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| **Supplementary Table 2. Major characteristics of the included studies** |
| **No.** | **Study ID****(Reference)** | **Country****(province/** **municipalities/** **special administrative regions / city)** | **Data collection period** | **COVID-19 confirmation procedure** | **Total number of COVID-19 patients (female)** | **Age (years) (mean±SD / median (IQR) / range** | **Subgroups of COVID-19 patients** |
| 1 | Bhatraju 2020(1) | USA(Seattle) | 24 Feb to 9 Mar, 2020 | RT-PCR | 24 (9) | 64·0±18·0 | All critical ICU patients |
| 2 | Cao 2020(2) | China(Shanghai) | 20 Jan to 15 Feb, 2020 | RT-PCR | 198 (97) | 50·1±16·3 | ICU (n=19) and non-ICU (n=179) |
| 3 | Chen 2020(3) | China(Hubei) | 19 Dec, 2019 to 27 Jan, 2020 | RT-PCR | 21 (4) | 56·3±14·3 | Severe (n=11) and non-severe (n=10) |
| 4 | Chen 2020a(4) | China(Shanghai) | 20 Jan to 6 Feb, 2020 | RT-PCR | 249 (123) | 51·0 (36·0-64·0) | ICU (n=22) and non-ICU (n=227) |
| 5 | Chen 2020b(5) | China(Hubei) | 1 Feb to 1 Mar, 2020 | RT-PCR | 534 (266) | Mobile cabin hospital: 40·0 (16·0-68·0); hospital: 50·0 (19·0-65·0) | Mobile cabin hospital (n=263) and hospital (n=271) |
| 6 | Chen 2020c(6) | China(Hubei) | 1 Jan to 20 Jan, 2020 | RT-PCR | 99 (32) | 55·5±13·1 | None |
| 7 | Chen 2020d(7) | China(Hebei) | 22 Jan to 14 Feb, 2020 | RT-PCR | 37 (16) | 58·7±13·7 | All severe or critical patients |
| 8 | Chen 2020e(8) | China(Hubei) | Jan to Mar, 2020 | RT-PCR | 30 (16) | 60·5 (32·0-77·0) | None |
| 9 | Chen 2020f(9) | China(Hubei) | 5 Jan to 7 Mar, 2020 | RT-PCR | 123 (73) | 51·0 (35·0-66·0) | With HBVinfection(n=15) andwithout HBVinfection(n=108) |
| 10 | Chen 2020g(10) | China(Hubei) | 13 Jan to 12 Feb, 2020 | RT-PCR | 274 (103) | 62·0 (44·0-70·0) | Survived (n=161) and non-survived (n=274) |
| 11 | Cheng 2020(11) | China(Hubei) | 15 Jan to 23 Feb, 2020 | RT-PCR | 111 (111) | 32·0 (22·0-41·0) | Pregnant(n=31) andnon-pregnant(n=80) |
| 12 | Chung 2020(12) | China(Guangdong, Jiangxi and Shandong) | 18 Jan to 27 Jan, 2020 | NR | 21 (8) | 51·0±41·0 | None |
| 13 | Deng 2020(13) | China(Hubei) | 1 Jan to 21 Feb, 2020 | RT-PCR | 225 (101) | Non-survived: 69·0 (62·0-74·0) and survived 40·0 (33·0-57·0) | Survived (n=116) and non-survived (n=109) |
| 14 | Ding 2020(14) | China(Hubei) | NR | NR | 5 (3) | 39·0-66·0 | None |
| 15 | Du 2020(15) | China(Hubei) | 25 Dec to 7Feb, 2020 | RT-PCR | 179 (82) | 57·6±13·7 | Severe or critical (n=100) and non-severe (n=79) |
| 16 | Du 2020a(16) | China(Shandong) | 23 Jan to 25Feb, 2020 | RT-PCR | 67 (35) | Adult: 41·4 (median); paediatric: 6·2 (median) | Severe (n=1) and non-severe (n=66) |
| 17 | Fan 2020(17) | China(Hubei) | 30 Dec to 16Feb, 2020 | RT-PCR | 101 (37) | 65·4±9·7 | All non-survived patients |
| 18 | Feng 2020(18) | China(Hunan) | 17 Jan to 1Feb, 2020 | RT-PCR | 141 (69) | 44·0 (34·0-55·0) | Severe (n=15) and non-severe (n=126) |
| 19 | Fu 2020(19) | China(Sichuan) | 1 Jan to 20 Feb, 2020 | RT-PCR | 52 (24) | 44·5 (33·0-56·5) | Severe or critical (n=14) and non-severe (n=38) |
