



義大醫療財團法人

E-DA HEALTHCARE GROUP

FORMULARY

處方集

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處方集使用說明

藥品名	懷孕分級^a	授乳安全性^b
Dosage Form: 商品名及本院備有之劑型 <藥品代碼>		
Use: 臨床應用		
Dose: 劑量		
Adverse Reactions: 不良反應		
Precautions: 注意事項		
Contraindications: 禁忌		

附註:

懷孕分級^a 依據 FDA 懷孕危險性級數

- A. 依對照試驗無法證實對胎兒有危險
- B. 動物試驗無法顯示具有危險性，但無人體試驗之充分研究
- C. 動物試驗有致畸胎性，但無人體試驗之充分研究
- D. 對胎兒具有危險性，使用時需衡量治療效益與危險性
- X. 動物或人體試驗具致畸胎性，孕婦禁用

a. 懷孕分級資料來源（上標表示）：**C¹**

- 1. 第 6 版：Drugs in pregnancy and lactation
- 2. PDR 2008
- 3. MARTINDALE
- 4. Micromedex
- 5. Package circulars
- 6. Drug information handbook

授乳安全性^b 授乳安全性其表示:

Unknown: 未有文獻資料

Unsafe: 不建議使用

Safe: 在餵乳期可安全使用

b. 授乳安全性資料來源（上標表示）：**Safe¹**

- 1. Micromedex
- 2. PDR 2008
- 3. Package circulars
- 4. Drug information handbook
- 5. 第 6 版：Drug in pregnancy and lactation

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1. ANALGESICS

1.1. Narcotics Agonist

Buprenorphine

C⁴ Unsafe¹

Dosage Forms

Temgesic[®] 0.2mg/sublingual tab <KBUPREN>

Use

Long-acting narcotic analgesic effective for moderate-to-severe pain

Dose

Children 6-12yrs: **SL** 16-25 kg: 0.1 mg; 25-37.5 kg: 0.1-0.2 mg; 37.5-50 kg: 0.2-0.3 mg q6-8h

Adults and \geq 12 yrs: **SL** 1-2 tab q6-8h

Adverse Reactions

Drowsiness, nausea, vomiting, dizziness, sedation, vertigo

Precautions

不可咀嚼。

Codeine

C⁴ Safe¹

Dosage Forms

Codeine[®] 15mg/ml/amp <CCODEIN>

Codeine[®] 30mg/tab <KCODE01>

Use

Analgesia, antitussive

Dose

Adults: **PO** 15-60mg q4-6h as needed, **IM/SC** 5-20mg q4-6h

Children: **PO/IM/SC** 0.5mg/kg/dose q4-6h as needed; **max: 60mg/dose**

Adverse Reactions

Constipation, nausea, vomiting, drowsiness, sedation, respiratory depression

Precautions

Do not administer IV

Desud Plus[®]

C⁴ Unsafe¹

Dosage forms

Buprenorphine 8mg and Naloxone 2mg/Sub.tab<KBUPRE1>

Use

Opioid dependency

Dose

SL 12-16mg (Buprenorphine)/day

Adverse Reactions

Constipation, sedation, drowsiness, nausea, vomiting

Precautions

1. Buprenorphine 會增加總膽內壓力，故膽道功能異常病患需小心使用。
2. Drug-drug interaction: Buprenorphine (Opioids) 與 benzodiazepines 併用時會增加鎮靜及致命性呼吸抑制的發生風險，且同時服用這兩種藥物於操作機械或開車時須小心。

Fentanyl

C⁴ Safe¹

Dosage Forms

Fentanyl-Fresenius[®] 500mcg/10ml/amp <CFENTAN>

Fentanyl[®] 100mcg/2ml/amp <CFENTA2>

Durogesic D-Trans[®] transdermal 12mcg/hr/patch <WFENTA3>

Fentanyl[®] transdermal 25mcg/hr/patch <WFENTA1>

Painkyl[®] 200mcg/buccal soluble films <KFENTAN>

Use

Analgesia

Dose

IM/IV 50-100mcg/dose before surgery

Transdermal 12-50mcg/hr, replace patch 72 hrs, dose over 300mcg/hr, may require opiate agonists of administration.

Transdermal 25mcg/patch 相當於 **IM** morphine 8-15mg/day 亦相當 **PO** morphine 30-60mg/day

Painkyl: initial 200mcg, if titration required, increase dose in 200 mcg increments once per episode; do not redose within a single episode of breakthrough pain and separate single doses by ≥ 2 hours

Adverse Reactions

Confusion, dizziness, sedation, constipation, dry mouth, nausea, vomiting, pruritus, sweating, urinary retention

Precautions

貼片：門診每次處方限 15 天；口頰錠：門診每次處方限 15 天。

Meperidine

C⁴ Unknown¹

Dosage Forms

Pethidine[®] 50mg/ml/amp <CMEPERI>

Pethidine[®] 50mg/tab <KMEPERI>

Use

Analgesia

Dose

IM/IV/SC/PO 50-150mg q3-4h

Adverse Reactions

Dizziness, sedation, nausea, vomiting, respiratory depression

Precautions

具活性代謝物易蓄積造成 seizures，老年人及腎功能不佳者應小心使用。

Morphine

C⁴ Safe¹

Dosage Forms

Morphine[®] 10mg/ml/amp <CMORPHI>

Morphine[®] 20mg/ml/amp <C20MOR>

Morphine[®] 15mg/tab <KMORPH3>

MST[®] 30mg/tab (controlled release) <KMORPH2>

Use

Analgesia

Dose

IM/SC 5-20mg q4-6h

PO 5-30mg q4h; controlled release: 30mg qd-q12h

Adverse Reactions

Constipation, nausea, urinary retention, vomiting, dizziness, headache, light-headedness, sedation, weakness

Precautions

MST[®] controlled release 不宜磨粉。

Nalbuphine

B⁴ Safe¹

Dosage Forms

Bain[®] 10mg/ml/amp <CNALBUP>

Use

Analgesia

Dose

IM/IV/SC 10mg q3-6h

Adverse Reactions

Dizziness, sedation, nausea, vomiting, sweateness, histamine release.

Traceton[®]

C⁴ Unknown¹

Dosage Forms

1 tab: Tramadol 37.5mg+Acetaminophen 325mg <KULTRAC>

Use

Acute pain, acute oral surgery pain

Dose

PO 1-2 tab q4-6h; **max: 8 tab/day**

Adverse Reactions

Anxiety, confusion, fatigue, headache, somnolence

Precautions

1. 肝、腎功能不良(Clcr<30mL/min)者應調降劑量。
2. 不建議與其它含有 tramadol 或 acetaminophen 的藥品一起併服。

1.2. NSAIDs

1.2.1. Non-COX-2 Selectives

Diclofenac sodium

C⁴ Unknown¹

Dosage Forms

Voren[®] 12.5mg/supp <WDICL02>

Use

Osteoarthritis, pain, primary dysmenorrhea, rheumatoid arthritis, fever

Dose

Children: **RECT** 0.5-2mg/kg/day in 2-3 doses

Adults: **RECT** 1-2 supp prn; **max: 150mg/day**

Adverse Reactions

Skin rash, pruritus, dry skin, and lacrimation

Diclofenac potassium

C⁴ Unknown¹

Dosage Forms

Voran-K[®] 25mg/tab <KDICLOF>

Use

Osteoarthritis, pain, primary dysmenorrheal, rheumatoid arthritis, fever

Dose

Adults: **PO** 3-4 tab/day

Adverse Reactions

Skin rash, pruritus, dry skin, lacrimation

Etofenamate

Dosage Forms

Teiria[®] gel 10%, 40g/tube <WETOFEN>

Use

Inflammation and pain

Dose

Topical bid-tid

Adverse Reactions

Pruritus, erythema, local irritation

Precautions

健規：每月至多處方一支；不得併服口服或外用同類之藥品。

Flurbiprofen

B⁴ Safe⁵

Dosage Forms

Flurbi PAP[®] patch 14g/patch (3.33mg/g) <WFLURBI>

Use

Relief of local pain and inflammation

Dose

Transdermal A replace patch 12hrs

Adverse Reactions

Itching, redness, numbness and tingling at the site of the application

Precautions

健規：每月處方至多 16 片；不得併用口服或外用 NSAID 之藥品。

Ibuprofen

C¹ Safe¹

Dosage Forms

Ibuprofen[®] 400mg/tab <KIBUPR1>

Ibuprofen[®] 1.2g/60ml/bot <KIBUPR2>

Use

Osteoarthritis, pain, primary dysmenorrheal, rheumatoid arthritis, fever

Dose

Children 6 mon-12 yrs: **PO** 5-10mg/kg q6-8h

Adults:

Light to moderate pain: **PO** 400mg q4-6h

Rheumatoid arthritis and osteoarthritis: **PO** 1200-2400mg/day tid-qid

Adverse Reactions

Headache, nervousness, fatigue, itching, rash, urticaria

Indomethacin

C¹ Unknown¹

Dosage Forms

Indoy[®] 25mg/cap <KINDOME>

Indomen[®] 50mg/supp <WINDOME>

Use

Management of inflammatory diseases and rheumatoid disorders

Dose

PO 25-50mg tid; **max: 200mg/day**

Supp 50mg bid-tid

Adverse Reactions

Nausea, vomiting, abdominal pain, constipation, diarrhea, dyspepsia

Ketorolac

C¹ Safe¹

Dosage Forms

Keto[®] 30mg/ml/amp <CKETORO>

Keto[®] 10mg/cap <KKETORO>

Use

Moderately, severe acute pain

Dose

Adults and ≥ 16 yrs: **IM/IV** 30-60mg q6h, **max: 120mg/day**; **PO**

10 mg q4-6h; **max: 40 mg/day**

Adverse Reactions

Peptic ulcers, GI bleeding

Precautions

1. 健規：針劑每次不得連續使用超過 5 天，疼痛之短期療法。

2. 老年人及腎功能不佳者應調降劑量。

Contraindications

不建議使用於 <16 歲的兒童。

Naproxen

C⁴ Safe¹

Dosage Forms

Naprosin[®] 250mg/tab <KNAPR01>

Use

Rheumatoid arthritis, acute gout, osteoarthritis, dysmenorrheal, fever

Dose

PO 250mg tid-qid

Adverse Reactions

Dizziness, rash, headache, nervousness, pruritus, rash, tinnitus, edema

1.2.2. COX-2 Selectives

Celecoxib

C⁴ Unknown¹

Dosage Forms

Celebrex[®] 200mg/cap <KCELECO>

Use

Rheumatoid arthritis, osteoarthritis, dysmenorrhea, postoperative pain

Dose

PO 200mg qd-bid

Adverse Reactions

Headache, peripheral edema, insomnia, dizziness, rash

Precautions

Hypertension, CHF, history of liver or renal dysfunction or coagulation defects

Etodolac

C ⁵	Unknown ³
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Dosage Forms

Lacoxa[®] SR 400mg/tab <KETODO2>

Use

Rheumatoid arthritis, osteoarthritis, gout arthritis

Dose

PO 1-2 tab qd; max: 1200 mg/day

Adverse Reactions

Headache, peripheral edema, constipation, diarrhea, dyspepsia

Precautions

- 1.嚴重腎病患者須小心使用。
- 2.為緩釋劑型須整顆吞服，不可撥半或咀嚼。
- 3.服藥期間須避免併用酒精性飲料。

Etoricoxib

C ⁵	Unknown ³
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Dosage Forms

Arcoxia[®] 60mg/tab <KETORIC>

Use

Rheumatoid arthritis, osteoarthritis, gout arthritis

DoseOsteoarthritis

PO 30-60 mg once daily

Rheumatoid arthritis

PO 90 mg once daily

Acute gouty arthritis

PO 120 mg once daily

Adverse Reactions

Headache, peripheral edema, constipation, diarrhea, dyspepsia, fatigue, insomnia, ALT increased, AST increased

Precautions

有缺血性心臟疾病病史之患者須謹慎使用。

Contraindications

嚴重腎病患者(CIcr <30ml/min)

Parecoxib

C ⁵	Unsafe ³
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Dosage Forms

Dynastat® 40mg/vial <CPARECO>

Use

Treatment (not more than 4 days) of postoperative pain

Dose

IVP/IM(深部肌肉注射) 40mg PRN, followed every 12-24hrs by 20mg as required; **max.: 80mg/day**

Adverse Reactions

Hypokalemia, insomnia, hypoaesthesia, dry socket, back pain

Precautions

1. 以 2ml 之 0.9%NaCl、5%Dextrose、0.45%NaCl/5%Dextrose 溶液稀釋，配製後藥液僅供一次使用，已抽取未用完溶液應丟棄，如完全未使用於室溫 25°C 下可存放 12 小時
2. 肝功能不全需調整劑量

Contraindications

1. Lactated ringer(造成藥品沉澱)及注射用水(非等張溶液)不宜作為稀釋調配溶液。
2. 不可與 Opioid 類藥物混合給藥。
3. 哺乳及懷孕婦女。

1.3. Analgesic Miscellaneous

Acetaminophen

C⁴ Safe¹

Dosage Forms

Depyretin® 500mg/tab <KACETA1>

Anti-phen® syrup 1440mg/60ml/bot <KACETA2>

Use

Relief of mild to moderate pain, fever

Dose

Children: **PO** 10-15mg/kg/dose q4-6h; **max: 2.6g/day**

Adults: **PO** 500mg tid-qid; **max: 4g/day**

Adverse Reactions

Hypothermia, rash

Precautions

Anti-phen® 開封後室溫下可放兩個月

Glucosamine

C¹ Unknown¹

Dosage Forms

Camine® 250mg/cap <KGLUCOS>

Use

Improvement of symptoms of osteoarthritis

Dose

Mild or moderate

PO 500mg bid AC for 6wks

Severe

PO initial 500mg tid AC for 8 wks, maintenance 500mg bid AC for 3-4

months

Adverse Reactions

Constipation, diarrhea, dyspepsia, nausea, vomiting, peripheral edema, tachycardia, drowsiness, headache, insomnia

Precautions

1. 健保給付每日最大劑量 750mg，增加劑量需事先審查，每一療程最長 12 週。
2. 建議飯前 15 分鐘服藥。

2.ANESTHETICS

2.1. General Anesthetics

Desflurane

B⁴ Unknown¹

Dosage Forms

Suprane[®] 吸入劑 240ml/bot <WDESFLU>

Use

Inhalation for induction and maintenance of general anesthesia

Dose

Initial 3%, increased in 0.5-1% increments every 2-3 breaths;
maintenance: 2.5-8.5%

Adverse Reactions

Coughing, breathholding, apnea, increased secretions, laryngospasm, oxyhemoglobin desaturation, pharyngitis

Dexmedetomidine

C⁴ Unknown¹

Dosage Forms

Precedex[®] 200mcg/2ml/vial <CDEXMED >

Use

Sedation, intubated/mechanically ventilated ICU patients

Dose

ICU sedation

Adult: initial, 0.5-1 mcg/kg IV over 10 min; followed by 0.2-0.7 mcg/kg/hr continuous **IVF** for a max of 24 hr

Procedural sedation

Adult: initial, 0.5-1 mcg/kg IV over 10 min; followed by 0.2-1mcg/kg/hr continuous **IVF** for a max of 24 hr

Adverse Reactions

Hypotension, nausea, xerostomia, bradycardia

Precautions

1. 儲存於15-30°C。
2. 以 NS 稀釋至 50ml，開瓶稀釋後儲存於 2-8°C 勿超過24小時。
3. 健規：限用於短期可拔管之 18 歲以上外科病患，術後 24 小時內需鎮靜與止痛病患使用，且使用時間不得超過 24 小時。
4. 全的病患應考慮減低劑量肝功能不。

Contraindication

Amphotericin B, diazepam

Isoflurane

C⁴ Unknown¹

Dosage Forms

Forane[®] 吸入劑 100ml/bot <WISOFLU>

Use

Inhalation for induction and maintenance of general anesthesia

Dose

Induction: 1.5-3% with oxygen-air mixture

Maintenance: 1-2.5% with oxygen-air mixture

Adverse Reactions

Respiratory depression, hypotension, arrhythmias, nausea, vomiting, malignant hyperthermia

Ketamine

A¹ Safe¹

Dosage Forms

Ketalar[®] 500mg/10ml/vial <CKETAMI>

Use

Induction and maintenance of anesthesia

Dose

IM 6.5-13mg/kg or **IV** 1-4.5mg/kg over 60 sec

Adverse Reactions

Respiratory depression, hypotension, bradycardia, arrhythmia

Precautions

建議開封或稀釋後 24 小時內使用完畢。

Midazolam

D⁴ Unknown¹

Dosage Forms

Uzolam[®] 5mg/ml/amp <CMIDA01>

Midatin[®] 15mg/3ml/amp <CMIDA02>

Use

Effective for anesthesia induction sedation

Dose

Induction of anesthesia

Unpremedication **IV** 0.3-0.35mg/kg (usual total dose ≤ 20mg) over 20-30 sec; **max: 0.6mg/kg**

Premedication **IV** 0.15-0.2mg/kg (usual total dose ≤ 15mg) over 5-10sec

ICU sedation

IV initial 0.03-0.3mg/kg (usual total dose ≤ 15mg); maintenance 0.03-0.2mg/kg/hr

Preoperative sedation

IM 0.07-0.1mg/kg (Uzolam[®] 禁用 IM)

Adverse Reactions

Hiccoughs, excessive somnolence, headache, respiratory arrest

Precautions

1.本品可使用 NS, D5W, D10W 稀釋，混合比例為 100-1000ml 加 15mg midazolam。

2.稀釋後溶液，室溫下可保存 24 小時或在 5°C 下存放 3 天。

Contraindication

不可與鹼性溶液混合，在 sodium bicarbonate 中會產生沉澱

Propofol

B⁴ Unknown¹

Dosage Forms

Fresofol[®] 200mg/20ml/amp <CPROPO1>

Fresofol® 500mg/50ml/vial <CPROPO2>

Use

Induction and maintenance of anesthesia, sedation during intensive care

Dose

Anesthesia

20-40mg **IV** every 10 sec until induction onset (2-2.5mg/kg). Maintenance

IVF 50-200mcg/kg/min or **IV bolus** 20-50mg increments as needed

Sedation in ICU

0.3-3mg/kg/hr

Adverse Reactions

Hypotension, apnea, convulsions, hiccups, cough, hot flashes

Precautions

1. 健規：每次使用以不超過 72 小時為原則。
2. 可用 D5W, NS 稀釋，最大稀釋量為 1:4（濃度不可低於 2mg/ml），並於 6 小時內使用完畢。
3. 本品與其他種類脂肪同一注射管路，時間不宜超過 12 小時。

Sevoflurane

B³ Unknown³

Dosage Forms

Ultane® 250ml/bot <WSEVOFL>

Use

Induction and maintenance of general anesthesia

Dose

0.5-3% concentration with oxygen-air mixture

Adverse Reactions

Hypotension, bradycardia, nausea, vomiting, laryngospasm, agitation

Thiamylal

Dosage Forms

Citosol® 500mg/20ml/amp <CTHIAM>

Use

Induction anesthesia, sedation, seizure

Dose

IV initial 2-3ml test dose, then 2-3ml every 30-40sec, maintenance 1-4ml as need; **max: 1g/dose**

Adverse Reactions

Vomiting, nausea, headache, vertigo, hypotension

2.2. Local Anesthetics

Bupivacaine

C⁴ Safe¹

Dosage Forms

Marcaine® 0.5%, 20ml/vial <CBUPI01>

Marcaine® spinal 0.5%, 4ml/amp <CBUPI02>

Marcaine® spinal heavy 0.5% (with glucose 8%), 4ml/amp <CBUPI03>

Use

Anesthesia, analgesia

Dose

Individualized dosage

Adverse Reactions

Hypotension, nausea, bradycardia

Epinephrine and Articaïne

C⁴ Unknown¹

Dosage Forms

Septanest[®] 4%, 1.7 ml/cartridge (epinephrine: articaïne= 1:100000), 1
Cartridge[®]: Epinephrine 0.017mg+Articaïne HCl 68mg <CLIDOC5>

Use

Anesthesia

Dose

Adult: 0.3-0.5ml, **max. articaïne dose:< 7 mg/kg**

Children: 0.06-0.07 ml/kg, **max: 0.175 ml/kg.**

Adverse Reactions

Headache, pain, hypotension, paresthesia, gingivitis

Precautions

使用 Septanest[®] 48 小時內不應哺乳。

Contraindication

不可 IV、DM、hyperthyroidism

Lidocaine

B¹ Unknown¹

Dosage Forms

Lidocaine[®] injection 2%, 100mg/5ml/amp <CLIDOC1>

Xylocaine[®] injection 1%, 50mg/5ml/amp <WLIDOC1>

Xylocaine[®] injection 2%, 400mg/20ml/vial <WLIDOC3>

Xylocaine[®] jelly 2%, 30g/tube <WLIDOC4>

Xylocaine[®] pump spray 10%, 50ml/bot <WLIDOC5>

Lidopat[®] 5% 700mg/patch<WLIDOC8>

Liprido cream[®] 30g/tub (Lidocaine 25mg+Prilocaine 25mg)<WLIPRID>

Liprido cream[®] 450g/bot (Lidocaine 25mg+Prilocaine 25mg)<WLIPRI1>

Use

Acute ventricular arrhythmia, anesthesia, relief post-herpetic neuralgia (patch)

Dose

Acute ventricular arrhythmia

Adult: slow **IV**(rate:1-2min) 50-100mg(1-2mg/kg), repeat dose after 5 or 10-20min; **max:300mg/hr**

Injectable local anesthetic

Children and adult: varies with procedure, degree of anesthesia need; **max: 4.5mg/kg/dose**, do not repeat within 2 hrs

Pump spray: adults 1-5 spray; **max: 20spray**

Jelly/cream: individualized dosage

Patch: one patch < 12hrs, **max: 3 patch/day**

Adverse Reactions

Cardiac arrest, malignant hyperthermia, seizure, sore throat, loss of voice, erythema, edema

Precautions

- 1.2%, 400mg/20ml/vial 為多次使用劑型，開瓶後使用不可超過 3 天。
- 2.Spray:清潔噴嘴可浸於水中煮沸 5 分鐘。
- 3.刺痛及灼熱感請移除貼片。
- 4.服用 Class I 抗心律不整藥物(如:Mexiletine)應小心使用，兩者毒性屬加乘作用及可能具協同作用。
5. Liprido cream[®] 450g/bot 僅供單位調撥領用

Lidocaine and Epinephrine

B⁴ Unknown¹

Dosage Forms

Lidophrine[®] 20ml/vial (Lidocaine: epinephrine = 1:50000) <CLIDOC9>

Use

Anesthesia

Dose

Dental anesthesia

<10 yrs children: rarely exceed 10 ml

Adult: initial dose, 1-2 ml. Dosage depends on an individual basis; **max: 500 mg.**

Adverse Reactions

Anxiety, restlessness, tremor, restlessness, confusion, hypotension,

Precautions

本品需避光。

Ropivacaine

B⁴ Unknown¹

Dosage Forms

Ropica[®] 10mg/ml, 20ml/vial <CROPIVA>

Use

Anesthesia

Dose

Surgical anesthesia

Lumbar epidural: 15-25ml of 0.75-1% soln

Lumbar epidural for cesarean section: 15-20ml of 0.75% soln

Thoracic epidural block: 5-15ml of 0.75% soln

Pain management

Post-OP: continuous infusion 6-14ml/hr of 0.2% soln

Field block: 1-100ml of 0.2% soln

Other : 10-20ml of 0.2% soln

Max: 800mg/day

Adverse Reactions

Hypotension, nausea

Precautions

- 1.與鹼性溶液混合 pH>6.0 時易產生沉澱
- 2.不含防腐劑，限單次使用。

2.3. Neuromuscular blockers

Cisatracurium

B⁴ Unknown¹

Dosage Forms

Nimbex[®] 10mg/5ml/amp <CCISATR>

Use

Skeletal muscle relaxation, during surgery as adjunct to general anesthesia and to facilitate endotracheal intubation or mechanical ventilation in the ICU

Dose

Tracheal intubation

Children: **IV bolus** 0.1mg/kg, maintenance 0.02mg/kg

Adults: **IV bolus** 0.15mg/kg, maintenance 0.03mg/kg

Continus infusion

Children and adult: initial 3mcg/kg/min, maintenance 1-2mcg/kg/min

ICU administration

Adult: initial **IV bolus or IVF** 3mcg/kg/min, maintenance 0.5-10.2mcg/kg/min

Adverse Reactions

Bradycardia, hypotension, bronchospasm, rash

Precautions

- 1.劑型為中效神經肌肉阻斷劑 (intemmediate duration)。
- 2.本品須冷藏。
- 3.以 NS, D5W 稀釋，於 5-25°C 下可保存 24 小時。

Pancuronium

C⁴ Unknown¹

Dosage Forms

Pancuronium[®] 4mg/2ml/amp <CPANCUR>

Use

Skeletal muscle relaxation, during surgery as adjunct to general anesthesia and to facilitate endotracheal intubation or mechanical ventilation in the ICU

Dose

Neonate: initial **IV** 0.03-0.04mg/kg, maintenance up to 0.02mg/kg

Children and Adult: initial **IV** 0.04-0.1mg/kg, maintenance 0.01-0.02mg/kg, 60-100 mins after initial dose if needed, repeat doses every 25-60 min as needed

Adverse Reactions

Bradycardia, hypotension, bronchospasm

Precautions

- 1.劑型為長效神經肌肉阻斷劑 (long duration)。
- 2.本品須冷藏。

Rocuronium

C⁴ Unknown¹

Dosage Forms

Esmeron[®] 50mg/5ml/vial <CROCURO>

Use

Intubation, skeletal muscle relaxation

Dose

Intubation

Initial **IV** 0.6-1.2mg/kg, maintenance 0.1-0.2mg/kg repeated as needed

Skeletal muscle relaxation

Initial bolus 0.6mg/kg, then continues **IV infusion** 0.01-0.012mg/kg/min

Adverse Reactions

Injection site pain, change in vital signs, prolong neuromuscular block

Precautions

- 1.劑型為中效神經肌肉阻斷劑(intermediate duration)須避光冷藏。
- 2.以 NS, D5W, D5W/NS, Diswater, Lactated ringers 稀釋為濃度 0.5mg/ml 或 2mg/ml。
- 3.開封後，於冰箱中可存放一天；若在室溫下，開封後應立即使用。

Succinylcholine

C⁴ Unknown¹

Dosage Forms

Relaxin[®] 500mg/vial <CSUCCIN>

Use

Muscle relaxation

Dose

Children: **IV** 1mg/kg or **IM** 2-3mg/kg

Adult:

Divided administration: **IV** 10-60mg, have not produce skeletal muscle relaxation, increase dose until provide skeletal muscle relation

Continus infusion: 10-60mg **IVF** dilute with NS or D5W to 0.1-0.2% sol'n, with rate of 2.5mg/min

Adverse Reactions

Increased intraocular pressure, prolonged muscle pain and stiffness, apnea, respiratory depression, malignant hyperthermia

Precautions

- 1.劑型為極短效神經肌肉阻斷劑(ultra-short duration)
- 2.泡製後於冰箱中冷藏可保存 1 週。

3. ANTIMICROBIALS

3.1. Aminoglycosides

Amikacin

D⁴ Unknown¹

Dosage Forms

Acemycin[®] 500mg/2ml/vial <CAMIK01>

Use

Serious infections due to organisms resistant to gentamicin and tobramycin including *Pseudomonas*, *Proteus*, *Serratia* and other G (-) bacilli

Dose

Neonate and infants: **IV/IM** initial 10mg/kg, then 7.5mg/kg q12h

Children and adults: **IV/IM** 7.5mg/kg q12h, **max 1.5 g/day**

Adverse Reactions

Ototoxicity (auditory and vestibular), nephrotoxicity

Precautions

1. 使用 0.9% NaCl, D5W, LR 稀釋，宜調配成 2.5-5mg/ml 之濃度，稀釋後於室溫下可存放 24 小時。
2. IV infusion over 30 min
3. 需依腎功能調整劑量。

Gentamicin

D⁴ Safe¹

Dosage Forms

Gentamycin[®] 80mg/2ml/vial <CGENTA2>

Oftalmolosa cusi[®] oph oint 0.3%, 5g/tube <WGENTA3> 參閱p.271

Gentamicin[®] oph soln 0.3%, 5ml/bot <WGENTA2> 參閱p.271

Gentermay[®] cream 0.1%, 15g/tube <WGARAMY> 參閱p.134

Use

Susceptible bacterial infections, G (-) organisms including *Pseudomonas*, *Proteus*, *Serratia* and G (+) *Staphylococcus*

Dose

Infants and children < 5 yrs: **IV/IM** 2.5mg/kg q8h

Children > 5 yrs: **IV/IM** 1.5-2.5mg/kg q8h

Adults: **IV/IM**

Severe life-threatening infections: 2-2.5mg/kg q8h

Urinary tract infections: 1.5mg/kg q8h

Synergy for G (+) infections: 1mg/kg q8h

Once-daily doses: 5mg/kg

Adverse Reactions

Neurotoxicity, vertigo, ataxia, gait instability, nephrotoxicity, ototoxicity, auditory and vestibular

Precautions

1. IV infusion over 30 min
2. 需依腎功能調整劑量。

Isepamicin

D³ Unknown³

Dosage Forms

Exacin[®] 200mg/2ml/amp <CISEPAM>

Use

Infections due to some aminoglycoside-resistant infections and enterobacteriaceae, staphylococci infection

Dose

Intermittent IV infusion

Infants < 16 days: 7.5mg/kg qd

Children >16 days-16 yrs:7.5mg/kg bid

Adults:

Mild-moderate or localized infections: 8mg/kg qd

More severe infections: 15mg/kg qd

Adverse Reactions

Headache, skin rash, ototoxicity, nephrotoxicity,

Precautions

1. IV infusion over 30 min
2. 需依腎功能調整劑量。

Neomycin

D⁴ Unknown¹

Dosage Forms

Neomycin[®] 250mg/cap <KNEOMYC>

Use

Diarrhea caused by E. Coli or prepare GI tract for surgery

Adjunct in the treatment of hepatic encephalopathy

Dose

Hepatic encephalopathy therapy

Children: **PO** 625mg-1.75g/m² q6h × 5-6 days

Adults: **PO** 3g q6h × 5-6 days, **max: 12g/day**

Bowel preparation (pre-operative)

Children: **PO** 14.7mg/kg or 417mg/m² q4h × 3 days

Adults: **PO** 1g q1h × 4 dose, then 1g q4h for the balance of 24 hrs

Adverse Reactions

Nausea, diarrhea, vomiting, ototoxicity, nephrotoxicity

3.2. Antifungals

Amphotericin B

B⁴ Unknown¹

Dosage Forms

Fungizone[®] 50mg/vial <CAMPHOT>

Use

Infection by Basidiobolus, Conidiobolus, aspergillosis, blastomycosis, candidiasis, coccidioidomycosis, cryptococcosis, fungal infection of central nervous system, histoplasmosis

Dose

Test dose: 1mg +20ml D₅W **IVF** over 20-30 min

Maintenance 0.25-1.5mg/kg/day diluted in 500ml D5W **IVF** over 4-6 hrs

Cumulative dose: **IVF** 1-4g (usual duration: 4-12 wks)

Bladder irrigation(膀胱沖洗)

Intermittently or continuously 30-50 mg diluted in 20-1000 mL of sterile water via bladder irrigation for 2-14 days

Adverse Reactions

Fever, chills, headache, hypokalemia, nephrotoxicity

Precautions

1. 溶液配製限以 Diswater 或 D5W 溶液稀釋。

2. 開封後儲存：室溫 24 小時，冷藏 1 星期。

3. 需依腎功能調整劑量。

Anidulafungin

C³ Unknown³

Dosage Forms

Eraxis[®] 100mg/vial <CANIDUL>

Use

Candidemia, intra-abdominal or peritoneal candidiasis

Dose

IVF (1.4ml/min, >90min)

Loading 200mg on day 1, then 100mg qd

Adverse Reactions

Rash, urticaria, flushing, pruritus, dyspnea, hypotension

Precautions

1. 儲存於 2-8°C。

2. 以 30ml 注射用水溶解，再以 100ml D5W 或 NS 稀釋。

3. 乾粉溶解後於 25°C 可存放 24hrs，稀釋後於 25°C 可存放 48hrs。

4. 需依腎功能調整劑量。

Caspofungin

C⁴ Unknown¹

Dosage Forms

Cancidas[®] 50mg/vial<CCASPOF>

Use

Antifungal

Dose

IVF 70 mg on day 1, then 50 mg daily; duration of therapy depends upon clinical response and microbiological response; continue for a minimum of 14 days beyond the first negative culture.

Adverse Reactions

Facial swelling, pruritus, rash, nausea, vomiting, increased liver enzymes, thrombophlebitis, headache, fever

Precautions

1. 不可使用含葡萄糖的稀釋液，且不可與其他藥品混合或同時輸注。

2. 調配方式：先將藥品回復到室溫，加入 10.5ml 的注射用水，輕輕的混合均勻，直到呈現澄清的溶液。將調配過之藥品加到 250ml 的靜

脈輸注液(NS 或 Lactated Ringer's solution)中，以約 1 小時的輸注時間緩慢靜脈輸注。

- 3.調配後的溶液可以儲存在 $\leq 25^{\circ}\text{C}$ ，必須在 24 小時內使用完畢，如於 $2-8^{\circ}\text{C}$ 冷藏，必須於 48 小時內使用完畢。
- 4.需依腎功能調整劑量。

Fluconazole

D⁴ Safe¹

Dosage Forms

Diflucan[®] 100mg/50ml/vial <CFLUCON>

Flu-D[®] 50mg/cap <KFLUC01>

Flu-D[®] 150mg/cap <KFLUC02>

Use

Candida infections

Dose

Fluconazole - Once-Daily Dosing **IV, PO (Children)**

Indication	Day 1	Daily Therapy	Duration of Therapy
Oropharyngeal candidiasis	6mg/kg	3mg/kg	14 days
Esophageal candidiasis	6mg/kg	3-12mg/kg	21 days and for at least 2 wks following resolution of symptoms
Systemic candidiasis	-	6-12mg/kg	28 day
Cryptococcal meningitis Acute	12mg/kg	6-12mg/kg	10-12 wks after CSF culture becomes negative
Relapse suppression	6mg/kg	6mg/kg	N/A

Fluconazole - Once-Daily Dosing **IV, PO (Adults)**

Indication	Day 1	Daily Therapy	Duration of Therapy
Oropharyngeal candidiasis	200mg	100mg	14 days
Esophageal candidiasis	200mg	100mg	21 days and for at least 14 days following resolution of symptoms
Prevention of candidiasis in bone marrow transplant	400mg	400mg	7 day after neutrophils > 1000 cells/mm ³
Candidiasis UTIs, peritonitis	-	50-200mg	N/A
Systemic candidiasis	800mg	400mg	28 days
Cryptococcal meningitis	-	400-800mg	10-12 wks after CSF culture becomes negative
Vaginal candidiasis	150mg	150mg	N/A

N/A = Not applicable

Adverse Reactions

Nausea, headache, skin rash, elevated AST/ALT/alkaline phosphatase, hypokalemia

Precautions

- 1.IV infusion over 1-2 hrs, don't exceed 200mg/hr
- 2.需依腎功能調整劑量。

Flucytosine

C⁴ Unknown¹

Dosage Forms

Flusine® 500mg/tab<KFLUCYT>

Use

Adjunctive treatment of systemic fungal infections (eg, septicemia, endocarditis, UTI, meningitis, or pulmonary) caused by susceptible strains of Candida or Cryptococcus

Dose

Usual dose: PO 50-150mg/kg/day divided q6h

Endocarditis

PO 100mg/kg/day divided q6-8h (with amphotericin B) for at least 4-6 weeks after valve replacement

Meningoencephalitis, cryptococcal

PO induction 100mg/kg/day divided q6h for at least 4 weeks, or if HIV-infected at least 2 weeks; if clinical improvement, may discontinue both amphotericin and flucytosine and follow with an extended course of fluconazole

Adverse reactions

Nausea, vomiting, abdominal pain, diarrhea, hallucinations

Precautions

1. 服藥期間需密切監測病人 CBC、liver function、renal function。
2. 腎功能不良需調整劑量。

Itraconazole

C⁴ Unknown¹

Dosage Forms

Sporanox® 100mg/cap <KITRACO>

Use

Superficial mycoses

Dose

Blastomycosis, histoplasmosis

Adult: PO 200mg qd, max 400mg/day

Aspergillosis

Adult: PO 200-400mg/day

Onychomycosis

Adult: PO 200mg qd for 12 wks

Adverse Reactions

Nausea, edema, headache, fever, abnormal liver function

Precautions

需依肝功能調整劑量。

Liposomal Amphotericin B

B⁵ Unknown¹

Dosage Forms

AmBil® 50mg/vial <CAMPHO1>

Use

Systemic fungal infection, cryptococcal meningitis of HIV infection.

Dose

Systemic fungal infection (aspergillosis, candidiasis, cryptococcosis)

IVF (>120min) 3-5mg/kg/day

Cryptococcal meningitis of HIV infection

IVF (>120min) 6mg/kg/day

Adverse Reactions

Chilly, diarrhea, nausea, vomiting, hypokalemia, hypomagnesemia

Precautions

- 1.需冷藏於 2-8°C。
- 2.配製方式:限以 12ml 無菌注射用水溶解(溶解濃度:4mg/ml Amphotericin B), 並僅限以 D5W 溶液稀釋(成人稀釋濃度:1-2mg/ml; 兒童稀釋濃度:0.2-0.5mg/ml)。
- 3.以注射用水溶解後, 於 2-8°C 可存放 24 小時; 以 D5W 稀釋後需於 6 小時內使用完畢。

Nystatin

C⁴ Unknown¹

Dosage Forms

Mycostatin[®] 10 萬 U/ml, 24ml/bot<KNYSTAT>

Nystatin[®] 0.5MU/cap <KNYSTAT>

Use

Fungal infections caused by the Candida species

Dose

Candidiasis

Swish and swallow orally: infants: 200,000U qid or 100,000U to each side of mouth qid

Children and adults: 400,000-600,000U qid

Intestinal infections

Adults: **PO** 500,000-1,000,000U q8h

Adverse Reactions

Nausea, vomiting, diarrhea, stomach pain, Stevens-Johnson syndrome

Precautions

Suspension 加入 23ml 水, 振搖後內容量為 24ml, 配置後於室溫下可保存 7 天。

Posaconazole

C⁵ Unknown¹

Dosage Forms

Posanol[®] oral suspension 40mg/ml, 105ml/bot<KPOSACO>

Use

Fungal infections caused by the Candida species

Dose

Aspergillosis, invasive (treatment)

PO 400mg(10ml) twice daily; in patients unable to tolerate food or nutritional supplement, administer 200mg 4 times daily.

Aspergillosis, invasive (prophylaxis)

PO 200mg(5ml) 3 times daily; duration of therapy is based on recovery from neutropenia or immunosuppression.

Oropharyngeal candidiasis

PO 400mg(10ml) twice daily

Adverse Reactions

Nausea, headache, thrombocytopenia, electrolyte imbalance, anorexia

Precautions

1. 具櫻桃口味之白色懸液，使用前振搖均勻，包裝為避光琥珀色玻璃瓶，內附量匙含兩種刻度(2.5ml 及 5ml)
2. 每 5ml 懸液中約含 1.75g 葡萄糖，具葡萄糖-半乳糖吸收不良患者不可使用
3. 藥品開封後室溫下可保存 4 週

Terbinafine

B⁴ Unknown¹

Dosage Forms

Lamisil[®] 250mg/tab <KTERBIN>

Use

Onychomycosis of the toenail or finger due to dermatophytes

Dose

Children <20kg: **PO** 62.5mg qd

Children 20-40kg: **PO** 125mg qd

Children >40kg: **PO** 250mg qd

Adults

Fingernail(手指甲癬)

PO 250mg/day for up to 6 wks

Toenail(足趾甲癬)

PO 250mg/day for 12 wks

Adverse Reactions

Abdominal pain, appetite decrease, headache, rash, muscle pain

Precautions

1. 應小心商品名易與 lamictal[®] (lamotrigine)混淆。
2. 使用前應檢查 CBC 及 LFTs，使用超過 6 週應再檢查一次
3. 需依肝腎功能調整劑量。

Voriconazole

D⁴ Unknown¹

Dosage Forms

Vfend[®] 200mg/vial <CVORICO>

Vfend[®] 200mg/tab <KVORICO>

Use

Invasive aspergillosis or serious fungal infections

Dose

Injection:

2-12yrs: loading **IV** 9mg/kg q12h for 2 dose, maintenance 8mg/kg q12h

>12yrs and adult: loading **IV** 6mg/kg q12h for 2 doses, maintenance 4 mg/kg q12h

Tablet:

2-12yrs: 9mg/kg q12h; max: 350mg/dose

≥ 40 kg: **PO** loading 400mg q12h for 2dose, maintenance 200mg q12h

<40 kg: **PO** loading 200 mg q12h for 2dose, maintenance 100mg q12h

Adverse Reactions

Visual changes (photophobia, color changes, increased or decreased visual acuity, blurred vision)

Precaution

1. 此藥僅建議大於 12 歲以上使用。
2. 口服給藥建議於飯前 1 小時或飯後 1 小時。
3. 針劑給藥速度建議 infusion 1-2 hrs (rate not to exceed 3mg/kg/hr)
4. 配置後，於冰箱冷藏可存放 24hr。
5. 需依肝功能調整劑量; Clcr <50 mL/minute 建議使用口服劑型。

Contraindications

併用 CYP3A4 substrates, terfenadine, astemizole, cisapride, or quinidine，會造成 QT prolongation and torsade de pointes 的危險。

3.3. Antimalarials

Hydroxychloroquine

C⁴ Safe¹

Dosage Forms

Plaquenil[®] 200mg/tab <KHYDR02>

Use

Suppresses and treatment of acute attacks of malaria, systemic lupus erythematosus (SLE), rheumatoid arthritis (RA)

Dose

Chemoprophylaxis of malaria

Children: **PO** 6.5mg/kg once weekly, **max: 400mg/dose**

Adults: **PO** 400mg weekly on same day each wk, begin 2 wks before exposure; continue for 4 wks after leaving endemic area

RA

Children: **PO** avoid exceeding 6.5mg/kg/day

Adults: **PO** 400-600mg/day; usually after 4-12 wks dose should be reduced by 1/2 and maintenance 200-400mg/day

SLE

Children: **PO** avoid exceeding 6.5mg/kg/day

Adults: **PO** 400mg/day qd-bid until remission then 200 to 400 mg qd

Adverse Reactions

Agranulocytosis, leukopenia, aplastic anemia, ataxia

Precaution

尿液會呈黃棕色。

3.4. Antiparasitics

Levamisole

C⁵ Unknown³

Dosage Forms

Decaris[®] 50mg/tab <KLEVAMI>

Use

An anthelmintic and immunomodulating agent

Dose

Ascariasis (蛔蟲)/ankylostomiasis(鈎蟲)

Children < 10kg: **PO** 25mg single dose

Children 10-20kg: **PO** 50mg single dose

Children 20-30kg: **PO** 75mg single dose

Children 30-40kg: **PO** 100mg single dose

Adults: **PO** 150mg single dose

Adjuvant treatment with fluorouracil in Dukes stage C colon cancer

PO initial 50mg q8h for 3 days, then 50mg q8h for 3 days every 2 wks

Adverse Reactions

Edema, fatigue, nausea, diarrhea, fever

Precautions

需依肝功能調整劑量。

Mebendazole

C⁴ **Safe¹**

Dosage Forms

Conquer[®] 100mg/tab <KMEBEND>

Use

Pinworms, whipworms, roundworms and hookworms

Dose

Pinworms(蟯蟲)

Children and adults: **PO** 100mg qd

Whipworm(鞭蟲), Roundworms(蛔蟲), Hookworms(鈎蟲)

Children and adults: **PO** 100mg bid for 3 consecutive days

Adverse Reactions

Rash, headache, diarrhea, constipation, abdominal pain

Precautions

Treatment should include family members in close contact with patient

Praziquantel

B⁴ **Unknown¹**

Dosage Forms

Kaicide[®] 600mg/tab<KPRAZIQU>

Use

Anthelmintic

Dose

Clonorchis sinensis (中華肝吸蟲)

PO 25mg/kg tid × 1day (at 4-6 hr intervals)

Schistosoma haematobium (埃及分體吸蟲)

PO 20mg/kg bid × 1day (at 4-6 hr intervals)

Schistosoma mansoni (曼氏分體吸蟲)

PO 40mg/kg qd × 1day

Schistosoma japonicum (日本分體吸蟲)

PO 20mg/kg tid × 1day (at 4-6 hr intervals)

Paragonimus westermani (衛氏並殖腺吸蟲)

PO 25mg/kg tid × 2day (at 4-6 hr intervals)

Hymenolepis nana (短小包膜條蟲), Diphyllbothrium latum (闊節雙槽條蟲)

PO 25mg/kg qd×1day

Taenia saginata & Taenia solium (牛肉條蟲及豬肉條蟲)

PO 10mg/kg qd ×1day

Cysticercus cellulosae (豚囊蟲)

PO 25mg/kg tid ×4day (at 4-6 hr intervals)

Adverse Reactions

Dizziness, headache, somnolence, vomiting, diarrhea

3.5. Antituberculars

Ethambutol (EMB)

C⁴ Safe¹

Dosage Forms

Ebutol[®] 400mg/tab <KETHAMB>

Use

Tuberculosis

Dose

Tuberculosis

Children and adults: **PO 15-25mg/kg/day; max: 2.5g/day**

Directly observed therapy (DOT)

Adults: **PO 50mg/kg twice weekly; max: 2.5g**

Disseminated Mycobacterium Avium Complex (MAC) with advanced HIV infection

Adults: **PO 15mg/kg** in combination with azithromycin 600mg/day

Adverse Reactions

Optic neuritis, headache, peripheral neuritis, confusion, rash, pruritis

Precaution

- 1.Regimen: INH/RIF/PZA/EMB for 2 months then INH/RIF±EMB for 4 months
- 2.需定期進行視力檢查。
- 3.服藥後可能發生急性痛風。
- 4.兒童須小心使用。
- 5.需依腎功能調整劑量。

Isoniazid (INH)

A⁴ Safe¹

Dosage Forms

Isoniazide[®] 100mg/tab <KISONIA>

Use

Tuberculosis

Dose

Children: **PO 10-15mg/kg/day; max: 300mg/day**

Adult: **PO 300mg qd**

Adverse Reactions

Hepatitis, peripheral neuritis, hepatitis prodromal symptoms

Precaution

- 1.Active or in remission alcoholism, hepatic function impairment
- 2.Pyridoxine (10-50mg/day) is recommended in individuals likely to develop peripheral neuropathies
- 3.需依肝功能調整劑量。

Pyrazinamide (PZA)

C⁴ Unknown¹

Dosage Forms

Pyrazinamide[®] 500mg/tab <KPRAZI >

Use

Tuberculosis

Dose

Children and adults: **PO**15-30mg/kg/day, **max 2g/day**

Directly observed therapy (DOT)

PO 50-70mg/kg twice weekly, **max 4g/day**

Adverse Reactions

Gout, malaise, vomiting, anorexia, hepatotoxicity

Precautions

需依肝腎功能調整劑量。

Rifabutin

B⁴ Unknown¹

Dosage Forms

Mycobutin[®] 150mg/cap <KRIFABU>

Use

Prevention of Disseminated Mycobacterium Avium Complex (MAC)

禽結核分枝桿菌 in patients with advanced HIV infection

Dose

Prophylaxis of Disseminated Mycobacterium Avium Complex

PO 300 mg qd

HIV infection - Tuberculosis combination

PO 450-600mg qd; 150-400mg qd 視併用抗病毒藥物決定

Adverse Reactions

Vomiting, nausea, thrombocytopenia, leukopenia, myalgia, increased AST/ALT

Precautions

需依腎功能調整劑量。

Rifampin (RIF)

C⁴ Safe¹

Dosage Forms

Rifampicin[®] 150mg/cap <KRIFAM1>

Rifampicin[®] 300mg/cap <KRIFAM3>

Use

Tuberculosis, meningococci, G (+) infections and prophylaxis of Haemophilus influenzae type b infection

Dose

Tuberculosis

Infants and children < 12 yrs: **PO** 10-20mg/kg qd, **max: 600mg/day**

Adults: **PO** 10mg/kg qd, **max: 600mg/day**

H. influenzae prophylaxis

Infants and children: **PO** 20mg/kg qd for 4 days, **max: 600mg/dose**

Adults: **PO** 600mg qd for 4 days

Meningococcal prophylaxis

Infants <1 mon: **PO** 10mg/kg q12h for 2 days

Infants ≥ 1 mon: **PO** 20mg/kg q12h for 2 days

Adults: **PO** 600mg q12h for 2 days

Synergy for Staphylococcus aureus infections

Adults: **PO** 600mg qd or 300-450mg q12h with other antibiotics

Adverse Reactions

Anorexia, nausea, flu-like syndrome, elevated LFTs, discoloration of urine, sweat, tears, saliva

Precautions

- 1.Periodic (baseline and every 2-4 wks) monitoring of liver function
- 2.Reddish coloration of the urine
- 3.需依肝功能調整劑量。

Rifater[®]

C⁴ Unknown¹

Dosage Forms

1 tab: Rifampin 120mg+Isoniazid 80mg+ Pyrazinamide 250mg
<KRIFAM4>

Use

Initial intensive phase of the short course treatment of tuberculosis (usually lasts 2 months)

Dose

PO 1 tab/10kg, not exceeding 5 tab daily

≥ 50kg: 5 tab; 40-49kg: 4 tab; 30-39kg: 3 tab

Adverse Reactions

Hepatitis, diarrhea, thrombocytopenia, flu-like syndrome, hemolytic anemia

Precautions

建議飯前給藥。

Rifinah[®]

C⁴ Unknown¹

Dosage Forms

1 tab: Rifampin 150mg+Isoniazid 100mg <KRIFAM2>

1 tab: Rifampin 300mg+Isoniazid 150mg <KRIFAM5>

Use

Tuberculosis

Dose

PO <50kg: 3 tab qd (Rifinah[®] 150); ≥ 50kg: 2 tab qd (Rifinah[®] 300)

Adverse Reactions

Hepatitis, diarrhea, thrombocytopenia, flu-like syndrome, hemolytic anemia

Streptomycin

D⁴ Safe¹

Dosage Forms

Streptomycin[®] 1g/vial <CSTRE02>

Use

Combination therapy of active tuberculosis, streptococcal or enterococcal endocarditis, mycobacterial infections, plague, tularemia and brucellosis

Dose

Tuberculosis

Children:

Daily therapy: **IM** 20-30mg/kg/day, **max 1g/day**

Directly observed therapy (DOT)

Twice weekly: **IM** 20-40mg/kg, **max: 1g**

Adults:

Daily therapy: **IM** 15mg/kg/day, **max: 1g/day**

Directly observed therapy (DOT)

Twice weekly: **IM** 25-30mg/kg, **max: 1.5g**

Enterococcal endocarditis

IM 1g q12h for 2 wks, 500mg q12h for 4 wks in combination with penicillin

Streptococcal endocarditis

IM 1g q12h for 1 wk, 500mg q12h for 1 wk

Adverse Reactions

Rash, urticaria, eosinophilia, facial paresthesia, drug fever

Precautions

以注射用水或 NS 溶解至 <250mg/ml

3.6. Anti- HIVs

3.6.1. Integrase Inhibitor

Drug name	Dosage Forms	Dose	Adverse Reactions
Raltegravir	Isentress[®] 400mg/ F.C tab <KRALTEG>	400mg bid	Dizziness, diarrhea, nausea, fatigue

3.6.2. Nucleoside Reverse Transcriptase Inhibitors (NRTI)

Drug name	Dosage Forms	Dose	Adverse Reactions
Combivir[®]	Lamivudine 150mg + Zidovudine 300mg/tab <KCOMBI>	1 tab bid	Headache, malaise, rash and fever
Kivexa[®]	Abacavir 600mg+Lamivudine 300mg/tab<KKIVEXA>	> 40 kg, 1 tab qd	Rash, lactic acidosis, joint pain, alopecia
Lamivudine (3-TC)	3-TC[®] 150mg/tab <KLAMIV2>	3mon-16yrs:4mg/kg bid Adults: 150mg bid	Fat redistribution, decreased appetite, nausea, vomiting, fatigue, headache
Zidovudine (AZT)	Retrovir[®] Oral Solution, 10mg/ml, 240ml/bot <KZIDOV1> Retrovir[®] 10mg/ml, 20ml/vial <CZIDOVU>	300mg bid or 200mg tid 預防愛 滋母子垂直感染母親：靜脈注 射一劑 2 mg/kg，接著持續輸 注 1 mg/kg/hr，直到生產。 嬰兒：口服 2 mg/kg q6h,共 6 週	Anemia, headache, insomnia, malaise, anorexia, constipation, nausea, vomiting

3.6.2. Nucleoside Reverse Transcriptase Inhibitors (NRTI) *continue*

Drug name	Dosage Forms	Dose	Adverse Reactions
Tenofovir	Viread [®] 300mg/tab<KTENOFO>	300mg qd	Headache, dizziness, diarrhea, nausea
Truvada[®]	Emtricitabine 200mg+ Tenofovir 300mg/tab <KTRUVAD>	1 tablet QD	Diarrhea, nausea, fatigue, headache, dizziness

3.6.3. Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTI)

Drug name	Dosage Forms	Dose	Adverse Reactions
Efavirenz	Stocrit [®] 600mg/cap <KEFAVIR>	>40 kg: 600mg qd	CNS side effects) 52% (Abnormal dreams, depression, dizziness, hallucinations, insomnia, impaired concentration, somnolence, rash, fat redistribution
Nevirapine	Viramune [®] 200mg/tab <KNEVIRA> Viramune XR [®] 400mg/tab <KNEVIRA>	initiate therapy with 200mg of immediate-release Nevirapine daily for the first 14 days, followed by 400mg of extended-release Nevirapine once daily.	Rash, headache, fatigue, diarrhea, nausea <註:持續釋放錠應整顆吞服，不可咀嚼、折斷或壓碎>
Rilpivirine	Eduran [®] 25mg/tab <KRILPIV>	25mg qd with meal	Depression, headache, insomnia, rash

3.6.4. Protease Inhibitors (PI)

Drug	Dosage Forms	Dose	Adverse Reactions
Kaletra [®]	Lopinavir 200mg+ Ritonavir 50mg/tab <KKALET1>	2 tab bid	Lipodystrophy, diarrhea, nausea, asthenia, headache <註: Kaletra 錠劑應整顆吞服，不可咀嚼、折斷或壓碎>
Atazanavir	Reyataz [®] 200mg/cap <KATAZAN> Reyataz [®] 150mg/cap <KATAZA1>	<u>For treatment-naïve and therapy-experienced patients</u> Reyataz 300mg + Ritonavir 100mg qd <u>For treatment-naïve patients who are unable tolerate</u> <u>Ritonavir</u> Reyataz 400mg qd	Rash, Abdominal pain, Diarrhea, Nausea, Unconjugated hyperbilirubinemia, Asymptomatic, Headache
Darunavir	Prezista [®] 600mg/tab <KDARUNA> Prezista [®] 400mg/tab <KDARUN1>	800mg qd or 600mg bid concomitantly with ritonavir 100mg qd or bid	Diarrhea, vomiting, abdominal pain, constipation, headache
Ritonavir	Norvir [®] 100mg/tab <KRITONA >	Adult: initial 300mg bid, then increase by 100 mg bid every 2 to 3 days, max: 600mg bid ≥ 2yrs Children: initial, 250 mg/m ² bid, then increase by 50 mg/m ² bid every 2 to 3 days, maintenance dose of 350 to 400 mg/m ² ; max: 600mg bid	Nausea, headach, diarrhea, vomiting, abdominal pain, taste sense altered. <註: 本品需冷藏儲存於 2-8°C，如置於室溫(25°C)下請於 30 天內使用完畢>

3.6.5. NNRTI + NRTI

Drug	Dosage Forms	Dose	Adverse Reactions
Atripla[®]	Efavirenz 600mg+ Emtricitabine 200mg+ Tenofovir 300mg/tab <KATRIPL>	1 tablet QDAC or HS	Diarrhea, nausea, fatigue, depression

3.7. Anti-Cytomegalovirus (Anti-CMV)

Ganciclovir

C⁴ Unknown¹

Dosage Forms

Cymevene[®] 500mg/vial <CGANCIC>

Use

Cytomegalovirus infection(巨細胞病毒感染症)

Dose

IV induction 5mg/kg q12h for 14-21 days, maintenance 5mg/kg qd × 7 days/wk or 6mg/kg qd × 5 days/wk

Adverse Reactions

Anemia, neutropenia, thrombocytopenia, fever, phlebitis, anorexia

Precautions

- 1.不可快速靜脈注射，因血中濃度過高會增加毒性。
- 2.不可使用含有 paraben 為保存劑的注射用水配製。
- 3.肌肉或皮下注射可能導致嚴重的組織刺激。
- 4.需依腎功能調整劑量。

Valganciclovir

C⁴ Unknown¹

Dosage Forms

Valcyte[®] 450mg/F.C tab <KVALGA1>

Use

Cytomegalovirus retinitis(巨細胞病毒視網膜炎)

Dose

PO induction 900mg bid for 21 days, maintenance 900mg qd

Adverse Reactions

Anemia, neutropenia, diarrhea, nausea, pyrexia, fatigue

Precautions

- 1.需依腎功能調整劑量。
- 2.本學名與 Valaciclovir (Valtrex[®])極為相似請注意。

3.8. Anti-Herpetics

Acyclovir

B⁴ Safe¹

Dosage Forms

Virless[®] lyophilized 250mg/vial <CACYC02>

Virless[®] 200mg/tab <KACYC01>

Zovirax[®] susp 4%, 125ml/bot <KACYC03>

Aclovir[®] cream 5%, 5g/tube <WACYC05>參閱p.133

Devirus[®] oph oint 3%, 4.5g/tube <WACYC02>參閱p.274

Use

Herpes simplex (HSV-1 and HSV-2) infections, herpes zoster, genital herpes infection, varicella-zoster infections in healthy

Dose

Mucocutaneous HSV

IV 5mg/kg q8h × 5-10 days

HSV encephalitis

IV 10mg/kg q8h × 10 days

Genital herpes simplex virus infections

Adults: PO 200mg q4h × 10 days if initial episode, for 5 days if recurrence

Varicella-zoster virus (chickenpox)水痘

Children: PO 10-20mg/kg qid for 5 days

Adults: PO 600-800mg q4h for 7-10 days or 1000mg q6h for 5 days

Children and Adults: IV 10mg/kg q8h for 7 days

Herpes zoster infections帶狀疱疹

Adults and Children: PO 800mg q4h (5 times/day) for 7-10days; IV 10mg/kg q8h

Topical

Cream: q4h for 5-10 days

Oph oint: q4h

Adverse Reactions

Diarrhea, nausea, vomiting, central nervous system effects, agitation, confusion, dizziness, hallucinations, somnolence, malaise, burning or stinging of the skin (topical), phlebitis (injection site), increased serum creatinine and BUN (IV infusion, transient)

Precautions

1. 本學名與 Valaciclovir (Valtrex[®]) 極為相似請注意。
2. 需依腎功能調整劑量。
3. 針劑以 10ml 注射用水或 NS 溶解配製，室溫下可保存 12 小時。
4. 健規：
 - (1) 使用療程以十天為限，疱疹性腦炎得使用 14-21 天。
 - (2) 口服、注射劑及外用藥膏擇一使用，不得合併使用。
 - (3) Herpes simplex 3 日內可使用 acyclovir 藥膏，每次以 5g 為限。

Valaciclovir



Dosage Forms

Valtrex[®] 500mg/FC. tab <KVALACI>

Use

Herpes zoster or herpes simplex infections

Dose

Herpes zoster (shingles)

Adult: PO 1g tid for 7 days

Herpes simplex

Adult: PO 500mg bid for 5-10 days

Adverse Reactions

Headache, nausea, vomiting

Precautions

需依腎功能調整劑量。

3.9. Anti-Influenzas

Oseltamivir

C⁴ Unknown¹

Dosage Forms

Tamiflu[®] 75mg/cap <KOSELTA>

Use

Treatment of influenza (A or B) infection

Dose

Treatment of influenza

Children <13yrs: ≤15kg **PO** 30mg bid; >15-23kg **PO** 45mg bid; >23-40kg **PO** 60mg bid; >40kg **PO** 75mg bid

Children ≥13 yr and adult: **PO** 75mg bid for 5 days

Prevention of influenza

Children ≥ 13 yr and adult: **PO** 75 mg qd for at least 7 days

Adverse Reactions

Bronchitis, nausea, vomiting, insomnia, vertigo, severe dyspnea

Precautions

需依腎功能調整劑量。

Contraindications

<1yr: 不建議使用。

3.10. Antivirals

3.10.1. Hepatitis

Adefovir dipivoxil

C⁴ Unknown¹

Dosage Forms

Hepsera[®] 10mg/tab <KADEFOV>

Use

Chronic hepatitis B viral infection

Dose

Adult 18-65yrs: **PO** 10mg qd

Adverse Reactions

Elevations in serum creatinine levels

Precautions

需依腎功能調整劑量。

Interferon Beta-1b

C⁴ Unknown¹

Dosage Forms

Betaferon[®] 0.25mg/8MIU/vial <CINTER5>參閱 p.39

Lamivudine

C⁴ Unknown¹

Dosage Forms

Zeffix[®] 100mg/FC.tab <KLAMIV1>

3-TC[®] 150mg/FC.tab <KLAMIV2> 參閱 p.29

Use

Chronic hepatitis B viral infection (Zeffix[®]), HIV infection(3-TC[®])

Dose

HBV infection (Zeffix)

Children 2-17 yrs: **PO** 3mg/kg qd; **max: 100mg/day**

Adults: **PO** 100mg qd

HIV infection (3-TC)

3 mon -16yrs children: **PO** 4mg/kg bid

Adults: **PO** 150mg bid or 300mg qd

Adverse Reactions

Fatigue, headache, decreased appetite, nausea, vomiting, fat redistribution

Precautions

需依腎功能調整劑量

Entecavir

C⁴ Unknown¹

Dosage Forms

Baraclude[®] 0.5mg/tab<KENTEC1>

Envir[®] 0.5mg/tab<KENTEC3>

Use

Chronic hepatitis B

Dose

Adult: **PO** 0.5-1 mg qd AC

Adverse Reactions

Nausea, dizziness, headache, fatigue

Precautions

- 1.使用期限不得超過 2 年。
- 2.需依腎功能調整劑量。

Peginterferon Alfa-2a

C⁴ Unknown¹

Dosage Forms

Pegasys[®] 135mcg/syringe <CPEGIN1>

Pegasys[®] 180mcg/syringe <CPEGIN2>

Use

Chronic hepatitis C, chronic hepatitis B

Dose

SC 135-180mcg/wk for 24-48 wks

Adverse Reactions

Fatigue, fever, myalgia, headache, insomnia, alopecia, anxiety, irritability

Precautions

- 1.腎功能不良者(ESRD or HD)起始劑量為 135mcg。

2.須冷藏於 2-8°C。

Contraindications

自體免疫性肝炎患者、無代償機能之肝硬化患者、併有肝硬化且 Child-Push 分數 ≥ 6 的 HIV-HCV 患者、新生兒及未滿 3 歲嬰兒。

Peginterferon Alfa-2b

C⁴ Unknown¹

Dosage Forms

Peg-Intron[®] 80mcg/vial <CPEGIN4>

Peg-Intron[®] 100mcg/vial <CPEGIN3>

Use

Chronic hepatitis C

Dose

Monotherapy: **SC** 0.5-1mcg/kg/wk for at least 6 mon

Combination: **SC** 1.5mcg/kg/wk with ribavirin 800-1200mg/day for 24-48wks

Adverse Reactions

Flu-like symptoms, injection site reactions, ophthalmologic disorders, bone marrow suppression, colitis, pancreatitis, psychiatric adverse events

Precautions

1.須冷藏2-8°C。

2.調配後藥品須立即使用或在 2-8°C 保存不超過 24 小時。

3.需依腎功能調整劑量。

Ribavirin

X⁴ Unknown¹

Dosage Forms

Ribarin[®] 200mg/cap <KRIBAVI>

Use

In combination with interferon alfa-2b for treatment of chronic hepatitis C in adult patients

Dose

Administration in two divided dose, in combination with interferon alfa-2b (3 MU tiw)

Adult ≤ 75 kg: **PO** 1000mg/day (400mg qd + 600mg qn)

Adult >75 kg: **PO** 1200mg/day in 2 divided dose

Adverse Reactions

Fatigue, headache, anorexia, dyspepsia, nausea, rash, conjunctivitis, pancreatitis

Contraindications

Ccr (mL/min) < 50。

Telbivudine

B⁴ Unknown¹

Dosage Forms

Sebivo[®] 600mg/tab <KTELBIV>

Use

Chronic hepatitis B viral infection

Dose

Adult and children ≥ 16 yr: **PO** 600mg qd

Adverse Reactions

Abdominal pain, finding of creatine kinase level (grade 3/4), headache, nasopharyngitis, upper respiratory infection, malaise and fatigue

Precautions

<16 yr 不建議使用

3.10.2. Multiple Sclerosis

Interferon Beta-1b

C⁴ Unknown¹

Dosage Forms

Betaferon[®] 8MIU (0.25mg)/vial <CINTER5>

Use

Multiple sclerosis

Dose

Adult: **SC** 8 MIU(0.25mg) qod

Adverse Reactions

Flu-like symptoms, headache, local skin reactions, sweating, anaphylaxis, depression, mental disorders, elevated GOT/GPT levels, hypertension

Precautions

須冷藏於2-8°C。

3.11. Carbapenems

Doripenem

B⁴ Unknown¹

Dosage Forms

Finibax[®] 250mg/vial <CDORIPE >

Use

Complicated intra-abdominal infections, complicated urinary tract infections including pyelonephritis

Dose

Adult: **IVF** (rate: > 1 hr; critical ill patient > 4hrs) 500mg q8h

Adverse Reactions

Headache, nausea, diarrhea, phlebitis

Precautions

- 1.先加入 10ml 注射用水或 NS 溶解乾粉，再以 100ml NS 或 D5W 稀釋。
- 2.乾粉於 25°C 下儲存，乾粉經溶解後請於 1 小時內以稀釋液稀釋，經 NS 稀釋後於室溫下可儲存 12 小時，於 2-8°C 下可儲存 24 小時，經 D5W 稀釋後於室溫下可儲存 4 小時，於 2-8°C 下可儲存 24 小時。
- 3.勿與其他藥品混合施打。
- 4.需依腎功能調整劑量。

Ertapenem

B⁴ Unknown¹

Dosage Forms

Invanz[®] 1g/vial <CERTAPE>

Use

Complicated intra-abdominal infections, skin and skin structure infections, urinary tract infections, community acquired pneumonia, acute pelvic infections, septic abortion and postsurgical gynecologic infections

Dose

Children 3 mon-12yrs: **IM/IV** 15mg/kg q12h for 3-14 days

Children ≥13 yrs and Adult : **IM/IV** 1g qd for 3-14 days

Adverse Reactions

Diarrhea, nausea, vomiting, headache

Precautions

- 1.不可與其他藥品混合或同時輸注，且不可使用含葡萄糖的稀釋液。
- 2.IV 注射的配製：加入 10ml 的注射用水或 NS，充分搖動使藥品溶解並立刻以 50ml NS 稀釋，輸注的時間必須超過 30 分鐘。
- 3.IM 注射配製：加入 3.2ml 的 1% 或 2% lidocaine HCl 注射液，充分搖動使藥品溶解。
- 4.稀釋後藥品必須在 6 小時內完成輸注，冷藏可保存 24 小時。
- 5.需依腎功能調整劑量。

Imipenem and Cilastatin

C⁴ Unknown¹

Dosage Forms

Tienam[®] 500mg/vial <CIMIPE1>

Use

Antibacterial activity includes pseudomonas aeruginosa, acinetobacter species, G(+) bacteria and anaerobes

Dose

Children ≥3 mon: **IV** 15-25 mg/kg q6h; **max 2 g/day**

Adults: **IV** 250mg-1g q6-8h; **max 50mg/kg/day or 4g/day**

Adverse Reactions

Diarrhea, nausea, vomiting, injection site pain, thrombophlebitis, seizures

Precautions

- 1.Should be infused over 20-30 minutes for doses of 250-500mg
- 2.稀釋後於室溫下可貯放 4 小時，冷藏(4°C)可貯放 24 小時。
- 3.需依腎功能調整劑量。
- 4.Children less than 30kg with renal impairment, CNS infections or higher doses may increased seizure risk
- 5.不可與 Lactate 製品混合。

Meropenem

B⁴ Unknown¹

Dosage Forms

Mepenum[®] 250mg/vial <CMEROPE>

Use

Antibacterial activity includes pseudomonas aeruginosa, acinetobacter

species, G (+) bacteria and anaerobes, also indicated for bacterial meningitis in pediatric patients > 3 months of age caused by S. pneumoniae

Dose

Intra-abdominal infections

Children: **IV** 20mg/kg q8h; **max 2g/dose q8h**

Adults: **IV** 0.5-1g q8h

Meningitis, bacterial

Children: **IV** 40mg/kg q8h; **max 2g/dose q8h**

Adults: **IV** 2g q8h

Adverse Reactions

Diarrhea, nausea, headache, injection site inflammation, seizures (CNS disorders), toxic epidermal necrolysis, Steven-Johnson syndrome

Precautions

1. 不得使用注射用水稀釋。
2. 以 ≥100ml 溶解，室溫下可存放 6 小時，5°C 可存放 24 小時。
3. 需依腎功能調整劑量。

3.12. Cephalosporins

3.12.1. 1st Generations

Cefadroxil

B⁴ **Safe¹**

Dosage Forms

Cefadroxil[®] 500mg/cap <KCEFADR>

Use

Susceptible G (+) bacterial infections, some G (-) bacilli

Dose

Children: **PO** 15mg/kg bid, **max: 2g/day**

Adults: **PO** 1-2g/day in 1-2 divided dose

Adverse Reactions

Diarrhea, nausea, vomiting, rash

Precautions

需依腎功能調整劑量。

Cefazolin

B⁴ **Safe¹**

Dosage Forms

Stazolin[®] 1g/vial <CCEFA02>

Use

G (+) bacilli and cocci (except enterococcus), some G (-) bacilli including E. coli, Proteus and Klebsiella

Dose

Children: **IM/IV** 25-100mg/kg/day in 3-4 divided dose

Adults: **IM/IV** 1-2g q8h, depending on severity of infection, **max 12g/day**

Adverse Reactions

Diarrhea, nausea, vomiting, pseudomembranous colitis

Precautions

1. IV, slowly over 3-5min
2. 靜脈注射可用 diswater、NS、D5W 稀釋，溶解後避光室溫下可保存 48 小時，若使用 NS 溶解，請立即使用完畢。
3. 需依腎功能調整劑量。

Cephalexin

B⁴ Safe¹

Dosage Forms

Ulex[®] 250mg/cap <KCEPHA1>

Use

G (+) bacilli and cocci (except enterococcus), some G (-) bacilli including E. coli, Proteus and Klebsiella

Dose

Children: **PO** 25-100mg/kg/day in 4 divided dose

Adults: **PO** 250mg-1g q6-12h

Adverse Reactions

Abdominal pain, diarrhea, transient elevation in liver enzymes

3.12.2. 2nd Generations

Cefmetazole

B¹ Unknown⁵

Dosage Forms

Cetazon[®] 500mg/vial <CCEFME1>

Use

Infections caused by staphylococcus, streptococcus, pneumococcus, meningococcus

Dose

Adults: **IV/IVF** 1-2g q8h; serious infection 2g q6h

Adverse Reactions

Transient liver enzyme increases, rash, diarrhea, nausea, vomiting

Precautions

1. 乾粉可使用 Dis-water、NS、D5W 5ml 溶解。
2. 需以 100ml 靜脈輸注時，請勿使用注射用蒸餾水稀釋。
3. 稀釋後於室溫下可貯放 24 小時。
4. 需依腎功能調整劑量。

Cefuroxime

B⁴ Safe¹

Dosage Forms

Cefuroxime[®] 750mg/vial <CCEFURO>

Use

Infections caused by staphylococci, group B streptococci, H. influenzae, E. coli, Enterobacter, Salmonella and Klebsiella

Dose

Children: **IM/IV** 30-100mg/kg/day in 3-4 divided dose

Infectious disorder of joint

Children (≥ 3months): **IV** 50mg/kg q8h

Adults: **IM/IV** 750-1500mg q8-6h

Adverse Reactions

Local reactions at IV site, diarrhea, nausea

Precautions

1. Give IV bolus need over 3-5 minutes
2. 稀釋後溶液於室溫下可貯放24 小時。
3. 需依腎功能調整劑量。

3.12.3. 3rd Generations

Cefixime

B⁴ **Unknown¹**

Dosage Forms

Cefixmycin[®] 100mg/cap <KCEFIXI>

Use

Urinary tract infections, otitis media, gonorrhea, respiratory infections due to susceptible organisms including *S. Pneumoniae*, *S. pyogenes*, *H. influenzae* and *Enterobacteriaceae*

Dose

Children 6 month-12 yrs: **PO** 8mg/kg/day in 1-2 divided dose

Adults: **PO** 100-400mg/day in 1-2 divided dose

Adverse Reactions

Abdominal pain, diarrhea, nausea, rash, urticaria, pruritus

Precautions

需依腎功能調整劑量。

Cefotaxime

B⁴ **Safe¹**

Dosage Forms

Claforan 2g/vial<CCEFOT2>

Use

Most G(-) bacilli (not *Pseudomonas*) and G(+) cocci (not enterococcus), active against many penicillin-resistant pneumococci

Dose

Neonate<1wk: **IM/IV** 50mg/kg q12h

Neonate 1-4wks: **IM/IV** 50mg/kg q8h

Children 1month-2yrs and <50kg: **IM/IV** 100-200mg/kg/day in 4-6 divided dose

Adults: **IM/IV** 1-2g q6-8h, meningitis may require **IV** 2g q4-6h, **max 12g/day**

Adverse Reactions

GI effects ,diarrhea, nausea, vomiting, hypersensitivity, fever, pruritus rash,phlebitis and pain at injection site, Steven- Johnson syndrome, granulocytopenia, agranulocytosis.

