

# Hvordan bli en Pubmed ninja?

Farmasøyt Hilde Fjeld  
RELIS Sør-Øst/Antibiotikateam OUS  
31. januar 2024



# Min bakgrunn

**RELIS** Produsentuavhengig legemiddelinformasjon  
for helsepersonell

Hjem Biaktivninger Om RELIS 

Søk etter svar hos RELIS

Søk i vår database

Still spørsmål til RELIS!

Siste publiserte artikler

RELIS og kunstig intelligens  
18.01.2024  
Kan antikolinerg belastning være en risikofaktor for urinveisinfeksjon?  
03.01.2024  
Bytte legemidler – ekvipotens  
18.12.2023  
Salisylsyre i hudpleieprodukter – Ingen grunn til å skremme gravide!  
18.12.2023  
Retningslinjer for behandling av depresjon  
15.12.2023

Se flere

Retningslinjer for behandling av depresjon

I 2023 ble retningslinje for diagnostisering og behandling av voksne med depresjon avpublisert. Vi ønsket å undersøke om det er andre retningslinjer som kan være til nytte for oss i Norge.

Webinar: Uønskede kinoloner – noen grunner til å velge andre antibiotika

RELIS arrangerte webinar i samarbeid med antibiotikateamet på sykehuset. Farmasøy Hilde Fjeld presenterte biaktivninger av kinoloner, samt en nyere studie om bruk av ciprofloxacin ved et lokalsykehus. Oppaket varer kun i 10 minutter.

Meld en biaktivning

Kurs og seminarer

Gravid eller ammende?

**KUPP** kunnskapsgasserte populærvitenskaper

<https://relis.no/>

TIDSSKRIFT FOR DEN NORSKE LEGEFORENING

MANDAG 29. JANUAR 2024

## Tidsskriftet

ARTIKLER FAGOMRÅDER UTGAVER PODKAST FORFATTERVEILEDNING LEGEJOBBER SØK 

### OVERSIKTSARTIKKEL

## Polyheksanid – sikkerhet og effekt som antiseptikum

ENGLISH

Hilde Fjeld, Egil Lingaa *Om forfatterne*

### BAKGRUNN

Polyheksametylenbiguanidhydroklorid/polyheksanid/polyaminopropylbiguanid (PHMB) brukes som desinfeksjonsmiddel og antiseptikum. Artikkelen omhandler bruk av stoffet som antiseptikum. Vi oppsummerer publiserte data om antimikrobiell effekt in vitro og klinisk effekt og sikkerhet ved bruk på hud, sår og slimhinner.

### KUNNSKAPSGRUNNLAG

Det ble søkt i PubMed etter artikler publisert de siste fem år. Tilgjengelige artikler per juni 2014 ble evaluert.

