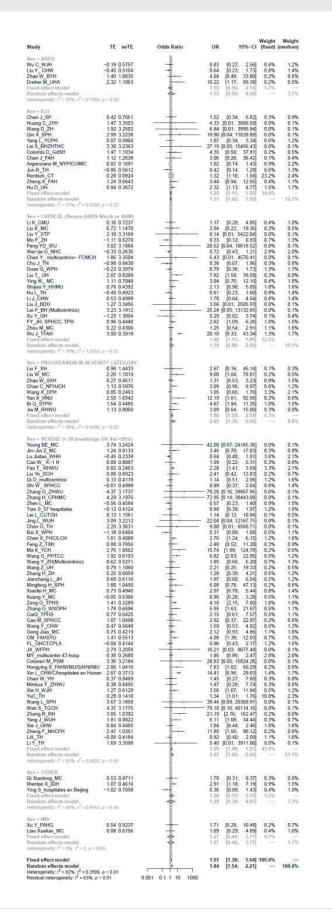
Candidate variable: Chest pain, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | | Weight (random) |
|---|----------------|---------------------|-------|----------------|--------|--------------------|
| Sev = CRITICAL (Severe ARDS S | hock or ARM) | | | | | |
| Li K_CMU | 2.38 1.1468 | | 10.86 | [1.15; 102.77] | 0.6% | 1.3% |
| Mo P_ZH | -3.61 3.2204 - | | 0.03 | [0.00; 14.98] | 0.1% | 0.2% |
| Peng YD_WU | -0.50 0.6155 | | 0.61 | | 2.0% | 3.3% |
| | -0.29 1.2076 | i | 0.75 | | 0.5% | 1.2% |
| | -0.79 0.6884 | _+ | 0.45 | | 1.6% | 2.9% |
| Shijiao Y HHMU | 0.49 0.4948 | 14 | 1.63 | [0.62; 4.31] | 3.1% | 4.3% |
| Hu L_TH | 1.77 1.2423 | <u> </u> | | [0.52; 67.35] | 0.5% | 1.1% |
| | -0.48 0.7296 | <u> </u> | | | 1.4% | 2.6% |
| | | <u> </u> | | [0.15; 2.57] | | |
| | -1.27 3.3456 | | | [0.00; 197.94] | 0.1% | 0.2% |
| | -0.04 0.6375 | -11 | 0.97 | [0.28; 3.37] | 1.9% | 3.2% |
| Zhou M_MC | 0.49 0.3301 | ł | | [0.85; 3.11] | 7.1% | 6.0% |
| Fixed effect model | | Pi | | [0.82; 1.80] | 19.0% | |
| Random effects model | | 연 | 1.16 | [0.71; 1.89] | | 26.2% |
| Heterogeneity: $I^2 = 20\%$, $\tau^2 = 0.1258$, I | p = 0.25 | | | | | |
| Sev = SEVERE (> 30 breathings (|)R Sat <90%) | | | | | |
| | -2.88 3.1909 | , i | 0.06 | [0.00; 29.27] | 0.1% | 0.2% |
| Fan T_ RHWU | 0.80 0.2945 | 4 | | [1.25; 3.98] | 8.9% | 6.4% |
| Zhang H_CPHMC | -1.00 1.1483 | Ē | | [0.04; 3.51] | 0.6% | 1.3% |
| | 1.24 0.5922 | · [[| 3.45 | [1.08; 11.02] | 2.2% | 3.5% |
| Zhen L_MC | -1.50 3.3505 | | 0.00 | [1.06; 11.02] | | 3.5% |
| | | | | [0.00; 158.04] | 0.1% | |
| Chen G_TH | 2.23 1.0494 | <u> </u> | | [1.19; 72.99] | 0.7% | 1.5% |
| | -0.52 0.8306 | <u>+ </u> ! | 0.60 | | 1.1% | 2.2% |
| Mingfeng H_SPH | 2.25 0.4600 | - + - | | [3.86; 23.41] | 3.6% | 4.6% |
| Kuang Y_MC | 0.56 0.4843 | -++- | 1.75 | | 3.3% | 4.4% |
| Zeng G_TPHS | 1.57 0.7753 | H+ | 4.80 | [1.05; 21.92] | 1.3% | 2.4% |
| Cao M SPHCC | 0.87 0.6919 | | | [0.62; 9.29] | 1.6% | 2.8% |
| FL_GHCTCPLA | 1.68 0.5844 | li. | 5.39 | [1.71; 16.94] | 2.3% | 3.5% |
| JX_WFPH | 0.18 1.1690 | i | | [0.12; 11.86] | 0.6% | 1.3% |
| Xin L_CHWC/hospitales en Hunan | | <u>1</u> | | [0.73; 6.71] | 2.4% | 3.7% |
| | -2.20 3.2089 | | | [0.00; 59.87] | 0.1% | 0.2% |
| YuC_TH | 0.57 0.1571 | · 📙 | | [1.30; 2.40] | | 8.1% |
| | 1.26 0.6263 | li. | | | | 3.2% |
| Wang L_SPH | | H+ | | [1.04; 12.09] | 2.0% | |
| | -0.44 0.3322 | | | [0.34; 1.23] | 7.0% | 6.0% |
| Li Y_TH | 1.25 0.9449 | | | [0.55; 22.30] | | 1.8% |
| Fixed effect model | | 19 | | [1.60; 2.42] | 69.8% | |
| Random effects model | | Ŷ | 2.23 | [1.50; 3.33] | | 57.2% |
| Heterogeneity: $I^2 = 54\%$, $\tau^2 = 0.3094$, I | o < 0.01 | | | | | |
| Sev = ARDS | | | | | | |
| Liu Y_ CHW | -0.25 0.7890 | | 0.78 | [0.17; 3.66] | 1.2% | 2.4% |
| Zhao W BYH | 0.96 0.7292 | 44 | | [0.62; 10.86] | | 2.6% |
| Fixed effect model | | <u> </u> | | [0.52; 4.27] | | |
| Random effects model | | I. | | [0.46; 4.80] | | 5.0% |
| Heterogeneity: $I^2 = 20\%$, $\tau^2 = 0.1476$, J | 0 = 0.26 | T | 1.40 | [3.40, 4.00] | | 3.070 |
| | | | | | | |
| Sev = IMV | 0.01.0.7010 | li | 2.25 | 0.54. 0.443 | 1.45 | 2.00 |
| Xu Y_FAHG | 0.81 0.7319 | T <u>r</u> | | [0.54; 9.44] | | 2.6% |
| Fixed effect model | | | | [0.54; 9.44] | 1.4% | |
| Random effects model | | ₽ | 2.25 | [0.54; 9.44] | | 2.6% |
| Heterogeneity: not applicable | | | | | | |
| Sev = ICU | | | | | | |
| Jun R TH | 1.08 0.4265 | <u> -</u> | 2.02 | [1.27; 6.77] | 4.2% | 4.9% |
| | 1.00 0.4200 | E C | | | | 4.8% |
| Fixed effect model | | E | | [1.27; 6.77] | 4.2% | 1.000 |
| Random effects model | | 2 | Z.93 | [1.27; 6.77] | | 4.9% |
| Heterogeneity: not applicable | | | | | | |
| Sev = PROGRESSION IN SEVERI | TY CATEGORY | , II | | | | |
| BiQ STPH | 0.68 0.5218 | LL_ | 1.09 | [0.71; 5.51] | 2.8% | 4.0% |
| | 0.00 0.0218 | II. | | | | 4.076 |
| Fixed effect model | | Ê | | [0.71; 5.51] | | |
| Random effects model | | f? | 1.98 | [0.71; 5.51] | | 4.0% |
| Heterogeneity: not applicable | | | | | | |
| Fixed effect model | | 11 | 1.92 | [1.53; 2.16] | 100.0% | |
| | | L. | | | | 100.09/ |
| Random effects model | | * | 1.85 | [1.40; 2.43] | | 100.0% |
| Heterogeneity: 1 ² - 43%, τ ² - 0.2221, 1 | 0 < 0.01 | | | | | |
| Residual heterogeneity: I ² = 45%, p < | 0.01 | 0.001 0.1 1 10 1000 | | | | |

Candidate variable: High fever (more than 39°C), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE se | TE (| Odds Ratio | OR | 95%-CI | Weight (fixed) | Weight (random) |
|---|---|---|----------------------------|--|--|---|--|
| Sev = ARDS Wu C_WJH Fixed effect model Random effects mode Heterogeneity: not applic: | | 963 | - | 2.15 2.15 2.15 | [1.20; 3.83] [1.20; 3.83] [1.20; 3.83] | 21.2% 21.2% | 10.6% 10.6% |
| Sev = ICU Huang C_JYH Fixed effect model Random effects mode Heterogeneity: not applica | | 336 | 101 | 0.46 0.46 0.46 | [0.10; 2.07] [0.10; 2.07] [0.10; 2.07] | 3.2% 3.2% | 4.9% 4.9% |
| Sev = CRITICAL (Seve Wei-jie G_NHC Liu T_UH Shijiao Y_HHMU Hu L_TH Liu J_BDH Xu Y_GH Fixed effect model Random effects mode Heterogenetly: J ² = 0%, t ² | 0.29 0.6 2.35 3.2 3.52 3.3 1.38 0.6 -0.47 1.1 -1.25 3.2 | 155 152 - 187 131 165 197 | ++ ++ ++ ++ ++ | | [0.40; 4.45] [0.02; 5603.29] [0.05; 23585.56] [1.19; 13.21] [0.06; 6.03] [0.00; 168.77] [0.93; 4.44] [0.93; 4.44] | 0.2% 0.2% 5.0% 1.4% | 6.3% 0.4% 0.4% 6.3% 2.7% 0.4% 16.5% |
| Sev = SEVERE (> 30 b Zhang G_ZHWU Zhang H_CPHMC Tian S_57 hospitales Jing L_WUH Chen G_TH Chen X_FHC/LCH Wang Z_UH Zhang G_WXDPH Cao M_SPHCC Wang Y_CHW Wang L_SPH Fixed effect model Random effects model Random effects model | 0.51 0.3 2.32 0.9 -0.55 1.0 0.62 0.8 0.62 0.9 -0.63 3.3 -0.41 0.8 1.63 0.4 1.18 0.4 0.14 0.7 2.63 1.2 | 225 103 733 734 734 734 735 724 705 705 705 727 705 727 705 727 705 | *** | 1.67 10.13 0.58 1.05 1.87 5.12 3.27 1.15 13.82 2.30 2.24 | [1.70; 60.29] [0.07; 4.74] [0.22; 5.08] [0.28; 12.31] [0.00; 369.29] [0.13; 3.42] [1.24; 8.59] [0.26; 5.09] [1.15; 165.38] | 1.8% 2.9% 2.0% 0.2% 2.7% 8.4% 7.7% 3.2% 1.2% 44.8% | 9.3% 3.9% 3.0% 4.6% 3.6% 0.4% 4.4% 7.8% 4.9% 2.3% |
| Sev = PROGRESSION Wang X_DFH Yan X_HNU Fixed effect model Random effects mode Heterogeneity: 1 ² = 83%, | -0.66 0.3 1.11 0.6 | 309 235 | <u>+</u> ↓ | 0.52 3.03 0.81 1.17 | [0.89; 10.30] | 19.1% | 9.6% 6.2% |
| Fixed effect model Random effects mode Heterogeneity: 1 ² - 45%, Residual heterogeneity: 1 ² | τ ² = 0.3386, μ | | 0.1 1 10 1 | 1.74 1.78 | [1.33; 2.27] [1.17; 2.70] | 100.0% | 100.0% |

Candidate variable: Fever, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition



Candidate variable: Rhinorrhea, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | | Weight (random) |
|---|---------------------|---------------------|-------|-----------------|--------|--------------------|
| Sev = CRITICAL (Severe ARD) | , | | | | | |
| Peng YD_WU | 0.45 0.8413 | | 1.57 | [0.30; 8.17] | 2.4% | 3.9% |
| Wei-jie G_NHC | -0.52 0.7321 | | 0.59 | [0.14; 2.49] | 3.1% | 4.7% |
| Chu J_TH | 0.96 3.3338 | | | [0.00; 1802.56] | | 0.3% |
| Duan Q_WPH | -3.00 0.5809 | | 0.05 | [0.02; 0.16] | | 6.1% |
| Liu T_ UH | 2.15 3.2103 | | 8.59 | [0.02; 4643.14] | | 0.4% |
| Ying W_ MC | -0.51 0.7463 | | 0.60 | [0.14; 2.59] | 3.0% | 4.5% |
| Shijiao Y_HHMU | -2.82 3.1945 | | 0.06 | | 0.2% | 0.4% |
| Li J_CHW | 0.24 1.4250 | | 1.28 | [0.08; 20.83] | | 1.7% |
| Wu J_TFAH | 0.55 0.4157 | | 1.73 | [0.77; 3.90] | 9.7% | 8.2% |
| Fixed effect model | | 4 | 0.63 | [0.38; 1.05] | 24.4% | |
| Random effects model | | 4 | 0.62 | [0.19; 2.02] | | 30.1% |
| Heterogeneity: $I^2 = 71\%$, $\tau^2 = 1.78$ | 00, <i>p</i> < 0.01 | | | | | |
| Sev = SEVERE (> 30 breathing | | | | | | |
| Young BE_MC | -1.79 3.3747 | | | [0.00; 124.27] | | 0.3% |
| Lu Jiatao_WHH | -2.46 3.2045 | | 0.09 | [0.00; 45.75] | 0.2% | 0.4% |
| Liu Yo_SCH | -3.00 3.2187 - | | 0.05 | [0.00; 27.40] | 0.2% | 0.4% |
| Qi D_multicentrico | -0.15 0.4050 | + | 0.86 | [0.39; 1.91] | | 8.4% |
| Zhang H_CPHMC | -1.42 1.1248 | | 0.24 | [0.03; 2.19] | | 2.5% |
| Zhen L_MC | -3.25 3.1980 - | | | [0.00; 20.37] | 0.2% | 0.4% |
| Lei L_CUTGH | 2.84 1.3127 | | | [1.31; 225.37] | 1.0% | 1.9% |
| Jing L_WUH | -1.50 3.3505 | | 0.22 | [0.00; 158.04] | | 0.3% |
| Chen X_FHC/LCH | 0.68 0.8515 | | 1.97 | [0.37; 10.44] | 2.3% | 3.8% |
| Huang H_GEPH | 0.46 0.5167 | | 1.58 | [0.57; 4.35] | 6.2% | 6.9% |
| Kuang Y_MC | -3.24 3.1885 - | | 0.04 | [0.00; 20.25] | 0.2% | 0.4% |
| Zeng G_TPHS | 0.28 0.5988 | <u></u> | 1.32 | [0.41; 4.26] | 4.7% | 5.9% |
| Hongying S_FAHWMU/SAHWM | IU -0.70 1.0815 | | 0.50 | [0.06; 4.13] | 1.4% | 2.6% |
| Chen W_YH | -1.44 3.2360 | | 0.24 | [0.00; 134.97] | 0.2% | 0.4% |
| YuC TH | 1.02 1.1557 | - <u>+</u> | 2.78 | [0.29; 26.78] | 1.2% | 2.4% |
| Wang L_SPH | -2.18 3.2085 | | 0.11 | [0.00; 60.85] | 0.2% | 0.4% |
| Fixed effect model | | \$ | 1.08 | [0.68; 1.72] | 29.6% | |
| Random effects model | | \$ | 1.08 | [0.68; 1.72] | | 37.3% |
| Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p =$ | 0.54 | | | | | |
| Sev = ARDS | | | | | | |
| Zhao W_BYH | -0.06 0.8613 | <u> </u> | 0.94 | [0.17; 5.11] | 2.2% | 3.7% |
| Dreher M UHA | 2.32 3.3455 | | 10.17 | [0.01; 7165.01] | 0.1% | 0.3% |
| Fixed effect model | | A 1 | | [0.21; 5.61] | 2.4% | |
| Random effects model Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p =$ | 0.49 | | 1.09 | [0.21; 5.61] | | 4.1% |
| | 0.45 | | | | | |
| Sev = ICU Chen J FAH | -3.41 3.2591 - | | 0.03 | [0.00; 19.70] | 0.2% | 0.4% |
| Argenziano M NYP/CUIMC | -0.00 0.2799 | 1 | 1.00 | [0.58; 1.73] | | 10.3% |
| Fixed effect model | 0.00 0.2133 | | 0.97 | [0.56; 1.68] | | 10.570 |
| Random effects model | | Ľ. | 0.86 | [0.21; 3.44] | | 10.6% |
| Heterogeneity: $I^2 = 8\%$, $\tau^2 = 0.4493$ | 2, <i>p</i> = 0.30 | Ť | 0.00 | [0.21, 0.44] | | 10.070 |
| Sev = OTHER | | | | | | |
| Ying S_hospitales en Beijing | -1.38 3.3446 | | 0.25 | [0.00; 176.78] | 0.1% | 0.3% |
| Fixed effect model | | | | [0.00; 176.78] | | |
| Random effects model | | | | [0.00; 176.78] | | 0.3% |
| Heterogeneity: not applicable | | | | [] | | |
| Sev = PROGRESSION IN SEV | ERITY CATEGORY | | | | | |
| Wang X DFH | 0.43 0.3968 | | 1.53 | [0.70; 3.33] | 10.6% | 8.5% |
| Yan X HNU | -2.02 3.1963 | | | [0.00; 69.78] | | 0.4% |
| Bi Q_STPH | 0.14 0.3843 | ÷ | | [0.54; 2.44] | | 8.7% |
| Fixed effect model | - | \$ | | [0.76; 2.23] | | |
| Random effects model | | \$ | | [0.76; 2.23] | | 17.6% |
| Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p =$ | 0.68 | | | , | | |
| Fixed effect model | | • | 0.96 | [0.75; 1.24] | 100.0% | |
| Random effects model | | 4 | 0.89 | [0.60; 1.31] | | 100.0% |
| Heterogeneity: $l^2 = 34\%$, $\tau^2 = 0.30$ | 09, p = 0.03 | | | | | |
| Residual heterogeneity: /2 = 38%, | p = 0.02 | 0.001 0.1 1 10 1000 | | | | |
| | | | | | | |