Precautions

1. 溶解後請儘速使用，稀釋後冷藏(2-8°C)可存放 24 小時。
2. 需依腎功能調整劑量。

Ceftazidime

B⁴ Safe¹

Dosage Forms

Tatumcef® 2g/vial<CCEFTA2>

Use

Pseudomonas aeruginosa infection and infections due to other susceptible aerobic G (-) organisms

Dose

Neonate ≥ 1 wk: **IV** 30-50mg/kg q8h

Neonate < 1 wk: **IV** 30mg/kg q12h

Children: **IV** 30-100mg/kg q8-12h, **max 6g/day** (meningitis 150mg/kg/day)

Adults: **IV/IM** 1-2g q8-12h, **max 6g/day**

Adverse Reactions

Rash, diarrhea, injection site pain, phlebitis, seizures, encephalopathy, asterixis, neuromuscular excitability

Precautions

1. 溶解後請儘速使用，稀釋後於室溫下可存放 18 小時，冷藏存放 7 天。
2. 需依腎功能調整劑量。

Ceftriaxone

B⁴ Safe¹

Dosage Forms

Sinrix® 1g/vial <CCEFTR1>

Use

Lower respiratory tract infections, skin and skin structure infections, bone and joint infections, intra-abdominal and urinary tract infections, sepsis and meningitis due to susceptible organisms

Dose

Children: **IV/IM** 25-37.5mg/kg q12h, **max 2g/day**; for serious infections 40-50 mg/kg q12h, **max 4g/day**; for meningitis **IV** 50mg/kg/day q12h, **max: 4g/day**

Adults: **IV/IM** 1-2g q12-24h; **max 4g/day**

Adverse Reactions

Diarrhea, injection site pain, transient liver enzyme increases, rash, reversible gallbladder disease, immune-mediated hemolysis

Precautions

1. 藥品乾粉使用 10ml 注射用水溶解，再以不含鈣溶液稀釋(0.9%NaCl, 0.45%NaCl+2.5 dextrose, D5W, D10W)。
2. 藥品配製後於 2-8°C 下可存放 48 小時，於 25°C 下可存放 24 小時。
3. 勿與 aminoglycoside 類抗生素混合或同時注射。
4. 不可與含鈣之溶液混合或併用；在注射 ceftriaxone 48 小時之後才能

再給予病患含鈣之溶液或其產品。

5. 需依腎功能調整劑量。

Contraindication

1. Hyperbilirubinemic neonates

2. ≤ 28 天的新生兒正在以靜脈注射方式接受含鈣藥品及營養品。

Flomoxef

Unknown¹

Dosage Forms

Flumarin[®] 1000mg/vial <CFLOMO1>

Use

Respiratory tract infections, soft tissue infections, urinary tract infections, gynecologic infections

Dose

Children: **IV** 60-80mg/kg/day in 3-4 divided dose, for serious infection

150mg/kg/day in 3-4 divided dose

Adults: **IV** 1-2g q12h, for serious infection 4g/day in 2-4 divided dose

Adverse Reactions

Transient eosinophilia, thrombocytosis, slight reductions in erythrocyte count, Hb, Hct and leukocyte count, loose stool, stomatitis, numbness of tongue, rash

Precautions

1. 配製後於室溫下可存放 6 小時，冷藏存放 24 小時。

2. 對 penicillin 過敏者須審慎使用。

3. 需依腎功能調整劑量。

3.12.4. 4th Generations

Cefepime

B⁴ Safe¹

Dosage Forms

Supecef[®] 500mg/vial <CCEFEP1>

Use

Treatment of urinary tract infections, monotherapy for febrile neutropenia, skin infections caused by Streptococcus pyogenes, moderate to severe pneumonia caused by pneumococcus, Pseudomonas aeruginosa and other G (-) organisms

Dose

Children > 2 mon and ≤ 40 kg: 50 mg/kg q8h for 7-10 days; **max: 2 g q8h**

Children 1-2 month: 30 mg/kg q8 or 12h.

Mild to moderate UTI

Children > 40 kg and adults: **IV/IM** 0.5-1 g q12h;

Mild to moderate infections other than UTI

Children > 40 kg and adults: **IV/IM** 1 g q12h;

Severe infections other than UTI

Children > 40 kg and adults: **IV** 2 g q12h;

Life-threatening infections:

Children >40 kg and adults: IV 2 g q8h.

Adverse Reactions

Headache, colitis, diarrhea, dyspepsia, local reactions, phlebitis, pain or inflammation, rash, encephalopathy, myoclonus, seizures

Precautions

- 1.稀釋後於室溫下可存放 24 小時，冷藏存放 7 天。
- 2.需依腎功能調整劑量。

3.13. Penicillins

3.13.1. Natural Penicillins

Penicillin G Sodium

B⁴ Unknown¹

Dosage Forms

Penicillin[®] 3MU/vial [Na: 6mEq/vial]<CPENIC2>

Use

Infections caused by penicillin-sensitive organisms, eg: meningitis, pneumonia, endocarditis, GI, skin and soft tissue infection, syphilis, gonorrhea etc.

Dose

Infants and children: **IV/IM** 10-25MU/kg/day in 6 divided dose, **max 24MU/day**

Adults: **IV/IM** 12-24MU/day in 4-6 divided dose

Adverse Reactions

Convulsions, confusion, drowsiness, myoclonus, fever, rash, electrolyte imbalance, hemolytic anemia, thrombophlebitis, interstitial nephritis, anaphylaxis, Jarisch-Herxheimer reaction

Precautions

- 1.第一次使用 penicillin 類之抗生素，建議執行 penicillin skin test。
- 2.需依腎功能調整劑量。

3.13.2. Antistaphylococcal Penicillins

Dicloxacillin

B⁴ Safe¹

Dosage Forms

Ziefmycin[®] 250mg/cap <KDICLOX>

Use

Systemic infections such as pneumonia, skin and soft tissue infections, osteomyelitis caused by penicillinase-producing staphylococci

Dose

Children <40kg: **PO** 12.5-25mg/kg/day in 4 divided dose

Children ≥40kg and adults: **PO** 125-500mg q6h

Adverse Reactions

Nausea, diarrhea, abdominal pain

Oxacillin

B⁴ Safe¹

Dosage Forms

Ocillina[®] 500mg/vial <COXACIL>

Use

Susceptible bacterial infections such as osteomyelitis, septicemia, endocarditis, CNS infections due to susceptible strains of Staphylococcus

Dose

Premature and neonates: **IV/IM** 25mg/kg/day

Children <40kg: **IV/IM** 12.5mg/kg q6h

Children ≥40kg and adults: **IV/IM** 250-2000mg q4-6h; **max:12g/day**

Adverse Reactions

Fever, rash, nausea, diarrhea, vomiting, eosinophilia, leukopenia, neutropenia, thrombocytopenia, agranulocytosis, hepatotoxicity, increased AST, hematuria, acute interstitial nephritis, hematuria, serum sickness-like reactions

Precautions

- 1.配製後溶液於室溫下可存放3天，冷藏存放7天。
- 2.第一次使用 penicillin 類之抗生素，建議執行 penicillin skin test。

3.13.3. Aminopenicillins

Amoxicillin

B⁴ Safe¹

Dosage Forms

Amoxicillin[®] 250mg/cap <KAMOX01>

Amoxicillin[®] 500mg/cap <KAMOX02>

Amolin[®] powder suspension 3g/60ml/bot <KAMOXIC>

Use

Otitis media, sinusitis, respiratory tract, skin, urinary tract infection, prophylaxis dental procedures, combination for eradication of H. pylori

Dose

Children: **PO** 20-50mg/kg/day in 3 divided dose

Adults: **PO** 250-500mg q8h, **max 2-3g/day**, for H. pylori 1000mg bid

Adverse Reactions

Agitation, anxiety, confusion, convulsions, dizziness, rashes, vasculitis, urticaria, nausea, vomiting, diarrhea, colitis, hemolytic anemia, hepatic cholestasis, eosinophilia, leucopenia, agranulocytosis, thrombocytopenia, elevated AST/ALT

Precautions

- 1.液劑：先加入冷開水至箭頭處，貯存於冰箱，並在7天內使用。
- 2.需依腎功能調整劑量。

Ampicillin

B⁴ Safe¹

Dosage Forms

Ampolin[®] 500mg/vial <CAMPI01>

Use

Respiratory tract, GI infections, UTI, gonorrhea, septicemia, peritonitis, endocarditis, osteomyelitis, enteric fever

Dose

Children <2 yrs: **IV/IM** 62.5-125mg q6h

Children 2-10 yrs: **IV/IM** 125-250mg/kg/day in 4 divided dose

Adults: **IV** 1-2g q4-6h or 50-250mg/day, **max 12g/day**

Adverse Reactions

Rash, diarrhea, vomiting, candidiasis, abdominal cramps, allergic reaction

Precautions

1. 針劑：泡製後必須在 1 小時內用完；第一次使用 penicillin 類之抗生素，建議執行 penicillin skin test。
2. 需依腎功能調整劑量。

Amoxicillin and Clavulanic acid



Dosage Forms

AmoClav[®] 600mg/vial, 1 vial: Amoxicillin 500mg+ Clavulanic acid 100mg <CAUGM01>

AmoClav[®] 1.2g/vial, 1 vial: Amoxicillin 1g+ Clavulanic acid 200mg <CAUGM02>

Curam[®] 1g/ tab, 1tab: Amoxicillin 875mg+ Clavulanic acid 125mg<KAUGM04>

Augmentin[®] Powder for syrup 457mg/5ml, 35ml/bot, 5ml: Amoxicillin 400mg+ Clavulanic acid 57mg <KAUGM02>

Use

Otitis media, sinusitis, lower respiratory tract, skin and skin structure, urinary tract infection

Dose

IV

Children 0-3 month: 25mg (amoxicillin)/kg q8-12h

Children 3 month-12 yrs: 25mg (amoxicillin)/kg q6-8h

Adults and children over 12yrs: 1g (amoxicillin) q6-8h

PO

Curam[®]: 1tab q12h

Syrup:

Children 2-6yrs: **PO** 2.5-5ml bid

Children 7-12yrs: **PO** 5-10ml tid

Adverse Reactions

Diarrhea, colitis, rash, GI upset, candidiasis

Precautions

1. Slow IV > 3-4 mins or IVF >30-40 mins and complete within 4 hrs
2. Curam 可撥半但不可咀嚼
3. Curam 不建議用於 12 歲以下兒童及腎絲球過濾率小於 30ml/min 的病患。
4. Syrup: 將水加至瓶身上箭頭三分之二處，蓋上瓶蓋後充分振搖，確定溶解後將水加至箭頭處，配製後未使用完之藥液可於 2~8°C 下存

放 7 天。

5. 針劑：第一次使用 penicillin 類之抗生素，建議執行 penicillin skin test；
泡製後須於 20 分鐘內使用完，稀釋後室溫下應於 4 小時內使用完畢，
稀釋後於 5°C 下可儲存 8 小時。
6. 需依腎功能調整劑量。

Subacillin® (Unasyn)

B⁴ Safe¹

Dosage Forms

1 vial: Ampicillin 1g+ Sulbactam 0.5g, 1.5g/vial <CUNASYN>

Use

G (+) or G (-) including some anaerobes, acinetobacter infection

Dose

Children >28day: **IM/IV** 25-75mg(ampicillin)/kg q6h

Adults: **IM/IV** 1-2g ampicillin (1.5-3g Subacillin) q6h; max: 8g/day
ampicillin(12g/day Subacillin)

Adverse Reactions

GI disturbances, skin rash, itching, blood disorders

Precautions

1. IV/IM: 3.2ml Dis-water、NS、D5W、LR；配置後 1 小時內使用
2. 靜脈輸注：依據不同稀釋液及濃度使用期限如下表

稀釋液	Subacillin 濃度	使用期限(小時)	
		25°C	4°C
Dis-water	45mg/ml	8	48
	30mg/ml	-	72
NS	45mg/ml	8	48
	30mg/ml	-	72
D5W	15-30mg/ml	2	-
	3mg/ml	4	-
	30mg/ml	-	4
LR	45mg/ml	8	24

2. 第一次使用 penicillin 類之抗生素，建議執行 penicillin skin test
3. 需依腎功能調整劑量。

3.13.4. Antipseudomonal Penicillins

Piperacillin

B⁴ Safe¹

Dosage Forms

Picillina® 2g/vial (Na: 3.7mEq/vial) <CPIPER1>

Use

Susceptible infections such as septicemia, respiratory tract, skin and soft tissue and urinary tract infections due to susceptible strains of Proteus, Pseudomonas, E. coli and Enterobacter

Dose

Neonates: **IV** 100-300mg/kg/day in 2-3 divided doses

Infants and children: **IV** 100-300mg/kg/day in 3-4 divided doses

Adults: **IV** 3-4g q4-6h, **max: 24g/day**, for UTI 2g q6h

Adverse Reactions

Diarrhea, colitis, rash, GI upset, candidiasis

Precautions

- 1.第一次使用 penicillin 類之抗生素，建議執行 penicillin skin test。
- 2.需依腎功能調整劑量。

Tapimycin[®]

B⁴ Safe¹

Dosage Forms

1 vial: Piperacillin 4g+Tazobactam 0.5g [Na: 216mg/vial], 4.5g/vial
<CPIPER3>

Use

Infections of lower respiratory tract, urinary tract, skin, gynecologic, bone and joint infections and activity of piperacillin to include beta-lactamase producing strains of *S. aureus*, *H. influenza*, *bacteroides*

Dose

Children ≥12 yrs and adults: **IV** 2.25-4.5g q6-8h, drip >30 mins

Adverse Reactions

Diarrhea, colitis, rash, GI upset, candidiasis

Precautions

- 1.第一次使用 penicillin 類之抗生素，建議執行 penicillin skin test。
- 2.稀釋後於室溫下可存放 24 小時，2-8°C 下存放 7 天。
- 3.需依腎功能調整劑量。

3.14. Quinolones

Ciprofloxacin

C⁴ Safe¹

Dosage Forms

Ciproxin[®] 200mg/100ml/bot <CCIPR1>

Cinolone[®] 250mg/tab <KCIPRO>

Use

Respiratory tract, ENT infections, cervicitis, uterine adnexitis, folliculitis, lymphangitis, mild to moderate skin and soft tissue infections

Dose

IVF 200-400mg q12h

PO 250-500mg q12h, for severe infection 750mg q12h

Adverse Reactions

Headache, restlessness, rash, nausea, diarrhea, vomiting, abdominal pain, elevated ALT/AST, elevated serum creatinine

Precautions

- 1.口服劑型避免與含鉛、鎂、鈣等制酸劑或鐵劑併用。
- 2.針劑移除外包裝後請於 3 天內使用完畢，開封後請立即使用。
- 3.需依腎功能調整劑量。

Contraindication

1. 不建議使用於 < 18 yrs
2. 併用 tizanidine

Levofloxacin

C⁴ Unknown¹

Dosage Forms

- Cravit[®] 250mg/50ml/vial <CLEVOFL>
Cravit[®] 500mg/tab <KKEVOFL>
Cravit[®] 0.5%, 5ml/bot <WLEVOFL> 參閱 p.271

Use

Respiratory tract, ENT infections, intracrine infections, cervicitis, uterine adnexitis, folliculitis, lymphangitis, mild to moderate skin and soft tissue infections,

Dose

IV/PO 500-750mg qd

Adverse Reactions

Dizziness, fever, headache, insomnia, nausea, vomiting, diarrhea, constipation

Precautions

1. Should be infused slowly over 60 mins for doses of 250-500mg and over 90 mins for doses of 750mg
2. 口服劑型避免與含鉛、鎂、鈣等制酸劑或鐵劑併用。
3. 針劑移除外包裝後請於 3 天內使用完畢，開封後請立即使用。
4. 口服可用於治療 chronic bacterial prostatitis (慢性細菌性前列腺炎)。
5. 需依腎功能調整劑量。
6. 健規：限用於成人(18 歲以上)之慢性支氣管炎的急性惡化、社區性肺炎、複雜性泌尿道感染。

Contraindication

1. 癲癇患者。
2. 曾使用 Fluoroquinolones 有關的肌腱病變患者。
3. 不建議使用於 < 18 yrs 。
4. 懷孕及哺乳女性。

Moxifloxacin

C⁴ Unknown¹

Dosage Forms

- Avelox[®] 400mg/250ml/bot <CMOXIFL>
Avelox[®] 400mg/tab <KMOXIFL>
Vigamox[®] 0.5%, 5ml/bot <WMOXIFL> 參閱 p.272

Use

Respiratory tract, skin and soft tissue infections and intra abdominal infections

Dose

IV/PO 400mg qd for 5-14 days, depending on the specific infection

Adverse Reactions

Dizziness, fever, headache, insomnia, nausea, vomiting, diarrhea

Precautions

1. IV infuse over 60 mins。
2. 口服劑型避免與含鉛、鎂、鈣等制酸劑或鐵劑併用。
3. 針劑開封稀釋後，在室溫下可貯存 24 小時。
4. 健規：限用於成人(十八歲以上)之慢性支氣管炎的急性惡化、社區性
5. 肺炎、複雜性腹腔內感染

Contraindications

1. 不建議使用於 < 18 yrs。
2. 懷孕及哺乳女性。

3.15. Macrolides

Azithromycin

B⁴ Safe¹

Dosage Forms

Zithromax[®] 40mg/ml, 15ml/bot <KAZIT02 >

Zithromax[®] 250mg/tab <KAZIT01 >

Use

Respiratory tract, skin and soft tissue infections, otitis media, uncomplicated genital infections due to Chlamydia trachomatis and Neisseria gonorrhoeae

Dose

Children: **PO** 10mg/kg qd for 3 days

Adults: **PO** 500mg qd for 3 days

Adverse Reactions

Diarrhea, nausea, abdominal pain, vomiting

Precautions

健規：使用期間不得超過三日，每日最大劑量 500mg；禽結合桿菌(MAC)感染則不在此限。

Clarithromycin

C⁴ Unknown¹

Dosage Forms

Klaricid[®] XL 500mg/tab <KCLARIT >

Use

Respiratory tract, uncomplicated skin infection, eradication of H. pylori in patients with duodenal ulcer when used with omeprazole

Dose

Children > 12 yrs and adults: **PO** 500mg qd, for H. pylori and MAC 500mg bid

Adverse Reactions

Dyscoordination, sedation, diarrhea, vomiting, headache, leukopenia, neutropenia, QT prolongation, thrombocytopenia, torsade de pointes

Precautions

- 1.健規：使用期間不得超過 10 日，每日最大劑量 500mg。對於非結核分枝桿菌 (NTM) 感染患者，每日得使用 1000mg，且得持續使用 6 個月以上。
- 2.服藥期間避免食用葡萄柚或葡萄柚汁。
- 3.需依腎功能調整劑量。

Erythromycin

B⁴ Safe¹

Dosage Forms

Erythrocin[®] lactobionate 500mg/vial <CERYTHR>

Use

Infections due to G (+), G (-) cocci, G (+) bacill including Legionella spp and Chlamydia

Dose

Severe infection

Children: **IV** 15-50mg/kg/day administered by continuous infusion or q6h infusion 1-2 hrs, **max: 4g/day**

Adults: **IV** 1-4g/day

Adverse Reactions

Diarrhea, nausea, abdominal pain, vomiting, oral candidiasis, dyspepsia, flatulence, anorexia, pancreatitis, eosinophilia, cholestatic jaundice

Precautions

- 1.注射劑建議 IVF 給藥，用 diswater 稀釋後，配製成 1-5mg/ml，溶液 >100ml 時輸注時間需超過 20-60 mins；不可以含 glucose 溶液稀釋。
- 2.需依腎功能調整劑量。

3.16. Sulfonamides

Sulfamethoxazole-Trimethoprim (SMZ-TMP) **C^d safe¹**

Dosage Forms

Sevatrim[®] 5ml/amp, 1amp: SMZ 400mg+TMP 80mg <CBAKTAR>

Chemix[®] 1 tab: SMZ 400mg+TMP 80mg <KBAKTA1>

Sulfacotrim[®] susp 60ml/bot, 1ml: SMZ 40mg+TMP 8mg <KBAKTA2>

Use

Urinary tract infection , Pneumocystis carinii pneumonia, skin and genital infections

Dose

IV 15-20mg TMP/kg/day q6-8h;

PO 2 tab q12h for 5 to 14 days

Suspension

Children 6 wks-5 month: **PO** 2.5ml bid

Children 6 month-5 yrs: **PO** 5ml bid

Children 6-12 yrs: **PO** 10ml bid

Adults: **PO** 20ml bid

Prophylaxis of Pneumocystis carinii pneumonia (PCP)

PO 2 tab qd

Treatment of PCP

IV/PO 15-20mg TMP/kg/day tid-qid for 14-21days

Adverse Reactions

Hypoglycemia, anorexia, nausea, vomiting, diarrhea, Steven-Johnson syndrome, thrombocytopenia, jaundice, hepatitis, hyperkalemia

Precautions

1. 需依腎功能調整劑量。
2. G6PD-deficiency 者應謹慎使用。

Contraindications

Neonate

3.17. Tetracyclines

Doxycycline

D⁴ Unkown¹

Dosage Forms

Doxymycin[®] 100mg/cap <KDOXYCY>

Use

Infections caused by susceptible Rickettsia, G (-) and G (+)

Dose

PO 100mg qd-q12h

Adverse Reactions

GI effects, photosensitivity, tooth discoloration

Precautions

1. Children <8 yrs, risk for permanent discoloration of teeth
2. 避免與含鋁、鎂、鈣等制酸劑或鐵劑併用。
3. 建議飯前 1 小時或飯後 2 小時服用避免與牛奶併服。

Minocycline

D⁴ Unsafe¹

Dosage Form

Borymycin[®] 100mg/cap <KMINOCY>

Mirosin[®] 100mg/vial <CMINOCY>

Use

Respiratory tract, soft tissue, acne vulgaris, ENT infection

Dose

IV initial 200mg then 100mg q12h

PO 100mg q12h

Adverse Reactions

GI disorders, tooth discolouration, photosensitivity

Precautions

1. Children <8 yrs, risk for permanent discoloration of teeth
2. 避免與含鋁、鎂、鈣等制酸劑或鐵劑併用。

3.建議飯前 1 小時或飯後 2 小時服用避免與牛奶併服。

4.需依腎功能調整劑量。

3.18. Antimicrobial Miscellaneous

Clindamycin

B⁴ Safe¹

Dosage Forms

Clinicin[®] 300mg/2ml/vial <CCLINDA>

Tidact[®] 150mg/cap <KCLINDA>

Kolincin[®] acne gel 1%, 5g/tube <WCLIND1>參閱p.131

Use

Aerobic and anaerobic streptococci (except enterococci), most staphylococci, pneumococci

Dose

Tablet

Children: **PO** 8-16mg/kg/day, more severe infections 16-20mg/kg/day

Adults: **PO** 150-300mg q6h, more severe infections 300-450mg q6h

Injection

Children: **IM/IV** 15-25mg/kg/day, more severe infections 25-40mg/kg/day in 3-4 divided dose

Adults: **IM/IV** 600-1200mg/day, more severe infections 1.2-2.7g/day in 2-4 divided doses, life-threatening infections 4.8g/day

Adverse Reactions

Diarrhea, urticaria, Stevens-Johnson syndrome, pseudomembranous colitis, nausea, vomiting, hypersensitivity, thrombocytopenia

Precautions

IM:一次劑量不可超過 600mg，而且必須深部注射。

IV:必須先經稀釋成濃度 12mg/ml 以下，然後再輸注投與。

Colistin

C⁵ Unknown¹

Dosage Forms

Colimycin[®] 2MU(colistin base 66.8mg)/vial<CCOLIST>

Use

Disease due to G(-) bacteria, P. aeruginosa, Enterobacter aerogenes, E. coli, and Klebsiella pneumoniae

Dose

IM 2.5-5mg colistin base/kg/day in 2-4 divided dose

IV (rate: over 3-5min)/**IVF** (rate: 5-6mg/hr) 2.5-5mg colistin base/kg/day in 2 divided dose

Adverse Reactions

Headache, GI upset, respiratory arrest, nephrotoxicity

Precautions

1.本品以 2ml 之滅菌注射用水或生理食鹽水溶解。

2.溶解後於室溫下可存放 7 天，冷藏可存放 14 天。

- 3.本品以靜脈輸注方式投與，可用 NS, D5W/NS, D5W, D5W in 0.45% NaCl, D5W in 0.225% NaCl, LR 稀釋。
- 4.稀釋後需於 24 小時內使用完畢。
- 5.需依腎功能調整劑量，輸注速率須降低。

Daptomycin

B⁴ Unknown¹

Dosage Forms

Cubicin[®] 500 mg/vial<CDAPTO1>

Use

Bacteremia, endocarditi, infection of skin or subcutaneous tissue

Dose

Complicated skin and skin structure infections

IVF (>30min) 4 mg/kg qd for 7-14 days.

Staphylococcus aureus bacteremia, including right-sided endocarditis

IVF (>30min) 6 mg/kg qd for 2-6 wks

Adverse Reactions

Hypokalemia, constipation, diarrhea, injection site reaction

Precautions

- 1.本品輸注時間需大於 30 分鐘。
- 2.本品需冷藏於 2-8°C，混合稀釋後室溫下可保存 12 小時，在 2-8°C 下可存放 48 小時。
- 3.配製方法：將 7ml 之 NS 注射液加入藥瓶中，確定完全溶解後，靜置 10 分鐘，溶解後之 daptomycin 需以 NS 再稀釋，配製藥品時避免劇烈震動或搖晃藥瓶。
- 4.需依腎功能調整劑量。
- 5.可能導致 PT/INR 異常上升，如有此異常可於下次給藥前抽血監測。

Fusidic acid

B⁴ Unknown¹

Dosage Forms

Fucidin[®] 250mg/tab <KFUSIDA>

Fusidic acid[®] cream 2%, 5g/tube <WFUSID1>參閱p.134

Use

Osteomyelitis, skin and soft tissue infections due to Staphylococcus aureus

Dose

PO 250-500mg tid

Adverse Reactions

GI disturbances, jaundice, hypersensitivity reactions

Precautions

- 1.若發生黃疸時，應中止投藥直到血清內 bilirubin 值回復正常。
- 2.應定期檢查肝功能。

Linezolid

C⁴ Unknown¹

Dosage Forms

Zyvox[®] 600mg/300ml/bot <CLINEZO>

Zyvox® 600mg/tab <KLINEZO>

Use

Methicillin-resistant staphylococcus aureus (MRSA), vancomycin-resistant, Enterococcus faecium (VRE) infections, complicated or uncomplicated skin infection, nosocomial pneumonia, community acquired pneumonia (CAP),

Dose

Children <11 yrs: **IV/PO** 10mg/kg q8-12h for 10-14 days

Adults and ≥12 yrs: **IV/PO** 600mg q12h for 10-14 day

Adverse Reactions

Anemia, thrombocytopenia, leukopenia headache, chills, drug fever

Precautions

- 1.IV infusion 給藥速率 30-120 分鐘。
- 2.給予注射劑型時，請勿加入其他藥品。
- 3.健規：骨髓炎(osteomyelitis)及心內膜炎(endocarditis)不建議使用。

Metronidazole

B⁴ Unknown¹

Dosage Forms

SABS® 500mg/100ml/bot <CMETRON>

Frotin® 250mg/tab <KMETRON>

Free® gel(膚麗凝膠) 0.75%, 15gm/tube <WMETRO2>參閱p.135

Sutrol Gel-Vaginal® 7.5mg/g, 25g/tube<WMETRO1>參閱p.135

Use

Anaerobic, protozoal, amebiasis, trichomoniasis pseudomembranous colitis, H. pylori

Dose

Anaerobic infection

Children: **IV** 30mg/kg/day in 4 divided doses; **PO** 15-35mg/kg/day in 3 divided doses

Adults: **IV/PO** 500mg q6-8h

Amebiasis

Children: **PO** 35-50mg/kg/day q8h

Adults: **PO** 500-750mg q8h

Pseudomembranous colitis

Children: **PO** 20mg/kg/day in 3-4 divided doses

Adults: **PO** 250mg q6h or 500mg q8h

H. pylori

Adults: **PO** 500mg bid

Adverse Reactions

Dizziness, headache, GI upset, loss of appetite, nausea, vomiting

Precautions

需依腎功能調整劑量。

Contraindications

SABS®:懷孕三個月內之婦女禁忌使用。

Teicoplanin

Unknown¹

Dosage Forms

Targocid[®] 400mg/vial <CTEICO1>

Use

Methicillin-resistant staphylococcus aureus (MRSA) or cephalosporin-allergic patients, prophylaxis for endocarditis

Dose

Moderate infections

Children < 14 yrs: **IM/IV** 10mg/kg q12h×3 doses, maintenance 6mg/kg qd

Adults: **IM/IV** loading 400mg (6mg/kg) single doses, maintenance 200mg (3mg/kg) qd

Severe infections

Children <14 yrs: **IV** 10mg/kg q12h 3 doses, maintenance 10mg/kg qd

Adults: **IV** loading 400mg (6mg/kg) q12h×3 doses, maintenance 400mg (6mg/kg) qd; **max: 12mg/kg/day**

Adverse Reactions

Local pain, allergic reactions, nausea, vomiting, diarrhea, eosinophilia, leukopenia

Precautions

- 1.配製後應立即使用，未用完者應丟棄，但某些情況無法立即使用時，應於 2-8°C 保存，並於 24 小時內使用完畢。
- 2.需依腎功能調整劑量。

Tigecycline

D⁴ Unknown¹

Dosage Forms

Tygacil[®] 50mg/vial <CTIGECY>

Use

Complicated skin and skin structure infections and complicated intra-abdominal infections

Dose

IV 100 mg, followed by 50 mg q12h for 5-14 days

Adverse Reactions

Abdominal pain, diarrhea, nausea, vomiting, thrombocytosis, headache

Contraindications

18 歲以下病人安全性與療效評估尚未確立。

Vancomycin

C⁵ Unsafe³

Dosage Forms

U-Vanco[®] 1g/vial <CVANCO1>

Use

Methicillin-resistant staphylococcus aureus (MRSA) or cephalosporin-allergic patients, prophylaxis for endocarditis, pseudomembranous colitis

Dose

Neonate and infant: **IV** initial 15mg/kg followed by 10mg/kg q8-12h

Children: **IV** 40mg/kg/day in 2-4 divided doses

Adults: **IV** 15mg/kg q12h

Pseudomembranous colitis(PMC)

Children: **PO** 40mg/kg/day in 3-4 divided doses

Adult: **PO** 0.5-2g/day in 4 divided dose

Adverse Reactions

Stomatitis, chills, drug fever, eosinophilia, thrombocytopenia, ototoxicity, renal failure, interstitial nephritis, Stevens-Johnson syndrome

Precautions

1. 給藥速率過快會造成 Red man syndrome。
2. 乾粉需先加入 20ml 滅菌注射用水溶解後，再以至少 200ml 5% Dextrose 或 0.9% NaCl 稀釋，稀釋成 5mg/ml 溶液，給藥速率至少要 60 分鐘以上（或 $< 10\text{mg/min}$ ）。
3. 給藥速率：Adults： $\geq 60\text{min}$ （或 $< 10\text{mg/min}$ ）。Children、neonate & infant： $\geq 60\text{min}$ 。
4. 乾粉以 20ml 注射用水溶解，可存放 14 天；稀釋後室溫下可存放 24 小時，冷藏可存放 96 小時。
5. 需依腎功能調整劑量。

4. ANTINEOPLASTIC AGENTS

4.1. Chemo therapy

4.1.1. Alkylating Agents

Carboplatin

D⁴ Unsafe¹

Dosage Forms

Carboplatin[®] 150mg/15ml/vial <CCARB01>

Use

Ovarian cancer

Dose

IV total dose (mg): Target AUC (mg/ml/mimute) × (GFR[ml/min] + 25)

Adverse Reactions

Myelosuppression, peripheral neuropathy, electrolyte disturbances, gastrointestinal disturbances

Precautions

1. 需依肝腎功能調整劑量。
2. 稀釋後於室溫下可保存 8 小時

Contraindications

禁用於曾對 cisplatin, 其他含鉑化合物, 或 mannitol 產生嚴重過敏反應的患者。

Chlorambucil

D⁴ Unsafe¹

Dosage Forms

Leukeran[®] 2mg/tab <KCHLOR1>

Use

Malignant lymphoma, follicular lymphomas

Dose

PO 0.1-0.2mg/kg/day for 3-6 wks then adjust for maintenance dose
2mg/day

Adverse Reactions

Anemia, thrombocytopenia, gastrointestinal disturbances, Stevens-Johnson syndrome

Precautions

1. 須避光冷藏。
2. 本品刺激黏膜，不宜磨粉。

Cisplatin

D⁴ Unsafe¹

Dosage Forms

Kemoplat[®] 50mg/50ml/vial <CCISP03>

Use

Bladder cancer, metastatic ovarian cancer, metastatic testicular cancer

Dose

Bladder cancer

IV 50-70mg/m² q3-4w

Testicular cancer

IV 20mg/m²/day for 5 days q3-4w

Ovarian cancer

IV 75-100mg/m² q4wks; **max: 120mg/m²**

Adverse Reactions

Nephrotoxicity, ototoxicity, peripheral neuropathy, gastrointestinal disturbances, myelosuppression

Precautions

1. 需依肝腎功能調整劑量。
2. 限用 0.3% 以上的含氯溶液稀釋。

Cyclophosphamide

D⁴ Unsafe¹

Dosage Forms

Syklofosamid[®] 500mg/vial <CCYCL02>

Syklofosamid[®] 50mg/tab <KCYCLOP>

Use

Leukemias, lymphoma, multiple myeloma

Dose

IV 40-50mg/kg for 2-5 days or 10-15mg/kg every 7-10 days or 3-5 mg/kg twice weekly; **PO** 1-5mg/kg/day

Adverse Reactions

Alopecia, gastrointestinal disturbances, hemorrhagic cystitis, leukopenia

Precautions

需依肝腎功能調整劑量。

Dacarbazine

C⁴ Unsafe¹

Dosage Form

Dacarbazine[®] 200mg/vial <CDACARB>

Use

Melanoma

Dose

IV 250mg/m²/day for 5 days q3w

Adverse Reactions

Myelosuppression, hepatotoxicity, gastrointestinal disturbances

Precautions

需依肝腎功能調整劑量。

Estramustine

Unknown¹

Dosage Form

Estracyt[®] 140mg/cap <KESTRA7>

Use

Prostate cancer

Dose

PO 560-1120mg (4-8 tab) bid-tid, recommended starting 560-840mg (4-6 tab)

Adverse Reactions

Gastrointestinal disturbances, impotence, anemia, thromboembolism, angioneurotic edema

Precautions

避免與牛奶或奶製品併服，建議空腹服用

Contraindications

禁用於對 estradiol 和 nitrogen mustard 過敏的患者。

Ifosfamide

D⁴ Unsafe¹

Dosage Form

Holoxan[®] 2g/vial <CIFOSFA>

Use

Bronchial carcinoma, testicular tumour, soft tissue sarcomas, malignant lymphomas, breast cancer, endometrial carcinoma, hypernephroma

Dose

IV 1.2-2.4g/m²/day for 5 days, q3-4w

Adverse Reactions

Hematuria, alopecia, nephrotoxicity, myelosuppression, nausea and vomiting

Precautions

需依肝腎功能調整劑量。

Melphalan

D⁴ Unsafe¹

Dosage Forms

Alkeran[®] 2mg/tab <KMELPHA>

Use

Multiple myeloma, ovarian cancer, polycythemia vera

Dose

Multiple myeloma

PO 0.15mg/kg/day in divided doses for 4 days, q6w

Ovarian cancer

PO 0.2mg/kg/day for 5 days, q4-8w

Polycythemia vera

PO 6-10mg/day for 5-7 days, maintenance dose 2-6mg/wk

Adverse Reactions

Myelosuppression, gastrointestinal disturbances, maculopapular rashes, hemolytic anemia, cystic fibrosis

Precautions

1. 需冷藏。
2. 需依肝腎功能調整劑量。

Oxaliplatin

D⁴ Unsafe¹

Dosage Forms

Eloxatin[®] 50mg/10ml/vial <COXALI2>

Use

Colorectal cancer, metastatic gastric cancer

Dose

Colorectal cancer

IV 85mg/m² q2w

Metastatic gastric cancer

IV 130mg/m² q2w

Adverse Reactions

Gastrointestinal disturbances, myelosuppression, alopecia, peripheral neuropathy, rash

Precautions

1. 需依肝腎功能調整劑量。
2. 限用 D5W 稀釋。

Temozolomide

D⁴ Unsafe¹

Dosage Forms

Temodal[®] 20mg/cap <KTEMOZ1>

Temodal[®] 100mg/cap <KTEMOZ2>

Use

Anaplastic astrocytoma

Dose

Adults: PO 150-200mg/m²/day for 5 days, q4w

Adverse Reactions

Gastrointestinal disturbances, myelosuppression, alopecia, headache, rash

Contraindications

禁用於曾對 dacarbazine 產生過敏反應的患者。

4.1.2. Antimetabolites

Capecitabine

D⁴ Unsafe¹

Dosage Forms

Xeloda[®] 500mg/tab <KCAPECI>

Use

Breast cancer, colorectal cancer, gastric cancer

Dose

PO 2500mg/m²/day bid for 3 week cycle; 2 week on, 1 week off

Adverse Reactions

Gastrointestinal disturbances, hand-foot syndrome, anemia, heart toxicity, peripheral neuropathy

Precautions

1. 需依肝腎功能調整劑量。
2. 重大心臟疾病患者，治療時需小心謹慎。

Cytarabine

D⁴ Unsafe¹

Dosage Forms

Cytosar-U[®] 500mg/vial <CCYTAR3>

Use

Leukemias

Dose

Acute non-lymphocytic leukemia

IV 100mg/m²/day continuous infusion for 7 days or every 12 hrs

Acute lymphocytic leukemia

IV 200mg/m²/day continuous infusion for 5 days

Adverse Reactions

Rash, neurotoxicity, peripheral neuropathy, gastrointestinal disturbances, myelosuppression

Precautions

需依肝腎功能調整劑量。

Fludarabine

D⁴ Unsafe¹

Dosage Forms

Fludara[®] 50mg/vial <CFLUDAR>

Use

Leukemia, non-Hodgkin's lymphoma

Dose

IV 25mg/m²/day for 5 days, repeated 28 days

Adverse Reactions

Myelosuppression, gastrointestinal disturbances, pneumonia, stomatitis, skin rash

Precautions

需依肝腎功能調整劑量。

Fluorouracil (5-FU)

X⁴ Unsafe¹

Dosage Forms

Fluoro-uracil[®] 1000mg/20ml/vial<CFLUOR5>

Use

Breast cancer, colorectal cancer

Dose

IV 0.5-1g or 10-20mg/kg qd or qod, total 8-15g

Adverse Reactions

Stomatitis, headache, alopecia, hand-foot syndrome, diarrhea

Precautions

需依肝腎功能調整劑量。

Gemcitabine

D⁴ Unsafe¹

Dosage forms

Gemmis[®] 200mg/6ml/vial <CGEMCIT>

Use

Pancreatic cancer, non-small-cell lung cancer, bladder cancer, metastatic breast cancer, ovarian cancer

Dose

Pancreatic cancer

IV 1000mg/m² qw, 7week on, 1 week off

Non-small-cell lung cancer

IV 4-week schedule: 1000mg/m² at D1,D8,D15 repeated every 28 days

3-week schedule: 1250mg/m² at D1,D8, repeated every 21 days

Bladder cancer

IV 1000mg/m² at D1,D8,D15 repeated every 28 days

Metastatic breast cancer

IV 1250mg/m² at D1,D8, repeated every 21 days

Ovarian cancer

IV 1000mg/m² at D1,D8, repeated every 21 days

Adverse Reactions

Proteinuria, flu-like symptoms, gastrointestinal disturbances, myelosuppression, rash

Precautions

1. 需依肝腎功能調整劑量。
2. 限用 NS 稀釋。

Mercaptopurine (6-MP)

D⁴ Unsafe¹

Dosage Forms

Mercaptopurine[®] 50mg/tab <KMERCAP>

Use

Leukemia

Dose

PO 2.5mg/kg/day may be increase up to 5mg/kg/day, maintenance 2.5mg/kg/day

Adverse Reactions

Myelosuppression, gastrointestinal disturbances, jaundice

Contraindications

Chronic lymphoid leukemia, Hodgkin's disease, malignant lymphoma 的患者禁止使用。

Methotrexate

X⁴ Unsafe¹

Dosage Forms

Methotrexate[®] 50mg/2ml/vial <CMETH01>

Methotrexate[®] 1g/10ml/vial <CMETH02>

Trexan[®] 2.5mg/tab <KMETHOT>

Use

Trophoblastic neoplasms, leukaemia, lymphomas, psoriasis

Dose

Trophoblastic neoplasm

IM/PO 15 to 30mg/day for 5 days; may repeat course 3 to 5 times with 1 or more week rest

Acute lymphoid leukemia

Induction: **IV** 3.3 mg/m²/day in combination with prednisone 60 mg/m²/day; maintenance: **IV** 2.5mg/kg every 14 days; **IM/PO** 30 mg/m²/week administered in 2 divided

Psoriasis

IV/PO initial 10 to 25mg/week or 2.5mg every 12 hour for 3 doses; **max:**
30mg/day

Adverse Reactions

Ulceration stomatitis, leucopenia, gastrointestinal disturbances, neurotoxicity, Stevens-Johnson syndrome

Precautions

1. 補充水份及鹼化尿液，以避免 methotrexate 及其代謝物在腎小管沉澱。
2. Calcium folinate 可中和 methotrexate 對造血器官的立即毒性。
3. 需依肝腎功能調整劑量。

Ufur[®]

D⁵ Unsafe³

Dosage Forms

1 cap: Tegafur 100mg+Uracil 224mg <KTEGAFU>

Use

Breast cancer, colorectal cancer, gastric cancer, squamous cell carcinoma, lung cancer

Dose

PO based on tegafur 500-800mg/day (300-350mg/m²/day) in 2-3 divided doses

Adverse Reactions

Gastrointestinal disturbances, stomatitis, myelosuppression

Pemetrexed

D⁴ Unknown¹

Dosage Forms

Alimta[®] 100mg/vial <CPEMET1>

Use

Non-small cell lung cancer, malignant mesothelioma

Dose

IV 500 mg/m² on day 1, repeat cycle every 21-days

Adverse Reactions

Gastrointestinal disturbances, peripheral neuropathy, rash, alopecia, pharyngitis, myelosuppression

Precautions

1. 需依肝腎功能調整劑量。
2. 限用 NS 稀釋。

TS-1[®]

D⁵ Unsafe³

Dosage Forms

1 cap: Tegafur 20mg+gimeracil 5.8mg+oteracil 19.6mg <KTS2>

Use

Gastric cancer, pancreatic cancer

Dose

PO Initial 40mg(tegafur)/dose for BSA<1.25, 50mg/dose for BSA 1.25-<1.5, 60mg/dose for BSA ≥ 1.5, twice daily, after breakfast and after the evening meal, for 28 consecutive days, followed by a 14-days rest.

Maximum dose: 75mg/dose; minimum dose: 40mg/dose

Adverse Reactions

Leukopenia, neutropenia, decreased hemoglobin, anorexia, nausea

Precautions

1. 空腹會降低藥品之生體可用率，抗腫瘤效果，故須於飯後服用
2. 建議兩週監測一次臨床檢查

Contraindications

嚴重骨髓抑制、嚴重肝腎功能障礙、接受其他 fluoropyrimidine 類抗腫瘤劑、接受 flucytosine 治療、懷孕

4.1.3. Antibiotics

Bleomycin

D⁴ Unsafe¹

Dosage Forms

Bleocin[®] 15mg/amp <CBLEOMY>

Use

Lymphoma, head-neck cancer, skin cancer, esophageal cancer

Dose

IV/IM/IA/SC 10-20mg/m² 1-2 times/wk, **max: 20mg/m², max. cumulative: 400mg**

Adverse Reactions

Gastrointestinal disturbances, alopecia, fever, interstitial pneumonia, hyperpigmentation of skin

Precautions

需依肝腎功能調整劑量。

Doxorubicin

D⁴ Unsafe¹

Dosage Forms

Adriblastina[®] 10mg/vial <CDOXOR2>

Use

Leukemias, lymphomas, breast cancer, lung cancer, neuroblastoma, soft-tissue sarcomas-osteogenic

Dose

IV 60-75mg/m² q3w; **max cumulative: 550mg/m²**

Adverse Reactions

Cardiovascular disease, alopecia, nausea and vomiting, injection site extravasation

Precautions

1. 需依肝腎功能調整劑量。
2. 使用後 1-2 天尿液會呈紅色。

Doxorubicin liposomal

D⁴ Unsafe¹

Dosage Forms

Lipo-Dox[®] 20mg/10ml/vial <CLIPODO>

Use

AIDS-related Kaposi sarcoma, ovarian cancer, breast cancer, multiple

myeloma

Dose

AIDS-related kaposi's sarcoma

IV 20mg/m² over 30 min q3w

Ovarian cancer, breast cancer

IV 50mg/m²/dose q4w.

Multiple myeloma

IV 40-60mg/m²/dose q3-4w.

Adverse Reactions

Myelosuppression, cardiomyopathy, alopecia, stomatitis, palmar-plantar erythrodysesthesia

Precautions

1. 需依肝腎功能調整劑量。
2. 限用 D5W 稀釋。(稀釋量: 90mg 以上用 500ml; 90mg 以下用 250ml)

Epirubicin

D⁴ Unsafe¹

Dosage Forms

Pharmorubicin[®] 10mg/vial <CEPIRU1>

Pharmorubicin[®] 50mg/vial <CEPIRU2>

Use

Breast cancer, bladder cancer, malignant lymphoma, gastric cancer, lung cancer, ovarian cancer, soft-tissue sarcomas

Dose

IV 60-90mg/m² q3w, **max. cumulative: 550-900mg/m²**

Intravesically 30-50mg qw for 8 wks

Adverse Reactions

Breast cancer, bladder cancer, malignant lymphoma, gastric cancer, lung cancer, ovarian cancer, soft-tissue sarcomas

Precautions

1. 不可與 heparin 混合,在特定比例下二者混合會產生沉澱。
2. 需依肝腎功能調整劑量。

Hydroxyurea

D⁴ Unsafe¹

Dosage Forms

Hydrea[®] 500mg/cap <KHYDR03>

Use

Chronic myelogenous leukemia, cancer, malignant melanoma, ovarian cancer, sickle cell disease, radiation and for local control of the outer lip of the primary head and neck squamous cell carcinoma

Dose

PO intermittent therapy: 80 mg/kg/day q3d; continuing therapy: 20-30 mg/kg/day qd

Adverse Reactions

Myelosuppression, stomatitis, anorexia, nausea, vomiting, diarrhea, constipation, skin rash, Headache, dizziness

Precautions

需依肝腎功能調整劑量。

Idarubicin

D⁴ Unsafe¹

Dosage Forms

Zavedos[®] 5mg/vial <CIDARUB>

Zavedos[®] 5mg/cap <KIDARUB>

Use

Acute non-lymphocytic leukemia(ANLL), acute lymphoblastic leukemia(ALL)

Dose

IV 12mg/m²/day for 3 days; **PO** 15-30 mg/m²/day for 3 days;

Adverse Reactions

Cardiotoxicity, myelosuppression, alopecia, stomatitis, hepatotoxicity, nausea, vomiting

Precautions

1.尿液會呈紅色。

2.不可吸咬或咀嚼，使用本品應盡量避免開車或操作機器。

Contraindication

針劑不可與 heparin 混合，會產生沉澱；也不建議與其他藥物混合。避免與任何鹼性溶液長時間接觸，會使本藥分解。

Mitomycin

D⁴ Unsafe¹

Dosage Forms

Mitomycin-C[®] 10mg/vial <CMITOM1>

Use

Gastric carcinoma, bladder cancer, lung cancer, sarcoma, leukemia

Dose

IV 10-20mg/m² q6-8w, **max: 20mg/m²**

Intravesically 20-40mg qw

Adverse Reactions

Hemolytic uremic syndrome, nephrotoxicity, myelosuppression, nausea and vomiting, fever

Precautions

需依肝腎功能調整劑量。

Mitoxantrone

D⁴ Unsafe¹

Dosage Forms

Mitoxantrone[®] 20mg/10ml/vial <CMITOXAX>

Use

Breast cancer,hepatoma,acute nonlymphocytic leukemia, multiple sclerosis

Dose

Breast cancer and lymphomas

IV 14mg/m² q3w **max: 14mg/m²**

Non-lymphoblastic leukaemia

IV 12mg/m²/day for 5 days **max: 14mg/m²**

Adverse Reactions

Myelosuppression, hepatotoxicity, vomiting, nausea, diarrhea, mucositis, alopecia

Precautions

1. 投予期間必須監視心臟功能
2. 投予後 24 小時候尿液呈藍綠色

4.1.4. Vinca Alkaloids

Docetaxel

D⁴ Unknown¹

Dosage Forms

Nolbaxol[®] 20mg/1ml/vial <CDOCET1>

Use

Breast cancer, non-small cell lung cancer, gastric cancer, head- neck cancer, prostate cancer

Dose

Breast cancer

IV 100mg/m² q3w

Non-small cell lung cancer, gastric cancer, head- neck cancer,

IV 75mg/m²

Prostate cancer

IV 75mg/m² q3w, repeat 4 cycles

Adverse Reactions

Neutropenia, GI disturbances, rash, peripheral neuropathy, systemic lupus erythematosus, Stevens-Johnson syndrome

Precautions

1. 需依肝腎功能調整劑量。
2. 建議稀釋後濃度 0.3-0.9 mg/ml，稀釋後於 25°C 下可保存 6 小時，若
在非 PVC 輸注袋在 2-8°C 下可保存 48 小時。

Etoposide

D⁴ Unsafe¹

Dosage Forms

Vepesid[®] 50mg/cap <KETOPOS>

Fytosid[®] 100mg/5ml/vial <CETOPOS>

Use

Small cell lung cancer, testicular cancer, Hodgkin's disease

Dose

Small cell lung cancer

IV 35mg/m²/day for 4 days or 50mg/m²/day for 5 days repeated 3-4 week

PO 100-200mg/m²/day for 1-5 days or 200mg/m²/day for 1st, 3rd, 5th days, repeated 3-4 week

Testicular cancer

IV 50-100mg/m²/day for 5 days

Adverse Reactions

Myelosuppression, alopecia, GI disturbances, anaphylaxis

Precautions

建議稀釋後濃度 0.2-0.4 mg/ml

Paclitaxel

D⁴ Unsafe¹

Dosage Forms

Formoxol[®] 150mg/25ml/vial <CPACLI3>

Use

Breast cancer, ovarian cancer, nonsmall cell lung carcinoma, s-related kaposi's sarcoma, Breast cancer, ovarian cancer

Dose

Ovarian cancer

IV 135-175 mg/m² over 3 hours q3w

Breast cancer

IV 175mg/m² over 3 hrs q3w

Nonsmall cell lung cancer

IV 135mg/m² over 3 hrs q3w

S-related Kaposi's sarcoma

IV 135 mg/m² over 3 hours q3w or 100 mg/m² over 3 hours q2w

Adverse Reactions

Anemia, neutropenia, alopecia, myopathy, peripheral neuropathy, hypersensitivity reaction.

Precautions

- 1.需依肝腎功能調整劑量。
- 2.不建議使用 PVC 塑膠容器及給藥組。

Contraindications

禁用對於含 polyoxyl 35 蓖麻油(純化)配方的藥品有嚴重過敏反應病史的患者

Vinblastine

D⁴ Unknown¹

Dosage Forms

Vinblastine[®] 10mg/10ml/vial <CVINBLA>

Use

Hodgkin's disease, leukemias, malignant non-Hodgkin's lymphoma

Dose

Adults: **IV** initial 3.7 mg/m², usual dose 5.5-7.4 mg/m² every 7 days; **max:** 18.5 mg/m²/dose

Adverse Reactions

Hypertension, alopecia, constipation, myelosuppression, malaise

Precautions

- 1.For IV use only
- 2.需依肝腎功能調整劑量。

Vincristine

D⁴ Unknown¹

Dosage Forms

Vincristine[®] 1mg/1ml/vial <CVINCRI>

Use

Acute lymphocytic leukaemia, malignant lymphomas, small cell lung cancer, Ewing's sarcoma, embryonal rhabdomyosarcoma, Wilm's tumour and retinoblastoma.

Dose

Children $\leq 10\text{kg}$ or $\text{BSA} > 1\text{m}^2$: **IV** 0.05mg/kg qw

Children $< 10\text{kg}$ or $\text{BSA} \geq 1\text{m}^2$: **IV** 1-2mg/m² qw

Adults: 0.4-1.4mg/m² qwk; **max: 2mg/dose**

Adverse Reactions

Alopecia, neuromyopathy, myelosuppression, nausea, vomiting

Precautions

1. For IV use only
2. 需依肝腎功能調整劑量。

Vinorelbine

D⁴ Unsafe¹

Dosage Forms

Navelbine[®] 20mg/soft cap <KVINORE>

Use

Non-small cell lung cancer, metastatic breast cancer

Dose

Monotherapy: **PO** 60mg/m²/week for 3 weeks then adjust for maintenance dose 80 mg/m²/week; **max: 120mg/week(60mg/m²);**

160mg/week(80mg/m²)

Adverse Reactions

Myelosuppression, neuromyopathy, alopecia, pancreatitis, bronchospasm

Precautions

1. 不宜以80mg/m²作為起始劑量，以免產生副作用。
2. 本品為軟膠囊(內容物為油狀，會刺激黏膜)必須整顆與冷開水服用，不可咀嚼或咬碎，並建議與食物同時併服。
3. 需冷藏。

Contraindications

1. 避免與Phenytoin 或 CYP 450 inhibitor 併用。
2. 不建議與活體稀釋疫苗及 itraconazole 混合使用。

4.1.5. Proteasome Inhibitor Miscellaneous

Asparaginase

C⁴ Unsafe⁴

Dosage Forms

Leunase[®] 10000KU(kallikrein unit)/vial(=10000U/vial) <CASPAR1>

Use

Acute lymphocytic leukemia, lymphoma

Dose

IVF 50-200ku/kg qd or qod

Adverse Reactions

Fever, nausea and vomiting, anorexia, analphylaxis, pancreatitis

Precautions

An intradermal skin test is recommended (1-10KU/0.1ml)

All-trans-retinoic acid (Tretinoin)

D¹ Unsafe¹

Dosage Forms

Vesanoid® 10mg/cap <KTRETIN>

Use

Acute promyelocytic leukemia (APL)

Dose

PO 45mg/m²/day bid

Adverse Reactions

Dry skin, mucous membrane dryness, rash, nausea, vomiting, skin irritation

Precautions

保持藥瓶密封，應避光及熱(不超過 30°C)。

Contraindications

治療時或停止治療一個月內可能懷孕之婦女禁用。

Irinotecan

D⁴ Unknown¹

Dosage Forms

Innocan® 100mg/5ml/vial <CIRINOT>

Use

Colorectal carcinoma

Dose

IV 350mg/m² q3w

Adverse Reactions

Diarrhea (early and late), alopecia, GI disturbances, neutropenia, cholinergic syndrome

Precautions

1. 需依肝腎功能調整劑量。
2. 即使患者在之前的治療週期曾經發生延遲性腹瀉也不可以預性的給予 loperamide。
3. 建議稀釋後濃度 0.12-2.8 mg/ml，稀釋後於室溫下可保存 12 小時，在 2-8°C 下可保存 24 小時。

Contraindications

禁用於慢性發炎性腸道疾病或腸阻塞之患者。

Topotecan

D⁴ Unsafe¹

Dosage Forms

Topotecan® 4mg/vial <CTOPOTE>

Use

Small cell lung cancer, ovarian cancer, cervical cancer

Dose

Small cell lung cancer, ovarian cancer

IV 1.5mg/m² for 5 days, repeat 4 cycle

Cervical cancer

IV 0.75mg/m² for first 3days

Adverse Reactions

Alopecia, GI disturbances, myelosuppression, infection, anorexia, interstitial pneumonia

Precautions

1. 需依肝腎功能調整劑量。
2. 未開封需冷藏，以 D5W 或 NS 稀釋至 0.01-0.05mg/ml，冷藏可存放 24 小時。

Thalidomide

X⁴ Unsafe¹

Dosage Forms

Thado[®] 50mg/cap <KTHALID>

Use

Erythema nodosum leprosum (ENL), multiple myeloma

Dose

Erythema nodosum leprosum

PO initial 100-300mg 1 hr after dinner or at bedtime; **max: 400mg/day**

Multiple myeloma

PO 200mg qd; **max: 400mg/day**

Adverse Reactions

Dizziness, peripheral neuropathy, edema, hypocalcemia, leucopenia, deep venous thrombosis,

Precautions

1. 簽署病患(男/女)同意書，了解此藥可能造成畸胎之危險性，服前後一個月期間應避孕。
2. 會加強 barbiturates、酒精、chlorpromazine 及 reserpine 的鎮靜作用。

4.2. Hormone Antagonists

4.2.1 Antiandrogen

Bicalutamide

X⁴ Unknown¹

Dosage Forms

Casodex[®] 50mg/tab <KBICALU>

Use

Metastatic prostate cancer (combination with GnRH analog)

Dose

PO 50mg qd

Adverse Reactions

Hot flashes, nausea, anemia, dizziness, hematuria, gynecomastia

Precautions

需依肝腎功能調整劑量。

Cyproterone

B⁴ Unknown¹

Dosage Forms

Androcur[®] 50mg/tab <KCYPR03>

Use

Prostatic carcinoma (palliative treatment)

Dose

PO initial 300mg/day bid-tid, maintenance 200-300mg/day

Adverse Reactions

Hepatotoxicity, anemia, myocardial ischemia, edema, thromboembolic disease, impotence, gynecomastia

Flutamide

D⁴ Unknown¹

Dosage Forms

Fugerel[®] 250mg/tab <KFLUTAM>

Use

Prostatic carcinoma (palliative treatment)

Dose

PO 250mg tid

Adverse Reactions

Hepatotoxicity, weight change, impotence, gynecomastia, anemia, hot flashes, fatigue

Precautions

- 1.服用本藥前四個月需每月檢測肝功能。
- 2.深色尿液(琥珀色或黃綠色)

4.2.2 Antiestrogens

Tamoxifen

D⁴ Unsafe¹

Dosage Form

Nolvadex[®] 10mg/tab <KTAMOXI>

Use

Metastatic breast cancer, adjuvant therapy after surgery for breast cancer

Dose

PO 10-20mg bid or 40mg qd

Adverse Reactions

Hot flashes, vaginal bleeding, genital itching, tumor flare, fluid retention

Precautions

停經前婦女使用本藥品,月經會受抑制

4.2.3. Gonadotropine-Releasing Hormone Analogs

Goserelin

X⁴ Unknown¹

Dosage Forms

Zoladex[®] Depot 3.6mg/syringe <CGOSERE>

Use

Prostate carcinoma, endometriosis, advanced breast cancer, thin endometrium before surgery and shrink uterine fibroids, assisted reproduction

Dose

SC 3.6mg every 28 days

Adverse Reactions

Headache, hot flashes, sexual dysfunction, bone pain, skin rash

Leuprolide depot

X⁴ Unknown¹

Dosage Forms

Leuplin[®] Depot 3.75mg/syringe <CLEUPR2>

Leuplin[®] Depot 11.25mg/syringe <CLEUPR1>

Use

Prostate carcinoma, endometriosis, central precocious puberty, premenopausal breast cancer, anemia(uterine leiomyoma, preoperatively)

Dose

Leuplin 3.75mg/vial

Central precocious puberty

SC 0.03mg/kg q4w, titrated upward in 0.09mg/kg

Endometriosis, premenopausal breast cancer, prostatic cancer

SC 3.75mg q4w

Anemia(uterine leiomyoma, preoperatively)

SC 1.88-3.75mg q4w

Leuplin 11.25mg/syringe

Prostate cancer

SC 1 syringe every 3 month

Endometriosis

SC 1 syringe every 3 month up to 2 doses

Uterine leiomyomata

SC 1 syringe as a single injection

Adverse Reactions

Amenorrhea, depression, pain, hot flashes, weight gain, nausea, vomiting, arrhythmias, edema, palpitation, dizziness, lethargy, insomnia, headache, rash

Precautions

- 1.限 SC (IV 易引起血栓症)
- 2.定期監控病人之血糖及/或糖化血紅素 (HbA1c) 以及心血管疾病之相關徵兆。
- 3.注射部位應在上臂部、腹部、臀部的皮下區，且應每次變換，勿重覆注射同一部位。

Leuprolide acetate

X⁴ **Unknown¹**

Dosage Forms

Leupron[®] 5mg/ml, 2.8ml/vial<CLEUPRO>

Use

Advanced prostate cancer (palliative treatment)

Dose

SC 1mg (0.2 ml) single dose qd

Adverse Reactions

Flushing, dizziness, headache, edema, nausea, vomiting

Precautions

需冷藏或於 25°C 以下儲存。

4.2.4. Progestins

Megestrol

X⁴ Unknown¹

Dosage Forms

Megejohn[®] 160mg/tab <KMEGES2>

Megest Oral Suspension 40mg/ml, 120ml/bot <KMEGES3>

Use

Tablet: Palliative treatment of breast and endometrial carcinomas

Suspension: 後天免疫缺乏症候群患者及癌症患者的厭食症

Dose

Tablet: **PO** 160mg qd

Suspension: **PO** 160-200mg/day (4-5ml); **max: 400mg/day (10ml)**

Adverse Reactions

Allergic rash, headache, fever, diarrhea

4.2.5. Aromatase Inhibitors

Anastrozole

D⁴ Unknown¹

Dosage Forms

Anazo[®] 1mg/FC. tab <KANASTR>

Use

Adjuvant treatment of postmenopausal early breast cancer

Dose

PO 1mg qd

Adverse Reactions

Headache, weakness, arthritis, bone pain, vaginal dryness, nausea, vomiting, diarrhea

Letrozole

D⁴ Unknown¹

Dosage Forms

Femara[®] 2.5mg/FC. tab <KLETRO>

Use

Breast cancer in postmenopausal women

Dose

PO 2.5mg qd

Adverse Reactions

Hot flushes, headache, fatigue, nausea, bone pain, back pain, cough, dyspnea

Exemestane

D⁴ Unknown¹

Dosage Forms

Aromasin[®] 25mg/S.C tab <KEXEMES>

Use

Breast cancer, advanced postmenopausal, following progression on tamoxifen therapy

Dose

PO 25mg qd

Adverse Reactions

Diaphoresis, hot flash, nausea, arthralgia, headache, insomnia, fatigue

4.3. Target therapy

4.3.1. Monoclonal Antibodies

Bevacizumab

C¹ Unsafe¹

Dosage Forms

Avastin[®] 100mg/vial <CBEVACI>

Use

Metastatic colorectal cancer, metastatic breast cancer, glioblastoma nonsquamous non-small cell lung cancer

Dose

Metastatic colorectal cancer

IV first-line: 5mg/kg q2w; second-line 10mg/kg q2w or 15mg/kg q3w

Metastatic breast cancer

IV 10mg/kg q2w

Glioblastoma

IV 10mg/kg q2w or 15mg/kg q3w

Nonsquamous non-small cell lung cancer

IV 15mg/kg q3w

Adverse Reactions

Abdominal pain, proteinuria, hypertension, hemorrhage, asthenia

Precautions

限用 NS 稀釋(稀釋後濃度 1.4-16.5mg/ml)。

Cetuximab

C⁴ Unsafe¹

Dosage Forms

Erbix[®] 100mg/20ml/vial<CCETUX2>

Use

Metastatic colorectal cancer, metastatic or recurrent squamous cell head and neck cancer

Dose

IV initial 400mg/m², loading dose 250mg/m² weekly

Adverse Reactions

Acneiform eruption, hypomagnesemia, infusion-related reaction, increase in liver enzyme levels

Precautions

原液給藥，限用 NS flush set

Pertuzumab

D⁴ Unknown¹

Dosage Forms

Perjeta[®] 420mg/vial<CPERTUZ>

Use

Metastatic breast cancer, HER2 overexpression, first-line, in combination with trastuzumab and docetaxel

Dose

IV initial 840mg (infusion time :60min), then 420mg q3w (infusion **time:** 30-60min)

Adverse Reactions

Diarrhea, alopecia, neutropenia, nausea, fatigue, neuropathy

Precautions

1. 本品需自費、需冷藏，由化療室調配
2. 以 250ml NS 溶液稀釋，禁用 D5W 溶液稀釋，配製後於 2-8°C 下可存放 24 小時。
3. 限以靜脈輸注給藥，不可靜脈推注或快速灌注給藥。
4. Pertuzumab、Trastuzumab、Docetaxel 應依序給藥，每次輸注後及任一藥物輸注前建議觀察 30-60 分鐘。

Rituximab

C¹ **Unsafe¹**

Dosage Forms

Mabthera[®] 100mg/10ml/vial <CRITUXI>

Mabthera[®] 500mg/50ml/vial <CRITUX5>

Use

Non-Hodgkin's lymphoma(low-grade, diffuse and follicular B-cell.), chronic lymphoid leukemia, rheumatoid arthritis

Dose

Non-Hodgkin's lymphoma

IV induction: 375mg/m² q3w for 4-8wks; relapsed or refractory: 375mg/m² weekly for 4-8 doses; maintenance: 375mg/m² every 8 weeks for 12doses

Chronic lymphoid leukemia

IV 375mg/m² and 500 mg/m² for all subsequent cycles (2 to 6)

Rheumatoid arthritis

IV 500-1000mg/day followed by a second 500-1000 mg 2 weeks later

Adverse Reactions

Peripheral edema, pruritus, anemia, fever, infusion reaction

Trastuzumab

B¹ **Unknown¹**

Dosage Forms

Herceptin[®] 440mg/vial <CTRASTU>

Use

HER2 over expression: adjuvant breast cancer, metastatic breast cancer, metastatic gastric cancer

Dose

IV loading dose is 4mg/kg, subsequent doses 2mg/kg qw; or loading dose is 8mg/kg, subsequent doses 4mg/kg q3w.

Adverse Reactions

Gastrointestinal disturbances, neutropenia, infectious disease, infusion reaction, cardiomyopathy, pulmonary toxicity

Precautions

限用 NS 稀釋。

4.3.2. Protein-Tyrosine Kinase Inhibitors

Afatinib

D⁵ Unknown³

Dosage Forms

Giotrif 30mg/tab <KAFATI3>

Giotrif 40mg/tab <KAFATI4>

Use

Non-small cell lung cancer

Dose

PO 40mg QDAC; max:50mg/day

Adverse Reactions

Diarrhea, stomatitis, rash, decrease appetite, paronychia

Precautions

- 1.不可在服藥前3小時內進食或服藥後1小時內進食；需整粒吞服
- 2.無法吞服整粒錠劑，可將藥錠放入100ml飲用水(非碳酸類)中崩散，攪拌直到錠劑崩散成極小的顆粒(約15分鐘)後立即飲用，再以100ml水沖洗杯緣並喝下
- 3.治療期間及使用最後一劑藥物後至少兩週內應採取適當避孕措施
- 4.須曬太陽的病患建議穿著保護衣物或使用防曬乳

Axitinib

D⁵ Unknown³

Dosage Forms

Inlyta[®] 1mg/tab <KAXITIN>

Use

Treatment of advanced renal cell carcinoma after failure of one prior systemic therapy

Dose

PO 5mg q12h; max:10mg q12h

Adverse Reactions

Diarrhea, hypertension, fatigue, decreased appetite, nausea

Precautions

- 1.欲進行手術，應停用 Inlyta 治療至少 24 小時
- 2.須依肝腎功能調整劑量

Crizotinib

D⁵ Unknown³

Dosage Forms

Xalkori[®] 250mg/cap <KCRIZOT>

Use

Treatment of patients with metastatic non-small cell lung cancer whose tumors are anaplastic lymphoma kinase (ALK)-positive

Dose

PO 250mg bid; max: 500mg/day

Adverse Reactions

Visual disturbance, vomiting, nausea, diarrhea, constipation

Precautions

- 1.膠囊應整粒吞服，不可壓碎、溶解或打開。
- 2.避免食用葡萄柚或葡萄柚汁，可能造成藥物濃度增加；避免使用聖約翰草，可能降低藥物濃度。
- 3.須依肝腎功能調整劑量。
- 4.治療期間應避孕，完成治療後亦應避孕至少 90 天。

Dasatinib

D⁴ Unsafe¹

Dosage Forms

Sprycel[®] 50mg/tab<KDASATI>

Use

Chronic myeloid leukemia(blastic, accelerated, chronic phase), acute lymphoid leukemia, philadelphia chromosome-positive

Dose

Chronic phase chronic myeloid leukemia

PO 100mg qd, escalate dose to 140mg/day

Chronic myeloid leukemia(blastic, accelerated phase)

PO 140mg qd, escalate dose to 180mg/day

Acute lymphoid leukemia

PO 140mg qd, escalate dose to 180mg/day

Adverse Reactions

Abdominal pain, headache, musculoskeletal pain, dyspnea, body fluid retention, myelosuppression

Precautions

- 1.本品不可磨碎切割，整粒吞服
- 2.與 CYP3A4 inducer 或 CYP3A4 inhibitor 併用會影響本品濃度。如需併用制酸劑，應在給與 dasatinib 之前或之後至少 2 小時給藥

Contraindications

不建議與 H2 blocker 或 PPI 併用。

Erlotinib

D⁴ Unknown¹

Dosage Forms

Tarceva[®] 150mg/tab <KERLOTI>

Use

Non-small cell lung cancer

Dose

Adults: **PO** 150mg qd AC

Adverse Reactions

Rash, diarrhea, loss of appetite, nausea, vomiting, conjunctivitis, keratoconjunctivitis sicca, fatigue

Precautions

- 1.服藥期間避免食用葡萄柚或葡萄柚汁。
- 2.需依肝腎功能調整劑量。

Gefitinib

D⁴ Unsafe¹

Dosage Forms

Iressa[®] 250mg/tab <KGEFITI>

Use

Non-small cell lung cancer

Dose

Adults: **PO** 250mg qd AC

Adverse Reactions

Anorexia, nausea, vomiting, acne, dry skin, pruritus, asthenia, diarrhea

Precautions

間質性肺病(ICD)應停用

Imatinib

D⁴ Unsafe¹

Dosage Forms

Glivec[®] 100mg/F.C tab <KIMATIN>

Use

Chronic myelogenous leukemia, gastrointestinal stomach tumors, dermatofibrosarcoma protuberans (DFSP)

Dose

PO 400-600mg qd, **max: 800 mg/day**

Adverse Reactions

Fluid retention, headache, fatigue, fever, rash, hypokalemia, nausea, vomiting, dyspepsia, abdominal pain, weight gain, hematologic toxicity

Precautions

需依肝腎功能調整劑量

Lapatinib

D⁴ Unknown¹

Dosage Forms

Tykerb[®] 250mg/tab <KLAPATI >

Use

Advanced or metastatic breast cancer, HER2 overexpression, in combination with capecitabine after prior

Dose

Combination with capecitabine

PO 1250mg/day (5table/day) AC

Adverse Reactions

Loss of appetite, depression of left ventricular systolic function, diarrhea, nausea, vomiting, rash, fatigue

Precautions

- 1.患者有間質性肺疾/肺炎症狀且LVEF 功能下降至第3級時需停藥，兩週後待LVEF 回復正常值時得以低劑量(1000mg/day)重新開始使用。
- 2.服藥期間應避免同時使用葡萄柚汁。
- 3.需依肝腎功能調整劑量。

Pazopanib

Unknown¹

Dosage Forms

Votrient[®] 200mg/FC. tab <KPAZOPA>

Use

Renal cell carcinoma

Dose

PO 800mg QDAC (at least 1 hour before or 2 hours after a meal), max: 800mg/day

If a dose is missed, it should not be taken if it is less than 12 hours until the next dose

初次劑量調降時應調整為 400mg，接續的劑量減少或增加應根據個別患者的耐受性，每次調整 200mg，劑量不應超過 800 mg。

Adverse Reactions

Diarrhea, hypertension, hair color changes, nausea, anorexia

Precautions

1. 請勿壓碎藥錠
2. 治療期間頭髮或皮膚可能發生色素脫失
3. 如有眼白與皮膚泛黃、不尋常深色尿液、異常疲倦、右上腹疼痛等症狀時應立即通知醫療人員。

Regorafenib

D³ Unknown¹

Dosage Forms

Stivarga[®] 40mg/tab <KREGORA>

Use

Metastatic colorectal cancer, gastrointestinal stromal tumor

Dose

PO 160mg QD for the first 21 days of each 28-day cycle, continue until disease progression or unacceptable toxicity

Adverse Reactions

Fatigue, hand-foot skin reaction, diarrhea, appetite decreased, hypertension

Precautions

1. 藥品開封後請旋緊瓶蓋，開瓶 7 週後，請將瓶中未使用藥物丟棄。
2. 服用時請整粒吞服，並配合低脂飲食(脂肪含量低於 30%)。
3. 請勿為了補足前一天忘記服用藥量，於同一日服用兩倍劑量
4. 治療期間及治療完成後 2 個月以上，需採取有效避孕措施。

Sorafenib

D³ Unsafe³

Dosage Forms

Nexavar[®] 200mg/cap<KSORAFE>

Use

Liver carcinoma, renal cell carcinoma

Dose

PO 400mg bid AC

Adverse Reactions

Alopecia, hand-foot syndrome, rash, diarrhea, hypophosphatemia, abdominal pain, increased amylase or lipase level, fatigue

Precautions

本品會導致 Doxorubicin 之 AUC 增加，併服時須謹慎小心。

Sunitinib

D⁴ Unsafe¹

Dosage Forms

Sutent[®] 12.5mg/cap <KSUNITI>

Use

Gastrointestinal stromal tumor, renal cell carcinoma

Dose

PO 50mg qd with a cycle of 4 weeks on followed by 2 weeks off

Adverse Reactions

Left ventricular dysfunction, bleeding, thrombocytopenia, discoloration of skin, hypothyroidism

Precautions

服藥期間避免食用葡萄柚或葡萄柚汁。

4.3.3. Proteasome Inhibitor

Bortezomib

D⁴ Unsafe¹

Dosage Forms

Velcade[®] 3.5mg/vial<CBORTEZ>

Use

Multiple myeloma, mantle cell lymphoma

Dose

IV 1.3 mg/m² twice a week(in day1, 4, 8, 11, 22, 25, 29, and 32) for 1-4 cycles, followed by 1.3 mg/m² once a week(in day 1, 8, 22, 29, and 32) for 5-9 cycles; consecutive doses should be separated ≥ 72 hr

Adverse Reactions

Neuropathy, nausea, vomiting, thrombocytopenia, fever, weakness

Precautions

需依肝腎功能調整劑量；血液透析患者，洗腎後給藥。

4.3.4. mTOR Kinase Inhibitor

Temsirolimus

D⁴ Unknown⁴

Dosage Forms

Torisel[®] 稀釋後：30mg/3ml/vial；<CTEMSIR >

未稀釋：含藥液 25mg/ml, 1.2ml/vial 及稀釋液 1.8ml/vial

Use

Renal cell carcinoma, mantle Cell Lymphom

Dose

Renal cell carcinoma

IVF(over 30-60 min) 25mg weekly

Mantle Cell Lymphoma

IVF(over 30-60 min) 175mg weekly for 3 wks, followed by 75mg weekly.