Publisert: 3. mai 2016  
Utgave 8, 3. mai 2016

Tidsskr Nor Legeforen 2016  
136: 707-11  
doi: 10.4045/tidsskr.14.1041

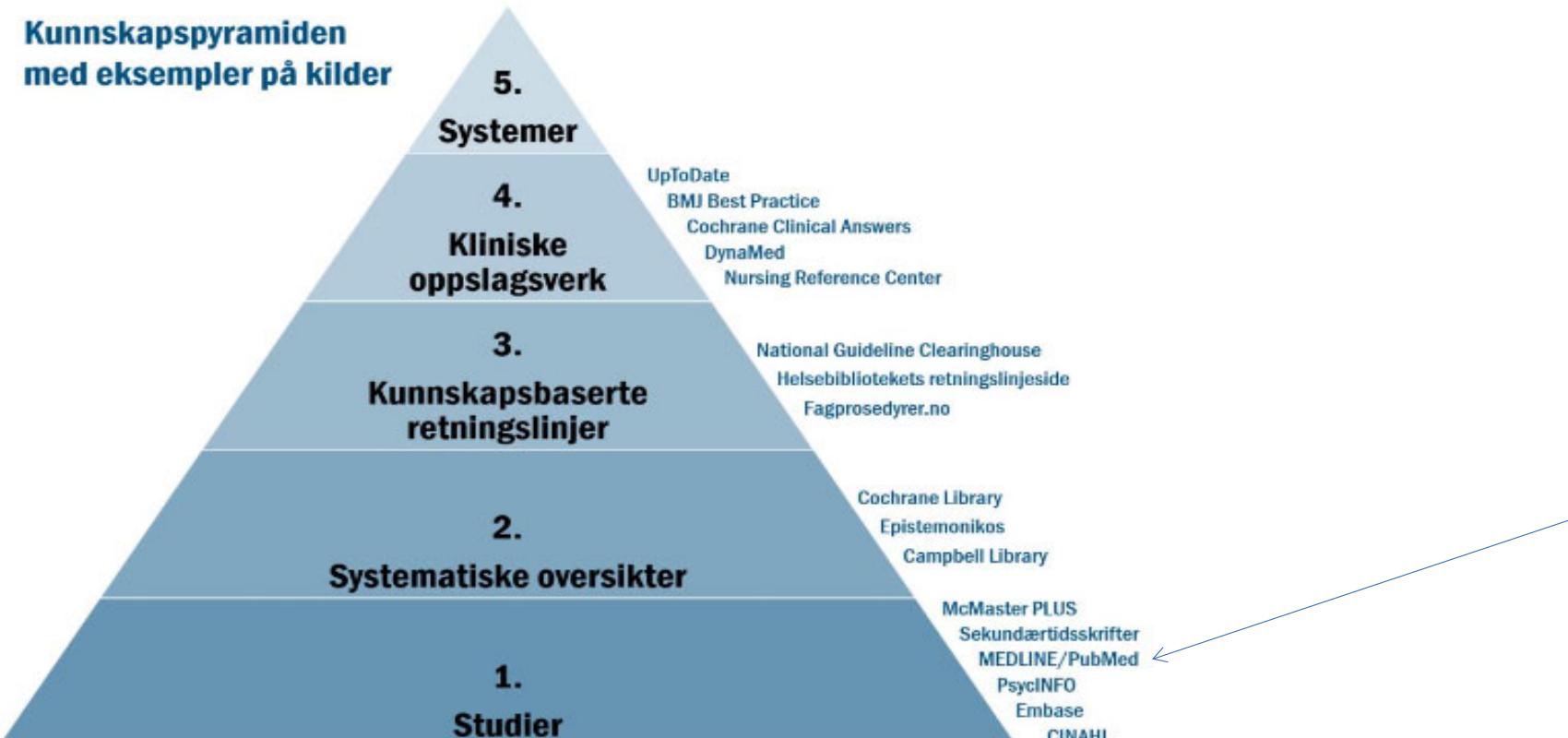
Mottatt 25.8. 2014, første  
revisjon innsendt 16.1. 2015,  
godkjent 7.3. 2016. Redaktør:  
Trine B. Haugen.

