



A Logical Combination

NEW Salbutamol Plus for Performance Plus

COMBIVENT

Salbutamol + ipratropium bromide

In a single metered dose inhaler

Prescribing information Combivent MDI Metered Dose Inhaler containing 200 doses, each delivering ipratropium bromide (anticholinergic bronchodilator) 20 micrograms and salbutamol (β_2 -adrenergic agonist) 100 micrograms. **Indication:** treatment of bronchospasm associated with chronic obstructive pulmonary disease in patients who require regular treatment with both ipratropium and salbutamol. **Dosage:** Adults only: two puffs four times a day. **Contra-indication:** known hypersensitivity to any of the components or to atropine or its derivatives. **Precautions:** cardiac disorders; hyperthyroidism; diabetes mellitus; co-prescription with β -blockers, corticosteroids, xanthine derivatives, other β -agonists or anticholinergics; pregnancy, especially the first trimester, and breast feeding. Potentially serious hypokalaemia may result from

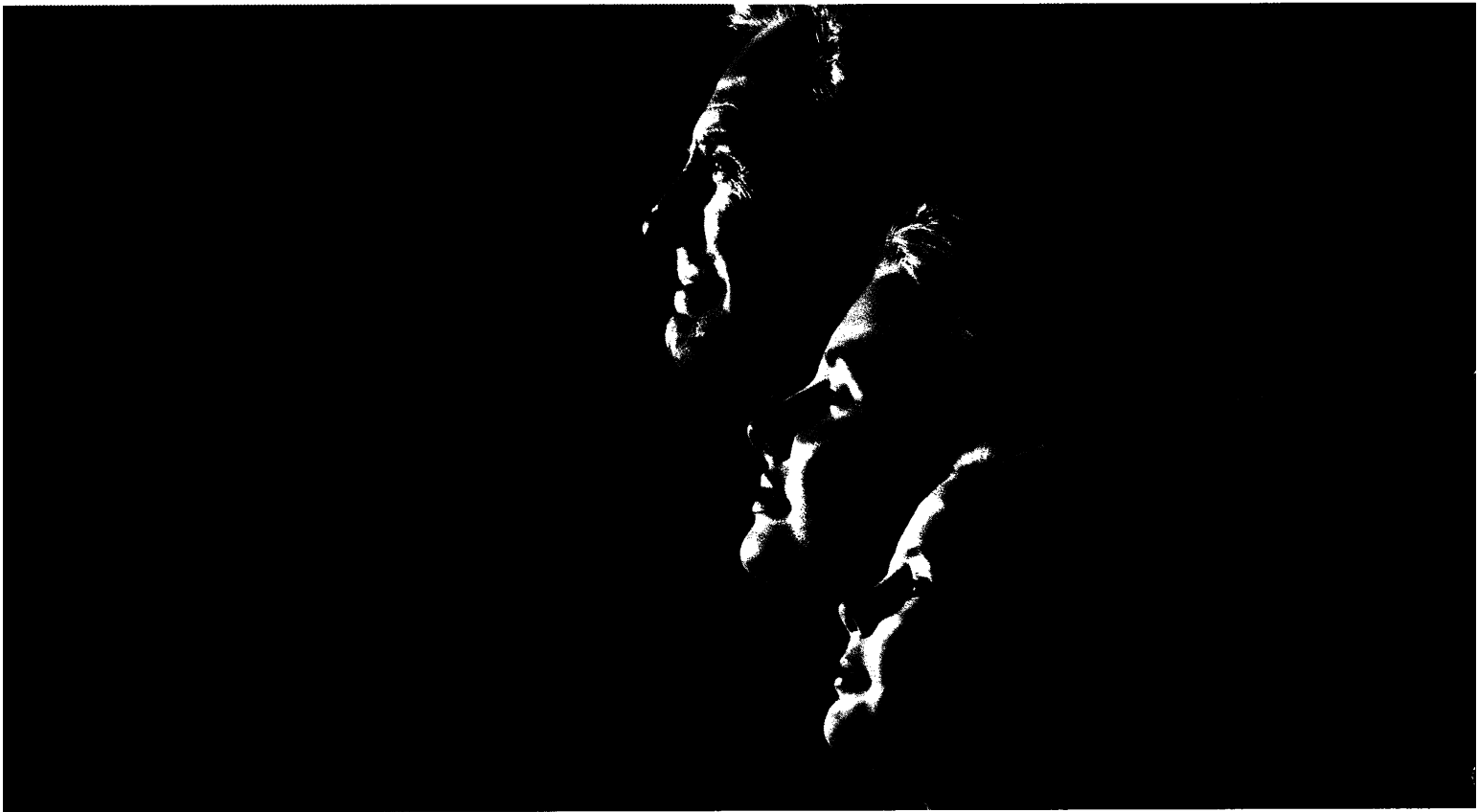
β_2 -agonist therapy. Advise patient to seek medical advice in the event of acute, rapidly worsening dyspnoea or if response lessens; do not spray into the eye. **Side-effects:** tremor and nervousness may occur; tachycardia, dizziness, palpitations, headache, local reactions such as dryness of the mouth are less frequent; urinary retention has been reported rarely. As with other bronchodilators, cough and, very rarely, paradoxical bronchoconstriction have been observed. **Basic NHS price** 10ml vial complete with mouthpiece UK £6.00 POM. PL 0015/0191. PA 7/52/1 **Product Licence and Authorisation Holder:** Boehringer Ingelheim Limited, Ellesfield Avenue, Bracknell, RG12 8YS. **Date of Preparation:** March 1994. For full prescribing information please see data sheet.



