

## Supplemental Online Content

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**eTable 1. Search Strategies for Meta-analysis of Observational Studies Reporting the Incubation Period of COVID-19**

Database	Search strategy
PubMed	("Coronavirus"[MeSH Terms] OR "Coronavirus Infections"[MeSH Terms] OR "COVID-19"[Supplementary Concept] OR "coronavir*"[Title/Abstract] OR "corona virus*"[Title/Abstract] OR "covid"[Title/Abstract] OR "nCoV"[Title/Abstract] OR "2019 novel*"[Title/Abstract] OR "2019nCoV"[Title/Abstract] OR "2019-CoV"[Title/Abstract] OR "nCoV2019"[Title/Abstract] OR "pneumonia virus*"[Title/Abstract] OR "Severe Acute Respiratory Syndrome"[Title/Abstract] OR "SARS"[Title/Abstract] OR "sarscov*"[Title/Abstract]) AND ("incubation period"[Text Word] OR "incubation"[Text Word])
EMBASE	('covid 19'/exp OR 'coronavirus disease 2019'/exp OR 'severe acute respiratory syndrome coronavirus 2'/exp OR 'SARS-related coronavirus'/exp OR 'coronaviridae'/de OR 'coronavirinae'/exp OR 'coronavirus infection'/exp OR (coronavir* OR 'corona virus*' OR covid OR COVID19 OR nCoV OR '2019-novel*' OR 2019nCoV OR 2019 - CoV OR nCoV2019 OR 'pneumonia virus*' OR 'Severe Acute Respiratory Syndrome*' OR SARS OR SARSCoV*):ab,ti,kw) AND ('incubation period' OR incubation)
Web of science	TS = (((coronavir* OR "corona virus*" OR covid OR COVID19 OR nCoV OR "2019-novel Cov" OR 2019nCoV OR 2019 - CoV OR nCoV2019 OR "pneumonia virus*" OR "Severe Acute Respiratory Syndrome" OR SARS OR SARS-CoV-2)) AND (("incubation period" OR incubation)))

**eTable 2. Quality Assessment Scale**

Part	
<b>External validity</b>	<p>1) Representativeness of the study cohort</p> <p>a) No selection of cases based on age, sex or general health status, supported by descriptive statistics demonstrating comparability with overall population※</p> <p>b) No selection of cases based on age, sex or general health status, not supported by descriptive statistics※</p> <p>c) Cases are likely to be biased towards those with more severe COVID-19 symptoms due to selection process – e.g. records from hospitalised patients</p> <p>d) Cases are selected (e.g. based on age or sex) to represent a particular cohort of individuals</p> <p>e) No description of the derivation of the cohort</p>
<b>Internal validity</b>	<p><b>Exposure window</b></p> <p>2) Ascertainment of exposure</p> <p>a) original data collected through interview ※</p> <p>b) travel period only ※</p> <p>c) secondary data (using publicly available reports)</p> <p>3) Precision of the exposure window for cases used in final analysis</p> <p>a) only includes cases with a 1-day exposure window ※</p> <p>b) only includes cases with less than or equal to 3-day exposure window</p> <p>c) includes cases with a range of exposure windows but statistical methods are used to account for this</p> <p>d) includes cases with a range of exposure windows</p> <p>e) no description/not clear</p>
	<p><b>Outcome</b></p> <p>4) Assessment of outcome (onset of symptoms)</p> <p>a) original data collected through interview ※</p> <p>b) no description/not clear</p> <p>5) Precision of estimate of outcome</p> <p>a) Precise date ※</p> <p>b) Window</p> <p>c) no description/not clear</p>