 PlumX Metrics

Avd. for smittevern, OUS



# Kunnskapspyramiden



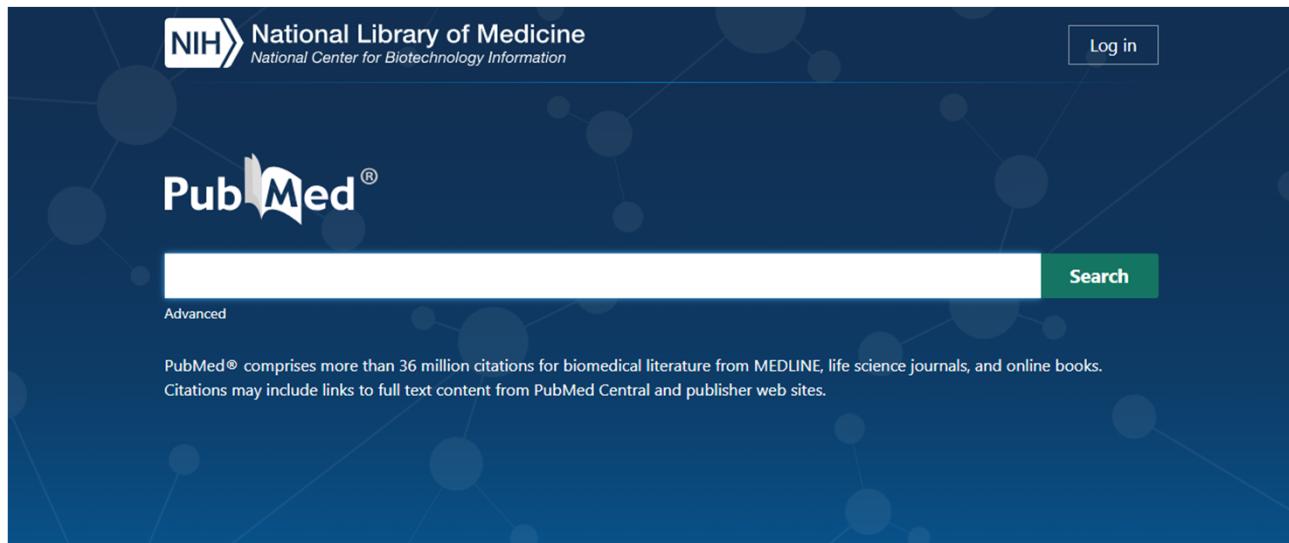
# Slik søker ofte jeg-tenkt enkelt!

- Først Google..UpToDate, retningslinjer (eks. CDC) osv.
- Tekstsøk i PubMed med to ord, ser hva jeg får
- Varierer kanskje med to nye ord
- Legger kanskje på filter RCT
- Legger kanskje til søk i tittel/abstract (hvis mange/irrelevante treff)
- Ser på de nyeste/mest relevante artiklene

# Smittevern vs. hjerte-kar

- Smittevern
  - Små miljø
  - Ikke alltid fulle stillinger, færre leger
  - Vanskeligere å forske på?
  - Sære tema
  - Vanligvis ikke målbart hos pasienter, mye indirekte og forebyggende arbeid
- Hjerte-kar
  - Store multisenterstudier
  - «Tunge» retningslinjer
  - Status/penger/legemidler
  - Ofte målbart hos pasienten

# Bruk biblioteket sin PubMed lenke



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[MeSH Database](#)  
[Journals](#)

<https://pubmed.ncbi.nlm.nih.gov/> + spesifikke tegn fra «ditt» bibliotek

# To søkemåter i PubMed

## Tekstsøk

- Ligner på «Google» søk
- Vanligst
- Lettest

## MeSH-term søk

- Faguttrykk/termer som brukes for å indeksere artikler
- Eks. «Infection control», «Anti-Infective Agents, Local»
- Man må prøve seg frem for å finne aktuelle MeSH-term søk

# Et tekstsøk

The screenshot shows the PubMed search interface. In the search bar, the query 'hospital infection' is entered. Below the search bar are buttons for 'Advanced', 'Create alert', 'Create RSS', 'Save', 'Email', 'Send to', 'Sort by: Best match', and 'Display options'. A red box highlights the search term '564,360 results'. To the left, there are filters for 'MY NCBI FILTERS', 'RESULTS BY YEAR' (with a timeline from 1887 to 2024), and 'TEXT AVAILABILITY' (with options for 'Abstract', 'Full Text', 'PDF', 'HTML', and 'Text'). The main results section displays a single study entry:

**Hospital** organisation, management, and structure for prevention of health-care-associated **infection**: a systematic review and expert consensus.

1 Zingg W, Holmes A, Dettenkofer M, Goetting T, Secci F, Clack L, Allegranzi B, Magiorakos AP, Pittet D; systematic review and evidence-based guidance on organization of hospital infection control programmes (SIGHT) study group.

