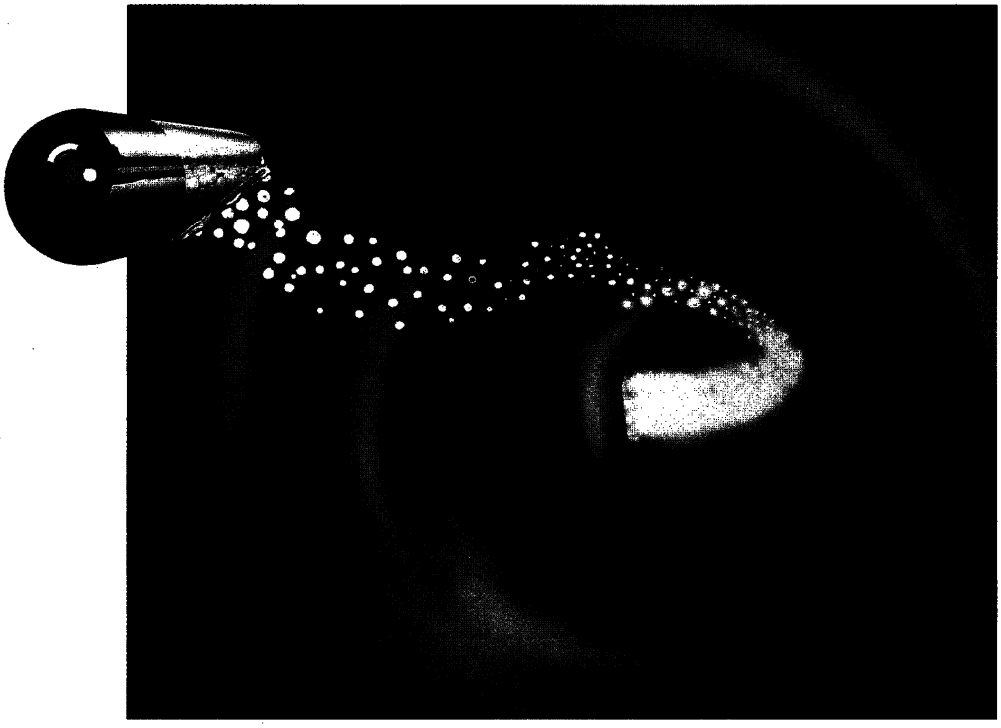
# PROGRESS
## In The Management Of Cystic Fibrosis



**creon®**
**pancreatin**

## RIGHT ON TARGET – RIGHT FROM THE START

**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 can be swallowed whole, or for ease of administration they may be opened and the granules taken with fluid or soft food, but without chewing. If the granules are mixed with food, it is important that they are taken immediately, otherwise dissolution of the enteric coating may result.

**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. **Name and address of Licence Holder:** Kali Chemie Pharma GmbH, Postfach 220, D-3000, Hannover 1, West Germany.

**duphar** Further information is available from:
Duphar Laboratories Limited, Gaters Hill, West End, Southampton SO3 3JD. Tel: 0703 472281.

CRAd/PEI/1/89

# What would you feed her if

**The Challenge**

What to feed the preterm, low birthweight infant is one of the biggest challenges in neonatology today. Preterm infants may have a five-fold range of body weight [illegible] level of immaturity. But [illegible] have made important [illegible] of their special [illegible]


**References**

1. Committee on Nutrition of the preterm infant. [illegible] Paediatric Gastroenterology and Nutrition. Nutrition [illegible] preterm infants. Oxford: Blackwell, 1987.
2. ESPGAN Committee on Nutrition of the preterm infant. Acta Paediatr. Scand. 1987 Suppl 336: 1-14.
3. Salle. B., Putet G. Service de Néonatologie de L'Hopital Universitaire, Edouard Herriot, Lyons, France. Senterre J., Rigo. J., Service [illegible]
6. Lucas [illegible] et al. [illegible] od, 1984. [illegible]

† Iron supplementation [illegible] be considered from [illegible] weeks.


Milupa Ltd., Milupa House, Uxbridge Road, Hillingdon, Uxbridge, Middlesex UB10 0NE. Tel: 081-573 996[illegible]

# she were born premature?

Clinical data shows an excellent performance from Milupa Prematil[3,4] and low birthweight formulae in general.[5,6] Babies fed preterm formulae grow faster and better than those fed EBM or standard formulae.

Milupa Prematil has been developed to meet the [illegible] guidelines[2] for preterm formulae and [illegible] action.

Milupa Prematil is now being used in over 60 Special Care Baby Units throughout the country.

**Milupa Prematil – Proven performance in clinical trials.**[3,4]

★ Fat blend includes 30% MCT for high fat absorption (87%) ensuring energy retention and enhanced protein utilization.

★ Excellent protein utilization (90%) promotes growth without metabolic overload.

★ Good tolerance and nutritional balance ensures supplementation is rarely required.

