

## SUPPLEMENTARY DATA

**Supplement Table I.** Search terms

Domains	Search term
PubMed Population	Acute Coronary Syndrome; Cardiovascular Disease; Cardiac Injury; Myocardial Injury; STEMI; NSTEMI; NSTEMI-ACS; Unstable Angina; acute coronary syndrome [MeSH Terms]
Intervention/Exposure ScienceDirect Population	Novel Coronavirus; COVID-19; SARS-CoV2; COVID-19; COVID-19[MeSH Terms]
Intervention/Exposure	cardiovascular disease [Title/Abstract]; cardiac injury [Title/Abstract]; Myocardial Injury [Title/Abstract]; STEMI[Title/Abstract]; NSTEMI [Title/Abstract]; (NSTEMI-ACS[Title/Abstract]; unstable angina [Title/Abstract]
Intervention/Exposure	novel coronavirus [Title/Abstract]; COVID-19[Title/Abstract]; SARS-CoV2[Title/Abstract]

**Supplement Table II.** Characteristics of included studies

No	Author	Year	Country	Time range	No. Hospital	Types of patients	No. Patients Before Pandemic	No. Patients During Pandemic	STROBE (%)	NOS
1.	Abdelaziz HK	2020	UK	March 2020 March 2019	1	STEMI	69	46	45.5	5
2.	Aldujeli A	2020	Lithuania	March-April 2019 March-April 2020	1	STEMI NSTEMI	122	77	45.5	6
3.	Aldujeli A	2021	Lithuania	March-April 2019 March-April 2020	6	STEMI NSTEMI	162	107	54.5	8
4.	Arai R	2021	Japan	Jan-Sept 2017-2019 Jan-Sept 2021	1	STEMI NSTEMI	70	66	50.0	7
5.	Araiza-Garaygordobil	2021	17 European countries	Dec 2019 April 2020	29	STEMI NSTEMI	5923	1425	59.1	5
6.	Ayad S	2021	Egypt	Feb-Oct 2019 Feb-Oct 2020	1	STEMI	364	270	45.5	7
7.	Azul Freitas	2021	Portugal	March-April 2019 March-April 2020	1	STEMI	55	49	45.5	6
8.	Baldi E	2021	Switzerland	March-May 2016-2019 March-May 2020	N/A	STEMI	28	34	50.0	5
9.	Balghith MA	2020	Saudi Arabia	August-Dec 2019 Jan-May 2020	1	STEMI	81	92	50.0	7
10.	Boeddinghaus J	2020	Switzerland	Jan-Feb 2020 March-April 2020	1	STEMI	63	64	59.1	5
11.	Bonnet G	2021	France	March-May 2019 March-May 2020	65	STEMI	3251	3055	59.1	5

12.	Braiteh N	2020 USA	March-April 2019 March-April 2020	4	STEMI NSTEMI	113	67	63.6	5
13.	Bruoha	2021 Israel	July 2018 June 2020	1	STEMI	176	36	68.2	5
14.	Calvao J	2021 Portugal	March-April 2019 March-April 2020	1	STEMI NSTEMI	31	39	59.1	7
15.	Cammalleri V	2020 Italy	March 2019 March 2020	1	STEMI	35	13	50.0	6
16.	Chen Y	2021 UK	March-May 2019 March-May 2020	1	STEMI	155	111	45.5	5
17.	Chew NW	2021 Singapore	Oct 2019-Feb 2020 Feb-March 2020	1	STEMI	208	95	50.0	7
18.	Cinier G	2020 Turkey	March-April 2019 March-April 2020	1	STEMI	174	90	68.2	7
19.	Claeys MJ	2020 Belgium	March-April 2017-2019 March-April 2020	N/A	STEMI	177	116	63.6	7
20.	Coughlan JJ	2020 Ireland	March-April 2019 March-April 2020	1	STEMI	14	9	59.1	7
21.	D'Amario D	2020 Italy	Same period in 2019 and 2020	N/A	STEMI	26	22	50.0	4
22.	Daoulah A	2020 Saudi Arabia	Jan-Apr 2019 Jan-Apr 2020	16	STEMI	635	500	63.6	6
23.	De Luca G	2020 18 European countries	March-April 2019 March-April 2020	77	STEMI	3484	2811	68.2	7
24.	Dharma S	2021 Indonesia	March-May 2019 March-May 2020	1	STEMI	208	116	54.5	7
25.	Erol M	2020 Turkey	November 2019 Apr-May 2020	48	STEMI NSTEMI	1872	1113	59.1	7
26.	Fabris E	2020 Italy	March-April 2019 March-April 2020	1	STEMI	43	21	59.1	7
27.	Fardman A	2021 Israel	March-April 2018 March-April 2020	13	STEMI	417	424	72.7	6
28.	Firman D	2021 Indonesia	Feb-June 2020 Feb-June 2019	5	STEMI	338	190	63.6	5

