

In response to a growing demand for flexibility and convenience.



Genotropin™ (somatropin (rbe)) is available in a 12 IU Multidose vial. Once reconstituted Genotropin 12 IU Multidose can be stored in a refrigerator for up to two weeks. This makes the use of individually titrated dosage regimens a practical proposition and reduces the time spent preparing injections.

The combination of authentic sequence growth hormone and multidose presentation makes the introduction of Genotropin 12 IU Multidose a significant development for patients requiring growth hormone therapy.

Genotropin™ 12 IU Multidose somatropin (rbe)

PRESCRIBING INFORMATION ▼ **Presentation** A vial of sterile lyophilised powder containing 12 IU somatropin (rbe) supplied with 3 ml of Water for Injections with 0.25% m-cresol for reconstitution. **Indications** The treatment of short stature caused by decreased or absent secretion of pituitary growth hormone. **Reconstitution** Add 3 ml of Water for Injections with 0.25% m-cresol to the lyophilised powder in the vial. Dissolve the drug gently without shaking vigorously. **Dosage and Administration** Administer by subcutaneous or intramuscular injection. Generally a dose of 0.5 - 0.7 IU/kg body weight per week is recommended divided into six or seven subcutaneous injections. Alternatively two to three intramuscular injections can be given. **Contra-Indications** Only patients with unfused epiphyses should be treated. **Precautions** Patients with diabetes mellitus may require adjustment of their antidiabetic therapy. Patients treated with Genotropin should be regularly assessed by a child growth specialist. If given subcutaneously, the injection site should be rotated to prevent lipoatrophy. **Pregnancy and Lactation** In the event of pregnancy occurring during Genotropin therapy, treatment should be discontinued. No information is available as to whether peptide hormones pass into breast milk. **Side-Effects** A few children developed transient local skin reactions during clinical trials. Some patients develop antibodies to growth hormone although the frequency with Genotropin has been low in clinical trials. **Pharmaceutical Precautions** Store between 2-8°C and protect from light. Reconstituted Genotropin 12 IU Multidose may be stored for up to 2 weeks in the refrigerator. **Legal Category** POM. **Package Quantities** Combined pack containing one vial of somatropin (rbe) 12 IU and one vial of Water for Injections with 0.25% m-cresol. **Product Licence Numbers** Genotropin 12 IU Multidose PL 0022/0079. Water for Injections with 0.25% m-cresol PL 0022/0081. **Price** NHS Price £91.50. **Product Licence Holder** KabiVitrum Ltd, KabiVitrum House, Riverside Way, Uxbridge, Middlesex UB8 2YF. Further information is available on request from the product licence holder.

KABI

What would you feed her if

The Challenge

This question is one of the biggest challenges in neonatology today. Preterm infants may have special nutritional needs, and we must know how to meet them. We must know how to provide the best nutrition for these infants, and we must know how to provide the best nutrition for these infants.

References

1. Committee on Nutrition of the preterm infant. European Society of Paediatric Gastroenterology and Nutrition. Nutrition and feeding of 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 Neonatologie, Hopital Edouard Herriot, Lyon, France. Senterre J., Rigo J., Neonatologie de L'Hopital Universitaire de Baviere, L...

she were born premature?

ESPGAN - Sets New Standards in Preterm Nutrition

A comprehensive review¹ and Guidelines² on nutrition and feeding of preterm infants have recently been published by the European Society of Paediatric Gastroenterology and Nutrition (ESPGAN).

Milupa Prematil - Meets ESPGAN Guidelines for Preterm Formulae
Developed to incorporate recent advances

Milupa Prematil meets the ESPGAN Guidelines and translates them into action.

New Milupa Prematil - Proven Performance in clinical trials^{3,4}

- ★ High fat absorption (87%) ensures energy retention and enhances protein utilization.³
- ★ Excellent protein utilization (90%) promotes growth without metabolic overload.³
- ★ Good tolerance and nutritional balance ensures supplementation is rarely required.^{4†}

NEW milupa
Prematil®

From the birth of Prematil an assured path to normal formula feeding.



Delivering night and day



Volmax is a controlled release formulation of salbutamol, designed to achieve constant therapeutic plasma levels.

With a simple twice daily dosage, Volmax provides 24-hour bronchodilatation,¹ thereby offering asthmatics and chronic bronchitics continuous night and day cover against attacks.