Lancet Infect Dis. 2015 Feb;15(2):212-24. doi: 10.1016/S1473-3099(14)70854-0. Epub 2014 Nov 11. PMID: 25467650 Review.

We did a systematic review to identify crucial elements for the organisation of effective **infection**-prevention programmes in hospitals and key components for implementation of monitoring. 92 studies published from 1996 to 2012 were assessed and ten key components identified ...



# Noen muligheter

NIH National Library of Medicine  
National Center for Biotechnology Information

Log in

PubMed Advanced Search Builder

Add terms to the query box

All Fields ▾ Enter a search term

ADD ▾ Show Index

User Guide

Query box

Enter / edit your search query here

Search ▾

History and Search Details

Download Delete

Search	Actions	Details	Query	Results	Time
#1	...	>	Search: hospital infection	564,360	03:25:11

Showing 1 to 1 of 1 entries

Fortsettelse følger



# Hva søkte PubMed etter?

History and Search Details

Download Delete

Search	Actions	Details	Query	Results	Time
#1	...		<b>Search:</b> <b>hospital infection</b>  "cross infection"[MeSH Terms] OR ("cross"[All Fields] AND "infection"[All Fields]) OR "cross infection"[All Fields] OR ("hospital"[All Fields] AND "infection"[All Fields]) OR "hospital infection"[All Fields]  <b>Translations</b>  <b>hospital infection:</b> "cross infection"[MeSH Terms] OR ("cross"[All Fields] AND "infection"[All Fields]) OR "cross infection"[All Fields] OR ("hospital"[All Fields] AND "infection"[All Fields]) OR "hospital infection"[All Fields]	564,360	03:25:11

Showing 1 to 1 of 1 entries

Search	Actions	Details	Query	Results	Time
#2	...	>	<b>Search:</b> <u>"hospital infection"</u>	3,652	03:31:05



# MeSH-terminen Cross infection

## Cross Infection

Any infection which a patient contracts in a health-care institution.

Year introduced: HOSPITAL INFECTIONS was see under CROSS INFECTION 1971-1978, was see CROSS INFECTIONS 1963-1970

Tree Number(s): C01.248, C23.550.291.875.500

MeSH Unique ID: D003428

Entry Terms:

- Infection, Cross
- Cross Infections
- Infections, Cross
- Healthcare Associated Infections
- Healthcare Associated Infection
- Infection, Healthcare Associated
- Infections, Healthcare Associated
- Health Care Associated Infection
- Health Care Associated Infections
- Infections, Hospital
- Hospital Infection
- Infection, Hospital
- Infections, Nosocomial
- Infection, Nosocomial
- Nosocomial Infection
- Nosocomial Infections
- Hospital Infections

 hospital infection (1)

MeSH

[See more...](#)

"cross infection"[MeSH Terms] OR  
hospital infection[Text Word]

[Search](#)

[See more...](#)

# Begrense søker, søk i tittel/abstract

PubMed Advanced Search Builder

PubMed® User Guide

Add terms to the query box

All Fields Enter a search term ADD Show Index

Issue Journal Language Location ID MeSH Major Topic MeSH Subheading MeSH Terms Other Term Pagination Pharmacological Action Publication Type Publisher Secondary Source ID Subject - Personal Name Supplementary Concept Text Word Title Title/Abstract Transliterated Title Volume

Search Download Delete

Query	Results	Time
Search: "hospital infection"	3,652	03:31:05
Search: hospital infection	564,360	03:25:11
ross infection"[MeSH Terms] OR ("cross"[All Fields] AND "infection"[All Fields]) OR "cross infection"[All Fields] OR ("hospital"[All Fields] AND		



# Treff ved søk i tittel/abstract

**PubMed®**

"hospital infection"[Title/Abstract]

[Advanced](#) [Create alert](#) [Create RSS](#) [User Guide](#)

Sort by: Best match  Display options

MY NCBI FILTERS

RESULTS BY YEAR

2,407 results   Page  of 241

[Journal of Hospital Infection moves to Article-Based Publishing.](#)  
1 Fears C, Mahida N, Oppenheim B, Lynch C, Gray J.  
Cite [J Hosp Infect. 2020 May;105\(1\):A1. doi: 10.1016/j.jhin.2020.04.039.](#)  
Share PMID: 32386677 No abstract available.