**Boehringer
Ingelheim**

Presentations: Pulmicort Respules: 2 ml single dose unit ampoules containing 0.25 mg/ml or 0.5 mg/ml budesonide in a suspension for nebulisation. **Uses:** Bronchial asthma where use of a pressurised inhaler or dry powder formulation is unsatisfactory or inappropriate. **Dosage and administration:** Dosage schedules. Administer from suitable nebulisers. Dose delivered to the patient varies depending on the nebulising equipment used (see data sheet). Adjust dosage individually. Initially during periods of severe asthma and while reducing or discontinuing oral glucocorticosteroids the recommended dose in adults (including elderly) and children 12 years and older is usually 1-2 mg twice daily. In very severe cases the dosage may be further increased. Children 3 months to 12 years: 0.5-1 mg twice daily. The maintenance dose should be the lowest dose which keeps the patient symptom-free. Recommended doses are: Adults (including elderly) and children 12 years and older: 0.5-1 mg twice daily. Children (3 months to 12 years): 0.25-0.5 mg twice daily. For an increased therapeutic effect, increase dose of Pulmicort rather than combine treatment with oral corticosteroids because of the lower risk of systemic effects. **Contra-indication:** Hypersensitivity to any of the constituents. **Special warnings and precautions:** Care is needed in patients with pulmonary tuberculosis and viral infections in the airways. A short course of oral steroids in addition to Pulmicort may be required in patients with excessive

mucus in the bronch. Transfer of patients dependent on oral steroids to Pulmicort demands special care, see data sheet for further details. The nebuliser chamber should be cleaned and dried after every administration. Pulmicort does not affect the ability to drive and use machines. Pulmicort Respules can be mixed with 0.9% saline and with solutions of terbutaline, salbutamol, sodium cromoglycate or pratrium bromide. **Side effects:** Mild irritation in the throat, coughing and hoarseness and oral candidiasis have been reported. In rare cases inhaled drugs may provoke bronchoconstriction in hyperreactive patients. Facial skin should be washed after use of the face mask as irritation can occur. Coughing can usually be prevented by inhaling a β_2 agonist (e.g. terbutaline) 5-10 minutes before inhalation of Pulmicort Respules. Avoid in pregnancy. **Pharmaceutical precautions:** Store below 30°C. Use within 3 months of opening the foil envelope. Protect opened ampoules from light. Use within 12 hours of opening. **Legal category:** POM. **Basic NHS price:** Pulmicort Respules 0.25 mg/ml: 20 single dose units: £32.00. Pulmicort Respules 0.5 mg/ml: 20 single dose units: £44.64. **Product licence numbers:** Pulmicort Respules 0.25 mg/ml: PL 0017/0309. Pulmicort Respules 0.5 mg/ml: PL 0017/0310. **For further information contact the product licence holder:** Astra Pharmaceuticals Ltd., Home Park, Kings Langley, Herts WD4 8D. **Reference:** 1. Higgenbottom TW et al. *Eur J Clin Res* 1994; 5: 1-10.



