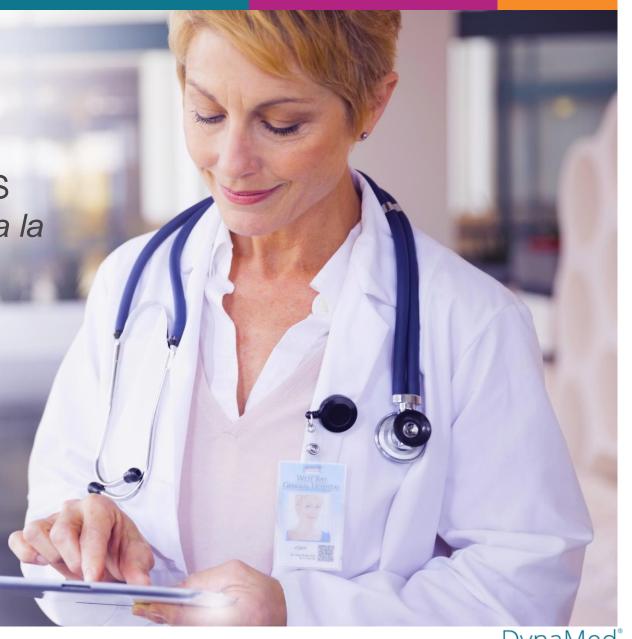
# DynaMed®

MEJORA LOS RESULTADOS DE LOS PACIENTES transformando el apoyo a la toma de decisiones clínicas



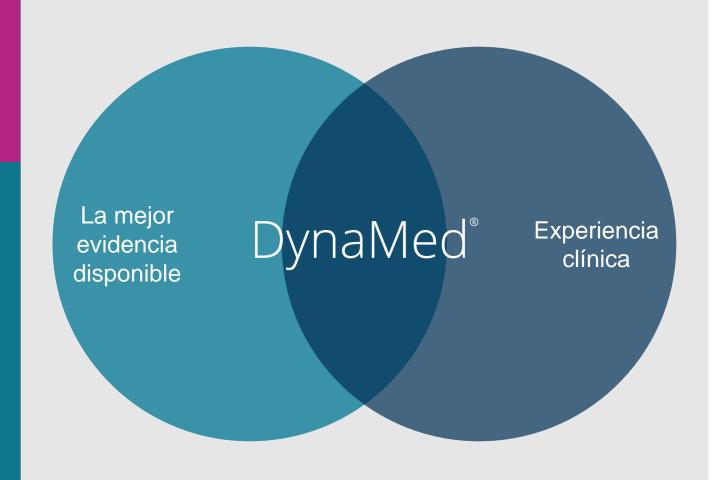




Garantiza la confianza en la práctica

Para garantizar la confianza en la práctica, se necesita la mejor evidencia disponible combinada con la experiencia clínica que complemente y aclare la evidencia.

Cualquiera de los dos por sí solo no es suficiente,
DynaMed es la combinación perfecta de ambos.



# Creado por un equipo de médicos de nivel mundial que:

- Son expertos en sus campos
- Seleccionan la mejor y más apropiada evidencia
- Confirman la aplicabilidad clínica del contenido
- Temas de revisión por pares



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of Cardiology

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Executive Deputy Editor

Family Practice Physician;
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125

médicos y científicos en plantilla



Más de

450

médicos de todo el mundo escriben o revisan nuestro contenido

Las organizaciones médicas, las principales instituciones de medicina basada en la evidencia y los principales vendedores de fármacos eligen DynaMed



# **IBM Micromedex**®







# Metodología basada en la evidencia de DynaMed







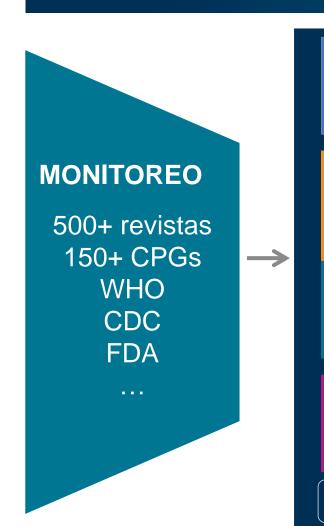




Informar sobre las conclusiones y hacer recomendaciones

Ajustar las conclusiones cuando se publiquen nuevas pruebas

# Vigilancia sistemática de la literatura



### Cardiología

Especialista 1 Especialista 2

...

### Cuidado Crítico

Especialista 1 Especialista 2

### Hematología

Especialista 1
Especialista 2

...

### Neurología

Especialista 1 Especialista 2

Cientos de editores especializados

**TRIAGE** 

32.000 artículos evaluados EVALUACIÓN CRÍTICA

SÍNTESIS

8.000 incorporados

IDENTIFICACIÓN DE LA PRÁCTICA -ACTUALIZACIONES CAMBIANTES

RESUMEN +
RECOMENDACIONES
ACTUALIZADAS

Priorización basada en el origen y el impacto de las nuevas pruebas/directrices

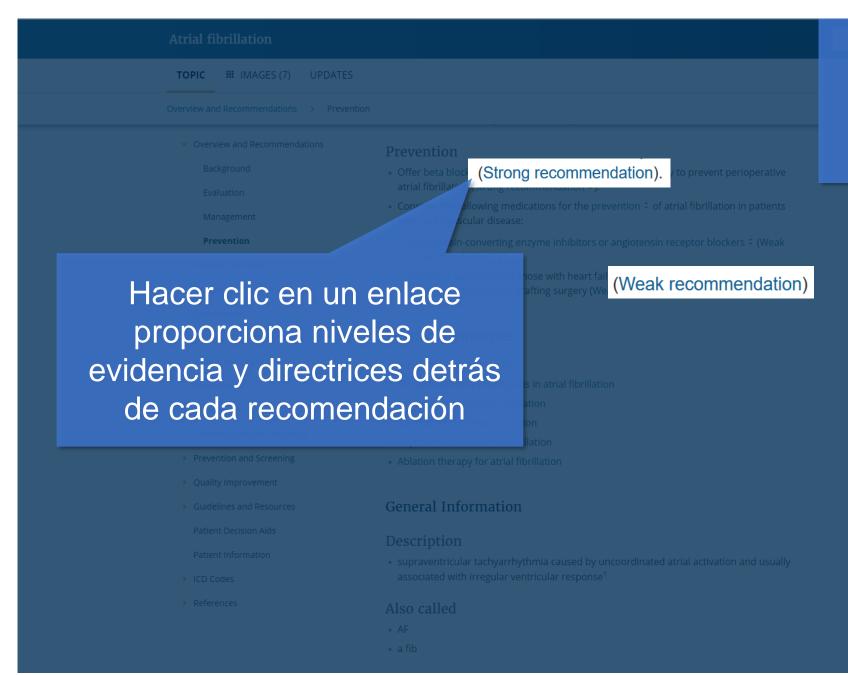
DynaMed utiliza el sistema GRADE para las recomendaciones y un sistema patentado para evaluar la fuerza de la evidencia.

### RECOMENDACIONES

- Fuerte
- Débil

### **EVIDENCIA**

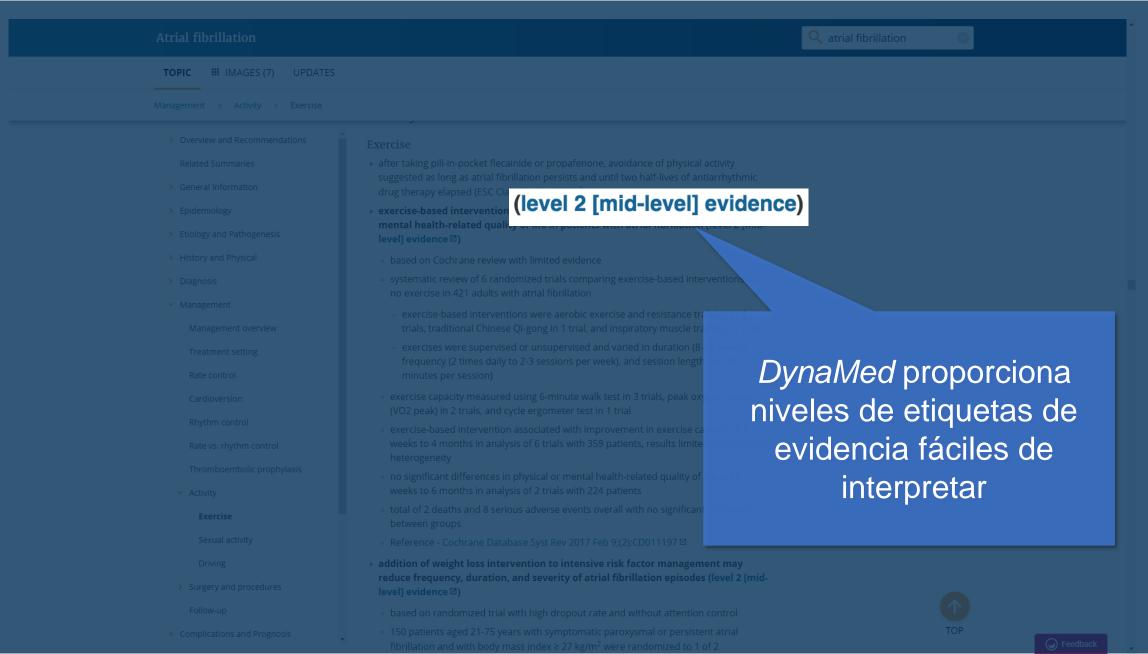
- Alto (1)
- Moderado (2)
- Baja o evidencia que carece de resultados clínicos (3)