Volmax is well tolerated by adults¹ and children,² and in comparison with sustained release theophylline demonstrates significantly fewer side effects.³

Thus, if you want to cover your patients night and day, remember two things – Volmax 8mg twice daily in adults and Volmax 4mg twice daily in children.

VOLMAX

controlled release salbutamol

Twice daily for asthmatics and chronic bronchitics

PRESCRIBING INFORMATION

Volmax Tablets. Uses Reversible airways obstruction. **Dosage & administration** Volmax tablets must be swallowed whole with a glass of water. **Adults:** One 8mg tablet b.d. **Elderly:** There is no need to adjust the dose. **Children: Aged 3 to 12 years:** One 4mg tablet b.d. **Contra-indications, warnings, etc.** **Contra-indications:** Salbutamol should not be used for threatened abortion during the first or second trimesters of pregnancy. Known hypersensitivity to components of Volmax. Volmax may be used with MAO's. **Precautions:** Administer with caution in thyrotoxicosis. Avoid prescription with non-selective beta-blocking agents. **Pregnancy:** Salbutamol has had widespread use for many years in humans, including its well-established use in the management of premature labour; there is little published evidence of its safety in the early stages of human pregnancy. In animal studies, there was evidence of some harmful effects on the fetus. **Side effects:** Fine tremor of skeletal muscle which may induce feelings of tension. Occasionally, headache, peripheral vasodilatation and an increased pulse rate. Very rarely; transient muscle cramps, hypersensitivity reactions. **Presentation, Basic NHS cost and Product licence numbers** Volmax controlled release tablets are white, hexagonal, printed 8 or 4 on one side and contain 8mg or 4mg salbutamol respectively as Salbutamol Sulphate BP 8mg tablets, blister packs of 14 in cartons of 56, £12.00, PL0021/0129. 4mg tablets, blister packs of 14 in cartons of 56, £10.00, PL0021/0128. **References** 1. Maesen FPV, Smeets JJ. Eur J Clin Pharmacol 1986; 31: 431-436. 2. Data on file, Duncan, Flockhart & Co. Limited. 3. Vyse T, Cochrane GM. J Int Med Res 1989; 17: 93-98. Further information is available on request from PL holder: Duncan, Flockhart & Co. Limited, 700 Oldfield Lane North, Greenford, Middlesex UB6 0HE.

Volmax is a trade mark. Date of preparation: July 1988.