Adverse Reactions

Rash, asthenia, inflammatory disease of mucous membrane, hyperglycemia, serum cholesterol raised

Precautions

- 1.投藥前須監測 ANC 及 platelet，開始使用後須每週監測，當病人 ANC<1000/mm³ 且 platelet<75000/mm³ 時需停藥。
- 2.需依肝腎功能調整劑量。
- 3.不建議使用 PVC 塑膠容器及給藥組。

Everolimus

D³ Unknown¹

Dosage Form

Afinitor[®] 5mg/tab <KEVERO1 >

Certican[®] 0.25mg/tab <KEVEROL >參閱 p.99

Use

Treatment of advanced renal cell cancer (RCC) after sunitinib or sorafenib failure

Dose

PO 10mg qd

Adverse Reactions

Leukopenia, hyperlipidemia, anemia, edema, stomatitis, infections, asthenia, fatigue, cough, diarrhea

Precautions

- 1.須避光儲存，易吸濕須整粒吞服，不可壓碎或撥半，對於無法吞服患者，應將藥錠溶於一杯水(約 30ml)中，立即喝下。
- 2.治療期間應避免接受活疫苗注射或與接種活疫苗的人緊密接觸。
- 3.健保規定須需經事前審查核准後使用。
- 4.肝功能不全應調整劑量。
- 5.高脂肪性食物會降低藥品濃度、葡萄柚汁易導致血中濃度增加。

4.4. Antineoplastic Miscellaneous

Concentrated fermented soy milk

Unknown¹

Dosage Forms

Chemo young[®] oral solution 210ml/bot <KCHEMOY>

Use

Improve cancer patient's fatigue and anorexia

Dose

PO 8ml/day in 2 divided dose, before meal

Adverse Reactions

Constipation, diarrhea

Precautions

- 1.藥品以 100ml 溫開水稀釋後服用，使用後需多喝水
- 2.本品為精密濃縮液，瓶口或瓶底產生之固體結晶為自然現象，以溫開水沖泡即可飲用
- 3.藥品開封後可存放一個月

Drug eluting microsphere

Dosage Forms

HepaSphere® 30-60um, 25mg/vial <CHEPAS1>

Use

Embolisation of vessels supplying malignant hypervascularised tumour, delivery of a local, controlled, sustained dose of doxorubicin to the tumor.

Dose

TACE 1 vial as order for loading doxorubicin, **max. concentration: 5mg/ml** (doxorubicin)

Adverse Reactions

Non-target embolisation, ischaemic infarction, infection

Precautions

3. 不可直接於乾燥狀態時使用、不可使用注射用水配置、勿使用 lipidol 或 ethiodol 還原栓塞微球體
4. 配置後如未立即使用，還原之栓塞微球體溶液應存放於 2-8°C，於 24 小時內使用。如加入顯影劑後微球體溶液則不繼續存放

Contraindications

Vasospasm, heamorrhage, severe atheromatous disease, intracranial anastomosis or shunts

Mesna

B⁴ Unknown¹

Dosage Forms

Uromitexan® 400mg/4ml/amp <CMESNA>

Siruta® 200mg/ml,3ml/amp <WMESNA>參閱 p.326

Use

Prevention of urothelial toxicity of oxazaphosphorines (ifosfamide or cyclophosphamide)

Dose

IV ifosfamide, 20% of ifosfamide dose at the time of ifosfamide and at 4 hrs, 8 hrs after each dose of ifosfamide.

Adverse Reactions

Nausea, vomiting, headache, pain in limb, fatigue

Precautions

本品可能會引起 ketone bodies 呈現偽陽性。

Polysaccharide-K (Kawartake)

Dosage Forms

Krestin® 1g/sacket <KPOLYSA>

Use

Digestive system cancer(gastric cancer, esophageal cancer, colon cancer, rectal cancer)

Dose

PO 3g/day in divided doses

Adverse Reactions

Nausea, vomiting, diarrhea, stomach cramping, constipation

Picibanil® (OK-432)

Dosage Forms

1vial: Penicillin G potassium 13470U+Streptococcus pyrogene Su strain tx with PN G potassium 0.5mg, 5KE/vial <CPICIBA>

Use

Digestive organ cancer (gastric cancer, liver cancer, bile duct cancer, colorectal cancer), head and neck cancer (maxillary cancer, Laryngeal, cancer, pharyngeal cancer, tongue cancer), thyroid cancer, lung cancer

Dose

IV 0.2-1KE 2-3times per week and the dose should gradually increased stepwise; maintenance: 1-3KE 2-3 times weekly

IM/SC 0.2-0.5KE qd or qod at first then gradually increased stepwise after 3-5 time; maintenance: 1-5KE 1-3 times weekly

Intratumor 5-10KE daily or several days once

Intracavitary 5-10KE, 2-3 times/wk

Adverse Reactions

Leukocytosis, chest pain, headache, nausea, vomiting, skin abscess

Precautions

需冷藏儲存。

Trastuzumab emtansine

D⁴ Unknown⁴

Dosage Forms

Kadcyla[®] 100mg/vial <CTRAST1>

Kadcyla[®] 100mg/vial <CTRAST2>

Use

Brest cancer

Dose

IVF

3.6mg/kg every 3 weeks until disease progression or unacceptable toxicity;

max. dose: 3.6 mg/kg

Adverse Reactions

Nausea, fatigue, musculoskeletal pain, thrombocytopenia, increased serum transaminases

Precautions

- 1.首次輸注時間須超過 90 分鐘，後續輸注時間須超過 30 分鐘。
- 2.配製：5ml 或 8ml 注射用水加入 100mg/vial 或 160mg/vial 小瓶中，不可搖晃，配置後於 2-8°C 可保存 24 小時。
- 3.稀釋：不可使用 D5W，取出所需量將之加入 250ml 的 NS 輸注袋內，稀釋後於 2-8°C 可保存 24 小時。

5. Biologic and Immunologic Agents

5.1. Vaccines-virus

自費疫苗

本院品項	Dosage Forms <藥品代碼>	Dose	備註
Hepatitis A vaccine VAQTA®	25U/0.5ml/vial <CHEPAT1>	IM 嬰幼兒/青少年：1st dose(0.5ml) at 12 to 23 months, the 2nd doses should be separated by 6 to 18 months >19yrs 成人：1ml with a booster dose, then 1ml to be given 6-18 months after primary immunization	懷孕分級:C ⁴ 哺乳: Unknown ¹ Inactive vaccine
Hepatitis B vaccine Engerix-B®	20mcg/ml/vial <CHEPAT6>	IM in deltoid region, 3 dose at 0, 1, 6 month Children: 10mcg/dose >20yr Adults: 20mcg/dose	懷孕分級:C ⁴ 哺乳: Unknown ³ Inactive vaccine
Influenza virus vaccine Vaxigrip®	0.25ml/syringe <CINFLU1> 0.5ml/syringe <CINFLU2>	IM Children: 0.25ml/dose Adults: 0.5ml/dose	懷孕分級:C ¹ 哺乳: Safe ¹ Inactive vaccine
Pneumococcal vaccine polyvalent Pneumovax® 23	0.5ml/vial <CPNEUMO>	IM/SC Children>2 years and Adults: 0.5ml	懷孕分級:C ¹ 哺乳: Unknown ¹ Inactive vaccine

本院品項	Dosage Forms <藥品代碼 >	Dose	備註
Pneumococcal 13-valent conjugate vaccine Prevenar 13 [®]	0.5ml/vial <CPNEUM1>	IM Infant 2-6mon: 4 dose, 接種 4 劑 7-11mon: 3 dose, 接種 3 劑 12-23mon: 2 dose, 接種 2 劑 Children 2-5yrs: single dose, 接種 1 劑	懷孕分級: C ¹ 哺乳: Unknown ¹ Inactive vaccine 不可靜脈輸注
Varicella virus vaccine Varilrix [®]	0.5ml/vial <CVARICE1>	SC Children (12months to 12 years): 0.5ml Children (>12 years) and Adults: 2 dose of 0.5ml separated by 4-8 weeks	懷孕分級: C ³ 哺乳: Unknown ¹ Live vaccine
Zoster virus vaccine Zostavax [®]	0.65ml/vial <CZOSTER>	SC Adults ≥50 years: 0.65 ml administered as a single dose	懷孕分級: Unknown ⁵ 哺乳: Unknown ³ Live vaccine
Quadrivalent human papillomavirus Gardasil [®]	0.5ml/vial <CHPV>	IM 0.5 mL × 3 doses at 0, 2, and 6months	懷孕分級: B ¹ 9-26 歲女性之預防人類乳突病毒四型 (type 6,11,16,18)所引起子宮頸、陰道、外陰部癌前期或病變、生殖器疣 Inactive vaccine

本院品項	Dosage Forms <藥品代碼 >	Dose	備註
Human Papillomavirus Vaccine Types16/18 Cervarix [®]	0.5ml/vial <CHPV1>	IM 0.5 ml/dose, three dose given on 0, 1, and 6 months	懷孕分級:Unknown ¹ 哺乳:Unknown ¹ 10歲至25歲的女性預防致癌性人類乳突病毒(HPV)第16型與第18型所引起的偶發性及持續性感染、與子宮頸上皮內贅瘤、及癌前病變，從而預防子宮頸癌。 Inactive vaccine
Rotavirus vaccine Rotarix [®]	1.5ml/syringe <KROTAVI>	PO 1 ml × 2 doses at 6-24 weeks	本品於6-16wks接種第一劑，兩劑間格至少4wks，第二劑於24wks內完成。 Live vaccine
Tetanus and diphtheria toxoids adsorbed vaccine Adacel [®]	0.5ml/vial <CDPT03>	IM Children>4yrs and adult: 0.5ml	1.冷藏於2-8°C，不可冷凍 2.三合一補追疫苗。 Inactive vaccine

肺炎球菌疫苗比較表格

學名/商品名	Pneumococcal 13-valent conjugate vaccine Prevenar 13 [®]	Pneumococcal vaccine polyvalent Pneumovax [®] 23
Dosage Forms <藥品代碼>	0.5ml/vial <CPNEUM6>	0.5ml/vial <CPNEUMO>
衛生署核准適應症	預防莢膜血清型(1, 3, 4, 5, 6A, 7F, 9V, 14, 18C, 19F, 23F)的肺炎鏈球菌所引起的侵入性疾病	預防肺炎鏈球菌性肺炎及肺炎鏈球菌性菌血症
用法/用量	IM 2-6 個月大的嬰兒接種 4 劑，7-11 個月大的嬰兒接種 3 劑，12-23 個月大的嬰兒接種二劑，2-5 歲接種一劑	IM 大於 2 歲兒童及成人使用
備註	1. 2-8°C 冷藏 2. 懷孕分級: C ¹ , 哺乳: Unknown ¹	1. 2-8°C 冷藏 2. 懷孕分級: C ¹ , 哺乳: Unknown ¹

註：疫苗不可混合(加在一起)施打，且須於不同部位施打。

公費疫苗

疫苗種類	適合年齡	本院品項	Dosage Forms <藥品代碼>	Dose	
B型肝炎免疫球蛋白	出生24小時內	Hepatitis B immune globulin(HBIG) HBIG®	0.5ml/vial <CHEPAT9>	IM 0.5ml	
B型肝炎疫苗	第一劑	Hepatitis B vaccine Engerix-B®	20mcg/ml/vial <CHEPAT11>常規 <CHEPAT12>高危險群追加	IM Children: 10mcg/dose	
	第二劑				出生滿一個月
	第三劑				出生滿六個月
卡介苗	第一劑	B.C.G vaccine BCG® vaccine	0.1ml/dose <CBCG1>	SC 0.1ml	
	追加				國小六年級普查測驗陰性之學童
白喉、百日咳、破傷風、不活化小兒麻痺混合疫苗	追加	Diphtheria, Tetanus, Pertussis and Polio vaccine Adacel®	0.5ml/vial <C4IN1>	IM 0.5ml	
麻疹疫苗	出生滿九個月	Measles vaccine (MV) Rouvax®	0.5ml/vial <CMEASL1>	SC 0.5ml	
德國麻疹混合、腮腺炎、麻疹疫苗	出生滿一年三個月	Measles, Mumps and Rubella vaccine MMRII®	0.5ml/vial <CMMR>	SC 0.5ml	
日本腦炎	第一劑	Japanese encephalitis vaccine (JE) Japanese encephalitis vaccine®	1ml/amp <CJAPANE>	SC 1-3 yrs: 0.5ml ≥3yrs : 1ml	
	第二劑				出生滿一年三個月
	第三劑				隔二週
	追加				出生滿二年三個月 國小一年級

5.2. Toxoids

Tetanus toxoid

C³ Unknown¹

Dosage Forms

Tetanus toxoid® 10LF/ml, 1ml/vial <CTETAN2>

Use

Selective induction of active immunity against tetanus in selected patients

Dose

IM/SC: 0.5ml × 2 times at 4-8 wks interval

Booster dose: 0.5ml every 6-12 months or in case of injury

Adverse Reactions

Fever, flushing, urticaria, tachycardia, hypotension, anaphylaxis, local redness

Precautions

需於 2-8°C 冷藏儲存，開封後於 24 小時內使用完畢。

5.3. Antitoxins and Antivenins

C⁴ Unknown¹

Dosage Forms

學名	商品名	藥品代碼	蛇毒屬性
Antivenin of A. acutus	抗百步蛇毒血清 1dose/vial	<CANTI03>	Hemorrhagic and Neurotropic
Antivenin polyvalent hemorrhagic	抗龜殼花、赤尾鮎蛇毒 血清 1dose/vial	<CANTI04>	Hemorrhagic
Antivenin polyvalent neurotropic	抗雨傘節、飯匙倩蛇毒 血清 1dose/vial	<CANTI05>	Neurotropic

Use

Treatment of snakebite

Dose

With systemic symptoms

IM/IV/SC

Children: double dose, repeated doses every 0.5-2hrs as needed until systemic symptoms improved

Adults: 1dose, repeated doses every 0.5-2hrs as needed until systemic symptoms improved

Bite time ≤ 2 hrs and no systemic symptoms

1/2 dose SC around wound, 1/2 dose IM

Bite time >2 hrs or with systemic symptoms

Majority of the dose administered by IV

(Note: First 1ml of IV dose should be given over 5 mins then followed with a infusion rate <1ml/min, remainder dose administered by SC around wound)

Adverse Reactions

Anaphylaxis, chills, fever, urticaria, arthralgia, arthus reaction

Precautions

- 1.需於 2-8°C 冷藏儲存
- 2.血清過敏性檢查:以 NS 稀釋 100 倍之抗蛇毒血清 0.1ml SC 於前臂, 30mins 後局部輪狀浮腫,周圍紅暈為陽性反應。

5.4. Immune Globulins

Antithymocyte immunoglobulin (rabbit)

C³ Unknown³

Dosage Forms

Thymoglobulin[®] 25mg/vial <CANTI02>

Use

Prophylaxis and treatment of transplant acute graft rejection, aplastic anemia

Dose

IVD (infusion rate \geq 4hrs)

Prophylaxis of acute graft rejection

1-1.5mg/kg/day for 2-9 days after transplantation of kidney, pancreas or liver

1-1.5mg/kg/day for 5 days after heart transplantation.

Treatment of acute graft rejection

1.5mg/kg/day for 3-14 days

Prophylaxis of acute and chronic graft versus host disease

2.5mg/kg/day 由移植前 4 天至移植前 2 或 1 天

Treatment of steroid-resistant, acute graft versus host disease

劑量依個體而定，usually between 2-5mg/kg/day for 5days

Aplastic anemia

2.5-3.5mg/kg/day for 5 consecutive days.

Adverse Reactions

Fever, chills, headache, rash, hyperkalemia, abdominal pain, diarrhea, leucopenia, thrombocytopenia, weakness, dyspnea, systemic infection, pain

Precautions

- 1.本品需於 2-8°C 冷藏儲存。
- 2.本品乾粉以 Dis-water 溶解，以 NS 或 D5W 稀釋，使輸注溶液體積達 50-500ml (通常 50ml/vial)。
- 3.稀釋後於 20°C 可存放 24 小時。
- 4.Monitoring parameters: lymphocyte profile, CBC with differential and platelet count, vital signs during administration

Cytomegalovirus immune globulin (human)

C³ Unknown¹

Dosage Forms

Cytotec[®] 2500IU/50ml/bot <CCYTOME>

Use

Prophylaxis of cytomegalovirus (CMV) disease associated with kidney, lung, liver, pancreas, heart transplants

Dose

Prophylaxis

IV 1ml/kg single dose, total 6 single DS should be given q3w

Treatment

IV 2ml/kg single dose qod until the clinical symptoms subside; **max infusion rate: 20 drops/min**

Adverse Reactions

Flushing, fever, chills, nausea, vomiting, arthralgia, back pain, muscle cramps, wheezing

Precautions

需於 2-8°C 冷藏儲存。

Contraindications

Immunoglobulin A deficiency

Hepatitis B immune globulin (HBIG)

C¹ **Unknown¹**

Dosage Forms

HyperHep B S/D[®] 0.5ml/vial <CHEPAT9>

HyperHep B S/D[®] 5ml/vial <CHEPAT4>

Hepatect[®] CP 500IU/10ml/vial <CHEPAT5>

Use

Provide prophylactic passive immunity to hepatitis B infection

Dose

HyperHep B S/D[®]

Postexposure prophylaxis of neonates born to HBsAg-positive

IM 0.5ml IM within 12 hrs after birth

Hepatitis prophylaxis, postexposure

IM 0.06 ml/kg IM within 24 hrs of percutaneous or permucosal exposure and within 14 days of sexual exposure

Hepatect[®] CP

IVD

In the anhepatic phase: 10,000 IU (200 ml).

On OP days 1-7: 2,000 IU (40ml)/day. **Max:1 ml/kg/hr.**

Adverse Reactions

Erythema at injection site, pain at injection site, headache, myalgias, malaise, nausea, vomiting, joint stiffness

Precautions

需於 2-8°C 冷藏儲存

Contraindications

Allergies to gamma globulin or anti-immunoglobulin antibiotics; allergies to thimerosal, IgA deficiency

Immune globulin (Human) (IVIG)

C¹ **Unknown¹**

Dosage Forms

Human Immune globulin for intravenous[®] 3g/50ml/vial <CIMMU04>

Use

Treatment of primary immunodeficiency syndromes, prevention of

bacterial infection in B-cell chronic lymphocytic leukemia (CLL), pediatric HIV infection, bone marrow transplant (BMT)

Dose

Immunodeficiency disease

IV Children and adults: 200-400mg/kg once monthly

Idiopathic thrombocytopenia purpura

IV Children and adults: 400mg/kg/day for 5 days

Kawasaki disease

1-2g/kg for one dose

Adverse Reactions

Flushing, angioedema, chills, lethargy, fever, urticaria, erythema, nausea, vomiting

Precautions

需於 2-8°C 冷藏儲存。

Gammaglobulin

C³ Safe¹

Dosage Forms

Rho (D) Immune Globulin (Human) Hyperrho S/D Full Dose[®]
165mg/ml/syringe <CRHOD>

Use

預防因配偶間 RH 因子不同而導致之流產及初生兒夭折

Dose

Postpartum prophylaxis

IM 165mg preferably within 72 hrs of delivery

Antepartum prophylaxis

IM 165mg at 26-28 wks gestation and 165mg within 72 hrs after an Rh-incompatible delivery to prevent Rh isoimmunization during pregnancy

Adverse Reactions

Hypotension, pallor, vasodilation, chills, dizziness, fever, headache, diarrhea somnolence, pruritus, rash, abdominal pain

Precautions

需於 2-8°C 冷藏儲存。

Contraindications

Not use in neonates

Tetanus Immune Globulin (TIG)

C⁴ Unknown¹

Dosage Forms

HyperTet S/D[®] 250U/syringe <CTETAN4>

Use

Prophylaxis or treatment of tetanus

Dose

Deep **IM** only

Prophylaxis

Adults and children ≥ 7 yrs: 250U as single dose

Children <7 yrs: 4 U/kg or 250U

Treatment

500-6000U as a single dose

Adverse Reactions

Injection site pain, fever

Precautions

- 1.本品須於 2-8°C 儲存。
- 2.不可以 IV 給予。

5.5. Immunologic Agents

Abatacept

C⁴ Unknown¹

Dosage Form

Orencia[®] 250mg/vial<CABATAC>

Use

Rheumatoid arthritis, juvenile idiopathic arthritis(JIA)

Dose

Juvenile idiopathic arthritis(JIA)

6-17yrs children, and BW<75kg: 10mg/kg, repeat dose at 2 weeks and 4 weeks after initial infusion, and every 4 weeks thereafter

≥ 75-100kg: 750mg (3vial)

>100 kg: 1000 mg (4vial)

Rheumatoid arthritis

<60 kg: 500 mg (2vial)

60-100 kg: 750 mg (3vial)

>100 kg: 1000 mg (4vial)

Following the initial IV infusion, repeat dose at 2 weeks and 4 weeks after initial infusion, and every 4 weeks thereafter

Adverse Reactions

Headache, upper respiratory tract infection, nasopharyngitis, nausea

Precautions

- 1.不可與其他治療類風濕性關節炎之生物製劑同時使用
- 2.未開封需冷藏於 2-8°C
- 3.使用前需以 10ml 注射用水配製(使用內附之不含矽膠的注射筒)，再以 NS 稀釋至 100ml。配製後可於室溫或 2-8°C 下保存，並於 24 小時內使用完畢。

Contraindications

嚴重或無法控制的感染，包括敗血症或伺機性感染、急性病毒性肝炎、肺結核、擴散性結核

Adalimumab

B⁴ Unsafe¹

Dosage Form

Humira[®] 40mg/0.8ml/syringe, 2syringe/box <CADALIM>

Use

Rheumatoid arthritis, psoriasis with arthropathy

Dose

SC 40mg every other week

Adverse Reactions

Hypertension, injection site reaction, rash, antibody development, antinuclear antibody positive, headache

Azathioprine

D¹ Unsafe²

Dosage Form

Asazipam[®] 50mg/tab <KAZATHI>

Use

Rheumatoid arthritis, prophylaxis of kidney transplant rejection

Dose

Prophylaxis of kidney transplant rejection

PO initial 3-5mg/kg/day, maintenance 1-3mg/kg/day

Rheumatoid arthritis

PO initial 1mg/kg/day qd-bid, maintenance 1-2.5mg/kg/day qd-bid

Adverse Reactions

Nausea, vomiting, hepatotoxicity, infection, leukopenia, pancreatitis

Precautions

Chronic immunosuppression increases risk of neoplasm, monitor hematologic function and mutagenicity, caution liver disease, renal impairment

Basiliximab

B² Unknown²

Dosage Form

Simulect[®] 20mg/vial <CBASIL>

Use

Prophylaxis of acute organ rejection in renal transplantation

Dose

IVF

Children <35 kg: 2 doses of 10mg each, first dose within 2 hrs prior to transplant, second dose 4 days after transplant; withhold second dose if complications occur

Children ≥35 kg and Adults: 2 doses of 20mg each, first dose within 2 hrs prior to transplant, second dose 4 days after transplant; withhold second dose if complications occur

Adverse Reactions

Abdominal pain, vomiting, dizziness, asthenia, insomnia, candidiasis, cough, dyspnea, fever

Precautions

本品泡製後溶液於 2-8°C 可保存 24hrs，常溫下可保存 4hrs。

Cyclosporine

C¹ Unsafe²

Dosage Form

Sandimmun[®] Inj. 50mg/1ml/amp <CCYCLOS>

Sandimmun Neoral[®] 25mg/cap <KCYCL01>

Sandimmun Neoral[®] 100mg/cap <KCYCL02>

Sandimmun Neoral Soln[®] 100mg/ml,50ml/bot <KCYCL03>

Restasis[®] oph emulsion 0.05% 0.4ml/vial, 30vial/box <WCYCLOS>

參閱 p.283

Use

Organ transplant rejection, rheumatoid arthritis, psoriasis

Dose

Prophylaxis of rejection in kidney, liver or heart transplantation

IV 5-6mg/kg/day q4-12h before transplant continue same initial dose as daily dose until patient can tolerate oral formulation.

PO Initial 15mg/kg/day given 4-12 hrs before transplantation and continued for 1-2 wks. Taper the dosage by about 5% weekly to a maintenance dosage of 5-10mg/kg/day

Rheumatoid arthritis

PO 2-5mg/kg/day

Psoriasis

PO 2-5mg/kg/day

Adverse Reactions

Ocular burning, hypertension, nephrotoxicity, headache

Precautions

Dose-related raise of nephrotoxicity and hepatotoxicity, monitor blood pressure and serum creatinine after any cyclosporine dosage changes or addition, modification or deletion of other medications

Everolimus

D⁵ Unknown¹

Dosage Form

Afinitor[®] 5mg/tab <KEVERO1>參閱 p.85

Certican[®] 0.25mg/tab <KEVEROL>

Use

Heart and kidney transplant rejection prophylaxis

Dose

PO 0.75mg bid should be administered as soon as possible after transplantation. (level: 3-8ng/ml)

Adverse Reactions

Leukopenia, hyperlipidemia, anemia, edema, stomatitis, infections, asthenia, fatigue, cough, diarrhea

Precautions

1. 須避光儲存，易吸濕須整粒吞服，不可壓碎或撥半，對於無法吞服患者，應將藥錠溶於一杯水(約 30ml)中，立即喝下。
2. 治療期間應避免接受活疫苗注射或與接種活疫苗的人緊密接觸。
3. 健保規定須需經事前審查核准後使用。
4. 肝功能不全應調整劑量。
5. 高脂肪性食物會降低藥品濃度、葡萄柚汁易導致血中濃度增加。

Golimumab

B⁴ Unknown⁴

Dosage Forms

Simponi[®] 50mg/0.5ml/syringe <CGOLIMU>

Use

Rheumatoid arthritis, ankylosing spondylitis, psoriatic arthritis

Dose**SC**

50mg once a month (either alone or in combination with methotrexate or other nonbiologic DMARDs)

Adverse Reactions

Upper respiratory tract infection, injection site reaction, virus infection, GOT/GPT increase, hypertension

Precautions

1. 不建議接種活性疫苗
2. 應輪流使用不同注射部位，絕對不可注射在有觸痛、瘀傷、發紅或變硬等現象的皮膚區域
3. 2-8°C 冷藏避光儲存。

Contraindications

活動性肺結核或其他嚴重感染症、中度或重度心衰竭(NYHA class III/IV)

Hydroxychloroquine**C⁴ Safe¹****Dosage Form**

Plaquenil[®] 200mg/tab <KHYDR02> 參閱p.23

Leflunomide**X³ Unsafe³****Dosage Form**

Arheuma[®] 20mg/tab <KLEFLU1>

Use

Rheumatoid arthritis

Dose

Adults: **PO** initial 100mg/day for 3 days, followed by 20mg/day; dosage may be decreased to 10mg/day in patients who have difficulty tolerating the 20mg dose

Adverse Reactions

Alopecia, rash, diarrhea, increased liver enzymes

Precautions

1. 服藥前及服藥後的前6個月，需每個月或較短的間隔檢測 ALT(GPT) 值，以後每隔8週檢測。
2. 若 ALT 值大於正常值二倍，則劑量需降低為 10mg/day，並持續或每週監控肝功能。

Mycophenolate acid**D¹ Unknown²****Dosage Form**

Myfortic[®] 180mg/tab <KMYCOP1>

Use

Prophylaxis kidney transplants rejection

Dose

PO 720 mg bid initiated within 24 hr following renal transplantation.

Adverse Reactions

Hypertension, peripheral edema, headache, constipation, diarrhea, nausea, vomiting

Precaution

避免與含鎂鋁成份制酸劑併服以免減少本品之吸收。

Mycophenolate mofetil

D¹ Unknown²

Dosage Form

Cellcept[®] 250mg/cap <KMYCOPH>

Use

Prophylaxis heart, kidney, liver transplants rejection

Dose

Renal transplant

Children (BSA 1.25-1.5m²) **PO** 750mg bid, (BSA >1.5m²) 1000mg bid

Adults: **PO** 1g bid

Cardiac and hepatic transplant

Adults: **PO** 1.5g bid

Adverse Reactions

Hypertension, peripheral edema, headache, constipation, diarrhea, nausea, vomiting

Precaution

- 1.Active serious digestive diseases
- 2.建議飯前及整粒吞服。

Palivizumab

C³ Unknown³

Dosage Forms

Synagis[®] 50mg/vial <CPALIVI>

Use

Prophylaxis respiratory syncytial virus infection

Dose

IM 15mg/kg monthly; **max: 6 dose**

Adverse Reactions

Injection site reaction, pyrexia

Precautions

- 1.冷藏保存。
- 2.使用藥盒內所附之無菌注射用水稀釋，抽取 0.6ml 注射用水，沿玻璃瓶內壁緩慢加入，稀釋時應輕輕旋轉藥瓶，避免搖晃瓶體產生泡沫，調配後靜置 20 分鐘，直至溶液澄清。

Penicillamine

D¹ Unsafe³

Dosage Forms

Metalcaptase[®] 300mg/FC. tab <KPENIC1>

Use

Rheumatoid arthritis, Wilson's disease, metal chelating agent

Dose

Rheumatoid arthritis

PO initial 300mg/day, maintenance 300-600mg/day

Acute and chronic metal poison

PO 900-1800mg/day

Wilson's disease

PO 300mg qid

Adverse Reactions

Anorexia, epigastric pain, nausea, myelosuppression, rash, taste disorders

Precautions

建議飯前一小時或飯後兩小時服用。

Sirolimus

C² Unsafe²

Dosage Form

Rapamune[®] 1mg/tab <KSIROL2>

Use

Renal transplant rejection prophylaxis

Dose

Should be taken 4 hr after cyclosporine

Adults: **PO** loading dose 6mg, maintenance 2mg qd

Children ≥13 yrs or BW <40kg: **PO** loading dose: 3mg/m², maintenance 1mg/m² qd

Adverse Reactions

Anemia, thrombocytopenia, arthralgia, asthenia, headache, venous thromboembolism, hypercholesteremia, hyperlipidemia, peripheral edema

Precautions

Co-administration of sirolimus with strong inhibitors or inducers of CYP3A4 and/or P-glycoprotein is not recommended, live vaccines should be avoided

Tacrolimus

C¹ Unsafe²

Dosage Form

Prograf[®] 0.5mg/cap <KTACR01>

Prograf[®] 1mg/cap <KTACR02>

Prograf[®] 5mg/cap <KTACR03>

Advagraf PR[®] 0.5mg/cap <KTACR04>

Advagraf PR[®] 1mg/cap <KTACR05>

Advagraf PR[®] 5mg/cap <KTACR06>

Protopic[®] oint. 0.1%, 5g/tube <WTACR03>參閱p.141

Protopic[®] oint. 0.03%, 5g/tube <WTACR04>參閱 p.141

Use

Atopic dermatitis (moderate/severe), liver and kidney transplant rejection prophylaxis

Dose

PO 0.2mg/kg/day q12h

Adverse Reactions

Tremor, headache, diarrhea, hypertension, nausea, renal dysfunction, hyperkalemia, hyperuricemia, hypomagnesemia, hyperglycemia, pleural effusion, abdominal pain, fever, back pain and peripheral edema

Precautions

Concomitant administration of drugs or other substances that inhibit or induce CYP3A enzyme systems

Tocilizumab

B⁴ Unknown¹

Dosage Forms

Actemra[®] 200mg/10ml/vial <CTOCILI>

Use

Rheumatoid arthritis, systemic juvenile idiopathic arthritis

Dose

Rheumatoid arthritis

IVF initial 4mg/kg every 4 weeks; may be increased to 8mg/kg based on clinical response; **max: 800mg**

Systemic juvenile idiopathic arthritis

Children ≥ 2 years: **IVF** $>1hr$ 12mg/kg every 2weeks for BW <30 kg; 8mg/kg every 2 weeks for BW ≥ 30 kg

Adverse reactions

Upper respiratory tract infection, nasopharyngitis, headache, hypertension, increase ALT

Precautions

1. 需冷藏於 2-8°C
2. 限靜脈點滴給藥，輸注時間應大於 1 小時，不可靜脈推注(push or bolus)，不可與其他藥品共用注射管路
3. 限 NS 稀釋至 100ml，稀釋後需避光，2-8°C 或室溫可保存 24 小時。
4. 給藥期間不可施打活性疫苗

Ustekinumab

B⁴ Unknown¹

Dosage Forms

Stelara[®] 45mg/0.5ml/syringe<CUSTEKI>

Use

Plaque psoriasis, psoriatic arthritis, pediatric psoriasis

Dose

Plaque psoriasis

≤ 100 kg: **SC** 45 mg at 0 and 4 weeks, and then every 12 weeks thereafter

>100 kg: **SC** 90 mg at 0 and 4 weeks, and then every 12 weeks thereafter

Pediatric Psoriasis (≥ 12 years)

<60 kg: **SC** 0.75 mg/kg at 0 and 4 weeks, and then every 12 weeks thereafter (or Dose may be calculated as BW (kg) x 0.0083 mL/kg)

≥ 60 kg to ≤ 100 kg: **SC** 45 mg at 0 and 4 weeks, and then every 12 weeks thereafter

>100 kg: **SC** 90 mg at 0 and 4 weeks, and then every 12 weeks thereafter

Psoriatic arthritis

SC 45 mg at 0 and 4 weeks, and then every 12 weeks thereafter

Moderate to severe plaque psoriasis and patients >100 kg: **SC** 90 mg at 0 and 4 weeks, and then every 12 weeks thereafter

Adverse reactions

Nasopharyngitis, upper respiratory tract infection, headache, fatigue, diarrhea

Precautions

- 1.需冷藏於 2-8°C，僅供一次使用

Contraindications

活動性感染(如活動性結核)

5.6. Biologic and Immunologic Miscellaneous

HTK solution

Dosage Form

Custodiol® 1000ml/pk <WHTK1>

Use

移植器官保存用

Dose

As order

Precautions

- 1.保存在 2-8°C。
- 2.若需使用本品請事先通知藥劑部。

6. CARDIOVASCULAR

6.1. Cardiac Glycosides

Digoxin

C⁴ Safe¹

Dosage Forms

Lanoxin[®] 0.5mg/2ml/amp <CDIGOX1>

Lanoxin[®] 0.25mg/tab <KDIGO02>

Cardiacin elixir[®] 0.05mg/ml, 60ml/bot <KDIGO01>

Use

Heart failure, atrial fibrillation, supraventricular arrhythmias

Dose

Age	Total Digitalizing Dose * (mcg/kg/day)		Daily Maintenance Dose (mcg/kg/day)	
	PO	IV/IM	PO	IV/IM
Preterm infant	20-30	15-25	5-7.5	4-6
Full-term infant	25-35	20-30	6-10	5-8
1 mon-2 yrs	35-60	30-50	10-15	7.5-12
2-5 yrs	30-40	25-35	7.5-10	6-9
5-10 yrs	20-35	15-30	5-10	4-8
> 10 yrs	10-15	8-12	2.5-5	2-3
Adults	0.75-1.5mg/d	0.5-1mg/d	0.125-0.5mg/d	0.1-0.4mg/d

* Give one-half of the total digitalizing dose (TDD) in the initial dose, then give one-quarter of the TDD in each of two subsequent doses at 6- to 8-hour intervals.

Adverse Reactions

Anorexia, nausea, vomiting, diarrhea, headache

Precautions

1. Therapeutic serum level: CHF 0.5-0.9mcg/l; non CHF 0.5-2ng/ml
2. 需依腎功能調整劑量。

6.2. Antiarrhythmic Agents

6.2.1. Class I-B

Lidocaine

B⁴ Safe¹

Dosage Forms

Lidocaine[®] 2%, 100mg/5ml/amp <CLIDOC1>

Use

Ventricular arrhythmias

Dose

Ventricular tachycardia or fibrillation

IV initial 1-1.5mg/kg, repeat 0.5-0.75mg/kg bolus may be given 3-5 mins after initial dose. Total dose should not exceed 200-300mg during a 1hr period or 3mg/kg total dose

Adverse Reactions

Hypotension, nausea, heart block, cardiac dysrhythmia, seizure

Mexiletine

C⁴ Safe¹

Dosage Forms

Meletin[®] 100mg/cap <KMEXITI>

Use

Ventricular arrhythmias

Dose

PO initial 200mg q8h, maintenance 200-300mg q8h; **max: 1200mg/day**

Adverse Reactions

Coordination difficulties, dizziness, lightheadedness, tremors, feeling nervous

Phenytoin (Diphenylhydantoin)

D⁴ Unsafe¹

Dosage Forms

Aleviatin[®] 250mg/5ml/amp <CPHENY1>

Dilantin[®] 100mg/cap <KPHENYT>

Use

Antiarrhythmic, anticonvulsant

Dose

Arrhythmia

100mg tid-qid

Status epilepticus

Neonates and children: **IV** loading 15-20mg/kg (rate \leq 1-3mg/kg/min)

Adult: **IV** loading 10-15mg/kg (rate \leq 50mg/min), then **IV/PO** 100mg q6-8h

Anticonvulsant

Children \leq 6yrs: **PO** 5 mg/kg/day bid-tid, usual maintenance dose is 4-8 mg/kg/day; **max: 300 mg/day**

Children > 6yrs: **PO** 100mg tid

Adult: **PO** maintenance 100 mg tid-qid; **max: 600mg/day** or loading 1000mg (300mg, 300mg, 400mg q2h) then maintenance dose after 24hrs

Adverse Reactions

Morbilloform eruption, rash, constipation, gingival hyperplasia, nystagmus

Precautions

限 NS 或 Sterile water 稀釋，避免使用 D5W，易產生結晶沉澱

Contraindicaton

Sinus bradycardia, second and third degree AV block

6.2.2. Class I-C

Propafenone

C¹ Unknown¹

Dosage Forms

Rytmonorm[®] 150mg/tab <KPROPAF>

Use

Ventricular arrhythmias

Dose

Adults: **PO** 150-300mg tid; **max: 900mg/day**

Adverse Reactions

Dizziness, proarrhythmic events, unusual taste

6.2.3 Class II

Propranolol

C⁴ Safe¹

Dosage Forms

Propranolol[®] 10mg/tab <KPROPRA1>

Cardolol[®] 40mg/tab <KPROPRA2>

Use

Hypertension, s, angina, migraine headache, tremor, anxiety, schizophrenia, prevention of bleeding esophageal varices

Dose

Angina

Adult: **PO** 10-20mg tid-qid, may titrate every 3 to 7 days to optimal response; **max: 320mg/day**

Arrhythmia

Children: **PO** 0.5-1mg/kg/day tid-qid for supraventricular tachycardia

Adult: **PO** 10-30mg tid-qid

Prophylaxis of migraine

Adult: **PO** initial 20mg qid, titrate to maintenance dose 160-240 mg/day in divided doses

Hypertension

Adult: **PO** initial 40mg bid, titrate to maintenance dose 120-240mg/day;

max: 640mg/day

Thyrotoxicosis

Adult: **PO** 10-40 mg tid-qid

Pheochromocytoma

Adult: **PO** 20 mg tid for 3 days prior to surgery, with alpha-adrenergic blocker

Adverse Reactions

Dermatitis, pruritus, urticarial, dizziness, fatigue

Precautions

1. 需依肝、腎功能調整劑量。
2. 充血性心衰竭、糖尿病、氣腫或非過敏性支氣管炎、肝腎功能障礙、Raynaud's 症及其他末梢血管疾病患者應小心使用。

Contraindications

Bronchial asthma, cardiogenic shock, heart block (second or third degree), sick sinus syndrome, sinus bradycardia

6.2.4 Class III

Amiodarone

X⁴ Unsafe¹

Dosage Forms

Cordarone[®] 150mg/3ml/amp <CAMIODA>

Cordarone® 200mg/tab <KAMIODA>

Use

Ventricular arrhythmias, supraventricular arrhythmia, atrial fibrillation/flutter, Wolff-Parkinson-White syndrome

Dose

IVF loading 5mg/kg over 20-120mins, may be repeated 2-3 times/24hrs, maintenance 10-20mg/kg/24hr

PO loading 800-1600mg daily for 1 to 3 wks until initial therapeutic response occurs, maintenance 200-600mg/day

Adverse Reactions

Corneal deposit, increased liver enzymes, photosensitivity, prolonged QT interval

Precautions

- 1.針劑需以 D5W 稀釋，並建議使用非 PVC 材質之點滴，因本品會導致塑化 PVC 容器之 DEHP 成分釋出。
- 2.須避光儲存。

Dronedarone

D⁴ Unsafe¹

Dosage Forms

Multaq® 400mg/F.C tab <KDRONED>

Use

Paroxysmal or persistent atrial fibrillation,

Dose

PO 400mg bid

Adverse Reactions

Diarrhea, nausea, asthenia, rash, QT prolong

Precautions

重度肝功能不全不建議使用。

Contraindications

NYHA class IV CHF, HR<50 bpm, second and third degree AV block, sick sinus syndrome, QTc Bazett interval ≥ 500 msce or PR interval > 280msec, concomitant use of QT-prolonging drugs, concomitant use of strong CYP3A inhibitor, severe hepatic impairment

6.2.5. Class IV

Diltiazem

C⁴ Safe¹

Dosage Forms

Diltisser® 30mg/tab <KDILT01>

Use

Angina pectoris, hypertension, arrhythmias

Dose

PO 30-60mg qid; **max: 360mg/day**

Adverse Reactions

Bradycardia, peripheral edema, headache, dizziness, fatigue

Contraindications

Sick sinus syndrome, second and third degree AV block, severe hypotension (SBP<90mmHg), acute MI or lung congestion

Verapamil

C⁴ Safe¹

Dosage Forms

Verpamil[®] 5mg/2ml/amp <CVERAPA>

Cintsu[®] 40mg/tab <KVERAP1>

Use

Angina, hypertension, paroxysmal supraventricular tachyarrhythmias

Dose

Angina

Adult: **PO** 80-120mg tid-qid

Atrial arrhythmia or paroxysmal supraventricular tachycardia

Children < 1yrs: **IV** 0.1-0.2mg/kg over 2min, may repeat after 30 min

Children 1-13yrs: **IV** 0.1-0.3mg/kg(max: 5mg) over 2min, may repeat dose after 30min(max: 10mg)

Adult: **IV** initial 5-10mg (0.075-0.15mg/kg) bolus over 2min, may give additional 10mg after 30min if no response; **PO** initial 240-320mg/day tid-qid, non-digitalized patients may require up to 480mg/day

Hypertension

Children: **PO** 3-4mg/kg tid; **max: 8mg/kg up to 480 mg/day**

Adult: **PO** initial 80mg tid, may titrate at daily or weekly intervals to 360-480mg/day

Adverse Reactions

Constipation, dizziness, edema, headache, hypotension

Precautions

需依肝功能調整劑量。

Contraindications

Severe LV dysfunction, hypotension(SBP<90mmHg), cardiogenic shock, second and third degree AV block, sick sinus syndrome

6.2.6 Antiarrhythmic Miscellaneous

Adenosine

C⁴ Unknown¹

Dosage Forms

Adenocor[®] 6mg/2ml/vial <CADENOS>

Use

Paroxysmal supraventricular tachycardia (PSVT), thallium-201 myocardial scintigraphy, diagnostic in narrow and broadcomplex tachycardias

Dose

Paroxysmal supraventricular tachycardia

Children < 50kg: **IV** initial 0.05-0.1mg/kg/dose (**max: 6mg/dose**) as a rapid bolus, repeat every 1-2 mins as needed; **max single dose: 0.3mg/kg**

Children ≥ 50kg and adult: **IV** initial 6mg over 1-2 sec, increase to 12mg every 1-2 mins as needed for 2 doses; **max: 12mg/dose**

Cardiac thallium 201 study

Adult: **IV** 140mcg/kg/min for 6min

Adverse Reactions

Chest discomfort, flushing, dyspnea, headache, abdominal discomfort

Contraindications

Sick sinus syndrome, second and third degree AV block

6.3. Calcium Channel Blocking Agents

6.3.1. Dihydropyridines

Amlodipine

C⁴ Unknown¹

Dosage Forms

Norvasc[®] 5mg/tab <KAMLODI>

Use

Hypertension, angina pectoris

Dose

Angina pectoris

PO 5-10mg/day

Hypertension

PO initial 2.5-5mg/day, usual dose 5mg/day; **max: 10mg/day**

Adverse Reactions

Dizziness, fatigue, flushing, headache, palpitation, peripheral edema

Contraindications

不建議與葡萄柚汁一起併用。

Amtrel[®]

D⁵ Unknown³

Dosage Forms

1tab: Amlodipine 5mg + Benazepril 10mg/tab <KAMTREL>

Use

Hypertension

Dose

Adults: **PO** 1 tab qd

Adverse Reactions

Headache, edema, cough, dizziness

Precautions

肝臟嚴重受損的病人服用本品時應特別注意。

Contraindications

嚴重腎功能不全不建議使用

Caduet[®]

X⁴ Unsafe¹

Dosage Forms

1tab: Amlodipine 5mg + Atorvastatin 10mg /tab <KCADUET>

Use

Hypertension and hyperlipidemia

Dose

PO 1-2 tab qd; **max: 2tab/day**

Adverse Reactions

Flush, edema, fatigue, headache, palpitation, nausea, indigestion

Precautions

1. 服用期間建議定期監測肝功能
2. 病患如出現肌肉疼痛、壓痛、肌肉無力等症狀時，請回診告知醫師。

Exforge[®]

D³ Unknown³

Dosage Forms

1 tab: Amlodipine 5mg+Valsartan 80mg/tab<KEXFORG>參閱 p.119

Exforge HCT[®]

X⁴ Unsafe¹

Dosage Forms

1 tab: Amlodipine 5mg+Valsartan 160mg+ Hydrochlorothiazide 12.5mg
<KEXFORG>參閱 p.119

Lacidipine

B³ Unknown³

Dosage Forms

Lesyn[®] 6mg/F.C.tab<KLACID1>

Use

Hypertension

Dose

PO initial 2mg/day slow titrate 6mg/day (titrate time> 3-4 weeks)

Adverse Reactions

Headache, flush, edema, dizziness, palpitation

Contraindications

不建議與葡萄柚汁一起併用。

Nicardipine

C⁴ Unknown¹

Dosage Forms

Perdipine[®] 10mg/10ml/amp <CNICARD>

Use

Hypertension

Dose

IV (dilute to 0.1mg/ml) initial 5mg/hr, titrate 2.5mg/hr every 5-15 min;

max: 15mg/hr; decrease to 3 mg/hr after reaching BP goal

Adverse Reactions

Hypotension, peripheral edema, tachyarrhythmia, headache, nausea

Nifedipine

C⁴ Safe¹

Dosage Forms

Alat[®] 10mg/cap <KNIFED1>

Adalat OROS[®] 33mg/tab <KNIFED3>

Use

Angina pectoris, hypertension

Dose

Cap: **PO** initial 10mg tid, usual dose: 10-30mg tid; **max: 60mg/day**

OROS: **PO** initial 30mg qd; **max: 120mg/day**

Adverse Reactions

Dizziness, flushing, headache, weakness, nausea, heartburn, peripheral edema

Precautions

1. 須避光儲存。
2. Adalat OROS[®] 不可剝半或磨粉。

Contraindication

Cardiogenic shock、不可與葡萄柚汁併服

Nimodipine

C⁴ Unknown¹

Dosage Forms

Nimotop[®] 10mg/50ml/bot <CNIMODI>

Nimotop[®] 30mg/FC tab <KNIMODI>

Use

Spasm following subarachnoid hemorrhage from ruptured intracranial aneurysms regardless of the patients neurological condition postictus (Hunt and Hess grades I-V)

Dose

Injection

Adults: **IV** initial 1mg/hr(5ml/hr) or 15mcg/kg/hr for 2 hrs, if necessary, titrate up to 2mg/hr or 30mcg/kg/hr, therapy course should be maintained 5-14 days;

Adults <70kg or BP unstable patients: **IV** initial 0.5mg/hr (2.5ml/hr);

Tablet

PO 60mg q4h AC for 21 consecutive days (after the end of 5-14 days of treatment with nimodipine infusion the administration tablet is advisable for about 7 days)

Adverse Reactions

Reduction blood pressure, nausea, diarrhea, abdominal discomfort

Precautions

Cardiovascular surgery, hepatic impairment, hypotension

Sevikar[®]

D³ Unknown³

Dosage Forms

1 tab: Amlodipine 5mg+ Omesartan 20mg/tab <KSEVIKA>

Use

Hypertension

Dose

PO 1 tab qd; **max: 2tab/day**

Adverse Reactions

Edema, headache, dizziness, flushing, palpitation

Precautions

不建議用於高血壓的起始治療。

Contraindications

肝功能不全者。

6.3.2. Non-Dihydropyridines

Diltiazem

C⁴ Safe¹

Dosage Forms

Diltisser[®] 30mg/tab <KDILT01> 參閱 p.108

Verapamil

C⁴ Safe¹

Dosage Forms

Verpamil[®] 5mg/2ml/amp <CVERAPA> 參閱 p.109

Cintsu[®] 40mg/tab <KVERAP1> 參閱 p.109

6.4. Vasodilators

6.4.1. Organic Nitrates

Isosorbide dinitrate

C⁴ Unknown¹

Dosage Forms

Angidil[®] 10mg/10ml/amp <CISOS01>

Use

Angina pectoris, congestive heart failure

Dose

IV usual dose 2-7mg/hr up to 10mg/hr as needed

Adverse Reactions

Headache, hypotension, dizziness, lightheadedness, tachycardia

Precautions

不可直接注射，需以氯化鈉或葡萄糖溶液稀釋後給藥。

Isosorbide -5- mononitrate

C⁴ Unknown¹

Dosage Forms

Coxine[®] 20mg/tab <KISOS03>

Use

Angina pectoris

Dose

PO initial 1/4-1/2 tab twice daily in 1 and 2 day, maintenance 1tab bid

Adverse Reactions

Headache, vertigo, hypotension, bradycardia

Contraindications

併用 Sildenafil、Tadalafil，會增強 nitrates 的降血壓作用而造成嚴重低血壓。

Nitroglycerin

C⁴ Unknown¹

Dosage Forms

Nitrostat[®] sublingual 0.6mg/tab <KNITRO1> <KNITRO3>

Use

Treatment of angina pectoris, congestive heart failure

Dose

SL 1 tab every 5 min, if the pain continues after a total of 3 doses in 15 minutes, prompt medical attention is recommended

Adverse Reactions

Hypotension, syncope, headache, dizziness, weakness, tachycardia

Precautions

1. Nitrostat[®] 舌下錠宜存放於涼爽乾燥室溫中，避免高溫或陽光直射處；避免儲放於潮濕空間，開封後請將瓶蓋栓緊儲存，於正確保存方式下可持續使用至瓶外標示之保存期限。
2. 若藥品呈粉末狀或變質，請勿使用。
3. 急診病人若需帶回 1 瓶(25 顆)者，藥品代碼需輸入<KERNT03>。

Contraindications

服藥期間避免服用 PDE-5 inhibitor (ex: viagra)。

Nitroglycerin and 5% Dextrose

C⁴ Unknown¹

Dosage Forms

N.T.G. Premixed[®] 0.2mg/ml, 250ml/bot <CNITRO4>

Use

Induction and maintenance hypotension during intraoperative, congestive heart failure

Dose

IVF initial 5mcg/min, increased by 5mcg/min q3-5min to response

Adverse Reactions

Hypotension, syncope, headache, dizziness, weakness, tachycardia

Precautions

1. 此藥易被 PVC 吸著，建議使用短的輸注管以減少吸著程度
2. 開封後於 24 小時內使用完畢。

6.4.2 Peripheral Vasodilators

Hydralazine

C⁴ Safe¹

Dosage Forms

Aprelazine[®] 20mg/1ml/amp <CHYDRAL>

Stable[®] 10mg/tab <KHYDRA1>

Apoline[®] 25mg/tab <KHYDRA2>

Use

Hypertension, congestive heart failure

Dose

Children: **PO** initial 0.75mg/kg/day qid, titrate to **max: 7.5mg/kg/day or 300mg/day** as needed

Adult: **IM/IV** 20-40mg/dose; **PO** initial 10mg qid for first 2-4 days, increase to 25mg qid for remainder of first week then increase to 50mg qid; **max: 300mg/day**

Adverse Reactions

Headache, palpitation, nausea, vomiting, tachycardia

Contraindications

針劑忌以dextrose溶液稀釋。

Minoxidil

C⁴ Safe¹

Dosage Forms

Loniten[®] 10mg/tab <KMINOXI>

PBF Minoxidil Solution[®] 2%, 60ml/bot<WMINOX3>參閱p.139

PBF Minoxidil Solution[®] 5%, 60ml/bot<WMINOX2>參閱p.139

Use

Hypertension, alopecia, androgenetica (topical formulation)

Dose

Hypertension

Children < 12yrs: **PO** initial 0.2 mg/kg/day, **max: 5 mg**; maintenance 0.25-1.0 mg/kg/day; **max: 50mg/day**

Adult: **PO** initial 5mg qd-bid, maintenance 10-40mg/day qd-bid; **max:100mg/day**

Adverse Reactions

Congestive heart failure, edema, tachycardia, hypertrichosis

6.4.3 Other vasodilators

Nicorandil

Unknown³

Dosage Forms

Sigmart[®] 5mg/tab <KNICORA>

Use

Angina pectoris

Dose

PO 5mg tid, adjust dose as need

Adverse Reactions

Headache, aphthous ulcers, thrombocytopenia, palpitation, flushing

Contraindications

服藥期間避免服用 PDE-5 inhibitor (ex: viagra)，以免發生嚴重低血壓。

6.5. Antiadrenergics and Sympatholytics

6.5.1. Beta-Blockers

Atenolol

D⁴ Unknown¹

Dosage Forms

Urosin[®] 50mg/tab <KATEN01>

Urosin[®] 100mg/tab <KATEN02>

Use

Hypertension, angina pectoris

Dose

PO 50-100mg qd; **max: 200mg/day**

Adverse Reactions

Bradycardia, cold extremities, hypotension, fatigue, depression

Bisoprolol

C⁴ Unknown¹

Dosage Forms

Concor[®] 1.25mg/tab <KBISOP1>

Bisol[®] 5mg/tab <KBISOPR>

Use

Hypertension, angina, congestive heart failure

Dose

Angina and hypertension

PO 2.5-20mg qd; **max: 20mg/day**

Congestive heart failure

PO initial 1.25mg qd, titrate to **maximum dose 10mg qd**

Adverse Reactions

Dizziness, headache, sleep disturbances, bradycardia, fatigue

Propranolol

C⁴ Safe⁴

Dosage Forms

Propranolol[®] 10mg/tab <KPROPRA1> 参閱p.107

Cardolol[®] 40mg/tab <KPROPRA2> 参閱p.107

6.5.2. Alpha and Beta Blocker Agents

Carvedilol

C⁴ Unknown¹

Dosage Forms

Syntrend[®] 6.25mg/tab <KCARV01>

Syntrend[®] 25mg/tab <KCAVE02>

Use

Hypertension and congestive heart failure

Dose

Hypertension

PO initial 6.25mg bid for 1-2 wks, then 12.5mg bid for 1-2 wks, than increase to 25mg bid; **max: 50mg/day**

CHF

PO initial 3.125mg bid, it can be increased to 6.25mg bid; < **80kg: maximum dose 25mg bid**; >**80kg: maximum dose 50mg bid**

Adverse Reactions

Dizziness, fatigue, hyperglycemia, weight gain, hypotension

Labetalol

C⁴ Safe¹

Dosage Forms

Labtal[®] 200mg/tab <KLABETA>

Trandate[®] 25mg/5ml/amp <CLABETA>

Use

Mild to severe hypertension

Dose

IV bolus 50 mg, injection >1 min, every 5 mins repeat, total dose <200mg;
IVF 50-200mg (rate: 2mg/min); **PO** 200-400mg bid; **max: 2.4g/day**

Adverse Reactions

Dizziness, nausea, hypotension, bradycardia

Precautions

- 1.注射液應避光儲存
- 2.稀釋後可儲存於室溫下 24 小時。

6.5.3. Alpha-adrenergic Blockers

Alfuzosin

B⁴ Unknown¹

Dosage Forms

Xatral[®] XL 10mg/tab <KALFUZO>參閱 p.302

Doxazosin

C⁴ Unknown¹

Dosage Forms

Doxaben[®] XL 4mg/tab <KDOXAZ2>

Use

Hypertension and benign prostate hypertrophy

Dose

Hypertension

PO initial 4mg qd; **max: 16mg/day**

BPH

PO 4-8mg qd; **max: 8mg/day**

Adverse Reactions

Dizziness, headache, hypotension, vertigo, edema, nausea, somnolence
vertigo

Precautions

不宜磨粉。

Silodosin

B³ Unknown¹

Dosage Forms

Urief[®] 4mg/cap <KSILODO >參閱 p.303

Tamsulosin

B⁴ Unknown¹

Dosage Forms

Harnalidge[®] D 0.2mg/tab <KTAMSU1>參閱 p.304

6.5.4. Alpha-2Adrenergic Agents

Clonidine

C⁵ Unknown³

Dosage Forms

Catapres[®] 75mcg/tab <KCLONID>

Use

Hypertension

Dose

PO 75-150mcg/day bid

Adverse Reactions

Dizziness, drowsiness, dry mouth, orthostasis, localized skin reactions

6.6. Angiotensin-Converting Enzyme Inhibitors

Captopril

D⁴ Safe¹

Dosage Forms

Cabudan[®] 25mg/tab <KCAPTOP>

Use

Hypertension, congestive heart failure and diabetic nephropathy

Dose

PO initial 12.5-25mg bid-tid AC, may increase to 50mg bid-tid; **max: 450mg/day**

Adverse Reactions

Dry cough, hyperkalemia, rash, pruritus

Precautions

需依腎功能調整劑量

Contraindications

Bilateral renal artery stenosis

Enalapril

D⁴ Safe¹

Dosage Forms

Synbot[®] 5mg/tab <KENALA1>

Synbot[®] 20mg/tab <KENALA2>

Use

Hypertension, congestive heart failure

Dose

Hypertension

Children: PO initial 0.08mg/kg qd, adjust dosage based on patient response

Adults: PO initial 2.5-5mg qd, than 10-40mg/day qd-bid

CHF

PO initial 2.5mg qd-bid, maintenance 5-20mg/day bid; **max: 40mg/day**

Adverse Reactions

Dry cough, hyperkalemia, dizziness, headache, hypotension, syncope, rash

Fosinopril

D⁴ Unknown¹

Dosage Forms

Fonosil[®] 10mg/tab <KFOSINO>

Use

Hypertension, congestive heart failure

Dose

PO initial 10mg qd, maintenance 20-40mg/day qd-bid

Adverse Reactions

Dry cough, hyperkalemia, dizziness, angioneurotic edema

Precautions

建議飯前服用。

Amtrel[®]

D⁴ Unknown¹

Dosage Forms

1 tab: Amlodipine 5mg + Benazepril 10mg/tab <KAMTREL> 參閱 p.110

6.7. Angiotensin II Receptor Antagonists

Exforge[®]

D³ Unknown³

Dosage Forms

1tab: Amlodipine 5mg+Valsartan 80mg/tab<KEXFORG>

Use

Hypertension

Dose

PO 1-2 tab daily, qd-bid; **max: 2 tab/day**

Adverse Reactions

Peripheral edema, dizziness, upper respiratory infection, nasopharyngitis.

Exforge HCT[®]

X⁴ Unsafe¹

Dosage Forms

1tab: Amlodipine 5mg+Valsartan 160mg+ Hydrochlorothiazide 12.5mg<KEXFOR1>

Use

Hypertension

Dose

PO 1 tab qd; **max: 2 tab/day**

Adverse Reactions

Dizziness, edema, headache, dyspepsia, fatigue

Contraindications

Anuria, hypersensitivity to sulfonamide drug, grapefruit juice

Hyzaar[®]

D³ Unknown³

Dosage Forms

1 tab: Losartan 100mg + Hydrochlorothiazide 12.5mg/tab<KHYZAAR>

Use

Hypertension

Dose

PO 1tab qd

Adverse Reactions

Dizziness, diarrhea, anaphylactic reaction, angioedema

Irbesartan

D⁴ Unknown¹

Dosage Forms

Aprovel[®] 300mg/tab <KIRBES1>

Use

Hypertension, diabetic nephropathy

Dose

Hypertension

Adults: **PO** initial 150mg qd; **max: 300mg/day**

Diabetic nephropathy

Adult: **PO** initial 150mg qd, target maintenance does 300mg qd

Adverse Reactions

Diarrhea, dyspepsia, upper respiratory infection, headache, fatigue

Precautions

1. 避免與 Aliskiren 併用於糖尿病患者。
2. 老年患者(>75yrs)起始劑量建議為 75mg。
3. 用於腎功能不全、因糖尿病腎病變引起明顯的蛋白尿及/或心衰竭患者時，應監測血鉀濃度。
4. 若有罕見遺傳性半乳糖不耐症、Lapp 氏乳糖缺乏或葡萄糖-半乳糖吸收不良症應避免使用。

Contraindications

孕婦(易引起胎兒腎衰竭及頭骨發育不全)

Olmесartan

D⁴ **Unknown¹**

Dosage Forms

Olmotec[®] 20mg/tab <KOLMESA>

Use

Hypertension

Dose

PO 20mg qd, may titrate to 40 mg qd after 2 wks of initial treatment

Adverse Reactions

Hypotension, diarrhea, dizziness, headache, fatigue

Sevikar[®]

D⁵ **Unknown³**

Dosage Forms

1 tab: Amlodipine 5mg+ Omесartan 20mg/tab <KSEVIKA>參閱 p.112

Valsartan

D⁴ **Unknown¹**

Dosage Forms

Diovan[®] 160mg/tab <KVALSA1>

Use

Hypertension, congestive heart failure

Dose

Hypertension

PO 80-160mg qd; **max: 320mg/day**

CHF

PO 40mg bid; **max: 320mg/day**

Adverse Reactions

Viral infection, neutropenia, postural hypotension, BUN and Scr raised

6.8. Direct Renin Inhibitor

Aliskiren

D⁴ Unknown¹

Dosage Forms

Rasilez[®] 150 mg/tab<KALISKI>

Use

Hypertension

Dose

PO initial 75-150mg once daily, may increase to 300mg/day.

Adverse Reactions

Headache, hypotension, abdominal pain, hyperkalemia

Precautions

- 1.本品與利尿劑併用,建議起始劑量75mg。
2. Drug-Drug interaction: with furosemide reduced furosemide serum concentration; with cyclosporine increased aliskiren serum concentration that didn't suggest combination therapy

6.9. Alpha-adrenergic agonists

Methyldopa anhydrous

B⁴ Safe¹

Dosage Forms

Methyldopa[®] 250mg/tab<KMETHY3>

Use

Hypertension

Dose

PO initial 250mg bid, maintenance 500-1000mg divide 2-3times

Adverse Reactions

Asthenia, dizziness, disorder of ejaculation, impotence, reduced libido

Contraindications

- 1.急慢性肝炎及肝硬化活動期之患者。
- 2.避免飯後使用及併用制酸劑服用。

6.10. Antihyperlipidemic Agents

6.10.1. HMG-CoA Reductase Inhibitors

Atorvastatin

X⁴ Unknown¹

Dosage Forms

Lipitor[®] 20mg/tab <KATORV1>

Use

Hyperlipidemias, secondary prevention of cardiovascular events

Dose

Adults: **PO** initial 10-20mg qd; **max: 80mg/day**

Adverse Reactions

Diarrhea, arthralgia, myalgia, pain in extremity, UTI, nasopharyngitis

Precautions

1. Discontinue drug if markedly elevated CPK level or if myopathy is diagnosed or suspected
2. Concomitant statin therapy with fibrates should generally be avoided (risk of rhabdomyolysis)

Caduet[®]

X⁴ Unsafe¹

Dosage Forms

1tab: Amlodipine 5mg + Atorvastatin 10mg /tab <KCADUET> 參閱 p.110

Fluvastatin

X⁴ Unknown¹

Dosage Forms

Lescol[®] XL 80mg/FC tab <KFLUVAS>

Use

Elevated total cholesterol, LDL-C, TC, mixed dyslipidemia (type IIa and IIb) and primary hypercholesterolemia, atherosclerotic vascular disease

Dose

PO 80mg hs

Adverse Reactions

Insomnia, indigestion, nausea, headache, disorder of muscle

Precautions

1. 須整顆吞服，不可撥半或磨粉。
2. 需依肝功能調降劑量。

Contraindications

年紀 < 18 歲，活動性肝疾病。

Linicor F.C.T[®]

X⁴ Unsafe¹

Dosage Forms

Niacin 500mg + Lovastatin 20mg /tab <KLINICO>

Use

Hyperlipidemias

Dose

PO 1tab HS; max. dose: 2tab/day

Adverse Reactions

Hot flashes, infection, headache, muscle pain, rhabdomyolysis

Precautions

1. 為緩釋劑型，不可弄破、壓碎或咀嚼
2. 不建議空腹使用，可與低脂點心併服
3. 服藥期間避免同時攝取酒精、熱飲或辛辣食物、食用葡萄柚或葡萄柚汁

Contraindications

活動性肝病、懷孕、授乳婦

Pravastatin

X⁴ Unknown¹

Dosage Forms

Mevalotin[®] 40mg /tab <KPRAVA1>

Use

Hyperlipidemias, secondary prevention of cardiovascular events

Dose

Adults: **PO** 10-40mg hs; **max: 80mg/day**

Adverse Reactions

URI, nausea, vomiting, rash, musculoskeletal pain, headache

Rosuvastatin

X⁴ **Unknown¹**

Dosage Forms

Crestor[®] 5mg/F.C tab <KROSUV1>

Crestor[®] 10mg/F.C tab <KROSUVA>

Use

Hypertriglyceridemia, hypercholesterolemia

Dose

Adults: **PO** initial 5-10mg qd, maintained 5-20mg/day

Adverse Reactions

Arthralgia, myalgia, headache, dizziness, headache, nausea

Precautions

建議於開始治療及調高劑量後監測肝功能

Contraindications

活動性肝病、懷孕、授乳婦

Vytorin[®]

X⁴ **Unknown¹**

Dosage Forms

1tab: Ezetimibe 10mg+ Simvastatin 20mg /tab<KVYTORI>

Use

Antilipemic agents (HMG-CoA reductase inhibitors +Cholesterol absorption inhibitor)

Dose

PO 1tab/day，晚間隨餐或空腹服用。

Adverse Reactions

Headache, flatulence, abdominal pain, myalgia, liver enzyme elevated

Precautions

1.嚴重腎功能不全 (CCR <30ml/min)，應小心使用。

2. Drug-Drug interaction: 與 CYP3A4 inhibitor，及其他 fibrates 併用會增加肌病變/橫紋肌溶解症的危險性。

Contraindications

中或重度肝功能不全

6.10.2 Fibric Acid Derivatives

Choline fenofibrate

C⁴ **Unsafe¹**

Dosage Forms

Trilipix[®] 135mg/cap <KFENOF2>

Use

Hyperlipidemia (reducing triglyceride levels)

Dose

PO 1cap qd; max: 135mg/day

Adverse Reactions

Headache, back pain, upper respiratory tract infection, pain in extremity, nausea

Precautions

膠囊可撥開，剝開後小藥錠為持續釋放劑型，請勿磨粉

Contraindications

重度腎功能不全(Clcr<30ml/min)、活動性肝病及肝功能不全、膽囊疾病、以fibrate或ketoprofen治療曾發生光過敏或光毒性

Fenofibrate

C ⁴	Unknown ¹
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Dosage Forms

Lipanthyl supra[®] 160mg/tab <KFENOF1>

Use

Hyperlipidemia (reducing triglyceride levels)

Dose

PO 1tab qd

Adverse Reactions

Abdominal pain, nausea, liver function tests abnormal, backache, rhinitis

Precautions

需依腎功能調整劑量

Contraindications

Gallbladder disease, active liver disease (including primary biliary cirrhosis, unexplained persistent liver function abnormality), severe renal impairment

Gemfibrozil

C ⁴	Unknown ¹
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Dosage Forms

GEMD[®] 300mg/cap <KGEMFIB>

Use

Hyperlipidemia (reducing triglyceride levels)

Dose

Adults: PO 600mg bid AC

Adverse Reactions

Abdominal pain, acute appendicitis, indigestion, increased liver function test, rhabdomyolysis

Contraindications

肝腎功能不全患者禁用

6.10.4. Cholesterol Absorption Inhibitor**Ezetimibe**

X ⁴	Unknown ¹
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Dosage Forms

Ezetrol[®] 10mg/tab <KEZETIM>

Use

Hypercholesterolemia

Dose

PO 10mg qd, can be administered at any time, with or without food

Adverse Reactions

Headache, abdominal pain, diarrhea, fatigue, increased liver enzymes

Precautions

- 1.Children <10yrs is not recommended。
- 2.不建議與 Fibrates 類的藥物(如 Fenofibrate, Gemfibrozil)併用。
- 3.中重度肝功能不良不建議使用。

Vytorin®

X⁴ Unknown¹

Dosage Forms

1tab: Ezetimibe 10mg+ Simvastatin 20mg /tab<KVYTORI>參閱 p.123

6.11 Vasopressors

Dobutamine

B⁴ Unknown¹

Dosage Forms

Gendobu® 250mg/20ml/vial <CDOBUTA>

Use

Congestive heart failure, increase cardiac output

Dose

IVF 2.5-10 mcg/kg/min; **max: 40mcg/kg/min**

Infusion rates of various dilutions of dobutamine

Rate (mcg/kg/min)	Infusion Rate (ml/kg/min)		
	250mg/L	500mg/L	1000mg/L
2.5	0.01	0.005	0.0025
5.0	0.02	0.01	0.005
7.5	0.03	0.015	0.0075
10.0	0.04	0.02	0.01
12.5	0.05	0.025	0.0125
15.0	0.06	0.03	0.015

Adverse Reactions

Tachyarrhythmia, hypertension, angina, headache, eosinophilic myocarditis

Contraindications

勿將 dobutamine hydrochloride 加到 5% Sodium Bicarbonate Injection、含有 Sodium Bisulfite、乙醇及其他強鹼溶液。由於可能的物理配伍禁忌，建議不要與其他藥物在同一溶液中互相混合。

Dopamine

C⁴ Unknown¹

Dosage Forms

Dopamin® 200mg/5ml/amp <CDOPAMI>

Use

Shock, congestive heart failure

Dose

Adults: **IVF** initial 1-5mcg/kg/min, and then increased by 1-4 mcg/kg/min at 10-15min interval.