Candidate variable: Cough, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| TE seTE | Odds Ratio | OR | | 95%-CI | Weight (fixed) | Weight (random) |
|------------------------------|--|--|--|--|---|--|
| -0.02 0.3649 | ÷ | 0.98 | [0.48; | 2.01] | 1.2% | 1.5% |
| | 1. | 0.78 | [0.36; [0.86; | | 1.0% | 1.3% |
| 0.30 0.5747 | + | 1.35 | [0.44; | 4.18] | 0.5% | 0.8% |
| | Į. | 1.11 | [0.71; [0.70; | 1.73] | 3.1% | 4.2% |
| p = 0.33 | | | | | | |
| 0.79 0.8751 | - | 2.20 | [0.40; | 12.23] | 0.2% | 0.4% |
| 3.76 3.1966 | + | 43.02 | [0.08; 22 | 629.01] | 0.0% | 0.0% |
| 0.51 0.6992 | Ŧ | 1.67 | [0.42; | 6.56] | 0.3% | 0.6% |
| 0.08 0.2682 | t_ | 1.08 | [0.64: | 1.83] | 2.2% | 2.0% |
| -0.09 0.1676 | 4 | 0.92 | [0.66; | 1.27] | 5.6% | 2.7% |
| 0.70 0.5807 | t- | | [0.64; | 6.28] | | 0.8% |
| 1.30 0.30 11 | | 1.18 | [0.93; | 1.50] | 10.5% | |
| p < 0.01 | 8 | 1.71 | [1.03; | 2.85] | - | 9.1% |
| hock or ARM) | | | | | | |
| | + | 9.95 | [0.31; | 4.10] | 0.1% | 0.3% |
| 1.22 3.4013 | <u> </u> | 3.37 | [0.00; 2 | | 0.0% | 0.0% |
| 0.41 0.6166 | Ŧ | 1.50 | [0.45; | 5.02] | 0.4% | 0.7% |
| 0.04 0.2716 | t_ | 1.04 4.50 | [0.61; | 1.78] | 2.1% | 2.0% |
| 0.25 0.7511 | + | 1.29 | [0.30; | 5.61] | 0.3% | 0.5% |
| | | 0.95 | | 2.02] | 1.1% | 1.4% |
| 0.72 0.3512 | - | 2.05 | [1.03; | 4.08] | 1.3% | 1.5% |
| -0.03 0.4090 | Ţ | 0.97 | [0.43; | 2.16] | 0.9% | 1.4% |
| 0.84 0.4421 | + | 2.31 | [0.97; | 5.48] | 0.8% | 1.1% |
| 1.17 1.2609 | ÷. | 3.22 | 10.27: | 38.15] | 0.1% | 0.6% |
| -1.30 0.2800 | + | 0.27 | [0.16; | 0.47] | 2.0% | 1.9% |
| 5.44 3.1688 | f | - 231.21 | 0.46; 115 | 166.86] | 0.0% | 0.0% |
| | | 1.09 1.30 | [0.89; [0.89; | 1.34] 1.90] | 14.3% | 17,5% |
| p = 0.01 | | | | | | |
| 3.46 3.3255 | | 31.67 | 10.05 21 | 444 233 | 0.0% | 0.0% |
| 0.06 0.6584 | + | 1.06 | [0.29; | 3.85] | 0.4% | 0.6% |
| -0.35 0.3808 -0.44 0.5446 | 1 | 0.71 | | 1.49] | 1.1% | 1.4% |
| 0.11 0.2117 | ÷ | 1.12 | [0.74; | 1.70] | 3.5% | 2.4% |
| 0.97 0.6379 0.37 0.2150 | t. | 2.63 | 10.95 | 9.19] | 3.4% | 0.7% |
| 0.82 0.3061 | ŀ | 2.27 | [1.25; | 4,15 | 1.7% | 1.8% |
| 0.23 0.0007 | ł | 1.30 | [1.03; | 1.64] | 0.4% | 0.6% |
| p = 0.23 | í. | 1.23 | 10.20 | rival | | 10.0 % |
| OR 5at <90%) | | 8753 | 1020425 | | 121610 | 10000 |
| 0.00 1.3416 1.01 0.4636 | | 2.75 | [0.07; | 13.87] | 0.7% | 0.2% |
| -0.07 0.2280 | t | 0.93 | [0.59; | 1.45] | 3.0% | 2.3% |
| 1.25 0.2595 | T- | 3.48 | [2.09; | 5.79] | 2.3% | 0.9% |
| -0.92 0.7853 | -1 | 0.40 | [0.09; | 1.86] | 0.3% | 0.5% |
| -0.05 0.4071 | 1 | 0.95 | [0.43; | 2.10] | 0.9% | 1.6% |
| 0.22 0.3249 | t | 1.25 | [0.66; | 2.36] | 1.5% | 1.7% |
| 0.68 0.3540 | + | 1.98 | [0.99; | 3.95] | 1.3% | 1.5% |
| 0.42 0.3262 | t | 1.52 | [0.80; | 2.87] | 1.5% | 1.6% |
| 0.22 0.9145 | + | 1.25 | [0.21; | 7.50] | 0.2% | 0.4% |
| -1.35 1.2599 0.21 0.4283 | -1 | 0.26 | [0.02; [0.53; | 2.871 | 0.1% | 0.2% |
| 0.62 0.3409 | F | 1.86 | [0.95; | 3.62] | 1.3% | 1.6% |
| | T. | 2.10 | [0.74; | 3.04] | 0.5% | 0.8% |
| 0.65 0.3780 | + | 1.91 | [0.91; | 4.00] | 1.1% | 1.4% |
| 0.11 0.6041 | 1 | 1.11 | [0.34; | 3.63] | 0.4% | 1.0% |
| -0.28 0.5627 | + | 0.76 | 0.25; | 2.28] | 0.5% | 0.8% |
| -0.62 0.4853 | - | 0.54 | [0.21; | 1.39] | 0.7% | 1.2% |
| 0.82 0.4914 | E | 2.28 | [0.87; | 5.96] | 0.6% | 1.0% |
| 0.42 0.4205 | F | 1.52 | [0.67; | 3.47] | 0.9% | 1.2% |
| 0.50 0.2665 | 1 | 1.65 | [0.98; | 2.77] | 2.2% | 2.0% |
| -0.55 0.4985 | 4 | 0.58 | [0.22; | 1.53] | 0.6% | 1.0% |
| -0.42 0.4095 0.34 0.3993 | 1 | 0.66 | [0.29; [0.64] | 1.47] | 0.9% | 1.3% |
| 4.16 3.1955 | + | 64.31 | [0.12; 33 | 747.31 | 0.0% | 0.0% |
| 0.62 0.2708 | 1 | 1.85 | [1.09; [0.19; | 2.61] | 0.4% | 2.0% |
| 0.61 0.4553 | t | 1.84 | [0.75; | 4,49] | 0.8% | 1.1% |
| 0.97 0.7501 | Į. | 2.64 | [0.61; | 11.50] | 0.3% | 0.5% |
| 0.04 0.5191 | t | 1.04 | [0.38; | 2.88] | 0.6% | 0.9% |
| -0.04 0.6505 | Ŧ | 0.96 | [0.27: | 3.43 | 0.4% | 0.6% |
| 0.68 0.5514 | t_ | | [0.67; | 5.84] | | 0.8% |
| 0.64 0.5348 | - | 1.90 | [0.67; | 5.43] | 0.5% | 0.9% |
| 0.40 0.4368 | Ţ | 1.17 | [0.58; | 2.34] | 1.2% | 1.5% |
| -0.03 0.1993 | 1 | 0.97 | [0.66; | 1.44] | 3.9% | 2.5% |
| -0.10 0.8893 | 1 | 1.39 | [1.25; | 1.53] | 0.2% | 0.4% |
| p = 0.13 | 1 | 1.37 | [1.21; | 1,56] | | 55.2% |
| | | | | | | |
| -0.66 1.1825 | | 0.51 | [0.05; | 5.22] | 0.1% | 0.2% |
| -0.06 0.4479 0.23 0.5541 | 1 | 0.94 | 0.39; | 2.26] | 0.8% | 1.1% |
| | 4 | 0.99 | 0.52; | 1.91] | 1.4% | |
| 8 | Î | 0.99 | 10.52; | 1.91] | - | 2.2% |
| | | | | | | |
| | | 1.41 | 10.38; | 5.26] | 0.3% | 0.6% |
| 0.34 0.6712 | | | 10 00 | 1 000 | 0.34 | 0.04 |
| 0.34 0.6712 -0.93 0.7298 | 4 | 0.39 | [0.09; [0.30; | 1,65] | 0.3% | 0.5% |
| -0.93 0.7298 | 400- | 0.39 | [0.09; [0.30; [0.22; | 1,65] 2.07] 2.69] | | 1.1% |
| | 100 | 0.39 | [0.30; | 2.07] 2.69] | | |
| | -0.02 0.3649 -0.02 0.3649 1.07 0.224 0.30 0.5747 -0.30 0.5747 -0.30 0.5747 -0.30 0.5747 -0.30 0.5747 -0.50 0.5763 -0.50 0.5763 -0.50 0.5692 -0.50 0.565 -0.50 0.50 -0.50 0.50 -0. | -0.02 0.3849 -0.22 0.3849 -0.30 0.5747 -0.30 0.5747 -0.50 0.5751 -0.50 0.5697 -0.50 0.569 -0.50 0.559 -0.50 0.50 0.559 -0.50 0 | -0.02 0.3649 -0.02 0.3649 -0.02 0.3649 -0.02 0.3649 -0.03 0.5774 -0.03 0.5774 -0.13 0.79 0.8751 -0.33 0.79 0.8751 -0.33 0.79 0.8751 -0.08 0.1675 -0.09 0.175 -0.00 0.4090 -0.07 0.150 -0.00 0.4090 -0.07 0.150 -0.00 0.4090 -0.07 0.150 -0.00 0.4090 -0.07 0.200 -0.00 0.4090 -0.00 0.400 -0.00 0.400 -0.00 0.4000 -0.00 0.4000 - | -0.22 0.3649 -0.23 0.3649 -0.24 0.3645 -0.30 0.5747 -1.35 0.044 -0.13 0.05747 -1.35 0.044 -1.31 0.76 -1.31 0.76 -1.31 0.76 -1.31 0.76 -1.31 0.76 -1.31 0.040 -1.31 0.76 -1.31 0.040 -1.31 0.05 -1.31 0.05 -1.30 0.05 -1. | TE seTE Odds Raio OR 95%-CI -0020 3849 -078 0.36 201 0.37 0.36 201 0.30 0.5747 -0.55 0.36 1.35 0.44 2.91 10.86 951 0.30 0.5747 -0.55 0.44 4.18 1.11 10.71; 1.73 0.30 0.5747 -0.55 0.46 2.20 10.46 1223 0.70 0.5807 -0.76 0.40 1.28 0.66 1.27 0.51 0.6992 -0.66 1.66 1.66 1.29 0.66 1.66 0.70 0.5807 - 2.01 1.046 6.65 1.60 1.03 2.61 0.12 0.66604 - 1.27 10.33 4.10 10.33 4.50 0.22 0.01666 - 9.95 11.24 79.55 1.20 0.12 0.6661 - 1.27 1.033 4.51 1.03 0.51 0.12 0.6661 - 1.27 1.036 6.51 < | TE odds Ratio OR 9%-CI (fixed) -020 03649 - 076 036: 170 125: 036: 170 107 06200 - 291 086: 9810 044: 058; 030 030 05747 - 135 076: 1086; 120: 010; 123; 028; 0370 079 08751 - 220 040; 123; 028; 030; 0574 076: 0876 - 096; 024; 046; 033; 056; 033; 056; 0358; 056; 0358; 056; 0166; 022; 0358; 010; 056; 0229; 010; 056; 0166; 022; 010; 056; 0170; 05807 070: 08807 - 167; 026; 2249; 010; 056; 0170; 058; 0170; 0166; 0170; 026; 0171; 058; 0170; 0176; 010; |

Candidate variable: Fatigue, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE | seTE | Odds Ratio | OR | 9 | 5%-CI | Weight (fixed) | Weight (random) |
|---|-----------------|------------------|---|-----------------|--------------------|-------------------|-------------------|--------------------|
| Sev = ICU | 0.55 | 0.0777 | | | 10.10 | 0.00 | 0.00 | |
| Huang C_JYH Wang D_ZH | | 0.6777 0.4699 | | 1.80 2.16 | [0.48; [0.86; | 6.81] 5.44] | 0.5% 1.0% | 1.1% 1.6% |
| Yang L_YCPH | | 0.4091 | | 1.91 | [0.86; | 4.26] | 1.3% | 1.8% |
| Lei S RHZHTHC | | 0.4091 | _ <u>[</u> | 1.85 | [0.38; | 9.081 | 0.3% | 0.8% |
| Colombi D_GdSH | | 0.4037 | - | 1.03 | [0.47; | 2.27] | 1.4% | 1.8% |
| Chen J FAH | | 0.9663 | | 1.06 | 0.16; | 7.06 | 0.2% | 0.6% |
| Jun R_TH | | 0.4394 | | 4.43 | [1.87; | 10.47] | 1.2% | 1.7% |
| Zheng X_FAH | 1.42 | 0.8914 | + | 4.12 | [0.72; | 23.62] | 0.3% | 0.7% |
| Fixed effect model | | | 8 | 2.00 | [1.38; | 2.90] | 6.2% | 40.000 |
| Random effects model Heterogeneity: I ² = 2%, τ ² = 0.0052, p | = 0.42 | | \$ \$ | 2.00 | [1.38; | 2.92] | | 10.2% |
| Sev = CRITICAL (Severe ARDS S | | | | | 10.50 | | | |
| Liu K_MC Mo P_7H | | 0.6324 | | 2.00 0.52 | [0.58; | 6.91] | 0.6% 2.0% | 1.2% 2.1% |
| Mo P_ZH Wei-jie G_NHC | -0.65 -0.46 | | 1 | 0.52 | [0.27; [0.38; | 1.00] 1.05] | 3.3% | 2.1% |
| Chen Y multicentrico- FCMCH | -0.62 | | | 0.54 | [0.11; | 2.53] | 0.4% | 0.9% |
| Chu J TH | -1.47 | 0.7869 | | 0.23 | 0.05; | 1.08] | 0.4% | 0.9% |
| Duan Q_WPH | -0.37 | 0.3844 | | 0.69 | [0.33; | 1.47] | 1.5% | 1.9% |
| Liu T_ UH | | 1.0761 | | 10.29 | [1.25; | 84.83] | 0.2% | 0.5% |
| Liu J_BDH | | 0.6119 | | 2.19 | [0.66; | 7.27] | 0.6% | 1.2% |
| Xu Y_GH Zhou M_MC | | 1.2914 | <u> </u> | 2.86 | [0.23; | 35.91] | 0.1% 2.7% | 0.4% |
| Zhou M_MC Fixed effect model | 0.19 | 0.2875 | <u>T</u> | 1.21 0.83 | [0.69; [0.63; | 2.13] | 2.7% | 2.2% |
| Random effects model | | | 4 | 0.83 | [0.63; [0.58; | 1.44] | | 13.6% |
| Heterogeneity: $I^2 = 52\%$, $\tau^2 = 0.2296$, I | | | den den en e | | | | | |
| Sev = SEVERE (> 30 breathings C Jin-Jin Z_MC | OR Sat -0.13 | | <u> </u> | 0.87 | [0.38; | 2.00] | 1.3% | 1.7% |
| Jin-Jin Z_MC Lu Jiatao_WHH | -0.13 | | 1 | 0.87 | [0.36; | 1.28 | 3.3% | 2.3% |
| | -0.46 | | - | 0.63 | [0.38; | 1.06] | 3.2% | 2.3% |
| Liu Yo_SCH | | 0.8339 | <u>+</u> | 3.52 | [0.69; | 18.05] | 0.3% | 0.8% |
| Qi D_multicentrico | -0.13 | 0.3699 | * | 0.88 | [0.42; | 1.81 | 1.6% | 1.9% |
| Zhang G_ZHWU | 0.39 | 0.3588 | - | 1.47 | [0.73; | 2.98] | 1.7% | 2.0% |
| Zhang H_CPHMC | -0.71 | 0.6996 | | 0.49 | [0.12; | 1.94] | 0.5% | 1.0% |
| Zhen L_MC | 0.55 | 0.3103 | E . | 1.74 | [0.95; | 3.20] | 2.3% | 2.2% |
| Tian S_57 hospitales | | 0.3516 | ŧ | 1.45 | [0.73; | 2.89] | 1.8% | 2.0% |
| Lei L_CUTGH | | 1.1246 | <u> </u> | 10.50 | [1.16; | 95.17] | 0.2% | 0.5% |
| Jing L_WUH | | 0.6880 3.2538 | - F . | 1.49 | [0.39; | 5.72] | 0.5% | 1.0% |
| Chen G_TH Bai X WPH | | 3.2538 0.3547 | - | 41.43 [1.46 | 0.07; 24 [0.73; | 375.31] [2.92] | 0.0% 1.8% | 0.1% 2.0% |
| Chen X_FHC/LCH | | 0.3547 | - | 2.87 | [0.73; [1.54; | 5.35] | 2.2% | 2.0% |
| | -0.04 | | | 0.96 | [0.25] | 3.66] | 0.5% | 1.1% |
| Ma K YCH | | 0.6020 | i | 6.66 | [2.05; | 21.68 | 0.6% | 1.2% |
| Wang G_PHTCC | | 0.3651 | - | 2.65 | [1.30; | 5.42 | 1.7% | 2.0% |
| Wang Z_UH | 0.41 | 0.6012 | | 1.50 | [0.46; | 4.87 | 0.6% | 1.2% |
| Zhang H_ZH | 0.16 | 0.4921 | - <u>k</u> - | 1.18 | [0.45; | 3.09 | 0.9% | 1.5% |
| Huang H_GEPH | | 0.4155 | | 1.91 | [0.84; | 4.30] | 1.3% | 1.8% |
| Jiancheng L_JH | -1.20 | | | 0.30 | [0.07; | 1.32] | 0.4% | 0.9% |
| Mingfeng H_SPH | | 0.5196 | | 4.74 | [1.71; | 13.11] | 0.8% | 1.4% |
| | -1.50 | | | 0.22 | [0.06; | 0.78] | 0.5% | 1.1% |
| Zeng G_TPHS CaiQ_TPHS | | 0.3232 0.6752 | - | 2.66 1.25 | [1.41; [0.33; | 5.01] 4.71] | 2.1% 0.5% | 2.1% 1.1% |
| Cao M_SPHCC | | 0.5200 | | 1.25 | [0.33, [0.40] | 3.04] | 0.5% | 1.1% |
| Wang Y_CHW | -0.75 | | _ | 0.47 | [0.40; | 1.12 | 1.2% | 1.7% |
| FL GHCTCPLA | | 0.4948 | £ | 3.79 | [1.44; | 10.01 | 0.9% | 1.5% |
| JX_WFPH | | 0.7909 | | 2.94 | 0.62 | 13.86 | 0.4% | 0.9% |
| MY_multicenter 43 hosp | | 0.2689 | - | 2.56 | [1.51; | 4.34] | 3.1% | 2.3% |
| Colaneri M_PSM | -2.56 | 3.2596 | | 0.08 | [0.00; | 46.06] | 0.0% | 0.1% |
| Hongying S_FAHWMU/SAHWMU | | | | 0.97 | [0.33; | 2.84] | 0.7% | 1.4% |
| Xin L_CHWC/hospitales en Hunan Chen W_YH | | 1.1439 | | 1.67 1.23 | [0.86; [0.13; | 3.23] | 2.0% 0.2% | 2.1% 0.5% |
| YuC_TH | | 0.1165 | C | 1.31 | [1.05; | 1.65] | 16.5% | 2.8% |
| Wang L_SPH | | 0.6978 | ÷ | 3.36 | [0.86; | 13.18] | 0.5% | 1.0% |
| Wan S TGCH | | 0.6948 | k | 3.52 | 0.90 | 13.73] | 0.5% | 1.0% |
| Zhang R_RH | | 0.5811 | i | 12.37 | [3.96; | 38.64 | 0.7% | 1.3% |
| Yang J_WUH | 0.19 | 0.5319 | - <u>F</u> - | 1.21 | [0.42; | 3.42] | 0.8% | 1.4% |
| Zheng F_NHCFH | | 0.4073 | 1 | 1.67 | [0.75; | 3.72] | 1.4% | 1.8% |
| LIX_TH | | 0.1712 | | 1.10 | [0.79; | 1.54] | 7.6% | 2.7% |
| Li Y_TH Fixed effect model | -1.69 | 0.9275 | | 0.18 | [0.03; [1.25; | 1.14] | 0.3% | 0.7% |
| Random effects model | | | 6 | 1.40 | [1.25; [1.22; | 1.57] | 00. ∠ % | 62.0% |
| Heterogeneity: $I^2 = 61\%$, $\tau^2 = 0.2329$, I | o < 0.01 | | | | | | | |
| Sev = ARDS Liu Y_CHW | | 0.3980 | 1. | 2.44 | [1.12; | 5.33] | 1.4% | 1.8% |
| Zhao W_BYH | | 0.7965 | | 0.22 | [0.05; | 1.06] | 0.4% | 0.9% |
| Dreher M_UHA Fixed effect model | -4.26 | 3.2032 - | | 0.01 1.43 | [0.00; [0.71; | 7.53] 2.86] | 0.0% 1.8% | 0.1% |
| Random effects model | | | 4 | 0.52 | [0.05; | 5.29] | 1.0% | 2.8% |
| Heterogeneity: $I^2 = 79\%$, $\tau^2 = 2.7393$, I | 0 < 0.01 | | | 0.32 | [0:00; | 5.23 | | 2.0 /0 |
| Sev = IMV | 0.04 | 0.6312 | | 2.57 | 10.75 | 9.00 | 0.6% | 1.2% |
| Xu Y_FAHG Liao Xuelian_MC | 0.94 -0.96 | | | 2.57 | [0.75; [0.08; | 8.86] 1.94] | 0.6% | 1.2% |
| Fixed effect model | 0.30 | 0.0210 | | 1.28 | [0.48; | 3.41] | 0.3% | 0.0 % |
| Random effects model Heterogeneity: $I^2 = 70\%$, $\tau^2 = 1.2672$, I | n = 0.07 | | - | 1.07 | [0.17; | 6.87] | | 2.0% |
| | v = 0.07 | | | | | | | |
| | -0.86 | 0.5966 | | 0.42 | [0.13; | 1.36] | 0.6% | 1.2% |
| Fixed effect model | | | 4 | 0.42 | [0.13; | 1.36] | 0.6% | |
| Random effects model Heterogeneity: not applicable | | | \$ | 0.42 | [0.13; | 1.36] | | 1.2% |
| Sev = PROGRESSION IN SEVERI | TY CAT | EGORY | ie ie | | | | | |
| Chao C_NFHJCH | | 0.5759 | - | 1.33 | [0.43; | 4.12] | 0.7% | 1.3% |
| Yan X_HNU | 0.69 | 0.4357 | <u>k</u> | 1.98 | [0.84; | 4.66] | 1.2% | 1.7% |
| Zhang L WUH | -0.06 | 0.1923 | ų. | 0.94 | 0.65; | 1.38 | 6.1% | 2.6% |
| Bi Q_STPH | | 0.3093 | * | 3.54 | [1.93; | 6.49] | 2.3% | 2.2% |
| Jia M_RHWU | -0.18 | 1.0593 | 1 | 0.83 | [0.10; | 6.65] | 0.2% | 0.6% |
| Fixed effect model | | | R | 1.41 | [1.06; | 1.88] | 10.5% | 0.201 |
| Random effects model Heterogeneity: I ² = 72%, τ ² = 0.3619, I | o < 0.01 | | | 1.62 | [0.83; | 3.16] | | 8.3% |
| Fixed effect model | | | | 1.34 | [1.22; | 1.47] | 100.0% | |
| Random effects model | | | jo l | 1.41 | [1.19; | 1.68 | | 100.0% |
| Heterogeneity: / ² = 61%, τ ² = 0.2578, / | | | | | | | | |