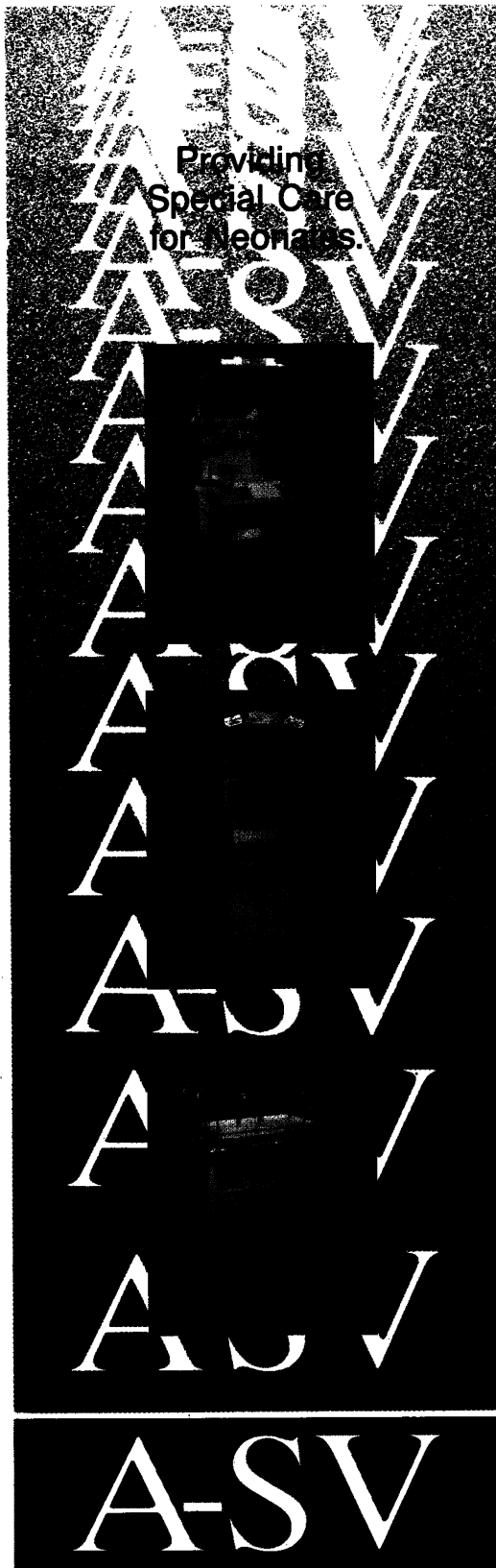
DUNCAN
FLOCKHART

Air-Shields Vickers

The Resuscitaire 165 provides all the basic facilities necessary to help babies born with breathing difficulties survive the immediate post-natal period. Its compact, self contained construction makes it easily mobile for use in the ward or theatre. Its comprehensive facilities makes the Resuscitaire 165 a totally practical and comprehensive resuscitation system.

The Neocrib is an alternative clinical approach to the incubator for the intensive care of the sick and preterm neonate. It provides continuous unrestricted access, clear visibility and a safe controlled thermal neutral environment. Built in features include sophisticated temperature control, large clear digital displays, fold down side walls, continuously variable bed tilt, two monitor shelves and IV pole and X-ray cassette tray.

The Neocare Mk2 incubator available in both air and baby modes, provides the safe, warm environment, essential in caring for the critical neonate. In addition to the standard bi-directional air flow system, independent temperature control and measurement, and comprehensive alarm system there is a wide range of optional accessories available which can tailor the Neocare for handling any situation in neonatal care.



S&W Vickers

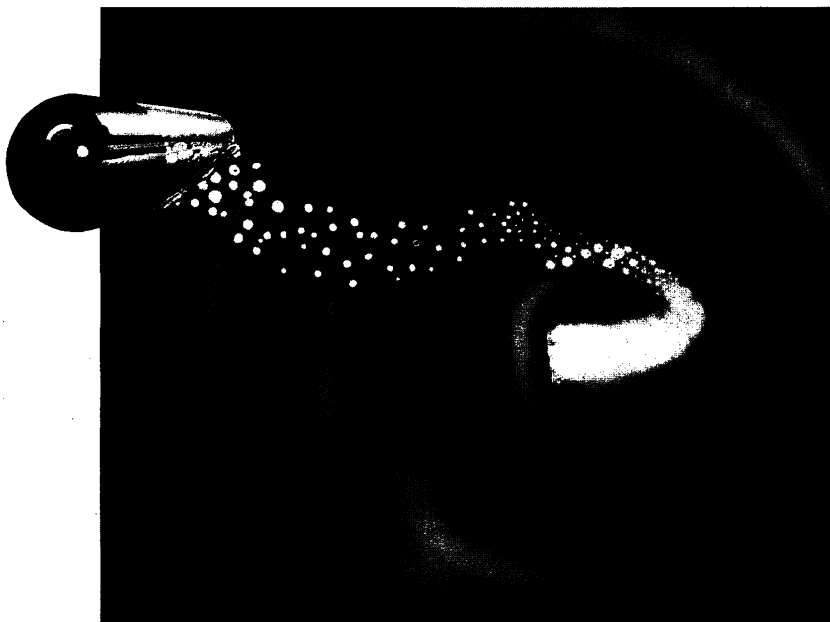
S&W Vickers Ltd, Ruxley Corner, Sidcup, Kent DA14 5BL

Telephone: 01-309 0433 Telex: 896328 Fax: 01-309 0919



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.

CRA4/CF1/89

ADVANCE NOTIFICATION OF MEETING

Newcastle-upon-Tyne SYMPOSIUM IN CHILD HEALTH

No. 10—Perspectives in Paediatric Nutrition

Friday 29th and Saturday 30th September 1989
in
The Medical School, Newcastle-upon-Tyne

Topics to include:

- | | |
|--|--|
| Infant Growth and Later Death Risk from Cardiovascular and Respiratory Disease | — Professor D Barker, Southampton |
| Does Infantile Nutrition Programme Long-Term Behaviour and Outcome | — Dr A Lucas, Cambridge |
| Early Nutrition and Brain Development, Implications from Experimental Studies | — Dr J Smart, Manchester |
| Early Nutrition and Adolescent Fat Patterns | — Professor F Johnston, University of Pennsylvania |
| Practical Problems of Nutrition in Children with Cancer | — Dr A D J Pearson, Newcastle-upon-Tyne |
| Is Dietary Manipulation Necessary in Children with Diabetes Mellitus | — Dr A F Hackett, Liverpool |
| Diet and Dental Disease in Childhood | — Professor A Rugg-Gunn, Newcastle-upon-Tyne |
| Priorities in Paediatric Nutrition—the Perspective from the Infant Food Industry | — Dr A R Hervada, Radnor, USA |
| Priorities and Perspectives in Paediatric Dietetics | — Miss M Lawson, Great Ormond Street |
| Adolescent Diet, Vitamins and Intelligence | — Professor D J Naismith, London |
| Current Issues in Obesity Research | — Dr M E J Lean, Aberdeen |
| Failure to Thrive—Diet or Deprivation | — Mr A Edwards, Newcastle-upon-Tyne |
| Priorities in Health Education in Relation to Diet | — Mrs L Stockley, HEA, London |
| Healthy Eating—a Model Approach in a Primary School | — Dr A Waterson
Mrs R Etherington
Mr B Russell |

Registration fee: £25 (includes coffee, tea and lunch)

For further details please contact:
Mrs P McEwen, Department of Child Health,
The Medical School University of Newcastle-upon-Tyne,
Framlington Place, Newcastle-upon-Tyne, NE2 4HH
Telephone: 091 232 8511 Ext. 7831

This meeting is sponsored
by Wyeth Department of
Postgraduate Education



INSTITUTE OF PSYCHIATRY and INSTITUTE OF CHILD HEALTH
University of London

Diploma in Child and Adolescent Psychiatry

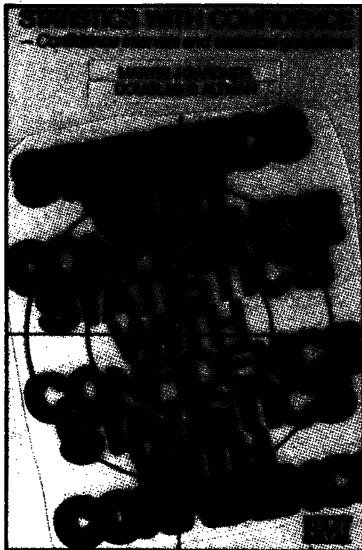
An International Course

A one year course leading to a Diploma in Child and Adolescent Psychiatry will start in January 1990. This annual course is run jointly in London by the Institute of Psychiatry and the Institute of Child Health. It covers diagnosis and treatment of children and adolescents with psychiatric disorders including those with physical illness and chronic handicap; assessment of community needs in relation to Child Mental Health, with a view to planning or implementing psychiatric services in the participant's own country; teaching and training medical and paramedical workers. The course will be particularly suitable for paediatricians, psychiatrists and psychologists intending to set up or work in child mental health services in developing countries. Good English is essential. A scholarship may be available for a suitably qualified candidate.

Course Teachers will include Dr. A. Bentovim, Dr. C. Dare, Dr. A. Gath, Prof. P. Graham, Dr. R. Howarth, Dr. P. Howlin, Dr. R. Lansdown, Dr. B. Lask, Dr. A. Nikapota, Dr. N. Richman, Prof. M. Rutter, Dr. D. Steinberg, Dr. E. Taylor, Dr. S. Wolkind, Dr. W. Yule.

Further details available from: Dr. A. Gath, Institute of Psychiatry, Department of Child & Adolescent Psychiatry, 16 De Crespigny Park, Denmark Hill, London SE5 8AF.

Applications should be returned by July 1st, 1989.