Chronic refractory congestive heart failure

IVF initial 0.5~2mcg/kg/min

Occlusive vascular disease

IVF initial 1mcg/kg/min

Severely ill patients

IVF initial 5mcg/kg/min, and then increased by 5-10mcg/kg/min up to 20-50mcg/kg/min

Adverse Reactions

Tachycardia, chest pain, dyspnea, headache, nausea, vomiting

Precautions

勿添加Sodium bicarbonate 或其他鹼性靜脈輸注溶液。

Ephedrine

C⁴ Unknown¹

Dosage Forms

Ephedrine[®] 40mg/ml/amp <CEPHED2>

Use

Bronchial asthma, nasal congestion, acute bronchospasm, idiopathic orthostatic hypotension

Dose

Children: **SC** 3mg/kg/day or 25-100mg/m²/day q4-6h; **IM/IV**(slow push) 0.2-0.3mg/kg/dose q4-6h slow push

Adults: **IM/SC** 25-50mg; **IV**(slow push) 5-25mg/dose, may repeat after 5-10 min then q3-4h as needed; **max: 150mg/day**

Adverse Reactions

Hypertension, tachycardia, palpitations, nausea, vomiting, tremor

Epinephrine

C⁴ Unknown¹

Dosage Forms

Adrenalin[®] 1mg/ml/amp <CEPINEP>

Bosmin[®] 0.1%, 500ml/bot <WEPINEP> 參閱p.326

Use

Bronchospasms, anaphylactic reactions, cardiac arrest, added to local anesthetics to decrease systemic absorption

Dose

Cardiac arrest

Children: **IV** 5-10mcg/kg, may repeat q3-5min as needed

Adults: **IV** 1mg, may repeat q3-5min as needed

Anaphylaxis

Children: **IM/SC** 10mcg/kg/dose q15min for 2 dose then q4h as needed; **max: 0.5mg/dose**

Adults: **IM/SC** 0.3-0.5mg, may repeat q10-15min as needed; **max: 1mg/dose**

Asthma

Children: **SC** 10mcg/kg/dose, may repeat q15-20min for 3-4 doses or q4h

as needed; **max: 0.5mg/dose**

Adults: **SC** 0.2-0.5mg, may repeat q20min for max 3 doses or q4h as needed

Adverse Reactions

Tachycardia (parenteral), palpitations, nervousness, pallor, headache

Precautions

1. IV infusion require an infusion pump
2. IM route is preferable to SC route during anaphylaxis

Isoproterenol

C⁴ Unknown¹

Dosage Forms

Proterol-L[®] 0.2mg/1ml/amp <CISOPRO>

Use

Adams-stokes syndrome, cardiac arrest, congestive heart failure, asthma

Dose

Cardiogenic shock, congestive heart failure

Adult: **IVF** 0.5 to 5 mcg/min, if the heart rate >110 beats/min, it may be necessary to decrease or discontinue the infusion

Stokes-Adams syndrome, heart block

Adult: **IV bolus** initial 0.02-0.06mg followed by 0.01-0.2mg depending on response; **IVF** initial, 5 mcg/min, titrate to response

Asthma with status asthmaticus

Children: **IVF** initial 0.1mcg/kg/min; **max:0.08-1.7mcg/kg/min**

Adverse Reactions

Syncope, tachyarrhythmia, confusion, headache, tremor

Precautions

- 1.Administration requires the use of an infusion pump
- 2.Prepare for infusion: 1mg isoproterenol to 500ml D5W, final concentration 2mcg/ml

Norepinephrine

C⁴ Unknown¹

Dosage Forms

Levophed[®] 4mg/4ml/vial <CNOREPI>

Use

Cardiac arrest, acute hypotension

Dose

Children: **IVF** initial 0.05-0.1mcg/kg/min, **max: 1-2mcg/kg/min**

Adults: **IVF** initial 8-12mcg/min, maintenance 2-4mcg/min

Adverse Reactions

Bradycardias, hypertension, extravasation injury, nausea, vomiting

Precautions

- 1.Levophed 應加在 1000ml D5W or D5W/NS 稀釋後使用(稀釋後濃度為 4mcg/ml),不可直接以 NS 稀釋。
- 2.使用時維持適當的血容量,以預防由於藥物之血收縮作用導致組織缺血。
- 3.儘可能注入大靜脈,並且要更換輸注部位以減少壞死之危險。

6.12. Cardiovascular Miscellaneous

Alprostadil

C⁴ Unknown¹

Dosage Forms

Promostan[®] 20mcg/vial <CALPR01>

Caverject[®] 20mcg/vial <CALPR03>

Prostin VR[®] Pediatric 500mcg/ml/amp <CALPR02>

Use

Promostan[®]: peripheral obstructive arterial disease, Raynaud's phenomena, angina.

Caverject[®]: erectile dysfunction

Prostin VR Pediatric[®]: temporarily maintain patency of ductus arteriosus in neonates with ductal-dependent congenital heart disease until surgery can be performed.

Dose

Peripheral vascular disease (Promostan[®])

Adults: **IVF** 40-60mcg qd or q12h (rate: 0.005-0.01mcg/kg/min); **IAF** 10-15mcg via infusion pump (rate 0.0001-0.00015mcg/kg/min)

Erectile dysfunction(Caverject[®])

Intracavernous(ICV)

Initial dose	Neurogenic etiology	Vasculogenic, psychogenic, or mixed etiology
Starting dose	1.25mcg	2.5mcg
Second dose	2.5mcg	Partial response: 5mcg No response: 7.5mcg
Third dose	5mcg	
增量至最佳劑量	5mcg	5-10mcg

Maintenance: once an appropriate dose has been determined, patient may self-administer injections at a frequency of no more than 3 times/week with at least 24hrs between doses.

Patent ductus arteriosus (Prostin VR[®] Pediatric)

Neonate: **IVF** initial 0.05-0.1mcg/kg/min, maintenance 0.01-0.4mcg/kg/min

Adverse Reactions

Prostin VR[®]: Flushing, fever, bradycardia, hypotension

Caverject[®]: Penile pain, haematoma, muscle spasms, erection increased, penis disorder

Promostan[®]: Injection site reaction, headache, cardiac arrest, edema

Precautions

- 1.投與時，注入部位偶有鈍痛、疼痛、腫脹，偶有發熱、發紅等症狀，發生此等症狀時應減慢投藥速度。
- 2.使用 infusion pump 時，注意請勿使氣泡混入袋內或針筒內。
- 3.Promostan[®] 動脈內給藥時，20mcg/amp 以 5ml NS 溶解。
- 4.Prostin VR[®] Pediatric 保存方式: 2-8 °C。

5. Caverject[®]: 藥品配製後於 25 度下可保存 24 小時。

Ivabradine

Unsafe¹

Dosage Forms

Coralan[®] 5mg/F.C. tab<KIVABRA>

Use

Heart failure

Dose

Initial **PO** 5mg BID with meal. After 2 weeks, if resting heart rate >60 bpm, the dose can be increased to 7.5mg BID; if resting hear rate <50 bpm or in case of symptoms related to bradycardia such as dizziness, fatigue or hypotension, the dose can be decrease to 2.5mg BID

Adverse Reactions

Phosphenes, blurred vision, headache, dizziness, bradycardia

Precautions

1. 可能造成光幻覺，駕駛或操作機械時應小心
2. 75 歲以上老年人起始劑量應為 2.5mg BID
3. 需依肝腎功能調整劑量
4. 服用此藥期間避免飲用葡萄柚汁

Contraindications

靜態心跳低於 60bpm、心因性休克、急性心肌梗塞、嚴重低血壓 (<90/50mmHg)、嚴重肝功能不全、sick sinus syndrome、竇房阻斷、不穩定或急性心衰竭、使用心律調節器者、不穩定狹心症者、第 3 度 AV block 患者、懷孕及授乳婦女。

Levosimendan

Unknown¹

Dosage Forms

Simdax[®] 12.5mg/5ml/vial<CLEVOSI>

Use

Heart failure

Dose

Initial **IV bolus** of 6-12mcg/kg delivered over 10 minutes, followed by a continuous **IVF** of 0.1mcg/kg/min. In patients receiving continuous infusions, doses of 0.05-0.2 mcg/kg/minute have been recommended

Adverse Reactions

Headache, ventricular tachycardia, hypotension

Precautions

1. 不建議與血管擴張劑或強心劑併用
2. 急性失代償性嚴重慢性心衰竭病人建議輸注時間為 24 小時
3. 未開封需保存於 2-8°C，儲存期間濃縮液可能變為橘色，不影響藥效
4. 使用前以 500ml D5W 稀釋至藥品濃度為 0.025-0.05mg/ml，稀釋後於 25°C 可保存 24 小時

Contraindications

低血壓(SBP<100mmHg or DBP<60mmHg)、心跳過快、影響心室充填或外流或兩者皆有明顯之機械性阻塞、重度肝腎功能不全、Torsades

de pointes 病史

Milrinone

C¹ **Unknown¹**

Dosage Forms

Primacor[®] 10mg/10ml/vial <CMILRIN>

Use

Congestive heart failure (short-term intravenous)

Dose

IV initial 0.05mg/kg over 10 mins, maintenance 0.59-1.13mg/kg/day, infusion rate: 0.375-0.75mcg/kg/min

Adverse Reactions

Proarrhythmic events, chest pain, hypotension, headache

Precautions

- 1.以 0.45%NaCl, NS 或 D5W 稀釋後，於室溫下可貯放 72 hrs。
- 2.需依腎功能調整劑量。

7. DERMATOLOGYS

7.1. Acne Preparations

Adapalene

C⁴ Unknown¹

Dosage Forms

Tifforly[®] gel 0.1%, 15g/tube <WADAPAL>

Use

Acne

Dose

Children >12 yrs and adults: **Topical** use jelly at bedtime

Adverse Reactions

Dry skin, erythema, scaly skin, burning, stinging

Precautions

1. Avoid contact with abraded, eczematous, or sunburned skin, mucous membranes, eyes, mouth
2. Use is associated with increased susceptibility/sensitivity to UV light; avoid sunlamps or excessive sunlight exposure

Benzoyl Peroxide

C⁴ Unknown¹

Dosage Forms

Aczo[®] gel 5% 10g/tube <WBENZOY>

Use

Acne

Dose

Topical once daily

Adverse Reactions

Irritation, contact dermatitis, dryness, erythema, , stinging

Precautions

使用本品需做防曬。

Clindamycin

B⁴ Safe¹

Dosage Forms

Kolincin[®] acne gel 1%, 20g/tube <WCLIND2>

Use

Acne

Dose

Children \geq 12 yrs and adults: **Topical** qd-bid

Adverse Reactions

Dryness, burning, itching, scaliness, or peeling of skin

Isotretinoin

X⁶ Unknown¹

Dosage Forms

Roaccutane[®] 10mg/cap <KISOTRE>

Use

Treatment of severe recalcitrant cystic and/or conglobate acne

Dose

Severe recalcitrant nodular acne:

Children (13-17 yrs): **PO** 0.5- 1mg/kg/day qd-bid for 15-20 wks

Adults: **PO** 0.5-2mg/kg/day qd-bid for 15-20 wks

Adverse Reactions

Hypertriglyceridemia ,increased liver function test, arthralgia , backache, dry skin

Precautions

1. Advise patient to use sunscreen and avoid sun and ultraviolet light
2. Instruct patient to take drug with food and to swallow capsules whole with a full glass of liquid
3. Instruct patient to avoid additional vitamin A supplementation during drug therapy, as this may increase the risk of toxicity
4. Children less than 12 yrs not established
- 5.本品限皮膚科專科醫師使用。

Contraindications

懷孕者禁止使用

Tazarotene

X⁶ **Unknown¹**

Dosage Forms

Zorac[®] cream 0.1%, 30g/tube <WTAZAR1>

Use

Psoriasis, acne vulgaris

Dose

Acne vulgaris

Children \geq 12 yrs and adults: **Topical** after cleansing the face every evening

Psoriasis

Topical once daily , use cream at evening

Adverse Reactions

Dry skin,erythema, pain of skin, skin irritation, pruritus

Precautions

During therapy, avoid exposing the treated areas to sunlight

Contraindications

懷孕者禁止使用

7.2 Antiseptics and Germicides

Povidone iodine

C⁶ **Unknown¹**

Dosage Forms

Biodyne[®] oint 10%, 10g/tube <WPOVID8>

Sindine solution [®] 10% 不含Alcohol	Sindine solution [®] 10% 含Alcohol
30ml/bot <WPOVID5> 200ml/bot <WPOVID4>	200ml/bot <WPOVID1> 500ml/bot <WPOVID3>

Use

External antiseptic

Dose

Topical apply as needed for treatment and prevention of susceptible microbial infections

Adverse Reactions

Irritation, itching, burning

Precautions

Prolonged exposure to wet solution may cause irritation or rarely, severe skin reactions

7.3. Anti-Infective Agents

Acyclovir**B⁴ Safe¹****Dosage Forms**

Virless[®] lyophilized 250mg/vial <CACYC02> 参閱 p.34

Virless[®] 200mg/tab <KACYC01> 参閱 p.34

Zovirax[®] susp 4%, 125ml/bot <KACYC03> 参閱 p.34

Aclovir[®] cream 5%, 5g/tube <WACYC05>

Devirus[®] oph oint 3%, 4.5g/tube <WACYC02> 参閱 p.274

Use

Herpes simplex infection

Dose

Topical q3h for 7 days

Adverse Reactions

Contact dermatitis

Amorolfine**B⁶ Unsafe¹****Dosage Forms**

Loceryl[®] 5%, 3ml/bot <WAMOROL>

Use

Onychomycosis due to dermatophytes, yeasts and moulds

Dose

Qw-biw until clinical cure is achieved is recommended. Usual durations of therapy are 6 months in fingernail infections and 9-12 months in toenail infections.

Adverse Reactions

Slight, transient periungual burning sensation

Biomycin[®]**C⁴ Unknown¹****Dosage Forms**

1g: Neomycin 5mg+ Tyrothricin 0.5mg, oint 40g/tube <WBIOMYC>

Use

Prophylaxis and treatment of minor skin infections and dermal ulcers

Dose

Topical bid-qid

Butenafine

C⁴ Unknown¹

Dosage Forms

Mentax[®] cream 1%, 10gm/tube <WBUTENA>

Use

Superficial fungal infections

Dose

Children>12 yrs and adults: **Topical** qd-bid

Adverse Reactions

Contact dermatitis, erythema, itching, skin irritation

Precautions

Advise patient to avoid contact with eyes, nose, mouth, and other mucous membranes

Clotrimazole

B⁶ Unknown¹

Dosage Forms

Mycosten[®] cream 10g/tube <WCLOTR3>

Camazole[®] 100mg/vag. tab <WCLOTR4> 参閱 p.146

Use

Candidal vulvovaginitis, Tinea cruris, Pityriasis versicolor, Candidiasis

Dose

Children \geq 12 yrs and adults: **Topical** bid (morning and evening) for 7 days

Adverse Reactions

Burning, itch

Fradiumycin

Dosage Forms

Framycin[®] gauze dressing patch 10cm×10cm <WFRAMYC>

Use

Treatment of infected burns, wounds, ulcers and graft sites

Dose

Topical apply to the skin qd or more frequently

Fusidic acid

B⁶ Unknown¹

Dosage Forms

Fucidin 250mg/tab <KFUSIDA> 参閱 p.56

Fusidic acid[®] cream 2%, 5g/tube <WFUSID1>

Use

Superficial dermatologic infections

Dose

Topical tid-qid

Adverse Reactions

Pain

Gentamicin

C⁶ Unknown¹

Dosage Forms

Gentamycin[®] 80mg/2ml/vial <CGENTA2> 参閱 p.16

Gentemay[®] cream 0.1%, 15g/tube <WGARAMY>

Oftalmolosa[®] oint 0.3%, 5g/tube<WGENTA3>参閱 p.271

Gentamicin[®] oph sol'n 0.3%,5ml/bot<WGENTA2>参閱 p.271

Use

Susceptible bacterial infections, normally gram-negative organisms and gram-positive, skin and soft tissue infections

Dose

Topical tid-qid

Adverse Reactions

Erythema, pruritus

Ketoconazole

C⁶ Safe¹

Dosage Forms

Ketosone[®] cream 2%, 10g/tube <WKETOC1>

Use

Susceptible fungal infections

Dose

Topical qd-bid

Adverse Reactions

Local burning, pruritus, stinging

Metronidazole

B⁴ Unsafe¹

Dosage Forms

Free[®] gel 0.75%, 15g/tube <WMETRO2>

Sutrol Gel-Vaginal[®] 25g/tube<WMETRO1>

Use

Free[®]: Acne rosacea,

Sutrol Gel-Vaginal[®]: Bacterial vaginosis or vaginitis due to *Gardnerella*, *Mobiluncus*

Dose

Acne rosacea

Topical apply thin film to affected area twice daily (morning and evening)

Bacterial vaginosis or vaginitis due to *Gardnerella*, *Mobiluncus*

Intravaginally apply 5g qd-bid for 5 days, before bedtime if to be used once daily

Adverse Reactions

Free[®]: redness, mild dry skin, burning, skin irritation.

Sutrol Gel-Vaginal[®]: vaginal discomfort, vaginal candidiasis, vaginal irritation, gastrointestinal discomfort

Pasca[®]

C⁶ Unknown¹

Dosage Forms

1g: Tolnaftate 20mg+Methyl salicylate 20mg, oint 10g/tube <WTOLNAF>

Use

Tinea pedis, tinea cruris, tinea corporis, Tinea versicolor

Dose

Topical bid

Adverse Reactions

Pruritus and contact dermatitis

Polyphenon E

C⁶ Unknown¹

Dosage Forms

Veregen[®] oint. 10%, 10g/tube <WPOLYPH>

Use

Condylomata acuminata

Dose

Topical 0.5cm ointment for all warts together, applied three times daily

Adverse Reactions

Redness, itching, irritation/burning, swelling, blisters

Precautions

- 1.不可塗抹於開放性傷口、患者生殖器或肛門周圍的區域應避免接觸陽光/紫外線
- 2.必須持續使用直到尖型濕疣完全清除為止，但療程不可超過 16 週
- 3.可能使衣物或寢具染色
- 4.開封後可保存 6 週

Sulconazole

C⁶ Unknown¹

Dosage Forms

Exelderm[®] cream 1%, 5g/tube <WSULCO1>

Use

Superficial fungal infections of the skin, including tinea cruris (jock itch), tinea corporis (ringworm), tinea versicolor, possibly tinea pedis (athlete's foot-cream only)

Dose

Adults: **Topical qd-bid**

Adverse Reactions

Itching, pruritus, stinging, redness

7.4. Antipsoriatics

Acitretin

X¹ Unsafe¹

Dosage Forms

Neotigason[®] 25mg/cap <KACITRE>

Use

Severe psoriasis, keratinization

Dose

Children: **PO** initial dose 0.5 mg/kg; **max: 35mg/day**

Adult: **PO** initial 25-30mg/day, maintenance dose: 25-50mg/day; **max: 75mg/day**

Adverse Reactions

Alopecia, cheilitis, disorder of nail, dry skin, peeling of skin

Precautions

1. Avoid excessive exposure to sunlight or sunlamps
2. Abnormally elevated blood lipid levels hyperlipidemia

Contraindications

Pregnant or intend on becoming pregnant, severe hepatic or renal dysfunction, chronically-elevated blood lipid levels

Calcipotriol

C¹ Unknown¹

Dosage Forms

Daivonex[®] oint 0.005%, 30g/tube <WCALCI01>

Use

Plaque psoriasis

Dose

Topical apply a thin film to the affected skin once or twice daily

Adverse Reactions

Burning sensation, dermatitis, itching, rash, skin irritation, stinging

Precautions

健規：用量以每星期不高於 30gm 或 30mL 為原則，如需使用超過 1 支，應於病歷詳細記載理由。

Betamethasone and Calcipotriol

C⁴ Unknown¹

Dosage Forms

Daivobet[®] :Betamethasone 0.5mg+Calcipotriol 50mcg oint 30g/tub <WDAIVOB>

Xamiol[®] :Betamethasone 0.5mg+Calcipotriol 50mcg/g gel 30g/bot <WXAMIOL>

Use

Plaque psoriasis

Dose

Oint:**Topical** Once daily for up to 4 weeks; **max: 100g/week**

Soln:**Topical** apply to affected area of scalp ,once daily for up to 8 weeks; maximum recommended dose: 15g/day; **max: 100g/week**

Adverse Reactions

Pruritus, erythema, irritation, scaly rash, burning sensation

Precautions

使用前將Xamiol[®] gel瓶子搖一搖，為了獲得最佳效果，建議在使用後不要立刻洗頭髮。

Contraindications

本品含 calcipotriol，禁用於高血鈣病患。

Methoxsalen

C¹ Unknown¹

Dosage Forms

Soralen-ultra[®] 10mg/FC tab <KMETHOX>

Use

Severe, recalcitrant disabling psoriasis not responsive to other therapy, with long wave UV radiation for repigmentation of idiopathic vitiligo

Dose

Psoriasis

Adults: **PO** 10-70mg (based on weight; approximately 0.6mg/kg) 1.5-2 hrs before exposure to UV light, 2-3 times at least 48 hrs apart, dosage is based upon patient's body weight and skin type

Weight (kg)	Dose (mg)
<30	10
30-50	20
51-65	30
66-80	40
81-90	50
91-115	60
>115	70

Vitiligo

Children >12 yrs and adults: **PO** 20mg 2-4 hrs before exposure to UVA light or sunlight, limit exposure to 15-40 min based on skin basic color and exposure

Adverse Reactions

Nausea, erythema, pain of skin, pruritus

Precautions

1. Avoid sun (including sun lamp) exposure for 8 hours after methoxsalen ingestion
2. Use caution with other (systemic or topical) photosensitizing drugs

7.5. Anti-Hemorrhoid Agents

Posuline[®]

Dosage Forms

1 supp: Policrosulen 100mg+ Cinchocaine 2.5mg/supp <WXYLMOL>

Use

Rectal for the treatment of hemorrhoids, anal fissures, pruritus ani, or similar conditions

Dose

Supp: **RECT** 1 supp bid-tid, then 1 supp qd if improved

Precautions

1. 儲存於 25°C 以下。
2. 栓劑可能會變色以及包裝可能會破損，但不影響產品的有效性。
3. 使用於懷孕婦女可能的危險研究報告尚未提出，也仍未知主成分是否會在哺乳母親的乳汁中。

Contraindications

對 Cinchocaine 過敏者不可使用。

Xylmol[®]

Dosage Forms

1g: Lidocaine 50mg + Aluminum acetate 35mg + Zinc oxide 180mg + Hydrocortisone 2.75mg oint, 15g/tube <WXYLMO1>

Use

Topical anti-inflammatory and anesthetic for skin disorders

Dose

Topical applicator tip should be gently inserted into the anal area, bid

Precautions

- 1.兩歲以下兒童使用須詢問醫師或藥師
- 2.蠱豆症患者請勿使用

7.6. Alopecias

Finasteride

X¹ **Unknown¹**

Dosage Forms

Propecia[®] 1mg/tab <KFINAS1>

Finta[®] 5mg/tab <KFINAS2>參閱 p.208

Use

Male pattern alopecia

Dose

Adults: **PO** 1mg qd

Adverse Reactions

Abnormal ejaculation, Breast tenderness, Reduced libido

Precautions

1. Use with caution in patients with hepatic impairment
2. Not indicated for use in pediatric and female patients

Contraindications

Pregnant women or women trying to conceive should not handle the product

Minoxidil

C⁴ **Unsafe¹**

Dosage Forms

Loniten[®] 10mg/tab <KMINOXI>參閱p.115

PBF Minoxidil Solution 2%, 60ml/bot <WMINOX3>

PBF Minoxidil Solution[®] 5%,60ml/bot<WMINOX2>

Use

2%: pattern baldness (alopecia androgenetica)

5%: alopecia androgenetica

Dose

2%: **Topical** 1ml bid; **max: 2ml/day**

5%: **Topical** 1ml twice a day .

Adverse Reactions

2%: leukoderma, pigmented contact dermatitis

5%: mild dermatitis, hypotension, hirsutism, body fluid retention, hypernatremia

Precautions

1.2%: Contact with eyes and mucous membranes should be avoided

2.5%: 禁用於 18 歲以下之患者。

7.7. Anti-Pruritus

Sinbaby Lotion[®]

Dosage Forms

ZinO 100mg+Dihydroxyamine 5mg+Dibucane 1.5mg+Camphor
1.5mg+Benzalkonium 2.5mg+Silicone oil 10mg/120ml/bot <WCALAMI>

Use

Relieve the itching, pain and discomfort of minor skin irritations

Dose

Topical bid- tid

Precautions

- 1.Shake well before use
- 2.蠶豆症患者禁止使用

C.B.[®]

Dosage Forms

1g: Chlorpheniramine 10mg+Hexachlorophene 1mg+ Methyl salicylate
10mg+Menthol 10mg+Camphor 5mg+Lidocaine 30mg, oint 5g/tube
<WCBO>

Use

Allergic skin disorders, insect bites, burns, wounds, corn

Dose

Topical apply to affected area several times daily

Precautions

- 1.兩歲以下兒童使用需詢問醫師或藥師
- 2.蠶豆症患者禁止使用

Doxepin

C¹ Unsafe¹

Dosage Forms

Ichderm[®] cream 0.5%, 15g/tube <WDOXEPI>

Use

Short-term (< 8 days) management of moderate pruritus in adults with atopic dermatitis

Dose

Adults: **Topical** apply a thin film 4 times/day (least 3-4 hrs interval)

Adverse Reactions

Stinging/burning

Precautions

健規：限成人使用，每次處方不超過 7 天。

7.8. Atopic Dermatitis

Pimecrolimus

C¹ Unknown¹

Dosage Forms

Elidel[®] cream 1%, 15g/tube <WPIMEC1>

Use

Atopic dermatitis, Second-line therapy in adults and children over 2 yrs of age

Dose

Topical application of a thin layer twice daily

Adverse Reactions

Sensation of burning of skin, headache, at risk for viral infection

Precautions

Infection at topical treatment sites, skin papillomas

Contraindications

1. Continuous long-term use is to be avoided
2. Development of lymphadenopathy including in the presence of acute infectious mononucleosis; risk that it could be lymphoma

Tacrolimus

C⁴ Unsafe¹

Dosage Forms

Protopic[®] oint 0.1%, 5g/tube <WTACR03>

Protopic[®] oint 0.03%, 5g/tube <WTACR04>

Use

Short-term and intermittent long-term therapy in moderate to severe atopic dermatitis

Dose

Adults and children 2-15 yrs: **Topical** apply thin layer bid

Adverse Reactions

Skin burning, pruritus, flu-like symptoms, skin erythema, headache

Precautions

健規：限以 3 個月為一療程，若需繼續治療則每月限使用 30g。

7.9. Burn Preparations

Silver sulfadiazine

B⁴ Unknown¹

Dosage Forms

Silverzine Cream[®] 1%, 20g/bot <WSILVE5>

Canflame Cream[®] 1%, 500g/bot <WSILVE4>

Use

Prevention and treatment of infection in second and third degree burns

Dose

Topical apply once or twice daily

Adverse Reactions

Discoloration of skin, erythema multiforme, itching, photosensitivity

Precautions

1. Use with caution in patients with G6PD deficiency, hepatic impairment,

renal impairment.

2. 因主成分物理特性關係，開封後藥品顏色會逐漸變深，屬正常現象。
3. 金屬會加速藥品顏色變深，建議使用非金屬器具取藥。
4. 開封後保存期限為 1 個月。

7.10. Corticosteroids

7.10.1 Single Preparations

Betamethasone

C⁶ Unknown¹

Ciprosone[®] cream 0.064%, 5g/tube <WBETA01> 【High potency】

Use

Psoriasis, inflammatory dermatoses

Dose

Topical bid-qid

Adverse Reactions

Acneiform eruptions, allergic dermatitis, burning, dry skin, erythema

Precautions

Discontinue if skin irritation or contact dermatitis should occur

Clobetasol

C⁶ Unknown¹

Dosage Forms

Beclosol[®] oint 0.05%, 7g/tube <WCLOB03> 【Very high potency】

Use

Short-term relief of inflammation of moderate to severe dermatosis, psoriasis

Dose

Topical bid; max: 50g/week

Adverse Reactions

Asteatotic eczema, burning sensation, dry skin

Precautions

1. Children <12 yrs of age have not been established
2. Hyperglycemia has been reported with systemic absorption of topical corticosteroids
3. Acne vulgaris, rosacea or perioral dermatitis; use not recommended

Clobetasone

C³ Unknown¹

Dosage Forms

Cloba[®] cream 0.05%, 5g/tube <WCLOB02> 【Very high potency】

Use

Non-infective inflammatory pathologies of the skin such as eczema, psoriasis, seborrhea

Dose

Topical bid

Adverse Reactions

Excessive dryness, allergic contact dermatitis

Precautions

- 1.Application to facial, groin, and axillae areas (increased risk of side effects)
- 2.Uncontrolled or severe bacterial, viral, or fungal infection

Diflucortolone

Unknown¹

Dosage Forms

Nerison[®] fatty oint 0.1%, 10g/tube <WDIFLUC> **【Very high potency】**

Use

Inflammatory and pruritic conditions of dermatologic diseases

Dose

Topical bid-tid

Adverse Reactions

Burning, itching, irritation, dryness, folliculitis

Precautions

Application to facial, groin, axillae areas and children (increased risk of side effects)

Fluocinonide

C⁶ Unknown¹

Dosage Forms

Topsym[®] cream 0.05%, 5g/tube <WFLUOC1> **【High potency】**

Topsym[®] lotion 0.05%, 10ml/bot <WFLUOC2> **【High potency】**

Use

Pruritus and inflammation, plaque-type psoriasis

Dose

Topical qd-tid

Adverse Reactions

Sensation of burning of skin

Precautions

Topsym[®] lotion:使用前請振搖

Fluticasone

C⁶ Unknown¹

Dosage Forms

Fluticasone[®] cream 0.05%, 5g/tube <WFLUT03> **【Intermediate potency】**

Use

Atopic dermatitis

Dose

Topical qd-bid

Adverse Reactions

Dry skin, pruritu, rash, stinging of skin

Hydrocortisone

A⁶ Unknown¹

Dosage Forms

Solu-Tisone[®] 100mg/vial< CHYDROC > 參閱 p.226

Cortema[®] enema 99.6mg/60ml/bot <WHYDR01> 參閱 p.168

Cort. S[®] oint 1%, 50g/bot <WHYDR02> 【Low potency】

Use

Dermatosis

Dose

Topical qd-bid

Adverse Reactions

Acneiform eruptions, irritation, itching, secondary infection

Contraindications

- 1.皮膚結核病、單純性疱疹、水痘帶狀疱疹、種痘疹等疾病之患者禁用
- 2.患部潰瘍者禁用，如第2度以上之燙傷、凍傷

Mometasone

C⁶ Unknown¹

Dosage Forms

Elisone[®] cream 0.1%, 5g/tube <WMOMET1> 【Intermediate potency】

Nasonex[®] aqueous nasal spray 50mcg/dose, 140dose/bot <WMOMET3>

參閱 p.316

Use

Relief of the inflammatory and pruritic manifestations of corticosteroid-responsive dermatoses

Dose

Topical qd

Adverse Reactions

Bacterial skin infection, burning, furunculosis, pruritus, skin atrophy

Precautions

Topical use of corticosteroids has been associated with local sensitization (redness, irritation); discontinue if sensitization is noted

7.10.2. Mixed Preparations

Flucort-F[®]

Dosage Forms

C⁶ Unknown¹

1g: Fradiomycin (Neomycin) 3.5mg+ Fluocinolone 0.25mg, cream 0.025%
5g/tube <WFLUOR5>

Use

Relief of susceptible inflammatory dermatosis, dermatitis or psoriasis of the scalp, atopic dermatitis

Dose

Topical qd-tid

Adverse Reactions

Allergic contact dermatitis, secondary infection, irritation, itching

Precautions

避免長時間使用於廣範圍的皮膚熱傷或潰瘍

Ecosone[®]

Dosage Forms

1g: Econazole 10mg +Triamcinolone 1mg, cream 10g/tube <WECONA1>

Use

Dermal fungal infections of the skin

Dose

Topical bid

Adverse Reactions

Itching, pruritus, stinging, redness

7.11. Keratolytic Agents

Duofilm[®]**C⁶ Unknown¹****Dosage Forms**

1ml: Salicylic acid 16.7%+Lactic acid 16.7% w/w, solution 15ml/bot
<WSALIC1>

Use

Keratolytic Agent

Dose

Adults: **Topical** apply to affected area (avoid applying to the surrounding normal skin) once or twice daily

Adverse Reactions

Burning and irritation at site of exposure on normal tissue, peeling, scaling

Salicylic acid**Unknown¹****Dosage Forms**

Salic[®] oint 2.5%, 10g/tube <WSALIC2>

Use

Topically for its keratolytic effect in controlling seborrheic dermatitis or psoriasis of body and scalp, dandruff, other scaling dermatoses; also used to remove warts, corns, and calluses; acne

Dose

Topical apply a thin layer to affected area once or twice daily

Adverse Reactions

Burning sensation, erythema, pruritus, stinging of skin

Ureson[®]**Dosage Forms**

1g: Hydrocortisone 10mg+Urea 100mg, cream 16g/tube <WURESON>

Use

Keratolytic effect, eczema

Dose

Topical apply thin film layer to affected area qd-bid

7.12. Scabicides and Pediculicides

Benzyl benzoate**B⁴ Unknown¹****Dosage Forms**

B.B. lotion[®] 25%, 100ml/bot <WBENZYL>

Use

Treatment in lice and scabies infestations

Dose

Pediculosis capitis

Children and Adults: after washing the hair, apply 10ml on the hair and massage approximately 3 mins then washed off by water

Scabies

After shower, apply topically to the entire body from the neck down and washed off by water after 24hrs

Infants: diluted with water to 8.3%

Children: diluted with water to 12.5%

Adverse Reactions

Burning, stinging, hypersensitivity

Precautions

Avoid contact eyes and mucous membranes, do not use on broken or secondarily infected skin

Ulex[®]

C⁶ Unknown¹

Dosage Forms

1g: Crotamiton 10%+Hydrocortisone 0.25%, cream 10g/tube <WCROTAM>

Use

Pruritus, Scabies

Dosage

Topical bid-tid

Adverse effects

Contact dermatitis, pruritus, rash

7.13. Obstetrics Preparations

Clotrimazole

B⁶ Unknown¹

Dosage Forms

Mycosten[®] cream 10g/tube <WCLOTR3> 参閱 p.134

Clomazole[®] 100mg/vag. tab <WCLOTR4>

Use

Fungal infections

Dose

Topical apply 1 tab hs for 7 days or 2 tab for 3 days.

Dinoprostone (PGE₂)

C³ Unknown¹

Dosage Forms

Prostin[®] E₂ 3mg/vag. tab <WDINOPR>

Use

Induction of labor

Dose

Intravaginally insert 3mg supp, 2nd tab may be inserted after 6-8 hrs; **max: 6mg/day**

Adverse Reactions

Diarrhea , nausea,vomiting, Headache

Precautions

- 1.需冷藏。
- 2.藉由藥物引產時，可能會增加分娩後引發血管內血液凝集的風險

Estradiol

X¹ Safe¹

Dosage Forms

Oestroge^l® 30g/tube, 1g: Estradiol 0.6mg <WESTRA3>

Use

Vulvar and vaginal atrophy associated with menopause

Dose

Topical 2.5g/dose qd apply to the area of abdomen, inside of both thighs (3 wks on, 1 wk off)

Adverse Reaction

Headache, vaginal bleeding, breast pain, endometrial carcinoma, abdominal pain

Precautions

外用藥塗抹於前臂、手臂、兩肩或者完整大面積的皮膚上，勿塗抹於乳房、陰部或陰道黏膜。

Contraindications

Breast cancer, liver dysfunction or disease, undiagnosed abnormal genital bleeding

Estrogens conjugated

X¹ Unknown¹

Dosage Forms

Premarin® vaginal cream 14g/tube, 1g: Conjugated estrogens 0.625mg <WESTRO1>

Use

Atrophic vaginitis, post-menopausal atrophic urethritis

Dose

Intravaginally 0.5 to 2g daily

Adverse Reactions

Breast pain , abdominal pain , Vaginitis weakness

Contraindications

Arterial thromboembolic disease, deep vein thrombosis/pulmonary embolism, genital bleeding, hepatic dysfunction, Carcinoma of the breast; estrogen-dependent tumor

Policresulen

Unknown¹

Dosage Forms

Polinin® 90mg/vag. supp <WPOLICR>

Use

Local treatment of cervical and vaginal inflammatory

Dose

Intravaginally 1 supp qod-hs

Adverse Reactions

Local irritation, contact dermatitis

7.14. Dermatology Miscellaneous

Antiscar[®]**Unknown⁵****Dosage Forms**

1g: Acexamic acid 50mg+Neomycin 4mg, cream 10g/tube <WCEXAM>

Use

Promotion the healing and prevention bacterial skin infection of ulcers and various other lesions

Dose

Topical qd-bid

Cadexomeriodine**Unknown⁵****Dosage Forms**

Iodosorb[®] 3g/pack (碘粉) <WCADEX>

Use

Moist wounds including decubitus ulcers and chronic leg ulcers associated with venous disease

Dose

Topical sufficient powder should be applied to form a layer about 3 mm thick

Adverse Reactions

Transient smarting sensation, mild erythema

Heparinoid**Unknown⁵****Dosage Forms**

Hirudoid[®] gel 20g/tube <WHEPARI>

Use

General care of the veins, superficial phlebitis and thrombosis, inflamed varicose veins, leg ulcers, various inflammatory processes, lymphadenitis, exudates, edema, hematomas, softening of hard scars, improved scars of injuries, burns, surgical operation

Dose

Topical take a length of cream (3-5cm) should be applied to or gently massaged into the affected area qd-qid

Precautions

Avoid open wounds or mucous membranes

Hydroquinone**C¹ Unknown¹****Dosage Forms**

Derma lightening[®] cream 7g/tube, 1g: Hydroquinone 40mg <WHYDROQ>

Use

Gradual bleaching of hyperpigmented skin condition

Dose

Children >12 yrs and adults: hs

Adverse Reactions

Burning, itching, stinging, erythema, localized contact dermatitis

Precautions

1. Avoid sun exposure, use protective sunscreen
2. Do not use in open wounds
3. 使用完畢須立即將瓶口栓緊，瓶口外部氧化是正常現象，不影響藥品品質。

Zinc oxide

Unknown^s

Dosage Forms

Zin[®] ointment 20%, 28.4g/tube <WZNO>

Use

Protective coating for mild skin irritations and abrasions; soothing and protective ointment to promote healing of chapped skin, diaper rash

Dose

Topical apply adequate amount to affected area several times a day

Precautions

需自費

8. GASTROENTEROLOGYS

8.1. Antacids and Antiflatulents

Algitab®

Unknown⁵

Dosage Forms

Chewable tab, 1 tab: Aluminum hydroxide dried gel 30mg+ Magnesium bicarbonate 40mg+Alginic acid 200mg <KTOPAAL>

Use

Antacid

Dose

Adults: **PO** 1- 2 tab tid-qid

Adverse Reactions

Abdominal distention, hiccups, constipation, diarrhea, nausea, vomiting

Precaution

- 1.請咀嚼後吞服。
- 2.腎衰竭病人長期服用含鋁胃藥可能導致或加重透析治療引起之透析性骨軟化症、透析性腦病變及低血磷血症

Aluzaine®

Unknown⁵

Dosage Forms

1ml: Aluminum hydroxide dried gel 61.2mg+Magnesium hydroxide 19.5mg+Oxethazaine 2mg, susp 360ml/bot <KALUM03>

Use

Antacid

Dose

Adults: **PO** 5-10ml qid AC

Precautions

- 1.Shake well before use
- 2.開封後請於 20 天內使用完畢。
- 3.請勿與 tetracycline(四環素)及鐵鹽併服。

Dried Aluminum hydroxide Gel

Unknown⁵

Dosage Forms

Aluminum Hydroxide Dried Gel ® 324mg/tab <KALUM02>

Use

Antacid, hyperphosphatemia

Dose

Children(≥ 12 yrs) and adults: **PO** 2 tab tid-qid

Children(6-11 yrs): **PO** 1 tab tid-qid

Children(3-5 yrs): **PO** 0.5 tab tid-qid

Precautions

- 1.請咬碎後吞服。
- 2.renal insufficiency

Dimethicone

C⁴ Unknown⁵

Dosage Forms

Kascoal[®] 40mg/tab <KGASCO1>

Wilcon[®] 20mg/ml, 60ml/bot < KGASCO2>

Use

Flatulence, meteorism

Dose

Antiflatulent

Infants and Children <2 yrs or <11 kg: **PO** 20 mg 4 times/day, as needed

Children(>2yrs or >11kg): **PO** 40 mg 4 times/day, as needed

Adults: 40-360mg/day tid-qid

Diagnostic aid (gastroscopy)

PO 40-80mg in 10ml of water, 15-40 min before diagnostic procedure

Radiography

PO 120-240mg/day divided to 3 dose since 3-4 days before diagnostic procedure (驅除腸內氣體)

Precaution

藥水開封後，應於 14 天內使用完畢。

Lederscon[®]

Unknown^S

Dosage Forms

1 tab: Aluminum hydroxide dried gel 334mg+Magnesium hydroxide 166mg+ Antiform emulsion 36.7mg <KLEDERS>

Use

Antacid

Dose

PO 1 tab qid

Precaution

請咀嚼後吞服。

Magnesium oxide

B¹ Unknown¹

Dosage Forms

Magnesium oxide[®] 250mg/tab <KMAGNE2>

Use

Antacid, laxative, mild hypomagnesemia

Dose

Antacid

PO 250-500mg tid-qid

Laxative

PO 2-4g/day tid-qid

Hypomagnesemia

PO 400-800mg/day, monitor serum magnesium response

Adverse Reactions

Diarrhea, nausea, abdominal pain, hypermagnesemia

Precautions

腎臟功能不佳者應小心使用。

Peichia®

Dosage Forms

1 tab: Aluminum dihydroxyallantoinate 50mg+Aluminum magnesium silicate 450mg <KPEICHI>

Use

Antacid

Dose

Adults: **PO** 1-2 tab tid-qid

Precautions

請咀嚼後吞服。

Strocain®

Dosage Forms

1tab: Oxethazaine 5mg+Polymigel 244mg <KSTROCA>

Use

Antacids

Dose

Adults: **PO** 1-2 tab tid-qid

Adverse Reactions

Anorexia, GI upset, constipation, dry mouth, vertigo, diarrhea

Precaution

整粒吞服，勿咬碎。

8.2. Antidiarrheals

Dioctahedral

Unknown⁵

Dosage Forms

Smecta® 3g/pack<KDIOCTA >

Use

Acute and chronic diarrhea

Dose

Children:

< 1yrs: **PO** 1 pack/ day, divide three times

1-2yrs: **PO** 1-2 packs/day, divide three times

> 2yrs: **PO** 2-3 packs/day, divide three times

Adult: **PO** 3 packs/day, divide three times

Adverse Reactions

Constipation

Precautions

- 1.藥品可與 50ml 水混或是肉湯、果汁、菜泥、嬰兒食品混勻後使用。食道炎病人需餐後服用，其餘病人宜於兩餐之間服用。
- 2.本品的吸附作用可能干擾其他藥物的吸收與排除，應盡量避免與其他藥物同時，如需服用其他藥物，建議間隔一段時間。不宜與鹼性藥品(如 quinidine, disopyramide)併用。

Contraindications

Fructose intolerance, glucose and galactose malabsorption, sucrase / somaltase deficiency

Loperamide

B¹ Safe¹

Dosage Forms

Lopedin[®] 2mg/cap <KLOPERA>

Use

Acute diarrhea, chronic diarrhea

Dose

Children: **PO** 0.08-0.24 mg/kg/day in 2-3 divided dose or

2-5yrs initial 1mg tid; 6-8yrs initial 2mg bid; 8-12yrs initial 2mg tid

Adults: **PO** initial 4mg; followed by 2 mg after each loose stool; **max:**

16mg/day

Adverse Reactions

Drowsiness, fatigue, dizziness, dry mouth, abdominal pain, constipation, nausea, vomiting, skin rash

Nifuroxazide

Unknown⁵

Dosage Forms

Nirozide[®] 200mg/cap <KNIFURO>

Use

Acute diarrhea, chronic diarrhea, gastro-enteritis, colitis

Dose

Infant: **PO** 200-600 mg/day

4-8yrs Children: **PO** 600mg/day; 8-12yrs: 600-800 mg/day

>12yrs Children and adults: **PO** 800 mg/day

8.3. Antiemetics

Aprepitant

B⁴ Unknown¹

Dosage Forms

Emend[®] 125mg/cap<KAPREP2>

Use

Antiemetics and antinauseants

Dose

PO 1cap 1 hr before chemotherapy then 1cap daily as a single dose for the next 2 days; should be used in combination with a corticosteroid and 5-HT₃ receptor antagonist.

Adverse Reactions

Constipation, headache, hiccoughs, fatigue

Precautions

本品一盒1顆。

Contraindications

禁止與 fosaprepitant 及 cisapride 併用。

Fosaprepitant

B⁴ Unknown¹

Dosage Forms

Emend[®] 50mg/vial<CFOSAPR>

Use

Antiemetics and antinauseants

Dose

Prevention of nausea and vomiting associated with moderately and highly emetogenic cancer chemotherapy:

IV 150mg fosaprepitant on Day 1 only as an infusion over 20-30minutes initiated approximately 30 minutes prior to chemotherapy. No oral emend are administered on Days 2 and Days 3.

Adverse Reactions

Infusion site erythma, pruritus, pain, ALT increased

Precautions

1. 未開封時需儲存於 2-8°C 冷藏。
2. 將 5ml 生理食鹽水沿瓶壁注入小瓶。輕輕旋動小瓶，切勿用力震搖或將生理食鹽水直接注入小瓶。將小瓶中溶液抽出，轉注入裝有 145ml 生理食鹽水輸注袋中，如此即得總量 150ml 溶液，輕輕將輸注袋倒轉 2-3 次。
3. 配製後室溫下(25°C)可維持穩定 24 小時
4. 可能導致荷爾蒙避孕藥效果降低，治療期間及最後一次劑量使用後一個月內，應使用其他替代或輔助避孕方法
5. 限於化療第一天使用

Contraindications

不可與 pimozide, terfenadine, astemizole 或 cisapride 同時使用，會導致藥物濃度升高，可能引發嚴重或危及生命的反應。

Diphenidol

Unknown⁵

Dosage Forms

Diphenidol[®] 25mg/tab <KDIPH02>

Use

Nausea, vomiting, vertigo

Dose

Children(> 23kg): **PO** 25mg q4h or 0.88mg/kg q4h; **max: 5.5mg/kg/day**

Adults: **PO** 25-50 mg q4h as needed; **max: 300 mg/day**

Adverse Reactions

Hallucinations, confusion, disorientation, dry mouth

Meclizine

B¹ Unknown¹

Dosage Forms

Semper[®] 25mg/tab <KMECLIZ>

Use

Motion sickness, vertigo

Dose

Motion sickness

>12yrs Children and adults: **PO** 25-50mg 1 hr before travel, repeat dose

q24h if needed; **max: 50 mg/day**

Vertigo

>12yrs Children and adults: **PO** 25-100 mg/day in divided dose

Granisetron

B¹ **Unknown³**

Dosage Forms

Grantron[®] 3mg/3ml/amp <CGRANIS >

Use

Prevention of nausea and vomiting associated with chemotherapy, radiation and postoperative.

Dose

IVP rate>30sec, IVF rate>5min

Chemotherapy or radiation induced nausea and vomiting:

Adult:

Prophylaxis: **IV** 1-3mg (10-40mcg/kg) single dose before therapy

Treatment: **IV** 1-3mg (10-40mcg/kg) single dose, additional infusions should be administered at least 10 min apart. **max: 9mg/day**

Children (for chemotherapy induced nausea and vomiting):

Prophylaxis: **IV** 10-40mcg/kg single dose before therapy, additional infusions should be administered at least 10 min apart. **max: 3mg/day**

Postoperative nausea and vomiting:

Adult: **IV** 1mg (10mcg/kg) single dose; **max:3mg/day**

Adverse Reactions

Headache, constipation, rash, allergy reaction

Precautions

- 1.本品使用 NS 或 D5W 稀釋，稀釋液體積成人加入 20-50ml，兒童加入 10-30ml。
- 2.稀釋後須於 24 小時內使用完畢。
- 3.健規：每次療程使用不得超過五日為原則。

Palonosetron

B⁴ **Unknown³**

Dosage Forms

Aloxi[®] 0.25mg/5ml/vial <CPALONO>

Use

Prevention of nausea and vomiting associated with chemotherapy

Dose

IV (>30sec.) 0.25mg as a single dose 30 min prior to the start of chemotherapy

Adverse Reactions

Headache, constipation, diarrhea, dizziness

Precautions

- 1.不可與其他藥品混合，投與前後需以生理食鹽水沖洗管路。
- 2.健規：限於中、高致吐化療藥前使用

8.4. Antiulcers

8.4.1.H₂-Blockers

Cimetidine

B⁴ Safe¹

Dosage Forms

Cimetidine[®] 200mg/2ml/amp <CCIMETI>

Tamedin[®] 200mg/tab <KCIMETI>

Use

Zollinger-Ellison syndrome, duodenal ulcers, gastric ulcers, reflux esophagitis

Dose

Duodenal and gastric ulcers

Children: **IV** 20-40mg/kg/day individual dose

Adult: **IV/IM** (>15-20min) 300mg q6-8h;

Tablet

PO 200-400mg tid or 400mg hs

Gastroesophageal reflux disease

Adult: **PO** 800mg bid or 400mg qid for 12 wks

Adverse Reactions

Headache, dizziness, agitation, drowsiness, diarrhea, gynecomastia

Precautions

1. 需依腎功能調整劑量
2. 服藥期間避免食用葡萄柚或葡萄柚汁
3. 靜脈輸注可加入 100ml D5W 稀釋

Famotidine

B⁴ Safe¹

Dosage Forms

Famodine[®] 20mg/vial <CFAMOTI>

Use

Duodenal or gastric ulcer, reflux esophagitis, Zollinger-Ellison syndrome

Dose

Reflux esophagitis

>1yrs Children: **IV** 0.25-0.5mg/kg q12h, **max: 40mg/day**

Adults: **IV** 20mg q12h

Duodenal or gastric ulcer

>1yrs Children: **IV** 0.25-0.5mg/kg q12h; **max: 40mg/day**

Adults: **IV** 20mg q12h

Adverse Reaction

Rash, dizziness, headache, constipation, diarrhea

Precautions

需依腎功能調整劑量

Ranitidine

B⁴ UnSafe¹

Dosage Forms

Ranitidine[®] 150mg/tab <KRANITI>

Use

Duodenal or gastric ulcer, reflux esophagitis

Dose

Duodenal ulcer

PO 2 tab HS

Gastroesophageal reflux disease

PO 1 tab BID

Zollinger-Ellison syndrome

PO 1 tab TID; max:6tab/day

Adverse Reaction

Abdominal pain, constipation, diarrhea, headache

Precautions

服藥期間避免食用葡萄柚或葡萄柚汁

8.4.2. Proton Pump Inhibitors(PPI)

Esomeprazole

B⁴ Unknown¹

Dosage Forms

Nexium[®] 40mg/vial <CESOMEPE>

Nexium[®] 40mg/tab <KESOMEPE>

Use

Gastroesophageal reflux disease, NSAID-associated gastropathy, Prevention of rebleeding of peptic ulcer and duodenal ulcer, Helicobacter pylori with peptic ulcers (PO), Zollinger-Ellison syndrome(PO)

Dose

Gastroesophageal reflux disease

Adults:**IVF/IVD** 20 mg or 40 mg once daily in patients unable to take oral;

PO 20-40mg qd for 4-8 wks

NSAID-associated gastropathy

IVF 20mg qd in patients unable to take oral; **PO** 20mg qd for 4-8wks

Prevention of rebleeding of peptic ulcer and duodenal ulcer

IV initial 80mg (rate:30min), followed by 8mg/hr (5vial/day) infusion for 72hrs

H. Pylori

Adults: **PO** 40mg qd for 7-14 days, requires combination therapy

Zollinger-Ellison syndrome

Adults: **PO** 40mg bid, adjust regimen to individual patient needs; **max: 240mg/day**

Adverse Reactions

Headache, diarrhea, nausea, flatulence, abdominal pain, constipation

Precautions

- 錠劑請勿剝半或切開，如遇吞嚥困難的病患，可將藥錠置入半杯非碳酸類液體中攪拌溶解，並立即或在 30 分鐘內服用。
- Safety and efficacy has not been established in pediatric
- 針劑以NS 100ml調配,不可混其它藥品使用，調配後於30°C可以放置 12 小時。
- 需依肝功能調整劑量

Dexlansoprazole

B⁴ Unknown¹

Dosage Forms

Dexilant[®] 60mg/DR cap <KDEXLAN>

Use

Erosive esophagitis, maintenance of healed EE and symptomatic relief of heartburn, symptomatic GERD

Dose

Erosive esophagitis

PO 60mg once daily for up to 8 weeks

Maintenance of healed EE and symptomatic relief of heartburn

PO 30mg once daily

Symptomatic GERD

PO 30mg once daily for 4 weeks

Adverse Reactions

Diarrhea, abdomen pain, nausea, upper respiratory tract infection

Precautions

必須整粒吞服，如無法整粒吞服，可打開膠囊服用：可將膠囊內藥粉顆粒灑入 1 湯匙食物(果醬)中，立刻吞服，勿咀嚼藥粉顆粒。

Pantoprazole

B¹ Unknown¹

Dosage Forms

Pantyl[®] 40mg/vial <CPANTOP>

Pantoloc[®] 40mg/tab <KPANTOP>

Use

Helicobacter pylori with peptic ulcers, duodenal, gastric ulcer, moderate and severe reflux esophagitis, Zollinger-Ellison syndrome

Dose

Peptic ulcer

Adults: **IV** 40mg qd; **PO** 40 mg qd for 8 weeks

Gastroesophageal reflux disease

Adults: **IV** 40mg qd for 7-10 days

Adults: **PO** 40mg qd for 8-16 weeks

Zollinger-Ellison syndrome

Adults: **IV** 80mg q8-12h (IV over 2 mins or IV infusion over 15 mins)

Adults: **PO** 40mg bid up to 240 mg/day and over 2 yrs duration have been administered

Adverse Reactions

Headache, diarrhea, upper abdominal pain, skin rash, pruritus, dizziness

Precautions

1. IV infusion diluted to 100ml, not to exceed 3mg/min
2. 針劑稀釋後 12hr 內用完
3. Safety and efficacy not established in children
4. 為腸溶膜衣錠,不可咀嚼或壓碎

Rabeprazole

B⁴ Unknown¹

Dosage Forms

Pariet® 20mg/tab <KRABEPR>

Use

Duodenal ulcers, gastroesophageal reflux disease, Zollinger-Ellison syndrome, Helicobacter pylori with peptic ulcers

Dose

Duodenal ulcer (active)

PO 20mg qd for 4-8 wks

Gastroesophageal reflux disease

PO 20mg qd for 4-8 wks, maintenance 20mg qd

H. pylori eradication

PO 20mg bid for 7 days (combination with Amoxicillin 1000mg plus Clarithromycin 500mg)

Adverse Reactions

Headache, nausea, diarrhea, dizziness, skin rash

Precautions

為腸溶膜衣錠故不建議磨粉。

8.4.3. Antiulcer Miscellaneous

Bismuth Subcarbonate

C¹ Unknown¹

Dosage Forms

Bismuth Subcarbonate® 324mg/tab <KBISMU1>

Use

Gastric ulcer, diarrhea

Dose

Adults: PO 1-2 tab tid-qid

Adverse Reactions

Pain, nausea and vomiting may occur during the early stages of treatment

Precautions

1. 會使糞便呈灰色。
2. 勿併服牛奶或制酸劑。

Misoprostol (PGE1)

X¹ Unsafe¹

Dosage Forms

Cytotec® 200mcg/tab <KMISOPR>

Use

Prevention of NSAID-induced gastric ulcers, duodenal gastric

Dose

NSAID-induced gastric ulcer prophylaxis

PO 200mcg qid

Duodenal gastric

PO 800mcg/day bid-qid for 4 wks

Abortion

PO 400mcg 2 days after mifepristone dose of 600 mg

Adverse Reactions

Abdominal pain, diarrhea, nausea

Precautions

1. Antacids containing magnesium may increase risk of diarrhea
2. Cerebral vascular or coronary artery disease, epilepsy

Sucralfate

B⁶ Safe¹

Dosage Forms

Scrat[®] 1g/10ml/sachet <KSUCRA3>

Use

Duodenal ulcer, gastric ulcers, gastroesophageal reflux disease, esophagitis, stress ulcer prophylaxis

Dose

Adults: **PO** 1sachet qid AC

Adverse Reactions

Constipation

Precautions

1. 飯前 30 分鐘服用
2. 與制酸劑或減少胃酸分泌藥物併用,二者需間隔 30-60 分鐘
3. 藥物含鋁鹽,腎衰竭病患長期服用需注意發生低血磷或 dialysis osteomalacia

8.5. Digestive Enzymes

Biotase[®]

Unknown⁵

Dosage Forms

1 tab: Biotiastase 30mg+Lipase 5mg+Newlase 10mg<KBIOTAS>

Use

Digestants

Dose

>12yrs Children and adult: **PO** 3tab tid

6-12yrs Children: **PO** 1.5tab tid

3-5yrs Children: **PO** 0.5tab tid

Adverse Reactions

Nausea, abdomen pain, diarrhea

Lactobacillus

Safe¹

Dosage Forms

Antibiophilus[®] 250mg/cap <KLACTOB>

Use

Diarrhea, constipation, reestablish normal physiologic and bacterial flora of the intestinal tract

Dose

>3yrs Children and adults: **PO** 2 cap bid-qid

Pancrelipase

C³ Unknown⁵

Dosage Forms

Protease[®] 280mg/E.C. cap <KPANCRE>

Use

囊腫性纖維化疾病、慢性胰臟炎、胰臟切除、胃腸鏡道手術及因腫瘤引發胰管式膽管阻塞等疾病所導致的胰液分泌不全

Dose

PO 1 tab tid with food

Adverse Reactions

Nausea, vomiting, abdominal discomfort, constipation

Precaution

- 1.服用時與三餐之食物或點心一起吞服，切勿於飯前或飯後及無食物之狀態下服用
- 2.不可壓碎或咀嚼，也不可與酸鹼值 5.5 以上之食物混合，以免溶解腸溶膜衣而提早釋放出酵素，造成口腔粘膜之刺激及失去酵素之活性

8.6. Gastrointestinal Stimulants

Domperidone

B¹ Unknown¹

Dosage Forms

Domtoo[®] 10mg/tab <KDOMPER>

Use

Nausea, vomiting, dyspepsia

Dose

Children: PO 0.3-0.6mg/kg tid-qid

Adults: PO 10mg tid-qid 15-30 mins before meals and at bedtime, if required

Adverse Reactions

Dystonic reactions, arrhythmias, extrapyramidal effects, seizures, stomatitis galactorrhoea

Precautions

建議飯前服用。

Contraindications

Gastrointestinal hemorrhage, mechanical obstruction or perforation, prolactinoma

Metoclopramide

B¹ Safe⁴

Dosage Forms

Promeran[®] 9.08mg/2ml/amp <CMETOCL>

Promeran[®] 3.84mg /tab <KMETOC1>

Aswell syrup[®] 60mg/60ml/bot <KMETOC3>

Use

Gastroesophageal reflux, prevention of nausea associated with chemotherapy

Dose

Gastroesophageal reflux

Children: PO 0.1-0.2mg/kg/dose qid, max: 0.5mg/kg/day

Adults: PO 1-2 tab tid AC

Gastrointestinal hypomotility

Children: **IM/PO** 0.1mg/kg/dose qid, **max: 0.5mg/kg/day**

Adults: **PO** 1-2 tab qid AC for 2-8 wks; **IV** (severe symptoms) 10mg for 10 days

Antiemetic (chemotherapy-induced emesis)

Children: **IV** 1-2mg/kg 30 mins before chemotherapy and q2-4h

Adults: **IV** 2mg/kg/dose q2-4h for 2-5 doses

Adverse Reactions

Restlessness, drowsiness, diarrhea, weakness, breast tenderness, prolactin stimulation, xerostomia, extrapyramidal (high-dose)

Precautions

1. Dosing adjustment in renal impairment

2. 建議飯前服用。

3. 藥水開封後室溫下可存放 2 個月。

Contraindication

Gastrointestinal obstruction, perforation or hemorrhage, pheochromocytoma, history of seizure disorder

Mosapride

Unsafe³

Dosage Forms

Mozapry[®] 5mg/F.C. tab <KMOSAPR>

Use

Diabetic gastroparesis, gastritis, gastroesophageal reflux disease, indigestion

Dose

Adults: **PO** 5mg tid

Adverse Reactions

Diarrhea, thirsty, tiredness

Precautions

與心臟節律藥物併用時應監測其心電圖，如有心律不整之情形發生，應予減少劑量或停藥。

8.7. Laxatives

Bisacodyl

B⁴ Unknown¹

Dosage Forms

Dulcolax[®] 5mg/EC. tab <KBISACO>

Bisacodyl[®] 10mg/supp <WBISACO>

Use

Constipation and bowel evacuation before procedures or surgery

Dose

Constipation

Supp

<6yrs Children: **RECT** 0.5supp

>6 yrs Children and adults: **RECT** 1supp qd;

Tablet

4-10yrs Children: **PO** 5mg qd

>10yrs Children and adults: **PO** 5-10mg qd

Bowel evacuation before procedures or surgery

Children \geq 4yrs: **PO** 5mg hs and **RECT** 0.5 supp qd

Adults: **PO** 10-20mg hs and **RECT** 1supp qd

Adverse Reactions

Abdominal cramps, abdominal pain, diarrhoea, nausea, haematochezia (blood in stool).

Precautions

1. 口服錠劑建議空腹，不宜磨粉。
2. 避免服藥後一小時內飲用牛奶，牛奶可能導致腸衣錠提早在胃中溶解，使藥品失效並對胃部產生刺激。
3. 栓劑形體變形時，照原塑膠包裝型態浸入於溫水(40-50°C)中，軟化後再浸於冷水即可凝固。栓劑如軟化或溶化時，浸於冷水即可凝固。

Contraindications

Appendicitis, acute inflammatory bowel disease, intestinal obstruction, sever dehydration

SlipFeel®

C⁶ Unsafe³

Dosage Forms

Oral solution 1ml: Monobasic sodium phosphate 480mg+ Dibasic sodium phosphate 180mg, 45ml/bot <KFLEE1>

Fleet® enema 1ml: Monobasic sodium phosphate 160.2mg+Dibasic sodium phosphate 60mg, 133ml/bot <WFLEE1>

Use

Bowel examination or surgery, constipation

Dose

Bowel examination or surgery

PO 45ml bid

Constipation

Children: **PO** (5-9yrs) 7.5ml; (10-11yrs) 15ml;

>12yrs child and adults: **PO** 20- 45ml; **max: 45ml/day**

Enema:

\geq 12yrs child and adult: 1bot st.

Adverse Reactions

Electrolyte imbalance, Acute phosphate nephropathy, Rash, Itching

Precautions

1. 不建議使用於5歲以下兒童。
2. 一般在服用後 30 分鐘至 6 小時會產生排便。
3. 放入冰箱冷藏可增加口感，但不可冷凍。
4. 口服液開封後如未飲用完，於室溫下可存放 7 天。
4. Fleet enema 24 小時內至多使用一瓶，若超量使用，可能引起傷害。

Contraindications

鬱血性心衰竭、嚴重腎臟疾病者

GI Klean powder®

C⁶ Unknown⁴

Dosage Forms

GI Klean powder® 68.6g/sachet <KKLEAN>

Each sachet contains:

Polyethylene glycol 3350.....59 g

Sodium sulfate anhydrous.....5.685 g

Sodium bicarbonate.....1.685 g

Sodium chloride.....1.465 g

Potassium chloride.....0.7425 g

Use

Bowel preparation before colonoscopy, colonic surgery, radiological examination and other related procedures

Dose

Adults(include elderly): **PO** 1 sachet dissolved in 1 liter of water. 250 ml to be drunk rapidly every 10-15min until all the solution has been consumed.

The procedure to be repeated with all 4sachets or until the rectal effluent is clear. The solution from all 4sachets should be drunk within 4-6hr

Adverse Reactions

Nausea, abdominal fullness, bloating

Precautions

- 1.配製後如未馬上服用應冷藏，並於 24 小時內使用完畢。
- 2.所有口服藥物均須於服藥前至少 1 小時使用。

Contraidications

CHF (NYHA grades 3 and 4), weight<20kg, sever renal insufficiency

Lactulose

B⁴ Unknown¹

Dosage Forms

Duphalac® 300ml/bot, 1ml: Lactulose 666mg <KLACTUL>

Lactul® 60ml/bot, 1ml: Lactulose 666mg <KLACTU1>

Use

Portal-systemic encephalopathy (PSE), chronic constipation

Dose

Portal systemic encephalopathy

Adults: **PO** 30-45ml tid-qid

Children: **PO** 40-90ml/day

Infants: **PO** 2.5-10ml/day

Rectal 300ml is mixed with 700ml water or saline, retained for 30-60min, may be repeated q4-6h.

Chronic constipation

Adults: **PO** 15-30ml/day, up to 60ml/day

Adverse Reactions

Flatulence, diarrhea (excessive dose), abdominal discomfort, nausea, vomiting, cramping

Precautions

- 1.本品含少量 galactose 及 lactose，所以糖尿病患及半乳糖血症 (galactosemia)病患須小心謹慎給藥。

2. 在室溫良好條件下儲存，顏色變深並不影響療效。
3. 長期置於 30°C 以上或光直射時，易變成極深色及混濁，當此現象發生時，請勿再使用。
4. 如覺口味不適時，可與果汁、白開水、牛乳混合後使用。

Magnesium citrate

A⁴ Safe¹

Dosage Forms

Magvac[®] 250ml/bot <KMAGNE1>

1ml: Magnesium carbonate 42.9mg+Citric acid 78.3mg+Potassium bicarbonate 7.14mg

Use

Laxative

Dose

Constipation

PO 20-50ml hs

Bowel cleansing prior to GI exam

PO 250ml

Adverse Reactions

Diarrhea, dizziness, weakness abdominal pain, nausea, vomiting

Precautions

1. 每次服用時需併服大量水份或其他液體。
2. 口服本劑後不得飲用或食用牛奶或牛奶類食品。
3. 如發生變質或過期，不可再食用。

Contraindications

Severe renal insufficiency

Normacol[®]

C⁴ Unknown¹

Dosage Forms

1g: Sterculia 0.62g+Frangula 0.08g, 7g/pack <KNORMAC>

Use

Laxative

Dose

Children 6-12yrs: **PO** as directed by a doctor

Adult: **PO** 1-2 pack qd-bid

Adverse Reactions

Abdominal distension, intestinal obstruction if overdosage or inadequate fluid intake

Precautions

1. The granules should not be chewed or crushed and should be swallowed immediately with plenty of water.
2. Do not use when abdominal pain, nausea, or vomiting is present
3. 應飲用足量的水以避免腸阻塞。

Contraindications

Intestinal obstruction, faecal impaction, total loss of muscle tone in the intestines.

Sennoside A+B

Unknown⁴

Dosage Forms

Sennapur[®] 12.5mg/tab <KSENNOS>

Use

Constipation

Dose

Children 3-5 yrs: 1/4 tab hs, 6-11 yrs: 1/2 tab hs

Adults: 1 tab hs

Adverse Reactions

Excessive bowel activity, abdominal cramps, eruption, nausea, vomiting

Precautions

Senna 類會使酸性尿呈黃、棕色，鹼性尿呈粉紅或紫紅

Contraindications

Bowel obstruction, fecal impaction, patients with nausea, vomiting or other symptoms of appendicitis, undiagnosed abdominal pain

8.8. Antiobesity Agents

Orlistat

X⁴ Unknown¹

Dosage Forms

Xenical[®] 120mg/cap <KORLIST>

Use

Management of obesity, indicated for obese patients with an initial body mass index (BMI) $\geq 30\text{kg/m}^2$ or $\geq 27\text{kg/m}^2$ in the presence of other risk factors

Dose

Adults: **PO** 120mg tid; **max: 360mg/dose**

Adverse Reactions

Fatty/oily stool, fecal urgency, flatus with discharge, oily evacuation, oily spotting, back pain, headach

Precautions

- 1.有時會有維生素 D,E 與貝他-胡蘿蔔素吸收減少。如有須補充綜合維生素時，應在服用完 Xenical 後兩小時服用或是睡前服用。
- 2.食品藥物管理局提醒：使用含 Orlistat 成分藥品應謹慎監視肝功能。

Contraindications

Chronic malabsorption syndrome or cholestasis

8.9. Spasmolytics

Atropine

C⁴ Unknown¹

Dosage Forms

Atropine[®] 1mg/ml/amp <CATROPI>

Tropine[®] 0.3%,5ml/bot <WATRO3> 閱參p.277

Use

Biliary colic, gastrointestinal tract spasm, organophosphate poisoning, pilocarpinism, mydriasis induction, premedication for anesthetic procedure, cycloplegic refraction

Dose

Antispasmodic

Children: **SC** 0.01 mg/kg ; **max:0.4mg/dose**

Adults: **SC** 0.4-0.6 mg q4-6h.