DynaMed incluye recomendaciones fuertes y débiles







Directrices a nivel mundial

### TOPIC III IMAGES (1) UPDATES

- Guidelines

International guidelines

United States guidelines

United Kingdom guidelines

#### European guidelines

Australian and New Zealand guidelines

African guidelines

#### **European guidelines**

- Aragon Institute for Health Sciences (IACS) clinical practice guideline on management of invasive meningococcal disease can be found at IACS PDF [English], IACS PDF [Spanish], or at National Guideline Clearinghouse 2015 Oct 12:49258
- European Federation of Neurological Societies (EFNS) guideline on management of community-acquired bacterial meningitis in older children and adults can be found in Eur J Neurol 2008 Jul;15(7):649 or at National Guideline Clearinghouse 2009 Jun 22:13564
- Société de Pathologie Infectieuse de Langue Française (SPILF) guideline on acute bacterial meningitis (except newborn and nosocomial meningitis) can be found in Med Mal Infect 2009 Jun;39(6):356 or in Rev Neurol (Paris) 2009 Sep;165 Spec No 3:F205 [French]

#### Australian and New Zealand guidelines

- Communicable Diseases Network Australia (CDNA) national guideline for public health units on invasive meningococcal disease can be found at CDNA 2017 July 4
- Western Australian Department of Health (WADH) guidelines on management of meningococcal disease can be found at WADH 2008 PDF

#### African guidelines

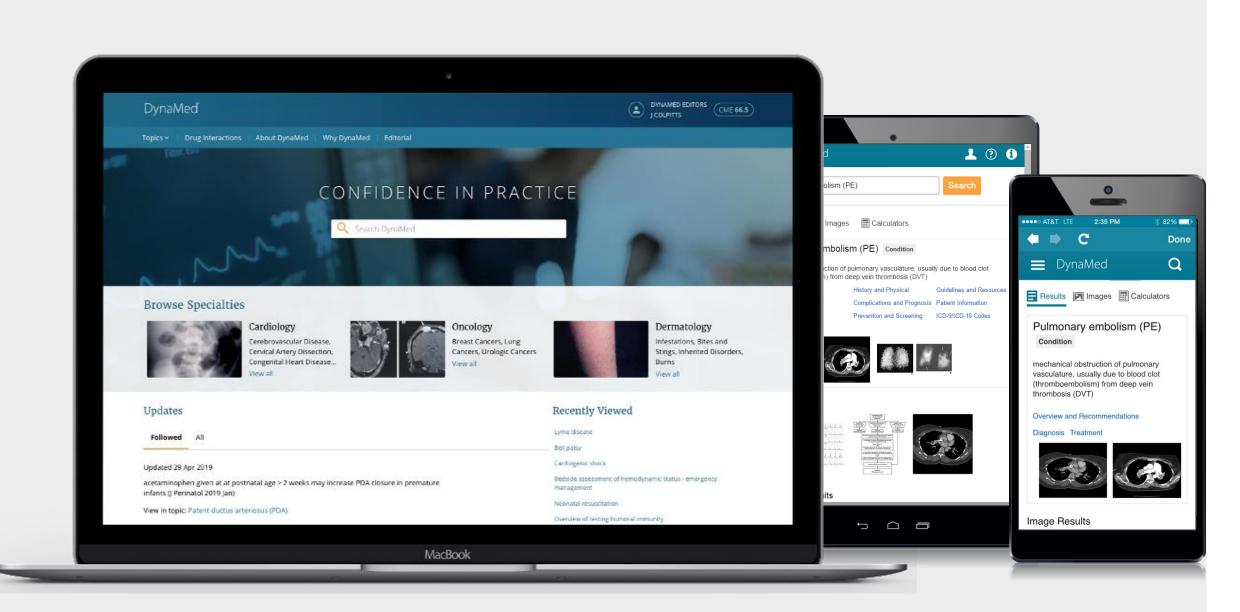
- South African National Department of Health (NDOH) guideline on management, prevention and control of meningococcal disease can be found at NDOH 2012 Jun 21 PDF







Mejora el tiempo de respuesta









### Panorama general y recomendaciones

#### Antiplatelet and anticoagulant drugs for elective percutaneous coronary intervention

TOPIC UPDATES ⊕ <</p> Overview and Recommendations

#### Overview and Recommendations

Background

Management

Related Summaries

Overview

Recommendations From Professional Organizations

Aspirin

- > P2Y12 Inhibitors and Dual Antiplatelet Therapy (DAPT)
- Glycoprotein IIb/IIIa Inhibitors
- Anticoagulants
- > Dual Therapies Compared to Triple

Revascularization Before Noncardiac Surgery and Dual Antiplatelet therapy

Use in Chronic Kidney Disease

- > Quality Improvement
- > Guidelines and Resources
- References

#### Overview and Recommendations

#### Background

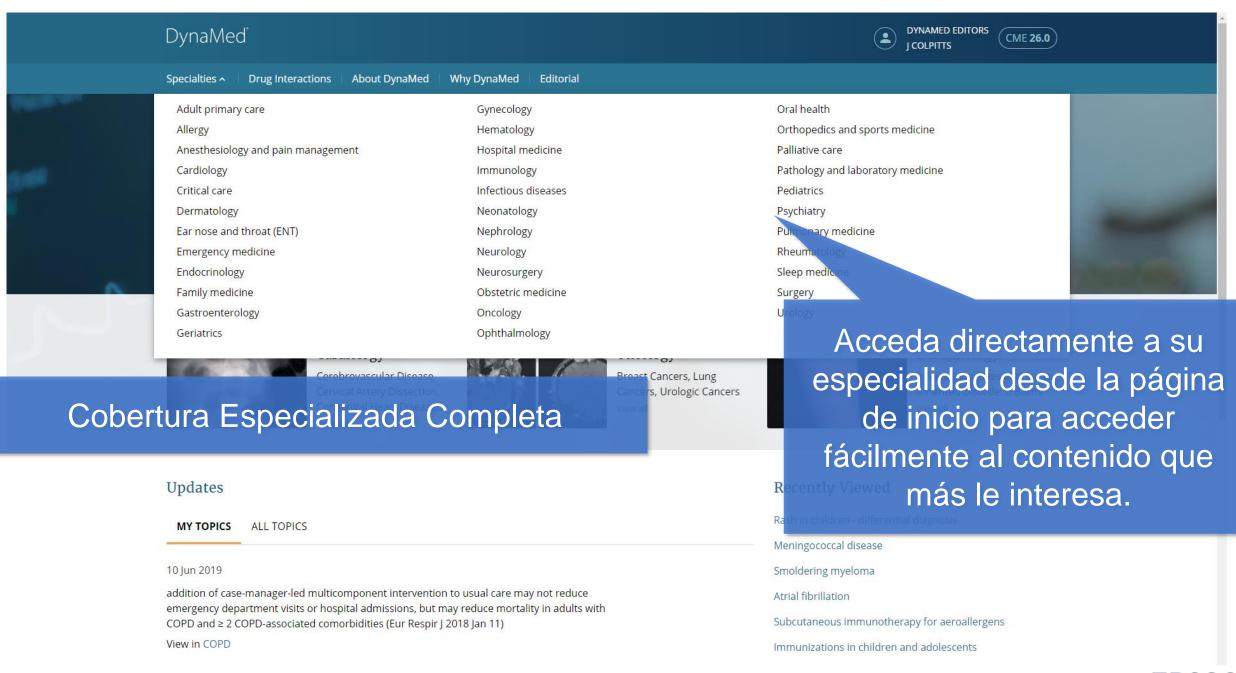
 Antiplatelet (including aspirin and P2Y12 inhibitors) and anticoagulant drugs are routinely administered during elective percutaneous coronary interventions (PCI).