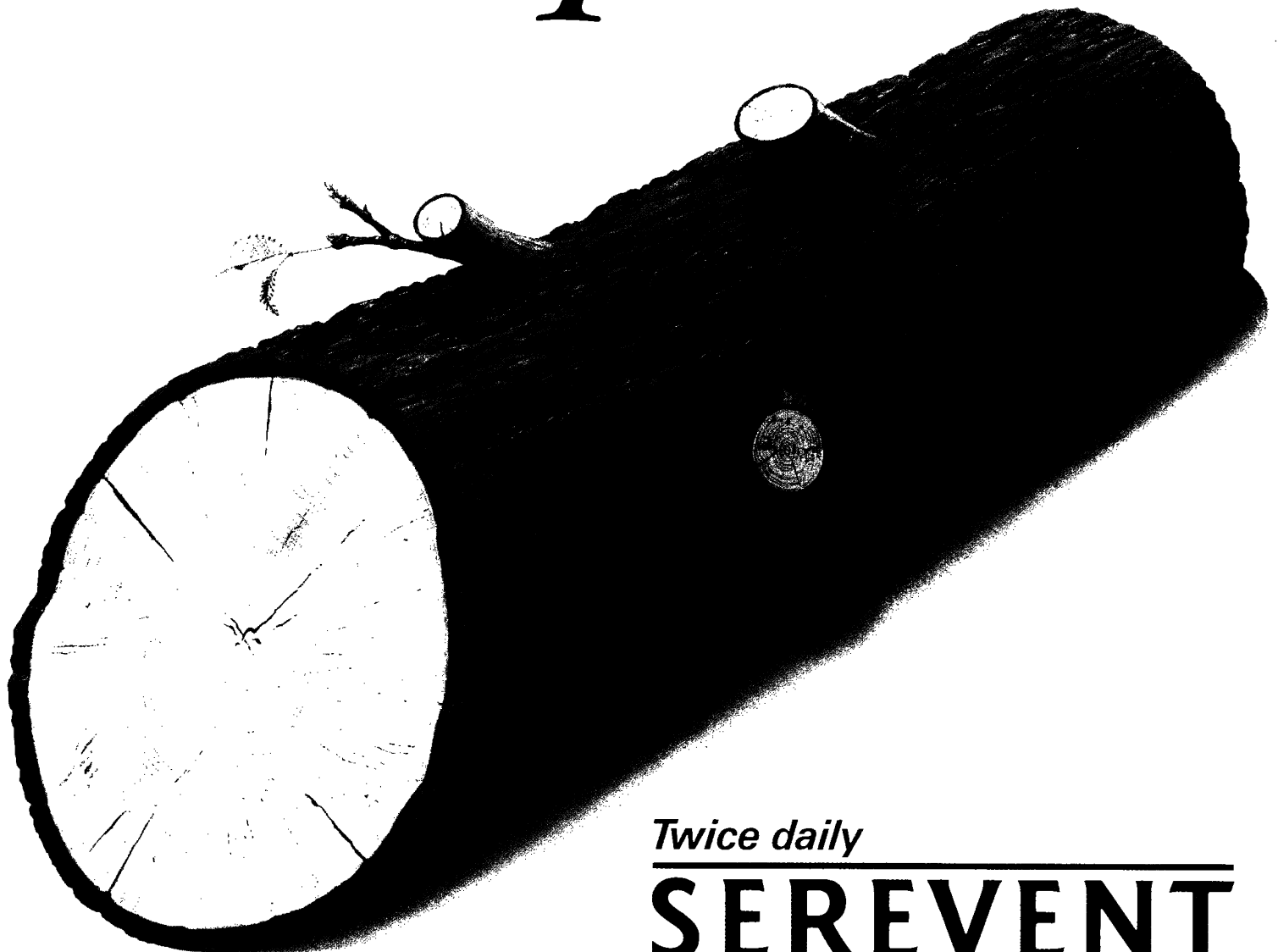
Time to take a breather from oral steroids

Pulmicort[®]
BUDESONIDE
Respules[®]

A high-dose nebulised steroid that's low on side effects[†]

† Compared to oral steroids

"I sleep well"



Twice daily

SEREVENT

salmeterol xinafoate

FOR ACTIVE DAYS AND RESTFUL NIGHTS

Serevent (salmeterol xinafoate)