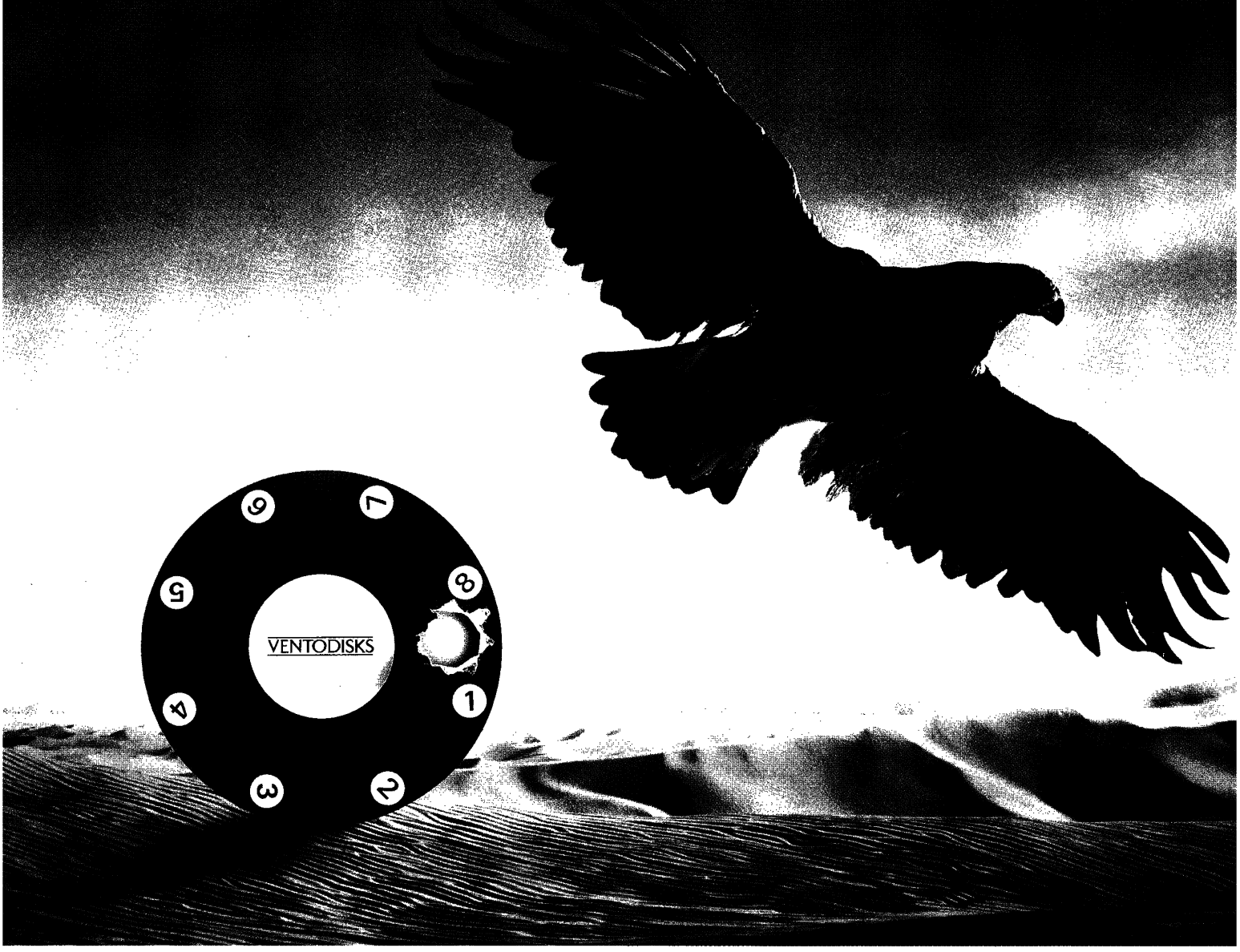
★ No added iron allows greater flexibility in the management of iron status.†


# milupa Prematil®

From milupa Prematil® to Aptamil® an assured path to normal formula feeding.

# VENTODISKS
(Salbutamol BP)

# Making sure Ventolin gets through




**Ventodisks (Salbutamol BP)**
**Abridged Prescribing Information:** (Please refer to full data sheet before prescribing.)
**Uses:** Treatment and prophylaxis of acute and chronic bronchospasm.
**Dosage and administration:** *Adults:* Ventodisks – 400 micrograms, as a single dose or three to four times daily. *Children:* Ventodisks – 200 micrograms, up to four times daily.
**Contra-indications:** Threatened abortion during first or second trimester. Hypersensitivity.
**Precautions:** If previously effective dose lasts less than three hours, seek medical advice. Caution in patients with thyrotoxicosis. Avoid use with non-selective beta-blockers. *Pregnancy:* Avoid unnecessary use during early pregnancy.
**Side-effects:** Mild tremor, headache occur rarely. Very rarely – transient muscle cramps and hypersensitivity reactions. Paradoxical bronchospasm could occur – substitute alternative therapy.

**Presentation and Basic NHS cost:** Ventodisks – pack of 14 Ventodisks each containing 8 x 200 micrograms Salbutamol BP (as sulphate) – light blue or 8 x 400 micrograms Salbutamol BP (as sulphate) – dark blue, together with a Ventolin Diskhaler. For inhalation. £7·11 and £12·02. Refill pack of 14 x 8 Ventodisks 200 micrograms or 14 x 8 Ventodisks 400 micrograms £6·54 and £11·45.
**Product licence numbers:** Ventodisks 200 micrograms 0045/0134, Ventodisks 400 micrograms 0045/0135.

ALLEN & HANBURYS
Full prescribing information is available on request from: Allen & Hanburys Limited Greenford, Middlesex UB6 0HE
Ventodisks should only be used with a Ventolin Diskhaler Diskhaler, Ventodisks and Ventolin are trade marks

Ventodisks is a dependable breath-operated system delivering Ventolin to the lungs without the need for synchronisation.

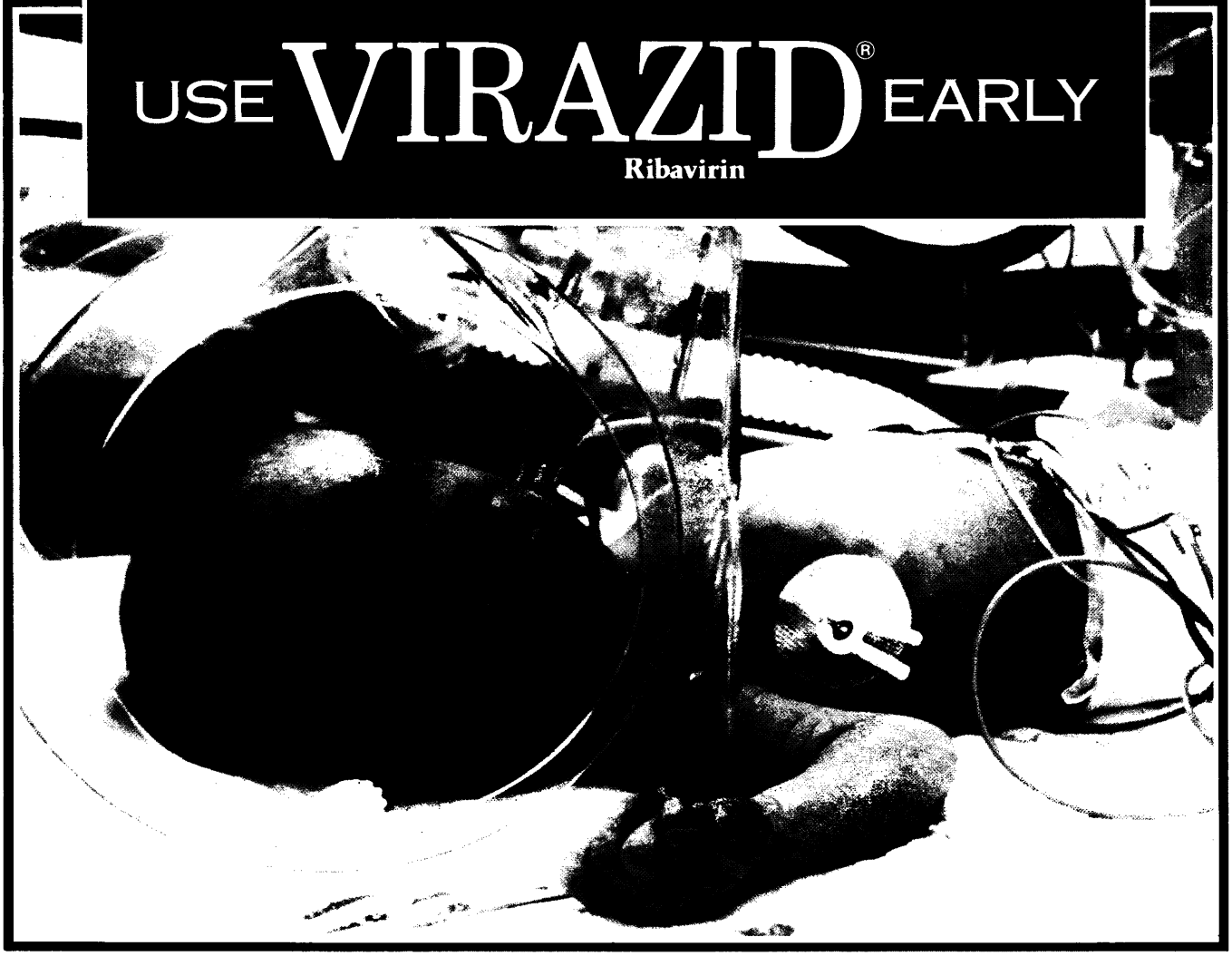
Furthermore, the disks provide a simple visual check on the number of doses delivered – an advantage for both children and adults.