#### Management

- Give aspirin  $\circ$  before percutaneous coronary intervention (PCI) using one of the following doses:
- 81-325 mg for patients already taking daily aspirin (Strong recommendation \$)
- 325 mg nonenteric coated aspirin if not already taking daily aspirin (Strong recommendation :)
- Give clopidogrel 
   600 mg to patients having PCI with stenting (Strong recommendation :).
- Do not perform routine genetic or platelet function testing 
   <sup>a</sup> to screen patients treated with clopidogrel having PCI (Strong recommendation  $\circ$  ).
- · Give one of the following anticoagulants to patients undergoing PCI (Strong recommendation :):
- unfractionated heparin (UFH)
- enoxaparin
- bivalirudin
- argatroban
- Glycoprotein (GP) IIb/IIIa blockers ::
- Glycoprotein IIb/IIIa blockers are associated with decreased mortality at 30 days but may increase the risk of major bleeding in patients having percutaneous coronary intervention.
- Consider giving a glycoprotein IIb/IIIa inhibitor (abciximab, double-bolus eptifibatide, or high-bolus-dose tirofiban) to patients treated with UFH and not pretreated with clopidogrel (Weak recommendation 2).
- Do not use platelet glycoprotein IIb/IIIa inhibitors as adjunctive therapy during saphenous vein graft PCI (Strong recommendation  $\circ$  ).













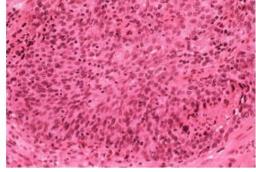


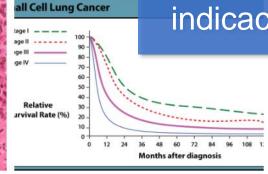
SEARCH RESULTS lung cancer

III IMAGES (7)

Los gráficos e imágenes ofrecen respuestas rápidas a preguntas clínicas con indicaciones visuales



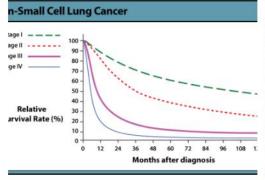




Lung Cancer.

Lung cancer.

Lung cancer survival trends.





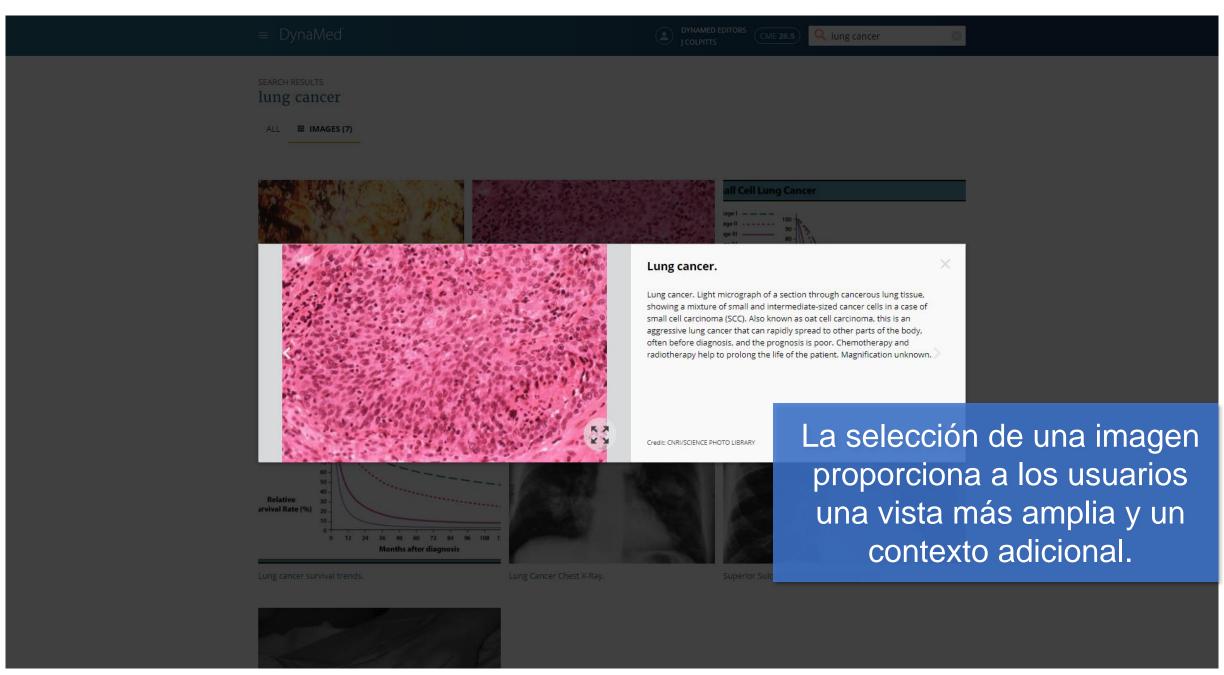


Lung cancer survival trends.

Lung Cancer Chest X-Ray.

Superior Sulcus Tumor Chest Radiograph.





#### Warfarin

### Enlaces a MICROMEDEX®

#### TOPIC

Dosing & Indications > Adult Dosi

Related Summaries

- International Formulary
- DynaMed-added Content

Class

Dosing & Indications

#### Adult Dosing

Pediatric Dosing

Dose Adjustment

Indications

Black Box Warning

Contraindications/Warnings

Pregnancy & Lactation

Drug Interactions

IV Compatibility

Adverse Effects

Monitoring

Toxicology

Clinical Teaching

Administration

Mechanism of Actio

Duration of therapy, 3 months (DVT secondary to reversible risk factor), 6 to 12

months ( prothron the 90th antibod

DRUGDEX® Subscribers: See additional details for WARFARIN

- Venous thromboembolism; Prophylaxis
- In Ital, 2 to 5 mg orally once a day; adjust dose based on the results of INR; usual
- DRUGDEX® Subscribers: See additional details for WARFARIN

#### **Pediatric Dosing**

- Important Note
  - Beers Criteria: Avoid use when possible in older adults
- General Dosage Information
- Safety and efficacy in pediatrics patients have not been established in randomized, controlled, clinical trials, although the use of warfarin for the treatment or prophylaxis of thrombosis is well documented.
- DRUGDEX® Subscribers: See additional details for WARFARIN <sup>©</sup>

#### Dose Adjustment

- Renal impairment
  - No adjustment necessary
- Geriatric
  - Consider using lower initial and maintenance dosage
- INR; single out of range value, below or above the therapeutic INR by 0.5 or les continue current warfarin dose and test INR within 1 to 2 weeks
- Bariatric surgery (Roux-en-Y gastric bypass or sleeve gastrectomy)



Search Micromedex

Q

Substance

Drug

Home

Drug ID

Drug Comparison

Tox & Drug Product Lookup

Calculators

### WARFARIN [Your search: WARFARIN]

Drug Classes: Anticoagulant | Blood Modifier Agent | All

Routes: Intravenous | Oral

In-Depth Answers

All Results

### Dosing/Administration

#### Adult Dosing

Normal Dosage

Dosage in Renal Failure

Dosage in Hepatic Insufficiency

Dosage in Geriatric Patients

Dosage Adjustment During Dialysis

Dosage in Other Disease States

#### **Normal Dosage**

Important Note

Warfarin

Warfarin Sodium

#### Important Note

Warfarin Sodium

Beers Criteria: Use caution or avoid use as potentially inappropriate in older adults [1].

Warfarin

### Dosing/Administration

Adult Dosing

**Pediatric Dosing** 

FDA Uses

Non-FDA Uses

**Dose Adjustments** 

Administration

Comparative Efficacy

Place In Therapy

### Medication Safety

Contraindications

Precautions

Adverse Effects

View Full Document

Print

Related Results

FDA

WARFARIN

Regulatory Authority

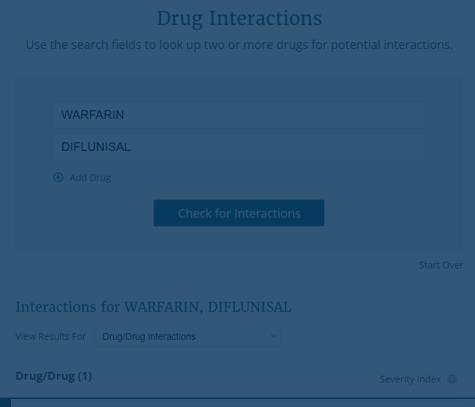
Disease

Toxicology

DynaMed le permite enlazar

directamente a su suscripción

de IBM MICROMEDEX®



Si hay una interacción presente, DynaMed le dirá la gravedad de la interacción.

Haga clic para obtener más detalles



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#### WARFARIN SODIUM



#### Warning:

Concurrent use of ANTICOAGULANTS and NSAIDS may result in increased risk of bleeding.

#### Clinical Management:

Coadministration of an anticoagulant and an NSAID may increase the risk of serious bleeding relative to the use of either drug alone (Prod Info CALDOLOR® intravenous injection, 2016; Prod Info CELEBREX® oral capsules, 2016; Prod Info COUMADIN® oral tablets, intravenous injection powder for solution, 2015) and may increase the risk of epidural or spinal hematomas that can result in long-term or permanent paralysis in patients who are receiving neuraxial anesthesia or undergoing spinal puncture (Prod Info PRADAXA® oral capsules, 2015; Prod Info SAVAYSA(TM) oral tablets, 2015). If used concomitantly, monitor for signs of bleeding (Prod Info CALDOLOR® intravenous injection, 2016; Prod Info CELEBREX® oral capsules, 2016).

