DRUGDEX®をはじめとした IBM Micromedex®のご紹介

OUGライフサイエンス分科会 御中

株式会社テクノミック 営業部

2020/2/20

IBM Watson Health™

IBM Micromedex®主要コンテンツ

DRUGDEX®	医薬品情報
POSINDEX®	中毒情報
Drug Interactions	薬物相互作用
IV Compatibility	静注剤配合変化
Reproductive Effects	催奇形性情報
Martindale	主要国の医薬品集
Index Nominum	世界の薬名検索辞典
Detailed Drug Information for the Consumer	患者服薬指導
Neofax®	新生児の医薬品集
Pediatrix	小児の医薬品集

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DRUGDEX®

DRUGDEX®
エビデンスに基づいた
バイアスのない医薬品情報

- 2,700以上のFDA承認薬を収載
- 世界80か国以上、5,000以上の医療機関で40年以上利用
- 米国議会で医薬品情報の標準資料として認定(1997年)
- Centers for Medicare and Medicade Servicesでは
  抗がん剤適応外使用の保険償還決定時に参照する
  医薬品集として認定(2008年)
- NICE(英国国立医療技術評価機構)認定の編集プロセス

編集プロセス

世界の医学文献
～15,000/週 medical articles
～ 8,500 journals

社内の専門家(医師/薬剤師/看護師等)
約90名が情報分析・評価

取捨選択した信頼性の高い情報に基づき
化合物ごとにモノグラフを作成

NICE accredited
www.nice.org.uk/accreditation

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編集プロセスの公開

CONTRIBUTORS:
*to meet requirement 3

PACKET PREPARATION	DISCLOSURES	EXPERT REVIEW	DISCLOSURES
Felicia Gelsey, MS	None		
Stacy LaClaire, PharmD	None		
Catherine Sabatos, PharmD	None		
		John D Roberts	None
		Jeffrey Klein	None
		Richard LoCicero	Incyte Corporation Local PI for REVEAL. Study is a multicenter, non-interventional, non-randomized, prospective, observational study in an adult population for patients who have been diagnosed with clinically overt PV and are being followed in either community or academic medical centers in the US who will be enrolled over a 12-month period and observed for 36 months.

ASSIGNMENT OF RATINGS:
*to meet requirement 4

	EFFICACY	STRENGTH OF RECOMMENDATION	COMMENTS	STRENGTH OF EVIDENCE
MICROMEDEX	Evidence Favors Efficacy	Class IIa: Recommended, In Most		B
John D Roberts	Effective	Class I: Recommended	One case control study and one prospective study show that in combination with chemotherapy pegfilgastrim is at least as effective as filgastrim for mobilization of peripheral blood stem cells for autologous stem cell transplantation following high dose chemotherapy. Both studies assessed frequency of successful harvest, and the case control study assessed long term events (engraftment, complications of cytopenias).	N/A
Jeffrey Klein	Evidence Favors Efficacy	Class IIa: Recommended, in Most Cases	The use of Pegfilgrastim in children to assist in harvesting stem cells prior to transplant appears to be effective and demonstrates a clinical benefit over filgrastim. In addition pegfilgrastim had minimal adverse effects.	N/A
Richard LoCicero	Evidence Favors Efficacy	Class IIa: Recommended, in Most Cases	At least two phase II studies have demonstrated the efficacy of pegfilgrastim to mobilize peripheral blood stem cells prior to autologous stem cell transplant.	

https://www.ibm.com/watson/health/provider-client-training/compendia-drugsources/

全引用文献の書誌事項を明記
Piperacillinの分布

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b) Tissues and Fluids

1) Adipose tissue: excellent [105].

a) Two to 3 hours following a 5-g intravenous dose of piperacillin, drug levels of 30 mcg/mL were obtained in skeletal muscle and adipose tissue [105].

2) Bone: widely distributed [102].

a) Piperacillin penetrates into bone [102].

3) Bile: excellent [102][106][107]

a) Following a 4-g IV injection of piperacillin, maximum biliary concentrations averaged 3205 mcg/mL [102]

b) Following a 1-g intravenous injection of piperacillin, biliary concentrations of 1600 mcg/mL were obtained at 1 hour. Following a 2-g intravenous injection, in 3 were obtained 3 hours following administration. Total excretion rates in bile at 6 hours were approximately 7.2%. Good clinical results were obtained in 3 patients biliary tract infections [107].

c) Five patients undergoing cholecystectomy received an infusion of 1 g piperacillin. Levels of 31 to 920 mcg/mL (mean 467 mcg/mL) were reported in the comm following the infusion. This mean piperacillin level would be expected to inhibit 97% of Pseudomonas aeruginosa and non-beta-lactamase-producing Staphyloco Enterobacteriaceae, and 100% of Bacteroides fragilis and streptococci [106].