**eTable 3. Quality Assessment of Final Studies Used in the Meta-analysis of Incubation Period**

Author	Area	Time period	Quality assessment item category					Quality assessment
			1	2	3	4	5	
Areekal et al <sup>16</sup> , 2021	India	2020.06-2020.07	a	a	e	a	c	Moderate
Backer et al <sup>18</sup> , 2020	China	2020.01.20-2020.01.28	a	c	d	b	a	Moderate
Backer et al <sup>17</sup> , 2020	Netherlands	2021.12.13-2021.12.26	a	a	c	a	a	Strong
Bao et al <sup>19</sup> , 2020	China	2020.01.15-2020.02.06	a	a	a	a	a	Strong
Brandal et al <sup>20</sup> , 2021	Norway	2021.11.26-2021.12.13	a	a	a	a	a	Strong
Bui et al <sup>21</sup> , 2020	Vietnam	2020.01.23-2020.04.13	a	c	c	b	a	Moderate
Chen et al <sup>22</sup> , 2020	China	2020.01.24-2020.02.13	c	a	d	a	c	Moderate
Covid-Epidemiology Investigation Team <sup>23</sup> , 2021	China	2020.12.23-2021.01.31	a	a	c	a	a	Strong
Dai et al <sup>24</sup> , 2020	China	2020.01.20-2020.02.29	a	b	d	a	a	Moderate
Del Águila-Mejía et al <sup>26</sup> , 2022	Spain	2021.11-2021.12	a	a	a	a	a	Strong
Deng et al <sup>27</sup> , 2021	China	by 2020.03.09	c	a	a	a	a	Strong
Deng et al <sup>28</sup> , 2020	China	by 2020.03.31	a	c	e	a	a	Moderate
Denis et al <sup>29</sup> , 2021	France	2020.12.15-2020.12.24	a	a	e	a	c	Moderate
Ding et al <sup>30</sup> , 2020	China	2020.01.21-2020.03.10	a	a	a	a	a	Strong
Dong et al <sup>31</sup> , 2020	China	2020.01.13-2020.02.21	a	c	a	b	a	Moderate
Du et al <sup>32</sup> , 2020	China	2020.01.08-2020.02.05	a	c	d	b	b	Weak
Gao et al <sup>34</sup> , 2020	China	2020.01.21-2020.02.11	a	c	a	b	a	Moderate
Gao et al <sup>33</sup> , 2020	China	2020.01.20-2020.03.17	c	a	e	a	b	Moderate
Grant et al <sup>35</sup> , 2022	France	2021.05.23-2021.08.13	a	a	a	a	a	Strong
Guo et al <sup>36</sup> , 2020	China	2020.01.15-2020.03.15	c	c	a	b	a	Moderate
Han et al <sup>37</sup> , 2020	South Korea	2020.03.28-2020.04.08	a	a	d	a	a	Strong
Han et al <sup>39</sup> , 2020	China	2020.01.20-2020.03.10	a	a	c	b	a	Moderate
Han et al <sup>38</sup> , 2020	China	2020.01.31-2020.02.16	c	a	e	a	a	Moderate
Hong et al <sup>40</sup> , 2020	China	2020.01.14-2020.03.09	a	c	a	b	a	Moderate
Hua et al <sup>41</sup> , 2020	China	2020.01.01-2020.02.29	d	a	b	b	a	Moderate
Huang et al <sup>43</sup> , 2020	China	2020.01.08-2020.02.16	a	c	c	b	c	Weak
Huang et al <sup>42</sup> , 2020	China	2020.01.22-2020.06.18	a	c	a	b	a	Moderate
Huang et al <sup>44</sup> , 2021	China	2020.01.01-2020.04.08	a	c	d	b	a	Moderate
Je et al <sup>45</sup> , 2021	Australia	2020.02-2020.04	a	c	d	b	a	Moderate
Jeong et al <sup>46</sup> , 2020	South Korea	2020.02.22-2020.02.26	c	a	a	a	a	Strong
Jiang et al <sup>47</sup> , 2020	China	2020.01.12-2020.02.20	a	a	e	a	a	Strong
Jiang et al <sup>48</sup> , 2021	China	2020.01.19-2020.01.23	a	c	c	b	a	Moderate
Jin et al <sup>49</sup> , 2020	China	2020.01.17-2020.02.08	a	b	a	b	a	Moderate
Khonyongwa et al <sup>50</sup> , 2020	UK	2020.03.01-2020.04.18	c	a	c	a	a	Moderate
Ki et al <sup>51</sup> , 2020	South Korea	2020.03.01-2020.06.30	a	c	d	b	b	Weak
Kim et al <sup>52</sup> , 2020	South Korea	2020.02.04-2020.04.07	c	a	a	a	a	Strong

