

# Bilagsfortegnelse til MTV for influenzavaccination

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## Bilag 1 – Søgeprotokol

### Søgeprotokol for guidelines

<b>Projekttitel/aspekt</b>	MTV for influenza vaccination – Guidelines søgning
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<b>Søgespecialist</b>	Birgitte Holm Petersen, SST
<b>Senest opdateret</b>	3. juni 2019

<b>Baggrund</b>	Sundheds- og Ældreministeriet har bedt Sundhedsstyrelsen udarbejde en medicinsk teknologivurdering (MTV), der skal udgøre det faglige beslutningsgrundlag for blandt andet en vurdering af, om målgrupperne for det nuværende influenzavaccinationsprogram bør udvides, og om valg af vaccinetype bør differentieres for de forskellige risiko- og målgrupper.
<b>Søgetermer</b>	Engelske: Influenza OR Flu, vaccination OR immunization, seasonal Danske: Influenza, Influenzavaccine, influenzavaccination Norske: Influenza, influensavaksine, influensavaksinasjon, sesonginfluensavaksine Svenske: Influensavacciner, influensa, influensavaccination, säsongsinfluensa
<b>Inklusions- og eksklusionskriterier</b>	Sprog: engelsk, dansk, norsk og svensk År: 2008 til 2019 Population: alle Publikationstyper: Retningslinjer, guidance, guidelines, practice guideline, clinical guidelines, recommendation, consensus, Health Technology Assessment /HTA rapporter

## Informationskilder

DATABASER	INTERFACE	FUND	DATO FOR SØGN-ING
G-I-N International	internettet	28	22. maj 2019
NICE (UK)	-	6 + 4	22. maj 2019
TRIP	-	19	22. maj 2019
Scottish Intercollegiate Guidelines Network (SIGN)	-	0	28. maj 2019
HTA Databasen (CRD data-base)	-	63	28. maj 2019
SBU, Sverige	-	0	28. maj 2019
Socialstyrelsen, Sverige	-	2	28. maj 2019
Folkhälsomyndigheten, Sverige	<a href="https://www.folkhalsomyndigheten.se/smittskydd-beredskap/">https://www.folkhalsomyndigheten.se/smittskydd-beredskap/</a>	15	29. maj 2019
Helsedirektoratet, Norge	-	0	28. maj 2019
FHI, Norge	-	19	28. maj 2019
Netpunkt	-	7	28. maj 2019
Medline	OVID	525	29. maj 2019
Embase	OVID	1095	3. juni 2019
Cinahl	EBSCO	521	29. maj 2019

## Note:

- Søgetermer og inklusions- og eksklusionskriterier er tilpasset de enkelte databaser.
- Dubletter er så vidt muligt frasorteret ved hjælp af RefWorks. De fundne referencer
- Fuldtekster vedhæftes i Refworks
- Søgestrategi for hver enkelt database præsenteres – hvis muligt vises det eksplicit hvor mange referencer den enkelte søgestreng genererer



## Søgestrategi

### GIN

(220519) - 28 fund

Søgetermer - influenza or influenza vaccine or influenza vaccination

Overført til Covidence

### NICE, UK

(220519) - 6 + 4 fund

Søgetermer: Influenza vaccine\*

6 results for influenza vaccine\*

#### 1. Flu vaccination: increasing uptake (NG103)

This guideline covers how to increase uptake of the free flu vaccination among people who are eligible. It describes ways to increase awareness and how to use all opportunities in primary and secondary care to identify people who should be encouraged to have the vaccination.

NICE guideline Published August 2018

#### 2. Myeloma: diagnosis and management (NG35)

This guideline covers the diagnosing and managing of myeloma (including smouldering myeloma and primary plasma cell leukaemia) in people aged 16 and over. It aims to improve care for people with myeloma by promoting the most effective tests and treatments for myeloma and its complications.

NICE guideline Published February 2016 Last updated October 2018

#### 3. Chronic obstructive pulmonary disease in over 16s: diagnosis and management (NG115)

This guideline covers diagnosing and managing chronic obstructive pulmonary disease (COPD) in people aged 16 and older, which includes emphysema and chronic bronchitis. It aims to help people with COPD to receive a diagnosis earlier so that they can benefit from treatments to reduce symptoms, improve quality of life and keep them healthy for longer.

NICE guideline Published December 2018

#### 4. Fever in under 5s: assessment and initial management (CG160)

This guideline covers the assessment and early management of fever with no obvious cause in children aged under 5. It aims to improve clinical assessment and help healthcare professionals diagnose serious illness among young children who present with fever in primary and secondary care.

Clinical guideline Published May 2013 Last updated August 2017



#### 5.Excess winter deaths and illness and the health risks associated with cold homes (NG6)

This guideline covers reducing the health risks (including preventable deaths) associated with living in a cold home. It aims to improve the health and wellbeing of people vulnerable to the cold. Improving the temperature in homes, by improving energy efficiency, may also help reduce unnecessary fuel consumption.

NICE guideline Published March 2015

#### 6.Chronic heart failure in adults: diagnosis and management (NG106)

This guideline covers diagnosing and managing chronic heart failure in people aged 18 and over. It aims to improve diagnosis and treatment to increase the length and quality of life for people with heart failure.

NICE guideline Published September 2018

#### **Andre NICE publikationer, 4 fund**

- [Guidance programme: Technology appraisal guidance](#) Remove 'Guidance programme: Technology appraisal guidance' filter

#### Amantadine, oseltamivir and zanamivir for the treatment of influenza (TA168)

Product type: Guidance  
Programme: Technology appraisal guidance  
Published date: 25 February 2009

#### Oseltamivir, amantadine (review) and zanamivir for the prophylaxis of influenza(TA158)

Product type: Guidance  
Programme: Technology appraisal guidance  
Published date: 24 September 2008

#### Peramivir for treating influenza [ID828]

Status: In development  
Programme: Technology appraisal guidance  
Expected publication date: TBC

#### Intravenous zanamivir for treating influenza in hospital [ID1196]

Status: Proposed  
Programme: Technology appraisal guidance  
Expected publication date: TBC

**TRIP – database,**  
(220519)

Søgetermer: influenza vaccination og Guidelines



Aus & NZ 26, Canada 38, UK 68, USA 96, Other 16

Antal fund I alt 244 fund her af 19 relevante fund

**Aus & NZ 26 fund – sorteret 2 ref.**

1. ASID (HICSIG) position statement: infection control guidelines for patients with influenza-like illnesses, including pandemic (H1N1) influenza 2009, in Australian health care facilities, 2009 MJA Clinical Guidelines
2. The Australian Immunisation Handbook, 2019 Clinical Practice Guidelines Portal

**Canada 38 fund - sorteret 4 ref.**

1. Canadian immunization guide chapter on influenza and statement on seasonal influenza vaccine for 2017-2018, 2017 CPG Infobase
2. Vaccine recommendations for children and youth for the 2018/2019 influenza season, 2018 Canadian Paediatric Society
3. The benefits of influenza vaccine in pregnancy for the fetus and the infant younger than six months of age, 2014 Canadian Paediatric Society
4. Statement on seasonal trivalent inactivated influenza vaccine (TIV) for 2010-2011, 2010 CPG Infobase

**UK 68 fund – sorteret 5 ref.**

1. Flu vaccination: increasing uptake, 2018 *National Institute for Health and Clinical Excellence - Clinical Guidelines*
2. Immunizations - seasonal influenza, 2016 *NICE Clinical Knowledge Summaries*
3. Influenza - seasonal, 2014 *NICE Clinical Knowledge Summaries*
4. Excess winter deaths and illness and the health risks associated with cold homes, 2015 *National Institute for Health and Clinical Excellence - Clinical Guidelines*
5. Fever in under 5s: assessment and initial management, 2013 *National Institute for Health and Clinical Excellence - Clinical Guidelines*



**USA 96 fund – sorteret 6 ref.**

1. [Influenza Vaccination During Pregnancy](#), 2018 *American College of Obstetricians and Gynecologists*
2. [Influenza Vaccination During Pregnancy](#), 2014 *American College of Obstetricians and Gynecologists*
3. [2018 Update on Diagnosis, Treatment, Chemoprophylaxis, and Institutional Outbreak Management of Seasonal Influenza](#), 2019 *Infectious Diseases Society of America*
4. [Assessment and Treatment of Pregnant Women With Suspected or Confirmed Influenza](#), 2018 *American College of Obstetricians and Gynecologists*
5. [Ethical Issues in Pandemic Influenza Planning Concerning Pregnant Women](#), 2013 *American College of Obstetricians and Gynecologists*
6. [Prenatal Care](#), 2018 *Kaiser Permanente Clinical Guidelines*

**Other 16 fund – sorteret 3 ref.**

1. [Communicating Risk in Public Health Emergencies. A WHO Guideline for Emergency Risk Communication \(ERC\) policy and practice](#), 2018 *World Health Organisation Guidelines*
2. [WHO recommendations on maternal health](#), 2017 *World Health Organisation Guidelines*
3. [WHO recommendations on child health](#), 2017 *World Health Organisation Guidelines*



### HTA database

(280519) - 63 fund overført til Covidence

	Line	Search	Hits	
<input type="checkbox"/>	1	(influenza*) IN HTA	109	Delete
<input type="checkbox"/>	2	MeSH DESCRIPTOR Influenza, Human EXPLODE ALL TREES	314	Delete
<input type="checkbox"/>	3	MeSH DESCRIPTOR Influenza Vaccines EXPLODE ALL TREES	201	Delete
<input type="checkbox"/>	4	(vaccine* or vaccination*) IN HTA	205	Delete
<input type="checkbox"/>	5	#1 OR #2	346	Delete
<input type="checkbox"/>	6	#4 OR #5	505	Delete
<input type="checkbox"/>	7	#5 AND #6	346	Delete
<input type="checkbox"/>	8	#3 OR #7	389	Delete
<input type="checkbox"/>	9	* IN HTA FROM 2008 TO 2019	9482	Delete
<input type="checkbox"/>	10	#8 AND #9	63	Delete





## Socialstyrelsen, Sverige

2 fund

[SOSFS 2009:17 Behörighet att ordinera läkemedel för vaccination mot influensa A\(H1N1\)](#)

Datum: 2009-10-15 [Visa med sökorden markerade](#)

Ladda ner sida RSS SOSFS 2009:17 Socialstyrelsens föreskrifter om behörighet att ordinera läkemedel för vaccination mot influensa A(H1N1) Knappar Ladda ner Beställ Visa varukorgen Läs hela sammanfattningen Publiceringsår: 2009 - Artikelnummer: ...

Sökväg:

Start / Publikationer 2009 / SOSFS 2009:17

[Nyckelord](#)

[SOSFS 2015:14 Upphävande av allmänna råden \(SOSFS 1997:21\) Vaccination mot influensa](#)

Datum: 2015-06-29 [Visa med sökorden markerade](#)

Ladda ner sida RSS Socialstyrelsens kungörelse om upphävande av allmänna råden (SOSFS 1997:21) Vaccination mot influensa Knappar Ladda ner Beställ Visa varukorgen Läs hela sammanfattningen 2015:14 Publiceringsår: 2015 - Artikelnummer: 2015-6-41 ...

Sökväg:

Start / Publikationer 2015 / SOSFS 2015:14 Upphävande av al...

[Nyckelord](#)

## Folkhälsomyndigheten, Sverige

15 fund

Smitskyd: <http://www.smittskyddsinstitutet.se/>

Søgt på: "publikationer og infuensa" og "publikationer og immunisering"

1. Influenzavaccination till riskgrupper

Utgivningsår: 2016 Författare: Folkhälsomyndigheten

2.Underlaget är en sammanställning av kunskapsläget om influensa, grupper som löper ökad risk att drabbas av allvarlig och livshotande sjukdom, och om riktad vaccination till dessa så kallade riskgrupper. Kunskapsunderlaget togs fram av Socialstyrelsen ...

Influensavaccination som särskilt vaccinationsprogram

Utgivningsår: 2016Författare: Folkhälsomyndigheten

3.Faktabladet om influensavaccination är ett stöd för de som arbetar med gravida. Faktabladet kan till exempel laddas ner och delas ut på mödravårdscentraler. Engelsk version publicerad november 2016. Andra språk - Faktabladet finns även på följande ...

Vaccination mot influensa - information för dig som är gravid (svenska)

Utgivningsår: 2016Författare: Folkhälsomyndigheten

4.Faktabladet om influensavaccination är ett stöd för de som arbetar med gravida. Faktabladet kan till exempel laddas ner och delas ut på mödravårdscentraler. Reviderad version från september 2016. Andra språk - Faktabladet finns även på följande ...

Rekommendationer om influensavaccination till riskgrupper

Utgivningsår: 2018Författare: Folkhälsomyndigheten

5.I denna revidering (fyra) finns samlad information om vilka som rekommenderas vaccination, dosering av vaccin, samt annan relevant information rörande influensa. Förändringar vid denna revision inkluderar ett nytt avsnitt om prioritering vid vaccinbrist, ...

Trivalenta och tetravalenta vacciner mot säsongsinfluensa

Utgivningsår: 2018Författare: Folkhälsomyndigheten

6.Denna kunskapssammanställning sammanfattar Folkhälsomyndighetens litteraturoversikt om vaccinernas skyddseffekt och hälsoekonomi för trivalenta och tetravalenta inaktiverade influensavacciner, samt tetravalenta levande attenuerade influensavacciner. ...



Upphävande av Folkhälsomyndighetens allmänna råd (HSLF-FS 2015:2) om vaccination mot influensa

Utgivningsår: 2016 Författare: Folkhälsomyndigheten

7.HSLF-FS 2016:83 Upphävande av Folkhälsomyndighetens allmänna råd (HSLF-FS 2015:2) om vaccination mot influensa Beslutade: 17 augusti 2016 Gäller från och med: 1 september 2016 HSLF-FS 2015:2 ersattes av: Rekommendationer om influensavaccination till riskgrupper. ...

Vaccinationskampanjen mot influensa AH1N1 2009

Utgivningsår: 2013 Författare: Smittskyddsinstitutet

8.Kalkylerna pekar på att vi kunnat förhindra ca 100 dödsfall och förhindra ca 215 intensivvårdsfall med hjälp av vaccinationerna. Dessutom undvek samhället ...

Vaccination av gravida mot influensa

Utgivningsår: 2017 Författare: Folkhälsomyndigheten

9.Kunskapsöversikt för hälso- och sjukvårdspersonal. Den här kunskapsöversikten ersätter ett dokument som Socialstyrelsen publicerade 2013. Sedan dess har det kommit flera studier och systematiska översikter som rör vaccination av gravida

10.Cell mediated immunity in laboratory vaccine surveillance

UTGIVNINGÅR: 2018 FÖRFATTARE: FOLKHÄLSOMYNDIGHETEN

11.A tool to better predict immunity to vaccine preventable ... Immunization Program (NIP) in Sweden and, to investigate the possible added value of CMI in vaccine surveillance and in research to address knowledge gaps. The report provides primarily an ...

12.Barriers and motivating factors to MMR vaccination in communities with low coverage in Sweden



UTGIVNINGÅR: 2015 FÖRFATTARE: FOLKHÄLSOMYNDIGHETEN

13. The report presents results from a pilot test of Tailoring Immunization Programmes (TIP), a method developed by WHO/Europe to identify barriers and motivating factors to MMR vaccination in communities with low coverage in Sweden. The study is the basis ...

14. Work model for changing national vaccination programmes in Sweden

PUBLICERAD: 18 DECEMBER 2018 UPPDATERAD: - FÖRFATTARE: FOLKHÄLSOMYNDIGHETEN

15. This report outlines how the Public Health Agency of Sweden ... Immunization Technical Advisory Groups (NITAGs) and their Secretariats in other countries. Summary - In Sweden, national vaccination programmes are regulated through the Communicable Diseases ...

## **Folke Helse Instituttet, Norge**

19 fund

### 1. Influensavaksine til friske barn

Influensavaksinering av friske barn (< 16 år) fører trolig til færre tilfeller av influensa, og muligens til færre tilfeller av influensaliknende sykdom.

## **FORSKNINGSOVERSIKT**

Publisert 20.12.2013 Oppdatert 09.09.2014

### 2. Influensavaksine til eldre utenfor institusjon

Influensavaksine til eldre som bor utenfor institusjon fører muligens til færre influensatilfeller (laboratoriebekreftet).

## **FORSKNINGSOVERSIKT**

Publisert 30.12.2012 Oppdatert 12.09.2014

### 3. Influensavaksine til eldre som bor på institusjon

Influensavaksine til eldre som bor på institusjon fører trolig til færre influensaliknende sykdommer og muligens til at færre får influensa og lungebetennelse.



## FORSKNINGSOVERSIKT

Publisert 20.12.2013 Oppdatert 09.09.2014

### 4. Influensavaksine til barn forebygger trolig ørebetennelse

Å gi influensavaksine til barn forebygger trolig akutt mellomørebetennelse og reduserer trolig bruken av antibiotika. Noen flere barn vil trolig få vanlige bivirkninger av influensavaksinen som feber og rennende nese. Det viser en Cochrane-oversikt.

## FORSKNINGSOVERSIKT

Publisert 11.12.2015

### 5. Influensavaksine til helsepersonell som arbeider med personer over 60 år

Systematisk gjennomgang av relevant forskningslitteratur

## FORSKNINGSOVERSIKT

Publisert 20.12.2013 Oppdatert 09.09.2014

### 6. Helseeffekt av influensavaksine til eldre og kronisk syke

Denne kunnskapsoppsummeringen presenterer dokumentasjonsgrunnlaget om effekten av influensavaksinering av eldre og personer med kronisk sykdom.

## FORSKNINGSOVERSIKT

Publisert 20.05.2009 Oppdatert 09.09.2014

### 7. Influensavaksine for friske voksne fører trolig til færre tilfeller av influensa

Influensavaksinasjon av friske voksne fører trolig til færre tilfeller av influensa og muligens også færre tilfeller av influensalignende sykdom.

## FORSKNINGSOVERSIKT

Publisert 26.12.2010 Oppdatert 12.09.2014

### 8. Effekter av tiltak mot sykefravær og uførhet hos helsepersonell

Formålet med denne systematiske oversikten var å oppsummere forskning om effekt av tiltak for å forebygge sykefravær og uførhet hos helsepersonell.



## FORSKNINGSOVERSIKT

Publisert 26.02.2014 Oppdatert 09.09.2014

### 9. Påminnelser får flere til å ta vaksiner - Cochrane: Kort oppsummert

Flere tar vaksiner når de blir minnet på det. Enkle påminnelser i form av brev, postkort, sms eller automatiserte telefonoppringninger ser ut til å øke opptak av alle typer vaksiner.

## FORSKNINGSOVERSIKT

Publisert 24.04.2018

### 10. Influensavaksine til eldre utenfor institusjon

Influensavaksine til eldre som bor utenfor institusjon fører muligens til færre influensatilfeller (laboratoriebekreftet).

## FORSKNINGSOVERSIKT

Publisert 30.12.2012 Oppdatert 12.09.2014

### 11. Influensavaksine til eldre som bor på institusjon

Influensavaksine til eldre som bor på institusjon fører trolig til færre influensliknende sykdommer og muligens til at færre får influensa og lungebetennelse.

## FORSKNINGSOVERSIKT

Publisert 20.12.2013 Oppdatert 09.09.2014

### 12. Influensavaksine til barn forebygger trolig ørebetennelse

Å gi influensavaksine til barn forebygger trolig akutt mellomørebetennelse og reduserer trolig bruken av antibiotika. Noen flere barn vil trolig få vanlige bivirkninger av influensavaksinen som feber og rennende nese. Det viser en Cochrane-oversikt.

## FORSKNINGSOVERSIKT

Publisert 11.12.2015

### 13. Influensavaksine til helsepersonell som arbeider med personer over 60 år

Systematisk gjennomgang av relevant forskningslitteratur



## FORSKNINGSOVERSIKT

Publisert 20.12.2013 Oppdatert 09.09.2014

### 14. Helseeffekt av influensavaksine til eldre og kronisk syke

Denne kunnskapsoppsummeringen presenterer dokumentasjonsgrunnlaget om effekten av influensavaksinering av eldre og personer med kronisk sykdom.

## FORSKNINGSOVERSIKT

Publisert 20.05.2009 Oppdatert 09.09.2014

### 15. National Influenza Centre. Influenza Epidemiological Information prepared for the WHO Informal Meeting on Strain Composition for Inactivated Influenza Vaccines for use in the Season 2019, Atlanta, September 2018

Norsk rapport til WHO's influensavaksinemøte i Genève, september 2018.

## RAPPORT

Publisert 09.10.2018

### 16. Influensavaksine for friske voksne fører trolig til færre tilfeller av influensa

Influensavaksinasjon av friske voksne fører trolig til færre tilfeller av influensa og muligens også færre tilfeller av influensalignende sykdom.

## FORSKNINGSOVERSIKT

Publisert 26.12.2010 Oppdatert 12.09.2014

### 17. Influenza epidemiological information prepared for WHO informal meeting on strain composition for inactivated influenza vaccines for use in season 2018-19 Geneva, Feb 2018

Norsk rapport til WHO's influensavaksinemøte i Genève, februar 2018.

## RAPPORT

Publisert 23.02.2018

### 18. Influenza Virological and Epidemiological Information prepared for the WHO Consultation on the Composition of Influenza Virus Vaccines for the Northern Hemisphere 2019–2020 Beijing, February 2019



Det nasjonale influensalaboratoriet for WHO i Norge (WHO National Influenza Centre Norway), Avdeling for Influenza, FHI, utarbeider en rapport til WHO hver februar og september som beskriver influensasituasjonen i Norge og som tas med i vurderingen ved bestemmelse av ny influensavaksine. Rapporten går i dybden og tar for seg immuniteten i befolkningen og genetiske karakteriseringer av sirkulerende virus i Norge. Rapporten sammenfatter data og analyser fra den kliniske overvåkingen, virusovervåkingen og den seroepidemiologiske overvåkingen i Norge.

## RAPPORT

Publisert 08.02.2019

### 19.Utsikter for influensasesongen 2018/19 i Norge

Denne rapporten presenterer Folkehelseinstituttets vurdering av utsiktene til influensasesongen 2018/2019 som er under utvikling. Rapporten er på engelsk.

## RAPPORT

Publisert 10.01.2019

### **Netpunkt**

DK – 7 fund

Der blev fundet 7 poster.

---

1.Infection prevention : new perspectives and controversies

 [Se mere](#)

2.Molecular biotechnology : principles and applications of recombinant DNA

[Bernard R. Glick](#); [Cheryl L. Patten](#)

 [Se mere](#)

3.Vaccine science and immunization guideline : a practical guide for primary care

[Pamela G. Rockwell](#)





 [Se mere](#)

4. Medical problems during pregnancy : a comprehensive clinical guide

[Carolyn Bernstein](#); [Tamara C. Takoudes](#)

 [Se mere](#)

5. Clinical management of bacterial pneumonia

[Antoni Torres](#); [Catia Cillóniz](#)

 [Se mere](#)

6. Evidens og retningslinjer for influenza-og pneumokokvaccination af ældre

forfatter: [Jan Gerstoft](#) ; forfatter: [Marie Helleberg](#)

 [Se mere](#)

7. Community-acquired pneumonia : strategies for management

[Torres Martí A.](#); [Rosario Menendez](#)

 [Se mere](#)

Høringsversion

## Medline

(290519) – overført til Covidence

Database(s): Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) 1946 to May 28, 2019

Search Strategy:

#	Searches	Results
1	vaccine/ or vaccine*.mp.	293840
2	vaccination*.mp. or vaccination/	161049
3	immunization*.mp. or immunization/	150235
4	influenza vaccination*.mp. or influenza vaccination/	8024
5	influenza*.mp. or influenza/	126138
6	flu*.mp.	1927213
7	influenza vaccine/ or influenza vaccin*.mp.	25978
8	seasonal influenza*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4339
9	1 or 2 or 3	411526
10	5 or 6	2038025
11	9 and 10	59044
12	4 or 7 or 11	59055
13	(Guideline* or practice guideline* or clinical guideline* or guidance or consensus or recommendations).ti,kw,kf,pt.	159199
14	Guidelines as topic/ or practice guideline as topic/	37968
15	13 or 14	187075
16	12 and 15	941
17	limit 16 to yr="2008 - 2019"	525

**Embase**

(030619) – overført til Covidence

Database(s): **Embase** 1996 to 2019 Week 22

Search Strategy:

#	Searches	Results
1	vaccine/ or vaccine*.mp.	298680
2	vaccination*.mp. or vaccination/	172414
3	immunization*.mp. or immunization/	120321
4	influenza vaccination*.mp. or influenza vaccination/	17709
5	influenza*.mp. or influenza/	134723
6	flu*.mp.	2029860
7	influenza vaccine/ or influenza vaccin*.mp.	36340
8	seasonal influenza*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating sub-heading word, candidate term word]	7564
9	1 or 2 or 3	382457
10	5 or 6	2137973
11	9 and 10	78269
12	4 or 7 or 11	78275
13	(Guideline* or practice guideline* or clinical guideline* or guidance or consensus or recommendations).ti,kw,pt.	175502
14	12 and 13	1616
15	limit 14 to yr="2008 - 2019"	1095

**CINAHL**

(280519) – 521 ref. overført til Covidence

Tuesday, May 28, 2019 8:27:07 AM

# Query Limiters/Expanders Last Run Via Results  
 S23 S17 AND S21 Limiters - Published Date: 20080101-20191231  
 Search modes - Boolean/Phrase Interface - EBSCOhost Research Databases  
 Search Screen - Advanced Search



Database - CINAHL with Full Text	521		
S22	S17 AND S21	Search modes - Boolean/Phrase	Interface - EBSCOhost Re-
search Databases			
Search Screen - Advanced Search			
Database - CINAHL with Full Text	786		
S21	S18 OR S19	Search modes - Boolean/Phrase	Interface - EBSCOhost Re-
search Databases			
Search Screen - Advanced Search			
Database - CINAHL with Full Text	163,215		
S20	(MH "Practice Guidelines") OR "clinical guideline**"	Search modes - Bool-	
ean/Phrase	Interface - EBSCOhost Research Databases		
Search Screen - Advanced Search			
Database - CINAHL with Full Text	71,185		
S19	(MH "Practice Guidelines")	Search modes - Boolean/Phrase	Interface - EB-
SCOhost Research Databases			
Search Screen - Advanced Search			
Database - CINAHL with Full Text	67,814		
S18	guideline* or practical guideline*	Search modes - Boolean/Phrase	
Interface - EBSCOhost Research Databases			
Search Screen - Advanced Search			
Database - CINAHL with Full Text	163,215		
S17	S12 OR S13 OR S14 OR S15 OR S16	Search modes - Boolean/Phrase	
Interface - EBSCOhost Research Databases			
Search Screen - Advanced Search			
Database - CINAHL with Full Text	14,635		
S16	"influenza vaccination"	Search modes - Boolean/Phrase	Interface - EB-
SCOhost Research Databases			
Search Screen - Advanced Search			
Database - CINAHL with Full Text	2,793		
S15	influenza vaccination*	Search modes - Boolean/Phrase	Interface - EB-
SCOhost Research Databases			
Search Screen - Advanced Search			
Database - CINAHL with Full Text	2,921		
S14	(MH "Influenza Vaccine")	Search modes - Boolean/Phrase	Interface - EB-
SCOhost Research Databases			
Search Screen - Advanced Search			
Database - CINAHL with Full Text	9,210		
S13	influenza vaccine*	Search modes - Boolean/Phrase	Interface - EB-
SCOhost Research Databases			
Search Screen - Advanced Search			
Database - CINAHL with Full Text	9,766		
S12	S10 AND S11	Search modes - Boolean/Phrase	Interface - EBSCOhost Re-
search Databases			
Search Screen - Advanced Search			
Database - CINAHL with Full Text	14,635		
S11	S3 OR S4 OR S5 OR S6 OR S7	Search modes - Boolean/Phrase	
Interface - EBSCOhost Research Databases			
Search Screen - Advanced Search			
Database - CINAHL with Full Text	63,982		
S10	S1 OR S2 OR S8 OR S9	Search modes - Boolean/Phrase	Interface - EB-
SCOhost Research Databases			



Search Screen - Advanced Search  
Database - CINAHL with Full Text 168,922  
S9 (MH "Influenza, Seasonal") OR "flu" OR (MH "Influenza+") Search modes - Boolean/Phrase Interface - EBSCOhost Research Databases  
Search Screen - Advanced Search  
Database - CINAHL with Full Text 20,364  
S8 flu\* Search modes - Boolean/Phrase Interface - EBSCOhost Research Databases  
Search Screen - Advanced Search  
Database - CINAHL with Full Text 147,173  
S7 immunization\* Search modes - Boolean/Phrase Interface - EBSCOhost Research Databases  
Search Screen - Advanced Search  
Database - CINAHL with Full Text 29,874  
S6 (MH "Immunization+") Search modes - Boolean/Phrase Interface - EBSCOhost Research Databases  
Search Screen - Advanced Search  
Database - CINAHL with Full Text 22,569  
S5 vaccination\* Search modes - Boolean/Phrase Interface - EBSCOhost Research Databases  
Search Screen - Advanced Search  
Database - CINAHL with Full Text 21,218  
S4 (MH "Vaccines+") Search modes - Boolean/Phrase Interface - EBSCOhost Research Databases  
Search Screen - Advanced Search  
Database - CINAHL with Full Text 39,798  
S3 vaccine\* Search modes - Boolean/Phrase Interface - EBSCOhost Research Databases  
Search Screen - Advanced Search  
Database - CINAHL with Full Text 48,394  
S2 (MH "Influenza+") Search modes - Boolean/Phrase Interface - EBSCOhost Research Databases  
Search Screen - Advanced Search  
Database - CINAHL with Full Text 17,789  
S1 influenza\* Search modes - Boolean/Phrase Interface - EBSCOhost Research Databases  
Search Screen - Advanced Search  
Database - CINAHL with Full Text 27,721

### Søgeprotokol for sekundær litteratur

<b>Projektitel/aspekt</b>	<b>MTV for influenza vaccine – søgning på PICO's – Sekundær litteratur</b>
<b>Kontakt /projektleder og fagkonsulent</b>	Stine Ulendorf Jacobsen, SST Vibe Cecilie Ballegaard, SST Camilla Hiul Suppli, SST
<b>Søgespecialist</b>	Birgitte Holm Petersen, SST
<b>Senest opdateret</b>	16. september 2019
<b>Baggrund</b>	<p>Fokuserede spørgsmål – MTV for influenzavaccination:</p> <p>PICO 1: Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner? Population: ældre på 65 år eller derover.</p> <p>PICO 2: Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner? Population: øvrige risikogrupper, kroniske syge</p> <p>PICO 3: Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner? Population: gravide</p> <p>PICO 4: Hvad er effekten af vaccination med en 3-valent adjuveret influenzavaccine sammenlignet med andre inaktiverede influenzavacciner?</p> <p>PICO 5: Hvad er effekten af vaccination med en high-dose influenza vaccine sammenlignet med andre inaktiverede influenzavacciner? Population: ældre på 65 år eller derover.</p> <p>PICO 6: Hvad er effekten af vaccination med en levende svækket influenzavaccine til raske børn over 2 år?</p> <p>PICO 7: Hvad er effekten af vaccination med en inaktiveret influenza vaccine til raske børn under 2 år?</p> <p>PICO 8: Hvad er effekten af influenzavaccination af sundhedspersonale? Population: health care workers and social workers</p>
<b>Søgetermer</b>	Se søgestrategierne for hvert PICO
<b>Inklusions- og eksklusionskriterier</b>	Sprog: dansk, engelsk, norsk og svensk År: angivet i søgestrategien