4) Cerebrospinal fluid: good [108].

a) Piperacillin penetrates into cerebrospinal fluid in the presence of inflamed meninges [102]

b) Penetration of piperacillin into the cerebrospinal fluid through inflamed meninges is good following continuous infusions. Penetration is not as effective with int

c) Continuous intravenous infusion in doses ranging from 324 to 436 mg/kg/day produced mean cerebrospinal fluid levels of 23 mcg/mL at 24 hours, in 4 patient

5) Gallbladder tissue: excellent [106].

a) A piperacillin level of 2.2 to 80 mcg/mL (mean, 27 mcg/mL) was reported in the gallbladder 30 to 75 minutes following a 1-g intravenous dose. The mean leve inhibit 97% of Pseudomonas aeruginosa and non-beta-lactamase-producing Staphylococci, 70% to 100% of Enterobacteriaceae cell, and 100% of Bacteroides f

6) Heart: widely distributed [102].

a) Piperacillin penetrates into heart [102].

7) Prostate: widely distributed [102].

a) Piperacillin penetrates into prostate [102].

8) Skeletal muscle: excellent [105].

a) Two to 3 hours following a 5-g intravenous dose of piperacillin, drug levels of 30 mcg/mL were obtained in skeletal muscle and adipose tissue [105].

9) Sputum: 6% to 22% [109][110].

a) Therapeutic levels of 17 mcg/mL were reported, corresponding to serum levels of over 500 mcg/mL [110]. The sputum concentration of piperacillin is 22% of serum concentration when the sample is obtained by expectoration; when the sample is obtained by bronchofibroscopy the sputum concentration is 6.8% to 16% of serum concentration [109].

10) Umbilical vein: good [111].

a) Piperacillin usually reached adequate concentrations in the umbilical vein to treat sensitive bacteria [111].

1)脂肪組織
2)骨
3)胆汁
4)脳脊髄液
5)胆嚢
6)心臓
7)前立腺
8)骨格筋
9)喀痰
10)臍帯静脈

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Pubmedへのリンク

dequate concentrations in the umbilical vein to treat sensitive bacteria [111].

cillin is 11 to 20 minutes [105].

References

[34] Oh KH, Kim C, Lee H, et al: Pharmacokinetics of intravenous piperacillin administration in patients undergoing on-line hemodiafiltration. Antimicrob Agents Chemother 2009; 53(8):3266-3268.
PubMed Abstract: http://www.ncbi.nlm.nih.gov/...
PubMed Article: http://www.ncbi.nlm.nih.gov/...

Close

[102].

emodialysis a Vd of 26.7 L/100 kg was reported [104].

cillin is 139 mL/min [114].

ancy is 456 mL/minute [111][115].

as unchanged drug with approximately 60% to 80% excreted in the urine in the first 24 hr. Following a 6-g and 4-g IV dose, urine c
rations remain above 1000 mcg/mL throughout the dosing interval [102]

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Clinical Trial > Antimicrob Agents Chemother, 53 (8), 3266-8 Aug 2009

Pharmacokinetics of Intravenous Piperacillin Administration in Patients Undergoing On-Line Hemodiafiltration

Kook-Hwan Oh [1], Chiweon Kim, Hankyu Lee, Hajeong Lee, Ji Yong Jung, Nam Joong Kim, Kyung-Sang Yu, Kwang-Hee Shin, In-Jin Jang, Curie Ahn

Affiliations + expand

PMID: 19451284 PMCID: PMC2715588 DOI: 10.1128/AAC.01670-08

Abstract

The pharmacokinetic characteristics of piperacillin sodium were studied in five volunteers undergoing on-line hemodiafiltration (HDF). The subjects were given 2 g of piperacillin sodium intravenously over