VENTODISKS
(Salbutamol BP)

# RSV POSITIVE?

# USE VIRAZID® EARLY

**Ribavirin**



## YOU CAN TREAT THE INFECTION NOT JUST THE SYMPTOMS

**Prescribing Information ▼**

**Indications**
Virazid is indicated in the treatment of infants and children with severe respiratory syncytial virus bronchiolitis.

**Dosage**
Treatment is carried out using a small particle aerosol generator (SPAG) for 12-18 hours per day for at least 3 and no more than 7 days. The concentration of ribavirin in the reservoir is 20mg/ml in the SPAG unit and the average concentration for a 7 hour period is 0.19mg/l of air.

**Presentation**
Virazid is a sterile lyophilised powder of ribavirin to be reconstituted for aerosol administration. Each 100ml glass vial contains 6g of ribavirin and, when reconstituted to the correct volume of 300ml with Water for Injections BP, will contain 20mg/ml ribavirin at a pH of approximately 5.5.

**Contra-Indications**
Ribavirin is contra-indicated in females who are or may become pregnant and it should be noted that ribavirin can be detected in human blood even four weeks after oral administration has ceased.

**Precautions**
In infants requiring assisted ventilation, Virazid should only be used when there is constant monitoring of both patients and equipment.

**Side Effects**
Several serious adverse events occurred in severely ill infants with life-threatening underlying disease many of whom required assisted ventilation. These events included worsening of respiratory status, bacterial pneumonia and pneumothorax. The role of ribavirin aerosol in these events has not been determined.
Anaemia has been reported with oral and intravenous administration but no such incidents have been reported with aerosol administration. Reticulocytosis has been reported with aerosol use.

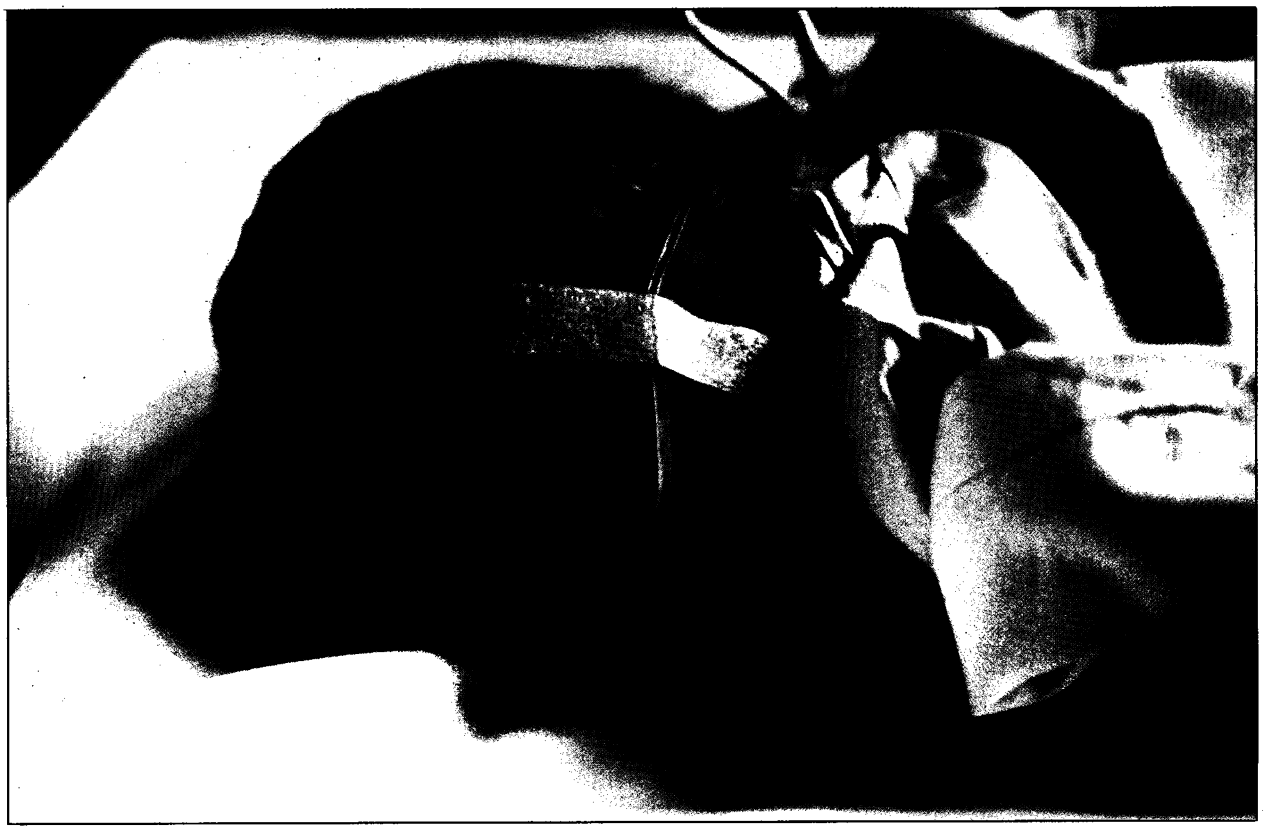
**Warnings**
Precipitation of the drug in respiratory equipment and consequent accumulation of fluid in the tubing has caused difficulties for patients requiring assisted ventilation.
In infants requiring assisted ventilation Virazid should only be used when there is constant monitoring of both patients and equipment.
Directions for use during assisted ventilation are given in the SPAG manual which should be read carefully before such administration.