Abridged Prescribing Information

(Please refer to the full data sheet before prescribing)
Uses Treatment of asthma (including nocturnal and exercise-induced) in patients requiring long-term regular bronchodilator therapy. Patients should normally also be receiving regular and adequate doses of inhaled anti-inflammatory agents, or oral corticosteroids. **Dosage and administration** For inhalation only. *Adults and children 4 years and over:* 50 micrograms twice daily. *Adults only:* More severe cases 100 micrograms twice daily. *Children below 4 years:* Not recommended at present. **Contra-indication** Hypersensitivity. **Precautions** **Steroid therapy:** Serevent is not a replacement for corticosteroids and/or, in children, sodium cromoglycate. Warn patients not to stop or reduce such therapy. **Severe or unstable asthma:** Bronchodilators should not be the only or main treatment. Consider using oral steroids and/or

maximum doses of inhaled corticosteroids. Warn patients to seek medical advice if short-acting bronchodilator use increases or becomes less effective. Treat severe exacerbations in the normal way. **Acute symptoms:** Serevent is not for relief of acute symptoms. A short-acting inhaled bronchodilator is required. **Thyrotoxicosis:** Use with caution. **Drug interactions:** Avoid beta-blockers. **Hypokalaemia:** May occur, particularly in acute severe asthma. It may be potentiated by xanthine derivatives, steroids, diuretics and hypoxia. Monitor serum potassium levels in these situations. **Pregnancy and lactation:** Experience is limited. Balance risks against benefits. **Side effects** Tremor, subjective palpitations and headaches have been reported, but are usually mild and transient. Skin reactions, muscle cramps, non-specific chest pain, local irritation and arthralgia have been reported. Potentially serious hypokalaemia may result from β_2 -agonist therapy. **Paradoxical bronchospasm:**

Substitute alternative therapy. **Presentation and Basic NHS cost** *Serevent Diskhaler:* Pack of 14 four-place disk foils, together with a Serevent Diskhaler. 50 micrograms – £29.97. *Serevent Diskhaler refill pack:* Pack of 14 four-place disk foils only – £29.40. *Serevent Inhaler:* 120 actuations per inhaler. 25 micrograms – £28.60. Hospital packs are also available. **Product licence numbers** 0045/0158, 0045/0157.

POM



ALLEN & HANBURYS

Further information is available on request from:
Allen & Hanburys Limited
Uxbridge, Middlesex UB11 1BT
Diskhaler and Serevent are trade marks of the
Glaxo Group of Companies
September 1993

When introducing Serevent in adults we strongly recommend that you do not stop or reduce the dose of corticosteroids. Similarly, in children, do not stop or reduce corticosteroids or sodium cromoglycate.



THE *AeroBec*™ TEAM

Reliable delivery of trusted treatments in asthma

200 dose unit

Aerolin
salbutamol

Autohaler™
breath-actuated inhaler
200 dose unit

AEROBEC 50 AUTOHALER, AEROBEC 100 AUTOHALER AND AEROBEC FORTE AUTOHALER ABBREVIATED PRESCRIBING INFORMATION

Presentation: Breath-actuated pressurized inhaler containing 200 doses of salbutamol (50 µg per dose) in AeroBec 50 Autohaler, 200 doses of salbutamol (100 µg per dose) in AeroBec 100 Autohaler and 200 doses of salbutamol (400 µg per dose) in AeroBec Forte Autohaler. **Indications:** For the treatment of reversible obstructive pulmonary disease. **Contra-indications:** AeroBec 50, 100 and AeroBec Forte are contraindicated in patients with known hypersensitivity to salbutamol or any of the excipients. **Precautions:** Patients should be warned of the risk of systemic effects, such as tachycardia, tremor, headache, dizziness, nervousness, insomnia, dry mouth, palpitations, muscle cramps, and hypokalaemia. **Side-effects:** Common side-effects include tachycardia, tremor, headache, dizziness, nervousness, insomnia, dry mouth, palpitations, muscle cramps, and hypokalaemia. **Basic NHS prices:** AeroBec 50, £3.50; AeroBec 100, £3.50; AeroBec Forte, £3.50. **Product licence numbers:** AeroBec 50, PL 08 014 1490; AeroBec 100, PL 08 014 1491; AeroBec Forte, PL 08 014 1492. **Legal Category:** P.