#### Onset:

Not Specified

Severity:

Major

Documentation:

Fair

Probable Mechanism:

additive effect on hemostasis

#### Summary:

Coadministration of an anticoagulant and an NSAID may increase the risk of serious bleeding relative to the use of either drug alone (Prod Info CALDOLOR® intravenous injection, 2016; Prod Info CELEBREX® oral capsules, 2016; Prod Info COUMADIN® oral tablets, intravenous injection powder for solution, 2015) and may increase the risk of epidural or spinal hematomas that can result in long-term or permanent paralysis in patients who are receiving neuraxial anesthesia or undergoing spinal puncture (Prod Info PRADAXA® oral capsules, 2015; Prod Info SAVAYSA(TM) oral tablets, 2015). If used concomitantly, monitor for signs of bleeding (Prod Info CALDOLOR® intravenous injection, 2016; Prod Info CELEBREX® oral capsules, 2016).

#### Reference(s):

Product Information: CALDOLOR(R) intravenous injection, ibuprofen intravenous injection. Cumberland Pharmaceuticals Inc. (per FDA), Nashville, TN, Apr, 2016.

Product Information: CELEBREX(R) oral capsules, celecoxib oral capsules. GD Searle LLC (per FDA), New York, NY, May, 2016.

Product Information: COUMADIN(R) oral tablets, intravenous injection powder for solution, warfarin sodium oral tablets, intravenous injection powder for solution. Bristol-Myers Squibb Company (per manufacturer), Princeton, NJ, Dec, 2015.

Product Information: PRADAXA(R) oral capsules, dabigatran etexilate mesylate oral capsules. Boehringer Ingelheim Pharmaceuticals (per manufacturer), Ridgefield, CT, Nov, 2015.

# Detalles adicionales sobre la interacción entre los fármacos









Los usuarios pueden ajustar fácilmente el tipo de interacción

Interactions for WARFARIN, DIFLUNISAL				
Display	Drug/Drug interactions	Severity Index 🕕		
Drug/Di	Drug/Drug interactions Drug/Food interactions Drug/Ethanol interactions Drug/Lab interactions Drug/Tobacco interactions			
WARFARIN SODIUM		MAJOR 🛕		
Documentation: Fair				
Concurre	nt use of ANTICOAGULANTS and I	NSAIDS may result in increased risk of		







Clinicians' Practice Points ofrece orientación y opinión de editores médicos expertos sobre lo que se percibe como buena práctica clínica en ausencia de pruebas sólidas.



#### UP CLINICIANS' PRACTICE POINT

For patients who are at increased risk of overcorrection or who demonstrate large urine volume (> 100 mL per hour), more frequent monitoring is necessary to change treatments in order to slow or reverse the serum sodium increase within 24 hours.



#### Pulmonary

Epidemiology

Overview a

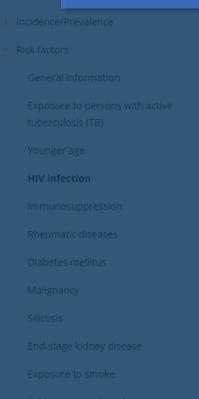
Related Sui

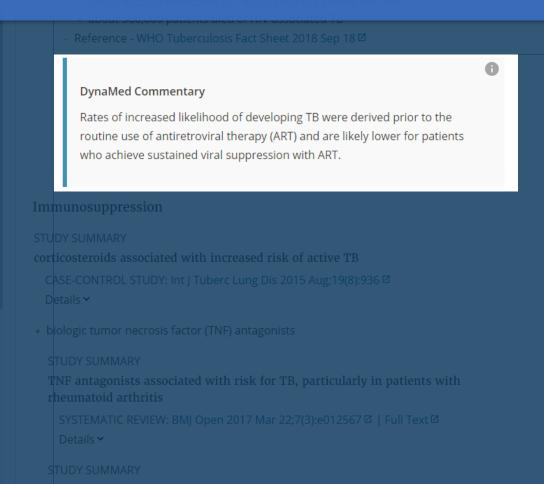
General Inf

Epidemiolo

Geograp

**DynaMed Commentary** proporciona orientación sobre la metodología u otros aspectos técnicos significativos de los estudios clínicos que se evalúan críticamente en los resúmenes de la evidencia.







#### **EVIDENCE SYNOPSIS**

Both the World Health Organization (WHO) and American Thoracic Society/Centers for Disease Control and Prevention/Infectious Diseases Society of America (ATS/CDC/IDSA) give preference for daily dosing during intensive phase of therapy, although the ATS/CDC/IDSA guidelines offer more leeway for less frequent dosing for patients at low risk for relapse

- ° WHO 2017 recommendations on frequency of dosing <sup>5</sup>
  - wherever feasible, daily dosing is optimal (WHO Strong recommendation, Highquality evidence) 5
  - consider daily dosing over 3-times weekly dosing throughout both intensive and continuation phase (WHO Conditional recommendation, Very low-quality evidence)
  - patients should not receive twice-weekly dosing unless done in the context of formal research (WHO Strong recommendation, High-quality evidence)
- ATS/CDC/IDSA 2016 recommendations
  - daily dosing recommended over intermittent dosing during intensive phase of therapy (ATS/CDC/IDSA Strong recommendation, Moderate-quality evidence)
- consider 3-times-weekly dosing in intensive phase (with or without initial 2 weeks of daily therapy) for patients without HIV infection and are at low risk of relapse (those with pulmonary, drug-susceptible, noncavitary, and/or smear-negative TB) (ATS/CDC/IDSA Conditional recommendation, Low-quality evidence)
- consider twice-weekly therapy after an initial 2 weeks of daily therapy in situations where daily or 3-times-weekly DOT is difficult to achieve for patients without HIV infection and are at low risk of relapse (ATS/CDC/IDSA Conditional recommendation, Very low-quality evidence)

**Evidence Synopsis** is es un breve resumen estructurado de un conjunto de evidencia que tiene la intención de proporcionar una "extracción" clínica y responder una pregunta lo más rápido posible



#### **Pulmonary Tuberculosis**

#### Epidemiology . Geographic distribution

- Overview and Recommendations
   Related Summaries
- General Information
- Epidemiology

#### Geographic distribution

- > Incidence/Prevalence
- > Risk factors

Associated conditions

- > Etiology and Pathogenesis
- > History and Physical
- > Diagnosis
- Management
- > Complications and Prognosis
- > Prevention and Screening
- Guidelines and Resources

Patient Information

- ICD Codes
- > References

Reference - WHO 2018 global tuberculosis report PDF

#### Incidence/Prevalence

#### Global

- estimated 1.7 billion people infected with M. tuberculosis worldwide
- World Health Organization (WHO) global tuberculosis (TB) statistics for 2017
- estimated 10 million incident cases of TB worldwide in 2017
  - 133 cases per 100,000 persons
  - 64% male
- estimated 1.3 million deaths attributed to TB among HIV-negative persons
- estimates among patients with HIV
- 920,000 new cases of TB reported (about 9% of all TB case
- 300,000 deaths attributed to TB
- ∘ Reference WHO 2018 global tuberculosis report PDF ☑
- estimated 2.8% provalence of active TB among 10.2 million pec worldwide (Lancet 2016 Sep 10;388(10049):1089 ☑)

#### **United States**

- United States TB statistics for 2018
- 9,029 cases of TB were provisionally reported to Centers for Disease Control and Prevention (CDC) in 2018 as of February 11, 2019 (0.7% decrease from 2017)
- TB annual incidence
  - 2.8 per 100,000 persons overall
- 1 per 100,000 United States-born persons
- 14.2 per 100,000 foreign-born persons
- 69.5% of TB cases occurred in foreign-born persons, with top 5 countries of origin Mexico, Philippines, India, Vietnam, and China
- 5.3% of persons with TB and reported HIV test results were HIV positive
- o most recent drug-susceptibility data available from 2017
- multidrug-resistant TB reported in 1.9%
- 3 cases of extensively drug-resistant TB reported
- ∘ Reference MMWR Morb Mortal Wkly Rep 2019 Mar 22 PDF ■

Acceso con un solo clic al texto completo







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### **Updates**

MY TOPICS

**ALL TOPICS** 

17 Jun 2019

ACC/AHA Task Force on Clinical Practice Guidelines 2018 cholesterol clinical practice guidelines - patients with primary severe hypercholesterolemia (LDL cholesterol [LDL-C] ≥ 190 mg/dL [≥ 4.9 mmol/L]) (J Am Coll Cardiol 2018 Nov 8)

View in Familial hypercholesterolemia

17 Jun 2019

chemoradiation may not increase relapse-free survival at 5 years compared to chemotherapy alone in women with stage III or IVA endometrial carcinoma (N Engl J Med 2019 Jun 13)

View in Endometrial cancer

17 Jun 2019

insufficient evidence to compare robot-assisted vs. conventional laparoscopic resection in women with endometriosis (Cochrane Database Syst Rev 2019 Apr 15)