[Hospital infection control.](#)  
2 Dawson S.  
Cite [BMJ. 2002 Oct 19;325\(7369\):S121. doi: 10.1136/bmj.325.7369.s121a.](#)  
Share PMID: 12386057 [Free PMC article.](#) No abstract available.

1910 2024

TEXT AVAILABILITY

Abstract



# Tillegg av filter, RCT

PubMed®

"hospital infection"[Title/Abstract]

Advanced Create alert Create RSS User Guide

Save Email Send to Sort by: Best match Display options

MY NCBI FILTERS

RESULTS BY YEAR

1994 2024

TEXT AVAILABILITY

Abstract  Free full text  Full text

ARTICLE ATTRIBUTE

Associated data

ARTICLE TYPE

Books and Documents  Clinical Trial  Meta-Analysis  Randomized Controlled Trial

14 results Page 1 of 2

Filters applied: Randomized Controlled Trial. [Clear all](#)

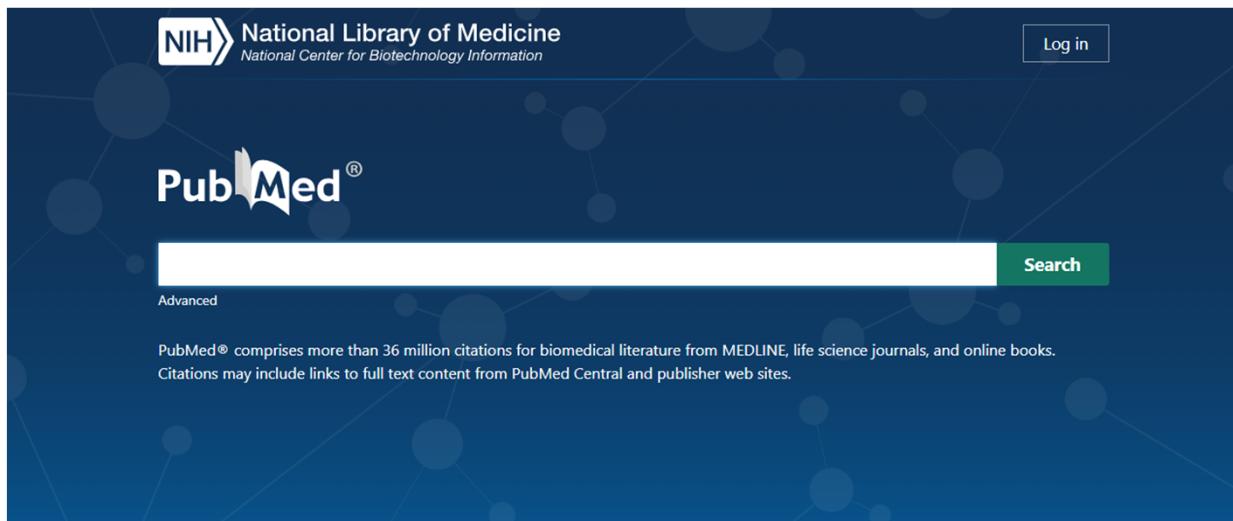
Plan-Do-Check-Action Circulation Combined with Accelerated Rehabilitation Nursing under Computed Tomography in Prevention and Control of **Hospital Infection** in Elderly Patients Undergoing Elective Orthopedic Surgery.  
Zhao L, Hu L, Li Z, Deng F.  
Contrast Media Mol Imaging. 2022 Apr 25;2022:4574730. doi: 10.1155/2022/4574730. eCollection 2022.  
PMID: 35548404 [Free PMC article.](#) Clinical Trial.  
To explore the adoption of plan-do-check-action (PDCA) circulation combined with accelerated rehabilitation nursing based on gemstone spectral imaging computed tomography (GSICT) in the prevention and control of **hospital infection** in the elderly patients undergoing ...

