



COVID-19 Living Evidence
Synthesis #10
(Version 10.5: 27 April 2022)

Appendix 1: Summary of Included Studies

Note: Newly added studies in blue, updated studies in green.

| Study ID | First author | Location | Population of interest | Total sample size | Vaccines included in report | Full schedule and/or booster data | Outcomes included in report | Maximum Number of follow-up time points | VOC specific data included in report |
|----------|------------------------|----------|-----------------------------|---|--|-----------------------------------|---|---|--------------------------------------|
| 01-3 | Andrews ¹ | UK | Persons aged >16 years | 52,333,72 | BNT162b2 AZD1222 (ChAdOx1) * | Full schedule | Symptomatic cases Hospitalisations Deaths | 2 | Delta |
| 02-3 | Bedston ² | UK | HCWs aged ≥16 years | 82,959 | BNT162b2 | Full schedule | Any cases | 3 | N/A |
| 03-3 | Britton ³ | USA | Adults aged ≥20 years | 1,634,271 | BNT162b2 mRNA-1273 Ad26.CoV2.S * | Full schedule | Symptomatic cases | 6 | Delta |
| 04-3 | Bruxvoort ⁴ | USA | KPSC members aged ≥18 years | 352,878 unvaccinated and 352,878 vaccinated | mRNA-1273 | Full schedule | Any cases | 3 | Delta |

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|-------------|------------------------------|-------------|---|-----------|--|----------------------|-----------------------------------|---|----------------------|
| 05-3 | Buchan ⁵ | Canada | Adults aged >18 years | 134,435 | BNT162b2 Ad26.CoV2.S AZD1222 (ChAdOx1) mRNA-1273 | Full schedul e | Symptomatic cases | 3 | Delta Omicro n |
| 06-3 | Cerqueira-Silva ⁶ | Brazil | Adults aged >18 years | 30,910 | BNT162b2, AZD1222 (ChAdOx1) Ad26.CoV2.S * | Full schedul e | Symptomatic cases | 1 | N/A |
| 07-2 | Chemaitelly ⁷ | Qatar | Persons aged ≥12 years in Qatar | 494,859 | BNT162b2 | Full schedul e | All cases | 4 | Delta |
| 08-2 | De Gier ⁸ | Netherlands | Persons aged ≥12 year in a nationwide registry of COVID-19 hospitalizations | 15,571 | BNT162b2 Ad26.CoV2.S AZD1222 (ChAdOx1) mRNA-1273 | Full schedul e | Hospitalisation s | 2 | Delta |
| 09-2 | El Sahly ⁹ | USA | Adults aged ≥18 years with high risk for Covid-19 | 28,451 | mRNA-1273 | Full schedul e | Symptomatic cases | 1 | N/A |
| 10-3 | Florea ¹⁰ | USA | KPSC members aged >18 years | 1,854,008 | mRNA-1273 | Full schedul e | All cases Hospitalisation s | 2 | N/A |
| 11-3 | Katikireddi ¹¹ | Scotland | Adults aged >18 years | 2,534,527 | AZD1222 (ChAdOx1) | Full schedul e | Symptomatic cases | 3 | N/A |

| | | | | | | | | | |
|-------------|--------------------------------|-------------|---|-------------|--|----------------------|--|---|-------|
| 12-3 | Lin ¹² | USA | Adults aged ≥18 years in North Carolina | 10,600,823 | BNT162b2 Ad26.CoV2.S mRNA-1273 * | Full schemul e | All cases Hospitalisation s Deaths | 3 | N/A |
| 13-3 | Lytras ¹³ | Greece | Persons aged ≥15 years | 9,200,000 | BNT162b2 Ad26.CoV2.S AZD1222 (ChAdOx1) mRNA-1273 * | Full schemul e | Deaths | 1 | N/A |
| 14-3 | Machado ¹⁴ | Portugal | Adults aged ≥65 years | 471,439,909 | BNT162b2 mRNA-1273 | Full schemul e | Symptomatic cases Hospitalisation s Deaths | 1 | N/A |
| 15-3 | Nordstrom ¹⁵ | Sweden | Adults aged >18 years in Sweden | 1,684,958 | BNT162b2 AZD1222 (ChAdOx1) mRNA-1273* | Full schemul e | All cases | 3 | N/A |
| 16-3 | Petras ¹⁶ | Prague | Hospital staff aged ≥18 years | 11,443 | BNT162b2 Ad26.CoV2.S AZD1222 (ChAdOx1) mRNA-1273 | Full schemul e | All cases | 1 | N/A |
| 17-3 | Poukka ¹⁷ | Finland | HCWs aged 16-69 years | 427,905 | BNT162b2 AZD1222 (ChAdOx1) mRNA-1273 | Full schemul e | All cases Hospitalisation s ^s | 1 | Delta |
| 18-4 | Robles-Fontan ^{18(p)} | Puerto Rico | Persons aged ≥12 years | 88,044 | BNT162b2 Ad26.CoV2.S | Full schemul | All cases | 1 | N/A |

| | | | | | mRNA-1273* | e | Hospitalisation s Deaths | | |
|-------------------------|--------------------------|--------|---|---|--|---------------|--------------------------------|---|---------------|
| 19-3 | Rosenberg ¹⁹ | USA | Adults aged ≥18 years in New York State | 8,690,825 | BNT162b2 mRNA-1273 AZD1222 (ChAdOx1) * | Full schedule | All cases Hospitalisation s | 1 | N/A |
| 20-5 | Skowronski ²⁰ | Canada | Adults aged >18 years in BC and QC | 2,846,077 (872,440 BC; 1,973,637 QC) | BNT162b2 AZD1222 (ChAdOx1) mRNA-1273* | Full schedule | All cases Hospitalisation s | 6 | Delta |
| 21-3 | Tartof ²¹ | USA | KPSC members aged >18 years | 3,436,957 | BNT162b2 | Full schedule | All cases Hospitalisation s | 4 | N/A |
| 22-1 | Thomas ²² | Global | Persons aged ≥16 years | 44,047 | BNT162b2 | Full schedule | All cases | 1 | N/A |
| 23-1 | Thompson ²³ | USA | Adults aged ≥50 years | 41,552 hospitalisations + 21,522 ED visits from 187 hospitals | BNT162b2 Ad26.CoV2.S mRNA-1273 | Full schedule | Hospitalisation s | 1 | N/A |
| 24-3[#] | Young-Xu ²⁴ | USA | Male veterans aged ≥65 years | 71,190 | BNT162b2 mRNA-1273 | Full schedule | All cases | 5 | Delta |
| 25-3 | Ferdinands ²⁵ | USA | Adults aged ≥18 years | 241,204 | BNT162b2 mRNA-1273 | Full schedule | Hospitalisation s | 2 | Delta Omicron |

| | | | | | | Full schedule and booster | | | Outcome |
|------|--------------------------------|---------|---------------------------------|-----------|--|---------------------------|---|---|------------------|
| 26-3 | Hall ²⁶ | UK | Adult HCWs aged ≥18 years | 35,768 | BNT162b2 Ad26.CoV2.S AZD1222 (ChAdOx1) mRNA-1273 | Full schedule | All cases | 2 | N/A |
| 27-3 | Chemaitelly ²⁷ | Qatar | Persons aged ≥12 years in Qatar | 84,884 | BNT162b2 | Full schedule and booster | Symptomatic cases | 9 | Omicron |
| 28-4 | Andrews ²⁸ | England | Adults aged ≥18 years | 2,663,549 | BNT162b2 AZD1222(ChAdOx1) mRNA-1273* | Full schedule | Symptomatic cases | 2 | Delta Omicron |
| 29-4 | Castillo ²⁹ | France | Adults aged ≥50 years | 1,296,351 | BNT162b2 Ad26.CoV2.S AZD1222 (ChAdOx1) mRNA-1273 | Full schedule | Symptomatic cases Hospitalisations | 3 | Delta |
| 30-4 | Syed ³⁰ | Qatar | Persons aged ≥12 years | 1,241,501 | BNT162b2 mRNA-1273* | Full schedule | All cases | 2 | N/A |
| 31-5 | Glatman-Freedman ³⁰ | Israel | Persons aged ≥16 years | 1,561,812 | BNT162b2 | Booster | All cases Hospitalisations Deaths | 3 | Omicron |
| 32-5 | Hansen ³¹ | Denmark | Persons aged | 3,090,833 | BNT162b2 | Full | All cases | 1 | Omicron |

| | | | | | | | | | |
|------|-------------------------|---------|------------------------|------------|--|---------------------------|---|---|------------------|
| | | | ≥12 years | | mRNA-1273* | schedule and Booster | Hospitalisations | | n |
| 33-5 | Horne ³² | England | Persons aged ≥16 years | 13,923,580 | BNT162b2 AZD1222 (ChAdOx1)* | Full schedule | All cases Hospitalisations Deaths | 3 | N/A |
| 34-5 | Kirsebom ³³ | England | Adults aged ≥18 years | 626,148 | BNT162b2 AZD1222(ChAdOx1) mRNA-1273* | Full schedule and Booster | Symptomatic cases | 1 | Omicron |
| 35-5 | Lauring ³⁴ | USA | Adults aged ≥18 years | 11,690 | BNT162b2 mRNA-1273* | Full schedule | Hospitalisations | 1 | N/A |
| 37-5 | Nyberg ³⁵ | England | Adults aged ≥20 years | 1,191,526 | BNT162b2 AZD1222(ChAdOx1) mRNA-1273* | Full schedule and Booster | Hospitalisations Deaths | 2 | Delta Omicron |
| 38-5 | Starrfelt ³⁶ | Norway | Adults aged ≥18 years | 4,301,995 | BNT162b2 AZD1222(ChAdOx1) mRNA-1273* | Full schedule | All cases Hospitalisations | 3 | N/A |
| 39-5 | Stowe ³⁷ | England | Adults aged ≥18 years | 409,985 | BNT162b2 AZD1222(ChAdOx1) mRNA-1273* | Full schedule and Booster | Hospitalisations | 1 | Delta Omicron |
| 40-5 | Gram ³⁸ | Denmark | Persons aged ≥12 years | 7,351,244 | BNT162b2 mRNA-1273 | Full schedule | All cases Hospitalisation | 1 | Delta Omicron |

| | | | | | | e and Booster | s | | n |
|------|--------------------|-----|--------------------------|---------|-----------------------|--------------------|-----------|---|---------|
| 41-5 | Lind ³⁹ | USA | Persons aged ≥5 years | 130,073 | BNT162b2 mRNA-1273 | Full scheduling | All cases | 1 | Omicron |

Legend: BC: British Columbia; HCWs: healthcare workers; PCR: Polymerase chain reaction test; QC: Quebec; RCT: randomized controlled trial; USA: United States of America; UK: United Kingdom; HCW: healthcare workers; KPSC: Kaiser permanente Southern California

*Data are reported separately by vaccine.

#Deleted due to critical risk of bias

§Excluded from meta-analyses due to a lack of reporting CIs

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Appendix 2: Details of meta-analytic procedure

Reports were included for meta-analytic review when they met all the following criteria:

1. Reported vaccine effectiveness (VE), risk ratio (RR), odds risk (OR) or hazard ratio (HR) data, along with corresponding confidence intervals (CIs)
2. Provided the above with regards to (a) cases, (b) hospitalisations, or (c) deaths due to COVID-19
3. Reported data for baseline (0-42 days since second dose of vaccine) and for at least one follow-up time point (≥ 112 days since complete primary series of a vaccine or ≥ 84 days since an additional dose of the vaccine)

All estimates, and their corresponding CIs, were converted to risk ratios (RRs). RRs were then log-transformed for use in meta-analytic models, and the CIs were used to derive a standard error for each effect size.

Random effects models were used to calculate pooled effects, as we anticipated meaningful heterogeneity across studies and group comparisons (e.g., follow-up time points). When data was available, subgroup analyses were computed to examine how patterns of findings varied according to:

1. Type of vaccine
 - a) Overall (i.e., any vaccine)
 - b) mRNA vaccines
 - i) Moderna (mRNA-1273)
 - ii) Pfizer-BioNTech (BNT162b2)
 - c) Any adenovirus
 - i) AstraZeneca/COVISHIELD (AZD1222/ChAdOx1)
 - ii) Janssen (Johnson & Johnson: Ad26.COV2.S)
2. Variants of Concern (VOC):
 - a) Any variant
 - b) Delta
 - c) Omicron

Analyses were performed using the *metafor* package in R (version 4.1.2). Models were computed using the DerSimonian and Laird procedure.

Imputations used in order to compute meta-analytic models

In order to be included in meta-analytic models, each effect size extracted from reports needed to be accompanied by a corresponding standard error (SE). The standard error was always derived from the confidence intervals provided. However, several values were not usable for computation and needed adjustment. Similarly, a few VE point-estimates required adjustments to compute models. The table that follows lists each of the adjustments we applied, along with our rationale.

| Problem Case | Explanation and Solution |
|---|--|
| 1. Provided CIs were asymmetric (when computed as log RRs). | Because standard errors (SEs) were derived from CIs, asymmetric CIs would produce two competing standard errors (SEs). To resolve this, we calculated the SE implied by both the upper and lower CI, and selected the larger of the 2 SEs for use in models. This represents the |

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| | more conservative approach (assuming more, rather than less, error in estimates extracted). |
| 2. VE estimates were negative in magnitude (or, equivalently, RRs were >1.0 in magnitude). Applies to point estimates and CIs. | <p>If the original metric was an RR, OR, or HR, this was not a problem, and the estimate could be used directly in analyses.</p> <p>When the original metric was a VE, we needed to take into account the calculating VEs typically assumes a positive number, where:</p> $VE = (1-RR)*100$ <p>When an RR is less than 1, the plausible range of VE is 0% to 100%. If we extend the logic of VE to the negative range, then we could assume that VE equal to -100% represents non-vaccination offering the highest protection. From this extension, VE can have a range of -100% to 100%.</p> <p>However, VE is negative, its relation to RR would need to be adjusted as the RR metric is unbounded in the positive range (ranges 0 to infinity). Consequently, when VE is negative (or RR>1), we used the following formulas to convert between the two metrics.</p> <p>A negative VE is assumed to reflect the following formula:</p> $VE = (-1 + 1/RR)*100$ $RR = 1 / (VE/100 + 1)$ |
| 3. VE point estimate was 100%, or RR point estimate was 0. | Both these cases make it impossible to calculate a log-transformed RR (as the transformation cannot be applied to a value of zero). We therefore imputed VE estimates of 100% with a VE of 99.5% (equivalent RR would be .005). The choice of 99.5% stemmed from a recognition that VE is often reported without decimals, and that a value of 99.5% would be likely to be rounded up. This decision is more conservative than using a value between 99.5 and 100). |
| 4. Upper CI was equal to VE = 100% or RR = 0. | Causes a similar problem as when the point estimate is VE = 100%. If a lower CI was available, we used that CI instead to derive the SE. Otherwise, we imputed a value of VE = 99.9% (or RR = .001). This allowed us to derive SEs while recognizing that the value may approach 100%. |
| 5. Lower CI is VE = 100 or RR = 0. | Causes a similar problem as when the point estimate is VE = 100%. If an upper CI was available, we used that CI instead to derive the SE. Otherwise, we imputed a value of VE = 97.5% (or RR = .025). This allowed us to derive SEs while recognizing that the value may approach 100%. The values of 99.9% for the upper CI and 97.5% for the lower CI were chosen to be symmetrical (in the log RR scale) around the value of VE = 100%. |
| 6. A study cohort had a point estimate for VE available, but no CIs. | No SE could be computed for such effects, and they were removed from the meta-analytic models. We further flagged these cases to comment on and acknowledge within our report. |

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| 7. A study cohort had a point estimate, but only one CI. | In such cases, we used the SE suggested by the CI that was provided. |
| 8. A CI was reported as -/+ Infinity or a CI was reported as less than - 100% (i.e. -189.8%) | We treated “infinity” or “less than -100%” as a missing value. We reasoned such estimates would have large enough errors as to be too imprecise to warrant including within our models. |
| 9. One of the CIs was equal in value to the point estimate. | When a CI is equal in magnitude to the point estimate, the implied standard error (SE) is effectively zero. SEs of zero cannot be used in analyses, so we used the other (provided) CI to derive an SE. This rule can be seen as a specific case of rule #1. |
| 10. Both CIs were equal in magnitude to the point estimate. | <p>When both CIs are equal in magnitude to the point estimate, both imply a standard error (SE) of zero, which cannot be used in meta-analytic models. Since SEs of zero are not usually plausible, such occurrences were taken to be artifacts of rounding estimates in reporting when SE was very low. Because low SEs are particularly valuable in meta-analytic reviews, we sought to retain these studies while accounting for this.</p> <p>Our solution was to add a 5 beyond the last decimal of the upper CI reported, and subtract a 5 beyond the last decimal of the lower CI reported. For example:</p> <p style="padding-left: 40px;">[CI = 15.5 - 15.5] -> [CI = 15.45 - 15.55] [CI = 15 - 15] -> [CI = 14.5 - 15.5]</p> <p>This rule was derived assuming that these cases derived from rounding error (i.e., rounding the imputed values to the right to have one fewer decimal point would lead to the values on the left). This rule allowed us to retain estimates for meta-analytic modeling while accounting for the fact that these studies would have small SE values.</p> <p>Since 2 CIs were imputed, the meta-analysis used the whichever produced the larger SE as per rule #1.</p> |
| 11. The point estimate was outside the range of the CI. | This was assumed to be an error in reporting. We thus operated under the assumption that the point-estimate was accurate and used the CI that had a plausible value to derive SEs (e.g., the upper CI if it was higher than the point estimate, or the lower CI if it was below the point estimate). |

Appendix 3: Definitions and glossary

Full vaccine series: Receipt of one of the following COVID-19 vaccines authorised by Health Canada:

- Two dose of AstraZeneca/COVISHIELD (AZD1222/ChAdOx1), Moderna (mRNA-1273), or Pfizer-BioNTech (BNT162b2);
- One dose of Janssen (Johnson & Johnson: Ad26.COV2.S); or
- A combination of the above

Fully vaccinated: A person who is at least 14 days post having received one of the following vaccine schedules:

- the full series of a COVID-19 vaccine authorized by Health Canada (see above); or
- the full series of the above vaccines plus an additional dose in immunocompromised individuals

Additional dose: A person who has received:

- a full series of a COVID-19 vaccine authorised by Health Canada (see above) plus an additional dose of a COVID-19 vaccine authorised by Health Canada; or
- the full series of the above vaccines plus two additional doses in immunocompromised individuals

Confirmed infection: A person with confirmation of infection with SARS-CoV-2 documented by the detection of at least 1 specific gene target by a validated laboratory-based nucleic acid amplification test (NAAT) assay (e.g. real-time PCR or nucleic acid sequencing) performed at a community, hospital, or reference laboratory (the National Microbiology Laboratory or a provincial public health laboratory).(2)

Symptomatic illness: A person with confirmation of SARS-CoV-2 infection, presenting symptoms that vary in type, frequency, and severity. The most common symptoms include fever, chills, new or worsening cough, fatigue, headache, and gastrointestinal symptoms.(3)

Asymptomatic infection: A person with confirmation of SARS-CoV-2 infection but with no presentation of symptoms in the course of the disease.

Hospitalisation due to COVID-19: Inpatient admission to a hospital and/or ICU unit, associated with laboratory-confirmed SARS-CoV-2 infection.

Death due to COVID-19: Death resulting from a clinically compatible illness in a probable or confirmed COVID-19 case, with no presence of clear alternative causes unrelated to COVID-19 (e.g., trauma, poisoning, drug overdose).

Variants of concern (VOC): A SARS-CoV-2 variant is considered a VOC in Canada based on a set of criteria including increased transmissibility or detrimental change in COVID-19 epidemiology, increased virulence, decreased effectiveness of vaccines, and so on. As of August 05, 2021, Canada has designated the following SARS-CoV-2 variants as VOCs: Alpha (B.1.1.7), Beta (B.1.351, B.1.351.1., B.1.351.2, B.1.351.3, B.1.351.4), Gamma (P.1, P.1.1, P.1.2), Delta (B.1.617.2, AY.1, AY.2, AY.3, AY.3.1), and Omicron (B.1.1.529, BA.2).

Vaccine effectiveness (VE): A measure of how well a vaccine protects people from getting the outcome of interest in real-world practice (For example: VE of 92% against infection means that 92% of people will be protected from becoming infected with COVID and 8% of people will still be at risk of becoming infected with COVID). In the context of the current report, we have utilised the term vaccine effectiveness to cover all studies. However, we are aware that the studies that have been included range from efficacy through to effectiveness studies. We decided to use this terminology as it is consistent with how most

evidence synthesis products describe these studies. To be consistent with this, in the French summary we have utilised the term efficacité, and it is noted that in French there is no distinction between the translations of efficacy and effectiveness.