والمراب والمراب

View in Endometriosis

17 Jun 2019







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### **Updates**

Filter by Category

<ul> <li>□ Adult Primary Care</li> <li>□ Allergy</li> <li>□ Anesthesiology and Pain Management</li> <li>□ Cardiovascular Medicine</li> <li>□ Complementary and Alternative Medicine</li> <li>□ Critical Care Medicine</li> <li>□ Dermatology</li> <li>□ Drugs</li> <li>□ Ear, Nose and Throat (ENT) Medicine</li> <li>□ Emergency Medicine</li> <li>□ Endocrinology</li> <li>□ Family Medicine</li> <li>□ Gastroenterology</li> <li>□ Genetic Disorders</li> </ul>	<ul> <li>□ Neurology</li> <li>□ Nutrition</li> <li>□ Obesity</li> <li>□ Obstetrics and Gynecology</li> <li>□ Occupational and Environmental Medicine</li> <li>□ Oncology</li> <li>□ Ophthalmology</li> <li>□ Oral and Maxillofacial Disorders</li> <li>□ Orthopedics and Sports Medicine</li> <li>□ Palliative Medicine</li> <li>□ Pathology and Laboratory Medicine</li> <li>□ Pediatrics</li> <li>□ Podiatry</li> <li>□ Psychiatry</li> </ul>	ra oxygen 55%-85% might not decrease risk of moderate-to-severe neurodevelopmental mi (Acta Paediatr 2019 Feb) Filtrar las  actualizaciones por hand without diabetes meilitus (IAMA 2019 Nov 8 early online) especialidad en la  compared página de Updates compared popen di in, and similar perioperativ mortality and mortality compared to sc surg 2019 lun)
Geriatric Medicine Hematology Hospital Medicine Immunology Infectious Diseases Labs Nephrology	□ Pulmonary Medicine □ Quality Improvement □ Rheumatology □ Sleep Medicine □ Substance Use and Poisoning □ Surgery □ Urology  Apply	norrhage compared to delayed umbilical cord clamping in preterm infants born between 8 and 32 weeks gestation (JAMA 2019 Nov 19)  ents who had stopped smoking (Cochrane Database Syst Rev 2019 Oct 28)

 $\times$ 

View in Treatment for Tobacco Use

3 Dec 2019

stress-related disorders associated with increased risk of endocarditis (BMJ 2019 Oct 23)



Calculators

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## DynaMed le permite buscar en 15 idiomas diferentes



Failure

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### CONFIDENCE IN PRACTICE

ataque al corazón



Deutsch

Italiano

日本語

한국어

Norsk Português Русский

Español Svenska

#### Oncology

Breast Cancers, Lung Cancers, Gastrointestinal Cancers, Lymphomas

View Specialty



### Dermatology

Eczematous Dermatoses, Malignant and Pre-malignant Lesions, Papulosquamous...

View Specialty

#### Recent Updates

FOLLOWED

ALL

13 Jan 2020

abstinence from alcohol may reduce atrial fibrillation recurrence at 6 months in adults with atrial fibrillation and regular alcohol consumption (N Engl J Med 2020 Jan 2)

View in Atrial Fibrillation

31 Dec 2019

C2HEST helps predict incident atrial fibrillation in Asian patients without structural heart disease (Chest 2019 Mar)

View in Atrial Fibrillation

#### Recently Viewed

COPD

Pulmonary Tuberculosis

Hyponatremia - Approach to the Patient

COPD

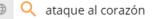
Atrial Fibrillation

Staphylococcal Toxic Shock Syndrome

Hormonal replacement therapy (HRT)

Physician Quality Reporting System Quality Measures





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SEARCH RESULTS

### ataque al corazón – heart attack

ALL (1280)

#### CONDITION

### Complications of Myocardial Infarction

The majority of complications present within 24 hours after acute myocardial infarction, with most others occurring within 7 days.

Prognosis > Embolic and bleeding complications after myocardial infarction

Embolic and bleeding complications after myocardial infarction

Prognosis

Inflammatory complications after myocardial infarction

Prognosis > Electrical complications after myocardial infarction

Electrical complications after myocardial infarction

#### CONDITION

### Myocardial Infarction With Nonobstructive Coronary Arteries (MINOCA)

MINOCA is a heterogeneous clinical syndrome characterized by acute myocardial infarction without coronary artery obstruction.

#### MANAGEMENT

### Bone Marrow Stem Cell Treatment for Myocardial Infarction

Bone marrow stem cell treatment during PCI in patients with acute myocardial infarction does not appear to improve survival or morbidity.

CONDITION

ST-elevation Myocardial Infarction (STEMI)





Calculators

**Differential Diagnosis** 

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Los clientes de Isabel pueden acceder al diagnóstico diferencial desde DynaMed

### CONFIDENCE IN PRACTICE





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### ogy

nary Syndromes, Stable rtery Disease, Heart



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Breast Cancers, Lung Cancers, Gastrointestinal Cancers, Lymphomas

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### Dermatology

Eczematous Dermatoses, Malignant and Pre-malignant Lesions, Papulosquamous...

View Specialty

### Recent Updates

14 Jan 2020

Limberg flap technique associated with reduced recurrence and similar complication rate, but less satisfaction with wound cosmesis at 1 year compared to excision with primary midline closure in adults with sacrococcygeal pilonidal sinus disease (Ann R Coll Surg Engl 2019 Jan)

View in Pilonidal Disease

14 Jan 2020

modified Valsalva maneuver may increase rate of sustained return to sinus rhythm compared to both standard Valsalva maneuver and carotid sinus massage in patients presenting to emergency department with supraventricular tachycardia (J Emerg Med 2019 Sep)

View in Supraventricular Tachycardia (SVT)

### Recently Viewed

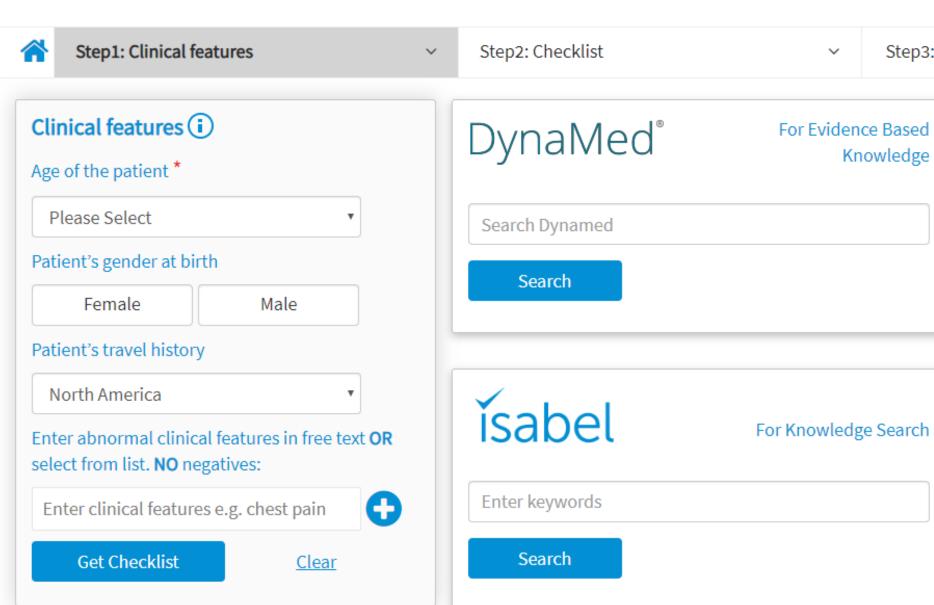
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Step3: Resources

### DynaMeď





Drugs A-Z

Drug Interactions

Differential Diagnosis

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DynaMed y DynaMed Shared Decisions se integran perfectamente asegurando la continuidad de la atención y mejorando los resultados

### ONFIDENCE IN PRACTICE





Q Search



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Eczematous Dermatoses, Malignant and Pre-malignant Lesions, Papulosquamous...

View Specialty



#### EFFECTIVE SHARED DECISION-MAKING

DynaMed Shared Decisions offers an ever-growing library of easy-to-use, evidence-based shared decision-making aids developed by a team of clinical experts. Visit the Site

### Recent Alerts

FOLLOWED TOPICS

ALL TOPICS

29 SEP 2020

belantamab mafodotin (Blenrep) authorized by European Commission for treatment of multiple myeloma in adults who have received ≥ 4 prior therapies (and refractory to ≥ 1 proteosome inhibitor, an immunomodulatory agent, and an anti-

### Recently Viewed

Prostate Cancer

Breast Cancer in Women

COVID-19 (Novel Coronavirus)

Middle East Respiratory Syndrome Coronavirus (MERS-CoV)

COPD

Acetaminophen

Bell Palsy

Heart Failure Alternative Treatments



### ¿Qué es DynaMed Shared Decisions?

DynaMed Shared Decisions es una robusta colección de herramientas basadas en la evidencia y ayudas para la toma de decisiones, diseñadas para permitir a los pacientes y al personal sanitario tener conversaciones significativas e informadas sobre la toma de decisiones compartidas que conduzcan a mejores resultados y a una mayor satisfacción del paciente.