タブとパネル


簡潔に情報を
まとめたサマリー
詳細情報
契約コンテンツ内
全ての検索結果
Infliximab
Drug Classes: Gastrointestinal Agent | Immunological Agent | All
Routes: Intravenous
Substance
Infliximab
Regulatory Authority
FDA
Quick Answers
In-Depth Answers
All Results
Dosing/Administration
Adult Dosing
Pediatric Dosing
FDA Uses
Non-FDA Uses
Dose Adjustments
Administration
Comparative Efficacy
Place In Therapy
Medication Safety
Contraindications
Drug Interactions (single)
IV Compatibility (single)
Dosing/Administration
Adult Dosing
Print
See 'In-Depth Answers' for detailed results.
Important Note
Do not initiate infliximab therapy in patients with active infections including clinically significant localized infections. Evaluate the benefit/risk ratio of infection prior to initiating infliximab therapy in patients with chronic or recurrent infection, TB exposure, history of opportunistic infection, endemic TB or mycosis area (travel or residence), underlying conditions with a predisposition to infection [3].
Orphan drug designation: Treatment of pediatric (0 to 16 years of age) Crohn disease
Orphan drug designation: Treatment of pediatric (0 to 16 years of age) ulcerative colitis
Orphan drug designation: Treatment of juvenile rheumatoid arthritis
Orphan drug designation: Treatment of chronic sarcoidosis
Orphan drug designation: Treatment of Crohn disease
Ankylosing spondylitis
Induction, 5 mg/kg IV over at least 2 hours given at week 0, 2 and 6, followed by maintenance therapy; premedication with antihistamines, acetaminophen, and corticosteroids may be considered [4]
Maintenance, 5 mg/kg IV over at least 2 hours every 6 weeks; premedication with antihistamines, acetaminophen, and corticosteroids may be considered [4]
Related Results
Disease
Toxicology
Drug Consults
Index Nominum
Martindale
Product Lookup - Martindale
Product Lookup - RED Book Online
Product Lookup - Tox & Drug
セクション
関連結果

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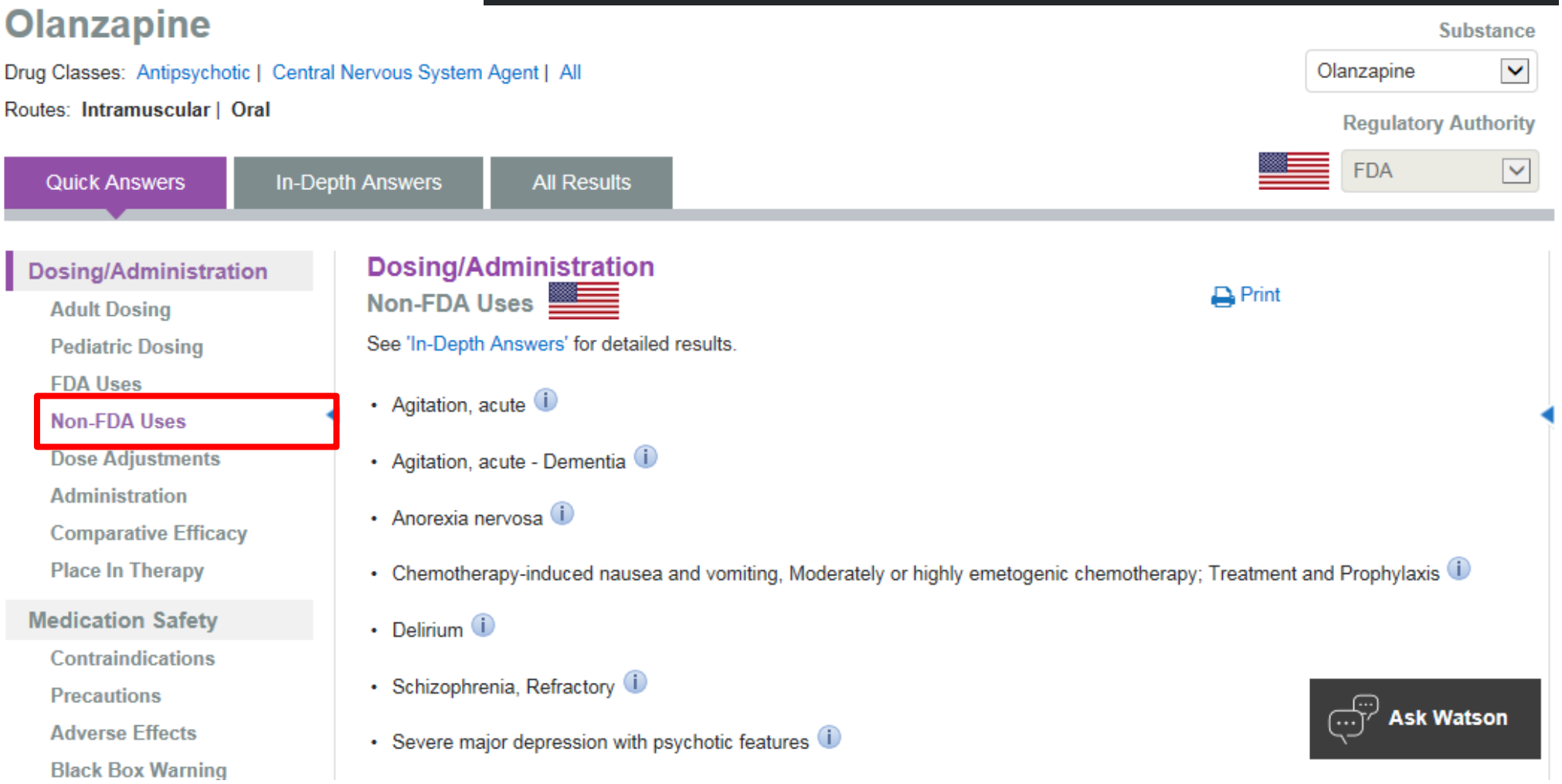
OlanzapineのFDA適応外処方