Just published

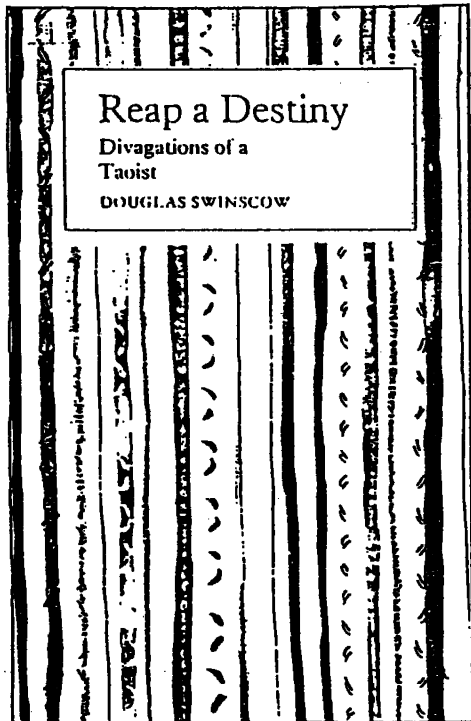
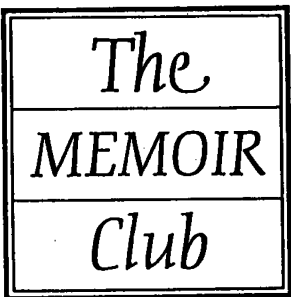
Many medical journals, including the *British Medical Journal* now expect scientific papers submitted to them to contain confidence intervals when appropriate. Why? what are they? and how do you calculate them? *Statistics with Confidence* tells you. A clear explanation of the reasons for using confidence intervals is followed by detailed presentation of methods of calculation, including numerous worked examples and specially compiled tables. To make things even easier, a computer programme, Confidence Interval Analysis (CIA), for calculating confidence intervals has been specially designed by Martin Gardner and details are available from the Publishing Department, *British Medical Journal*.

An essential handbook for everybody using statistical methods to present their findings (and that means most doctors). *Statistics with Confidence* can also be applied to other disciplines—such as engineering, agriculture, and the social sciences.

Price: Inland £7.95; Abroad £9.50; USA \$19.00
BMA Members: Inland £7.45; Abroad £9.00; USA \$18.00
including postage, by air abroad

Order from: BRITISH MEDICAL JOURNAL, PO BOX 295, LONDON WC1H 9TE or any leading bookseller.
Please enclose payment with order, or send us full details of your ACCESS, VISA or AMERICAN EXPRESS credit card.

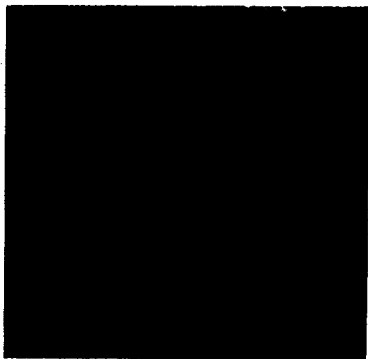
The BMJ's series of books of general interest by medical writers



Reap a Destiny

Divagations of a
Taoist
DOUGLAS SWINSCOW

To readers of the *BMJ* Douglas (Dougal) Swinscow is probably best known as its former deputy editor and author of one of its most popular books, *Statistics at Square One*. But he is also a world authority on lichens, and his first work to appear in print was a poem, published by T S Eliot in the *New English Weekly*. A lover of the arts and a painstaking scientist, a philosopher who nevertheless thrived in a military role and went through one of the bloodiest battles of the second world war (at Arnhem), Douglas Swinscow looks back at the contrasting forces that have shaped his life and at the personal choices that have gone into the making of his character.



Price: Inland £14.95; Abroad £17.50; USA \$29.00
BMA members: Inland £13.95; Abroad £16.50; USA \$27.00
including postage, by air abroad

ORDER FORM

BRITISH MEDICAL JOURNAL
PO BOX 295, LONDON WC1H 9TE
or any leading medical bookseller

Please send me:

- | | | | |
|--|--------------|------------------|----------------|
| <input type="checkbox"/> Reap a Destiny
by Douglas Swinscow | UK
£14.95 | ABROAD
£17.50 | USA
\$29.00 |
| <input type="checkbox"/> Blood, Sweat, and Cheers
by Sir Ian Fraser | £14.95 | £17.50 | \$29.00 |
| <input type="checkbox"/> A Natural History of Everyday Life
by Lord Taylor of Harlow | £19.95 | £24.00 | \$40.00 |
| <input type="checkbox"/> Portraits from Memory
by Sir James Howie | £14.95 | £17.50 | \$29.00 |
| <input type="checkbox"/> Not Always on the Level
by E J Moran Campbell | £14.95 | £18.50 | \$30.00 |
| <input type="checkbox"/> Recollections and Reflections
by Sir Douglas Black | £14.95 | £17.50 | \$29.00 |
| <input type="checkbox"/> Doctors in Science and Society
by Sir Christopher Booth | £14.95 | £19.50 | \$32.00 |

BMA members please deduct £1.00 £1.00 \$2.00
from the price of Memoir Club books

NAME
Please print name and address clearly

ADDRESS

I enclose

BMA Membership No

Please make cheques payable to **British Medical Journal** or debit my credit card (please tick box)