-









Drugs A-Z

Drug Interactions

Differential Diagnosis

Calculators

Mobile

Los usuarios pueden cambiar fácilmente entre las soluciones sin

to detect breast cancer earlier with the goal of decreasing mortality and/or morbidity.

perder su lugar

Mammography for Breast Cancer Screening

This x-ray of the breast tissue is for asymptomatic women to detect breast cancer earlier with the goal of decreasing mortality.

From DynaMed Shared Decision

PATIENT DECISION AID

Mammogram for Breast Cancer Scree

Their 60s: Should I Have It?

PATIENT DECISION AID

Mammogram for Breast Cancer Scre Their 50s: Should I Have It?

**EVALUATION** 

**BRCA Mutation Testing and Management** 

Inherited mutations in either of these two DNA repair genes are associated with a life

Screening > Breast cancer screening evidence

Breast cancer screening evidence

CONDITION

Risk Factors for Breast Cancer

Risk factors include inherited gene mutations, therapeutic thoracic radiation, family

Breast Cancer in Men

Las herramientas de DynaMed Shared Decisions stán cuidadosamente integradas en la experiencia de búsqueda de DynaMed para permitir una mejor atención y compromiso del paciente



# Crea una experiencia personalizada

Desde la página de inicio, DynaMed lo lleva a la información que más le interesa.



### CME/CPD/CE and MOC

Earn CME/CPD/CE credits while using DynaMed. Claim earned credits and we will submit eligible credits for Maintenance of Certification for you. Learn more about CME/CPD/CE and MOC

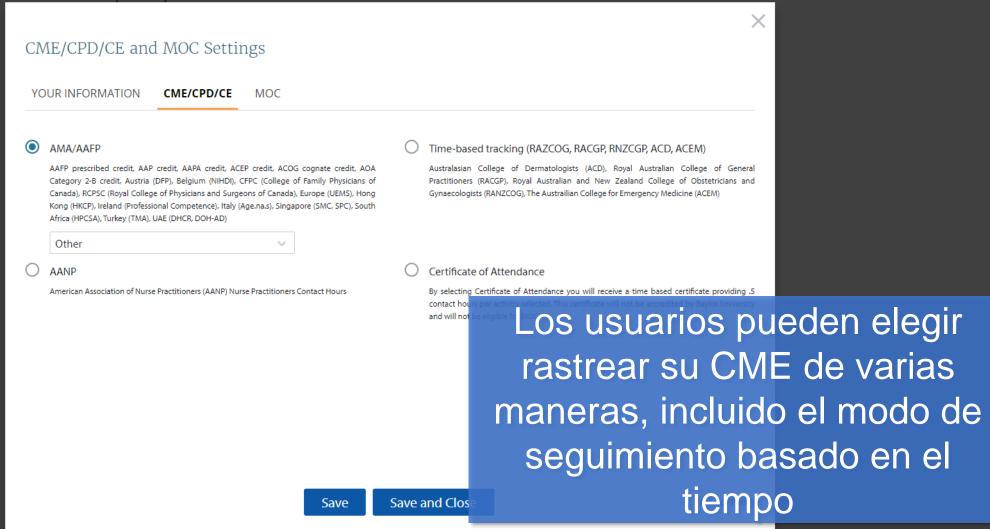
		CLAIMED CREDITS MOC	Setting Gane CME/CPD/CE y		
June 2019 17 Jun 2019	0.5	Search term/Speciality: pneumonia TOPICS REVIEWED	MOC con cada búsqueda en DynaMed		
		Aspiration pneumonia			
17 Jun 2019	0.5	Search term/Speciality: atrial fibrillation  TOPICS REVIEWED  Atrial fibrillation	Prepare		
17 Jun 2019	0.5	Search term/Speciality: pneumonia  TOPICS REVIEWED  Streptococcus pneumoniae pneumonia	Prepare		
17 Jun 2019	0.5	Search term/Speciality: atrial fibrillation  TOPICS REVIEWED  > Smoldering myeloma	Prepare		
17 Jun 2019	0.5	Search term/Speciality: lung cancer  TOPICS REVIEWED  Non-small cell lung cancer	Prepare		







### CME/CPD/CE and MOC









Back to Available Credits CME se puede preparar y enviar en Application in Practice Part 1 of 2 volumen o Pulmonary Tuberculosis (0.5) individualmente 4 Dec 2019 Your search for 'Pulmonary Tuberculosis' was to learn about: (Choose one) Indicate how you expect to apply the information obtained in your search for 'Pulmonary Tuberculosis' (Select any that apply) Clinical manifestations I will change diagnostic tests or strategy (e.g., eliminate an imaging study, change lab work for this Diagnosis condition) Treatment I will make other practice changes Prognosis I found the information supports my plan Prevention I will share the information with my patient(s) Other I will share the information with colleagues I did not find that the information answered my clinical question hyponatremia (0.5) 4 Dec 2019 Your search for 'hyponatremia' was to learn about: (Choose one) Indicate how you expect to apply the information obtained in your search for 'hyponatremia' (Select any that apply) Clinical manifestations I will change diagnostic tests or strategy (e.g., eliminate an imaging study, change lab work for this Diagnosis condition) Treatment I will make other practice changes Prognosis I found the information supports my plan

## Mantenimiento del crédito de certificación

DynaMed Point-of-Care
Learning ha cumplido con los
requisitos como actividad CME
de la Parte II del MOC para las
siguientes 15 juntas de
miembros del American Board
of Medical Specialties

- Alergia e Inmunología
   Medicina física y
- Anestesiología
- Medicina Familiar
- Medicina Interna
- Medicina nuclear
- Oftalmología
- Otorrinolaringología Cirugía de cabeza y
   cuello
- Patología

- Medicina física y rehabilitación
- Cirugía plástica
- Medicina preventiva
- Psiquiatría y Neurología
- Radiología
- Cirugía
- Cirugía torácica
- Urología

### CME/CPD/CE and MOC

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AVAILABLE CREDITS (235.5) CLAIMED CREDITS MOC

Después de una fácil configuración de una sola vez, DynaMed enviará los créditos MOC en su nombre.

American Board of Anesthesiology (ABA)

View submissions on theaba.org 

View Details 

American Board of Internal Medicine (ABIM)

View submissions on abim.org 

View Details 

View Det

Add a Board



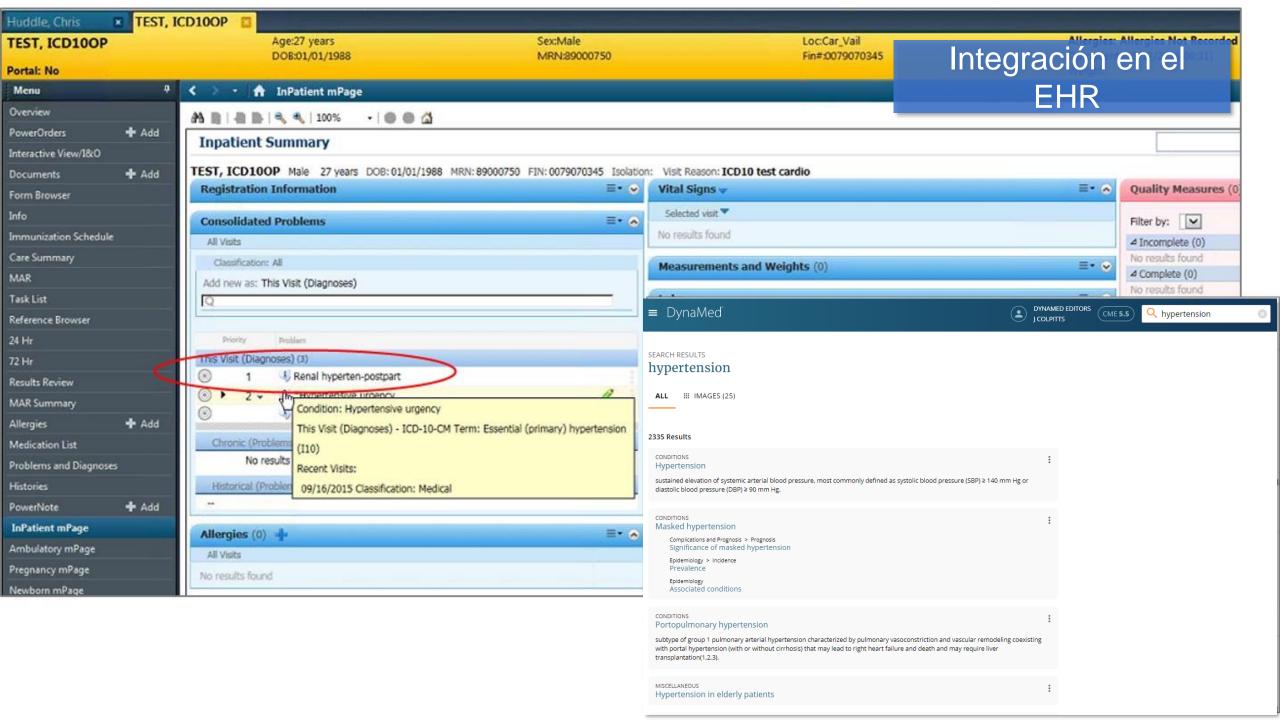
Proporciona acceso en cualquier momento y lugar

