backbone

By **PEPID**

The Largest Drug
KNOWLEGEBASE

COMPREHENSIVE DATA
SEAMLESSLY INTEGRATED

25⁺
Years
Experience

159
Countries

1,000⁺
Institutions

30⁺
Strategic and
Editorial Partners

THE LARGEST DRUG KNOWLEDGEBASE
on the market

Comprehensive. Unbiased.

The extensive drug data in Backbone by PEPID is continuously updated and reviewed by highly experienced and authoritative clinicians, including the American Society of Health System Pharmacists (ASHP).

Designed for context sensitivity, the modular architecture of Backbone offers extreme granularity and customization to return only the information that is relevant to the user, and only at the points in the care process where it is desired.

Our robust APIs offer seamless integration of Backbone into any health information system. Clinical modules, such as the Drug Interactions Checker, return action-oriented results, providing additional guidance to end users. The database and modules meet the highest standards of interoperability, including HL7's Infobutton® and FHIR®. PEPID works closely with all clients to ensure a smooth and efficient integration process.

Backbone is mapped to all common nomenclatures. Custom mapping is available.

IN THE DATABASE

- 40,000+ Medications
- 100,000+ Drug Products
- 13,000+ Drug Names (Trade Names and Generics)
- 900+ Nutraceuticals
- 8,500+ Drug Monographs
- Dosing Form
- Strength
- Unit of Measure
- Administration Route
- Pack Size
- Manufacturer
- Instructions
- Indications & Uses
- Contraindications

- Cautions
- Adult Dosing
- Adult Daily Max Dose
- Adult Daily Max Dose Strength
- Pediatric Dosing
- Pediatric Daily Max Dose
- Pediatric Daily Max Dose Strength
- Overdose Management
- Ingredients
- Mechanisms of Action
- Adverse Drug Reactions
- Drug Interaction Severity
- Pharmacological Categories

- Interaction Monographs
- Duplicate Therapy Classes
- Allergy Agents
- Allergy Classes Agents
- Allergy Cross Reference
- Pharmacy Drugs Master
- Drug Form Details
- Kinetics/Dynamics
- Pregnancy/Lactation
- Trades and Cost Information
- Patient Education Handouts
- Evidence-based Inquiries
- Nursing Considerations

Drug Monographs in Backbone

INFORMATION THAT DRIVES ACCURATE TREATMENTS

Backbone by PEPID brings all of the drug data together to create action-oriented monographs. Concise bullet point content delivers everything from dosing algorithms to pregnancy/lactation restrictions to provide clinicians with all the information they need when making treatment decisions.

89%
of PEPID users have changed a clincial decision after using PEPID

IN THE MONOGRAPHS

- Adult Dosing
- Pediatric Dosing
- Contraindications
- Cautions
- Indications and Uses
- Mechanisms of Action
- Adverse Drug Reactions
- Kinetics/Dynamics

- Pregnancy/Lactation
- Overdose Management
- Interactions
- Trades and Cost Information
- Patient Education Handouts
- Evidence-based Inquiries
- Nursing Considerations

Delivery at a Glance

SUPPORTED NOMENCLATURE:
- ICD-10
- SNOMED
- RXNORM
- NDC
- DIN
- CPT
- ATC
- LOINC
- SFDA
- UMLS

DATA EXPRESSION:
- XML
- HTML
- SQL
- JSON
- ASCII
- Flatfile

HL7 STANDARDS:
- FHIR®
- Infobutton
- C-CDA

DEVELOPMENT TOOLBOX:
- SDK
- API
- Web
- Services
- RESTful
- SOAP
- TLS
- SSL
- AJAX

INTEGRATION:
- EHR
- EMR
- EPR
- EDISPatient
- Portal
- HIE
- Ambulatory
- SLA 99.9%
- Uptime
- PHR
- PBM

CLINICAL MODULES

Make the data work for you.