	Population: se hvert PICO Publikationstyper: Systematiske reviews og Metaanalyser
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#### Informationskilder

DATABASER	INTERFACE	FUND	DATO FOR SØGNING
Medline incl. Cochrane	OVID		15. – 17. juli 2019
Embase incl. Cochrane	OVID		15. – 17. juli 2019

#### Note:

- Søgetermer og inklusions- og eksklusionskriterier er tilpasset de enkelte databaser.
- Dubletter er så vidt muligt frasorteret ved hjælp af RefWorks. De fundne referencer overføres til Covidence (referenceværktøj)
- Fuldtekster præsenteres i Covidence i pdf-format
- Søgestrategi for hver enkelt database præsenteres – hvis muligt vises det eksplicit hvor mange referencer den enkelte søgestreng genererer

## Søgestrategi

Cochrane reviews er inkluderet i Medline og Embase søgningerne PICO 1 - 8

### PICO 1 – (aged)

#### Medline (150719)

Database(s): Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) 1946 to July 12, 2019

Search Strategy:

#	Searches	Results
1	afluria*.mp.	15
2	agrippal*.mp.	27
3	influvac*.mp.	31
4	preflucel*.mp.	1
5	vaxigrip*.mp.	97
6	trivalent influenza vaccine*.mp.	629
7	TIV.mp.	759
8	fluad*.mp.	70
9	fluarix tetra*.mp.	3
10	flucelvax tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	1
11	influvac tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	0
12	vaxigrip tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2





13	QIV.mp.	100
14	quadrivalent influenza vaccine*.mp.	150
15	fluenz tetra*.mp.	2
16	LAIV.mp.	505
17	live-attenuated influenza vaccine*.mp.	679
18	Influenza Vaccines/ or influenza vaccine*.mp.	24371
19	fluarix quadrivalent*.mp.	4
20	flublok quadrivalent*.mp.	2
21	flulaval quadrivalent*.mp.	1
22	fluzone quadrivalent*.mp.	4
23	fluzone*.mp.	74
24	QIVc*.mp.	5
25	flucelvax*.mp.	4
26	flumist.mp.	95
27	Influenza Vaccines/ or influenza vaccine*.mp.	24371
28	quadrivalent inactivated vaccine*.mp.	8
29	aTIV.mp.	27
30	adjuvanted trivalent inactivated *.mp.	0
31	adjuvanted trivalent inactivated influenza vaccine*.mp.	11
32	Vaccines, Inactivated/	5141
33	high dose trivalent inactivated influenza vaccine*.mp.	14
34	HD TIV.mp.	2
35	vaccine*.mp.	295590
36	influenza*.mp.	126777
37	35 and 36	35436
38	Influenza Vaccines/ or influenza vaccine*.mp.	24371
39	or/1-34	28254
40	35 or 36 or 38 or 39	387216
41	vaccination*.mp. or vaccination/	162096



42	immunization*.mp. or immunization/	150793
43	influenza vaccination*.mp. or influenza vaccination/	8094
44	influenza*.mp. or influenza/	126777
45	flu*.mp.	1938370
46	seasonal influenza*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4388
47	"Aged, 80 and over"/ or Aged/ or aged*.mp.	5103865
48	elderly.mp. or Aged/	2993316
49	47 or 48	5151338
50	41 or 42 or 43 or 44 or 45 or 46	2277167
51	((systematic or method* or rapid or integrative) adj3 (review* or overview* or study or studies or search* or approach*)) or meta analy* or meta-analy* or metaanaly*).ti,ab,kw,kf.	745306
52	40 and 49 and 50	41307
53	51 and 52	1726
54	limit 53 to (yr="2008 - 2019" and (danish or english or norwegian or swedish))	1296

## EMBASE (150719)

Database(s): **Embase** 1996 to 2019 Week 28  
Search Strategy:

#	Searches	Results
1	afluria*.mp.	142
2	agrippal*.mp.	126
3	influvac*.mp.	275
4	preflucel*.mp.	23
5	vaxigrip*.mp.	471
6	trivalent influenza vaccine*.mp.	676
7	TIV.mp.	996



8	fluad*.mp.	320
9	fluarix tetra*.mp.	16
10	flucelvax tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	2
11	influvac tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	0
12	vaxigrip tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	4
13	QIV.mp.	141
14	quadrivalent influenza vaccine*.mp.	202
15	fluenz tetra*.mp.	20
16	LAIV.mp.	581
17	live-attenuated influenza vaccine*.mp.	755
18	Influenza Vaccines/ or influenza vaccine*.mp.	32544
19	fluarix quadrivalent*.mp.	16
20	flublok quadrivalent*.mp.	5
21	flulaval quadrivalent*.mp.	15
22	fluzone quadrivalent*.mp.	12
23	fluzone*.mp.	614
24	QIVc*.mp.	9
25	flucelvax*.mp.	73
26	flumist.mp.	663
27	Influenza Vaccines/ or influenza vaccine*.mp.	32544
28	quadrivalent inactivated vaccine*.mp.	12
29	aTIV.mp.	28
30	adjuvanted trivalent inactivated *.mp.	0
31	adjuvanted trivalent inactivated influenza vaccine*.mp.	9



32	Vaccines, Inactivated/	4167
33	high dose trivalent inactivated influenza vaccine*.mp.	16
34	HD TIV.mp.	4
35	vaccine*.mp.	301883
36	influenza*.mp.	136166
37	35 and 36	48538
38	Influenza Vaccines/ or influenza vaccine*.mp.	32544
39	or/1-34	35871
40	35 or 36 or 38 or 39	389942
41	vaccination*.mp. or vaccination/	174623
42	immunization*.mp. or immunization/	121497
43	influenza vaccination*.mp. or influenza vaccination/	17919
44	influenza*.mp. or influenza/	136166
45	flu*.mp.	2052231
46	seasonal influenza*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	7666
47	41 or 42 or 43 or 44 or 45 or 46	2357497
48	((systematic or method* or rapid or integrative) adj3 (review* or overview* or study or studies or search* or approach*)) or meta analy* or meta-analy* or metaanaly*).ti,ab,kw.	1102484
49	aged/ or aged*.mp.	3302894
50	very elderly/ or frail elderly/ or elderly*.mp.	438289
51	49 or 50	3368010
52	40 and 47 and 51	36775
53	48 and 52	2204
54	limit 53 to yr="2008 - 2019"	1840
55	limit 53 to ((danish or english or norwegian or swedish) and yr="2008 - 2019")	1758

**PICO 2**

## Medline (150719)

Database(s): Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) 1946 to July 15, 2019

Search Strategy:

#	Searches	Results
1	afluria*.mp.	15
2	agrippal*.mp.	27
3	influvac*.mp.	31
4	preflucel*.mp.	1
5	vaxigrip*.mp.	97
6	trivalent influenza vaccine*.mp.	629
7	TIV.mp.	759
8	fluad*.mp.	70
9	fluarix tetra*.mp.	3
10	flucelvax tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	1
11	influvac tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	0
12	vaxigrip tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2
13	QIV.mp.	100
14	quadrivalent influenza vaccine*.mp.	150
15	fluenz tetra*.mp.	2
16	LAIV.mp.	505
17	live-attenuated influenza vaccine*.mp.	679



18	Influenza Vaccines/ or influenza vaccine*.mp.	24377
19	fluarix quadrivalent*.mp.	4
20	flublok quadrivalent*.mp.	2
21	flulaval quadrivalent*.mp.	1
22	fluzone quadrivalent*.mp.	4
23	fluzone*.mp.	74
24	QIVc*.mp.	5
25	flucelvax*.mp.	4
26	flumist.mp.	95
27	Influenza Vaccines/ or influenza vaccine*.mp.	24377
28	quadrivalent inactivated vaccine*.mp.	8
29	aTIV.mp.	27
30	adjuvanted trivalent inactivated *.mp.	0
31	adjuvanted trivalent inactivated influenza vaccine*.mp.	11
32	Vaccines, Inactivated/	5141
33	high dose trivalent inactivated influenza vaccine*.mp.	14
34	HD TIV.mp.	2
35	vaccine*.mp.	295696
36	influenza*.mp.	126820
37	35 and 36	35447
38	Influenza Vaccines/ or influenza vaccine*.mp.	24377
39	or/1-34	28260
40	35 or 36 or 38 or 39	387354
41	vaccination*.mp. or vaccination/	162166
42	immunization*.mp. or immunization/	150823
43	influenza vaccination*.mp. or influenza vaccination/	8098
44	influenza*.mp. or influenza/	126820
45	flu*.mp.	1938975



46	seasonal influenza*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4394
47	41 or 42 or 43 or 44 or 45 or 46	2277879
48	((systematic or method* or rapid or integrative) adj3 (review* or overview* or study or studies or search* or approach*)) or meta analy* or meta-analy* or metaanaly*).ti,ab,kw,kf.	745935
49	Cochrane.jw.	14338
50	Chronic Disease/ or chronic disease*.mp.	301043
51	chronic illness*.mp.	15162
52	illness.mp.	475665
53	risk group*.mp.	39835
54	immunocompromising*.mp.	317
55	immunocompromised*.mp.	43059
56	Acquired Immunodeficiency Syndrome/ or immunodeficiency*.mp.	195731
57	Heart Diseases/ or cardiac disease*.mp.	82439
58	Diabetes Mellitus/ or diabetes*.mp.	581880
59	Respiratory Tract Diseases/ or chronic respiratory condition*.mp.	21809
60	Lung Diseases, Obstructive/ or Pulmonary Disease, Chronic Obstructive/ or chronic obstructive pulmonary disease*.mp.	70945
61	COPD.mp. or Pulmonary Disease, Chronic Obstructive/	52586
62	asthma.mp. or Asthma/	168105
63	Nervous System Diseases/ or chronic neurologic condition*.mp.	42387
64	Autoimmune Diseases/ or autoimmune disease*.mp.	94109
65	Liver Diseases/ or chronic liver disease*.mp.	80509
66	Liver Diseases/ or liver disease*.mp.	145842
67	cancer.mp. or Neoplasms/	1788542
68	or/50-67	3769279
69	40 and 47 and 68	43094



70	48 and 69	1661
71	49 and 69	80
72	70 or 71	1688
73	limit 72 to (yr="2008 - 2019" and (danish or english or norwegian or swedish))	1322

## Embase (150717)

Database(s): **Embase** 1996 to 2019 Week 28

Search Strategy:

#	Searches	Results
1	afluria*.mp.	142
2	agrippal*.mp.	126
3	influvac*.mp.	275
4	preflucel*.mp.	23
5	vaxigrip*.mp.	471
6	trivalent influenza vaccine*.mp.	676
7	TIV.mp.	996
8	fludad*.mp.	320
9	fluarix tetra*.mp.	16
10	flucelvax tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	2
11	influvac tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	0
12	vaxigrip tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	4
13	QIV.mp.	141
14	quadrivalent influenza vaccine*.mp.	202





15	fluenz tetra*.mp.	20
16	LAIV.mp.	581
17	live-attenuated influenza vaccine*.mp.	755
18	Influenza Vaccines/ or influenza vaccine*.mp.	32544
19	fluarix quadrivalent*.mp.	16
20	flublok quadrivalent*.mp.	5
21	flulaval quadrivalent*.mp.	15
22	fluzone quadrivalent*.mp.	12
23	fluzone*.mp.	614
24	QIVc*.mp.	9
25	flucelvax*.mp.	73
26	flumist.mp.	663
27	Influenza Vaccines/ or influenza vaccine*.mp.	32544
28	quadrivalent inactivated vaccine*.mp.	12
29	aTIV.mp.	28
30	adjuvanted trivalent inactivated influenza vaccine*.mp.	9
31	Vaccines, Inactivated/	4167
32	high dose trivalent inactivated influenza vaccine*.mp.	16
33	HD TIV.mp.	4
34	vaccine*.mp.	301883
35	influenza*.mp.	136166
36	Influenza Vaccines/ or influenza vaccine*.mp.	32544
37	or/1-34	302331
38	vaccination*.mp. or vaccination/	174623
39	immunization*.mp. or immunization/	121497
40	influenza vaccination*.mp. or influenza vaccination/	17919
41	influenza*.mp. or influenza/	136166
42	flu*.mp.	2052231



43	seasonal influenza*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	7666
44	((systematic or method* or rapid or integrative) adj3 (review* or overview* or study or studies or search* or approach*)) or meta analy* or meta-analy* or metaanaly*).ti,ab,kw.	1102484
45	Cochrane.jx.	20480
46	Chronic Disease/ or chronic disease*.mp.	174948
47	chronic illness*.mp.	18997
48	illness.mp.	297788
49	risk group*.mp.	56447
50	immunocompromising*.mp.	409
51	immunocompromised*.mp.	43289
52	Acquired Immunodeficiency Syndrome/ or immunodeficiency*.mp.	402200
53	Heart Diseases/ or cardiac disease*.mp.	28463
54	Diabetes Mellitus/ or diabetes*.mp.	861120
55	Respiratory Tract Diseases/ or chronic respiratory condition*.mp.	17446
56	Lung Diseases, Obstructive/ or Pulmonary Disease, Chronic Obstructive/ or chronic obstructive pulmonary disease*.mp.	97809
57	COPD.mp. or Pulmonary Disease, Chronic Obstructive/	88540
58	asthma.mp. or Asthma/	222361
59	Nervous System Diseases/ or chronic neurologic condition*.mp.	24863
60	Autoimmune Diseases/ or autoimmune disease*.mp.	118036
61	Liver Diseases/ or chronic liver disease*.mp.	39364
62	Liver Diseases/ or liver disease*.mp.	174262
63	cancer.mp. or Neoplasms/	2818040
64	38 or 39 or 40 or 41 or 42 or 43	2357497
65	34 and 35	48538
66	37 or 65	302331
67	or/46-63	4927397



68	64 and 66 and 67	59057
69	44 and 68	2445
70	45 and 68	91
71	69 or 70	2486
72	limit 71 to ((danish or english or norwegian or swedish) and yr="2008 - 2019")	1973

### PICO 3

#### Medline (150719)

Database(s): **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R)** 1946 to July 15, 2019

Search Strategy:

#	Searches	Results
1	afluria*.mp.	15
2	agrippal*.mp.	27
3	influvac*.mp.	31
4	preflucel*.mp.	1
5	vaxigrip*.mp.	97
6	trivalent influenza vaccine*.mp.	629
7	TIV.mp.	759
8	fluad*.mp.	70
9	fluarix tetra*.mp.	3
10	flucelvax tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	1
11	influvac tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	0



12	vaxigrip tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2
13	QIV.mp.	100
14	quadrivalent influenza vaccine*.mp.	150
15	fluenz tetra*.mp.	2
16	LAIV.mp.	505
17	live-attenuated influenza vaccine*.mp.	679
18	Influenza Vaccines/ or influenza vaccine*.mp.	24377
19	fluarix quadrivalent*.mp.	4
20	flublok quadrivalent*.mp.	2
21	flulaval quadrivalent*.mp.	1
22	fluzone quadrivalent*.mp.	4
23	fluzone*.mp.	74
24	QIVc*.mp.	5
25	flucelvax*.mp.	4
26	flumist.mp.	95
27	Influenza Vaccines/ or influenza vaccine*.mp.	24377
28	quadrivalent inactivated vaccine*.mp.	8
29	aTIV.mp.	27
30	adjuvanted trivalent inactivated *.mp.	0
31	adjuvanted trivalent inactivated influenza vaccine*.mp.	11
32	Vaccines, Inactivated/	5141
33	high dose trivalent inactivated influenza vaccine*.mp.	14
34	HD TIV.mp.	2
35	vaccine*.mp.	295696
36	influenza*.mp.	126820
37	35 and 36	35447



38	Influenza Vaccines/ or influenza vaccine*.mp.	24377
39	or/1-34	28260
40	35 or 36 or 38 or 39	387354
41	vaccination*.mp. or vaccination/	162166
42	immunization*.mp. or immunization/	150823
43	influenza vaccination*.mp. or influenza vaccination/	8098
44	influenza*.mp. or influenza/	126820
45	flu*.mp.	1938975
46	seasonal influenza*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4394
47	41 or 42 or 43 or 44 or 45 or 46	2277879
48	((systematic or method* or rapid or integrative) adj3 (review* or overview* or study or studies or search* or approach*)) or meta analy* or meta-analy* or metaanaly*).ti,ab,kw,kf.	745935
49	Cochrane.jw.	14338
50	Pregnancy Complications, Infectious/ or pregnant*.mp. or Pregnant Women/ or Pregnancy/ or Pregnancy Complications/	883792
51	Pregnancy/ or pregnancy.mp.	927558
52	Pregnancy Complications, Cardiovascular/ or Pregnancy, High-Risk/ or pregnancy high risk*.mp.	20332
53	50 or 51 or 52	949289
54	40 and 47 and 53	9141
55	48 and 54	354
56	49 and 54	15
57	55 or 56	357
58	limit 57 to (yr="2008 - 2019" and (danish or english or norwegian or swedish))	295

## Embase (150719)

Database(s): **Embase** 1996 to 2019 Week 28

Search Strategy:

#	Searches	Results
1	afluria*.mp.	142
2	agrippal*.mp.	126
3	influvac*.mp.	275
4	preflucel*.mp.	23
5	vaxigrip*.mp.	471
6	trivalent influenza vaccine*.mp.	676
7	TIV.mp.	996
8	fluad*.mp.	320
9	fluarix tetra*.mp.	16
10	flucelvax tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	2
11	influvac tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	0
12	vaxigrip tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	4
13	QIV.mp.	141
14	quadrivalent influenza vaccine*.mp.	202
15	fluenz tetra*.mp.	20
16	LAIV.mp.	581
17	live-attenuated influenza vaccine*.mp.	755



18	Influenza Vaccines/ or influenza vaccine*.mp.	32544
19	fluarix quadrivalent*.mp.	16
20	flublok quadrivalent*.mp.	5
21	flulaval quadrivalent*.mp.	15
22	fluzone quadrivalent*.mp.	12
23	fluzone*.mp.	614
24	QIVc*.mp.	9
25	flucelvax*.mp.	73
26	flumist.mp.	663
27	Influenza Vaccines/ or influenza vaccine*.mp.	32544
28	quadrivalent inactivated vaccine*.mp.	12
29	aTIV.mp.	28
30	adjuvanted trivalent inactivated influenza vaccine*.mp.	9
31	Vaccines, Inactivated/	4167
32	high dose trivalent inactivated influenza vaccine*.mp.	16
33	HD TIV.mp.	4
34	vaccine*.mp.	301883
35	influenza*.mp.	136166
36	35 and "36".mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	3654
37	Influenza Vaccines/ or influenza vaccine*.mp.	32544
38	or/1-34	302331
39	35 or 36 or 38 or "39".mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	806130
40	vaccination*.mp. or vaccination/	174623
41	immunization*.mp. or immunization/	121497
42	influenza vaccination*.mp. or influenza vaccination/	17919



43	influenza*.mp. or influenza/	136166
44	flu*.mp.	2052231
45	seasonal influenza*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	7666
46	41 or 42 or 43 or 44 or 45 or "46".mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	2624030
47	((systematic or method* or rapid or integrative) adj3 (review* or overview* or study or studies or search* or approach*)) or meta analy* or meta-analy* or metaanaly*).ti,ab,kw.	1102484
48	Cochrane.jx.	20480
49	Pregnancy Complications, Infectious/ or pregnant*.mp. or Pregnant Women/ or Pregnancy/ or Pregnancy Complications/	440080
50	Pregnancy/ or pregnancy.mp.	558726
51	Pregnancy Complications, Cardiovascular/ or Pregnancy, High-Risk/ or pregnancy high risk*.mp.	33846
52	49 or 50 or 51	603963
53	39 and 46 and 52	9887
54	47 and 53	760
55	48 and 53	22
56	54 or 55	762
57	limit 56 to ((danish or english or norwegian or swedish) and yr="2008 - 2019")	677

**PICO 4 = PICO 1**

**PICO 5 = PICO 1**

**PICO 6**

**Medline (160719)**





Database(s): **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R)** 1946 to July 16, 2019

Search Strategy:

#	Searches	Results
1	afluria*.mp.	15
2	agrippal*.mp.	27
3	influvac*.mp.	31
4	preflucel*.mp.	1
5	vaxigrip*.mp.	97
6	trivalent influenza vaccine*.mp.	629
7	TIV.mp.	759
8	fluad*.mp.	70
9	fluarix tetra*.mp.	3
10	flucelvax tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	1
11	influvac tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	0
12	vaxigrip tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2
13	QIV.mp.	100
14	quadrivalent influenza vaccine*.mp.	151
15	fluenz tetra*.mp.	2
16	LAIV.mp.	506
17	live-attenuated influenza vaccine*.mp.	680
18	Influenza Vaccines/ or influenza vaccine*.mp.	24389



19	fluarix quadrivalent*.mp.	4
20	flublok quadrivalent*.mp.	2
21	flulaval quadrivalent*.mp.	1
22	fluzone quadrivalent*.mp.	4
23	fluzone*.mp.	75
24	QIVc*.mp.	5
25	flucelvax*.mp.	4
26	flumist.mp.	96
27	Influenza Vaccines/ or influenza vaccine*.mp.	24389
28	quadrivalent inactivated vaccine*.mp.	8
29	aTIV.mp.	27
30	adjuvanted trivalent inactivated *.mp.	0
31	adjuvanted trivalent inactivated influenza vaccine*.mp.	11
32	Vaccines, Inactivated/	5142
33	high dose trivalent inactivated influenza vaccine*.mp.	14
34	HD TIV.mp.	2
35	vaccine*.mp.	295846
36	influenza*.mp.	126866
37	Influenza Vaccines/ or influenza vaccine*.mp.	24389
38	or/1-37	387534
39	vaccination*.mp. or vaccination/	162263
40	immunization*.mp. or immunization/	150859
41	influenza vaccination*.mp. or influenza vaccination/	8101
42	influenza*.mp. or influenza/	126866
43	flu*.mp.	1939740
44	Cochrane.jw.	14340
45	(child* or Child Health or Child or children* or (Infant Health or infant* or Infant) or (Child, Pre-school or preschool child*) or (Adolescent or adolescent*)).ti,ab,kw,kf.	1764777



46	(vaccination* or vaccination or (immunization* or immunization) or (influenza vaccination* or influenza vaccination) or (influenza* or influenza) or flu* or seasonal influenza*).ti,ab,kw,kf.	1760875
47	((systematic adj3 (review* or study or studies or search*)) or meta analy* or meta-analy* or metaanaly*).ti,ab,kw.	269073
48	child*.mp. or Child/	2336356
49	children*.mp.	1014118
50	Child, Preschool/ or preschool child*.mp.	886621
51	Adolescent/ or adolescent*.mp.	2004219
52	limit 51 to ("preschool child (2 to 5 years)" or "child (6 to 12 years)" or "adolescent (13 to 18 years)")	1951818
53	48 or 49 or 50 or 51 or 52	3365826
54	(child* or Child or children* or (Child, Preschool or preschool child*) or (Adolescent or adolescent*) or 52).ti,ab,kw,kf.	2918520
55	38 and 46 and 54	53506
56	47 and 55	819
57	limit 56 to yr="2008 - 2019"	701
58	limit 57 to (danish or english or norwegian or swedish)	675
59	44 and 56	36
60	limit 59 to yr="2008 - 2019"	20
61	58 or 60	675
62	44 and 55	105
63	limit 62 to yr="2008 - 2019"	73
64	61 or 63	728

**Embase (170719)**Database(s): **Embase** 1996 to 2019 Week 28

Search Strategy:

#	Searches	Results
1	afluria*.mp.	142



2	agrippal*.mp.	126
3	influvac*.mp.	275
4	preflucel*.mp.	23
5	vaxigrip*.mp.	471
6	trivalent influenza vaccine*.mp.	676
7	TIV.mp.	996
8	fluad*.mp.	320
9	fluarix tetra*.mp.	16
10	flucelvax tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	2
11	influvac tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	0
12	vaxigrip tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	4
13	QIV.mp.	141
14	quadrivalent influenza vaccine*.mp.	202
15	fluenz tetra*.mp.	20
16	LAIV.mp.	581
17	live-attenuated influenza vaccine*.mp.	755
18	Influenza Vaccines/ or influenza vaccine*.mp.	32544
19	fluarix quadrivalent*.mp.	16
20	flublok quadrivalent*.mp.	5
21	flulaval quadrivalent*.mp.	15
22	fluzone quadrivalent*.mp.	12
23	fluzone*.mp.	614
24	QIVc*.mp.	9
25	flucelvax*.mp.	73



26	flumist.mp.	663
27	Influenza Vaccines/ or influenza vaccine*.mp.	32544
28	quadrivalent inactivated vaccine*.mp.	12
29	aTIV.mp.	28
30	adjuvanted trivalent inactivated *.mp.	0
31	adjuvanted trivalent inactivated influenza vaccine*.mp.	9
32	Vaccines, Inactivated/	4167
33	high dose trivalent inactivated influenza vaccine*.mp.	16
34	HD TIV.mp.	4
35	vaccine*.mp.	301883
36	influenza*.mp.	136166
37	Influenza Vaccines/ or influenza vaccine*.mp.	32544
38	or/1-37	389942
39	vaccination*.mp. or vaccination/	174623
40	immunization*.mp. or immunization/	121497
41	influenza vaccination*.mp. or influenza vaccination/	17919
42	influenza*.mp. or influenza/	136166
43	flu*.mp.	2052231
44	Cochrane.jw.	20480
45	((systematic adj3 (review* or study or studies or search*)) or meta analy* or meta-analy* or metaa-naly*).ti,ab,kw.	337834
46	child*.mp. or Child/	1884433
47	children*.mp.	1006502
48	Child, Preschool/ or preschool child*.mp.	354290
49	Adolescent/ or adolescent*.mp.	1159928
50	(vaccination* or vaccination or (immunization* or immunization) or (influenza vaccination* or influ-enza vaccination) or (influenza* or influenza) or flu* or seasonal influenza*).ti,ab,kw.	1674983
51	46 or 47 or 48 or 49	2399129



52	(child* or Child or children* or (Child, Preschool or preschool child*) or (Adolescent or adolescent*)),ti,ab,kw.	1440150
53	38 and 50	212502
54	limit 53 to (preschool child <1 to 6 years> or school child <7 to 12 years> or adolescent <13 to 17 years>)	26905
55	52 and 53	38968
56	54 or 55	49599
57	45 and 56	925
58	44 and 56	121
59	57 or 58	1011
60	limit 59 to ((danish or english or norwegian or swedish) and yr="2008 - 2019")	827

**PICO 7**

Medline (170719)

Database(s): Ovid MEDLINE(R) and Epub Ahead of Print, In-Process &amp; Other Non-Indexed Citations, Daily and Versions(R) 1946 to July 16, 2019

Search Strategy:

#	Searches	Results
1	afluria*.mp.	15
2	agrippal*.mp.	27
3	influvac*.mp.	31
4	preflucel*.mp.	1
5	vaxigrip*.mp.	97
6	trivalent influenza vaccine*.mp.	629
7	TIV.mp.	759
8	fluad*.mp.	70
9	fluarix tetra*.mp.	3
10	flucelvax tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word,	1



	protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	
11	influvac tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	0
12	vaxigrip tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2
13	QIV.mp.	100
14	quadrivalent influenza vaccine*.mp.	151
15	fluenz tetra*.mp.	2
16	LAIV.mp.	506
17	live-attenuated influenza vaccine*.mp.	680
18	Influenza Vaccines/ or influenza vaccine*.mp.	24389
19	fluarix quadrivalent*.mp.	4
20	flublok quadrivalent*.mp.	2
21	flulaval quadrivalent*.mp.	1
22	fluzone quadrivalent*.mp.	4
23	fluzone*.mp.	75
24	QIVc*.mp.	5
25	flucelvax*.mp.	4
26	flumist.mp.	96
27	Influenza Vaccines/ or influenza vaccine*.mp.	24389
28	quadrivalent inactivated vaccine*.mp.	8
29	aTIV.mp.	27
30	adjuvanted trivalent inactivated *.mp.	0
31	adjuvanted trivalent inactivated influenza vaccine*.mp.	11
32	Vaccines, Inactivated/	5142



33	high dose trivalent inactivated influenza vaccine*.mp.	14
34	HD TIV.mp.	2
35	vaccine*.mp.	295846
36	influenza*.mp.	126866
37	Influenza Vaccines/ or influenza vaccine*.mp.	24389
38	or/1-37	387534
39	vaccination*.mp. or vaccination/	162263
40	immunization*.mp. or immunization/	150859
41	influenza vaccination*.mp. or influenza vaccination/	8101
42	influenza*.mp. or influenza/	126866
43	flu*.mp.	1939740
44	Cochrane.jw.	14340
45	(vaccination* or vaccination or (immunization* or immunization) or (influenza vaccination* or influenza vaccination) or (influenza* or influenza) or flu* or seasonal influenza*).ti,ab,kw,kf.	1760875
46	((systematic adj3 (review* or study or studies or search*)) or meta analy* or meta-analy* or metaanaly*).ti,ab,kw.	269073
47	Infant/ or infant*.mp.	1221565
48	38 and 45	225434
49	limit 48 to ("all infant (birth to 23 months)" or "newborn infant (birth to 1 month)" or "infant (1 to 23 months)")	31056
50	47 and 48	34804
51	49 or 50	34804
52	46 and 51	428
53	limit 52 to (yr="2008 - 2019" and (danish or english or norwegian or swedish))	345
54	38 and 44 and 45 and 47	53
55	limit 54 to yr="2008 - 2019"	43
56	53 or 55	374

**Embase (170719)**



Database(s): **Embase** 1996 to 2019 Week 28

Search Strategy:

#	Searches	Results
1	afluria*.mp.	142
2	agrippal*.mp.	126
3	influvac*.mp.	275
4	preflucel*.mp.	23
5	vaxigrip*.mp.	471
6	trivalent influenza vaccine*.mp.	676
7	TIV.mp.	996
8	fluad*.mp.	320
9	fluarix tetra*.mp.	16
10	flucelvax tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	2
11	influvac tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	0
12	vaxigrip tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	4
13	QIV.mp.	141
14	quadrivalent influenza vaccine*.mp.	202
15	fluenz tetra*.mp.	20
16	LAIV.mp.	581
17	live-attenuated influenza vaccine*.mp.	755
18	Influenza Vaccines/ or influenza vaccine*.mp.	32544
19	fluarix quadrivalent*.mp.	16
20	flublok quadrivalent*.mp.	5