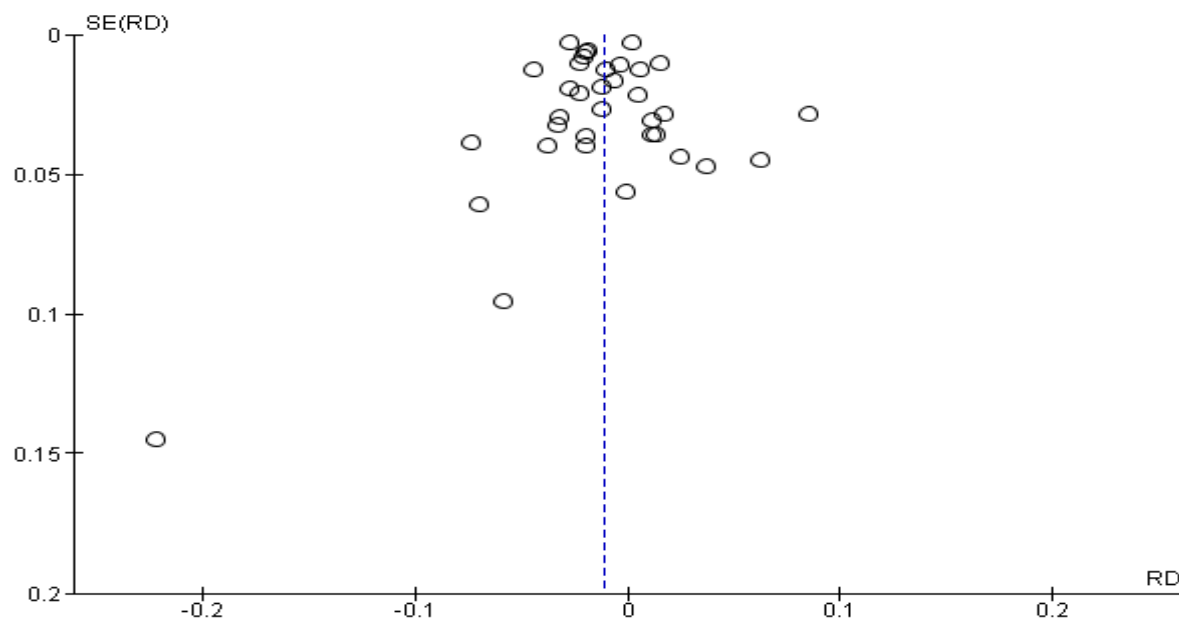
29.	Gluckman TC	2021	USA	December 2018-February 22, 2020 February 23-May 2020	49	STEMI NSTEMI	13329	1915	100.0	7
30.	Gramegna M	2020	Italy	Feb-Apr 2018-2019 Feb-Apr 2020	1	STEMI	21	26	50.0	6
31.	Haddad K	2020	Canada	March-May 2019 March-May 2020	2	STEMI	60	53	59.1	6
32.	Hannan EL	2020	USA	Jan 2019-Mar 2020 Mar-Apr 2020	51	STEMI	6584	463	54.5	7
33.	Hauguel-Moreau M	2020	France	Feb-Apr 2018-2019 Feb-Mar 2020 Mar-Apr 2020	1	STEMI NSTEMI	63	16	50.0	5
34.	Kiris T	2021	Turkey	March-May 2019 March-May 2020	15	STEMI	1055	733	68.2	7
35.	Kobo O	2020	Israel	Mar-Apr 2019 Mar-Apr 2020	4	STEMI	136	107	63.6	7
36.	Leng WX	2020	China	Jan-Apr 2019 Jan-Apr 2020	1	STEMI	240	164	63.6	5
37.	Little CD	2020	UK	Mar-Apr 2019 Mar-Apr 2020	N/A	STEMI	440	348	63.6	6
38.	Liu S	2020	China	Feb-March 2019 Feb-March 2020	1	NSTEMI	145	115	68.2	7
39.	Lu Q	2021	China	Jan-Apr 2019 Jan-Apr 2020	1	STEMI	41	21	59.1	7
40.	Ma T	2021	China	Jan-Apr 2019 Jan-Apr 2021	2	STEMI NSTEMI	256	207	63.6	7
41.	Mafham MM	2020	England	Jan – May 2019 Jan – May 2020	147	STEMI NSTEMI	1,888	1,210	68.2	7
42.	Mao Q	2021	China	Jan-March 2019 Jan-March 2020	14	STEMI	220	100	68.2	6
43.	Medranda GA	2021	USA	March-Aug 2019 March-Aug 2020	1	STEMI	90	93	63.6	6
44.	Mengal N	2020	Pakistan	March-Apr 2019 March-Apr 2020	1	STEMI	1537	1139	54.5	6
45.	Natarajan MK	2020	Canada	Jan-May 2019 Jan-May 2020	N/A	STEMI	2513	2221	50.0	5
46.	Papafaklis MI	2020	Greece	March-Apr 2019 March-Apr 2020	Registry	STEMI NSTEMI	806	599	86.4	6