Quick Answersでは代表的な疾患名を記載



抗がん剤投与に伴う消化器症状における小児へのOlanzapine投与

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Chemotherapy-induced nausea and vomiting, Moderately or highly emetogenic chemotherapy; Treatment and Prophylaxis

1) Overview

FDA Approval: Adult, no; Pediatric, no

Efficacy: Adult, Evidence favors efficacy; Pediatric, Evidence favors efficacy

Recommendation: Adult, Class IIb; Pediatric, Class IIb

Strength of Evidence: Adult, Category B; Pediatric, Category B

See Drug Consult reference: RECOMMENDATION AND EVIDENCE RATINGS

有効性、推奨度
エビデンスレベル

2) Summary:

Evidence (Prophylaxis in Adults)

The addition of olanzapine to a prophylactic regimen for chemotherapy-induced nausea and vomiting with dexamethasone, a 5-hydroxytryptamine type 3 (5-HT3) receptor antagonist (palonosetron, granisetron or ondansetron), and a neurokinin-1 (NK-1) receptor antagonist (fosaprepitant or aprepitant) significantly increased the proportion of patients with no nausea during the acute phase (0 to 24 hours after chemotherapy; 73.8% vs 45.3%), the delayed phase (25 to 120 hours after chemotherapy; 42.4% vs 25.4%), and during the overall 120-hour period (37.3% vs 21.9%) compared with no olanzapine in a randomized trial (N=380). Olanzapine also significantly increased the complete response rate (no emesis, no nausea) during all 3 phases (85.7% vs 64.6%, acute phase; 66.9% vs 52.4%, delayed phase; 63.6% vs 40.6% overall phase) [6].

In a systematic review and metaanalysis of 10 randomized trials in 1082 patients receiving moderately or highly emetogenic chemotherapy, prophylactic treatment with olanzapine 5 or 10 mg compared with other 5-HT3 or NK-1 receptor antagonists, in the overall phase significantly improved the likelihood of no emesis by 41% and no nausea by 53%. In the acute phase (0 to 24 hours after chemotherapy), olanzapine 5 or 10 mg significantly improved the likelihood of no emesis by 10%, and olanzapine 10 mg significantly improved no emesis by 10% and no nausea by 5%. In the delayed phase (24 to 120 hours after chemotherapy) olanzapine 5 or 10 mg significantly improved the likelihood of no emesis by 31% and no nausea by 50% [7].

Evidence (Treatment in Adults)

In a systematic review and metaanalysis of 3 randomized trials in 308 patients receiving moderately or highly emetogenic chemotherapy and experiencing breakthrough chemotherapy-induced nausea and vomiting, treatment with olanzapine 5 or 10 mg compared with other 5-HT3 or neurokinin 1 receptor antagonists, significantly improved the likelihood of no emesis by 109% [7].

Evidence (Prophylaxis in Children)

In children who received adjunctive olanzapine on day 1 of chemotherapy for the prophylaxis of chemotherapy-induced nausea and vomiting, complete control was achieved in 65% (83 of 128 chemotherapy blocks) in a retrospective review of 60 children aged 3 years or older (median, 13 years). In children with a history of prophylaxis failure while receiving highly emetogenic chemotherapy, complete control with olanzapine was achieved by 66% (23 of 35 chemotherapy blocks). The mean initial olanzapine dose was 0.1 mg/kg (range, 0.026 to 0.256 mg/kg) given once daily, up to 10 mg/dose; there was no association between dose/kg and complete control. Patients also received ondansetron or granisetron (98%), dexamethasone (55%) and aprepitant (17%) [8].