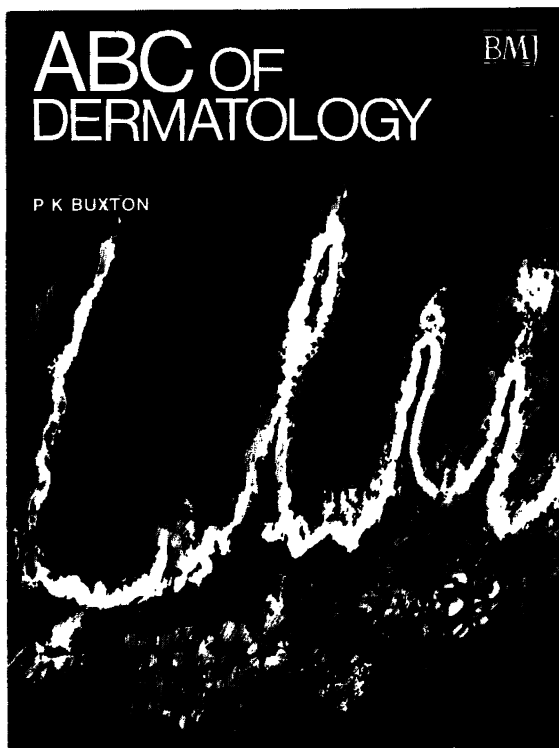
Access/MasterCard Barclaycard/Visa American Express

Card No.

Card expiry date

Signature

Please send me a book catalogue



Non-specialists overwhelmed by too many systematic descriptions of individual disease will welcome the new approach of *ABC of Dermatology*. Here the history, clinical appearance, and pathology of a few common key conditions are discussed and then as a basis for comparison with other skin diseases. Also dealing in detail with allergic reactions, autoimmunity, acne, and infections, this handbook is **fully illustrated in colour**, providing a clear guide to assessment and treatment as well as an understanding of the histological changes underlying the clinical presentations.

Price: Inland £10.95; Abroad £13.00; USA \$22.00. BMA members: Inland £9.95
Abroad £12.00; USA \$20.00 *including postage, by air abroad.*

Please enclose payment with order or send us full details of your ACCESS, AMERICAN EXPRESS or VISA credit card.

ORDER FROM: BRITISH MEDICAL JOURNAL, PO Box 295, London WC1H 9TE
or any leading medical bookseller