Full prescribing information is available upon request.

▼ Special reporting to the CSM required.

**Basic NHS Price:** 1 × 6g vial £195.
**Product Licence Number** : 4657/0004
**Product Licence Holder** : Viratek Inc. USA
**Supplied By** : Britannia Pharmaceuticals Ltd
Forum House
41-51 Brighton Road
Redhill, Surrey,
RH1 6YS

# Some infants are ahead of their time.

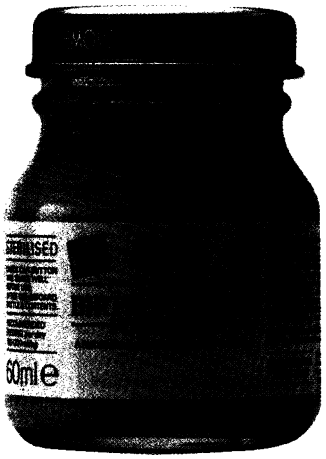


# Fortunately, so are we.

Cow & Gate has been looking after the nutritional needs of infants for over 90 years. During that time, we've created the widest range of formulas and foods for normal infants and those with very special needs.

The low birth weight baby is one of them.

Our Low Birth Weight Formula was specially created to provide higher energy and nutrient levels, at a lower volume than might otherwise be obtained from breast-milk or standard infant formula – an important consideration in the prevention of problems associated with immature digestive systems.



This formulation was one of the first designed to meet the guidelines set out by ESPGAN, the European Society of Paediatric Gastroenterology and Nutrition.

What's more, Cow & Gate Low Birth Weight Formula achieves good calcium retention and still offers the lowest osmolality of any low birth weight formula available today.

Cow & Gate Low Birth Weight Formula. Well-absorbed. Proven well-tolerated.

And just one of an ever increasing range of infant formulas and foods from a specialist ahead of its time.

**Extra nourishment when it's needed most**

Cow & Gate

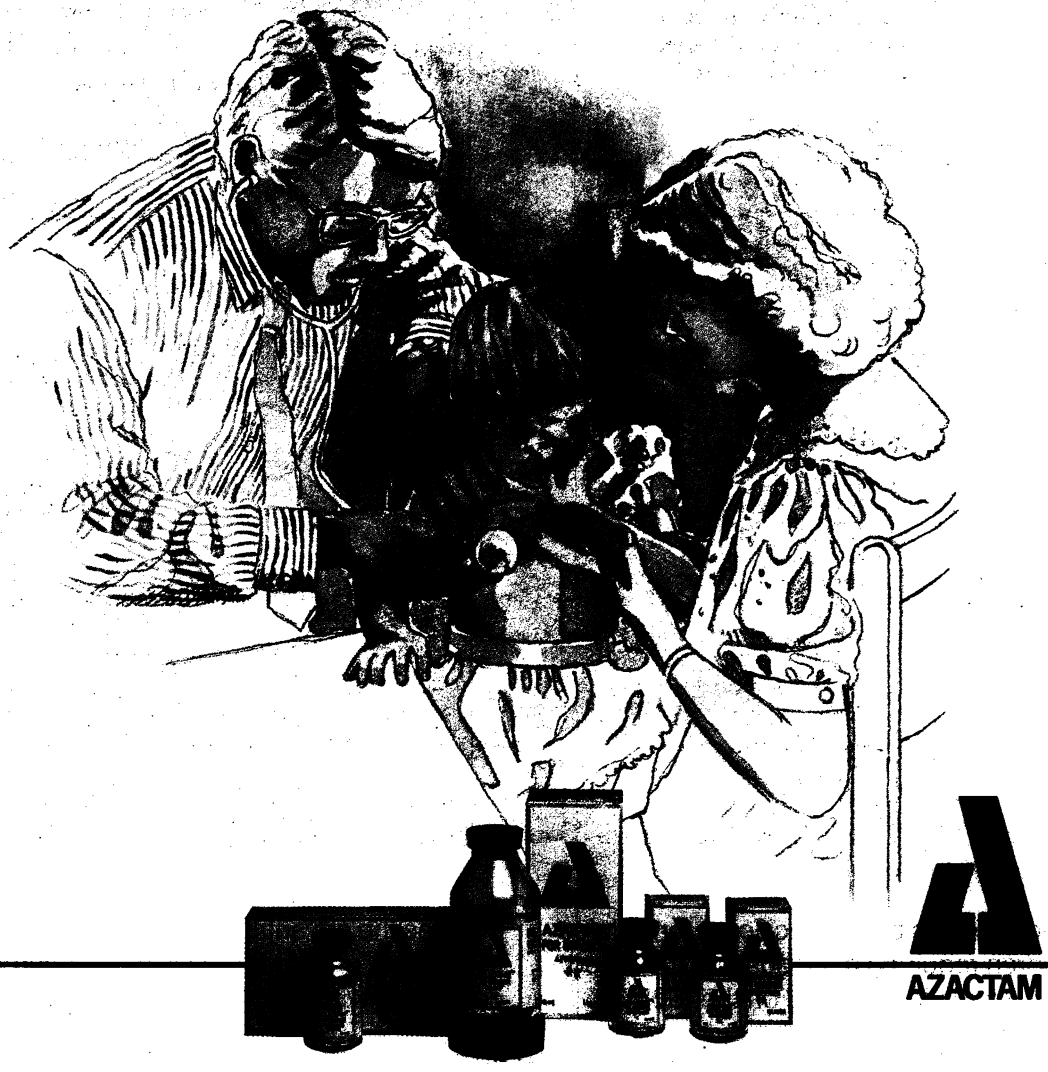
Convenient 60ml size means less waste

Breastmilk is the best food for babies. The purpose of infant milk formula is to replace or supplement breastmilk when a mother cannot or chooses not to breastfeed. The cost of infant milk formula should be considered and medical advice taken before deciding how to feed a baby. For further information contact Cow & Gate, Medical Department, Trowbridge, Wiltshire BA14 8YX. (0225 768381.)