Bradycardia

Children: **IV** 0.01-0.03mg/kg

Adults: **IV** 0.4-1 mg q1-2h; **max: 2 mg**

Cholinesterase inhibitor

Children: **IV** initial dose 1mg. 0.5-1mg titrated to response

Adults: **IV** 2-4 mg titrated to response

Premedication

Adults: **IM** 0.2-0.6mg 1-2hrs preoperation

Adverse Reactions

Hot skin, impaired GI motility, constipation, dry throat, dry mouth, dry nose, diaphoresis, irritation at inject site

Precautions

1. 不建議加入大型溶液內
2. 靜脈輸注應緩慢

Contraindications

Narrow-angle glaucoma, tachycardia, thyrotoxicosis, obstructive GI tract disease, obstructive uropathy

Hyoscyamine

C⁴ Unknown¹

Dosage Forms

Buwecon[®] 0.125mg/tab <KHYOSCY>

Use

GI tract disorders caused by spasm, adjunctive therapy for peptic ulcers, biliary colic, renal colic, bladder infection, vomiting of pregnancy, and dysmenorrhea

Dose

Children (2-12 yrs): **PO** 0.0625-0.125mg q4h as needed; **max: 0.75mg/day**

Adults: **PO** 0.125-0.25mg q4h; **max: 1.5mg/day**

Adverse Reactions

Dry mouth, urine retention, double vision, fast heartbeat, palpitations

Precautions

含阿斯巴甜(Aspartame)賦形劑，苯酮尿症(Phenylketonurics)不宜使用。

Contraindications

Glaucoma, obstructive uropathy, obstructive GI tract disease, myasthenia gravis, unstable cardiovascular status in acute hemorrhage

Otilonium bromide

Unknown³

Dosage Forms

Catilon[®] 40mg/tab<KOTILON>

Use

Irritable bowel syndrome

Dose

PO 40mg bid-tid; **max: 240mg/day (6tab/day)**

Adverse Reactions

Nausea, vomiting, upper abdominal pain, dizziness, headache

Precautions

青光眼、攝護腺肥大或幽門狹窄者需審慎使用

Pinaverium

Unknown ³

Dosage Forms

Dicetel[®] 50mg/tab <KPINAVE>

Use

Gastric ulcer, duodenal ulcer, irritable bowel syndrome, colonitis, biliary tract dyskinesia syndrome

Dose

PO 50-100mg tid

Adverse Reactions

Dyspepsia

Precautions

為腸溶膜衣錠，不建議磨粉或剝半。

Scopolamine bromobutylate

C ⁴	safe ¹
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Dosage Form

Butyscol[®] 20mg/ml/amp <CSCOPOL>

Use

Intestinal colic, cholelithic colic and adjunct in the treatment of peptic ulcer disease

Dose

Adults: **IM/slow IV** 20mg bid-tid

Adverse Reactions

Dry mouth, headache, constipation

Contraindications

Narrow angle glaucoma, benign prostatic hyperplasia

8.10. Inflammatory Bowel Disease

Hydrocortisone

C ⁵	Unknown ¹
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Dosage Forms

Solu-Tisone[®] 100mg/vial <CHYDROC> 參閱 p.226

Cortema[®] enema 99.6mg/60ml/bot <WHYDR01>

Cort. S[®] oint 1%, 50g/bot <WHYDR02> 參閱 p.143

Use

Ulcerative colitis

Dose

RECT 100mg administered once daily at bedtime for 21 days.
Treatment may be continued for 2-3 months. If used for longer than 3 wks, treatment should be gradually tapered over 2 or 3 wks

Adverse Reactions

Body fluid or electrolyte imbalance, wounds not easy to heal

Contraindications

Systemic fungal infections, enterostomy

Mesalazine

B⁴ Unknown¹

Dosage Forms

Asacol[®] supp 500mg/supp <WMESALA>

Mezavant[®] XL 1200mg/tab <WMESALA>

Use

Active ulcerative colitis, proctosigmoiditis or proctitis

Dose

Mezavant:

Treatment of ulcerative colitis

PO 2.4-4.8g qd for up to 8 weeks; **max: 4.8g/day**

Maintenance of remission of ulcerative colitis

PO 2.4g qd

Asacol:

Adults: **RECT** 500mg-1000mg bid-tid × 3-6 wks

Adverse Reactions

Pain, abdominal pain, dyspepsia, constipation

Precautions

- 1.Asacol:2歲以下兒童、老年人須小心使用。
- 2..口服藥物建議與食物併服，不可咬碎或咀嚼。

Contraindications

Urea nitrogen or proteinuria, severe renal failure

Sulfasalazine

B⁴ Unknown¹

Dosage Forms

Salazine[®] 500mg/E.C. tab <KSULFAS>

Use

Ulcerative colitis, rheumatoid arthritis

Dose

Ulcerative colitis

Children: **PO** 40-60 mg/kg/day in 3-6 divided doses

Adults: **PO** severe, 2-4 tab tid-qid; moderate, 2 tab tid-qid

Rheumatoid arthritis

Adults: **PO** 2 tab bid

Adverse Reactions

Headache, neutropenia, anorexia, nausea, vomiting, diarrhea, gastric distress

Precautions

- 1.本品為腸溶錠不宜磨粉。

2. Hepatic or renal impairment, asthma or severe allergic 須小心使用

Contraindications

對水楊酸類，磺胺類賦形劑過敏者，acute intermittent porphyria,
Glucose-6-phosphate dehydrogenase deficiency

8.11. Gastroenterology Miscellaneous

Flopropione

Unknown¹

Dosage Forms

Cospanon[®] 40mg/cap <KFLOPRO>

Use

Gallbladder tract spasms, cholecystitis, cholecystolithiasis, pancreatitis

Dose

Adults: **PO** 40-80mg tid

Adverse Reactions

Skin rash, flatulence, abdominal discomfort

Gabexate mesilate

Unknown³

Dosage Forms

Foy[®] 100mg/vial <CGABEXA>

Use

Acute pancreatitis, acute exacerbation stage of chronic recurrent
pancreatitis, disseminated intravascular coagulation (DIC)

Dose

Pancreatitis

Adults: **IVF** 100-300mg/day at a rate 8ml/min and decrease the dosage
depending on the improvement of the symptoms

Disseminated intravascular coagulation

IVF 20-39mg/kg over 24 hrs

Adverse Reactions

Phlebitis, vascular pain, reddening and inflammatory at injection site,
hypotension, nausea

Precautions

1. 溶解後儘快使用
2. 與抗生素、血液製劑混合時須注意可能產生混濁變化。
3. 與胺基酸輸液，鹼性藥劑以及含亞硫酸鹽類藥劑配合使用時須注意可能產生分解變化。

Contraindications

Cerebral aneurysm or cerebrovascular hemorrhage, severe and
uncontrolled hypertension, uncontrolled bleeding

Glutathione

C⁴ Unsafe¹

Dosage Forms

Agifutol[®] 500mg/vial <CGLUTAT>

Use

Uses of exogenous GSH supplementation to protect against oxidant injury, detoxification, immunomodulatory activities

Dose

Adults: **IM/IV** 100-200mg/dose

Adverse Reactions

Anaphylaxis, nausea, vomiting

Precautions

1. 避免與cefazolin，kanamycin 等注射劑混合使用，因會產生變化。
2. 與 Vitamin B6、Vitamin K、Cyanocobalamin 混合時，應於 3 小時內迅速注射。
3. 溶解後應立即使用，若分次使用藥品需冷藏，可存放 8 小時。

Glycyrrhizin

Unknown⁵

Dosage Forms

Stronger Neo-minophagen C[®] 40mg/20ml/amp <CGLYCYR>

Use

Hepatic disease, drug or food allergy

Dose

Drug or food allergy

Adult: **IV** 5-20ml qd

Chronic hepatic disease

IV 40-60ml qd; **max: 100ml/day**

Adverse Reactions

Decrease in serum potassium, increase in blood pressure, flushing, edema

Lanreotide Autogel

C⁴Unsafe³

Dosage Forms

Somatuline[®] 60mg/syringe<CLANREO>

Use

Acromegaly, Carcinoid tumours

Dose

Acromegaly

Deep SC 60-120mg every 28 days

Carcinoid tumours

Deep SC 90mg every 28 days during 2 months

Adverse Reactions

Diarrhea, abdominal pain, cholelithiasis, flatulence, nausea

Precautions

1. 會抑制胰島素及升糖激素分泌,故需監測血糖濃度。
2. 須儲存於2-8°C
3. 注射部位會有局部紅腫結塊此一反應為可逆。

Contraindications

Complicated, untreated lithiasis of the bile ducts

Octreotide

B⁴Unknown¹

Dosage Forms

Sandostatin LAR® 20mg/vial <COCTRE2>

Use

Acromegaly, Gastroenteropancreatic endocrine tumors

Dose

Acromegaly

IM 20mg q4w for 3months, then dose adjustment depends on the response

Gastroenteropancreatic endocrine tumors

IM 20mg q4w for 3months, may increase to 30 mg per 4 wk based on clinical symptoms and biochemical parameters.

Adverse Reactions

Hyperglycemia, sinus bradycardia, diarrhea, abdominal pain, flatulence, constipation, headache

Precautions

1. 需避光冷藏。
2. 用於孩童的經驗非常有限。
3. Sandostatin LAR 注射用微粒用於單一劑量的容器，並不與其他產品做稀釋。
4. Octreotide 長效型注射劑，需事前審查後使用。

Silymarin

B⁵ Unknown³

Dosage Forms

Siygen-H® 150mg/cap <KSILYMA>

Use

Fatty degeneration of the liver, chronic hepatitis, chronic cirrhosis liver

Dose

Adults: **PO** 150mg qd-tid

Precautions

1. 肝庇護劑之使用，門診以口服一種為原則
2. 使用肝庇護劑應檢附肝功能報告，該報告有效期為三個月，逾期應再複查。

Somatostatin

B⁴ Unknown¹

Dosage Forms

Somatosan® 3mg/amp <CSOMATO>

Use

Severe acute bleeding from esophageal varices, severe acute gastroduodenal ulcer bleeding, severe acute bleeding in acute erosive or hemorrhagic gastritis, prevention of postoperative pancreatic complication after pancreatic surgery

Dose

Adults: **IV** initially 250 mcg IV bolus > 3-5 min, followed by a continuous infusion at the rate of 250 mcg/hr (3.5 mcg/kg/hr) for 24 hr

Adverse Reactions

Nausea, dizziness, hot flashes, vomiting

Precautions

1. 以生理食鹽水溶解藥品安定性可達 24 小時

2. 會抑制胰島素及升糖激素分泌,故需監測血糖濃度。
3. 預防胰臟手術後併發症,最長使用五天。
4. 胃、食道靜脈曲張出血,限三天。
5. 嚴重性急性消化性潰瘍出血,急性之糜爛或出血性胃炎之急性嚴重出血,經內視鏡處理同時經氫離子幫浦阻斷劑或乙型組織胺受體阻斷劑注射治療仍不能止血,且不適合外科手術者,得使用本品作為輔助治療三天。

Sulpiride

D³ Unsafe¹

Dosage Forms

Sunpylon[®] 50mg/tab <KSULP01>

Use

Psychosis, duodenal ulcer

Dose

Duodenal ulcer

Adults: **PO** 50mg tid

Schizophrenia

PO 300-600mg/day in divided doses; **max: 1200mg/day**

Depression

PO 150-300mg/day in divided doses; **max: 600mg/day**

Adverse Reactions

Leukocytosis, sedation, extrapyramidal symptoms, tardive dyskinesia

Terlipressin

X³ Unsafe³

Dosage Forms

Terlissin[®] 1mg/vial <CTERLIP>

Use

Bleeding esophageal varices, hepatorenal syndrome

Dose

Bleeding esophageal varices(duration<5days)

IV bolus initial 2mg(<50kg:1mg) q4h, **max: 48hrs**; maintenance 1mg q4h, **max: 3days**

Type 1 hepatorenal syndrome

IV 3-4mg/day in divided 3-4 times, and treatment is continued until

Scr<1.5mg/dl(130umol/L), or Scr decreased to 30%. If used for 3 days, treatment is ineffective that should be stopped the medicine.

The average of treatment duration about 10 days.

Adverse Reactions

Increase blood pressure, abdominal cramps, headache

Precautions

1. 本藥物不可與其他藥品相混合
2. 避光儲存,置於 25°C 以下
3. 溶解後的注射液須立即使用

Contraindications

Acute coronary insufficiency, uncontrolled hypertension

respiratory insufficiency, asthma, renal insufficiency, septic shock

Ursodeoxycholic acid

B⁴ **Unknown¹**

Dosage Forms

Genurso[®] 100mg/tab <KURSOD1>

Use

Gallbladder stone dissolution, primary biliary cirrhosis

Dose

Adults: **PO** 13-15mg/kg/day

Adverse Reactions

Diarrhea, nausea, vomiting, constipation, abdominal pain

Precautions

1. 肝庇護劑之使用，門診以口服一種為原則
2. 使用肝庇護劑應檢附肝功能報告，該報告有效期為三個月，逾期應再複查。

Contraindications

Bile duct obstruction, severe hepatitis

9. HEMATOLOGYS

9.1. Anticoagulants

Dabigatran

C⁵ Unsafe¹

Dosage Forms

Pradaxa[®] 110mg/cap <KDABIG1>

Pradaxa[®] 150mg/cap <KDABIG2>

Use

Prevention of stroke and systemic embolism in patients with non-valvular atrial fibrillation

Dose

PO 110~150mg bid

Adverse Reactions

Bleeding, dyspepsia, GERD, esophagitis, gastritis, GI ulcer

Precautions

1. ≥75 歲、CHADS 2 分數≥3、<50kg、胃腸出血病史、Clcr 30-50ml/min 等病患，建議劑量為 110mg bid
2. 膠囊建議整粒吞服，取出膠囊內藥粒服用會增加生理可用率達 75%
3. 侵入性檢查或手術前 1-2 天(Clcr≥50ml/min)或 3-5 天(Clcr<50ml/min) 停用
4. 需依肝腎功能調整劑量

Contraindications

活躍的病理性出血、重度腎功能受損、出血性徵候、出血傾向、自發性或藥物性止血功能障礙、具出血風險之器質性病變

Heparin

C⁴ Safe¹

Dosage Forms

Hepac[®] 25000IU/5ml/vial <CHEPARI>

Use

Prophylaxis and treatment of thromboembolic disorders

Dose

Low dose prophylaxis

SC 5000IU 2 hrs before surgery and q8-12h for 7 days

Full dose therapeutic

SC initial 10000-20000IU, then 8000-10000IU q12h or 15000-20000IU q12h

IV

Children: initial 50IU/kg, then 50-100IU/kg q4h

Adults: initial 5000IU-10000IU, then 5000IU-10000IU q4-6h

IVF

Children: initial 50IU/kg, then 100IU/kg q4h

Adults: initial 5000IU, then 20,000-30,000 units/day at a rate of 10-30IU/kg/hr

Adverse Reactions

Allergic reaction, urticaria, thrombocytopenia, Bleeding, osteoporosis, fever

Precautions

1. 需依肝功能調整劑量。
2. 不可IM；開封後於室溫下可保存 14 天；可用 NS、D5W 或 D10W 溶液稀釋，稀釋後可保存 48 小時。
3. 解毒劑：protamine (注射 Heparin 15 分鐘內，10mg protamine 可中和 1000IU Heparin)
4. 需監測APTT (建議可於最後一次 IV 5hr 後或最後一次 SC 12hr 後監測)。

Contraindications

Severe thrombocytopenia, hypertension with a diastolic blood pressure > 105 mmHg, uncontrolled active bleeding, brain haemorrhage

Rivaroxaban

C⁴ Unsafe¹

Dosage Forms

Xarelto[®] 10mg/FC. tab <KRIVARO>

Xarelto[®] 15mg/FC. tab <KRIVAR2>

Xarelto[®] 20mg/FC. tab <KRIVAR1>

Use

Postoperative thromboprophylaxis in patients who have undergone hip or knee replacement surgery

Dose

Arthroplasty of knee

Prophylaxis **PO** 10mg qd beginning at least 6 to 10 hours after surgery and continued for 2 weeks

Repair of hip

Prophylaxis **PO** 10mg qd beginning at least 6 to 10 hours after surgery and continued for 5 weeks

Prevention of stroke and systemic embolism in patients with non-valvular atrial fibrillation

PO 15~20mg qn; **max: 20mg/day**

Treatment of deep vein thrombosis and prevention of recurrent DVT and pulmonary embolism

PO 15mg bid for 21days (**max: 30mg/day**) then 20mg qd (**max: 20mg/day**)

Adverse Reactions

ALT and AST increase, anemia, nausea, bleeding

Precautions

1. 服用本品須監測出血徵狀
2. 本品含乳糖，患有罕見遺傳疾病，包含乳糖不耐症、乳糖酶缺乏症或葡萄糖-半乳糖吸收不良者不應服用本藥
3. 外科手術與介入治療：應於該治療的至少 24 小時前停用
4. 硬腦膜外導管應在服用本品最後一劑後的 18 小時之後再移除，導管取出後的 6 個小時之後才可再服用本品，如發生外傷性穿刺，則給藥時間應延後 24 小時

Warfarin

X⁴ Safe¹

Dosage Forms

Cofarin[®] 1mg/tab <KWARFA1>

Mafarin[®] 5mg/tab <KWARFA2>

Use

Prophylaxis and treatment venous thrombosis, pulmonary embolism and thromboembolic disorders, atrial fibrillation with risk of embolism and as an adjunct in the prophylaxis of systemic embolism after myocardial infarction

Dose

Adults: **PO** initial 2-5mg/day for 2-5 days, then 2-10mg/day according to PT or INR

Adverse Reactions

Hemorrhage, edema, fever, skin lesions, alopecia, leukopenia

Precautions

1. 監測PT及INR。
2. 解毒劑: Vit.K₁ (initial: 0.5-10mg, if necessary, increased to 25mg)

Contraindications

anesthesia, aneurysms, bacterial endocarditis, blood dyscrasias, blood dyscrasias, pregnancy

9.2. Anticoagulants (low-molecular-weight heparin)

Enoxaparin

B⁴ Unknown¹

Dosage Forms

Clexane[®] 60mg/0.6ml/syringe <CENOXAP>

Use

Deep venous thrombosis(DVT), unstable angina, non-Q-wave myocardial infarction(MI)

Dose

Prevention of DVT

SC 0.2-0.4ml/day q12h-q24h

DVT

SC 0.01ml/kg/dose q12h for ≤ 10 days

Unstable angina, non-Q-wave MI

SC 0.01 ml/kg/dose q12h for 2-8 days

Adverse Reactions

Anemia, Fever, Increased liver function test, thrombocytopenia, nausea

Contraindications

1. Active major bleeding, thrombocytopenia associated with positive antiplatelet antibody test in vitro induced by enoxaparin, severe renal dysfunction
2. 不可IM

Tinzaparin

B⁴ Unknown³

Dosage Forms

Innohep® 20000IU/2ml/vial <CTINZAP>

Use

Deep venous thrombosis (DVT), prevention of post-op DVT in patients undergoing general & orthopedic surgery, prevention of clotting during hemodialysis

Dose

DVT

SC 175 anti-Xa IU/kg qd once daily.

Prevention of post-op DVT (general surgery)

SC on the day of op 3500 anti-Xa IU 2 hr before surgery and post-op 3500 anti-Xa IU qd for 7-10 days.

Hemodialysis

Bolus into the arterial side of the dialyser (or **IV**) at the beginning of dialysis.

< 4 hr: 2000-2500 anti-Xa IU

> 4 hr: 2500 anti-Xa IU, followed by an infusion of 750 anti-Xa IU/hr

Adverse Reactions

Erythema, hematoma, asymptomatic, local irritation symptom, local pain

Precautions

Sulfite sensitivity, hemorrhagic stroke, elderly patients with renal insufficiency, severe and uncontrolled hypertension.

9.3. Antiplatelet Agents

9.3.1. Aggregation Inhibitors

Anagrelide

C⁴ Unknown¹

Dosage Forms

Agrylin® 0.5mg/cap <KANAGR>

Use

Thrombocytosis

Dose

PO initially, 0.5 mg qid or 1 mg bid for at least 1 wk, **max: 10mg/day or 2.5mg/dose**. The dose may be adjusted as needed but should not be increased by > 0.5 mg/day in any 1 wk.

Adverse Reactions

Headache, palpitations, diarrhea, asthenia, edema

Precautions

Abrupt stoppage of anagrelide therapy may increase platelet counts, usually within 4 days.

Aspirin

D⁴ Unknown¹

Dosage Forms

Bokey® 100mg/cap <KASPI01>

Use

Prophylaxis myocardial infarction and thromboembolism

Dose

Previous myocardial infarction or unstable angina

PO 75-325mg/day

Thromboembolic disorders

PO 160-325mg qd-bid

Adverse Reactions

Nausea, vomiting, dyspepsia, gastrointestinal ulcers, Reye's syndrome

Precautions

- 1.本藥會延長出血時間，欲接受手術之患者應於手術前一周停藥。
- 2.本品可剝開膠囊，但不宜磨粉。

Contraindications

Children and teenagers with chickenpox or flu symptoms (risk of Reye's syndrome), asthma, rhinitis and nasal polyps

Cilostazol

C⁴ Unknown¹

Dosage Forms

Pletaal[®] 100mg/tab <KCILOS1>

Use

Intermittent claudication

Dose

PO 100mg bid AC

Adverse Reactions

Headache, abdominal pain, diarrhea, dyspepsia, flatulence, nausea

Contraindications

Congestive heart failure of any severity

Clopidogrel

B⁴ Unknown¹

Dosage Forms

Plavix[®] 75mg/tab <KCLOPID>

Pidogrel[®] 75mg/tab <KCLOPI1>

Use

Prophylaxis against thrombotic events (myocardial infarction, stroke, vascular deaths) or acute coronary syndrome (unstable angina/non-Q-wave MI)

Dose

Recent MI, recent stroke or established arterial disease

PO 75mg qd

Acute coronary syndrome

PO loading dose 300mg, followed by 75mg qd

Adverse Reactions

Abdominal pain, vomiting dyspepsia, gastritis and constipation

Precautions

- 1.Risk of increased bleeding, severe liver disease and renal impairment
- 2.若病人需手術，預防出血時間延長的危險，可於手術前 7 天停藥。

Contraindications

Active bleeding

Dipyridamole

B⁴ Unknown¹

Dosage Forms

Posintin[®] 10mg/2ml/amp <CDIPYRI> 參閱 p.194

Dipyridamole[®] 25mg/tab <KDIPY01>

Use

Prophylaxis platelet aggregation, evaluation of coronary artery disease

Dose

Prophylaxis platelet aggregation

PO 75-100mg/day qid

Adverse Reactions

Chest pain, dizziness, headache, Abdominal discomfort, Flushing

Ticagrelor

C⁴ Unknown⁴

Dosage Forms

Brilinta[®] 90mg/FC. tab <KTICAGR>

Use

Acute coronary syndrome: Unstable angina, non-ST-segment elevation myocardial infarction (NSTEMI), ST-segment elevation myocardial infarction (STEMI)

Dose

PO loading 180mg with 325mg aspirin, maintenance 90mg bid with 75-100mg aspirin

Patients who have received a loading dose of clopidogrel may be started on ticagrelor therapy

Adverse Reactions

Dyspnea, bleeding, headache, cough, dizziness

Precautions

1. 手術前 5 天建議停用
2. 忘記服藥應於下次服藥時間服用 1 顆 Ticagrelor，無須一次服用 2 顆
3. 健規；限用於已發作之急性冠心症(包括不穩定型心絞痛、非 ST 段上升型心肌梗塞或 ST 段上升型心肌梗塞)而住院的病人時，得與 acetylsalicylic acid (如 Aspirin) 合併治療，最長 9 個月。

Contraindications

顱內出血病史(ICH)、活動性病理出血(消化性潰瘍或顱內出血)、嚴重肝功能不全

Tirofiban

B⁴ Unknown¹

Dosage Forms

Aggrastat[®] 12.5mg/50ml/vial <CTIROFI>

Use

Acute coronary syndrome (relate thrombosis)

Dose

Acute coronary syndrome (unstable angina, non-Q-wave MI)

IVF loading 0.4mcg/kg/min for 30 min, maintenance 0.1mcg/kg/min in

combination with aspirin and heparin for least 48 hrs, up to 108 hrs

Angioplasty or atherectomy

Initial 10mcg/kg **IV bolus** over 3 min, maintenance 0.15mcg/kg/min **IV**
plus unfractionated heparin for 24-48 hrs after coronary intervention

Adverse Reactions

Bleeding, bradycardia, dizziness, thrombocytopenia

Precautions

1. 需避光儲存，使用前須先稀釋，以 50ml NS 或 D5W 稀釋(稀釋濃度: 50mcg/ml)。
2. 需依肝腎功能調整劑量。

Contraindications

Aortic dissection, bleeding, hemorrhagic stroke, severe hypertension

9.3.2. Antianemics

Ferric chloride hexahydrate

Unknown¹

Dosage Forms

Sucrofer[®] 2%, 5ml/vial (Trivalent iron 20mg/ml) <CFERRI1>

Use

Iron deficiency anemia

Dose

IV 1st day 2.5ml, 2nd day 5ml, 3rd day 10ml, followed 10ml twice weekly
depending on Hb level

Adverse Reactions

Anaphylaxis

Ferric hydroxide polymaltose

Unknown¹

Dosage Forms

Tedalin[®] (1 tab 含 100mg Fe)/chewable tab <KFERRI2>

Ferrum Hausmann[®] drops 30ml/bot (1 drops 含 2.5mg Fe) <KFERRI1>

Use

Prevention and treatment iron deficiency, iron deficiency anemia

Dose

Ferrum Hausmann[®] Drops

Infant: **PO** begin with 6 drops/day and gradually increase to 20 drops/day

Children: **PO** 20 drops qd-bid

Adults: **PO** 20 drops bid-tid

Tedalin[®] tab

Adults: **PO** 1 tab qd-bid

Adverse Reactions

GI disturbances, constipation

Precautions

1. Black stools
2. Drops may be mixed with vegetable juices or other liquids

Folic acid

A⁴ Safe¹

Dosage Forms

Folacin[®] 5mg/tab <KFOLATE>

Use

Pernicious anemia, Megaloblastic anemia, Pregnancy vitamin/iron prophylaxis

Dose

Children <1 yr: **PO** 0.5mg/day, 1-5 yrs: 5mg/day, 6-12 yrs: 10mg/day

Adults: **PO** initial 5mg tid for 14 days, maintenance 5mg qd

Adverse Reactions

Anorexia, nausea, allergic sensitization

Hydroxocobalamin

C⁶ Safe¹

Dosage forms

B-Red[®] 1mg/ml/amp <CHYDROXL>

Use

Megaloblastic anemia due to vitamin B₁₂ deficiency, peripheral neuropathies

Dose

SC/IM 1-2amp q12-24h

Adverse Reactions

Headache, anxiety, dizziness, diarrhea, nausea, vomiting, itching

Precautions

易受光線分解，使用時從避光器取出應立即使用，並避光保存 □

Leucovorin calcium (Calcium folinate)

C⁴ Unknown¹

Dosage Forms

Folina[®] 50mg/5ml/vial <CLEUCO1>

Folina[®] 15mg/tab <KCALC04>

Use

Colorectal cancer (combination with 5-FU to prolong survival), rescue therapy after high-dose MTX, counteract overdoses of folic acid antagonists.

Dose

Colorectal cancer

IV 200 mg/m² followed by 370-425mg/m² 5-fluorouracil IV daily for 5 days repeat course at 4 wks intervals for 2 courses then 4-5 wks intervals

Folic acid antagonist overdose

IM/IV/PO 15mg (10mg/m²) q6h until serum MTX level <10⁻⁸M, if serum MTX level >5×10⁻⁶M, increase dose to 100mg/m²/dose q3h until serum MTX level<10⁻⁸M

Adverse Reactions

Rash, pruritus, erythema, urticaria, thrombocytosis

Precautions

1. Rescue therapy should start within 24 hrs of MTX therapy
2. IV輸注速率不可超過160mg/min。
3. 針劑須冷藏及避光。

4. Pernicious anemia and other megaloblastic anemias due to vitamin B12 deficiency.

9.4. Antihemophilic Agents

9.4.1. Antihemophilic Factors

Antihemophilic factor VIII (recombinant) C⁴ Unknown¹

Dosage Forms

Advate[®] 500IU/5ml/vial <CANTIH1>

Use

Management of hemophilia A (deficiency in factor VIII)

Dose

Minor hemorrhage

10-20IU/kg q12-24h for 1-3 days until bleeding is resolved or healing achieved

Moderate hemorrhage

15-30IU/kg q12-24h for ≥ 3 days until pain and disability are resolved

Severe/life-threatening hemorrhage

30-50IU/kg q8-24h until threat is solved or loading 40-50IU/kg, then followed 20-25IU/kg q8-12h until threat is resolved

Adverse Reactions

Fever, headache, dizziness, nausea, disorder of taste

Precautions

1. 須冷藏在 2-8°C。
2. IU required = body weight (kg) \times desired factor VIII increase (%) \times 0.5 IU/kg
3. 室溫下 (<30°C) 可存放 6 個月，且移存於室溫後不可再重存於冷藏。

9.4.2. Heparin Antagonists

Protamine C⁴ Unknown¹

Dosage forms

Protamine[®] 50mg/5ml/amp <CPROTAM>

Use

Heparin overdose

Dose

Slow IV loading 25-50mg, with the rest of the calculated dose over 8-16 hrs

Time Elapsed	Dose of Protamine (mg) to Neutralize 100IU of Heparin
Immediate	1-1.5
30-60 min	0.5-0.75
> 2 hrs	0.25-0.375

Adverse Reactions

Hypotension, bradycardia, dyspnea, hemorrhage, flushing

9.4.3. Warfarin Antagonists

Phytomenadione (Vitamin K1)

C⁴ Safe¹

Dosage Forms

Katimin 1[®] 10mg/ml/amp <CVITK1>

Use

Hemorrhage during severe hypoprothrombinemia, vitamin K deficiency or surgical operation, hemorrhage of newborn

Dose

Hemorrhage

Newborn: **IM/IV/SC** 1-2 mg

Adults: **IM/IV/SC** 10 -15mg (<1mg/min), rarely up to 50mg/day

Oral anticoagulant overdose

IM/IV/SC initial 5-10 mg, up to 20 mg

Adverse Reactions

Flushing, sweating, dyspnea, allergic skin reactions, chest pain and chest constriction

Precautions

不可急速靜脈注射。

Contraindications

G6PD deficiency

9.5. Hematopoietic Agents

9.5.1. Recombinant Human Erythropoietins

Darbepoetin alfa

C⁴ Unknown¹

Dosage Forms

NESP[®] 20mcg/0.5ml/syringe <CDARBE1>

Use

Anemia associated with chronic renal failure and chemotherapy

Dose

Anemia of chronic renal failure

IV/SC starting dose 0.45mcg/kg qw

Anemia of chemotherapy

SC starting dose 2.25mcg/kg qw

Adverse Reactions

Edema, abdominal pain, dyspnea, cough, cardiovascular events.

Precautions

冷藏儲存，如未冷藏於室溫下可存放 7 天。

Contraindications

Uncontrolled hypertension

Epoetin beta

C⁴ Unknown¹

Dosage Forms

Recormon[®] 2000IU/0.3ml/syringe <CEPO1>

Use

Anemia associated with chronic renal failure and chemotherapy

Dose

Anemia associated with chronic renal failure

IV/SC initial 50-100IU/kg tiw, maintenance will maintain hematocrit (HCT) at the desired level (30-36%)

Anemia in cancer therapy

SC initial 150IU/kg tiw, up to 300IU/kg tiw

Reduction of allogenic blood transfusion in anemic surgery

SC 300IU/kg/day for 10 days prior to surgery or 600IU/kg qw, 21, 14 and 7 days prior to surgery

Adverse Reactions

Hypertension, fatigue, headache, fever

Precautions

冷藏在 2-8°C，室溫下可存放 3 天。

Methoxypolyethylene (glycol-epoetin beta) C⁴ Unknown¹

Dosage Forms

Mircera[®] 50mcg/0.3ml/syringe <CEPO4>

Use

Anemia associated with chronic renal failure

Dose

IVP/SC: 50mcg q2w-q4w

Adverse Reactions

Nausea, vomiting, diarrhea, weight loss, anorexia

Precautions

冷藏在 2-8°C，若置於 25°C 下不可超過 30 天。

9.5.2. Colony Stimulating Factors

Human granulocyte colony stimulating factor (G-CSF)

C⁴ Unknown¹

Dosage Forms

Filgrastim[®] (rHG-CSF) 300 mcg/0.7ml/amp <CFILG02>

Use

Chemotherapy related neutropenia, severe chronic neutropenia, promotion of myeloid engraftment following bone marrow transplantation, mobilization of hematopoietic progenitor cells to peripheral blood

Dose

Chemotherapy related myelosuppressive neutropenia

SC 5mcg/kg qd

Bone marrow transplantation

IV/SC 10mcg/kg/day q4 or 24 hrs

Peripheral Blood Progenitor cell (PBPC) collection

SC 10mcg/kg/day

Neutropenia

SC congenital: 6mcg/kg bid; idiopathic/cyclic: 5mcg/kg qd

Adverse Reactions

Bone/skeletal pain, headache, Neutropenic fever, fever, alopecia

Precautions

1. 須冷藏在 2-8°C，室溫 15-30°C 下可存放 24 小時。
2. 使用 D5W 或 NS 稀釋使用。

Pegfilgrastim

C⁴ Unknown¹

Dosage Forms

Neulasta[®] 6mg/0.6ml/syringe <CPEGFIL>

Use

Decrease the incidence of infection, in patients with nonmyeloid malignancies receiving myelosuppressive cancer chemotherapy associated with a clinically significant incidence of febrile neutropenia.

Dose

SC 6 mg once per chemotherapy cycle, beginning at least 24 hours after completion of chemotherapy

Adverse Reactions

Ostealgia, limb pain, splenic rupture, acute respiratory distress syndrome, anaphylaxis

Precautions

未開封時需儲存於 2-8°C 冷藏；若放置於室溫超過 48 小時需丟棄。

9.6. Hemorrhologic Agents

Cinnarizine

C¹ Unknown¹

Dosage form

Cinnazine[®] 25mg/tab <KCINNAR>

Use

Cerebral circulatory and balance disorder, motion sickness, peripheral circulatory disorder, Meniere's disease, urticaria

Dose

Cerebral circulatory and balance disorders

Adults: **PO** 25mg tid

Peripheral circulatory disorders

Adults: **PO** 50-75mg tid

Motion sickness

Children 5-12 yrs: half of adult dose

Adults: **PO** 25mg 30 mins before traveling and q6h

Adverse reactions

Drowsiness, allergic skin reactions, fatigue

Precaution

Parkinson's disease, elderly patients (possible accumulation)

Flunarizine

Unknown¹

Dosage Forms

Fluzine[®] 5mg/tab <KFLUNAR>

Use

Nausea, vomiting, prophylaxis migraine, peripheral vascular disease and motion sickness

Dose

Prophylaxis migraine headache and peripheral vascular disease

Adults: **PO** 5-10mg qd-bid, maintenance 5mg hs

Motion sickness

Adults: **PO** 10mg 30 mins before traveling

Adverse Reactions

Sedation, drowsiness, weight gain, gingival hyperplasia

Precautions

Extrapyramidal reactions, parkinsonism

Nicergoline

Unknown¹

Dosage Forms

Seromin[®] 10mg/S.C. tab <KNICERG>

Use

Cerebrovascular insufficiency (eye and ear) and peripheral vascular disease

Dose

Adults: **PO** 5-15mg tid AC

Adverse Reactions

Slight GI disturbances, flushing, drowsiness, insomnia

Contraindications

Acute hemorrhage, arterial hypotension, concurrent use of alpha or beta receptor agonists, recent myocardial infarction, severe bradycardia

Piracetam

B³ Unsafe⁵

Dosage Forms

Syntam[®] 2.4g/pack <KPIRAC1>

Use

Improve dementia and other cerebrovascular disorders

Dose

Cerebrovascular insufficiencies and age-associated intelligence disturbance

PO 1.2-2.4g/day qd-bid

Cortical myoclonus

PO initial 7.2g/day bid-tid, increasing by 4.8g q3-4d; max: 24g/day

Adverse Reactions

Hyperkinesia, weight gain, nervous, drowsiness, depression, impotent sense

Precautions

- 1.可能影響開車及操作機械的能力，因此需小心注意。
- 2.先將顆粒倒入適量(約 50ml)水中溶解後服用，溶解後於 2-8°C 冷藏可儲放 72 小時。

3. 需依腎功能調整劑量。

Contraindications

腦內出血、ESRD

9.7. Hemostatics

Pentoxifylline

C⁴ Unknown¹

Dosage Forms

Pentop[®] 400mg/ S.R.F.C tab <KPENTOX>

Use

Intermittent claudication

Dose

Adults: **PO** 400mg bid-tid

Adverse Reactions

Dizziness, headache, nausea, vomiting, dyspepsia

Precautions

1. 需依腎功能調整劑量。
2. 不宜磨粉。

Contraindications

Patients with recent cerebral and/or retinal hemorrhage

Tranexamic acid

B⁴ safe¹

Dosage Forms

Transamin[®] 5%, 250mg/5ml/amp <CTRANEX>

Tren[®] 250mg/cap <KTRANEX>

Use

Hemorrhage, abnormal bleeding

Dose

PO 3-8 cap/day tid-qid

IM/IV 250-500 mg/day qd-bid. Operation or post-op 500-25000 mg/dose

Adverse Reactions

Nausea, diarrhea, vomiting, thrombosis

Precautions

需依腎功能調整劑量。

Contraindications

Active intravascular clotting

9.8. Plasma Expanders

Albumin

C⁴ Unknown¹

Dosage Form

Plasbumin-25[®] 25%, 12.5g/50ml/vial <CALBU01>

Use

Hypovolemic shock, burn, hypoproteinemia with or without edema

Dose

Burn

IVF achieve plasma albumin level of approximately 2.5g/100ml (total plasma protein concentration of 5.2g/100ml)

Hypoproteinemia

Children: IVF 0.5-1g/kg, repeat every 1-2 days; **max: 2g/kg/day**

Adults: IVF 200-300ml; **max: 2g/kg/day**

Hypovolemia shock

Children: IVF 0.5-1g/kg, may repeat in 15-30 min; **max: 6g/kg/day**

Adults: IVF 200-300ml, may repeat in 15-30 min

Adverse Reactions

Hypersensitivity (Shaking, chills, urticaria), hypervolemia, tachycardia, nausea, vomiting, pulmonary edema

Contraindications

Severe anemia and cardiac failure

Dextran low molecule 40

C⁴ Unknown¹

Dosage Forms

Dextran 40[®] 10%, 500ml/bot (dextran 40 10%+dextrose 5%) <CDEXTRA>

Use

Prevention and treatment of surgical shock due to trauma, burns, hemorrhage, plasma substitute for the treatment of acute hemorrhage

Dose

Volume expansion/shock

Children: IVF total dose should not exceed 20ml/kg during first 24 hrs

Adults: IVF 500-1000ml (20-40ml/min); **max: 20ml/kg** for first 24 hrs; 10ml/kg/day thereafter, not continue beyond 5 days

Pump prime

Varies with the volume of the pump oxygenator, general dose of 1-2g/kg

Prophylaxis of venous thrombosis/pulmonary embolism

During surgical procedure 50-100g IVF on the day of surgery, then 50g (500ml) 2-3 days during the period of risk (up to 2 wks postoperatively), usual **max infusion rate** for nonemergency use **4ml/min**

Adverse Reactions

Mild hypotension, tightness of chest, wheezing

Precautions

- 1.Active hemorrhage, bowel surgery, thrombocytopenia
- 2.肝腎功能不良者需小心使用。

Contraindications

Severe bleeding disorders, pulmonary edema, renal disease with severe oliguria or anuria, severe congestive heart failure

Tetraspan (HES)[®]

C⁴ Unknown³

Dosage Forms

商品名	Tetraspan [®]
規格<代碼>	10%, 500ml/bot <CTETRA1>

含量	Each 1000 ml solution contains: Poly starch (HES).....100 g Sodium chloride 6.25 g Potassium chloride..... 0.30 g Calcium chloride 2H ₂ O.....0.37 g Manesium chloride 6H ₂ O..... 0.20 g Sodium acetate 3H ₂ O..... 3.27 g Malic acid..... 0.67 g
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Use

Therapy and prophylaxis of hypovolaemia

Dose

IVF 500ml qd; **max: 30ml/kg/day**

Adverse Reactions

Reduced hematocrit, decrease plasma protein, elevated serum α -amylase concentrations

Contraindications

Renal failure with oliguria or anuria, fluid overload condition, severe hypernatremia or hyperchloremia, intracranial bleeding.

9.9. Thrombolytic Agents

Alteplase, tissue plasminogen activator (t-PA) C⁴ Unknown¹

Dosage Forms

Actilyse[®] 50mg/vial <CTPA>

Use

Management of acute myocardial infarction of thrombus in coronary arteries, acute ischemic stroke and acute massive pulmonary embolism

Dose

Acute myocardial infarction

100mg over 1.5 hrs

IV bolus 15mg over 1-2 min; **50mg IV infusion** 30 min (若 BW > 67kg: 0.75mg/kg, 不超過 50mg); **35mg IV infusion** 60 min (若 BW ≤ 67kg: 0.5mg/kg, 不超過 35mg)

Acute ischemic stroke

0.9mg/kg with in the first 3 hrs

IV bolus 0.09mg/kg, then **IV infusion** 0.81mg/kg over 60 min; **max: 90mg/dose**

Pulmonary embolism

100mg within 2 hrs, **IV bolus** 10mg over 1-2 min, then **IV infusion** 90mg

Adverse Reactions

Bleeding, reperfusion arrhythmias, intracranial hemorrhage, nausea, vomiting, hypotension, epistaxis, ecchymosis

Precautions

1. 未配製之藥品須避光儲存於 30°C 以下。
2. 調製後冷藏於可存放 24hrs，若於 30°C 下可放 8hrs。

Contraindications

不可使用注射用水或含碳水化合物之輸注液稀釋，例如 dextrose。

Urokinase

B⁴ **Unknown¹**

Dosage Forms

Urokinase[®] 60,000IU(60KIU)/vial <CUROKIN>

Use

Thromboembolic disorders (pulmonary embolism, coronary occlusion in MI and arterio-venous thrombosis in the limb)

Dose

Cerebral thrombosis

IV 60,000 IU once a day for about 7 days

Peripheral arterial-venous occlusion

IV 60,000-240,000 IU on first day of treatment followed by tapered dose for about 7 days)

Occluded catheter

IV 5000 IU in each lumen over 1-2 mins, leave in lumen for 1-4 hrs, then aspirate. May repeat with 10,000 IU in each lumen if 5000 IU fails to clear the catheter.

Adverse Reactions

Hemorrhagic infarction, bleeding

Precautions

1. 小兒使用安全性尚未建立。
2. 以 10ml NS, D5W 溶解乾粉，在用 NS, D5W 稀釋，藥品稀釋後應盡速使用。

Contraindications

Active internal bleeding, recent intracranial or intraspinal surgery or trauma, intracranial neoplasm, aneurysm or arteriovenous malformation, known bleeding diathesis

10. DIAGNOSTIC AGENTS

10.1. Adrenocortical Insufficiencies

Cortisone

D⁴ Unknown¹

Dosage Forms

Cortisone[®] 25mg/tab <KCORTIS>

Use

Adrenocortical insufficiency

Dose

PO 25mg tid-qid

Adverse Reactions

GI distress, growth depression, hypertension, increased skin of infection, Cushing's syndrome

Precautions

Cirrhosis, hypothyroidism, peptic ulcer

10.2. Liver Functions

Indocyanine green (ICG)

Unknown⁴

Dosage Forms

Diagnogreen[®] 25mg/vial (1 vial: 含碘3mg) <CINDOC>

Use

Liver function tests-general

Dose

Slow IV 25mg 稀釋成 2.5-5mg/ml 後，0.5mg/kg

Precautions

本品須先以蒸餾水溶解後，再以 N/S 稀釋後投予。

Contraindication

對碘過敏者應避免使用。

Gadoxetic acid

C⁵ Unknown³

Dosage Forms

Primovist[®] 0.25mmol/ml, 10ml/syringe <CGADOXE >

Use

Contrast medium for magnetic resonance imaging (MRI) to detect and characterize lesions within focal liver disease

Dose

Adult: IV (rate:2ml/sec) 0.1ml/kg

Adverse reactions

Headache, blood pressure increase, vomiting, respiratory distress, rash, chest pain

Precautions

1. 避免使用肌肉注射
2. 使用後，靜脈留置針應用生理食鹽水沖洗

3. 腎功能不良 Clcr<30ml/min 需小心使用。

10.3. Myasthenia Gravis

Neostigmine

C⁴ **Unknown¹**

Dosage Forms

Vagostin[®] 0.5mg/ml/amp <CNEOSTI>

Use

Abdominal distension, Myasthenia gravis

Dose

Abdominal distension

IM 0.25-0.5mg, repeat every 4 to 6 h for 2 to 3 days

Myasthenia gravis

IM 0.5mg

Adverse Reactions

GI effects, salivation, miosis, diaphoresis, muscle cramps, fasciculation, weakness

10.4. Skin Test

Penicillin skin test

Dosage Forms

10000IU/10ml/bot <CPENIC4>

Use

Testing for penicillin hypersensitivity

Dose

SC 0.1ml (100IU)

Precautions

需冷藏於 2~8°C，可存放 7 天。

Tuberculin Purified Protein Derivative (PPD) **B⁵** **Safe³**

Dosage Forms

Tuberculin PPD[®] 30T.U./1.5ml/vial <CTUBERC>

Use

Diagnostic agent for tuberculosis

Dose

皮內診斷測試

SC 使用 0.1ml 在前臂三分之二處皮內注射，產生一圓形疙瘩且在約 10 分鐘後消失，注射後 72 小時判讀。

Adverse Reactions

Ulceration, necrosis, vesiculation, pain at injection site

Precautions

本品需冷藏，開封後 24 小時內須使用完畢。

10.5. Thyroid Functions

Thyrotropin alfa

C⁴ Unknown¹

Dosage Forms

Thyrogen[®] 1.1mg/vial (0.9mg/ml reconstituted) <CTHYROT>

Use

Thyroid cancer - diagnosis

Dose

Children >16 yrs and adults: **IM** 0.9mg q24h ×2 doses or 0.9mg q72h ×3doses

Adverse Reactions

Headache, nausea, asthenia, dizziness, flu-like syndrome, paresthesia, vomiting

Precautions

本品需冷藏。

10.6. Thallium Myocardial Perfusion Scintigraphys

Adenosine

C⁴ Unknown¹

Dosage Forms

Adenocor[®] 6mg/2ml/vial <CADENOS>

Use

Paroxysmal supraventricular tachycardias, diagnostic in narrow and broadcomplex tachycardias

Dose

Rapid IV bolus initial 3mg over 2 seconds. If required, 2nd dose of 6mg and 3rd dose of 12mg at 1-2 min intervals may be given; **max: 12 mg/dose**

Adverse Reactions

Chest pain or pressure, dyspnea, headache, lightheadedness, flushing, neck, throat or jaw discomfort

Dipyridamole

B⁴ Unknown¹

Dosage Forms

Posintin[®] 10mg/2ml/amp <CDIPYRI>

Dipyridamole[®] 25mg/tab <KDIPY01> 參閱p.180

Use

Thallium myocardial perfusion imaging for the evaluation of coronary artery disease

Dose

IV 0.14mg/kg/min for 4 min; **max: 60mg**

Adverse Reactions

Dizziness, electrocardiography changes, headache, exacerbation of angina pectoris

10.7. Radiopaque Contrast Agents

10.7.1. Iodinated-Ionics

Sodium and meglumine ioxitalamate

Dosage Forms

Telebrix 35® 100ml/vial (碘: 350 mg/ml) <CXYTELI>

Use

Angiocardiology (ventriculography, coronary angiography), digital subtraction angiography, intravenous urography, computed tomography

Dose

Ventriculography

IV 40 ml/dose

Coronary angiography

IV 4-8 ml/dose

Digital subtraction angiography

IV 0.6 ml/kg

Intravenous urography

IV 2 ml/kg

Computed tomography

IV 100 ml/dose

Adverse Reactions

Sensation of heat

Contraindications

Myelography

10.7.2. Iodinated-Non-Ionics

Iodixanol

B⁴ Unknown¹

Dosage Forms

Visipaque® 100ml/vial (碘:320mg/ml)<CIODIXA>

Use

Coronary angiography, arteriography of cerebral arteries, abdominal angiography

Dose

IV/IA/~~蛛~~膜下腔注射/體腔注射 depending on the requirement for specific exam

Adverse Reactions

Nausea, vomiting, pain, feelings of coldness, warmth.

Precautions

- 1.對有過敏、氣喘史或曾對含碘對比劑有不明反應者需特別注意。
- 2.含碘對比劑可能引發過敏性休克或高過敏反應，因此須隨時備有可立即治療嚴重反應之急救藥物。
- 3.使用前可加溫至 35-37°C 加溫後可存放 1 個月。

Iohexol

Unknown¹

Dosage Forms

Omnipaque® 10ml/vial (碘: 300mg/ml)<CIOHEX>

Omnipaque® 100ml/vial (碘: 350mg/ml)<CXYOMNI>

Use

Myelography, angiography, contrast enhancement in CT and urography

Dose

IV/IA/IT/PO/RECT depending on the requirement for specific exam

Adverse Reactions

Feelings of coldness, warmth, nausea, vomiting.

Precautions

- 1.接受抗痙攣劑之病人，應持續其治療。萬一發生癲癇發作時，建議靜脈注射 diazepam 或 phenobarbital 治療。
- 2.患有肝或腎嚴重障礙者、嚴重甲狀腺毒症者需謹慎使用。
- 3.使用前可加溫至 35-37°C

Contraindications

明顯的甲狀腺毒症。對 Iohexol 過敏者。

Iopamidol

Dosage Forms

Iopamiro 370[®] 200ml/bot, 1 ml: Iopamidol 755.3 mg <CXIYIOP1>

Use

Angiography, urography

Dose

IV/IA/IT depending on the requirement for specific exam

Adverse Reactions

Nausea, vomiting, dizziness, headache, dyspnea.

Precautions

使用前可加溫至 35-37°C，加溫後可存放 1 個月。

Iopromide

Unknown¹

Dosage Forms

Ultravist 370[®] 50ml/bot (碘: 370mg/ml) <CIOVER1>

Ultravist 370[®] 100ml/bot (碘: 370mg/ml) <CIOVER2>

Use

Coronary arteriography, left ventriculography, visceral angiography, aortography

Dose

IV/IA/體腔注射 depending on the requirement for specific exam

Adverse Reactions

Nausea, vomiting, pain, feelings of coldness, warmth.

Precautions

- 1.使用前可加溫至 40°C，加溫後可存放 6 個月。
- 2.開瓶後 10 小時，未使用完藥品應丟棄。

10.7.3. Oily Contrast Mediums

Ethiodized oil

Unknown¹

Dosage Forms

Lipiodol[®] ultra-fluid 3.8%, 10ml/amp (碘: 480mg/ml) <CETHIOD>

Use

Lymphography, hysterosalpingography, tranarterial embolization of hepatoma

Dose

Lymphography

Children and infants: **Intralymphatically** 1-6ml; **max: 6ml**

Adult: **Intralymphatically** 8ml

Hysterosalpingography

Instilled into the uterus 5ml

Adverse Reactions

Cardiovascular collapse, thrombophlebitis, lipogranuloma, dermatitis, fever, iodism, abdominal pain, pelvic inflammatory disease, alveolar hemorrhage

10.7.4. Contrast Mediums for MRI

Gadobenate dimeglumine

C⁴Unknown¹

Dosage Forms

Multihance[®] 20ml/vial <CXYMULT>

Use

Radiological contrast media

Dose

Central nervous system finding - Finding of lesion - Magnetic resonance imaging

IV rapid bolus 0.1mmol/kg(0.2 mL/kg) (成人 10ml/dose)

Adverse Reactions

Nausea, taste sense altered, vomiting, xerostomia, Dizziness, headache

Gadobutrol

C⁴Unknown¹

Dosage Forms

Gadovist 1.0[®] 604.72mg/ml, 15ml/vial<CXYGAD1>

Use

Contrast enhancement in cranial magnetic resonance imaging (MRI), contrast enhancement in Magnetic Resonance Angiography (CE-MRA)

Dose

Cranial and spinal MRI

>18 yrs: **IV** 0.1 ml/kg

CE-MRA

Imaging of one field of view: **IV** <75 kg: 7 ml; ≥ 75 kg: 10 ml

Imaging of more than one field of view: **IV** <75 kg: 10 ml; ≥ 75 kg: 15 ml

max: 15 ml/dose

Adverse Reactions

Feelings of coldness, warmth or pain, nausea, vomiting.

Precautions

- 1.曾有過敏性休克情形，須小心。
- 2.須特別注意低癲癇發作閾值病患的使用狀況。
- 3.除非必要，懷孕期間不應使用本品。至少應間隔 24 小時後再繼續餵乳。

Gadodiamide

C⁴ Unknown¹

Dosage Forms

Omniscan[®] 0.5mmol/ml, 20ml/vial <CGADODI>

Use

MRI of cranial, spinal and general

Dose

Children > 6 mon: **IV** 1ml/10kg/dose

Adults: **IV** 15ml/dose

max: 20ml/total dose

Precautions

1.嚴重腎功能不良之患者(GFR<30 mL/min)要特別謹慎。

2.注射Omniscan 前，應停止哺乳；注射後 24hrs，方可再次哺乳。

Gadoxetic acid

C⁵ Unknown³

Dosage Forms

Primovist[®] 0.25mmol/ml, 10ml/syringe <CGADOXE >

Use

Contrast medium for magnetic resonance imaging (MRI) to detect and characterize lesions within focal liver disease

Dose

Adult: **IV** (rate:2ml/sec) 0.1ml/kg

Adverse reactions

Headache, blood pressure increase, vomiting, respiratory distress, rash, chest pain

Precautions

1.避免使用肌肉注射

2.使用後，靜脈留置針應用生理食鹽水沖洗

3.腎功能不良 Clcr<30ml/min 需小心使用。

10.8. Radiopaque Miscellaneous

Fluorescein sodium

C⁴ Unknown¹

Dosage Forms

Fluorescite[®] 10%, 5ml/vial <CFLUOR3>

Use

Diagnostic agent for detecting corneal lesions and foreign bodies in the eye, for ocular angiography, determination of the circulation time

Dose

Children: **IV** 7.7mg/kg

Adults: **IV** 500mg

Gonadorelin

B⁴ Unknown¹

Dosage Forms

LH-RH[®] 0.1mg/1ml/amp <CGONADO>

Use

Diagnostic test to evaluate hypothalamic/pituitary gonadotropin function,

induce ovulation in primary hypothalamic amenorrhea

Dose

IV/SC/IM 0.1mg as a single injection

Adverse Reactions

Flushing, headache, lightheadedness, nausea, abdominal discomfort

Precautions

配製後室溫儲存可放24小時。

Patent blue-V

Unknown¹

Dosage Forms

Blue Patent V[®] 2.5%, 2ml/amp <CPATENT>

Use

Colour the lymph vessels,

Dose

Colour the lymph vessels for contrast medium

SC 1ml

Visualize the arterial bed for chemotherapy

IV 2.5% Patent blue V 40ml + 0.9% NaCl 80ml +1% Xylocaine 20ml

Adverse Reactions

Hypersensitivity reactions, shock, dyspnea, laryngeal spasm, edema, nausea, hypotension, tremor

Precautions

The bluish skin colour which may develop after injection usually disappears after 24 to 48 hrs

11. ENDOCRINE AND METABOLIC

11.1. Estrogens

Estradiol

X⁴ **Safe¹**

Dosage Forms

Estrade[®] (estradiol valerate) 2mg/tab <KESTRA5>

Oestrogel[®] 18mg/30g/tube <WESTRA3>

Use

Atrophic vaginitis, postmenopausal symptoms, hormone replacement therapy

Dose

PO

1-2mg/day, administration should be cyclic (3 weeks on, 1 week off)

Topical

2.5g/dose qd apply to the area of abdomen, inside of both thighs (3 weeks on, 1 week off)

Adverse Reactions

Breast tenderness, headache, dizziness, nausea, abdominal pain

Precautions

外用藥塗抹於前臂、手臂、兩肩或者完整大面積的皮膚上，勿塗抹於乳房、陰部或陰道黏膜。

Estrogens conjugated

X⁴ **Safe¹**

Dosage Forms

Estromon[®] 0.625mg/tab <KESTRO2>

Premarin[®] vaginal cream 14g/tube (1g: estrogens conjugated 0.625 mg) <WESTRO1>

Use

Atrophic vaginitis, postmenopausal symptoms, hormone replacement therapy, abnormal uterine bleeding

Dose

Tablet:

PO 0.625-3.75 mg/day

Vaginal cream:

Atrophic vaginitis

Intravaginally 0.5-2g vaginal cream/day, cyclically(e.g. 3wk on and 1wk off); **max: 4g/day**; reduce or discontinue dose at 3-6 month intervals

Adverse Reactions

Headache, dizziness, nausea, vomiting, weight change, edema

11.2. Selective Estrogen Receptor Modulators

Raloxifene

X⁴ **Unsafe¹**

Dosage Forms

Evista® 60mg/tab <KRALOXI>

Use

Prevention and treatment of osteoporosis in postmenopausal women

Dose

PO 60mg qd

Adverse Reactions

Hot sweats, leg cramp, arthralgia, flu syndrome, venous thromboembolism

11.3. Progestins

Hydroxyprogesterone caproate

B⁴ Safe¹

Dosage forms

Progesteron depot® 125mg/1ml/amp <CPROGE1>

Use

Amenorrhea, uterine bleeding, infertility, abortion

Dose

IM 65-125mg once weekly

Adverse Reactions

Pain at injection site, swelling at injection site, preterm labor, urticaria

Precautions

注射時須注意：避開神經走位部位、如需連續使用請左右邊交互注射、確實觀察注射器反吸時無血液逆流現象

Contraindication

嚴重肝障礙及肝疾患者

Levonorgestrel

X⁵ Safe³

Dosage Forms

Mirena® 250mg/tab <CLEVONO>

Use

Contraception, menorrhagia, prophylaxis of endometrial hyperplasia

Dose

Intrauterine device

Mirena is inserted into the uterine cavity and is effective for five years.

Initially dissolution rate is approximately 20mcg/24hrs, and is reduced to

10mcg/24hrs after 5years. The mean release rate over 5 years is

levonorgestrel 14 mcg/24hrs.

Adverse Reactions

Headache, depressed mood, nervousness, abdominal pain, nausea

Precautions

1.可能影響病人葡萄糖耐受性，糖尿病患者應監測血糖。

2.用於避孕或預防雌激素補充治療引起的子宮內膜增生之病人需自費。

Contraindication

懷孕、骨盆腔或下生殖道感染、產後子宮內膜炎、前3個月內曾發生感染性流產、子宮頸炎/瘤或發育異常、不明原因子宮不正常出血、急

性肝病或肝腫瘤、感染機率增高之狀況。

Medroxyprogesterone

X^A **Safe¹**

Dosage Forms

Provera[®] 10mg/tab <KMEDRO1>

Use

Amenorrhea, hormone replacement therapy, endometrial carcinoma, breast cancer, prostate carcinoma

Dose

Amenorrhea

PO 5-10mg/day for 5-10 days

Abnormal uterine bleeding

PO 5-10 mg/day for 5-10 days beginning on day 16 or 21 of the menstrual cycle

Endometrial hyperplasia, Estrogen-induced: Prophylaxis

PO 5 or 10 mg/day for 12-14 consecutive days per month, either beginning on day 1 or day 16 of the cycle

Adverse Reactions

Weight gain, abdominal pain, headache, feeling nervous, amenorrhea

Progesterone

B^A **Safe¹**

Dosage forms

Progesterone[®] 25mg/ml/amp <CPROGES>

Promone[®] 100mg/soft cap <KPROGES>

Crinone[®] 8% 80mg/ tube<WPROGES>

Use

Amenorrhea, hormone replacement therapy, uterine bleeding, infertility (vag gel)

Dose

Capsule:

PO

200-300 mg/day (one in the morning and two at night) during 10 days/month, from 17-26th day of the cycle. The normal dose may vary from 1-4 caps per day.

Intravaginally (cap)

1-2 tab bid-tid.

Injection:

IM

5-10 mg/day qd-bid

Vaginal tube:

Intravaginally

Infertility due to inadequate luteal phase: One tube qd starting after documented ovulation or arbitrarily on the 18th-21st day of the cycle.

In-vitro fertilisation

If pregnancy occurs, one tube qd should be for 30 days

Adverse Reactions

Dizziness, breast pain, headache, fatigue, abdominal pain, viral infection

Precautions

Crinone[®]：本品需保存於 25°C 以下。

11.4. Estrogen and Progestin Combination

Diane-35[®]

X³ Unknown³

Dosage Forms

1 tab: Cyproterone acetate 2mg+ Ethinylestradiol 0.035mg, 21 tab/box
<KDIANE>

Use

Androgen-dependent diseases in women, contraceptives

Dose

PO 1 tab/day qd for 21 days, then a tablet-free interval of 7 days follows

Adverse Reactions

Nausea, abdominal pain, weight gain, headache, depression

Premelle Lite[®]

X³ Unsafe³

Dosage Forms

1 tab: Estrogens 0.3mg+ Medroxyprogesterone 1.5mg, 28 tab/box
<KPREM03>

Use

Treatment of moderate to severe vasomotor symptoms associated with menopause, atrophic vaginitis, osteoporosis

Dose

PO 1 tab/day

Adverse Reactions

Headache, abdominal pain, breast enlargement, breast tenderness

Tibolone

X³ Unsafe³

Dosage Forms

Livial[®] 2.5/tab<KTIBOLO>

Use

自然或手術後停經引起之症狀

Dose

PO 2.5 mg/day at the same time of day

Adverse Reactions

Headache, dizziness, edema, weight gain, abnormal vaginal bleeding

YAZ[®]

X⁴ Unsafe³

Dosage Forms

Ethinyl estradiol 0.02mg+ Drospirenone 3mg/tab, 28 tab/box <KYAZ>

Use

Contraception, acne vulgaris

Dose

PO 1tab(pink) qd for 1-24 days, then take 1tab(white) qd for 25-28 days.

Adverse Reactions

Irregular Uterine bleeding, nausea, breast tenderness, headache

Precautions

1. 可於月經週期第一天或月經開始後第一個星期日開始服用
2. 執行大型手術前至少 4 週須停用，並於手術 2 週後開始服用

11.5. Ovulation Stimulants

Choriogonadotropin alfa (γ -hCG) X⁴ Unknown³

Dosage Forms

Ovidrel[®] 250mcg/vial <CHCG3>

Use

Primary ovarian failure, non-in vitro fertilization fertility

Dose

SC 250mcg one day following the last dose of follicle stimulating agent

Adverse Reactions

Injection site pain, headache, fatigue, nausea, vomiting, abdominal pain

Precautions

1. 儲存方式: 2-8°C；若於 25°C 可存放 30 天。
2. 一劑 250mcg 相當於 6500IU，但本品為 DNA 重組技術合作，效力應用於 ovulation induction 相當於 5000IU 尿液製成 hCG，若用於人工生殖促進濾泡成熟與引發早期黃體期時，250mcg 相當於 5000IU、10000IU HCG 尿液製劑。

Clomiphene X⁴ Unknown¹

Dosage Forms

Clomid[®] 50mg/tab <KCLMIP>

Use

Ovulatory dysfunction

Dose

PO 50-100mg/day for 5 days, if not effective, a second and third course may be given

Adverse Reactions

Ovarian enlargement, vasomotor flushing, abdominal discomfort, blurred vision

Follitropin alfa X⁴ Unknown¹

Dosage Forms

Gonal-F[®] 75IU/amp <CFOLLIT>

Use

Assisted reproductive technologies, induction of ovulation

Dose

Assisted reproductive technologies

SC 150-225IU/day; **max: 450IU/day**

Ovulation induction

SC 75-150IU/day; **max: 225IU/day**

Adverse Reactions

Ovarian hyperstimulation and multiple pregnancies, nausea, vomiting, weight gain, abdominal pain

Precautions

須冷藏於2-8°C。

Follitropin beta

X⁴ Unknown¹

Dosage Forms

Puregon[®] 300IU/0.36ml/pen<CFOLLI1>

Use

Female:

Anovulation (including polycystic ovarian disease, PCOD), controlled ovarian hyperstimulation to induce the development of multiple follicles in medically assisted reproduction programs.

Male:

Deficient spermatogenesis due to hypogonadotropic hypogonadism.

Dose

Anovulation

SC initial dose 50IU ×7days, if ovarian not response, gradually increased until follicle growth and plasma oestradiol level.

Medically assisted reproduction programs

SC initial dose 100-225IU ×4days,dose adjusted individually based upon ovarian response.

Deficient spermatogenesis

SC 450 IU/week divided in 3 dosages, concomitantly with hCG, for 3-4month.

Adverse Reactions

Headache,bruising, pain, redness, swelling, and itching,abdominal pain

Precautions

1. 2-8°C 冷藏；若於室溫 25°C 可放置 3 個月。
2. 若匣式包裝之橡皮鑲嵌物已被針頭戳過，請於 28 天內使用完畢。
3. Drug-drug interaction: Puregon 與 Clomiphene citrate 併用會使濾泡反應增強。

Gonadorelin

B⁴ Unknown¹

Dosage Forms

LH-RH[®] 0.1mg/1ml/amp <CGONADO>

Use

Gonadotropic function evaluation

Dose

IV/SC/IM 0.1mg as a single injection

Adverse Reactions

Flushing, headache, lightheadedness, nausea, abdominal discomfort

Precautions

配置後室溫儲存可放置 24 小時。

Menopur®

X⁵ Unsafe³

Dosage Forms

1 vial: FSH 75 IU+LH 75 IU <CMERION>

Use

Stimulation of follicle maturation in infertile women

Dose

Ovulation induction

IM initial 75-150 IU/day followed by hCG, 5,000-10,000 IU qd after the last dose; until indices of estrogen activity are equivalent to or greater than those of the normal individual.

Spermatogenesis induction

IM 75-150 IU tiw for > 10-12 wks.

Adverse Reactions

Gastrointestinal symptoms, bloating, abdominal pain

Precautions

1. 須存放在25°C以下，避光儲存。
2. 配製後須立即使用。

11.6. Androgens

Abiraterone

X⁵ Unsafe³

Dosage Forms

Zytiga® 250mg/tab <KABIRAT>

Use

Metastatic prostate cancer, Castration-resistant, in combination with prednisone

Dose

PO 1000mg(4 tablet) qdac in combination with prednisolone 5mg bid

Adverse Reactions

Joint swelling, myalgia, edema, hot flush, diarrhea

Precautions

1. 應整顆以水吞服，勿壓碎或嚼碎藥錠
2. 建議治療前應先檢測 AST/ALT 及 Bilirubin，並於最初 3 個月治療期間每兩週檢測一次，之後亦應每月檢測一次
3. 食物會導致藥物濃度增加，故需空腹，服用前應至少 2 小時不可進食或服用後至少 1 小時不可進食
4. 須經事前審查核准後使用，每 3 個月需再次申請

Contraindication

懷孕、嚴重肝功能不良(Child-Pugh Class C)

Methyltestosterone

X⁴ Unknown¹

Dosage Forms

Methyltestosterone® 10mg/tab <KMETH03>

Use

Hypogonadism

Dose

PO 10 mg qd-tid

Adverse Reactions

Gynecomastia, impotence, hirsutism, acne, nausea

Precautions

Hepatic disease, cardiac disease, renal disease, hypercalcemia

Contraindications

Prostate cancer

Testosterone

X³ Unsafe¹

Dosage Forms

Testosterone[®] 200mg/ml/amp <CTESTO1>

Nebido[®] 1000mg/4ml/amp<CTESTO3>

Androgel gel[®] 5g/sachets< WYY11>

Use

Androgen replacement therapy, inoperable breast cancer, male hypogonadism

Dose

Testosterone injection:

IM 200-400mg every 3-4 wks or 1000mg q10-12wks

Androgel gel

Topical 1 sachets qd; **max: 2 sachets/day**

Adverse Reactions

Acne, application site reactions, weight gain, hot flashes, polycythemia

Precautions

限肌肉注射需以極緩慢的速度施打，並避免注射到血管內

Contraindications

攝護腺癌、男性乳腺癌、惡性腫瘤伴隨高血鈣、罹患肝腫瘤之患者及女性

11.8. Antigonadotropics

Ganirelix

X⁴ Unsafe¹

Dosage Forms

Orgalutran[®] 0.25mg/0.5ml/syringe <CGANIRE>

Use

Female infertility

Dose

SC 0.25 mg, once daily

Adverse Reactions

Abdominal pain, injection site reaction

Precautions

1. Orgalutran 和濾泡刺素需同時給予，不可以混合使用，且需使用不同的注射部位。

2.體重50kg 以下及 90kg 以上之安全性及效力尚未確立，須小心使用。

Contraindications

中度或重度肝或腎功能損傷者

Gestrinone

X³ Unsafe³

Dosage Forms

Gestrin[®] 2.5mg/cap <KGESTRI>

Use

Endometriosis

Dose

PO 2.5mg three times weekly; the first dose is taken on the first day of the menstrual cycle with the second dose taken three days later.

Adverse Reactions

Acne, weight gain, hot flushes, headache, gastrointestinal disturbances

Precautions

- 1.本品非避孕藥，不可作為避孕用途。
- 2.建議固定每週相同兩天服藥。
- 3.避孕藥、抗癲癇藥結核病藥物(Rifampicin)，可能會干擾本品作用。

11.9. Antiandrogen Hormones

Dutasteride

X⁴ Unknown¹

Dosage Forms

Avodart[®] 0.5mg/cap <KDUTAST>

Use

Benign prostatic hyperplasia

Dose

PO 0.5mg qd

Adverse Reactions

Pruritus, Disorder of breast, gynecomastia, impotence, angioedema

Finasteride

X³ Unknown¹

Dosage Forms

Propecia[®] 1mg/tab <KFINAS1>參閱 p.139

Finta[®] 5mg/tab <KFINAS2>

Use

Male pattern hair loss, benign prostatic hyperplasia

Dose

Androgenetic alopecia

PO 1mg qd

Benign prostatic hyperplasia

PO 5mg qd

Adverse Reactions

Decreased libido, ejaculation disorder, erectile dysfunction, breast enlargement, breast tenderness, rash

Contraindications

懷孕或可能懷孕之婦女不可接觸已壓碎或破損之 finasteride 錠劑，可能會對男性胎兒造成危險。

11.10. Growth Hormone

Somatropin

C⁴ Unknown¹

Dosage Form

Omnitrope[®] 5mg/1.5ml/cart. <CSOMAT1>

Use

Growth hormone deficiency, prader-willi syndrome, turner syndrome, chronic renal insufficiency, children or adolescents born small for gestational age

Dose

Growth hormone deficiency

SC 0.025-0.035mg/kg/day or 0.7-1mg/m²/day

Prader-willi syndrome, children/adolescents born small for gestational age

SC 0.035mg/kg/day or 1mg/m²/day

Turner syndrome, chronic renal insufficiency

SC 0.045-0.05mg/kg/day or 1.4mg/m²/day

Adverse Reactions

Peripheral edema, stiffness in the extremities, arthralgia, myalgia, paraesthesia

Precautions

- 1.須冷藏於 2-8°C，開始使用後儲存於 2-8°C 可存放 28 天。
- 2.因含 benzyl alcohol,故不可用於早產或新生兒用,可能引起 3 歲以內幼兒有毒性及過敏反應。
- 3.需自費。

11.11. Abortifacients

Dinoprostone (PGE₂)

C⁴ Unknown¹

Dosage Form

Prostarmon-E[®] 0.5mg/tab <KDINOPR>

Prostin[®] E₂ 3mg/vaginal tab <WDINOPR>參閱 p.146

Use

Induction of labor

Dose

Tablet

PO 0.5mg q1h × 6 doses; **max: 3mg/day**

Vaginal tab:

Adverse Reactions

Abdominal cramps, nausea, vomiting, diarrhea, transient fever, headache

Precautions

陰道錠劑須冷藏於 2-8°C。

Mifepristone (RU486)

X⁴ Unknown¹

Dosage Forms

Apano[®] 200mg/tab <KMIFEPR>

Use

Termination of pregnancy through 49 days of pregnancy

Dose

PO 600mg one dose, followed by misoprostol 400mcg if needed

Adverse Reactions

Vaginal bleeding and uterine cramping, nausea, vomiting, diarrhea

Misoprostol (PGE1)

X⁴ Unknown³

Dosage Forms

Cytotec[®] 200mcg/tab <KMISOPR> 參閱 p.159

11.12. Uterotonics

Ergometrine

C³ Unknown¹

Dosage Forms

Ergometrine[®] 0.2mg/tab <KERGONO>

Use

Postpartum hemorrhage caused by uterine atony

Dose

PO 0.2-0.4mg bid-qid

Adverse Reactions

Dizziness, headache, hypertension, nasal congestion, nausea, vomiting

Methylergometrine

C⁴ Safe¹

Dosage Forms

Methergin[®] 0.2mg/ml/amp <CMETH03>

Use

Postpartum and postabortion hemorrhage

Dose

IM/IV 0.2mg, may be repeated after 2-4 hrs if needed

Adverse Reactions

Tinnitus, dizziness, hypertension, nausea, vomiting, sweating

Precautions

須冷藏於 2-8°C。

Oxytocin

C⁴ Unknown¹

Dosage Forms

Oxocin[®] 10IU/ml/amp <COXYTOC>

Use

Induces of labor, postpartum bleeding

Dose

Induction of labor

SC/IM 3 IU every 20-30 min

Slow IVF 10 IU added to 1000ml of infusion fluid, infusion rate 15 drops/min

Postpartum bleeding

IVF 0.6-2 IU added to 3-5ml 0.9% NaCl

Adverse Reactions

Exceptionally, water intoxication symptoms, icterus neonatorum, nausea, vomiting

Precautions

Oxytocin 稀釋在 NS 或 D5W，其效力至少可以維持 24 小時以上，而其它稀釋液的 24 小時安定性則尚未確定。

Contraindications

Oxytocin should not be given after delivery of the placenta.