Evidence (Treatment in Children)

In a cohort of 20 children who received olanzapine for the treatment of breakthrough chemotherapy-induced nausea and vomiting, complete control was achieved in 57%, and partial control in 29%, in a retrospective review of 60 children aged 3 years or older (median, 13 years) receiving 159 chemotherapy blocks. Patients also received ondansetron or granisetron (98%)

推奨度・エビデンスレベル・有効性の独自評価を定義

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Recommendation, Evidence and Efficacy Ratings

Drug Consults

RESPONSE

推奨度

The Micromedex Efficacy, Strength of Evidence and Strength of Recommendation definitions are outlined below:

Table 1. Strength Of Recommendation		
Class I	Recommended	The given test or treatment has been proven to be useful, and should be performed or administered.
Class IIa	Recommended, In Most Cases	The given test, or treatment is generally considered to be useful, and is indicated in most cases.
Class IIb	Recommended, In Some Cases	The given test, or treatment may be useful, and is indicated in some, but no
Class III	Not Recommended	The given test, or treatment is not useful, and should be avoided.
Class Indeterminate	Evidence Inconclusive	

エビデンスレベル

Table 2. Strength Of Evidence	
Category A	Category A evidence is based on data derived from: Meta-analyses of randomized controlled trials with homogeneity with regard to the directions and degrees of results between individual studies. Multiple, well-done randomized clinical trials involving large numbers of patients.
Category B	Category B evidence is based on data derived from: Meta-analyses of randomized controlled trials with conflicting conclusions with regard to the directions and degrees of results between individual studies. Randomized controlled trials that involved small numbers of patients or had significant methodological flaws (e.g., bias, drop-out rate, flawed analysis, etc.). Nonrandomized studies (e.g., cohort studies, case-control studies, observational studies).
Category C	Category C evidence is based on data derived from: Expert opinion or consensus, case reports or case series.
No Evidence	

有効性

Table 3. Efficacy		
Class I	Effective	Evidence and/or expert opinion suggests that a given drug treatment for a specific indication is effective
Class IIa	Evidence Favors Efficacy	Evidence and/or expert opinion is conflicting as to whether a given drug treatment for a specific indication is effective, but the weight of evidence and/or expert opinion favors efficacy.
Class IIb	Evidence is Inconclusive	Evidence and/or expert opinion is conflicting as to whether a given drug treatment for a specific indication is effective, but the weight of evidence and/or expert opinion argues against efficacy.
Class III	Ineffective	Evidence and/or expert opinion suggests that a given drug treatment for a specific indication is ineffective.

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同効剤との有効性比較

ZOLEDRONIC ACID

Drug Classes: Bisphosphonate | Calcium Regulator | All

Routes: **Intravenous**

Quick Answers | In-Depth Answers | All Results

- Dosing/Administration
  - Adult Dosing
  - Pediatric Dosing
  - FDA Uses
  - Non-FDA Uses
  - Dose Adjustments
  - Administration
  - Comparative Efficacy
  - Place In Therapy

Dosing/Administration

Comparative Efficacy

- Alendronate Sodium
- Clodronic Acid
- Denosumab
- Ibandronate Sodium
- Pamidronate
- Pamidronate Disodium
- Risedronate
- Risedronate Sodium
- Teriparatide
- Tiludronate Disodium