# AZACTAM

**aztreonam**

## Confidence in paediatric gram-negative infections



AZACTAM

### ABBREVIATED PRESCRIBING INFORMATION AZACTAM

**Presentation** Vials containing 500mg, 1g, 2g aztreonam. Infusion bottle containing 2g aztreonam. All with L-arginine.
**Indications** For the treatment of the following infections caused by susceptible aerobic Gram-negative micro-organisms: Urinary tract infections, gonorrhoea, lower respiratory tract infections (including pneumonia, bronchitis, lung infections in patients with cystic fibrosis), septicaemia, meningitis caused by Haemophilus influenzae or Neisseria meningitidis, bone and joint infections, skin and soft-tissue infections, intra-abdominal infections and gynaecological infections.
**Dosage and administration** Adults: 1g-8g daily in divided doses depending on site and severity of infection. The usual dose is 3-4g daily. In serious infections a dose of 6-8g daily is recommended. In cystic fibrosis 2g 6-8 hourly IV. Gonorrhoea/cystitis 1g im. single dose. Children: patients older than 1 week 30mg/kg/dose every 6-8 hours. For severe infections in patients 2 years of age or older, 50mg/kg/dose every 6 or 8 hours is recommended. Total daily dose should not exceed 8g. Dosage information not available for newborns less than 1 week old. Azactam can be given intravenously or intramuscularly. Intravenous injection or infusion is recommended for doses greater than 1g. Adjust dosage in renal impairment. (See Data Sheet.)
**Contra-indications** Patients with a known hypersensitivity to Azactam.
**Pregnancy.**
**Precautions** Initial concurrent therapy with other antibiotics is recommended for infections which may be due to non-susceptible organisms. (See Data Sheet.) Lactating mothers should refrain from breast feeding. Therapy with Azactam may result in superinfections which may require additional therapy. Impaired renal/hepatic function. Caution should be exercised in patients with beta-lactam hypersensitivity. Prothrombin times should be monitored in patients with concomitant anticoagulant therapy.
**Side effects** Aztreonam is generally well tolerated. Side-effects include rash, local reactions at the injection site, diarrhoea, nausea, vomiting. (See Data Sheet.)
**Legal category** POM.
**Product Licence No./Cost** Azactam injection 500mg vial PL0034/0250 £4.48, 1g vial PL0034/0251 £8.95, 2g vial PL0034/0252 £17.90, 2g infusion bottle PL0034/0255 £17.90.
**Product Licence Holder** E R Squibb and Sons Ltd, Squibb House, Hounslow, Middlesex TW3 3JA.
**Date of preparation** May 1989.

SQUIBB™
Investing in Britain

**E.R. Squibb & Sons Limited,** Squibb House, 141-149 Staines Road, Hounslow, Middlesex TW3 3JA.

# Specially for kids


Fortison® Paediatric has been specifically formulated for young children requiring a nasogastric tube feed. It is a balanced, sterile feed, based on the 1988 BDA Paediatric and PEN Group Joint Working Party guidelines.[1]

Furthermore, Fortison® Paediatric is ready-to-use and has the advantages of saving time, and reducing inaccuracy of nutrient levels and contamination risks, compared with modified adult formulas.

To help patients and ward staff with feeding time, Cow & Gate will be providing a range of MR MEN educational and fun items.

**Fortison®**
**paediatric**

ready-to-use nasogastric feed

1. Paediatric Enteral Feeding Solutions and Systems. A Report by the Joint Working Party of the Paediatric Group and the Parenteral and Enteral Nutrition Group of the British Dietetic Association, 1988.