Candidate variable: Diarrhea, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | Weight (fixed) | Weight (random) |
|---|----------------------------|-----------------|----------------------|---|-------------------|--------------------|
| Sev - ICU | | 1 | | | | |
| Huang C_JYH | -1.58 3.3510 | | | [0.00; 146.02] | | 0.0% |
| Wang D_ZH | 0.85 0.5793 | | 2.35 | [0.75; 7.31] | 1.0% | 1.4% |
| Qin X_SPH Yang L_YCPH | -0.27 1.2444 | | 0.76 | [0.07; 8.76] | 0.2% | 0.3% |
| Yang L_YCPH | 0.52 0.6848 | T | 1.68 | [0.44; 6.42] | 0.8% | 1.1% |
| Lei S_RHZHTHC | 0.25 1.4584 | - | 1.29 | [0.07; 22.41] | 0.2% | 0.3% |
| | -0.19 0.1827 | | 0.83 | [0.58; 1.18] | 10.6% | 6.6% |
| Zheng X_FAH | 0.67 1.1880 | -T. | 1.96 | [0.19; 20.07] | | 0.4% |
| Fixed effect model | 0.01 1.1000 | 5 | 0.95 | [0.69; 1.31] | 13.2% | |
| Random effects model | | 4 | 0.95 | [0.69; 1.31] | | 10.3% |
| Heterogeneity: $l^2 = 0\%$, $c^2 = 0$, $p = 0.7$. | 3 | | | faces: could | | |
| | | | | | | |
| Sev - CRITICAL (Severe ARDS S Mo P_ZH | 0.75 0.8527 | + | 2.12 | [0.40; 11.30] | 0.5% | 0.7% |
| Peng YD WU | -0.09 0.8126 | - | 0.91 | [0.19; 4.48] | | 0.8% |
| Wei-jie G NHC | 0.51 0.5415 | - | 1.66 | [0.57; 4.80] | 1.2% | 1.6% |
| | -0.79 1.2072 | | 0.45 | [0.04; 4.82] | 0.2% | 0.4% |
| Chu J_TH | 2.08 3.2342 | | 7.97 | 0.01; 4515.72 | 0.0% | 0.1% |
| Chu J_TH Liu T_UH | -1.10 0.7078 | | 0.33 | [0.08; 1.33] | 0.7% | 1.0% |
| Ying W_MC | 1.29 0.6392 | | 3.65 | [1.04; 12.77] | 0.9% | 1.2% |
| Shijiao Y_HHMU | 0.66 0.6437 | | 1.94 | [0.55; 6.84] | 0.9% | 1.2% |
| | -0.17 0.4372 | + | 0.85 | [0.36; 1.99] | 1.8% | 2.3% |
| | -0.72 1.1349 | | 0.49 | [0.05; 4.51] | 0.3% | 0.4% |
| | -0.21 0.5102 | Ť | 0.81 | [0.30; 2.21] | 1.4% | 1.8% |
| Zhou M_MC | 0.25 0.4106 | t | 1.29 | [0.58; 2.88] | 2.1% | 2.5% |
| Wu J_TFAH | 2.73 1.0884 | | 15.27 | [1.81; 128.94] | 0.3% | 0.4% |
| Fixed effect model Random effects model | | l. | 1.23 | [0.87: 1.76] | 10.8% | 14.2% |
| Heterogeneity: 1 ² = 26%, x ² = 0.1531, J | p = 0.19 | T I | 1.60 | favore recol | | 1942.09 |
| | | | | | | |
| Sev - SEVERE (> 30 breathings 0 Young BE_MC | -2.96 3.2592 - | | 0.05 | [0.00; 30.75] | 0.0% | 0.1% |
| Jin-Jin Z_MC | 0.42 0.5067 | +- | 1.52 | [0.56; 4.11] | 1.4% | 1.8% |
| Lu Jiatao_WHH | -1.23 0.7475 | | 0.29 | [0.07; 1.27] | 0.6% | 0.9% |
| Fan T_ RHWU | -0.18 0.4366 | + | 0.84 | [0.36; 1.97] | 1.8% | 2.3% |
| Liu Yo SCH | 0.23 0.9425 | + | 1.26 | [0.20; 7.97] | 0.4% | 0.6% |
| Qi D_multicentrico | 0.65 0.7087 | + | 1.91 | [0.48; 7.68] | 0.7% | 1.0% |
| Zhang G_ZHWU | 0.61 0.4495 | <u> 4</u> | 1.83 | [0.76; 4.43] | 1.7% | 2.2% |
| Zhang H_CPHMC | 0.68 0.6814 | | 1.97 | [0.52; 7.48] | 0.8% | 1.1% |
| | -0.84 0.4537 | -+- | 0.43 | [0.18; 1.05] | 1.7% | 2,1% |
| | -1.92 3.2286 | | 0.15 | [0.00; 82.05] | 0.0% | 0.1% |
| Jing L_WUH | 1.55 1.2764 | + | 4.73 | [0.39; 57.69] | 0.2% | 0.3% |
| | -1.35 1.2599 | + | 0.26 | [0.02; 3.06] | 0.2% | 0.3% |
| Chen X_FHC/LCH | 0.21 0.5261 | Ť | 1.23 | [0.44; 3.44] | 1.3% | 1.7% |
| Feng Z_TXH | 1.55 0.9138 | | 4.69 | [0.78; 28.13] | 0.4% | 0.6% |
| Ma K_YCH | 2.05 0.9103 | | 7.75 | [1.30; 46.15] | 0.4% | 0.6% |
| | -0.97 1.0509 | -+ | 0.38 | [0.05; 2.97] | 0.3% | 0.5% |
| Wang Z_UH | -0.02 0.8542 | - | 0.98 | [0.18; 5.22] | 0.5% | 0.7% |
| Zhang H_ZH | 0.77 0.6820 | + | 2.17 | [0.57; 8.26] | 0.8% | 1.1% |
| Jin X_MC | 1.21 0.3155 | + | 3.36 | [1.81; 6.24] | 3.5% | 3.7% |
| Jiancheng L_JH | 0.69 0.8253 | | 1,99 | [0.40; 10.05] | 0.5% | 0.7% |
| Zeng G_TPHS | 0.11 0.4289 | T | 1.12 | [0.48; 2.58] | 1.9% | 2.3% |
| CaiQ TPHS | 1.25 0.6876 | | 3.48 | [0.90; 13.40] | 0.7% | 1.0% |
| Cao M_SPHCC | | | 3.74 | | 0.6% | 0.1% |
| Gong Jiao_MC FL_GHCTCPLA | 1.32 0.7614 | | 0.80 | [0.84; 16.65] [0.09; 7.46] | 0.3% | 0.4% |
| JX WFPH | 0.86 0.7757 | 1. | 2.36 | [0.52; 10.78] | 0.6% | 0.8% |
| MY multicenter 43 hosp | -0.23 0.4869 | 1 | 0.79 | [0.31; 2.06] | 1.5% | 1.9% |
| Colaneri M_PSM | 1.24 1.2669 | | 3.47 | [0.29; 41.53] | 0.2% | 0.3% |
| Xin L_CHWC/hospitales en Hunan | | + | 1.25 | [0.37: 4.25] | 0.9% | 1.3% |
| | -0.24 3.3522 | | 0.79 | [0.00; 563.79] | 0.0% | 0.0% |
| Xie H_WJH | 0.98 0.8036 | + | 2.67 | [0.55; 12.88] | 0.5% | 0.8% |
| YuC TH | 0.20 0.2368 | 6 | 1.22 | [0.76; 1.93] | 6.3% | 5.2% |
| Wang L SPH | -2.18 3.2085 | | 0.11 | [0.00; 60.85] | 0.0% | 0.1% |
| Zhang R_RH | 2.17 0.8668 | ş | 8,80 | [1.61; 48.12] | 0.5% | 0.7% |
| Yang J_WUH | 1.07 0.8218 | ÷ | 2.92 | [0.58; 14.60] | 0.5% | 0.8% |
| Zhang L_WUH | 0.08 0.1880 | - P | 1,09 | [0.75; 1.57] | 10.0% | 6.4% |
| | -0.00 0.4139 | + | 1.00 | [0.44; 2.24] | | 2.5% |
| | -1.39 1.0515 | | 0.25 | [0.03; 1.95] | | 0.5% |
| | -0.10 0.1823 | | 0.91 | [0.64; 1.30] | 10.6% | 6.6% |
| LIT_IN | -0.98 1.2076 | | 0.38 | [0.04; 4.00] | 0.2% | 0.4% |
| Fixed effect model Random effects model | | | 1.23 | [1.05; 1.44] [1.06; 1.67] | 55.2% | 55.1% |
| Random effects model Heterogeneity: $t^2 = 31\%$, $\tau^2 = 0.1230$, (| 0.03 | | 1.33 | [1760]; 1/0/] | | 33,176 |
| | | | | | | |
| Sev – OTHER Qi Xiaolong_MC | -1.15 1.4793 | | 0.32 | [0.02; 5.78] | 0.2% | 0.2% |
| Wentao X_IDH | 0.36 0.6294 | - | 1.44 | [0.42, 4.94] | 0.9% | 1.2% |
| | -0.59 1.1535 | -+- | 0.56 | [0.06; 5.33] | | 0.4% |
| Fixed effect model | 1.1000 | 4 | 0.99 | [0.36; 2.72] | 1.3% | |
| Random effects model | | + | 0.59 | [0.36; 2.77] | - | 1.9% |
| Heterogeneity: $l^2 = 0\%$, $t^2 = 0$, $p = 0.5$ | 5 (| | | | | |
| Sev - ARDS | | | | | | |
| Liu Y CHW | 0.06 0.6120 | + | 1.06 | [0.32; 3.53] | 0.9% | 1.3% |
| Zhao W_BYH | -1.17 3.3434 | | 0.31 | [0.00; 218.20] | 0.0% | 0.0% |
| Dreher M_UHA | 1.39 0.8740 | + | 4.00 | [0.72; 22.18] | | 0.7% |
| Fixed effect model | | | | [0.60; 4.19] | | |
| Random effects model | | P | 1.59 | [0.60; 4.19] | | 2.0% |
| Heterogeneity: $l^2 = 0\%$, $r^2 = 0$, $p = 0.4$ | 1 | | | | | |
| Sex - PROGRESSION IN SEVERI | TY CATEGORY | | | | | |
| Zhao W_SXH | 0.51 0.8395 | - | 1.67 | [0.32; 8.64] | 0.5% | 0.7% |
| | -0.72 1.1874 | | 0.48 | [0.05; 4.97] | 0.2% | 0.4% |
| | 0.16 0.2821 | 4 | 1.18 | [0.68; 2.05] | 4.4% | 4.2% |
| Chao C_NFHJCH | 0.69 0.6807 | + | 1,99 | [0.52, 7.55] | 0.8% | 1.1% |
| Chao C_NFHJCH Wang X_DFH | | 10 | 1.63 | [1.08; 2.47] | 7.9% | 5.8% |
| Chao C_NFHJCH Wang X_DFH Yan X_HNU | 0.49 0 2113 | 2 ¹⁰ | | 10.74 2.47 | 4.0% | 4.0% |
| Chao C_NFHJCH Wang X_DFH Yan X_HNU Zhang L_WUH | 0.49 0.2113 0.24 0.2966 | - | 1.27 | | 1000 | |
| Chao C_NFHJCH Wang X_DFH Yan X_HNU Zhang L_WUH Bi Q_STPH | 0.24 0.2966 | -Ť | 1.27 2.82 | 0.27: 30.021 | 0.2% | 0.478 |
| Chao C_NFHJCH Wang X_DFH Yan X_HNU Zhang L_WUH BIQ_STFH Jia M_RHWU | | + | 2.82 | [0.71; 2.27] [0.27; 30.02] | | 0.4% |
| Chao C_NFHJCH Wang X_DFH Yan X_HNU Zhang L_WUH Bi Q_STPH Ji M_RPHVU Fixed effect model Random effects model | 0.24 0.2966 | 4 | 2.82 | [1.00; 1.87] | 0.2% | 16.5% |
| Chao C_NFHJCH Wang X_DFH Yan X_HNU Zhang L_WUH BI Q_STPH Jia M_RHWU Fixed effect model | 0.24 0.2966 | - | 2.82 | [0.71; 2.27] [0.27; 30.02] [1.00; 1.87] [1.00; 1.87] | | |
| Chao C, NFHJCH Wang X, OFH Yan X, INU Zhang L, WUH Bi Q, STPH Jia M, EHWU Fixed siffect model Random effects model Heterogenety: 7 ² = 0%, x ² = 0, p = 0.8 | 0.24 0.2966 | | 2.82 1.43 1.43 | [1.00; 1.87] [1.00; 1.87] | 18.1% | |
| Chao C_NFHJCH Wang X_DFH Xan X_HNU Zhang L_WUH Bio_STPH Jia M_RHWU Faxed affect model Random effects model | 0.24 0.2966 1.04 1.2061 | | 2.82 1.43 1.43 | [1.00; 1.87] | 10.0% | |

Candidate variable: Anemia, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE SeTE | Odds Ratio | OR | 95%-CI | | Weight (random) |
|--|---|----------------|---|--|---|--------------------|
| Sev = SEVERE (> 30 breath) Zhen L_MC Chen X_FHC/LCH Ma K_YCH Hongying S.FAHWMU/SAHW Chen W_YH YUC_TH Zheng F_NHCFH Fixed effect model Random effects model Heterogenetiy: J ² = 32%, x ² = 0.0 | 0.69 0.3326 -0.24 0.5639 1.13 0.5352 /MU 0.39 1.1561 1.74 0.7698 0.25 0.1044 -0.25 0.7968 | | 2.00 [1.0 0.79 [0.2 3.10 [1.0 1.47 [0.18 5.70 [1.26 1.29 [1.0 0.78 [0.1 1.37 [1.1 1.58 [1.0 | 6; 2.37] 8; 8.84] 5; 14.17] 5; 25.77] 5; 1.58] 6; 3.71] 4; 1.65] | 1.5% 1.6% 0.3% 0.8% 42.7% 0.7% | 1.3% |
| Sev = ICU Jun R_TH Rentsch_CT Fixed effect model Random effects model Heterogeneity: J ² = 0%, τ ² = 0, p | 0.31 0.4725 0.00 0.1066 = 0.52 | | 1.36 [0.5 1.00 [0.8 1.02 [0.8 1.02 [0.8 | 1; 1.23] 3; 1.24] | 41.0% 43.1% | |
| Bev = CRITICAL (Severe AR Zhou M_MC Fixed effect model Random effects model Heterogeneity: not applicable | DS Shock or ARM) -0.34 0.3052 | | 0.71 [0.3 0.71 [0.3 0.71 [0.3 | 9; 1.29] | 5.0% | 12.1% |
| Fixed effect model Random effects model Heterogeneity: $l^2 = 46\%$, $\tau^2 = 0.0$ Residual heterogeneity: $l^2 = 25\%$ | | 0.1 0.5 1 2 10 | 1.17 [1.0 1.24 [0.9 | | | 100.0% |

Candidate variable: Neutrophil count increase (per 1 x 10⁹ U/L), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE | seTE | Odds Ratio | OR | 95%-CI | Weight (fixed) | Weight (random) |
|--|--------------|----------------------------------|---|--------------|--|-------------------|--------------------|
| Sev = ARDS Wu C_WJH Yu T_DPHNH Fixed effect model Random effects model Heterogenetly: 1 ² = 42%, t ² | -0.08 | 0.0264 0.1694)4, p = 0.19 | ● | 0.93 1.15 | [1.10; 1.22] [0.67; 1.29] [1.10; 1.21] [0.92; 1.32] | 2.0% 84.4% | 13.6% |
| Sev = CRITICAL (Seven Mo P_ZH Fixed effect model Random effects model Heterogeneity: not applicat | 0.05 | Shock or ARM 0.0916 | +++++++++++++++++++++++++++++++++++++++ | 1.05 | [0.88; 1.26] [0.88; 1.26] [0.88; 1.26] | 6.9% | |
| Sev = SEVERE (> 30 bro Han Y_RHWU Luo X_ECRH Fixed effect model Random effects model Heterogeneity: <i>1</i> ² = 85%, τ ² | 0.73 0.25 | 0.1593 0.0940 | | 1.29 1.46 | [1.52; 2.84] [1.07; 1.55] [1.24; 1.71] [1.00; 2.57] | 6.5% 8.8% | |
| Fixed effect model Random effects model Heterogeneity: I ² - 77%, t ² Residual heterogeneity: I ² | | | 1 2 | | [1.12; 1.23] [1.04; 1.45] | | 100.0% |

Candidate variable: Low neutrophil count (Less than 1.8 x 10⁹/L), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE | seTE | Odds Ratio | OR | 95 | i%-CI | Weight (fixed) | Weight (random) |
|--|--|--|---------------------|--|--|--|--|---|
| Sev = CRITICAL (Sever Li K_CMU Liu T_UH Shijiao Y_HHMU Hu L_TH Fixed effect model Random effects model Heterogenetty: /² = 0%, τ ² | -1.37 2.79 -0.38 -4.29 | 3.3419 3.1968 0.6600 3.1717 — | ARM) | 16.32 0.69 0.01 0.64 | [0.00; 1] [0.03; 850 [0.19; [0.00; [0.19; [0.19; [0.19; | 85.32] 2.50] 6.84] 2.17] | 0.2% 3.7% | 0.4% 0.4% 7.0% 0.4% |
| Sev = PROGRESSION I Liu W_MC Fixed effect model Random effects model Heterogenelty: not applicat | -0.71 | | | 0.49 0.49 0.49 | [0.06; [0.06; [0.06; | 4.23] | 1.3% 1.3% | 3.2% |
| Sev = SEVERE (> 30 br Qi D_multicentrico Chen X_FHC/LCH Wang Z_UH Zhang G_WXDPH Cao M_SPHCC MY_multicenter 43 hosp Chen W_YH YuC_TH LiX_TH Fixed effect model Random effects model Heterogenetly: I ² = 58%, t ² | 0.23 (-0.10 (-1.60 (-1.43 (-3.02 (-0.51 (-2.20 (-0.22 (-1.18 (| 0.3253 0.4039 0.8121 0.5183 3.1808 | 90%) | 1.26 0.90 0.24 0.05 0.60 0.11 0.81 0.63 0.56 | [0.67; [0.41; [0.04; [0.09; [0.00; [0.21; [0.00; [0.23; [0.17; [0.49; [0.34; | 1.99 0.99 0.66] 24.93 1.71] 59.87] 1.22] 0.55] 0.81] | 9.8% 2.4% 6.0% 0.2% 5.6% 0.2% 35.6% 18.3% | 14.6% 12.3% 5.2% 9.5% 0.4% 9.2% 18.2% 18.2% 85.2% |
| Sev = ARDS Zhao W_BYH Fixed effect model Random effects model Heterogenelty: not applicat | -2.09 | 1.0660 | 101 | 0.12 | [0.02; [0.02; [0.02; | 1.00] | 1.4% 1.4% | 3.3% |
| Fixed effect model Random effects model Heterogeneity: $l^2 = 42\%$, τ^2 Residual heterogeneity: l^2 | | | 0.001 0.1 1 10 1000 | 0.61 0.54 | [0.48; [0.35; | | 100.0% | 100.0% |

Candidate variable: Leukopenia (Less than 3.5-4 x 10⁹/L), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE | seTE | Odds Ratio | OR | 95%-CI | - | Weight (random) |
|---|----------|----------|-----------------|------|------------------------------|---------------|--------------------|
| Sev = ICU | | | 4 | | | | |
| Huang C_JYH | -1.79 | 1.1180 | | 0.17 | [0.02; 1.49] | 0.4% | 1.3% |
| | -1.51 | 0.7537 | | 0.22 | [0.05; 0.97] | 1.0% | 2.3% |
| Fixed effect model | | | | | [0.06; 0.69] | 1.4% | |
| Random effects model | | | \sim | 0.20 | [0.06; 0.69] | | 3.6% |
| Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p = 0.8$ | 4 | | | | | | |
| Sev = CRITICAL (Severe ARDS S | hock o | r ARM) | | | | | |
| Li K_CMU | | 0.6953 | | 1.65 | [0.42; 6.45] | | 2.5% |
| | -1.21 | | | | [0.14; 0.63] | | 4.1% |
| | -1.07 | | | 0.34 | [0.11; 1.04] | 1.7% | 3.1% |
| | -0.41 | 0.5187 | - () | | [0.24; 1.83] | | 3.3% |
| Fixed effect model | | | 4 | | [0.28; 0.76] | | |
| Random effects model Heterogeneity: $I^2 = 45\%$, $\tau^2 = 0.2202$, | p = 0.14 | | • | 0.51 | [0.26; 1.02] | | 13.1% |
| Sev = PROGRESSION IN SEVERI | TYCA | FGORY | | | | | |
| Liu F XH | | 3.3255 - | | 0.03 | [0.00; 21.38] | 0.0% | 0.2% |
| Liu W MC | | 0.7177 | | | [0.16; 2.74] | | 2.4% |
| Wang X DFH | | 0.3038 | 4 | | [0.10, 2.74] | | 4.6% |
| Bi Q_STPH | | 0.2416 | | | [1.64; 4.22] | 9.5% | 5.0% |
| Fixed effect model | 0.01 | | | | [1.18; 2.42] | | 5.070 |
| Random effects model | | | ų. | | [0.57; 2.99] | | 12.3% |
| Heterogeneity: $I^2 = 67\%$, $\tau^2 = 0.3791$, | p = 0.03 | | | 1101 | [0101] 2100] | | 121070 |
| Sev = SEVERE (> 30 breathings (| OR Sat | <90%) | | | | | |
| Jin-Jin Z_MC | -0.38 | 0.4512 | | 0.68 | [0.28; 1.65] | 2.7% | 3.7% |
| Qi D_multicentrico | 0.89 | 0.3226 | ी | 2.44 | [1.30; 4.59] | 5.3% | 4.5% |
| Zhang G_ZHWU | -0.87 | 0.3733 | | 0.42 | [0.20; 0.87] | 4.0% | 4.2% |
| Zhen L_MC | -1.01 | 0.4789 | -= <u>*</u> | 0.36 | [0.14; 0.93] | 2.4% | 3.6% |
| | -0.84 | | | 0.43 | [0.08; 2.41] | 0.7% | 1.9% |
| | -3.82 | 3.2524 - | | 0.02 | [0.00; 12.88] | | 0.2% |
| _ | -0.00 | |) | 1.00 | [0.53; 1.88] | | 4.5% |
| | 0.28 | | | | [0.45; 3.90] | | 3.2% |
| | -1.80 | | | | [0.04; 0.67] | | 2.4% |
| Zhang G_WXDPH | | 0.5183 | | | [0.09; 0.66] | | 3.3% |
| | -0.49 | | | | [0.13; 2.80] | | 2.2% |
| JX_WFPH | | 0.9431 | | | [1.39; 55.87] | | 1.7% |
| MY_multicenter 43 hosp | | 0.4473 | | | [0.30; 1.76] | | 3.8% |
| Colaneri M_PSM | | 0.6200 | | | [0.36; 4.08] | | 2.8% |
| Xin L_CHWC/hospitales en Hunan | | | <u>.</u> | | [0.40; 1.93] | | 4.0% |
| Chen W_YH | | 0.9535 | } • | | [0.67; 28.24] | 0.6% | 1.7% |
| YuC_TH | | 0.1735 | -4 | | [0.65; 1.28] | | 5.4% |
| | -0.77 | | 3 | | [0.13; 1.70] | 1.3% | 2.6% |
| | -0.59 | | 3 | | [0.24; 1.31] | 2.9% | 3.8% |
| - | -0.75 | | | | [0.31; 0.71] | | 5.2% 1.2% |
| Li Y_TH Fixed effect model | -1.29 | 1.1099 | | | [0.03; 2.83] | 0.4% 70.8% | 1.270 |
| Random effects model | | | 1 | | [0.62; 0.88] | 10.070 | 66.0% |
| Heterogeneity: $I^2 = 60\%$, $\tau^2 = 0.2661$, | p < 0.01 | | Y I I | 0.12 | [0.52; 0.99] | | 00.076 |
| Sev = ARDS | | | | | | | |
| Zhao W BYH | -0.88 | 0.5552 | | 0.41 | [0.14; 1.23] | 1.8% | 3.2% |
| Fixed effect model | | | 4 | | [0.14; 1.23] | | |
| Random effects model | | | 4 | | [0.14; 1.23] | | 3.2% |
| Heterogeneity: not applicable | | | 4 | | [,] | | |
| Sev = IMV | | | 4 | | | | |
| Liao Xuelian MC | -0.07 | 0.8423 | <u>-ij</u> | 0 93 | [0.18; 4.86] | 0.8% | 2.0% |
| Fixed effect model | 0.07 | 0.0420 | 3 | | [0.18; 4.86] | 0.8% | 2.0 /0 |
| Random effects model | | | - | | [0.18; 4.86] | 0.0 % | 2.0% |
| Heterogeneity: not applicable | | | 3 | 0.30 | [0.10, 4.00] | | 2.0 /0 |
| notorogeneity. not applicable | | | | | | | |
| | | | 1 | | | | |
| Fixed effect model | | | | | [0.69; 0.92] | | |
| Fixed effect model Random effects model Heterogeneity: /² = 65%, τ² = 0.3642, | | | | | [0.69; 0.92] [0.53; 0.93] | | 100.0% |