21	flulaval quadrivalent*.mp.	15
22	fluzone quadrivalent*.mp.	12
23	fluzone*.mp.	614
24	QIVc*.mp.	9
25	flucelvax*.mp.	73
26	flumist.mp.	663
27	Influenza Vaccines/ or influenza vaccine*.mp.	32544
28	quadrivalent inactivated vaccine*.mp.	12
29	aTIV.mp.	28
30	adjuvanted trivalent inactivated *.mp.	0
31	adjuvanted trivalent inactivated influenza vaccine*.mp.	9
32	Vaccines, Inactivated/	4167
33	high dose trivalent inactivated influenza vaccine*.mp.	16
34	HD TIV.mp.	4
35	vaccine*.mp.	301883
36	influenza*.mp.	136166
37	Influenza Vaccines/ or influenza vaccine*.mp.	32544
38	or/1-37	389942
39	vaccination*.mp. or vaccination/	174623
40	immunization*.mp. or immunization/	121497
41	influenza vaccination*.mp. or influenza vaccination/	17919
42	influenza*.mp. or influenza/	136166
43	flu*.mp.	2052231
44	Cochrane.jx.	20480
45	(vaccination* or vaccination or (immunization* or immunization) or (influenza vaccination* or influenza vaccination) or (influenza* or influenza) or flu* or seasonal influenza*).ti,ab,kw.	1674983
46	((systematic adj3 (review* or study or studies or search*)) or meta analy* or meta-analy* or metaanalysis*).ti,ab,kw.	337834
47	Infant/ or infant*.mp.	575957



48	38 and 45	212502
49	47 and 48	22120
50	38 and 44 and 45 and 47	47
51	limit 50 to yr="2008 - 2019"	37
52	38 and 45 and 46	2727
53	limit 52 to (infant or child )	360
54	47 and 52	302
55	53 or 54	553
56	limit 55 to yr="2008 - 2019"	477
57	51 or 56	506
58	limit 57 to (danish or english or norwegian or swedish)	480

## PICO 8

### Medline (160719)

Database(s): **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R)** 1946 to July 15, 2019

Search Strategy:

#	Searches	Results
1	afluria*.mp.	15
2	agrippal*.mp.	27
3	influvac*.mp.	31
4	preflucel*.mp.	1
5	vaxigrip*.mp.	97
6	trivalent influenza vaccine*.mp.	629
7	TIV.mp.	759
8	fluad*.mp.	70
9	fluarix tetra*.mp.	3



10	flucelvax tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	1
11	influvac tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	0
12	vaxigrip tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2
13	QIV.mp.	100
14	quadrivalent influenza vaccine*.mp.	150
15	fluenz tetra*.mp.	2
16	LAIV.mp.	505
17	live-attenuated influenza vaccine*.mp.	679
18	Influenza Vaccines/ or influenza vaccine*.mp.	24377
19	fluarix quadrivalent*.mp.	4
20	flublok quadrivalent*.mp.	2
21	flulaval quadrivalent*.mp.	1
22	fluzone quadrivalent*.mp.	4
23	fluzone*.mp.	74
24	QIVc*.mp.	5
25	flucelvax*.mp.	4
26	flumist.mp.	95
27	Influenza Vaccines/ or influenza vaccine*.mp.	24377
28	quadrivalent inactivated vaccine*.mp.	8
29	aTIV.mp.	27
30	adjuvanted trivalent inactivated *.mp.	0



31	adjuvanted trivalent inactivated influenza vaccine*.mp.	11
32	Vaccines, Inactivated/	5141
33	high dose trivalent inactivated influenza vaccine*.mp.	14
34	HD TIV.mp.	2
35	vaccine*.mp.	295696
36	influenza*.mp.	126820
37	35 and 36	35447
38	Influenza Vaccines/ or influenza vaccine*.mp.	24377
39	or/1-34	28260
40	35 or 36 or 38 or 39	387354
41	vaccination*.mp. or vaccination/	162166
42	immunization*.mp. or immunization/	150823
43	influenza vaccination*.mp. or influenza vaccination/	8098
44	influenza*.mp. or influenza/	126820
45	flu*.mp.	1938975
46	seasonal influenza*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4394
47	41 or 42 or 43 or 44 or 45 or 46	2277879
48	((((systematic or method* or rapid or integrative) adj3 (review* or overview* or study or studies or search* or approach*)) or meta analy* or meta-analy* or metaanaly*).ti,ab,kw,kf.	745935
49	Cochrane.jw.	14338
50	Health Personnel/ or health care worker*.mp. or "Attitude of Health Personnel"/	158093
51	Primary Health Care/ or health care provider*.mp.	103876
52	Social Workers/ or social worker*.mp.	9487
53	nurse*.mp. or Nurse-Patient Relations/	343755
54	Physician-Nurse Relations/ or physician*.mp. or Physician Assistants/ or Physician-Patient Relations/	540661



55	General Practitioners/ or practioner*.mp.	7418
56	Nurse Practitioners/ or nurse practioner*.mp.	17111
57	50 or 51 or 52 or 53 or 54 or 55 or 56	1011902
58	40 and 47 and 48 and 57	588
59	47 and 49 and 58	9
60	58 or 59	588
61	limit 60 to yr="2008 - 2019"	477
62	limit 61 to (danish or english or norwegian or swedish)	442

## Embase (160719)

Database(s): **Embase** 1996 to 2019 Week 28

Search Strategy:

#	Searches	Results
1	afluria*.mp.	142
2	agrippal*.mp.	126
3	influvac*.mp.	275
4	preflucel*.mp.	23
5	vaxigrip*.mp.	471
6	trivalent influenza vaccine*.mp.	676
7	TIV.mp.	996
8	fluad*.mp.	320
9	fluarix tetra*.mp.	16
10	flucelvax tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	2
11	influvac tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	0



12	vaxigrip tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	4
13	QIV.mp.	141
14	quadrivalent influenza vaccine*.mp.	202
15	fluenz tetra*.mp.	20
16	LAIV.mp.	581
17	live-attenuated influenza vaccine*.mp.	755
18	Influenza Vaccines/ or influenza vaccine*.mp.	32544
19	fluarix quadrivalent*.mp.	16
20	flublok quadrivalent*.mp.	5
21	flulaval quadrivalent*.mp.	15
22	fluzone quadrivalent*.mp.	12
23	fluzone*.mp.	614
24	QIVc*.mp.	9
25	flucelvax*.mp.	73
26	flumist.mp.	663
27	Influenza Vaccines/ or influenza vaccine*.mp.	32544
28	quadrivalent inactivated vaccine*.mp.	12
29	aTIV.mp.	28
30	adjuvanted trivalent inactivated influenza vaccine*.mp.	9
31	Vaccines, Inactivated/	4167
32	high dose trivalent inactivated influenza vaccine*.mp.	16
33	HD TIV.mp.	4
34	vaccine*.mp.	301883
35	influenza*.mp.	136166
36	Influenza Vaccines/ or influenza vaccine*.mp.	32544
37	vaccination*.mp. or vaccination/	174623
38	immunization*.mp. or immunization/	121497



39	influenza vaccination*.mp. or influenza vaccination/	17919
40	influenza*.mp. or influenza/	136166
41	flu*.mp.	2052231
42	seasonal influenza*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	7666
43	((systematic or method* or rapid or integrative) adj3 (review* or overview* or study or studies or search* or approach*)) or meta analy* or meta-analy* or metaanaly*).ti,ab,kw.	1102484
44	Cochrane.jx.	20480
45	Health Personnel/ or health care worker*.mp. or "Attitude of Health Personnel"/	160210
46	Primary Health Care/ or health care provider*.mp.	84809
47	Social Workers/ or social worker*.mp.	14301
48	nurse*.mp. or Nurse-Patient Relations/	306985
49	Physician-Nurse Relations/ or physician*.mp. or Physician Assistants/ or Physician-Patient Relations/	622600
50	General Practitioners/ or practioner*.mp.	77595
51	Nurse Practitioners/ or nurse practioner*.mp.	14857
52	or/1-37	427160
53	37 or 38 or 39 or 40 or 41 or 42	2357497
54	45 or 46 or 47 or 48 or 49 or 50 or 51	1076996
55	52 and 53 and 54	20895
56	43 and 55	1417
57	44 and 55	22
58	56 or 57	1422
59	limit 58 to yr="2008 - 2019"	1201
60	limit 59 to (danish or english or norwegian or swedish)	1153





Supplerende søgeprotokol primær litteratur

<b>Projekttitel/aspekt</b>	<b>MTV for influenza vaccine – søgning på PICOs – primær litteratur</b>
<b>Kontakt /projektleder</b>	Katrine Finderup Nielsen Vibe Cecilie Ballegaard Henriette Callesen
<b>Søgespecialist</b>	Birgitte Holm Petersen
<b>Senest opdateret</b>	1. oktober 2019

<b>Baggrund</b>	<p>Fokuserede spørgsmål – MTV for influenzavaccination</p> <p>PICO 1: Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner? Population: ældre på 65 år eller derover.</p> <p>PICO 2: Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner? Population: øvrige risikogrupper, kroniske syge</p> <p>PICO 3: Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner? Population: Gravide</p> <p>PICO 4: Hvad er effekten af vaccination med en 3-valent adjuveret influenzavaccine sammenlignet med andre inaktiverede influenzavacciner? Population: ældre på 65 år eller derover.</p> <p>PICO 5: Hvad er effekten af vaccination med en high-dose influenza vaccine sammenlignet med andre inaktiverede influenzavacciner? Population: ældre på 65 år eller derover.</p> <p>PICO 6: Hvad er effekten af vaccination med en levende svækket influenzavaccine til raske børn over 2 år?</p> <p>PICO 7: Hvad er effekten af vaccination med en inaktiveret influenza vaccine til raske børn under 2 år?</p> <p>PICO 8: Hvad er effekten af influenzavaccination af sundhedspersonale?</p>
<b>Søgetermer</b>	Se søgestrategien for hvert PICO

<b>Inklusions- og eksklusionskriterier</b>	Sprog: dansk, engelsk, norsk og svensk År: angivet søgestrategien for hvert PICO Population: angivet i søgestrategien for hvert PICO Publikationstyper: (RCT, cohort, observationelle studier)
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#### Informationskilder

DATABASER	INTERFACE	FUND	DATO FOR SØGNING
Medline	OVID		5.til 30.september 2019
Embase	OVID		5.til 30.september 2019
Clinical Trials. Gov.	Internettet		5.til 30.september 2019

#### Note:

- Søgetermer og inklusions- og eksklusionskriterier er tilpasset de enkelte databaser.
- Dubletter er så vidt muligt frasorteret ved hjælp af RefWorks.
- Referencerne overføres til Covidence, hvor fuldteksterne lægges på.
- Søgestrategi for hver enkelt database præsenteres – hvis muligt vises det eksplicit hvor mange referencer den enkelte søgestreng genererer

#### Søgestrategi

##### PICO 1 primær (aged)

Clinical trials.gov (050919)

177 Studies found for: **vaccines,vaccination,elderly** | **Completed Studies** | **Studies With Results** | **Influenza** | **Older Adult**

Also searched for **Older adult**, **Vaccination**, **Vaccines** and more. [See Search Details](#)

Terms	Search Results*	Entire Database**
Synonyms		
<b>vaccines,vaccination,elderly</b>	--	0 studies
<b>elderly</b>	177 studies	244,893 studies
older adult	177 studies	240,375 studies
Aged	79 studies	8,426 studies
Geriatrics	3 studies	1,998 studies
Senescence	1 studies	102 studies
Advanced age	--	108 studies



Terms	Search Results*	Entire Database**
Synonyms		
Old age	--	221 studies
Senior Citizen	--	24 studies
<b>vaccination</b>	177 studies	8,764 studies
vaccines	177 studies	8,066 studies
Immunization	20 studies	1,860 studies
inoculations	--	203 studies
VACCIN	--	33 studies
<b>vaccines</b>	177 studies	8,764 studies
Vaccination	163 studies	5,360 studies
Immunization	20 studies	1,860 studies
inoculations	--	203 studies
VACCIN	--	33 studies
<b>Influenza</b>	177 studies	2,220 studies
Fluzone	21 studies	74 studies
Fluarix	21 studies	47 studies
Flu	17 studies	376 studies
Fluviral	5 studies	15 studies
fluvirin	2 studies	4 studies
flumist	1 studies	44 studies
Agriflu	--	1 studies
Flucelvax	--	3 studies
FluLaval	--	4 studies
flus	--	1 studies
flushield	--	1 studies
Grippe	--	77 studies



-- No studies found  
\* Number of studies in the search results containing the term or synonym  
\*\* Number of studies in the entire database containing the term or synonym

**Medline (060919)**

Database(s): **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R)** 1946 to September 05, 2019

Search Strategy:

#	Searches	Results
1	afluria*.mp.	16
2	agrippal*.mp.	27
3	influvac*.mp.	31
4	preflucel*.mp.	1
5	vaxigrip*.mp.	98
6	trivalent influenza vaccine*.mp.	636
7	TIV.mp.	764
8	fluad*.mp.	71
9	fluarix tetra*.mp.	3
10	flucelvax tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2
11	influvac tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	0



12	vaxigrip tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2
13	quadrivalent influenza vaccine*.mp.	158
14	fluenz tetra*.mp.	2
15	LAIV.mp.	514
16	live-attenuated influenza vaccine*.mp.	693
17	QIV*.mp.	158
18	fluarix quadrivalent*.mp.	4
19	flublok quadrivalent*.mp.	2
20	flulaval quadrivalent*.mp.	1
21	fluzone*.mp.	78
22	flucelvax*.mp.	7
23	flumist*.mp.	96
24	quadrivalent inactivated vaccine*.mp.	9
25	Vaccines, Inactivated/	5168
26	aTIV.mp.	27
27	adjuvanted trivalent inactivated influenza vaccine*.mp.	11
28	adjuvanted trivalent vaccine*.mp.	6
29	high dose trivalent inactivated influenza vaccine*.mp.	14
30	Influenza Vaccines/ or influenza vaccine*.mp.	24551
31	or/1-30	28504
32	vaccination*.mp. or Vaccination/	163369
33	Immunization/ or immunization*.mp.	151461
34	influenza vaccination*.mp.	8198
35	vaccination*.mp. or Vaccination/	163369



36	flu*.mp.	1951582
37	seasonal influenza*.mp.	4448
38	seasonal flu*.mp.	2066
39	"Aged, 80 and over"/ or Aged/ or aged*.mp.	5139132
40	elderly.mp.	243736
41	32 or 33 or 34 or 35 or 36 or 37 or 38	2207349
42	39 or 40	5187033
43	31 and 41 and 42	7566
44	Randomized Controlled Trials as Topic/ or RCT*.mp.	153140
45	randomized controlled trial*.mp.	661802
46	((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj3 (trial*1 or study or studies or analy*)) or rct).ti,ab,kw,kf.	627999
47	((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*)).ti,ab,kw,kf.	1534186
48	(cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent*).ti,ab,kw,kf.	2734359
49	44 or 45 or 46 or 47 or 48	3558393
50	43 and 49	2780
51	limit 50 to yr="2014 - 2019"	1018
52	51 not child*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	701



Database(s): **Embase** 1996 to 2019 Week 35

Search Strategy:

#	Searches	Results
1	afluria*.mp.	143
2	agrippal*.mp.	128
3	influvac*.mp.	277
4	preflucel*.mp.	23
5	vaxigrip*.mp.	473
6	trivalent influenza vaccine*.mp.	687
7	TIV.mp.	1011
8	fluad*.mp.	323
9	fluarix tetra*.mp.	16
10	flucelvax tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	3
11	influvac tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	0
12	vaxigrip tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	4
13	quadrivalent influenza vaccine*.mp.	210
14	fluenz tetra*.mp.	20
15	LAIV.mp.	596
16	live-attenuated influenza vaccine*.mp.	772
17	QIV*.mp.	244
18	fluarix quadrivalent*.mp.	18



19	flublok quadrivalent*.mp.	5
20	flulaval quadrivalent*.mp.	16
21	fluzone*.mp.	623
22	flucelvax*.mp.	77
23	flumist*.mp.	664
24	quadrivalent inactivated vaccine*.mp.	12
25	Vaccines, Inactivated/	4205
26	aTIV.mp.	29
27	adjuvanted trivalent inactivated influenza vaccine*.mp.	10
28	adjuvanted trivalent vaccine*.mp.	5
29	high dose trivalent inactivated influenza vaccine*.mp.	16
30	Influenza Vaccines/ or influenza vaccine*.mp.	32918
31	or/1-30	36366
32	vaccination*.mp. or Vaccination/	176937
33	Immunization/ or immunization*.mp.	122865
34	influenza vaccination*.mp.	18163
35	vaccination*.mp. or Vaccination/	176937
36	flu*.mp.	2078159
37	seasonal influenza*.mp.	7770
38	seasonal flu*.mp.	1978
39	"Aged, 80 and over"/ or Aged/ or aged*.mp.	3358813
40	elderly.mp.	445879
41	32 or 33 or 34 or 35 or 36 or 37 or 38	2312834
42	39 or 40	3422813
43	31 and 41 and 42	7153
44	Randomized Controlled Trials as Topic/ or RCT*.mp.	154931





45	randomized controlled trial*.mp.	726684
46	((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj3 (trial*1 or study or studies or analy*)) or rct).ti,ab,kw.	782444
47	((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*)).ti,ab,kw.	2040214
48	(cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent*).ti,ab,kw.	3743215
49	44 or 45 or 46 or 47 or 48	4620132
50	43 and 49	2740
51	limit 50 to yr="2014 - 2019"	1243
52	51 not child*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	849

**PICO 2 primær (Chronic)**

Clinical trials.gov (090919)

54 Studies found for: **vaccine, chronic** | **Completed Studies** | **Studies With Results** | **Influenza**Applied Filters: ☒ **Completed** ☒ **With Results**

Terms and Synonyms Searched:

Terms	Search Results*	Entire Database**
Synonyms		
<b>vaccine, chronic</b>	--	2 studies
<b>chronic</b>	54 studies	34,226 studies
<b>vaccine</b>	54 studies	8,769 studies
Vaccination	49 studies	5,365 studies



Terms	Search Results*	Entire Database**
Synonyms		
Immunization	5 studies	1,861 studies
inoculations	--	203 studies
VACCIN	--	33 studies
<b>Influenza</b>	54 studies	2,222 studies
flumist	10 studies	44 studies
Fluarix	4 studies	47 studies
Flu	4 studies	378 studies
Fluzone	2 studies	74 studies
Agriflu	1 studies	1 studies
fluvirin	1 studies	4 studies
Flucelvax	--	3 studies
FluLaval	--	4 studies
flus	--	1 studies
flushield	--	1 studies
Fluviral	--	15 studies
Grippe	--	77 studies

**Medline (090919)**

Database(s): **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R)** 1946 to September 06, 2019

Search Strategy:

#	Searches	Results
1	afluria*.mp.	16
2	agrippal*.mp.	27
3	influvac*.mp.	31



4	preflucel*.mp.	1
5	vaxigrip*.mp.	98
6	trivalent influenza vaccine*.mp.	636
7	TIV.mp.	764
8	fluad*.mp.	71
9	fluarix tetra*.mp.	3
10	flucelvax tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2
11	influvac tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	0
12	vaxigrip tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2
13	quadrivalent influenza vaccine*.mp.	158
14	fluenz tetra*.mp.	2
15	LAIV.mp.	514
16	live-attenuated influenza vaccine*.mp.	693
17	QIV*.mp.	158
18	fluarix quadrivalent*.mp.	4
19	flublok quadrivalent*.mp.	2
20	flulaval quadrivalent*.mp.	1
21	fluzone*.mp.	78
22	flucelvax*.mp.	7



23	flumist*.mp.	96
24	quadrivalent inactivated vaccine*.mp.	9
25	Vaccines, Inactivated/	5168
26	aTIV.mp.	27
27	adjuvanted trivalent inactivated influenza vaccine*.mp.	11
28	adjuvanted trivalent vaccine*.mp.	6
29	high dose trivalent inactivated influenza vaccine*.mp.	14
30	Influenza Vaccines/ or influenza vaccine*.mp.	24557
31	or/1-30	28510
32	vaccination*.mp. or Vaccination/	163413
33	Immunization/ or immunization*.mp.	151485
34	influenza vaccination*.mp.	8201
35	vaccination*.mp. or Vaccination/	163413
36	flu*.mp.	1952048
37	seasonal influenza*.mp.	4450
38	seasonal flu*.mp.	2067
39	randomized controlled trial*.mp.	661979
40	((((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj3 (trial*1 or study or studies or analy*)) or rct).ti,ab,kw,kf.	628259
41	randomized controlled trial/ or RCT*.mp.	527533
42	((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*)).ti,ab,kw,kf.	1534906
43	Observational study/ or Multicenter study/ or Evaluation study/ or exp comparative study/ or intervention study/ or exp longitudinal study/ or prospective study/ or retrospective	3715697



	study/ or Follow up/ or validation study/ or cohort analysis/ or cross-sectional study/ or crossover procedure/ or double blind procedure/ or single blind procedure/	
44	(randomized controlled trial*or RCT* or observational study or observational stud* or cohort studies or cohort stud*).ti,ab,kw,kf.	278212
45	Chronic Disease/ or chronic disease*.mp.	302738
46	chronic illness*.mp.	15319
47	illness.mp.	479708
48	risk group*.mp.	40235
49	immunocompromising*.mp.	324
50	immunocompromised*.mp.	43435
51	Acquired Immunodeficiency Syndrome/ or immunodeficiency*.mp.	196538
52	Heart Diseases/ or cardiac disease*.mp.	82824
53	Diabetes Mellitus/ or diabetes*.mp.	587320
54	Respiratory Tract Diseases/ or chronic respiratory condition*.mp.	21882
55	Lung Diseases, Obstructive/ or Pulmonary Disease, Chronic Obstructive/ or chronic obstructive pulmonary disease*.mp.	71701
56	COPD.mp. or Pulmonary Disease, Chronic Obstructive/	53296
57	asthma.mp. or Asthma/	169021
58	Nervous System Diseases/ or chronic neurologic condition*.mp.	42595
59	Autoimmune Diseases/ or autoimmune disease*.mp.	94891
60	Liver Diseases/ or chronic liver disease*.mp.	80841
61	Liver Diseases/ or liver disease*.mp.	147002
62	cancer.mp. or Neoplasms/	1806951
63	or/45-62	3801965
64	39 or 40 or 41 or 42 or 43 or 44	4710645
65	or/32-38	2207866
66	31 and 63 and 64 and 65	1623



67	limit 66 to yr="2008 - 2019"	1044
68	45 or 46 or 47 or 48 or 49 or 50 or 51 or 52 or 53 or 54 or 55 or 56 or 57 or 58 or 59 or 60 or 61 or 62	3801965
69	(Chronic Disease or chronic disease* or chronic illness* or illness or risk group* or immunocompromising* or immunocompromised* or (Acquired Immunodeficiency Syndrome or immunodeficiency*) or (Heart Diseases or cardiac disease*) or (Diabetes Mellitus or diabetes*) or (Respiratory Tract Diseases or chronic respiratory condition*) or (Lung Diseases, Obstructive or Pulmonary Disease, Chronic Obstructive or chronic obstructive pulmonary disease*) or (COPD or Pulmonary Disease, Chronic Obstructive) or (asthma or Asthma) or (Nervous System Diseases or chronic neurologic condition*) or (Autoimmune Diseases or autoimmune disease*) or (Liver Diseases or chronic liver disease*) or (Liver Diseases or liver disease*) or (cancer or Neoplasms)).ti,ab,kw,kf.	2997852
70	31 and 64 and 65 and 69	1457
71	limit 70 to (yr="2014 - 2019" and (danish or english or norwegian or swedish))	492

**Embase** (090919)Database(s): **Embase** 1996 to 2019 Week 36

Search Strategy:

#	Searches	Results
1	afluria*.mp.	144
2	agrippal*.mp.	129
3	influvac*.mp.	277
4	preflucel*.mp.	23
5	vaxigrip*.mp.	474
6	trivalent influenza vaccine*.mp.	690
7	TIV.mp.	1011
8	fluad*.mp.	323
9	fluarix tetra*.mp.	17



10	flucelvax tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	3
11	influvac tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	0
12	vaxigrip tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	4
13	quadrivalent influenza vaccine*.mp.	211
14	fluenz tetra*.mp.	20
15	LAIV.mp.	600
16	live-attenuated influenza vaccine*.mp.	777
17	QIV*.mp.	244
18	fluarix quadrivalent*.mp.	18
19	flublok quadrivalent*.mp.	5
20	flulaval quadrivalent*.mp.	16
21	fluzone*.mp.	627
22	flucelvax*.mp.	78
23	flumist*.mp.	668
24	quadrivalent inactivated vaccine*.mp.	12
25	Vaccines, Inactivated/	4213
26	aTIV.mp.	29
27	adjuvanted trivalent inactivated influenza vaccine*.mp.	10
28	adjuvanted trivalent vaccine*.mp.	5
29	high dose trivalent inactivated influenza vaccine*.mp.	16
30	Influenza Vaccines/ or influenza vaccine*.mp.	32983



31	or/1-30	36440
32	vaccination*.mp. or Vaccination/	177346
33	Immunization/ or immunization*.mp.	123058
34	influenza vaccination*.mp.	18218
35	vaccination*.mp. or Vaccination/	177346
36	flu*.mp.	2082470
37	seasonal influenza*.mp.	7800
38	seasonal flu*.mp.	1983
39	randomized controlled trial*.mp.	728717
40	((((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj3 (trial*1 or study or studies or analy*)) or rct).ti,ab,kw.	784465
41	randomized controlled trial/ or RCT*.mp.	574510
42	((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*)).ti,ab,kw.	2046486
43	Observational study/ or Multicenter study/ or Evaluation study/ or exp comparative study/ or intervention study/ or exp longitudinal study/ or prospective study/ or retrospective study/ or Follow up/ or validation study/ or cohort analysis/ or cross-sectional study/ or crossover procedure/ or double blind procedure/ or single blind procedure/	4104077
44	(randomized controlled trial*or RCT* or observational study or observational stud* or cohort studies or cohort stud*).ti,ab,kw.	416068
45	Chronic Disease/ or chronic disease*.mp.	177502
46	chronic illness*.mp.	19318
47	illness.mp.	301829
48	risk group*.mp.	57512
49	immunocompromising*.mp.	415
50	immunocompromised*.mp.	44090





51	Acquired Immunodeficiency Syndrome/ or immunodeficiency*.mp.	407228
52	Heart Diseases/ or cardiac disease*.mp.	28869
53	Diabetes Mellitus/ or diabetes*.mp.	875604
54	Respiratory Tract Diseases/ or chronic respiratory condition*.mp.	18152
55	Lung Diseases, Obstructive/ or Pulmonary Disease, Chronic Obstructive/ or chronic obstructive pulmonary disease*.mp.	99725
56	COPD.mp. or Pulmonary Disease, Chronic Obstructive/	90685
57	asthma.mp. or Asthma/	224564
58	Nervous System Diseases/ or chronic neurologic condition*.mp.	26467
59	Autoimmune Diseases/ or autoimmune disease*.mp.	120589
60	Liver Diseases/ or chronic liver disease*.mp.	40630
61	Liver Diseases/ or liver disease*.mp.	177345
62	cancer.mp. or Neoplasms/	2874430
63	39 or 40 or 41 or 42 or 43 or 44	5141508
64	or/32-38	2317611
65	(Chronic Disease or chronic disease* or chronic illness* or illness or risk group* or immunocompromising* or immunocompromised* or (Acquired Immunodeficiency Syndrome or immunodeficiency*) or (Heart Diseases or cardiac disease*) or (Diabetes Mellitus or diabetes*) or (Respiratory Tract Diseases or chronic respiratory condition*) or (Lung Diseases, Obstructive or Pulmonary Disease, Chronic Obstructive or chronic obstructive pulmonary disease*) or (COPD or Pulmonary Disease, Chronic Obstructive) or (asthma or Asthma) or (Nervous System Diseases or chronic neurologic condition*) or (Autoimmune Diseases or autoimmune disease*) or (Liver Diseases or chronic liver disease*) or (Liver Diseases or liver disease*) or (cancer or Neoplasms)).ti,ab,kw.	3652309
66	31 and 63 and 64 and 65	1935
67	limit 66 to ((danish or english or norwegian or swedish) and yr="2014 - 2019")	846

### **PICO 3 primær (Pregnant)**

**Clinical trials.gov** (090919)

11 Studies found for: **vaccine, pregnancy** | **Completed Studies** | **Studies With Results** | **Influenza**

Applied Filters: ☒ **Completed** ☒ **With Results**

Terms and Synonyms Searched:

Terms	Search Results*	Entire Database**
Synonyms		
<b>vaccine, pregnancy</b>	--	0 studies
<b>pregnancy</b>	11 studies	10,724 studies
Gestation	3 studies	1,813 studies
<b>vaccine</b>	11 studies	8,769 studies
Vaccination	11 studies	5,365 studies
Immunization	3 studies	1,861 studies
inoculations	--	203 studies
VACCIN	--	33 studies
<b>Influenza</b>	11 studies	2,222 studies
Flu	1 studies	378 studies
Agriflu	--	1 studies
Fluarix	--	47 studies
Flucelvax	--	3 studies
FluLaval	--	4 studies
flumist	--	44 studies
flus	--	1 studies



Terms	Search Results*	Entire Database**
Synonyms		
flushield	--	1 studies
Fluviral	--	15 studies
fluvirin	--	4 studies
Fluzone	--	74 studies
Grippe	--	77 studies

**Medline** (090919)

Database(s): **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R)** 1946 to September 06, 2019

Search Strategy:

#	Searches	Results
1	afluria*.mp.	16
2	agrippal*.mp.	27
3	influvac*.mp.	31
4	preflucel*.mp.	1
5	vaxigrip*.mp.	98
6	trivalent influenza vaccine*.mp.	636
7	TIV.mp.	764
8	fluad*.mp.	71
9	fluarix tetra*.mp.	3
10	flucelvax tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2



11	vaxigrip tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2
12	QIV*.mp.	158
13	quadrivalent influenza vaccine*.mp.	158
14	fluenz tetra*.mp.	2
15	LAIV.mp.	514
16	live-attenuated influenza vaccine*.mp.	693
17	Influenza Vaccines/ or influenza vaccine*.mp.	24557
18	fluarix quadrivalent*.mp.	4
19	flublok quadrivalent*.mp.	2
20	flulaval quadrivalent*.mp.	1
21	fluzone quadrivalent*.mp.	5
22	fluzone*.mp.	78
23	flucelvax*.mp.	7
24	flumist.mp.	96
25	Influenza Vaccines/ or influenza vaccine*.mp.	24557
26	quadrivalent inactivated vaccine*.mp.	9
27	aTIV.mp.	27
28	adjuvanted trivalent inactivated influenza vaccine*.mp.	11
29	Vaccines, Inactivated/	5168
30	high dose trivalent inactivated influenza vaccine*.mp.	14
31	HD TIV.mp.	2
32	vaccine*.mp.	297719
33	influenza*.mp.	127596
34	32 and 33	35746