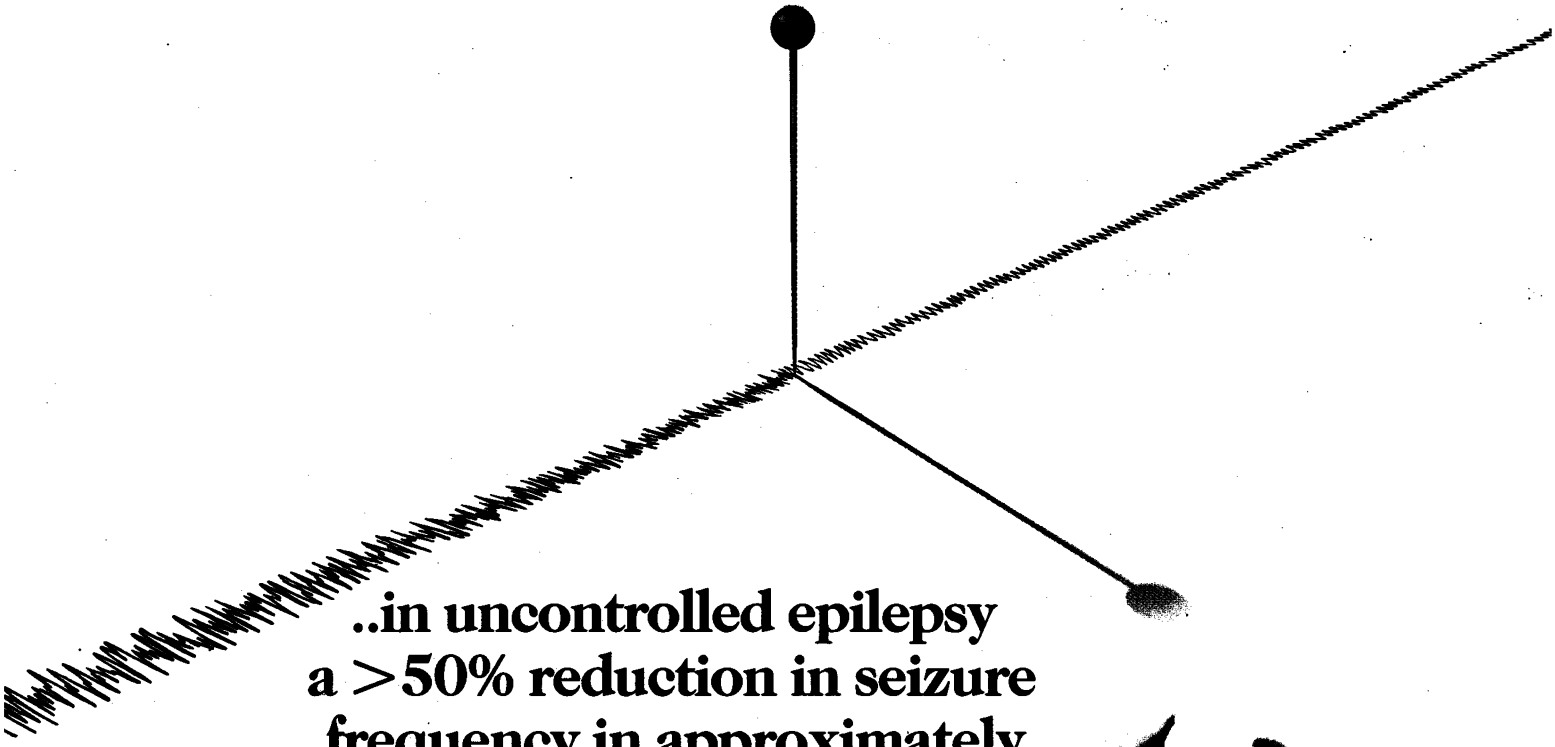
Cow & Gate CLINICAL CARE

**Leaders in scientific nutrition** Cow & Gate House, Trowbridge, Wiltshire BA14 8YX. Tel: 0225 768381



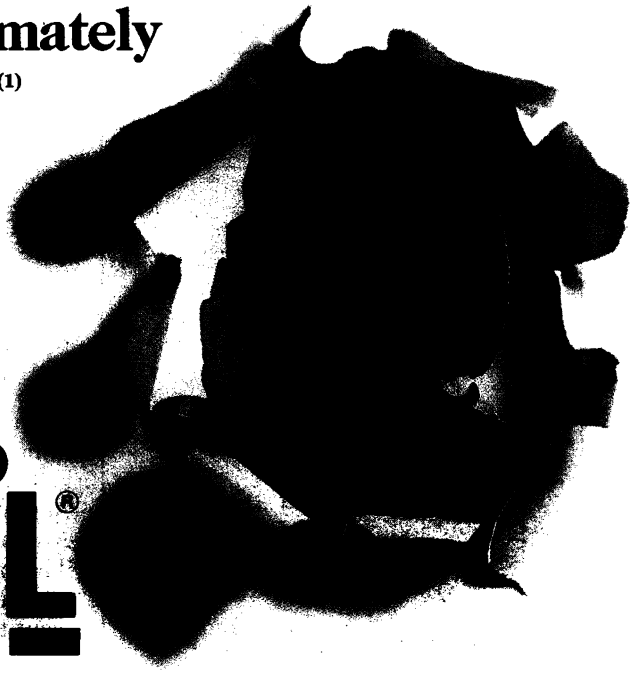
CC421/5/90

# A breakthrough in seizure control...



## ..in uncontrolled epilepsy a >50% reduction in seizure frequency in approximately 50% of patients[1]

- No therapeutically significant drug interactions with other anti-convulsants[2-5]*
- Flexible dosing - once or twice daily



**SABRIL®**

**VIGABATRIN**

Specific GABA-transaminase inhibition for uncontrolled epilepsy

*Decreases of about 20% in plasma phenytoin levels have been reported but these are unlikely to be of therapeutic significance.

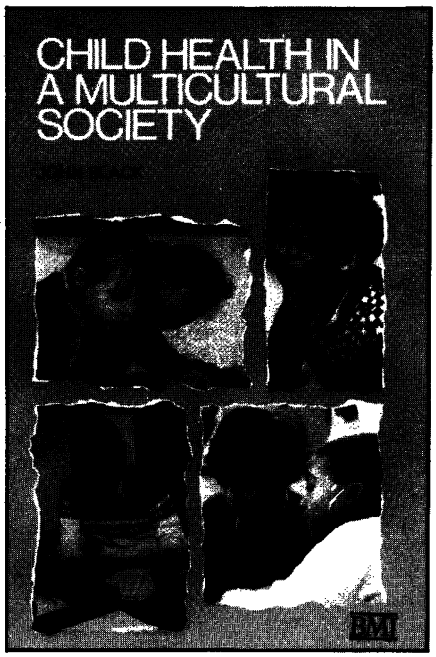
**MERRELL DOW**

Merrell Dow Pharmaceuticals Limited, Lakeside House, Stockley Park, Uxbridge, Middlesex UB11 1BE



Abridged Prescribing Information and references appear on the following page.

SAB 5 90



# NUTRIZYM® GR

## GASTRO-RESISTANT PANCREATIN THERAPY IN PANCREATIC INSUFFICIENCY

## EFFICIENT DELIVERY FOR MAXIMUM ENZYME AVAILABILITY IN THE DUODENUM.

*"The size of microspheres of pancreatin should be such that they empty at least as fast as the food they are intended to digest."* [2]

Gelatin capsule containing enteric coated acid resistant microspheres of Lipase, Amylase and Protease.

Capsule dissolves in gastric fluids; microspheres remain intact and disperse throughout chyme.

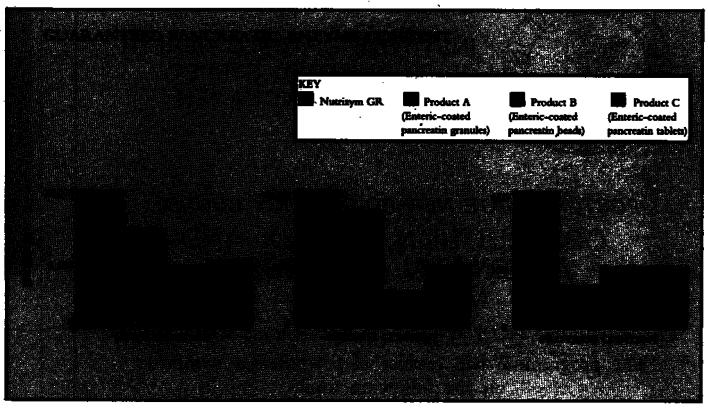
Enteric coating of microspheres starts to dissolve in duodenum at pH of about 5, releasing enzymes for digestion of food.

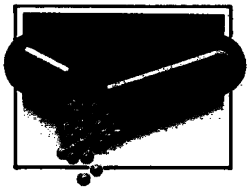
*"Recent reports on both Cystic Fibrosis and Adult Chronic Pancreatitis have demonstrated that duodenal postprandial pH . . . is frequently less than pH 5.5 . . ."* [3]

**● THE PANCREATIN MICROSPHERE PREPARATION WITH THE HIGHEST GUARANTEED POTENCY.**[1]

**● FEWER CAPSULES NEEDED**

At equal doses of lipase Nutrizym GR has been shown to result in equivalent lipid digestion and absorption with less than half as many capsules as required by preparation B [4] (see bar chart for enzyme concentrations).