Candidate variable: Low lymphocyte count (less than 0.8-1.5x 10⁹/L), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | | 95%-CI | (fixed) | (randon |
|---|-----------------------------|--|------------|-----------|----------|---------|---------|
| Sev = ICU | | | | | | | |
| Huang C_JYH | 1.56 0.8570 | | 4.77 | [0.89; | 25.57] | 0.4% | 0.99 |
| Yang L_YCPH | 1.19 0.5620 | <u>l</u> ∔_ | 3.29 | [1.09; | 9.91] | 1.0% | 1.89 |
| Lei S RHZHTHC | 1.32 1.1782 | <u>_</u> } | 3.73 | [0.37; | 37.58 | 0.2% | 0.59 |
| Colombi D GdSH | 0.83 0.2736 | 1. | 2.30 | [1.35; | 3,931 | | 4.19 |
| | | 17 | | | | | |
| Jun R_TH | 0.99 0.4683 | T. | 2.68 | [1.07; | 6.71] | | 2.49 |
| Rentsch_CT | 0.97 0.2325 | 17 | 2.65 | [1.68; | 4.18] | 5.6% | 4.69 |
| Fixed effect model | | Q. | 2.64 | [1.95; | 3.58] | 12.6% | - |
| Random effects model Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p = 0.9$ | 6 | n frank an ∲rn∳rn∳rne | 2.64 | [1.95; | 3.58] | | 14.49 |
| | | | | | | | |
| Sev = CRITICAL (Severe ARDS S Li K CMU | hock or ARM) 2.03 0.5712 | | 7.60 | [2.48; | 23.28] | 0.9% | 1.89 |
| | | 15- | | | | | |
| Wei-jie G_NHC | 0.97 0.5276 | ÷ | 2.64 | [0.94; | 7.43] | | 2.0 |
| Liu T_ UH | 1.55 0.6755 | - 1 - | 4.71 | [1.25; | 17.72] | 0.7% | 1.49 |
| Shijiao Y HHMU | 1.15 0.3994 | + | 3.17 | [1.45; | 6.93] | 1.9% | 2.9 |
| | 2.27 0.7476 | ÷+ | 9.69 | [2.24; | 41.92 | 0.5% | 1.29 |
| Xu Y_GH | 1.76 1.2696 | Į. | 5.83 | 0.48; | 70.24] | | 0.5 |
| | | 1: | | | | | |
| FY_JH, SPHCC, TPH | 1.19 0.2829 | 17 | 3.30 | [1.90; | 5.75] | | 4.09 |
| Zhou M_MC | 1.29 0.2811 | **** | 3.65 | [2.10; | 6.33] | 3.8% | 4.09 |
| Fixed effect model | | 6 | 3.78 | [2.80; | 5.11 | 12.9% | - |
| Random effects model | | | 3.78 | [2.80; | 5.11] | | 17.89 |
| Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p = 0.7$ | 6 | | 5.10 | [2.00, | and | | 11.0 |
| Sev = PROGRESSION IN SEVERI | TY CATEGORY | | | | | | |
| Liu F XH | 0.00 1.5811 | ! | 1.00 | 10.05 | 22 171 | 0.1% | 0.39 |
| | | | | [0.05; | 22.17] | | |
| Liu W_MC | 0.47 0.6689 | + * } | 1.60 | [0.43; | 5.94] | 0.7% | 1.49 |
| Dong J_FMC | 1.50 0.5053 | | 4.50 | [1.67; | 12.11] | 1.2% | 2.19 |
| BI QÎ STPH | 0.88 0.2837 | 14 | 2.42 | [1.39; | 4.22 | | 4.0 |
| Fixed effect model | | l à | 2.57 | [1.64; | 4.03] | | 1.0 |
| | | 1 X | | | | 3.0 70 | 7.04 |
| Random effects model Heterogeneity: I ² = 0%, τ ² = 0, p = 0.5 | 5 | | 2.57 | [1.64; | 4.03] | | 7.99 |
| | | | | | | | |
| Sev = SEVERE (> 30 breathings (| | 1 | 4.00 | 10.00 | 4 000 | 4 704 | |
| Jin-Jin Z_MC | 0.64 0.4250 | 1 | 1.90 | [0.83; | 4.38] | | 2.79 |
| Xiao M_ECRH | 1.24 0.2092 | 7 | 3.45 | [2.29; | 5.20] | | 4.99 |
| Qi D multicentrico | 0.69 0.5553 | * | 1.99 | 0.67 | 5.91 | 1.0% | 1.99 |
| Zhang G ZHWU | 1.11 0.4382 | 4 | 3.04 | 1.29; | 7.18 | | 2.6 |
| | 1.08 0.3778 | <u>ئا</u> | 2.95 | | | | 3.19 |
| Zhen L_MC | | Ĩ | | [1.40; | 6.18] | | |
| Jing L_WUH | 1.58 0.7660 | 17 | 4.85 | [1.08; | 21.76] | 0.5% | 1.19 |
| Chen G_TH | 3.18 1.2528 | <u></u> + | 24.00 | [2.06; | 279.61] | 0.2% | 0.59 |
| Chen X FHC/LCH | 1.43 0.3304 | i te | 4.18 | [2.19; | 7.98] | 2.8% | 3.59 |
| Tabata S SDFCH | 1.46 0.5652 | <u> </u> | 4.30 | [1.42; | 13.02 | 0.9% | 1.89 |
| | | 1 | | | | | |
| Wang Z_UH | 2.05 0.7147 | 1 | 7.76 | [1.91; | 31.51] | | 1.39 |
| Kuang Y_MC | 1.06 0.4128 | ÷ | 2.89 | [1.29; | 6.50] | 1.8% | 2.89 |
| Zhang G WXDPH | 2.48 0.8191 | } | 11.93 | [2.40; | 59.44] | 0.5% | 1.09 |
| Cao M_SPHCC | 6.83 1.1839 | | | [90.64; 9 | | 0.2% | 0.59 |
| JX WFPH | | t. | | | | 0.4% | 0.99 |
| | 1.96 0.8766 | ÷ | 7.07 | [1.27; | 39.41] | | |
| MY_multicenter 43 hosp | 1.11 0.2694 | 7 | 3.05 | [1.80; | 5.16] | 4.2% | 4.19 |
| Colaneri M_PSM | 3.63 3.2106 | | 37.86 | [0.07; 20 |)468.87] | 0.0% | 0.1 |
| Hongying S FAHWMU/SAHWMU | | | 2.50 | [0.19; | 32.59 | | 0.4 |
| | | 1 | 5.93 | [2.78; | 12.64] | | 3.0 |
| Xin L_CHWC/hospitales en Hunan | | LE T | | | | | |
| Chen W_YH | 6.68 3.2356 | ÷ • • | - 796.25 [| | | 0.0% | 0.1 |
| Fei J_UHHUST | 1.27 0.3092 | \$ - | 3.57 | [1.95; | 6.54] | 3.2% | 3.7 |
| ruC_TH | 0.61 0.1040 | | 1.84 | [1.50; | 2.26] | 28.1% | 6.0 |
| Nan S TGCH | 2.19 0.6555 | T - | 8.93 | [2.47; | 32.26 | 0.7% | 1.5 |
| Li H_TH | 1.04 0.4054 | L <u>i</u> | 2.82 | [1.27; | 6.25] | | 2.8 |
| | | L | | | | | |
| Zheng F_NHCFH | 0.99 0.4243 | s≢ d d ≠ | 2.69 | [1.17; | 6.18] | | 2.7 |
| LIX_TH | 1.34 0.2685 | 17 | 3.81 | [2.25; | 6.45] | | 4.29 |
| Li Y_TH | 0.13 1.3024 | | 1.14 | [0.09; | 14.68] | 0.2% | 0.49 |
| Fixed effect model | | l é | 2.76 | [2.42; | 3.14] | | |
| | | 1 | | | | | E7 / / |
| Random effects model Heterogeneity: / ² = 63%, τ ² = 0.2376, j | 0 < 0.01 | | 3.79 | [2.87; | 5.01] | | 57.5 |
| | | | | | | | |
| Sev = IMV | 4 52 2 1002 | | 02.04 | 0.10.44 | 125 441 | 0.09/ | 0.4 |
| Xu Y_FAHG | 4.53 3.1992 | 1: | | [0.18; 4 | | | 0.19 |
| Liao Xuelian_MC | 0.50 1.1039 | - <u>I+i-</u> | 1.65 | [0.19; | 14.36] | 0.2% | 0.69 |
| Fixed effect model | | \Leftrightarrow | 2.53 | [0.33; | 19.591 | 0.3% | - |
| Random effects model | | | | [0.15; | | | 0.79 |
| -leterogeneity: $l^2 = 30\%$, $\tau^2 = 2.3984$, l | 0 = 0.23 | 1 | 1.00 | L 0110 | 100120] | | |
| Sev = ARDS | | | | | | | |
| | 4.05 0.5711 | | 7.05 | 10.00 | | 0.000 | |
| Zhao W_BYH | 1.95 0.5741 | {* | 7.05 | [2.29; | 21.72] | | 1.89 |
| Fixed effect model | | | 7.05 | [2.29; | 21.72 | 0.9% | _ |
| Random effects model | | 6 | 7.05 | [2.29; | 21.72 | | 1.89 |
| Heterogeneity: not applicable | | 4.0.0 | 1.03 | [2.2.5, | 21112] | | 1.0 |
| Fixed effect model | | | 2.87 | [2.59- | 3 201 | 100.0% | |
| | | 15 | | [2.58; | | | - |
| Jan dam affects madel | | • | 3.47 | [2.91; | 4.14] | | 100.09 |
| Random effects model Heterogeneity: / ² = 44%, τ ² = 0.1235, j | | | | | | | |

Candidate variable: Low platelet count (less than 100-150 x 10⁹/L), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | | Weight (random) |
|--|---|---------------------|---|--|--|--|
| Sev = ICU Huang C_JYH Yang L_YCPH Colombi D_GdSH Jun R_TH Zhou H_UH Fixed effect model Random effects model Heterogeneity: $l^2 = 75\%$, $\tau^2 = 0.7309$ | 0.77 1.4566 0.36 0.4395 -1.06 0.3582 0.59 0.4642 1.07 0.4848 | | 2.17 1.43 0.34 1.80 2.91 1.05 1.28 | | 2.9% 4.4% 2.6% 2.4% 12.5% | 0.7% 4.1% 5.0% 3.9% 3.7% 17.4% |
| Sev = PROGRESSION IN SEVER Liu W_MC Bi Q_STPH Fixed effect model Random effects model Heterogeneity: $l^2 = 0\%$, $\tau^2 = 0$, $p = 0$ | 0.82 0.8937 1.41 0.3129 | , <u> </u> | 2.26 4.09 3.83 3.83 | [0.39; 13.03] [2.21; 7.54] [2.15; 6.83] [2.15; 6.83] | 5. 7% 6.4% | 1.6% 5.6% 7.1% |
| Sev = CRITICAL (Severe ARDS Wei-jie G_NHC Liu T_UH Shijiao Y_HHMU Hu L_TH Zhou M_MC Fixed effect model Random effects model Heterogeneity: $l^2 = 0\%$, $\tau^2 = 0$, $p = 0$ | 0.46 0.2733 3.58 3.1889 1.44 0.6642 1.15 0.6792 1.00 0.2819 | | 1.58 35.75 4.23 3.14 2.71 2.25 2.25 | [0.93; 2.70] [0.07; 18520.52] [1.15; 15.56] [0.83; 11.90] [1.56; 4.71] [1.58; 3.21] [1.58; 3.21] | 0.1% 1.3% 1.2% 7.1% 17.1% | 6.1% 0.1% 2.5% 2.4% 6.0% 17.0% |
| Sev = SEVERE (> 30 breathings Xiao M_ECRH Qi D_multicentrico Zhen L_MC Jing L_WUH Chen G_TH Chen X_FHC/LCH Tabata S_SDFCH Zhang G_WXDPH Cao M_SPHCC JX_WFPH Colaneri M_PSM Hongying S_FAHWMU/SAHWMU Chen W_YH YuC_TH Wan S_TGCH Li H_TH Zheng F_NHCFH LiX_TH Fixed effect model Random effects model | 1.08 0.3129 0.94 0.3382 0.80 0.3655 0.37 0.9828 -2.40 3.3634 0.47 0.3214 -0.11 0.8482 0.56 0.6490 0.88 0.5349 1.88 1.4712 0.05 1.2046 4.89 3.2236 4.29 3.3543 0.19 0.1851 1.23 0.5499 -0.41 0.5116 0.54 0.7096 0.43 0.1910 | | 1.05 - 132.73 | | 4.9% 4.2% 0.6% 0.0% 5.4% 0.8% 1.3% 0.4% 0.3% 0.4% 0.1% 0.1% 0.1% 1.9% 2.1% 1.1% 15.4% 62.5% | 5.6% 5.2% 4.9% 1.3% 0.1% 5.5% 1.7% 2.5% 0.6% 0.9% 0.1% 7.2% 3.2% 3.2% 3.5% 2.2% 5.3% |
| Heterogeneity: $l^2 = 13\%$, $r^2 = 0.0269$ Sev = ARDS Zhao W_BYH Fixed effect model Random effects model Heterogeneity: not applicable | , <i>p</i> = 0.30 1.58 0.9541 | | 4.85 4.85 4.85 | [0.75; 31.49] [0.75; 31.49] [0.75; 31.49] | 0.6% | 1.4% |
| Sev = IMV Liao Xuelian_MC Fixed effect model Random effects model Heterogeneity: not applicable | 2.12 0.8302 | 400 | 8.35 8.35 8.35 | [1.64; 42.49] [1.64; 42.49] [1.64; 42.49] | 0.8% | 1.8% 1.8% |
| Fixed effect model Random effects model Heterogeneity: $l^2 = 48\%$, $\tau^2 = 0.1751$ Residual heterogeneity: $l^2 = 35\%$, p | , p < 0.01 = 0.04 | 0.001 0.1 1 10 1000 | 1.78 1.93 | [1.54; 2.06] [1.52; 2.46] | 100.0% | 100.0% |

Candidate variable: High plasma creatinine (more than 1.5 mg%), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-0 | Weight CI (fixed) | |
|---|-------------------|-----------------|----------|-----------------|----------------------|--------|
| Sev = ICU | | | | | | |
| Huang C_JYH | 0.86 1.0627 | | 2.36 | [0.29; 18.9 | | 1.9% |
| Yang L_YCPH | 1.02 0.4113 | + | 2.78 | [1.24; 6.2 | | 7.6% |
| Jun R_TH | 0.74 0.4299 | 1 1 | 2.09 | [0.90; 4.8 | | 7.3% |
| Fixed effect model | | \$ | 2.42 | [1.38; 4.24 | 4] 13.2% | |
| Random effects model Heterogeneity: $l^2 = 0\%$, $\tau^2 = 0$, $p = 0.8$ | 19 | | 2.42 | [1.38; 4.2 | 4] | 16.9% |
| Sev = PROGRESSION IN SEVER | TY CATEGORY | | | | | |
| Liu W MC | -0.34 1.0621 | | 0.71 | [0.09; 5.6 | 9] 1.0% | 1.9% |
| Bi Q_STPH | 5.97 3.1805 | +÷+ | - 390.04 | [0.77; 198780.3 | 1 0.1% | 0.2% |
| Fixed effect model | | | 1.34 | [0.19; 9.6] | | |
| Random effects model | | 2 | 8.16 | [0.02; 3368.7 | 21 | 2.2% |
| Heterogeneity: $I^2 = 72\%$, $\tau^2 = 14.2782$ | , <i>p</i> = 0.06 | | | [, | | |
| Sev = CRITICAL (Severe ARDS S | | | | | | |
| Wei-jie G_NHC | 2.35 0.6046 | (| 10.53 | [3.22; 34.4 | | 4.8% |
| Liu T_ UH | 0.48 3.3324 | | | [0.00; 1110.3 | | 0.2% |
| Shijiao Y_HHMU | 4.88 3.2103 | -+ ; | 132.00 | [0.24; 71312.1 | | 0.2% |
| Zhou M_MC | 1.13 0.2746 | | 3.10 | [1.81; 5.3 | 1] 14.3% | 10.7% |
| Fixed effect model | | 4 | 3.88 | [2.39; 6.3] | 2] 17.5% | |
| Random effects model | | à () | 5.15 | [1.93; 13.7 | 8] | 15.9% |
| Heterogeneity: $I^2 = 36\%$, $\tau^2 = 0.3444$, | p = 0.20 | t. | | | | |
| Sev = SEVERE (> 30 breathings (| | | | | | |
| Xiao M_ECRH | 1.83 0.3448 | [= | 6.24 | [3.17; 12.2 | | 9.09 |
| Qi D_multicentrico | 2.62 1.1658 | | 13.79 | [1.40; 135.4 | | 1.7% |
| Shi W_ SPHCC | 0.67 0.5388 | 11 | 1.96 | [0.68; 5.6 | | 5.6% |
| Zhen L_MC | 1.46 0.4973 | | 4.32 | [1.63; 11.4 | | 6.2% |
| Chen X_FHC/LCH | 0.76 0.7083 | 11 | 2.13 | [0.53; 8.5 | | 3.8% |
| Zhang G_WXDPH | 0.15 0.5084 | +: | 1.17 | [0.43; 3.1 | | 6.0% |
| Cao M_SPHCC | 1.48 0.7381 | - <u>+-</u> - | 4.39 | [1.03; 18.6 | | 3.6% |
| JX_WFPH | 4.10 3.3578 | | | [0.08; 43592.1 | | 0.29 |
| Hongying S_FAHWMU/SAHWMU | | | 1.83 | [0.32; 10.5 | | 2.69 |
| YuC_TH | 0.85 0.3204 | ÷ | 2.33 | [1.25; 4.3] | 7] 10.5% | 9.69 |
| Yang J_WUH | 2.63 2.2726 | <u>+</u> ; | 13.87 | [0.16; 1192.6 | 4] 0.2% | 0.59 |
| Zheng F_NHCFH | 1.50 1.4290 | | 4.48 | [0.27; 73.7 | | 1.19 |
| LiX_TH | 0.49 0.1960 | + | 1.63 | [1.11; 2.4 | 0] 28.1% | 12.79 |
| Fixed effect model | | 4 | 2.38 | [1.85; 3.0 | 5] 67.1% | |
| Random effects model | | 6 | 2.72 | [1.83; 4.04 | 4] | 62.6% |
| Heterogeneity: $I^2 = 40\%$, $\tau^2 = 0.1647$, | p = 0.07 | | | | | |
| Sev = ARDS | 4 02 2 25 40 | | | 10.00.05.0 | 0.40 | 0.00 |
| | -1.93 3.2549 | | 0.14 | [0.00; 85.3 | | 0.2% |
| Fixed effect model | | | 0.14 | [0.00; 85.3 | | 0.00 |
| Random effects model Heterogeneity: not applicable | | | 0.14 | [0.00; 85.3 | 3] | 0.2% |
| Sev = IMV | | | | | | |
| Liao Xuelian MC | 2.69 0.9953 | <u>+</u> | 14.79 | [2.10; 104.0 | 0] 1.1% | 2.2% |
| Fixed effect model | | \diamond | 14.79 | [2.10; 104.0 | | |
| Random effects model | | \diamond | 14.79 | [2.10; 104.0 | - | 2.2% |
| Heterogeneity: not applicable | | | | [| -1 | |
| Fixed effect model | | 6 | 2.62 | [2.14; 3.2 | 2] 100.0% | |
| | | | | | | |
| Random effects model | | * | 2.95 | [2.16; 4.0 | 3] | 100.0% |
| | | r | 2.95 | [2.16; 4.0 | 3] | 100.0% |

Candidate variable: High LDH (more than 240-250 U/L), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | Weight (fixed) | |
|---|-----------------|--------------------|-------|------------------|-------------------|-------|
| Sev = ICU | | | | | | |
| Huang C JYH | 1.95 1.1145 | <u> </u> | 7.06 | [0.79; 62.72] | 0.4% | 1.7 |
| Yang ĽÝCPH | 2.23 0.5232 | | 9.31 | 3.34; 25.95] | 1.9% | 4.0 |
| Colombi D GdSH | 1.10 0.3494 | <u>.</u> | 3.00 | [1.51; 5.95] | 4.2% | 5.1 |
| Fixed effect model | 1.10 0.0404 | L L | 4.39 | [2.53; 7.62] | 6.4% | 0.1 |
| Random effects model | | | | [2.18; 11.56] | 0.4 /0 | 10.9 |
| Heterogeneity: $I^2 = 42\%$, $\tau^2 = 0.2295$ | <i>p</i> = 0.18 | + • • | 5.01 | [2.10; 11.30] | | 10.9 |
| Sev = CRITICAL (Severe ARDS | shock or ARM) | | | | | |
| Wei-jie G NHC | 1.32 0.3404 | <u>L.</u> | 3.73 | [1.92; 7.27] | 4.4% | 5.2 |
| Duan Q WPH | 1.00 0.4156 | | 2.71 | [1.20; 6.12] | 2.9% | 4.7 |
| Liu T_ UH | 2.93 1.0788 | | | [2.26; 155.34] | 0.4% | 1.8 |
| | | | | | | |
| Hu L_TH | 1.77 0.8641 | | 5.88 | [1.08; 32.01] | 0.7% | 2.4 |
| Zhou M_MC | 1.19 0.4710 | | 3.29 | [1.31; 8.28] | 2.3% | 4.4 |
| Fixed effect model | | | 3.66 | [2.39; 5.60] | 10.7% | - |
| Random effects model | | | 3.66 | [2.39; 5.60] | | 18.5 |
| Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, $p = 0$. | 53 | | | | | |
| Sev = SEVERE (> 30 breathings | | | | | | |
| Qi D_multicentrico | 0.94 0.3436 | 1 .* | 2.57 | [1.31; 5.03] | 4.3% | 5.2 |
| Zhen L_MC | 1.46 0.5089 | -!+- | 4.30 | [1.59; 11.66] | 2.0% | 4.1 |
| Chen X_FHC/LCH | 2.32 0.3669 | | 10.20 | [4.97; 20.94] | 3.8% | 5.0 |
| Tabata S SDFCH | 0.66 0.4810 | += <u>+</u> : | 1.93 | [0.75; 4.95] | 2.2% | 4.3 |
| Wang Z UH | 2.43 0.8343 | | | [2.21; 58.15] | 0.7% | 2.5 |
| Huang H GEPH | 5.39 1.2399 | | | [19.33; 2494.65] | 0.3% | 1.5 |
| Kuang Y MC | 2.11 0.5116 | | | [3.04; 22.59] | 1.9% | 4.1 |
| CaiQ_TPHS | 2.67 0.5046 | | 14.51 | [5.40; 39.02] | 2.0% | 4.2 |
| | | | | | 6.2% | 4.2 |
| MY_multicenter 43 hosp | 0.66 0.2867 | | 1.94 | [1.11; 3.41] | | |
| Hongying S_FAHWMU/SAHWMU | | L | | [2.56; 178.19] | 0.4% | 1.8 |
| YuC_TH | 0.35 0.1252 | + | 1.42 | [1.11; 1.81] | | 6.3 |
| Zhang R_RH | 0.92 0.5809 | - 1 1 - | 2.50 | [0.80; 7.81] | 1.5% | 3.7 |
| Zheng F_NHCFH | 1.55 0.4314 | 11 | 4.70 | [2.02; 10.94] | 2.7% | 4.6 |
| LiX_TH | 1.62 0.2277 | H | 5.06 | [3.24; 7.91] | 9.8% | 5.9 |
| Li Y_TH | 0.69 0.8660 | | 2.00 | [0.37; 10.92] | 0.7% | 2.4 |
| Fixed effect model | | • | 2.64 | [2.23; 3.11] | 70.9% | - |
| Random effects model | | | 4.75 | [2.87; 7.84] | | 61.1 |
| Heterogeneity: $I^2 = 84\%$, $\tau^2 = 0.6911$ | <i>p</i> < 0.01 | | | | | |
| Sev = IMV | | | | | | |
| Xu Y_FAHG | 1.49 0.7446 | <u> ++</u> | | [1.03; 19.16] | | 2.9 |
| Fixed effect model | | | 4.45 | [1.03; 19.16] | 0.9% | - |
| Random effects model | | \sim | 4.45 | [1.03; 19.16] | | 2.9 |
| Heterogeneity: not applicable | | | | | | |
| Sev = PROGRESSION IN SEVER | | | | | | |
| Dong J_FMC | 3.38 1.8722 | + + | 29.35 | [0.75; 1151.35] | 0.1% | 0.7 |
| Zhang L_WUH | 1.12 0.2155 | ÷. | 3.05 | [2.00; 4.65] | 10.9% | 5.9 |
| Fixed effect model | | | | [2.06; 4.78] | | - |
| Random effects model | | | | [0.86; 22.68] | | 6.7 |
| Heterogeneity: $I^2 = 31\%$, $\tau^2 = 0.7877$ | p = 0.23 | | | L, ARIOU | | 0.11 |
| Fixed effect model | | • | 2.89 | [2.51; 3.32] | 100.0% | |
| Random effects model | | \$ | 4.48 | [3.21; 6.25] | | 100.0 |
| Heterogeneity: $l^2 = 75\%$, $\tau^2 = 0.4420$ | p < 0.01 | | | | | |
| | | | | | | |