11.13. Uterine Relaxants

Ritodrine

B³ Unknown¹

Dosage Forms

Anpo[®] 50mg/5ml/amp <CRITODR>

Anpo[®] 10mg/tab <KRITODR>

Use

Prevention of preterm labor

Dose

IV initial 0.05mg/min, increase by 0.05mg/min every 10-15 min, continue for 12-48 hrs after contractions have stopped; **max: 0.35mg/min**

IM initial 10mg, followed by 10-20mg q2-6h for 12-48 hrs

PO Start 30-60 min before stopping IV infusion, 10mg q2h for 24 hrs, then 10-20mg q4-6h (usual dose: 80-120mg/day); **max: 120mg/day**

Adverse Reactions

Increase maternal heart rate, palpitation, tremor, nausea, arrhythmia

11.14. Hyperprolactinemias

Cabergoline

B⁴ Unknown¹

Dosage Forms

Dostinex[®] 0.5mg/tab <KCABERG>

Use

Hyperprolactinemia, puerperal lactation inhibition

Dose

Puerperal lactation inhibition

PO 1 mg as a single dose on the first day after delivery

Interrupt lactation

PO 0.25 mg bid for 2 days

Hyperprolactinemia

PO 0.25-0.5 mg, once or twice weekly

Adverse Reactions

Dizziness, fatigue, headache, constipation, nausea, somnolence, depression

11.15. Bisphosphonates

Clodronate

C⁵ Unknown³

Dosage Forms

Bonfos[®] 400mg/cap <KCLODRO>

Use

Osteolysis of malignant origin and malignant hypercalcemia

Dose

PO 1600 mg daily in single or 2 divided doses, **max: 3.2g/day**. 於飯前 1 小時或飯後 2 小時服用

Adverse Reactions

GI disturbances (nausea, dyspepsia, diarrhea), hypocalcemia, nephrotoxicity, leukemia

Precautions

避免與含二價離子藥品、高酪酸胺(tyramine)食物併用。

Fosamax plus[®]

C⁴ Unknown¹

Dosage Forms

1 tab: Alendronate 70mg+ Colecalciferol 5600IU <KALEND1>

Use

Osteoporosis prevention and treatment in postmenopausal women, osteoporosis treatment in men

Dose

PO 70mg qw

Adverse Reactions

Abdominal pain, constipation, diarrhea, dyspepsia, flatulence, headache

Precautions

- 1.早晨起床後以一整杯的白開水伴服，且病人在服藥後至少維持上半身直立 30 分鐘，並一直到吃過當天第一份食物之後才可躺下。
- 2.無法站立或坐直至少 30 分鐘者不建議使用。

Ibandronate

C⁵ Unknown³

Dosage Forms

Bonviva[®] 3mg/3ml/syringe <CIBANDR>

Use

Osteoporosis treatment in postmenopausal women

Dose

IVP (5-30sec) 3mg every 3 months

Adverse Reactions

Arthralgia, back pain, hypertension, abdominal pain, influenza-like illness

Precautions

1. 限靜脈注射(請務必小心，若注入動脈或靜脈旁側可能導致組織損害)
2. 健規：不得併用其他骨質疏鬆症治療藥物。

Contraindications

Scr >2.3mg/dl 或 Clcr <30ml/min 禁用

Zoledronic acid

D⁴ Unknown¹

Dosage Forms

Zodonic[®] 4mg/vial <CZOLEDR>

Aclasta[®] 5mg/100ml/vial<CZOLED1>

Use

Zodonic[®] : Hypercalcemia of malignancy(HCM), osteolytic metastases

Aclasta[®] : Paget's disease, Postmenopausal osteoporosis

Dose

Zodonic[®] : **IV** (>15 min)

Hypercalcemia of malignancy

4 mg as single dose. Wait at least 7 days before considering retreatment.

Multiple myeloma or metastatic bone lesions from solid tumors

4 mg q3-4 wks

Aclasta[®] : **IV infusion** (>15min)

Paget's disease

5 mg single dose

Postmenopausal osteoporosis

5 mg every year

Adverse Reactions

Dermatitis, nausea, fever, anemia, neutropenia

Precautions

1. 欲調製Zodonic[®] 輸注溶液，以 100ml 的 0.9%NaCl 或 5%Dextrose 溶液稀釋。
2. Zodonic[®] 調配後應保存於 2-8°C 的冰箱內並於 24 小時內使用完畢。
3. Aclasta[®] 開封後於 2-8°C 可儲存 24 小時。

Contraindications

1. 不可與含鈣離子或其他二價離子之溶液混合。
2. 腎功能不全: Ccr<35ml/min, 不建議使用。

11.16. Antidiabetic Agents

11.16.1. Insulins

類型/外觀	藥品名	商品名	規格	藥物動力學			儲存方式	
				Onset	Peak	Duration	未開封	開封後
Rapid- Short acting								
速效筆型 (澄清液)	Insulin Aspart	NovoRapid® flexpen	300IU/3ml/flexpen	10-20 min	1-3 hr	3-5 hr	2-8°C	室溫(30°C)，下 存放4個星期
短效 (澄清液)	RI (Regular insulin, neutral)	Actrapid® HM	1000IU/10ml/vial	30 min	1.5-2hr	7-8 hr	2-8°C	室溫(25°C)，下 存放6個星期
Intermediate-Acting								
中效 (懸浮液)	NPH (Isophaneinsulin suspension)	Insulatard® HM	1000IU/10ml/vial	1.5hr	2-18hr	24 hr	2-8°C	室溫(25°C)，下 存放6個星期
中-長效筆 (澄清液)	Insulin detemir	Levemir Flex Pen®	300IU/3ml/pen	3-4hr	6-8 hr	24 hr	2-8°C	室溫(25°C)，下 存放6個星期
Long-Acting								
長效 (澄清液)	Insulin glargine	Lantus Solo Star®	100 IU/ml, 3ml/pen	4-6 hr	none	24 hr	2-8°C	室溫(25°C)，下 存放4個星期
Combinations								
速-中效筆型 (懸浮液)	Insulin aspart 30% + Protamin insulin aspart 70%	NovoMix® 30 flexpen	300IU/3ml/flexpen	10-20 min	1-4 hr	24 hr	2-8°C	室溫(25°C)，下 存放4個星期
速-中效筆型 (懸浮液)	Insulin lispro 50% + Protamin insulin lispro 50%	HumalogMix® 50 kwikpen	300IU/3ml/ kwikpen	15-30 min	0.8-4.8hr	14-24 hr	2-8°C	室溫(30°C)，下 存放4個星期

Insulin每日給藥分配表

	早餐前	午餐前	晚餐前	睡前	備註
方法1	NPH : RI(2/3)	—	NPH : RI(1/3)	—	方便常用，但早餐前血糖不易控制
方法2	NPH : RI(2/3)	—	RI (1/6)	NPH(1/6)	可控制早餐前血糖
方法3	RI(1/4)	RI(1/4)	RI(1/4)	NPH(1/4)	多次給藥，控制效果佳

Humalog Mix[®] 50(Rapid-intermediate acting) **B⁴** **Unknown¹**

Dosage Forms

Humalog Mix[®] 50: Insulin lispro 50%+Protamin insulin lispro 50%,
300IU/3ml/ kwikpen <CINSUL19>

Use

Type 1, type 2 DM

Dose

SC

Dosage should be determined by the physician, according to the requirement of the patient

Adverse reactions

Hypoglycemia, redness, swelling, itching, edema

Precautions

1. 不可靜脈注射
2. 若引起低血糖可能影響到患者注意力的集中及反應，若駕駛或操作機械需小心。
3. 未開封時需儲存於 2-8°C 冷藏；開始使用後儲存於 30°C 下可保存 28 天。
4. 由 insulin lispro(快速作用)與 insulin lispro protamine(中速作用)組成混合懸液，約 30-70 分鐘可達最高血中濃度。

Insulin aspart (Rapid-acting) **C¹** **Unknown¹**

Dosage Forms

NovoRapid[®] flexpen 300IU/3ml/flexpen <CINSUL9>

Use

Type 1 or type 2 DM

Dose

SC 0.5-1IU/kg/day divided doses

Regularly adjust dose according to blood glucose

Adverse reactions

Hypoglycemia, local reactions (redness, swelling, itching), lipodystrophy, weight gain, allergic skin reaction, hypokalemia

Precautions

1. 本品為無色澄清液，可與中或長效型胰島素併用。
2. 給藥時間：飯前 5-10 分鐘。
3. 需依腎功能調整劑量。

Insulin detemir (Intermediate-acting) **C¹** **Unknown¹**

Dosage Forms

Levemir[®] Flex Pen 300IU/3ml/pen <CINSUL16>

Use

Type 1 or type 2 DM

Dose

SC individualized dose administered once or twice daily at the same time

every day

Adverse Reactions

Allergic skin reactions, hypoglycemia, injection site pain, lipodystrophy, rash

Precautions

- 1.本品為多次劑量的拋棄式注射筆。
- 2.勿加到點滴注射液裡。

Insulin glargine (Long-acting)

C¹ **Safe¹**

Dosage Forms

Lantus[®] Solo Star 300 IU/3ml/pen <CINSUL17>

Use

Type 1, type 2 DM

Dose

SC individualized dose administered once daily at the same time every day

Adverse Reactions

Allergic skin reactions, hypoglycemia, injection site pain, lipodystrophy, rash

Precautions

- 1.本品不可與其它胰島素混合或稀釋。
- 2.本品為無色透明溶液，使用前不需要振搖。
- 3.開啟後保存期限是4週，建議將首次使用之日期標示於注射筆標籤上。
- 4.使用期間勿儲存在高於25°C的環境，開封後的注射筆不要放入冰箱
- 5.本品為多次劑量的拋棄式注射筆。

NovoMix[®] 30 flexpen(Rapid-intermediate acting)**B¹** **Unknown¹**

Dosage Forms

Insulin aspart 30%+Protamin insulin aspart 70%, 300IU/3ml/flexpen <CINSUL10>

Use

Type 1, type 2 DM

Dose

SC

Type 1 DM

0.5-1.2 IU/kg/day in divided dose

Type 2 DM

Adults: A total insulin dose: 5-10IU/day or 0.7-2.5IU/kg/day in divided dose

Regularly adjust dose according to blood glucose

Adjustment of the initial dose is based on fasting and postprandial BG conc.

Adverse reactions

Hypoglycemia, local reactions (redness, swelling, itching), lipodystrophy weight gain, allergic skin reaction

Precautions

1. 白色混濁懸浮液，使用前應振搖成均勻的混濁或牛奶樣方可使用。
2. 給藥時間：飯前 5-10 分鐘。

NPH (Isophane insulin suspension) (Intermediate-acting)

B⁴Safe¹

Dosage Forms

Insulatard[®] HM, NPH 1000IU/10ml/vial <CINSUL14>

Use

Type 1, type 2 DM

Dose

Adults: **SC** 0.5-1.0IU/kg/day divided doses and before meal

Regularly adjust dose according to blood glucose

Adverse Reactions

Hypoglycemia, local reactions (redness, swelling, itching), lipodystrophy, weight gain, allergic skin reaction

Precautions

1. 白色混濁懸浮液，使用前應振搖成均勻的混濁或牛奶樣方可使用。
2. 可與短效型 (actrapid) 胰島素併用。
3. 給藥時間：飯前 30-60 分鐘。
4. 開封後於室溫(25°C)下可使用達 6 個星期。

Regular Insulin (Neutral) (Short-acting)

B¹Safe¹

Dosage Forms

Actrapid[®] HM 1000IU/10ml/vial <CINSUL02>; 1 IU/dose <CINSUL13>

Use

Type 1 or type 2 DM, gestational DM

Dose

Type 1 DM

SC 0.5-1.0IU/kg/day divided doses

Type 2 DM

SC initial 0.5-1.0IU/kg/day divided doses, maintenance increased 5-10IU/wk until SMBG reach 120ml/dL

Obesity and insulin resistance

SC 80-100IU/day or more to achieve control level

Gestational diabetes mellitus

A combination of short and intermediate actino insulin is generally used

Initial **SC** 0.7IU/IBW (1st trimester); 0.8IU/IBW (2nd trimester); 0.9IU/IBW (3rd trimester)

Adjustment of the initial dose is based on fasting and postprandial BG conc.

Adverse Reactions

Hypoglycemia, local reactions (redness, swelling, itching), lipodystrophy, weight gain, allergic skin reaction, hypokalemia

Precautions

1. 本品為無色澄清液，可與中效或長效型胰島素併用。

2. Type 1 及 type 2 DM 給藥時間：飯前 30 分鐘。

3. 需依腎功能調整劑量。

11.16.2. Sulfonylureas

Amaryl M[®]

C⁴ Unknown¹

Dosage Forms

1 tab: Glimepiride 2mg +Metformin 500mg <KAMARYL>

Use

Type 2 DM

Dose

PO 1 tab once or twice per day before or with meals.

Adverse Reactions

Hypoglycemia, dizziness, nausea, flatulence, lactic acidosis

Precautions

1. 含碘顯影劑會增加 metformin 引起乳酸中毒的危險，應先暫停使用 metformin 48 小時。
2. ACEI 可能會暫時性的增加 insulin 的敏感度，併用降血糖藥會有低血糖的危險。

Gliclazide

B³ Unknown¹

Dosage Forms

Gliclax[®] 30mg/SR tab <KGLICL2>

Use

Type 2 DM

Dose

Initial PO 30mg qd AC, maintenance 30-120mg; **max: 120mg/day**

Adverse Reactions

Hypoglycemia, dizziness, nausea, vomiting, abdominal pain, weight gain

Glimepiride

C³ Unknown¹

Dosage Forms

Amaryl[®] 2mg/tab <KGLIMEP>

Use

Type 2 DM

Dose

Initial PO 1-2mg qd AC, maintenance 1-4mg qd AC; **max: 8mg/day**

Adverse Reactions

Hypoglycemia, dizziness, nausea, vomiting, abdominal pain, weight gain

Glipizide

C⁴ Unknown¹

Dosage Forms

Glidiab[®] 5mg/tab <KGLIPIZ>

Use

Type 2 DM

Dose

Adults: initial **PO** 5mg qd AC, increase by 2.5-5mg/day; **max: 40mg/day**
Elderly or hepatic impairment patient: initial **PO** 2.5mg qd AC

Adverse Reactions

Hypoglycemia, dizziness, nausea, vomiting, abdominal pain, weight gain

11.16.3. Meglitinides

Repaglinide

C⁴ Unknown¹

Dosage Forms

Repaglinide[®] 1mg/tab <KREPAGL>

Use

Type 2 DM

Dose

Initial **PO** 0.5 mg taken 1-30 min before meals. The starting dose of patients transferred from another oral hypoglycemic agent is 1 mg. Dosage adjustments should be made at intervals of at least 1 wk or more; **max: 16 mg/day**.

Adverse Reactions

Hypoglycemia, nausea, diarrhea, constipation, vomiting, dyspepsia

Precaution

1. 需依腎功能調整劑量。
2. 本品須於用餐前服用，未進食則不需服藥，避免低血糖。

11.16.4. Alpha-Glucosidase Inhibitors

Acarbose

B⁴ Unknown¹

Dosage Forms

Glucobay[®] 100mg/tab <KACARB1>

Use

Type 2 DM

Dose

Initial **PO** 50mg tid with meal, **max: 200mg tid with meal**

Adverse Reactions

Abdominal pain, diarrhea, flatulence, elevated liver enzymes

Precautions

治療初期應監測肝功能。

Contraindications

CrCl <25ml/min, age <18 yrs, colon ulcerations, cirrhosis, diabetic ketoacidosis, bowel obstruction

11.16.5. Biguanides

Actosmet[®]

C⁴ Unknown¹

Dosage Forms

1 tab: Pioglitazone 15mg+ Metformin 850mg/tab <KACTOSM>參閱 P.220

GalvusMet[®]

Unsafe³

Dosage Forms

1tab: Metformine 500mg+ vildagliptine 50mg/tab <KGALVU1>參閱 p.221

Metformin

B⁴ **Unknown¹**

Dosage Forms

Loditon[®] 500mg/tab <KMETFOR>

Use

Type 2 DM, polycystic ovary syndrome (unlabeled use)

Dose

Type 2 DM

Adults: initial **PO** 500mg qd-bid, maintenance 500-2500mg/day in divided dose; **max: 2500mg/day**

Polycystic ovary syndrome (PCOS)

PO 500mg tid

Adverse Reactions

Diarrhea, nausea, vomiting, flatulence, anorexia, lactic acidosis

Precautions

進行放射線性檢查須注射顯影劑者應先停藥 48 小時。

Contraindications

腎不全患者, CHF, acute and chronic metabolic acidosis, including diabetic ketoacidosis and conditions

11.16.6. Thiazolidinediones

Actosmet[®]

C⁴ **Unknown¹**

Dosage Forms

1 tab: Pioglitazone 15mg+ Metformin 850mg/tab <KACTOSM>

Use

Type 2 DM

Dose

PO 1table qd-bid; **max: 3 table/day**

Adverse Reactions

Upper respiratory infection, diarrhea, edema, headache

Precaution

進行放射線性檢查須注射顯影劑者應先停藥 48 小時。

Contraindications

腎不全患者、正罹患肝臟疾病或 ALT 濃度超過正常上限 2.5 倍

Pioglitazone

C⁴ **Unknown¹**

Dosage Forms

Glitos[®] 30mg/tab <KPIOGLI>

Use

Type 2 DM

Dose

Initial **PO** 15-30mg qd; **max: 45mg/day**

Adverse Reactions

Anemia, edema, myalgia, upper respiratory tract infection, weight gain

Precaution

Active liver disease (transminases >2.5 times), CHF (class I-II), edema, rapid weight gain, dyspnea, diabetic ketoacidosis

Contraindications

NYHA class III or IV CHF

11.16.7. Antihypoglycemics

Glucagon

B⁴ Unknown¹

Dosage Forms

GlucaGen[®] 1mg/vial <CGLUCAG>

Use

Hypoglycemia, GI radiography

Dose

Hypoglycemia

IM/IV/SC

Children: weight <20kg: 0.5mg/dose, weight ≥20kg: 1mg; **max: 1mg/dose**

Adults: 1mg, may repeat in 20 min if necessary

Radiologic examinations

Adults: 0.2-2mg **IV** 1 min before procedure or 1-2mg **IM** 5-15 min before procedure

Adverse Reactions

Nausea, rash, vomiting

11.16.8. Dipeptidyl Peptidase 4 Inhibitors

GalvusMet[®]

Unsafe³

Dosage Forms

1tab: Metformine 500mg+ vildagliptine 50mg/tab <KGALVU1>

Use

Type 2 DM

Dose

PO 1 tab bid; **max: 2tab/day**

Adverse Reactions

Hypoglycemia, tremor, headache, dizziness, nausea

Precautions

- 1.使用含碘顯影劑：含 metformin 成分，應在檢測前停用，且在完成後 48 小時內不可重新使用。
- 2.手術：含 metformin 成分，如需以全身麻醉進行非急需性手術，應在 48 小時前停止治療，且通常不可在手術完成後 48 小時內恢復使用

Contraindications

糖尿病酮酸血症、糖尿病性昏迷、肝腎功能不全、可能影響腎功能之急性病症(心衰竭、呼吸衰竭、近期心肌梗塞、休克、經血管注射含碘顯影劑)、急性酒精中毒、酗酒

Linagliptin

B⁵ **Unknown³**

Dosage Forms

Trajenta[®] 5mg/FC. Tab <KLINAGL >

Use

Type 2 DM

Dose

PO 5mg qd

Adverse Reactions

Hypoglycemia, nasopharyngitis, cough

Precautions

可能引起低血糖需小心

Contraindications

不可用於治療第一型糖尿病及糖尿病酮酸中毒

Sitagliptin

B⁴ **Unknown¹**

Dosage Forms

Januvia[®] 100mg/tab <KSITAGL>

Use

Type 2 DM

Dose

PO 100mg qd

Adverse Reactions

Hypoglycemia, headache, nasopharyngitis, upper respiratory infection

Precautions

需依腎功能調整劑量，Clcr<50ml/min: 0.5tab qd, Clcr<30ml/min: 0.25tab qd

Saxagliptin

B⁴ **Unknown¹**

Dosage Forms

Onglyza[®] 5mg/FC. tab <KSAXAGL>

Use

Type 2 DM

Dose

PO 2.5-5mg qd

Adverse Reactions

Peripheral edema, hypoglycemia, headache, nasopharyngitis

Precautions

需依腎功能調整劑量，Clcr<50ml/min: 0.5# qd

Vildagliptin

C⁵ **Unknown³**

Dosage Forms

Galvus[®] 50mg/F.C tab <KVILDAG>

Use

Type 2 DM

Dose

PO 50mg qd-bid; **max:100mg/day**

Adverse Reactions

Tremor, headache, dizziness, asthenia, weight increase, hypoglycemia

Precaution

1. 與 sulfonyleurea 併用時僅能 1tab qd
2. 需依腎功能調整劑量，Clcr<50ml/min: 1tab qd

Contraindications

中重度腎功能不全或接受血液透析之患者、ALT 或 AST 大於正常值 2.5 倍以上之患者。

11.16.9. Glucagon-Like Peptide-1 (GLP-1) Receptor Agonist

Exenatide

C^S Unknown^I

Dosage Forms

Byetta[®] 10mcg/dose, 2.4ml/prefilled pen <CEXENA2>

Use

Type 2 diabetes mellitus

Dose

Initial SC 5mcg bidAC (within 60min before the meal) for 1 month, may increase to 10mcg bidAC

Adverse Reactions

Nausea, vomiting, diarrhea, dizziness, headache

Precautions

1. 兩次注射時間需間隔 6 小時以上
2. 本品為澄清無色液體，如有顆粒或混濁請勿使用
3. 未開封時需儲存於 2-8°C，開封後於 25°C 下可存放 30 天
4. 病患已進食者勿補打
5. 健規: 不得與 insulin、DPP-4 抑制劑(如 sitagliptin 成分)等藥物併用。

Contraindications

末期腎疾病或嚴重腎功能不足之患者(Clcr<30ml/min)

Liraglutide

C^S Unknown^I

Dosage Forms

Victoza[®] 18mg/3ml/pen <CLIRAGL>

Use

Type 2 diabetes mellitus

Dose

Initial SC 0.6mg once daily for 1 week, maintenance 1.2mg/day; **max: 1.8mg/day**

Adverse Reactions

Nausea, vomiting, diarrhea, constipation, upper respiratory infection

Precautions

1. 不可用於第一型糖尿病或糖尿病酮酸血症
2. 未開封時需儲存於 2-8°C 冷藏; 開始使用後需儲存於 30°C 下或冷藏 2-8°C 下可保存 30 天
3. 健規: 不得與 insulin、DPP-4 抑制劑(如 sitagliptin 成分)等藥物併用

Contraindications

甲狀腺髓樣癌、第 2 型多發性內分泌腫瘤綜合症

11.16.10. Sodium-Glucose Cotransporter 2(SGLT2) inhibitor

Dapagliflozin

C⁵ Unknown¹

Dosage Forms

Forxiga[®] 10mg/tab <KDAPAGL>

Use

Type 2 diabetes mellitus

Dose

PO initial 5mg once daily in the morning, the dose can be increased to 10mg once daily

Adverse Reactions

Genital mycotic infection, nasopharyngitis, urinary tract infection, back pain, increased urination

Contraindications

嚴重腎功能不全、末期腎病、透析患者

Empagliflozin

C⁵ Unknown¹

Dosage Forms

Jardiance[®] 10mg/tab <KEMPAG1>

Jardiance[®] 25mg/tab <KEMPAG2>

Use

Type 2 diabetes mellitus

Dose

PO 10mg once daily in the morning, the dose may be increased to 25mg/day

Adverse Reactions

Genital mycotic infection, urinary tract infection, hypotension, impairment in renal function, hypoglycemia, increase LDL

Contraindications

嚴重腎功能不全、末期腎病、透析患者

11.17. Adrenocortical Steroids

Cortisone

D⁴ Unknown¹

Dosage Forms

Cortisone[®] 25mg/tab <KCORTIS>

Use

Management of adrenocortical insufficiency

Dose

PO 25mg tid-qid

Adverse Reactions

GI distress, growth depression, hypertension, increased skin of infection
Cushing's syndrome

Contraindications

Systemic fungal infections, cirrhosis, hypothyroidism, peptic ulcer

Dexamethasone

C⁴ Unknown¹

Dosage Forms

Dexamethasone[®] 5mg/ml/amp <CDEXAME>

Decone[®] 0.5mg/tab <KDEXA01>

Dorison[®] 4mg/tab <KDEXA02>

Zine[®] orabase 0.1%, 5g/tube <WDEXA02> 参閱p.328

Use

Systemically and locally for chronic inflammation, allergy, autoimmune diseases, cerebral edema, septic shock, antiemetic

Dose

Cerebral edema

Injection:

initial 10mg **IV** followed by 4mg q6h **IM** until symptoms subside

Tablet

PO 2mg bid-tid

Allergic disorder (acute)

First day: 4-8mg **IM**; second and third days: 1.5mg bid **PO** each day;

fourth day: 0.75mg bid **PO**; fifth and sixth days 0.75mg/day **PO**

Shock

IV 2-6mg/kg repeated in 2-6 hrs if shock persist

Antiemetic

Children: **IV** 10mg/m² before chemotherapy, then 5mg/m² q6h as needed;

max: 20mg

Adults: **IV** 20mg before chemotherapy, then 8mg (**IV/PO**) bid for 3 days after chemotherapy

Inflammatory conditions

Children: **PO/IM/IV**, 0.08-0.3mg/kg/day or 2.5-10mg/m²/day q6-12h

Adults: **PO** 0.75-9mg/day or **IM/IV** initial 0.5-9mg/day

Oral paste : Apply to the affected area once to several times daily

Adverse Reactions

GI distress, growth depression, hypertension, increased skin of infection

Cushing's syndrome

Precautions

Cirrhosis, hypothyroidism, peptic ulcer

Contraindications

Systemic fungal infections

Fludrocortisone

C⁴ Unknown¹

Dosage Forms

Florinef[®] 0.1mg/tab <KFLUDRO>

Use

Chronic adrenocortical insufficiency in Addison's disease, salt-losing adrenogenital syndrome

Dose

Minerocorticoid insufficiency

Children: **PO** 0.05-0.1mg/day

Adults: **PO** 0.1 mg, 3 times/wk to 0.2 mg/day

Adrenogenital syndrome

Adults: **PO** 0.1-0.2mg/day

Adverse Reactions

Edema, muscle weakness, peptic ulcer, impair wound healing, convulsions

Precautions

Cirrhosis, hypothyroidism, peptic ulcer, diabetes mellitus, electrolyte abnormalities, renal insufficiency.

Contraindications

Systemic fungal infections

Hydrocortisone

C⁵ Unknown¹

Dosage Forms

Solu-Tisone[®] 100mg/vial <CHYDROC >

Cortema[®] enema 99.6mg/60ml/bot <WHYDR01> 參閱 p.168

Cort. S[®] oint 1%, 50g/bot <WHYDR02> 參閱 p.143

Use

Adrenocortical insufficiency, inflammation of dermatoses, ulcerative colitis

Dose

IV/IVD/IM

Children: >25mg/day; **max: 15mg/kg**

Adults: 100-500mg q6h

Adverse Reactions

GI distress, musculoskeletal weakness, negative protein balance due to protein catabolism, headache, osteoporosis

Precautions

1. Cirrhosis, hypothyroidism, peptic ulcer, measles, chickenpox and other infections, myasthenia gravis
2. 以 2ml 注射用水溶解，以 50-1000ml D5W, NS 溶液稀釋，配置後溶液可存放 4 小時。

Contraindications

Systemic fungal infections, live or live attenuated vaccines (immunosuppressive doses)

Methylprednisolone

C⁴ Unknown¹

Dosage Forms

Methylprednisolone[®] 40mg/vial <CMETH04>

Solu-Medrol[®] 500mg/vial <CMETH05>

Use

Adrenocortical insufficiency, immunosuppression and inflammatory conditions, multiple sclerosis (MS), nephrotic syndrome, acute spinal cord injury

Dose

Asthma

IV 40-80mg/day in 1-2 divided until severe symptoms have been controlled

Systemic lupus erythematosus

Pulse doses: 1 g IV daily for 3 days

Multiple sclerosis(MS)

160 mg/day IV for 1 wk followed by 64 mg qod for 1 month

Acute spinal cord injury (Solu-Medrol®)

Administered within 8 hours of the incident 30mg/kg IV over 10-20 min, then 5.4mg/kg/h for 23 hrs

Adverse Reactions

Euphoria/depression, GI distress, peptic ulcer, elevations in liver function tests, growth depression, hypertension, sodium and fluid retention

Precautions

1. Cirrhosis, hypothyroidism, peptic ulcer, measles, chickenpox and other infections, myasthenia gravis
2. Methylprednisolone® 乾粉以 2ml 注射用水溶解。

Contraindications

Systemic fungal infections, live or live attenuated vaccines (immunosuppressive doses)

Prednisolone



Dosage Forms

Donison® 5mg/tab <KPREDNI>

Pred Forte® oph 1%, 5ml/bot <WPREDNI> p.273

Kidsolone® oral solution 60mg/60ml/bot, 1ml:Prednisolone 1.344mg <KPREDNI>

Use

Asthma (uncontrolled), endocrine disorders, hematologic disorders, multiple sclerosis exacerbations, allergic and nonrheumatic inflammatory disorders

Dose

PO

Asthma

7.5-60mg/day tid-qid (Long-Term Therapy)

Endocrine disorders, hematologic disorders, multiple sclerosis exacerbations, allergic and nonrheumatic inflammatory disorders

5-60mg/day tid-qid

Adverse Reactions

Euphoria, depression, GI distress, peptic ulcer, growth depression, skin atrophy

Precautions

Cirrhosis, hypothyroidism, peptic ulcer, measles, chickenpox and other infections, myasthenia gravis

Contraindications

Systemic fungal infections, live or live attenuated vaccines (immunosuppressive doses)

Triamcinolone

C⁴ Unknown¹

Dosage Forms

Shincort[®] 40mg/ml/amp <CTRIAM2>

Nincort[®] oral paste 0.1% 6g/tube <WTRIAM3> 參閱 p.329

Nasacort[®] nasal spray 55mcg/puff, 120puffs/bot <WTRIAM4 > 參閱 p.316

Use

Arthritic disorders and dermatologic lesions

Dose

Intra-articular (IA)

Up to 10 mg for smaller area and up to 40 mg for larger areas.

Single injections into several joint for multiple locus involvement, up to a total of 80 mg.

IM

Children 6-12yrs: initial 40mg, adjustment

Adults: initial 60mg, usual dose 40-80mg

Topical: apply to the affected area qd-tid

Adverse Reactions

Euphoria, depression, GI distress, peptic ulcer, growth depression, skin atrophy, rhinitis, headache, pharyngitis, epistaxis, nasal irritation

Precautions

Local viral, fungal or bacterial infections, cirrhosis, hypothyroidism, peptic ulcer, measles, chickenpox and other infections, myasthenia gravis, ulcerative colitis, renal insufficiency

Contraindications

禁用靜脈注射。

11.18. Gout Related Agents

Allopurinol

C⁴ Unknown¹

Dosage Forms

Allopurinol[®] 100mg/tab <KALLOPU>

Use

Prevention of gout arthritis, antineoplastic-induced hyperuricemia and urate stone

Dose

Gout

Adults: **PO** 100-300mg/day qd-tid; **max: 800mg/day**

Antineoplastic-induced hyperuricemia

Children 6-10 yrs: **PO** 100mg tid or 300mg qd

Adults: **PO** 600-800mg/day, 12 hrs to 3 days prior to initiation of chemotherapy

Urate stone(抗尿酸結石)

PO 100-200mg qd

Adverse Reactions

Rash, pruritus, renal failure, renal insufficiency, Stevens-Johnson

syndrome, nausea, vomiting

Precautions

1. Allopurinol should be discontinued at the first appearance of a rash or other sign of hypersensitivity
2. Do not use to treat asymptomatic hyperuricemia
3. 需依腎功能調整劑量

Benzbromarone

C⁵ Unknown³

Dosage Forms

Beenrone[®] 50mg/tab <KBENZBR>

Use

Hyperuricemia and gout

Dose

Adults: **PO** 50-150mg/day

Adverse Reactions

Diarrhea, nausea, urticaria, allergic conjunctivitis

Precautions

Hepatic disease (開始服用後需定期監測肝功能)

Contraindications

Acute gout attack, severe renal disease(GFR<20ml/min), nephrolithiasis

Colchicine

D⁴ Unknown³

Dosage Forms

Colchicine[®] 0.5mg/tab <KCOLCHI>

Use

Treatment and prevention of acute gouty arthritis attacks

Dose

Gouty arthritis(acute attacks)

Adults: **PO** initial 0.5-1mg, then 0.5mg q1-2h or 1mg q2h until relief or GI side effects occur; **max: 8mg/day (increase dose <1.8mg/hr)**

Gout (prophylaxis)

Less than 1 acute attack/yr, **PO** 0.5-0.6mg/day 3-4 times/wk; more than 1 acute attack/yr, 0.5-1.5mg/day

Adverse Reactions

Nausea, vomiting, diarrhea, abdominal pain

Precautions

需依腎功能調整劑量。

Contraindications

Blood dyscrasias (granulocytopenia, thrombocytopenia), hepatic failure, severe (cardiac, gastrointestinal renal) disease

Febuxostat

C⁴ Unknown¹

Dosage Forms

Feburic[®] 80mg/tab <KFEBUXO>

Use

Chronic management of hyperuricemia in patients with gout

Dose

PO initial 40mg qd, increased to 80mg qd if sUA \geq 6mg/dl after 2 weeks

Adverse Reactions

Liver enzymes abnormal, rash, nausea, arthralgia, gout attack(during initial treatment)

Precautions

開始使用後，由於血清尿酸濃度改變導致尿酸鹽從組織沉積移轉，痛風可能會發作，故建議併用 NSAIDs 或 Colchicine 以預防痛風發作，預防性治療效益達 6 個月；治療過程若痛風發作無需停用 Feburic

Contraindications

正在使用 Azathioprine 或 Mercaptopurine 的患者、無症狀高尿酸血症禁用

11.19. Thyroid Agents

11.19.1. Thyroid Hormones

Levothyroxine

A⁴ **Unknown¹**

Dosage Forms

Eltroxin[®] 50mcg/tab <KTHYRO1>

Use

Supplemental therapy in hypothyroidism

Dose

Adults: initial **PO** 50-100mcg/day, maintenance 100-200mcg/day

Adverse Reactions

Anginal pain, cardiac arrhythmia, palpitation, tachycardia, diarrhea,

Precautions

1. Cardiovascular disease, diabetes mellitus, pituitary myoedema, adrenocortical deficiency
2. 需飯前服用。

11.19.2. Antithyroid Drugs

Methimazole

D⁴ **Unsafe¹**

Dosage Forms

Lica[®] 5mg/tab <KMETHIM>

Use

Management of hyperthyroidism

Dose

Children: initial **PO** 0.4mg/kg/day tid, maintenance 0.2mg/kg/day tid

Adults: initial **PO** 15mg/day, maintenance 5-15mg/day; **max: 60mg/day**

Adverse Reactions

Rash, leukopenia, agranulocytosis, drowsiness, nephrotic syndrome

Precautions

Bleeding disorders or easy bruising, liver disease, signs of infection,

surgery

Propylthiouracil

D⁴ Unknown¹

Dosage Forms

Procil[®] 50mg/tab <KPROPYL>

Use

Management of hyperthyroidism

Dose

Children 6-10 yrs: **PO** 50mg/day q8h, upward titration should occur carefully based on the patient's clinical response as well as their TSH and free T4 levels.

Adults: **PO** initial 300-400mg/day q8h, maintenance 100-150mg/day q8-12h, server 600-900mg/day.

Adverse Reactions

Drug fever, skin rash, leukopenia, dizziness, nausea, vomiting

Precautions

1. Hepatic function impairment (開始使用後六個月內需監測肝功能)
2. 腎功能不良者須調整劑量。

Contraindications

Not established in children ≤ 6 yrs

11.19.3. Iodine Products

Lugol's solution

D⁴ Unknown¹

Dosage Forms

複方碘稀釋溶液 60ml/bot (1ml: Iodine 5mg+Potassium Iodine 10mg)
<KLUGOL>

Use

Disinfection, suppress hyperthyroidism, thyrotoxicosis, thyroid disorder due to iodine deficiency, induce thyroid involution before thyroidectomy

Dose

Before subtotal thyroidectomy, thyrotoxicosis

PO 1-3ml tid

Adverse Reactions

Skin rash, fever, salivary gland swelling or tenderness, diarrhea, nausea

11.20. Posterior Pituitary Hormones

Desmopressin (DDAVP)

B⁴ Safe¹

Dosage Forms

Minirin[®] 4mcg/ml/amp <CDESM01>

Minirin[®] 0.1mg/tab <KDESM01>

Minirin[®] nasal spray 250mcg/25puffs/2.5ml/bot <WDESMO>

Use

Treatment of diabetes insipidus and controlling bleeding in mild

hemophilia, Von Willebrand disease (VWD), thrombocytopenia (eg, uremia), primary nocturnal enuresis

Dose

Central diabetes insipidus

Intranasal

Children > 12 yrs: 5-10mcg/day qd-bid

Children \geq 12 yrs and adults: 10-20mcg/day qd-bid

IV/SC

Children \geq 12 yrs and adults: 2-4mcg/day bid

PO

Children \geq 4 yrs and adults: 0.1-1.2mg/day bid-tid

Primary nocturnal enuresis (PNE)

PO 0.2-0.6mg hs

Therapeutic control of bleeding, bleeding prophylaxis in Haemophilia A, type 1 VWD

IV 0.3mcg/kg (dilute in 0.9% NaCl 50-100 ml) over 15-30 mins, may be repeated 1-2 times intervals of 6-12 hrs

Adverse Reactions

Flushing, headache, nausea, hyper- or hypotension, palpitations,

Precautions

1. Hypertension, coronary artery insufficiency, patients predisposed to thrombus formation

2. 針劑及鼻噴劑需冷藏。

Contraindications

Type IIB or platelet-type Von Willebrand disease, desmopressin injection in children under 3 months of age with hemophilia A, type 1VWD

Vasopressin

C⁴ Unknown¹

Dosage Forms

Pitressin[®] 20IU/1ml/amp <CVASOPR>

Use

Diabetes insipidus, prevention and treatment of postoperative abdominal distention, esophageal varices bleeding (EV bleeding)

Dose

Diabetes insipidus

Children: **IM/SC** 2.5-10IU 2-4 times/day

Adults: **IM/SC** 5-10IU 2-3 times/day

Abdominal distension, prophylaxis-postoperative complication

IM 5IU postoperatively, increase to 10IU at subsequent injections repeated at 3-4 hrs intervals if necessary

GI bleeding (EV bleeding)

Dilute in 100-200 ml D5W, initial **IVF** 0.1-0.2IU/min, then titrate dose as needed, may repeat 1-2 hours.

Adverse Reactions

Arrhythmias, myocardial infarction, fever, vertigo, urticaria, bronchial constriction, hyponatremia

11.21. Calcitonin-Salmon

Calcitonin

C⁴ Unknown¹

Dosage Forms

Miacalcic[®] 100IU/ml/amp <CCALC01>

Use

Treatment of Paget's disease of bone (osteitis deformans), adjunctive therapy for hypercalcemia, postmenopausal osteoporosis and osteogenesis imperfecta

Dose

Paget's disease

Adults: **IM/SC** 100IU/day to start, 50IU/day or 50-100IU every 1-3 days as maintenance dose

Hypercalcemia

Adults: **IM/SC** initial 4IU/kg q12h, **max: 8IU/kg q6-12h**

Osteogenesis imperfecta

Adults: **IM/SC** 2IU/kg 3 times/wk

Postmenopausal osteoporosis

IM/SC 100IU/day

Adverse Reactions

Facial flushing, nausea, diarrhea, anorexia, edema at injection site, polyuria, back or joint pain, nasal bleeding/crusting, dyspnea

Precautions

Administration of calcitonin possibly could lead to hypocalcemic tetany, in relapse of Paget's disease, a dosage increase beyond 100IU/day does not improve response

11.22. Parathyroid Hormone Analogues

Teriparatide

C⁴ Unknown¹

Dosage Forms

Forteo[®] 750mcg/3ml/syringe <CTERIPA>

Use

Postmenopausal osteoporosis, primary or hypogonadal osteoporosis

Dose

SC 20 mcg qd

Adverse Reactions

Arthralgia, leg cramp, dizziness, orthostatic hypotension

Precautions

- 1.本品須冷藏，每 syringe 開封後使用期限不得超過 28 天。
- 2.健規：本品不得併用 biphosphonates、calcitonin、raloxifene 及活性 Vit D3 等藥品。

11.23. Endocrine and Metabolic Miscellaneous

Strontium

Unsafe³

Dosage Forms

Protos[®] granule 2g/sachet <KSTRONT>

Use

Osteoporosis

Dose

PO 1pk QDAC or HS

Adverse Reactions

Nausea, diarrhea, headache, dermatitis

Precautions

- 1.加一杯水泡製成懸浮液服用，泡製後室溫可存放 24 小時。
- 2.每日需同時補充鈣(1500mg)及維生素 D(400IU~800IU)
- 3.鈣片、制酸劑、牛奶、食物會影響本品吸收，建議至少間隔 2 小時
- 4.易與 tetracycline 及 quinolone 類抗生素螯合，因此使用抗生素期間應暫停使用本品
- 5.需依腎功能調整劑量。

Contraindications

現有或曾有靜脈血栓栓塞(VTE)病史之病人，及暫時或永久無法行動者。

Denosumab

C^s Unknown³

Dosage Forms

Prolia[®] 60mg/ml/syringe <CDENOSU>

Xgeva[®] 120mg/1.7ml/vial <CDENOS1>

Use

Prolia[®]: Postmenopausal osteoporosis

Xgeva[®]: Prevention of skeletal-related events in bone metastases from solid tumors

Dose

Prolia[®]: **SC** 60mg once every 6 months

Xgeva[®]: **SC** 120mg once every 4 weeks

Adverse Reactions

Prolia[®]: Back pain, limb pain, musculoskeletal pain, hypercholesterolemia, cystitis

Xgeva[®]: Fatigue, asthenia, hypophosphatemia, nausea, hypocalcemia, osteonecrosis

Precautions

- 1.每日需補充 1000mg 鈣質及 400IU 維生素 D。
- 2.需儲存於 2-8°C，自冰箱取出後不可超過 25°C，並於 14 天內使用完畢。
- 3.Xgeva 需使用 27 號針頭抽取及注射，每四週一次於上臂、大腿或腹部皮下注射

12. NEUROLOGYS

12.1 Anticonvulsants

Carbamazepine

D⁴ **Safe¹**

Dosage Forms

Tegretol[®] 200mg/CR.tab <KCARB02>

Use

Epilepsy, trigeminal neuralgia, bipolar disorder, glossopharyngeal neuralgia

Dose

Epilepsy

Children ≤4yrs: initial **PO** 20-60mg/day, increased by 20-60mg/day; >4yrs: initial **PO** 100mg/day, increased by 100mg/day

Children 0-1yrs: maintenance **PO** 100-200 mg/day; 1-5 yrs **PO** 200-400 mg/day; 6-10 yrs **PO** 400-600 mg/day; 11-15 yrs **PO** 600-1000 mg/day

Adults: initial **PO** 100-200 mg/day qd-bid, increased by 200 mg/day at weekly intervals, up to 1600-2000 mg/day.

Trigeminal neuralgia

Adults: **PO** initial 200-400 mg/day, maintenance 100 mg tid-qid.

Bipolar disorder

PO 400-1600 mg/day divided in 2-3 doses.

Glossopharyngeal neuralgia

Initial **PO** 100 mg q12h, increase by 200 mg/day (divided into 2 doses) as needed for pain control (max dose 1200 mg/day)

Adverse Reactions

Leucopenia, dizziness, nausea, vomiting, stevens-johnson syndrome

Precautions

- 1.服藥後發生皮膚，口腔黏膜處發紅，起疹或水泡建議立刻就醫。
- 2.不建議磨粉。

Contraindications

Tricyclic antidepressant or MAO inhibitor use, bone marrow depression, AV block

Clonazepam

D⁴ **Unsafe¹**

Dosage Forms

Clonopam[®] 0.5mg/tab <KCLON01>

Clonopam[®] 2mg/tab <KCLON02>

Use

Seizure

Dose

Children <10 yrs or 30kg: initial **PO** 0.01-0.03mg/kg/day, maintenance 0.05-0.1mg/kg/day tid

Children >10 yrs or 30kg: initial **PO** 1-2mg /day, maintenance 1.5-3mg/day

Adults: initial **PO** 0.5mg tid, maintenance 2-4mg/day, **max: 20mg/day**

Adverse Reactions

Problem behavior, somnolence, ataxia, dizziness, fatigue

Precautions

- 1.突然停藥可能會導致重積性癲癇(status epilepticus)
- 2.應定期做血液學檢查及肝功能檢查。

Contraindications

Severe liver disease, narrow-angle glaucoma

Diazepam

D⁴ Unsafe¹

Dosage Forms

Dianlin[®] 10mg/2ml/amp <CDIAZ01>

Use

Anxiety, alcohol withdrawal symptoms, skeletal muscle spasm, status epilepticus

Dose

Anxiety

Adults: **IM/IV** 2 to 10 mg every 3 to 4 hr if needed depending on symptom severity; **IM** 10 mg before surgery

Alcohol withdrawal symptoms

Adults:**IV/IM** 10 mg , may give 5 to 10 mg in 3 to 4 hr if necessary

Skeletal muscle relaxation or anxiety

Children < 5 yrs: **slow IV/IM** 5-10mg q3-4h

Adults: **IM/IV** 2-10mg, may repeat in 3-4 hrs if needed

Status epilepticus

Children 30 days-5 yrs: **slow IV/IM** 0.2-0.5mg/dose q2-5min, repeat every 2 to 4 hr as necessary, **max:5mg/dose**

Children > 5 yrs: **slow IV/IM** 1mg q2-5min, repeat every 2 to 4 hr as necessary, **max: 10mg/dose**

Adults: **IM/IV** 5 to 10 mg every 10 to 15 min as necessary, may repeat in 2 to 4 hr if needed , **max: 30 mg/dose**

Adverse Reactions

Hypotension, muscle weakness, ataxia, somnolence, respiratory depression

Precautions

- 1.年老及體弱病人,幼童,肝病或低血清蛋白病人,對本藥的中樞神經系統抑制作用較為敏感
- 2.肌肉注射時應注射至三角肌深部。

Contraindications

Severe hepatic insufficiency, myasthenia gravis, acute narrow-angle glaucoma

Levetiracetam

C⁴ Unsafe¹

Dosage Forms

Keppra[®] 500mg/5ml/vial <CLEVETI>

Keppra[®] 500mg/FC. tab <KLEVETI>

Keppra solution[®] 100mg/ml, 300ml/bot<KLEVET1>

Use

Partial seizures, myoclonic seizure, tonic-clonic seizure

Dose

Injection

Monotherapy

>16yrs adolescent and adult: **IV** initial 250mg/dose twice daily, increase to 500mg/dose twice daily after 2 weeks; **max: 1500mg/dose twice daily**

Add-on therapy

12-17yrs (BW \geq 50kg) adolescent and adult: **IV** initial 500mg/dose twice daily, may increase every 2 weeks by 1000mg/day (500mg/dose); **max: 1500mg/dose twice daily**

4-11yrs children and BW<50kg adolescent: **IV** 10mg/kg/dose twice daily, may increase every 2 weeks by 20mg/kg/day (10mg/kg/dose); **max: 30mg/kg/dose twice daily**

Tablet

PO initial 500mg bid, increased by 1000mg/day every 2 wks; **max: 3000mg/day**

Solution

<11 y/o or <50 kg: **PO** initial dose 10mg/kg/bid; **max: 30mg/kg/bid**

>18 y/o or >50 kg: **PO** initial dose 500mg/bid; increased by 1000 mg/day at 2-4 weekly, **max: 3000mg/day**

Adverse Reactions

Somnolence, asthenia, dizziness, headache

Precautions

1. 需依腎功能調整劑量。
2. Abrupt withdrawal of therapy may increased risk of seizure frequency
3. 針劑限靜脈注射(注射時間需大於 15 分鐘)，不建議連續使用超過 4 天
4. 針劑可使用 100ml NS、LR 或 D5W 稀釋，稀釋後於室溫 15-25°C 下可存放 24 小時
5. 針劑與口服均可直接轉換，不需漸段式增減劑量，每日總劑量及使用頻率需維持不變

Contraindications

4 歲以下兒童、pyrrolidone 衍生物過敏

Oxcarbazepine

C⁴ Unknown¹

Dosage Forms

Trileptal[®] 300mg/FC. tab <KOXCARB>

Trileptal[®] oral suspension 6%, 60mg/ml, 100ml/bot <KOXCAR1>

Use

Partial seizures and trigeminal neuralgia

Dose

Children: **PO** initially 8-10mg/kg/day in 2 divided dose, **max: 60mg/kg/day**

Adults: **PO** initially 600 mg/day (8-10mg/Kg/day) in 2 divided doses, **max: 2400mg/day**

Conversion to monotherapy: **PO** 2400mg/day

Adverse Reactions

Dizziness, somnolence, headache, nausea, vomiting

Precautions

- 1.服藥後發生皮膚，口腔黏膜處發紅起疹或水泡建議立刻就醫。
- 2.需依腎功能調整劑量。
- 3.Suspension:請於開封後室溫儲存7週內使用完畢。

Phenytoin (Diphenylhydantoin)

D⁴ Unsafe¹

Dosage Forms

Aleviatin[®] 250mg/5ml/amp <CPHENY1>

Dilantin[®] 100mg/cap <KPHENYT>

Use

Control of generalized tonic clonic and complex partial seizures, prevention and treatment of seizures occurring during or after neurosurgery

Dose

Status epilepticus:

Infant and children: loading dose **IV** 15-20mg/kg in a single or divided dose, maintenance 5 mg/kg/day in 2 divided doses .

Adults: loading doses **IV** 15-20mg/kg; **max rate: 50mg/min**

Anticonvulsant:

Children: initial **PO** 5 mg/kg/day in 2-3 divided doses, maintenance 4-8mg/kg/day divided 2-3 doses; **max: 300mg/day**

Adults: initially **PO** 100mg tid, maintenance 300 mg/day

Adverse Reactions

Nystagmus, ataxia, gingival hyperplasia, Stevens-Johnson syndrome,

Precautions

- 1.服藥後若黏膜出現變化(腫脹,潰瘍)或出現皮疹請立即就醫
- 2.突然停藥可能會導致重積性癲癇(status epilepticus)
- 3.應定期做血液檢查

Contraindications

Sinus bradycardia, SA block, second and third degree AV block and Adams-Stokes syndrome (intravenous phenytoin only)

Phenobarbital

D⁴ Unsafe¹

Dosage Forms

Phenobital[®] 100mg/ml/amp <CPHENOB>

Phenobarbital[®] 30mg/tab <KPHENOB>

Use

Sedative, hypnotic, generalized tonic-clonic (grand mal) and partial seizures

Dose

Sedation

Children: **PO** 2mg/kg tid

Adults: **IM/PO** 30-120mg/day bid-tid

Hypnotic

Children: **IM/SC** 3-5mg/kg hs

Adults: **IM/SC/PO** 100-320mg hs

Anticonvulsant(status epilepticus)

IM 1-3mg/kg/day

Adverse Reactions

Somnolence, hallucinations, syncope, dizziness, lightheadedness

Precautions

- 1.服用本藥應避免飲用含有酒精之飲料，因為可能引起昏睡。
- 2.停藥時應逐漸進行以免產生戒斷症狀。
- 3.注射劑限皮下或肌肉注射，嚴禁靜脈注射。

Valproic acid

X⁴ Safe¹

Dosage Forms

Depakine[®] 400mg/vial <CVALPRO>

Depakine[®] 200mg/EC. tab <KVALPR1>

Depakine[®] Chrono (1 tab: Sodium valproate 333mg+Valproic acid 145mg)
500mg/FC. tab <KVALPR2>

Depakine[®] 8000mg/40ml/bot <KVALPR3>

Use

Epilepsy and mania

Dose

Seizures disorders

Children: **PO** (suggest take oral solution) 30mg/kg/day in 2-3divided dose
Adults:

IV initially 15 mg/kg **bolus** over 5 min, then 1 mg/kg/hr continuous **IVD**
maintenance 20-30mg/kg in 2-4 divided doses.(administer as a 60 minute
infusion)

PO initial 10-15mg/kg, maintenance 20-30mg/kg in 2-4 divided doses;

max: 60mg/kg/day

Mania

Adults: **PO** initial, 750mg/day, in divided doses;may increase dose to
achieve desired clinical response or desired range of plasma concentrations;

max: 60mg/kg/day(or less with a therapeutic serum range of 50 to 125
mcg/mL)

Adverse Reactions

GI disturbance, asthenia, dizziness, somnolence, tremor, alopecia

Precautions

- 1.可能引起嚴重肝病或胰臟癌
- 2.不建議與 lamotrigine or carbapenem 併用
- 3.治療前應進行肝功能監測，並在初期 6 個月中定期追蹤

Contraindications

Acute and chronic hepatitis,hepatic porphyria

12.2. Adjuvant Anticonvulsants

Gabapentin

C⁴ Unknown¹

Dosage Forms

Neurontin® 100mg/cap <KGABA01>

Use

Partial seizures, postherpetic neuralgia

Dose

Anticonvulsant

Children 3-12 yrs: **PO** initial 10-15mg/kg/day tid, titrate to effective dose over 3 days; 3-4 year: effective dose 40mg/kg/day tid; ≥5-12 years:

effective dose:25-35 mg/kg/day tid

Children < 12 yrs and adults: **PO** initial 300mg tid; if necessary the dose may be increased up to 1800mg/day tid.

Postherpetic neuralgia

Adults: initial **PO** 300mg tid, may be titrate up to 1800mg/day

Adverse Reactions

Somnolence, dizziness, ataxia, fatigue, viral infection

Precautions

1. Avoid abrupt withdrawal, may precipitate status epilepticus, discontinue gradually over a minimum of 1 week
2. 需依腎功能調整劑量
3. 與含 Mg, Al 制酸劑需間隔 2 小時

Pregabalin

C^S Unknown³

Dosage Forms

Lyrica® 75mg/cap < KPREGAB>

Use

Neuropathic pain associated with diabetic peripheral neuropathy or with spinal cord injury, postherpetic neuralgia, adjunctive therapy for partial-onset seizure disorder, fibromyalgia

Dose

Postherpetic neuralgia, Diabetic peripheral neuropathy

PO 75-150mg bid, **max: 300mg/day**

Partial-onset seizures (adjunctive therapy)

PO 150-600mg/day bid-tid, **max:600mg/day**

Fibromyalgia

PO initial 75mg bid, increased to 300mg/day within 1week based on tolerability and effect; **max: 450mg/day**

Spinal cord injury induce neuropathic pain

PO initial 75mg bid, increased to 150-600mg/day twice daily within 1week based on tolerability and effect; **max: 600mg/day**

Adverse Reactions

Dizziness, somnolence, ataxia, asthenia, blurred vision, edema

Precautions

1. 需依腎功能調整劑量。
2. 駕駛或操作機械時需小心。

Lamotrigine

C⁴ Unknown¹

Dosage Forms

Lamictal® 5mg/chewable tab <KLAMOT1>

Lamictal® 50mg/tab <KLAMOT2>

Lamictal® 100mg/tab <KLAMOT3>

Use

Primary generalized tonic-clonic seizure, partial seizures, bipolar I disorder, Lennox-Gastaut syndrome

Dose

Children 2-12yrs: initial **PO** 0.15mg/kg qd for 2wks, then 0.3mg/kg qd for 2wks. Maintenance 1-5mg/kg/day qd-bid. **Max:200mg/day**

Monotherapy of seizure, bipolar disorder and Lennox-Gastaut syndrome

Children >12 yrs and adults: initial **PO** 25mg qd for 2 wks, then 50mg qd for 2wks, maintenance 100-200mg qd-bid

Adverse Reactions

Somnolence, ataxia, dizziness, fatigue, headache

Precautions

1. 併用 valproic acid 可能會增加 stevens-Johnson syndrome 的危險
2. 服藥後若出現皮疹建議盡速就醫
3. Pediatric patients (2 to 16 years of age) ,higher rate of serious rash

Topiramate

D⁴ Unknown¹

Dosage Forms

Topamax® 25mg/tab <KTOPIR1>

Topamax® 100mg/tab <KTOPIR2>

Use

Monotherapy or Adjunctive therapy for partial onset seizures and primary generalized tonic-clonic seizures, seizures associated with Lennox-Gastaut syndrome, migraine (Prophylaxis)

Dose

Epilepsy, monotherapy

Children ≥ 10 yrs and adult: **PO** 25mg bid, may increase weekly by 50mg/day up to 100mg bid. **max:200mg bid**

Epilepsy, adjunctive therapy

Children 2-16yrs: initial **PO** 25mg, may be increase in increments of 1-3mg/kg/day at 1-2weekly to a total daily dose of 5-9mg/kg/day.

Children ≥ 17yrs and adults: initial **PO** 25-50mg/day bid for 1 week, increase at weekly intervals by 25-50mg/day until response; maintenance 100-200mg bid

Migraine Prophylaxis

Adult: initial **PO** 25mg/day, titrate at weekly intervals in 25mg increments, up to 100mg/day bid

Adverse Reactions

Somnolence, dizziness, nervousness, fatigue, loss of appetite

Precautions

肝腎功能不良須小心使用

Vigabatrin

C⁴ Unknown¹

Dosage Forms

Sabril® 500mg/tab <KVIGABA>

Use

Adjunctive therapy for epilepsy

Dose

Adults: usual **PO** 2-3g/day qd-bid; **max: 3g/day**

Children: initial **PO** 40mg/kg/day, maintenance dose base on p't weight

Body Weight (kg)	Dose (g/day bid)
10-15	0.5-1
15-30	1-1.5
30-50	1.5-3
>50	2-3

Adverse Reactions

Visual field defects, drowsiness, fatigue, acute psychosis, dizziness

Precautions

1.治療期間建議每半年進行一次眼科檢查

2.老年人與腎功能不全者應考慮調整劑量或服用頻次

12.3. Skeletal Muscle Relaxants

Baclofen

C⁴ Safe¹

Dosage Forms

Befon® 5mg/tab <KBACLO5>

Use

Cerebral origin spasticity, Spinal cord spasticity

Dose

Children: initial **PO** 5mg/day qd-bid,

maintenance dose:12-15 yrs 5-25mg/day bid-tid; 7-11 yrs 5-20mg/day bid-tid; 4-6 yrs 5-15mg/day bid-tid

Adults: initial **PO** 5-15mg/day qd-tid; maintenance 30mg/day bid-tid.

max:80 mg/day.

Adverse Reactions

Poor muscle ton, dizziness, somnolence, nausea, headache

Precautions

Seizure disorder, impaired renal function

Methocarbamol

C⁴ Safe¹

Dosage Forms

Bolaxin® 500mg/tab <KMETHOC>

Use

Muscle spasm associated with acute painful musculoskeletal conditions

Dose

Initial **PO** 500mg qid for 2-3days, then 1000mg qid

Adverse Reactions

Dizziness, headache, lightheadedness, somnolence, leukopenia

Tizanidine

C⁴ Unsafe³

Dosage Forms

Tizaflex[®] 2mg/tab <KTIZANI>

Use

Skeletal muscle relaxant used for treatment of muscle spasticity

Dose

Adults: **PO** 2-4mg tid-qid, **max: 36mg/day**

Adverse Reactions

Hypotension, sedation, daytime drowsiness, somnolence, xerostomia

Precautions

- 1.需依肝腎功能調整劑量
- 2.Hypotension, cardiac disease, bleeding

Contraindications

嚴重肝功能不良者

12.4. Migraines

Dihydroergotamine

X¹ Unsafe¹

Dosage Forms

Digalo[®] 1mg/tab <KDIHYD6>

Use

Migraine

Dose

PO 1mg tid

Adverse Reactions

Rhinitis, dizziness, nausea, vomiting, diarrhea

Sumatriptan

C⁴ Safe¹

Dosage Forms

Imigran[®] FDT 50mg/tab <KSUMAT1>

Imigran[®] nasal spray 20mg/spray, 2spray/box <WSUMATR>

Use

Acute treatment of migraine with or without aura

Dose

PO

Initial dose 25-50mg, may repeat after 2 hrs

Usual dose 50-100 mg as a single dose; **max: 300mg/day**

Intranasal

20mg prn in one nostril, may repeat after 2 hr as needed; **max: 40 mg/day**

Adverse Reactions

Bad taste, nausea, vomiting, tingling, paresthesias, dizziness, fatigue

Precautions

- 1.不建議使用於 65 歲以上病患
- 2.健規:每月限用 4 次,口服劑型每次用量不超過 100mg,每月不超過 400mg,鼻噴劑型每次用量不超過 1 劑(10mg 或 20mg),每月不超過四

劑(10mg 或)20mg。

Contraindication

- 1.不可與含有 ergotamine 或 methylsergide 製劑併用。
- 2.不可與 MAOI 同時投予，也不可在 MAIO 停藥後 2 星期內使用。

12.5. Parkinsonian Agents

Amantadine

C⁴ Unknown¹

Dosage Forms

Enzil[®] 100mg/tab <KAMANTA>

Use

Prophylaxis and treatment influenza A virus infection and parkinsonism, drug-induced extrapyramidal symptoms (EPS)

Dose

Influenza A virus infection

Children 1-9 yrs: **PO** 4-8mg/kg/day in 2 divided dose; **max: 150mg/day**

Children >9 yrs and adults: **PO** 100mg bid; treatment for 5-7days, prophylaxis for 7-10days

Parkinsonism

PO initial 100mg qd then 100mg bid after 5-7days.

Drug-induced EPS

PO 100mg bid, up to 300mg/day in divided dose.

Adverse Reactions

Nausea, orthostatic hypotension, peripheral edema, agitation, dizziness

Biperiden

C⁴ Unknown¹

Dosage Forms

Bipiden[®] 5mg/ml/amp <CBIPERI>

Akinfree[®] 2mg/tab <KBIPERI>

Use

Neuroleptic-induced extrapyramidal reactions, adjunctive therapy in Parkinson's disease

Dose

Drug induced extrapyramidal reactions

Children: **IM/IV** <1yrs: 1mg/dose, <6yrs: 2mg/dose, <10yrs: 3mg/dose, may repeat after 30 mins as needed; **max: 4 doses/day**

Adults: **IM/IV** 2.5-5mg/dose, may repeat q30min until resolution of symptoms; **max: 20mg/day**

Adults: **PO** 2mg qd-tid

Parkinson's disease

Adults: **PO** 2mg tid-qid; **max: 16mg/day**

Adverse Reactions

Constipation, xerostomia, somnolence, blurred vision, urinary retention

Precautions

Cardiac arrhythmia, epilepsy, prostatism, manifest glaucoma

Contraindication

Bowel obstruction, megacolon, narrow angle glaucoma

Entacapone

C⁴ Unknown¹

Dosage Forms

Comtan[®] 200mg/FC. tab <KENTACA>

Use

Adjunct to Levodopa/Benserazide or Levodopa/Carbidopa therapy idiopathic Parkinson's disease

Dose

Adults: PO 200mg/does; **max: 2000mg/day**

Adverse Reactions

Nausea, dyskinesia, diarrhea, abdominal pain, dry mouth

Precautions

Levodopa/carbidopa dosage must be reduced by 10-30%

Contraindication

1. Concomitant use of non-selective MAOI (eg, phenelzine, tranylcypromine) should generally be avoided.如需轉換需間隔 2 週。
2. Hepatic impairment, non-traumatic rhabdomyolysis, 抗精神病藥惡性症候群 (neuroleptic malignant syndrome)。

Levodopa and Benserazide

C⁴ Unsafe¹

Dosage Forms

Madopar[®] 250, 1 tab Benserazide 50mg+Levodopa 200mg <KMADOP2>

Madopar[®] HBS, 1 cap Benserazide 25mg+Levodopa 100mg <KMADOP3>

Use

Parkinson's disease

Dose

Initial PO 25-50mg benserazide and 100-200mg levodopa bid-qid; **max: 200mg benserazide and 800mg levodopa/day**

Adverse Reactions

Anorexia, nausea, vomiting, thrombocytopenia, orthostatic hypotension

Precautions

1. Severe hepatic, active peptic ulcer, bone marrow, heart disease, severe hyperthyroidism, tachycardia or pheochromocytoma, osteomalacia
2. 可能會引起嗜睡或突然睡著反應，應避免駕駛或操作機械
3. 尿液可能會變紅色，靜置後由淡轉暗。

Contraindication

Narrow-angle glaucoma, MAO inhibitor drug, melanoma

Carbidopa and Levodopa

C¹ Unknown¹

Dosage Forms

Sinemet[®] 125, 1 tab: Carbidopa 25mg+Levodopa 100mg <KSINEM1>

Sinemet[®] 275, 1 tab: Carbidopa 25mg+Levodopa 250mg <KSINEM2>

Sinemet[®] 250 CR, 1 tab: Carbidopa 50mg+Levodopa 200mg <KSINEM3>

Use

Parkinson's disease

Dose

Adults: initial **PO** 25/100mg bid-qid; **max: 200/2000mg/day**

Elderly: initial **PO** 25/100mg bid

Adverse Reactions

Dystonic, choreiform, nausea, dyskinesia, neuroleptic malignant syndrome

Precautions

1. Severe cardiovascular disease, severe pulmonary disease hepatic disease, renal disease
2. May cause or exacerbate preexisting dyskinesia; may require dose reduction
3. 尿液顏色變深。

Contraindication

Narrow-angle glaucoma, nonselective MAOI, malignant melanoma

Levodopa and Carbidopa and Entacapone

C ¹	Unknown ¹
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Dosage Forms

Stalevo[®] FC/tab: Carbidopa 25mg + Entacapone 200mg + Levodopa 100mg <KSTALEV>

Use

Parkinson's disease

Dose

PO 1tab tid-qid, individualized with titration based on clinical response.

Adverse Reactions

Dyskinesia, nausea, urine discolouration, insomnia, diarrhea, fatigue

Precautions

1. 與 MAO inhibitor 併用時, 須至少停用 MAOI 兩週後才可開始服用
2. 易引起嗜睡、突然睡著、暈眩、姿勢性低血壓, 開車或操作機械需小心。
3. 建議長期治療之患者, 定期追蹤評估肝臟、造血、心血管及腎臟功能。

Contraindications

18歲以下、嚴重肝功能受損、隅角狹窄型青光眼、嗜鉻細胞瘤、藥物引起的椎體外症狀。

Trihexyphenidyl

C ¹	Unknown ¹
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Dosage Forms

B.H.L.[®] 2mg/tab <KTRIHEX>

Use

Adjunctive treatment of Parkinson's disease and drug-induced extrapyramidal symptoms(EPS)

DoseParkinson's disease

Adults: initial **PO** 1-2mg/day increase by 2mg increments at intervals of 3-5 days, maintenance 5-15mg/day tid-qid

EPS

initial **PO** 1mg/dose increase as necessary to usual range 5-15 mg/day in 3-4 divided doses

Adverse Reactions

Nausea, xerostomia, dizziness, blurred vision, feeling nervous

Precautions

對尿滯留、心臟血管疾病、肝或腎損害等，應避免突然的停止治療。

Contraindication

Glaucoma

Rasagiline

C⁴ Unknown¹

Dosage Forms

Rakinson[®] 1mg/tab <KRASAGI>

Use

Parkinson's disease

Dose

Mono-therapy: **PO** 1mg qd; **max: 1mg/day**

Adjunctive therapy with levodopa: **PO** initial 0.5mg qd, may increase to 1 mg qd based on response and tolerability; **max: 1mg/day**

Adverse Reactions

Headache, musculoskeletal pain, depression, flu-like symptoms, rhinitis

Precautions

健規：單獨使用每日最高劑量 1mg，與 levodopa 併用每日最高劑量 0.5mg，且不可與 levodopa 以外抗帕金森氏症治療藥品併用。

Contraindication

Severe hepatic dysfunction

12.6. Dopaminergics

Pramipexole

C⁴ Unknown¹

Dosage Forms

Mirapex[®] 0.25mg/tab <KPRAM01>

Mirapex[®] 1mg/tab <KPRAM02>

Use

The sign and symptoms of idiopathic Parkinson's disease, depression, restless legs syndrome (RLS)

Dose

Parkinson's disease

Adults: initial **PO** 0.375mg/day given in 3 divided doses increase gradually by 0.125mg/dose every 5-7 days, range 1.5-4.5mg/day; **max. 4.5mg/day**

RLS

Initial **PO** 0.125mg/day hs, increase gradually by 0.125mg/dose every 4-7 days; **max: 0.5mg/day**

Adverse Reactions

Dizziness, insomnia, constipation, nausea, dyskinesia, hallucinations

Precautions

1. 需依腎功能應調整劑量
2. Use with caution in patients with myasthenia gravis.