## DynaMed se integra con todos los principales EHRs, incluyendo:



### Opciones de integración en el EHR

- Enlace incorporado
- Clave de sintaxis
- API de botones de información HL7
- Widget del cuadro de búsqueda
- API de servicios web
- Integraciones SMART en FHIR



### Diseño responsivo

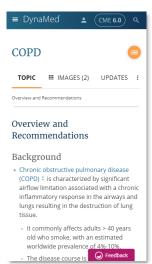
Fácil de leer en todos los dispositivos

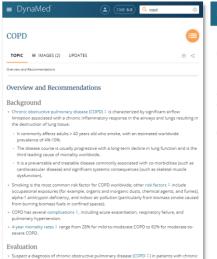




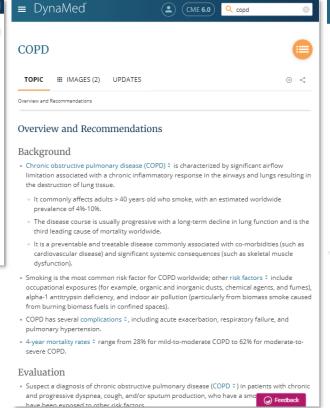


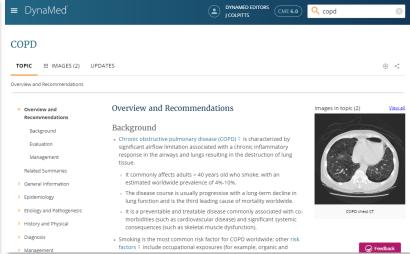






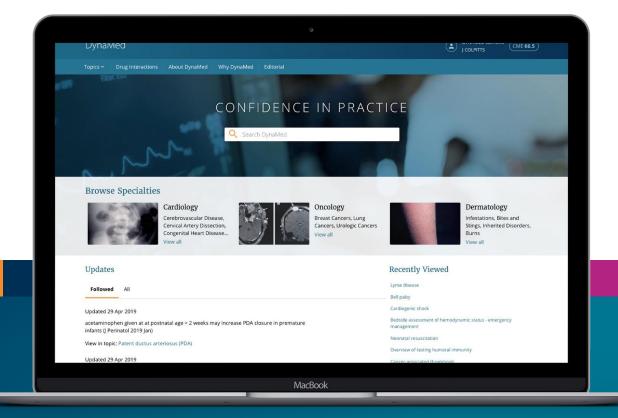
and progressive dyspnea, cough, and/or sputum production, who have a smo





### Inicio de sesión único

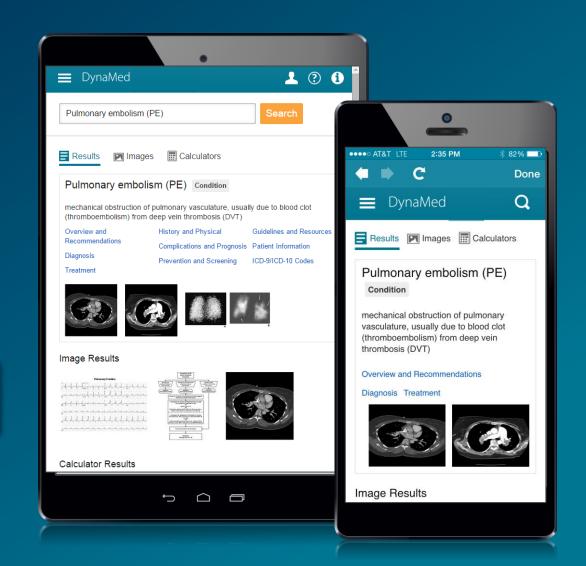
DynaMed ofrece una integración sin fisuras de inicio de sesión único para eliminar la fatiga de las contraseñas y conseguir que los médicos obtengan rápidamente la información que necesitan.



Aplicación móvil disponible para dispositivos iOS y Android.









Ejemplo de un caso clínico

### Conoce a nuestro paciente



Samantha es una mujer afroamericana de 64 años que se presenta para una visita de seguimiento de rutina. Sus condiciones médicas incluyen DM tipo II, HTN, obesidad, migraña HA y gota. Tiene antecedentes familiares de enfermedad cardiovascular, diabetes tipo II y HTA en múltiples miembros de la familia.

Durante la visita, dice que le ha ido muy bien y que no tiene síntomas ni preocupaciones. Sin embargo, su presión arterial está funcionando 136/88. Samantha pregunta durante la visita si debería estar preocupada o necesita medicamentos para su presión arterial alta.

¿Cómo respondería?

### Umbral de tratamiento de la presión arterial para personas de 64 años con diabetes

For JNC8: < 140/90

### Recommendation 5

In the population aged 18 years or older with diabetes, initiate pharmacologic treatment to lower BP at SBP of 140 mm Hg or higher or DBP of 90 mm Hg or higher and treat to a goal SBP of lower than 140 mm Hg and goal DBP lower than 90 mm Hg. Expert Opinion - Grade E

For ACC/AHA: < 130/80

### 9.6. Diabetes Mellitus

		and Systematic Review Report.	
COR	LOE	Recommendations	
1	SBP: B-R <sup>SR</sup>	<ol> <li>In adults with DM and hypertension, antihypertensive drug treatmen should be initiated at a BP of 130/80 mm Hg or higher with a treatment go.</li> </ol>	
	DBP: C-EO	of less than 130/80 mm Hg (1-8).	
1	<b>A</b> <sup>SR</sup>	2. In adults with DM and hypertension, all first-line classes of antihyperte agents (i.e., diuretics, ACE inhibitors, ARBs, and CCBs) are useful effective (1, 9, 10).	
IIb	B-NR	3. In adults with DM and hypertension, ACE inhibitors or ARBs may be considered in the presence of albuminuria (11, 12).	

Recommendations for Treatment of Hypertension in Patients With DM

For ACP/AAFP: < 150

RECOMMENDATIONS

The Figure summarizes the recommendations and clinical considerations.

Recommendation 1: ACP and AAFP recommend that clinicians initiate treatment in adults aged 60 years or older with systolic blood pressure persistently at or above 150 mm Hg to achieve a target systolic blood pressure of less than 150 mm Hg to reduce the risk for stroke, cardiac events, and possibly mortality. (Grade: strong recommendation, high-quality evidence). ACP and AAFP recommend that clinicians select the treatment goals for adults aged 60 years or older based on a periodic discussion of the benefits and harms of specific blood pressure targets with the patient.

High-quality evidence showed that treating hypertension in older adults to moderate targets (<150/90 mm Hg) reduces stroke (ARR, 0.92) and cardiac events (ARR, 0.72). Moderate-quality evidence showed a possible reduction in mortality, however, the results did not quite achieve statistical significance (RR, 0.93 [CI, 0.85 to 1.00]). Most benefits apply to all adults regardless of whether they have diabetes. We rated the overall evidence as high because effects were favorable across outcomes and the reduction in mortality was nearly statistically significant. The most consistent and greatest absolute benefit was shown in trials with a higher mean SBP at baseline (>160 mm Hg). Any additional benefit from aggressive BP control is small, with a lower magnitude of benefit and inconsistent results across outcomes.

### Desafío - No sabemos lo que hay que hacer



**SOLUCIÓN:** Directrices



PERO:
Las directrices
pueden ser
inconsistentes,
anticuadas y
erróneas



MEJOR SOLUCIÓN: Sintetizar a través de pautas y evidencia About ~

### Hypertension

III IMAGES (4)

UPDATES





#### Overview and Recommendations

Background

- > Evaluation
- Management

Related Summaries

- > General Information
- > Epidemiology
- > Etiology and Pathogenesis
- History and Physical
- Diagnosis
- > Management
- > Complications and Prognosis
- > Prevention and Screening
- > Quality Improvement
- > Guidelines and Resources

Patient Information

- > ICD Codes
- > References

### Overview and Recommendations

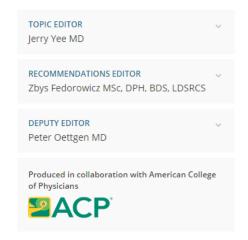
### Background

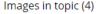
- Hypertension is a sustained elevation of systemic arterial blood pressure.
- Hypertension is most commonly defined as systolic blood pressure (SBP) ≥ 140 mm Hg or diastolic blood pressure (DBP) ≥ 90 mm Hg, but definitions vary by professional organization (see Definitions section for specific cutoffs).
- Onset is generally at age 20-50 years, but prevalence increases with age.
- Risk factors for hypertension include weight gain and obesity, alcohol use (particularly for men), and exposure to insulin.
- Most patients with hypertension have primary or essential hypertension, but in 10%-15% of patients it may be due to secondary causes.
- · Selected lifestyle interventions, including modifications in diet, regular exercise, and restriction of alcohol intake, can lower blood pressure and prevent or reduce the likelihood of developing hypertension.
- Untreated hypertension is associated with an increased risk of cardiovascular events and mortality.