47.	Perrin N	2020	Switzerland	Mar-Apr 2019 Mar-Apr 2020	1	STEMI NSTEMI	140	45	68.2	6
48.	Petrovic M	2021	Serbia	March-May 2019 March-May 2020	N/A	STEMI NSTEMI	242	145	59.1	7
49.	Phua K	2021	Singapore	Dec 2019-Feb 2020 Feb-March 2020	1	STEMI	126	112	54.5	7
50.	Rodriguez Leor O	2020	Spain	April 2019 March-Apr 2020	75	STEMI	1305	1009	77.3	6
51.	Rodriguez Ramos MA	2020	Cuba	Feb-Apr 2015-2019 Feb-Apr 2020	1	STEMI	44	35	59.1	8
52.	Scholz KH	2020	Germany	March 2017, 2018, 2019 March 2020	41	STEMI	47	35	68.2	6
53.	Soylu K	2021	Turkey	Before Jan 2020 After March 2020	3	STEMI	83	82	59.1	7
54.	Su YH	2021	Taiwan	Feb-Apr 2016-2019 Feb-Apr 2020	1	STEMI	33	28	50.0	6
55.	Sutherland N	2021	Australia	March-April 2019 March-April 2020	1	STEMI NSTEMI	130	98	50.0	7
56.	Tomasoni D	2020	Italy	Jan-Feb 2020 Feb-Apr 2020	1	STEMI	51	34	54.5	7
57.	Tousek P	2020	Czech Republic	Feb-May 2020 Oct 2018-Jan 2020	1	STEMI NSTEMI	834	181	54.5	6
58.	Ullah A	2020	UK	March-June 2019 March-June 2019	1	STEMI NSTEMI	539	278	45.5	5
59.	Wienberg H	2021	Germany	2006-2019 2020	N/A	STEMI	731	726	45.5	6
60.	Xiang D	2020	China	Dec 2019- Jan2020 Jan-Feb 2020	N/A	STEMI	16355	11834	50.0	7
61.	Zachariah G	2021	India	March-June 2019 March-June 2020	187	STEMI NSTEMI	25418	16414	81.8	6
62.	Zhang F	2020	China	Jan-March 2019 Jan-March 2020	1	STEMI	138	119	45.5	7
63.	Popovic B	2020	France	Feb-May 2008-2017 Feb May 2020	1	STEMI	155	83	45.5	6