AZ: AstraZeneca

CI: Confidence Intervals

Delta: variant of concern B.1.617.2

HCW: Healthcare workers

LTC: Long-term care

LTCF: Long-term care facility

MOD: Moderna

Obs: observational study

Omicron: variant of concern B.1.1.529

OR: odds ratio

PF: Pfizer

RCT: Randomized controlled trial

UK: United Kingdom

USA: United States of America

VOI: variant of interest

WHO: World Health Organization

Appendix 4: Critical appraisal process

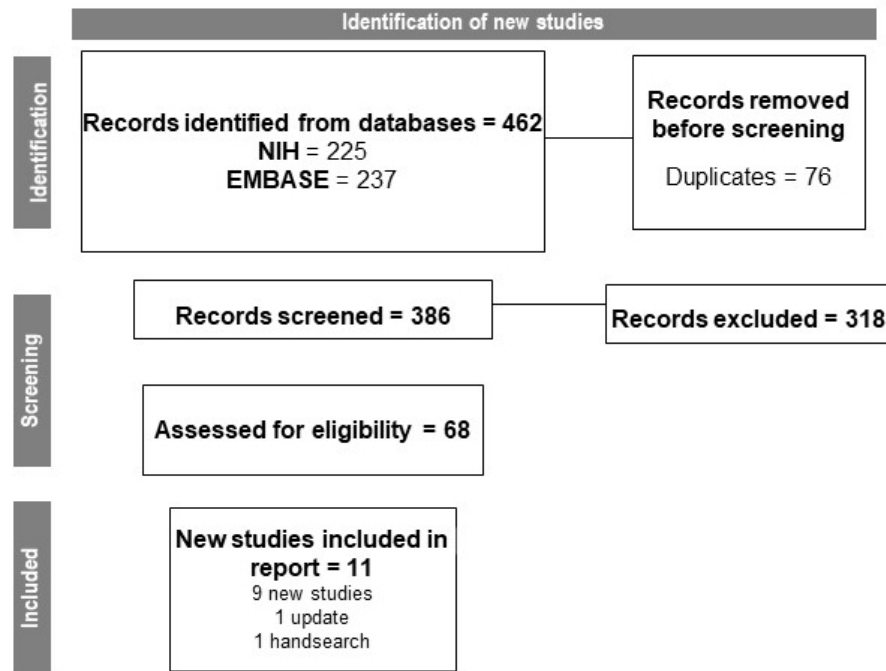
We appraised the quality of the individual studies using an adapted version of ROBINS-I. This tool classifies the Risk of Bias of a study as **Low, Moderate, Serious, Critical, or No Information**. *Low Risk of Bias indicates High Quality, and Critical Risk of Bias indicates Very Low (insufficient) Quality*. ROBINS-I appraises 7 bias domains and judges each study against an ideal reference randomised controlled trial. To improve the utility of ROBINS-I for assessing studies reporting vaccine effectiveness, we have focused on study characteristics that introduce bias as reported in the vaccine literature (see WHO. Evaluation of COVID-19 vaccine effectiveness. Interim Guidance. 17 March 2021). An overall judgement of “serious” or “critical” is given when the study is judged to be at critical risk of bias in at least one domain. Three or more serious risk of bias domains is given an overall risk of bias of critical.

Appendix 5: Data-extraction template

| | |
|--------------------------------------|---|
| Study details | |
| Source | First author of study and year of publication |
| Location | Country data was collected in |
| COI | If conflicts of interest were reported |
| Funding | public or industry |
| Study type | RCT/cohort/data-linkage/test-negative/case-control/other |
| Publication format | Peer-reviewed / pre-print / report |
| Population(s) | general public/LTC/Households/HCW/Other |
| Total (N) | Total study sample |
| Age | Description of age of the population |
| Female | number or % |
| Definition of cases | How were COVID-19 cases defined |
| Definition of COVID hospitalisations | How were COVID-19 hospitalisations defined |
| Definition of COVID deaths | How were COVID-19 deaths defined |
| Vaccines | Details of what vaccines were included in the study |
| Booster dose | Did the study report on booster doses (Y/N) |
| Comparator | What comparison group was used to generate VE |
| Study calendar time | When was the study actually conducted |
| | |
| Outcomes | |
| Variant sub-group | Was a specific variant being studied (any, delta, or omicron) |
| Was VOC sequenced | Yes or no, only applicable if looking at a variant |

| | |
|---------------------|---|
| Outcome | Cases, hospitalisations, or deaths |
| Specific vaccine | If individual vaccine data is reported |
| Vaccine class | mRNA, adenovirus, or mixed (reporting mRNA, adenovirus, and/or mixed doses) |
| Effect measure used | VE, RR, or other |
| Level of CIs | 95% or 99% |
| Time window | Time since second dose administered |
| VE outcome | Reported point estimate |
| Lower CI | Reported lower CI |
| Upper CI | Reported upper CI |
| Adjustments | What variables were used to adjust for in analyses |
| Comments | |

Appendix 6a: Flow chart of studies included in the current update:



Appendix 6b: Studies excluded from the current update:

| Authors | Title | Journal | Reason for exclusion |
|--------------------|---|---|---------------------------------|
| Abu-Raddad | Waning mRNA-1273 Vaccine Effectiveness against SARS-CoV-2 Infection in Qatar | New England Journal of Medicine | wrong publication type |
| Akaishi | Effectiveness of mRNA COVID-19 Vaccines in Japan During the Nationwide Pandemic of the Delta Variant | The Tohoku journal of experimental medicine | wrong outcome, wrong comparator |
| Amodio | Effectiveness of mRNA COVID-19 Vaccination on SARS-CoV-2 Infection and COVID-19 in Sicily over an Eight-Month Period | Vaccines | wrong study duration |
| Andeweg | Protection of COVID-19 vaccination and previous infection against Omicron BA.1 and Delta SARS-CoV-2 infections, the Netherlands, 22 November 2021-19 January 2022 | medRxiv | wrong study duration |
| Arora | Adverse events and breakthrough infections associated with COVID-19 vaccination in the Indian population | Journal of Medical Virology | wrong study duration |
| Arregoces-Castillo | Effectiveness of COVID-19 vaccines in older adults in Colombia: | The Lancet. Healthy longevity | wrong outcome |

| | | | |
|-----------------|---|--|-------------------------|
| | a retrospective, population-based study of the ESPERANZA cohort | | |
| Baum | High vaccine effectiveness against severe Covid-19 in the elderly in Finland before and after the emergence of Omicron | | wrong study duration |
| Behera | Effectiveness of COVID-19 vaccine (Covaxin) against breakthrough SARS-CoV-2 infection in India | Human Vaccines and Immunotherapeutics | wrong outcome |
| Bello Chavolla | Effectiveness of a nation-wide COVID-19 vaccination program in Mexico | | wrong study duration |
| Botton | Effectiveness of Ad26.COVS.S Vaccine vs BNT162b2 Vaccine for COVID-19 Hospitalizations | JAMA Network Open | wrong comparator |
| Cerqueira-Silva | Effectiveness of CoronaVac, ChAdOx1 nCoV-19, BNT162b2, and Ad26.COVS.S among individuals with previous SARS-CoV-2 infection in Brazil: a test-negative, case-control study | The Lancet. Infectious diseases | wrong study duration |
| Chemaitelly | Duration of protection of BNT162b2 and mRNA-1273 COVID-19 vaccines against symptomatic SARS-CoV-2 Omicron infection in Qatar | medRxiv | Already assessed before |
| Cohen | Effectiveness of the BNT162b vaccine fourth dose in reducing SARS-CoV-2 infection among healthcare workers in Israel, a multi-center cohort study | | wrong comparator |
| Dale | Investigation of A SARS-CoV-2 Delta (B.1.617.2) Variant Outbreak Among Residents of a Skilled Nursing Facility and Vaccine Effectiveness Analysis - Maricopa County, Arizona, June-July 2021 | Clinical infectious diseases : an official publication of the Infectious Diseases Society of America | wrong study duration |
| Fabiani | Effectiveness of an mRNA vaccine booster dose against SARS-CoV-2 infection and severe COVID-19 in persons aged ≥ 60 years and other high-risk groups during predominant circulation of the Delta variant in Italy, 19 July to 12 December 2021 | Expert review of vaccines | Already assessed before |
| Fillmore | Inadequate sars-cov-2 vaccine effectiveness in patients with multiple myeloma: A large nationwide veterans affairs study | Blood | wrong study duration |

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|------------|--|------------------------------------|-------------------------|
| Gazit | Relative Effectiveness of Four Doses Compared to Three Dose of the BNT162b2 Vaccine in Israel | | wrong intervention |
| Goldberg | Protection of previous SARS-CoV-2 infection is similar to that of BNT162b2 vaccine protection: A three-month nationwide experience from Israel | American journal of epidemiology | wrong study duration |
| Hall | Protection against SARS-CoV-2 after covid-19 vaccination and previous infection | New England Journal of Medicine | Already assessed before |
| Hammerman | Effectiveness of the BNT162B2 vaccine after recovery from Covid-19 | New England Journal of Medicine | wrong outcome |
| Hermosilla | Comparative effectiveness and safety of homologous two-dose ChAdOx1 versus heterologous vaccination with ChAdOx1 and BNT162b2 | Nature communications | wrong comparator |
| Ioannou | COVID-19 Vaccination Effectiveness Against Infection or Death in a National U.S. Health Care System A Target Trial Emulation Study | Annals of Internal Medicine | wrong study duration |
| Jalali | Increased household transmission and immune escape of the SARS-CoV-2 Omicron variant compared to the Delta variant: evidence from Norwegian contact tracing and vaccination data | medRxiv | wrong study duration |
| Joshi | Vaccine effectiveness to protect against moderate or severe disease in COVID cases: A prospective cohort study | Medical Journal Armed Forces India | wrong study duration |
| Kim | Effectiveness of 2 and 3 mRNA COVID-19 Vaccines Doses against Omicron and Delta-Related Outpatient Illness among Adults, October 2021 – February 2022 | | wrong comparison |
| Kislaya | Comparative complete scheme and booster effectiveness of COVID-19 vaccines in preventing SARS-CoV-2 infections with SARS-CoV-2 Omicron (BA.1) and Delta (B.1.617.2) variants | medRxiv | wrong comparison |
| Kiss | Nationwide Effectiveness of First and Second SARS-CoV2 Booster Vaccines during the Delta and | | wrong intervention |

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|-------------------|---|--|----------------------|
| | Omicron Pandemic Waves in Hungary (HUN-VE 2 Study) | | |
| Kodera | Estimation of Real-World Vaccination Effectiveness of mRNA COVID-19 Vaccines against Delta and Omicron Variants in Japan | Vaccines | results in figures |
| Krisztina | Real-time monitoring of the effectiveness of six COVID-19 vaccines in Hungary in 2021 using the screening method | medRxiv | wrong comparison |
| Kwon | mRNA Vaccine Effectiveness Against COVID-19 Hospitalization Among Solid Organ Transplant Recipients | The Journal of infectious diseases | wrong study duration |
| Lafuente-Lafuente | COVID-19 Outbreaks in Nursing Homes Despite Full Vaccination with BNT162b2 of a Majority of Residents | Gerontology | wrong study duration |
| Lev-Tzion | COVID-19 Vaccine Is Effective in Inflammatory Bowel Disease Patients and Is Not Associated With Disease Exacerbation | Clinical Gastroenterology and Hepatology | wrong comparison |
| Ma | Effectiveness of adenovirus type 5 vectored and inactivated COVID-19 vaccines against symptomatic COVID-19, COVID-19 pneumonia, and severe COVID-19 caused by the B.1.617.2 (Delta) variant: Evidence from an outbreak in Yunnan, China, 2021 | Vaccine | wrong study duration |
| Ma | Effectiveness of Covid-19 Vaccines against the SARS-COV-2-Delta (B.1.617.2) in China - A Real World Study | medRxiv | wrong study duration |
| Maeda | Effectiveness of mRNA COVID-19 vaccines against symptomatic SARS-CoV-2 infections during the Delta variant epidemic in Japan: Vaccine Effectiveness Real-time Surveillance for SARS-CoV-2 (VERSUS) | Clinical infectious diseases : an official publication of the Infectious Diseases Society of America | wrong comparison |
| Magen | Fourth Dose of BNT162b2 mRNA Covid-19 Vaccine in a Nationwide Setting | The New England journal of medicine | wrong comparison |
| Marra | Effectiveness of two COVID-19 vaccines (viral vector and inactivated viral vaccine) against SARS-CoV-2 infection in a cohort of healthcare workers | Infection control and hospital epidemiology | wrong outcome |

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|------------|---|---|----------------------|
| Mazuecos | Breakthrough Infections Following mRNA SARS-CoV-2 Vaccination in Kidney Transplant Recipients | Transplantation | wrong outcome |
| Menni | COVID-19 vaccine waning and effectiveness and side-effects of boosters: a prospective community study from the ZOE COVID Study | The Lancet. Infectious diseases | Excluded for ROB |
| Mielke | Boosters reduce in-hospital mortality in patients with COVID-19: An observational cohort analysis | Lancet Regional Health. Americas | wrong study duration |
| Moreira | Safety and Efficacy of a Third Dose of BNT162b2 Covid-19 Vaccine | The New England journal of medicine | wrong outcome |
| Murari | Retrospective cohort study of COVID-19 in patients of the Brazilian public health system with SARS-COV-2 Omicron variant infection | | wrong study duration |
| Nasreen | Effectiveness of COVID-19 vaccines against hospitalization and death in Canada: A multi provincial test-negative design study | | wrong outcome |
| Natarajan | Effectiveness of Homologous and Heterologous COVID-19 Booster Doses Following 1 Ad.26.COVS (Janssen [Johnson & Johnson]) Vaccine Dose Against COVID-19-Associated Emergency Department and Urgent Care Encounters and Hospitalizations Among Adults - VISION Network, 10 States, December 2021-March 2022 | MMWR. Morbidity and mortality weekly report | wrong study duration |
| Nguyen | Comparative effectiveness of different primary vaccination courses on mRNA based booster vaccines against SARS-COV-2 infections: A time-varying cohort analysis using trial emulation in the Virus Watch community cohort | medRxiv | wrong comparator |
| Pardo-Seco | Evaluation of BNT162b2 Vaccine Effectiveness in Galicia, Northwest Spain | International journal of environmental research and public health | wrong study duration |
| Petrovic | Early Effectiveness of Four SARS-CoV-2 Vaccines in Preventing COVID-19 among Adults Aged ≥60 Years in Vojvodina, Serbia | Vaccines | wrong study duration |
| Plumb | Effectiveness of COVID-19 mRNA Vaccination in Preventing COVID-19-Associated Hospitalization Among Adults with Previous SARS- | MMWR. Morbidity and mortality weekly report | wrong study duration |

| | | | |
|--------------|---|--|----------------------|
| | CoV-2 Infection - United States, June 2021-February 2022 | | |
| Polinski | Durability of the Single-Dose Ad26.COVS Vaccine in the Prevention of COVID-19 Infections and Hospitalizations in the US before and during the Delta Variant Surge | JAMA Network Open | wrong study duration |
| Premikha | Comparative Effectiveness of mRNA and Inactivated Whole Virus Vaccines against COVID-19 Infection and Severe Disease in Singapore | Clinical infectious diseases : an official publication of the Infectious Diseases Society of America | wrong comparator |
| Ranzani | Effectiveness of an Inactivated Covid-19 Vaccine with Homologous and Heterologous Boosters against the Omicron (B.1.1.529) Variant | | wrong outcome |
| Regev-Yochay | 4th Dose COVID mRNA Vaccines' Immunogenicity & Efficacy Against Omicron VOC | medRxiv | wrong comparator |
| Russo | Boosters and time from the last anti-COVID-19 vaccine dose: lead public health choices by real-time epidemiological assessment | Epidemiologia e prevenzione | wrong comparator |
| Suah | Waning COVID-19 Vaccine Effectiveness for BNT162b2 and CoronaVac in Malaysia: An Observational Study | International Journal of Infectious Diseases | wrong outcome |
| Tenforde | Effectiveness of mRNA Vaccination in Preventing COVID-19-Associated Invasive Mechanical Ventilation and Death - United States, March 2021-January 2022 | MMWR. Morbidity and mortality weekly report | wrong outcome |
| Tseng | Effectiveness of mRNA-1273 against SARS-CoV-2 Omicron and Delta variants | Nature Medicine | wrong comparator |
| Wang | Impact of Vaccination, Prior Infection, and Therapy on Delta and Omicron Variants | | wrong comparator |
| Winkelman | Trends in COVID-19 Vaccine Administration and Effectiveness Through October 2021 | JAMA network open | wrong outcome |
| Xie | Comparative effectiveness of the BNT162b2 and ChAdOx1 vaccines against Covid-19 in people over 50 | Nature Communications | wrong outcome |

Appendix 7: Studies excluded from the updates 1-4:

| Authors | Title | Journal | Reason for exclusion |
|----------------------------|--|--|---|
| Abbasi | COVID-19 mRNA Vaccines Blunt Breakthrough Infection Severity | JAMA - Journal of the American Medical Association | wrong intervention |
| Abbasi | Oldest Adults Need 2 mRNA Vaccine Doses to Neutralize SARS-CoV-2 | JAMA - Journal of the American Medical Association | wrong publication type |
| Abdool Karim & de Oliveira | New SARS-CoV-2 variants - Clinical, public health, and vaccine implications | New England Journal of Medicine | wrong intervention |
| Absalon et al. | Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine. Reply | The New England Journal of Medicine | wrong intervention |
| Abu Raddad et al. | Effectiveness of BNT162b2 and mRNA-1273 COVID-19 boosters against SARS-CoV-2 Omicron (B.1.1.529) infection in Qatar | medRxiv | wrong outcome |
| Abu Raddad et al. | Waning of mRNA-1273 vaccine effectiveness against SARS-CoV-2 infection in Qatar | | delayed exclusion - this is a letter of correspondence that refers to an original study |
| Abu Raddad et al. | Effect of vaccination and of prior infection on infectiousness of vaccine breakthrough infections and reinfections | Preprint - medRxiv | wrong outcome |
| Abu Raddad et al. | Protection afforded by the BNT162b2 and mRNA-1273 COVID-19 vaccines in fully vaccinated cohorts with and without prior infection | Preprint - medRxiv | wrong intervention |
| Abu Raddad et al. | Protection offered by mRNA-1273 versus BNT162b2 vaccines against SARS-CoV-2 infection and severe COVID-19 in Qatar | medRxiv | wrong comparator |
| Abu-Raddad et al. | Effectiveness of BNT162b2 and mRNA-1273 COVID-19 boosters against SARS-CoV-2 Omicron (B.1.1.529) infection in Qatar | medRxiv | wrong study duration |
| Abu-Raddad et al. | Effect of mRNA Vaccine Boosters against SARS-CoV-2 Omicron Infection in Qatar | The New England journal of medicine | wrong study duration |
| Abu-Raddad et al. | Protection offered by mRNA-1273 versus BNT162b2 vaccines against SARS-CoV-2 infection and severe COVID-19 in Qatar | medRxiv | wrong comparator |
| Abu-Raddad et al. | Effectiveness of the BNT162b2 Covid-19 Vaccine against the B.1.1.7 and B.1.351 Variants | The New England Journal of Medicine | wrong intervention |
| Abu-Raddad et al. | Pfizer-BioNTech mRNA BNT162b2 Covid-19 vaccine protection against variants of concern after one versus two doses | Journal of Travel Medicine | wrong intervention |

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|-------------------|---|--|------------------------|
| Abu-Sinni et al. | COVID-19 vaccine - Long term immune decline and breakthrough infections | Vaccine | wrong comparator |
| Ackland et al. | Evolution of case fatality rates in the second wave of coronavirus in England: effects of false positives, a Variant of Concern and vaccination | Preprint - medRxiv | wrong intervention |
| Adhikari & Spong | COVID-19 Vaccination in Pregnant and Lactating Women | JAMA - Journal of the American Medical Association | wrong study design |
| Adibi et al. | Continuing COVID-19 Vaccination of Front-Line Workers in British Columbia with the AstraZeneca Vaccine: Benefits in the Face of Increased Risk for Prothrombotic Thrombocytopenia | Preprint - medRxiv | wrong outcome |
| Al Qahtani et al. | Morbidity and mortality from COVID-19 post-vaccination breakthrough infections in association with vaccines and the emergence of variants in Bahrain | Preprint - Research Square | wrong intervention |
| Alali et al. | Effectiveness of BNT162b2 and ChAdOx1 Vaccines against Symptomatic COVID-19 among Healthcare Workers in Kuwait: A Retrospective Cohort Study | Healthcare (Basel, Switzerland) | wrong outcome |
| Alali et al. | Effectiveness of BNT162b2 and ChAdOx1 vaccines against symptomatic COVID-19 among Healthcare Workers in Kuwait: A retrospective cohort study | Preprint - medRxiv | wrong intervention |
| Albach et al. | Successful BNT162b2 booster vaccinations in a patient with rheumatoid arthritis and initially negative antibody response | Annals of the Rheumatic Diseases | wrong study design |
| Aldridge et al. | Waning of SARS-CoV-2 antibodies targeting the Spike protein in individuals post second dose of ChAdOx1 and BNT162b2 COVID-19 vaccines and risk of breakthrough infections: analysis of the Virus Watch community cohort | medRxiv | wrong comparator |
| Alencar et al. | High Effectiveness of SARS-CoV-2 Vaccines in Reducing COVID-19-Related Deaths in over 75-Year-Olds, Ceara State, Brazil | Tropical Medicine and Infectious Disease | wrong intervention |
| Alholm et al. | SARS-CoV-2 vaccination in gynecologic oncology | European Journal of Gynaecological Oncology | wrong publication type |
| Ali et al. | Evaluation of mRNA-1273 SARS-CoV-2 Vaccine in Adolescents | The New England Journal of Medicine | wrong intervention |
| Alkhafaji et al. | The Impact of COVID-19 Vaccine on Rate of Hospitalization and Outcome of COVID-19 Infection in a Single Center in the Eastern Province of Saudi Arabia | Research Square | wrong population |
| Allen et al. | Comparative transmission of SARS-CoV-2 Omicron (B.1.1.529) and Delta (B.1.617.2) variants and the impact of vaccination: national cohort study, England | medRxiv | wrong study duration |

| | | | |
|----------------------|---|---------------------------------|--|
| Alroy-Preis et al. | Impact and effectiveness of mRNA BNT162b2 vaccine against SARS-CoV-2 infections and COVID-19 cases, hospitalisations, and deaths following a nationwide vaccination campaign in Israel: an observational study using national surveillance data | The Lancet | wrong intervention |
| AlRuthia et al. | Demographic Characteristics and Status of Vaccinated Individuals with a History of COVID-19 Infection Pre- or Post-Vaccination: A Descriptive Study of a Nationally Representative Sample in Saudi Arabia | Vaccines | wrong comparator |
| Altmann et al. | Immunity to SARS-CoV-2 variants of concern | Science | wrong publication type |
| Amatya et al. | COVID-19 in fully vaccinated Everest trekkers in Nepal | Journal of Travel Medicine | wrong study design |
| Amirthalingam et al. | Higher serological responses and increased vaccine effectiveness demonstrate the value of extended vaccine schedules in combating COVID-19 in England | Preprint - medRxiv | wrong intervention |
| Amit et al. | COVID-19 vaccine efficacy data: solid enough to delay second dose? - Authors' reply | The Lancet | wrong study design |
| Amit et al. | Early rate reductions of SARS-CoV-2 infection and COVID-19 in BNT162b2 vaccine recipients | The Lancet | wrong intervention |
| Amodio et al. | Effectiveness of mRNA COVID-19 vaccination against SARS-CoV-2 infection and COVID-19 disease in Sicily over an eight-month period | SSRN | delayed exclusion - unvaccinated group include single-dose and non mRNA vaccines |
| Andeweg et al. | Protection of COVID-19 vaccination and previous infection against Omicron BA.1 and Delta SARS-CoV-2 infections, the Netherlands, 22 November 2021- 19 January 2022 | medRxiv | wrong study duration |
| Andrejko et al. | Prevention of COVID-19 by mRNA-based vaccines within the general population of California | Clinical Infectious Diseases | wrong intervention |
| Andrejko et al. | Early evidence of COVID-19 vaccine effectiveness within the general population of California | Hand search; Preprint - medRxiv | wrong intervention |
| Andrews et al. | Effectiveness of COVID-19 vaccines against the Omicron (B.1.1.529) variant of concern | medRxiv | duplicate |
| Andrews et al. | Effectiveness of COVID-19 vaccines against the Omicron (B.1.1.529) variant of concern | medRxiv | wrong comparator |
| Andrews et al. | Effectiveness of COVID-19 booster vaccines against covid-19 related symptoms, hospitalisation and death in England | Nature medicine | wrong comparator |