Direct Gloving vs Hand Hygiene Before Donning Gloves in Adherence to **Hospital Infection** Control Practices: A Cluster Randomized Clinical Trial.  
Thom KA, Rock C, Robinson GL, Reisinger HS, Baloh J, Li S, Diekema DJ, Herwaldt LA, Johnson JK, Harris AD, Perencevich EN.  
JAMA Netw Open. 2023 Oct 2;6(10):e2336758. doi: 10.1001/jamanetworkopen.2023.36758.  
PMID: 37883088 [Free PMC article.](#) Clinical Trial.  
OBJECTIVE: To evaluate the effectiveness of a direct-gloving policy on adherence to **infection** prevention practices in a **hospital** setting. DESIGN, SETTING, AND PARTICIPANTS: This mixed-method, multicenter, cluster randomized clinical trial was conducted at 4 academic ...

Influence of a combination of probiotics on bacterial infections in very low birthweight newborns.



# MeSH-term database



MeSH (Medical Subject Headings) is the NLM controlled vocabulary thesaurus used for indexing articles for PubMed.

<https://www.ncbi.nlm.nih.gov/mesh/>

# Mesh-term søk

NIH National Library of Medicine  
National Center for Biotechnology Information

MeSH MeSH hospital infection Search Help

Create alert Limits Advanced

Full Send to: PubMed Search Builder

Cross Infection

Any infection which a patient contracts in a health-care institution.

Year introduced: HOSPITAL INFECTIONS was seen under CROSS INFECTION 1971-1978, was seen under CROSS INFECTIONS 1963-1970

PubMed search builder options

Subheadings:

<input type="checkbox"/> blood	<input type="checkbox"/> enzymology	<input type="checkbox"/> pathology
<input type="checkbox"/> cerebrospinal fluid	<input type="checkbox"/> epidemiology	<input type="checkbox"/> physiopathology
<input type="checkbox"/> chemically induced	<input type="checkbox"/> ethnology	<input type="checkbox"/> prevention and control
<input type="checkbox"/> classification	<input type="checkbox"/> etiology	<input type="checkbox"/> psychology
<input type="checkbox"/> complications	<input type="checkbox"/> genetics	<input type="checkbox"/> radiotherapy
<input type="checkbox"/> congenital	<input type="checkbox"/> history	<input type="checkbox"/> rehabilitation
<input type="checkbox"/> diagnosis	<input type="checkbox"/> immunology	<input type="checkbox"/> surgery
<input type="checkbox"/> diagnostic imaging	<input type="checkbox"/> metabolism	<input type="checkbox"/> therapy
<input type="checkbox"/> diet therapy	<input type="checkbox"/> microbiology	<input type="checkbox"/> transmission
<input type="checkbox"/> drug therapy	<input type="checkbox"/> mortality	<input type="checkbox"/> urine
<input type="checkbox"/> economics	<input type="checkbox"/> nursing	<input type="checkbox"/> veterinary
<input type="checkbox"/> embryology	<input type="checkbox"/> parasitology	<input type="checkbox"/> virology

Restrict to MeSH Major Topic.

Do not include MeSH terms found below this term in the MeSH hierarchy.

