

# Enteric coated granules for improved enzyme delivery in cystic fibrosis



**Creon<sup>®</sup>**  
pancreatin

Enteric coated granules in stomach  
Granules unaffected by stomach acid  
Enzymes released in duodenum  
Mimics the normal digestive process

## A new release for cystic fibrosis patients

**PRESCRIBING INFORMATION:** **Presentation:** Brown/yellow capsules containing enteric coated granules of pancreatin equivalent to: 9,000 BP units of amylase, 8,000 BP units of lipase, 210 BP units of protease. Available in packs of 100. Basic NHS price £13.33. **Indication:** Pancreatic exocrine insufficiency. **Dosage and administration:** Adults and children: Initially one or two capsules with meals, then adjust according to response. The capsules should be swallowed whole, without chewing, with a little fluid, during the meal. **Contra-indications, Warnings, etc. Contra-indications:** Substitution with pancreatic enzymes is contra-indicated in the early stages of acute pancreatitis. **Warnings:** Use in pregnancy: There is inadequate evidence of safety in use during pregnancy. The product is of porcine origin. Rarely cases of hyper-uricosuria and hyper-uricaemia have been reported with high doses of pancreatin. Overdosage could precipitate meconium ileus equivalent. Perianal irritation could occur, and, rarely, inflammation when large doses are used. **Product Licence Number 5727/0001.**

**duphar**

Further information is available from:  
Duphar Laboratories Ltd, Duphar House, Gaters Hill, West End, Southampton SO3 3JD. Tel: (0703) 472281

**NEW**  
5mg per puff\*

# Intal

initiating Intal therapy as early as their first repeat bronchodilator prescription affords effective control of the deteriorating process of asthma. It acts positively on the underlying condition by reducing bronchial hyperreactivity.

But many patients can benefit from extra Intal protection:

- the new patient – who needs early control
- the young patient at risk from increased challenge.

For these children and young adults, Intal 5 delivers that extra protection in a modern, convenient form to ensure effective control.



**Presentation** Intal 5 Inhaler: metered dose pressurised aerosol delivering 112 inhalations, each containing 5.0 mg Sodium Cromoglycate B.P. Intal Inhaler: metered dose pressurised aerosol delivering 200 inhalations of 1.0 mg Sodium Cromoglycate. **Indication** Preventive treatment of bronchial asthma, including exercise-induced asthma. **Dosage and Administration** Intal 5 Inhaler: initially two inhalations four times daily. Once adequate control of symptoms has been achieved it may be possible to reduce to a maintenance dose of one inhalation four times daily. Additional doses may also be taken before exercise. Intal Inhaler: two inhalations four times daily. **Side effects** No significant side effects have been reported. It has not been reported with Intal 5 Inhaler or Intal Inhaler but there have been rare cases involving severe bronchospasm following the administration of Intal Spincaps by Spinhaler. There are no specific contra-indications to Intal 5 Inhaler or Intal Inhaler. **Basic NHS cost** Inhaler containing 112.5 mg inhalations: £13.20. Inhaler containing 200 1 mg inhalations: £10.95. **PL** Intal 5 Inhaler 0113/0109. Intal Inhaler 0113/0080. \*The standard Intal Inhaler delivers 1 mg per puff. Registered Trade Marks of the Manufacturer

**FISONS**

Pharmaceuticals FISONS plc - PHARMACEUTICAL DIVISION, 12 Derby Road, Loughborough, Leicestershire LE11 0BB



**Intal 5 Inhaler**  
Metered dose aerosol  
112 inhalations

**Intal 5 Inhaler**  
(Sodium Cromoglycate BP 5mg)

112 inhalations

REMEMBER  
To obtain  
full benefit -  
use regularly

**Intal 5 Inhaler**

**Intal 5 Inhaler**  
for best effect  
take 4 times  
every day

**delivering  
extra Intal  
protection**

**Intal 5 Inhaler**

Sodium Cromoglycate BP

**giving extra protection that counts**

# NEW DRUGS

In the past few years the number of important new drugs and our understanding of pharmacology have continued to increase. Reliable and unbiased information on the therapeutic use of these agents is, however, not always readily available. Articles recently published in the *BMJ* on entirely new groups of drugs – H<sub>2</sub> receptor antagonists, calcium antagonists, captopril – and on new members of groups of drugs already available – beta-blockers, tranquillisers, hypnotics, diuretics – fill this gap and are now collected together in book form. Busy practitioners will find that this comprehensive review allows them to make a more rational choice of treatment.