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|------------------|---|--|------------------------|
| Angel et al. | Association between Vaccination with BNT162b2 and Incidence of Symptomatic and Asymptomatic SARS-CoV-2 Infections among Health Care Workers | JAMA - Journal of the American Medical Association | wrong intervention |
| Anjan et al. | Breakthrough COVID-19 infections after mRNA vaccination in Solid Organ Transplant Recipients in Miami, Florida | Transplantation | wrong intervention |
| Anonymous | Exam 2: Effectiveness of SARS-CoV-2 vaccination in a Veterans Affairs Cohort of Inflammatory Bowel Disease Patients with Diverse Exposure to Immunosuppressive Medications | Gastroenterology | wrong publication type |
| Aran | Estimating real-world COVID-19 vaccine effectiveness in Israel | Preprint - medRxiv | wrong intervention |
| Arbel et al. | How many lives do COVID vaccines save? Evidence from Israel | American journal of infection control | wrong study design |
| Arbel et al. | How many lives do COVID vaccines save? Evidence from Israel | medRxiv | wrong comparator |
| Arnold et al. | Are vaccines safe in patients with Long COVID? A prospective observational study | Preprint - medRxiv | wrong intervention |
| Aslam et al. | Coronavirus disease 2019 vaccination is protective of clinical disease in solid organ transplant recipients | Transplant Infectious Disease | wrong outcome |
| Aslam et al. | COVID-19 vaccination is protective of clinical disease in solid organ transplant recipients | Transplant infectious disease : an official journal of the Transplantation Society | wrong comparator |
| Auvigne et al. | Serious hospital events following symptomatic infection with Sars-CoV-2 Omicron and Delta variants: an exposed-unexposed cohort study in December 2021 from the COVID-19 surveillance databases in France | medRxiv | wrong study duration |
| Azamgarhi et al. | BNT162b2 vaccine uptake and effectiveness in UK healthcare workers - a single centre cohort study | Nature Communications | wrong intervention |
| Baden et al. | Efficacy and safety of the mRNA-1273 SARS-CoV-2 vaccine | New England Journal of Medicine | wrong intervention |
| Baden et al. | Covid-19 in the Phase 3 Trial of mRNA-1273 During the Delta-variant Surge | medRxiv | wrong intervention |
| Bahl et al. | Vaccination reduces need for emergency care in breakthrough COVID-19 infections: A multicenter cohort study | Preprint - medRxiv | wrong intervention |
| Bailly et al. | BNT162b2 mRNA vaccination did not prevent an outbreak of SARS COV-2 variant 501Y.V2 in an elderly nursing home but reduced transmission and disease severity | Clinical Infectious Diseases | wrong intervention |

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|-----------------|---|---|----------------------|
| Bajema et al. | Comparative Effectiveness and Antibody Responses to Moderna and Pfizer-BioNTech COVID-19 Vaccines among Hospitalized Veterans - Five Veterans Affairs Medical Centers, United States, February 1-September 30, 2021 | MMWR. Morbidity and mortality weekly report | wrong comparator |
| Bajema et al. | Effectiveness of COVID-19 mRNA Vaccines Against COVID-19-Associated Hospitalization - Five Veterans Affairs Medical Centers, United States, February 1-August 6, 2021 | MMWR. Morbidity and mortality weekly report | wrong outcome |
| Balicer et al. | Effectiveness of the BNT162b2 mRNA COVID-19 Vaccine in Pregnancy | Preprint – Research Square | wrong intervention |
| Baltas et al. | Post-vaccination COVID-19: A case-control study and genomic analysis of 119 breakthrough infections in partially vaccinated individuals | Clinical Infectious Diseases | wrong intervention |
| Banon et al. | BNT162b2 Messenger RNA COVID-19 Vaccine Effectiveness in Patients With Inflammatory Bowel Disease: Preliminary Real-World Data During Mass Vaccination Campaign | Gastroenterology | duplicate |
| Bar On et al. | BNT162b2 vaccine booster dose protection: A nationwide study from Israel | Preprint - medRxiv | wrong intervention |
| Barbosa et al. | High effectiveness of sars-cov-2 vaccines in reducing covid-19-related deaths in over 75-year-olds, Ceara State, Brazil | Tropical Medicine and Infectious Disease | duplicate |
| Barda et al. | Effectiveness of a third dose of the BNT162b2 mRNA COVID-19 vaccine for preventing severe outcomes in Israel: an observational study | The Lancet | wrong comparator |
| Barlow et al. | Effectiveness of COVID-19 Vaccines Against SARS-CoV-2 Infection During a Delta Variant Epidemic Surge in Multnomah County, Oregon, July 2021 | Preprint - medRxiv | wrong intervention |
| Barnabas et al. | A Public Health COVID-19 Vaccination Strategy to Maximize the Health Gains for Every Single Vaccine Dose | Annals of Internal Medicine | wrong outcome |
| Bar-On et al. | Protection of BNT162b2 vaccine booster against Covid-19 in Israel | New England Journal of Medicine | wrong comparator |
| Barrière et al. | Impaired immunogenicity of BNT162b2 anti-SARS-CoV-2 vaccine in patients treated for solid tumors | Annals of Oncology | wrong outcome |
| Barros et al. | Estimating the early impact of vaccination against COVID-19 on deaths among elderly people in Brazil: Analyses of routinely-collected data on vaccine coverage and mortality | EClinicalMedicine | duplicate |
| Baum et al. | High vaccine effectiveness against severe Covid-19 in the elderly in Finland before and after the emergence of Omicron | | wrong study duration |

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|-------------------|---|-------------------------------------|--|
| Baum et al. | Effectiveness of vaccination against SARS-CoV-2 infection and Covid-19 hospitalisation among Finnish elderly and chronically ill—An interim analysis of a nationwide cohort study | PloS one | wrong comparator |
| Baum et al. | Effectiveness of vaccination against SARS-CoV-2 infection and Covid-19 hospitalization among Finnish elderly and chronically ill—An interim analysis of a nationwide cohort study | Preprint - medRxiv | wrong intervention |
| Belmin et al. | First-Dose Coronavirus 2019 Vaccination Coverage among the Residents of Long-Term Care Facilities in France | Gerontology | wrong outcome |
| Ben Dov, et al. | Impact of tozinameran (BNT162b2) mRNA vaccine on kidney transplant and chronic dialysis patients: 3-5 months followup | medRxiv | delayed exclusion - data mainly focusing on immunogenicity findings |
| Ben-Aharon et al. | 15590 Efficacy and toxicity of BNT162b2 vaccine in cancer patients | Annals of Oncology | duplicated |
| Benenson et al. | BNT162b2 mRNA Covid-19 Vaccine Effectiveness among Health Care Workers | The New England Journal of Medicine | wrong intervention |
| Benjamini et al. | Safety and efficacy of BNT162b mRNA Covid19 Vaccine in patients with chronic lymphocytic leukemia | Haematologica | wrong outcome |
| Benotmane et al. | Low immunization rates among kidney transplant recipients who received 2 doses of the mRNA-1273 SARS-CoV-2 vaccine | Kidney International | wrong outcome |
| Benotmane et al. | Weak anti-SARS-CoV-2 antibody response after the first injection of an mRNA COVID-19 vaccine in kidney transplant recipients | Kidney International | wrong outcome |
| Ben-Tov et al. | BNT162b2 Messenger RNA COVID-19 Vaccine Effectiveness in Patients With Inflammatory Bowel Disease: Preliminary Real-World Data During Mass Vaccination Campaign | Gastroenterology | wrong intervention |
| Berec et al. | Real-life protection provided by vaccination, booster doses and previous infection against covid-19 infection, hospitalisation or death over time in the Czech Republic: A whole country retrospective view | medRxiv | wrong comparator |
| Berec et al. | Real-life protection provided by vaccination, booster doses and previous infection against covid-19 infection, hospitalisation or death over time in the Czech Republic: A whole country retrospective view | medRxiv | delayed exclusion - baseline is calculated 0-2 months after 14 days post-receipt of second dose, which is beyond our 30.5 days average post- |

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| | | | receipt of second dose threshold |
| Bergwerk et al. | Covid-19 Breakthrough Infections in Vaccinated Health Care Workers | The New England Journal of Medicine | wrong outcome |
| Bermingham et al. | Estimating the effectiveness of first dose of COVID-19 vaccine against mortality in England: a quasi-experimental study | Preprint - medRxiv | wrong intervention |
| Bernal et al. | Early effectiveness of COVID-19 vaccination with BNT162b2 mRNA vaccine and ChAdOx1 adenovirus vector vaccine on symptomatic disease, hospitalisations and mortality in older adults in England | Preprint - medRxiv | wrong intervention |
| Bernal et al. | Effectiveness of BNT162b2 mRNA vaccine and ChAdOx1 adenovirus vector vaccine on mortality following COVID-19 | Preprint - medRxiv | wrong intervention |
| Bernal et al. | Effectiveness of COVID-19 vaccines against the B.1.617.2 variant | The New England Journal of Medicine | wrong intervention |
| Berry et al. | Audit of vaccination status of health-care workers who tested positive for SARS-CoV-2 | Journal of clinical virology plus | wrong outcome |
| Bhattacharya et al. | Evaluation of the dose-effect association between the number of doses and duration since the last dose of COVID-19 vaccine, and its efficacy in preventing the disease and reducing disease severity: A single centre, cross-sectional analytical study from India | Diabetes and Metabolic Syndrome: Clinical Research and Reviews | wrong study design |
| Bianchi et al. | BNT162b2 mRNA COVID-19 vaccine effectiveness in the prevention of SARS-CoV-2 Infection: A preliminary report | Journal of Infectious Diseases | wrong intervention |
| Bianchi et al. | BNT162b2 mRNA COVID-19 Vaccine Effectiveness in the Prevention of SARS-CoV-2 Infection and Symptomatic Disease in Five-Month Follow-Up: A Retrospective Cohort Study | Vaccines | wrong outcome |
| Bianchi, et al. | BNT162b2 mRNA COVID-19 vaccine effectiveness in the prevention of SARS-CoV-2 Infection: A preliminary report | SSRN | delayed exclusion - K-M plot included the 14 days before full vaccination - the correct FUP is non-extractable (figure 1) |

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| Bird et al. | Response to first vaccination against SARS-CoV-2 in patients with multiple myeloma | The Lancet Haematology | wrong intervention |
| Bjork et al. | Effectiveness of the BNT162b2 vaccine in preventing COVID-19 in the working age population - first results from a cohort study in Southern Sweden | Preprint - medRxiv | wrong intervention |
| Bjork et al. | High level of protection against COVID-19 after two doses of BNT162b2 vaccine in the working age population-first results from a cohort study in Southern Sweden | Infectious Diseases | uplicated |
| Blain et al. | Receptor binding domain-IgG levels correlate with protection in residents facing SARS-CoV-2 B.1.1.7 outbreaks | Allergy | wrong intervention |
| Blaiszik et al. | The Delta Variant Had Negligible Impact on COVID-19 Vaccine Effectiveness in the USA | medRxiv | wrong study design |
| Bleicher et al. | Early exploration of COVID-19 vaccination safety and effectiveness during pregnancy: interim descriptive data from a prospective observational study | Vaccine | wrong outcome |
| Bliden et al. | Evolution of Anti-SARS-CoV-2 IgG Antibody and IgG Avidity Post Pfizer and Moderna mRNA Vaccinations | Preprint - medRxiv | wrong outcome |
| Bobdey et al. | Effectiveness of ChAdOx1 nCoV-19 Vaccine: Experience of a tertiary care institute | Medical Journal Armed Forces India | wrong intervention |
| Bollineni et al. | Characteristics and outcomes among vaccinated lung transplant patients with breakthrough COVID-19 | Transplant infectious disease : an official journal of the Transplantation Society | wrong outcome |
| Bongiovanni et al. | Evaluation of the immune response to COVID-19 vaccine mRNA BNT162b2 and correlation with previous COVID-19 infection | Journal of Clinical Virology | wrong outcome |
| Bookstein Peretz et al. | Short-term outcome of pregnant women vaccinated with BNT162b2 mRNA COVID-19 vaccine | Ultrasound in Obstetrics & Gynecology | wrong intervention |
| Botton et al. | Effectiveness of Ad26.COVS.S Vaccine vs BNT162b2 Vaccine for COVID-19 Hospitalizations | JAMA network open | wrong comparator |
| Bouton et al. | COVID-19 vaccine impact on rates of SARS-CoV-2 cases and post vaccination strain sequences among healthcare workers at an urban academic medical center: a prospective cohort study | Preprint - medRxiv | wrong outcome |
| Bouton et al. | Coronavirus Disease 2019 Vaccine Impact on Rates of Severe Acute Respiratory Syndrome Coronavirus 2 Cases and Postvaccination Strain Sequences Among Health Care Workers at an Urban Academic Medical Center: A Prospective Cohort Study | Open forum infectious diseases | wrong intervention |

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| Boyarsky et al. | Antibody response to 2-dose sars-cov-2 mrna vaccine series in solid organ transplant recipients | JAMA - Journal of the American Medical Association | wrong intervention |
| Braeye et al. | Vaccine effectiveness against infection and onwards transmission of COVID-19: Analysis of Belgian contact tracing data, January-June 2021 | Vaccine | wrong intervention |
| Brinkley-Rubinstein et al. | Breakthrough SARS-CoV-2 Infections in Prison after Vaccination | The New England Journal of Medicine | wrong intervention |
| Britton et al. | Association of COVID-19 Vaccination with Symptomatic SARS-CoV-2 Infection by Time since Vaccination and Delta Variant Predominance | JAMA - Journal of the American Medical Association | uplicated |
| Britton et al. | Association of COVID-19 Vaccination With Symptomatic SARS-CoV-2 Infection by Time Since Vaccination and Delta Variant Predominance | JAMA | already assessed |
| Brosh-Nissimov et al. | BNT162b2 vaccine breakthrough: clinical characteristics of 152 fully vaccinated hospitalized COVID-19 patients in Israel | Clinical Microbiology and Infection | wrong outcome |
| Brouqui et al. | COVID-19 re-infection | European Journal of Clinical Investigation | wrong intervention |
| Brunelli et al. | Comparative Effectiveness of mRNA-Based BNT162b2 Vaccine versus Adenovirus Vector-Based Ad26.COVS.2 Vaccine for Prevention of COVID-19 among Dialysis Patients | Journal of the American Society of Nephrology : JASN | wrong comparator |
| Brunner et al. | Comparison of Antibody Response Durability of mRNA-1273, BNT162b2, and Ad26.COVS.2 SARS-CoV-2 Vaccines in Healthcare Workers | medRxiv | wrong outcome |
| Brunner et al. | Comparison of Antibody Response Durability of mRNA-1273, BNT162b2, and Ad26.COVS.2 SARS-CoV-2 Vaccines in Healthcare Workers | New England Journal of Medicine | wrong outcome |
| Brunner et al. | SARS-CoV-2 Postvaccination Infections Among Staff Members of a Tertiary Care University Hospital—Vienna, January-July 2021; an Exploratory Study on 8 500 Employees with Better Outcome of Vector than m-RNA Vaccine | Preprint - SSRN | wrong intervention |
| Bruvoort et al. | Effectiveness of mRNA-1273 against delta, mu, and other emerging variants of SARS-CoV-2: test negative case-control study | BMJ (Clinical research ed.) | wrong comparator |
| Bruvoort et al. | Real-world effectiveness of the mRNA-1273 vaccine against COVID-19: Interim results from a prospective observational cohort study | Lancet Regional Health. Americas | wrong outcome |

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| Bruxvoort, Katia J. and Sy, Lina S. and Qian, Lei and Ackerson, Bradley K. and Luo, Yi and Lee, Gina S. and Tian, Yun and Florea, Ana and Aragonés, Michael and Tubert, Julia E. and Takhar, Harpreet S. and Ku, Jennifer H. and Paila, Yamuna D. and Talarico, Carla A. and Tseng, Hung Fu | Effectiveness of mRNA-1273 against Delta, Mu, and other emerging variants | medRxiv | delayed exclusion - baseline VE assessed at 14-60 (below our 30-day threshold) |
| Buchan et al. | Effectiveness of COVID-19 vaccines against Omicron or Delta symptomatic infection and severe outcomes | medRxiv | duplicate |
| Buchan et al. | Effectiveness of COVID-19 vaccines against Omicron or Delta symptomatic infection and severe outcomes | medRxiv | wrong comparator |
| Buchan et al. | Effectiveness of COVID-19 vaccines against Omicron or Delta infection | medRxiv | delayed exclusion - study ID 05-3 is a more recent version of this study |
| Bukhari et al. | Real-World Effectiveness of COVID-19 Vaccines: the Diverging Pattern of COVID-19 Cases and Deaths in Countries with High Vaccination Rates | Preprint - SSRN | wrong intervention |
| Buonfrate et al. | Antibody response induced by the BNT162b2 mRNA COVID-19 vaccine in a cohort of health-care workers, with or without prior SARS-CoV-2 infection: a prospective study | Clinical Microbiology and Infection | wrong intervention |
| Burd et al. | The Israeli study of Pfizer BNT162b2 vaccine in pregnancy: Considering maternal and neonatal benefits | Journal of Clinical Investigation | wrong publication type |
| Butt et al. | Vaccine Effectiveness of Three vs. Two Doses of SARS-CoV-2 mRNA Vaccines in a High Risk National Population | Clinical infectious diseases : an official publication of the Infectious Diseases Society of America | wrong study duration |

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| Butt et al. | Real-world Effectiveness of the SARS-CoV-2 mRNA Vaccines in Preventing Confirmed Infection in Patients on Chronic Hemodialysis | Clinical infectious diseases : an official publication of the Infectious Diseases Society of America | wrong study duration |
| Butt et al. | Effectiveness of the SARS-CoV-2 mRNA Vaccines in Pregnant Women | Preprint - Research Square | wrong intervention |
| Butt et al. | Outcomes among patients with breakthrough SARS-CoV-2 infection after vaccination in a high-risk national population | EClinicalMedicine | wrong intervention |
| Butt et al. | Rate and risk factors for breakthrough SARS-CoV-2 infection after vaccination | The Journal of Infection | wrong intervention |
| Butt et al. | SARS-CoV-2 Vaccine Effectiveness in a High-Risk National Population in a Real-World Setting | Annals of Internal Medicine | wrong intervention |
| Butt et al. | SARS-CoV-2 vaccine effectiveness in preventing confirmed infection in pregnant women | The Journal of clinical investigation | wrong study duration |
| Cabezas et al. | Effects of BNT162b2 mRNA Vaccination on COVID-19 Disease, Hospitalisation and Mortality in Nursing Homes and Healthcare Workers: A Prospective Cohort Study Including 28,594 Nursing Home Residents, 26,238 Nursing Home Staff, and 61,951 Healthcare Workers in Catalonia | Hand search; Preprint - SSRN | uplicated |
| Cabezas et al. | Effects of BNT162b2 mRNA Vaccination on COVID-19 Disease, Hospitalisation and Mortality in Nursing Homes and Healthcare Workers: A Prospective Cohort Study Including 28,594 Nursing Home Residents, 26,238 Nursing Home Staff, and 61,951 Healthcare Workers in Catalonia | Preprint - SSRN | wrong intervention |

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| Cabezas, et al. | Associations of BNT162b2 vaccination with SARS-CoV-2 infection and hospital admission and death with covid-19 in nursing homes and healthcare workers in Catalonia: Prospective cohort study | BMJ | delayed exclusion - prospective cohort evaluated VE data among nursing home residents, nursing home staff, and healthcare workers. Incidence rates, and adjusted hazard ratios for covid-19 infection according to vaccination status in study population is presented in Table 2 (but no information of individual level follow up; the authors presented only Exposure person days). Kaplan-Meier estimates of COVID infection according to vaccination status in study population is presented visually in Figure 3 (but no extractable information presented). |
| Callaghan et al. | Real-world Effectiveness of the Pfizer-BioNTech BNT162b2 and Oxford-AstraZeneca ChAdOx1-S Vaccines Against SARS-CoV-2 in Solid Organ and Islet Transplant Recipients | Transplantation | wrong outcome |
| Callaghan et al. | Real-world Effectiveness of the Pfizer-BioNTech BNT162b2 and Oxford-AstraZeneca ChAdOx1-S Vaccines Against SARS-CoV-2 in Solid Organ and Islet Transplant Recipients | Transplantation | wrong outcome |
| Carazo et al. | Single-dose mRNA vaccine effectiveness against SARS-CoV-2 in healthcare workers extending 16 weeks post-vaccination: a test-negative design from Quebec, Canada | Preprint - medRxiv | wrong intervention |