35	Influenza Vaccines/ or influenza vaccine*.mp.	24557
36	vaccination*.mp. or vaccination/	163413
37	immunization*.mp. or immunization/	151485
38	influenza vaccination*.mp. or influenza vaccination/	8201
39	influenza*.mp. or influenza/	127596
40	flu*.mp.	1952048
41	seasonal influenza*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4450
42	36 or 37 or 38 or 39 or 40 or 41	2292888
43	Pregnancy Complications, Infectious/ or pregnant*.mp. or Pregnant Women/ or Pregnancy/ or Pregnancy Complications/	888047
44	Pregnancy/ or pregnancy.mp.	932247
45	Pregnancy Complications, Cardiovascular/ or Pregnancy, High-Risk/ or pregnancy high risk*.mp.	20405
46	43 or 44 or 45	954206
47	or/1-31	28508
48	34 or 47	39599
49	42 and 46 and 48	1723
50	((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj3 (trial*1 or study or studies or analy*)) or rct).ti,ab,kw,kf.	628259
51	((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*)).ti,ab,kw,kf.	1534906
52	Randomized Controlled Trials as Topic/ or RCT*.mp.	153198
53	randomized controlled trial*.mp.	661979



54	50 or 51 or 52 or 53	2237270
55	49 and 54	378
56	limit 55 to (yr="2014 - 2019" and (danish or english or norwegian or swedish))	227

**Embase** (090919)Database(s): **Embase** 1996 to 2019 Week 36

Search Strategy:

#	Searches	Results
1	afluria*.mp.	144
2	agrippal*.mp.	129
3	influvac*.mp.	277
4	preflucel*.mp.	23
5	vaxigrip*.mp.	474
6	trivalent influenza vaccine*.mp.	690
7	TIV.mp.	1011
8	fluad*.mp.	323
9	fluarix tetra*.mp.	17
10	flucelvax tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	3
11	vaxigrip tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	4
12	QIV*.mp.	244
13	quadrivalent influenza vaccine*.mp.	211
14	fluenz tetra*.mp.	20
15	LAIV.mp.	600



16	live-attenuated influenza vaccine*.mp.	777
17	Influenza Vaccines/ or influenza vaccine*.mp.	32983
18	fluarix quadrivalent*.mp.	18
19	flublok quadrivalent*.mp.	5
20	flulaval quadrivalent*.mp.	16
21	fluzone quadrivalent*.mp.	14
22	fluzone*.mp.	627
23	flucelvax*.mp.	78
24	flumist.mp.	668
25	Influenza Vaccines/ or influenza vaccine*.mp.	32983
26	quadrivalent inactivated vaccine*.mp.	12
27	aTIV.mp.	29
28	adjuvanted trivalent inactivated influenza vaccine*.mp.	10
29	Vaccines, Inactivated/	4213
30	high dose trivalent inactivated influenza vaccine*.mp.	16
31	HD TIV.mp.	4
32	vaccine*.mp.	305948
33	influenza*.mp.	137915
34	32 and 33	49216
35	Influenza Vaccines/ or influenza vaccine*.mp.	32983
36	vaccination*.mp. or vaccination/	177346
37	immunization*.mp. or immunization/	123058
38	influenza vaccination*.mp. or influenza vaccination/	18218
39	influenza*.mp. or influenza/	137915
40	flu*.mp.	2082470



41	seasonal influenza*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	7800
42	36 or 37 or 38 or 39 or 40 or 41	2391931
43	Pregnancy Complications, Infectious/ or pregnant*.mp. or Pregnant Women/ or Pregnancy/ or Pregnancy Complications/	445880
44	Pregnancy/ or pregnancy.mp.	566223
45	Pregnancy Complications, Cardiovascular/ or Pregnancy, High-Risk/ or pregnancy high risk*.mp.	34444
46	43 or 44 or 45	612080
47	or/1-31	36439
48	34 or 47	52415
49	42 and 46 and 48	2572
50	((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj3 (trial*1 or study or studies or analy*)) or rct).ti,ab,kw.	784465
51	((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*)).ti,ab,kw.	2046486
52	randomized controlled trial/ or randomized controlled trial*.mp.	728717
53	50 or 51 or 52	2849875
54	49 and 53	555
55	limit 54 to ((danish or english or norwegian or swedish) and yr="2014 - 2019")	331

**PICO 4 Primær (aged 3-valent)****Medline** (180919)Database(s): **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R)** 1946 to September 16, 2019

Search Strategy:





#	Searches	Results
1	afluria*.mp.	16
2	agrippal*.mp.	27
3	influvac*.mp.	31
4	preflucel*.mp.	1
5	vaxigrip*.mp.	98
6	trivalent influenza vaccine*.mp.	637
7	TIV.mp.	766
8	aTIV*.mp.	1682
9	trivalent*.mp.	8631
10	fluad*.mp.	71
11	Influenza Vaccines/ or influenza vaccine*.mp.	24592
12	vaccination*.mp. or vaccination/	163657
13	immunization*.mp. or immunization/	151580
14	influenza vaccination*.mp. or influenza vaccination/	8220
15	influenza*.mp. or influenza/	127745
16	flu*.mp.	1953895
17	seasonal influenza*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4464
18	12 or 13 or 14 or 15 or 16 or 17	2295077
19	aged*.mp. or "Aged, 80 and over"/ or Aged/	5145356
20	elderly.mp.	244189
21	19 or 20	5193426



22	((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj4 (trial*1 or study or studies or analy*)) or rct).ti,ab,kw,kf.	656967
23	((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*)).ti,ab,kw,kf.	1538314
24	randomized controlled trial*.mp.	662678
25	randomized controlled trial/ or RCT*.mp.	527983
26	22 or 23 or 24 or 25	2255749
27	or/1-11	33288
28	18 and 21 and 27	8563
29	26 and 28	2280
30	limit 29 to ((danish or english or norwegian or swedish) and yr="2016 - 2019")	511

**Embase** (180919)Database(s): **Embase** 1996 to 2019 Week 37

## Search Strategy:

#	Searches	Results
1	afluria*.mp.	144
2	agrippal*.mp.	129
3	influvac*.mp.	277
4	preflucel*.mp.	23
5	vaxigrip*.mp.	474
6	trivalent influenza vaccine*.mp.	692
7	TIV.mp.	1015
8	aTIV*.mp.	3344
9	trivalent*.mp.	7290



10	fluad*.mp.	323
11	Influenza Vaccines/ or influenza vaccine*.mp.	33048
12	vaccination*.mp. or vaccination/	177725
13	immunization*.mp. or immunization/	123250
14	influenza vaccination*.mp. or influenza vaccination/	18269
15	influenza*.mp. or influenza/	138240
16	flu*.mp.	2086267
17	seasonal influenza*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	7833
18	12 or 13 or 14 or 15 or 16 or 17	2396346
19	aged*.mp. or "Aged, 80 and over"/ or Aged/	3375186
20	elderly.mp.	448497
21	19 or 20	3439370
22	((((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj4 (trial*1 or study or studies or analy*)) or rct).ti,ab,kw.	825221
23	((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*)).ti,ab,kw.	2051400
24	randomized controlled trial*.mp.	731302
25	randomized controlled trial/ or RCT*.mp.	576464
26	22 or 23 or 24 or 25	2879978
27	or/1-11	41997
28	18 and 21 and 27	7975
29	26 and 28	2205
30	limit 29 to ((danish or english or norwegian or swedish) and yr="2016 - 2019")	656

**PICO 5 primær (aged high dose)**

**Medline** (190919)

Database(s): **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R)** 1946 to September 17, 2019

Search Strategy:

#	Searches	Results
1	afluria*.mp.	16
2	agrippal*.mp.	27
3	influvac*.mp.	31
4	preflucel*.mp.	1
5	vaxigrip*.mp.	98
6	trivalent influenza vaccine*.mp.	637
7	TIV.mp.	766
8	aTIV*.mp.	1682
9	fluad*.mp.	71
10	fluarix tetra*.mp.	3
11	flucelvax tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2
12	vaxigrip tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2
13	quadrivalent influenza vaccine*.mp.	158
14	fluenz tetra*.mp.	2
15	fluarix quadrivalent*.mp.	4



16	flublok quadrivalent*.mp.	2
17	flulaval quadrivalent*.mp.	1
18	fluzone*.mp.	78
19	flucelvax*.mp.	7
20	flumist*.mp.	96
21	quadrivalent inactivated vaccine*.mp.	10
22	Vaccines, Inactivated/	5178
23	adjuvanted trivalent inactivated influenza vaccine*.mp.	11
24	adjuvanted trivalent vaccine*.mp.	7
25	high dose trivalent inactivated influenza vaccine*.mp.	14
26	high-dose*.mp.	129935
27	Influenza Vaccines/ or influenza vaccine*.mp.	24591
28	vaccination*.mp. or Vaccination/	163662
29	Immunization/ or immunization*.mp.	151589
30	influenza vaccination*.mp.	8219
31	vaccination*.mp. or Vaccination/	163662
32	flu*.mp.	1953849
33	seasonal influenza*.mp.	4466
34	seasonal flu*.mp.	2070
35	"Aged, 80 and over"/ or Aged/ or aged*.mp.	5147181
36	elderly.mp.	244250
37	28 or 29 or 30 or 31 or 32 or 33 or 34	2209930
38	35 or 36	5195243
39	Randomized Controlled Trials as Topic/ or RCT*.mp.	153325
40	randomized controlled trial*.mp.	662908



41	((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj3 (trial*1 or study or studies or analy*)) or rct).ti,ab,kw,kf.	629380
42	((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*)).ti,ab,kw,kf.	1538820
43	(cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent*).ti,ab,kw,kf.	2742329
44	39 or 40 or 41 or 42 or 43	3567722
45	or/1-27	159750
46	37 and 38 and 45	11816
47	44 and 46	4658
48	limit 47 to (yr="2018 - 2019" and (danish or english or norwegian or swedish))	328

**Embase (190919)**Database(s): **Embase** 1996 to 2019 Week 37

Search Strategy:

#	Searches	Results
1	afluria*.mp.	144
2	agrippal*.mp.	129
3	influvac*.mp.	277
4	preflucel*.mp.	23
5	vaxigrip*.mp.	474
6	trivalent influenza vaccine*.mp.	692
7	TIV.mp.	1015
8	aTIV*.mp.	3344



9	fluad*.mp.	323
10	fluarix tetra*.mp.	17
11	flucelvax tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	3
12	vaxigrip tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	4
13	quadrivalent influenza vaccine*.mp.	212
14	fluenz tetra*.mp.	20
15	fluarix quadrivalent*.mp.	18
16	flublok quadrivalent*.mp.	5
17	flulaval quadrivalent*.mp.	16
18	fluzone*.mp.	628
19	flucelvax*.mp.	78
20	flumist*.mp.	667
21	quadrivalent inactivated vaccine*.mp.	13
22	Vaccines, Inactivated/	4218
23	adjuvanted trivalent inactivated influenza vaccine*.mp.	10
24	adjuvanted trivalent vaccine*.mp.	5
25	high dose trivalent inactivated influenza vaccine*.mp.	16
26	high-dose*.mp.	150499
27	Influenza Vaccines/ or influenza vaccine*.mp.	33048
28	vaccination*.mp. or Vaccination/	177725
29	Immunization/ or immunization*.mp.	123250
30	influenza vaccination*.mp.	18269
31	vaccination*.mp. or Vaccination/	177725



32	flu*.mp.	2086267
33	seasonal influenza*.mp.	7833
34	seasonal flu*.mp.	1986
35	"Aged, 80 and over"/ or Aged/ or aged*.mp.	3375186
36	elderly.mp.	448497
37	28 or 29 or 30 or 31 or 32 or 33 or 34	2321840
38	35 or 36	3439370
39	Randomized Controlled Trials as Topic/ or RCT*.mp.	156322
40	randomized controlled trial*.mp.	731302
41	((((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj3 (trial*1 or study or studies or analy*)) or rct).ti,ab,kw.	786836
42	((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*)).ti,ab,kw.	2051400
43	(cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent*).ti,ab,kw.	3762117
44	39 or 40 or 41 or 42 or 43	4643520
45	or/1-27	189739
46	37 and 38 and 45	11931
47	44 and 46	5099
48	limit 47 to ((danish or english or norwegian or swedish) and yr="2018 - 2019")	642



**PICO 6 primær (child) og PICO 7 primær (infant)**

**Clinical trials, PICO 6 (Child) (240919)**

69 Studies found for: **vaccination, infant | Completed Studies | Studies With Results | Influenza Vaccine | Child**

Applied Filters: ☒ **Completed** ☒ **With Results** ☒ **Child (birth–17)**

Terms and Synonyms Searched:

Terms	Search Results*	Entire Database**
Synonyms		
<b>vaccine, infant</b>	2 studies	3 studies
<b>infant</b>	69 studies	11,527 studies
babies	7 studies	2,880 studies
<b>vaccine</b>	69 studies	8,808 studies
Vaccination	63 studies	5,389 studies
Immunization	14 studies	1,869 studies
inoculations	--	204 studies
VACCIN	--	33 studies
<b>influenza</b>	69 studies	2,228 studies
Fluzone	5 studies	74 studies
Flu	1 studies	379 studies
flumist	1 studies	44 studies
Fluviral	1 studies	15 studies
Agriflu	--	1 studies
Fluarix	--	47 studies
Flucelvax	--	3 studies
FluLaval	--	4 studies
flus	--	1 studies



Terms	Search Results*	Entire Database**
Synonyms		
flushield	--	1 studies
fluvirin	--	4 studies
Grippe	--	77 studies

**Clinical trials, PICO 7 child (240919)**

214 Studies found for: **vaccination, child** | Completed Studies | Studies With Results | Influenza Vaccine | Child

Applied Filters: ☒ Completed ☒ With Results ☒ Child (birth–17)

Terms and Synonyms Searched:

Terms	Search Results*	Entire Database**
Synonyms		
<b>vaccination, child</b>	--	2 studies
<b>child</b>	214 studies	69,941 studies
offsprings	38 studies	680 studies
kid	2 studies	752 studies
progeny	--	20 studies
<b>vaccination</b>	214 studies	8,808 studies
Vaccine	212 studies	8,107 studies
Immunization	37 studies	1,869 studies
inoculations	--	204 studies
VACCIN	--	33 studies
<b>Influenza Vaccine</b>	214 studies	2,087 studies
Influenza	213 studies	2,068 studies
Fluzone	24 studies	74 studies
flumist	8 studies	44 studies
flu vaccines	7 studies	93 studies



Terms	Search Results*	Entire Database**
Synonyms		
Fluarix	5 studies	47 studies
Flu vaccination	1 studies	14 studies
Agriflu	1 studies	1 studies
Fluviral	1 studies	15 studies
fluvirin	1 studies	4 studies
Flu prevention	--	3 studies
Flu shot	--	7 studies
Flucelvax	--	3 studies
FluLaval	--	4 studies
flushield	--	1 studies
<b>Vaccine</b>	204 studies	7,100 studies
Vaccination	41 studies	1,733 studies
Immunization	7 studies	682 studies
inoculations	--	28 studies
VACCIN	--	8 studies
<b>Influenza</b>	214 studies	2,228 studies
Fluzone	24 studies	74 studies
Flu	17 studies	379 studies
flumist	8 studies	44 studies
Fluarix	5 studies	47 studies
Agriflu	1 studies	1 studies
Fluviral	1 studies	15 studies
fluvirin	1 studies	4 studies
Flucelvax	--	3 studies
FluLaval	--	4 studies
flus	--	1 studies



Terms	Search Results*	Entire Database**
Synonyms		
flushield	--	1 studies
Grippe	--	77 studies

-- No studies found

\* Number of studies in the search results containing the term or synonym

\*\* Number of studies in the entire database containing the term or synonym

### Medline (240919)

Database(s): Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R) 1946 to September 22, 2019

Search Strategy:

#	Searches	Results
1	afluria*.mp.	16
2	agrippal*.mp.	27
3	influvac*.mp.	31
4	preflucel*.mp.	1
5	vaxigrip*.mp.	98
6	trivalent influenza vaccine*.mp.	638
7	TIV.mp.	767
8	fluad*.mp.	71
9	fluarix tetra*.mp.	3
10	flucelvax tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2



11	vaxigrip tetra*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	2
12	QIV.mp.	104
13	quadrivalent influenza vaccine*.mp.	159
14	fluenz tetra*.mp.	2
15	LAIV.mp.	513
16	live-attenuated influenza vaccine*.mp.	691
17	Influenza Vaccines/ or influenza vaccine*.mp.	24604
18	fluarix quadrivalent*.mp.	4
19	flublok quadrivalent*.mp.	2
20	flulaval quadrivalent*.mp.	1
21	fluzone quadrivalent*.mp.	5
22	fluzone*.mp.	78
23	QIVc*.mp.	6
24	flucelvax*.mp.	7
25	flumist.mp.	96
26	Influenza Vaccines/ or influenza vaccine*.mp.	24604
27	quadrivalent inactivated vaccine*.mp.	10
28	aTIV.mp.	27
29	adjuvanted trivalent inactivated *.mp.	0
30	adjuvanted trivalent inactivated influenza vaccine*.mp.	11
31	Vaccines, Inactivated/	5180
32	high dose trivalent inactivated influenza vaccine*.mp.	14
33	HD TIV.mp.	2
34	vaccine*.mp.	298155



35	influenza*.mp.	127791
36	Influenza Vaccines/ or influenza vaccine*.mp.	24604
37	vaccination*.mp. or vaccination/	163693
38	immunization*.mp. or immunization/	151613
39	influenza vaccination*.mp. or influenza vaccination/	8219
40	influenza*.mp. or influenza/	127791
41	flu*.mp.	1954370
42	(vaccination* or vaccination or (immunization* or immunization) or (influenza vaccination* or influenza vaccination) or (influenza* or influenza) or flu* or seasonal influenza*).ti,ab,kw,kf.	1775486
43	or/1-36	390428
44	((((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj4 (trial*1 or study or studies or analy*)) or rct).ti,ab,kw,kf.	657268
45	((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*).ti,ab,kw,kf.	1539297
46	Randomized Controlled Trials as Topic/ or RCT*.mp.	153450
47	randomized controlled trial*.mp.	663236
48	44 or 45 or 46 or 47	2257116
49	Infant/ or infant*.mp. or Infant Health/ or Infant, Newborn/	1228360
50	(child* or Child Health or Child or children* or (Child, Preschool or preschool child*) or (Adolescent or adolescent*).ti,ab,kw,kf.	1502516
51	42 and 43 and 48 and 49	6664
52	limit 51 to (yr="2017 - 2019" and (danish or english or norwegian or swedish))	960
53	42 and 43 and 48 and 50	7594
54	limit 53 to (yr="2017 - 2019" and (danish or english or norwegian or swedish))	1358



**Embase (230919)**

Database(s): **Embase** 1996 to 2019 Week 38

Search Strategy:

#	Searches	Results
1	afluria*.mp.	144
2	agrippal*.mp.	129
3	influvac*.mp.	277
4	preflucel*.mp.	23
5	vaxigrip*.mp.	474
6	trivalent influenza vaccine*.mp.	696
7	TIV.mp.	1016
8	fluad*.mp.	325
9	fluarix tetra*.mp.	17
10	flucelvax tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	3
11	vaxigrip tetra*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	4
12	QIV.mp.	147
13	quadrivalent influenza vaccine*.mp.	213
14	fluenz tetra*.mp.	20
15	LAIV.mp.	600
16	live-attenuated influenza vaccine*.mp.	779
17	Influenza Vaccines/ or influenza vaccine*.mp.	33129
18	fluarix quadrivalent*.mp.	18
19	flublok quadrivalent*.mp.	5



20	flulaval quadrivalent*.mp.	16
21	fluzone quadrivalent*.mp.	15
22	fluzone*.mp.	629
23	QIVc*.mp.	10
24	flucelvax*.mp.	78
25	flumist.mp.	667
26	Influenza Vaccines/ or influenza vaccine*.mp.	33129
27	quadrivalent inactivated vaccine*.mp.	13
28	aTIV.mp.	29
29	adjuvanted trivalent inactivated influenza vaccine*.mp.	10
30	Vaccines, Inactivated/	4227
31	high dose trivalent inactivated influenza vaccine*.mp.	17
32	HD TIV.mp.	4
33	vaccine*.mp.	307050
34	influenza*.mp.	138563
35	Influenza Vaccines/ or influenza vaccine*.mp.	33129
36	vaccination*.mp. or vaccination/	178099
37	immunization*.mp. or immunization/	123416
38	influenza vaccination*.mp. or influenza vaccination/	18310
39	influenza*.mp. or influenza/	138563
40	flu*.mp.	2090257
41	(vaccination* or vaccination or (immunization* or immunization) or (influenza vaccination* or influenza vaccination) or (influenza* or influenza) or flu* or seasonal influenza*).ti,ab,kw.	1706897
42	or/1-36	434599
43	((((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj4 (trial*1 or study or studies or analy*)) or rct).ti,ab,kw.	827580





44	((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*)).ti,ab,kw.	2057993
45	Randomized Controlled Trials as Topic/ or RCT*.mp.	157063
46	randomized controlled trial*.mp.	733642
47	43 or 44 or 45 or 46	2888837
48	(Infant or infant* or Infant Health or Infant, Newborn).ti,ab,kw.	331387
49	(child* or Child or (Child, Preschool or preschool child*) or (Adolescent or adolescent*)).ti,ab,kw.	1468774
50	41 and 42 and 47 and 48	3430
51	limit 50 to ((danish or english or norwegian or swedish) and yr="2017 - 2019")	741
52	41 and 42 and 47 and 49	10064
53	limit 52 to ((danish or english or norwegian or swedish) and yr="2017 - 2019")	2182

**PICO 8 primær (personale)****Clinical trials (300919)**

80 Studies found for: **health personnel | Completed Studies | Studies With Results | Influenza vaccination**

Also searched for **Investigator, Medical Personnel, Vaccine** and more. [See Search Details](#)

Applied Filters: ☒ **Completed** ☒ **With Results**

**Terms and Synonyms Searched:**

Terms	Search Results*	Entire Database**
Synonyms		
<b>health personnel</b>	59 studies	4,118 studies
Medical Personnel	42 studies	154 studies
Health Care Provider	12 studies	1,842 studies



Terms	Search Results*	Entire Database**
Synonyms		
healthcare workers	7 studies	342 studies
health care professionals	1 studies	1,023 studies
Care personnel	--	64 studies
health care personnel	--	82 studies
health professionals	--	844 studies
<b>personnel</b>	80 studies	235,422 studies
Investigator	78 studies	233,866 studies
Researcher	1 studies	7,411 studies
Human Capital	--	18 studies
Human Resources	--	82 studies
manpower	--	26 studies
<b>health</b>	29 studies	90,955 studies
Well-being	--	5,854 studies
Wellness	--	1,469 studies
<b>Influenza vaccination</b>	13 studies	202 studies
Influenza immunization	2 studies	29 studies
Flu vaccination	1 studies	14 studies
Flu prevention	--	3 studies
vaccination influenza	--	1 studies
<b>vaccination</b>	82 studies	7,105 studies
Vaccine	77 studies	6,304 studies
Immunization	4 studies	683 studies
inoculations	--	28 studies
VACCIN	--	8 studies
<b>Influenza</b>	82 studies	2,229 studies
Flu	9 studies	379 studies



Terms	Search Results*	Entire Database**
Synonyms		
Fluarix	6 studies	47 studies
Fluzone	3 studies	74 studies
flumist	1 studies	44 studies
Fluviral	1 studies	15 studies
Agriflu	--	1 studies
Flucelvax	--	3 studies
FluLaval	--	4 studies
flus	--	1 studies
flushield	--	1 studies
fluvirin	--	4 studies
Grippe	--	77 studies

-- No studies found

\* Number of studies in the search results containing the term or synonym

\*\* Number of studies in the entire database containing the term or synonym

### Medline (300919)

Database(s): **Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Daily and Versions(R)** 1946 to September 27, 2019

Search Strategy:

#	Searches	Results
1	Influenza Vaccines/ or influenza vaccine*.mp.	24628
2	vaccination*.mp. or vaccination/	163862
3	immunization*.mp. or immunization/	151689
4	influenza vaccination*.mp. or influenza vaccination/	8227
5	influenza*.mp. or influenza/	127888
6	flu*.mp.	1956060



7	seasonal influenza*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	4478
8	Health Personnel/ or health care worker*.mp. or "Attitude of Health Personnel"/	159943
9	Primary Health Care/ or health care provider*.mp.	105463
10	Social Workers/ or social worker*.mp.	9593
11	nurse*.mp. or Nurse-Patient Relations/	346782
12	Physician-Nurse Relations/ or physician*.mp. or Physician Assistants/ or Physician-Patient Relations/	545945
13	General Practitioners/ or practioner*.mp.	7632
14	Nurse Practitioners/ or nurse practioner*.mp.	17241
15	8 or 9 or 10 or 11 or 12 or 13 or 14	1022057
16	((((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj4 (trial*1 or study or studies or analy*)) or rct).ti,ab,kw,kf.	658095
17	((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*)).ti,ab,kw,kf.	1541763
18	Randomized Controlled Trials as Topic/ or RCT*.mp.	153664
19	randomized controlled trial*.mp.	663963
20	16 or 17 or 18 or 19	2260339
21	((((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj4 (trial*1 or study or studies or analy*)) or rct or ((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spec- tive or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*)) or (Randomized Controlled Trials as Topic or RCT*) or randomized controlled trial*).ti,ab,kw,kf.	2015408



22	1 or 2 or 3 or 4 or 5 or 6 or 7	2297555
23	(Influenza Vaccines or influenza vaccine* or (vaccination* or vaccination) or (immunization* or immunization) or (influenza vaccination* or influenza vaccination) or (influenza* or influenza) or flu* or seasonal influenza*).ti,ab,kw,kf.	1777149
24	(Health Personnel or health care worker* or "Attitude of Health Personnel" or (Primary Health Care or health care provider*) or (Social Workers or social worker*) or (nurse* or Nurse-Patient Relations) or (Physician-Nurse Relations or physician* or Physician Assistants or Physician-Patient Relations) or (General Practitioners or practioner*) or (Nurse Practitioners or nurse practioner*)).ti,ab,kw,kf.	702937
25	21 and 23 and 24	4935
26	limit 25 to (yr="2016 - 2019" and (danish or english or norwegian or swedish))	1196

**Embase** (300919)

Database(s): **Embase** 1996 to 2019 Week 39

Search Strategy:

#	Searches	Results
1	Influenza Vaccines/ or influenza vaccine*.mp.	33189
2	vaccination*.mp. or vaccination/	178412
3	immunization*.mp. or immunization/	123574
4	influenza vaccination*.mp. or influenza vaccination/	18336
5	influenza*.mp. or influenza/	138814
6	flu*.mp.	2093357
7	seasonal influenza*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	7885
8	Health Personnel/ or health care worker*.mp. or "Attitude of Health Personnel"/	164303
9	Primary Health Care/ or health care provider*.mp.	86672



10	Social Workers/ or social worker*.mp.	14698
11	nurse*.mp. or Nurse-Patient Relations/	312758
12	Physician-Nurse Relations/ or physician*.mp. or Physician Assistants/ or Physician-Patient Relations/	634647
13	General Practitioners/ or practioner*.mp.	79377
14	Nurse Practitioners/ or nurse practioner*.mp.	15268
15	8 or 9 or 10 or 11 or 12 or 13 or 14	1098866
16	((((random* or cluster-random* or control?ed or crossover or cross-over or blind* or mask*) adj4 (trial*1 or study or studies or analy*)) or rct).ti,ab,kw.	829517
17	((Epidemiologic or cohort* or perspective or prospective or longitud* or follow-up or follow up or followup or retro-spective or retrospective or observational or cross-section* or cross section* or multi-cent* or multicent* or evaluation or comparative or intervention or provoca* or validation) adj3 (study or studies or trial*1 or analys*)).ti,ab,kw.	2063600
18	1 or 2 or 3 or 4 or 5 or 6 or 7	2404528
19	(Influenza Vaccines or influenza vaccine* or (vaccination* or vaccination) or (immunization* or immunization) or (influenza vaccination* or influenza vaccination) or (influenza* or influenza) or flu* or seasonal influenza*).ti,ab,kw.	1709722
20	(Health Personnel or health care worker* or "Attitude of Health Personnel" or (Primary Health Care or health care provider*) or (Social Workers or social worker*) or (nurse* or Nurse-Patient Relations) or (Physician-Nurse Relations or physician* or Physician Assistants or Physician-Patient Relations) or (General Practitioners or practioner*) or (Nurse Practitioners or nurse practioner*)).ti,ab,kw.	744819
21	16 or 17	2645277
22	19 and 20 and 21	7659
23	limit 22 to ((danish or english or norwegian or swedish) and yr="2016 - 2019")	2295

## Bilag 2 – Fokuserede spørgsmål (PICO's) og udfaldsmål

**PICO 1:** Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt personer, som er fyldt 65 år?

Population: personer som er fyldt 65 år

Intervention: Cellebaseret 4-valent vaccine

Comparison (sammenligning): Alle inaktiverede vacciner

Udfaldsmål	Kritisk/Vigtigt
Død (overdødelighed eller verificerede enkeltstående dødsfald)	Kritisk
Alvorlige hændelser (SAE)	Kritisk
Alle indlæggelser	Kritisk
Influenzarelaterede indlæggelser (laboratieverificerede eller registreret ved diagnosekodning)	Vigtig
Influenzalungebetændelse	Vigtig
Laboratieverificeret influenza	Vigtig
Antibiotikaforbrug	Vigtig



**PICO 2: Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt personer med kronisk sygdom?**

Population: Personer med kronisk sygdom, som er i øget risiko for alvorligt forløb med influenza

Intervention: Cellebaseret 4-valent vaccine

Comparison (sammenligning): Alle inaktiverede vacciner

Udfaldsmål	Kritisk/Vigtigt
Død (overdødelighed eller verificerede enkeltstående dødsfald)	Kritisk
Alvorlige hændelser (SAE)	Kritisk
Influenzarelaterede indlæggelser (laboratieverificerede eller registreret ved diagnosekodning)	Kritisk
Alle indlæggelser	Vigtig
Influenzarelateret lungebetændelse	Vigtig
Laboratieverificeret influenza	Vigtig
Antibiotikaforbrug	Vigtig





**PICO 3: Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt gravide?**

Population: Gravide

Intervention: Cellebaseret 4-valent vaccine

Comparison (sammenligning): Alle inaktiverede vacciner

Udfaldsmål	Kritisk/Vigtigt
Død (overdødelighed eller verificerede enkeltstående dødsfald)	Kritisk
Alvorlige hændelser (SAE) (inkl. hændelser for barnet: spontan abort, præterm fødsel, lav fødselsvægt, føtal væksthæmning, føtal død)	Kritisk
Influenzarelaterede indlæggelser (laboratieverificerede eller registreret ved diagnosekodning)	Kritisk
Alle indlæggelser	Vigtig
Influenzarelateret lungebetændelse	Vigtig
Laboratieverificeret influenza	Vigtig
Antibiotikaforbrug	Vigtig

**PICO 4: Hvad er effekten af vaccination med en 3-valent adjuveret influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt personer som er fyldt 65 år?**

Population: personer som er fyldt 65 år

Intervention: Adjuveret 3-valent vaccine

Comparison (sammenligning): Inaktiverede influenzavacciner

Udfaldsmål	Kritisk/Vigtigt
Død (overdødelighed eller verificerede enkeltstående dødsfald)	Kritisk
Alvorlige hændelser (SAE)	Kritisk
Alle indlæggelser	Kritisk
Influenzarelaterede indlæggelser (laboratorieverificerede eller registreret ved diagnosekodning)	Vigtig
Influenzalungebetændelse	Vigtig
Laboratorieverificeret influenza	Vigtig
Antibiotikaforbrug	Vigtig



**PICO 5: Hvad er effekten af vaccination med en højdosis influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt personer som er fyldt på 65 år?**

Population: personer som er fyldt 65 år

Intervention: højdosis vaccine

Comparison (sammenligning): andre inaktiverede influenzavacciner

Udfaldsmål	Kritisk/Vigtigt
Død (overdødelighed eller verificerede enkeltstående dødsfald)	Kritisk
Alvorlige hændelser (SAE)	Kritisk
Alle indlæggelser	Kritisk
Influenzarelaterede indlæggelser (laboratieverificerede eller registreret ved diagnosekodning)	Vigtig
Influenzalungebetændelse	Vigtig
Laboratieverificeret influenza	Vigtig
Antibiotikaforbrug	Vigtig



**PICO 6: Hvad er effekten af vaccination med en inaktiveret influenzavaccine til raske børn under 2 år?**

Population: Børn under 2 år

Intervention: Ingen vaccine (eller placebo).