Add to search builder AND Search PubMed YouTube Tutorial

Related information

- PubMed
- PubMed - Major Topic
- Clinical Queries
- NLM MeSH Browser
- MedGen

Recent Activity

- Cross Infection Turn Off Clear

<https://www.ncbi.nlm.nih.gov/mesh/>

# MeSH-term søk (lenger nede på siden)

Tree Number(s): C01.248, C23.550.291.875.500

MeSH Unique ID: D003428

Entry Terms:

- Infection, Cross
- Cross Infections
- Infections, Cross
- Healthcare Associated Infections
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- Infections, Nosocomial
- Infection, Nosocomial
- Nosocomial Infection
- Nosocomial Infections
- Hospital Infections

 hospital infection (1)

MeSH

[See more...](#)

"cross infection"[MeSH Terms] OR  
hospital infection[Text Word]

[Search](#)

[See more...](#)

# MeSH-term søk med «Cross Infection»

NIH National Library of Medicine  
National Center for Biotechnology Information

Log in

PubMed®

"Cross Infection"[Mesh]

Search

Advanced Create alert Create RSS User Guide

Save Email Send to Sort by: Most recent Display options

MY NCBI FILTERS

RESULTS BY YEAR

1945 2024

65,408 results

Page 1 of 6,541

1 Management of Ventilator-Associated Pneumonia: Guidelines.  
Metersky ML, Kalil AC.  
Infect Dis Clin North Am. 2024 Mar;38(1):87-101. doi: 10.1016/j.idc.2023.12.004.  
PMID: 38280768 Review.

2 The Role of Biomarkers in the Diagnosis and Management of Pneumonia.  
Sungurlu S, Balk RA.  
Infect Dis Clin North Am. 2024 Mar;38(1):35-49. doi: 10.1016/j.idc.2023.12.005.  
PMID: 38280766 Review.

3 Infectious Pulmonary Diseases.  
Rafeq R, Igneri LA.  
Infect Dis Clin North Am. 2024 Mar;38(1):1-17. doi: 10.1016/j.idc.2023.12.006.  
PMID: 38280758 Review.

Abstract Free full text Full text

ARTICLE ATTRIBUTE

RESULTS BY YEAR

1945 2024

65,408 results

Page 1 of 6,541

1 Management of Ventilator-Associated Pneumonia: Guidelines.  
Metersky ML, Kalil AC.  
Infect Dis Clin North Am. 2024 Mar;38(1):87-101. doi: 10.1016/j.idc.2023.12.004.  
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Rafeq R, Igneri LA.  
Infect Dis Clin North Am. 2024 Mar;38(1):1-17. doi: 10.1016/j.idc.2023.12.006.  
PMID: 38280758 Review.

Abstract Free full text Full text

ARTICLE ATTRIBUTE

# En annen MeSH-term

## **Clostridioides difficile**

A common inhabitant of the colon flora in human infants and sometimes in adults. The type species *Clostridioides difficile* is formerly known as *Clostridium difficile*. It is a causative agent for CLOSTRIDIODES INFECTIONS and is associated with PSEUDOMEMBRANOUS ENTEROCOLITIS in patients receiving antibiotic therapy.

Year introduced: 2021(1991)

- *Clostridium difficile*

Previous Indexing:

- [Clostridium \(1976-1990\)](#)

See Also:

- [Enterocolitis, Pseudomembranous](#)

[All MeSH Categories](#)

[Organisms Category](#)

[Bacteria](#)

[Firmicutes](#)

[Clostridiales](#)

[Clostridioides](#)

[Clostridioides difficile](#)

<https://www.ncbi.nlm.nih.gov/mesh/>



# En tilfeldig artikkkel, scroller nedover

Clinical Trial

> N Engl J Med. 2017 Jan 26;376(4):305-317. doi: 10.1056/NEJMoa1602615.

