

### Supplementary Material\*

Hernandez AV, Roman YM, Pasupuleti V, et al. Update alert: hydroxychloroquine or chloroquine for the treatment or prophylaxis of COVID-19. *Ann Intern Med.* 15 July 2020. [Epub ahead of print].  
doi:10.7326/L20-0945

<b>Item</b>	<b>Page</b>
Supplement Table 1. Effect of Hydroxychloroquine Reported in Controlled Studies	2
Supplement Table 2. Effect of Chloroquine Reported in Controlled Studies	4

\* This supplementary material was provided by the authors to give readers further details on their article. The material was reviewed but not copyedited.

Supplement Table 1. Effect of Hydroxychloroquine Reported in Controlled Studies

Name	Type	RoB	Unadjusted Absolute effect of HCQ vs. Control (95% CI)	SOE
<b>All-Cause Mortality</b>				
J Chen <sup>17</sup>	RCT	SC	0/15 vs. 0/15; RD 0% (NA)	I
L Chen <sup>5</sup>		H	0/15 vs. 0/12; RD 0% (NA)	
Barbosa <sup>18</sup>	Cohort	C	4/31 vs. 1/32; RD 9.8% (-3.5% to 23.3%)	I
Magagnoli <sup>19</sup>		S	27/97 vs. 18/158; RD 16.4% (6.2% to 26.6%) †	
Mallat <sup>20</sup>		S	0/23 vs. 0/11 [0%]; RD 0% (NA)	
Membrillo <sup>21</sup>		C	27/123 vs. 21/43; RD -26.9% (-43.5% to -10.3%) †	
Geleris <sup>22</sup>		M	157/811 vs. 75/565; RD 6.1% (2.2% to 10%) †	
Rosenberg <sup>7</sup>		S	54/271 vs. 28/221; RD 7.3% (0.8% to 13.7%) †	
Mahévas <sup>3</sup>		S	9/84 vs. 8/97; RD 2.5% (-6.1% to 11.1%)	
Ip <sup>8</sup>		S	383/1914 vs. 120/598; RD -0.1% (-3.7% to 3.6%)	
Sbidian <sup>6</sup>		M	111/623 vs. 830/3792; RD -4.1% (-7.4% to 0.8%)	
Singh <sup>9</sup>		S	104/910 vs. 109/910; RD -0.6% (-3.5% to 2.4%)	
Yu <sup>4</sup>		S	9/48 vs. 238/502; RD -29.7% (-40.5% to -16.8%) †	
Arshad <sup>10</sup>		S	162/1202 vs. 108/409; RD -12.9% (-17.6% to -8.2%) †	
<b>Composite of Intubation or Death</b>				
Geleris <sup>22</sup>	Cohort	M	262/811 vs. 84/565; RD 17.4% (13.1% to 21.8%) †	I
<b>Composite of ICU Admission Within 7-Days or Death</b>				
Mahévas <sup>23</sup>	Cohort	S	16/84 vs. 21/97; RD -2.6% (-14.3% to 9.1%)	I
<b>ICU admission</b>				
Rosenberg <sup>7</sup>	Cohort	S	52/271 vs. 27/221; RD 7% (0.6% to 13.3%) †	I
<b>Survival without ICU admission</b>				
Mahévas <sup>3</sup>	Cohort	S	17/84 vs. 22/89; RD -4.5% (-16.9% to 7.9%)	I
<b>Need of Mechanical Ventilation</b>				
Magagnoli <sup>19</sup>	Cohort	S	12/90 vs. 25/177; RD -0.8% (-9.5% to 7.9%)	I
Mallat <sup>20</sup>		S	0/23 vs. 0/11; RD 0% (NA)	
Geleris <sup>22</sup>		M	154/811 vs. 26/565; RD 14.4% (11.2% to 17.6%) †	
Rosenberg <sup>7</sup>		S	51/271 vs. 18/221; RD 10.7% (4.8% to 16.6%) †	
Singh <sup>9</sup>		S	46/910 vs. 57/910; RD -1.2% (-3.3% to 0.9%)	
<b>Severe Disease Progression</b>				
J Chen <sup>17</sup>	RCT	SC	1/15 vs. 0/15; RD 6.7% (-6.0% to 19.3%)	I
Z Chen <sup>24</sup>		SC	0/31 vs. 4/31; RD -12.9% (-24.7% to -1.1%) †	
L Chen <sup>5</sup>		H	0/15 vs. 0/12; RD 0% (NA)	
Barbosa <sup>18</sup>	Cohort	C	Respiratory support level: +0.63±0.79 vs. +0.16±0.64 points; MD 0.47 (0.11 to 0.83) †	I
Mahévas <sup>23</sup>		S	ARDS: 24/84 vs. 23/95; RD 4.4% (-8.6% to 17.3%)	
Mallat <sup>20</sup>		S	High flow oxygen therapy: 0/23 vs. 0/11; RD 0% (NA)	
<b>Discharge from hospital</b>				
Mahévas <sup>3</sup>	Cohort	S	67/84 vs. 71/89; RD 0% (-12% to 12%)	I
Sbidian <sup>6</sup>		M	351/623 vs. 1507/3792; RD 16.6% (12.4% to 20.8%)	
<b>Symptom Resolution</b>				
J Chen <sup>17</sup>	RCT	SC	Fever: 1 vs. 1 day; MD 0 days (NA)	I