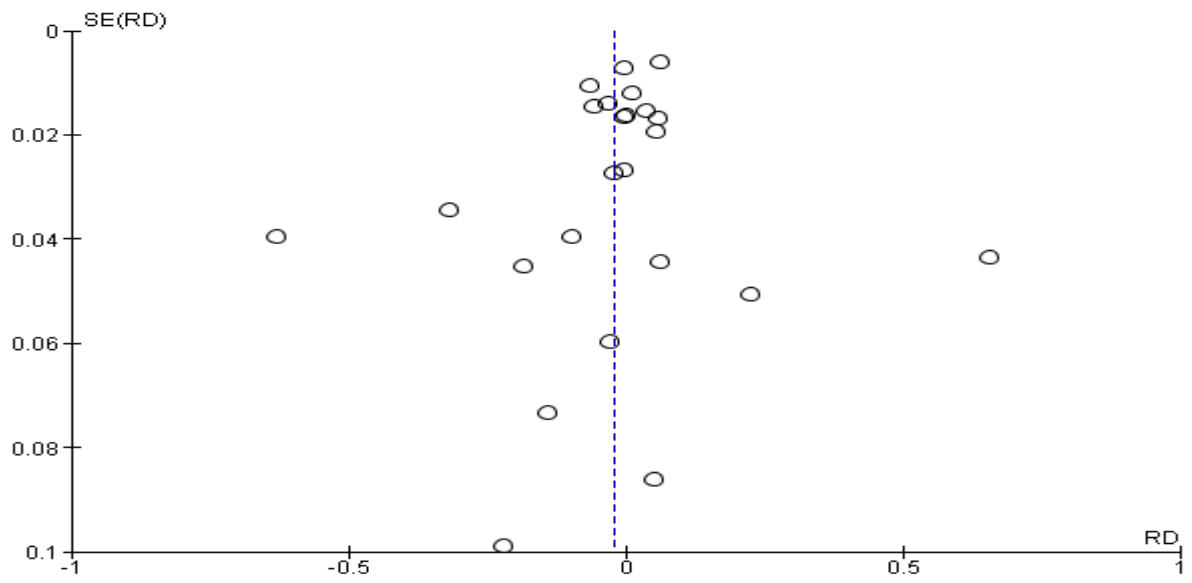
N/A : not available

**Supplement Table III.** Total ischemic time among STEMI patients before and during COVID-19 pandemic

No	Study	Median (Q1, Q3) or mean $\pm$ SD (minute)		Condition compared to before the pandemic
		Before pandemic	During pandemic	
1	Bonnet G, 2021	245 (140, 646)	270 (150, 705)	Significantly Longer
2	De Luca G, 2020	181 (120, 301)	200 (127, 357)	Significantly Longer
3	Dharma S, 2021	449 (356.5, 585.5)	475.5 (354, 679.5)	Longer
4	Erol M, 2020	195 (115, 331)	245 (149, 469)	Significantly Longer
5	Fabris E, 2020	212 (125, 290)	183 (139, 280)	Shorter
6	Fardman A, 2021	180 (122, 292)	290 (161, 1080)	Significantly Longer
7	Firman D, 2021	447.33 $\pm$ 164.75	488.57 $\pm$ 185.26	Significantly Longer
8	Little CD, 2020	246 (157, 536)	282 (173, 618)	Significantly Longer
9	Mao Q, 2021	264 (204, 367)	420 (295, 688)	Significantly Longer
10	Mengal N, 2020	346.75 $\pm$ 207.31	429.25 $\pm$ 272.16	Significantly Longer
11	Petrovic M, 2021	200,8 $\pm$ 156,8	303 $\pm$ 163,4	Significantly Longer
12	Rodriguez Leor O, 2020	200 (140, 332)	233 (150, 375)	Significantly Longer
13	Rodriguez Ramos MA, 2020	240 (152, 540)	210 (112, 300)	Significantly Shorter
14	Sutherland N, 2021	137 (102, 307)	267 (13, 1124)	Longer
15	Popovic B, 2020	228 $\pm$ 180	444 $\pm$ 462	Significantly Longer



**Supplement figure 1:** Funnel plots of In-Hospital mortality among STEMI patients



**Supplement Figure 2:** Funnel plots of underwent PCI among STEMI patients