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| Carazo et al. | Single-dose mRNA vaccine effectiveness against SARS-CoV-2 in healthcare workers extending 16 weeks post-vaccination: a test-negative design from Quebec, Canada | Clinical infectious diseases : an official publication of the Infectious Diseases Society of America | uplicated |
| Cardona et al. | <p>SARS-CoV-2 Vaccinated Breakthrough Infections With Fatal and Critical Outcomes in the Department of Antioquia, Colombia</p> | Research Square | wrong outcome |
| Carrera et al. | How well do hemodialysis patients respond to the BNT162b2 mRNA COVID-19 vaccine | Journal of the American Society of Nephrology | wrong intervention |
| Cerqueira Silva et al. | Influence of age on the effectiveness and duration of protection in Vaxzevria and CoronaVac vaccines | Preprint - medRxiv | wrong intervention |
| Cerqueira-Silva et al. | Vaccine effectiveness of heterologous CoronaVac plus BNT162b2 in Brazil | Nature Medicine | already assessed |
| Cerqueira-Silva et al. | Influence of age on the effectiveness and duration of protection of Vaxzevria and CoronaVac vaccines: A population-based study | Lancet Regional Health. Americas | wrong intervention |
| Chadeau Hyam et al. | REACT-1 round 15 final report: Increased breakthrough SARS-CoV-2 infections among adults who had received two doses of vaccine, but booster doses and first doses in children are providing important protection | medRxiv | wrong comparator |
| Chadeau Hyam et al. | REACT-1 study round 14: High and increasing prevalence of SARS-CoV-2 infection among school-aged children during September 2021 and vaccine effectiveness against infection in England | medRxiv | wrong comparator |
| Chadeau-Hyam et al. | SARS-CoV-2 infection and vaccine effectiveness in England (REACT-1): a series of cross-sectional random community surveys | The Lancet. Respiratory medicine | wrong comparator |
| Chagla | The BNT162b2 (BioNTech/Pfizer) vaccine had 95% efficacy against COVID-19 ≥ 7 days after the 2nd dose | Annals of Internal Medicine | wrong intervention |
| Charles Pon Ruban et al. | Effectiveness of vaccination in preventing severe SARS CoV-2 infection in South India-a hospital-based cross-sectional study | medRxiv | wrong study design |
| Charmet et al. | Impact of original, B.1.1.7, and B.1.351/P.1 SARS-CoV-2 lineages on vaccine effectiveness of two doses of COVID-19 mRNA vaccines: Results from a nationwide case-control study in France | The Lancet Regional Health-Europe | wrong intervention |
| Chauhan et al. | SARS-CoV-2 Vaccine-Induced Antibody Response and Reinfection in Persons with Past Natural Infection | Preprint - medRxiv | wrong intervention |
| Chemaitelly et al. | Duration of mRNA vaccine protection against SARS-CoV-2 Omicron BA.1 and BA.2 subvariants in Qatar | | wrong study duration |

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| Chemaitelly et al. | Duration of protection of BNT162b2 and mRNA-1273 COVID-19 vaccines against symptomatic SARS-CoV-2 Omicron infection in Qatar | medRxiv | already assessed |
| Chemaitelly et al. | mRNA-1273 COVID-19 vaccine effectiveness against the B.1.1.7 and B.1.351 variants and severe COVID-19 disease in Qatar | Hand search; Nature Medicine | wrong intervention |
| Chemaitelly et al. | Pfizer-BioNTech mRNA BNT162b2 Covid-19 vaccine protection against variants of concern after one versus two doses | Journal of Travel Medicine | duplicate |
| Chemaitelly et al. | MRNA-1273 COVID-19 vaccine effectiveness against the B.1.1.7 and B.1.351 variants and severe COVID-19 disease in Qatar. | Nature Medicine | wrong intervention |
| Chen et al. | Prediction of long-term kinetics of vaccine-elicited neutralizing antibody and time-varying vaccine-specific efficacy against the SARS-CoV-2 Delta variant by clinical endpoint | BMC medicine | wrong intervention |
| Chin et al. | Effectiveness of COVID-19 vaccines among incarcerated people in California state prisons: retrospective cohort study | Clinical infectious diseases : an official publication of the Infectious Diseases Society of America | wrong study design |
| Chin et al. | Effectiveness of COVID-19 Vaccines among Incarcerated People in California State Prisons: A Retrospective Cohort Study | Preprint - medRxiv | wrong intervention |
| Chin et al. | Effectiveness of the mRNA-1273 Vaccine during a SARS-CoV-2 Delta Outbreak in a Prison | The New England journal of medicine | wrong outcome |
| Chodick et al. | The effectiveness of the TWO-DOSE BNT162b2 vaccine: analysis of real-world data | Clinical Infectious Diseases | wrong intervention |
| Christie et al. | Decreases in COVID-19 Cases, Emergency Department Visits, Hospital Admissions, and Deaths Among Older Adults Following the Introduction of COVID-19 Vaccine - United States, September 6, 2020-May 1, 2021 | MMWR. Morbidity and mortality weekly report | wrong population |
| Chung et al. | Effectiveness of BNT162b2 and mRNA-1273 covid-19 vaccines against symptomatic SARS-CoV-2 infection and severe covid-19 outcomes in Ontario, Canada: Test negative design study | The BMJ | wrong intervention |
| Clemens et al. | Efficacy of ChAdOx1 nCoV-19 (AZD1222) vaccine against SARS-CoV-2 lineages circulating in Brazil; an exploratory analysis of a randomised controlled trial | Preprint - Research Square | wrong intervention |
| Clemens et al. | Efficacy of ChAdOx1 nCoV-19 (AZD1222) vaccine against SARS-CoV-2 lineages circulating in Brazil | Nature communications | duplicate |
| Clifford et al. | Effectiveness of BNT162b2 and ChAdOx1 against SARS-CoV-2 household transmission: a prospective cohort study in England | medRxiv | wrong comparator |

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| Coggiola et al. | SARS-CoV-2 infection: efficacy of extensive vaccination of the healthcare workforce in a large Italian hospital | La Medicina del lavoro | wrong study design |
| Cohen et al. | Comparative Efficacy over time of the mRNA-1273 (Moderna) vaccine and the BNT162b2 (Pfizer-BioNTech) vaccine | Research Square | wrong comparator |
| Cohn et al. | SARS-CoV-2 vaccine protection and deaths among US veterans during 2021 | Science | wrong comparator |
| Cohn et al. | Breakthrough SARS-CoV-2 infections in 620,000 US Veterans, February 1, 2021 to August 13, 2021 | medRxiv | wrong intervention |
| Consonni et al. | Effectiveness of BNT162b2 COVID-19 vaccine among healthcare workers of a large hospital, Milan, Italy | Safety and Health at Work | already assessed |
| Consonni et al. | Effectiveness of COVID-19 vaccine in health care workers, Milan, Italy | Occupational and Environmental Medicine | Full text unavailable |
| Cook et al. | Clinical characteristics and outcomes of COVID-19 breakthrough infections among vaccinated patients with systemic autoimmune rheumatic diseases | Preprint - medRxiv | wrong outcome |
| Corchado Garcia et al. | Real-world effectiveness of Ad26.COV2.S adenoviral vector vaccine for COVID-19 | Preprint - medRxiv | wrong intervention |
| Corchado-Garcia et al. | Real-world effectiveness of Ad26. COV2. S adenoviral vector vaccine for COVID-19 | SSRN | wrong study duration |
| Corchado-Garcia et al. | Analysis of the Effectiveness of the Ad26.COV2.S Adenoviral Vector Vaccine for Preventing COVID-19 | JAMA network open | wrong outcome |
| Corrao et al. | Persistence of protection against SARS-CoV-2 clinical outcomes up to 9 months since vaccine completion: a retrospective observational analysis in Lombardy, Italy | The Lancet. Infectious diseases | already assessed |
| Corrao et al. | Persistence of protection against SARS-CoV-2 clinical outcomes up to 9 months since vaccine completion: a retrospective observational analysis in Lombardy, Italy | The Lancet. Infectious diseases | wrong comparator |
| Corrao et al. | Persistence of protection against SARS-CoV-2 clinical outcomes up to 9 months since vaccine completion: a retrospective observational analysis in Lombardy, Italy | The Lancet Infectious Diseases | delayed exclusion - definition of unvaccinated group is unclear |
| Cox et al. | An observational cohort study on the incidence of SARS-CoV-2 infection and B.1.1.7 variant infection in healthcare workers by antibody and vaccination status | Clinical Infectious Diseases | uplicated |
| Dagan et al. | BNT162b2 mRNA Covid-19 Vaccine in a Nationwide Mass Vaccination Setting | The New England Journal of Medicine | wrong intervention |

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| Dagan et al. | Effectiveness of the BNT162b2 mRNA COVID-19 vaccine in pregnancy | Nature Medicine | wrong intervention |
| Dahlem et al. | Humoral Response after SARS-CoV-2 mRNA Vaccination in a Cohort of Hemodialysis Patients and Kidney Transplant Recipients | Journal of the American Society of Nephrology | duplicated |
| Danthu et al. | Humoral Response after SARS-Cov-2 mRNA Vaccine in a Cohort of Hemodialysis Patients and Kidney Transplant Recipients | Journal of the American Society of Nephrology: JASN | wrong intervention |
| Das et al. | Relation of vaccination with severity, oxygen requirement and outcome of COVID-19 infection in Chattogram, Bangladesh | Preprint - medRxiv | wrong intervention |
| Dash et al. | Breakthrough SARS-CoV-2 infections in an eastern state of India: A preliminary report | Preprint - Research Square | wrong outcome |
| Dashdorj et al. | Direct Comparison of Antibody Responses to Four SARS-CoV-2 Vaccines in Mongolia | Preprint - medRxiv | wrong outcome |
| Deiana et al. | Impact of Full Vaccination with mRNA BNT162b2 on SARS-CoV-2 Infection: Genomic and Subgenomic Viral RNAs Detection in Nasopharyngeal Swab and Saliva of Health Care Workers | Microorganisms | wrong outcome |
| Del Cura-Bilbao et al. | Effectiveness of 3 COVID-19 Vaccines in Preventing SARS-CoV-2 Infections, January-May 2021, Aragon, Spain | Emerging infectious diseases | wrong outcome |
| Dickerman et al. | Comparative effectiveness of BNT162B2 and mRNA-1273 vaccines in U.S. Veterans | New England Journal of Medicine | wrong comparator |
| Domi et al. | The BNT162b2 vaccine is associated with lower new COVID-19 cases in nursing home residents and staff | Journal of the American Geriatrics Society | wrong intervention |
| Donadio et al. | Asymptomatic COVID-19 cases among older patients despite BNT162b2 vaccination: A case series in a geriatric rehabilitation ward during an outbreak | The Journal of Infection | wrong intervention |
| Drawz et al. | Effectiveness of BNT162b2 and mRNA-1273 Second Doses and Boosters for SARS-CoV-2 infection and SARS-CoV-2 Related Hospitalizations: A Statewide Report from the Minnesota Electronic Health Record Consortium | medRxiv | wrong comparator |
| Drawz et al. | Effectiveness of BNT162b2 and mRNA-1273 Second Doses and Boosters for SARS-CoV-2 infection and SARS-CoV-2 Related Hospitalizations: A Statewide Report from the Minnesota Electronic Health Record Consortium | Clinical infectious diseases : an official publication of the Infectious Diseases Society of America | wrong comparator |
| Du Plessis et al. | Efficacy of the ChAdOx1 nCoV-19 Covid-19 Vaccine against the B.1.351 Variant | New England Journal of Medicine | duplicated |

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| Dulovic et al. | Diminishing immune responses against variants of concern in dialysis patients four months after SARS-CoV-2 mRNA vaccination | Preprint - medRxiv | wrong outcome |
| Ebinger et al. | Antibody responses to the BNT162b2 mRNA vaccine in individuals previously infected with SARS-CoV-2 | Nature Medicine | wrong intervention |
| Ebinger et al. | Prior COVID-19 Infection and Antibody Response to Single Versus Double Dose mRNA SARS-CoV-2 Vaccination | Preprint - medRxiv | wrong outcome |
| Edelstein et al. | BNT 13b2 Pfizer vaccine protects against SARS-CoV-2 respiratory mucosal colonization even after prolonged exposure to positive family members | The Journal of Hospital Infection | wrong outcome |
| Efrati et al. | Safety and humoral responses to BNT162b2 mRNA vaccination of SARS-CoV-2 previously infected and naive populations | Scientific Reports | wrong outcome |
| Ella et al. | Efficacy, safety, and lot to lot immunogenicity of an inactivated SARS-CoV-2 vaccine (BBV152): a, double-blind, randomised, controlled phase 3 trial | Preprint - medRxiv | wrong intervention |
| Elliott et al. | Rapid increase in Omicron infections in England during December 2021: REACT-1 study | Rapid increase in Omicron infections in England during December 2021: REACT-1 study | wrong outcome |
| Elliott et al. | REACT-1 round 13 final report: exponential growth, high prevalence of SARS-CoV-2 and vaccine effectiveness associated with Delta variant in England during May to July 2021 | Hand search; Preprint - medRxiv | wrong intervention |
| Emary et al. | Efficacy of ChAdOx1 nCoV-19 (AZD1222) vaccine against SARS-CoV-2 variant of concern 202012/01 (B.1.1.7): an exploratory analysis of a randomised controlled trial | The Lancet | wrong intervention |
| Embi et al. | Effectiveness of two-dose vaccination with mRNA COVID-19 vaccines against COVID-19-associated hospitalizations among immunocompromised adults-Nine States, January-September 2021 | American journal of transplantation : official journal of the American Society of Transplantation and the American Society of Transplant Surgeons | wrong outcome |
| Embi et al. | Effectiveness of 2-Dose Vaccination with mRNA COVID-19 Vaccines Against COVID-19-Associated Hospitalizations Among Immunocompromised Adults - Nine States, January-September 2021 | MMWR. Morbidity and mortality weekly report | wrong study duration |

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| Emborg et al. | Vaccine effectiveness of the BNT162b2 mRNA COVID-19 vaccine against RT-PCR confirmed SARS-CoV-2 infections, hospitalisations and mortality in prioritised risk groups | Preprint - medRxiv | wrong intervention |
| Epaulard et al. | Symptoms and severity in vaccinated and unvaccinated patients hospitalised with SARS-CoV-2 delta (B.1.617.2) variant infection | medRxiv | wrong comparator |
| Espi et al. | A prospective observational study for justification, safety, and efficacy of a third dose of mRNA vaccine in patients receiving maintenance hemodialysis | Kidney international | wrong outcome |
| Espi et al. | Justification, safety, and efficacy of a third dose of mRNA vaccine in maintenance hemodialysis patients: a prospective observational study | Preprint - medRxiv | wrong outcome |
| Eyre et al. | The impact of SARS-CoV-2 vaccination on Alpha & Delta variant transmission. medRxiv 2021 | Preprint]. [Google Scholar] | wrong study duration |
| Fabiani et al. | Effectiveness of mRNA vaccines and waning of protection against SARS-CoV-2 infection and severe covid-19 during predominant circulation of the delta variant in Italy: retrospective cohort study | BMJ (Clinical research ed.) | wrong comparator |
| Fabiani et al. | Effectiveness of the comirnaty (BNT162b2, BioNTech/Pfizer) vaccine in preventing SARS-CoV-2 infection among healthcare workers, Treviso province, Veneto region, Italy, 27 December 2020 to 24 March 2021 | Eurosurveillance | wrong intervention |
| Fabiani et al. | Risk of SARS-CoV-2 infection and subsequent hospital admission and death at different time intervals since first dose of COVID-19 vaccine administration, Italy, 27 December 2020 to mid-April 2021 | Eurosurveillance | wrong intervention |
| Falsey et al. | Phase 3 Safety and Efficacy of AZD1222 (ChAdOx1 nCoV-19) Covid-19 Vaccine | The New England journal of medicine | wrong study duration |
| Farah et al. | Effectiveness of Pfizer-BioNTech Vaccine Against COVID-19 Associated Hospitalizations among Lebanese Adults ≥75 years- Lebanon, April-May 2021 | medRxiv | wrong outcome |
| Faria et al. | Performance of vaccination with CoronaVac in a cohort of healthcare workers (HCW) - preliminary report | Preprint - medRxiv | wrong intervention |
| Felip et al. | 1591P Immune response after vaccination against SARS-COV-2 in lung cancer (LC) patients (p). Prospective study in the Medical Oncology Department at the Catalan Institute of Oncology-Badalona, Spain: COVID-lung vaccine | Annals of Oncology | wrong outcome |

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| Feng et al. | Modelling COVID-19 Vaccine Breakthrough Infections in Highly Vaccinated Israel - the effects of waning immunity and third vaccination dose | medRxiv | wrong study design |
| Feng et al. | Correlates of protection against symptomatic and asymptomatic SARS-CoV-2 infection | Preprint - medRxiv | wrong outcome |
| Fernando et al. | Neutralizing SARS-CoV-2 Antibody Response and Protective Effect of 2 Doses of ChAdOx1 nCoV-19 and BBV152 Vaccines in hemodialysis Patients: A Preliminary Report | Kidney International Reports | wrong outcome |
| Firinu et al. | Evaluation of antibody response to BNT162b2 mRNA COVID-19 vaccine in patients affected by immune-mediated inflammatory diseases up to 5 months after vaccination | Preprint - Research Square | wrong outcome |
| Fisman et al. | Timing of Breakthrough Infection Risk After Vaccination Against SARS-CoV-2 | medRxiv | wrong comparator |
| Fisman et al. | Timing of Breakthrough Infection Risk After Vaccination Against SARS-CoV-2 | Timing of Breakthrough Infection Risk After Vaccination Against SARS-CoV-2 | wrong comparator |
| Fisman et al. | Timing of Breakthrough Infection Risk After Vaccination Against SARS-CoV-2 | medRxiv | delayed exclusion - definition of unvaccinated group is unclear |
| Flacco et al. | Risk of SARS-CoV-2 reinfection 18 months after primary infection: population-level observational study | medRxiv | wrong study duration |
| Folegatti et al. | Safety and immunogenicity of the ChAdOx1 nCoV-19 | Hand search; The Lancet | wrong outcome |
| Fontan et al. | Time-Varying Effectiveness of Three Covid-19 Vaccines in Puerto Rico | medRxiv | wrong outcome |
| Foulkes et al. | COVID-19 vaccine coverage in health-care workers in England and effectiveness of BNT162b2 mRNA vaccine against infection (SIREN): a prospective, multicentre, cohort study | The Lancet | wrong intervention |
| Fournier et al. | SARS-CoV-2 Vaccination and Protection Against Clinical Disease: A Retrospective Study, Bouches-du-Rhône District, Southern France, 2021 | Frontiers in Microbiology | delayed exclusion - baseline is <14 days, which is beyond our 30.5 days average post-receipt of second dose threshold. |
| Frenck et al. | Safety, immunogenicity, and efficacy of the BNT162B2 covid-19 vaccine in adolescents | New England Journal of Medicine | wrong intervention |

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| Friedrichs et al. | Immunogenicity and safety of anti-SARS-CoV-2 mRNA vaccines in patients with chronic inflammatory conditions and immunosuppressive therapy in a monocentric cohort | Annals of the Rheumatic Diseases | wrong intervention |
| Fu et al. | POS-941 THE EFFECTIVENESS OF COVID-19 VACCINE IN REDUCING THE SEVERITY AND MORTALITY RATE AMONG THE END STAGE KIDNEY DISEASE WITH COVID-19 | Kidney International Reports | Full-text not found |
| Fuca et al. | Antibody response to mRNA-1273 SARS-COV-2 vaccine in hemodialysis patients with and without prior COVID-19 | Clinical Journal of the American Society of Nephrology | wrong intervention |
| Furer et al. | Immunogenicity and safety of the BNT162B2 mRNA COVID-19 vaccine in adult patients with autoimmune inflammatory rheumatic diseases and general population: A multicenter study | Annals of the Rheumatic Diseases | wrong intervention |
| Gaio et al. | COVID-19 vaccine effectiveness among healthcare workers in Portugal: results from a hospital-based cohort study, December 2020 to November 2021 | medRxiv | wrong comparator |
| Gaio et al. | COVID-19 vaccine effectiveness among healthcare workers in Portugal: results from a hospital-based cohort study, December 2020 to November 2021 | medRxiv | wrong intervention |
| Garvey et al. | Early observations on the impact of a healthcare worker COVID-19 vaccination programme at a major UK tertiary centre | The Journal of Infection | wrong intervention |
| Gazit et al. | BNT162b2 mRNA Vaccine Effectiveness Given Confirmed Exposure: Analysis of Household Members of COVID-19 Patients | Clinical infectious diseases : an official publication of the Infectious Diseases Society of America | wrong comparator |
| Gazit et al. | BNT162b2 mRNA Vaccine Effectiveness Given Confirmed Exposure; Analysis of Household Members of COVID-19 Patients | Preprint - medRxiv | wrong intervention |
| Gazit et al. | Comparing SARS-CoV-2 natural immunity to vaccine-induced immunity: reinfections versus breakthrough infections | Preprint - medRxiv | wrong intervention |
| Geysels et al. | SARS-CoV-2 vaccine breakthrough infections among healthcare workers in a large Belgian hospital network | Infection Control and Hospital Epidemiology | wrong intervention |
| Ghadiri et al. | The study of COVID-19 infection following vaccination in patients with multiple sclerosis | Multiple sclerosis and related disorders | wrong outcome |