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# Humulin

Human Insulin (crb)

'HUMULIN'S' ▼ 'HUMULIN'I' ▼ 'HUMULIN' Zn ▼  
Human insulin (crb) **Presentation:** Humulin S: A sterile, aqueous solution of human insulin (crb), 100 IU/ml. Humulin I: A sterile suspension of isophane human insulin (crb), 100 IU/ml. Humulin Zn:

A sterile suspension of crystalline human insulin (crb), 100 IU/ml. **Uses:** For the treatment of insulin-dependent diabetics. **Dosage and Administration:** The dosage should be determined by the physician, according to the requirements of the patient. Humulin S may be administered by subcutaneous, intramuscular or intravenous injection. Humulin I and Humulin Zn should be administered by subcutaneous or intramuscular injection only. Humulin S may be administered in combination with Humulin I or Humulin Zn as required. Humulin I and Zn: Rotate vial in palm of hands before use to re-suspend. **Mixing of insulins:** The shorter-acting insulin should be drawn into the syringe first, to prevent contamination of the vial by the longer-acting preparation. It is advisable to inject immediately after mixing. **Contra-indications, Warnings, etc. Contra-indications:** Hypoglycaemia. Under no circumstances should Humulin I or Humulin Zn be given intravenously. **Precautions:** Usage in pregnancy: Insulin requirements usually fall during the first trimester and increase during the second and third trimesters. Transferring from other insulins: A small number of patients transferring from insulins of animal origin may require a reduced dosage, especially if they are very tightly controlled and bordering on hypoglycaemia. The risk of hypoglycaemia can be considered minimal if the daily dosage is less than 40 IU. Insulin-resistant patients receiving more than 100 IU daily should be referred to hospital for transfer. **Side effects:** Lipodystrophy, insulin resistance and hypersensitivity have rarely been reported. **Legal Category:** P **Package Quantities:** 10ml glass vials in packs of 5. **Price:**

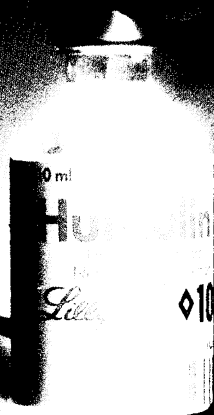
Humulin S: 100 IU/ml £6.44.  
Humulin I: 100 IU/ml £6.44.  
Humulin Zn: 100 IU/ml £6.44.

**Product Licence Numbers:**

Humulin S 100 IU/ml 0006/0165  
Humulin I 100 IU/ml 0006/0168  
Humulin Zn 100 IU/ml 0006/0179.

Date of preparation: December 1983. **Full Prescribing Information Available From:** Eli Lilly and Company Limited, Kingsclere Road, Basingstoke, Hampshire, RG21 2XA. Telephone: Basingstoke (0256) 473241 'HUMULIN' is a trade mark. HU69 Dec '83  
1. Johnson I.S., Diabetes Care 1982, Vol. 5, Suppl. 2, 4-12. 2. Fineberg, S.E. et al, Diabetologia 1983, 25, (6) 465-469.





**The cost of living has never looked so good.**

Human insulin has always been seen as an outstandingly pure, less immunogenic form of insulin than that which comes from the pancreas of pigs and cattle.

It has, however, been seen as expensive.

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**Humulin**  
Human Insulin (crb)

**THE HUMAN WAY TO TREAT DIABETES**

# THE PROVEN ANSWER TO THE PRESENT DAY QUESTION...

## NUTRITION OF LOW BIRTHWEIGHT INFANTS

NUTRITIONAL NEEDS	- HIGH
BODY NUTRIENT STORES	- LOW
DIGESTIVE SYSTEM	- IMMATURE
METABOLIC SYSTEM	- IMMATURE
EXCRETORY SYSTEM	- IMMATURE
STOMACH CAPACITY	- LOW

## REQUIREMENTS

EASILY DIGESTED WELL TOLERATED FORMULA. MEET HIGH NUTRIENT REQUIREMENT. ADAPTED TO MEET SPECIAL NEEDS. APPROPRIATE FOR AGA AND SGA BABIES. READY TO FEED. PURE AND STERILE TO PROTECT IMMATURE DIGESTIVE SYSTEM. SCREENED AGAINST HERBICIDES, PESTICIDES AND LEAD.