| 20 | Guan 2020(20) | China(30 provinces / autonomous regions / provincial municipalities) | 11 Dec to 29Jan, 2020 | RT-PCR | 1096 (459) | 47·0 (35·0-58·0) | Severe (n=173) and non-severe (n=926) |
| 21 | Guan 2020a(21) | China(31 provinces / autonomous regions / provincial municipalities) | 21 Nov, 2019 to 31 Jan, 2020 | RT-PCR | 1590 (686) | 48·9±16·3 | With comorbidity (n=399) or without comorbidity (n=1191) |
| 22 | Han 2020(22) | China(Hubei) | 4 Jan to 3Feb, 2020 | RT-PCR | 108 (70) | 21·0-90·0 | None |
| 23 | Han 2020a(23) | China(Hubei) | 20 Dec to 2Feb, 2020 | RT-PCR | 17 (11) | 40·0±10·0 | None |
| 24 | He 2020(24) | China(Hubei) | 23 Jan to 14 Feb, 2020 | RT-PCR | 31 (18) | 34·0 (25·5-47·0) | With HDs (n=15) and without HDs (n=16) |
| 25 | Hu 2020(25) | China(Hubei) | 8 Jan to 10 March, 2020 | RT-PCR | 323 (157) | 61·0 (23·0-91·0) | Severe (n=151) and non-severe or critical (n=172) |
| 26 | Huang 2020(26) | China(Hubei) | 16 Dec to 2Jan, 2020 | RT-PCR | 41 (11) | 49·0 (41·0-58·0) | ICU (n=13) and non-ICU (n=28) |
| 27 | Huang 2020a(27) | China(Jiangsu) | 22 Jan to 10 February, 2020 | RT-PCR | 221 (95) | 45·0 (33·5-56·0) | Severe or critical (n=25) and non-severe (n=196) |
| 28 | Huang 2020b(28) | China(Hubei) | 21 Dec to 28 Jan, 2020 | RT-PCR | 34 (20) | 56·2±17·1 | None |
| 29 | Jin 2020(29) | China(Zhejiang) | 17 Jan to 8Feb, 2020 | RT-PCR | 651 (320) | 45·6±14·3 | With GI symptoms (n=74) and without GI symptoms (n=577) |
| 30 | Lei 2020(30) | China(Hubei) | 14 Jan to 29 Jan, 2020 | NR | 29 (8) | 26·0-79·0 | Severe or critical (n=14) and non-severe (n=15) |
| 31 | Li 2020(31) | China(Hubei) | 21 Jan to 14 Feb, 2020 | RT-PCR | 161 (58) | Survived: 46·0 (22·0-87·0) and non-survived 67·0 (31·0-87·0) | Survived (n=96) and non-survived (n=65) |
| 32 | Li 2020a(32) | China(Beijing) | 8 Feb to 22 Feb, 2020 | RT-PCR | 47 (19) | 62·0 (51·0-70·0) | All severe patients |
| 33 | Li 2020b(33) | China(Chongqing) | 1 Jan to 29 Feb, 2020 | RT-PCR | 83 (39) | 45·5±12·3 | Severe or critical (n=25) and non-severe (n=58) |
| 34 | Li 2020c(34) | China(Beijing) | 19 Jan to 22 Feb, 2020 | RT-PCR | 18 (7) | 39·0 (34·0-60·2) | None |
| 35 | Li 2020d(35) | China(Guangdong) | 18 Jan to 7 Feb, 2020 | RT-PCR | 78 (40) | 44·6±17·9 | None |
| 36 | Lian 2020(36) | China(Zhejiang) | 17 Jan to 12 Feb, 2020 | RT-PCR | 788 (381) | 54·7±9·3 | Older (≥ 60 years) (n=136) and younger (< 60 years) (n=652) |
| 37 | Liang 2020(37) | China(Beijing) | 21 Jan to 15 Feb, 2020 | RT-PCR | 21 (10) | 42·0 (34·5-66·0) | None |
| 38 | Liao 2020(38) | China(Chongqing) | 25 Jan to 18 Feb, 2020 | RT-PCR | 32 (15) | 25·0-35·0 | None |
| 39 | Liu 2020(39) | China(Hainan) | 1 Jan to 16 Feb, 2020 | NR | 51 (23) | 50·4±13·0 | None |
| 40 | Liu 2020a(40) | China(Chongqing) | 20 Jan to 3 Feb, 2020 | NR | 51 (19) | 45·0 (34·0-51·0) | Severe (n=7) and non-severe (n=44) |
| 41 | Liu 2020b(41) | China(Guangdong) | 10 Jan to 24 Feb, 2020 | RT-PCR | 291 (158) | 48·1 (34·0-62·0) | With cardiac injury (n=15) and without cardiac injury (n=276) |