AEROLIN AUTOHALER ABBREVIATED PRESCRIBING INFORMATION

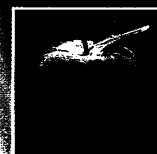
Presentation: Breath-actuated pressurized inhaler containing 200 doses of salbutamol (200 µg per dose) in Aerolin Autohaler. **Indications:** For the treatment of reversible obstructive pulmonary disease. **Contra-indications:** Aerolin is contraindicated in patients with known hypersensitivity to salbutamol or any of the excipients. **Precautions:** Patients should be warned of the risk of systemic effects, such as tachycardia, tremor, headache, dizziness, nervousness, insomnia, dry mouth, palpitations, muscle cramps, and hypokalaemia. **Side-effects:** Common side-effects include tachycardia, tremor, headache, dizziness, nervousness, insomnia, dry mouth, palpitations, muscle cramps, and hypokalaemia. **Basic NHS prices:** Aerolin, £3.50. **Product licence numbers:** Aerolin, PL 08 014 1493. **Legal Category:** P.

Precautions

Patients should be warned of the risk of systemic effects, such as tachycardia, tremor, headache, dizziness, nervousness, insomnia, dry mouth, palpitations, muscle cramps, and hypokalaemia. **Side-effects:** Common side-effects include tachycardia, tremor, headache, dizziness, nervousness, insomnia, dry mouth, palpitations, muscle cramps, and hypokalaemia. **Basic NHS prices:** AeroBec 50, £3.50; AeroBec 100, £3.50; AeroBec Forte, £3.50; Aerolin, £3.50. **Product licence numbers:** AeroBec 50, PL 08 014 1490; AeroBec 100, PL 08 014 1491; AeroBec Forte, PL 08 014 1492; Aerolin, PL 08 014 1493. **Legal Category:** P.



TAKE THE STRAIN OUT OF PNEUMONIA



Once an X-ray confirms your diagnosis of pneumonia you need to act quickly. Treatment with once a day ROCEPHIN can be started immediately, before the results of susceptibility tests are known.

With a clinical success rate of 89.7% (n=1,060),^{1,2} ROCEPHIN provides effective treatment of pneumonia, with proven efficacy in both community acquired and nosocomial pneumonia.³

Once-a-day

▼ Rocephin[®]
IV-IM
ceftriaxone

**THE WORLD'S BEST SELLING
INJECTABLE ANTIBIOTIC⁴**

References

1. Brown, B.B. and Sands, M., *Curr. Ther. Res.* (1989) **46** (2), 285-91.
2. Data On File, (GCR B-116 232) 3. Niebuhr, H. *et al.* *Chemotherapie Journal* (1993), **2**, 28-35. 4. Estimated current cash annual sales worldwide - Data on File, Roche Products Ltd.

Brief Prescribing Information

Indications: Pneumonia, septicaemia, meningitis; bone, skin and soft tissue infections; infections in neutropenic patients; gonorrhoea; pen-operative prophylaxis of infections associated with surgery. Treatment may be started before the results of susceptibility tests are known. **Dosage and Administration:** Rocephin should be administered by deep intramuscular injection, slow intravenous injection, or as a slow intravenous infusion, after reconstitution of the solution. **Adults and children 12 years and over:** Standard dosage - 1g once daily. Severe infections - 2-4g normally once daily. Duration of therapy varies according to course of disease. Gonorrhoea - single dose of 250mg i.m. Peri-operative prophylaxis - usually single dose of 1g, colorectal surgery 2g in conjunction with a suitable agent against anaerobic bacteria. **Children under 12 years:** Standard dosage - 20-50mg/kg once daily. Severe infections - maximum 80mg/kg once daily. Doses of 50mg/kg or over should be given by slow intravenous infusion over

at least 30 minutes. **Renal and hepatic impairment:** In the absence of hepatic impairment dose reduction is required only in severe renal failure (creatinine clearance <10ml/min), when the daily dose should be 2g or less. No dose reduction is required in liver damage provided renal function is intact. In severe renal impairment accompanied by hepatic insufficiency the plasma concentration should be determined at regular intervals and dosage adjusted. Serum concentrations should be monitored in dialysis. **Contra-indications, Warnings etc.** Cephalosporin hypersensitivity. Premature infants. Full-term infants during first six weeks of life. Safety in pregnancy has not been established. **Precautions:** Stated dose should not be exceeded. Caution in patients with a history of hypersensitivity (especially anaphylactic reaction) to penicillins or other non-cephalosporin beta-lactam antibiotics. Anaphylactic shock requires immediate countermeasures. Severe renal impairment accompanied by hepatic insufficiency (see Dosage). **Side-effects and Adverse Reactions:** Gastro-intestinal side-effects including loose stools, diarrhoea, nausea, vomiting, stomatitis and glossitis. Cutaneous reactions including maculopapular rash, pruritus, urticaria, oedema and erythema multiforme. Haematological reactions including anaemia (all grades), leucopenia, neutropenia, thrombocytopenia, eosinophilia, agranulocytosis, positive Coombs' test and