Alendronate Sodium

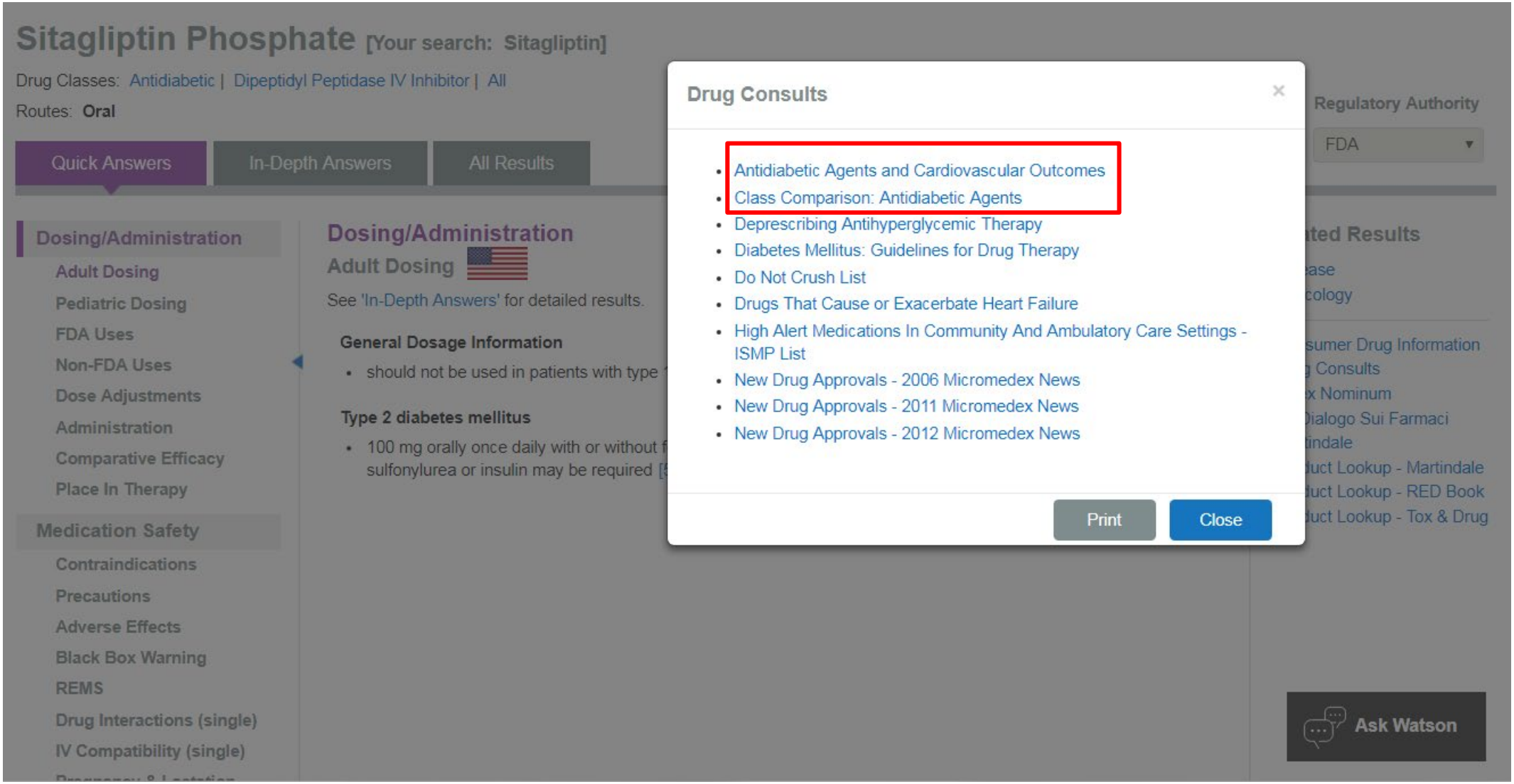
- Fracture of bone; Prophylaxis - Primary osteoporosis
- Osteogenesis imperfecta
- Osteopenia; Prophylaxis - Transplanted kidney present
- Osteoporosis
- Osteoporosis, In men
- Postmenopausal osteoporosis

Fracture of bone; Prophylaxis - Primary osteoporosis

a) A systematic review with network metaanalysis identified 36 randomized studies that compared a bisphosphonate wit
the treatment of primary osteoporosis, including women with postmenopausal osteoporosis and men with osteoporosis
Follow-up ranged from 24 to 48 months. Alendronate and zoledronic acid significantly reduced the risks of vertebral frac
and any fracture compared with placebo (see table). Zoledronic acid compared with alendronate significantly reduced th
0.65) and any fracture (OR, 0.79). Zoledronic acid also significantly reduced the risk of vertebral fracture compared with
0.45), ibandronate (OR, 0.52), risedronate (OR, 0.59), and tiludronate (OR, 0.31). The risk of nonvertebral fracture was
versus etidronate (OR, 0.57) and with clodronate versus etidronate (OR, 0.56). Tiludronate and etidronate did not signifi
compared with placebo, and tiludronate significantly increased the risk of vertebral fracture compared with alendronate,
pamidronate, risedronate, and zoledronic acid [120]

Significant Reductions in Odds of Fracture with Bisphosphonate Versus Placebo			
Vertebral Fracture			
Drug	Number of studies	Number of study subjects	Odds Ratio
Alendronate	5	7878	0.52 (0.42 to 0.65)
Clodronate	2	6075	0.63 (0.42 to 0.95)
Ibandronate	2	5808	0.64 (0.52 to 0.8)
Minodronate	1	704	0.43 (0.25 to 0.74)
Pamidronate	2	149	0.33 (0.14 to 0.75)
Risedronate	5	3372	0.57 (0.47 to 0.7)
Zoledronic acid	5	12,234	0.34 (0.26 to 0.44)
Nonvertebral Fracture			
Alendronate	6	7998	0.83 (0.72 to 0.95)
Clodronate	1	5592	0.68 (0.54 to 0.86)
Risedronate	6	12,703	0.79 (0.7 to 0.89)
Zoledronic acid	6	12,284	0.69 (0.61 to 0.79)
Hip Fracture			
Alendronate	5	7900	0.6 (0.37 to 0.94)
Risedronate	2	10,147	0.73 (0.57 to 0.94)
Zoledronic acid	5	11,085	0.61 (0.48 to 0.79)
Any Fracture			
Alendronate	5	6693	0.79 (0.69 to 0.91)
Clodronate	1	5592	0.68 (0.55 to 0.85)
Zoledronic acid	6	12,284	0.63 (0.55 to 0.71)