## Bezlotoxumab for Prevention of Recurrent Clostridium difficile Infection

Mark H Wilcox <sup>1</sup>, Dale N Gerding <sup>1</sup>, Ian R Poxton <sup>1</sup>, Ciaran Kelly <sup>1</sup>, Richard Nathan <sup>1</sup>, Thomas Birch <sup>1</sup>, Oliver A Cornely <sup>1</sup>, Galia Rahav <sup>1</sup>, Emilio Bouza <sup>1</sup>, Christine Lee <sup>1</sup>, Grant Jenkins <sup>1</sup>, Werner Jensen <sup>1</sup>, You-Sun Kim <sup>1</sup>, Junichi Yoshida <sup>1</sup>, Lori Gabryelski <sup>1</sup>, Alison Pedley <sup>1</sup>, Karen Eves <sup>1</sup>, Robert Tipping <sup>1</sup>, Dalya Guris <sup>1</sup>, Nicholas Kartsonis <sup>1</sup>, Mary-Beth Dorr <sup>1</sup>, MODIFY I and MODIFY II Investigators

Collaborators, Affiliations + expand

PMID: 28121498 DOI: 10.1056/NEJMoa1602615

Free article

### Abstract

**Background:** Clostridium difficile is the most common cause of infectious diarrhea in hospitalized patients. Recurrences are common after antibiotic therapy. Actoxumab and bezlotoxumab are human monoclonal antibodies against C. difficile toxins A and B, respectively.

**Methods:** We conducted two double-blind, randomized, placebo-controlled, phase 3 trials, MODIFY I and MODIFY II, involving 2655 adults receiving oral standard-of-care antibiotics for primary or

<https://pubmed.ncbi.nlm.nih.gov/28121498/>

FULL TEXT LINKS

NEJM FREE FULL TEXT

UiO :

ACTIONS

“ Cite

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PAGE NAVIGATION

◀ Title & authors

Abstract



# Mye informasjon om artikkelen

## Comment in

[Bezlotoxumab - A New Agent for Clostridium difficile Infection.](#)

Bartlett JG.

N Engl J Med. 2017 Jan 26;376(4):381-382. doi: 10.1056/NEJMMe1614726.

PMID: 28121509 No abstract available.

## Similar articles

[The effect of bezlotoxumab for prevention of recurrent Clostridium difficile infection \(CDI\) in Japanese patients.](#)

Mikamo H, Aoyama N, Sawata M, Fujimoto G, Dorr MB, Yoshinari T.

J Infect Chemother. 2018 Feb;24(2):123-129. doi: 10.1016/j.jiac.2017.10.005. Epub 2017 Oct 31.

## Cited by 165 articles

[Protecting intubated patients from the threat of antimicrobial resistant infections with monoclonal antibodies.](#)

Baker S, Kellam P, Krishna A, Reece S.

Lancet Microbe. 2020 Sep;1(5):e191-e192. doi: 10.1016/S2666-5247(20)30126-9. Epub 2020 Sep 7.

## Publication types

- Clinical Trial, Phase III
- Multicenter Study
- Randomized Controlled Trial
- Research Support, Non-U.S. Gov't

## MeSH terms

- Adolescent
- Adult
- Aged
- Aged, 80 and over
- Anti-Bacterial Agents / therapeutic use
- Antibodies, Monoclonal / adverse effects
- Antibodies, Monoclonal / therapeutic use\*
- Antibodies, Neutralizing / adverse effects
- Antibodies, Neutralizing / therapeutic use\*
- Broadly Neutralizing Antibodies
- Clostridioides difficile\*
- Clostridium Infections / prevention & control\*
- Double-Blind Method

## Associated data

- ClinicalTrials.gov/NCT01241552
- ClinicalTrials.gov/NCT01513239



PLOS BLOGS

## Absolutely Maybe

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# 8 PubMed Ninja Skills

November 30, 2015 / [Hilda Bastian](#) / [Listicles](#)

<https://absolutelymaybe.plos.org/2015/11/30/8-pubmed-ninja-skills/>

Fyr løs med søker ☺

# Take home message: Tenkt enkelt

- Først Google..UpToDate, retningslinjer (eks. CDC) osv.
- Tekstsøk i PubMed med to ord, ser hva jeg får
- Varierer kanskje med to nye ord
- Legger kanskje på filter RCT
- Legger kanskje til søker i tittel/abstract (hvis mange/irrelevante treff)
- Ser på de nyeste/mest relevante artiklene
- Vurdere artikler: En annen gang 😊