Candidate variable: LDH increase (per 1 U/L), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE | seTE | Odds Ratio | OR | 95%-CI | | Weight (random) |
|--|-------------------------------|-------------------------------|------------|--------------|--|--------------|----------------------------|
| Sev = ARDS Wu C_WJH Yu T_DPHNH Fixed effect model Random effects mod Heterogeneity: 1 ² = 62%, | 0.01 el | 0.0006 0.0038 0001, p = | 0.11 | 1.01 1.00 | [1.00; 1.01] [1.00; 1.02] [1.00; 1.01] [1.00; 1.01] | 1.8% | 26.0% 12.3% |
| Sev = ICU Chen J_SP Fixed effect model Random effects mod Heterogeneity: not applic | el | 0.0051 | | 1.01 | [1.00; 1.02] [1.00; 1.02] [1.00; 1.02] | | 8.6% |
| Sev = CRITICAL (Sev Mo P_ZH Fan T_RHWU Fixed effect model Random effects mod Heterogeneity: l^2 = 0%, s | 0.00 0.00 | 0.0026 0.0052 | c or ARM) | 1.00 1.00 | [0.99; 1.01] [0.99; 1.01] [1.00; 1.00] [1.00; 1.00] | 1.0% | 17.3% 8.4% |
| Sev = SEVERE (> 30 Han Y_ RHWU Jiancheng L_JH Fixed effect model Random effects mod Heterogenethy: <i>1</i> ² - 82%, | 0.02 0.01 el | 0.0050 0.0023 | + | 1.01 1.01 | [1.01; 1.03] [1.00; 1.01] [1.01; 1.01] [1.00; 1.03] | 5.1% 6.1% | 8.7% 18.7% 27.4% |
| Fixed effect model Random effects mod Heterogeneity: / ² - 66%, Residual heterogeneity: | el , τ ² < 0.00 | 001, p < 0 | • | | [1.00; 1.01] [1.00; 1.01] | 100.0% | 100.0% |
| | | | | | | | |

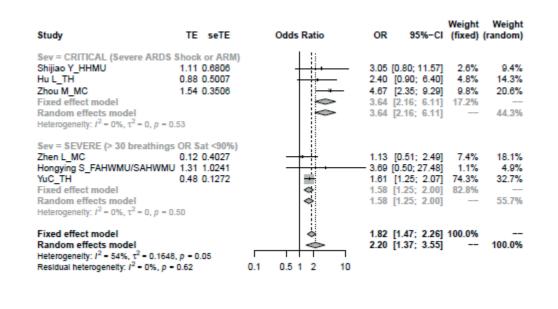
Candidate variable: CK-MB increase (per 1 U/L), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE | seTE | Odds Ratio | OR | 95%-CI | Weight (fixed) | Weight (random) |
|---|--------|-------------------------|------------|------|--|-------------------|--------------------|
| Sev = ARDS Wu C_WJH Fixed effect model Random effects model Heterogeneity: not applicat | | 0.4524 | | 1.82 | [0.75; 4.42] [0.75; 4.42] [0.75; 4.42] | 10.2% | 28.1% |
| Sev = SEVERE (> 30 br Han Y_RHWU Fixed effect model Random effects model Heterogeneity: not applicat | 1.28 (| gs OR Sat <90 0.5052 | | 3.60 | [1.34; 9.69] [1.34; 9.69] [1.34; 9.69] | 8.2% | 25.2% |
| Sev = IMV Liu R_CHW Fixed effect model Random effects model Heterogeneity: not applicat | | 0.1604 | | 1.10 | [0.80; 1.51] [0.80; 1.51] [0.80; 1.51] | 81.5% | 46.7% |
| Fixed effect model Random effects model Heterogeneity: I ² = 65%, t ² Residual heterogeneity: I ² | | | 0.5 1 2 5 | | [0.96; 1.70] [0.85; 3.42] | | 100.0% |

Candidate variable: High D-dimer (more than 500-1000 ng/ml), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | Weight (fixed) | |
|---|-------------------|-----------------------|---------|----------------|-------------------|-------|
| Sev = CRITICAL (Severe ARDS | Shock or ARM) | 1.8 | | | | |
| Gao Y FSH | 2.50 0.9990 | | - 12.13 | [1.71; 85.95] | 0.5% | 1.7 |
| Duan Q WPH | 0.70 0.3865 | ⊢ ∎ <u>i</u> ÷ | 2.02 | [0.95; 4.31] | 3.2% | 5.1 |
| Shijiao Y HHMU | 1.10 0.6726 | | 3.00 | [0.80; 11.21] | 1.0% | 3.0 |
| Hu L_TH | 0.89 0.4571 | | | [0.99; 5.95] | | 4.5 |
| Zhou M MC | 1.96 0.5108 | | | [2.61; 19.32] | 1.8% | 4.0 |
| Fixed effect model | 1.55 0.5100 | | | [2.01; 5.00] | 8.7% | 4.0 |
| Random effects model | | | | [1.89; 6.10] | 0.1 /0 | 18.3 |
| Heterogeneity: $I^2 = 33\%$, $\tau^2 = 0.1454$ | , <i>p</i> = 0.20 | | 3.40 | [1.05; 0.10] | | 10.5 |
| Sev = PROGRESSION IN SEVE | | | | | | |
| Liu W_MC | 0.59 0.8191 | | 1.80 | [0.36; 8.96] | 0.7% | 2.3 |
| Dong J FMC | 0.00 0.3969 | | | [0.46; 2.18] | 3.0% | 5.0 |
| Bi Q STPH | 1.36 0.3384 | | | [2.01; 7.57] | 4.1% | 5.6 |
| Fixed effect model | | ~ | | [1.33; 3.50] | 7.8% | - |
| Random effects model | | | | [0.73; 5.31] | | 12.9 |
| Heterogeneity: $I^2 = 71\%$, $\tau^2 = 0.5174$ | , <i>p</i> = 0.03 | | 1.57 | [0.75, 5.51] | | 12.5 |
| Sev = SEVERE (> 30 breathings | OR Sat <90%) | | | | | |
| Jin-Jin Z MC | 1.05 0.3225 | | 2.86 | [1.52; 5.38] | 4.5% | 5.8 |
| Xiao M ECRH | 1.68 0.3269 | - C _ | | [2.82; 10.15] | 4.4% | 5.7 |
| | | | | | | |
| Qi D_multicentrico | 2.51 0.5247 | | | [4.42; 34.56] | 1.7% | 3.9 |
| Zhen L_MC | 0.51 0.3245 | 1-1 | | [0.88; 3.14] | 4.5% | 5.8 |
| Chen X_FHC/LCH | 0.44 0.4671 | | | [0.62; 3.87] | 2.2% | 4.4 |
| Zhang G_WXDPH | 1.11 0.5202 | | | [1.10; 8.44] | | 4.0 |
| CaiQ_TPHS | 1.67 0.3183 | | | [2.86; 9.96] | 4.6% | 5.8 |
| Cao M_SPHCC | 1.39 0.5036 | - ; ; • | 4.02 | [1.50; 10.79] | 1.9% | 4.1 |
| Wang Y_CHW | 2.84 0.9708 | <u> </u> | - 17.05 | [2.54; 114.31] | 0.5% | 1.8 |
| JX WFPH | 1.82 0.8126 | _ | 6.17 | [1.25; 30.32] | 0.7% | 2.3 |
| Hongying S FAHWMU/SAHWMU | 1.51 0.5051 | | 4.54 | [1.69; 12.22] | 1.8% | 4.1 |
| YuC TH | 0.46 0.1091 | | 1.58 | [1.28; 1.96] | 39.6% | 7.7 |
| Lix TH | 1.23 0.1882 | | | [2.37; 4.96] | | 7.1 |
| LIYTH | 0.73 0.8465 | | | [0.40; 10.95] | 0.7% | 2.2 |
| Fixed effect model | 0.10 0.0100 | \$ | | [2.08; 2.80] | | |
| Random effects model | | | | [2.38; 5.00] | | 64.7 |
| Heterogeneity: $l^2 = 75\%$, $\tau^2 = 0.3012$ | , <i>p</i> < 0.01 | | 3.43 | [2.30, 3.00] | | 04.1 |
| Sev = ICU | | | | | | |
| Yang L_YCPH | 1.80 0.6314 | | 6.03 | [1.75; 20.78] | 1.2% | 3.2 |
| Fixed effect model | | | | [1.75; 20.78] | | - |
| Random effects model | | | 6.03 | [1.75; 20.78] | | 3.2 |
| Heterogeneity: not applicable | | | | [] | | |
| Sev = OTHER | | | | | | |
| Ying S hospitales en Beijing | 1.67 1.4254 | | - 5.31 | [0.33; 86.83] | 0.2% | 0.9 |
| Fixed effect model | | | | [0.33; 86.83] | 0.2% | |
| Random effects model | | i: | | [0.33; 86.83] | | 0.9 |
| Heterogeneity: not applicable | | | 0101 | [| | 010 |
| Fixed effect model | | • | 2.48 | [2.17; 2.84] | 100.0% | - |
| Random effects model | | \ | | [2.47; 4.36] | | 100.0 |
| Heterogeneity: $l^2 = 66\%$, $\tau^2 = 0.2602$ | <i>p</i> < 0.01 | | 7 | [| | |
| | | | | | | |

Candidate variable: Prolonged PT (more than 13.2-15 seconds), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition



Candidate variable: Prolonged APTT (more than 35-45 seconds), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | Weight (fixed) | Weight (random) |
|--|--|--------------|--------------------------------|---|-------------------|--------------------------------------|
| Sev = CRITICAL (Severe ARI | Shock or ARM) | | | | | |
| Shijiao Y_HHMU | 1.04 0.7476 | - <u> </u> + | - 2.83 | [0.65; 12.23] | 1.8% | 9.5% |
| Zhou M_MC | 0.98 0.3007 | 1 | 2.67 | [1.48; 4.81] | 11.1% | 19.7% |
| Fixed effect model | | \diamond | 2.69 | [1.56; 4.65] | 12.8% | |
| Random effects model | | \sim | 2.69 | [1.56; 4.65] | | 29.2% |
| Heterogenelty: $I^2 = 0\%$, $\tau^2 = 0$, p Sev = SEVERE (> 30 breathin Zhen L_MC Cao M_SPHCC Hongying S_FAHWMU/SAHW YuC_TH Fixed effect model Random effects model Heterogenelty: $I^2 = 71\%$, $\tau^2 = 0.2$ | ngs OR Sat <90%) -0.57 0.3347 1.38 0.5096 MU -0.23 0.5156 -0.02 0.1189 | | - 3.96 0.80 0.98 0.98 | [0.29; 1.09] [1.46; 10.75] [0.29; 2.19] [0.78; 1.24] [0.79; 1.21] [0.58; 1.96] | 3.8% 3.8% | 18.7% 14.2% 14.1% 23.8% |
| Fixed effect model Random effects model Heterogeneity: $l^2 = 77\%$, $\tau^2 = 0.3$ Residual heterogeneity: $l^2 = 61\%$ | 517, p < 0.01 | 0.5 1 2 | | [0.92; 1.36] [0.79; 2.52] | | 100.0% |

Candidate variable: APTT time increase (per 1 second), outcome: severe COVID-19 disease

| Study | TE | seTE | Odds Ratio | OR | 95%-CI | Weight (fixed) | Weight (random) |
|---|------|---------------------|------------|--------|--|-------------------|--------------------|
| Sev = ARDS Wu C_WJH Fixed effect model Random effects model Heterogenelty: not applicat | | 0.0238 | 44 | 0.96 | [0.92; 1.01] [0.92; 1.01] [0.92; 1.01] | 97.1% | 56.5% 56.5% |
| Sev = SEVERE (> 30 br Han Y_RHWU Fixed effect model Random effects model Heterogenelty: not applicat | 0.34 | gs OR Sal 0.1383 | | - 1.40 | [1.07; 1.84] [1.07; 1.84] [1.07; 1.84] | 2.9% | 43.5% |
| Fixed effect model Random effects model Heterogeneity: 1 ² - 86%, t ² Residual heterogeneity: 1 ² | | | 0.75 1 1.5 | | [0.93; 1.02] [0.78; 1.63] | | 100.0% |

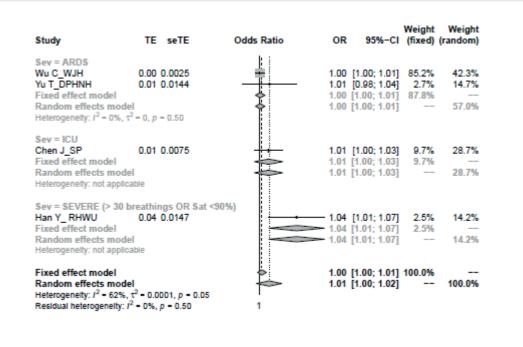
Candidate variable: High procalcitonin (More than 0.01-05 ng/ml), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | Weight 95%-CI (fixed) | |
|--|----------------------------------|--------------------|---------------|--------------------------|----------|
| Sev = ICU | | | | | |
| Huang C_JYH | 4.47 3.2392 | | — 87.00 [0.15 | | |
| Wang D_ZH | 2.39 0.4540 | | | 48; 26.56] 3.0% | 4.9% |
| Yang L_YCPH | 3.60 0.5904 | | 36.69 [11.5 | 4; 116.70] 1.8% | 4.4% |
| Lei Š_RHZHTHC | 1.93 0.8018 | <u></u> | 6.86 [1.4 | 42; 33.01] 1.0% | 3.7% |
| Jun R TH | 1.87 0.5670 | | 6.52 2.1 | | 4.5% |
| Fixed effect model | 1.01 0.3010 | • | | 98; 21.17] 7.7% | |
| | | | | | |
| Random effects model Heterogeneity: $l^2 = 29\%$, $\tau^2 = 0$. | 1835, <i>p</i> = 0.23 | | 12.24 [6.0 | JO; Z4.78] | 18.1% |
| Sev = CRITICAL (Severe AR | DS Shock or ARM) | | | | |
| Lik CMU | 2.08 0.6080 | | 7.99 [2.4 | 43; 26.30] 1.7% | 4.4% |
| | | | | | |
| Wei-jie G_NHC | 2.04 0.3936 | | 7.69 [3.9 | | |
| Shijiao Y_HHMU | 0.42 0.5275 | - 1 ++ | | .54; 4.28] 2.2% | |
| Hu L_TH | 0.24 0.3543 | · · · · · | 1.27 [0. | .63; 2.54] 4.9% | 5.3% |
| Zhou M MC | 2.11 0.3473 | | 8.28 [4.1 | 19; 16.36] 5.1% | 5.3% |
| Fixed effect model | | 0 | 3.93 [2. | 73: 5.661 17.9% | |
| Random effects model | | | L . | 63; 9.56] | 24.7% |
| Heterogeneity: $l^2 = 82\%$, $\tau^2 = 0$. | 8191, <i>p</i> < 0.01 | * * | 5.54 [1. | 00, 0.00] | 2-4.1 70 |
| Sev = PROGRESSION IN SE | VERITY CATEGORY | | | | |
| Liu W MC | -1.75 1.3466 | | 0.17 [0. | 01; 2.44] 0.3% | 2.2% |
| Bi Q_STPH | 3.03 0.6449 | | | 87; 73.51 1.5% | 4.2% |
| Fixed effect model | 0.00 0.0110 | \diamond | | 72; 26.61] 1.8% | |
| | | | | | |
| Random effects model | | | 2.20 [0.0 | 2; 236.55] | 6.4% |
| Heterogeneity: $I^2 = 90\%$, $\tau^2 = 10\%$ | 0.3200, p < 0.01 | | | | |
| Sev = SEVERE (> 30 breath | ings OR Sat <90%) 1.18 0.4022 | | 3.25 [1. | 48: 7.15] 3.8% | 5.1% |
| Jin-Jin Z_MC | | | | | |
| Xiao M_ECRH | 3.56 1.0203 | | 35.22 [4.7 | | |
| Qi D_multicentrico | 2.09 0.4517 | | 8.05 [3.3 | | |
| Zhang G_ZHWU | 2.45 0.3624 | | | 71; 23.63] 4.7% | |
| Chen G TH | 3.50 3.2577 | | — 33.14 [0.06 | ; 19647.54] 0.1% | 0.5% |
| Wang G PHTCC | 0.81 0.3686 | | 2.24 [1. | 09; 4.62] 4.5% | 5.2% |
| Wang Z_UH | -2.32 3.2189 - | | | 00; 54.00] 0.1% | |
| Cao M SPHCC | -0.11 0.5472 | | | 31; 2.61] 2.1% | |
| | | | | | |
| FL_GHCTCPLA | 2.18 1.0351 | | | 17; 67.38] 0.6% | |
| MY_multicenter 43 hosp | -0.13 0.5415 | -11 | | .30; 2.54] 2.1% | |
| Hongying S_FAHWMU/SAHV | /MU -1.19 3.2436 | | 0.31 [0.0 | 0; 175.95] 0.1% | 0.5% |
| Chen W_YH | 3.47 1.2311 | | 32.00 [2.8 | 7; 357.31] 0.4% | 2.4% |
| YuC_TH | 0.45 0.1124 | + | 1.57 [1. | 26; 1.96] 48.8% | 5.8% |
| LIX TH | 2.90 0.6048 | | | 55; 59.47 1.7% | |
| Fixed effect model | 2.00 0.0010 | 0 | | 84; 2.64] 72.5% | |
| | | | L | · | |
| Random effects model Heterogeneity: / ² = 82%, τ ² = 0. | 9602, p < 0.01 | \$ | 4.29 [2. | 20; 8.36] | 49.8% |
| Sev = ARDS | | | | | |
| Liu Y_ CHW | 1.19 3.2566 | | 3.28 [0.0 | 1; 1942.54] 0.1% | 0.5% |
| Zhao W BYH | 3.30 3.3438 | | - 27.00 [0.04 | | |
| | 3.30 3.3430 | | | | |
| Fixed effect model | | | | 9; 886.35] 0.1% | |
| Random effects model Heterogeneity: $I^2 = 0\%$, $\tau^2 = 0$, μ | 0 = 0.65 | | 9.16 [0.0 | 9; 886.35] | 1.0% |
| Fixed effect model | | | 2.86 [2. | 45; 3.33] 100.0% | |
| | | 1 | | | |
| Random effects model | | | 5.14 [3. | 16; 8.35] | 100.0% |
| Heterogeneity: $I^2 = 82\%$, $\tau^2 = 1$. | 0378. p < 0.01 | | | | |
| Residual heterogeneity: /2 = 799 | | .001 0.1 1 10 1000 | | | |

Candidate variable: High ALT level (more than 35-50 U/L), outcome: severe COVID-19 disease. subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | Weight (fixed) | |
|---|--------------|---|---------|------------------------------|-------------------|--------|
| Sev = ARDS | | L d | | | | |
| Wu C WJH | 1.05 0.3381 | <u>+</u> | 2.87 | [1.48; 5.57] | 3.5% | 4.49 |
| Fixed effect model | 1.00 0.0001 | | | [1.48; 5.57] | 3.5% | 4.47 |
| | | 1 | | | 3.3% | 4 40 |
| Random effects model | | ~ | 2.87 | [1.48; 5.57] | | 4.4% |
| Heterogeneity: not applicable | | | | | | |
| Sev = PROGRESSION IN SEVER | TY CATEGORY | | | | | |
| Liu W MC | 0.03 0.5688 | | 1.03 | [0.34; 3.15] | 1.2% | 3.09 |
| Zhang L WUH | 0.40 0.1911 | | 1.50 | [1.03; 2.18] | 10.9% | 5.49 |
| Bi Q STPH | 1.61 0.2589 | | | [3.02; 8.33] | 5.9% | 5.09 |
| | 1.01 0.2505 | | | | | 5.07 |
| Fixed effect model | | 2 | | [1.62; 2.90] | 18.1% | |
| Random effects model | | | 2.10 | [0.81; 5.46] | | 13.4% |
| Heterogeneity: $I^2 = 87\%$, $\tau^2 = 0.5874$, | p < 0.01 | | | | | |
| Sev = CRITICAL (Severe ARDS S | hock or ARM) | | | | | |
| Wei-jie G_NHC | 1.02 0.3058 | | 2 77 | [1.52; 5.04] | 4.3% | 4.79 |
| | | | | | | |
| Liu T_ UH | 1.80 1.0778 | | | [0.73; 50.00] | 0.3% | 1.39 |
| Shijiao Y_HHMU | 0.81 0.7072 | | | [0.56; 9.01] | 0.8% | 2.49 |
| Hu L_TH | 0.73 0.3303 | <u> </u> | 2.08 | [1.09; 3.98] | 3.6% | 4.59 |
| FY_JH, SPHCC, TPH | 1.75 0.2802 | | 5.75 | [3.32; 9.95] | 5.1% | 4.89 |
| Zhou M MC | 0.69 0.2744 | <u>-</u> | | [1.17; 3.42] | 5.3% | 4.99 |
| Fixed effect model | | 6 | | [2.21; 3.87] | 19.4% | |
| Random effects model | | | | [1.91; 4.42] | 10.470 | 22.6% |
| Heterogeneity: $I^2 = 47\%$, $\tau^2 = 0.1171$, | p = 0.09 | | 2.31 | [1.31, 4.42] | | 22.07 |
| notorogonoly. 1176, 4 0.1111, | p 0.00 | | | | | |
| Sev = SEVERE (> 30 breathings (| | | 5.47 | | 4 704 | 0.50 |
| Qi D_multicentrico | 1.64 0.4794 | 1 | | [2.02; 13.24] | 1.7% | 3.59 |
| Zhen L_MC | 0.41 0.3537 | | | [0.75; 3.01] | 3.2% | 4.39 |
| Chen X_FHC/LCH | 1.02 0.4237 | - * | 2.76 | [1.20; 6.34] | 2.2% | 3.99 |
| Tabata S SDFCH | 1.58 0.5890 | | 4.84 | [1.52; 15.34] | 1.1% | 2.99 |
| Wang Z UH | 0.52 0.6138 | | | [0.50; 5.58] | 1.1% | 2.89 |
| Zhang G WXDPH | 1.32 0.4806 | | | [1.46; 9.62] | 1.7% | 3.59 |
| CaiQ TPHS | 1.81 0.3653 | | | [2.99; 12.53] | 3.0% | 4.39 |
| | | | | | | |
| Cao M_SPHCC | 0.50 0.6765 | | | [0.44; 6.20] | 0.9% | 2.59 |
| JX_WFPH | 0.67 0.8075 | | | [0.40; 9.56] | 0.6% | 2.09 |
| MY multicenter 43 hosp | 0.02 0.3118 | | 1.02 | [0.55; 1.88] | 4.1% | 4.69 |
| Hongying S FAHWMU/SAHWMU | 2.30 1.0372 | | - 10.00 | [1.31; 76.36] | 0.4% | 1.49 |
| | -0.01 0.1303 | <u>唐</u> 月 | | [0.77; 1.28] | 23.4% | 5.79 |
| Zheng F NHCFH | 1.12 0.6108 | <u></u> | | [0.93; 10.18] | 1.1% | 2.89 |
| | 0.11 0.2041 | 上目 | | | 9.6% | 5.39 |
| LIX_TH | 0.11 0.2041 | 青月 | | [0.75; 1.66] | | 5.37 |
| Fixed effect model | | • | | [1.23; 1.72] | 54.0% | |
| Random effects model | | \ | 2.23 | [1.50; 3.33] | | 49.5% |
| Heterogeneity: $I^2 = 74\%$, $\tau^2 = 0.3534$, | p < 0.01 | | | | | |
| Sev = IMV | | | | | | |
| Xu Y FAHG | 1.79 0.6770 | | 6.00 | [1.59; 22.62] | 0.9% | 2.59 |
| Fixed effect model | | | | [1.59; 22.62] | 0.9% | |
| Random effects model | | 1 | | [1.59; 22.62] | 0.570 | 2.5% |
| | | | 0.00 | [1.33, 22.02] | | 2.57 |
| Heterogeneity: not applicable | | | | | | |
| Sev = ICU | | | | | | |
| Yang L_YCPH | 1.12 0.4250 | | 3.07 | [1.33; 7.05] | 2.2% | 3.99 |
| Jun R_TH | 0.46 0.4438 | - | | 0.66; 3.77 | 2.0% | 3.79 |
| Fixed effect model | | 4 | | [1.22; 4.08] | 4.2% | 0.77 |
| | | Ť. | | | ~r.ℤ /0 | 7.6% |
| Random effects model Heterogeneity: $l^2 = 14\%$, $\tau^2 = 0.0303$, | p = 0.28 | <u> </u> | 2.23 | [1.17; 4.26] | | 1.69 |
| | | | | | | |
| Fixed effect model Random effects model | | • | | [1.67; 2.14] [1.85; 3.21] | | 100.00 |
| | | | | | | |
| Heterogeneity: $I^2 = 74\%$, $\tau^2 = 0.3266$, | | | 2.44 | [1.05, 5.21] | | 100.0% |