Udfaldsmål	Kritisk/Vigtigt
Død (overdødelighed eller verificerede enkeltstående dødsfald)	Kritisk
Alvorlige hændelser (SAE)	Kritisk
Alle indlæggelser	Kritisk
Laboratieverificerede influenzaindlæggelser	Vigtig
Influenzalungebetændelse	Vigtig
Laboratieverificeret influenza	Vigtig
Antibiotikaforbrug	Vigtig
Reduktion i indlæggelser og dødelighed relateret til andre risikogrupper (indirekte effekt - flokimmunitet).	Vigtig



**PICO 7: Hvad er effekten af vaccination med en levende svækket influenzavaccine til raske børn mellem 2-6 år?**

Population: børn fra 2 til under 6 år (*Der søges på 0-18 år*)

Intervention: nasal 4-valent levende svækket influenzavaccine

Sammenligning: ingen vaccine.

Udfaldsmål	Kritisk/Vigtigt
Død (overdødelighed eller verificerede enkeltstående dødsfald)	Kritisk
Alvorlige hændelser (SAE)	Kritisk
Alle indlæggelser	Kritisk
Laboratieverificerede influenzaindlæggelser	Vigtig
Influenzalungebetændelse	Vigtig
Laboratieverificeret influenza	Vigtig
Antibiotikaforbrug	Vigtig
Reduktion i indlæggelser og dødelighed relateret til andre risikogrupper (indirekte effekt - flokimmunitet).	Vigtig

**PICO 8: Hvad er effekten af influenzavaccination af sundhedspersonale?**

Population: sundhedspersonale

Intervention: Influenzavaccine af hvilken som helst type.

Sammenligning: Ingen influenzavaccination

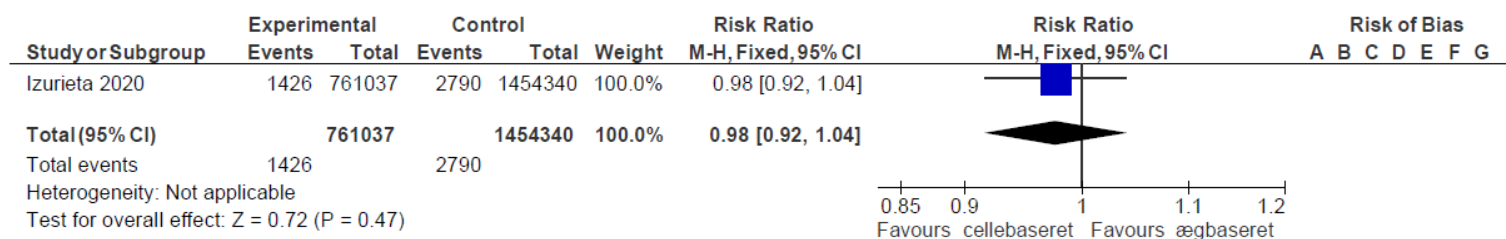
Udfaldsmål	Kritisk/Vigtigt
Alvorlige hændelser (SAE) hos personale	Kritisk
Laboratorieverificerede influenzaindlæggelser hos personale	Kritisk
Reduktion i sygelighed og dødelighed relateret til risikogrupper med kontakt til sundhedspersonale (indirekte effekt) – dødelighed,	Kritisk
Alle indlæggelser hos personale	Vigtig
Sygefravær hos personale	Vigtig

## Bilag 3 – Metaanalyser

### Fokuseret spørgsmål 1:

Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt ældre på 65 år eller derover?

### Udfaldsmål: Indlæggelser

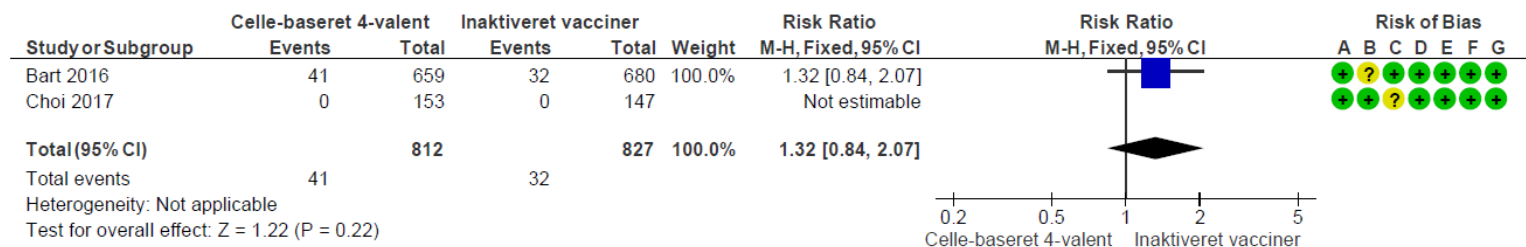


#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



### Udfaldsmål: Alvorlige bivirkninger (SAE)



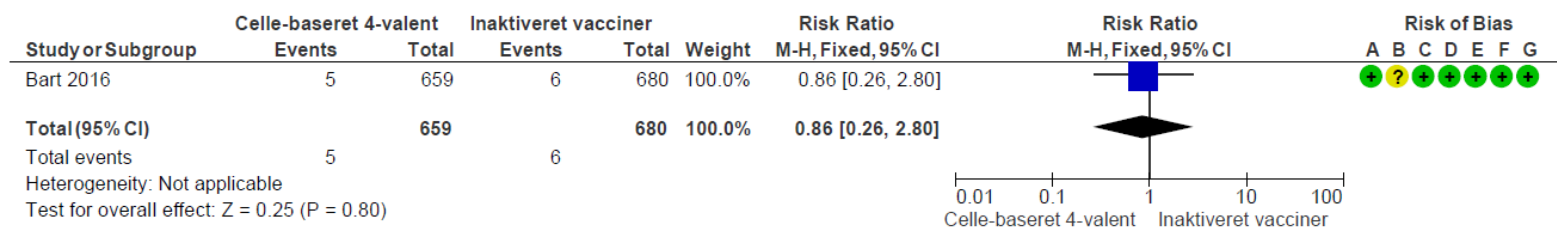
#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias





## Udfaldsmål: Død

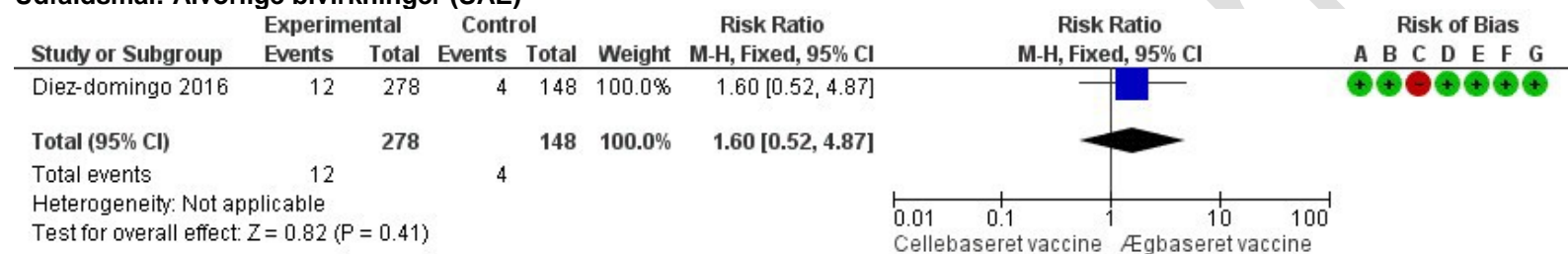


### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



### Udfaldsmål: Alvorlige bivirkninger (SAE)



#### Risk of bias legend

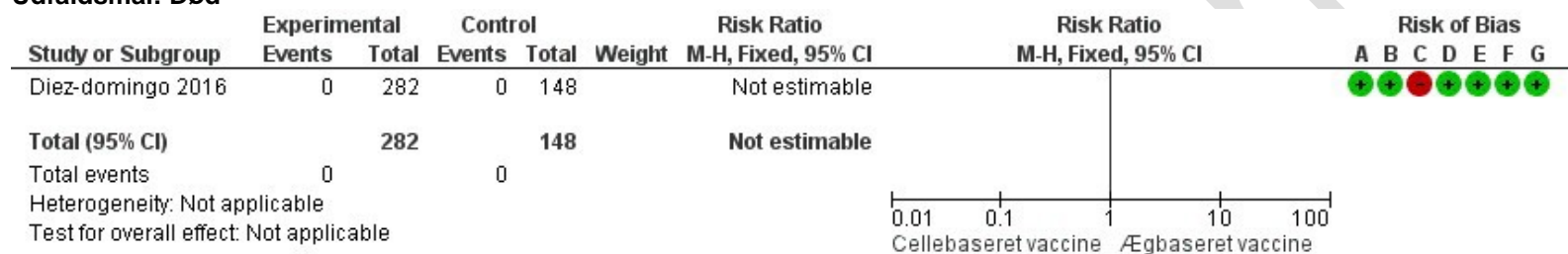
- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias

### Fokuseret spørgsmål 2

Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt personer med kronisk sygdom?



Udfaldsmål: Død



Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias

### Fokuseret spørgsmål 3:

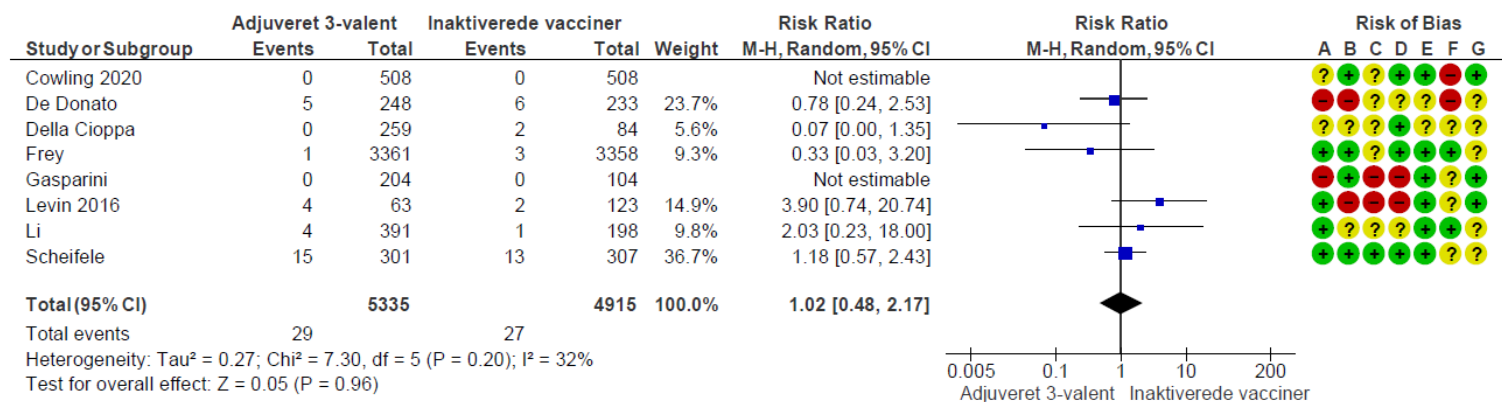
Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt gravide?

Ingen data tilgængelig.

### Fokuseret spørgsmål 4:

Hvad er effekten af vaccination med en 3-valent adjuveret influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt ældre på 65 år eller derover?

### Alvorlige hændelser (SAE), randomiserede forsøg

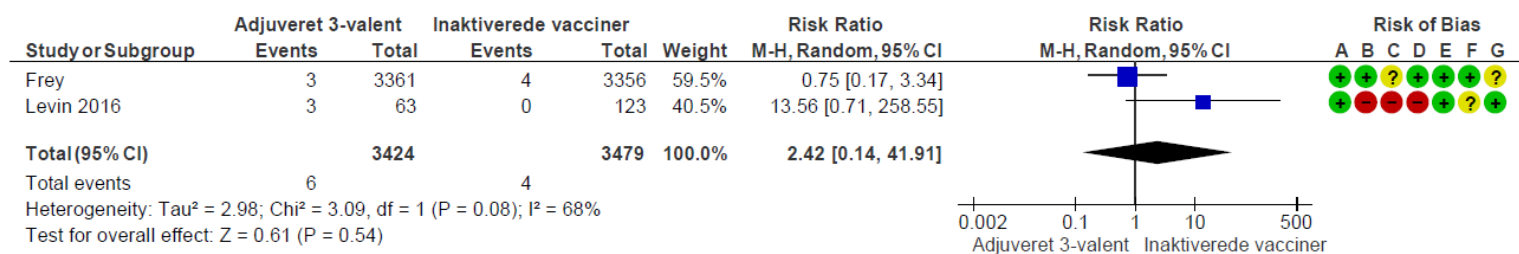


#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



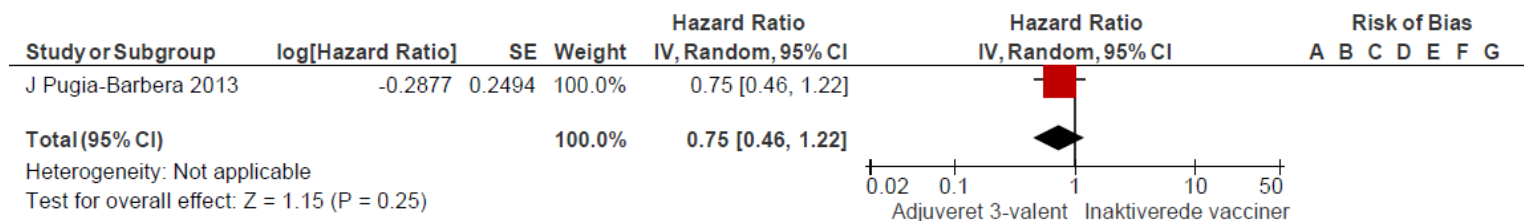
## Død, randomiserede forsøg



Høring



### Laboratorieverificeret influenzaindlæggelser, observationelle studier

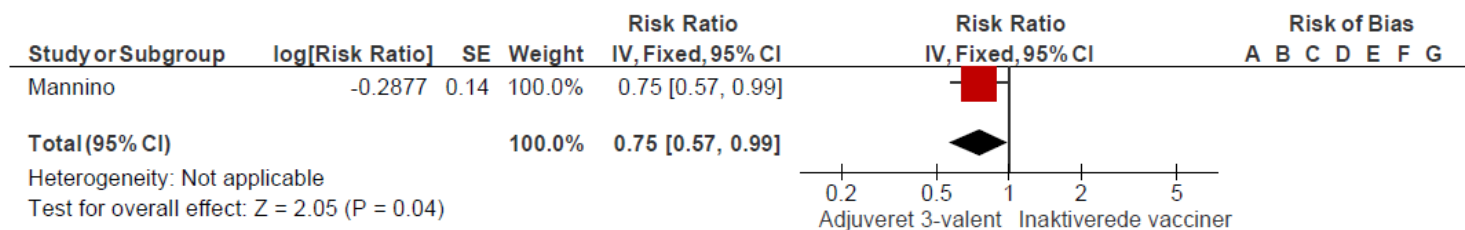


#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



Alle indlæggelser, observationelle studier

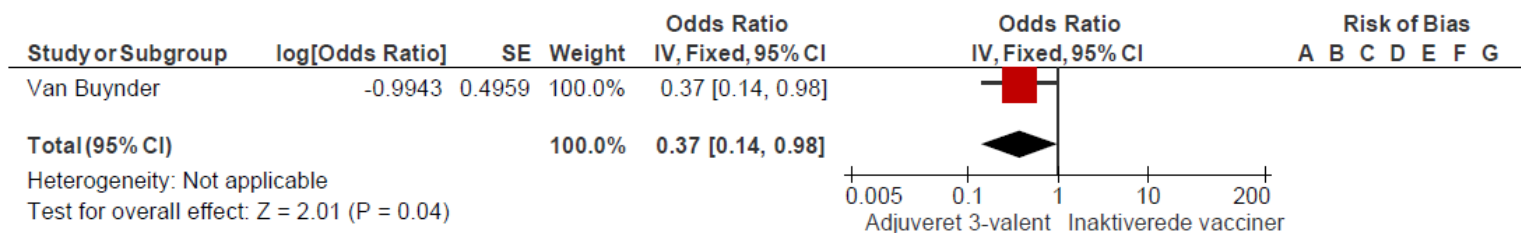


Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



### Laboratorieverificeret influenza, observationelle studier



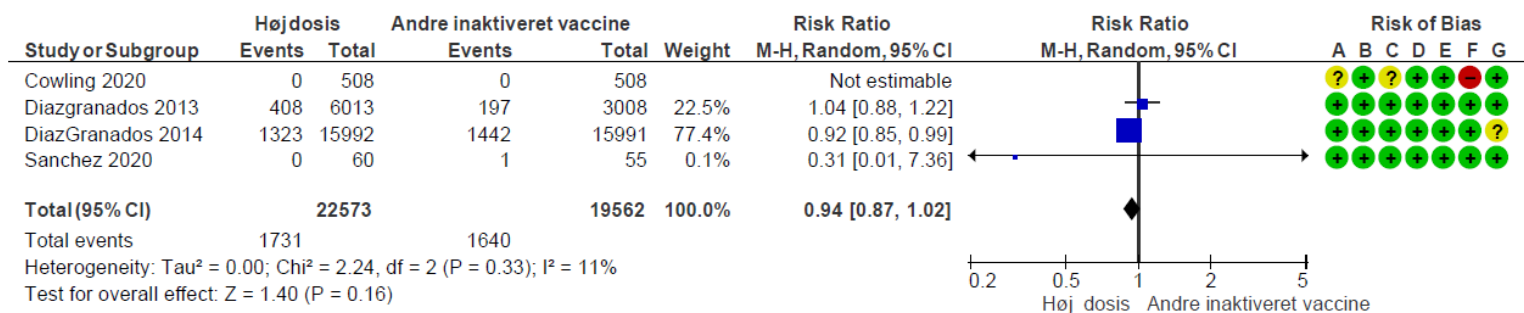
#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias





## Personer med minimum en alvorlig bivirkning



### Risk of bias legend

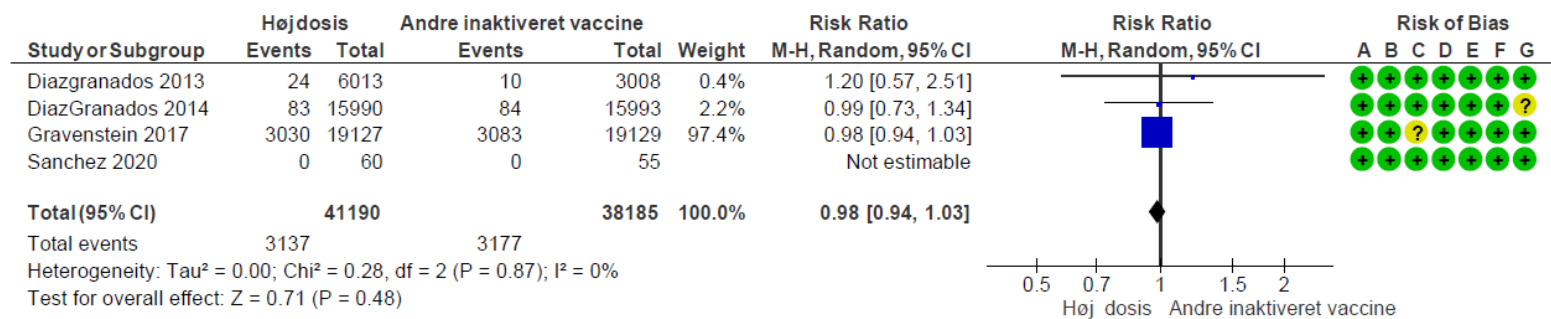
- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias

### Fokuseret spørgsmål 5:

Hvad er effekten af vaccination med en high-dose influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt ældre på 65 år eller derover?



## Død





### Laboratorieverificerede influenzaindlæggelser

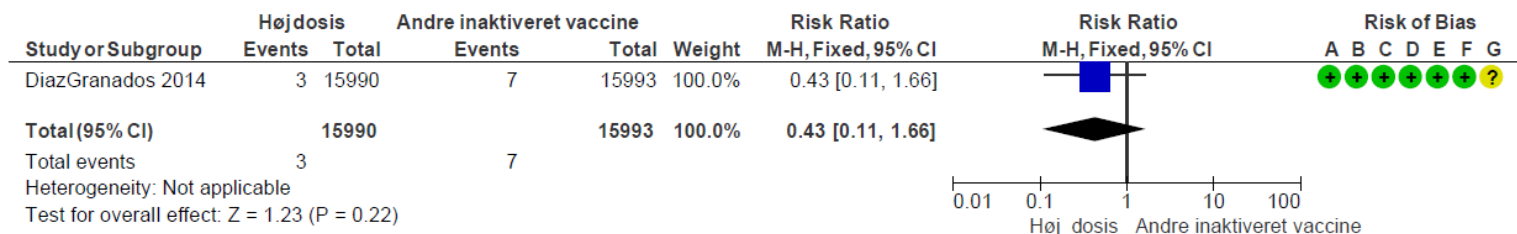


#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



### Laboratorieverificerede pneumoni

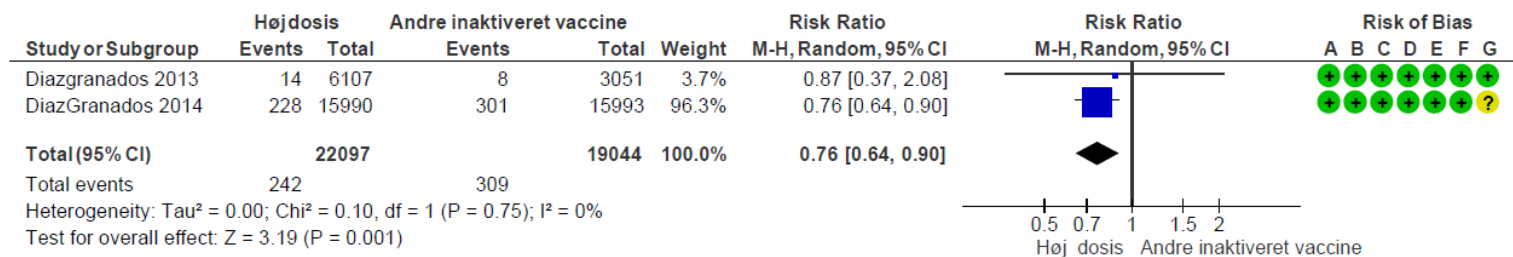


#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



## Laboratorieverificerede influenza

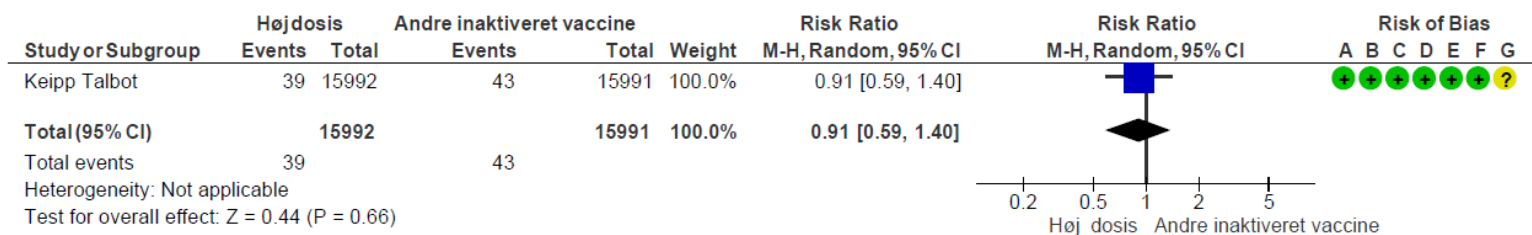


### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



## Gastrointestinale bivirkninger



### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



### Alle indlæggelser



#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



### Indlæggelser pga. pneumoni (ICD koder)



#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias

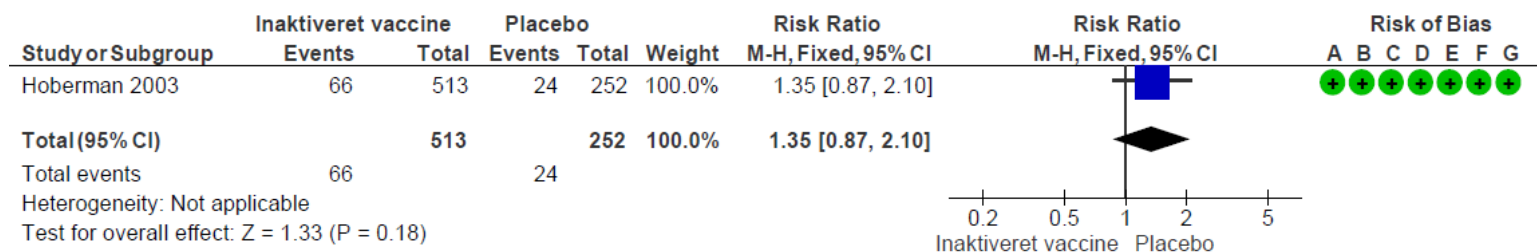
### Fokuseret spørgsmål 6:

Hvad er effekten af vaccination med en inaktiveret influenzavaccine til raske børn under to år?





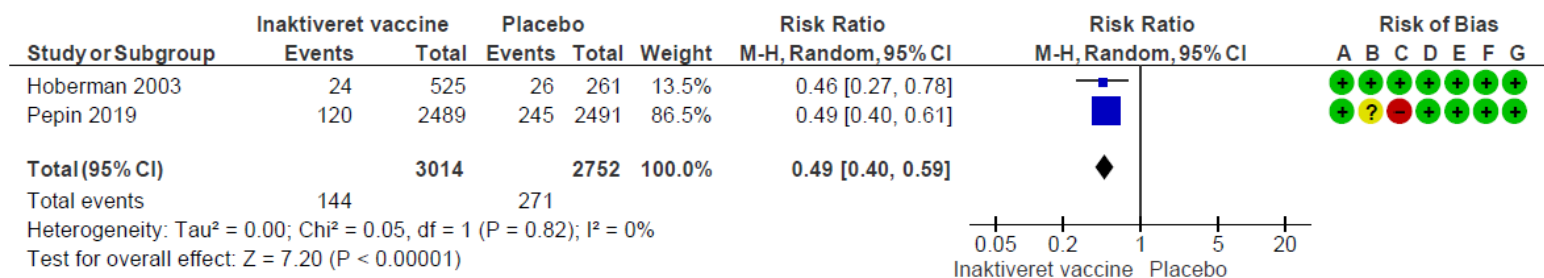
### Alle indlæggelser, inaktiveret vaccine vs. placebo



#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias

## Laboratorieverificeret influenza, inaktiveret vaccine vs. placebo

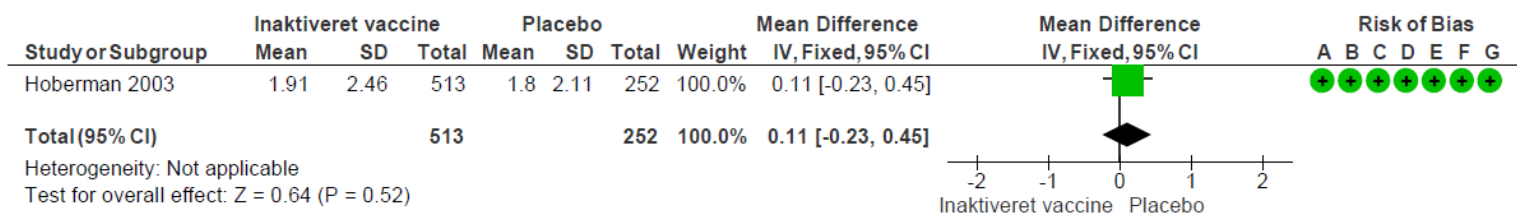


### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



### Brug af antibiotika, inaktiveret vaccine vs. placebo

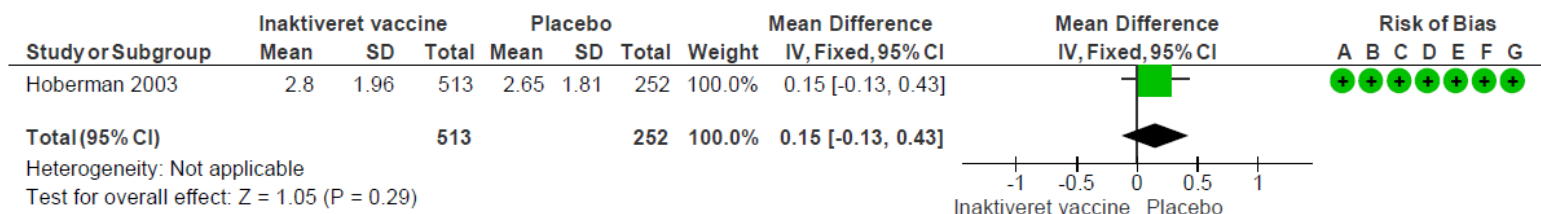


#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



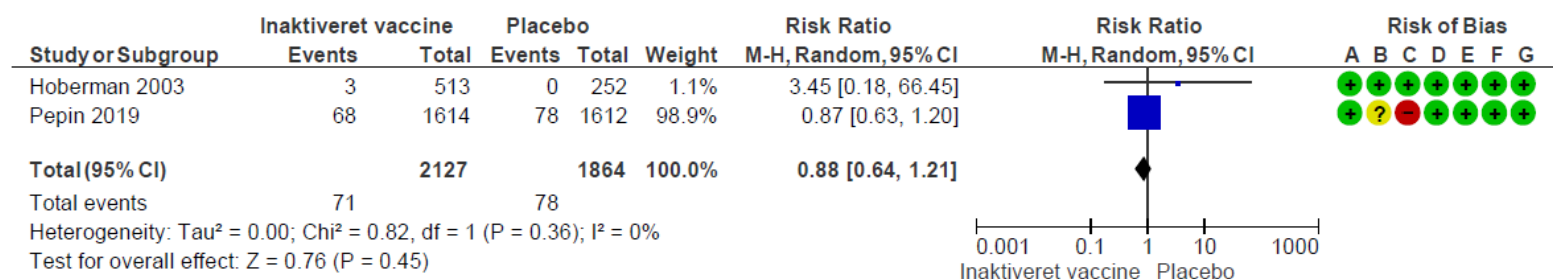
### Tilfælde af anden sygdom hos familiemedlem, inaktiveret vaccine vs. placebo