Kong et al <sup>53</sup> , 2020	China	2020.01.08-2020.01.27	a	c	e	a	a	Moderate
Kong et al <sup>55</sup> , 2020	China	2020.01.22-2020.02.15	d	e	b	b	a	Weak
Kong et al <sup>54</sup> , 2020	China	2020.01.25-2020.02.20	a	a	c	b	a	Moderate
Lai et al <sup>56</sup> , 2020	China	2020.01.11-2020.02.10	c	c	e	a	a	Moderate
Lau et al <sup>57</sup> , 2021	China	2020.01.01-2020.01.29	a	c	c	b	b	Weak
Laval et al <sup>25</sup> , 2021	France	2020.02.25-2020.03.04	a	a	e	a	a	Strong
Le et al <sup>58</sup> , 2020	Vietnam	2020.01-2020.02	a	a	c	a	a	Strong
Lee et al <sup>59</sup> , 2021	South Korea	2021.11.24-2021.12.10	a	a	d	a	a	Strong
Lei et al <sup>60</sup> , 2020	China	2020.01.22-2020.02.01	d	a	d	a	a	Moderate
Leung et al <sup>61</sup> , 2020	China	2020.01.20-2020.02.12	a	c	d	b	a	Moderate
Li et al <sup>63</sup> , 2020	China	2020.01.21-2020.02.09	c	a	d	a	c	Moderate
Li et al <sup>64</sup> , 2022	China	2021.05.21-2021.06.24	a	c	a	b	a	Moderate
Li et al <sup>62</sup> , 2020	China	2019.12-2020.01	a	a	a	a	a	Strong
Linton et al <sup>65</sup> , 2020	China	by 2020.01.31	a	c	d	b	a	Moderate
Liu et al <sup>66</sup> , 2021	China	2020.01.20-2020.02.23	a	a	d	a	a	Strong
Liu et al <sup>68</sup> , 2020	China	2020.01.20-2020.04.15	c	a	a	a	a	Strong
Liu et al <sup>69</sup> , 2020	China	2019.12.25-2020.02.05	a	a	a	a	a	Strong
Liu et al <sup>70</sup> , 2020	China	2020.01.28-2020.04.12	a	c	e	b	a	Moderate
Liu et al <sup>71</sup> , 2020	China	2020.01.22-2020.02.21	a	a	a	a	a	Moderate
Liu et al <sup>72</sup> , 2020	China	2020.01.23-2020.02.10	c	a	e	a	c	Strong
Liu et al <sup>74</sup> , 2021	China	2020.01.01-2020.03.30	a	a	a	a	a	Strong
Liu et al <sup>67</sup> , 2020	China	by 2020.02.11	a	c	c	b	a	Moderate
Liu et al <sup>73</sup> , 2020	China	2020.01.20-2020.03.17	c	a	e	a	a	Moderate
Llaque-Quiroz et al <sup>75</sup> , 2020	Peru	2020.03-2020.05	d	a	e	a	a	Moderate
Mao et al <sup>76</sup> , 2020	China	by 2020.03.17	a	c	a	b	a	Moderate
Moazzami et al <sup>77</sup> , 2021	Iran	2020.04	c	a	c	a	a	Moderate
Ng et al <sup>78</sup> , 2021	China	by 2020.03.21	a	c	e	b	a	Moderate
Nie et al <sup>79</sup> , 2020	China	2020.01.19-2020.02.08	a	c	c	b	a	Moderate
Ogata et al <sup>80</sup> , 2022	Japan	2020.07.01-2021.09.16	a	a	a	a	a	Strong
Pak et al <sup>81</sup> , 2020	Global	2019.12.01-2020.03.30	a	c	c	b	b	Weak
Pan et al <sup>82</sup> , 2020	China	2020.01-2020.02.20	a	a	a	a	a	Strong
Patrikar et al <sup>83</sup> , 2020	India	by 2020.05	a	c	a	b	c	Moderate
Paul et al <sup>84</sup> , 2021	Canada	by 2020.11.07	b	c	e	b	c	Weak
Ping et al <sup>85</sup> , 2021	China	2020.01.03-2020.03.05	a	a	a	a	a	Strong
Pongpirul et al <sup>86</sup> , 2020	Thailand	2020.01.08-2020.04.16	a	a	a	a	a	Strong
Pung et al <sup>87</sup> , 2020	Singapore	2020.02.03-2020.02.15	a	a	e	a	c	Moderate
Qi et al <sup>88</sup> , 2020	China	2020.01.13-2020.03.23	c	a	c	a	b	Moderate
Qian et al <sup>89</sup> , 2020	China	2020.01.20-2020.02.11	a	a	e	a	c	Moderate
Qiu et al <sup>90</sup> , 2020	China	2020.01.22-2020.02.12	c	a	e	a	c	Moderate
Ratovoson et al <sup>91</sup> , 2021	Madagascar	2020.03.09-2020.07.30	a	a	c	a	a	Strong
Ren et al <sup>92</sup> , 2020	China	by 2020.01.23	a	c	d	b	a	Moderate
Samrah et al <sup>93</sup> , 2021	Jordan	2020.03.15-2020.06.09	c	b	a	a	a	Strong