Candidate variable: ALT increase (per 1 U/L). outcome: severe COVID-19 disease. subgroup analysis by COVID-19 severity definition



Candidate variable: High lactate (more than 1.5-2.2 mmol/L), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | Weight (fixed) | Weight (random) |
|---|-------------------------------------|------------|------------------------------|--|-------------------|-----------------------------|
| Sev = SEVERE (> 3 Chen X_FHC/LCH Cao M_SPHCC Fixed effect model Random effects mo Helerogeneity: I ² = 0% | 0.04 0.6622 | t <90%) | 2.03 1.04 1.75 1.75 | [0.29; 3.82] | | 36.9% 31.9% 68.7% |
| Sev = CRITICAL (Se Hu L_TH Fixed effect model Random effects mo Heterogeneity: not app | | | 28.06 | [7.21; 109.24] [7.21; 109.24] [7.21; 109.24] | 16.7% | 31.3% 31.3% |
| Fixed effect model Random effects mo Heterogeneity: 1 ² = 86 ⁰ Residual heterogeneity | %, τ ² = 1.8828, p < 0.0 | | | [1.60; 4.86] [0.69; 20.16] | 100.0% | 100.0% |

Candidate variable: Ground glass opacity. outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Chen Y _ multicentrico - FCMCH 3.31 0.9439 27.50 [$\frac{4}{32}$; 174.88] 3.1% 6 Chu J TH 2.11 3.2325 8.25 [0.01 ; 4655.18] 0.3% 1 Duan Q WPH 0.44 0.4480 1.56 [0.65 ; 3.74 [13.8% 10 Shijao Y HHMU -0.30 0.6740 0.74 [0.20 ; 2.78] 6.1% 9 Zhou M MC 0.21 0.4367 1.23 [0.52 ; 2.89] 14.5% 11 Fixed effect model 1.18 [0.81 ; 1.72 [74.7% Random effects model 1.56 [0.73 ; 3.34] -51 Heterogeneity: $l^2 = 64\%$, $\tau^2 = 0.4819$, $p = 0.02$ Sev = ARDS 41.58 [0.08 ; 21504.46] 0.3% 1 Liw Y CHW 3.73 3.1880 41.58 [0.08 ; 21504.46] 0.3% 1 -540 [1.15 ; 25.34] 4.4% 8 Sev = ARDS 41.58 [0.08 ; 21504.46] 0.3% 1 -540 [1.15 ; 25.34] 4.4% 8 Staofei H MC 1.76 1.0429 5.79 [0.75 ; 44.67] 2.5% 6 6 Colaneri M PSM 1.01 0.7507 2.75 [0.83 ; 11.96] 4.9% 8 30.68 [3.76 ; 248.68] 2.4% 6 Sev = SEVERE (> 30 breathings OR Sat <90%) 4.48 [0.27 ; 7.37.8] 1.4% 4 6 Mark YCH 1.60 1.4290 5.79 [0.75 ; 44.67] 2.5% 6 6 Chew YH 3.42 1.0676 | Wei-jie G_NHC -0.16 0.2735 0.85 [0.50; 1.45] 37.0% 12 Chen Y_multicentrico-FCMCH 3.31 0.9439 -27.50 [4.32; 174.88] 3.1% 6 Duan Q_WPH 0.44 0.4480 8.25 [0.01; 465: 18] 3.4% 1 Shijiao Y_HHMU -0.30 0.6740 0.74 [0.20; 2.78] 6.1% 1 Shijiao Y_HMC 0.21 0.4367 1.23 [0.52; 1.28] 14.5% 11 Staigo Y_HMC 0.21 0.4367 1.23 [0.52; 2.28] 14.5% 1 Random effects model 1.18 [0.81; 1.72] 74.7% 1 1.56 0.3% 1 Random effects model 1.56 [0.08; 21504.46] 0.3% 1 1.56 0.3% 1 Random effects model 41.58 [0.08; 21504.46] 0.3% 1 1 1.56 0.3% 1 Sev = SEVERE (> 30 breathings OR Sat <90%) Ma K_YCH 1.69 0.7507 2.755 1.86 0.287; 357.31] 1.8% 6 Colaner if M C 1.50 1.4290 -771 12.36; 25.24] 7.6% 6 <td< th=""><th>Study</th><th>TE</th><th>seTE</th><th>Odds Ratio</th><th>OR</th><th></th><th>95%-CI</th><th></th><th>Weigh (random</th></td<> | Study | TE | seTE | Odds Ratio | OR | | 95%-CI | | Weigh (random |
|--|--|---|-----------|----------|--|-------|-----------|----------|--------|------------------|
| Chen Y multicentrico FCMCH 3.31 0.9439 Chu J TH 2.11 3.2325 Duan Q WPH 0.44 0.4480 Shijao Y HHMU -0.30 0.6740 Zhou M MC 0.21 0.4367 Fixed effect model Random effects model Heterogeneity: $l^2 = 64\%$, $\tau^2 = 0.4819$, $p = 0.02$ Sev = ARDS Liu Y CHW 3.73 3.1880 Fixed effect model Heterogeneity: not applicable Sev = SEVERE (> 30 breathings OR Sat <90%) Ma K YCH 1.69 0.7888 K. YeH 3.47 1.2311 Minhua Y ZHWU 2.04 0.6049 Zheag F_NHCFH 1.50 1.4290 Colaner M PSM 1.01 0.7507 Colaner M PSM 1.01 0.7507 Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: $l^2 = 0\%$, $\tau^2 = 0.97$, $\tau^2 = 0.987$, $\tau^2 = 0.97$, $\tau^2 = 0.987$, $\tau^2 = 0.97$, $\tau^2 = 0.987$, $\tau^2 = 0.987$, $\tau^2 = 0.987$, $\tau^2 = 0.9878$, $r^2 = 0.9978$, $r^2 = 0.9878$, $r^2 = 0.9878$, $r^2 = 0.9878$, $r^2 = 0.9878$, $r^2 = 0.9978$, $r^2 = 0.9878$, $r^2 = 0.9978$, $r^2 = 0.9878$, $r^2 = 0.9978$, $r^2 = 0.99788$, $r^2 = 0.99788$, $r^2 = 0.99788$, $r^2 = 0.99788$, r^2 | Chen Y multicentrico - FCMCH 3.31 0.9439 Chu J TH 2.11 3.2325 Duan Q WPH 0.44 0.4480 Shijiao Y HHMU -0.30 0.6740 Duan Q WPH 0.44 0.4480 Shijiao Y HHMU -0.30 0.6740 Zhou M MC 0.21 0.4367 Fixed effect model Random effects model Heterogeneity: $t^2 = 64\%$, $\tau^2 = 0.4819$, $p = 0.02$ Sev = ARDS Liu Y CHW 3.73 3.1880 Fixed effect model Random effects model Heterogeneity: not applicable Sev = SEVERE (> 30 breathings OR Sat <90%) Ma K_YCH 1.69 0.7888 Xiaofei H MC 1.76 1.0429 Colaneri M PSM 1.01 0.7507 Colaneri M PSM 1.01 0.7507 Chen W_YH 3.47 1.2311 Minhua Y ZHWU 2.04 0.6049 Zheng F_NHCFH 1.50 1.4290 Fixed effect model Random effects model Heterogeneity: $t^2 = 0, p = 0.67$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: $t^2 = 0.976$, $\tau^2 = 0.976$, $p = 0.01$ | Sev = CRITICAL (Severe ARDS | Shock | or ARM) | | | | | | |
| Chu J \overline{TH} 2.11 3.2325 Duan Q WPH 0.44 0.4480 Dijiao Y HMU -0.30 0.6740 Dijiao Y HMU -0.30 0.6740 Dijiao Y HMU -0.30 0.6740 Di Q Di Z 10.4367 Fixed effect model Random effects model Heterogenetly: $l^2 - 64\%$, $\tau^2 - 0.4819$, $p - 0.02$ Sev = ARDS Liu Y CHW 3.73 3.1880 Fixed effect model Random effects model Heterogenetly: $l^2 - 64\%$, $\tau^2 - 0.4819$, $p - 0.02$ Sev = ARDS Liu Y CHW 3.73 3.1880 Fixed effect model Random effects model Random effects model Heterogenetly: $l^2 - 64\%$, $\tau^2 - 0.4819$, $p - 0.02$ Sev = SEVERE (> 30 breathings OR Sat <90%) Ma K_YCH 1.69 0.7888 Xiaofei H MC 1.78 1.0429 Colaneri M PSM 1.01 0.7507 Colaneri M PSM 1.01 0.7507 Chen W_YH 3.47 1.2311 Minhua Y ZHWU 2.04 0.6049 Zheng F_NHCFH 1.50 1.4290 Fixed effect model Random effects model Heterogenetly: $l^2 - 0\%$, $\tau^2 - 0$, $p - 0.67$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogenetly: $l^2 - 0\%$, $\tau^2 - 0.9 = 0.67$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogenetly: $l^2 - 0\%$, $\tau^2 - 0.97$, $t^2 - 0.97$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogenetly: $l^2 - 0\%$, $t^2 - 0.97$, $t^2 - 0.97$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogenetly: $l^2 - 0\%$, $t^2 - 0.97$, $t^2 - 0.977$, $t^2 - 0.975$, $t^2 - 0.9878$, $p < 0.01$ | Chu J \overrightarrow{TH} 2.11 3.2325 Duan Q WPH 0.44 0.4460 Duan Q WPH 0.44 0.4460 Duan Q WPH 0.44 0.4460 Thiga Y HMU -0.30 0.6740 Chu M MC 0.21 0.4367 Fixed effect model Random effects model Heterogeneity: $l^2 - 64\%$, $\tau^2 - 0.4819$, $p - 0.02$ Sev = ARDS Liu Y CHW 3.73 3.1880 Fixed effect model Random effects model Random effects model Random effects model Heterogeneity: $l^2 - 6\%$, $\tau^2 - 0.4819$, $p - 0.02$ Sev = ARDS Liu Y CHW 3.73 3.1880 Fixed effect model Random effects model Random effects model Heterogeneity: $l^2 - 6\%$, $\tau^2 - 0.9578$, $p < 0.01$ Fixed effect model Random effects model Heterogeneity: $l^2 - 0\%$, $\tau^2 - 0.9578$, $p < 0.01$ Fixed effect model Random effects model Heterogeneity: $l^2 - 0\%$, $\tau^2 - 0.9578$, $p < 0.01$ Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: $l^2 - 0\%$, $\tau^2 - 0.9578$, $p < 0.01$ | | | | | | | | | 12.29 |
| Duan Q_WPH 0.44 0.4480 1.56 $[0.65; 3.74]$ 13.8% 10 Shijao Y_HHMU -0.30 0.6740 0.74 $[0.20; 2.78]$ 6.1% 9 Duan M_MC 0.21 0.4367 1.23 $[0.52; 2.89]$ 14.5% 11 Fixed effect model 1.18 $[0.85; 3.74]$ 13.8% 10 Random effects model 1.18 $[0.85; 3.74]$ 13.8% 10 Heterogeneity: $l^2 = 64\%$, $\tau^2 = 0.4819$, $p = 0.02$ Sev = ARDS 1.56 $[0.73; 3.34]$ | Duan Q_WPH 0.44 0.4480 1.56 [0.65; 3.74] 13.8% 10 Shijao Y_HHMU -0.30 0.6740 0.74 [0.20; 2.78] 6.1% 6 Zhou M_MC 0.21 0.4367 1.23 [0.65; 3.74] 13.8% 10 Fixed effect model 1.18 [0.65; 3.74] 13.8% 10 Random effects model 1.18 [0.62; 2.28] 14.5% 11 Heterogeneity: $l^2 = 64\%$, $\tau^2 = 0.4819$, $p = 0.02 Sev = ARDS 1.56 [0.73; 3.34] $ | | 3.31 | 0.9439 | | | | | | 6.9% |
| Shijiao \tilde{Y} HHMU -0.30 0.6740 0.21 0.4367 Thised effect model Random effects model Heterogenetity: $t^2 - 64\%$, $t^2 - 0.4819$, $p - 0.02$ Sev = ARDS Liu Y CHW 3.73 3.1880 Fixed effect model Random effects model Heterogenetity: $t^2 - 64\%$, $t^2 - 0.4819$, $p - 0.02$ Sev = ARDS Liu Y CHW 3.73 3.1880 Fixed effect model Random effects model Heterogenetity: $t^2 - 60\%$, $t^2 - 0.9878$, $t^2 - 0.9878$, $p < 0.01$ Fixed effect model Random effects model Random effects model Heterogenetity: $t^2 - 0\%$, $t^2 - 0.9878$, $p < 0.01$ Fixed effect model Random effects model Heterogenetity: $t^2 - 0\%$, $t^2 - 0.9878$, $p < 0.01$ Fixed effect model Random effects model Heterogenetity: $t^2 - 0\%$, $t^2 - 0.9878$, $p < 0.01$ Fixed effect model Random effects model Heterogenetity: $t^2 - 0\%$, $t^2 - 0.9878$, $p < 0.01$ | Shijiao \tilde{Y} HHMU -0.30 0.6740 0.21 0.4367 Thised effect model Random effects model Heterogenetity: $l^2 - 64\%$, $t^2 - 0.4819$, $p - 0.02$ Sev = ARDS Liu Y_ CHW 3.73 3.1880 Fixed effect model Random effects model Heterogenetity: not applicable Sev = SEVERE (> 30 breathings OR Sat <90%) Ma K_ YCH 1.68 0.7888 Xiaofei H_MC 1.78 1.0429 Colaneri M_PSM 1.01 0.7507 Colaneri M_PSM 1.01 0.7507 Chen W_YH 3.47 1.2311 Minhua Y_ZHWU 2.04 0.6049 Zheng FNHCFH 1.50 1.4290 Fixed effect model Random effects model Heterogenetity: $l^2 - 0.\%$, $t^2 - 0.9 = 0.57$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogenetity: $n^2 - 0.9878$, $t^2 - 0.9878$, $p < 0.01$ | | | | | | | | | 1.19 |
| Zhou M_MC 0.21 0.4367 1.23 $[0.52; 2.89]$ 14.5% 11 Fixed effect model 1.18 $[0.81; 1.72]$ 74.7% 1.56 $[0.73; 3.34]$ | Zhou M_MC 0.21 0.4367 1.23 [0.52; 2.89] 14.5% 11 Fixed effect model 1.18 [0.81; 1.72] 74.7% 1.56 1.56 [0.73; 3.34] | | | | 青 | | | | | 10.99 |
| Fixed effect model Random effects model Heterogeneity: $t^2 - 64\%$, $\tau^2 - 0.4819$, $p - 0.02$ Sev = ARDS Liu Y_ CHW 3.73 3.1880 Fixed effect model Random effects model Heterogeneity: not applicable Sev = SEVERE (> 30 breathings OR Sat <90%) Ma K_YCH 1.69 0.7888 Xiaofei H_MC 1.76 1.0429 Colaneri M_PSM 1.01 0.7507 Chen W_YH 3.47 1.2311 Minhua Y_ZHWU 2.04 0.6049 Zheng F_NHCFH 1.50 1.4280 Fixed effect model Random effects model Heterogeneity: $t^2 - 0\%$, $\tau^2 - 0.9 = 0.67$ Sev = PROGRES SION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random e | Fixed effect model Random effects model Heterogeneity: $r^2 - 64\%$, $\tau^2 - 0.4819$, $p - 0.02$ Sev = ARDS Liu Y_ CHW 3.73 3.1880 Fixed effect model Random effects model Heterogeneity: not applicable Sev = SEVERE (> 30 breathings OR Sat <90%) Ma K_YCH 1.69 0.7888 Xiaofei H_MC 1.76 1.0429 Colaneri M_PSM 1.01 0.7507 Chen W_YH 3.47 1.2311 Minhua Y_ZHWU 2.04 0.6049 Zheng F_NHCFH 1.50 1.4290 Fixed effect model Random effects model Heterogeneity: $r^2 - 0\%$, $\tau^2 - 0$, $p - 0.67$ Sev = PROGRES SION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: $r^2 - 0\%$, $\tau^2 - 0.9878$, $p < 0.01$ | | | | | | | | | 9.0% |
| Random effects model 1.56 $[0.73; 3.34]$ 51 Heterogeneity: $t^2 - 64\%, t^2 - 0.4819, p = 0.02$ Sev = ARDS 41.58 $[0.08; 21504.46]$ 0.3% 1 Sev = ARDS Liu Y_CHW 3.73 3.1880 41.58 $[0.08; 21504.46]$ 0.3% 1 Random effects model Random effects model 41.58 $[0.08; 21504.46]$ 0.3% 1 Sev = SEVERE (> 30 breathings OR Sat <90%) | Random effects model 1.56 $[0.73; 3.34]$ 51 Heterogeneity: $t^2 - 64\%, t^2 - 0.4819, p = 0.02$ Sev = ARDS 41.58 $[0.08; 21504.46]$ 0.3% 1 Liu Y_CHW 3.73 3.1880 41.58 $[0.08; 21504.46]$ 0.3% 1 Random effects model 41.58 $[0.08; 21504.46]$ 0.3% 1 1 Random effects model 41.58 $[0.08; 21504.46]$ 0.3% 1 Minhu Y_CHW 1.09 0.7888 5.40 $[1.15; 25.34]$ 4.4% 8 Colaneri M_PSM 1.01 0.7507 2.75 $[0.63; 11.90]$ 4.9% 8 Colaner M_PSM 1.01 0.7507 2.75 $[0.63; 11.91]$ 4.9% 8 Minhua Y_ZHWU 2.04 0.6049 7.71 $[2.36; 25.24]$ 7.6% 6.04 $[3.05; 11.99]$ 2.6% Random effects model Random effects model 8.6 6.04 $[3.05; 11.99]$ 2.6% 6.04 $[3.05; 11.99]$ 2.6% 6.04 $[3.05; 11.99]$ 2.6% 6.04 $[3.068]$ $[3.79; 248.68]$ < | | 0.21 | 0.4367 | 一前 | | | | | 11.09 |
| Heterogeneity: $t^2 - 64\%$, $t^2 - 0.4819$, $p - 0.02$ Sev = ARDS Liu Y_CHW 3.73 3.1880 Fixed effect model Random effects model Heterogeneity: not applicable Sev = SEVERE (> 30 breathings OR Sat <90%) Ma K_YCH 1.69 0.7888 Xiaofei H_MC 1.76 1.0429 Colaneri M_PSM 1.01 0.7507 Chen W_YH 3.47 1.2311 Minhua Y_ZHWU 2.04 0.6049 Zheng F_NHCFH 1.50 1.4290 Chaner M_PSM 1.01 0.7507 Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: $t^2 - 0\%$, $t^2 - 0$, $p = 0.67$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: $t^2 - 0\%$, $t^2 - 0.9878$, $p < 0.01$ | Heterogeneity: $t^2 - 64\%$, $t^2 - 0.4819$, $p - 0.02$ Sev = ARDS Liu Y_CHW 3.73 3.1880 Fixed effect model Random effects model Heterogeneity: not applicable Sev = SEVERE (> 30 breathings OR Sat <90%) Ma K_YCH 1.69 0.7888 Xiaofei H_MC 1.76 1.0429 Colaneri M_PSM 1.01 0.7507 Chen W_YH 3.47 1.2311 Minhua Y_ZHWU 2.04 0.6049 Zheng F_NHCFH 1.50 1.4290 Cicker tmodel Random effects model Heterogeneity: $t^2 - 0\%$, $t^2 - 0$, $p - 0.57$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: $t^2 - 0\%$, $t^2 - 0$, $p - 0.57$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: $t^2 - 0\%$, $t^2 - 0.9878$, $p < 0.01$ | | | | Č. | | | - | | |
| Sev = ARDS Liu Y_CHW $3.73 \ 3.1880$ Fixed effect model Random effects model Heterogeneity: not applicable Sev = SEVERE (> 30 breathings OR Sat <90%) | Sev = ARDS Liu Y_CHW $3.73 \ 3.1880$ Fixed effect model Random effects model Heterogeneity: not applicable Sev = SEVERE (> 30 breathings OR Sat <90%) | | | | n n n n n n n n n n n n n n n n n n n | 1.56 | [0.73] | 3.34] | | 51.19 |
| Liu Y_CHW 3.73 3.1880 Fixed effect model Random effects model Heterogenetty: not applicable Sev = SEVERE (> 30 breathings OR Sat <90%) Ma K_YCH 1.69 0.7888 Xiaofei H_MC 1.76 1.0429 Colaneri M_PSM 1.01 0.7507 Chen W_YH 3.47 1.2311 Minhua Y_ZHWU 2.04 0.6049 Zheng F_NHCFH 1.50 1.4290 Fixed effect model Random effects model Heterogenetty: $l^2 - 0\%$, $\tau^2 - 0$, $p = 0.67$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogenetty: not applicable Fixed effect model Random effects model Heterogenetty: not applicable Fixed effect model Random effects model Heterogenetty: not applicable Fixed effect model Random effects model Heterogenetty: $l^2 - 0\%$, $\tau^2 - 0.9678$, $p < 0.01$ | Liu Y_CHW 3.73 3.1880 Fixed effect model Random effects model Heterogenetty: not applicable Sev = SEVERE (> 30 breathings OR Sat <90%) Ma K_YCH 1.69 0.7888 Xiaofei H_MC 1.76 1.0429 Colaneri M_PSM 1.01 0.7507 Colene W_YH 3.47 1.2311 Minhua Y_ZHWU 2.04 0.6049 Zheng F_NHCFH 1.50 1.4290 Fixed effect model Random effects model Heterogenetty: $l^2 - 0\%$, $t^2 - 0$, $p = 0.67$ Sev = PROGRES SION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogenetty: not applicable Fixed effect model Random effects model Heterogenetty: $l^2 - 0\%$, $t^2 - 0.9678$, $p < 0.01$ | Heterogeneity: $I^* = 64\%$, $\tau^* = 0.4819$ |), p = 0. | 02 | | | | | | |