Roberto Burgio
On the occasion of his 70th birthday 487*Review***Rational pharmacotherapy of gastrointestinal motility disorders**
P. Demol, H.-J. Ruoff, T. R. Wehrauch 489*Gastroenterology/Hepatology***IgG, IgA and IgE gliadin antibody determinations as screening test for untreated coeliac disease in children, a multicentre study**
A. Bürgin-Wolff, R. Berger, H. Gaze, H. Huber, M. J. Lentze, D. Nussli 496*Hematology/Oncology***Studies of variations of subcutaneously infused desferrioxamine and iron movements in thalassaemia children**
E. A. Lladós i Vallory, R. Girot, G. Lenoir, M. Payet, P. Houze, R. Bourdon 503**Erythropoietic protoporphyria in a child**
M. Plette, A. Hassoun, A. Bourlond, G. Cornu 507*Imaging techniques***Evaluation of vein of Galen arteriovenous malformation in newborns by two dimensional ultrasound, pulsed and colour Doppler method**
G. Vaksmann, E. Decoulx, P. Mauran, M. Jardin, C. Rey, C. Dupuis 510*Immunology/Allergology***Atypical spondyloarthritis in children: proposed diagnostic criteria**
A. Hussein, H. Abdul-Khalik, H. von der Harth 513**DiGeorge syndrome with hypogammaglobulinaemia: a patient with excess suppressor T cell activity treated with fetal thymus transplantation**
M. Mayumi, H. Kimata, Y. Suehiro, S. Hosoi, S. Ito, Y. Kuge, K. Shinomiya, H. Mikawa 518**Sjogren syndrome in childhood: report of two cases**
A. Siamopoulou-Mavridou, A. A. Drosos, A. P. Andonopoulos 523**Crohn disease in systemic lupus erythematosus: a case report**
M. Nagata, Y. Ogawa, S. Hisano, K. Ueda 525*Infectious diseases***Lyme borreliosis in children. A controlled clinical study based on ELISA values**
M. Millner, M. G. Schimek, D. Spork, M. Schnizer, G. Stanek 527**Recurrent ascites in an infant with perinatally acquired cytomegalovirus infection**
I. Levy, M. Shohat, Y. Levy, G. Alpert, M. Nitzan 531*Medical genetics***Mitral valve prolapse in Turner syndrome**
V. Bastianon, A. M. Pasquino, E. Giglioli, G. Bosco, L. Tebaldi, C. Cives, V. Colloridi 533*Metabolic diseases***Biochemical markers of bone turnover, intact serum parathyroid hormone and renal calcium excretion in patients with pseudohypoparathyroidism and hypoparathyroidism before and during vitamin D treatment**
K. Kruse, U. Kracht, K. Wohlfart, U. Kruse 535**Carbamyl glutamate prevents the potentiation of ammonia toxicity by sodium benzoate**
J. E. O'Connor, M. Costell, S. Grisolia 540**Neonatal pyruvate dehydrogenase deficiency with lipote responsive lactic acidemia and hyperammonemia**
D. J. Byrd, H.-P. Krohn, L. Winkler, C. Steinborn, M. Hadam, J. Brodehl, D. H. Hunneman 543**Hypercalciuria and nephrolithiasis as a presenting sign in Wilson disease**
E. Azizi, G. Eshel, M. Aladjem 548**A neonatal case of apolipoprotein C-II deficiency**
M. Ohno, S. Ishibashi, K. Nakao, T. Nozue, K. Nonomura, N. Yamada, H. Aburatani, H. Shimano, T. Murase 550**Study of the bone pathology in early mucopolidiosis II (I-cell disease)**
U. E. Pazzaglia, G. Beluffi, E. Bianchi, A. Castello, A. Coci, A. Marchi 553**A case of combined Farber and Sandhoff disease**
Ch. Fusch, R. Huenges, H. W. Moser, A. C. Sewell, W. Roggendorf, B. Kustermann-Kuhn, A. Poulos, W. F. Carey, K. Harzer 558*Neonatology***The prevalence of high insertion of scrotum, hydrocele and mobile testis in the newborn infant (36-42 weeks gestation)**
J. Ben-Ari, P. Merlob, F. Mimouni, O. Rosen, S. H. Reisner 563**Respiratory and arousal responses to hypoxia in apnoeic infants reinvestigated**
J. Milerad, T. Hertzberg, G. Wennergren, H. Lagercrantz 565*Nutrition***Apple juice, fructose, and chronic nonspecific diarrhoea**
C. M. F. Kneepkens, C. Jakobs, A. C. Douwes 571*Pneumology***The effect of a manometer on the mean airway pressure during hand ventilation, an in vitro study**
J. Karsdon, T. Stijnen, H. M. Berger 574**Aminophylline dosage in acute severe asthma**
J. G. A. Gleeson, J. F. Price 577*Letters to the editors***Increase in bone density during testosterone therapy in adolescent hypogonadism**
O. Arisaka, M. Arisaka, A. Hosaka, N. Shimura, K. Yabuta, Y. Kawaguchi 579**Steroids in pneumocystis carinii pneumonia in HIV seropositive infants**
A. Plebani, M. Clerici Schoeller, M. C. Pietrogrande, M. Bardare, P. Careddu 579**Neutropenia in Kawasaki disease**
T. Hara, Y. Mizuno, K. Ueda, H. Akeda, T. Aoki, S. Honda, Y. Yamaguchi, T. Hosoyamada 580**Very long chain fatty acids in amniotic fluid from a fetus affected with Zellweger syndrome**
C. Jakobs, H. ten Brink, R. M. Kok, F. Stellaard, W. J. Kleijer, R. J. A. Wanders, R. B. H. Schutgens 581**Copper in human fetal tissues**
P. Kamoun, M. Gonzales, N. Mulliez 581**Lack of relationship between low serum C4 concentrations and incipient retinopathy or nephropathy in diabetic children**
H. Dorchy, J. Duchateau 582**Further observations on serum complement levels in diabetic children**
F. Chiaralli, A. Verrotti, G. Morgese 583**Urinary excretion of glycosaminoglycans in neoplastic diseases of children**
P. Strisciuglio, A. Fiorillo, M. Costabile, T. Montini 584*Abstracts***The 66th Annual General Meeting of the Scottish Paediatric Society held in Glasgow, November 28th, 1988**
585

Springer International

Subscription information

Volume 148 (8 issues) will appear in 1989. Information about obtaining back volumes and microform editions available upon request.