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| Ghosh et al. | COVISHIELD (AZD1222) VaccINe effectiveness among healthcare and frontline Workers of INdian Armed Forces: Interim results of VIN-WIN cohort study | Medical Journal Armed Forces India | wrong intervention |
| Giansante et al. | COVID-19 vaccine effectiveness among the staff of the Bologna Health Trust, Italy, December 2020-April 2021 | Acta Bio-medica: Atenei Parmensis | wrong intervention |
| Gilbert et al. | Immune Correlates Analysis of the mRNA-1273 COVID-19 Vaccine Efficacy Trial | Preprint - medRxiv | wrong intervention |
| Glampson et al. | North West London Covid-19 Vaccination Programme: Real-world evidence for Vaccine uptake and effectiveness: Retrospective Cohort Study | JMIR Public Health and Surveillance | wrong intervention |
| Glatman-Freedman et al. | The BNT162b2 vaccine effectiveness against new COVID-19 cases and complications of breakthrough cases: A nation-wide retrospective longitudinal multiple cohort analysis using individualised data | EBioMedicine | wrong study duration |
| Glatman-Freedman et al. | Effectiveness of BNT162b2 Vaccine in Adolescents during Outbreak of SARS-CoV-2 Delta Variant Infection, Israel, 2021 | Emerging infectious diseases | wrong study duration |
| Goes et al. | New infections by SARS-CoV-2 variants of concern after natural infections and post-vaccination in Rio de Janeiro, Brazil | Infection, Genetics and Evolution | wrong study design |
| Gohil et al. | Asymptomatic and Symptomatic COVID-19 Infections Among Health Care Personnel Before and After Vaccination | JAMA network open | wrong intervention |
| Goldberg et al. | Protection of previous SARS-CoV-2 infection is similar to that of BNT162b2 vaccine protection: A three-month nationwide experience from Israel | Preprint - medRxiv | wrong intervention |
| Goldberg et al. | Waning Immunity after the BNT162b2 Vaccine in Israel | The New England journal of medicine | wrong comparator |
| Goldin et al. | BNT162b2 mRNA COVID-19 (Comirnaty) Vaccine Effectiveness in Elderly Patients Who Live in Long-Term Care Facilities: A Nationwide Cohort | Gerontology | wrong outcome |
| Goldshtein et al. | Association Between BNT162b2 Vaccination and Incidence of SARS-CoV-2 Infection in Pregnant Women | JAMA | wrong intervention |
| Gomes et al. | Is the BioNTech-Pfizer COVID-19 vaccination effective in elderly populations? Results from population data from Bavaria, Germany | Preprint - medRxiv | wrong intervention |
| Gomes et al. | Is the BNT162b2 COVID-19 vaccine effective in elderly populations? Results from population data from Bavaria, Germany | PloS one | duplicate |
| Gounant et al. | Efficacy of SARS-CoV-2 vaccine in thoracic cancer patients: a prospective study supporting a | Preprint - medRxiv | wrong intervention |

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| | third dose in patients with minimal serologic response after two vaccine doses | | |
| Gower et al. | Effectiveness of Covid-19 Vaccines against the B.1.617.2 (Delta) Variant | New England Journal of Medicine | duplicated |
| Gower et al. | Effectiveness of the Pfizer-BioNTech and Oxford-AstraZeneca vaccines on covid-19 related symptoms, hospital admissions, and mortality in older adults in England: Test negative case-control study | The BMJ | duplicated |
| Gram et al. | Vaccine effectiveness against SARS-CoV-2 infection, hospitalization, and death when combining a first dose ChAdOx1 vaccine with a subsequent mRNA vaccine in Denmark: A nationwide population-based cohort study | PLoS medicine | wrong study duration |
| Gram et al. | Vaccine effectiveness when combining the ChAdOx1 vaccine as the first dose with an mRNA COVID-19 vaccine as the second dose | Preprint - medRxiv | wrong intervention |
| Grannis et al. | Interim estimates of COVID-19 vaccine effectiveness against COVID-19, associated emergency department or urgent care clinic encounters and hospitalizations among adults during SARS-CoV-2 B. 1.617. 2 (Delta) variant predominance, Nine States, June, August 2021 | Morbidity and Mortality Weekly Report | wrong study duration |
| Grant et al. | Impact of SARS-CoV-2 Delta variant on incubation, transmission settings and vaccine effectiveness: Results from a nationwide case-control study in France | The Lancet regional health. Europe | wrong study duration |
| Gray et al. | Vaccine effectiveness against hospital admission in South African health care workers who received a homologous booster of Ad26.COV2 during an Omicron COVID19 wave: Preliminary Results of the Sisonke 2 Study | medRxiv | wrong intervention |
| Grima et al. | Relative Virulence of SARS-CoV-2 Among Vaccinated and Unvaccinated Individuals Hospitalized with SARS-CoV-2 | medRxiv | wrong study duration |
| Guarino et al. | Effectiveness of SARS-Cov-2 vaccination in liver transplanted patients: the debate is open! | Journal of Hepatology | wrong outcome |
| Guha et al. | The incidence and in-hospital mortality of COVID-19 patients post-vaccination in eastern India | Preprint - medRxiv | wrong study design |
| Haas et al. | Impact and effectiveness of mRNA BNT162b2 vaccine against SARS-CoV-2 infections and COVID-19 cases, hospitalisations, and deaths following a nationwide vaccination campaign in Israel: an observational study using national surveillance data | The Lancet | wrong intervention |

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| Haas et al. | Infections, Hospitalizations, and Deaths Averted Via Direct Effects of the Pfizer-BioNTech BNT162b2 mRNA COVID-19 Vaccine in a Nationwide Vaccination Campaign, Israel | Preprint - SSRN | wrong intervention |
| Hall et al. | Effectiveness and durability of protection against future SARS-CoV-2 infection conferred by COVID-19 vaccination and previous infection; findings from the UK SIREN prospective cohort study of healthcare workers March 2020 to September 2021 | medRxiv | delayed exclusion - a published version of this article is available |
| Hall et al. | Randomized Trial of a Third Dose of mRNA-1273 Vaccine in Transplant Recipients | New England Journal of Medicine | wrong comparator |
| Hammerman et al. | Effectiveness of the BNT162b2 Vaccine after Recovery from Covid-19 | The New England journal of medicine | wrong intervention |
| Hansen et al. | Vaccine effectiveness against SARS-CoV-2 infection with the Omicron or Delta variants following a two-dose or booster BNT162b2 or mRNA-1273 vaccination series: A Danish cohort study | medRxiv | delayed exclusion - last follow-up period is 91-150 days, which is insufficient to meet our 112-day lower limit. |
| Hardt et al. | Efficacy and Safety of a Booster Regimen of Ad26.COVS Vaccine against Covid-19 | medRxiv | wrong comparator |
| Hardt et al. | Efficacy and Safety of a Booster Regimen of Ad26.COVS Vaccine against Covid-19 | medRxiv | wrong intervention |
| Harris et al. | Impact of vaccination on household transmission of SARS-COV-2 in England | Hand search; Preprint - medRxiv | wrong intervention |
| Havers et al. | COVID-19-associated hospitalizations among vaccinated and unvaccinated adults ≥ 18 years - COVID-NET, 13 states, January 1 - July 24, 2021 | Preprint - medRxiv | wrong outcome |
| Herishanu et al. | Efficacy of the BNT162b2 mRNA COVID-19 vaccine in patients with chronic lymphocytic leukemia | Blood | wrong outcome |
| Herzberg et al. | SARS-CoV-2-antibody response in health care workers after vaccination or natural infection in a longitudinal observational study | Preprint - medRxiv | wrong intervention |
| Heudel et al. | Reduced SARS-CoV-2 infection and death after two doses of COVID-19 vaccines in a series of 1503 cancer patients | Annals of Oncology | wrong intervention |
| Hitchings et al. | Effectiveness of the ChAdOx1 vaccine in the elderly during SARS-CoV-2 Gamma variant transmission in Brazil | Preprint - medRxiv | wrong intervention |
| Hitchings et al. | Effectiveness of ChAdOx1 vaccine in older adults during SARS-CoV-2 Gamma variant circulation in Sao Paulo | Nature Communications | duplicate |

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| Hoehl et al. | A new group at increased risk of a SARS-CoV-2 infection emerges: The recently vaccinated | Vaccine | wrong intervention |
| Hollinghurst et al. | COVID-19 Infection Risk amongst 14,104 Vaccinated Care Home Residents: A national observational longitudinal cohort study in Wales, United Kingdom, December 2020 to March 2021 | Preprint - medRxiv | wrong intervention |
| Hoque et al. | Serial evaluation of anti-SARS-CoV-2 IgG antibody and breakthrough infections in BNT162b2 Vaccinated migrant workers from Bangladesh | medRxiv | wrong comparator |
| Horst | Covid-19 and Patients with IBD: Who Is at Highest Risk for Severe Complications? | Digestive Diseases and Sciences | wrong publication type |
| Hu et al. | Effectiveness of inactive COVID-19 vaccines against severe illness in B.1.617.2 (Delta) variant-infected patients in Jiangsu, China | Preprint - medRxiv | wrong intervention |
| Hulme et al. | Comparative effectiveness of ChAdOx1 versus BNT162b2 COVID-19 vaccines in Health and Social Care workers in England: a cohort study using OpenSAFELY | medRxiv | wrong intervention |
| Hung & Poland | Single-dose Oxford-AstraZeneca COVID-19 vaccine followed by a 12-week booster | The Lancet | wrong intervention |
| Hyams et al. | Effectiveness of BNT162b2 and ChAdOx1 nCoV-19 COVID-19 vaccination at preventing hospitalisations in people aged at least 80 years: a test-negative, case-control study | The Lancet Infectious Diseases | wrong intervention |
| Hyams et al. | Assessing the Effectiveness of BNT162b2 and ChAdOx1nCoV-19 COVID-19 Vaccination in Prevention of Hospitalisations in Elderly and Frail Adults: A Single Centre Test Negative Case-Control Study | Hand search; Preprint - SSRN | wrong intervention |
| Iliaki et al. | COVID-19 Vaccine Efficacy in a Diverse Urban Healthcare Worker Population | Preprint - medRxiv | wrong intervention |
| Ioannou et al. | COVID-19 Vaccination Effectiveness Against Infection or Death in a National U.S. Health Care System : A Target Trial Emulation Study | Annals of internal medicine | wrong study duration |
| Irizarry et al. | Time-Varying Effectiveness of Three Covid-19 Vaccines in Puerto Rico | SSRN | delayed exclusion - study ID 18-3 is a more recent version of this study |
| Iskander et al. | Effectiveness of vaccination against reported SARS-CoV-2 infection in United States Coast Guard personnel between May and August 2021: A time-series analysis | medRxiv | wrong comparator |
| Ismail et al. | Effectiveness of BNT162b2 mRNA and ChAdOx1 adenovirus vector COVID-19 vaccines on risk of hospitalisation among older | Hand search - Public Health England preprint | wrong intervention |

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| | adults in England: an observational study using surveillance data | | |
| Israel et al. | Large-scale study of antibody titer decay following BNT162b2 mRNA vaccine or SARS-CoV-2 infection | Preprint - medRxiv | wrong outcome |
| Israel, et al. | Elapsed time since BNT162b2 vaccine and risk of SARS-CoV-2 infection in a large cohort | medRxiv | delayed exclusion - study included only vaccinated individuals. The authors presented risk of COVID infection according to the time since the vaccination (greater or lower than 146 days) in Table 3 (but no indication of individual level follow-up time). |
| Issac et al. | SARS-CoV-2 Breakthrough Infections among the Healthcare Workers Post-Vaccination with ChAdOx1 nCoV-19 Vaccine in the South Indian State of Kerala | Preprint - medRxiv | wrong intervention |
| Italian Istituto Superiore di Sanita | Impact of COVID-19 vaccination on the risk of SARS-CoV-2 infection and hospitalization and death in Italy | Report forwarded by PHAC | wrong comparator |
| Jablonska et al. | The real-life impact of vaccination on COVID-19 mortality in Europe and Israel | Preprint - medRxiv | wrong population |
| Jacobson et al. | Post-vaccination SARS-CoV-2 infections and incidence of presumptive B.1.427/B.1.429 variant among healthcare personnel at a northern California academic medical center | Clinical Infectious Diseases | wrong intervention |
| Jacobson et al. | Post-vaccination SARS-CoV-2 infections and incidence of the B.1.427/B.1.429 variant among healthcare personnel at a northern California academic medical center | Preprint - medRxiv | duplicated |
| Jacquemont et al. | Minimal change disease relapse following SARS-CoV-2 mRNA vaccine | Kidney International | wrong study design |
| Jagadeesh Kumar et al. | Clinical outcomes in vaccinated individuals hospitalized with Delta variant of SARS-CoV-2 | Preprint - medRxiv | wrong intervention |
| Jalali et al. | Increased household transmission and immune escape of the SARS-CoV-2 Omicron variant compared to the Delta variant: evidence from Norwegian contact tracing and vaccination data | medRxiv | wrong study duration |

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| Jara et al. | Effectiveness of an Inactivated SARS-CoV-2 Vaccine in Chile | Hand search; New England Journal of Medicine | wrong intervention |
| Jeulin et al. | Comparative analysis of post-vaccination anti-spike IgG antibodies in old Nursing Home Residents and in middle-aged Healthcare workers | Preprint - medRxiv | wrong outcome |
| June Choe et al. | Safety and effectiveness of BNT162b2 mRNA Covid-19 vaccine in adolescents | Vaccine | wrong population |
| Junghans | Technical note: The calculated real world BNT162b2 vaccine efficacy was 88% when accounting for asymptomatic cases | Human vaccines & immunotherapeutics | wrong population |
| Kale et al. | Clinicogenomic analysis of breakthrough infections by SARS CoV2 variants after ChAdOx1 nCoV-19 vaccination in healthcare workers | Hand search; Preprint - medRxiv | wrong intervention |
| Kamar et al. | Three Doses of an mRNA Covid-19 Vaccine in Solid-Organ Transplant Recipients | The New England Journal of Medicine | wrong intervention |
| Kannian et al. | Booster and anergic effects of the Covishield vaccine among healthcare workers in South India | Preprint - medRxiv | wrong outcome |
| Katz et al. | Early effectiveness of BNT162b2 Covid-19 vaccine in preventing SARS-CoV-2 infection in healthcare personnel in six Israeli hospitals (CoVEHPI) | Vaccine | wrong outcome |
| Katz et al. | Covid-19 Vaccine Effectiveness in Healthcare Personnel in six Israeli Hospitals (CoVEHPI) | Preprint - medRxiv | wrong intervention |
| Kaur et al. | Occurrence of COVID-19 in priority groups receiving ChAdOx1 nCoV-19 coronavirus vaccine (recombinant): a preliminary analysis from north India | Journal of Medical Virology | wrong intervention |
| Keegan et al. | Progress of the Delta variant and erosion of vaccine effectiveness, a warning from Utah | Preprint - medRxiv | wrong study design |
| Keehner et al. | SARS-CoV-2 Infection after Vaccination in Health Care Workers in California | The New England Journal of Medicine | wrong intervention |
| Keehner, et al | Resurgence of SARS-CoV-2 Infection in a Highly Vaccinated Health System Workforce. | The New England Journal of Medicine | delayed exclusion - a series of cross-sectional analysis over months (no indication of individual level follow-up times) |
| Keeling et al. | Waning, boosting and a path to endemicity for SARS-CoV-2 | medRxiv | wrong population |
| Kepten et al. | BNT162B2 mRNA covid-19 vaccine in a nationwide mass vaccination setting | New England Journal of Medicine | uplicated |

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| Kertes et al. | Effectiveness of the mRNA BNT162b2 vaccine six months after vaccination: Findings from a large Israeli HMO. | Hand search; Preprint - medRxiv | wrong control |
| Khan & Mahmud | Effectiveness of SARS-CoV-2 vaccination in a Veterans Affairs Cohort of Inflammatory Bowel Disease Patients with Diverse Exposure to Immunosuppressive Medications | Gastroenterology | wrong study duration |
| Khan et al. | Safety and effectiveness of the BNT162B2 mRNA COVID-19 vaccine in a nationwide cohort of patients with inflammatory bowel disease | Inflammatory Bowel Diseases | Full-text unavailable |
| Khan et al. | SAFETY AND EFFECTIVENESS OF THE BNT162B2 MRNA COVID-19 VACCINE IN A NATIONWIDE COHORT OF PATIENTS WITH INFLAMMATORY BOWEL DISEASE | Gastroenterology | Full text unavailable |
| Khan et al. | Effectiveness of SARS-CoV-2 Vaccination in a Veterans Affairs Cohort of Patients With Inflammatory Bowel Disease With Diverse Exposure to Immunosuppressive Medications | Gastroenterology | wrong intervention |
| Khoury et al. | COVID-19 vaccine - Long term immune decline and breakthrough infections | Vaccine | wrong comparator |
| Kim et al. | mRNA Vaccine Effectiveness against COVID-19 among Symptomatic Outpatients Aged ≥16 Years in the United States, February - May 2021 | The Journal of Infectious Diseases | wrong intervention |
| Kim et al. | mRNA Vaccine Effectiveness against COVID-19 among Symptomatic Outpatients Aged ≥16 Years in the United States, February - May 2021 | The Journal of infectious diseases | wrong comparator |
| Kislaya et al. | Comparative complete scheme and booster effectiveness of COVID-19 vaccines in preventing SARS-CoV-2 infections with SARS-CoV-2 Omicron (BA.1) and Delta (B.1.617.2) variants | medRxiv | wrong comparator |
| Kislaya et al. | Comparative Effectiveness of Coronavirus Vaccine in Preventing Breakthrough Infections among Vaccinated Persons Infected with Delta and Alpha Variants | Emerging infectious diseases | wrong study duration |
| Kislaya et al. | Delta variant and mRNA Covid-19 vaccines effectiveness: higher odds of vaccine infection breakthroughs | Preprint - medRxiv | wrong intervention |
| Kissling et al. | Vaccine effectiveness against symptomatic SARS-CoV-2 infection in adults aged 65 years and older in primary care: I-MOVE-COVID-19 project, Europe, December 2020 to May 2021 | Hand search; Eurosurveillance | wrong intervention |
| Klaassen et al. | Population immunity to pre-Omicron and Omicron SARS-CoV-2 variants in US states and counties through December 1, 2021 | medRxiv | wrong intervention |

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| Klaser et al. | COVID-19 due to the B.1.617.2 (Delta) variant compared to B.1.1.7 (Alpha) variant of SARS-CoV-2: two prospective observational cohort studies | medRxiv | wrong study duration |
| Knobel et al. | Coronavirus disease 2019 (COVID-19) mRNA vaccine effectiveness in asymptomatic healthcare workers | Infection Control and Hospital Epidemiology | wrong intervention |
| Knobel et al. | COVID-19 mRNA vaccine effectiveness in asymptomatic healthcare workers | Infection Control and Hospital Epidemiology | wrong intervention |
| Knoll et al. | Oxford-AstraZeneca COVID-19 vaccine efficacy | The Lancet | wrong publication type |
| Kontou et al. | Antibody response following a two-dose mRNA vaccination regimen, in health care workers of a tertiary hospital in Athens, Greece | Journal of Personalized Medicine | wrong intervention |
| Korves et al. | Relative effectiveness of booster vs. 2-dose mRNA Covid-19 vaccination in the Veterans Health Administration: Self-controlled risk interval analysis | | wrong study duration |
| Koshy | Effectiveness of ChAdOx1 nCoV-19 Vaccine: Experience of a tertiary care institute | Medical Journal Armed Forces India | wrong outcome |
| Kridin et al. | Determinants and Effectiveness of BNT162b2 mRNA Vaccination Among Patients with Atopic Dermatitis: A Population-Based Study | American Journal of Clinical Dermatology | wrong outcome |
| Krisztina et al. | Real-time monitoring of the effectiveness of six COVID-19 vaccines in Hungary in 2021 using the screening method | medRxiv | wrong intervention |
| Kugeler et al. | Estimating the number of symptomatic SARS-CoV-2 infections among vaccinated individuals in the United State - January-April, 2021 | Preprint - medRxiv | wrong study design |
| Kustin et al. | Evidence for increased breakthrough rates of SARS-CoV-2 variants of concern in BNT162b2 mRNA vaccinated individuals | Preprint - medRxiv | wrong study design |
| Lamacchia et al. | Clinical and immunological features of SARS-CoV-2 breakthrough infections in vaccinated individuals requiring hospitalization | medRxiv | wrong outcome |
| Landre et al. | 1600P Suboptimal response to COVID-19 mRNA vaccines in older patients with cancer | Annals of Oncology | wrong comparator |
| Lange et al. | Immune response to COVID-19 mRNA vaccine-a pilot study | Vaccines | wrong intervention |
| Lanini et al. | A single intramuscular injection of monoclonal antibody MAD0004J08 induces in healthy adults SARS-CoV-2 neutralising antibody titres exceeding those induced by infection and vaccination | Preprint - medRxiv | wrong intervention |
| Lanthier et al. | [In subjects 16 years of age and older, is messenger RNA vaccine BNT162b2 against COVID-19 effective and safe?] | La Revue de Médecine Interne | wrong intervention |

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| Larese Filon et al. | Incidence of COVID-19 infection in hospital workers from March 1, 2020 to May 31, 2021 routinely tested, before and after vaccination with BNT162B2 | Scientific reports | wrong study duration |
| Lauring et al. | Clinical severity of, and effectiveness of mRNA vaccines against, covid-19 from omicron, delta, and alpha SARS-CoV-2 variants in the United States: prospective observational study | BMJ (Clinical research ed.) | wrong outcome |
| Lauring et al. | Clinical Severity and mRNA Vaccine Effectiveness for Omicron, Delta, and Alpha SARS-CoV-2 Variants in the United States: A Prospective Observational Study | medRxiv | wrong comparator |
| Layan et al. | Impact of BNT162b2 vaccination and isolation on SARS-CoV-2 transmission in Israeli households: an observational study | American journal of epidemiology | wrong outcome |
| Layan et al. | Impact of BNT162b2 vaccination and isolation on SARS-CoV-2 transmission in Israeli households: an observational study | Preprint - medRxiv | wrong intervention |
| Lee et al. | POS-950 COVID-19 IN END STAGE KIDNEY DISEASE WITH RENAL REPLACEMENT THERAPIES: OUR EXPERIENCE IN PENANG | Kidney International Reports | Full-text not found |
| Lefèvre et al. | Beta SARS-CoV-2 variant and BNT162b2 vaccine effectiveness in long-term care facilities in France | The Lancet. Healthy longevity | wrong study duration |
| Lefèvre et al. | Impact of B. 1.351 (beta) SARS-CoV-2 variant on BNT162b2 mRNA vaccine effectiveness in long-term care facilities of eastern France: a retrospective cohort study | medRxiv | duplicated |
| Leo | Effectiveness of the mRNA BNT162b2 vaccine against SARS-CoV-2 severe infections in the Israeli over 60 population: a temporal analysis done by using the national surveillance data | medRxiv | wrong study duration |
| Lev Zion et al. | COVID-19 vaccine effectiveness in inflammatory bowel disease patients on tumor-necrosis factor inhibitors: Real world data from a massvaccination campaign | Journal of Crohn's and Colitis | Full-text unavailable |
| Lev-Tzion et al. | COVID-19 vaccine is effective in inflammatory bowel disease patients and is not associated with disease exacerbation | Clinical gastroenterology and hepatology : the official clinical practice journal of the American Gastroenterological Association | wrong outcome |
| Lewis et al. | Effectiveness of mRNA vaccines in preventing COVID-19 hospitalization by age and burden of chronic medical conditions among | The Journal of infectious diseases | wrong study duration |