| Fixed effect model 41.58 [0.08; 21504.46] 0.3% Random effects model 41.58 [0.08; 21504.46] | Fixed effect model 41.58 [0.08; 21504.46] 0.3% Random effects model 41.58 [0.08; 21504.46] | Sev = ARDS | | | | | | | | |
| Random effects model 41.58 [0.08; 21504.46] - 1 Heterogeneity: not applicable 41.58 [0.08; 21504.46] - 1 Sev = SEVERE (> 30 breathings OR Sat <90%) | Random effects model 41.58 $[0.08; 21504.46]$ | Liu Y_ CHW | 3.73 | 3.1880 | | 41.58 | [0.08; 21 | 1504.46] | 0.3% | 1.29 |
| Random effects model 41.58 [0.08; 21504.46] 1 Heterogeneity: not applicable Sev = SEVERE (> 30 breathings OR Sat <90%) | Random effects model 41.58 [0.08; 21504.46] | Fixed effect model | | | | 41.58 | 0.08; 21 | 504.46 | 0.3% | - |
| Sev = SEVERE (> 30 breathings OR Sat <90%) | Sev = SEVERE (> 30 breathings OR Sat <90%) | | | | | 41.58 | [0.08; 21 | 504.46] | | 1.29 |
| Ma K_YCH 1.69 0.7888 Xiaofei H_MC 1.76 1.0429 Colaneri M_PSM 1.01 0.7507 Chen W_YH 3.47 1.2311 Minhua Y_ZHWU 2.04 0.6049 Zheng F_NHCFH 1.50 1.4290 Fixed effect model 6.04 Random effects model 6.04 Heterogeneity: $t^2 - 0., p = 0.67$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: $t^2 - 6.9, t^2 - 0.978, p < 0.01$ | Ma K_YCH 1.69 0.7888 Xiaofei H_MC 1.76 1.0429 Colaneri M_PSM 1.01 0.7507 Chen W_YH 3.47 1.2311 Minhua Y_ZHWU 2.04 0.6049 Zheng F_NHCFH 1.50 1.4290 Fixed effect model 6.04 [3.05; 11.99] Random effects model 6.04 [3.05; 11.99] Heterogeneity: $l^2 = 0.9, \tau^2 = 0.9 = 0.67$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: $l^2 - 69\%, \tau^2 - 0.9678, p < 0.01$ | Heterogeneity: not applicable | | | | | | | | |
| Xiaofei H_MC 1.76 1.0429 5.79 $[0.75; 44.67]$ 2.5% 6 Colaneri M_PSM 1.01 0.7507 2.75 $[0.63; 11.96]$ 4.9% 8 Chen W_YH 3.47 1.2311 32.00 $[2.87; 357.31]$ 1.8% 5 Minhua Y_ZHWU 2.04 0.6049 7.71 $[2.36; 25.24]$ 7.6% 9 Zheng F_NHCFH 1.50 1.4290 4.48 $[0.27; 73.78]$ 1.4% 4 Fixed effect model 6.04 $[3.05; 11.99]$ 22.6% 6.04 $[3.05; 11.99]$ | Xiaofei H_MC 1.76 1.0429 5.79 $[0.75; 44.67]$ 2.5% 60 Colaneri M_PSM 1.01 0.7507 2.75 $[0.63; 11.96]$ 4.9% 80 Chen W_YH 3.47 1.2311 32.00 $[2.87; 357.31]$ 1.8% 80 Minhua Y_ZHWU 2.04 0.6049 7.71 $[2.36; 25.24]$ 7.8% 60 Zheng F_NHCFH 1.50 1.4290 4.48 $[0.27; 73.78]$ 1.4% 44 Fixed effect model 6.04 $[3.05; 11.99]$ 41 Heterogeneity: $l^2 = 0; p = 0.67$ 6.04 $[3.05; 11.99]$ 41 Sev = PROGRESSION IN SEVERITY CATEGORY 6.04 $[3.79; 248.68]$ 2.4% 60 Bi Q_STPH 3.42 1.0676 30.68 $[3.79; 248.68]$ 2.4% 60 Fixed effect model 30.68 $[3.79; 248.68]$ 2.4% 60 | Sev = SEVERE (> 30 breathings | OR S | at <90%) | | | | | | |
| Colaneri M PSM 1.01 0.7507 2.75 [0.63; 11.96] 4.9% 8 Chen W YH 3.47 1.2311 32.00 [2.87; 357.31] 1.8% 5 Minhua Y ZHWU 2.04 0.6049 7.71 [2.36; 25.24] 7.6% 9 Zheng F_NHCFH 1.50 1.4290 4.48 [0.27; 73.78] 1.4% 4 Fixed effect model 6.04 [3.05; 11.99] 22.6% Random effects model 6.04 [3.05; 11.99] - 41 Heterogeneity: $l^2 - 0\%$, $\tau^2 = 0$, $p = 0.67$ 30.68 [3.79; 248.68] 2.4% 6 Sev = PROGRESSION IN SEVERITY CATEGORY 30.68 [3.79; 248.68] 2.4% 6 Bi Q_STPH 3.42 1.0676 30.68 [3.79; 248.68] 2.4% 6 Fixed effect model 30.68 [3.79; 248.68] 2.4% 6 Random effects model 30.68 [3.79; 248.68] - 6 Fixed effect model 30.68 [3.79; 248.68] - 6 Heterogeneity: not applicable 1.86 [1.34; 2.58] 100.0% - 100 Heterogeneity: $l^2 - 69\%$, | Colaneri M PSM 1.01 0.7507 2.75 [0.63; 11.96] 4.9% 8 Chen W_YH 3.47 1.2311 32.00 [2.87; 357.31] 1.8% 5 Minhua Y ZHWU 2.04 0.6049 7.71 [2.36; 25.24] 7.6% 6 Zheng F_NHCFH 1.50 1.4290 4.48 [0.27; 73.78] 1.4% 4 Random effects model 6.04 [3.05; 11.99] 22.6% Random effects model 6.04 [3.05; 11.99] - 41 Heterogeneity: $l^2 - 0\%$, $\tau^2 - 0.p = 0.67$ 30.68 [3.79; 248.68] 2.4% 6 Sev = PROGRESSION IN SEVERITY CATEGORY 30.68 [3.79; 248.68] 2.4% 6 Bi Q_STPH 3.42 1.0676 30.68 [3.79; 248.68] 2.4% 6 Sev = PROGRESSION IN SEVERITY CATEGORY 30.68 [3.79; 248.68] 2.4% 6 Random effects model 30.68 [3.79; 248.68] 2.4% 6 Fixed effect model 30.68 [3.79; 248.68] 2.4% 6 Random effects model 1.86 [1.34; 2.58] 100.0% 3.66 1.81; 7.41] 10 | Ma K_YCH | 1.69 | 0.7888 | <u></u> | 5.40 | [1.15; | 25.34] | 4.4% | 8.09 |
| Chen W_YH $3.47 \ 1.2311$ $32.00 \ [2.87; \ 357.31] \ 1.8\% \ 5$ Minhua Y_ZHWU $2.04 \ 0.6049$ $7.71 \ [2.36; \ 25.24] \ 7.6\% \ 9$ Zheng F_NHCFH $1.50 \ 1.4280$ $4.48 \ [0.27; \ 73.78] \ 1.4\% \ 4$ Fixed effect model $4.48 \ [0.27; \ 73.78] \ 1.4\% \ 4$ $6.04 \ [3.05; \ 11.99] \ 22.6\% \ 6.04 \ [3.05; \ 11.99] \ \ 41$ Heterogeneity: $t^2 - 0\%, \tau^2 - 0, p - 0.67$ $6.04 \ [3.05; \ 11.99] \ \ 41$ Sev = PROGRESSION IN SEVERITY CATEGORY $6.04 \ [3.05; \ 11.99] \ \ 41$ Bi Q_STPH $3.42 \ 1.0676$ $30.68 \ [3.79; \ 248.68] \ 2.4\% \ 6$ Random effects model $30.68 \ [3.79; \ 248.68] \ 2.4\% \ 6$ Random effects model $30.68 \ [3.79; \ 248.68] \ 2.4\% \ 6$ Fixed effect model $30.68 \ [3.79; \ 248.68] \ 2.4\% \ 6$ Random effects model $30.68 \ [3.79; \ 248.68] \ \ 6$ Heterogeneity: not applicable $1.86 \ [1.34; \ 2.58] \ 100.0\% \ 3.66 \ [1.81; \ 7.41] \ \ 100$ | Chen W_YH 3.47 1.2311 32.00 $[2.87; 357.31]$ 1.8% 55 Minhua Y_ZHWU 2.04 0.6049 7.71 $[2.36; 25.24]$ 7.6% 66 Zheng F_NHCFH 1.50 1.4290 4.48 $[0.27; 73.78]$ 1.4% 4 Fixed effect model 6.04 $[3.05; 11.99]$ 22.6% 6.04 $[3.05; 11.99]$ 41 Heterogeneity: $l^2 = 0\%, \tau^2 = 0, p = 0.67$ Sev = PROGRESSION IN SEVERITY CATEGORY 6.04 $[3.05; 11.99]$ 41 Bi Q_STPH 3.42 1.0676 30.68 $[3.79; 248.68]$ 2.4% 6 Random effects model 30.68 $[3.79; 248.68]$ 2.4% 6 Bi Q_STPH 3.42 1.0676 30.68 $[3.79; 248.68]$ 2.4% 6 Random effects model 30.68 $[3.79; 248.68]$ 6 6 6 1.86 $[1.34; 2.58]$ 100.0% 3.66 1.81; 7.41] 100 Heterogeneity: l ² - 69%, t ² - 0.9678, p < 0.01 | Xiaofei H_MC | 1.76 | 1.0429 | <u></u> | 5.79 | [0.75; | 44.67] | 2.5% | 6.29 |
| Minhua Y_ZHWU 2.04 0.6049 Zheng F_NHCFH 1.50 1.4290 Fixed effect model Random effects model Heterogeneity: $l^2 = 0\%$, $\tau^2 = 0$, $p = 0.67$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Heterogeneity: not applicable Fixed effect model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: l ² - 60%, t ² - 0.9878, p < 0.01 | Minhua Y ZHWU 2.04 0.8049 Zheng F_NHCFH 1.50 1.4290 Fixed effect model 4.48 [0.27; 73.78] 1.4% Random effects model 6.04 [3.05; 11.99] 22.6% Heterogeneity: $l^2 - 0\%$, $t^2 - 0$, $p - 0.67$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: $l^2 - 69\%$, $t^2 - 0.9678$, $p < 0.01$ | Colaneri M_PSM | 1.01 | 0.7507 | - Heimer - H | 2.75 | [0.63; | 11.96] | 4.9% | 8.49 |
| Zheng F_NHCFH 1.50 1.4290 4.48 $[0.27; 73.78]$ 1.4% 4 Fixed effect model Random effects model 6.04 $[3.05; 11.99]$ 22.6% Random effects model 6.04 $[3.05; 11.99]$ | Zheng F_NHCFH 1.50 1.4290 4.48 $[0.27; 73.78]$ 1.4% 4 Fixed effect model 6.04 $[3.05; 11.99]$ 22.6% Random effects model 6.04 $[3.05; 11.99]$ 22.6% Heterogeneity: $l^2 = 0\%, \tau^2 = 0, p = 0.67$ 6.04 $[3.05; 11.99]$ 41 Sev = PROGRESSION IN SEVERITY CATEGORY 6.04 $[3.79; 248.68]$ 2.4% 6 Bi Q_STPH 3.42 1.0676 30.68 $[3.79; 248.68]$ 2.4% 6 Fixed effect model 30.68 $[3.79; 248.68]$ 2.4% 6< | Chen W_YH | 3.47 | 1.2311 | l <u></u> ∔-• | 32.00 | 2.87; | 357.31] | 1.8% | 5.29 |
| Fixed effect model 6.04 $(3.05; 11.99)$ 22.6% Random effects model 6.04 $(3.05; 11.99)$ 41 Heterogeneity: $l^2 - 0\%$, $\tau^2 - 0$, $p - 0.67$ 6.04 $(3.05; 11.99)$ 41 Sev = PROGRESSION IN SEVERITY CATEGORY 3.42 1.0676 30.68 $(3.79; 248.68)$ 2.4% 6 Fixed effect model 30.68 $(3.79; 248.68)$ 2.4% 6 Random effects model 30.68 $(3.79; 248.68)$ 2.4% 6 Fixed effect model 30.68 $(3.79; 248.68)$ 2.4% 6 Random effects model 6 6 Heterogeneity: not applicable 1.86 $(1.34; 2.58)$ 100.0% 3.66 3.66 $(1.81; 7.41)$ 100 | Fixed effect model 6.04 $[3.05; 11.99]$ 22.6% Random effects model 6.04 $[3.05; 11.99]$ 22.6% Heterogeneity: $l^2 = 0\%, t^2 = 0, p = 0.67$ 6.04 $[3.05; 11.99]$ | | 2.04 | 0.6049 | i i≡ - | 7.71 | [2.36; | 25.24] | 7.6% | 9.6% |
| Random effects model 6.04 $[3.05; 11.99]$ 41 Heterogeneity: $l^2 - 0\%$, $\tau^2 - 0$, $p - 0.67$ 6.04 $[3.05; 11.99]$ 41 Sev = PROGRESSION IN SEVERITY CATEGORY 30.68 $[3.79; 248.68]$ 2.4% 6 Bi Q_STPH 3.42 1.0676 30.68 $[3.79; 248.68]$ 2.4% 6 Random effects model 30.68 $[3.79; 248.68]$ 2.4% 6 Fixed effect model 30.68 $[3.79; 248.68]$ 2.4% 6 Heterogeneity: not applicable 1.86 $[1.34; 2.58]$ 100.0% 3.66 $[1.81; 7.41]$ 100 | Random effects model 6.04 $[3.05; 11.99]$ 41 Heterogeneity: $l^2 = 0\%$, $t^2 = 0, p = 0.67$ 6.04 $[3.05; 11.99]$ 41 Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 30.68 $[3.79; 248.68]$ 2.4% 6 Fixed effect model 30.68 $[3.79; 248.68]$ 2.4% 6 6 6 6 6 6 6 6 6 6 6 6 6 | | 1.50 | 1.4290 | | 4.48 | [0.27; | 73.78] | 1.4% | 4.39 |
| Heterogeneitly: $l^2 - 0\%$, $\tau^2 - 0$, $p - 0.67$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneitly: not applicable Fixed effect model Random effects model Heterogeneitly: not applicable Fixed effect model Random effects model Heterogeneitly: $l^2 - 69\%$, $\tau^2 - 0.9878$, $p < 0.01$ | Heterogeneity: $l^2 = 0\%$, $\tau^2 = 0$, $p = 0.67$ Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: $l^2 = 69\%$, $\tau^2 = 0.9678$, $p < 0.01$ | | | | 1.1 | 6.04 | [3.05; | 11.99] | 22.6% | |
| Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: l ² - 69%, t ² - 0.9878, p < 0.01 | Sev = PROGRESSION IN SEVERITY CATEGORY Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: l ² - 69%, t ² - 0.9678, p < 0.01 | | | | ۲ | 6.04 | [3.05; | 11.99] | | 41.79 |
| Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: <i>I</i> ² - 69%, <i>t</i> ² - 0.9878, <i>p</i> < 0.01 Bi Q_STPH 3.42 1.0676 30.68 [3.79; 248.68] 2.4% 30.68 [3.79; 248.68] 6 1.86 [1.34; 2.58] 100.0% 3.66 [1.81; 7.41] 100 | Bi Q_STPH 3.42 1.0676 Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: l ² - 69%, t ² - 0.9878, p < 0.01 | Heterogeneity: $l^2 = 0\%$, $\tau^2 = 0$, $p = 0$ | .67 | | | | | | | |
| Fixed effect model 30.68 [3.79; 248.68] 2.4% Random effects model 30.68 [3.79; 248.68] 6 Heterogeneity: not applicable 1.86 [1.34; 2.58] 100.0% Fixed effect model Image: Second second | Fixed effect model 30.68 [3.79; 248.68] 2.4% Random effects model 30.68 [3.79; 248.68] 6 Heterogeneity: not applicable 9 1.86 [1.34; 2.58] 100.0% Random effects model 9 3.66 [1.81; 7.41] 100 Heterogeneity: l ² - 69%, x ² - 0.9878, p < 0.01 | | RITY C | ATEGORY | | | | | | |
| Random effects model 30.68 [3.79; 248.68] 6 Heterogeneity: not applicable 1.86 [1.34; 2.58] 100.0% 1.86 [1.34; 2.58] 100.0% Fixed effect model | Random effects model 30.68 [3.79; 248.68] - 6 Heterogeneity: not applicable 0 1.86 [1.34; 2.58] 100.0% 1.86 [1.81; 7.41] - 100 Fixed effect model 0 3.66 [1.81; 7.41] - 100 Heterogeneity: l ² - 69%, t ² - 0.9878, p < 0.01 | Bi Q_STPH | 3.42 | 1.0676 | | | | | | 6.19 |
| Heterogeneity: not applicable Fixed effect model Random effects model Heterogeneity: <i>I</i> ² − 69%, τ ² − 0.9878, <i>p</i> < 0.01 | Heterogeneity: not applicable Fixed effect model Fixed effect model Fixed effects | | | | \diamond | | | | | |
| Fixed effect model Random effects model Heterogeneity: <i>I</i> ² − 69%, τ ² − 0.9878, <i>p</i> < 0.01 | Fixed effect model Random effects model Heterogeneity: l ² = 69%, τ ² = 0.9878, p < 0.01 | | | | \sim | 30.68 | [3.79; | 248.68] | | 6.19 |
| Random effects model Heterogeneity: <i>I</i> ² - 69%, <i>t</i> ² - 0.9878, <i>p</i> < 0.01 | Random effects model Heterogeneity: I ² = 69%, τ ² = 0.9878, p < 0.01 | Heterogeneity: not applicable | | | | | | | | |
| Heterogeneity: 1 ² = 69%, τ ² = 0.9878, p < 0.01 | Heterogeneity: 12 = 69%, t2 = 0.9878, p < 0.01 | Fixed effect model | | | • | 1.86 | [1.34; | 2.58] | 100.0% | - |
| | | | | | ¢. | 3.66 | [1.81; | 7.41] | | 100.09 |
| | Residual heterogeneity: 1 ² = 41%, p = 0.08 0.001 0.1 1 10 1000 | | | | | | | | | |
| Residual heterogeneity: /* = 41%, p = 0.08 0.001 0.1 1 10 1000 | | Residual heterogeneity: I ² = 41%, p | - 0.08 | 0.001 | 0.1 1 10 1000 | | | | | |

Candidate variable: Crazy paving pattern (CT assessment), outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | Weight (fixed) | Weight (random) |
|---|--|---------------------|--|--|--|---|
| Sev = CRITICAL (Sev Li K_CMU Liu T_UH Shijao Y_HHMU Hu L_TH Fixed effect model Random effects model Helerogenelty: I ² = 0%, 1 | -1.37 3.3419 2.79 3.1968 -0.38 0.6600 -4.29 3.1717 | ARM) | 16.32 0.69 0.01 | [0.00; 177.14] [0.03; 8585.32] [0.19; 2.50] [0.00; 6.84] [0.19; 2.17] [0.19; 2.17] | 0.2% 3.7% 0.2% | 0.4% 0.4% 7.0% 0.4% 8.3% |
| Sev = PROGRESSION Liu W_MC Fixed effect model Random effects model Heterogeneity: not applic | -0.71 1.0993 | EGORY | 0.49 0.49 0.49 | [0.06; 4.23] [0.06; 4.23] [0.06; 4.23] | | 3.2% |
| Sev = SEVERE (> 30 I Qi D_multicentrico Chen X_FHC/LCH Wang Z_UH Zhang G_WXDPH Cao M_SPHCC MY_multicenter 43 hos Chen W_YH YuC_TH Fixed effect model Random effects model Heterogeneity: J ² = 58%, | 0.23 0.3253 -0.10 0.4039 -1.60 0.8121 -1.43 0.5183 -3.02 3.1808 - -90.51 0.5349 -2.20 3.2089 - -0.22 0.2122 -1.18 0.2954 el | 90%) | 1.26 0.90 0.20 0.24 0.05 0.60 0.11 0.81 0.31 0.56 | [0.67; 2.38] [0.41; 1.99] [0.04; 0.96] [0.00; 24.03] [0.21; 1.71] [0.00; 59.87] [0.53; 1.22] [0.17; 0.53] [0.49; 0.81] [0.34; 0.90] | 9.8% 2.4% 6.0% 0.2% 5.6% 35.6% 18.3% | 14.6% 12.3% 5.2% 9.5% 9.2% 0.4% 18.2% 15.2% 85.2% |
| Sev = ARDS Zhao W_BYH Fixed effect model Random effects model Heterogeneity: not applic | | 101 | 0.12 0.12 0.12 | [0.02; 1.00] [0.02; 1.00] [0.02; 1.00] | 1.4% 1.4% | 3.3% 3.3% |
| Fixed effect model Random effects mode Heterogeneity: / ² = 42%, Residual heterogeneity: / | $\tau^2 = 0.2010, p = 0.05$ | ,.001 0.1 1 10 1000 | 0.61 0.54 | [0.48; 0.79] [0.35; 0.81] | | 100.0% |