#### Evaluation

### **Initial Diagnosis**

- Measure blood pressure with the appropriate cuff size in a calm, seated position and with the patient's arm supported at the level of the heart (Strong recommendation).
- A hypertension diagnosis is based on ≥ 2 blood pressure measurements per visit, at ≥ 2 visits, with systolic blood pressure (SBP) ≥ 140 mm Hg and/or diastolic blood pressure (DBP) ≥ 90 mm Hg when using manual measurement methods (Strong recommendation).





View all



Blood pressure classification by professional organization



### $\otimes$

### Hypertension

Overview and Recommendations . Management

- Overview and Recommendations
  - Background
- > Evaluation
- Management
  - Non-pharmacological Management
  - The Decision to Initiate Medications
  - Target Blood Pressure and Medications for Patients without Comorbidities
  - Target Blood Pressure and Medications for Patients with Comorbidities

#### Related Summaries

- > General Information
- > Epidemiology
- > Etiology and Pathogenesis
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- > Management
- > Complications and Prognosis
- > Prevention and Screening
- > Quality Improvement
- Guidelines and Resources
  - Patient Information

### Management

### Non-pharmacological Management

- Encourage lifestyle modifications which reduce blood pressure and have other health benefits including:
  - weight reduction if overweight or obese (Strong recommendation)
  - dietary changes (decreased fat intake and increased intake of fruits, vegetables, and low-fat dairy) (Strong recommendation)
  - physical activity (Strong recommendation)
  - smoking cessation (Strong recommendation) see Treatment for tobacco use
- Consider sodium restriction and limiting alcohol consumption, but the effects on reducing cardiovascular events or mortality are less certain (Weak recommendation).

#### The Decision to Initiate Medications

- The decision to start medications for blood pressure lowering should be individualized with shared decision making including considerations of
  - The patient's estimated 10-year cardiovascular risk
  - The estimated risk reduction from medications (considering the patient's baseline risk and systolic blood pressure)
- The potential adverse effects and burdens of medications used
- Any comorbidities or factors affecting risks for cardiovascular events or adverse effects
- o The patient's values and preferences

### Target Blood Pressure and Medications for Patients without Comorbidities

- For most patients without comorbidities
- consider a target blood pressure < 140/90 mm Hg for most patients (Weak recommendation)
- when starting antihypertensive medications:
  - use a thiazide-type diuretic or an angiotensin-converting enzyme (ACE) inhibitor for most patients (Strong recommendation).
    - Thiazide-type diuretics are a recommended option in most guidelines, and are shown to reduce mortality.
    - ACE inhibitors are a recommended option in most guidelines, especially for nonblack patients, and may reduce mortality.
- consider an angiotensin receptor blocker (ARB) or a calcium channel blocker as an





### 8

### Hypertension

Management · Medications · Antihypertensive Medication Selection

- Activity
- > Counseling
- Medications

Target Blood Pressure

### Antihypertensive Medication Selection

Antihypertensive Medication Monitoring

Antiplatelet Agents

Statin Therapy

Alternative Oral Supplements for Hypertension

Consultation and Referral

- > Other Management
- > Follow-up
- Complications and Prognosis

Complications

- > Prognosis
- > Prevention and Screening
- > Quality Improvement
- > Guidelines and Resources

Patient Information

- > ICD Codes
- > References

#### (ESC/ESH Class IIB, Level A)

• see Hypertension medication selection and management and Antihypertensive drugs and dosing for details

### Antihypertensive Medication Selection

- in patients without comorbidities
  - guidelines recommend initial antihypertensive drug choice (either monotherapy or combination therapy) from 5 drug classes

### Table 5. Initial Antihypertensive Choices

Drug Choice	ACC/AHA	JNC8	ESC/ESH	Hyperto Cana
ACE inhibitor	Recommended for nonblack patients (ACC/AHA Class I, Level A)	Recommended for nonblack patients (JNC8 Moderate recommendati on)	Recommended for all (ESC/ESH Class I, Level A)	Recomm for nonk patients (Hyperte Canada B)
ARB	Recommended for nonblack patients (ACC/AHA Class I, Level A)	Recommended for nonblack patients (JNC8 Moderate recommendati on)	Recommended for all (ESC/ESH Class I, Level A)	Recomm for all (Hyperte Canada B)*

- comparative efficacy
- thiazide-type diuretics, angiotensin-converting enzyme (ACE) inhibitors, and calcium channel blockers appear to have similar efficacy for reduction of total cardiovascular events (level 2 [mid-level] evidence ☑)
- calcium channel blockers may have higher rates of heart failure but lower rates of stroke compared to other drug classes (level 2 [mid-level] evidence ☑)
- angiotensin-converting enzyme (ACE) inhibitors but not angiotensin receptor blockers (ARBs) associated with reduced all-cause mortality in patients with hypertension (level 2 [mid-level] evidence ☑)





### 8

### Hypertension

Management · Medications · Antihypertensive Medication Selection

- Activity
- > Counseling
- Medications

Target Blood Pressure

### Antihypertensive Medication Selection

Antihypertensive Medication Monitoring

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- > Other Management
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- > Prevention and Screening
- > Quality Improvement
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- comparative efficacy
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- calcium channel blockers may have higher rates of heart failure but lower rates of stroke compared to other drug classes (level 2 [mid-level] evidence ☑)
- angiotensin-converting enzyme (ACE) inhibitors but not angiotensin receptor blockers (ARBs) associated with reduced all-cause mortality in patients with hypertension (level 2 [mid-level] evidence ☑)
- beta-blockers (especially atenolol) appear less effective for reducing stroke incidence than other antihypertensives as first-line therapy (level 2 [mid-level] evidence ☑)
- all-cause mortality is reduced by thiazide-type diuretics(level 1 [likely reliable] evidence ☑), may be reduced by ACE inhibitors(level 2 [mid-level] evidence ☑), does not appear to be reduced by ARBs(level 2 [mid-level] evidence ☑), and limited data for calcium channel blockers and beta blockers
- in black patients antihypertensive drugs reported to differ in efficacy for lowering blood pressure(level 3 [lacking direct] evidence ☑) but insufficient evidence to determine effect on clinical outcomes

Table 6. Selected Drug Classes and Corresponding Selected Indications to Consider for Use

Drug Class	Indications for Consideration	Contraindications
Thiazide or thiazide-like diuretics	ISH, elderly	Anuria
ACE inhibitor (or ARB if ACE intolerant)	Diabetes, CKD, CAD, Heart failure	Pregnancy, renovascular disease
Calcium channel blocker (dihydropyridine)	ISH, elderly	







Actualizado diariamente

VS.

Actualizado cuando los expertos lo consideren necesario



Diseño moderno e intuitivo vs.

Textos extensos



Alertas cuando se actualizan los temas

VS.

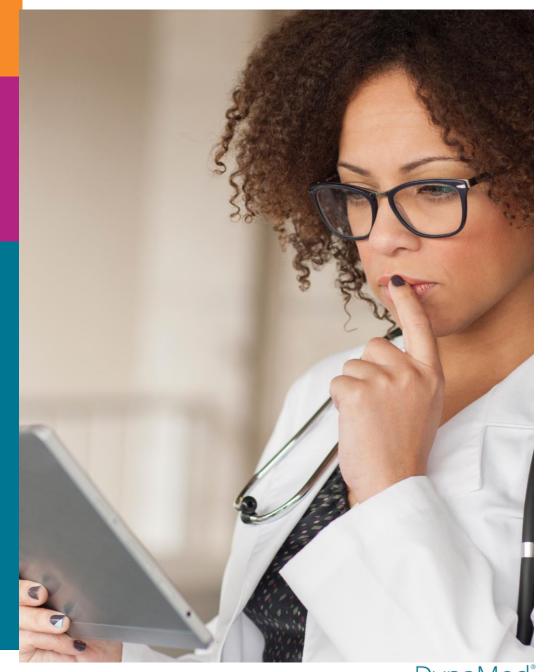
Sin alertas: los usuarios deben buscar para encontrar actualizaciones importantes



Precios transparentes y estables

VS.

Aumentos de precios volátiles e insostenibles



### Características y funcionalidad de *DynaMed*



Actualización 24x7x365



Gane CME y MOC



Contenido de medicamentos Micromedex



Aplicación Móvil



O&R Basado en la Evidencia



Gráficos E Imágenes



Alerta cuando los temas se actualizan



Inicio de sesión único