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| | immunocompetent US adults, March-August 2021 | | |
| Lillie et al. | First dose of BNT162b2 mRNA vaccine in a Health Care Worker cohort is associated with reduced symptomatic and asymptomatic SARS-CoV-2 infection | Clinical Infectious Diseases | wrong intervention |
| Lim et al. | POS-962 A SURVEY OF COVID-19 INFECTION AMONG VACCINATED AND UNVACCINATED PATIENTS ON RENAL REPLACEMENT THERAPY: A SINGLE CENTRE EXPERIENCE | Kidney International Reports | Full-text not found |
| Lin et al. | Effectiveness of Covid-19 Vaccines over a 9-Month Period in North Carolina | The New England journal of medicine | wrong intervention |
| Lippi & Mattiuzzi | Primary COVID-19 vaccine cycle and booster doses efficacy: analysis of Italian nationwide vaccination campaign | European journal of public health | delayed exclusion - baseline is < 6 month, which is beyond our 30.5 days average post-receipt of second dose threshold |
| Lippi et al. | Real-world analysis of age-dependent efficacy of COVID-19 vaccination | Research Square | wrong comparator |
| Liu, Cong and Lee, Junghwan and Ta, Casey and Soroush, Ali and Rogers, James R. and Kim, Jae Hyun and Natarajan, Karthik and Zucker, Jason and Weng, Chunhua | A Retrospective Analysis of COVID-19 mRNA Vaccine Breakthrough Infections ,À Risk Factors and Vaccine Effectiveness | medRxiv | delayed exclusion - no comparative data for unvaccinated individuals |
| Lo Sasso et al. | Evaluation of Anti-SARS-Cov-2 S-RBD IgG Antibodies after COVID-19 mRNA BNT162b2 Vaccine | Diagnostics (Basel, Switzerland) | wrong outcome |
| Lopez Bernal et al. | Effectiveness of Covid-19 Vaccines against the B.1.617.2 (Delta) Variant | The New England Journal of Medicine | uplicated |
| Lopez Bernal et al. | Effectiveness of the Pfizer-BioNTech and Oxford-AstraZeneca vaccines on covid-19 related symptoms, hospital admissions, and mortality in older adults in England: test negative case-control study | BMJ (Clinical Research Ed.) | wrong intervention |
| Lumley et al. | An observational cohort study on the incidence of SARS-CoV-2 infection and B.1.1.7 variant infection in healthcare workers by antibody and vaccination status | Preprint - medRxiv | uplicated |

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| Lumley et al. | An observational cohort study on the incidence of SARS-CoV-2 infection and B.1.1.7 variant infection in healthcare workers by antibody and vaccination status | Clinical Infectious Diseases | wrong intervention |
| Lytras et al. | Comparative effectiveness of COVID-19 vaccination against death and severe disease in an ongoing nationwide mass vaccination campaign | medRxiv | duplicated |
| Ma et al. | Effectiveness of Covid-19 Vaccines against the SARS-COV-2-Delta (B.1.617.2) in China-A Real World Study | medRxiv | wrong outcome |
| Madhi et al. | ChAdOx1 nCoV-19 Vaccine Efficacy against the B.1.351 Variant. Reply | The New England Journal of Medicine | wrong publication type |
| Madhi et al. | Safety and efficacy of the ChAdOx1 nCoV-19 (AZD1222) Covid-19 vaccine against the B.1.351 variant in South Africa | Preprint - medRxiv | duplicated |
| Maeda et al. | Effectiveness of mRNA COVID-19 vaccines against symptomatic SARS-CoV-2 infections during the Delta variant epidemic in Japan: Vaccine Effectiveness Real-time Surveillance for SARS-CoV-2 (VERSUS) | medRxiv | wrong comparator |
| Maeda et al. | Effectiveness of mRNA COVID-19 vaccines against symptomatic SARS-CoV-2 infections during the Delta variant epidemic in Japan: Vaccine Effectiveness Real-time Surveillance for SARS-CoV-2 (VERSUS) | medRxiv | wrong comparator |
| Mahase | Covid-19: Pfizer vaccine's efficacy declined from 96% to 84% four months after second dose, company reports | BMJ (Clinical Research Ed.) | wrong publication type |
| Mallow et al. | Real world SARS-COV-2 vaccine effectiveness in a Miami academic institution | The American journal of emergency medicine | wrong study duration |
| Maltezou et al. | COVID-19 vaccination significantly reduces morbidity and absenteeism among healthcare personnel: A prospective multicenter study | Vaccine | wrong study duration |
| Maneikis et al. | Immunogenicity of the BNT162b2 COVID-19 mRNA vaccine and early clinical outcomes in patients with haematological malignancies in Lithuania: a national prospective cohort study | The Lancet Haematology | wrong intervention |
| Manley et al. | SARS-CoV-2 vaccine effectiveness and breakthrough infections in maintenance dialysis patients | medRxiv | wrong outcome |
| Manley et al. | SARS-CoV-2 vaccine effectiveness and breakthrough infections in maintenance dialysis patients | medRxiv | wrong study duration |
| Martinez-Baz et al. | Effectiveness of COVID-19 vaccines in preventing SARS-CoV-2 infection and hospitalisation, Navarre, Spain, January to April 2021 | Eurosurveillance | wrong intervention |

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| Martínez-Baz et al. | Product-specific COVID-19 vaccine effectiveness against secondary infection in close contacts, Navarre, Spain, April to August 2021 | Euro surveillance : bulletin Européen sur les maladies transmissibles = European communicable disease bulletin | wrong comparator |
| Martinot et al. | Outbreak of SARS-CoV-2 infection in a long-term care facility after COVID-19 BNT162b2 mRNA vaccination | Clinical Microbiology and Infection | wrong intervention |
| Massimo et al. | COVID-19 convalescent plasma donors: impact of vaccination on antibody levels, breakthrough infections and reinfection rate | Preprint - medRxiv | wrong intervention |
| Massonnaud et al. | Evaluating COVID-19 booster vaccination strategies in a partially vaccinated population: a modeling study | SSRN | wrong study design |
| Mateo-Urdiales et al. | Risk of SARS-CoV-2 infection and subsequent hospital admission and death at different time intervals since first dose of COVID-19 vaccine administration, Italy, 27 December 2020 to mid-April 2021 | Hand search; Eurosurveillance | wrong intervention |
| Mateus et al. | Low dose mRNA-1273 COVID-19 vaccine generates durable T cell memory and antibodies enhanced by pre-existing crossreactive T cell memory | Preprint - medRxiv | wrong outcome |
| Mathema et al. | Post-vaccination SARS-COV-2 among healthcare workers in New Jersey: a genomic epidemiological study | Preprint - medRxiv | wrong intervention |
| Mattar et al. | Efficacy of the CoronaVac® Vaccine in a Region of the Colombian Amazon, Was Herd Immunity Achieved? | Preprint - Research Square | wrong intervention |
| Mattiuzzi & Lippi | Primary COVID-19 vaccine cycle and booster doses efficacy: analysis of Italian nationwide vaccination campaign | European journal of public health | wrong comparator |
| Mattiuzzi & Lippi | Efficacy of COVID-19 vaccine booster doses in older people | European geriatric medicine | wrong comparator |
| Mattiuzzi & Lippi | <p>COVID-19 vaccination is highly effective to prevent SARS-CoV-2 circulation</p> | Research Square | wrong comparator |
| Mazagatos et al. | Effectiveness of mRNA COVID-19 vaccines in preventing SARS-CoV-2 infections and COVID-19 hospitalisations and deaths in elderly long-term care facility residents, Spain, weeks 53 2020 to 13 2021 | Eurosurveillance | wrong intervention |
| McConaghy et al. | An assessment of the impact of the vaccination program on coronavirus disease 2019 (COVID-19) outbreaks in care homes in Northern Ireland-A pilot study | Infection Control and Hospital Epidemiology | wrong intervention |

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| McConeghy et al. | Effectiveness of a SARS-CoV-2 mRNA vaccine booster dose for prevention of infection, hospitalization or death in two nation-wide nursing home systems | medRxiv | wrong study duration |
| McConeghy et al. | Effectiveness of a SARS-CoV-2 mRNA vaccine booster dose for prevention of infection, hospitalization or death in two nation-wide nursing home systems | medRxiv | wrong outcome |
| McDade et al. | Durability of antibody response to vaccination and surrogate neutralization of emerging variants based on SARS-CoV-2 exposure history | Scientific Reports | wrong intervention |
| McEllistrem et al. | Introduction of the BNT162b2 vaccine during a COVID-19 nursing home outbreak | American Journal of Infection Control | wrong intervention |
| McEvoy et al. | Real-world Effectiveness of 2-dose SARS-CoV-2 Vaccination in Kidney Transplant Recipients | medRxiv | wrong comparator |
| McKeigue et al. | Vaccine efficacy against severe COVID-19 in relation to delta variant (B.1.617.2) and time since second dose in patients in Scotland (REACT-SCOT): a case-control study | The Lancet. Respiratory medicine | wrong outcome |
| McKeigue et al. | Efficacy of vaccination against severe COVID-19 in relation to Delta variant and time since second dose: the REACT-SCOT case-control study | medRxiv | wrong comparator |
| McKeon et al. | Real-world effectiveness and immunogenicity of mRNA-1273 in dialysis patients | Journal of the American Society of Nephrology | wrong intervention |
| McLean et al. | mRNA COVID-19 vaccine effectiveness against SARS-CoV-2 infection in a prospective community cohort, rural Wisconsin, November 2020-December 2021 | medRxiv | wrong outcome |
| McLean et al. | mRNA COVID-19 vaccine effectiveness against SARS-CoV-2 infection in a prospective community cohort, rural Wisconsin, November 2020 to December 2021 | Influenza and other respiratory viruses | wrong study duration |
| Medeiros et al. | Reduced T cell and antibody responses to inactivated coronavirus vaccine among males and individuals above 55 years old | Preprint - medRxiv | wrong intervention |
| Medina-Pestana et al. | Inactivated Whole-virus Vaccine Triggers Low Response Against SARS-CoV-2 Infection Among Renal Transplant Patients: Prospective Phase 4 Study Results | Transplantation | wrong intervention |
| Meggiolaro et al. | Effectiveness of vaccination against symptomatic and asymptomatic SARS-CoV-2 infection: a systematic review and meta-analysis | Preprint - medRxiv | wrong study design |
| Mehta & Silveira | COVID-19 after two doses of mRNA vaccines in kidney transplant recipients | American Journal of Transplantation | wrong intervention |
| Menascu et al. | Safety and efficacy of COVID-19 Pfizer-BNT162b2 m-RNA vaccine in young MS population | Multiple Sclerosis Journal | wrong comparator |

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| Menni et al. | Vaccine side-effects and SARS-CoV-2 infection after vaccination in users of the COVID Symptom Study app in the UK: a prospective observational study | The Lancet Infectious Diseases | wrong intervention |
| Meo et al. | Effect of Pfizer/BioNTech and Oxford/AstraZeneca vaccines against COVID-19 morbidity and mortality in real-world settings at countrywide vaccination campaign in Saudi Arabia | European review for medical and pharmacological sciences | wrong outcome |
| Meo et al. | COVID-19 vaccines: Comparison of biological, pharmacological characteristics and adverse effects of Pfizer/BioNTech and Moderna vaccines | European Review for Medical and Pharmacological Sciences | wrong study design |
| Meylan | Efficacy and safety of BioNTech/Pfizer and Moderna vaccines | Revue Medicale Suisse | wrong publication type |
| Meylan | Safety and efficacy of the Oxford-AstraZeneca vaccine: Interim analysis of four randomized controlled trials | Revue Medicale Suisse | wrong intervention |
| Michos et al. | Association of total and neutralizing SARS-CoV-2 spike -receptor binding domain antibodies with epidemiological and clinical characteristics after immunization with the 1st and 2nd doses of the BNT162b2 vaccine | Vaccine | wrong outcome |
| Mielke et al. | Fully Vaccinated and Boosted Patients Requiring Hospitalization for COVID-19: an Observational Cohort Analysis | medRxiv | wrong outcome |
| Mirahmadizadeh et al. | "Effectiveness of COVID-19 Vaccines in preventing Infectiousness, Hospitalization and Mortality: A Historical Cohort Study Using Iranian Registration Data During Vaccination program" | medRxiv | wrong outcome |
| Mirahmadizadeh et al. | ,ÁúEffectiveness of COVID-19 Vaccines in preventing Infectiousness, Hospitalization and Mortality: A Historical Cohort Study Using Iranian Registration Data During Vaccination program,Àù | medRxiv | wrong study duration |
| Miron et al. | Effectiveness of COVID-19 Vaccines BNT162b2 and mRNA-1273 by Days from Vaccination: A Reanalysis of Clinical Trial Data | Preprint - SSRN | wrong intervention |
| Mittelman et al. | Effectiveness of the BNT162b2mRNA Covid-19 Vaccine in Patients with Hematological Neoplasms | Blood | wrong study duration |
| Mizrahi et al. | Correlation of SARS-CoV-2 Breakthrough Infections to Time-from-vaccine; Preliminary Study | Preprint - medRxiv | wrong outcome |
| Mizrahi et al. | Correlation of SARS-CoV-2-breakthrough infections to time-from-vaccine | Nature Communications | duplicated |

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| Molani et al. | Time to reinfection and vaccine breakthrough SARS-CoV-2 infections: a retrospective cohort study | medRxiv | wrong outcome |
| Moline et al. | Effectiveness of COVID-19 Vaccines in Preventing Hospitalization Among Adults Aged ≥ 65 Years - COVID-NET, 13 States, February-April 2021 | Morbidity and Mortality Weekly Report | wrong intervention |
| Moncunill et al. | Determinants of early antibody responses to COVID-19 mRNA vaccines in exposed and naive healthcare workers | medRxiv | wrong study duration |
| Monge et al. | Direct and Indirect Effectiveness of mRNA Vaccination against Severe Acute Respiratory Syndrome Coronavirus 2 in Long-Term Care Facilities, Spain | Emerging Infectious Diseases | wrong intervention |
| Monge et al. | Direct and Indirect Effectiveness of mRNA Vaccination against Severe Acute Respiratory Syndrome Coronavirus 2 in Long-Term Care Facilities, Spain | Emerging infectious diseases | wrong study duration |
| Mor et al. | BNT162b2 Vaccination efficacy is marginally affected by the SARS-CoV-2 B.1.351 variant in fully vaccinated individuals | Preprint - medRxiv | wrong population |
| Mor et al. | BNT162b2 vaccine effectiveness was marginally affected by the SARS-CoV-2 beta variant in fully vaccinated individuals | Journal of clinical epidemiology | duplicate |
| Moustsen Helms et al. | Vaccine effectiveness after 1st and 2nd dose of the BNT162b2 mRNA Covid-19 Vaccine in long-term care facility residents and healthcare workers—a Danish cohort study | Preprint - medRxiv | wrong intervention |
| Muhsen et al. | Effectiveness of BNT162b2 mRNA COVID-19 vaccine against acquisitions of SARS-CoV-2 among health care workers in long-term care facilities: a prospective cohort study | Clinical infectious diseases : an official publication of the Infectious Diseases Society of America | wrong study duration |
| Muhsen et al. | Effectiveness of BNT162b2 mRNA COVID-19 vaccine against acquisitions of SARS-CoV-2 among health care workers in long-term care facilities: a prospective cohort study | Clinical infectious diseases : an official publication of the Infectious Diseases Society of America | wrong study duration |
| Mukim et al. | Covid-19 Vaccines available in India | Combinatorial chemistry & high throughput screening | Full-text unavailable |
| Munitz et al. | BNT162b2 vaccination effectively prevents the rapid rise of SARS-CoV-2 variant B.1.1.7 in high-risk populations in Israel | Cell Reports Medicine | wrong intervention |
| Murillo-Zamora et al. | Effectiveness of BNT162b2 COVID-19 Vaccine in Preventing Severe Symptomatic Infection among Healthcare Workers | Medicina (Kaunas, Lithuania) | wrong intervention |

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| Murt et al. | Antibody responses to the SARS-CoV-2 vaccines in hemodialysis patients: Is inactivated vaccine effective? | Therapeutic apheresis and dialysis : official peer-reviewed journal of the International Society for Apheresis, the Japanese Society for Apheresis, the Japanese Society for Dialysis Therapy | wrong comparator |
| Musser et al. | Delta variants of SARS-CoV-2 cause significantly increased vaccine breakthrough COVID-19 cases in Houston, Texas | Preprint - medRxiv | wrong study design |
| Naaber et al. | Declined antibody responses to COVID-19 mRNA vaccine within first three months | Preprint - medRxiv | wrong outcome |
| Naito et al. | Real-world evidence for the effectiveness and breakthrough of BNT162b2 mRNA COVID-19 vaccine at a medical center in Japan | Human vaccines & immunotherapeutics | wrong outcome |
| Naleway et al. | Incidence of SARS-CoV-2 Infection, Emergency Department Visits, and Hospitalizations Because of COVID-19 Among Persons Aged ≥12 Years, by COVID-19 Vaccination Status - Oregon and Washington, July 4-September 25, 2021 | MMWR. Morbidity and mortality weekly report | wrong study duration |
| Nanduri et al. | Effectiveness of Pfizer-BioNTech and Moderna Vaccines in Preventing SARS-CoV-2 Infection Among Nursing Home Residents Before and During Widespread Circulation of the SARS-CoV-2 B.1.617.2 (Delta) Variant - National Healthcare Safety Network, March 1-August 1, 2021 | Morbidity and Mortality Weekly Report | wrong study design |
| Naranbhai et al. | Comparative immunogenicity and effectiveness of mRNA-1273, BNT162b2 and Ad26.COV2.S COVID-19 vaccines | medRxiv | wrong population |
| Nasreen et al. | Effectiveness of COVID-19 vaccines against symptomatic SARS-CoV-2 infection and severe outcomes with variants of concern in Ontario | Nature microbiology | wrong study duration |
| Nasreen et al. | Effectiveness of COVID-19 vaccines against variants of concern in Ontario, Canada | Preprint - medRxiv | wrong intervention |
| Nasreen et al. | Effectiveness of COVID-19 vaccines against variants of concern, Canada | Hand search; Preprint - medRxiv | wrong intervention |
| Nasreen et al. | Effectiveness of mRNA and ChAdOx1 COVID-19 vaccines against symptomatic SARS-CoV-2 infection and severe outcomes with variants of concern in Ontario | medRxiv | wrong study duration |
| Nguyen et al. | Comparative effectiveness of ChAdOx1 versus BNT162b2 vaccines against SARS-CoV-2 infections in England and Wales: A cohort | medRxiv | wrong comparator |

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| | analysis using trial emulation in the Virus Watch community data | | |
| Nomura et al. | Age and smoking predict antibody titres at 3 months after the second dose of the BNT162b2 COVID-19 vaccine | Preprint - medRxiv | wrong outcome |
| Nordström et al. | Effectiveness of heterologous ChAdOx1 nCoV-19 and mRNA prime-boost vaccination against symptomatic Covid-19 infection in Sweden: A nationwide cohort study | The Lancet regional health. Europe | wrong study duration |
| Nunes et al. | mRNA vaccines effectiveness against COVID-19 hospitalizations and deaths in older adults: a cohort study based on data-linkage of national health registries in Portugal | Preprint - medRxiv | wrong intervention |
| Nunes et al. | mRNA vaccine effectiveness against COVID-19-related hospitalisations and deaths in older adults: a cohort study based on data linkage of national health registries in Portugal, February to August 2021 | Euro surveillance : bulletin European sur les maladies transmissibles = European communicable disease bulletin | wrong study duration |
| Nunez Lopez et al. | Effectiveness of the BNT162b2 mRNA Covid-19 vaccine in Spanish healthcare workers | Enfermedades Infecciosas y Microbiologia Clinica | wrong intervention |
| Nyberg et al. | Comparative analysis of the risks of hospitalisation and death associated with SARS-CoV-2 omicron (B.1.1.529) and delta (B.1.617.2) variants in England: a cohort study | Lancet (London, England) | wrong outcome |
| Oliveira et al. | Assessment of Clinical Effectiveness of BNT162b2 COVID-19 Vaccine in US Adolescents | JAMA network open | wrong population |
| Oliver et al. | Vaccine Effectiveness Against SARS-CoV-2 Infection and Severe Outcomes in the Maintenance Dialysis Population in Ontario, Canada | Journal of the American Society of Nephrology : JASN | wrong study duration |
| Olson et al. | Effectiveness of BNT162B2 Vaccine against Critical Covid-19 in Adolescents | New England Journal of Medicine | wrong population |
| Olson et al. | Effectiveness of Pfizer-BioNTech mRNA Vaccination Against COVID-19 Hospitalization Among Persons Aged 12-18 Years - United States, June-September 2021 | MMWR. Morbidity and mortality weekly report | wrong study duration |
| Oster et al. | Association Between Exposure Characteristics and the Risk for COVID-19 Infection Among Health Care Workers With and Without BNT162b2 Vaccination | JAMA network open | wrong study design |