Candidate variable: Consolidation pattern, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | | 95%-CI | Weight (fixed) | |
|---|-----------------------------|------------|-------|-----------|---------|-------------------|-------|
| Sev = CRITICAL (Severe ARDS S | hock or ARM) | | | | | | |
| LIK CMU | 1.85 0.6693 | | 6.38 | [1.72; | 23.69] | 1.2% | 3.9 |
| Liu K_MC | 5.49 3.1952 | | | [0.46; 12 | | 0.1% | 0.5 |
| Chen Y multicentrico- FCMCH | 0.36 0.6981 | | 1.43 | [0.36; | 5.61 | 1.1% | 3.8 |
| Chu J TH | -0.77 0.9417 | | 0.46 | [0.07; | 2.921 | 0.6% | 3.0 |
| Zhang L TH | 1.94 0.9488 | | 6.96 | [1.08; | 44.701 | 0.6% | 3.0 |
| FY_JH, SPHCC, TPH | -0.98 0.4446 | | 0.38 | [0.16; | | 2.8% | 4.6 |
| Zhou M MC | 1.88 0.3354 | | 6.58 | [3.41; | 12.70] | 4.9% | 5.0 |
| Fixed effect model | 1.00 0.3334 | | 2.46 | [1.59; | 3.79] | 11.4% | 5.0 |
| Random effects model | | L. | 2.40 | [0.70; | 8.21] | 11.470 | 23.7 |
| Heterogeneity: $I^2 = 83\%$, $\tau^2 = 1.9779$, | p < 0.01 | Ĩ | 2.40 | [0.70, | 0.21] | | 23.1 |
| Sev = SEVERE (> 30 breathings | OR Sat <90%) | | | | | | |
| Jin-Jin Z MC | 0.83 0.2969 | + | 2.29 | [1.28; | 4,10] | 6.3% | 5.1 |
| Lu Jiatao WHH | -1.74 3.2466 | | 0.18 | [0.00; | 102.11] | 0.1% | 0.5 |
| Qi D multicentrico | 2.46 0.6246 | | 11.69 | [3.44; | 39.76] | 1.4% | 4.0 |
| Lei L CUTGH | 1.90 0.9025 | <u> </u> | 6.67 | [1.14; | 39.10] | 0.7% | 3.1 |
| Feng Z_TXH | 0.14 0.7993 | _ <u>_</u> | 1.15 | [0.24; | | 0.9% | 3.4 |
| Ma K YCH | 2.25 0.6774 | | 9.44 | [2.50; | 35.62] | 1.2% | 3.8 |
| Tabata S_SDFCH | 1.18 0.5874 | <u>L</u> | 3.24 | [1.02; | 10.25] | 1.6% | 4.1 |
| Kuang Y MC | 1.28 0.4262 | | 3.58 | [1.55: | | 3.0% | 4.7 |
| CM FAHSYU | 2.12 0.5234 | . | 8.32 | [2.98; | 23.20] | 2.0% | 4.4 |
| Hongying S FAHWMU/SAHWMU | | | 1.37 | [0.00; | 876.74] | 0.1% | 0.5 |
| Xin L CHWC/hospitales en Hunan | | <u>.</u> | 3.69 | [1.30; | 10.46] | 2.0% | 4.3 |
| Chen W YH | 1.23 0.9271 | | 3.43 | [0.56; | 21.10] | 0.6% | 3.0 |
| Minhua Y ZHWU | 1.06 0.7643 | | 2.88 | [0.64; | 12.86] | 0.9% | 3.5 |
| YuC TH | -0.42 0.1024 | | 0.65 | [0.54; | | | 5.5 |
| Zhang R RH | 1.97 0.5347 | 1 | 7.16 | [2.51; | 20.43 | 1.9% | 4.3 |
| Zheng F NHCFH | -0.39 0.4257 | | 0.68 | [0.30; | | 3.0% | 4.7 |
| Fixed effect model | 0.00 0.4201 | | 1.10 | [0.93; | 1.30] | 78.4% | |
| Random effects model | | \ | 3.07 | [1.60; | 5.891 | | 59.0 |
| Heterogeneity: $l^2 = 86\%$, $\tau^2 = 1.2280$, | n < 0.01 | | 5.01 | [1.00, | 2.02] | | 55.0 |
| | | | | | | | |
| Sev = PROGRESSION IN SEVER Zhao W SXH | ITY CATEGORY 0.09 0.3809 | | 1.09 | [0.52; | 2.301 | 3.8% | 4.8 |
| Wang X DFH | 0.78 0.3674 | E | 2.19 | [1.07; | | 4.1% | 4.0 |
| Fixed effect model | 0.70 0.3074 | | 1.57 | [0.93; | | 7.9% | 4.3 |
| Random effects model | | E . | 1.57 | [0.53; | - | 1.370 | 9.7 |
| Heterogeneity: $l^2 = 43\%$, $\tau^2 = 0.1042$, | p = 0.19 | 4 | 1.30 | [0.10, | 2.02] | | 5.1 |
| Sev = OTHER | | | | | | | |
| Ying S_hospitales en Beijing | 0.47 0.6513 | - | 1.61 | [0.45; | | 1.3% | 3.9 |
| Fixed effect model | | * | 1.61 | [0.45; | 5.76] | 1.3% | |
| Random effects model | | ÷ | 1.61 | [0.45; | 5.76] | | 3.9 |
| Heterogeneity: not applicable | | | | | | | |
| Sev = IMV | 0 44 0 7402 | | 0.64 | 10.40 | 2 621 | 1.10/ | 27 |
| Herold T_UH | -0.44 0.7182 | | 0.64 | [0.16; | | 1.1% | 3.7 |
| Fixed effect model | | A A | 0.64 | [0.16; | 2.63] | 1.1% | 3.7 |
| Random effects model | | 9 | 0.64 | [0.16; | 2.63] | | 5.1 |
| Heterogeneity: not applicable | | | | | | | |
| Fixed effect model | | | 1.24 | [1.07; | | 100.0% | 100.0 |
| Random effects model | | ♥ | 2.46 | [1.54; | 3.93] | | 100.0 |
| Heterogeneity: $l^2 = 84\%$, $\tau^2 = 1.0381$, | n < 0.01 | | | | | | |

Candidate variable: Enlarged lymph nodes, outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95%-CI | | Weight (random) |
|--|--|---|---|---|---------------------------------------|---|
| Sev = CRITICAL (Severe ARDS S Chu J_TH Zhou M_MC Fixed effect model Random effects model Heterogeneity: l^2 = 0%, τ^2 = 0, p = 0.3 | 0.31 0.8610 0.03 0.4852 | +++++++++++++++++++++++++++++++++++++++ | 1.03 1.10 | | 16.9% | 6.1% 17.8% |
| Sev = PROGRESSION IN SEVER Zhao W_SXH Fixed effect model Random effects model Heterogenelty: not applicable | TY CATEGOR -1.73 3.3387 - - | | 0.18 | [0.00; 123.53] [0.00; 123.53] [0.00; 123.53] | 0.4% | 0.4% 0.4% |
| Sev = SEVERE (> 30 breathings Feng Z_TXH Wang Y_ZH(Multicéntrico) Xiaofei H_MC Kuang Y_MC Hongying S_FAHWMU/SAHWMU Zhang R_RH Fixed effect model Random effects model Heterogenetly: $l^2 = 0\%$, $\tau^2 = 0$, $p = 0.5$ | 0.55 1.1312 -0.07 1.0569 1.47 0.4321 1.16 1.0203 -0.75 3.2426 2.62 1.1400 | ** ** | 0.93 4.33 3.19 0.47 13.69 3.57 | [0.19; 15.87] [0.12; 7.39] [1.86; 10.11] [0.43; 23.55] [0.00; 273.15] [1.47; 127.90] [1.85; 6.90] [1.85; 6.90] | 3.6% 21.4% 3.8% 0.4% 3.1% | 3.6% 4.1% 21.8% 4.4% 0.4% 3.6% |
| Sev = ICU Colombi D_GdSH Fixed effect model Random effects model Heterogeneity: not applicable | 0.65 0.3081 | | 1.91 | [1.04; 3.49] [1.04; 3.49] [1.04; 3.49] | 42.0% | |
| Fixed effect model Random effects model Heterogeneity: <i>I</i> ² = 6%, <i>t</i> ² = 0.0305, <i>p</i> Residual heterogeneity: <i>I</i> ² = 0%, <i>p</i> = (| | | | [1.41; 3.09] [1.37; 3.20] | | 100.0% |

Candidate variable: Pleural effusion (X ray or CT assessment). outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | 95 | | Weight (fixed) | Weight (random) |
|---|--------------|---------------------|----------------|---------------|--------|-------------------|--------------------|
| Sev = CRITICAL (Severe ARDS S | hock or ARM) | | | | | | |
| Li K_CMU | 5.21 3.1970 | | 184.00 | [0.35; 968 | 56.04] | 0.1% | 0.6% |
| Liu K MC | 4.21 3.2268 | | 67.67 | [0.12; 377 | 52.68] | 0.1% | 0.6% |
| Mo P_ZH | 1.17 0.8495 | | 3.22 | [0.61; | 17.02] | 1.6% | 5.1% |
| Chen Y_ multicentrico- FCMCH | 1.17 1.2746 | | 3.23 | [0.27; 3 | 39.28 | 0.7% | 2.9% |
| Chu J_TH | 0.03 1.1729 | | 1.03 | [0.10; | 10.22] | 0.9% | 3.3% |
| FY_JH, SPHCC, TPH | 1.65 0.4264 | | 5.22 | [2.26; | 12.04] | 6.5% | 9.4% |
| Zhou M_MC | 0.55 0.3595 | | 1.74 | [0.86; | 3.52] | 9.2% | 10.2% |
| Fixed effect model | | 4 | 2.80 | [1.72; | 4.56] | 19.2% | |
| Random effects model Heterogeneity: $I^2 = 18\%$, $\tau^2 = 0.1294$, | p = 0.29 | | 2.93 | [1.56; | 5.51] | | 32.0% |
| Sev = SEVERE (> 30 breathings (| | | | | | | |
| Qi D multicentrico | 3.79 3.3203 | <u>III</u> | 44 29 | [0.07; 296 | 84 941 | 0.1% | 0.5% |
| Shi W SPHCC | 1.52 0.6941 | <u></u> | 4.59 | | 17.91] | 2.5% | 6.4% |
| Lei L CUTGH | 5.55 1.4798 | ⊪ | | [14.19; 46 | | 0.5% | 2.3% |
| | -1.57 3.2142 | | 0.21 | [0.00; 1 | | 0.1% | 0.6% |
| Wang Y_ZH(Multicéntrico) | 1.69 0.7261 | <u>.</u> | 5.44 | | 22.57 | 2.3% | 6.1% |
| Xiaofei H MC | 1.28 0.6826 | <u></u> | 3.61 | | 13.761 | 2.5% | 6.5% |
| Kuang Y MC | 1.86 1.2413 | <u></u> | 6.44 | | 73.34 | 0.8% | 3.0% |
| CM FAHSYU | 3.24 3.3414 | | | [0.04; 178 | | 0.1% | 0.5% |
| Hongying S FAHWMU/SAHWMU | | | 1.54 | [0.00; 9 | | 0.1% | 0.5% |
| Chen W YH | 5.17 3.2687 | <u></u> , | | [0.29; 1068] | | 0.1% | 0.6% |
| Minhua Y ZHWU | 1.41 0.6119 | <u>i.</u> | 4.10 | [1.23; | | 3.2% | 7.2% |
| YuC_TH | 0.34 0.1481 | + | 1.41 | [1.05; | 1.88 | | 12.4% |
| Zhang R RH | 5.94 3.1892 | 12 | | [0.74; 1977 | | 0.1% | 0.6% |
| Fixed effect model | | ¢ | 1.83 | [1.41; | 2.371 | 66.5% | |
| Random effects model | | • | 5.24 | | 12.341 | | 47.3% |
| Heterogeneity: $I^2 = 58\%$, $\tau^2 = 0.9078$, | p < 0.01 | ¢ | | L / | 1 | | |
| Sev = PROGRESSION IN SEVER | | | | | | | |
| | -0.91 0.6813 | | 0.40 | [0.11; | 1.53] | 2.6% | 6.5% |
| Fixed effect model | | | 0.40 | [0.11; | 1.53] | 2.6% | |
| Random effects model | | | 0.40 | [0.11; | 1.53] | | 6.5% |
| Heterogeneity: not applicable | | | | | | | |
| Sev = ICU Colombi D GdSH | 0.70 0.3317 | | 2.01 | [1.05; | 3.85] | 10.8% | 10.5% |
| Fixed effect model | | \$ | 2.01 | [1.05; | 3.85 | | |
| Random effects model | | \$ | 2.01 | [1.05; | 3.85 | | 10.5% |
| Heterogeneity: not applicable | | | | | - | | |
| Sev = OTHER | 2 22 4 4470 | | 25.00 | 12.04. 2 | 1 201 | 4.000 | 2.00 |
| Ying S_hospitales en Beijing Fixed effect model | 3.22 1.1178 | | 25.08 | [2.81; 2 | | 1.0% | 3.6% |
| Fixed effect model Random effects model | | \sim | 25.08 25.08 | [2.81; 22 | 24.30] | 1.0% | 3.6% |
| Heterogeneity: not applicable | | \sim | Z0.00 | [2.01; 24 | 24.30J | | 3.0% |
| Fixed effect model | | 0 | 1.98 | [1.60; | 2.45] | 100.0% | |
| Random effects model | | | 3.31 | [2.04; | 5.38] | | 100.0% |
| Heterogeneity: $l^2 = 55\%$, $\tau^2 = 0.4752$, | | | | - | | | |
| Residual heterogeneity: $l^2 = 50\%$, $p <$ | 0.01 | 0.001 0.1 1 10 1000 | | | | | |

Candidate variable: Bilateral infiltrates. outcome: severe COVID-19 disease, subgroup analysis by COVID-19 severity definition

| Study | TE seTE | Odds Ratio | OR | | 95%-CI | Weight (fixed) | Weigl (randon |
|---|--------------|---------------|-----------|------------|----------|-------------------|------------------|
| Sev = ICU | | l: | | | | | |
| Huang C_JYH | 1.47 3.3503 | | 4.33 | IO 01· 3 | 3080.50] | 0.1% | 0.5 |
| | 1.66 1.0391 | | 5.25 | | | 0.6% | 2.7 |
| Yang L_YCPH | | | | [0.69; | 40.24] | | |
| Colombi D_GdSH | -0.68 0.5858 | 1 | 0.51 | [0.16; | 1.60] | 1.9% | 3.9 |
| Fixed effect model | | \$ | 0.92 | [0.34; | 2.49] | 2.6% | - |
| Random effects model | | \Rightarrow | 1.44 | [0.22; | 9.38] | | 7.0 |
| Heterogeneity: $I^2 = 51\%$, $\tau^2 = 1.3245$, | p = 0.13 | | | | | | |
| Sev = CRITICAL (Severe ARDS S | hock or ARM) | | | | | | |
| LIK CMU | 2.89 3.2116 | | 18.06 | [0.03; 9 | 9780.32] | 0.1% | 0.5 |
| Liu K MC | 4.93 3.1827 | | 138.58 | [0.27; 70 | 0925.141 | 0.1% | 0.5 |
| Wei-jie G_NHC | 1.61 0.3745 | - | 4.99 | [2.40; | 10.40 | 4.7% | 4.4 |
| | 2.66 3.2623 | | 14.25 | | | 0.1% | 0.5 |
| Chen Y_multicentrico- FCMCH | | | | | 3524.88] | | |
| Duan Q_WPH | -0.01 0.5516 | T | 0.99 | [0.34; | 2.92] | 2.2% | 4.0 |
| Shijiao Y_HHMU | 1.03 0.5418 | | 2.79 | [0.96; | 8.07] | 2.2% | 4.0 |
| Hu L_TH | -1.14 0.4572 | | 0.32 | [0.13; | 0.78] | 3.2% | 4.2 |
| Li J_CHW | 2.50 1.0537 | | 12.16 | [1.54; | 95.91] | 0.6% | 2.6 |
| Liu J BDH | 0.92 0.8294 | | 2.50 | [0.49; | 12.70] | 1.0% | 3.2 |
| Zhou M MC | 1.13 0.4820 | + | 3.09 | [1.20; | 7.95 | 2.8% | 4.1 |
| Wu J TFAH | -0.35 0.2710 | * | 0.70 | 0.41; | 1.20 | 9.0% | 4.6 |
| Fixed effect model | 0.00 0.2110 | k | 1.44 | [1.05; | 1.96] | 25.8% | |
| Random effects model | | | 2.03 | [0.94; | 4.421 | 201070 | 32.8 |
| Heterogeneity: $I^2 = 76\%$, $\tau^2 = 0.9859$, | p < 0.01 | | 2.03 | [0.54; | 4.4Z] | | J£.0 |
| Sev = PROGRESSION IN SEVERI | TYCATEGORY | | | | | | |
| Liu W MC | 0.29 0.6735 | | 1.34 | [0.36; | 5.00] | 1.5% | 3.6 |
| | 5.39 3.1755 | <u>T</u> | | | | 0.1% | 0.5 |
| Zhao W_SXH | | | | [0.43; 110 | | | |
| Bi Q_STPH | 2.50 0.5240 | | 12.23 | [4.38; | 34.16] | 2.4% | 4.0 |
| Fixed effect model | | \$ | 5.65 | [2.53; | 12.61] | 3.9% | - |
| Random effects model | | | 6.05 | [0.76; | 48.07] | | 8.2 |
| Heterogeneity: $I^2 = 75\%$, $\tau^2 = 2.1021$, | p = 0.02 | | | | | | |
| Sev = SEVERE (> 30 breathings (| OR Sat <90%) | | | | | | |
| Jin-Jin Z MC | 0.67 0.6193 | | 1.95 | [0.58; | 6.56] | 1.7% | 3.8 |
| Lu Jiatao WHH | -0.63 0.2298 | | 0.53 | 0.34; | 0.83 | 12.5% | 4.7 |
| Shi W SPHCC | 1.67 0.7516 | | 5.33 | [1.22; | 23.25 | 1.2% | 3.4 |
| Zhang G_ZHWU | 3.01 3.1927 | | 20.28 | | | 0.1% | 0.5 |
| | | | | | | | |
| Chen G_TH | 1.46 1.2554 | 1. | 4.29 | [0.37; | 50.19] | 0.4% | 2.2 |
| Feng Z_TXH | -0.06 0.8053 | 1 | 0.95 | [0.20; | 4.58] | 1.0% | 3.2 |
| Ma K_YCH | 4.78 3.1806 | 1: ' | 119.50 | [0.23; 60 | | 0.1% | 0.5 |
| Tabata S_SDFCH | 1.18 0.4587 | | 3.27 | [1.33; | 8.03] | 3.1% | 4.2 |
| JX_WFPH | 3.81 3.1964 | | 45.07 | [0.09; 23 | 3695.01] | 0.1% | 0.5 |
| Hongying S_FAHWMU/SAHWMU | 1.94 3.2258 | ;• | 6.95 | [0.01; 3 | 3868.08] | 0.1% | 0.5 |
| Xin L CHWC/hospitales en Hunan | 2.29 1.0530 | Li. | 9.85 | [1.25; | 77.58] | 0.6% | 2.6 |
| Chen W YH | 4.40 3.1894 | | 81.79 | [0.16; 42 | | 0.1% | 0.5 |
| YuC TH | -0.70 0.1306 | | 0.50 | [0.38; | | | 4.8 |
| | 3.36 3.1882 | | | | | 0.1% | 0.5 |
| Wang L_SPH Zhang D_DH | | | | [0.06; 14 | | | |
| Zhang R_RH | 2.86 0.7620 | 1 | 17.50 | [3.93; | 77.93] | 1.1% | 3.4 |
| Zheng F_NHCFH | 1.95 0.5648 | 1 | 7.02 | [2.32; | 21.23] | 2.1% | 3.9 |
| LiX_TH | 1.02 0.4556 | lt - | 2.77 | [1.13; | 6.76] | 3.2% | 4.2 |
| Fixed effect model | | ∮ ∃ | 0.80 | [0.66; | 0.98] | 65.9% | - |
| Random effects model | | \$ | 3.02 | [1.47; | 6.23] | | 43.7 |
| Heterogeneity: $I^2 = 82\%$, $\tau^2 = 1.1967$, | p < 0.01 | | | | | | |
| Sev = ARDS | | | | | | | |
| Zhao W_BYH | 3.38 1.0422 | [→→ | 29.47 | [3.82; | 227.24] | 0.6% | 2.6 |
| Dreher M_UHA | 3.29 1.0946 | l ⊨→ | 26.83 | [3.14; | 229.31 | 0.5% | 2.5 |
| Fixed effect model | | \diamond | 28.19 | 6.42; | 123.74 | 1.2% | - |
| Random effects model | | \diamond | | [6.42; | | | 5.2 |
| Heterogeneity: $l^2 = 0\%$, $\tau^2 = 0$, $p = 0.9$ | 5 | _ | | | 1 | | |
| Sev = OTHER | | | | | | | |
| Ying S hospitales en Beijing | 7.30 3.2059 | ļ <u> </u> | - 1478.20 | [2.76; 79 | 1812.331 | 0.1% | 0.5 |
| Fixed effect model | | | - 1478.20 | | | 0.1% | - |
| Random effects model | | | - 1478.20 | | | 0.170 | 0.5 |
| Heterogeneity: not applicable | | | | | | | 0.0 |
| Sev = IMV | | | | | | | |
| Herold T_UH | -0.74 1.0713 | | 0.48 | [0.06; | 3.89] | 0.6% | 2.6 |
| Fixed effect model | 0.14 1.0110 | 4 | 0.48 | [0.06; | 3.89] | 0.6% | 2.0 |
| Random effects model | | X | | [0.06; | | 0.0 /0 | 2.6 |
| Heterogeneity: not applicable | | Ť | 0.48 | [0.06; | 3.89] | | ∠.0 |
| | | | | 10.00 | 4.0.5 | 400.00 | |
| Fixed effect model | | b : | 1.06 | [0.90; | 1.24] | 100.0% | - |
| | | | | | | | |
| Random effects model Heterogeneity: $l^2 = 81\%$, $\tau^2 = 1.2735$, | | | 2.99 | [1.83; | 4.87] | | 100.0 |

Candidate variable: High APACHE score (more than 8), outcome: severe COVID- 19 disease. subgroup analysis by COVID-19 severity definition