Sanche et al <sup>94</sup> , 2020	China	2020.01.15-2020.01.30	a	c	a	b	a	Moderate
Shen et al <sup>95</sup> , 2020	China	2020.01.08-2020.02.19	d	c	a	a	a	Moderate
Shen et al <sup>96</sup> , 2020	China	2020.01-2020.02	a	b	b	a	b	Moderate
Shi et al <sup>97</sup> , 2020	China	2020.01.17-2020.03.05	c	b	b	a	a	Moderate
Shi et al <sup>98</sup> , 2020	China	2020.01.18-2020.03.02	a	a	c	a	a	Strong
Shiel et al <sup>99</sup> , 2021	Australia	2020.01-2020.06	a	c	a	a	a	Strong
Shu et al <sup>100</sup> , 2020	China	by 2020.02.28	c	a	d	a	c	Moderate
Song et al <sup>101</sup> , 2020	China	by 2020.01.26	b	c	c	b	a	Moderate
Song et al <sup>102</sup> , 2020	China	2020.01.16-2020.01.29	a	a	d	a	a	Strong
Song et al <sup>103</sup> , 2020	China	2020.02-2020.03	c	a	e	b	c	Weak
Su et al <sup>104</sup> , 2021	China	2020.01.21-2020.04.18	a	c	e	b	c	Weak
Sugano et al <sup>105</sup> , 2020	Japan	2020.01.15-2020.03.19	a	c	a	b	a	Moderate
Sun et al <sup>106</sup> , 2021	China	2020.12.23-2021.01.10	a	a	e	b	c	Moderate
Sun et al <sup>107</sup> , 2020	China	2020.01.24-2020.02.16	a	a	e	a	c	Moderate
Sun et al <sup>108</sup> , 2020	China	2020.01.20-2020.02.15	c	a	e	a	a	Moderate
Sun et al <sup>109</sup> , 2021	China	2020.06-2020.07.10	a	b	a	b	a	Strong
Sun et al <sup>110</sup> , 2020	China	2020.02	c	c	a	a	b	Moderate
Tan et al <sup>111</sup> , 2020	Singapore	2020.01.23-2020.04.02	a	a	a	a	b	Strong
Tanaka et al <sup>112</sup> , 2022	Japan	2022.01.01-2022.01.28	a	a	c	a	a	Strong
The SARS-CoV-2 variant with line <sup>113</sup> , 2021	France	2020.12-2021.01	a	a	e	a	a	Strong
Tian et al <sup>114</sup> , 2020	China	2020.01.20-2020.02.10	c	a	e	a	c	Moderate
Tindale et al <sup>115</sup> , 2020	China	2020.01.21-2020.02.22	b	c	b	b	c	Weak
Viego et al <sup>116</sup> , 2020	Argentina	2020.03.20-2020.05.08	b	a	e	b	c	Moderate
Wang et al <sup>158</sup> , 2021	China	by 2020.02.26	a	a	a	a	a	Strong
Wang et al <sup>117</sup> , 2020	China	2020.01.23-2020.02.20	a	a	e	a	c	Moderate
Wang et al <sup>118</sup> , 2020	China	2020.01.01-2020.04.03	a	a	e	a	c	Moderate
Wang et al <sup>119</sup> , 2020	China	2020.01.05-2020.02.12	a	a	a	a	a	Strong
Wang et al <sup>120</sup> , 2020	China	2020.01.20-2020.02.10	c	a	e	a	c	Moderate
Wei et al <sup>123</sup> , 2021	China	2020.01.19-2020.03.01	c	a	e	b	c	Weak
Wei et al <sup>122</sup> , 2020	China	2020.01.27-2020.03.11	c	a	a	a	c	Moderate
Won et al <sup>124</sup> , 2021	South Korea	2020.01.20-2020.02.10	b	c	e	b	a	Moderate
Wong et al <sup>125</sup> , 2020	Brunei	2020.03.09-2020.04.05	a	a	a	a	a	Strong
Wu et al <sup>128</sup> , 2021	China	-	a	c	a	b	c	Moderate
Wu et al <sup>127</sup> , 2020	China	2020.01-2020.02	c	a	e	a	c	Moderate
Wu et al <sup>126</sup> , 2020	China	by 2020.02.18	a	a	b	a	a	Strong
Wu et al <sup>129</sup> , 2020	China	2020.01.23-2020.02.09	a	a	e	a	c	Moderate
Xiao et al <sup>131</sup> , 2020	China	2020.01.19-2020.03.03	c	a	c	a	c	Moderate
Xiao et al <sup>133</sup> , 2021	China	by 2020.02.21	a	c	d	b	a	Moderate
Xiao et al <sup>132</sup> , 2020	China	by 2020.02.12	a	c	c	b	a	Moderate
Xiao et al <sup>130</sup> , 2020	China	2020.01.24-2020.02.16	d	c	e	b	c	Weak
Xie et al <sup>134</sup> , 2020	China	2020.01.01-2020.02.15	c	c	e	b	c	Weak
Xin et al <sup>135</sup> , 2020	China	2020.07.10-2021.04.02	a	c	c	b	a	Moderate

Xu et al <sup>136</sup> , 2020	China	2020.01.23-2020.02.18	a	a	e	a	c	Moderate
Xu et al <sup>137</sup> , 2020	China	2020.01.10-2020.01.26	c	a	a	a	c	Moderate
Yang et al <sup>138</sup> , 2020	China	2020.01.01-2020.02.20	a	c	a	b	a	Moderate
Yang et al <sup>139</sup> , 2021	China	2020.01.21-2020.02.25	c	a	e	a	a	Moderate
Yang et al <sup>140</sup> , 2020	China	2020.01.25-2020.02.08	a	a	a	a	a	Strong
You et al <sup>141</sup> , 2020	China	by 2020.03.31	b	a	b	a	a	Strong
Yu et al <sup>143</sup> , 2022	China	2020.01.01-2020.12.31	a	c	e	b	c	Weak
Yu et al <sup>142</sup> , 2020	China	by 2020.02.19	a	a	c	a	a	Strong
Zhang et al <sup>146</sup> , 2021	China	2020.01.27-2020.02.13	a	a	c	a	a	Strong
Zhang et al <sup>144</sup> , 2020	China	2020.01.19-2020.02.17	a	c	c	b	a	Moderate
Zhang et al <sup>145</sup> , 2020	China	2020.01.26-2020.02.20	a	a	b	a	c	Moderate
Zhang et al <sup>147</sup> , 2021	China	by 2020.03.11	a	c	d	a	a	Moderate
Zhang et al <sup>148</sup> , 2021	China	-	a	a	a	a	a	Strong
Zhao et al <sup>151</sup> , 2021	China	by 2020.04.08	a	c	a	b	a	Moderate
Zhao et al <sup>152</sup> , 2020	China	2020.01.16-2020.02.17	c	a	a	a	a	Strong
Zhao et al <sup>153</sup> , 2021	China	2020.01.07-2020.05.17	a	a	c	a	a	Strong
Zhao et al <sup>150</sup> , 2021	China	2021.05.21-2021.06.18	a	c	a	b	a	Moderate
Zhao et al <sup>149</sup> , 2020	China	2020.01.21-2020.02.22	c	c	e	b	c	Weak
Zhong et al <sup>154</sup> , 2020	China	2020.01.21-2020.02.10	c	a	c	a	a	Moderate
Zhu et al <sup>156</sup> , 2021	China	2020.02.26-2020.04.04	a	c	c	b	a	Moderate
Zhu et al <sup>155</sup> , 2020	China	by 2020.03.26	b	a	e	a	c	Moderate
Zhu et al <sup>157</sup> , 2021	China	2021.01.02-2021.02.14	a	c	c	b	a	Moderate