#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias

### Alvorlige hændelser (SAE), inaktiveret vaccine vs. placebo

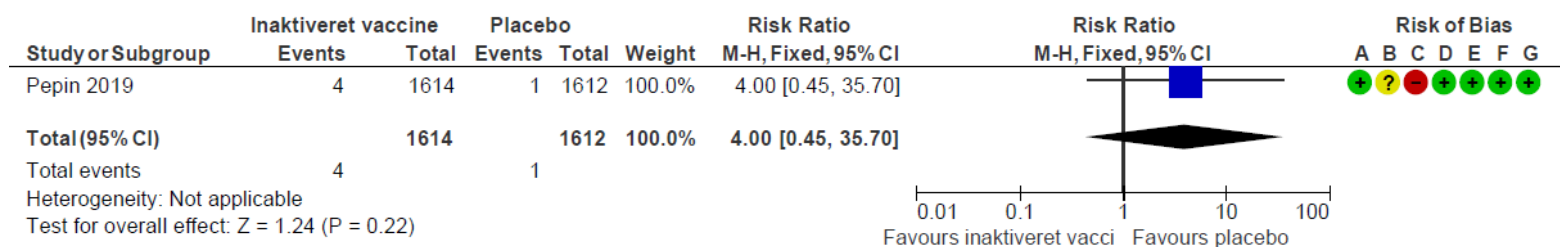


#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



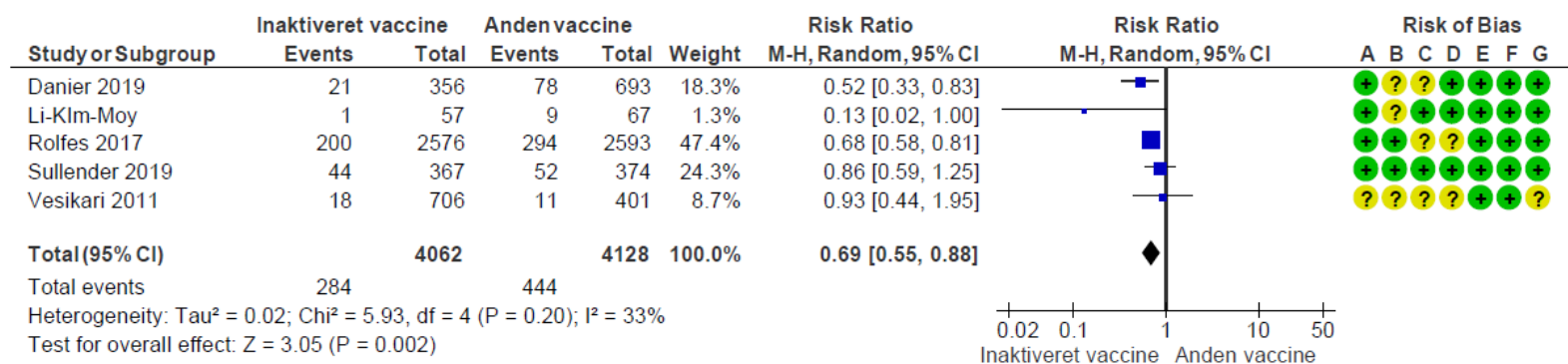
### Død, inaktiveret vaccine vs. Placebo



#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias

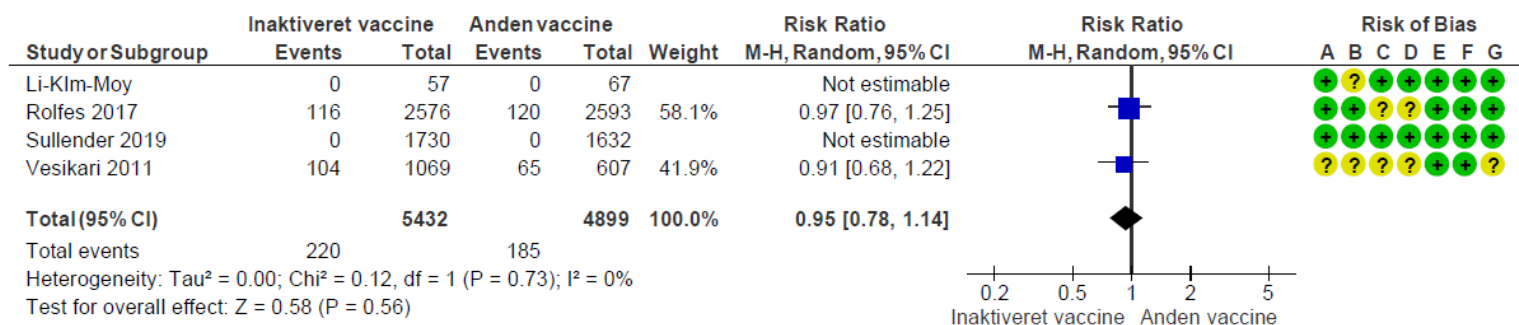
## Laboratorieverificeret influenza, inaktiveret vaccine vs. anden vaccine



### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias

## Alvorlige hændelser (SAE), inaktiveret vaccine vs. anden vaccine



### Risk of bias legend

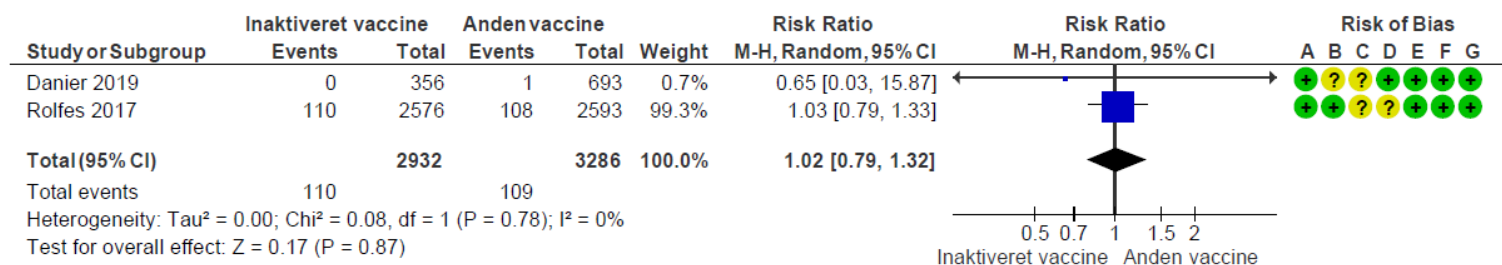
- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias





## Fokuseret spørgsmål 6: Hvad er effekten af vaccination med en inaktiveret influenzavaccine til raske børn under to år?

Udfaldsmål: Alle indlæggelser, inaktiveret vaccine vs. anden vaccine



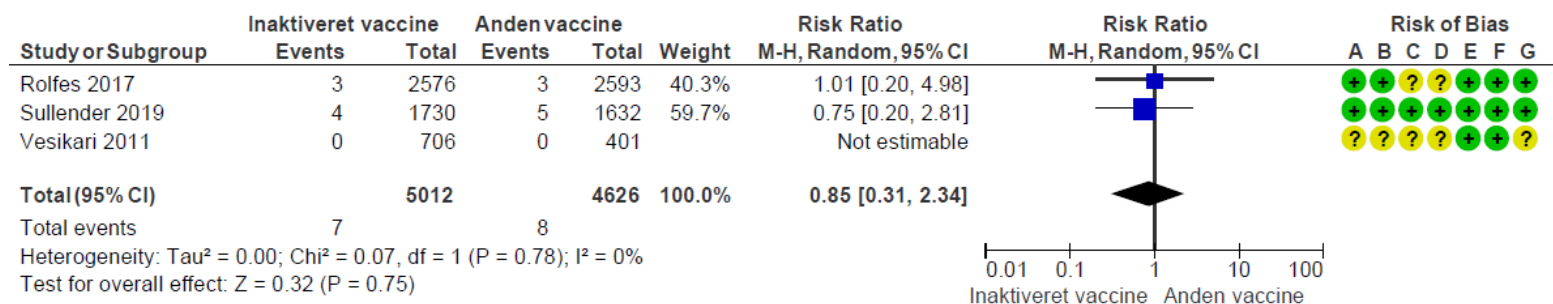
### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



## Fokuseret spørgsmål 6: Hvad er effekten af vaccination med en inaktiveret influenzavaccine til raske børn under to år?

### Udfaldsmål: Død, inaktiveret vaccine vs. anden vaccine



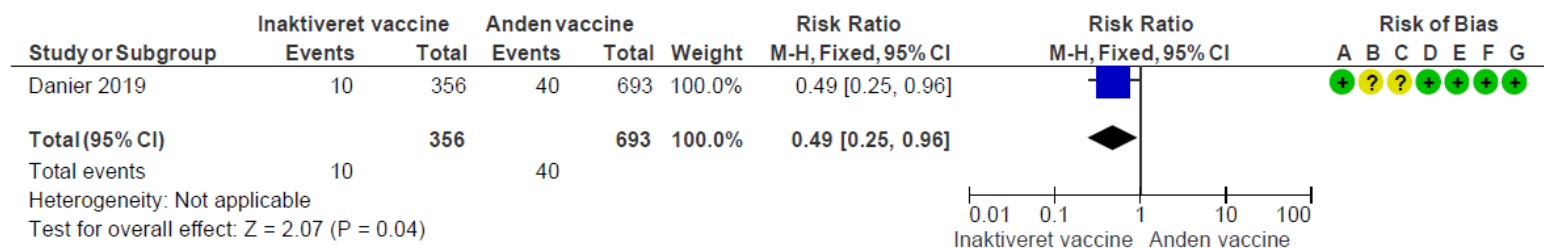
#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



**Fokuseret spørgsmål 6: Hvad er effekten af vaccination med en inaktiveret influenzavaccine til raske børn under to år?**

**Udfaldsmål: Brug af antibiotika, inaktiveret vaccine vs. anden vaccine**



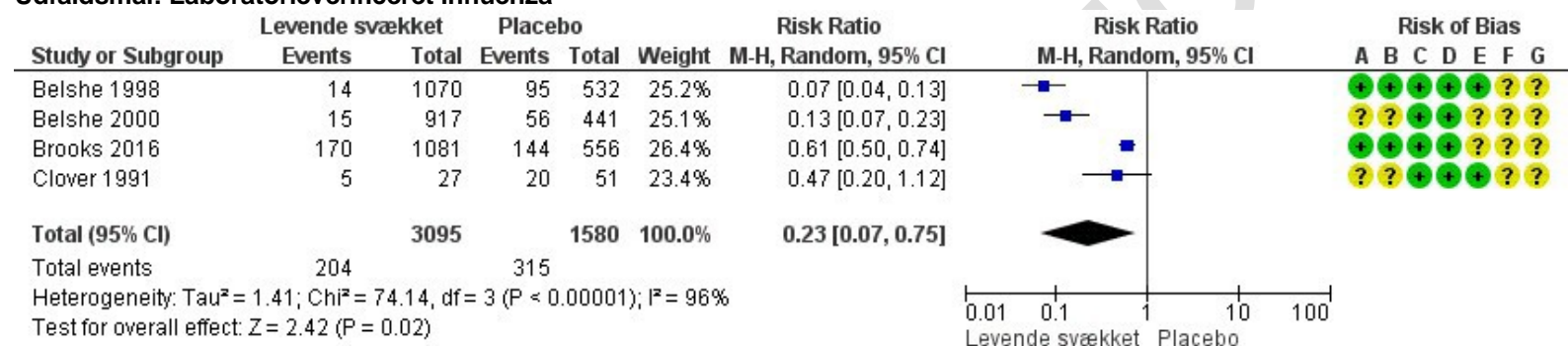
Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



**Fokuseret spørgsmål 7: Hvad er effekten af vaccination med en levende svækket influenzavaccine til raske børn mellem to og seks år?**

**Udfaldsmål: Laboratorieverificeret influenza**



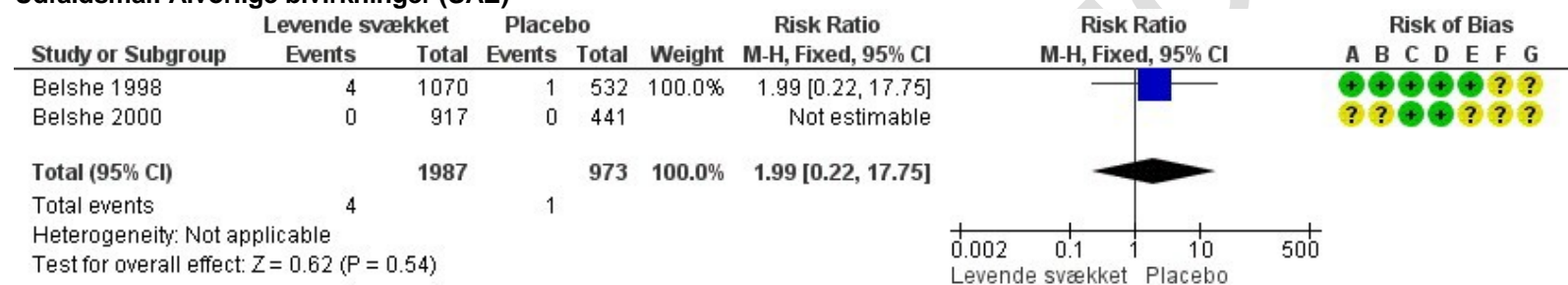
Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



**Fokuseret spørgsmål 7: Hvad er effekten af vaccination med en levende svækket influenzavaccine til raske børn mellem to og seks år?**

**Udfaldsmål: Alvorlige bivirkninger (SAE)**



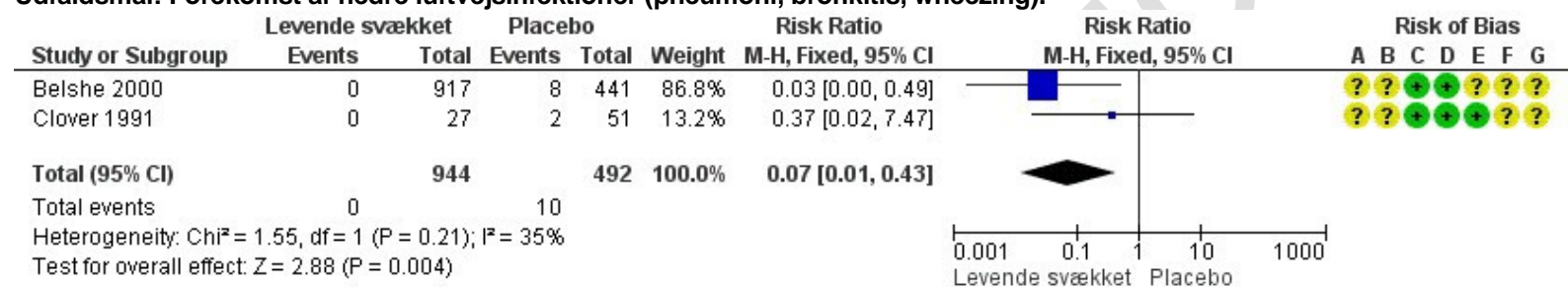
Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



**Fokuseret spørgsmål 7: Hvad er effekten af vaccination med en levende svækket influenzavaccine til raske børn mellem to og seks år?**

**Udfaldsmål: Forekomst af nedre luftvejsinfektioner (pneumoni, bronkitis, wheezing).**



Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



**Fokuseret spørgsmål 7: Hvad er effekten af vaccination med en levende svækket influenzavaccine til raske børn mellem to og seks år?**

**Udfaldsmål: Brug af antibiotika**



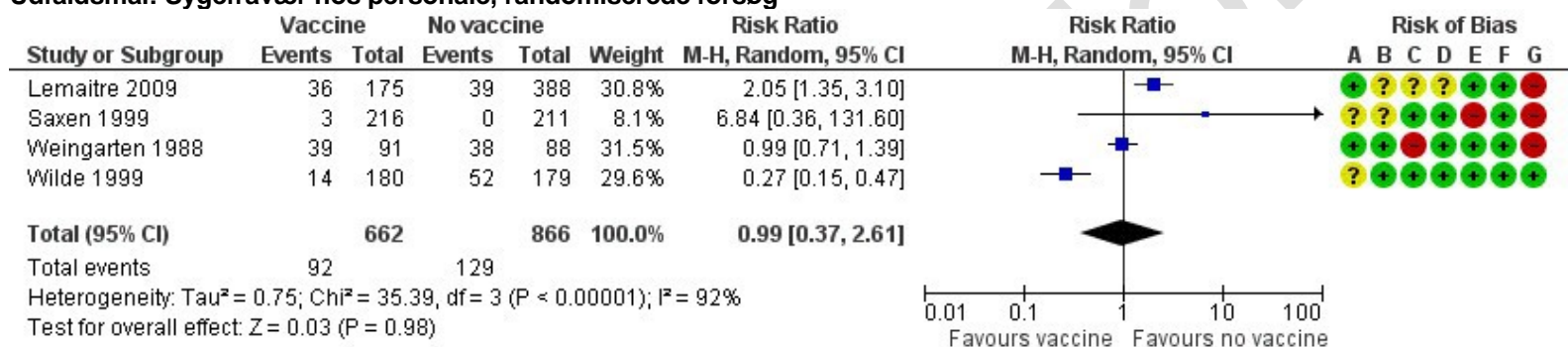
Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



### Fokuseret spørgsmål 8: Hvad er effekten af influenzavaccination af sundhedspersonale?

#### Udfaldsmål: Sygefravær hos personale, randomiserede forsøg



#### Risk of bias legend

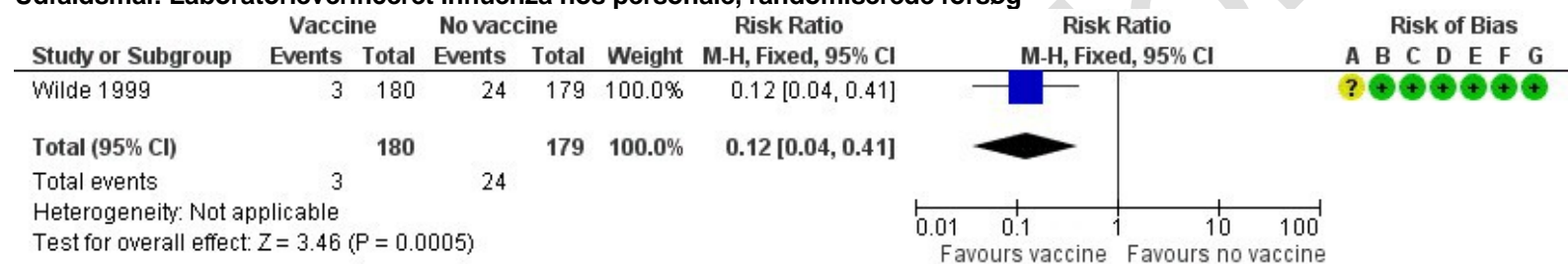
- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias





### Fokuseret spørgsmål 8: Hvad er effekten af influenzavaccination af sundhedspersonale?

Udfaldsmål: Laboratorieverificeret influenza hos personale, randomiserede forsøg



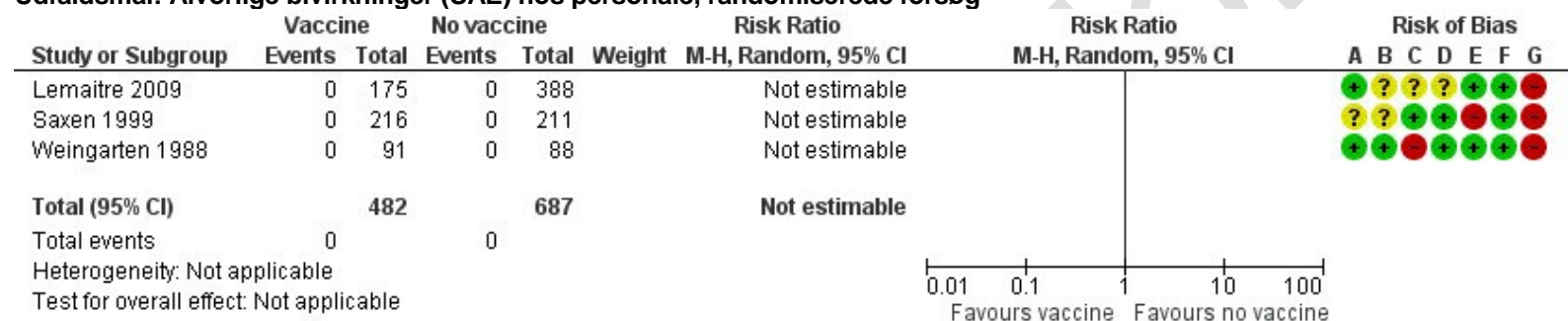
#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



**Fokuseret spørgsmål 8: Hvad er effekten af influenzavaccination af sundhedspersonale?**

**Udfaldsmål: Alvorlige bivirkninger (SAE) hos personale, randomiserede forsøg**

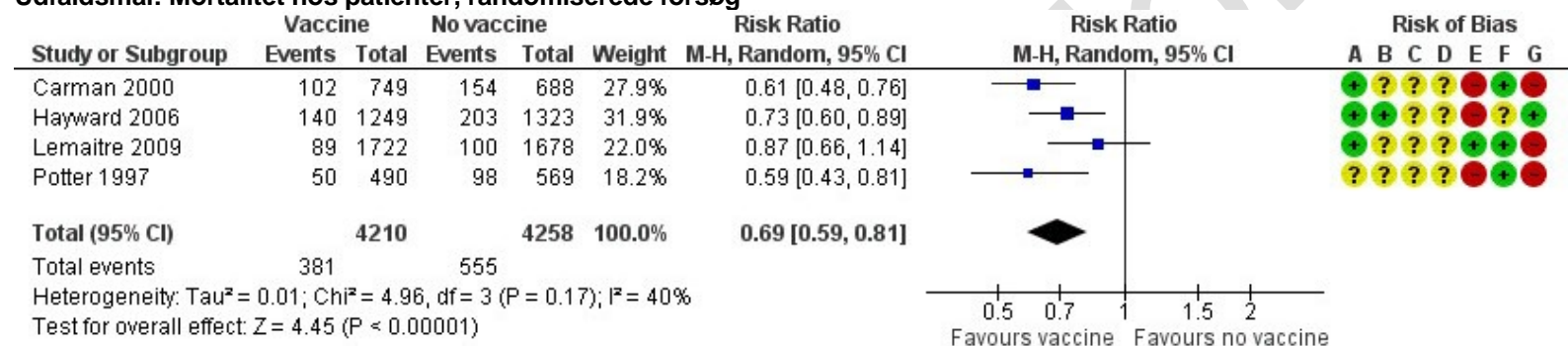


Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias

## Fokuseret spørgsmål 8: Hvad er effekten af influenzavaccination af sundhedspersonale?

### Udfaldsmål: Mortalitet hos patienter, randomiserede forsøg



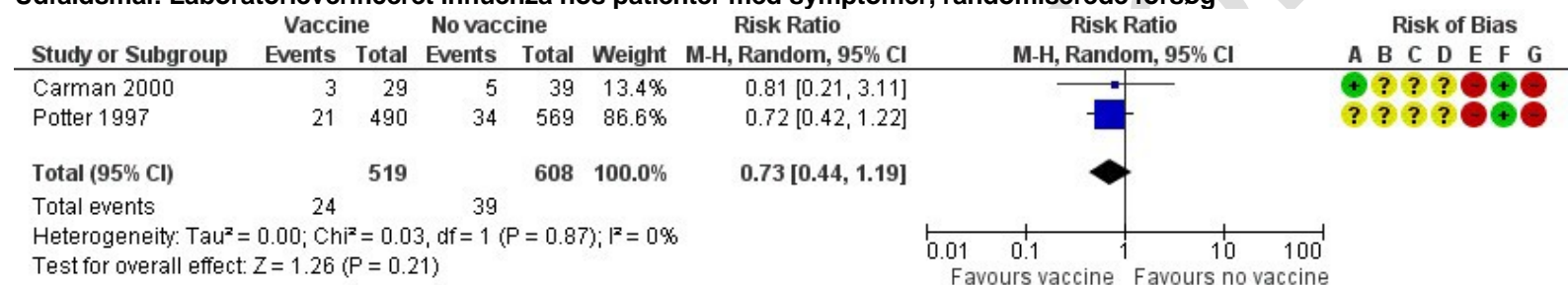
#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



### Fokuseret spørgsmål 8: Hvad er effekten af influenzavaccination af sundhedspersonale?

Udfaldsmål: Laboratorieverificeret influenza hos patienter med symptomer, randomiserede forsøg



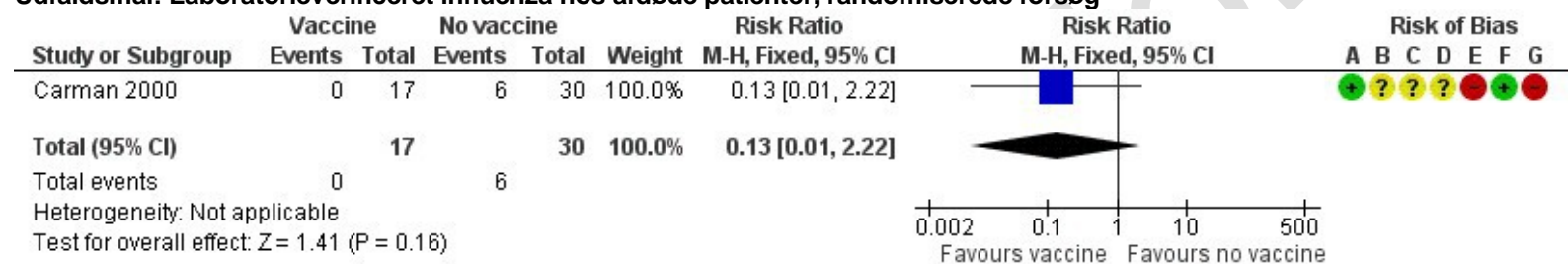
#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



**Fokuseret spørgsmål 8: Hvad er effekten af influenzavaccination af sundhedspersonale?**

**Udfaldsmål: Laboratorieverificeret influenza hos afdøde patienter, randomiserede forsøg**



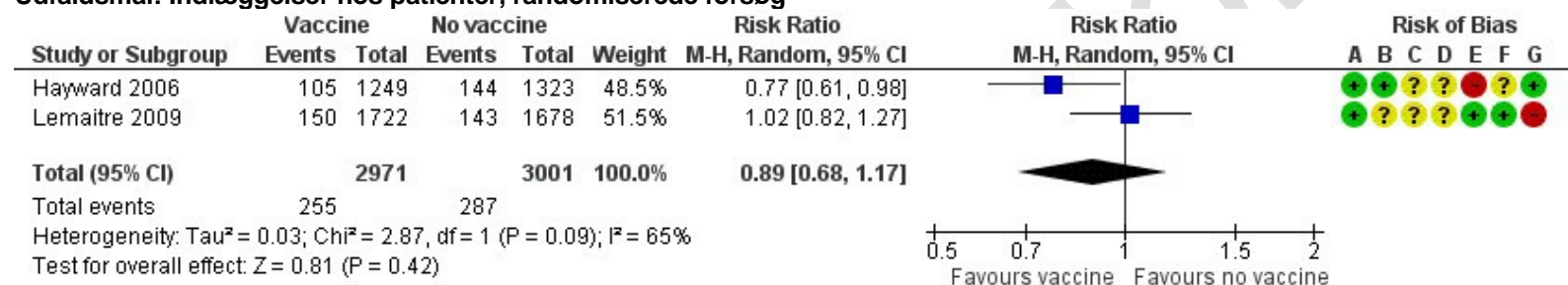
Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



### Fokuseret spørgsmål 8: Hvad er effekten af influenzavaccination af sundhedspersonale?

#### Udfaldsmål: Indlæggelser hos patienter, randomiserede forsøg



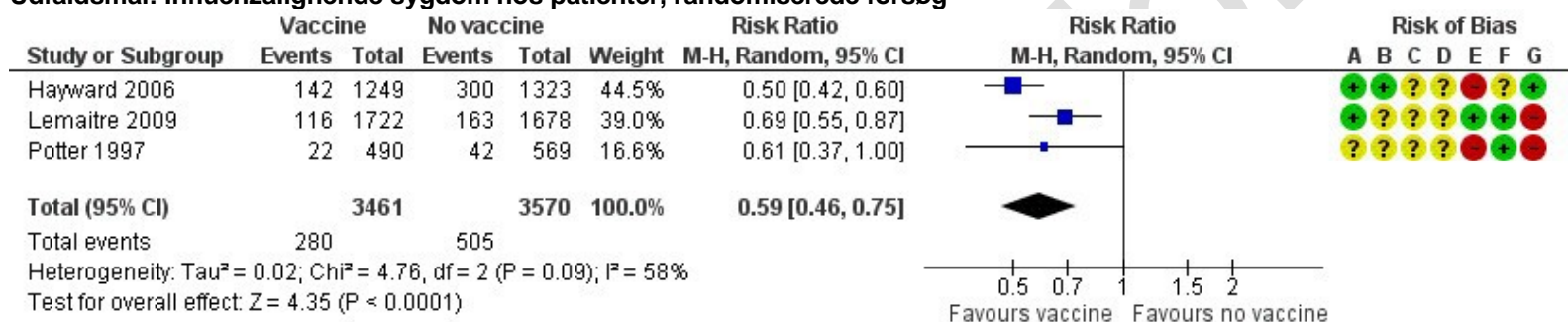
#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



### Fokuseret spørgsmål 8: Hvad er effekten af influenzavaccination af sundhedspersonale?

#### Udfaldsmål: Influenzalignende sygdom hos patienter, randomiserede forsøg



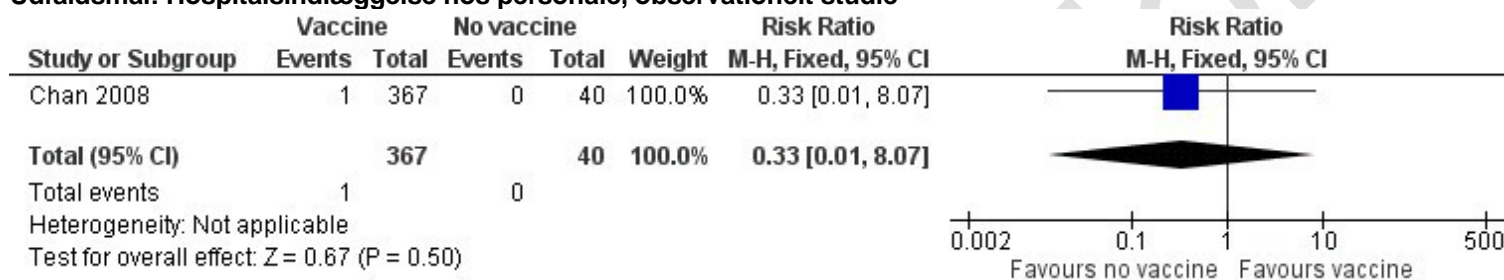
#### Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias



**Fokuseret spørgsmål 8: Hvad er effekten af influenzavaccination af sundhedspersonale?**

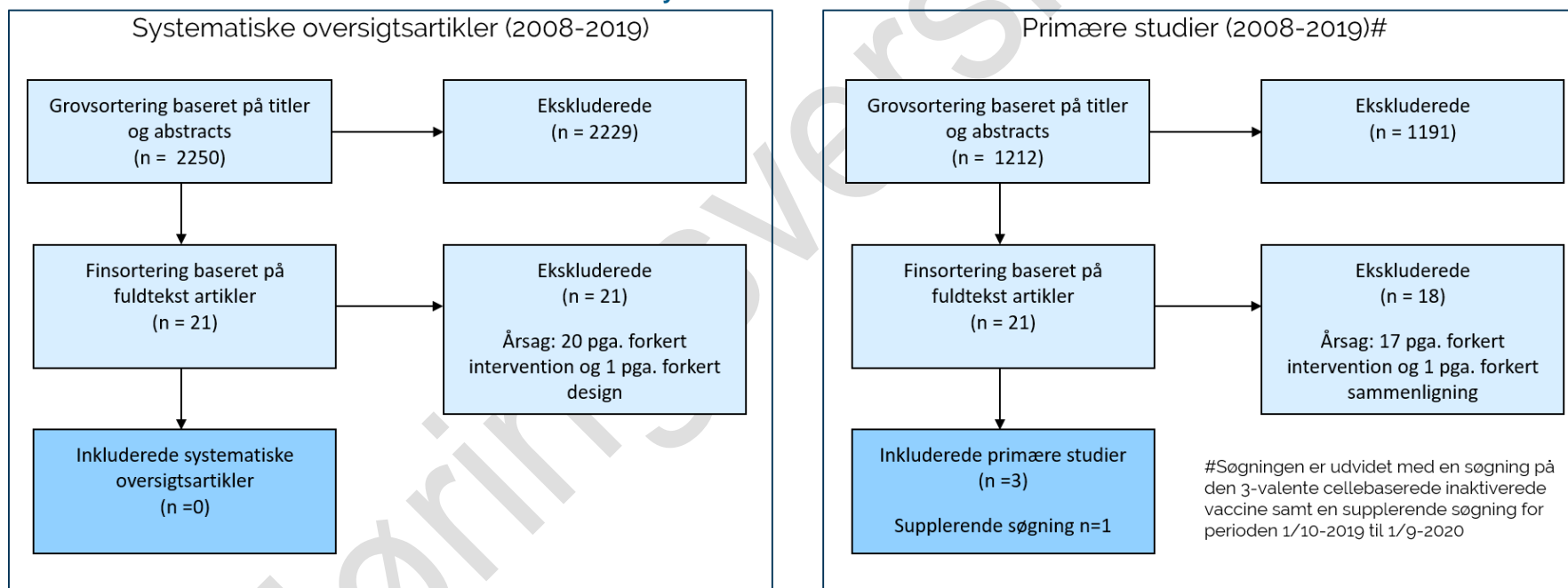
**Udfaldsmål: Hospitalsindlæggelse hos personale, observationelt studie**





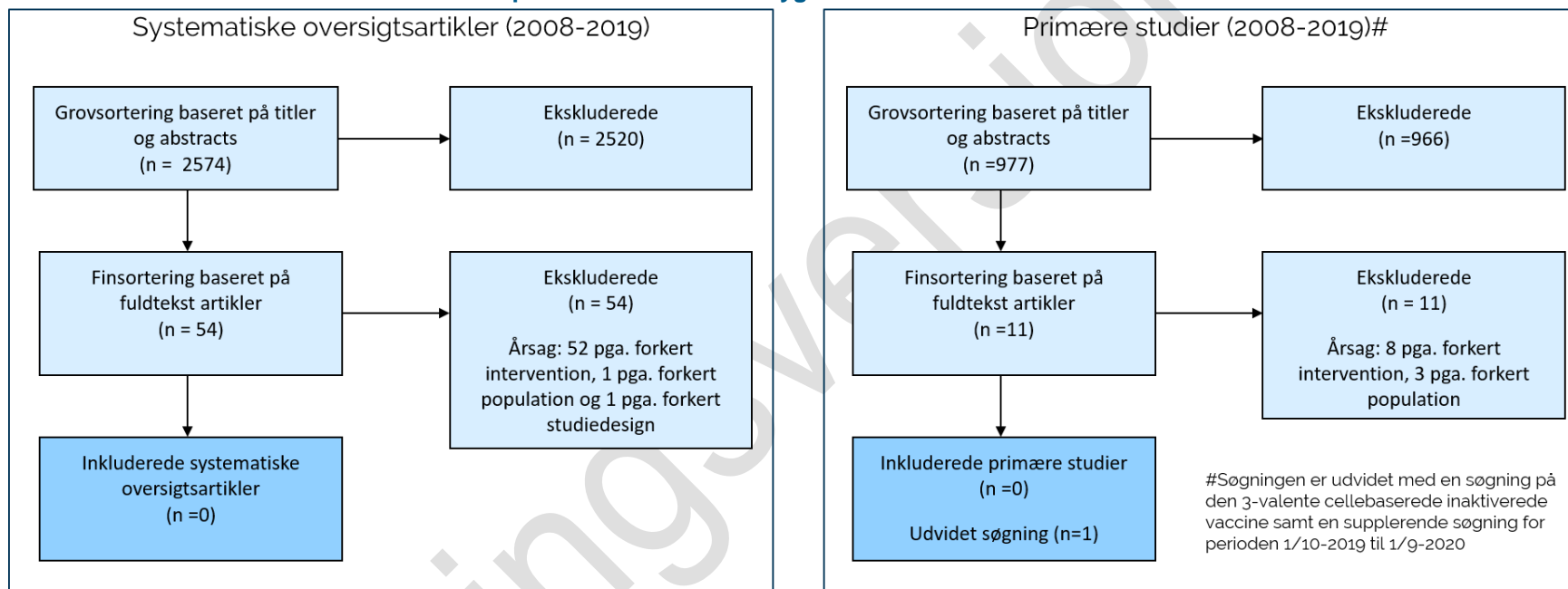
## Bilag 4 – Flowcharts

**Fokuseret spørgsmål 1: Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner til ældre som er fyldt 65 år?**



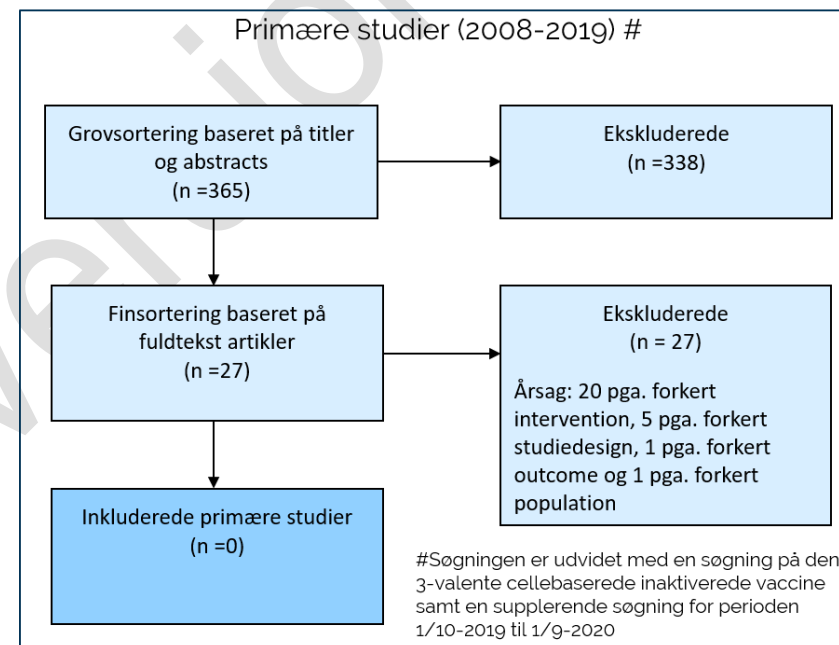
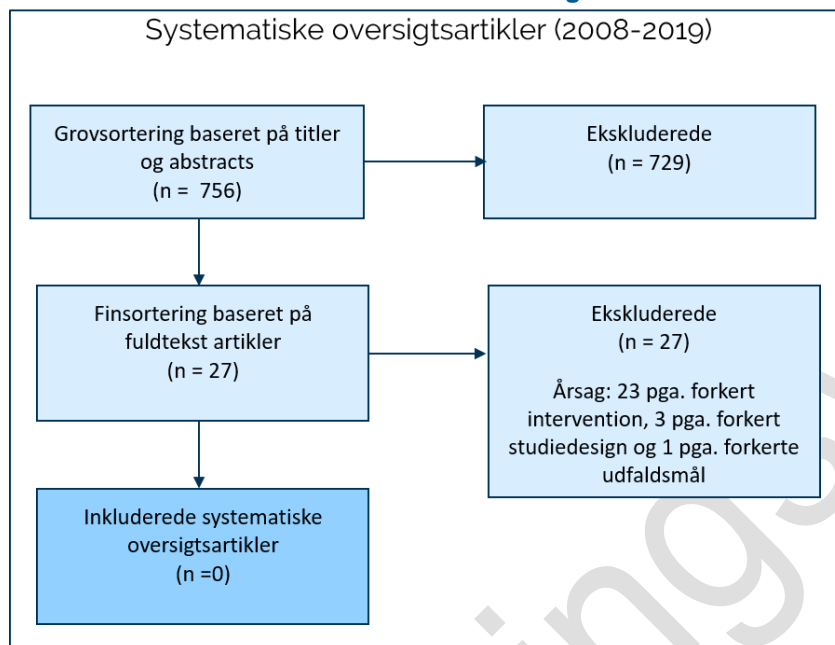


**Fokuseret spørgsmål 2: Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner til personer med kronisk sygdom?**



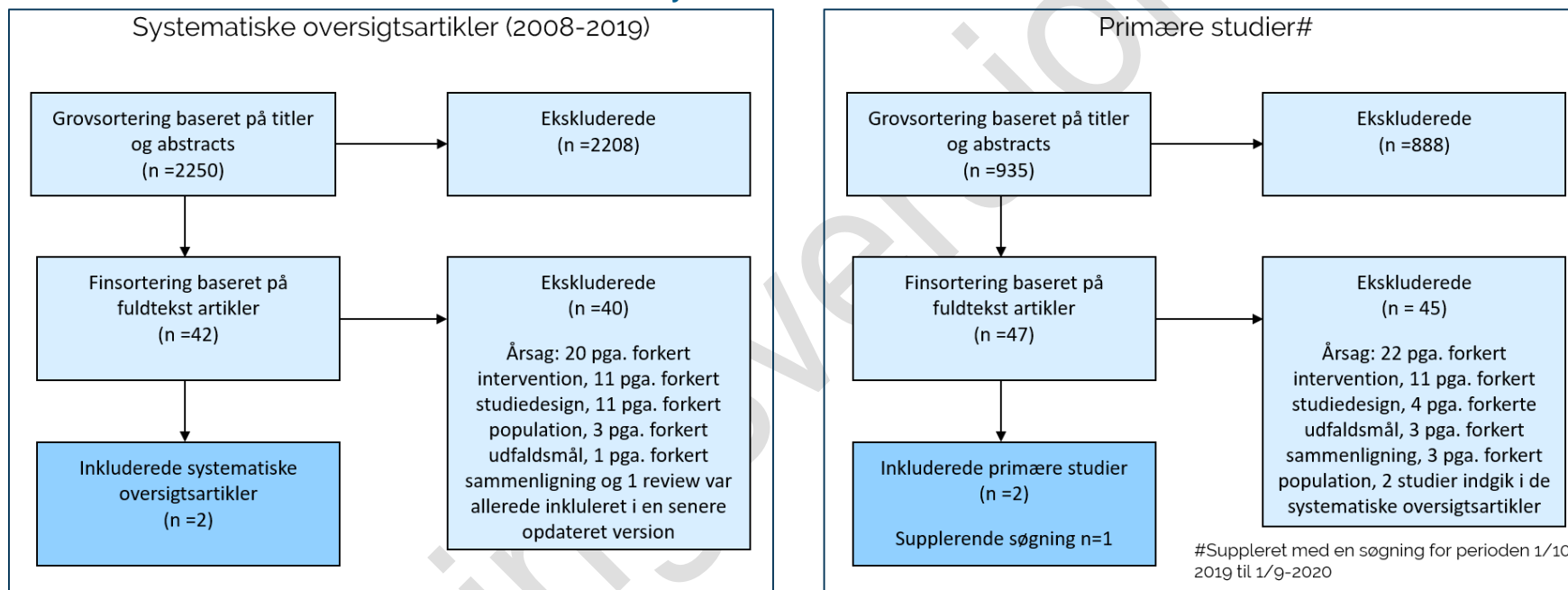


**Fokuseret spørgsmål 3: Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner til gravide?**



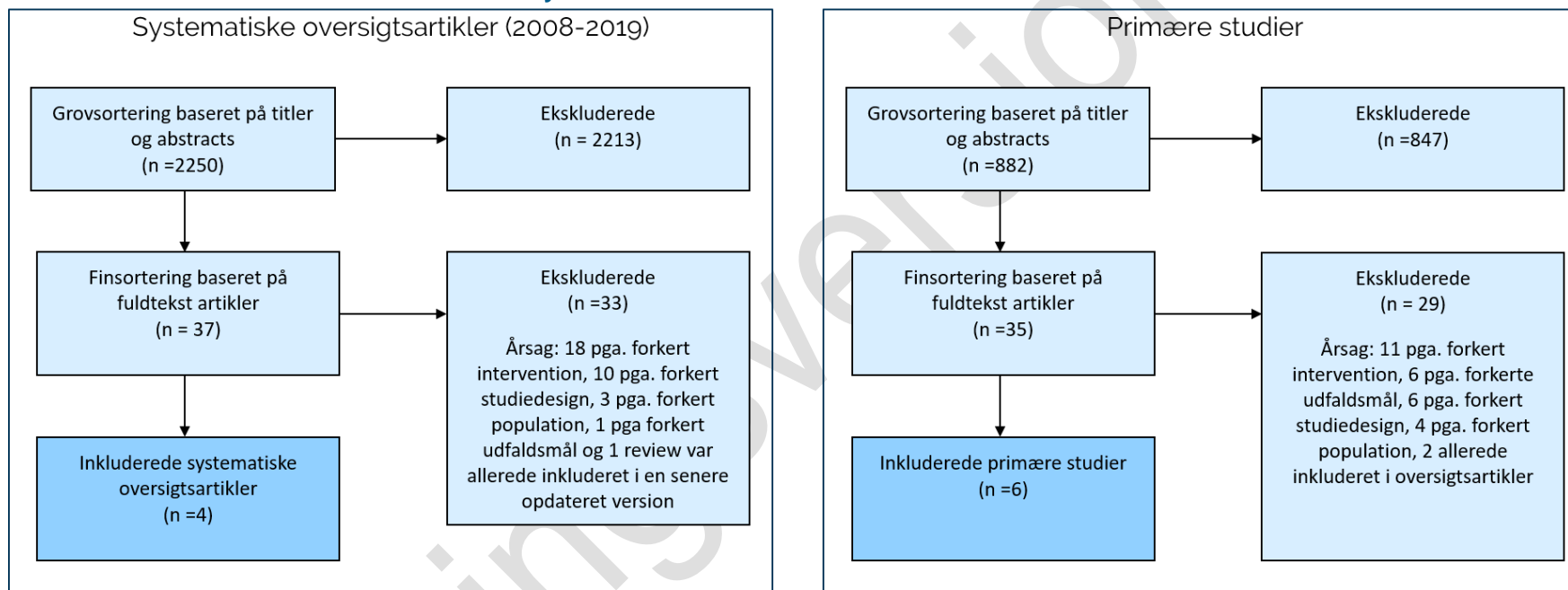


**Fokuseret spørgsmål 4: Hvad er effekten af vaccination med en 3-valent adjuveret inaktiveret influenzavaccine sammenlignet med andre inaktiverede influenzavacciner til ældre som er fyldt 65 år?**



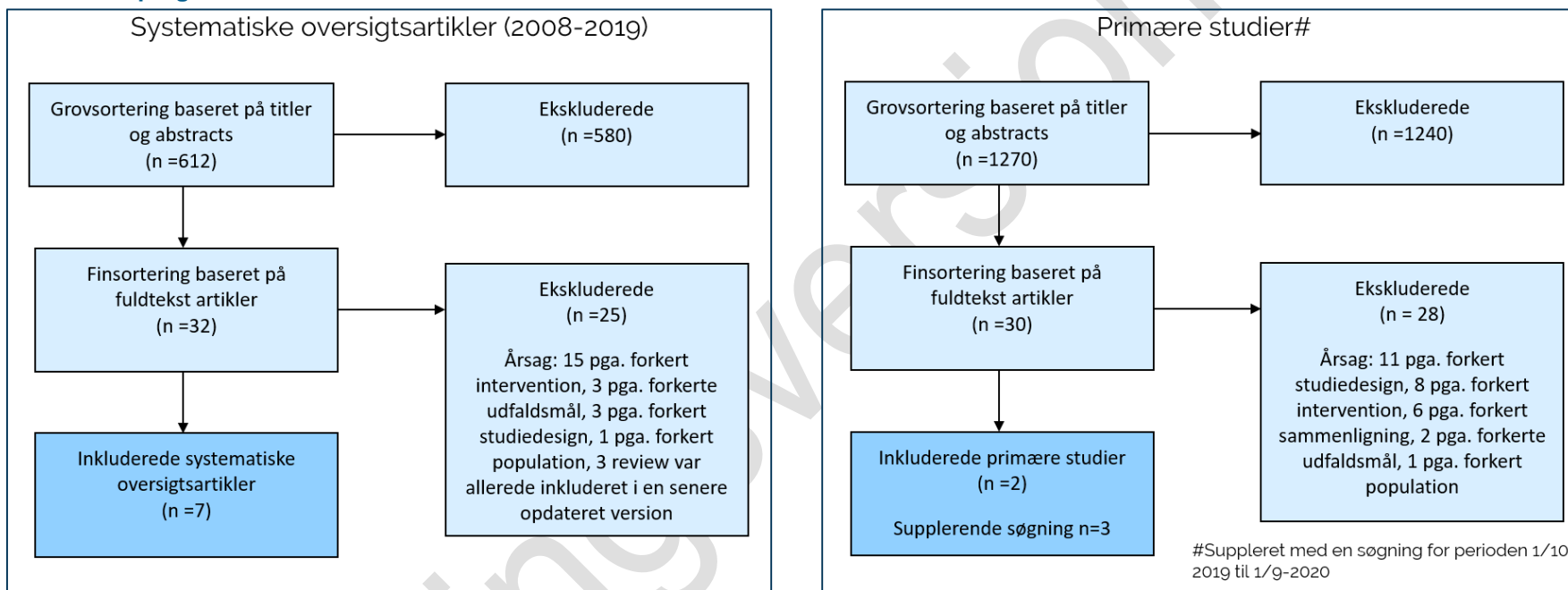


**Fokuseret spørgsmål 5: Hvad er effekten af vaccination med en højdosis inaktiveret influenzavaccine sammenlignet med andre inaktiverede influenzavacciner til ældre som er fyldt 65 år?**



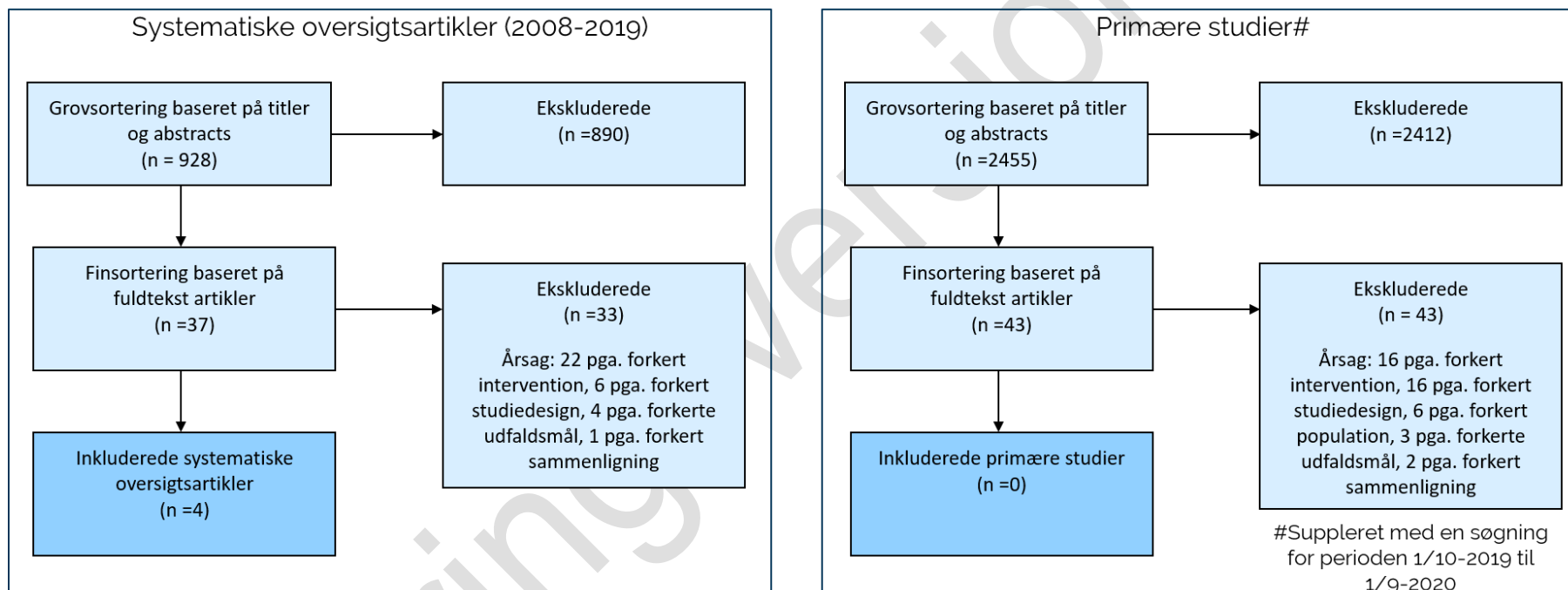


**Fokuseret spørgsmål 6: Hvad er effekten af vaccinationen med en inaktiveret influenzavaccine til raske børn under to år?**



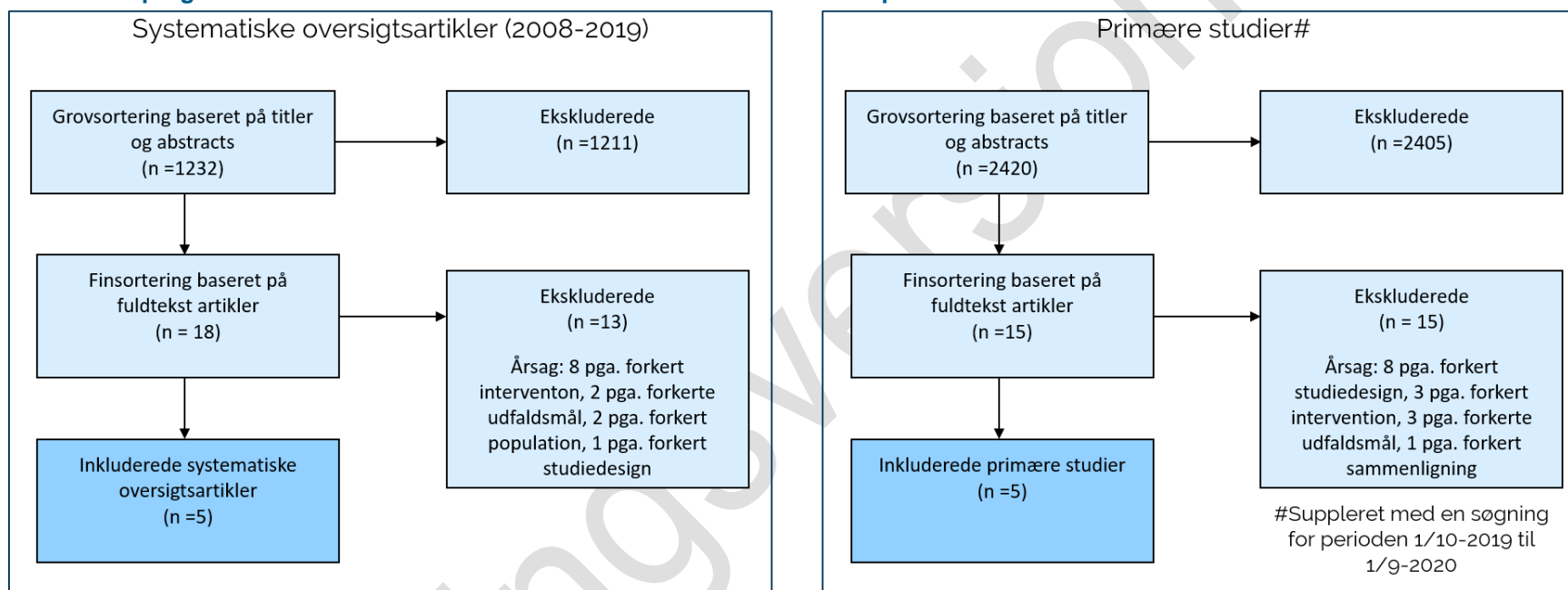


**Fokuseret spørgsmål 7: Hvad er effekten af vaccination med en levende svækket influenzavaccine til raske børn i alderen 2-6 år?**





**Fokuseret spørgsmål 8: Hvad er effekten af influenzavaccination af sundhedspersonale?**





## Bilag 5 – ROBINS-I

Nedenstående tabel viser oversigt over ROBINS-I.

Study	Confounding	Participants	Classify intervention	Deviation intervention	Missing data	Measurement outcome	Selection of reporting	Overall assessment
Purig-Babera 2012	Serious	Serious	Moderate	Serious	Serious	Serious	Serious	<b>Serious</b>
Purig-Babera 2013	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Low	<b>Moderate</b>
Mannino 2012	Serious	Serious	Moderate	Serious	Serious	Serious	Serious	<b>Serious</b>
Spadera 2014	Serious	Serious	Moderate	Serious	Serious	Serious	Serious	<b>Serious</b>
Van Buynder 2013	Serious	Serious	Moderate	Moderate	Serious	Moderate	Serious	<b>Serious</b>
Richardson	Moderate	Serious	Moderate	Moderate	Serious	Serious	Serious	<b>Serious</b>
Young-Xu 2018	Serious	Serious	Moderate	Moderate	Serious	Moderate	Serious	<b>Serious</b>
Izurieta 2018	Serious	Serious	Moderate	Serious	Serious	Serious	Serious	<b>Serious</b>
Piedra 2005	Serious	Moderate	Moderate	Moderate	Serious	Serious	Low	<b>Serious</b>
Toback 2013	Moderate	Moderate	Moderate	Serious	Serious	Serious	Low	<b>Serious</b>
Chan 2008	Serious	Serious	Serious	Serious	Serious	Serious	Low	<b>Serious</b>
Izurieta 2018	Serious	Serious	Moderate	Serious	Serious	Serious	Serious	<b>Serious</b>

## Bilag 6 – Litteraturgennemgang til økonomikapitlet

### Metode

Der er gennemført en litteraturgennemgang for at få et overblik over eksisterende litteratur på området. Der er endnu ikke gennemført studier med de nye typer af vacciner, der undersøges i denne MTV, da de først er blevet tilgængelige fra 2019. Litteratursøgningen indeholder derfor alene litteratur om omkostningseffektivitet ved at influenzavaccinere forskellige populationer, fx børn, ældre eller personer med øget risiko for influenza.

Som et led i litteratursøgningen identificeres input til den økonomiske model, herunder QALY-tab og fravær fra arbejdsmarkedet i forbindelse med influenza.

Relevante økonomiske studier er identificeret gennem en systematisk litteratursøgning. Søgningen omfatter en gennemgang af publikationer, der er udgivet i perioden januar 2009 til november 2019.

I tabel 1 præsenteres de termer, der søges på i litteratursøgningen. Der søges efter litteratur på engelsk, norsk, svensk og dansk i følgende databaser: Pubmed, Cochrane database, HTA database og Forskningsdatabasen. Medical Subject Headings (MeSH-termer) er inkluderet, hvor det er relevant.

Tabel 1: Søgetermer

Sygdomsområde		Udfald
Influenza (MeSH) OR Influenza vaccine (MeSH) OR Influenza vaccination (MeSH) OR "Influenza-like-illness" OR Influenza, Human (MeSH)	AND	"Quality of life" OR Quality of life (MeSH) OR QALY (MeSH) OR "Quality-adjusted life years" OR Costs (MeSH) OR "Cost-effectiveness" OR "Cost-utility"

Relevante publikationer udvælges ud fra nedenstående inklusions- og eksklusionskriterier.



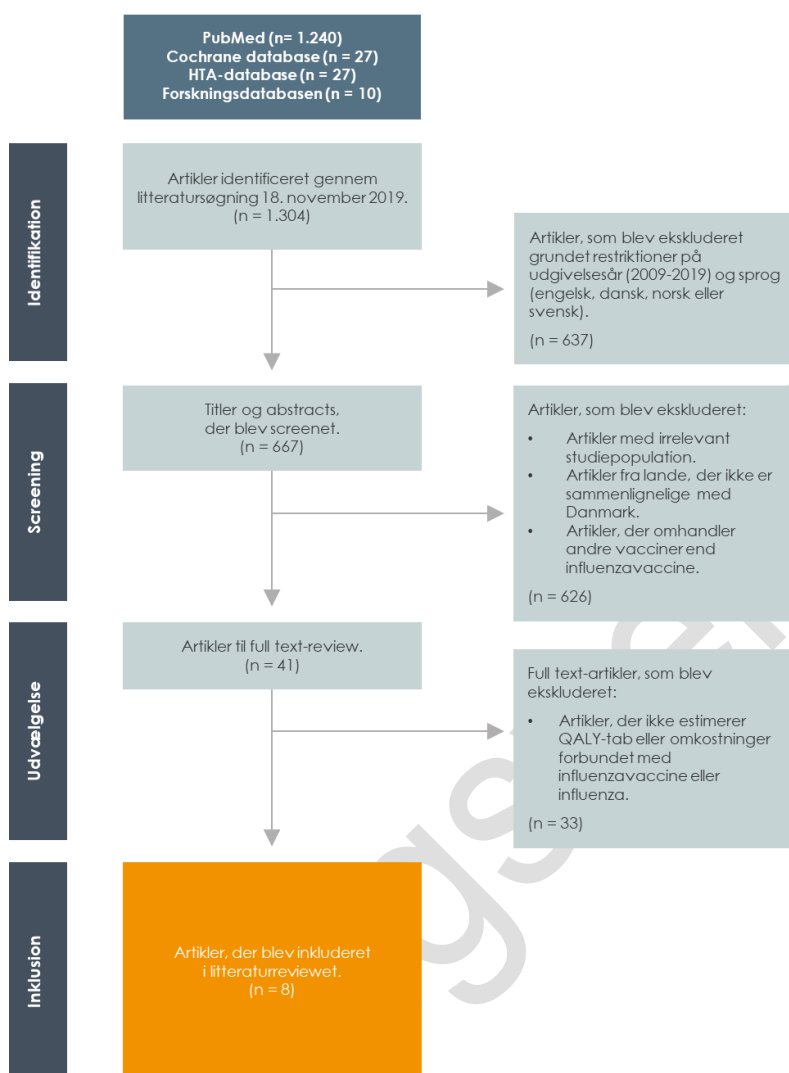
#### Inklusionskriterier

- Systematiske reviews eller metaanalyser, der undersøger omkostningseffektiviteten af influenzavaccination.
- Systematiske reviews, der undersøger, hvilken effekt influenzavaccination eller influenza har på livskvaliteten, herunder estimerer for QALY-tab.
- Primærstudier, herunder cost-effectiveness-studier, omhandlende samme type af økonomiske analyser, og som ikke er inkluderet i de identificerede systematiske reviews.