右パネルRelated ResultsからDrug Consultsへ



Drug Consults
薬物の治療やガイドラインに関する記事

Antidiabetic Agents and Cardiovascular Outcomes

Drug Consults

Top of P

RESPONSE

In response to concerns of increased cardiovascular risk with noninsulin antidiabetic medications, the FDA issued a guidance statement in 2008 for all new type 2 diabetes medications to undergo cardiovascular outcomes studies. Patients with type 2 diabetes and established atherosclerotic cardiovascular disease should have a medication proven to reduce cardiovascular adverse events added to lifestyle interventions and metformin therapy. Results for medications approved since then are discussed below [1].

Dipeptidyl Peptidase-4 (DPP-4) Inhibitors

DPP-4 inhibitors provide no cardiovascular benefit to patients with type 2 diabetes and established cardiovascular disease [1]. Three large, randomized studies determined that DPP-4 inhibitors added to background therapy were noninferior to placebo regarding the composite outcome of nonfatal myocardial infarction, nonfatal stroke, or cardiovascular death. Additionally, there was no significant difference between DPP-4 inhibitors and placebo for each component of the composite outcome. DPP-4 inhibitors studied were alogliptin (EXAMINE, N=5380), saxagliptin (SAVOR-TIMI 53, N=16,492), and sitagliptin (TECOS, N=14,671) [2][3][4].

Addition of DPP-4 Inhibitors vs Insulin

In patients with type 2 diabetes who failed dual therapy with metformin plus a sulfonylurea, the addition of insulin (n=1584) resulted in a 2.6-fold increase in the risk of the composite endpoint of nonfatal stroke, nonfatal myocardial infarction, or all-cause death compared with the addition of a DPP-4 inhibitor (n=3654). There was a 2-fold increased risk of cardiovascular events and a 3.7-fold increased risk of all-cause death with insulin. Obese patients with a body mass index (BMI) of 30 to 34.9 kg/m(2) had a 3.6-fold increased risk of the composite outcome while those with a BMI of 35 kg/m(2) or greater had a 2.4-fold increased risk with insulin. Time to the composite outcome was 2.4 years with DPP-4 inhibitors and 2.1 years with insulin. Patients with baseline cardiovascular conditions were excluded from the study, and patients were followed for up to 5 years [5]

Heart Failure Risk

A network meta-analysis of 50 randomized studies found that alogliptin (a 2-fold increase in risk) was the only DPP-4 inhibitor associated with a significantly increased risk of heart failure compared with placebo. When compared with alogliptin, vildagliptin and sitagliptin had significantly lower heart failure risk. Ranking with regards to lowest risk of heart failure to highest risk was estimated as follows: vildagliptin, saxagliptin, sitagliptin, linagliptin, and alogliptin. The following table provides detailed results [6]:

DPP-4 Inhibitor	Relative Risk of Heart Failure Compared with Placebo	95% CI
Alogliptin*	2.13	1.06 to 6.26
Linagliptin	2.76	0.95 to 8.31
Saxagliptin	0.84	0.33 to 1.61
Sitagliptin	0.86	0.43 to 1.57
Vildagliptin	0.71	0.25 to 1.68
* Statistically significant		

Of note, a significant network inconsistency was found, which may affect the validity of some results [6].

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- 中毒物質の同定と管理のデータベース
- 428,000以上の市販製品・化学物質・医薬品・有毒の動植物の識別情報と、1,780以上の詳細な曝露時の治療方法を物質ごとに収載
- アメリカ合衆国では全ての中毒センターで採用、日本を含む世界のほとんどの中毒情報センターで利用

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Quick Answers 概要を簡潔に表示

Morphine

Quick Answers | In-Depth Answers | All Results

- Overview
  - Life Support
  - Clinical Effects
  - Laboratory/ Monitoring
  - Treatment Overview
  - Range Of Toxicity

Overview

Clinical Effects

Print

See 'In-Depth Answers' for detailed results.

SUMMARY OF EXPOSURE

A) USES: Morphine is primarily used for the treatment of pain. Morphine may be abused for euphoric effects by multiple routes (ie, injection, insufflation, smoking, ingestion).

B) EPIDEMIOLOGY: Overdose is not common, but may be more common in patients with chronic opioid abuse or dependence, and may be life threatening.