Ropinirole

C⁴ Unsafe³

Dosage Forms

Requip[®] 0.25mg/F.C tab <KROPIN1>

Requip PD[®] 2mg/P.R tab <KROPIN4>

Requip PD[®] 4mg/P.R tab <KROPIN5>

Use

Idiopathic parkinson's disease, primary restless legs syndrome

Dose

Parkinson's disease

Requip[®]: Initial **PO** 0.25mg tid increase gradually by 0.25mg/dose every 7 days; **max: 24mg/day**

週	1	2	3	4
單一劑量 (mg)	0.25	0.5	0.75	1.0
每日總劑量 (mg)	0.75	1.5	2.25	3.0

Requip PD[®]: **PO** 2mg qd increase gradually by 2mg/day every 7-14 days; **max: 24mg/day**

RLS

Requip[®]: Initial **PO** 0.25mg/day hs increase gradually by 0.25mg/dose every 4-7 days; **max: 4mg/day**

Adverse Reactions

Postural hypotension, dizziness, nausea, headache, hallucinations, dyskinesias, somnolence

Precautions

1. Requip PD[®] 為持續釋放膜衣錠，需整粒吞服，切勿咀嚼，壓碎或剝半服用。
2. 會抑制乳汁分泌，不建議用於哺乳婦女。

Contraindications

ClCr < 30ml/min, 嚴重肝功能損害之患者。

Rotigotine

C⁵ Unsafe³

Dosage Forms

Neupro[®] 4mg/24hr, 9mg/patch <WROTIGO>

Use

Idiopathic parkinson's disease

Dose

Transdermal

Early-stage: initial 2mg qd, may increase weekly by 2mg to 4mg qd;

max: 8mg qd

Advanced-stage: initial 4mg qd, may increase weekly by 2mg; **max: 8mg qd**

Adverse Reactions

Application site reaction, somnolence, dizziness, nausea, orthostatic hypotension

Precautions

1. 本品儲存於 2-8°C
2. 貼片應貼在潔淨、乾燥、沒有損傷的皮膚表面，避免在 14 天內重複黏貼在同一個部位。
3. 當貼片脫落，應換用一張新的貼片。
4. 賦形劑含亞硫酸鹽(sulfite)，氣喘患者需小心使用。
5. 治療期間開車、操作機械或在高處工作應小心。
6. 健規：限用於原發性帕金森氏症，每日限用一片，且不得併用其他 dopamine agonist 之口服藥。

Contraindications

進行核磁共振造影(MRI)或心臟電擊

12.7. Myasthenias

Pyridostigmine

C⁴ Safe¹

Dosage Forms

Mestinon[®] 60mg/tab <KPYRID1>

Use

Improve muscle strength in patients with myasthenia gravis

Dose

Children: **PO** 7mg/kg/day in 5-6 divided doses

Adults: **PO** 60-1500mg/day, usually 600mg/day divided into 5-6 doses

Adverse Reactions

Nausea, vomiting, diarrhea, increased salivation, sweating, weakness

12.8. Amyotrophic lateral sclerosis (ALS)

Riluzole

C⁴ Unknown¹

Dosage Forms

Rilutek[®] 50mg/tab <KRILUZO>

Use

Amyotrophic lateral sclerosis (ALS)

Dose

Adults: **PO** 50mg bidAC; **max: 100mg/day**

Adverse Reactions

Asthenia, elevation of serum transaminases, worsening of spasticity, gastrointestinal symptoms and blood pressure elevations

Precautions

1. 需依肝腎功能調整劑量(ALT>5 備以上須停藥)。
2. 健規：經兩位神經專科醫師診斷為運動神經元疾病(ALS/MND),且未經氣管切開或使用人工呼吸器之病患。

12.9. Neuromuscular blockers

Botulinum Toxin Type A

C² Unknown¹

Dosage Forms

Botox[®] 100U/vial <CBOTUL1>

Dysport[®] 500IU/vial <CBOTUL2>

Use

Strabismus and blepharospasm associated with dystonia (including benign essential blepharospasm or VII nerve disorders in patients ≥ 12 yrs); cervical dystonia (spasmodic torticollis) in patients ≥ 16 yrs

Dose

Doses for other indications will be determined by clinical experience

Strabismus

IM 1.25-5 U

Blepharospasm

IM 1.25-2.5 U without electromyographic guidance

Glabellar lines

IM 4 U into each of 5 sites for a total dose of 20 IU

Primary axillary hyperhidrosis

IM 50 U per axilla, evenly distributed in multiple sites

Adverse Reactions

Injection site pain, chest pain, tenderness, bruise

Precautions

1. Botox 儲存：2-8°C，開封混合後置冷藏室可存放 6 個禮拜。
2. 與 aminoglycoside 類抗生素或干擾神經肌肉傳導藥物併用須小心
3. 以 2.5ml 之 NS 調配，調配至 200IU/ml 濃度，避免氣泡或劇烈振盪
4. Dysport:於 2-8°C 冷藏，配製後於 2-8°C 可存放 8 小時。

12.10. Alzheimer's Disease

Donepezil

C⁴ Unknown¹

Dosage Forms

Aricept[®] 5mg/FC. tab <KDONEPE>

Aricept[®] 10mg/FC. tab <KDONEP1>

Use

Alzheimer's disease- Dementia

Dose

PO 5mg hs, dose may be increased to 10mg hs following 4-6 weeks of clinical assessment

Adverse Reactions

Headache, nausea, diarrhea, anorexia, muscle cramps

Precautions

1. 胃潰瘍病史或同時併服非類固醇抗發炎藥物(NSAID)之病患應小心觀察是否有急性或隱藏性胃腸道出血。
2. 氣喘及阻塞性肺病之病患應小心給藥。

Memantine

B⁴ Unknown¹

Dosage Forms

Exmem[®] 10mg/tab <KMEMANT>

Use

Moderate-to-severe dementia of the Alzheimer's type

Dose

Initial **PO** 5mg qd, titration by 5mg/day, maintenance 10mg bid

Adverse Reactions

Constipation, dizziness, headache, hypertension, pain

Precautions

1. Use caution with seizure disorder or severe hepatic impairment
2. 需依腎功能調整劑量
3. 避免使用會使尿液呈鹼性藥品，(例 carbonic anhydrase inhibitor 或 sodium bicarbonate)，會導致藥品清除率明顯降低。

Rivastigmine

B¹ **Unknown¹**

Dosage Forms

Exelon[®] 1.5mg/cap <KRIVAS1>

Exelon[®] 3mg/cap <KRIVAS2>

Exelon[®] 4.5mg/cap <KRIVAS3>

Exelon[®] patch 9mg/5cm²/patch, 4.6mg/24hrs <WRIVAST>

Use

Mild to moderate dementia of the Alzheimer's type

Dose

Tablet

Initial **PO** 1.5mg bid, may increase to 3mg bid after 2 wks, maintenance 1.5-6mg bid; **max: 6mg bid**

Patch

1 patch qd (switch from oral to patch 已使用 3mg Exelon[®] bid 若耐受性良好且情況穩定達四週以上可轉換為 Exelon[®] patch 一天一片)

Adverse Reactions

Dizziness, headache, nausea, vomiting, diarrhea, anorexia, abdominal pain

Precautions

1. 建議每天變換部位黏貼，以避免對皮膚產生刺激，相同的點 14 天內不宜重複黏貼。貼片應每 24 小時更換一片且每日黏貼時間應一致
2. 貼片不可剪裁或摺疊。
3. 健規：使用 rivastigmine 貼片劑(如 Exelon Patch)，每日限用一片，且不得併用同成分之口服藥品。

12.11. Antivertigo Preparations

Betahistine

Unknown¹

Dosage Forms

Ecycle[®] 16mg/tab <KBETAH1>

Use

Meniere's disease and other audiovestibular disorders

Dose

PO 24-48mg in divided dose

Adverse Reactions

Gastrointestinal disturbances, headache, sedation

Precautions

Phaeochromocytoma, asthma, peptic ulcer disease, liver disease

Cinnarizine

C ¹	Unknown ¹
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Dosage form

Cinnazine[®] 25mg/tab <KCINNAR> 参閱p.186

Diphenidol**Dosage Forms**

Diphenidol[®] 25mg/tab <KDIPH02> 参閱p.154

Flunarizine

Unknown ¹

Dosage Forms

Fluzine[®] 5mg/tab <KFLUNAR> 参閱p.187

Meclizine

B ¹	Unknown ¹
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Dosage Forms

Semper[®] 25mg/tab <KMECLIZ> 参閱p.154

13. NUTRIENTS AND NUTRITIONAL AGENTS

13.1. Electrolytes

品項	規格	代碼	Dextrose (g/L)	Na ⁺ (mEq/L)	K ⁺ (mEq/L)	Cl(mEq/L)	Ca ²⁺ (mM/L)	Lactate(mM/L)	mOsm/Kg
5% Dextrose	250ml/pack	CDEXT02	50						278
	500ml/pack	CDEXT04							
	500ml/P.P	CDEXT10							
10% Dextrose	500ml/pack	CDEXT09	100						556
50% Dextrose	20ml/amp	CDEXTR2	500						2778
	500ml/pack	CDEXT05							
0.9% NaCl+5% Dextrose	500ml/pack	CNSD511	50	154		154			559
	1000ml/pack	CNSD512							
0.225% NaCl+5% Dextrose	500ml/pack	CNSD502	50	34		34			330
0.45% NaCl	20ml/amp	CNAC452		77		77			154
	500ml/pack	CNAC451							

品項	規格	代碼	Dextrose (g/L)	Na ⁺ (mEq/L)	K ⁺ (mEq/L)	Cl ⁻ (mEq/L)	Ca ²⁺ (mM/L)	Lactate(mM/L)	mOsm/Kg
0.45% NaCl+2.5% Dextrose	500ml/pack	CNSDE25	25	77		77			
0.9% NaCl	20ml/amp 100ml/pack 250ml/pack 250ml/P.P. 500ml/pack 500ml/P.P. 1000ml/pack	CNAC903 CNAC904 CNAC905 CNA905G CNAC901 CNA901G CNAC902		154		154			308
0.9% NaCl irrigation	500ml/bot 1000ml/bot 2000ml/pack	WNAC901 WNAC902 WNACL2							
3% NaCl	500ml/pack	CNACL3		513		513			1026
23.5% NaCl	200ml/bot	CNAC235		4000		4000			
Lactated Ringer	500ml/pack 1000ml/pack	CLACTA1 CLACTA2		130	4	109	3	28	274
Water for injection	20ml/amp 1000ml/pack	CWATER1 CWATER2							

品項	規格	代碼	Dextrose (g/L)	Na ⁺ (mEq/L)	K ⁺ (mEq/L)	Cl ⁻ (mEq/L)	Ca ²⁺ (mM/L)	Lactate(mML)	mOsm/Kg
Sterile water for irrigation	2000ml/bot	WH2O1							
	1000ml/bot	WH2O2							
	500ml/bot	WH2O3							

註：1.5% Dextrose 500ml/PP建議用於稀釋amiodarone, etoposide, oxaliplatin 等針劑。

2.50%Dextrose 500ml/pack 因滲透壓高，不建議週邊靜脈注射使用。

3.23.5%NaCl限TPN 調配用。

4.Lactated Ringer 用於燒傷、體液流失病患之酸中毒。

5.0.9%NaCl 100ml/pack 及 250ml/P.P.限化療調配用。

TAITA

品名	NAKO (No.2)	NAKO (No.4)	NAKO (No.5)
代碼	CTAITA2	CTAITA4	CTAITA5
規格	500ml/bot	500ml/bot	500ml/bot
成份			
mEq/L	Na	40	110
	K	12	20
	Mg	-	-
	Cl	26	102
	Ca	-	-
	SO ₄	-	-
	Acetate	20	16
	Gluconate	-	-
nM/L	(PO ₄) ³⁻	6	12
g/L	Glucose	33	8
	Kcal/L	132	32
	pH	5.5	5.5
	mOsm/L	287	300
適應症	高張性下痢及小兒下痢之水份、電解質、養份補充；成人維持液	等張性下痢、腸液損失之病人其水份、電解質、養份補充；DM病人磷之補充	手術前後及未能進食之水份、電解質、養份補充
特色		DM 病人磷補充	非 DM 病人磷補充

Calcium chloride

C⁴ Unknown¹

Dosage Forms

Vitalcal[®] 2%, 20ml/amp (1ml: Ca²⁺ 0.272mEq+Glucose 100mg)
<CCALC04>

Use

Hemorrhagen, nutrition, hypocalcemia

Dose

Hypocalcemia

Pediatric: 2.7 to 5mg/kg, IV every 4 to 6hours; **max rate: 1mL/min**

Adults: 200mg to 1g, IV every 1 to 3days; **max rate: 1mL/min**

Adverse Reactions

Burning sensation, vasodilatation, necrosis vomiting

Calcium polystyrene sulfonate

C⁴ Unknown¹

Dosage Forms

Kalimate[®] 5g/pack <KCALC05>

Use

Acute and chronic renal insufficiency associated with hyperkalaemia

Dose

PO 15-30 g, 1-3 times daily, slurry in water

Rectal 30g suspended in 100 ml water or 2 % methylcellulose soln.

Adverse Reactions

Constipation, anorexia, nausea

Precautions

1. Not mixed with fruit juices having K content
2. 服用此藥需注意病人是否發生便秘之現象。

Magnesium sulfate (MgSO₄)

A⁴ Safe¹

Dosage Forms

Magnesium sulfate[®] 10%, 20ml/amp (1ml: 0.81mEq Mg²⁺= 9.84mg Mg²⁺)
<CMAGNE1>

Use

Hypomagnesemia, eclampsia, pre-eclampsia, uremia

Dose

Hypomagnesemia

Pediatrics: **IV** 25-50mg/kg (rate > 30min); **max 2g/dose**

Adults: mild hypomagnesemia **IM** 1 g q6h for 4doses; severe hypomagnesemia, **IM** > 250mg/kg in 4hours or 5g (40mEq) (rate>3hrs)

Treatment and prophylaxis eclampsia

Adults: **IV** initial, 4-5g , maintenance 1-2g/hr/day until paroxysms cease or **IM** 4-5g q4h as needed; **max: 30-40g/day**

Adverse Reactions

Decreased heart rate, facial flushing, hypotension, muscle weakness

Potassium chloride

C⁴ Unknown¹

Dosage Forms

KCl[®] 15%, 10ml/amp (K⁺: 2mEq/ml) <CPOTASS>

Use

Treatment or prevention of hypokalemia

Dose

Normal daily requirement

IV

Children: 2-3mEq/kg/day

Adults: 1-2mEq/kg/day

Hypokalemia

IV

Pediatric: 0.5 -0.75 mEq/kg (infused >1-2 hrs), **max:40 mEq/dose**;

Adults: serum K < 2 mEq/L(rate >40 mEq/hr) ; **max 400 mEq/day**;

K > 2.5 mEq/L(rate < 10 mEq/hr); **max 200 mEq/day** ;

Adverse Reactions

Hyperkalemia, electrocardiogram changes, nausea, abdominal pain, diarrhea, indigestion, flatulence, vomiting

Precautions

1. 限稀釋後使用，稀釋濃度為週邊輸注 40 mEq/L 及中央輸注 80 mEq/L，需監測心電圖
2. 成人最大輸注速率為 40 mEq/hr。

Potassium chloride solution (ready-to-use)

C⁵ Unknown³

Dosage Forms

0.298% KCl 20mEq+ 0.9% NaCl Injection® 500ml/bot<CPOTAS2>
0.149% KCl 10mEq+ 0.9% NaCl Injection® 500ml/bot<CPOTAS3>
0.149% KCl 10mEq+ 5% Dextrose/0.33% NaCl
Injection® 500ml/bot<CPOTAS10>
0.298% KCl 20mEq+5%Dextrose Injection® 500ml/bot<CPOTAS11>
KCl 20mEq+ 0.9% NaCl Injection® 100ml/bag<CPOTAS8>
KCl 20mEq+ 0.45% NaCl Injection® 500ml/bag<CPOTAS6>

Use

Treatment or prevention of hypokalemia

Dose

Normal daily requirement

Children: **IVF** 2-3mEq/kg/day

Adults: **IVF** 1-2mEq/kg/day

Hypokalemia

IVF 0.5-1mEq/kg/dose

Infusion rate 10-20mEq/hr; K<2mEq/L 20-40mEq/hr; **max: 400mEq/day**

Adverse Reactions

Hyperkalemia, abdominal pain/discomfort, diarrhea, flatulence

Precautions

1. 投與藥物前需檢查是否混濁或混合後產生沉澱
2. 藥廠之商業配方若使用幫浦給藥，於藥液快用完或可能有空氣栓塞時，需停止幫浦。若未以幫浦給藥要避免過度擰扭施壓(>300mmHg)導致容器變形，會損壞容器。
3. 藥劑部製劑室配置之 KCl 20mEq+ 0.9%NaCl 100ml/bag 與 KCl 20mEq + 0.45%NaCl 500ml/bag，於室溫可保存 14 天

Contraindications

對玉米製品過敏者、有鈉滯留現象的腎衰竭、少尿或尿毒症、無尿、Crush syndrome、嚴重溶血反應、腎上腺功能不足、急性脫水、遺傳性偶發無力、手術後初期少尿狀態等

Potassium gluconate

C⁴ Unknown¹

Dosage Forms

Radi-K® 595mg/tab (K⁺: 2.54mEq/tab) <KPOTAS5>

Use

Treatment or prevention of hypokalemia

Dose

Adults: **PO** 3-9 tab/day divided 2-3 dose (1tab=2.54 mEq k+)

Adverse Reactions

Nausea, vomiting, diarrhea, abdomen pain, constipation

Potassium phosphate

C⁴ Unknown¹

Dosage Forms

K₃PO₄® 20ml/amp (K⁺: 4.4mEq/ml, P: 3.0mmol/ml) <CPOTAS1>

K₃PO₄+ 0.9% NaCl® 250ml/pk (K⁺: 17.6mEq+ P: 12mmol+ 0.9% NaCl 250ml /pk) <CPOTAS7>

Use

Treatment and prevention of hypophosphatemia

Dose

Children: **IVF** (rate <0.2mmol/kg/hr) 0.15-0.33mmol (P)/kg over 6 hrs

Adults: **IVF** (rate< 0.24mmol/kg/day) 0.08-0.16mmol (P)/kg over 6 hrs

Adverse Reactions

Bradycardia, hypocalcemia, hypomagnesemia, hyperphosphatemia, dyspnea, weakness, hypotension

Precautions

- 1.給藥速度過速會引起心律不整
- 2.配製後室溫下可存放3天
- 3.藥劑部製劑室配製之磷酸鉀溶液基於用藥安全退藥一律不再使用
- 4.血中K值>4 meq/L時，應謹慎使用，避免產生高血鉀

Contraindications

- 1.禁用 IV push
- 2.禁止與含鈣溶液混合

Sodium bicarbonate



Dosage Forms

Rolikan[®] 7%, 20ml/amp (Na⁺: 0.8mEq/ml) <CNAHCO>

Sodium bicarbonate[®] 300mg/tab (Na⁺: 3.6mEq/tab, bicarbonate: 3.6mEq/tab) <KNAHCO1>

Use

Metabolic acidosis, Diabetic ketoacidosis

Dose

Metabolic acidosis

Adult: **PO** initial 600mg 3times daily; maintain serum bicarbonate ≥ 23 mmol/L

Diabetic ketoacidosis

Pediatric: **IV** 1 to 2mmol/kg (60minutes)

Adult: **IV** 100mmol in 400mL Dis-water + 20mEq KCl (rate 200mL/hr, 2 hours until venous pH >7; if pH remains < 7, q2h repeat until pH > 7)

Adverse Reactions

Cellulitis, injection site extravasation, skin ulcer, tissue necrosis metabolic alkalosis

Precautions

- 1.與鈣離子會產生沉澱，勿與鈣製劑混合使用。
- 2.為鹼性溶液，當與其它藥物配合使用時須注意。

Trace element[®]

Dosage Forms

1 ml: Zn 1.5mg+Copper 0.5mg+Mn 0.2mg+Cr 0.005mg+ I 0.028mg, 10ml/vial <CTRACE>

Use

Supplement of trace elements, diluted in TPN solution

Dose

IVF

<3 kg Preterm Neonates: 0.02ml/kg/day

>3 kg Term Neonates: 0.02ml/kg/day

<20 kg Children: 0.02ml/kg/day

>20 kg Children: 0.04ml/kg/day

Adult: 1-2ml/day

Precautions

1. 儲放於 TPN 室；為低張溶液，稀釋液體積至少要 250ml 以上，未經稀釋，不可直接由末梢靜脈注射。
2. 藥品開封後需冷藏，可存放 2 週。

13.2. Amino Acids

Alanyl-glutamine

Unknown¹

Dosage Forms

Dipeptiven[®] 20g/100ml/bot <CALANYL>

Each 100ml contain N(2)-L-alanyl-L-glutamine 20g (=8.2g L-alanine+13.64g L-glutamine)

Use

Part of an IV parenteral nutrition regimen as a supplement to amino acid solution (hypercatabolic and/or hypermetabolic)

Dose

Adults: **IVF** 1.5-2 ml (0.3-0.4 g)/kg/day; 稀釋後週邊最大輸注速率為 2.5ml/kg/hr

Adverse Reactions

Peripheral edema, fever, abnormal liver function

Precautions

1. 每日量不應超過氨基酸總量的 20%；請勿使用超過 3 週。
2. 為高濃度溶液，若為原液，則應由中央靜脈輸注；若為稀釋液，建議以氨基酸溶液、N/S 或 D5W 稀釋(ex: Dipeptiven 100ml+400ml 稀釋液)後由週邊靜脈輸注。

Contraindications

Clcr< 25ml/min、嚴重肝功能不全、嚴重代謝性酸血症。

Cerebrolysin

Unknown³

Dosage Forms

Cerebrolysin[®] 10ml/amp <CYY04>

Use

Amino acid supplementation

Dose

IM/IV 2ml qd at initial stage, then extend the interval to 2ml qod-q3d

IVD(high doses) 5-40ml/day slowly IV drip

可依據病況使用，較輕的症狀每一治療過程需 10-15amp，較重的症狀視需要可加長至數個治療過程。

Adverse Reactions

If injected too quickly, mild flush may result

Precautions

1. 以 NS 250ml 稀釋，緩慢點滴輸注，輸注時間應在 60-120 分鐘以上。
2. 藥品稀釋後可保存 24 小時。

Contraindications

嚴重腎功能不全禁用

Clinimix N9G15E[®]

C⁵ Unknown³

Dosage Forms

Amino acid 2.75%+ Glucose 7.5% 20g/100ml/bot <CCLINIM >

Use

Electrolytic, caloric, and water balance

Dose

Dosage is individualized. IVD > 8 hr after mixing the two compartments;
max: 40ml/kg/day or 2400-2800ml/day

Adverse Reactions

Hypertonic solutions may cause venous irritation. Hyperglycaemia, Glycosuria & Hyperosmolar syndrome may occur.

Precautions

1. 配製後 25°C 下儲存 48 小時，2-8°C 下可儲存 7 天，不可冰凍
2. 本品需避光(勿直接曝曬於陽光及烤燈下)。

Contraindications

未進行透析之腎臟衰竭患者、嚴重肝疾病患者、代謝性酸中毒、高乳酸血症、氨基酸代謝不良者、腎上腺功能不良者、肺水腫脫水及代償性心臟功能不良、高血鉀與高血鈉患者不應使用。

Ketosteril[®]

Unknown³

Dosage Forms

Ketosteril[®] 67mg/tab <KKETOST>

成份	含量
Calcium-3-methyl-2-oxo-valerate	67mg
Calcium-4-methyl-2-oxo-valerate	101mg
Calcium-2-oxo-3-phenylpropionate	68mg
Calcium-3-methyl-2-oxo-butyrate	86mg
Calcium-DL-2-hydroxy-4-butyrate	59mg
L-Lysine-acetate	105mg
L-Threonine	53mg
L-Tryptophan	23mg
L-Histidine	38mg
L-Tyrosine	30mg
Total nitrogen content/tablet	36mg
Calcium/table	1.25mmol =0.05g

Use

Chronic renal insufficiency amino acid supplement

Dose

4-8 tab tid with meals

Adverse Reactions

Hypercalcemia

Precautions

1. 須於餐中服用。
2. 應定期監測血清鈣含量。
3. 使用於 GFR 5-15ml/min，且蛋白質攝取 < 40g/day 之病患。
4. 健規：用於 Scr > 6mg/dl，**max: 6tab/day**

Oliclinomel N4-550E[®] emulsion

Unknown¹

Dosage Forms

Premix: 5.5% Amino acid 600ml+ 20% Glucose 600ml+ 10% fat 300ml, 1500ml/bag

Mix: 2.2% Amino acid+ 8% Glucose+ 2% fat/1500ml/bag <CPPN2 >

Use

Electrolytic, caloric, and water balance

Dose

IVF (central or peripheral) 1 bag q12-24h

Children > 2yrs: **max 100ml/kg/day**

Adult: **max 40ml/kg/day**

Adverse Reactions

Hyperthermia, excessive sweating, tremors, nausea, headaches, dyspnoea

Precautions

1. 混合後 2~8°C 可存放 7 天，拿出冰箱後於 25°C 可保存 48 小時；但下方輸注 set 如拆開則需立即使用。
2. 勿直接於軟袋上使用簽字筆寫字，會導致墨水滲入軟帶內。

Contraindications

未滿 2 歲下兒童、對蛋或黃豆類蛋白質過敏者、無法進行透析之嚴重腎功能不良者、高血糖(insulin > 6IU/hr)。

Amino acid

品項	10% Moriamin-SN	7.4% Amiyu	7.1% Aminopoly-H	10% Aminosteril-infant	5% Aminoplasmal
規格	200ml/bot	200ml/bot	500ml/bot	100ml/bot	500ml/bot
代碼	CAMIN01	CAMIN05	CAMIN03	CAMIN06	CAMIN02
成份	含有量(w/v %)				
必須氨基酸					
L-Isoleucine	0.560	0.720	0.920	0.8	0.25
L-Leucine	1.250	1.125	0.945	0.13	0.37
L- Lysine				0.851	0.33
L-Lysine acetate	1.240	1.155	0.395	0.12	0.215
L-Methionine	0.350	1.125	0.065	0.312	0.225
L-Phenylalanine	0.935	1.125	0.030	0.375	0.255
L-Threonine	0.650	0.515	0.300	0.440	0.22
L-Tryptophan	0.130	0.255	0.070	0.201	0.1
L-Valine	0.450	0.820	0.890	0.9	0.31
非必須氨基酸					
L-Alanine	0.620		0.840	0.93	0.7
L-Arginine	0.790		0.920	0.75	0.45
L-Aspartic acid	0.380		0.020		
L-Cysteine	0.100		0.020	0.052	
L-malic acid				0.262	
L-Glutamic acid	0.650				
L-Histidine	0.600	0.560	0.310	0.476	0.15
L-Proline	0.330		0.530	0.971	0.506
L-Serine	0.220		0.260	0.767	0.325
L-Tyrosine	0.035		0.060	0.42	
Glycine			0.540	0.415	0.5
Taurine				0.04	0.01
L-Acetyltyrosine					1.038
L-Ornithine aspartate					0.23
L-Aspartic acid			0.020		
Aminoacetic acid	1.070				
Na ⁺	<1mEq/200ml	13mEq/L	15-16mEq/L		
Cl ⁻	0 mEq/L		0 mEq/L		
CH ³ COO ⁻		56mEq/L			
EAA/NEAA			1.04		
Total amino acid	10.36 w/v %	7.4 w/v %	7.115 w/v %	10 w/v %	5 w/v %
Osmotic	924 mosm/L	616mosm/ L	770 mosm/L	885 mosm/L	483mosm/L
總氮量	15.2mg/ml	9.0mg/ml	12.1mg/ml	14.9 mg/ml	7.75mg/ml
PH	5.5-5.6	7.0-7.8	6.8-7.8	5.5-6.0	5.0-7.5
適應症	嚴重創傷/ 火傷/骨折/ 手術前後蛋 白質補給	腎功能不 全氨基酸 補給	肝昏迷氨基 酸補給	嬰幼兒部分腸外	周邊靜脈營養 液
用法用量	200 ml IVF for 20 min	200-400ml IVF 120-180mi n	500ml加 D50W 80ml 混合，於 2-3 小時緩慢滴 注	IVF 最大輸注速率： 0.1g/kg/hr =1.0ml/kg/hr Max dose： <1歲:1.5-2.5g/kg >1：歲1.5 g/kg	IVF 1-1.25ml/kg/hr Max dose： 2g/kg/day

13.3. Lipids

品項	10% MCT/LCT Lipofundin	20% MCT/LCT Lipovenoes MCT
規格	100ml/bot	250ml/bot
代碼	CFAT03	CFAT02
成份	每1000ml乳劑中含有	
Soya-bean oil	50g	100g
Medium-chain Triglycerides	50g	100g
Essential fatty acids	24-29g	
Linoleic acid	2.5-5.5g	
Theoretical osmolarity	345mOsm/L	273mOsm/L
pH	6.5-8.8	6.5-8.7
熱量提供		
Kcal/bot	約110Kcal/bot	約500Kcal/bot
Caloric value	1022kcal/L	1950Kcal/L
劑量	1-2g/kg/day(10-20ml/kg/day)	1-2g/kg/day(5-10ml/kg/day) 最大劑量2g/kg/day
注射速率	最初15分不宜>0.05g-0.1g/kg/hr (0.5-1ml/kg/hr)	最初15分不宜>0.05g-0.1g/kg/hr (0.25-0.5ml/kg/hr)
最大注射速率	1)不可>0.15g/hr/kg(1.5ml/hr/kg) ;不可>0.5滴/kg/min 2)營養不良及兒童應調降注射速率,每天輸注速率>16hrs	不可>0.15g/kg/hr (0.625ml/kg/hr)
注射方式	可經週邊靜脈或中央靜脈	
貯放方式	避光存放於25°C以下,避免冷凍;未用完者應立即丟棄。	

13.4. Vitamins

Alinamin-F[®] 50

Dosage Forms

1 tab: Thiamine tetrahydrofuryl disulfide 50mg+Vitamin B₂ 5mg
<KALIN02>

Use

Neuralgia, neuritis, eye's fatigue, nervous cystitis, postoperative intestinal paralysis, vitamin B₁ deficiency

Dose

PO 1-3 tab/day

Critical neuritis

PO 300mg/day

Precautions

造成尿液顏色變黃。

Alpha-Tocopherol acetate (Vitamin E)

A⁴ **Unknown¹**

Dosage Forms

Vitamin E[®] 50mg/tab (1mg=1IU) <KVITE>

Use

Prevention and treatment vitamin E deficiency, premenstrual symptoms

Dose

Prevention and treatment vitamin E deficiency

Adult: **PO** 32-50mg/day,max 300mg/dat

Premature or low-birth-weight neonates: **PO** 25 to 50 units/day

Premenstrual symptoms

Adult: **PO** 400 IU/day

Ascorbic acid (Vitamin C)

C⁴ Safe¹

Dosage Forms

Vitacicol[®] 100mg/2ml/amp <CASCORB>

Pannobel[®] 5g/20ml/amp <CASCOR1>

Use

Ascorbic acid deficiency

Dose

Ascorbic acid deficiency

Children: **IM/IV/SC** 100 mg 3 times/day

Adult: **IM/IV/SC** mild to moderate 100- 250 mg; severe 1- 2 g/day

Scurvy

IM/IV/SC 100-250mg qd-bid for at least 2 wks

Urinary acidification

IM/IV/SC 500mg q6-8h

Dietary supplement

IM/IV/SC 50-200mg/day; **max: 2g/day**

Adverse Reactions

Hyperoxaluria with large doses

Calcitriol (Vitamin D₃)

C⁴ Unknown¹

Dosage Forms

Cacare[®] 2mcg/ml/amp <CCALC02>

U-Ca[®] 0.5mcg/soft cap <KCALC06>

Use

Management of hypocalcemia in patient undergoing chronic renal dialysis

Dose

Hypocalcemia - Renal dialysis

Adult: **IV** 1mcg -2mcg 3times/wks, the dose may be increase by 0.5-1mcg at2-4 wk interval

Adult: **PO** initial 0.25mcg qd or qod, increased by 0.25 mcg/day at 2-4 wk intervals as needed. Maintenance: 0.5-1 mcg/day

Adverse Reactions

Hypercalcemia, weakness, bone pain, metallic taste

Mecobalamin (Vitamin B₁₂)

C⁴ Safe¹

Dosage forms

Mecobal® 500mcg/amp <CMETHYL>
 Methylcobal® 500mcg/cap <KMETHY4>

Use

Vitamin B₁₂ deficiency, anemia

Dose

Vitamin B₁₂ deficiency

Children: **IM/IV** 30-50 mcg/day for 2 or more wk; then 100 mcg/ mon
 mantance dose 1000 mcg/day; **PO** 1000 mcg/day

Adult: **IM/IV** 500mcg/day, 3-4 times/week; **PO** 1000 mcg/day

Adverse Reactions

Headache, anxiety, dizziness, diarrhea, nausea, vomiting, itching

Precautions

- 1.若發生過敏症狀時，請停止使用。
- 2.本劑易受光線分解，使用時，從避光器取出應立即使用，並避光保存。

Multivitamins

C⁴ Unknown¹

Dosage Forms

商品名	注射: Lyo-Povigent®	
規格	CVITAM2	
<代碼>	PART I	PART II
含量	Vitamin E (IU).....10 Vitamin K1 (mg).....2 Thiamin Hydrochloride(B1, mg)...3.9 Riboflavin-5-phosphate sodium(B2, mg)...4.6 Cyanocobalamin (B12 ,µg)...5 Niacinamide (B3 ,mg)...40 Folic acid (B9 , µg).....400 Biotin (µg).....60 Ascorbic acid (mg).....100	Vitamin A3300IU Vitamin D.....200IU Pyridoxine Hydrochloride.....4.9mg D-Pantheno.....14mg

Use

Vitamin supplementation

Dose

Children>11 yrs and adults: **IV** 1盒(part I+part II)

Precautions

- 1.注射劑 Lyo-Povigent® 應儲存於 2-8°C，每次輸注需同時將 part I+part II 混合溶解後加入輸液稀釋後才可使用。
2. part I+part II 混合溶解後應儲存於 2-8°C，必須 72 小時內使用完畢。

Phytomenadione (Vitamin K₁)

C⁴ Safe¹

Dosage Forms

Katimin 1® 10mg/ml/amp <CVITK1>參閱 p.184

Pyridoxal phosphate (Vitamin B₆) A⁴ Safe¹

Dosage Forms

Pyridoxine[®] 50mg/tab <KVITB61>

Use

Prevents and treats vitamin B₆ deficiency, pyridoxine-dependent seizures in infants, adjunct to treatment of acute toxicity from isoniazid, cycloserine or hydralazine overdose

Dose

Pyridoxine-dependent

Infant: **PO** 2-100 mg/day

Drug-induced neuritis

Children: **PO** 10-50mg/day, prophylaxis: 1-2mg/kg/day

Adults: **PO** 100-200mg/day, prophylaxis: 25-100mg/day

Adverse Reactions

Sensory neuropathy, headache, nausea, decreased serum folic acid secretions

Vitamin B complex C⁴ Unknown¹

Dosage Forms

商品名	Combeplex [®]	Vitamin B-complex [®]
規格<代碼>	1ml/amp <CVITBC>	Cap <KVITAB>
含量	Thiamin(Vit B ₁).....100mg Riboflavin (Vit B ₂).....5mg Pyridoxine (Vit B ₆).....5mg Nicotinamide..... 50mg Sod. Pantothenate..... 5mg Benzyl alcohol..... 20mg	Thiamin(Vit B ₁).....5mg Riboflavin (Vit B ₂).....2mg Pyridoxine(Vit B ₆).....1mg Cyanocobalamin(Vit B ₁₂).....1μg Cal. Pantothenate..... 2.75mg Nicotinamide..... 10mg

Use

Supply vitamin B complex

Dose

Vitamin B deficient

IM/SC 1-2ml qd until symptome disappeared.

PO 1-3 cap/day

Vitamin B supplament before surgical operation

IM/SC 1ml/day qd-bid

13.5. Minerals

Bio-Cal[®] C⁴ Unsafe¹

Dosage Forms

1 chewable tab: Tricalcium phosphate 802mg (equivalent Ca²⁺=300mg) + Cholecalciferol 62.5IU (1.56mcg) <KCALC01>

Use

Treatment and prevention of calcium deficiency

Dose

2-4 tab/day

Adverse Reactions

Hypercalcemia, hypervitaminosis D

Calcium acetate

C⁴ Safe¹

Dosage Forms

Caphos[®] 667mg/tab (equivalent Ca²⁺ =169mg=8.45mEq) <KCALC02>

Use

Control of hyperphosphatemia in ESRD

Dose

Adults: 2-4 tab with each meal

Adverse reaction

Nausea, hypercalcemia

Calcium carbonate

C⁴ Safe¹

Dosage Forms

A-CAL[®] 500mg/tab <KCALC03>

Use

Calcium deficiency, hyperphosphatemia, antacid, hyperparathyroidism

Dose

Calcium supplement

PO 500mg bid-tid

Antihyperphosphoremia in uremia

Adults: **PO** 2.5g/day; **max: 8g/day**

Osteoporosis

Adult>51yrs: **PO** 1.2g/day

Antacid

PO 0.5-1g; **max: 7g/day**

Hyperparathyroidism

PO 1-2g tid, until calcium conc. to arrive at normal range.

Adverse Reactions

Hypophosphatemia, hypercalcemia

Precautions

腎功能不全(Clcr<25ml/min)需調整劑量。

Lanthanum carbonate hydrate

C⁴ Unsafe¹

Dosage Forms

Fosrenol[®] chewable tablets 750mg/tab<KLANTHA>

Use

A phosphate binder agent for use in hyperphosphatemia therapy

Dose

Adults: Initial 1500mg/day in divided doses with meals, increase 750mg every 2-3 weeks, maintenance 1500-3000 mg/day in divided doses with meals.

Adverse Reactions

Abdominal pain, Diarrhea, Nausea, Vomiting.

Precautions

錠劑必須咬碎，不可整粒吞服

Sevelamer carbonate

C¹ Safe¹

Dosage Forms

Renvela[®] powder 800mg/pack <KSEVELA>

Use

Phosphate Binder

Dose

PO 5.5mg/dl < P < 7.5mg/dl: 800mg tid with meal; P ≥ 7.5mg/dl:
1600mg tid with meal

Adverse Reactions

Vomiting, nausea, diarrhea, dyspepsia, abdominal pain

Precautions

- 1.800-1600mg 以 30ml 白開水混合服用，用力攪拌(本品不會溶解)並於 30 分鐘內喝完
- 2.可能會降低微生素 D,E,K 或葉酸的吸收，建議隨餐服用並適量補充維生素

Contraindications

低血磷、腸阻塞

Zinc gluconate

A¹ Unknown¹

Dosage Forms

Zinga[®] 78mg/tab (equivalent zinc=10mg) <KZINCGL>

Use

Zinc supplementation

Dose

Infants and children: 0.5-1mg equivalent zinc/kg/day qd-tid
Adults: 25-50mg equivalent zinc/day qd-tid

Adverse Reactions

Vomiting, neutropenia, jaundice, pulmonary edema

Precautions

Coffee reduces zinc absorption by up to 50%

13.6. Nutritional Agents Miscellaneous

All-right calcium suspension[®]

Dose Forms

1ml: Tribasic calcium phosphate 103 mg+Cholecalciferol 160 IU+Vitamine A 1600 IU, 180ml/bot <KCALC07>

Use

Vitamin A, D and calcium supplement

Dose

Infants: 2.5ml/day, children: 15 ml/day
Adults: 10-15 ml/day, pregnancy: 15 ml/day

Precautions

- 1.本品顏色為白-淡黃，使用前須先振搖。
- 2.本品含活性 Vit D3，不建議與 Biphosphonate 類、Teriparatide 併用。

14. OPHTHALMOLOGYS

【注意事項】

- 1.若要使用兩種以上眼藥水，則不同眼藥水點藥時間須間隔5分鐘，若同時須使用眼藥水與眼藥膏，請先點完眼藥水後再點眼藥膏，並間隔5分鐘，若使用兩種眼藥膏時，兩者至少隔10分鐘。
- 2.開封後置於室溫乾燥處且避光，一個月內若未用完則丟棄。
- 3.點眼藥水後，眼睛儘量張開，不眨眼數秒，再輕輕閉上眼睛二到三分鐘，擦掉流到臉上的多餘眼藥水。
- 4.手指可輕按壓眼角處的上下淚小管至少兩分鐘，防止藥水流進鼻淚管進入喉嚨。

14.1. Antibacterials

Chloramphenicol

C¹ Unsafe¹

Dosage Forms

Chloramphenicol[®] oph drop 0.25%, 5ml/bot <WCHLOR1>

Use

Treatment of bacterial eye infection due to E coli, H influenza, Staph aureus, Strep hemolyticus, Morax Axenfeld bacillus

Dose

1-2 drops 4-8 times a day

Precautions

開瓶後可保存1個月，儲存以不超過25°C為主。

Gentamicin

C¹ Unknown¹

Dosage Forms

Gentamicin[®] oph soln 0.3%, 5ml/bot <WGENTA2>

Oftalmolosa cusi[®] oph oint 0.3%, 5g/tube <WGENTA3>

Use

Superficial bacterial infection of the eye

Dose

Soln: 2 drop tid-qid; Oint: tid-qid

Levofloxacin

C¹ Unknown¹

Dosage Forms

Cravit[®] oph slon 0.5%, 5ml/bot <WLEVOFL>

Use

Corneal ulcers, conjunctivitis

Dose

1-3drop qd-tid

Adverse reactions

Eye irritation, eye itching, corneal lesion, blepharitis

Precautions

- 1.用於結膜炎治療不建議超過2週
- 2.點眼時注意藥瓶瓶口勿觸及眼睛

3.健規：限用於角膜潰瘍或嚴重角膜炎病例，其餘眼科疾病列為第二線用藥

Moxifloxacin

C¹ Unsafe¹

Dosage Forms

Vigamox[®] oph solution 0.5% 5ml/bot<WMOXIFL>

Use

Treatment of bacterial conjunctivitis due to susceptible organisms

Dose

1 drop tid for 7 days

Adverse Reactions

視覺敏銳度降低、眼睛乾澀、角膜炎、眼部不適、充血、疼痛、搔癢、結膜下出血及流淚。

Precautions

儲存於2-25°C。

Sulfamethoxazole

C⁴ Unsafe¹

Dosage Forms

Sinomin[®] eye drops 4%, 15ml/bot <WSULFAM>

Use

Trachoma or inclusion conjunctivitis

Dose

1-2 drops qid

Adverse Reactions

Irritation, pain, stinging and burning

Precautions

使用本品後15分鐘才可戴隱形眼鏡。

Contraindications

Sulfonamide allergy, G6PD dysfunction

Tetracycline

D¹ Safe¹

Dosage Forms

Tetracycline[®] oph oint 1%, 5g/tube <WTETRAC>

Use

Superficial ocular infections, post-op infections, conjunctivitis

Dose

bid-qid

Tobramycin

D⁴ Unknown¹

Dosage Forms

Tobrex[®] oph oint 0.3% 3.5g/tube <WTOBRA1>

Use

Palpebritis, sty, conjunctivitis, keratitis

Dose

Mild to moderate: bid-tid

Severe: instill q3-4h until symptoms improved

14.2. Antibacterials and Corticosteroids

Tobradex[®]

C⁴ Unknown¹

Dosage Forms

Oint 3.5g/tube: Dexamethasone 0.1%+Tobramycin 0.3% <WTOBRA3>

Susp 5ml/bot: Dexamethasone 0.1%+Tobramycin 0.3% <WTOBRA4>

Use

Inflammatory ocular conditions with bacterial infection

Dose

3-4 times a day

Adverse Reactions

Hypersensitivity, lid itching and swelling, conjunctival erythema

14.3. Corticosteroids

Fluorometholone (FML)

C⁴ Unknown¹

Dosage Forms

Foxone[®] oph susp 0.02%, 10ml/bot <WFLUOR6>

Viscone[®] eye drops, 5ml/bot <WFLUOR2>

Use

Steroid-responsive inflammatory conditions of the palpebral and bulbar conjunctiva, cornea and anterior segment of the eye

Dose

1-2 drops bid-qid

Contraindications

遮蔽或加重急性化膿性眼睛發炎、單純性疱疹角膜炎、濾過性病毒角膜炎、黴真菌之眼疾。

Prednisolone

C¹ Safe¹

Dosage Forms

Donison[®] 5mg/tab <KPREDNI>參閱 p.227

Pred Forte[®] oph 1%, 5ml/bot <WPREDN1>

Kidsolone[®] oral solution 60mg/60ml/bot, 1ml:Prednisolone 1.344mg <KPREDN1>參閱p.227

Use

Steroid responsive inflammation of the palpebral and bulbar conjunctiva, cornea and anterior segment of globe

Dose

1-2 drop bid-qid

Contraindications

遮蔽或加重急性化膿性眼睛發炎、單純性疱疹角膜炎、濾過性病毒角膜炎、黴真菌之眼疾。

14.4. Antivirals

Acyclovir

B¹ Safe¹

Dosage Forms

Virless[®] lyophilized 250mg/vial <CACYC02> 參閱p.34

Virless[®] 200mg/tab <KACYC01> 參閱p.34

Zovirax[®] susp 4%, 125ml/bot <KACYC03> 參閱p.34

Devirus[®] oph oint 3%, 4.5g/tube <WACYC02>

Aclovir[®] cream 5%, 5g/tube <WACYC05> 參閱p.133

Use

Herpes simplex keratitis

Dose

q4-q6h

Adverse Reactions

Transient mild stinging, superficial punctuate keratopathy, local irritation

Precautions

1. Herpes simplex 3 日內可使用 acyclovir 藥膏，每次以 5g 為限。
2. 口服、注射、外用藥膏擇一使用，不得合併使用。

14.5. Glaucomas

14.5.1. Beta-Blockers

Levobunolol

C⁴ Unknown¹

Dosage Forms

Bunolgan[®] oph soln 0.5%, 5ml/bot <WLEVOBU>

Use

Open-angle glaucoma, ocular hypertension

Dose

Adults: 1 drop qd-bid

Adverse Reactions

Transient ocular burning, stinging, itching, dizziness, headache

Precautions

嚴重 COPD、asthma、CHF、AV-block 等病人不建議使用。

14.5.2. Alpha-2-Agonists

Brimonidine

B⁴ Unknown¹

Dosage Forms

Alphagan[®] P oph soln 0.15%, 5ml/bot <WBRIMO1>

Use

Open-angle glaucoma, ocular hypertension

Dose

1 drop tid

Adverse Reactions

Oral dryness, ocular hyperemia, burning, headache

Precautions

儲存於25°C以下。

14.5.3. Carbonic Anhydrase Inhibitors

Azarga®

C⁵ Unknown³

Dosage Forms

1ml: Brinzolamide 10mg+Timolol 5mg, oph suspension 5ml/bot
<WAZARGA>

Use

Elevated intraocular pressure in patients with ocular hypertension or open-angle glaucoma

Dose

1 drop bid

Adverse Reactions

Blurred vision, pain in eye, eye irritation, taste sense altered

Precautions

- 1.使用前需先搖勻。
- 2.不可在戴隱形眼鏡時使用，至少間隔 15 分鐘以上。
- 3.開封後可保存 4 週，不可冷藏。
- 4.健規:限單一降眼壓藥物治療，眼壓控制不良之青光眼第二線用藥，每月以處方一瓶為原則。

Contraindications

氣喘、心因性休克、心跳徐緩、高血氣性酸中毒、腎功能 Clcr<30ml/min。

Brinzolamide

C⁴ Unknown¹

Dosage Forms

Azopt® oph slon 1%, 5ml/bot <WBRINZO>

Use

Intraocular hypertension, open-angle glaucoma

Dose

1 drop bid-tid

Adverse Reactions

Abnormal taste in mouth, bitter, headache, blurred vision

Precautions

開封後 4 週內使用完畢。

Contraindications

Sulfonamide 過敏者禁用。

Combigan®

C⁵ Unknown³

Dosage Forms

1ml: Brimonidine 0.2%+ Timolol 0.5% oph solution 5ml/bot <WCOMBI1>

Use

Glaucoma

Dose

1 drop bid

Adverse Reactions

Blurred vision, pain in eye, eye irritation, taste sense altered

Precautions

1. 使用前需先搖勻。
2. 不可在戴隱形眼鏡時使用，至少間隔 15 分鐘以上。
3. 開封後可保存 4 週，不可冷藏。
4. 健規:限單一降眼壓藥物治療，眼壓控制不良之青光眼第二線用藥，每月以處方一瓶為原則。

Contraindications

氣喘、心因性休克、心跳徐緩、高血氣性酸中毒、腎功能 $Cl_{cr} < 30 \text{ml/min}$ 。

14.5.4. Prostaglandin Agonists

Bimatoprost

C⁵ Unknown³

Dosage Forms

Lumigan[®] oph soln 0.01%, 3ml/bot <WBIMAT1>

Use

Reduction of elevated intraocular pressure in patients with open-angle glaucoma and ocular hypertension

Dose

1 drop in the affected eye(s) in the evening; **max: 1drop/day**

Adverse Reactions

Conjunctival hyperemia, growth of eyelashes, ocular pruritus

Precautions

1. 開封後 28 天內應丟棄。
2. 使用前應先取下隱形眼鏡，滴入 15 分鐘後再重新戴上。
3. 避免讓瓶口碰觸到眼睛及其周圍結構、手指或任何其他表面，以避免造成眼睛感染。
4. 使用後可能發生永久性的虹膜棕色色素沉著增加，以及停藥後可逆轉的眼瞼皮膚變深和睫毛或柔毛變化。
5. 健規每月處方一瓶為原則。

Contraindications

嚴重乾眼症及小於 16 歲的病患不建議使用。

Travoprost

C⁴ Unknown¹

Dosage Forms

Travatan[®] oph soln 0.004%, 2.5ml/bot <WTRAVOP>

Use

Glaucoma and ocular hypertension

Dose

1 drop in the affected eye once a day in the evening

14.5.5. Miotics

Carbachol

C⁴ Unknown¹

Dosage Forms

Miostat[®] oph soln 0.01%, 1.5ml/vial <CCARBAC>

Use

Intraocular use for miosis during surgery

Dose

Instilled 0.5ml into anterior chamber of the eye before or after securing sutures

Adverse Reactions

Headache, blurred vision, burning sensation in eye, eye irritation, night blindness

Pilocarpine

C⁴ Unknown¹

Dosage Forms

Salagen[®] 5mg/tab <KPILOCA> 参閱p.329

Isopto[®] Carpine oph drop 2%, 15ml/bot <WPILOC2>

Use

Control of intraocular pressure

Dose

2 drops tid-qid

Adverse Reactions

Slight ciliary spasm, conjunctival vascular congestion, temporal or supraorbital headache

14.6. Mydriatics and Cycloplegics

Atropine sulphate

C⁴ Unknown¹

Dosage Forms

Atropine[®] 1mg/ml/amp <CATROPI> 参閱p.166

Tropine[®] oph soln 0.3%, 5ml/bot <WATRO3>

Use

Cycloplegic refraction

Dose

Children: 1 drop tid

Adults: 2 drops tid

Adverse Reactions

Dryness of the month, blurred vision, sensitivity to light, local irritation

Precautions

Children who have previously had severe systemic reaction to atropine (ophthalmic formulation)

Contraindications

Glaucoma, or a predisposition to narrow anterior chamber angle glaucoma

Cyclopentolate

C⁴ Unknown¹

Dosage Forms

Cyclogyl® oph soln 1%, 5ml/bot <WCYCL01>

Use

Mydriasis and cycloplegia induction

Dose

1-2 drops, may repeat in 5-10 min as needed

Adverse Reactions

Increased intraocular pressure, burning, photophobia, blurred vision, irritation

Precautions

Children with spastic paralysis or brain damage; Down's syndrome; predisposition to angle-closure glaucoma

Contraindications

Narrow-angle glaucoma or anatomical narrow angles

Mydrin-P®

Dosage Forms

1ml: Phenylephrine 5mg+Tropicamide 5mg, 10ml/bot <WTROP01>

Use

Mydriasis and cycloplegia for diagnosis

Dose

Mydriasis for diagnosis

1-2 drops q3-5min for 2 doses

Cycloplegia

1 drop q3-5min for 2-3 times

Adverse Reactions

Transient sting, dry mouth

Phenylephrine

C⁴ Unknown¹

Dosage Forms

Phenylephrine® oph soln 10%, 5ml/bot <WPHENYL>

Use

Induce mydriasis to facilitate ocular surgery and allow exam of intraocular structures, adjunctive treatment of anterior uveitis

Dose

1 drop to each eye, may repeat once only, after 1 hr

Adverse Reactions

Irritation, photophobia, decreased vision

Precautions

Contact lens users

Contraindications

Anatomical narrow-angle, narrow angle glaucoma

Tropicamide

C⁴ Unknown¹

Dosage Forms

Mydracyl® oph drop 1%, 5ml/bot <WTROP03>

Use

Mydriasis, cycloplegia for diagnostic procedures

Dose**Refracts**

1-2drops repeated 15-20 min prior to exam.

Adverse Reactions

Blurred vision, headache, ocular irritation

Precautions

Increased intraocular pressure, infants and children, may cause central nervous system disturbances

Contraindications

Primary glaucoma or a tendency toward glaucoma

14.7. Cataracts

Azapentacene**Dosage Forms**

Quinax[®] oph soln 0.015%, 15ml/bot <WAZAPEN>

Use

Senile and traumatic cataract

Dose

2 drops 3-5 times/day

14.8. Ocular Decongestants and Anti-Allergys

Cromolyn

B⁴	Unknown¹
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Dosage Forms

Cromo[®] eye drops 20mg/ml, 10ml/bot<WCROM01>

Allergocrom[®] nasal spray, 100sprays/15ml/bot<WCROM04> 參閱 p.318

Use

Prevention and relief of the ocular symptoms that appear with allergic conjunctivitis

Dose

1 drop qid

Adverse Reactions

Stinging, irritation

Contraidcations

- 1.懷孕前三個月禁用。
- 2.治療期間不配戴隱形眼鏡。

Cyanocobalamin (Vitamin B₁₂)

C⁴	Safe¹
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Dosage Forms

Sancoba[®] oph soln 0.02%, 5ml/bot <WCYANOC>

Use

Allergic conjunctivitis, vitamin B12 deficiencies

Dose

1 drop 3-5 times/day

Emedastine

B⁴ Unknown¹

Dosage Forms

Emadine[®] oph soln 0.05%, 5ml/bot <WEMEDAS>

Use

H₁-blocker for allergic conjunctivitis

Dose

1 drop qid

Adverse Reactions

Headache

Olopatadine

C⁴ Unsafe¹

Dosage Forms

Patanol[®] oph soln 0.1%, 5ml/bot <WOLPAT>

Use

H₁-blocker for allergic conjunctivitis

Dose

1 drop bid

Adverse Reactions

Headache, blurred vision, xerophthalmia

14.9. Dry Eye Products

Carbomer

Dosage Forms

Ginpol[®] gel 20mg/10g/tube <WCARBOM>

Use

Substitute for lacrimal fluid in deficiency of tear or dry eye

Dose

Instil 1 drop into conjunctival sac 3-5 times daily or more frequently during the day and before retiring at night

Adverse Reactions

Transient blurring in vision

Duratears[®]

Dosage Forms

1g: Anhydrous liquid lanolin 30mg+Mineral oil 30mg+Methylparaben 0.5mg+Propylparaben 0.1mg, artificial tears oph oint 3.5g/tube <WDURATE>

Use

Ocular lubricant

Dose

Apply a small ribbon under the lower lid or to the affected area

Optive[®]

Dosage Forms

1ml: Carboxymethylcellulose sodium 0.5% + Glycerin 0.9% oph soln

15ml/bot <WOPTIVE>

Use

Dry eyes, exposure to wind or sun, protectant against further irritation

Dose

1-2 drops in the affected eye(s) as needed

Precautions

開封後需在 180 天內使用完畢。

Propylene glycol

Dosage Forms

Systane[®] 10ml/bot<WSYSTAN>

Use

Ocular lubricant

Dose

1-2 drops in the affected eye(s) as needed

Precautions

開瓶後在 25°C 下可保存 30 天。

Tears naturale[®]

Dosage Forms

1ml: Hydroxypropyl methylcellulose 3mg+Dextran 70 1mg+ Borax 3.5mg+ NaCl 6mg+ KCl 1.2mg+ Polyquaternium-1 solution 0.001% , 15ml/bot <WARTI02>

Use

Dry eye

Dose

1-2 drops as required

Adverse Reactions

Irritation

Precautions

開瓶後請於 30 天內使用完畢。

Contraidcations

配戴軟式隱形眼鏡時請勿使用。

Tears naturale[®] Free

Dosage Forms

1ml: 0.3% Hydroxypropyl methylcellulose+ 0.1% Dextran 70, artificial tears oph drop 1ml/vial (32vial/box) <WTEARS1>

Use

Dry eye

Dose

1-2 drops as required

Adverse Reactions

Irritation

Precautions

開瓶後請於 12 小時內使用完畢。

14.10. Ophthalmology Miscellaneous

Aflibercept

Dosage Forms

Eylea 4mg/0.1ml/vial <CAFLIB1>

Use

Neovascular(wet) age-related macular degeneration(AMD), macular edema following retinal vein occlusion(RVO) and Diabetic retinopathy (DR) in patients with Diabetic macular edema (DME)

Dose

Age-related macular degeneration(AMD)

Intravitreal injection (IVI) 2 mg (0.05 mL) every 4 weeks for 12 weeks, then once every 8 weeks

Macular edema following retinal vein occlusion(RVO)

IVI 2 mg (0.05 mL) once every 4 weeks

Diabetic retinopathy (DR) in patients with Diabetic macular edema (DME)

IVI 2 mg (0.05 mL) once every 4 weeks for the first 5 injections, then 2 mg (0.05 mL) every 8 weeks

Adverse Reactions

Conjunctival hemorrhage, pain in eye

Precautions

1. 冷藏保存，使用前於室溫(25°C)可存放 24 小時，僅供單次使用
2. 進行眼內手術，應於之前或之後 28 天暫時停用藥物
3. 治療期間應避孕，直到最後一劑注射後至少 3 個月

BSS[®]

Dosage Forms

1ml: NaCl 6.4mg+KCl 0.75mg+CaCl₂ 0.48mg+MgCl₂ 0.3mg+Na acetate 3.9mg+Na citrate 1.7mg, balanced salt soln 15ml/bot <WBSS>

Use

For irrigation during various surgical procedures of the eye, ear, nose or throat

Adverse Reactions

When the corneal endothelium is abnormal, irrigation or any other trauma may result in bullous keratopathy

Precautions

不含防腐劑，開封後請一日內使用完畢，如有變色或混濁時，請勿繼續使用。

BSS[®] plus

Dosage Forms

Balanced salt soln 480ml (Part I)/bot+20ml(Part II)/vial <WBSSPLU>

Part I 1ml: NaCl 7.14mg+KCl 0.38mg+Dibasic sodium phosphate 0.42mg+ NaHCO₃ 2.1mg

Part II 1ml: $\text{CaCl}_2 \cdot 2\text{H}_2\text{O}$ 0.154mg+ $\text{MgCl}_2 \cdot 6\text{H}_2\text{O}$ 0.2mg+Dextrose 0.92mg+ Glutathione disulfide 0.184mg

Use

For irrigation during various surgical procedures of the eye, ear, nose or throat

Adverse Reactions

When the corneal endothelium is abnormal, irrigation or any other trauma may result in bullous keratopathy

Precautions

- 1.不得做為注射劑或靜脈輸注之用。
- 2.混合液配置後 6 小時內使用完畢，剩餘部份應予丟棄。

Cyclosporine

C¹ Unknown²

Dosage Form

Restasis[®] oph emulsion 0.05% 0.4ml/vial, 30vial/box <WCYCLOS>

Use

Anti-inflammatory

Dose

1 drop q12h

Adverse Reactions

Burning, conjunctival hyperemia, eye pain, epiphora, blurring

Precautions

- 1.本品須經事先審查核准後方可使用。
- 2.使用前需先振搖數次，形成均勻白色不透明乳液後方可使用。
- 3.每盒 30 小瓶，每小瓶限單次使用，開封後須立即使用，未使用完之藥液需丟棄。
- 4.使用時勿配戴隱形眼鏡，待投藥 15 分鐘後才可重新戴上隱形眼鏡。

Proparacaine

C⁴ Unknown¹

Dosage Forms

Alcaine[®] oph soln 0.5%, 15ml/bot <WOXYBUP>

Use

Corneal anesthesia of short duration (tonometry, gonioscopy, removal of corneal foreign bodies, for short corneal and conjunctival procedures)

Dose

1 drop q5-10 min for 5-7 doses

Adverse Reactions

Local irritation and stinging

Precautions

須冷藏

Ranibizuma

C⁴ Unknown¹

Dosage Forms

Lucentis[®] 10mg/ml, 0.23ml/vial <CRANIBI >

Use

Exudative age-related macular degeneration

Dose**IVI**

0.3-0.5mg(0.03-0.05ml) once monthly

Adverse Reactions

Intraocular inflammation, eye pruritus, blepharitis, headache, arthralgia

Precautions

- 1.需儲存於 2~8°C
- 2.本品須經事先審查後方可使用

Contraindication

眼睛周圍或眼內發炎。

15. PSYCHIATRY

15.1. Antidepressants

15.1.1. Tricyclic-Tertiary Amines (TCA)

Amitriptyline

C⁴ Unknown¹

Dosage Forms

Trynol[®] 25mg/tab <KAMITRI>

Use

Relief of symptoms of depression

Dose

PO initial 75 milligrams/day in divided doses, maintain 50-100mg/day in divided dose; max: 300mg/day

Adverse Reactions

Weight gain, constipation, drowsiness, dizziness, headache

Imipramine

D⁴ Unknown¹

Dosage Forms

Fronil[®] 25mg/tab <KIMIPRA>

Use

Various forms of depression, childhood enuresis

Dose

Depression

Outpatient initial 75mg/day **PO** in divided doses; **max: 200mg/day**

Inpatient initial 100mg/day **PO** in divided doses; **max: 300mg/day**

Adverse Reactions

Weight gain, constipation, bloating, blurred vision, dizziness

Precautions

1. 使用 MAOI 二者投藥時間需至少間隔 14 天。

2. 心肌梗塞危急者。

15.1.2. Serotonin-Norepinephrine Reuptake Inhibitors

Atomoxetine

C⁵ Unknown³

Dosage Forms

Strattera[®] 40mg/tab <KATOMOX>

Use

Attention deficit hyperactivity disorder (ADHD)

Dose

<70 kg children and adolescent:

PO initial 0.5mg/kg/day qd, may increase after minimum of 3 days to 1.2mg/kg/day; **max: 1.4mg/kg/day or 100mg/day**

>70kg children, adolescent and adult:

PO initial 40mg/day qd, may increase after minimum of 3 days to 80mg/day; **max: 100mg/day**

Adverse Reactions

Decrease appetite, insomnia, sedation, depression, tremor

Precautions

1. 粉末對眼睛具刺激性，膠囊不可打開，須整粒吞服。
2. 使用 MAO I 二者投藥時間需至少間隔 14 天。

Contraindications

狹角性青光眼。

Duloxetine

C⁵ Unknown³

Dosage Forms

Cymbalta[®] 30mg/cap <KDULOXE>

Use

Major depressive disorder, Generalized anxiety disorder, Diabetic peripheral neuropathy pain

Dose

Major depressive disorder

PO 40-60mg/day qd-bid; **max: 120mg/day**

Generalized anxiety disorder

PO 30mg/day qd; **max: 120mg/day**

Peripheral neuropathy pain

PO 60mg/day qd; **max: 60mg/day**

Adverse Reactions

Nausea, xerostomia, dizziness, fatigue, constipation

Precautions

1. 為腸膜衣藥丸，不可打開膠囊、咀嚼、及壓碎。
2. 正接受 MAO I 治療轉換為本品時，至少停藥間隔 14 天。

Contraindications

嚴重腎功能不全 (Ccr < 30mL/min) 或肝能不全者

Venlafaxine

C⁴ Unsafe³

Dosage Forms

Valosin[®] 37.5mg/tab <KVENLA1>

Rafax[®] 75mg/XR. cap <KVENLA2>

Use

Depression, Generalized anxiety disorder, Social phobia, Panic disorder

Dose

Valosin[®]

Depression

PO initial 75mg/day bid-tid, dose may be increased to 75mg at interval of at least 4 days. **max: 375mg/day**

Rafax[®] XR

Depression

PO 75mg qd; **max: 375mg/day**

Generalized anxiety disorder

PO 37.5mg qd; **max: 225mg/day**

Social phobia

PO 37.5mg qd; max: 225mg/day

Panic disorder

PO 37.5mg qd; max: 225mg/day

Adverse Reactions

Nausea, xerostomia, dizziness, weight loss, somnolence, insomnia

Precautions

正接受 MAOI 治療轉換為本品時，至少停藥間隔 14 天，停止使用本品至使用 MAOI 則需間隔 7 天。

15.1.3. Selective Serotonin Reuptake Inhibitors (SSRI)

Escitalopram

C⁴ Unsafe¹

Dosage Forms

Leeyo[®] 10mg/FC. tab <KESCITA>

Use

Major depressive disorder, generalized anxiety disorder

Dose

PO 10-20mg qd

Adverse Reactions

Nausea, insomnia, somnolence, ejaculation disorder, diaphoresis, fatigue

Precautions

接受 MAOI 治療轉換為本藥時，至少停藥間隔 14 天。

Contraindications

<18yrs 不建議使用。

Paroxetine

D⁴ Unknown¹

Dosage Forms

Setine[®] 20mg/tab <KPAROXE>

Use

Depression, panic disorder, obsessive-compulsive disorder, anxiety

Dose

Initial 20mg/day qd; **max: 60mg/day**

Adverse Reactions

Dizziness, insomnia, nervousness, somnolence, tremor, sweating, constipation, diarrhea, dry mouth, nausea

Sertraline

C⁴ Unknown¹

Dosage Forms

You-Jet[®] 50mg/tab <KSERTRA>

Use

Depression, obsessive-compulsive disorder (OCD), panic disorder

Dose

PO 25-50mg once daily, increased at intervals of at least 1 wk; max: 200mg/day

Adverse Reactions

Insomnia, somnolence, dizziness, tremor, rash, anorexia, diarrhea,

dyspepsia, dry mouth, nausea, abnormal ejaculation, headache

Precautions

接受 MAOIs 治療者須停藥 14 天後，才可使用本品。

15.1.4. 5-HT₂ Receptor Antagonists

Trazodone

C⁴ Unknown¹

Dosage Forms

Mesyrel[®] 50mg/tab <KTRAZOD>

Use

Depression

Dose

50mg tid; **max: 600mg/day**

Adverse Reactions

Dizziness, restlessness, fatigue, hypotension

15.1.5. Alpha-2 Antagonist

Mirtazapine

C³ Unknown¹

Dosage Forms

Mirtine[®] 30mg/F.C. tab<KMIRTAZ>

Use

Depression

Dose

Adult: initial 15mg/day hs or bid, mantaince dose 15-45mg/day hs or bid;

max: 45mg/day

Adverse Reactions

Increased appetite, weight gain, dizziness, agranulocytosis.

Precautions

- 1.本品會降低注意力及警覺性，操作機械及駕駛汽車須小心。
- 2.如有發燒、喉嚨痛、口腔炎應盡速回診。
- 3.本品與 Warfarin 併用時，建議監測 INR。

15.1.6. Dopamine Reuptake Inhibitors

Bupropion

B⁴ Unknown¹

Dosage Forms

Wellbutrin[®] 150mg/XL tab <KBUPROP>

Use

Depression

Dose

Initial 150mg/day; **max: 300mg/day in 2 divided dose**

Adverse Reactions

Agitation, constipation, dry mouth, tremor, sweating

15.2. Antipsychotic Agents

15.2.1. Phenothiazine Derivatives

Prochlorperazine

C⁵ Unsafe³

Dosage Forms

Novamin[®] 5mg/ml/amp <CPROCHL>

Novamin[®] 5mg/tab <KPROCHL>

Use

Nausea, vomiting, psychosis

Dose

IM

Infant > 6 months: 0.1mg/kg/day

Adult: 5mg/day

PO

Child 2-6yrs: **max: 20mg/day**; 6-12yrs **max: 25mg/day**

Adult: 5-10mg tid-qid **max: 150mg/day**

Adverse Reactions

Extrapyramidal symptoms, drowsiness, constipation, urinary retention, hypotension

Precautions

口服錠劑可能導致尿液變色。

Contraindications

口服錠劑禁用於 2 歲或 9kg 以下兒童，針劑禁用於 6 個月以下嬰兒。

15.2.2. Benzisothiazoyl Piperazine Derivatives

Ziprasidone

C⁴ Unknown¹

Dosage Forms

Geodon[®] 40mg/cap <KZIPRAS>

Use

Schizophrenia, bipolar mania

Dose

PO 40mg bid; max: 80mg bid

Adverse Reactions

Asthenia, extrapyramidal syndrome, somnolence, headache, nausea

Contraindications

QT prolong patient, <18yrs.

15.2.3. Thioxanthene Derivatives

Deanxit[®]

Unknown¹

Dosage Forms

1 tab: Flupentixol 0.5mg+ Melitracen 10mg <KDEANXI>

Use

Anxiety

Dose

PO 1 tab bid; **max: 6 tab/day**

Adverse Reactions

Restlessness, insomnia

15.2.4. Phenylbutylpiperadine Derivatives

Haloperidol

C⁴ Unknown¹

Dosage Forms

Halosten[®] 1mg/tab <KHALOP5>

Use

Hyperactive children, psychotic disorders, several behavior problems in children, tourette's disorders

Dose

PO initial 0.75-2.25mg/day; **max: 25mg/day**

Adverse Reactions

Akathisia, dystonic extrapyramidal effects, hypotension, blurred vision, constipation

Precautions

急遽增量時可能會引起惡性症狀(neuroleptic malignant syndrome; NMS)

15.2.5. Dibenzapine Derivatives

Clozapine

B⁴ Unsafe¹

Dosage Forms

Clozaril[®] 100mg/tab <KCLOZ02>

Use

Refractory schizophrenia, parkinsonism induced psychiatric disease

Dose

PO 5mg qd-bid at 1st day, 25mg qd-bid at 2nd day, dosage adjustment to 300mg /day in 2-3 wks, therapeutic dosage is 300-450mg/day ; **max: 900mg/day**

Adverse Reactions

Somnolence, dizziness, weight increase, excessive salivation, tachycardia, hypotension

Precautions

需密切監測病患之 WBC 及 ANC 值，病患出現類感冒症狀如發燒、喉嚨痛時需特別注意。

Contraindications

骨髓功能受損、未控制癲癇、毒性或特異性白血球減少、進行性肝疾病、麻痺性腸阻塞、無法定期接受血液檢查者。

Quetiapine

C⁴ Unknown¹

Dosage Forms

Seroquel[®] 25mg/tab <KQUET11>

Seroquel XR[®] 50mg/tab <KQUET14>

Seroquel XR[®] 300mg/tab <KQUET13>

Use

Schizophrenia, depression and manic phase of bipolar disorder

Dose

Schizophrenia

Seroquel XR[®]:**PO** initial 300 mg once daily; **max:800 mg/day**

Seroquel[®]:**PO** initial 25-50mg bid, usual effective dosage 150-750mg/day;
max:800mg/day

Bipolar disorder, depressed phase

Seroquel XR[®]:**PO** 50, 100, 200, and 300 mg given daily on days 1- 4

Manic bipolar I disorder

Seroquel XR[®]:**PO** 300 mg on day 1 and 600 mg on day 2. Adjust the dose between 400 and 800 mg daily beginning on day 3

Seroquel[®]:**PO** 400-800mg/day bid

Adverse Reactions

Hypertension, weight gain, TG and cholesterol raised, xerostomia, somnolence

Precautions

- 1.Seizure disorder, cardiovascular disease, cerebrovascular disease
- 2.需依肝功能調整劑量。
- 3.Seroquel XR[®]可撥半不可磨粉。

Zotepine

C^s UnSafe³

Dosage Forms

Lodopin[®] 50mg/tab < KZOTEPI>

Use

Schizophrenia

Dose

PO 75-150mg/day divided dose; **max: 450mg/day**

Adverse Reactions

Dizziness, strengthless, insomnia, thirsty, constipation

Precautions

- 1.有肝功能障礙、血液障礙、疑似心臟疾病、重症氣喘、肺氣腫、癲癇等應慎重給藥。
- 2.可能造成嗜睡、注意力不集中，應避免開車或從事機械操作。
- 3.服藥期間應避免服用含酒精及咖啡因飲料。

Contraindications

- 1.腦炎、腦腫瘤、頭部外傷之患者。
- 2.使用 Terfenadine 或 Astemizole 的患者(造成心室性心律不整)。

15.2.6. Benzisoxazole Derivatives

Paliperidone

C^s UnSafe¹

Dosage Forms

Invega[®] 3mg/ER tab<KPALIFE>

Invega[®] sustenna 100mg/1ml/syringe<CPALIP1>

Invega[®] sustenna 150mg/1.5ml/syringe<CPALIP2>

Use

Schizophrenia, Schizoaffective disorder

Dose

PO 3-6mg qd, administered in the morning, may increase by 3 mg/day increments at intervals of more than 4 days. **Max: 12mg/day**

IM initial 150mg on day 1, followed by 100mg 1 week later. Maintenance dose is 25-150mg every monthly base on individual patient tolerability and efficacy.

Adverse Reactions

Tachycardia, hyperprolactinemia, extrapyramidal disease, somnolence, orthostatic hypotension

Precautions

- 1.錠劑為滲透壓控釋劑型，須整粒吞服，不可嚼碎、撥半或磨粉
- 2.錠劑因劑型設計關係，藥錠會隨糞便整粒排出。
- 3.可能造成知能及運動障礙(如嗜睡、鎮靜、傷害判斷及思考或行動)，操作機械及駕駛汽車須小心。
- 4.需依腎功能調整劑量。
- 5.針劑僅供深部肌肉注射，勿將一劑分成數次施打。

Contraindications

18歲以下安全及有效性尚未建立，不建議使用。

Risperidone

C⁴ Unsafe¹

Dosage Forms

Risperdal[®] 1mg/tab <KRISPE1>

Seridol[®] soln 30mg/30ml/bot <KRISPE3>

Use

Bipolar mania, schizophrenia

Dose

PO initial 2mg/day, usual dose: 2-6mg/day; **max: 8mg/day**

Adverse Reactions

Anxiety, extrapyramidal symptoms, akathisia, constipation

Precautions

需依肝腎功能調整劑量。

15.2.7. Thienobenzodiazepine Derivatives

Olanzapine

C⁴ Unknown¹

Dosage Forms

Zyprexa[®] 10mg/vial<COLANZA>

Zyprexa[®] Zydys OD 5mg/tab <KOLANZ1>

Use

Agitation associated with schizophrenia or bipolar mania

Dose

PO 5-20mg/day qd; **max: 20mg/day**

IM initial dose is 10 mg, followed by 5-10 mg as required after 2 hours.