**eTable 4.** Characteristics of the Studies Included in the Systematic Review and Meta-analysis

Author	Time period	Type of design	Method of assessing strain types	Virus strain	Sample size
Areckal et al <sup>16</sup> , 2021	2020.06-2020.07	Cross-sectional study	PCR/Rapid Antigen Test	Wild-type strain	311
Backer et al <sup>18</sup> , 2020	2020.01.20-2020.01.28	Cross-sectional study		Wild-type strain	88
Backer et al <sup>17</sup> , 2020	2021.12.13-2021.12.26	Cohort study	PCR	Multiple strains	258
Bao et al <sup>19</sup> , 2020	2020.01.15-2020.02.06	Case series	PCR	Wild-type strain	57
Brandal et al <sup>20</sup> , 2021	2021.11.26-2021.12.13	Case series	PCR/WGS	Omicron variant	81
Bui et al <sup>21</sup> , 2020	2020.01.23-2020.04.13	Model study		Wild-type strain	19
Chen et al <sup>22</sup> , 2020	2020.01.24-2020.02.13	Case series		Wild-type strain	18
Covid-Epidemiology Investigation Team <sup>23</sup> , 2021	2020.12.23-2021.01.31	Case series	PCR/Sequence alignment and phylogenetic analyses	B.1.160.4 variant	31
Dai et al <sup>24</sup> , 2020	2020.01.20-2020.02.29	Model study		Wild-type strain	180
Del Águila-Mejía et al <sup>26</sup> , 2022	2021.11-2021.12	Cohort study	PCR/WGS	Multiple strains	333
Deng et al <sup>27</sup> , 2021	by 2020.03.09	Cohort study	PCR	Wild-type strain	43
Deng et al <sup>28</sup> , 2020	by 2020.03.31	Model study		Wild-type strain	198
Denis et al <sup>29</sup> , 2021	2020.12.15-2020.12.24	Cross-sectional study	PCR/Rapid Antigen Test	Wild-type strain	1676
Ding et al <sup>30</sup> , 2020	2020.01.21-2020.03.10	Cross-sectional study	PCR	Wild-type strain	27
Dong et al <sup>31</sup> , 2020	2020.01.13-2020.02.21	Cross-sectional study	PCR	Wild-type strain	16
Du et al <sup>32</sup> , 2020	2020.01.08-2020.02.05	Model study		Wild-type strain	109



Gao et al <sup>34</sup> , 2020	2020.01.21-2020.02.11	Cross-sectional study		Wild-type strain	24
Gao et al <sup>33</sup> , 2020	2020.01.20-2020.03.17	Cohort study	PCR	Wild-type strain	12
Grant et al <sup>35</sup> , 2022	2021.05.23-2021.08.13	Case control study	PCR	Multiple strains	7553
Guo et al <sup>36</sup> , 2020	2020.01.15-2020.03.15	Cross-sectional study	PCR	Wild-type strain	85
Han et al <sup>37</sup> , 2020	2020.03.28-2020.04.08	Case series	PCR	Wild-type strain	8
Han et al <sup>39</sup> , 2020	2020.01.20-2020.03.10	Cross-sectional study 研究	PCR	Wild-type strain	226
Han et al <sup>38</sup> , 2020	2020.01.31-2020.02.16	Cohort study	PCR	Wild-type strain	25
Hong et al <sup>40</sup> , 2020	2020.01.14-2020.03.09	Model study		Wild-type strain	58
Hua et al <sup>41</sup> , 2020	2020.01.01-2020.02.29	Cohort study	PCR	Wild-type strain	43
Huang et al <sup>43</sup> , 2020	2020.01.08-2020.02.16	Cross-sectional study 研究		Wild-type strain	734
Huang et al <sup>42</sup> , 2020	2020.01.22-2020.06.18	Cohort study	PCR	Wild-type strain	429
Huang et al <sup>44</sup> , 2021	2020.01.01-2020.04.08	Model study		Wild-type strain	787
Je et al <sup>45</sup> , 2021	2020.02-2020.04	Cohort study	PCR	Wild-type strain	29
Jeong et al <sup>46</sup> , 2020	2020.02.22-2020.02.26	Case series	PCR	Wild-type strain	25
Jiang et al <sup>47</sup> , 2020	2020.01.12-2020.02.20	Case series	PCR	Wild-type strain	43
Jiang et al <sup>48</sup> , 2021	2020.01.19-2020.01.23	Model study		Wild-type strain	147
Jin et al <sup>49</sup> , 2020	2020.01.17-2020.02.08	Cohort study	PCR	Wild-type strain	195
Khonyongwa et al <sup>50</sup> , 2020	2020.03.01-2020.04.18	Cross-sectional study	PCR	Wild-type strain	44
Ki et al <sup>51</sup> , 2020	2020.03.01-2020.06.30	Model study		Wild-type strain	79