prolongation of prothrombin time. Regular blood counts should be carried out during treatment. Other reactions include headache, dizziness, drug fever and transient elevations in liver function tests. Rarely glycosuria, oliguria, haematuria, anaphylaxis and bronchospasm. Very rarely, precipitation of ceftriaxone calcium salt in urine in patients on higher than recommended dose. Reversible precipitates of calcium ceftriaxone have been detected by gallbladder sonograms. In symptomatic cases (which are rare), conservative non-surgical management is recommended. Superinfections with yeasts, fungi or other resistant organisms. Rare instances of pseudomembranous colitis. Injection site pain and local phlebitis. **Legal Category:** POM. **Presentations and Basic NHS Cost:** 250mg vials i.m. and i.v. (containing 250mg ceftriaxone) - £2.87. 1g vials i.m. and i.v. (containing 1g ceftriaxone) - £11.46. 2g vials for infusion (containing 2g ceftriaxone) - £22.92. **Product Licence Numbers:** PL 0031/0169 (250mg vials), PL 0031/0171 (1g vials), PL 0031/0172 (2g vials) **Product Licence Holder:** Roche Products Limited, PO Box 8, Welwyn Garden City, Hertfordshire, AL7 3AY. Full prescribing information is available on request.

PREScribing INFORMATION

Presentation: Fortum for Injection - vials contain 250mg, 500mg, 1g and 2g ceftazidime. Fortum/Saline Infusion Kit - contains a 2g vial of ceftazidime, 50ml infusion bag of 0.9% w/v Sodium Chloride Intravenous Infusion, transfer needle, pre-injection swab, sealing cap and label. **Uses** The treatment of suspected or proven single and mixed infections caused by susceptible organisms. Fortum/Saline Infusion Kit - for a saline infusion of 2g ceftazidime only. **Dosage and administration**

Adults: (See Data Sheet for details.) 1g to 6g i.m. or i.v. per day and by the i.p. route 125 to 250mg per 2L dialysis fluid. Most infections, 2g i.v. b.i.d.; severe infections, up to 6g i.v. per day. Cystic fibrosis - up to 9g i.v. per day in three divided doses. Dosage should be reduced when glomerular filtration <50ml/min. An initial 1g loading dose may be given with suspected renal insufficiency. **Elderly:** Daily dosage should not normally exceed 3g. **Neonates/Infants/Children:** (See Data Sheet for details.) Up to two months: 25 to 60mg/kg/day as two divided doses. Over two months: 30 to 100mg/kg/day as two or three divided doses. Cystic fibrosis, meningitis, immunocompromised: up to 150mg/kg/day (max 6g daily) in three divided doses. Sensitivity results are recommended before commencing meningitis monotherapy. The Infusion Kit, in the dosage presented, may not be appropriate for use in children.

Contra-indication Known

hypersensitivity to cephalosporins.

Precautions Previous anaphylactic reaction to penicillin. Administer with caution in early pregnancy, infancy and with concurrent nephrotoxic drug treatment. Fortum is excreted in human milk in low concentrations. Slight interference with copper reduction methods may occur.

Fortum and aminoglycosides should not be mixed in the same giving set or syringe. Prolonged use may cause overgrowth of non-susceptible organisms (e.g. Candida, Enterococci)

which may require interruption of treatment or other measures. **Side effects**

Adverse reactions occur infrequently: pain and/or inflammation (i.m.) and phlebitis and/or thrombophlebitis (i.v.), rashes, fever, pruritus, anaphylaxis, GI disturbances, headache, dizziness, paraesthesia and bad taste. Transient changes in laboratory values may occur: eosinophilia, positive Coombs' test, thrombocytosis, leucopenia, neutropenia, thrombocytopenia and slight rises in hepatic enzymes. **Basic NHS cost** Packs of vials for injection (5 x 250mg, 5 x 500mg, 5 x 1g, 5 x 2g), and an infusion pack (5 x 2g): £9.90 per gram.