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| Ostropolets & Hripcsak | COVID-19 vaccination effectiveness rates by week and sources of bias | medRxiv | delayed exclusion - VE for full vaccination is not stratified by time since full vaccination (see appendix 7-9). As for VE that is stratified by time (Figure 3 and 4), time is calculated from receipt of first dose, not second. There are no week-by-week estimates for single-dose Janssen because of the small sample size |
| Paetzold et al. | The effects of rapid mass vaccination against SARS-CoV-2 and its Variants-of-Concern: Evidence from an early VoCs hotspot | Preprint – Research Square | wrong study design |
| Painter et al. | Rapid induction of antigen-specific CD4+ T cells guides coordinated humoral and cellular immune responses to SARS-CoV-2 mRNA vaccination | Preprint - bioRxiv | wrong outcome |
| Pajon et al. | Initial Analysis of Viral Dynamics and Circulating Viral Variants During the mRNA-1273 Phase 3 COVE Trial | medRxiv | wrong study duration |
| Palich et al. | Weak immunogenicity after a single dose of SARS-CoV-2 mRNA vaccine in treated cancer patients | Annals of Oncology | wrong outcome |
| Palladino et al. | A quantitative risk-benefit analysis of ChAdOx1 nCoV-19 vaccine among people under 60 in Italy | Preprint - medRxiv | wrong study design |
| Panasoff et al. | Specific antibody response of patients with common variable immunodeficiency to BNT162b2 coronavirus disease 2019 vaccination | Annals of Allergy, Asthma and Immunology | wrong outcome |
| Papousek et al. | Experience with the production of COVID-19 convalescent plasma in a tertiary hospital | Vox Sanguinis | wrong outcome |
| Paris et al. | Effectiveness of mRNA-BNT162b2, mRNA-1273, and ChAdOx1 nCoV-19 vaccines against COVID-19 in healthcare workers: an observational study using surveillance data | Clinical Microbiology and Infection | wrong intervention |
| Parry et al. | Extended interval BNT162b2 vaccination enhances peak antibody generation in older people | Preprint - medRxiv | wrong outcome |

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| Parry et al. | Antibody responses after first and second Covid-19 vaccination in patients with chronic lymphocytic leukaemia | Blood Cancer Journal | wrong outcome |
| Parry et al. | Antibody responses after first and second Covid-19 vaccination in patients with chronic lymphocytic leukaemia | Blood cancer Journal | wrong outcome |
| Pascucci et al. | Evaluation of the Effectiveness and Safety of the BNT162b2 COVID-19 Vaccine in the Vaccination Campaign among the Health Workers of Fondazione Policlinico Universitario Agostino Gemelli IRCCS | International journal of environmental research and public health | wrong study duration |
| Passalacqua et al. | Efficacy of SARS-CoV-2 vaccination in cancer patients during treatment: A prospective observational study (ANTICOV trial) | Tumori | wrong study duration |
| Patalon et al. | Waning Effectiveness of the Third Dose of the BNT162b2 mRNA COVID-19 Vaccine | | wrong comparator |
| Pattni et al. | Effectiveness of the BNT162b2 (Pfizer-BioNTech) and the ChAdOx1 nCoV-19 (Oxford-AstraZeneca) vaccines for reducing susceptibility to infection with the Delta variant (B.1.617.2) of SARS-CoV-2 | medRxiv | wrong outcome |
| Paulsen et al. | Immune Thrombocytopenic Purpura after vaccination with COVID-19 Vaccine (ChAdOx1 nCov-19) | Blood | wrong study design |
| Pawlowski et al. | FDA-authorized mRNA COVID-19 vaccines are effective per real-world evidence synthesized across a multi-state health system | Med (New York, N.Y.) | wrong intervention |
| Payne et al. | Sustained T cell immunity, protection and boosting using extended dosing intervals of BNT162b2 | Hand search; Preprint - SSRN | wrong outcome |
| Peet et al. | COVID-19 infection and vaccination in patients with autoinflammatory diseases on biologics | Pediatric Rheumatology | wrong outcome |
| Pefaur Penna et al. | POS-912 EFFECTIVENESS OF SARS-COV 2 VACCINATION IN KIDNEY TRANSPLANT PATIENTS IN CHILE | Kidney International Reports | Full-text not found |
| Pegu et al. | Durability of mRNA-1273 vaccine-induced antibodies against SARS-CoV-2 variants | Science (New York, N.Y.) | wrong outcome |
| Peled et al. | BNT162b2 vaccination in heart transplant recipients: Clinical experience and antibody response | Journal of Heart and Lung Transplantation | wrong intervention |
| Perkmann et al. | Serum antibody response to BNT162b2 after natural SARS-CoV-2 infection | European Journal of Clinical Investigation | wrong outcome |
| Perry et al. | COVID-19 vaccine uptake and effectiveness in adults aged 50 years and older in Wales UK: a 1.2m population data-linkage cohort approach | Human Vaccines and Immunotherapeutics | wrong study duration |

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| Pilishvili et al. | Interim Estimates of Vaccine Effectiveness of Pfizer-BioNTech and Moderna COVID-19 Vaccines Among Health Care Personnel - 33 U.S. Sites, January-March 2021 | Morbidity and Mortality Weekly Report | wrong intervention |
| Polinski et al. | Durability of the Single-Dose Ad26.COV2.S Vaccine in the Prevention of COVID-19 Infections and Hospitalizations in the US Before and During the Delta Variant Surge | JAMA network open | wrong outcome |
| Polinski et al. | Effectiveness of the Single-Dose Ad26.COV2.S COVID Vaccine | medRxiv | wrong outcome |
| Porru et al. | Post-Vaccination SARS-CoV-2 Infections among Health Workers at the University Hospital of Verona, Italy: A Retrospective Cohort Survey | Vaccines | wrong outcome |
| Porru et al. | Post-Vaccination SARS-CoV-2 Infections among Health Workers at the University Hospital of Verona, Italy: A Retrospective Cohort Survey | Vaccines | wrong outcome |
| Pouwels et al. | Impact of Delta on viral burden and vaccine effectiveness against new SARS-CoV-2 infections in the UK | Preprint - medRxiv | wrong intervention |
| Pouwels et al. | Effect of Delta variant on viral burden and vaccine effectiveness against new SARS-CoV-2 infections in the UK | Nature medicine | duplicate |
| Pozdnyakova et al. | Decreased Antibody Responses to Ad26.COV2.S Relative to SARS-CoV-2 mRNA Vaccines in Patients with Inflammatory Bowel Disease | Gastroenterology | wrong outcome |
| Pozzetto et al. | Immunogenicity and efficacy of heterologous ChadOx1/BNT162b2 vaccination | Preprint - Research Square | wrong intervention |
| Prabhu et al. | Antibody Response to Coronavirus Disease 2019 (COVID-19) Messenger RNA Vaccination in Pregnant Women and Transplacental Passage Into Cord Blood | Obstetrics and Gynecology | wrong intervention |
| Pramod et al. | Effectiveness of Covishield vaccine in preventing Covid-19 - A test-negative case-control study | Vaccine | wrong study duration |
| Prasad et al. | COVID-19 Vaccination Associated with Reduced Post-Operative SARS-CoV-2 Infection and Morbidity | Annals of Surgery | wrong intervention |
| Pratesi et al. | BNT162b2 mRNA SARS-CoV-2 vaccine elicits high avidity and neutralizing antibodies in healthcare workers | Vaccines | wrong outcome |
| Pratò et al. | SARS-CoV-2 Transmission Risk to Household and Family Contacts by Vaccinated Healthcare Workers | Journal of Occupational and Environmental Medicine | wrong intervention |
| Prendecki et al. | Comparison of humoral and cellular responses in kidney transplant recipients receiving | Preprint - medRxiv | wrong outcome |

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| | BNT162b2 and ChAdOx1 SARS-CoV-2 vaccines | | |
| Predecki et al. | Humoral and T-cell responses to SARS-CoV-2 vaccination in patients receiving immunosuppression | Annals of the Rheumatic Diseases | wrong outcome |
| Prieto Alhambra et al. | Comparative effectiveness and safety of homologous two-dose ChAdOx1 versus heterologous vaccination with ChAdOx1 and BNT162b2: a cohort analysis | Research Square | wrong comparator |
| Pritchard et al. | Impact of vaccination on new SARS-CoV-2 infections in the UK | Nature Medicine | wrong intervention |
| Prunas et al. | Waning Effectiveness of the BNT162b2 Vaccine Against Infection in Adolescents | medRxiv | wrong population |
| Prunas et al. | Vaccination with BNT162b2 reduces transmission of SARS-CoV-2 to household contacts in Israel | Preprint - medRxiv | wrong study design |
| Puranik et al. | Comparative effectiveness of mRNA-1273 and BNT162b2 against symptomatic SARS-CoV-2 infection | Med (New York, N.Y.) | wrong comparator |
| Puranik et al. | Comparison of Two Highly-Effective mRNA Vaccines for COVID-19 During Periods of Alpha and Delta Variant Prevalence | Preprint - medRxiv | uplicated |
| Puranik, et al. | Comparison of two highly-effective mRNA vaccines for COVID-19 during periods of Alpha and Delta variant prevalence | medRxiv | delayed exclusion - retrospective cohort study (matched unvaccinated and vaccinated individuals). The authors present Kaplan-Meier plots with VE data, but no extractable information (Figure 2 and Figure S2). Additional VE by month data presented in the Table 3 for Breakthrough infections, that comes from modelling (but no indication of the individual level follow-up time across the |

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| | | | specified time period) |
| Ramirez et al. | Correspondence on 'Immunogenicity and safety of anti-SARS-CoV-2 mRNA vaccines in patients with chronic inflammatory conditions and immunosuppressive therapy in a monocentric cohort' | Annals of the Rheumatic Diseases | wrong outcome |
| Ramirez et al. | SARS-CoV-2 Breakthrough Infections in Fully Vaccinated Individuals | Preprint - medRxiv | wrong outcome |
| Ranzani et al. | Vaccine effectiveness of ChAdOx1 nCoV-19 against COVID-19 in a socially vulnerable community in Rio de Janeiro, Brazil: a test-negative design study | Clinical Microbiology and Infection | wrong study duration |
| Ranzani et al. | Vaccine effectiveness of ChAdOx1 nCoV-19 against COVID-19 in a socially vulnerable community in Rio de Janeiro, Brazil: a test-negative design study | Clinical microbiology and infection : the official publication of the European Society of Clinical Microbiology and Infectious Diseases | wrong study duration |
| Rearte et al. | Effectiveness of rAd26-rAd5, ChAdOx1 nCoV-19, and BBIBP-CorV vaccines for risk of infection with SARS-CoV-2 and death due to COVID-19 in people older than 60 years in Argentina: a test-negative, case-control, and retrospective longitudinal study | Lancet (London, England) | wrong outcome |
| Redjoul et al. | Antibody response after second BNT162b2 dose in allogeneic HSCT recipients | The Lancet | wrong outcome |

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| Redmond et al. | Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection in vaccinated and unvaccinated healthcare personnel in a Veterans' Affairs healthcare system | Infection Control and Hospital Epidemiology | wrong intervention |
| Regev Yochay et al. | 4th Dose COVID mRNA Vaccines, Æ Immunogenicity & Efficacy Against Omicron VOC | medRxiv | wrong comparator |
| Revon-Riviere et al. | The BNT162b2 mRNA COVID-19 vaccine in adolescents and young adults with cancer: A monocentric experience | European Journal of Cancer | wrong intervention |
| Revon-Riviere et al. | The BNT162b2 mRNA COVID-19 vaccine in adolescents and young adults with cancer: A monocentric experience | European Journal of Cancer | wrong study duration |
| Reynolds et al. | COVID-19 vaccination breakthrough infections in a real-world setting: Using community reporters to evaluate vaccine effectiveness | medRxiv | wrong study design |
| Risk et al. | Comparative Effectiveness of COVID-19 Vaccines against the Delta Variant | Clinical infectious diseases : an official publication of the Infectious Diseases Society of America | wrong comparator |
| Roberts et al. | Estimating COVID-19 Vaccination Effectiveness Using Electronic Health Records of an Academic Medical Center in Michigan | medRxiv | wrong study duration |
| Roberts et al. | Estimating COVID-19 Vaccination Effectiveness Using Electronic Health Records of an Academic Medical Center in Michigan | medRxiv | wrong comparator |
| Robilotti et al. | Clinical and Genomic Characterization of SARS CoV-2 infections in mRNA Vaccinated Health Care Personnel in New York City | Clinical infectious diseases : an official publication of the Infectious Diseases Society of America | wrong study duration |
| Rodríguez-Espinosa et al. | Incidence of severe breakthrough SARS-CoV-2 infections in vaccinated kidney transplant and haemodialysis patients | Journal of nephrology | wrong comparator |
| Roest et al. | BNT162b2 mRNA Covid-19 vaccine in a nationwide mass vaccination setting | New England Journal of Medicine | uplicated |
| Rosenberg et al. | New COVID-19 Cases and Hospitalizations Among Adults, | Hand search; Morbidity and Mortality Weekly Report | wrong intervention |
| Rosenberg et al. | COVID-19 Vaccine Effectiveness by Product and Timing in New York State | medRxiv | wrong outcome |
| Rosero Bixby | Vaccine effectiveness of Pfizer-BioNTech and Oxford-AstraZeneca to prevent severe COVID-19 in Costa Rica by September and October 2021: A nationwide, observational study of hospitalisations prevalence | Europe PMC | wrong study duration |

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| Rosero-Bixby | Vaccine effectiveness of Pfizer-BioNTech and Oxford-AstraZeneca to prevent severe COVID-19 in Costa Rica by September and October 2021: A nationwide, observational study of hospitalisations prevalence | medRxiv | wrong study duration |
| Rovida, et al. | SARS-CoV-2 vaccine breakthrough infections are asymptomatic or mildly symptomatic and are infrequently transmitted | medRxiv | delayed exclusion - not enough time of follow up (4 months criterion) |
| Russo et al. | SARS-COV-2 vaccination with BNT162B2 in renal transplant patients: Risk factors for impaired response and immunological implications | Clinical Transplantation | wrong outcome |
| Saban et al. | Changes in infectivity, severity and vaccine effectiveness against delta COVID-19 variant ten months into the vaccination program: The Israeli case | Preventive medicine | wrong intervention |
| Sabnis et al. | Break-through COVID-19 infection rate with Indian strain in Single-center Healthcare Workers: A real world data | Preprint - medRxiv | wrong outcome |
| Saciuk et al. | Pfizer-BioNTech vaccine effectiveness against Sars-Cov-2 infection: Findings from a large observational study in Israel | Preventive medicine | wrong study duration |
| Saciuk et al. | Pfizer-BioNTech Vaccine Effectiveness Against SARS-CoV-2 Infection: Findings From a Large Observational Study in Israel | Hand search; Preprint - SSRN | uplicated |
| Saciuk et al. | Pfizer-BioNTech Vaccine Effectiveness Against SARS-CoV-2 Infection: Findings From a Large Observational Study in Israel | Preprint - SSRN | wrong intervention |
| Saciuk et al. | Effectiveness of a third dose of BNT162b2 mRNA vaccine | The Journal of infectious diseases | wrong comparator |
| Sacks | The single-dose J&J vaccine had 67% efficacy against moderate to severe-critical COVID-19 at ≥ 14 d | Annals of Internal Medicine | wrong publication type |
| Sadoff et al. | Final Analysis of Efficacy and Safety of Single-Dose Ad26.COV2.S | New England Journal of Medicine | wrong outcome |
| Sadoff et al. | Safety and Efficacy of Single-Dose Ad26.COV2.S Vaccine against Covid-19 | The New England Journal of Medicine | delayed exclusion - data is in graphs and not easily extractable at this point in time |
| Sagiraju et al. | The effectiveness of SARS-CoV-2 vaccination in preventing severe illness and death—real-world data from a cohort of patients hospitalized with COVID-19 | Preprint - medRxiv | wrong intervention |
| Salo et al. | The indirect effect of mRNA-based COVID-19 vaccination on healthcare workers' unvaccinated household members | Nature Communications | wrong outcome |

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| Sansone et al. | Effectiveness of BNT162b2 vaccine against SARS-CoV-2 among healthcare workers | La Medicina del Lavoro | wrong intervention |
| Sarkar et al. | Seroprevalence and Dynamics of anti-SARS-CoV-2 antibody among healthcare workers following ChAdOx1 nCoV-19 vaccination | Preprint - medRxiv | wrong intervention |
| Saul et al. | Reanalysis of the Pfizer mRNA BNT162b2 SARS-CoV-2 vaccine data fails to find any increased efficacy following the boost: Implications for vaccination policy and our understanding of the mode of action | Preprint - medRxiv | wrong intervention |
| Saure et al. | Dynamic IgG seropositivity after rollout of CoronaVac and BNT162b2 COVID-19 vaccines in Chile: a sentinel surveillance study | The Lancet Infectious Diseases | wrong outcome |
| Scobie et al. | Monitoring incidence of covid-19 cases, hospitalizations, and deaths, by vaccination status, 13 US jurisdictions, April 4, 2021–July 17, 2021 | Morbidity and Mortality Weekly Report | wrong comparator |
| Selby et al. | Effect of severe acute respiratory coronavirus virus 2 (SARS-CoV-2) mRNA vaccination in healthcare workers with high-risk coronavirus disease 2019 (COVID-19) exposure | Infection Control and Hospital Epidemiology | wrong intervention |
| Self et al. | Comparative Effectiveness of Moderna, Pfizer-BioNTech, and Janssen (Johnson & Johnson) Vaccines in Preventing COVID-19 Hospitalizations Among Adults Without Immunocompromising Conditions - United States, March-August 2021 | MMWR. Morbidity and mortality weekly report | wrong comparator |
| Shah et al. | Effect of vaccination on transmission of COVID-19: an observational study in healthcare workers and their households | Preprint - medRxiv | wrong intervention |
| Shapiro et al. | Efficacy of booster doses in augmenting waning immune responses to COVID-19 vaccine in patients with cancer | Cancer cell | wrong comparator |
| Sharma et al. | Effectiveness of a third dose of BNT162b2 or mRNA-1273 vaccine for preventing post-vaccination COVID-19 infection: an observational study | medRxiv | wrong outcome |
| Sharma et al. | COVID-19 Vaccine Breakthrough Infections in Veterans Health Administration | medRxiv | wrong comparator |
| Sheikh et al. | BNT162b2 and ChAdOx1 nCoV-19 vaccine effectiveness against death from the delta variant | New England Journal of Medicine | wrong study duration |
| Sheikh et al. | SARS-CoV-2 Delta VOC in Scotland: demographics, risk of hospital admission, and vaccine effectiveness | The Lancet | wrong intervention |
| Shen et al. | Efficacy of COVID-19 vaccines in patients taking immunosuppressants | Annals of the rheumatic diseases | wrong outcome |

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| Shinde et al. | Efficacy of NVX-CoV2373 Covid-19 Vaccine against the B.1.351 Variant | Hand search; New England Journal of Medicine | wrong intervention |
| Shostak et al. | Early humoral response among lung transplant recipients vaccinated with BNT162b2 vaccine | The Lancet Respiratory Medicine | wrong intervention |
| Shrestha et al. | Coronavirus Disease 2019 (COVID-19) Vaccine Boosting in Persons Already Protected by Natural or Vaccine-Induced Immunity | medRxiv | wrong comparator |
| Shrestha, et al. | Necessity of COVID-19 vaccination in previously infected individuals | medRxiv | delayed exclusion - a retrospective cohort study that estimated cumulative incidence of COVID infection over five months, among previously infected subjects who received the vaccine, compared with those of previously infected subjects who remained unvaccinated, previously uninfected subjects who received the vaccine, and previously uninfected subjects who remained unvaccinated. Figure 3 reports Simon-Makuch plot with cumulative incidence of COVID-19, but has no extractable information (authors presented only the number of individuals at risk |

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| | | | among all the groups of interest) |
| Shrotri et al. | Duration of vaccine effectiveness against SARS-CoV2 infection, hospitalisation, and death in residents and staff of Long-Term Care Facilities (VIVALDI): a prospective cohort study, England, Dec 2020-Dec 2021 | | wrong outcome |
| Sibbel et al. | Real-World Effectiveness and Immunogenicity of BNT162b2 and mRNA-1273 SARS-CoV-2 Vaccines in Patients on Hemodialysis | Journal of the American Society of Nephrology | wrong intervention |
| Sibbel et al. | Real-World Effectiveness and Immunogenicity of BNT162b2 and mRNA-1273 SARS-CoV-2 Vaccines in Patients on Hemodialysis | Journal of the American Society of Nephrology : JASN | wrong study duration |
| Silzle et al. | Effectiveness of the BNT162b2 mRNA COVID-19 vaccine in patients with multiple myeloma three and six months after vaccination | Swiss Medical Weekly | wrong outcome |
| Singer et al. | Effectiveness of BNT162b2 mRNA COVID-19 vaccine against SARS-CoV-2 variant Beta (B.1.351) among persons identified through contact tracing in Israel: A prospective cohort study | EClinicalMedicine | wrong study duration |

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| Singer et al. | Effectiveness of BNT162b2 mRNA COVID-19 Vaccine Against SARS-CoV-2 Variant Beta (B.1.351) Among Persons Identified Through Contact Tracing in Israel | Preprint - SSRN | wrong intervention |
| Singh et al. | Antibody Response after First-dose of ChAdOx1-nCoV (Covishield) and BBV-152 (Covaxin) amongst Health Care Workers in India: Preliminary Results of Cross-sectional Coronavirus Vaccine-induced Antibody Titre (COVAT) study | Preprint - medRxiv | wrong intervention |
| Skowronski & de Serres | Safety and efficacy of the BNT162B2 mRNA covid-19 vaccine | New England Journal of Medicine | wrong intervention |
| Skowronski et al. | Comparative single-dose mRNA and ChAdOx1 vaccine effectiveness against SARS-CoV-2, including variants of concern: test-negative design, British Columbia, Canada | The Journal of infectious diseases | wrong intervention |
| Smith et al. | Genomic and Virological Characterization of SARS-CoV-2 Variants in a Subset of Unvaccinated and Vaccinated U.S. Military Personnel | medRxiv | wrong population |
| Sobieszczyk et al. | Asymptomatic Infection and Duration of Viral Shedding in Symptomatic Breakthrough Infections in a Phase 3 Study of AZD1222 (ChAdOx1 nCoV-19) | Open Forum Infectious Diseases | conference abstract |
| Spensley et al. | Comparison of vaccine effectiveness against the Omicron (B.1.1.529) variant in patients receiving haemodialysis | medRxiv | wrong outcome |
| Spensley et al. | Comparison of vaccine effectiveness against the Omicron (B.1.1.529) variant in patients receiving haemodialysis | medRxiv | wrong study duration |
| Spitzer et al. | Association of a Third Dose of BNT162b2 Vaccine With Incidence of SARS-CoV-2 Infection Among Health Care Workers in Israel | JAMA | wrong comparator |
| Sritipsukho et al. | Comparing real-life effectiveness of various COVID-19 vaccine regimens during the delta variant-dominant pandemic: a test-negative case-control study | Emerging Microbes and Infections | wrong outcome |
| Sritipsukho et al. | Comparing real-life effectiveness of various COVID-19 vaccine regimens during the delta variant-dominant pandemic: A test-negative case-control study | Emerging microbes & infections | wrong study duration |
| Sritipsukho et al. | Comparing real-life effectiveness of various COVID-19 vaccine regimens during the delta variant-dominant pandemic: A test-negative case-control study | Emerging microbes & infections | wrong study duration |
| Starrfelt et al. | Age and product dependent vaccine effectiveness against SARS-CoV-2 infection and hospitalisation among adults in Norway: A national cohort study, January - September 2021 | medRxiv | wrong comparator |