Max: 20mg/day, and injection less 3 times/day

>60 y/o older man: **IM** initial dose is 2.5 mg, followed by 2.5-5 mg as required after 2 hours. **Max: 20 mg/day and injection less 3 times/day.**

Adverse Reactions

Somnolence, weight gain, TG, cholesterol and prolactin raised, asthenia

Precautions

1. 需依腎功能調整劑量。
2. 限用注射用水配製，配製後可貯放 1 小時，不得與其他不相容藥品 (diazepam, haloperidol) 共用注射針筒。
3. 不可靜脈或皮下注射且 24 小時內不可注射超過 3 次。

Contraindications

廣角性青光眼病患。

15.2.8. Selective D₂ Antagonists

Amisulpride

D⁴ Unsafe¹

Dosage forms

Solian[®] 200mg/tab <KAMISUL>

Use

Acute and chronic schizophrenia

Dose

PO 400-800mg/day in divided doses; **max: 1200mg/day**

Adverse Reactions

Insomnia, anxiety, agitation, menstrual disorders, weight increases

Precautions

需依腎功能調整劑量。

Sulpiride

D³ Unsafe¹

Dosage Forms

Sunpylon[®] 50mg/tab <KSULP01>

Use

Schizophrenia, depression

Dose

Schizophrenia

PO 300-600mg/day in divided doses; **max: 1200mg/day**

Depression

PO 150-300mg/day in divided doses; **max: 600mg/day**

GI ulcer

PO 150mg/day tid

Adverse Reactions

Leukocytosis, sedation, extrapyramidal symptoms, tardive dyskinesia

Precautions

需依腎功能調整劑量。

15.2.9. Quinolinone Derivatives

Aripiprazole

C⁵ Unknown³

Dosage forms

Abilify[®] 15mg/OD tab <KARIPI1>

Abilify[®] 5mg/tab <KARIPI2>

Use

Schizophrenia, bipolar disorder, depression, irritability associated with autistic disorder

Dose

Schizophrenia

13~17yrs adolescents: **PO** initial 2mg/day, increase to 5mg/day after 2days and to 10mg/day (target dose) after 2 more days; **max: 30mg/day**

Adult: **PO** 10-15mg once daily, **max: 30mg/day**; Dosage titration should not be more frequent than every 2 weeks

Bipolar disorder

10-17yrs children: **PO** initial 2mg/day, increase to 5mg/day after 2days and to 10mg/day (target dose) after 2 more days, subsequent dose increases may be made in 5 mg increments

Adult: initial 15mg/day monotherapy or 10-15mg/day adjunct to lithium or valproate; **max:30mg/day**

Major depression

Adult: **PO** initial 2-5mg/day, dose adjust to 5 mg/day increments at intervals of more than 1 week; max: 15mg/day

Irritability associated with autistic disorder

6-17yrs children: **PO** initial 2mg/day, then increase to 5mg/day, subsequent dose increases may be made in 5 mg increments at intervals of ≥ 1 week as needed, **max: 15mg/day**

Adverse Reactions

Akathisia, headache, somnolence, sedation, extrapyramidal sign

Precautions

1. 口服錠服藥前才可拆開藥片，撥開藥片時不可以推擠藥錠方式取藥，以避免藥錠受損。
2. 口服錠，可放置於舌面上以唾液溶解後吞服。

15.3. Sedatives and Hypnotics

15.3.1. Barbiturates

Phenobarbital

D⁴ Unsafe¹

Dosage Forms

Phenobital[®] 100mg/ml/amp <CPHENOB>

Phenobarbital[®] 30mg/tab <KPHENOB >

Use

Epilepsy, sedation, neonatal jaundice

Dose

Sedation

Children: **PO**: 6mg/kg tid
Adults: **PO** 30-120mg/day tid, **max:400mg/day**

Hypnotic

Adults: **PO** 100-320mg hs

Neonatal jaundice

Neonate: **PO** 5-10mg/kg/day

<12yrs children: **PO** 1-4mg/kg tid

Adverse Reactions

Somnolence, nervousness, unsteadiness, dizziness, light headedness

Precautions

- 1.需依肝腎功能調整劑量。
- 2.Anticonvulsant 治療劑量可參考第 12 章，參閱 p.238。
- 3.注射劑禁用 IV 注射。

15.3.2. Non-Barbiturates

Hydroxyzine

C⁴ Unsafe³

Dosage forms

Vistaril[®] 25mg/cap <KHYDR04>

Use

Anxiety, pruritus

Dose

Anxiety

Children <6 yrs: **PO** 50 mg/day in divided doses

Children >6 yrs: **PO** 50-100mg/day in divided doses

Adult: **PO** 50-100mg qid

Adverse Reactions

Drowsiness, dry mouth, headache

Zaleplon

C⁴ Unknown¹

Dosage Forms

Sonaplon[®] 10mg/cap <KZALEP2>

Use

Insomnia

Dose

Adult: **PO** 10mg hs. **max:10mg/day**

Elderly: **PO** 5mg hs.

Adverse Reactions

Rebound insomnia, anxiety, memory impairment, depression.

Precautions

健規：非精神科醫師、神經科專科醫師若需開立本類藥品，每日不宜超過一顆，連續治療期間不宜超過 6 個月。

Contraindication

重症肌無力、嚴重肝功能不全、嚴重呼吸功能不全、未滿 18 歲。

15.3.3. Benzodiazepines

Alprazolam

D⁴ Unsafe¹

Dosage Forms

Alpraline[®] 0.5mg/tab <KALPRA2>

Use

Anxiety

Dose

Anxiety

PO Initial 0.25-0.5mg tid, maintenance 0.5-4mg daily in divided doses;

max: 4mg/day

Adverse Reactions

Sedated, drowsiness, decreased libido, fatigue, increased or decrease appetite

Precautions

需依肝功能調整劑量。

Diazepam

D⁴ Unsafe¹

Dosage Forms

Dianlin[®] 10mg/2ml/amp <CDIAZ01>參閱 p.236

Estazolam

X⁴ Unknown¹

Dosage Forms

ESZO[®] 2mg/tab <KESTAZO>

Use

Insomnia

Dose

PO 1-2 mg hs

Adverse Reactions

Dizziness, drowsiness, light-headedness, lassitude

Precautions

需依肝功能調整劑量。

Fludiazepam

Unknown¹

Dosage Forms

Erispan-S[®] 0.25mg/tab <KFLUDIA>

Use

Short-term treatment of anxiety disorders

Dose

PO 0.25mg tid

Adverse Reactions

Drowsiness, dizziness, confusion, GI discomfort, respiratory depression,

Precautions

需依肝腎功能調整劑量。

Lorazepam

D⁴ Unknown¹

Dosage Forms

Anxicam[®] 4mg/2ml/amp <CLORAZ1>

Lowen[®] 0.5mg/tab <KLORAZI>

Use

Anxiety disorders, preanesthetic, status epilepticus

Dose

Anxiety and sedation

Adults: **IV** 2mg or 0.044mg/kg; **PO** initial 1-3mg/day bid-tid, **max:**
10mg/day

Insomnia

PO 2-4mg hs

Pre-operation

>18yrs adult: **IM** 0.05mg/kg before 2 hours of surgical operation, **max:**
4mg

Adverse Reactions

Sedation, Dizziness, weakness, unsteadiness

Precautions

1. 針劑須冷藏。
2. 高齡及未滿 18 歲之患者使用針劑時須小心。

Midazolam

D⁴ Unknown¹

Dosage Forms

Uzolam[®] 5mg/ml/amp <CMIDA01>參閱 p10.

Midatin[®] 15mg/3ml/amp <CMIDA02>參閱 p10.

Triazolam

X⁴ Unknown¹

Dosage Forms

Halcion[®] 0.25mg/tab <KTRIAZO>

Use

Insomnia

Dose

PO 0.25mg hs; max: **0.5mg/day**

Adverse Reactions

Somnolence, dizziness, ataxia, lightheadedness

15.3.4. Sedative and Hypnotics Miscellaneous

Bupirone

B⁴ Unknown¹

Dosage Forms

Sepirone[®] 5mg/tab <KBUSPIO>

Use

Anxiety

Dose

PO Initial 5mg tid, may increase by 5mg q2-3 days; **max: 60mg/day**

Adverse Reactions

Dizziness, nausea, headache, nervousness

Precautions

需依肝腎功能調整劑量。

15.4. Antimanic Agents

Carbamazepine

D⁴ Safe¹

Dosage Forms

Tegretol[®] CR 200mg/CR.tab <KCARB02> 參閱 p.235

Lamotrigine

C⁴ Unknown¹

Dosage Forms

Lamictal[®] 5mg/chewable tab <KLAMOT1> 參閱p.241

Lamictal[®] 50mg/tab <KLAMOT2> 參閱p.241

Lamictal[®] 100mg/tab <KLAMOT3> 參閱p.241

Lithium

D⁴ Unsafe¹

Dosage Forms

Lidin[®] 300mg/cap <KLITHIU>

Use

Manic episodes, bipolar disorder

Dose

Bipolar disorder, manic episode

PO 1800mg/day tid

Bipolar disorder, maintenance therapy

PO 900mg/day tid

Adverse Reactions

Albuminuria, oliguria, polyuria, glycosuria, ataxia, tremor, muscle hyperirritability, drowsiness, muscular weakness, diarrhea, dry mouth

Precautions

1. 需依腎功能調整劑量。
2. 開車或操作機械時須注意。

15.5. Sympathomimetics and Anorexiant

Midodrine

C⁴ Unknown¹

Dosage Forms

Midorine[®] 2.5mg/tab <KMIDODR>

Use

Symptomatic orthostatic hypotension

Dose

Symptomatic orthostatic hypotension

Adults: PO initial 2.5 mg bid-tid therapeutic response in increments of 2.5 milligrams 3 times daily at approximate weekly. **max:40mg/day**

Urinary incontinence

PO 2.5-5mg/day, **max:7.5mg/day**

Adverse reaction

Piloerection, pruritus, urinary retention, paresthesia

Precautions

1. 需依腎功能調整劑量。
2. 需監控病患血壓及心跳。

Methylphenidate

C⁴ **Unknown¹**

Dosage Form

Ritalin[®] 10mg/tab 短效錠<KMETHYL>

Concerta[®] 18mg/ER. tab 長效錠<KMETHYL>

Use

Attention deficit hyperactivity disorder (ADHD), narcolepsy

Dose

ADHD

Ritalin[®]

Children >6yrs: **PO** Initial 0.3mg/kg/dose bid; usual dose: 0.5-1mg/kg/day;

max: 2mg/kg/day

Adults: **PO** 20-30mg/day bid-tid **max:60mg/day**

Concerta[®]: **PO** 18 mg qd in the morning; **max : 54 mg/day**

Narcolepsy

Ritalin[®]

Adults: **PO** 10mg/day bid before breakfast and lunch ; **max: 60mg/day**

Adverse reaction

Restlessness, behavior disturbances, slurred speech, loss of appetite

Precautions

1. 建議飯前服用。
2. Concerta[®]: 整顆吞服，不可咀嚼、剝半或壓碎，外殼為不可溶成份會排出體外。

Modafinil

C⁴ **Unknown¹**

Dosage Forms

Provigil[®] 200mg/tab<KMODAFIL>

Use

Narcolepsy with excessive daytime sleepiness

Dose

PO 200 mg once daily in the morning

Adverse reactions

Piloerection, pruritus, urinary retention, paresthesia

Precautions

1. 從事機械性活動需小心。
2. 需依肝功能調整劑量

15.6. Smoking Deterrents

Nicotine patch

D⁴ **Unknown¹**

Dosage Forms

Smokfree[®] patch 31.2mg/patch <WNICOTI>

Use

戒菸輔助劑

Dose

Transdermal one patch daily

Adverse Reactions

Skin irritation , red and swollen

Precautions

- 1.進行核磁造影需撕掉，避免掃描過程中過熱造成皮膚灼燒。
- 2.使用不宜超過3個月避免成癮。

Varenicline

C⁴ Unknown¹

Dosage Forms

Champix[®] 1mg/FC. tab <KVARENI>

Use

戒菸輔助劑

Dose

PO initial 0.5 mg qd for days 1 through 3, then 0.5 mg bid for days 4-7, then 1 mg bid; duration of treatment is 12 weeks

Adverse Reactions

Nausea, insomnia, headache, flatulence, constipation, dream disorder

16. RENAL AND GENITOURINARY AGENTS

16.1. Impotence Agents

16.1.1. Phosphodiesterase-5 inhibitor

Sildenafil

B⁴ Unknown¹

Dosage Forms

Viagra[®] 100mg/FC. tab <KSILDEN>

Revatio[®] 20mg/tab<KSILDE1>

Use

Erectile dysfunction, pulmonary arterial hypertension (PAH)

Dose

Erectile dysfunction

PO 50mg taken as needed, 1 hr before sexual activity; **max: 100mg/day**

Pulmonary arterial hypertension (PAH)

PO 20mg 3 times daily, taken 4 to 6 hours apart; **max: 20mg 3 times daily**

Adverse Reactions

Headache, flushing, abnormal vision, nasal congestion, epistaxis, diarrhea

Precautions

1. Viagra[®] : Onset 30-60 min, duration 4 hrs

2. 若服用 Viagra[®] 4 hr 內不可使用 α_1 adrenergic blocker

3. Viagra[®] : Ccr<30ml/min , 起始劑量應由 25mg 開始 , 最高可增加至 20-100mg

Contraindications

Concurrent use of nitrates (eg. nitroglycerin)

Tadalafil

B⁴ Unknown¹

Dosage Forms

Cialis[®] 20mg/tab <KTADALA>

Use

Erectile dysfunction

Dose

Starting dose: 10mg, no more than once daily, 1 hr before sexual activity; may increase to 20mg

Adverse Reactions

Headache, flushing, abnormal vision, nasal congestion, dyspepsia

Precautions

1. Onset: 30-45 min, duration: 36 hrs

2. 若服用本品不建議使用 α_1 adrenergic blocker

3. 本品不建議每日服用

Contraindications

1. Concurrent use of nitrates (eg. nitroglycerin)

2. 嚴重心血管疾病(如:近 90 天有心肌梗塞、未受控制的心律不整等)

Vardenafil

B⁴ Unknown¹

Dosage Forms

Levitra® 20mg/tab <KVARDE2>

Use

Treatment of erectile dysfunction

Dose

10-20mg 1 hr prior to sexual activity; **max: 20mg/ady**

Adverse Reactions

Flushing, headache, rhinitis

Precautions

1. Onset: 1 hr, duration: 1 hr
2. 服用本品 6 小時之內不可使用 α_1 adrenergic blocker

Contraindications

Concurrent use of nitrates (eg. nitroglycerin)

16.1.2. Impotence Miscellaneous

Dapoxetine

X⁴ Unknown¹

Dosage Forms

Priligy® 20mg/tab <KDAPOXE>

Use

Premature ejaculation

Dose

30mg is taken 1 to 3 hours before sexual intercourse

Adverse Reactions

Dizziness, headache, nausea, diarrhea, insomnia

Precautions

1. 服用時至少搭配 240cc 的水
2. 不可磨粉或撥半
3. 服藥後可能發生昏厥、頭暈，應小心從事駕駛或操作危險機械

Contraindications

顯著病理性心血管疾病:心臟衰竭、心律傳導異常、顯著缺血性心臟疾病、顯著心瓣膜疾病、中度以及重度肝功能不全的病人

16.2. Urinary Alkalinizers

Potassium citrate

C⁴ Unknown¹

Dosage Forms

K-Stone® 5g/pk (1g contains: potassium citrate 660mg;K:30mEq)
<KPOTAS4>

Use

Renal tubular acidosis (RTA) with calcium stones, prevention of calcium renal stones

Dose

1 pk qid or hs

Adverse Reactions

Hyperkalemia, metabolic alkalosis, nausea, vomiting, diarrhea

Precautions

每包(5g)加 180ml 冷開水或果汁混均服用。

16.3. Benign Prostatic Hyperplasias (BPH)

16.3.1. Alpha-adrenergic Blockers

Alfuzosin

B⁴ Unknown¹

Dosage Forms

Xatral[®] XL 10mg/tab <KALFUZO>

Use

Benign prostatic hyperplasias

Dose

10mg qd

Adverse Reactions

Nausea, vomiting, diarrhea, dizziness, malais, headache

Precaution

Ccr <30ml/min 需小心使用。

Contraindications

Moderate to server hepatic impairment, co-administration with potent CYP 3A4 inhibitors

Doxazosin

C⁴ Unknown¹

Dosage Forms

Doxaben[®] XL 4mg/tab <KDOXAZ2> 參閱 p.117

Use

Hypertension and benign prostate hypertrophy (BPH)

Dose

BPH

PO 4-8mg qd; **max: 8mg/day**

Adverse Reactions

Dizziness, headache, hypotension, fatigue, vertigo, diarrhea

Precautions

本品不宜磨粉。

Silodosin

B⁵ Unknown¹

Dosage Forms

Urief[®] 4mg/cap <KSILODO >

Use

Benign prostate hypertrophy

Dose

PO initial 4mg bid with food

Adverse Reactions

Retrograde ejaculation, orthostatic hypotension, dizziness, diarrhea, nasal

congestion

Precautions

1. 需依腎功能調整劑量
2. 進行白內障手術中可能發生虹膜鬆弛症候群(intraoperative floppy iris syndrome)

Contraindications

嚴重腎功能障礙(Clcr<30ml/min)、嚴重肝功能障礙(Child-Pugh score≥10)、與強效 CYP3A4 抑制劑併用。

Tamsulosin

B⁴ Unknown¹

Dosage Forms

Harnalidge[®] D 0.2mg/tab <KTAMSU1>

Use

Benign prostatic hyperplasias

Dose

PO 0.2-0.4mg qd

Adverse Reactions

Headache, dizziness, abnormal ejaculation, rhinitis, arthralgia

Precautions

1. 服藥時可將藥錠置於舌上，以唾液潤滑後吞服；也可以與水共服。
2. 本品勿咬碎服用。

16.3.2. 5-Alpha Reductase Inhibitor

Dutasteride

X⁴ Unknown¹

Dosage Forms

Avodart[®] 0.5mg/soft cap <KDUTAST>

Use

Benign prostatic hyperplasia

Dose

PO 0.5mg qd

Adverse Reactions

Decreased libido, ejaculation disorders, gynecomastia, impotence

Finasteride

X⁴ Unknown¹

Dosage Forms

Propecia[®] 1mg/tab <KFINAS1>

Finta[®] 5mg/tab <KFINAS2>

Use

Benign prostatic hyperplasia

Dose

PO 5mg qd

Adverse Reactions

Decreased libido, ejaculation disorder, erectile dysfunction, impotence

Precautions

Male pattern hair loss 參閱 p.139, 208

16.4. Bladder Spasms

16.4.1. Cholinergics

Bethanechol

C⁴ Unknown¹

Dosage Forms

Dampurine[®] 25mg/tab <KBETHAN>

Use

Neurogenic bladder atony with retention, postoperative nonobstructive urinary retention

Dose

Urinary retention

PO 10-50 mg/day tid-qid AC, max 50 mg

Adverse Reactions

Abdominal cramps, diarrhea, excessive lacrimation, miosis, flushing of skin

16.4.2. Antimuscarinics

Propiverine

Unknown¹

Dosage Forms

Urotrol[®] 15mg/tab <KPROPIV>

Use

Urinary incontinence

Dose

Urinary incontinence

children 4.5-11yrs: PO 0.2 - 0.4 mg/kg/day bid

Adults: PO 15mg bid-tid

Adverse Reactions

Dry mouth, fatigue, blurred vision, GI upset

Solifenacin

C⁴ Unknown¹

Dosage Forms

Vesicare[®] 5mg/tab <KSOLIFE>

Use

Overactive bladder with symptoms of urinary frequency, urgency or urge incontinence

Dose

PO initial 5mg qd; may increase to 10mg/day

Adverse Reactions

Constipation, xerostomia, dry mouth, nausea

Tolterodine

C⁴ Unknown¹

Dosage Forms

Detrusitol[®] 4mg/S.R cap <KTOLTE1>

Use

Overactive bladder with symptoms of urinary frequency, urgency or urge incontinence

Dose

PO 4mg qd

Adverse Reactions

Headache, dyspepsia, nausea, vomiting, dry mouth

16.4.3. Bladder Spasm Miscellaneous

Imipramine

D⁵ **Unknown¹**

Dosage Forms

Fronil[®] 25mg/tab <KIMIPRA>

Use

Depression, childhood enuresis

Dose

Urinary incontinence

Adults: **PO** 25 mg hs; **max dose 150mg**

Childhood enuresis

6-12 yrs: **PO** initial 25mg hs; **max: 50mg**

>12 yrs: **PO** 25mg hs; **max: 75mg**

Adverse Reactions

Weight gain, constipation, dizziness, blurred vision, urinary retention

Precautions

1.用於 childhood enuresis 不建議<6 yrs 使用。

2.Depression dose 參閱p.285。

16.5. Diuretics

16.5.1. Thiazides

Exforge HCT[®]

X⁴ **Unsafe¹**

Dosage Forms

1 tab: Amlodipine 5mg+Valsartan 160mg+ Hydrochlorothiazide 12.5mg <KEXFORG>參閱 p.119

Indapamide

B⁴ **Unknown¹**

Dosage Forms

Natrilix[®] 1.5mg/SR tab <KINDAP2>

Use

Edema associated with congestive heart failure, hypertension

Dose

Edema associated with congestive heart failure

Adult: **PO** 1.5mg qd may after 1 wk increase to 5 mg qd

Hypertension

Adult: **PO** 1.25 mg qd (in the morning), maintenance:2.5-5 mg qd

Adverse Reactions

Hypokalemia, Dizziness, Headache

Precautions

不宜磨粉。

Trichlormethiazide

C⁵ Unknown³

Dosage Form

Eazide[®] 2mg/tab <KTRICHL>

Use

Edema associated with CHF, renal and hepatic disorders, hypertension

Dose

Edema or hypertension

Pediatric: **PO** 0.07 mg/kg/24 hrs or 2 mg/m²/24 hours

Adult: **PO** 1-4mg qd-bid

Adverse Reactions

Hypokalemia, electrolyte imbalances, hyperglycemia, GI disturbances

Contraindications

Hypersensitivity to trichlormethiazide or other sulfonamides, anuria

16.5.2. Loop Diuretics

Bumetanide

C⁴ Unknown¹

Dosage Forms

Busix[®] 0.5mg/2ml/amp <CBUMET1>

Busix[®] 1mg/tab <KBUMETA>

Use

Congestive heart failure, edema, hypertension

Dose

Edema

Adult:

IM/IV 0.5-1mg over 1-2 min, give a second and third dose at intervals of 2-3 hrs; **max: 10mg/day**

PO 0.5-2 mg, usually given single dose **max: 10mg/day**

Adverse Reactions

Hyperuricemia, hypochloremia, hypokalemia

Precautions

不可與鋰鹽同時給藥，會導致高鋰血清濃度。

Furosemide

C⁴ Unknown¹

Dosage Forms

Furosemide[®] 20mg/2ml/amp <CFUROSE>

Rasitol[®] 40mg/tab <KFUROS1>

Use

Hypertension, edema

Dose

Edema

IM/IV

Children: 1mg/kg/dose q6-12h; **max: 6mg/kg/dose**

Adults: 20-40mg (rate < 4 mg/min), repeat after 2 hours or increased 20 mg until response

PO

Children: 1-2mg/kg/dose; **max: 6mg/kg/dose** (no more frequently than 6 hrs)

Adults: 20-80mg q6-q8h; **max: 600mg/day**

Adverse Reactions

Hyperuricemia, hypomagnesia, electrolyte imbalance, hyperglycemia, muscle spasms

Precautions

1. 忌酸性溶液，必要時可以 NS, LR, D5W 調整 pH 值。
2. 須高劑量注射時，以不超過 4mg/min 之靜脈輸注速率給藥。

16.5.3. Potassium-Sparing Diuretics

Spironolactone

C⁴ Safe¹

Dosage Form

Spiron[®] 25mg/tab <KSPIRON>

Use

Essential hypertension, diagnosis and treatment of primary hyperaldosteronism, edema and ascites associated with congestive heart failure, liver cirrhosis or nephrotic syndrome

Dose

Edema, hypertension

PO 25-200mg/day; max: 400mg/day

Diagnosis of primary hyperaldosteronism

Long test **PO 400mg/day** for 3-4 wks, short test 400mg/day for 4 days

Primary hyperaldosteronism

PO 100-400mg/day; max: 400mg/day

Adverse Reactions

Gynecomastia, GI upset, somnolence, menstruation disorder, impotence

16.5.4. Carbonic Anhydrase Inhibitors

Acetazolamide

C⁴ Unknown¹

Dosage Form

Acetazolamide[®] 250mg/tab <KACETA4>

Use

Edema, epilepsy, glaucoma, altitude sickness

Dose

Edema

PO 250-375mg/day

Epilepsy

PO 8-30mg/kg/day q8-12h

Glaucoma

PO 250-1000mg/day qd-qid

Altitude sickness (prophylaxis)

PO 500-1000mg/day bid-qid

Adverse Reactions

Acidosis, hematuria, dysurea, glaucoma, dry mouth

16.5.5. Potassium-Sparing diuretics and Thiazides

Amizide[®]

B⁴ Unknown¹

Dosage Form

1tab: Amiloride hydrochloride 5mg+Hydrochlorothiazide 50mg
<KAMILOR>

Use

Edema, hypertension

Dose

PO 1-2 tab qd; **max: 4 tab/day**

Adverse Reactions

Headache, weakness, nausea, anorexia, rash, dizziness, orthostatic effects

Contraindications

高血鉀(K>5.5mEq/L)、嚴重腎功能損傷

16.5.6. Osmotic Diuretics

Glycetose[®]

Dosage Form

1ml: Glycerin 100mg+ Fructose 50mg+ NaCl 9mg, 300ml/bot<CGLYCE1>

Use

Brain edema, brain obstruction, post and during cranial surgery, brain trauma, high ocular pressure, intracranial hemorrhage

Dose

IV 200-500ml qd-bid, rate of 500ml > 2-3 hrs

Adverse Reactions

Hematuria, hemoglobinuria

Precautions

- 1.需依肝腎功能調整劑量。
- 2.糖尿病患者建議降低劑量。

Mannitol

C⁴ Safe¹

Dosage Form

Maniton[®] 20%, 20g/100ml/bot <CMANNIT1>

Use

Prophylaxis and treatment of acute renal insufficiency during or after surgery, promotion of urinary excretion of toxic substances, reduction of intracranial pressure

Dose

IVD (rate: 3-10min) 0.25-0.5g/kg q4-6h, usual adults dose: 20-200g/day

Adverse Reactions

Electrolyte imbalance, chest congestion, dry mouth, chills

Precautions

若貯存溫度太低產生結晶時，可以 40-50°C 的水浴法加溫，待溶解後即可供注射用。

16.5.7. Diuretic Miscellaneous

Tolvaptan

B⁴ Unknown¹

Dosage Form

Samsca[®] 15mg/tab <KAMILOR>

Use

Hyponatremia

Dose

PO initial 15mg qd, may increase to 30 mg qd after at least 24 hours; **max: 60mg/day**

Adverse Reactions

Thirst, dry mouth, asthenia, constipation, pollakiuria or polyuria, hyperglycemia

Precautions

- 1.需每日監測血鈉濃度
- 2.血鈉濃度矯正速度：24 小時內 <10-12mEq/L 及 48 小時內 <18mEq/L
- 3.避免限制水分攝取，應告知病患依口渴狀況，繼續攝取水份

Contraindications

緊急需要快速升高血鈉濃度、患者無法產生口渴的感覺或無法對口渴產生適當的反應、低血容積性低血鈉症、與強力 CYP3A 抑制劑併用、無尿症患者、與高張生理食鹽水併用

17. RESPIRATORY AGENTS

17.1. Bronchodilators

17.1.1. Sympathomimetics Beta-2-Agonists

Fenoterol

B¹ **Unknown¹**

Dosage Forms

Strolin[®] liquid 30mg/60ml/bot <KFENOT2>

Use

Prophylaxis and treatment of bronchospasm in bronchial asthma, obstructive bronchitis, chronic bronchitis, emphysema

Dose

Children <1 yr: **PO** 2.5ml bid

Children 1-6 yrs: **PO** 2.5-5ml tid

Children 6-14 yrs: **PO** 5ml tid

Adult: **PO** 5-10ml tid

Adverse Reactions

Tremor of the fingers, restlessness, dizziness, fatigue, sweating

Precautions

開封後於室溫下可存放 2 個月。

Indacaterol

C⁴ **Unknown¹**

Dosage Forms

Onbrez[®] Breezhaler 105mcg/cap, 30cap/box <WINDACA>

Use

Chronic obstructive pulmonary disease

Dose

INHL 150mcg once daily at the same time; **max: 300mcg once daily**

Adverse Reactions

Nasopharyngitis, cough, upper respiratory tract infection, headache

Precautions

1. 不可吞服膠囊。
2. 膠囊需存放於鋁箔中，需使用時才取出。
3. 不可用於 18 歲以下病患及氣喘治療。

Procaterol

Unknown¹

Dosage Forms

Meptin[®] 25mcg/tab <KPROCA1>

Pocathma[®] liquid 5mcg/ml, 60ml/bot <KPROCA2>

Use

Bronchial asthma, chronic bronchitis, emphysema

Dose

Tablet

Children >6yrs: **PO** 25mcg bid or hs

Adults: **PO** 50mcg bid or hs

Liquid

Children <6yrs: **PO** 0.25ml/kg bid

Children >6yrs: **PO** 5ml bid-hs

Adult: **PO** 10ml bid-hs

Adverse Reactions

Palpitation, headache, tachycardia, tremor

Precautions

開封後於室溫下可存放 2 個月。

Salbutamol

C⁴ Unknown¹

Dosage Forms

Ventolin[®] inhaler 100mcg/puff, 200puffs/bot <WSALBU3>

Use

CPD, exercise-induced bronchospasm, asthma

Dose

預防急性氣喘發作或運動前

Children: **INHL** 100mcg/dose before challenge, **max: 200mcg/dose**

Adult: **INHL** 200mcg/dose before challenge

急性氣喘治療

INHL 200mcg/dose, **max: 4dose/day**

Adverse Reactions

Tremor of skeletal muscles, palpitation, peripheral vasodilatation, headache

Precautions

使用前先充分振搖，第一次使用需對空氣試噴兩下

Terbutaline

B¹ Safe¹

Dosage Forms

Bricanyl[®] 5mg/2ml/vial <WTERBUT>

Use

Bronchial asthma, reversible bronchospasm in bronchitis

Dose

Body weight <20kg: **INHL** 2.5mg qid

Body weight >20kg: **INHL** 5mg qid

Adverse Reactions

Tremor, paradoxical, bronchospasm, headache, palpitation, tachycardia

Precautions

開封後，若未用完可在噴霧劑之儲存槽存於 24 小時。

17.1.2 Methylxanthiens

Aminophylline

C¹ Unsafe¹

Dosage Forms

Asiphylline[®] 250mg/10ml/amp <CAMIN04>

Use

Asthma, chronic obstructive pulmonary disease, exercise-induced

bronchospasm

Dose

IV

Loading dose:

Children: 5mg/kg q6h

Adult: 6mg/kg given over 20 min

Maintenance dose:

Aminophylline maintenance infusion rate (mg/kg/hr)		
Patient group	First 12 hrs	Beyond 12 hrs
Neonates to infant 6 mons	individualized	
Children 6 mons-9 yrs	1.2	1
Children 9-16 yrs, young adult smoker	1	0.8
Otherwise healthy non smoker adult	0.7	0.5
Older patients and those with corpulmonale	0.6	0.3
Patients with CHF, liver disease	0.5	0.1 - 0.2

Adverse Reactions

Insomnia, headache, GI disturbances, nervousness, dizziness

Theophylline

C¹ Unsafe¹

Dosage Forms

Telin[®] 200mg/S.R. tab <KTHEOP4>

Ventol[®] liquid 5.34mg/ml, 60ml/bot <KTHEOP3>

Use

Asthma, chronic obstructive pulmonary disease

Dose

Telin[®] SR:

35-50 kg: **PO** 125mg bid-tid

>50 kg: **PO** 250mg bid-tid

Ventol[®] liquid

Neonates: **PO** 1-1.5mg/kg bid

Children 1-15yrs: **PO** initial 12-16mg/kg/day q4-6h, maintance

20mg/kg/day q4-6h; **max: 600mg/day**

Adverse Reactions

GI upset, nervousness, headache, insomnia, tremor

Precautions

- 1.需依肝功能調整劑量。
- 2.喝茶、咖啡、可樂、巧克力及抽煙或大麻將影響茶鹼的作用。
- 3.Telin SR 不可咬碎。

17.1.3. Anticholinergics

Ipratropium

B¹ Unknown¹

Dosage Forms

Atrovent[®] nebulizer soln 0.5mg/2ml/vial <WIPRAT2>

Use

Asthma, chronic obstructive pulmonary disease

Dose

Children ≥12 yrs and adults: **INHL** 0.5mg 3-4times/day

Adverse Reactions

Bitter taste, dry mouth, nasal congestion, nasal dryness

Combivent UDV

C¹ Unknown¹

Dosage Forms

1 vial: Ipratropium 0.5mg + Salbutamol 2.5mg/2.5ml/vial <WCOMBIV>

Use

Asthma, chronic obstructive pulmonary disease

Dose

Children ≥ 12 yrs and adults: **INHL** 1 vial 3-4 times/day

Adverse Reactions

Headache, dizziness, nervous, tachycardia, palpitations

Tiotropium

C¹ Unknown¹

Dosage Forms

Spiriva respimat[®] inhalation solution 2.5mcg/puff, 60puff/bot <WTIOTR1>

Use

Chronic obstructive pulmonary disease

Dose

INHL 2 puff qd

Adverse Reactions

Xerostomia, upper respiratory infection, sinusitis, pharyngitis, constipation

Precautions

1. Narrow-angle glaucoma, prostatic hyperplasia or bladder neck obstruction
2. 開封後保存期限：3 個月
3. 為維持性支氣管擴張劑，不可用於急性期急救用藥。
4. 當瓶身的劑量顯示器指針進入紅色區域時，表示大約僅剩 7 天藥量。

17.2. Leukotriene Receptor Antagonists**Montelukast**

B¹ Unknown¹

Dosage Forms

Singulair[®] 4mg/chewable tab <KMONTE1>

Singulair[®] oral granules 4mg/pack <KMONTE4>

Singulair[®] 5mg/chewable tab <KMONTE2>

Montelukast[®] 10mg/F.C tab <KMONTE3>

Use

Allergic rhinitis, seasonal asthma (prophylaxis and chronic treatment)

Dose

Children 2-5 yrs: **PO** 4mg hs

Children 6-14 yrs: **PO** 5mg hs

Adults: **PO** 10mg hs

Adverse Reactions

Abdominal pain, headache, thirst

Precautions

1. Singulair 4mg 及 5mg 為咀嚼錠請嚼碎後吞服。
2. 顆粒劑可直接口服，或與一匙冷或室溫的軟性食物(如蘋果泥)混合服用，亦可溶於一茶匙(5ml)冷或室溫的嬰兒奶粉或母乳中。
3. 開封後需立即服用(15 分鐘內)，已溶解或混合之顆粒劑切勿保存。

17.3. Respiratory Inhalant Products

17.3.1. Inhaled Steroids

Budesonide

C¹ Safe¹

Dosage Forms

- Pulmicort[®] respules nebulising suspension 1mg/2ml/vial <WPULM02>
Pulmicort[®] nasal spray 64mcg/dose, 120 doses/bot <WPULM01>
Pulmicort[®] turbuhaler 200mcg/dose, 100 doses/bot <WPULM03>

Use

Rhinitis, asthma

Dose

Respules

Children: **INHL** 0.5-1mg bid, maintenance 0.25-0.5mg

Adults: **INHL** 1-2mg bid, maintenance 0.5-1mg

Nasal spray

Children >6yrs and adults: **INHL** 64-128mcg qd-bid

Turbuhaler

Children ≥6yrs: **INHL** initial 1puff bid; **max: 2puffs bid**

Adults: **INHL** 1-2puff bid; **max: 4puffs bid**

Adverse Reactions

Candidiasis infection, nasal irritatin, hoarseness, throat irritation

Precautions

1. 吸入劑用後請用清水漱口。
2. Pulmicort turbuhaler: 窗口出現紅色時，約剩下 20 次劑量。

Fluticasone

C⁴ Unknown¹

Dosage Forms

- Flixotide[®] evohaler 50mcg/dose, 120 doses/bot <WFLUT05>
Avamys[®] nasal spray 27.5mcg/spray, 120 spray/bot <WFLUT06>
Fluticasone[®] cream 0.05%, 5g/tube <WFLUT03>參閱 p.143

Use

Rhinitis, asthma

Dose

Inhalation

Children 4-11 yrs: **INHL** 50-100mcg bid

Children >12 yrs and adults: **INHL** 100-1000mcg bid

Intranasal

Children 2-12 yrs: 55mcg once daily administered as 1spray in each nostril;

max: 110mcg/day

Children >12 yrs and adults: initial 110mcg once daily administered as 2 sprays (27.5mcg/spry) in each nostril, maintain 55mcg once daily

Adverse Reactions

Candidiasis infection, nasal irritatin, hoarseness, throat irritation

Precautions

Inhalation: 使用後以清水漱口，避免口腔念珠菌感染。

Contraindications

1. Inhalation: <4 yrs 禁用

2. Intranasal: 有鼻潰瘍、鼻手術、鼻傷口者，傷口癒合前請勿使用。

Mometasone

C⁶ Unsafe¹

Dosage Forms

Nasonex[®] aqueous nasal spray 50mcg/dose, 140dose/bot <WMOMET3>

Use

Allergic rhinitis

Dose

Allergic rhinitis

Children >12yrs and adult: **Intranasal** 100mcg qd in each nostril, upon symptom control, may consider dose reduction to 50 mcg qd in each nostril

2~11yrs children: **Intranasal** 50 mcg qd in each nostril

Nasal polyyps

>18 yrs adult: **Intranasal** 100 mcg bid in each nostril, upon symptom control, may consider dose reduction to 50mcg qd in each nostril

Adverse Reactions

Headache, epistaxis, pharyngitis

Contraidcations

鼻腔手術、鼻腔有傷口或鼻腔黏膜有感染。

Triamcinolone

C¹ Unsafe¹

Dosage Forms

Shincort[®] 40mg/ml/amp <CTRIAM2> 參閱p.228

Nincort[®] oral paste 0.1% 6g/tube <WTRIAM3> 參閱 p.329

Nasacort[®] nasal spray 55mcg/puff, 120puffs/bot<WTRIAM4>

Use

Nasal spray: symptoms of seasonal and perennial allergic rhinitis

Dose

Children >12yrs and adult: **Intranasal** initial 2 sprays qd in each nostril , mantaince 1 spray qd in each nostril

Children 6-12yrs: **Intranasal** 1spray qd in each nostril

Adverse Reactions

Rhinitis, headache, pharingitis, epistaxis, nasal irritation

Precautions

1. 開封後請於 2 個月內使用完畢。

2.12 歲以下兒童不建議使用超過 3 個月。

Contraindications

鼻噴劑禁用於 6 歲以下兒童。

17.3.2. Inhaled Steroids and Bronchodilators

Symbicort® turbuhaler

C⁴ Unknown¹

Dosage Forms

1 dose: Budesonide 160mcg+Formoterol 4.5mcg, 120 doses/bot
<WSYMBI2>

Use

Asthma, chronic obstructive pulmonary disease, exercise-induced bronchospasm

Dose

Adults and children >12 yrs: **INHL** 1-2 dose bid; **max: 8dose/day, 4puff/dose**

Children >6yrs: **INHL** mantaince 1dose bid; **max: 2dose/day**

Adverse Reactions

Candidiasis infection, tremor, palpitation, throat irritation

Precautions

- 1.使用後以清水漱口，避免口腔念珠菌感染。
- 2.顯示視窗：每隔 10 個劑量才會有 1 次數字標示，窗口出現紅色時約剩下 10 次劑量。
- 3.兒童不可使用於急性緩解。

Contraindications

<4 yrs 禁用。

Seretide®

C⁴ Unknown¹

Dosage Forms

1 dose: Fluticasone 100mcg+ Salmeterol 50mcg, accuhaler 60DS/bot
<WSERET1>

1 dose: Fluticasone 250mcg+ Salmeterol 50mcg, accuhaler 60DS/bot
<WSERET2>

1 dose: Fluticasone 500mcg+ Salmeterol 50mcg, accuhaler 60DS/bot
<WSERET6>

1 dose: Fluticasone 50mcg+ Salmeterol 25mcg, evohaler 120DS/bot
<WSERET4>

1 dose: Fluticasone 250mcg+ Salmeterol 25mcg, evohaler 120DS/bot
<WSERET5>

Use

Asthma, chronic obstructive pulmonary disease, exercise-induced bronchospasm

Dose

Accuhaler

Children >4 yrs: **INHL** 1 dose bid (Seretide® 100)

Children >12 yrs and adults: **INHL** 1 dose bid (Seretide® 100 or Seretide®

250 or Seretide® 500)

Evohaler

Children >4 yrs: **INHL** 2 dose bid (Seretide® 50)

Adults: **INHL** 2 dose bid (Seretide® 50 or Seretide® 250)

Adverse Reactions

Candidiasis infection, tremor, palpitation

Precautions

1. 使用後以清水漱口，避免口腔念珠菌感染。

2. Seretide evohaler: 使用前須先充分振搖吸入器。

3. Seretide accuhaler: 吸入後有甜味;每使用 1 個劑量窗口數字標示 1 次，當窗口出現紅色時約剩下 5 次劑量。

Contraindications

<4 yrs 禁用

17.3.3. Inhaled Anticholinergic agents and Bronchodilators

Anoro® ellipta

C⁴ Unknown¹

Dosage Forms

1 puff: Umeclidinum 55mcg+Vilanterol 22mcg, 30 doses/bot
<WANORO>

Use

Chronic obstructive pulmonary disease (COPD)

Dose

INHL 1puff qd; **max: 1puff/day**

Adverse Reactions

Pharyngitis, diarrhea, pain in extremity

Precautions

1. 不適用於緩解急性支氣管痙攣或治療氣喘。

2. 藥品開始使用後可保存 6 週。

Contraindications

嚴重乳蛋白過敏

17.3.4. Mast Cell Stabilizers

Cromolyn

B¹ Unknown¹

Dosage Forms

Cromo® eye drops 20mg/ml, 10ml/bot<WCROM01>參閱 p.279

Allergocrom® nasal spray 2.8mg/spray, 100sprays/15ml/bot <WCROM04>

Use

Allergic rhinitis, asthma, prevention of exercise-induced bronchospasm

Dose

Intranasal 1 spray in each nostril, 4-6spray/day

Adverse Reactions

Irritation of nasal mucosa, throat irritation, coughing, transient bronchospasm

Ketotifen

C⁴ Unknown¹

Dosage Forms

Asumalife[®] 1mg/cap <KKETOTI>

Use

Prophylactic and treatment of asthma, treatment of allergic condition

Dose

Children >3 yrs and adults: **PO** 1mg bid

Adverse Reactions

Drowsiness, dizziness, weight gain, dry mouth

17.4. Lung Surfactants

Beractant

Unknown¹

Dosage Forms

Survanta[®] intratracheal suspension 200mg/8ml/vial <CBERACT>

Use

Neonatal respiratory distress syndrome

Dose

Intratracheal administration only

Prevention and treatment: 100mg/kg, preferably within 15min of birth, up to 4 dose if needed during first 48 hours of life, no more frequently than q6h

Adverse Reactions

Transient bradycardia and oxygen desaturation, endotracheal tube reflux, pallor, vasoconstriction, hypotension, hypocarbia, hypercarbia, apnea

Precautions

- 1.本品應避光冷藏 2-8°C。
- 2.未開封品項可在溫熱後 24 小時內放回冰箱，但此情形不應超過一次。
- 3.使用前應於室溫回溫 ≥ 20 分鐘或以手溫溫熱至少 8 分鐘。

17.5. Antihistamines

17.5.1. Sedations

Chlorpheniramine

C⁴ Unsafe¹

Dosage Forms

Chlorpheniramine[®] 5mg/amp <CDIPHEN>

Use

Allergic rhinitis, allergic reactions

Dose

Children: **IM/IV/SC** 0.0875mg/kg or 2.5mg/m² q6h

Adults: **IM/IV/SC** 5-10mg q8h

Adverse Reactions

Constipation, diarrhea, nausea, vomiting, somnolence

Cyproheptadine

B⁴ Unsafe¹

Dosage Forms

Pilian[®] 4mg/tab <KCYPR01>

Cypromin[®] 24mg/60ml/bot <KCYPR02>

Use

Allergic rhinitis, allergic reactions, urticaria

Dose

Children 2-6 yrs: **PO** 1mg tid-qid; max: 12mg/day

Children 7-14 yrs: **PO** 2mg tid-qid; max: 16mg/day

Adults: **PO** 4mg tid-qid

Adverse Reactions

CNS depression, dry mouth, drowsiness, increased appetite

Precautions

1. Hyperthyroidism, history of bronchial asthma, hypertension

2. 可能有思睡感；服藥期間請小心開車、操作機械及避免飲酒。

3. 水劑開瓶後，於常溫下可存放約 2 個月。

Contraindications

Angle-closure glaucoma, concurrent MAOI therapy

Dexchlorpheniramine

B⁴ Unknown¹

Dosage Forms

Somin[®] 2mg/tab <KDEXCHL>

Use

Allergic rhinitis, common cold

Dose

Children 2-5 yrs: **PO** 0.5mg q4-6h

Children 6-11 yrs: 1mg q4-6h

Adults: **PO** 2mg q4-6h

Adverse Reactions

Drowsiness, dry of mouth/nose, epigastric distress, nausea, vomiting

Precautions

Narrow angle glaucoma, bladder neck obstruction, prostatic hypertrophy

Hydroxyzine

C⁴ Unknown¹

Dosage Forms

Vistaril[®] 25mg/cap <KHYDR04>

Use

Anxiety, preoperative sedative, antipruritic

Dose

Anxiety

Children <6yrs: **PO** 50mg/day

Children >6yrs: **PO** 50-100mg/day

Adult: **PO** 50-100mg qid

Preoperative sedative

Children: **PO** 0.6mg/kg

Adult: **PO** 50-100mg

Antipruritic

Children ≤ 6 yrs: **PO** 50mg/day

Children >6 yrs: **PO** 50-100mg/day

Adults: **PO** 25mg tid-qid

Adverse Reactions

Drowsiness, dry mouth, headache

Precautions

1. Asthma, concurrent administration with central nervous system depressants

2. 需依肝功能調整劑量

Mequitazine

Unknown¹

Dosage Forms

Mekin[®] 5mg/tab <KMEQUIT>

Use

Allergic rhinitis, hay fever, urticaria, eczema, ocular allergies

Dose

Children: **PO** 0.25mg/kg/day bid

Adults: **PO** 5mg bid

Adverse Reactions

Dry mouth, disturbance of visual accommodation

Precautions

Hepatic diseases, glaucoma, prostatic hypertrophy, epilepsy

Contraindications

Premature infants

17.5.2. Non-Sedations

Cetirizine

B⁴ Unknown¹

Dosage Forms

Cetia[®] 10mg/tab <KCETIR1>

Cetirizine[®] 60mg/60ml/bot <KCETIR2>

Use

Seasonal rhinitis, conjunctivitis, allergic rhinitis, urticaria, allergic pruritus

Dose

Children ≥ 6 years and adult: **PO** 10mg daily.

Adverse Reactions

Headache, dry mouth, fatigue, somnolence

Precautions

Hepatic dysfunction, renal insufficiency

Levocetirizine

B⁴ Unsafe³

Dosage Forms

Xyzal[®] 5mg/tab <KLEVOCE>

Use

Allergic rhinitis, chronic urticaria

Dose

Children > 6 years and adult: **PO** 5mg qd

Adverse Reactions

Dry mouth, fatigue, headache, dizziness

Precautions

需依腎功能調整劑量

Loratadine

B⁴ Safe¹

Dosage Forms

Clatine[®] syrup 60mg/60ml/bot <KLORA02>

Use

Seasonal allergic rhinitis, chronic idiopathic urticaria

Dose

>30kg children 2-12 yrs: **PO** 10ml qd

≤30kg children 2-12 yrs: **PO** 5ml qd

>12 yrs Children and adults: **PO** 10mg qd

Adverse Reactions

Headache, somnolence, fatigue, dry mouth

Precautions

需依肝腎功能調整劑量

LoraPseudo[®]

C⁴ Unknown¹

Dosage Forms

1 tab: Loratadine 5mg+Pseudoephedrine 120mg <KLORA03>

Use

Relief of symptoms associated with allergic rhinitis and the common cold

Dose

Children >12yrs and adults: **PO** 1 tab qd-bid

Adverse Reactions

Dizziness, headache, dry mouth, fatigue, insomnia, somnolence

Precautions

Glaucoma, stenosing peptic ulcer, prostatic hypertrophy

Contraindications

MAOI therapy, narrow angle glaucoma, severe coronary artery disease, hyperthyroidism

Fexofenadine

C⁴ Safe¹

Dosage Forms

Allegra[®] 180mg/tab <KFEXOFE>

Use

Seasonal allergic rhinitis

Dose

PO 180mg qd

Adverse Reactions

Drowsiness, fatigue, dyspepsia, otitis media, headache, insomnia, nausea, upper respiratory infection

Precautions

Safety and efficacy not established in children < 6 yrs of age

17.5.3. H₁ Antagonist

Cinnarizine

C¹ Unknown¹

Dosage form

Cinnazine[®] 25mg/tab <KCINNAR> 參閱 p.186

17.6. Cold Preparations

Peace[®]

Dosage Forms

1 tab: Pseudoephedrine 60mg+Triprolidine 2.5mg <KACTI01>

Syrup 60ml/bot, 1ml: Pseudoephedrine 6mg+Triprolidine 0.25mg
<KACTI02>

Use

Nasal congestion, sneeze, allergic rhinitis

Dose

Tablet:

Children 3-6yrs: **PO** 0.25 tab tid-qid

Children 6-12yrs: **PO** 0.5 tab tid-qid

Children ≥ 12 yrs and adults: **PO** 1 tab tid-qid

Liquid:

Children 4 mons-2 yrs: **PO** 1.25ml tid-qid

Children 3-4 yrs: **PO** 2.5ml tid-qid

Children 5-6 yrs: **PO** 3.75ml tid-qid

Children 7-12yrs: **PO** 5ml tid-qid

Children >12yrs and adult: **PO** 10ml tid-qid

Adverse Reactions

Occasionally mild sedation or insomnia

Contraindications

Excessive sedation, hypertension, narrow angle glaucoma, urinary retention

Precautions

需依腎功能調整劑量

17.7. Antitussives and Expectorants

Benzonatate

C⁴ Unknown¹

Dosage Forms

Bensau[®] 200mg/cap <KBENZO1>

Use

Symptomatic relief of nonproductive cough

Dose

PO 200mg tid; **max: 600mg/day**

Adverse Reactions

Sedation, dizziness, headache, skin eruption, GI upset, chills, allergy

Precautions

不宜磨粉或咬碎。

Contraindications

Safety and efficacy not established in children < 14 yrs of age

Consrine[®]

Dosage Forms

1ml: Codeine 0.48mg+Chlorpheniramine 0.25mg+Methylephedrin 1.6mg+Glycyrrhizic acid 0.25mg, 120ml/bot <KCOUSON>

Use

Symptomatic relief of common cold

Dose

Adults: **PO** 5-10ml tid

Precautions

Addiction on prolonged use

Contraindications

含 codeine 不建議用於 2 歲以下幼兒。

Liquid Brown mixture[®]

Dosage Forms

1ml: Glycyrrhiza extract 0.12ml + Tincture opium camphor 0.12ml+ Potassium antimony tartrate 0.24ml, 120ml/bot <KLIQUI1>

Use

Symptomatic relief of cough

Dose

PO 常用劑量 2-10ml，依年齡遞減

Adverse Reactions

Respiratory depression, arrhythmia, abnormal blood pressure, somnolence, nausea, vomiting

Precaution

1. 一歲以下嬰兒不宜長期使用。
2. 不得併服含酒精飲料。
3. 使用前請搖勻。
4. 開封後室溫可存放 15 天。

Contraindications

1. 嚴重呼吸抑制病患、嚴重肝機能障礙、心肌不全、急性酒精中毒患者均禁用。
2. 孕婦及哺乳婦：動物試驗會產生畸型胎，且會由母乳產生新生兒呼吸抑制，故除非醫療上必要，一般不建議給藥。

Codicon-U[®] (Medicon-A)

Dosage Forms

1 cap: Dextromethorphan 20mg+ Lysozyme 20mg+ K cresolsulfonate 90mg <KMEDICO>

Use

Antitussive and expectoration

Dose

PO 1 cap tid-qid

Adverse Reactions

Sleepiness, headache, nausea, vomiting, constipation, anorexia

Precautions

1. Pregnancy
2. May affect ability to drive or operate machinery

Medicon[®]

Dosage forms

1ml: Dextromethorphan 2.5mg+ K cresolsulfonate 15mg, 60ml/bot
<KMEDI01>

Use

Symptomatic relief of cough, expectoration

Dose

Children 3 mon-7 yrs : PO 3-8ml/day;

Children 8-14 yrs: PO 9-16ml/day tid-qid

Adults: PO 18-24ml/day tid-qid

Secorine[®]

Dosage Forms

1ml: Chlorpheniramine 0.1mg+ Guaifenesin 5.0mg+ DL- methylephedrine
1.0mg, 120ml/bot <KSECORI>

Use

Symptomatic relief of common cold

Dose

Children 6-12 yrs : PO 5ml tid-qid

Adults: PO 10ml tid-qid

17.8. Mucolytics

Acetylcysteine

B¹ **Unknown¹**

Dosage Forms

Hidonac[®] 5g/25ml/bot <CACETY1> 參閱p.330

Actein Effervescent Tablets[®] 600mg/tab<KACETYL>

Use

Mucolytics

Dose

Actein Effervescent Tablets[®] :

Adult and children ≥ 6yrs: PO 1 tab qd-bid. 置於玻璃容器中，加少量的水溶解混勻直接飲用。

Adverse Reactions

Rhinorrhea, drowsiness, chest tightness, stomatitis, nausea, vomiting, fever, bronchospasm

Ambroxol

Unknown¹

Dosage Forms

Musco[®] 30mg/tab <KAMBR01>

Musco[®] 3mg/ml, 180mg/60ml/bot <KAMBR02>

Use

Mucolytics

Dose

Tablet

Children 5-10yr: **PO** 15mg tid

Children ≥10 yrs and adults: **PO** 30mg tid

Liquid

Children: **PO** 1.2-1.6mg/kg/day bid-tid

Adverse Reactions

Mild GI effects, allergic reactions

Precautions

開封後常溫下可保存 7 天。

Bromhexine

Unknown¹

Dosage Forms

Bisco[®] 8mg/tab <KBROMHE>

Use

Expectorant and mucolytics, sicca syndrome, Sjogren's syndrome

Dose

Children <6 yrs: **PO** 4mg tid

Children 6-14 yrs: **PO** 8mg tid

Adults: **PO** 8-16mg tid

Adverse Reactions

Nausea, epigastric pain, vomiting, headache, dizziness, skin rash

Mercaptoethanesulphonate(Mesna)

B¹ Unknown¹

Dosage Forms

Uromitexan[®] 400mg/4ml/amp <CMESNA> 參閱 p.86

Siruta[®] 200mg/ml,3ml/amp <WMESNA>

Use

Mucolytics

Dose

Nebulizations

INHL 1-2amp q6-24h

Instillations

INHL 滴注於氣管內或氣切之套管 1-2ml mesna 以等體積蒸餾水或生理食鹽水稀釋，每小時滴注一次，直到分泌物液化並排出。

治療上額竇炎時，灌洗後竇內滴注 2-3ml 不經稀釋的 mesna，每隔 2-3 天可重複一次

Adverse Reactions

Irritable cough

Precautions

- 1.不可直接注射
- 2.不可與其他藥品混合於噴霧器內，開瓶後未使用完之藥液須丟棄。
- 3.可不經稀釋或以等體積蒸餾水或生理食鹽水稀釋後使用
- 4.Sirutau[®]因使用過程會產生白色結晶沉澱物，故不建議使用在呼吸器的病患，會導致機器阻塞；使用在霧化器的病人，則建議使用後立刻清洗白色沉澱物(此為正常現象，不影響藥物品質和療效)。

Contraindications

無黏液阻塞之氣喘、對噴霧劑耐受性缺乏者

17.9. Nasal Decongestants

Epinephrine

C⁴ Unknown¹

Dosage Forms

Adrenaline[®] 1mg/ml/amp <CEPINEP> 參閱p.126

Bosmin[®] 0.1%, 500ml/bot <WEPINEP>

Use

Bronchodilator and vasoconstriction

Dose

Severe anaphylactic shock

Children: **IM/SC** initial 0.3mg, may be repeated q15min 3-4 times

Adults:

Slow IV 0.1-0.25mg, may be repeated q5-15 min;

SC/IM initial 0.5mg, 0.025-0.05mg may be repeated q5-15 min as needed

Severe asthma

Children: **SC** (1: 1000), 0.01mg/kg; **max: 0.5mg/dose**, may be repeated at 20 min to 4hr

Adults: **SC** 0.2-0.5 mg; **max: 1mg/dose**, may be repeated at 20 min to 4hr intervals

Cardiac resuscitation

Children: **IV** 0.005-0.01mg/kg

Adults: **IV** 0.1-1mg may be repeated q5min

Bosmin[®] 外用：

手術時外傷、鼻、拔牙後、齒齦等局部出血的預防與治療、鼻、口腔粘膜的充血、腫脹，以原液 2-5 滴或五倍的稀釋液。

Adverse Reactions

Palpitation, chest pain, anxiety, headache, tremor, dizziness

Precautions

Heart disease, coronary insufficiency (angina), hypertension

Oxymetazoline

Unsafe¹

Dosage Forms

Sindecon[®] nasal spray 0.05%, 15ml/bot <WOXYME>

Use

Conjunctivitis, rhinitis

Dose

Children ≥ 6 yrs and adults: 1 spray qd-tid

Adverse Reactions

Local stinging or burning, sneezing, dry mouth and throat, nausea, headache

Precautions

Avoid excessive use in children, concurrently MAOI, hypertension, hyperthyroidism, cardiac diseases, diabetes mellitus

17.10. Ear Preparations**Ofloxacin****C⁴ Unknown¹****Dosage Forms**

Tarivid[®] 0.3%, 5ml/bot <WOFLOXA>

Use

Otitis externa and acute otitis media

Dose

6-10 drops into the ear bid for 10days

Adverse Reactions

Earache, superinfection

Precautions

1. When inflammation is extended into the region around the tympanum
2. 健規：每次處方以一(十日)瓶為限。

17.11. Mouth and Lip Preparations**Chlorhexidine****Dosage Forms**

Parmason[®] 0.2%, 200ml/bot <WCHLOR3>

Use

Cleansing and disinfection of mouth infection

Dose

10-20ml rinse for 20-30 seconds bid-tid

Adverse Reactions

Conjunctive irritation, discolouration of the tongue and teeth, burning sensation of the tongue, taste disturbances

Dexamethasone**Unsafe¹****Dosage Forms**

Dexamethasone[®] 5mg/ml/amp <CDEXAME> 參閱p.225

Decone[®] 0.5mg/tab <KDEXA01> 參閱p.225

Dorison[®] 4mg/tab <KDEXA02> 參閱 p.225

Zine[®] orabase 0.1%, 5g/tube <WDEXA02>

Use

Intractable stomatitis or glossitis associated with erosion or ulceration

Dose

Apply to the affected area once to several times daily

Adverse Reactions

Infection of the oral cavity (fungal or bacterial)

Precautions

Do not take food or fluid for a short time after application, not for eye use

Contraindications

Tuberculous, viral or other purulent infection of the oral cavity

Pilocarpine

C⁴ Unknown¹

Dosage Forms

Salagen[®] 5mg/tab <KPILOCA>

Isopto[®] Carpine oph drop 2%, 15ml/bot <WPILOC2> 參閱p.277

Use

Sjogren's syndrome, radiotherapy-induced xerostomia

Dose

Sjogren's Syndrome

PO 5mg q6h

Xerostomia

PO 5-10mg q8h; max: 10mg/dose

Adverse Reactions

Sweating, chill, flushing, nausea, rhinitis, dizziness, urinary frequency

Precautions

Significant cardiovascular disease, concurrent use of beta adrenergic antagonists

Triamcinolone

C⁴ Unknown¹

Dosage Forms

Shincort[®] 40mg/ml/vial <CTRIAM2> 參閱p.228

Nincort[®] oral paste 0.1% 6g/tube <WTRIAM3>

Nasacort[®] nasal spray 55mcg/puff, 120puffs/bot <WTRIAM4> 參閱p.316

Use

Stomatitis and lesions of the oral mucosa

Dose

Apply to the affected area qd-tid

Adverse Reactions

Infection of the oral cavity (fungal or bacterial)

Precautions

口內膏:使用後避免進食，建議飯後或睡前塗抹。

18. ANTIDOTES

18.1. For Acetaminophen

Acetylcysteine

B⁶ Unknown¹

Dosage Forms

Actein Effervescent Tablets[®] 600mg/tab<KACETYL> 參閱p.325

Hidonac[®] 5g/25ml/bot <CACETY1>

Use

Acetaminophen overdose

Dose

20 kg or less:

Loading Dose: **IV** 150 mg/kg in 3 mL/kg of body weight of diluent administered over 1 hr

Second dose: **IV** 50 mg/kg in 7 mL/kg of body weight of diluent administered over 4 hr

Third dose: **IV** 100 mg/kg in 14 mL/kg of body weight of diluent administered over 16 hr

>20kg to ≤40kg:

Loading dose:150mg/kg in 100ml of NS or D5W **IVF** over 1hr

Second dose:50 mg/kg in 250ml of NS or D5W **IVF** over 4hrs

Third dose:100 mg/kg in 500ml of NS or D5W **IVF** over 16hrs

Children>40kg and adult:

Loading dose:150mg/kg in 200ml of NS or D5W **IVF** for 15-30min

Second dose:50 mg/kg in 500ml of NS or D5W **IVF** over 4hrs

Third dose:100 mg/kg in 1000ml of NS or D5W **IVF** over 16hrs

Adverse Reactions

Rash, urticaria, pruritus, nausea, vomiting, diarrhea

Precautions

1. 開封後於室溫下可保存 24 小時。

2. 硫磺味是主成分本身的氣味，並非表示變質可能產生氣管痙攣，有支氣管氣喘或曾有氣喘病史者需小心使用

Charcoal

C⁶ Unknown¹

Dosage Forms

Carbomix[®] 61.5g/bot (50g activated charcoal/bot)<KCHARCO>

Use

Emergency treatment in poisoning by drugs and chemicals

Dose

Children: **PO** 0.5-1g/kg, may be repeated as needed

Adults: **PO** 1-2g/kg, repeat initial dose as soon as possible or 20-50g q2-6h (about 1-2bot/day)

Adverse Reactions

Vomiting, constipation, diarrhea, pulmonary aspiration, gastrointestinal obstruction

Precautions

- 1.加入蒸餾水到標籤上之紅色線(約 400ml)後徹底搖勻再使用。
- 2.本品對 alkalis, boric acid, lithium, alcohols, ethylene glycol, iron salts, mineral acids, cyanide methanol poisoning 無效
- 3.服用後會造成黑便。

Spherical absorptive carbon

Unknown¹

Dosage Forms

Kremezin[®] 2g/pack<KKREMEZ>

Use

Emergency treatment in poisoning by drugs and chemicals

Dose

<12yrs children: **PO** 依體重及中毒程度給予 10-50g (5-25 包)

>12yrs children and adult: **PO** 盡快使用 50-100g (25-50 包), 嚴重中毒時服用初始劑量後, 每 4-6 小時給予 20g(10 包), 連續數天。可於嘔吐或洗胃後使用。

Adverse Reactions

Constipation, diarrhea

Precautions

- 1.腐蝕性物質引起之中毒, 應避免使用。
- 2.消化性潰瘍、食道靜脈曲張、便秘傾向之患者應小心使用。
- 3.與其他藥品應間隔使用, 避免降低藥品藥效。
- 4.需自費。

18.2. For Irons

Deferoxamine

C⁶ Unknown¹

Dosage Forms

Desferal[®] 500mg/vial <CDEFER>

Use

Acute iron intoxication, chronic iron overload, iron overload secondary to congenital anemias, hemochromatosis

Dose

Acute iron intoxication

IV rate< 15mg/kg/hr

Children>3 yrs: 50 mg/kg/dose **IM** q6h or **IV** infusion 15mg/kg/hr, max: 6g/day

Adults: **IM/IV**: initial 1g then 0.5g q4h for 2 dose then subsequent 0.5g q4-12h PRN; max: 6g/day.

Chronic iron overload

Children>3 yrs: 20-40mg/kg/day **SC** over 8-24 hrs

Adults: **IM** 0.5-1g/day or 1-2 g/day **SC** over 8 to 24 h

Adverse Reactions

Injection site pain, fever, headache, nausea, decreased body growth, urticaria

Precautions

1. 鐵複合物的排除可能使尿液變成紅棕色。
2. 限用注射用水當溶劑，溶解後可再加入 NS、D5W、Ringer、LR、腹膜透析液等進一步稀釋。
3. 快速靜脈輸注易造成低血壓及休克。
4. 高劑量特別是用於治療血清鐵蛋白含量低之患者時，可能導致視覺及聽覺障礙。

Contraindication

配伍禁忌：Heparin

18.3. For Benzodiazepines

Flumazenil

C^d Unknown¹

Dosage Forms

Anexate[®] 0.5mg/5ml/amp <CFLUMAZ>

Use

Reversal benzodiazepine induced sedation and benzodiazepine overdose

Dose

Benzodiazepine overdose

Children: **IV** 0.01-0.02mg/kg over 15 sec, may repeat dose after 1 min;

max: 1mg/dose

Adults: **IV** 0.2mg over 30 sec, if no responses after 30 sec, then 0.3mg over 30 sec, may repeat with 0.5mg q60sec; **max: 3mg/dose**

Reversal benzodiazepine

Children: **IV** 0.01-0.02mg/kg over 15 sec, repeat dose after 1 min; **max:**

1mg/dose

Adults: **IV** 0.2mg over 15 sec, may repeat 0.2mg q60sec; **max: 1mg/dose**

Adverse Reactions

Dizziness, nausea, vomiting, headache, hyperventilation

Precautions

Drug and alcohol dependent patients, convulsion in epileptic patients

18.4. For High Dose Methotrexate

Leucovorin calcium (Calcium folinate)

C^d Unknown¹

Dosage Forms

Folina[®] 50mg/5ml/vial <CLEUCO3> 參閱 p.182

Folina[®] 15mg/tab <KCALC04>

Use

Colorectal cancer (combination with 5-FU to prolong survival), rescue therapy after high-dose methotrexate, folic acid antagonist overdosage

Dose

Advanced or metsatic colorectal cancer

Adult: **IV** 200mg/m² followed by 370mg/m² 5-fluorouracil (or 20mg/m²)

followed by 425mg/m² 5-fluorouracil) IV daily for 5 days repeat course q4w

Rescue therapy after high-dose MTX

Children and adult: **IM/IV/PO** 15mg (6-12mg/m²) q6h, start 12-24hrs after MTX infusion until serum MTX level <5×10⁻⁸M; when 48hrs after MTX administration, serum MTX level ≥ 10⁻⁶M, increase dose to 100mg/m² (if serum MTX level ≥ 2×10⁻⁶M, increase dose to 200mg/m²) for 48hrs or until serum MTX level <5×10⁻⁸M

Antidote to the folic acid antagonist

Trimetrexate toxicity: **IV** 40mg/m² q6h for 3days

Trimethoprim toxicity: **IV** 3-10mg/day until recovery of a normal blood count

Pyrimethamine toxicity: **IV** 5-50mg/day with pyrimethamine

Megaloblastic anemia due to folate deficiency

Children <12yrs: **PO** 0.25mg/kg/day

Adult: **PO** 10-20mg qd

Adverse Reactions

Diarrhea, nausea, vomiting, stomatitis, allergy

Precautions

1. 未開封的針劑需避光儲存於 2~8°C

2. 針劑可用 NS 或 D5W 稀釋，稀釋後於室溫下避光可穩定 24 小時

Contraindication

不可用於治療因維生素 B12 缺乏所引起的惡性貧血或其他巨紅血球性貧血

18.5. For Opioids

Naloxone

B⁶ Unknown¹

Dosage Forms

Naloxone[®] 0.4mg/ml/amp <CNALOXO>

Use

Narcotic overdose and complete or partial reversal opioid depression

Dose

Opioid overdose, known or suspected

Children: **IV/IM/SC** initial 0.01mg/kg, subsequent dose 0.1mg/kg

Adults: **IV/IM/SC** initial 0.4-2mg, repeat q2-3min as needed; if no response after 10mg, reconsider diagnosis of opioid toxicity

Postoperative opioid depression

Children: **IV** 0.005-0.01mg/kg, repeat q2-3min to desired degree of reversal

Adults: **IV** 0.1-0.2mg, repeat q2-3min to desired degree of reversal

Opioid addiction, diagnosis

Adults: **IV** 0.2mg, observe withdrawal symptoms for 30sec, if no responses, repeat 0.6mg then observe 20min; **SC** 0.8mg, observe for 20min

Adverse Reactions

Hypertension, hypotension, ventricular fibrillation, ventricular tachycardia, dyspnea, pulmonary edema, cardiac arrest

Precautions

1. 可用 NS 或 D5W 稀釋，稀釋溶液應於 24 小時內使用。
2. 不可與含有 bisulfite、metabisulfite、長鏈或高分子量陰離子或任何鹼性溶液混合使用。

18.6. For Organophosphates

Pralidoxime (PAM)

C⁶ Unknown¹

Dosage Forms

Pampara[®] 500mg/20ml/amp <CPRALID>

Use

Organophosphate poisoning

Dose

Children: 20-50 mg/kg **IV** over 15-30 minutes; **not to exceed 2g/dose**, then 10-20 mg/kg/hr **IV infusion**

Adult: 1-2 g in 100 ml NS **IV infused** over 15-30 minutes, repeat after 1 hour if muscle weakness persists; **IV continuous infusion** 500mg/hr; **max:12g/day**, general use for 3-7days

Adverse Reactions

Increased creatine kinase level, cardiac arrest, seizure, apnea, laryngeal spasm

Precautions

1. Slow IV infusion($\leq 200\text{mg}/\text{min}$) prevents tachycardia, laryngospasm, muscle rigidity
2. Renal impairment, myasthenia gravis Not effective in poisonings due to phosphorus/inorganic phosphates or organophosphates without anticholinesterase activity

18.7. For Anesthetics

Dantrolene

C⁶ Unknown¹

Dosage Forms

Dantrolen[®] 20mg/vial <CDANTRO>

Use

Malignant hyperthermia

Dose

IV 1mg/kg by continuous rapid push and continue until symptoms subside or to the **max cumulative dose: 10mg/kg**

Adverse Reactions

Diarrhea, asthenia, dizziness, somnolence, fatigue, malaise

Precautions

1. Dilute each 20mg with 60mg sterile water without preservatives. Shake until clear, then give by rapid direct IV injection

2.調配後需避光且於6小時內使用完畢。

18.7. For Methaemoglobinaemia

Methylthioninium

X⁶ Unsafe¹

Dosage Forms

Methylene blue[®] 100mg/10ml/amp <CMETHY1>

Use

Drug-induced methemoglobinemia

Dose

Children ≤ 3mon: **IV** initial 0.3-0.5mg/kg (= 0.03-0.05ml/kg) over 5min, repeat after 1hr as needed

Children > 3mon and adult: **IV** initial 1-2mg/kg (=0.2-0.4ml/kg) over 5min, repeat after 1hr as needed; **max cumulative dose: 7mg/kg**

Adverse Reactions

Nausea, abdominal and chest pain, headache, dizziness, arrhythmia

Precautions

- 1.由 aniline 或 dapson 引起之變性血紅素血症，最高治療建議累積劑量為 4mg/kg
- 2.以 D5W 50ml 稀釋，緩慢 IV 注射，注射時間須超過 5 分鐘。
- 3.開封稀釋後請立即使用。
- 4.會造成尿液及糞便成藍綠色，皮膚呈現藍色，可能會遮蓋氰化物中毒診斷。
- 5.中重度腎疾病須小心使用，需給予較低劑量(<1mg/kg)。

Contraindications

- 1.禁用 NS 稀釋及皮下或腦脊髓膜內注射
- 2.G6PD、氰化物中毒以 sodium nitrite 治療病患、chlorate 中毒、NADPH reductase 缺乏。

18.8. For Anticholinergic syndrome

Physostigmine

C⁶ Unknown¹

Dosage Forms

Anticholium[®] 0.4mg/ml; 2mg/5ml/amp <CPHYSOS>

Use

Reversal of toxic anticholinergic effects

Dose

Anticholinergic agent toxicity

Children: **IM/IV**(≤ 0.5mg/min) 0.02mg/kg, repeated at 5-10min intervals if inadequate patient response up to max dose of 2mg

Adult: **IM/IV**(≤ 1mg/min) 2mg, repeated if there are life-threatening signs

Anticholinergic adverse reaction, post anesthesia period

Adult: **IM/IV**(≤ 1mg/min) 0.5-1mg, repeated at 10-30min intervals if

inadequate patient response

Adverse Reactions

Nausea, vomiting, excessive salivation, diaphoresis, bradycardia, seizure

Precautions

1. 麻醉後不建議 physostigmine 與 atropine 併用，因 atropine 會拮抗 physostigmine 作用。
2. 療程結束後請將病歷影本及解毒劑使用報告書送交藥劑部

Contraindications

Asthma, gangrene, diabetes, cardiovascular disease, mechanical obstruction of the intestine or the urogenital tract, vagotonic state, concomitant choline ester or depolarizing neuromuscular blocker use(eg. succinylcholine)

18.9 For Cyanide

Nithiodote[®]

C^s Unknown³

Dosage Forms

Sodium nitrite 300mg/10ml+ Sodium thiosulfate 12.5g/50ml <KLACTUL>

Use

Acute, life-threatening cyanide poisoning

Dose

Administer sodium nitrite first, followed immediately by the administration of sodium thiosulfate, may repeat at one-half the original dose if symptoms of cyanide toxicity return

Adult: **IV** sodium nitrite 300mg/10ml (rate: 2.5-5ml/min) then sodium thiosulfate 12.5g/50ml

Child: **IV** sodium nitrite 0.2ml/kg (6mg/kg) (rate: 2.5-5ml/min), **max: 10ml**, then sodium thiosulfate 1ml/kg (250mg/kg), **max: 50ml**

Adverse Reactions

Hypotension, methemoglobinemia, headache, nausea, vomiting

Precautions

1. 給藥期間應監測血壓，如發生低血壓症狀，應降低輸注速率
2. sodium nitrite 給藥期間建議監測變性血紅素濃度，當濃度>30%時應停止給藥
3. 不建議與其他藥物同一條管路給藥
4. 貧血、G6PD 缺乏症需小心使用。