Drug Interactions Checker

Drug Interactions Checker

add a drug, OTC, herbal, etc

Selected Drugs: — clear

- PHENELZINE
- WARFARIN
- IBUPROFEN
- FLUOXETINE
- GRAPEFRUIT

Interactions (10)   Filter: All   Severity: All

⚠ ↑	St:PHENELZINE,FLUOXETINE-pd	›
⚠	FLUOXETINE:WARFARIN-other	›
⚠ ↑	Atc:WARFARIN,IBUPROFEN-pd	›
⚠ ↓	SMOKING: WARFARIN-pk	›
⚠ ↑	GRAPEFRUIT: WARFARIN-pk	›
⚠ ↑	FLUOXETINE: WARFARIN {CYP3A4/5}-pk	›
⚠ ↑	FLUOXETINE: WARFARIN {CYP2C9/10}-pk	›
⚠	FLUOXETINE:IBUPROFEN-other	›
⚠ ↑	FLUOXETINE: IBUPROFEN-pk	›
⚠ ↑	FLUOXETINE: WARFARIN-pk	›

Ingredients-based interactions checker identifies, weighs, and scores possible interactions of more than 40,000 medications against:

- Prescription Drugs
- OTC Drugs
- Herbal Medicines
- Lifestyle Factors
- Nutrition & Foods
- Duplicate Therapies

OVER ½

of clinicians who use PEPID avoid at least one ADE a week by using the Drug Interactions Checker.

Drug-Allergy Checker

Drug-Allergy Checker

search for allergy agent or class

Selected Classes/Agents: Auto Clear: On — clear

- Peanuts
- Tapentadol
- Milk Protein

search for drug to take

Planning to Take: — clear

Milk

Allergic Interactions:

🔴 Milk Protein

Immediate type (IgE mediated, mild rash to anaphylactic shock) and Delayed type (T-Cell mediated, maculopapular rash). Hypersensitivity to milk protein. Use of another Non-Milk Protein agent indicated. Use extreme caution and be prepared for severe allergic reaction, including potential life-threatening anaphylaxis.

Check a patient's food or drug allergies against current and new medications to identify risks of allergic reactions or sensitivity. Details on allergy include type, possible symptoms, other concerns, and guidance on proceeding with treatment.

3000+ Dosing Calculators

Dosing Calculator

Fentanyl

Standard Dose: 1-2 mcg/kg q30-60min PRN IV/IM

Selected Dose: 2 mcg/kg

Concentration: 50 mcg/mL ▾

Patient's Weight: 70.3 kg ▾

CALCULATE

Unit Dose: 140.6 mcg q30-60min PRN IV/IM

Calculated Dose Range: 70.3 - 140.6 mcg

AMOUNT TO GIVE: **2.812** ml

Proprietary and reviewed dosing calculators can be opened directly from relevant drug information for efficient workflows. Select the dose and concentration, enter body weight and other necessary info and view immediate results.

MORE TOOLS & RESOURCES

Differential Diagnosis Generator

Generate a weighted list of potential diagnoses by inputting a patient's gender, age, symptoms and symptom severity. The results are organized by likelihood of occurrence based on the selected factors.

IV Compatibility

Quickly compare compatibility of meds in Y-site, syringe and additives with our IV Compatibility Tool, which allows you to check drug-solution and drug-drug-solution combinations prior to mixing in clinical situations.

Medical Calculators

Over 800 medical calculators, equations & scores including body surface area, Glasgow Coma Scale, total calcium NIH Stroke Scale, port analysis, and more to be placed where you need them.

Lab Manual

PEPID's lab results include critical values, descriptions, normal ranges, interpretation highs and lows, links to related tests and equations, and physiology and tech information.

Pill-ID

Easily identify patient medications with just a few details – score, shape and color, even when all you have is a partial imprint.