Kim et al <sup>52</sup> , 2020	2020.02.04-2020.04.07	Case series	PCR	Wild-type strain	7
Kong et al <sup>53</sup> , 2020	2020.01.08-2020.01.27	Case series		Wild-type strain	10
Kong et al <sup>55</sup> , 2020	2020.01.22-2020.02.15	Cohort study		Wild-type strain	136
Kong et al <sup>54</sup> , 2020	2020.01.25-2020.02.20	Cohort study	PCR/WGS	Wild-type strain	411
Lai et al <sup>56</sup> , 2020	2020.01.11-2020.02.10	Cohort study	PCR/WGS	Wild-type strain	330
Lau et al <sup>57</sup> , 2021	2020.01.01-2020.01.29	Model study		Wild-type strain	160
Laval et al <sup>25</sup> , 2021	2020.02.25-2020.03.04	Case series	PCR	Wild-type strain	23
Le et al <sup>58</sup> , 2020	2020.01-2020.02	Case series	PCR/WGS	Wild-type strain	11
Lee et al <sup>59</sup> , 2021	2021.11.24-2021.12.10	Case series	PCR	Omicron variant	80
Lei et al <sup>60</sup> , 2020	2020.01.22-2020.02.01	Case series		Wild-type strain	7
Leung et al <sup>61</sup> , 2020	2020.01.20-2020.02.12	Model study		Wild-type strain	90
Li et al <sup>63</sup> , 2020	2020.01.21-2020.02.09	Cohort study	PCR	Wild-type strain	74
Li et al <sup>64</sup> , 2022	2021.05.21-2021.06.24	Cross-sectional study	PCR	Delta variant	103
Li et al <sup>62</sup> , 2020	2019.12-2020.01	Cross-sectional study	PCR	Wild-type strain	10
Linton et al <sup>65</sup> , 2020	by 2020.01.31	Model study		Wild-type strain	158
Liu et al <sup>66</sup> , 2021	2020.01.20-2020.02.23	Case series	PCR	Wild-type strain	6
Liu et al <sup>68</sup> , 2020	2020.01.20-2020.04.15	Cohort study		Wild-type strain	49
Liu et al <sup>69</sup> , 2020	2019.12.25-2020.02.05	Cross-sectional study		Wild-type strain	33
Liu et al <sup>70</sup> , 2020	2020.01.28-2020.04.12	Cross-sectional study		Wild-type strain	27
Liu et al <sup>71</sup> , 2020	2020.01.22-2020.02.21	Cohort study		Wild-type strain	41

Liu et al <sup>72</sup> , 2020	2020.01.23-2020.02.10	Cross-sectional study		Wild-type strain	44
Liu et al <sup>74</sup> , 2021	2020.01.01-2020.03.30	Cross-sectional study	PCR/NGS	Wild-type strain	57
Liu et al <sup>67</sup> , 2020	by 2020.02.11	Cross-sectional study	PCR/WGS	Wild-type strain	431
Liu et al <sup>73</sup> , 2020	2020.01.20-2020.03.17	Cohort study	PCR	Wild-type strain	90
Llaque-Quiroz et al <sup>75</sup> , 2020	2020.03-2020.05	Cross-sectional study	PCR/Rapid Antigen Test	Wild-type strain	33
Mao et al <sup>76</sup> , 2020	by 2020.03.17	Cross-sectional study	PCR	Wild-type strain	28
Moazzami et al <sup>77</sup> , 2021	2020.04	Case series		Wild-type strain	23
Ng et al <sup>78</sup> , 2021	by 2020.03.21	Case series		Wild-type strain	158
Nie et al <sup>79</sup> , 2020	2020.01.19-2020.02.08	Cross-sectional study		Wild-type strain	2907
Ogata et al <sup>80</sup> , 2022	2020.07.01-2021.09.16	Cohort study	PCR/WGS	Multiple strains	121
Pak et al <sup>81</sup> , 2020	2019.12.01-2020.03.30	Model study		Wild-type strain	207
Pan et al <sup>82</sup> , 2020	2020.01-2020.02.20	Cross-sectional study	PCR	Wild-type strain	18
Patrikar et al <sup>83</sup> , 2020	by 2020.05	Model study		Wild-type strain	268
Paul et al <sup>84</sup> , 2021	by 2020.11.07	Model study		Unknown strain	211735
Ping et al <sup>85</sup> , 2021	2020.01.03-2020.03.05	Cross-sectional study	PCR/WGS	Wild-type strain	90
Pongpirul et al <sup>86</sup> , 2020	2020.01.08-2020.04.16	Cross-sectional study	PCR	Wild-type strain	83
Pung et al <sup>87</sup> , 2020	2020.02.03-2020.02.15	Cross-sectional study	PCR	Wild-type strain	19