C) PHARMACOLOGY: Morphine binds primarily at the Mu opiate receptors at therapeutic doses. Morphine is an opiate, a group of naturally occurring compounds derived from the poppy, Papaver somniferum.

D) TOXICOLOGY: Therapeutic and toxic effects are mediated by different opioid receptors. Mu 1: Supraspinal and peripheral analgesia, sedation, and euphoria. Mu 2: Spinal analgesia, respiratory depression, physical dependence, GI dysmotility, bradycardia and pruritus. Kappa 1: Spinal analgesia and miosis. Kappa 2: Dysphoria and psychotomimesis. Kappa 3: Supraspinal analgesia. Chronic opioid users develop tolerance to the analgesic and euphoric effects, but not to the respiratory depression effects.

E) WITH POISONING/EXPOSURE

1) MILD TO MODERATE TOXICITY: Euphoria, drowsiness, constipation, nausea, vomiting and pinpoint pupils. Mild bradycardia or hypotension may be present.

2) SEVERE TOXICITY: Respiratory depression leading to apnea, hypoxia, coma, bradycardia, or acute lung injury. Rarely, seizures may develop from hypoxia. Death may result from any of these complications.

3) INTRATHECAL INJECTION: Hypotension, respiratory depression, hypertension, CNS depression, agitation, and protracted seizures have been reported after intrathecal morphine overdose.

4) EPIDURAL OVERDOSE: Even massive large overdoses have only caused CNS and respiratory depression.

REPRODUCTIVE

A) Morphine has been shown to cross the placenta. There are insufficient data regarding the use of morphine in pregnant women to determine the risk for major birth defects or miscarriage. Opioids cross the placental barrier. Prolonged use of opioid analgesics during pregnancy is associated with fetal adverse effects including respiratory depression and physical dependence in the neonate and neonatal withdrawal syndrome shortly after birth. Symptoms of neonatal opioid withdrawal syndrome

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In-Depth Answers 詳細情報

Morphine

Quick Answers | In-Depth Answers | All Results

Clinical Effects

View Full Document

Print

Summary Of Exposure

A) USES: Morphine is primarily used for the treatment of pain. Morphine may be abused for euphoric effects by multiple routes (ie, injection, insufflation, smoking, ingestion).
B) EPIDEMIOLOGY: Overdose is not common, but may be more common in patients with chronic opioid abuse or dependence, and may be life threatening.
C) PHARMACOLOGY: Morphine binds primarily at the Mu opiate receptors at therapeutic doses. Morphine is an opiate, a group of naturally occurring compounds derived from the poppy, Papaver somniferum.
D) TOXICOLOGY: Therapeutic and toxic effects are mediated by different opioid receptors. Mu 1: Supraspinal and peripheral analgesia, sedation, and euphoria. Mu 2: Spinal analgesia, respiratory depression, physical dependence, GI dysmotility, bradycardia and pruritus. Kappa 1: Spinal analgesia and miosis. Kappa 2: Dysphoria and psychotomimesis. Kappa 3: Supraspinal analgesia. Chronic opioid users develop tolerance to the analgesic and euphoric effects, but not to the respiratory depression effects.
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2) SEVERE TOXICITY: Respiratory depression leading to apnea, hypoxia, coma, bradycardia, or acute lung injury. Rarely, seizures may develop from hypoxia. Death may result from any of these complications.
3) INTRATHECAL INJECTION: Hypotension, respiratory depression, hypertension, CNS depression, agitation, and protracted seizures have been reported after intrathecal morphine overdose.
4) EPIDURAL OVERDOSE: Even massive large overdoses have only caused CNS and respiratory depression.

妊産婦への投与

DRUGDEX®とReproductive Effects

DRUGDEX®		
IBM Watson Health	2,700件以上	・FDA承認薬を対象に医薬品情報を収載
Reproductive Effects		
REPROTEXT®		
IBM Watson Health	800件以上	・工業用化学品や騒音・熱などの物理現象が人体とその生殖機能に与える影響をレビュー
Reprotox® Reproductive Hazard Information		
The Reproductive Toxicology Center, Bethesda, MD	3,500件以上	・医薬品など化学物質による妊孕性、男性の曝露、授乳を含む生殖への影響
Shepard's Catalog of Teratogenic Agents		
ワシントン大学小児科教授 Dr. T H. Shepard Dr. R J. Lemire共同編纂	3,600件以上	・医薬品、化学物質、食品添加物、家庭用品、環境汚染物質、ウイルス等の催奇形性情報
TERIS Teratogen Information System		
ワシントン大学	4,000件以上	・医薬品や環境要因による催奇形性情報 ・催奇形性リスクと根拠となるデータを評価

お問い合わせ先

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