| 42 | Liu 2020c(42) | China(Zhejiang) | 22 Jan to 11Feb, 2020 | RT-PCR | 10 (6) | 43·0±10·4 | None |
| 43 | Liu 2020d(43) | China(Hubei) | 5 Jan to 24 Jan, 2020 | RT-PCR | 40 (25) | 48·7±13·9 | Severe (n=13) and non-severe (n=27) |
| 44 | Liu 2020e(44) | China(Hubei) | 16 Jan to 15 Feb, 2020 | RT-PCR | 64 (41) | 35·0 (29·0-43·0) | Symptoms onset ≤10 days (n=37) and symptoms onset >10 days (n=25) |
| 45 | Liu 2020f(45) | China(Hubei) | 30 Dec, 2019 to 24 Jan, 2020 | RT-PCR | 137 (76) | 57·0 (20·0-83·0) | None |
| 46 | Lu 2020(46) | China(Hubei) | 1 Jan to 15 Feb, 2020 | RT-PCR | 123 (62) | 62·5±11·5 | Survived (n=92) and non-survived (n=31) |
| 47 | Lu 2020a(47) | China(Shanghai) | 20 Jan to 19 Feb, 2020 | RT-PCR | 265 (NR) | NR | Severe or critical (n=243) and non-severe (n=22) |
| 48 | Lu 2020b(48) | China(Hubei) | 21 Jan to 10 Feb, 2020 | RT-PCR | 91 (42) | 47·6±15·6 | None |
| 49 | Mao 2020(49) | China(Shanghai) | 17 Jan to 16 Feb, 2020 | RT-PCR | 188 (94) | 46·7±16·1 | None |
| 50 | Miao 2020(50) | China(Shanghai) | 12 Jan to 13 Feb, 2020 | RT-PCR | 62 (30) | 43·8±13·9 | None |
| 51 | Min 2020(51) | China(Hubei) | 3 Jan to 11 Jan, 2020 | NR | 30 (20) | 35·0±8·0 | Severe (n=22) and non-severe (n=243) |
| 52 | Mo 2020(52) | China(Hubei) | 1 Jan to 5 Feb, 2020 | NAT | 155 (69) | 54·0 (42·0-66·0) | General (n=70) and refractory (n=85) |
| 53 | Qian 2020(53) | China(Hubei) | 20 Jan to 11 Feb, 2020 | RT-PCR | 91 (54) | 50·0 (36·5-57·0) | Severe (n=82) and non-severe (n=9) |
| 54 | Qin 2020(54) | China(Hubei) | 10 Jan to 12 Feb, 2020 | RT-PCR | 452 (217) | 58·0 (47·0-67·0) | Severe (n=286) and non-severe (n=166) |
| 55 | Qin 2020a(55) | China(Hubei) | 23 Jan to 11 Feb, 2020 | RT-PCR | 89 (43) | 55·0 (23·0-86·0) | ICU (n=35) and non-ICU (n=53) |
| 56 | Shi 2020(56) | China(Hubei) | 20 Dec to 23 Jan, 2020 | RT-PCR | 81 (39) | 49·5±11·0 | NR |
| 57 | Shi 2020a(57) | China(Hubei) | Until 15 Feb, 2020 | NR | 101 (41) | 71·0 (59·0-80·0) | All non-survived patients |
| 58 | Shu 2020(58) | China(Hubei) | 13 Feb to 29 Feb, 2020 | RT-PCR | 545 (281) | 50·0 (38·0- 58·0) | None |
| 59 | Song 2020(59) | China(Shanghai) | 20 Jan to 27 Jan, 2020 | RT-PCR | 51 (26) | 49·6±16·0 | None |
| 60 | Tian 2020(60) | China(Shandong) | NR | RT-PCR | 37 (20) | 44·3±1·6 | Quarantine onset duration ≤20 days (n=19) and >20 days (n=18) |
| 61 | Wan 2020(61) | China(Chongqing) | 23 Jan to 8 Feb, 2020 | RT-PCR | 135 (63) | 47·0 (36·0-55·0) | Severe (n=40) and non-severe (n=95) |
| 62 | Wang 2020(62) | China(Hubei) | 1 Jan to 3 Feb, 2020 | RT-PCR | 138 (63) | 56·0 (42·0-68·0) | ICU (n=36) and non-ICU (n=102) |
| 63 | Wang 2020a(63) | China(Guangdong) | 26 Jan to 19 Feb, 2020 | RT-PCR | 11 (1) | 58·0 (49·0-72·0) | All severe or critical patients |
| 64 | Wang 2020b(64) | China(Hubei) | 16 Jan to 17 Feb, 2020 | RT-PCR | 90 (57) | 45·0±14·0 | None |
| 65 | Wang 2020c(65) | China(Hubei) | 16 Jan to 29 Jan, 2020 | RT-PCR | 69 (37) | 42·0 (35·0-62·0) | SpO2 ≥90% (n=55) andSpO2 <90% (n=14) |