## THE ANSWER IS:

PRE-APTAMIL (MEB) BY MILUPA. PROVEN BY OVER 10 YEARS SUCCESSFUL USE IN EUROPE AND BY UK CLINICAL TRIAL.<sup>1</sup>

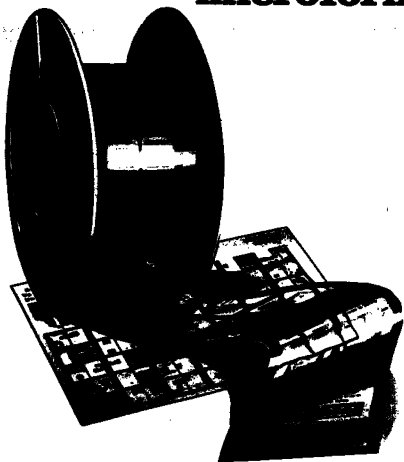


**Pre-Aptamil (MEB)**

For further information contact Janet Souster BSc at Milupa Limited, Milupa House, Hercules Road, Hillingdon, Uxbridge, Middlesex UB10 9NA. Telephone: (0895) 59851.

1. Brooke, D. G., Wood, C., Barley, J. Arch. Dis. Child 1982, **57**, 898-904.

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# A TRULY REMARKABLE CEPHALOSPORIN

# FORTUM

## ceftazidime

#### PRESCRIBING INFORMATION

**Presentation.** Fortum for Injection is supplied in vials containing 500mg, 1g and 2g ceftazidime (as pentahydrate) with sodium carbonate.

**Uses.** Fortum is a bactericidal cephalosporin antibiotic which is resistant to most beta-lactamases and is active against a wide range of Gram-positive and Gram-negative bacteria.

It is indicated for the treatment of single infections and for mixed infections caused by two or more susceptible organisms. Fortum, because of its broad antibacterial spectrum, may be used alone as first choice drug, pending sensitivity test results.

**Dosage and administration.** The usual adult dosage is in the range 1g to 6g i.m. or i.v. per day and by the i.p. route 125-250mg/2 litre of dialysis fluid (see Data Sheet for details).

**Contra-indication.** Fortum is contra-indicated in patients with known hypersensitivity to cephalosporin antibiotics.

**Precautions.** Cephalosporins may, in general, be given safely to patients who are hypersensitive to penicillins. Care is indicated in patients who have experienced an anaphylactic reaction to penicillin.

Cephalosporin antibiotics at high dosage should be given with caution to patients receiving concurrent treatment with nephrotoxic drugs. Clinical experience with Fortum has shown that this is not likely to be a problem at the recommended dose levels. Reduce dosage when renal function is impaired (see Data Sheet).

As with all drugs, Fortum should be administered with caution during the early months of pregnancy and in early infancy. Fortum is excreted in human milk in low concentrations.

Fortum does not interfere with enzyme-based tests for glycosuria. Slight interference with copper reduction methods may be observed. Fortum does not interfere in the alkaline picrate assay for creatinine.

Fortum and aminoglycosides should not be mixed in the same giving set or syringe. As with other broad spectrum antibiotics, prolonged use of Fortum may result in the overgrowth of non-susceptible organisms (e.g., *Candida*, *Enterococci*) which may require interruption of treatment or adoption of appropriate measures.

**Side effects.** Fortum is generally well tolerated with only infrequent adverse reactions, e.g., pain and/or inflammation after i.m. administration and phlebitis and/or thrombophlebitis after i.v. administration, rashes, fever, pruritus, gastro-intestinal disturbances, headache, dizziness, paraesthesiae and bad taste. Transient changes in laboratory values may occur including: eosinophilia, a positive Coombs' test, thrombocytosis and slight rises in hepatic enzymes.

**Basic NHS cost (exclusive of VAT).** The basic NHS cost of Fortum is £9.90 per gram. Available in packs of: 5 x 500mg, 5 x 1g and 5 x 2g vials and an infusion pack of 5 x 2g vials.

**Product licence numbers.** 500mg: 0004/0292. 1g: 0004/0293. 2g: 0004/0294.

#### References

1. Morgan G, Duerden B I, Lilleyman J S. J of Antimicrob Chemother 1983; 12 (Supp. A): 347-351.
2. Snelling S, Hart C A, Cooke R W I. J of Antimicrob Chemother 1983; 12 (Supp. A): 353-356.
3. David T J, Phillips B M, Connor P J. J of Antimicrob Chemother 1983; 12 (Supp. A): 337-340.