North America. Annual subscription rate: approx. US \$ 786.00 (single issue price approx. \$ 117.00), including carriage charges. Subscriptions are entered with prepayment only.

Orders should be addressed to:

Springer-Verlag New York Inc.
Service Center Secaucus
44 Hartz Way
Secaucus, NJ 07094, USA
Tel. (201) 348-4033
Telex 023 125994**All other countries.** Annual subscription rate: DM 1358.00 plus carriage charges; Federal Republic of Germany: DM 17.98 incl. value added tax; all other countries: DM 34.80 ex-

cept for the following countries to which SAL delivery (Surface Airmail Lifted) is mandatory: Japan DM 76.80, India DM 58.00, Australia/New Zealand DM 86.80. Airmail delivery to all other countries is available upon request. Volume price: DM 1358.00, single issue price: DM 203.70 plus carriage charges. Subscriptions can either be placed via a bookdealer or sent directly to:

Springer-Verlag
Heidelberger Platz 3, D-1000 Berlin 33
Tel. (0)30/8207-0, Telex 183319

PRESCRIBING INFORMATION

HUMAN VELOSULIN® ▼ (Neutral Insulin Injection, human insulin (emp)), **HUMAN INSULATARD**® ▼ (Isophane Insulin Injection (NPH), human insulin (emp)), **HUMAN MIXTARD**® 30/70 ▼ (Neutral Suspension comprising 30% Neutral Insulin Injection and 70% Isophane Insulin Injection (NPH), human insulin (emp)), **HUMAN INITARD**® 50/50 ▼ (Neutral Suspension comprising 50% Neutral Insulin Injection and 50% Isophane Insulin Injection (NPH), human insulin (emp)). **Presentation:** HUMAN VELOSULIN, HUMAN INSULATARD, HUMAN MIXTARD 30/70 and HUMAN INITARD 50/50 are available in 10 ml vials containing 100 iu/ml. To aid identification the metal sealing rings of the vials have tactile marks as follows: Human Velosulin – one mark; Human Insulatard – two marks; Human Mixtard 30/70 – three marks; Human Initard 50/50 – four marks. The vials are fitted with tamper-evident caps. **Uses:** The treatment of insulin-requiring diabetes. **Dosage and Administration:** The dosage of insulin is determined by the physician according to the needs of the patient. Human Velosulin may be given by s.c., i.m., or i.v. injection. Human Insulatard, Human Mixtard 30/70 and Human Initard 50/50 should be re-suspended by inverting the vial several times before being given by s.c. or i.m. injection (they must not be given intravenously). Intermixing does not affect the characteristics of any of these insulins. **Use in pregnancy:** Insulin requirements usually fall during the first trimester and increase during the second and third trimesters. **Use in the elderly:** Insulin may have a more prolonged action due to reduced clearance rates. **Contra-indications warnings etc. Contra-indications:** Hypoglycaemia. **Precautions:** Patients transferring from other insulins may require a dosage adjustment. Concomitant therapy with thyroxine, corticosteroids, oral contraceptives, diuretics, beta blockers and M.A.O.I.s may affect insulin requirements. **Side and Adverse Effects:** Hypoglycaemia. Local reactions, lipodystrophy and hypersensitivity reactions are rarely reported with human insulins. **Pharmaceutical Precautions:** Store between 2–8°C, protected from sunlight. Insulin which has been frozen should not be used. **Legal Category P. Package Quantities:** 10 ml glass vials. **Basic NHS Price:** Human Insulatard 3132/0034; Human Mixtard 30/70 3132/0037; Human Initard 50/50 Insulatard 0003/0212; Human Mixtard 30/70 0003/0213; Human Initard 50/50 0003/0214. House, Garland Court, Garland Road, East Grinstead, West Sussex, RH19 1DN. Foundation Ltd, Crewe Hall, Crewe, Cheshire CW1 1UB. Tel: Crewe (0270) 583151.



HUMAN VELOSULIN®

Human neutral soluble insulin (emp)

HUMAN INSULATARD®

Human isophane (NPH) insulin (emp)

Quick and intermediate acting insulins developed to be compatible.

No interaction when mixed!

Predictable effect in individually titrated regimens.