| 66 | Wang 2020d(66) | China(Hubei) | 1 Jan to 6 Feb, 2020 | RT-PCR | 339 (173) | 69·0 (65·0-76·0) | Survived (n=174) and non-survived (n=65) |
| 67 | Wei 2020(67) | China(Hubei) | 1 Feb to 28 Feb, 2020 | RT-PCR | 100 (60) | 49·1±17·2 | All non-severe patients |
| 68 | Wei 2020a(68) | China(Hubei) | 19 Jan to 7 Feb, 2020 | RT-PCR | 84 (56) | 37·0 (24·0-74·0) | Diarrhoea group(n=26)non-diarrhoeagroup(n=58) |
| 69 | Xu 2020(69) | China(Hubei) | 6 Jan to 31 Jan, 2020 | RT-PCR | 48 (35) | 39·0±13·8 | Non-hospitalizedpatients (n=42) andhospitalizedpatients (n=6) |
| 70 | Xu 2020a(70) | China(Hubei, Beijing and Shanghai) | 7 Feb to 28 Feb, 2020 | RT-PCR | 69 (34) | 57·0 (43·0-69·0) | Severe or critical (n=25) and non-severe (n=44) |
| 71 | Yang 2020(71) | China(Hubei) | 24 Dec, 2019 to 26 Jan, 2020 | RT-PCR | 52 (17) | 59·7±13·3 | All severe or critical patients, survived(n=20) andnon-survived(n=32) |
| 72 | Yang 2020a(72) | China(Beijing) | 27 Dec, 2019 to 18 Feb, 2020 | RT-PCR | 55 (22) | 44·0 (34·0-54·0) | Severe (n=14) and non-severe (n=41) |
| 73 | Yao 2020(73) | China(Hubei) | 26 Jan to 18 Feb, 2020 | RT-PCR | 55 (18) | 70·7±13·5 | None |
| 74 | Yu 2020(74) | China(Beijing) | 5 Feb to 19 Feb, 2020 | RT-PCR | 76 (38) | 40·0 (32·0-63·0) | None |
| 75 | Yuanyuan 2020(75) | China(Hubei) | Jan to Feb, 2020 | RT-PCR | 31 (16) | 54·0±13·0 | Severe (n=11) and non-severe (n=20) |
| 76 | Zhang 2020(76) | China(Hubei) | 30 Jan to 15 Feb, 2020 | RT-PCR | 81 (36) | NR | Severe or critical (n=35) and non-severe (n=46) |
| 77 | Zhang 2020a(77) | China(Hubei) | 2 Jan to 10 Feb, 2020 | RT-PCR | 221 (113) | 55·0 (39·0-66·5) | Severe (n=55) and non-severe (n=166) |
| 78 | Zhang 2020b(78) | China(Zhejiang) | 17 Jan to 8 Feb, 2020 | NAT | 645 (317) | 40·8±14·0 | Normal imaging findings (n=72) andabnormal imaging findings (n=573) |
| 79 | Zhang 2020c(79) | China(Hubei) | 18 Feb to 12 Mar, 2020 | NAT | 212 (127) | 48·5±13·1 | None |
| 80 | Zhang 2020d(80) | China(Hubei) | 2 Jan to 13 Feb, 2020 | RT-PCR | 319 (171) | 47·0 (34·0-61·0) | Survived (n=273) and non-survived (n=46) |
| 81 | Zhao 2020(81) | China(Anhui) | 23 Jan to 5 Feb, 2020 | RT-PCR | 19 (8) | 48·0 (27·0-56·0) | None |
| 82 | Zhao 2020a(82) | China(Hunan) | 16 Jan to 6 Feb, 2020 | RT-PCR | 56 (30) | 50·3±15·6 | None |
| 83 | Zhao 2020b(83) | China(Zhejiang) | 27 Jan to 12 Feb, 2020 | RT-PCR | 459 (215) | 48·0 (2·0-93·0) | Severe (n=42) and non-severe (n=417) |
| 84 | Zhong 2020(84) | China(Hubei) | 1 Jan to 14 Feb, 2020 | RT-PCR | 49 (42) | 31·0 (29·0-34·0) | None |
| 85 | Zhou 2020(85) | China(Hubei) | 20 Dec, 2019 to 9 Feb, 2020 | NAT | 254 (139) | 50·0 (36·0-65·0) | Medical staff (n=93) andnon-medical staff (n=161) |
| 86 | Zhu 2020(86) | China(Anhui) | 24 Jan to 20 Feb, 2020 | NAT | 32 (17) | 46·0 (35·0‐52·0) | None |
| SD: Standard deviation; IQR: interquartile range; RT-PCR: reverse transcription polymerase chain reaction; ICU: intensive care unit; NAT: nucleic acid test; HDs: haematological disorders; NR: not reported. |

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