Further information is available on request from:

**Glaxo**

Glaxo Laboratories Limited, Greenford, Middlesex UB6 0HE

Fortum is a Glaxo trade mark

Hospital antibiotics created in Britain by 

**A TRULY  
REMARKABLE  
CEPHALOSPORIN**

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**ceftazidime**

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broad spectrum combination therapy<sup>1, 2, 3</sup>  
Fortum provides first line treatment without  
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# HOW TO DO IT

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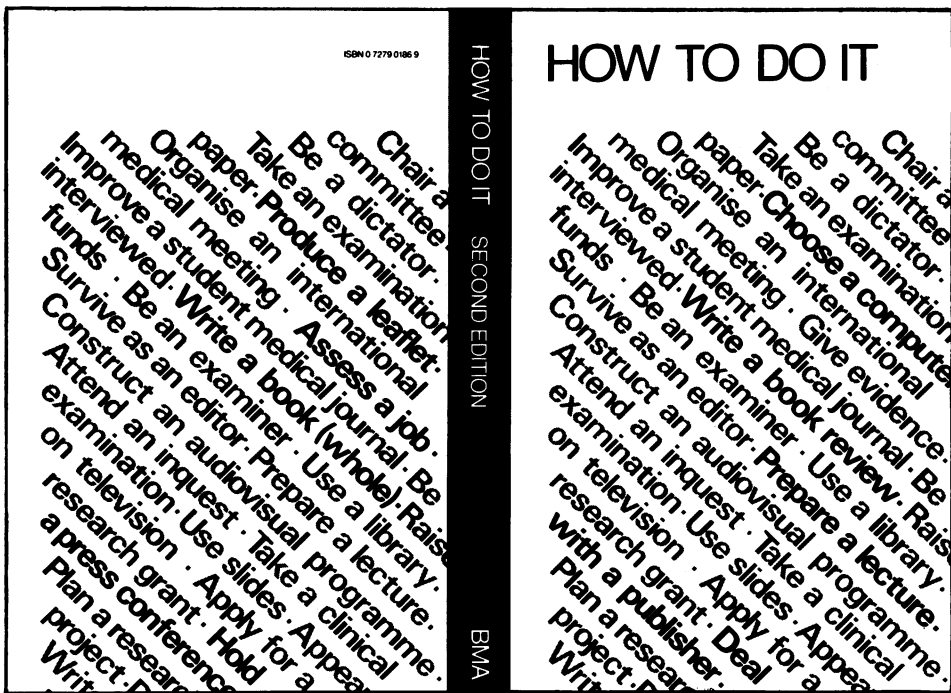
The first edition of HOW TO DO IT proved a useful and popular guide to those things a doctor needs to know but is rarely taught: how to take an examination, how to interview and be interviewed, how to plan and write up research, how to behave at an inquest. In the second edition the original chapters have been expanded and updated, and there are several more chapters on new challenges—choosing a computer, flying, holding a press conference—and on some older ones not included in the first edition—assessing a job, dealing with a publisher.

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**Indications** Epilepsy (generalised tonic-clonic and partial seizures)

**Dosage in epilepsy** Use a gradually increasing dosage scheme, adjusting to patient's needs. Adults: 100-200mg once or twice daily, increasing slowly up to 800-1,200mg daily; in some cases 1,600mg daily may be necessary. Children: up to 1 year old, 100-200mg daily; aged 1-5 years, 200-400mg daily; aged 5-10 years, 400-600mg daily; aged 10-15 years, 600-1,000mg daily.

It may be helpful to monitor plasma drug levels: optimum therapeutic range is 3-10µg/ml (13-42µmol/l).

**Side-effects** Dizziness and diplopia (usually dose-dependent), less frequently dry mouth, nausea and vomiting. Generalised erythematous rash, disappearing on cessation of therapy. Isolated reports of oedema, hyponatraemia, exfoliative dermatitis, leucopenia, thrombocytopenia, agranulocytosis, aplastic anaemia, cholestatic

jaundice and acute renal failure. Blood count should be checked in early stages of treatment.

**Precautions** Caution in patients taking oral anticoagulants or requiring oral contraception. In pregnancy, potential benefits of Tegretol must be weighed against potential hazards. Do not administer with, or within two weeks of cessation of, MAOI therapy. In rats treated with carbamazepine for two years, incidence of liver

tumours increased (no evidence of significant bearing on the therapeutic use of the drug). Serum folic acid levels should be observed during anticonvulsant therapy

**Contra-indications** Previous drug sensitivity to Tegretol. Do not administer to patients with atrioventricular conduction abnormalities unless paced.

**Packs** Tablets of 100mg (PL0001/5027) basic, NHS price £2.90 per 100, £13.95 per 500; tablets of 200mg

(PL0001/5028, £5.38 per 100, £25.93 per 500; tablets of 400mg (PL0001/0088)

£10.58 per 100; syrup 100mg/5ml (PL0001/0050) £5.17 per 300ml bottle.

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# Geigy



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