**Nutrizym GR**
Gastro-resistant pancreatin

**Its strong point is its strength**


REFERENCES
1) *Pancreatin section, BNF.*
2) *Meyer JH et al, Gastroenterology, 1988, Vol. 94, No. 6, 1315-25.*
3) *Littlewood JM, Kelleher J, Walters MP & Johnson AW, J Paediatr. Gastroenterol. Nutr., 1988, Vol. 7, Suppl. 1, 522-529.*
4) *Dodge JA & Matthews EE (Data on file).*


Further information is available on request from E. Merck Pharmaceuticals (a division of Merck Ltd) FREEPOST, Winchester Road, Four Marks, Alton Hants GU34 5HB. Telephone (0420) 64011.

**NUTRIZYM GR - Prescribing Information**
Each capsule contains enteric coated pellets of Pancreatin BP 300 mg with not less than the following activities:
Lipase 10,000 BPU, Protease 650 BPU, Amylase 10,000 BPU
**Use:** Fibrocystic disease of the pancreas, chronic pancreatitis, steatorrhoea and other pancreatic deficiency states.
**Dosage and Administration:** Usually 1 - 2 capsules with meals.
Capsules should be swallowed whole with water or contents sprinkled on food.
Pellets should not be chewed.
**Contra-indications:** Known hypersensitivity to porcine pancreatin.
**Precautions:** Hyperuricaemia and hyperuricosuria have been reported to occur in cystic fibrosis patients; pancreatin extracts contain a very small amount of purine which might, in high dose, contribute to this condition.
**Use in Pregnancy:** Safety in pregnancy has not been established.
**Side effects:** Very rarely hypersensitivity reactions. High doses may cause buccal and perianal irritation, in rare cases amounting to inflammation.
**Pharmaceutical Precautions**
Store below 25°C in tightly closed containers.
**Package quantities**
Containers of 100 capsules (OP) PL 0493/0121;
NHS Price: £12.52 at February 1990

**MERCK**

## 3rd INTERNATIONAL PAEDIATRIC HAEMATOLOGY AND ONCOLOGY UPDATE CONFERENCE

**16TH–17TH MAY, 1991**

EDINBURGH CONFERENCE CENTRE, EDINBURGH, SCOTLAND, U.K.

ORGANISING COMMITTEE
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*Conference is aimed at Haematologists, Oncologists, Radiotherapists, and Staff involved in the development and giving of treatments in Paediatric Haematology and Oncology.*

*TOPICS TO BE COVERED:*
Red Cell Membrane Disorders • Sickle Cell Disease • Thalassaemia
Haemophilia • Coagulation in the Newborn • Emesis Control
Epidemiology of Childhood Tumours • Cytokines • ALL and ANLL
Non Hodgkins Lymphoma • Bone Marrow Transplants
Infection Control • Hodgkin's Disease • Neuroblastoma
Soft Tissue Sarcomas • Bone Tumours • New Agents in Phase I and Phase II • Late Effects of Treatment

*SPEAKERS INCLUDE:*

| | |
|---|---|
| Dr. J. Birch, Manchester | Dr. F. Hill, Birmingham |
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*Registration Fee: Doctors–U.K. £74* *Nurses and Pharmacists–U.K. £37*

Further information available from the Conference Secretariat:
INDEX COMMUNICATIONS, HILLCREST HOUSE, DANES ROAD, AWBRIDGE, ROMSEY, HAMPSHIRE SO51 0HL, ENGLAND.
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PORTON

# The Milupa Award for Research into Infant and Child Nutrition.

Applications are now invited for the 1991 Milupa Award for research into infant and child nutrition.

The Award was first instituted in 1982 by the Herbert Quandt foundation of Altana Industrie Aktien und Anlagen AG West Germany. It reflects the close relationship between Milupa AG and university researchers in the field of nutritional science.

Applications should take the form of scientific papers on infant and child nutrition which have already been published or are awaiting publication. Individuals and research teams in all European countries are eligible.

The first prize is DM 10,000 and the two runners-up will each receive DM 5,000. Prize-winners will be chosen by the Milupa Prize Committee of the Herbert Quandt foundation. The results will be published in the specialist press and the prize-winners will receive diplomas.

To be considered for the Milupa Award, submit a copy of the paper, a curriculum vitae and list of publications to Milupa AG, Bahnstrasse 14-30, 6380 Friedrichsdorf Taunus FRG. Mark envelopes "Milupa Preis". The closing date is 31st December 1991.

milupa®

INSTITUTE OF CHILD HEALTH
30 GUILFORD STREET,
LONDON WC1N 1EH

*POSTGRADUATE NEPHRO-UROLOGY COURSE:*

## OBSTRUCTION, REFLUX AND ANTENATAL DIAGNOSIS

**March 4–8 1991**

Course organisers: Prof T M Barratt, Dr I Gordon and Mr P G Ransley

The programme will consist of 5 whole-day symposia on the following topics:

EMBRYOLOGY AND DEVELOPMENT OF RENAL FUNCTION

CONSEQUENCES OF LOSS OF RENAL MASS

URINARY OBSTRUCTION

VESICOURETERIC REFLUX AND URINARY TRACT INFECTION

ANTENATAL DIAGNOSIS OF UROLOGICAL ABNORMALITIES

Speakers include: Professor T M Barratt, Dr M Coulthard, Dr M J Dillon, Mr P G Duffy, Dr I Gordon, Dr J P Guignard (Lausanne), Dr G B Haycock, Dr U Jodal (Gothenburg), Professor M Pembrey, Professor A P Provoost (Rotterdam), Professor C Rodeck, Dr S P A Rigden, Dr J M Smellie, Dr R S Trompeter, Professor R H R White, Dr K Verrier Jones

In addition there will be presentations of current cases of interest from the Hospital for Sick Children, Great Ormond Street, London. Participants will be encouraged to present interesting cases.