#### Eksklusionskriterier

- Studier fra lande, der ikke vurderes sammenlignelige med Danmark.
- Studier, hvor studiepopulationen er defineret af en sygdom (fx effekten af influenzavaccination blandt personer med hjerte-kar-sygdomme).

Figur 1 Litteratursøgningsproces



### Resultater af litteraturgennemgang

Litteratursøgningen resulterer i 667 artikler publiceret mellem 2009 og 2019. Ved den efterfølgende gennemgang af abstract vurderes 41 artikler til at være relevante til gennemlæsning. Efter gennemlæsning af 41 artikler bliver otte artikler inkluderet i reviewet, herunder fire systematiske litteraturreviews og fire primærstudier. De inkluderede studier er præsenteret i bilag,

tabel 2 og tabel 3.

### Omkostningseffektivitet ved influenzavaccination

I følgende afsnit præsenteres viden om omkostningseffektiviteten af influenzavaccination i den generelle befolkning. Dernæst er resultater fra de specifikke målgrupper beskrevet.

Dette omfatter personer over 65 år, personer med høj risiko for at få influenza og gravide i 2. og 3. trimester. Disse grupper tilbydes influenzavaccination i Danmark på nuværende tidspunkt. Derudover er børn samt sundheds- og plejepersonale målgrupper, som potentielt vil have gavn af at blive tilbudt influenzavaccination. Derfor undersøges disse målgrupper også i denne litteraturgennemgang.

### Den generelle befolkning

De systematiske reviews inkluderer både studier, der sammenligner omkostningseffektiviteten i scenarier med og uden vaccinationsprogram, og studier, der sammenligner forskellige vaccinationsprogrammer eller typer af vaccinationer.

Blandt de 14 studier, der er identificeret i D'Angiolella *et al.* (ref. D'Angiolella 2018), som inkluderer "ingen vaccination" som reference, rapporterer to, at vaccination er en omkostningsbesparende strategi (dvs. vaccination er en dominant strategi), otte rapporterer en inkrementel omkostningseffektratio under 150.000 kr./QALY, og to studier rapporterer en inkrementel omkostningseffektratio mellem 150.000 kr. og 370.000 kr./QALY. Alle studierne estimerer altså, at det er omkostningseffektivt at influenzavaccinere.

Blandt de 17 studier identificeret i D'Angiolella *et al.* (ref. D'Angiolella 2018), der sammenlignede forskellige vaccinestrategier, er den 3-valente vaccine hyppigst evalueret og sammenlignet med den 4-valente vaccine eller "*live attenuated influenza vaccine*". *Live attenuated Influenza vaccine* er en svækket vaccine, der administreres nasalt, modsat de andre vacciner, som administreres via injektion. Tre af de inkluderede studier rapporterer, at den 3-valente vaccine er mindre effektiv og dyrere end de alternative vaccinationsmuligheder. Et studie rapporterer, at "*live attenuated influenza vaccine*" er omkostningsbesparende sammenlignet med den 3-valente vaccine. To studier rapporterer, at den 4-valente vaccine er omkostningsbesparende sammenlignet med den 3-valente, og ni studier finder, at den 4-valente vaccine er omkostningseffektiv sammenlignet med den 3-valente. Endelig finder to af de inkluderede studier, at den 4-valente vaccine er lige så effektiv som den 3-valente. Flere analyser indikerer ydermere, at den 4-valente vaccine medfører flere sundhedsfordele, fx reducerer den antallet af symptomatiske influenzatilfælde samt dødsfald og dermed mindre QALY-tab på grund af influenza sammenlignet med den 3-valente.

### Personer over 65 år

Det nyeste systematiske litteraturreview af omkostningseffektiviteten af influenzavaccine, inkluderet i vores søgning, er studiet af Dabestani *et al.*, som blev publiceret i 2019 (ref. Dabestani 2019). Reviewet gennemgår 12 artikler omhandlende omkostningseffektiviteten af influenzavaccination blandt en amerikansk population sammenlignet med et scenarie uden influenzavaccination, hvoraf seks af studierne inkluderer en population af personer over 65 år. Blandt dem rapporterer forfatterne en relativt lav omkostningseffektivitetsratio, hvor den inkrementelle omkostningseffektratio varierer fra at være omkostningsbesparende (dvs. det er både billigere og bedre at vaccinere) til at være 100.000 kr./QALY. Desuden konkluderer et af de inkluderede studier, at influenzavaccination re-



ducerer risikoen for influenza blandt personer over 65 år med en risikoratio på 0,42, hvilket var statistisk signifikant lavere sammenlignet med et scenarie uden influenzavaccination. Forfatterne pointerer, at nogle af grundene til de relativt lave omkostningseffektratioer er, at influenzavaccinen er billig (75-150 kr.), ligesom influenza er en sygdom, der rammer en relativt stor population hver år, hvorfor det har et stort potentiale at forebygge nogle af disse tilfælde.

Shields *et al.* (ref. Shields 2017) undersøger også omkostningseffektiviteten af at influenzavaccinere personer over 65 år. Ligesom ovennævnte review (ref. Dabestani 2019) rapporterer forfatterne, at syv ud af otte inkluderede artikler estimerer, at influenzavaccination blandt ældre er omkostningseffektivt. Et af de inkluderede studier tager højde for flokimmunitet, hvilket har en betydelig effekt på omkostningseffektiviteten. Forfatterne pointerer derfor, at denne dimension er væsentlig at tage højde for, da smitterisikoen mindskes, jo flere personer der er vaccineret, også blandt dem, der ikke er vaccineret. I den økonomiske analyse i denne rapport har vi taget højde for flokimmunitetseffekten.

Endelig identificerer D'Angiolella *et al.* (ref. D'Angiolella 2018), i 2018 11 studier, der undersøger effekten af influenzavaccination blandt personer over 65 år. De inkluderede studier varierer mellem at sammenligne et scenarie med influenzavaccination med et scenarie uden influenzavaccination og at sammenligne forskellige vaccinationsscenarioer, fx to forskellige typer af vaccinationer. Blandt de studier, der sammenligner influenzavaccination med ingen influenzavaccination, rapporterer fem en omkostningseffektratio under 150.000 kr./QALY, og et studie rapporterer en omkostningseffektratio mellem 150.000 og 370.000 kr./QALY. De to inkluderede studier, der sammenligner to typer af influenzavaccinationer blandt personer over 65 år, konkluderer begge, at en 4-valent vaccine er omkostningseffektiv sammenlignet med en 3-valent vaccine.

### Personer med høj risiko

Kun et af de identificerede litteraturreviews undersøger omkostningseffektiviteten i en population af personer med høj risiko for influenza. Denne population består af personer, der er i højere risiko for at udvikle influenza sammenlignet med den generelle befolkning og dem, der er i højere risiko for at udvikle influenzarelaterede komplikationer. D'Angiolella *et al.* (ref. D'Angiolella 2018) inkluderer fem studier blandt personer med høj risiko for influenza. Det er fx personer med kroniske respiratoriske sygdomme, kronisk hjertesygdom, kronisk leversygdom og diabetes.

Alle de fem studier finder, at vaccinationsprogrammer mod influenza var dyrere end ingen vaccination, bortset fra i en population af patienter med tidligere lungebetændelse, formentlig fordi de var i højere risiko for at blive syge og blive indlagt på hospitalet sammenlignet med den generelle befolkning. Ligesom i flere af de andre populationer finder to studier blandt højrisikopatienter også, at den 4-valente vaccination er mere effektiv og reducerer flere influenzarelaterede sygdomme end den 3-valente vaccine. Ud af de to studier, der estimerer omkostningseffektratioen, estimerer det ene studie, at vaccination blandt personer med høj risiko er en omkostningsbesparende strategi, og det andet studie estimerer, at det er en omkostningseffektiv strategi.

### Gravide i 2. og 3. trimester

D'Angiolella *et al.* (ref. D'Angiolella 2018) inkluderer også studier, hvor målgruppen er gravide kvinder. Forfatterne identificerer tre studier, der estimerer omkostningseffektiviteten for influenzavaccination blandt gravide, sammenlignet med et scenarie, hvor gravide ikke er vaccineret. To af de inkluderede studier estimerer omkostningseffektratioen til at være omkostningsbesparende eller omkostningseffektiv. Det sidste studie rapporterer modstridende resultater: De estimerer, at influenzavaccination er omkostningsbesparende blandt gravide kvinder i en influenzasæson med moderat influenzaaktivitet, men ikke omkostningseffektiv i en sæson med lav influenzaaktivitet<sup>62</sup>.

Dabestani *et al.* inkluderer tre studier, hvor målgruppen er gravide kvinder, hvoraf ét af studierne er det samme, som også er identificeret af D'Angiolella *et al.* Blandt de identificerede omkostningseffektivitetsstudier varierede omkostningseffektratioen fra at være omkostningsbesparende til at være ikke-omkostningseffektiv. Forfatterne pointerer, at den målgruppe, hvor omkostningseffekten varierer mest, er blandt gravide kvinder, og at omkostningseffektiviteten netop afhænger af, om der er høj eller lav influenzaincidens i den pågældende sæson.

### Børn

I Danmark er børn på nuværende tidspunkt ikke inkluderet i influenzavaccinationsprogrammet. I en del øvrige europæiske lande tilbydes børn dog influenzavaccination og omkostningseffekten heraf er blandt andet undersøgt i D'Angiolella *et al.* (ref. D'Angiolella 2018). Forfatterne inkluderer syv studier, der gennemgår omkostningseffektiviteten af influenzavaccine blandt børn.

Alle de inkluderede studier rapporterer, at influenzavaccination er mere omkostningseffektiv end ingen influenzavaccination, da vaccination forebygger et betydeligt antal indlæggelser og dødsfald samt resulterer i et mindre QALY-tab. Studier, der både inkluderer direkte og indirekte omkostninger, estimerer i højere grad, at vaccination er omkostningseffektiv, specielt blandt børn, da de i højere grad er smittebærere, og det dermed har en større effekt at vaccinere dem end andre målgrupper. Indirekte omkostninger omfatter produktionstab og fravær fra arbejdsmarkedet (i dette tilfælde blandt forældre). Derudover kan de indirekte effekter også forstås som effekter af fx flokimmunitet. Alle syv studier rapporterer desuden omkostningseffektratioer, der varierer fra at være omkostningsbesparende til at være omkostningseffektiv (dvs. mindre end 175.000 kr./QALY). De studier, der medregner effekter af eksempelvis flokimmunitet, estimerede omkostningseffektratioer, som er omkostningsbesparende.

### Sundheds- og plejepersonale

Imai *et al.*<sup>65</sup> undersøger de sundhedsmæssige og økonomiske effekter af, at sundheds- og plejepersonale vaccineres mod influenza. Det primære formål med reviewet og metaanalysen er at undersøge, om vaccinen reducerer fraværet i forbindelse med influenza eller influenzalignende sygdomme. Metaanalysen viser, at sygefravær i forbindelse med influenza i gennemsnit reduceres med 0,46 dag blandt sundheds- og plejepersonale,



som er vaccineret, sammenlignet med sundheds- og plejepersonale, som ikke er vaccineret. Dermed finder de inkluderede studier, at vaccination af sundheds- og plejepersonale er omkostningseffektivt baseret på de omkostningsbesparelser, der relaterer sig til reduceret sygefravær. I studierne rapporteres det ikke, om der er taget højde for, at vaccineret sundhedspersonale smitter patienterne og andre personer i mindre grad, end de ville gøre, hvis de ikke var vaccinerede. Denne effekt er medtaget i alle de analyser, der præsenteres i denne rapport.

### Effekter på kvalitetsjusterede leveår (QALY) af vaccinationer og influenza

I litteratursøgningen blev der identificeret fire primærstudier (ref Fragaszy 2018, Van Hoek 2011, Blicke 2014, Hollman 2013), som undersøger, hvilket QALY-tab der er forbundet med at have influenza. De fire studier var alle nyere studier publiceret mellem 2011 og 2018 fra henholdsvis England, Belgien og Spanien, og de estimerer QALY-tab i forbindelse med influenzatilfælde.

#### Fakta

##### QALY-tab

QALY-tabet er også et mål mellem 0 og 1. Ved influenza er QALY-tab typisk kortlagt ved at undersøge, hvor dårligt man har det, når man har influenza, og hvor lang tid man har det dårligt. Hvis en person med perfekt helbred ( $QALY=1$ ) fx har en 20% nedgang i livskvalitet i 14 dage, svarer det til et QALY-tab på 0,00767, beregnet som  $20\% \cdot 14/365$ . QALY-tabet bliver større, jo dårligere man får det af influenza, og jo længere tid man har det dårligt. Set over et helt år et QALY-tab på 0,00767 relativt beskedent sammenlignet med andre mere alvorlige lidelser, men et tab i livskvalitet på 20% i en koncentreret periode (fx 14 dage) er mærkbart tab i den pågældende periode.

QALYs (eller en persons livskvalitet på et givent tidspunkt) estimeres ved brug af forskellige instrumenter, som indeholder spørgsmål til personen vedr. den fysiske og psykiske funktion og velbefindende på besvarelestidspunktet. Der er altså tale om selvrapporteret livskvalitet vha. et instrument. Et af de mest udbredte instrumenter er EQ-5D. Vha. en landespecifik algoritme er det muligt at omregne EQ-5D-besvarelsen til en QALY-værdi.

Fragazy *et al.* (ref. Fragaszy 2018) gennemførte et studie i England, hvor forfatterne inkluderer mere end 5.400 personer, som blev tilfældigt udvalgt gennem praktiserende læger. Deltagerne blev fulgt gennem seks influenzasæsoner, hvor de ugentligt rapporterede, hvorvidt de havde symptomer. I perioder med symptomer rapporterer deltagerne dagligt symptomer, temperatur, sygemelding samt livskvalitet målt ved EQ-5D. EQ-5D blev udfyldt ved studiestart samt dagligt i sygdomsperioder. Forfatterne estimerer det QALY-tab, der er forbundet med influenzatilfælde, hvor patienten ikke er i kontakt med sundhedsvæsenet. Blandt børn under 15 år er QALY-tabet i forbindelse med influenza 0,0029. Det er lavere end blandt personer mellem 16 og 65 år og personer over 65 år, hvor QALY-tabet i begge aldersgrupper er 0,0048.



I et prospektivt populationsbaseret studie af van Hoek (ref. Van Hoek 2011), også fra England, inkluderer forfatterne både personer med klinisk bekræftet influenza og ikke-klinisk bekræftet influenza med samme influenzasympptomer. Begge populationer udfylder to spørgeskemaer: ét inden for en uge, efter symptomerne viste sig, og ét to uger efter. Spørgeskemaet indeholder spørgsmål om sygdomslængde, fravær fra arbejdsmarkedet samt EQ-5D spørgsmål til at måle livskvalitet. Forfatterne estimerer et QALY-tab både blandt patienter med klinisk bekræftet og ikke-klinisk bekræftet influenza på henholdsvis 0,008 og 0,0075.

Bilcke *et al.* (ref. Blicke 2014) undersøger QALY-tab i forbindelse med influenza i en population af 2.250 belgiere. Forfatterne rekrutterer deltagere ved at ringe til tilfældigt udvalgte. Dem, der har influenzasympptomer, får tilsendt et spørgeskema om deres sygdomsforløb samt livskvalitet baseret på SF-12v2. Bilcke *et al.* estimerer QALY-tab i tre influenzapopulationer i Belgien: Influenzapatienter, der ikke har kontakt til sundhedsvæsenet, influenzapatienter, der har kontakt til egen læge/ambulatorium, og influenzapatienter, der er indlagt på et hospital. De tre populationers QALY-tab i forbindelse med influenza er henholdsvis 0,005, 0,006 og 0,009.

Endelig estimerer Hollmann *et al.* (ref. Hollmann 2013) QALY-tabet blandt 432 indlagte og 563 ambulante patienter med klinisk bekræftet influenza i Spanien. Patienterne rekrutteres på hospitalet og deltager i to interviews i løbet af studieperioden: Ét ved baseline og ét, efter de er blevet raske. Ved baseline spørges de til livskvalitet syv dage inden influenzaepisoden og i løbet af influenzaperioden, som måles ved EQ-5D. Ved det opfølgende interview spørges de til livskvalitet efter sygdomsperioden. Forfatterne estimerer et QALY-tab på 0,031 blandt indlagte patienter og 0,009 blandt ambulante patienter.

På trods af det relativt lave QALY-tab, som influenza medfører for enkeltpersoner, er QALY-tabet ikke ubetydeligt. Den totale byrde for samfundet som helhed af influenza er betydelig større end byrden ved andre infektionssygdomme (ref. Hollmann 2013). Ligeledes medfører influenza et betydeligt produktionstab, da patienten sandsynligvis vil have fravær fra sit job i forbindelse med sygdom. I de inkluderede studier er fraværet estimeret til at være mellem to og syv dage for patienter, der ikke er indlagt på hospitalet<sup>50,52,53</sup>.

### Opsummering

Langt de fleste studier, der har estimeret omkostningseffektiviteten af influenzavaccination, finder, at influenzavaccination er omkostningseffektiv. Studierne finder altså, at det godt kan betale sig for samfundet at vaccinere mod influenza, specielt i subpopulationer som børn, ældre og sundheds- og plejepersonale. Flere af forfatterne pointerer, at det er specielt effektivt at vaccinere børn, idet de ofte er smittebærere.

De primærstudier, der har estimeret, hvilket QALY-tab der er forbundet med at have influenza, har estimeret QALY-tabet til mellem 0,0048 og 0,009 blandt voksne, som ikke er indlagt, og et enkelt studie estimerer QALY-tabet blandt børn til at være en smule lavere (0,0029). Yderligere estimerer studierne, at influenza medfører et fravær på mellem to og syv dage.

## Bilag 7 – Litteraturgennemgang til økonomikapitlet, oversigter

Tabel 2: Oversigt over systematiske litteraturreviews identificeret gennem litteratursøgning

Forfatter (år)	Dabestani <i>et al.</i> (2019)	D'Angiolella <i>et al.</i> (2018)	Imai <i>et al.</i> (2018)	Shields <i>et al.</i> (2017)
Titel	A review of the cost-effectiveness of adult influenza vaccination and other preventive services	Costs and effectiveness of influenza vaccination: a systematic review	A systematic review and meta-analysis of the direct epidemiological and economic effects of seasonal influenza vaccination on healthcare workers	A systematic review of economic evaluations of seasonal influenza vaccination for the elderly population in the European Union
Formål	At estimere omkostningseffektiviteten af influenzavaccination blandt voksne sammenlignet med ingen vaccination.	At estimere omkostningseffektiviteten af influenzavaccination.	At estimere sundheds- og økonomiske effekter af influenzavaccination blandt sundhedsprofessionelle.	At gennemgå, om det er omkostningseffektivt at vaccinere ældre i EU.
Periode for litteratursøgning	Januar 1996 til januar 2016	Januar 2012 til januar 2017	Januar 1980 til januar 2018	Ikke specificeret i artiklen
Målpopulation	Voksne, ældre over 65 år og gravide	Børn, voksne, ældre, gravide, personer med høj risiko samt hele befolkningen	Sundheds- og plejepersonale	Ældre over 65 år
Antal inkluderede studier	12	30	13	8

Konklusion	Reviewet finder, at influenzavaccination blandt voksne i USA højest sandsynligt vil være omkostningseffektivt.	Alle de inkluderede studier med undtagelse af ét rapporterer, at influenzavaccination er omkostningseffektiv eller omkostningsbesparende.	Reviewet underbygger effekten af influenzavaccine blandt sundhedsprofessionelle, dels ved at reducere incidensen af influenza og dels ved at forkorte sygefraværperiode i forbindelse med influenza.	Forfatterne konkluderer, at syv ud af otte studier rapporterer, at influenzavaccination blandt ældre i EU var omkostningseffektivt.
Lande	Alle inkluderede studier var fra USA	12 fra Europa, 9 fra USA, 3 fra Canada, 3 fra Kina, 1 fra Tyrkiet, 1 fra Thailand, 1 fra Australien og 1 fra Israel	2 fra Italien, 1 fra Hong Kong, 1 fra Taiwan, 2 fra Japan, 1 fra Singapore, 1 fra Belgien, 1 fra Finland, 1 fra Australien, 1 fra Canada og 2 fra USA	2 fra Italien, 2 fra UK, 1 fra Frankrig, 1 fra Polen, 1 fra Holland, 1 fra Tyskland, Holland og UK og 1 fra England, Wales, Frankrig og Tyskland

Tabel 3: Oversigt over primærlitteratur identificeret gennem litteratursøgning

Forfatter (år)	<b>Fragazy et al. (2018)</b>	<b>van Hoek et al. (2011)</b>	<b>Bilcke et al. (2014)</b>	<b>Hollmann et al. (2013)</b>
Titel	Effects of seasonal and pandemic influenza on health-related quality of life, work and school absence in England: Results from the Flu Watch cohort study	The Impact of Pandemic Influenza H1N1 on Health-Related Quality of Life: A Prospective Population-Based Study	Influenza-Like-Illness and Clinically Diagnosed Flu: Disease Burden, Costs and Quality of Life for Patients Seeking Ambulatory Care or No Professional Care at All	Impact of Influenza on Health-Related Quality of Life among Confirmed (H1N1)2009 Patients
Formål	At estimere QALY-tab og fravær fra skole/arbejde i forbindelse med influenza blandt personer, der ikke er i kontakt med sundhedsvæsenet.	At estimere QALY-tab i forbindelse med influenza for at kunne sammenligne med andre sygdomsområder.	At beskrive byrden af influenzatilfælde uden for hospitalet.	At estimere livskvalitet blandt influenza-patienter samt QALY-tab forbundet med sygdommen.
Design	Kohortestudie	Prospektivt populationsbaseret studie	Prospektivt kohortestudie	Longitudinelt studie



Population	5.484 personer, som var tilfældigt udvalgt af praktiserende læger.	287 personer med bekræftet eller ikke-bekræftet influenza fra syv forskellige regioner i England.	2.250 personer med influenza-symptomer.	432 indlagte patienter og 563 ambulante patienter.
Resultater (QALY-tab)	Børn: 0,0029 Personer mellem 16 og 65 år og personer over 65 år: 0,0048	Patienter med ikke-klinisk bekræftet influenza: 0,0075 Patienter med klinisk bekræftet influenza: 0,008	Influenzapatienter, der ikke har kontakt til sundhedsvæsenet: 0,005 Influenzapatienter, der har kontakt til egen læge/ambulatorium: 0,006 Influenzapatienter, der er indlagt på et hospital: 0,009	Indlagte patienter: 0,031 Ambulante patienter: 0,009
Konklusion	QALY-tabet var mindre end i tidligere studier, fordi forfatterne inkluderede ikke-klinisk bekræftede influenzatilfælde.	QALY-tabet er minimalt for enkeltpersoner, men den samlede byrde i forbindelse med influenza er betydelig sammenlignet med andre infektionssygdomme.	Vaccination var forbundet med lavere omkostninger og højere livskvalitet under sygdom.	Influenza havde en betydelig men midlertidig betydning for livskvaliteten for størstedelen af patienterne.
Land	England	England	Belgien	Spanien

## Bilag 8 – Antagelser i den økonomiske model

De undersøgte scenarier er vist i tabellen nedenfor. I dette bilag henviser vi til numrene, når vi omtaler de forskellige parametre.

### Fokuserede spørgsmål

1. Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt ældre på 65 år eller derover?
2. Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt personer med en kronisk sygdom?
3. Hvad er effekten af vaccination med en cellebaseret inaktiveret 4-valent influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt gravide?
4. Hvad er effekten af vaccination med en 3-valent adjuveret influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt ældre på 65 år eller derover?
5. Hvad er effekten af vaccination med en high-dose influenzavaccine sammenlignet med andre inaktiverede influenzavacciner blandt ældre på 65 år eller derover?
6. Hvad er effekten af vaccination med en levende svækket influenzavaccine til raske børn mellem 2-6 år?
7. Hvad er effekten af vaccination med en inaktiveret influenzavaccine til raske børn under 2 år?
8. Hvad er effekten af vaccination af sundhedspersonale?

### Vaccinationsdækning

I analysen er antaget, at vaccinationsdækningen er uændret for scenarie 1-5. For børn og sundhedspersonale har vi regnet med en vaccinationsdækning på 75%.

### Vaccinens effekt

Vaccineeffektiviteten afhænger af aldersgruppe og vaccine-type. I tabellen nedenfor ses vaccineeffektiviteten af den vaccine, der blev anvendt i årene, der ligger til grund for basis-scenariet.

Aldersgruppe	Ikke højrisiko	Højrisiko
[0,2)	55%	30%



[2,6)	55%	30%
[6,15)	55%	30%
[15,45)	38%	30%
[45,65)	37%	25%
65+	23%	23%

Kilde: Sundhedsstyrelsen.

I tabellen nedenfor er angivet de faktorer, som ganges på vaccineeffektiviteten i de forskellige scenarier.

Scenarie	Faktor til vaccineffektiviteten
1	1,11
2	1,08
3	1,08
4	2,70
5	1,32
6	1
7	1
8	1

Kilde: Sundhedsstyrelsen baseret på omfattende litteratursøgning og vurdering.

### Kontaktmatrix

Tabellen nedenfor angiver antallet af kontakter mellem befolkningsgrupper i Danmark.

	[0,2)	[2,6)	[6,15)	[15,45)	[45,65)	65+
65+	0,05	0,09	0,38	2,05	2,23	2,48
[45,65)	0,10	0,23	0,68	5,24	4,90	1,16
[15,45)	0,16	0,56	1,47	9,84	3,35	0,70
[6,15)	0,13	0,96	12,77	5,53	1,62	0,49
[2,6)	0,79	12,30	2,15	7,16	1,86	0,27
[0,2)	1,50	1,57	0,58	4,81	1,54	0,28

Kilde: Mossong et al.<sup>57</sup>

Antallet af kontakter, som de yngste børn har, er øget efter dialog med Sundhedsstyrelsen. Det skyldes, at danske børn i langt højere grad end hollandske børn bliver passet i institution. Det gælder både andelen af børn og antallet af timer pr. barn i pasningsordning.

Kontaktmatricen for sundhedspersonale er vist nedenfor.

[0,2)	[2,6)	[6,15)	[15,45)	[45,65)	65+	Sundhedspersonale
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0-2	1,50	1,57	0,58	4,81	1,54	0,28	0,12
[2,6)	0,79	12,30	2,15	7,16	1,86	0,27	0,06
[6,15)	0,13	0,96	12,77	5,53	1,62	0,49	0,04
[15,45)	0,16	0,56	1,47	9,84	3,35	0,70	0,13
[45,65)	0,10	0,23	0,68	5,24	4,90	1,16	0,16
65+	0,05	0,09	0,38	2,05	2,23	2,48	1,31
Sundheds-personale	0,05	0,05	0,12	1,55	1,90	5,01	14,64

### Kontakt til sundhedsvæsenet og døde

Type kontakt	%
Andel uden kontakt til sundhedsvæsenet	69,5%
Andel med kontakt til egen læge/vagtlæge	30,0%
Andel der bliver indlagt	0,5%
- Af disse andel der kommer på intensivafdeling	7%

Kilde: Sundhedsstyrelsen.

Andel døde	
[0,2)	0,0059%
[2,6)	0,0032%
[6,15)	0,0004%
[15,45)	0,0021%
[45,65)	0,0021%
65+	0,0589%
Andre	0,0021%

Kilde: Statens Serum Institut.

### Produktivitetstab

Aldersgruppe	Antal dage	Note
[0,2)	1	Forældres første sygedag
[2,6)	1	Forældres første sygedag
[6,15)	1	Forældres første sygedag
[15,45)	5	Antagelse
[45,65)	5	Antagelse
65+	5	Antagelse

### Livskvalitet

Influenza	QALY
QALY uden influenza	0,88
QALY-tab ved influenza	0,0055
Ekstra tabt QALY ved hospitalsbesøg	0,0035



QALY tab ved vaccine 0,000415

Kilde: Bilcke et al.<sup>52</sup> & Evans et al.<sup>66</sup>.

Aldersgruppe	Gennemsnitlig livskvalitet (QALY)
[0,2)	0,93
[2,6)	0,93
[6,15)	0,93
[15,45)	0,92
[45,65)	0,87
65+	0,79

Kilde: Olsen and Jørgensen<sup>67</sup>.





## Bilag 9 - Antal influenzatilfælde i forskellige scenarier

### Influenza i de forskellige scenarier 2020

Aldersgruppe	Basis-scenariet	Cellebaseret 4-valent, +65 år	Adjuveret 3-valent, +65 år	Højdosis 3-valent, +65 år	Inaktiveret 4-valent, <2 år	Levende svækket 4-valent, 2-6 år	Sundhedspersonale
[0,2)	8.732	8.729	8.681	8.722	6.011	4.424	8.388
[2,6)	54.635	54.621	54.424	54.596	54.059	23.039	54.060
[6,15)	52.428	52.398	52.008	52.349	51.840	26.802	51.551
[15,45)	338.720	338.611	337.164	338.427	334.988	176.923	306.285
[45,65)	84.170	84.121	83.459	84.036	83.107	44.795	59.992
65+	44.061	43.254	32.590	41.890	43.422	23.319	43.580
Andre	0	0	0	0	0	0	47.469
I alt	582.746	581.733	568.326	580.020	573.427	299.302	571.324

Bemærk, at der er udarbejdet en lidt anderledes basis-matrice for sundhedspersonalet, hvor disse er skilt ud under kategorien "Andre".

### Ændring i forhold til basis-scenariet i de forskellige scenarier 2020

Aldersgruppe	Cellebase-ret 4-valent, +65 år	Adjuveret 3-valent, +65 år	Højdosis 3-valent, +65 år	Inaktiveret 4-valent, <2 år	Levende svækket 4-valent, 2-6 år	Sundhedspersonale
[0,2)	0,0%	-0,6%	-0,1%	-31,2%	-49,3%	-1,3%
[2,6)	0,0%	-0,4%	-0,1%	-1,1%	-57,8%	-1,3%
[6,15)	-0,1%	-0,8%	-0,2%	-1,1%	-48,9%	-3,6%
[15,45)	0,0%	-0,5%	-0,1%	-1,1%	-47,8%	-1,2%
[45,65)	-0,1%	-0,8%	-0,2%	-1,3%	-46,8%	-1,5%
65+	-1,8%	-26,0%	-4,9%	-1,5%	-47,1%	-3,9%
Andre						-4,5%
I alt	-0,2%	-2,5%	-0,5%	-1,6%	-48,6%	-1,9%

Bemærk, at der er udarbejdet en lidt anderledes basis-matrice for sundhedspersonalet, hvor disse er skilt ud under kategorien "Andre". Værdierne i søjlen "Sundhedspersonale" er beregnet i forhold til denne.