Medical Content

Comprehensive topic collection, action-oriented delivery

Trusted, Focused Content

Backbone's content is synthesized from leading resources, rigorously peer-reviewed, and continuously updated. PEPID's in-house physicians, nurses, and pharmacists retrieve & review content daily, producing PEPID's high quality content you can always rely on.

EASILY PARSABLE XML ENCODING RETURNS ONLY RELEVANT CONTENT SECTIONS

Sections Include:

- Background
- Pathophysiology
- Diagnostics

- Differential Diagnosis
- Treatment
- Disposition

- References
- ICD Codes
- Patient Education

Pneumococcal Pneumonia

Background [1, 2]

1. Definition
   - Streptococcus pneumoniae (S. pneumoniae) is a gram-positive, catalase-negative organism commonly referred to as pneumococcus
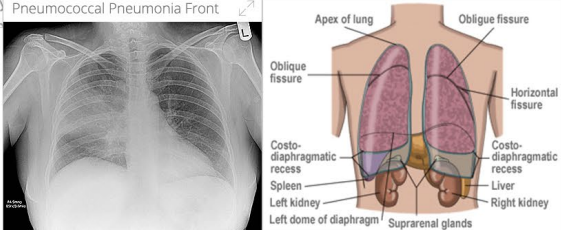2. Synopsis
   - Most common cause of community-acquired pneumonia (CAP), meningitis, bactermia, otitis media
   - More common in young children and elderly (> 60 yo)
     - Suspect immunocomp (i.e. HIV) if in previously healthy, young adults
     - Routine pneumococcal conjugate vaccine (introduced in USA in 2000) has led to decr rates of invasive pneumococcal infections [3]
     - In addition, herd immunity has led to decreased rates of disease in older children, adults [4]

Pathophysiology [1-4]

1. Mechanism
   - Encapsulated, gram-positive diplococci
   - Spread by respiratory droplets, not highly communicable
     - Inhaled organisms accumulate in bronchioles
   - Pathogenicity requires
     - Adherence to host cells
     - Ability to replicate and escape phagocytosis
     - Access to areas where it can manifest infection (i.e. direct extension, lymphatic or hematogenous spread)
   - Virulence is determined in part by
   - All serotypes produce pneum

FORMATTED FOR RAPID ASSIMILATION OF SYNTHESIZED CONTENT

Pneumococcal Pneumonia Front

Apex of lung — Oblique fissure
Oblique fissure
Horizontal fissure
Costo-diaphragmatic recess
Costo-diaphragmatic recess
Spleen — Liver
Left kidney — Right kidney
Left dome of diaphragm — Suprarenal glands

HD RADIOGRAPHIC IMAGES AND ILLUSTRATIONS AVAILABLE

Profession-based Medical and Clinical Repositories

EMERGENCY MEDICINE
Easy-to-search, fully relevant content and calculators made specifically for emergency medicine physicians.

PRIMARY CARE PLUS AMBULATORY CARE
Our most comprehensive, integrated reference tool, covering all specialties.

CRITICAL CARE NURSING
Assessments, nursing considerations, and drugs and drips information for treating the critically ill.

GERONTOLOGICAL NURSING
Drug and dosing information, drug interactions, disease profiles and gerontological assessments.

CLINICAL ROTATION COMPANION
Step-by-step processes for exams, dosing calculators and an interactions generator for medical students.

PEDIATRIC EMERGENCY MEDICINE
Information on pediatric emergent medical, surgical and traumatic conditions.

PROFESSIONAL NURSING
A comprehensive reference and drug database with nursing considerations and diagnosis.

ONCOLOGY NURSING
Developed with the Oncology Nursing Society; contains drugs and drips, interactions, nursing considerations, and more.

PHARMACIST PRO WITH AHFS
Thousands of clinical situations and diseases; integrated with AHFS Drug Information Essentials® database.

RN STUDENT CLINICAL COMPANION
Resource for classroom, lab and clinical settings; includes everything from assessment to disposition.

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By **PEPID**

Robust, authoritative, actionable.

Contact us

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