Name	Type	RoB	Unadjusted Absolute effect of HCQ vs. Control (95% CI)	SOE
Z Chen <sup>24</sup>		SC	Fever: 2.2±0.4 vs. 3.2±1.3 days; MD -1 day (-1.5 to -0.5) † Cough: 2.0±0.2 vs. 3.1±1.5 days; MD -1.1 days (-1.6 to -0.6) †	
Tang <sup>2</sup>		H	Composite Symptom Resolution: 32/64 vs. 24/55; RD 6.4% (-11.6% to 24.3%)	
L Chen <sup>5</sup>		H	Days to clinical recovery [Median(IQR)]: 6 (3-8) vs. 7.5 (5-16.3)	
<b><i>Progression of Pulmonary Lesions on CT Scan</i></b>				
J Chen <sup>17</sup>	RCT	SC	5/15 vs. 7/15; RD -13.3% (-48.1% to 21.4%)	L
Z Chen <sup>24</sup>		SC	2/31 vs. 9/31; RD -22.6% (-40.8% to -4.4%) †	
<b><i>Improvement in Pulmonary Lesions on CT Scan</i></b>				
Z Chen <sup>24</sup>	RCT	SC	25/31 vs. 17/31; RD 25.8% (3.4% to 48.2%) †	I
<b><i>Upper Respiratory Virological Clearance</i></b>				
J Chen <sup>17</sup>	RCT	SC	Day 7: 13/15 vs. 14/15; RD -6.7% (-28% to 14.7%) Day 14: 15/15 vs. 15/15; RD 0% (NA)	I
Tang <sup>2</sup>		H	Day 23: 53/75 vs. 56.75; RD -4% (-18.3% to 10.3%)	
L Chen <sup>5</sup>		H	Day 10: 15/15 vs/ 12/12; RD 0% (NA)	
Gautret <sup>25</sup>	Cohort	C	Day 6: 14/20 vs. 2/16; RD 57.6% (31.8% to 83.3%) †	I
Mallat <sup>20</sup>		S	Day 14: 11/23 vs. 10/11; RD -43.1% (-69.6% to -16.5%) †	

95%CI: 95% confidence interval; ARDS: Acute respiratory distress syndrome; HCQ: Hydroxychloroquine; MD: Mean difference; RCT: Randomized controlled trial; RD: Absolute risk difference; RoB: Risk of bias; SOE: Strength of evidence.

† denotes a statistically significant finding.

Risk of Bias Codes: SC – some concerns, H– high, M – moderate, S –serious, C – critical, NI – no information.

Strength of Evidence Codes: I – insufficient, L- low.

Supplement Table 2. Effect of Chloroquine Reported in Controlled Studies

Name	Type	RoB	Unadjusted Absolute effect of CQ vs. Control (95% CI)	SOE
<b>All-Cause Mortality</b>				
Borba <sup>26,27</sup>	RCT	H	16/41 vs. 6/40; RD 24% (5.4% to 42.6%)†	I
L Chen <sup>5</sup>		H	0/16 vs. 0/12; RD 0% (NA)	
Huang <sup>28</sup>	Cohort	C	0/197 vs. 0/176; RD 0% (NA)	
<b>ICU Admission</b>				
Borba <sup>26,27</sup>	RCT	H	1/2 vs. 1/11; RD 40.9% (-30.4% to 112.3%)	I
Huang <sup>28</sup>	Cohort	C	0/197 vs. 0/176; RD 0% (NA)	I
<b>Need of Mechanical Ventilation</b>				
Borba <sup>26,27</sup>	RCT	H	4/20 vs. 2/19; RD 9.5% (-12.8% to 31.8%)	I
<b>Oxygen Support Need</b>				
Borba <sup>26,27</sup>	RCT	H	3/15 vs. 1/13; RD 12.3% (-12.6% to 37.2%)	I
<b>Severe disease progression</b>				
L Chen <sup>5</sup>	RCT	H	0/16 vs. 0/12; RD 0% (NA)	I
<b>Symptom Resolution</b>				
L Chen <sup>5</sup>	RCT	H	Days to clinical recovery [Median (IQR)]: 5.5 (3.3-7.5) vs. 7.5 (5-16.3)	I
Huang <sup>28</sup>	Cohort	C	Time to normal body temperature (GM): 1.2 vs. 1.9 days; MD: -0.7 days (95%CI NR)	I
<b>Upper respiratory Virological Clearance</b>				
Borba <sup>16,27</sup>	RCT	H	Day 4: 0/14 vs. 1/12; RD -8.3% (-24% to 7.3%)	I
L Chen <sup>5</sup>		H	Day 10: 16/16 vs. 12/12; RD 0% (NA)	
Huang <sup>28</sup>	Cohort	C	Day 10: 180/197 vs. 101/176; RD 34% (25.7% to 42.3%)† Day 14: 189/197 vs. 140/176; RD 16.4% (9.8% to 23%)†	I

Borba et al. compared high dose CQ vs. low dose CQ; Huang et al. compared CQ vs non-CQ.  
95%CI: 95% confidence interval; CQ: Chloroquine; GM: Geometric mean; MD: Mean difference; NA: Not applicable; NR: Not reported; RCT: Randomized controlled trial; RD: Absolute risk difference; RoB: Risk of bias; SOE: Strength of evidence.  
Risk of Bias Codes: H– high, C – critical.  
Strength of Evidence Codes: I – insufficient, L- low.