Fortum/Saline Infusion Kit: £20.82.

Product licence numbers Fortum for Injection: 250mg: 0004/0304; 500mg: 0004/0292; 1g: 0004/0293; 2g: 0004/0294.

Sodium Chloride Intravenous Infusion: 3460/0015. **Product licence holder** Fortum for Injection: Glaxo Operations UK Limited, Greenford, Middlesex UB6 0HE. Sodium Chloride Intravenous Infusion: Galen Research Ltd, Craigavon, Northern Ireland BT63 5UA. **POM**

DECISIVE ACTION



FORTUM ceftazidime

Further information is available on request from: Glaxo Laboratories Limited, Stockley Park West, Uxbridge, Middlesex UB11 1BT Tel: 081-990 9444. Fortum is a Glaxo trade mark
December 1993

Proven success in serious infections

A LIFE-SAVING SYSTEM FOR ASTHMATICS



Bricanyl[®]

✘ **Turbohaler**[®]

TERBUTALINE SULPHATE

Pulmicort[®]

✘ **Turbohaler**[®] 200

BUDESONIDE

Abridged prescribing information: Presentation: Bricanyl Turbohaler. Dry powder inhaler delivering 0.5 mg terbutaline sulphate per actuation. **Uses:** Relief and prevention of bronchospasm in bronchial asthma and bronchopulmonary disorders in which bronchospasm or reversible airways obstruction is a complicating factor. **Dosage and administration:** Adults and children, including elderly: One inhalation 0.5 mg, as required. Not more than 4 inhalations/day. **Contra-indications, warnings, etc:** Sensitivity to terbutaline sulphate. Precautions: Care should be taken in patients with myocardial insufficiency, or myotoxicosis. Additional blood glucose measurements are initially recommended in diabetic patients. If treatment becomes less effective or shorter acting, the patient's general condition should be reviewed. Do not use in patients with hypertrophic cardiomyopathy. Potentially serious hypoxaemia may result from β_2 -agonist therapy. Administer with caution during the first trimester of pregnancy. Do not administer concurrently with non-selective β -blockers. Use with caution with other sympathomimetic agents. **Side effects:** Tremor, tonic cramp and palpitations are all characteristic of sympathomimetic amines. A few patients feel tense. **Basic NHS price:** Bricanyl Turbohaler 100 doses: £8.94. **Legal category:** POM. **Product licence number:** PL 0017/0241.

Presentations: Pulmicort Turbohaler 100. 100 μ g/puff budesonide dry powder inhaler containing 200 doses. Pulmicort Turbohaler 200. 200 μ g/puff budesonide dry powder

inhaler containing 100 doses. Pulmicort Turbohaler 400. 400 μ g/puff budesonide dry powder inhaler containing 50 doses. **Uses:** Bronchial asthma. **Dosage and administration:** Individualised dose. Adults: 200-600 μ g daily in divided doses. Children: 200-800 μ g daily in divided doses. Maintenance: Use lowest possible dose. Brush the teeth and rinse the mouth out with water after each use. **Contra-indications, warnings, etc:** Active pulmonary tuberculosis. Special care is needed in patients with fungal and viral infections in the airways. Avoid administration during pregnancy. A short course of oral steroids in addition to Pulmicort may be required in patients with excessive mucus in the bronchi. Transfer of patients dependent on oral steroids to treatment with Pulmicort demands special care. See data sheet for further details. **Side effects:** Mild irritation in the throat, hoarseness and oral candidiasis occur in some patients. Rare cases of cataract have been reported after prolonged use of corticosteroids. **Legal category:** POM. **Basic NHS price:** Pulmicort Turbohaler 100 (200 doses): £18.50. Pulmicort Turbohaler 200 (100 doses): £18.50. Pulmicort Turbohaler 400 (50 doses): £18.50. **Product licence numbers:** Pulmicort Turbohaler 100 PL 0017/0319. 100 μ g/puff; Pulmicort Turbohaler 200 PL 0017/0272. 200 μ g/puff; Pulmicort Turbohaler 400 PL 0017/0271. 400 μ g/puff.

ASTRA
Astra Pharmaceuticals

Further information is available from the product licence holder: Astra Pharmaceuticals Limited, Home Park, Kings Langley, Herts WD4 8DH. ©Registered trade mark.

Date of preparation: April 1994