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| Starrfelt et al. | Age and product dependent vaccine effectiveness against SARS-CoV-2 infection and hospitalisation among adults in Norway: a national cohort study, January ,Åi September 2021 | medRxiv | wrong outcome |
| Starrfelt, et al. | High vaccine effectiveness against COVID-19 infection and severe disease among residents and staff of long-term care facilities in Norway, November – June 2021 | medRxiv | delayed exclusion - a cohort study, estimating vaccine effectiveness among residents and health care workers in long-term care facilities. COVID-19 vaccine effectiveness against infection, hospitalisation and death presented from Cox models in Tables 2 and 3 (but no information about individual level follow up; authors presented only person time at risk. |
| Stowe et al. | Effectiveness of COVID-19 vaccines against hospital admission with the Delta (B.1.617.2) variant | Hand search; Public Health England pre-prints | wrong intervention |
| Suah et al. | Waning COVID-19 Vaccine Effectiveness for BNT162b2 and CoronaVac in Malaysia: An Observational Study | medRxiv | wrong outcome |
| Suah et al. | Waning COVID-19 Vaccine Effectiveness for BNT162b2 and CoronaVac in Malaysia: An Observational Study | medRxiv | wrong outcome |
| Suah et al. | PICK-ing Malaysia's Epidemic Apart: Effectiveness of a Diverse COVID-19 Vaccine Portfolio | Vaccines | wrong outcome |
| Sultan et al. | Distinct Vaccine Efficacy Rates Among Health Care Workers During a COVID-19 Outbreak in Jordan | medRxiv | wrong outcome |
| Sultan et al. | Distinct Vaccine Efficacy Rates Among Health Care Workers During a COVID-19 Outbreak in Jordan | medRxiv | wrong outcome |

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| Svoboda et al. | Safety and Efficacy of Sars-Cov-2 Vaccines in Hodgkin Lymphoma Patients Receiving PD-1 Inhibitors | Blood | wrong outcome |
| Swift et al. | Effectiveness of mRNA COVID-19 vaccines against SARS-CoV-2 infection in a cohort of healthcare personnel | Clinical Infectious Diseases | wrong intervention |
| Tahor et al. | Evidence for increased breakthrough rates of SARS-CoV-2 variants of concern in BNT162b2-mRNA-vaccinated individuals | Nature Medicine | duplicate |
| Tai et al. | Booster protection against Omicron infection in a highly vaccinated cohort | | wrong study duration |
| Tande et al. | Impact of the COVID-19 Vaccine on Asymptomatic Infection Among Patients Undergoing Pre-Procedural COVID-19 Molecular Screening | Clinical Infectious Diseases | wrong intervention |
| Tande et al. | mRNA Vaccine Effectiveness Against Asymptomatic SARS-CoV-2 Infection Over a Seven-Month Period | Infection Control and Hospital Epidemiology | wrong study design |
| Tang et al. | Asymptomatic and Symptomatic SARS-CoV-2 Infections after BNT162b2 Vaccination in a Routinely Screened Workforce | JAMA - Journal of the American Medical Association | wrong intervention |
| Tang et al. | BNT162b2 and mRNA-1273 COVID-19 vaccine effectiveness against the Delta (B.1.617.2) variant in Qatar | Preprint - medRxiv | wrong study design |
| Tang et al. | BNT162b2 and mRNA-1273 COVID-19 vaccine effectiveness against the SARS-CoV-2 Delta variant in Qatar | Nature Medicine | duplicate |
| Tanislav et al. | Effect of SARS-CoV-2 vaccination among health care workers in a geriatric care unit after a B.1.1.7-variant outbreak | Public Health | wrong intervention |
| Taquet et al. | Six-month sequelae of post-vaccination SARS-CoV-2 infection: a retrospective cohort study of 10,024 breakthrough infections | medRxiv | wrong outcome |
| Tartof et al. | Effectiveness of a third dose of BNT162b2 mRNA COVID-19 vaccine in a large US health system: A retrospective cohort study | SSRN | delayed exclusion - duplicate of Study ID 21-3 |
| Tartof et al. | Effectiveness of mRNA BNT162b2 COVID-19 vaccine up to 6 months in a large integrated health system in the USA: a retrospective cohort study | Lancet (London, England) | duplicate |
| Taubel et al. | Can a second booster dose be delayed in patients who have had COVID-19? | Preprint - medRxiv | wrong outcome |
| Tene et al. | Assessment of effectiveness of 1 dose of BNT162B2 vaccine for SARS-CoV-2 infection 13 to 24 days after immunization | JAMA network open | wrong intervention |
| Tene et al. | The effectiveness of the TWO-DOSE BNT162b2 vaccine: analysis of real-world data | Clinical Infectious Diseases | wrong intervention |

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| Tenforde et al | Effectiveness of SARS-CoV-2 mRNA Vaccines for Preventing Covid-19 Hospitalizations in the United States | Clinical Infectious Diseases | wrong study design |
| Tenforde et al. | Effectiveness of a Third Dose of Pfizer-BioNTech and Moderna Vaccines in Preventing COVID-19 Hospitalization Among Immunocompetent and Immunocompromised Adults - United States, August-December 2021 | MMWR. Morbidity and mortality weekly report | wrong study duration |
| Tenforde et al. | Effectiveness of Pfizer-BioNTech and Moderna Vaccines Against COVID-19 Among Hospitalized Adults Aged ≥ 65 Years - United States, January-March 2021 | Morbidity and Mortality Weekly Report | wrong intervention |
| Tenforde, et al. | Sustained Effectiveness of Pfizer-BioNTech and Moderna Vaccines Against COVID-19 Associated Hospitalizations Among Adults - United States, March-July 2021 | Morbidity and Mortality Weekly Report (MMWR) - CDC | delayed exclusion - case-control study, assessing vaccine effectiveness against hospitalization in a multistate network over 24 weeks. Vaccine effectiveness across diverse time points presented in Supplementary material (as figures, with no extractable information) |
| Thangaraj et al. | Predominance of delta variant among the COVID-19 vaccinated and unvaccinated individuals, India, May 2021 | The Journal of Infection | wrong outcome |
| Thiruvengadam et al. | Effectiveness of ChAdOx1 nCoV-19 vaccine against SARS-CoV-2 infection during the delta (B.1.617.2) variant surge in India: a test-negative, case-control study and a mechanistic study of post-vaccination immune responses | The Lancet. Infectious diseases | wrong study duration |
| Thiruvengadam et al. | Cellular Immune Responses are Preserved and May Contribute to ChAdOx1 nCoV-19 Vaccine Effectiveness Against Infection Due to SARS-CoV-2 B.1.617.2 Delta Variant Despite Reduced Virus Neutralisation | Preprint - SSRN | wrong intervention |
| Thomas et al. | Efficacy and safety of the BNT162b2 mRNA COVID-19 vaccine in participants with a history of cancer: subgroup analysis of a global phase 3 randomized clinical trial | Vaccine | wrong comparator |

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| Thomas et al. | 15580 COVID-19 vaccine in participants (pts) with cancer: Subgroup analysis of efficacy/safety from a global phase III randomized trial of the BNT162b2 (tozinameran) mRNA vaccine | Annals of Oncology | wrong outcome |
| Thomas et al. | Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine through 6 Months | The New England journal of medicine | duplicated |
| Thomas, et al. | Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine through 6 Months | The New England Journal of Medicine | delayed exclusion - pre-print version of the article (the published version is included in the main document) |
| Thompson et al. | Effectiveness of a Third Dose of mRNA Vaccines Against COVID-19-Associated Emergency Department and Urgent Care Encounters and Hospitalizations Among Adults During Periods of Delta and Omicron Variant Predominance - VISION Network, 10 States, August 2021-January 2022 | MMWR. Morbidity and mortality weekly report | wrong comparator |
| Thompson et al. | Interim Estimates of Vaccine Effectiveness of BNT162b2 and mRNA-1273 COVID-19 Vaccines in Preventing SARS-CoV-2 Infection Among Health Care Personnel, First Responders, and Other Essential and Frontline Workers - Eight U.S. Locations, December 2020-March 2021 | Morbidity and Mortality Weekly Report | wrong intervention |
| Thompson et al. | Prevention and Attenuation of Covid-19 with the BNT162b2 and mRNA-1273 Vaccines | New England Journal of Medicine | wrong intervention |
| Thompson et al. | Effectiveness of covid-19 vaccines in ambulatory and inpatient care settings | New England Journal of Medicine | duplicated |
| Toback et al. | Safety, Immunogenicity, and Efficacy of a COVID-19 Vaccine (NVX-CoV2373) Co-administered With Seasonal Influenza Vaccines | Preprint - medRxiv | wrong intervention |
| Toker et al. | Vaccination status among patients with the need for emergency hospitalizations related to COVID-19 | The American journal of emergency medicine | wrong comparator |
| Toniasso et al. | Reduction in COVID-19 prevalence in healthcare workers in a university hospital in southern Brazil after the start of vaccination | International Journal of Infectious Diseases: IJID | wrong intervention |
| Tran et al. | Efficacy of COVID-19 vaccination on the symptoms of patients with long COVID: a target trial emulation using data from the ComPaRe e-cohort in France | SSRN | wrong outcome |
| Trapani et al. | COVID-19 vaccines in patients with cancer | The Lancet Oncology | wrong publication type |

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| Tré-Hardy et al. | Waning antibodies in SARS-CoV-2 naïve vaccines: Results of a three-month interim analysis of ongoing immunogenicity and efficacy surveillance of the mRNA-1273 vaccine in healthcare workers | The Journal of Infection | wrong intervention |
| Tré-Hardy, et al. | Six-month interim analysis of ongoing immunogenicity surveillance of the mRNA-1273 vaccine in healthcare workers: A third dose is expected | Journal of Infection | delayed exclusion - data mainly focusing on immunogenicity findings. |
| Tsapepas et al. | Clinically Significant COVID-19 Following SARS-CoV-2 Vaccination in Kidney Transplant Recipients | American Journal of Kidney Diseases | wrong outcome |
| Tseng et al. | Effectiveness of mRNA-1273 against SARS-CoV-2 omicron and delta variants | medRxiv | wrong comparator |
| Tseng et al. | Effectiveness of mRNA-1273 against SARS-CoV-2 Omicron and Delta variants | Nature medicine | wrong comparator |
| Tseng et al. | Effectiveness of mRNA-1273 against SARS-CoV-2 omicron and delta variants | | delayed exclusion - baseline is 14-90 days, which is beyond our 30.5 days average post-receipt of second dose threshold |
| Tsiatis et al. | Estimating vaccine efficacy over time after a randomized study is unblinded | Biometrics | wrong study design |
| Tyagi et al. | Breakthrough COVID19 infections after vaccinations in healthcare and other workers in a chronic care medical facility in New Delhi, India | Diabetes & Metabolic Syndrome | wrong outcome |
| Uschner et al. | Breakthrough SARS-CoV-2 Infections after Vaccination in North Carolina | medRxiv | wrong outcome |
| Uzun et al. | COVID-19: vaccination vs. hospitalization | Infection | wrong outcome |
| Vahidy et al. | Real-world Effectiveness of COVID-19 mRNA Vaccines against Hospitalizations and Deaths in a Retrospective Cohort | Open Forum Infectious Diseases | conference abstract |
| Vahidy et al. | Real World Effectiveness of COVID-19 mRNA Vaccines against Hospitalizations and Deaths in the United States | Preprint - medRxiv | article withdrawn |
| Vaishya et al. | SARS-CoV-2 infection after COVID-19 immunization in healthcare workers: A retrospective, pilot study | The Indian Journal of Medical Research | NO PDF |
| Vasileiou et al. | Interim findings from first-dose mass COVID-19 vaccination roll-out and COVID-19 hospital admissions in Scotland: a national prospective cohort study | The Lancet | wrong intervention |

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| Vasileiou et al. | Effectiveness of First Dose of COVID-19 Vaccines Against Hospital Admissions in Scotland: National Prospective Cohort Study of 5.4 Million People | Hand search; Preprint - SSRN | wrong intervention |
| Vergnes | Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine | The New England Journal of Medicine | wrong intervention |
| Victor et al. | Protective Effect of COVID-19 Vaccine Among Health Care Workers During the Second Wave of the Pandemic in India | Mayo Clinic proceedings | wrong intervention |
| Victoria et al. | Estimating the early impact of vaccination against COVID-19 on deaths among elderly people in Brazil: Analyses of routinely-collected data on vaccine coverage and mortality | EClinicalMedicine | wrong study design |
| Vijayasingham et al. | Sex-disaggregated data in COVID-19 vaccine trials | The Lancet | wrong study design |
| Villela et al. | Effectiveness of Mass Vaccination in Brazil against Severe COVID-19 Cases | medRxiv | wrong outcome |
| Vitek et al. | Vaccine effectiveness against severe acute respiratory infections (SARI) COVID-19 hospitalisations estimated from real-world surveillance data, Slovenia, October 2021 | Eurosurveillance | wrong comparator |
| Vivaldi et al. | Risk factors for SARS-CoV-2 infection after primary vaccination with ChAdOx1 nCoV-19 or BNT1262b2 and after booster vaccination with BNT1262b2 or mRNA-1273: a population-based cohort study (COVIDENCE UK) | | wrong outcome |
| Vivaldi et al. | Correlation between post-vaccination titres of combined IgG, IgA, and IgM anti-Spike antibodies and protection against breakthrough SARS-CoV-2 infection: a population-based longitudinal study (COVIDENCE UK) | medRxiv | wrong comparator |
| Vokó et al. | Nationwide effectiveness of five SARS-CoV-2 vaccines in Hungary-the HUN-VE study | Clinical microbiology and infection : the official publication of the European Society of Clinical Microbiology and Infectious Diseases | wrong study duration |
| Voysey et al. | Safety and efficacy of the ChAdOx1 nCoV-19 vaccine (AZD1222) against SARS-CoV-2: an interim analysis of four randomised controlled trials in Brazil, South Africa, and the UK | The Lancet | wrong intervention |
| Voysey et al. | Single-dose administration and the influence of the timing of the booster dose on immunogenicity and efficacy of ChAdOx1 nCoV-19 (AZD1222) vaccine: a pooled analysis of four randomised trials | The Lancet | wrong intervention |

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| Wadei et al. | COVID-19 infection in solid organ transplant recipients after SARS-CoV-2 vaccination | American Journal of Transplantation | wrong intervention |
| Wagner et al. | COVID-19 vaccine: mRNA-1273 is effective and safe | Pneumologie | foreign language |
| Waldhorn et al. | Six-Month Efficacy and Toxicity Profile of BNT162b2 Vaccine in Cancer Patients with Solid Tumors | Cancer discovery | wrong comparator |
| Waldhorn, et al. | Six Month Efficacy and Toxicity Profile of BNT162b2 Vaccine in Cancer Patients with Solid Tumors | Cancer Discovery | delayed exclusion - data mainly focusing on immunogenicity findings. Also, study included only vaccinated individuals (no unvaccinated controls) |
| Wang et al. | Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine | The New England Journal of Medicine | wrong intervention |
| Wang et al. | The impacts of COVID-19 vaccine timing, number of doses, and risk prioritization on mortality in the US | Preprint - medRxiv | wrong study design |
| Wang et al. | Increased risk for COVID-19 breakthrough infection in fully vaccinated patients with substance use disorders in the United States between December 2020 and August 2021 | World Psychiatry | wrong comparator |
| Waxman et al. | Comparison of Natural and BNT162b2 Vaccine-induced Immunity, with and without an Enhancer or Booster Dose, on the Risk of COVID-19-Related Hospitalization in Israel | Research Square | wrong study duration |
| Westholter & Taube | SARS-CoV-2 outbreak in a long-term care facility after vaccination with BNT162b2 | Clinical Infectious Diseases | wrong intervention |
| Whitaker et al. | Pfizer-BioNTech and Oxford AstraZeneca COVID-19 vaccine effectiveness and immune response among individuals in clinical risk groups | The Journal of infection | wrong study duration |
| Whitaker et al. | Pfizer-BioNTech and Oxford AstraZeneca COVID-19 vaccine effectiveness and immune response among individuals in clinical risk groups | Hand search - Public Health England preprints | wrong intervention |
| White et al. | Incident SARS-CoV-2 Infection among mRNA-Vaccinated and Unvaccinated Nursing Home Residents | The New England Journal of Medicine | wrong intervention |
| Wickert et al. | Estimates of Single Dose and Full Dose BNT162b2 Vaccine Effectiveness among USAF Academy cadets, 1 Mar - 1 May 2021 | Preprint - medRxiv | wrong intervention |
| Williams et al. | Measuring vaccine efficacy against infection and disease in clinical trials: sources and magnitude of bias in COVID-19 vaccine efficacy estimates | Preprint - medRxiv | wrong intervention |

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| Williams et al. | COVID-19 Outbreak Associated with a SARS-CoV-2 P.1 Lineage in a Long-Term Care Home after Implementation of a Vaccination Program – Ontario, April-May 2021 | Hand search; Clinical Infectious Diseases | wrong intervention |
| Wise et al. | Covid-19: New data on Oxford AstraZeneca vaccine backs 12 week dosing interval | BMJ (Clinical Research Ed.) | wrong publication type |
| Wise et al. | Covid-19: People who have had infection might only need one dose of mRNA vaccine | BMJ (Clinical Research Ed.) | wrong publication type |
| Wise et al. | Covid-19: People who have had infection might only need one dose of mRNA vaccine | BMJ (Clinical Research Ed.) | duplicated |
| Wise et al. | Covid-19: Pfizer BioNTech vaccine reduced cases by 94% in Israel, shows peer reviewed study | BMJ (Clinical Research Ed.) | wrong publication type |
| Wright et al. | Comparative vaccine effectiveness against severe COVID-19 over time in US hospital administrative data: a case-control study | The Lancet. Respiratory medicine | wrong comparator |
| Wu et al. | 1562MO Effectiveness of COVID-19 vaccination in cancer patients: A nationwide Veterans Affairs study | Annals of Oncology | wrong outcome |
| Xie et al. | Comparative effectiveness of the BNT162b2 vs ChAdOx1 vaccine against Covid-19 | medRxiv | wrong comparator |
| Xiong et al. | Age and Gender Disparities in Adverse Events Following COVID-19 Vaccination: Real-World Evidence Based on Big Data for Risk Management | Frontiers in Medicine | wrong intervention |
| Yadav et al. | The high mortality and impact of vaccination on COVID-19 in hemodialysis population in India during the second wave | Kidney International Reports | wrong intervention |
| Yan et al. | Rate and risk factors for breakthrough SARS-CoV-2 infection after vaccination | Journal of Infection | wrong intervention |
| Yassi et al. | Infection control, occupational and public health measures including mRNA-based vaccination against SARS-CoV-2 infections to protect healthcare workers from variants of concern: a 14-month observational study using surveillance data | Preprint - medRxiv | wrong intervention |
| Yelin et al. | Associations of the BNT162b2 COVID-19 vaccine effectiveness with patient age and comorbidities | Preprint - medRxiv | wrong intervention |
| Young Xu | Effectiveness of mRNA COVID-19 Vaccines against Omicron among Veterans | medRxiv | wrong study duration |
| Young Xu et al. | Effectiveness of mRNA COVID-19 Booster Vaccines against Omicron and Delta Variants among US Veterans | | wrong study duration |
| Young Xu et al. | Coverage and Effectiveness of mRNA COVID-19 Vaccines among Veterans | Preprint - medRxiv | wrong intervention |

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| Young-Xu et al. | Coverage and Estimated Effectiveness of mRNA COVID-19 Vaccines Among US Veterans | JAMA network open | wrong study duration |
| Yu Chen et al. | POS-977 RISK OF COVID-19 INFECTION POST VACCINATION PROGRAMME IN PATIENTS WITH END STAGE KIDNEY DISEASE IN PENANG STATE | Kidney International Reports | Full-text not found |
| Zacay et al. | BNT162b2 Vaccine Effectiveness in Preventing Asymptomatic Infection With SARS-CoV-2 Virus: A Nationwide Historical Cohort Study | Open Forum Infectious Diseases | wrong intervention |
| Zambrano et al. | Effectiveness of BNT162b2 (Pfizer-BioNTech) mRNA Vaccination Against Multisystem Inflammatory Syndrome in Children Among Persons Aged 12-18 Years - United States, July-December 2021 | MMWR. Morbidity and mortality weekly report | wrong outcome |
| Zaqout et al. | The initial impact of a national BNT162b2 mRNA COVID-19 vaccine rollout | International Journal of Infectious Diseases: IJID | wrong intervention |
| Zheutlin et al. | Durability of Protection against COVID-19 Breakthrough Infections and Severe Disease by Vaccines in the United States | medRxiv | wrong comparator |
| Zheutlin et al. | Durability of Protection against COVID-19 Breakthrough Infections and Severe Disease by Vaccines in the United States | medRxiv | wrong comparator |