Fee: £250 for week or £50 a day
For further details and registration forms please contact:
John Parkinson, Short Courses Office, Institute of Child Health 30 Guilford Street, London WC1N 1EH. Tel: 071 829 8692

SPECIAL BMA MEMBERS EDITION

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352 pp., illus., Clarendon Press/BMJ, September 1990

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European Journal of
# Pediatrics
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**Volume 149 No. 12 1990**

**The pioneers of pediatric medicine** 813

*Review*

**Childhood Lyme borreliosis in Europe**
H.-I. Huppertz **814**

*Annotation*

**Thoughts of a reviewer**
H. J. Schmidt **822**

*Endocrinology*

**Growth and endocrine disorder in optic glioma**
R. Brauner, F. Malandry, R. Rappaport, J. M. Zucker, C. Kalifa, A. Pierre-Kahn, P. Bataini, J. L. Dufier **825**

*Gastroenterology/ Hepatology*

**Cellular cytotoxicity against autologous hepatocytes in children with different forms of chronic hepatitis B**
K. M. Keller, T. Poralla, H. P. Dienes, S. Wirth, W. Baumann **829**

**Prevalence and diagnostic significance of gliadin antibodies in children with Down syndrome**
W. Storm **833**

*Growth and development*

**Neurological outcome in high risk weight appropriate for gestational age preterm children at early school age**
R. H. Largo, L. Molinari, S. Kundu, U. Hunziker, G. Duc **835**

**Intellectual outcome, speech and school performance in high risk preterm children with birth weight appropriate for gestational age**
R. H. Largo, L. Molinari, S. Kundu, A. Lipp, G. Duc **845**

*Neonatology*

**Pulse oximetry used for documenting oxygen saturation and right-to-left shunting immediately after birth**
P. Meier-Stauss, H. U. Bucher, R. Hürlimann, V. König, R. Huch **851**

*Neuropediatrics*

**Cardiomyopathy and multicore myopathy with accumulation of intermediate filaments**
E. Bertini, C. Bosman, M. Bevilacqua, E. Ricci, G. M. Gagliardi, F. Parisi, S. Servidei, C. Dionisi-Vici, L. Ballerini **856**

*Oncology*

**Fluctuation in the concentrations of vanillylmandelic acid and homovanillic acid in mass screening for neuroblastoma**
M. Nishi, H. Miyake, T. Takeda, K. Yamashiro, N. Takasugi, J. Hanai, T. Kawai **859**

**Lung volumes following resection of pulmonary metastases in paediatric patients – a retrospective study**
K. P. Paul, H. Toomes, I. Vogt-Moykopf **862**

*Letter to the editors*

**Pelvic lipomatosis in the Proteus syndrome: a further diagnostic sign**
G. Beluffi, G. Di Guilio, P. Fiori **866**

*Contents of volume 149*

*Index of key words*

Indexed in *Current Contents*

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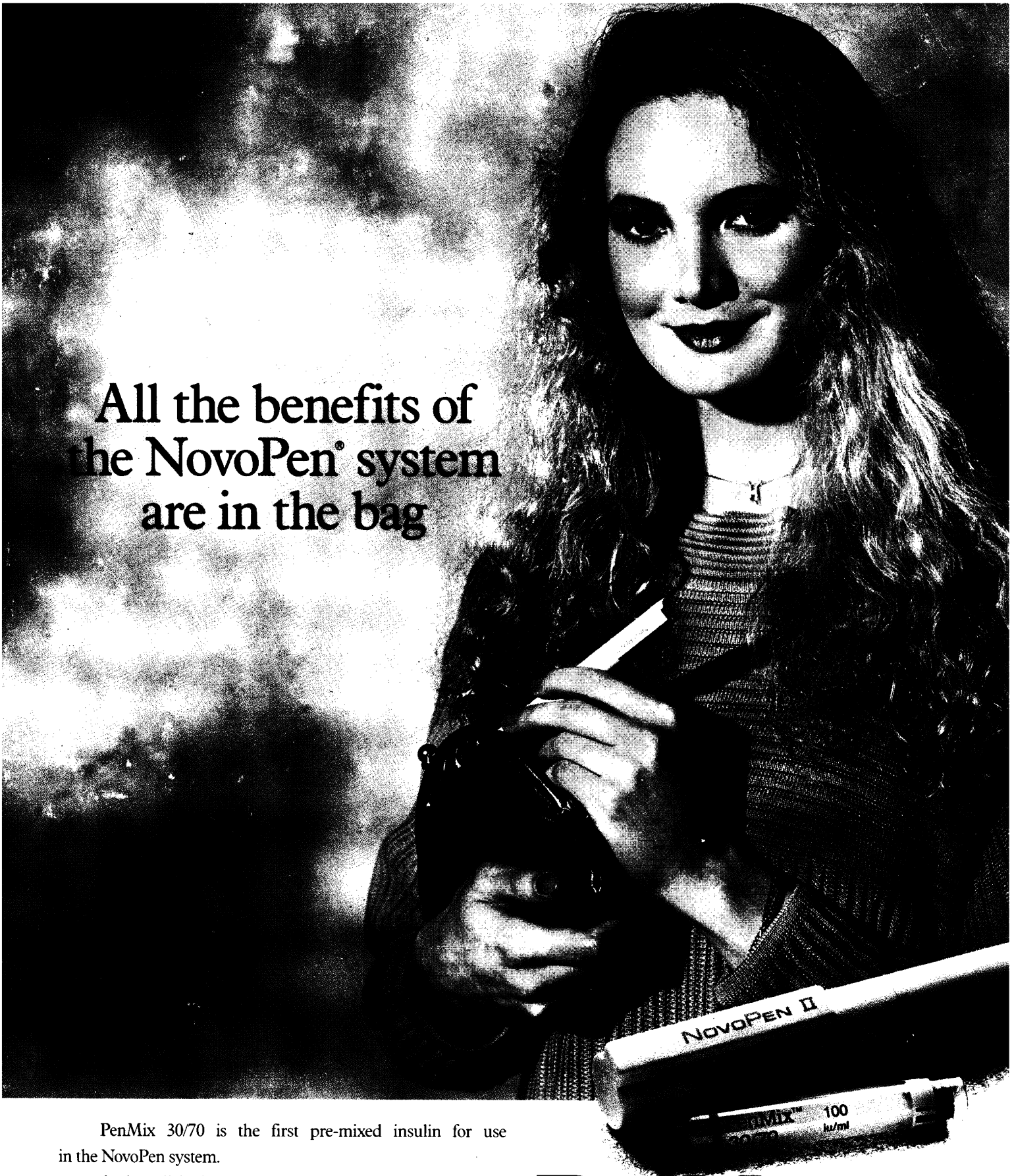


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INTEGRATED DIABETIC CARE

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