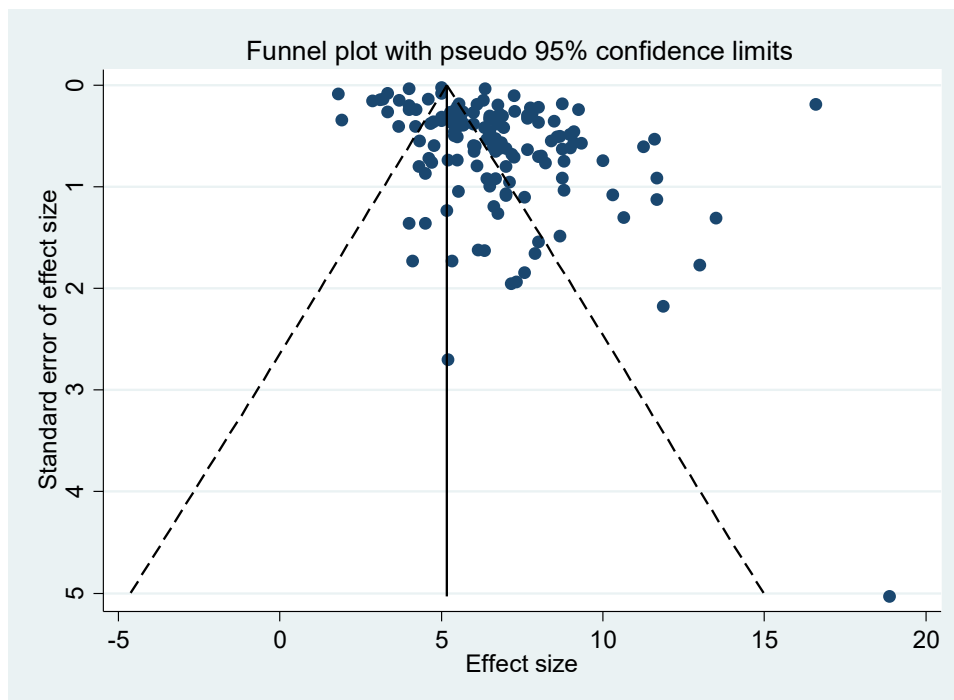
Qi et al <sup>88</sup> , 2020	2020.01.13-2020.03.23	Case series	PCR	Wild-type strain	56
Qian et al <sup>89</sup> , 2020	2020.01.20-2020.02.11	Case series	PCR	Wild-type strain	91
Qiu et al <sup>90</sup> , 2020	2020.01.22-2020.02.12	Cross-sectional study		Wild-type strain	104
Ratovoson et al <sup>91</sup> , 2021	2020.03.09-2020.07.30	Case series	PCR	Wild-type strain	32
Ren et al <sup>92</sup> , 2020	by 2020.01.23	Cross-sectional study		Wild-type strain	98
Samrah et al <sup>93</sup> , 2021	2020.03.15-2020.06.09	Cohort study	PCR	Unknown strain	157
Sanche et al <sup>94</sup> , 2020	2020.01.15-2020.01.30	Model study		Wild-type strain	24
Shen et al <sup>95</sup> , 2020	2020.01.08-2020.02.19	Cross-sectional study		Wild-type strain	6
Shen et al <sup>96</sup> , 2020	2020.01-2020.02	Case series		Wild-type strain	7
Shi et al <sup>97</sup> , 2020	2020.01.17-2020.03.05	Cross-sectional study		Wild-type strain	38
Shi et al <sup>98</sup> , 2020	2020.01.18-2020.03.02	Cross-sectional study	PCR	Wild-type strain	46
Shiel et al <sup>99</sup> , 2021	2020.01-2020.06	Cross-sectional study	PCR	Unknown strain	100
Shu et al <sup>100</sup> , 2020	by 2020.02.28	Cross-sectional study	PCR/WGS	Wild-type strain	32
Song et al <sup>101</sup> , 2020	by 2020.01.26	Model study		Wild-type strain	90
Song et al <sup>102</sup> , 2020	2020.01.16-2020.01.29	Cross-sectional study	PCR	Wild-type strain	22
Song et al <sup>103</sup> , 2020	2020.02-2020.03	Cross-sectional study	PCR	Wild-type strain	17
Su et al <sup>104</sup> , 2021	2020.01.21-2020.04.18	Cross-sectional study	PCR	Wild-type strain	101

Sugano et al <sup>105</sup> , 2020	2020.01.15-2020.03.19	Case series	PCR	Wild-type strain	40
Sun et al <sup>106</sup> , 2021	2020.12.23-2021.01.10	Case series	PCR	Unknown strain	19
Sun et al <sup>107</sup> , 2020	2020.01.24-2020.02.16	Case series	PCR	Wild-type strain	
Sun et al <sup>108</sup> , 2020	2020.01.20-2020.02.15	Case series	PCR	Wild-type strain	55
Sun et al <sup>109</sup> , 2021	2020.06-2020.07.10	Case series	PCR/WGS	B.1.1 variant	
Sun et al <sup>110</sup> , 2020	2020.02	Case series	PCR	Wild-type strain	
Tan et al <sup>111</sup> , 2020	2020.01.23-2020.04.02	Cross-sectional study	PCR	Wild-type strain	164
Tanaka et al <sup>112</sup> , 2022	2022.01.01-2022.01.28	Cross-sectional study	PCR/Time period	Multiple strains	77
The SARS-CoV-2 variant with line <sup>113</sup> , 2021	2020.12-2021.01	Case series	PCR/WGS	Beta variant	10
Tian et al <sup>114</sup> , 2020	2020.01.20-2020.02.10	Cohort study	PCR	Wild-type strain	262
Tindale et al <sup>115</sup> , 2020	2020.01.21-2020.02.22	Cross-sectional study		Wild-type strain	135
Viego et al <sup>116</sup> , 2020	2020.03.20-2020.05.08	Cross-sectional study		Unknown strain	15
Wang et al <sup>158</sup> , 2021	by2020.02.26	Case series	PCR	Wild-type strain	14
Wang et al <sup>117</sup> , 2020	2020.01.23-2020.02.20	Case series	PCR	Wild-type strain	62
Wang et al <sup>118</sup> , 2020	2020.01.01-2020.04.03	Cross-sectional study	PCR/NGS	Wild-type strain	219
Wang et al <sup>119</sup> , 2020	2020.01.05-2020.02.12	Case series	PCR/WGS	Wild-type strain	14
Wang et al <sup>120</sup> , 2020	2020.01.20-2020.02.10	Case series	PCR/WGS	Wild-type strain	275
Wei et al <sup>123</sup> , 2021	2020.01.19-2020.03.01	Case series		Wild-type strain	28
Wei et al <sup>122</sup> , 2020	2020.01.27-2020.03.11	Case series	PCR/NGS	Wild-type strain	71

Won et al <sup>124</sup> , 2021	2020.01.20-2020.02.10	Model study		Wild-type strain	28
Wong et al <sup>125</sup> , 2020	2020.03.09-2020.04.05	Cross-sectional study	PCR	Wild-type strain	15
Wu et al <sup>128</sup> , 2021	-	Cross-sectional study	PCR/WGS	Unknown strain	39
Wu et al <sup>127</sup> , 2020	2020.01-2020.02	Case series	PCR	Wild-type strain	14
Wu et al <sup>126</sup> , 2020	by 2020.02.18	Case series	PCR	Wild-type strain	19
Wu et al <sup>129</sup> , 2020	2020.01.23-2020.02.09	Case series	PCR	Wild-type strain	41
Xiao et al <sup>131</sup> , 2020	2020.01.19-2020.03.03	Case series	PCR	Wild-type strain	44
Xiao et al <sup>133</sup> , 2021	by 2020.02.21	Cross-sectional study	PCR	Wild-type strain	217
Xiao et al <sup>132</sup> , 2020	by 2020.02.12	Cross-sectional study		Wild-type strain	2555
Xiao et al <sup>130</sup> , 2020	2020.01.24-2020.02.16	Cross-sectional study	PCR	Wild-type strain	279
Xie et al <sup>134</sup> , 2020	2020.01.01-2020.02.15	Case series	PCR	Wild-type strain	21
Xin et al <sup>135</sup> , 2020	2020.07.10-2021.04.02	Model study	PCR	Unknown strain	177
Xu et al <sup>136</sup> , 2020	2020.01.23-2020.02.18	Case series	PCR	Wild-type strain	19
Xu et al <sup>137</sup> , 2020	2020.01.10-2020.01.26	Case series		Wild-type strain	56
Yang et al <sup>138</sup> , 2020	2020.01.01-2020.02.20	Case series		Wild-type strain	325
Yang et al <sup>139</sup> , 2021	2020.01.21-2020.02.25	Case series		Wild-type strain	74
Yang et al <sup>140</sup> , 2020	2020.01.25-2020.02.08	Case series	PCR	Wild-type strain	10
You et al <sup>141</sup> , 2020	by 2020.03.31	Model study		Wild-type strain	169
Yu et al <sup>143</sup> , 2022	2020.01.01-2020.12.31	Model study		Unknown strain	211

Yu et al <sup>142</sup> , 2020	by 2020.02.19	Cross-sectional study		Wild-type strain	57
Zhang et al <sup>146</sup> , 2021	2020.01.27-2020.02.13	Case series		Wild-type strain	10
Zhang et al <sup>144</sup> , 2020	2020.01.19-2020.02.17	Cross-sectional study		Wild-type strain	49
Zhang et al <sup>145</sup> , 2020	2020.01.26-2020.02.20	Cohort study	PCR	Wild-type strain	6
Zhang et al <sup>147</sup> , 2021	by 2020.03.11	Cross-sectional study		Wild-type strain	139
Zhang et al <sup>148</sup> , 2021	-	Cross-sectional study		Unknown strain	353
Zhao et al <sup>151</sup> , 2021	by 2020.04.08	Model study		Wild-type strain	254
Zhao et al <sup>152</sup> , 2020	2020.01.16-2020.02.17	Case series		Wild-type strain	45
Zhao et al <sup>153</sup> , 2021	2020.01.07-2020.05.17	Model study		Unknown strain	102
Zhao et al <sup>150</sup> , 2021	2021.05.21-2021.06.18	Cross-sectional study	PCR/WGS	Delta variant	39
Zhao et al <sup>149</sup> , 2020	2020.01.21-2020.02.22	Case series		Wild-type strain	26
Zhong et al <sup>154</sup> , 2020	2020.01.21-2020.02.10	Case series		Wild-type strain	62
Zhu et al <sup>156</sup> , 2021	2020.02.26-2020.04.04	Cross-sectional study		Wild-type strain	197
Zhu et al <sup>155</sup> , 2020	by 2020.03.26	Cross-sectional study		Wild-type strain	245
Zhu et al <sup>157</sup> , 2021	2021.01.02-2021.02.14	Model study		Unknown strain	869

eFigure 1. Funnel Plot with a 95% Confidence Interval for Included Studies in the Meta-analysis





eFigure 2. Forest Plot for the Meta-analysis of Incubation Period for COVID-19 Caused by Wild-type Strain

