

In response to a growing demand for flexibility and convenience.



GenotropinTM (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.

GenotropinTM 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 lipodystrophy. **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
KABI VITRUM LTD

THE HEINZ FELLOWSHIPS OF THE BRITISH PAEDIATRIC ASSOCIATION

H. J. Heinz Company Limited generously endows Fellowships in Paediatrics which are administered by the British Paediatric Association.

Two or three Fellowships will be offered each year, the number and type awarded in any one year depending on circumstances and the calibre of applicants available.

The types of Fellowship, which are open to men or women are

- A To enable paediatricians from any part of the Commonwealth overseas to spend up to twelve weeks in the United Kingdom, meeting British Paediatricians and seeing something of their work. Preference will be given to those recently established in an academic career who can arrange their visit to allow attendance at the Annual Meeting of the British Paediatric Association in April 1990.
- C To enable paediatricians from the United Kingdom of Registrar, Senior Registrar, or Consultant status, or non-medically qualified members of the Association, in the early years of professional life to make a short working visit (up to three months) to a centre in a developing country, teaching or conducting research so as to benefit both fellow and hosts.

Applications for A Fellowships must be received by the British Paediatric Association not later than 31st December 1989

Applications for C Fellowships can be accepted by 31st January 1990 or 31st July 1990.

The conditions for the Fellowships and applications forms may be obtained from the British Paediatric Association, 5 St Andrew's Place, Regent's Park, London NW1 4LB.



**Think
about
it**

You make a clinical diagnosis. Do you ever consider the thought processes by which you arrived at it? Medical students and practitioners are often concerned with examples of diagnostic logic, but seldom consider them in the context of a general philosophy. Is diagnostic logic out on a limb, or is it based on the same principles as logic in general?

In *Logic in Medicine* doctors and philosophers combine to provide a coherent system of diagnostic logic with a broader view of the science and art of reasoning.

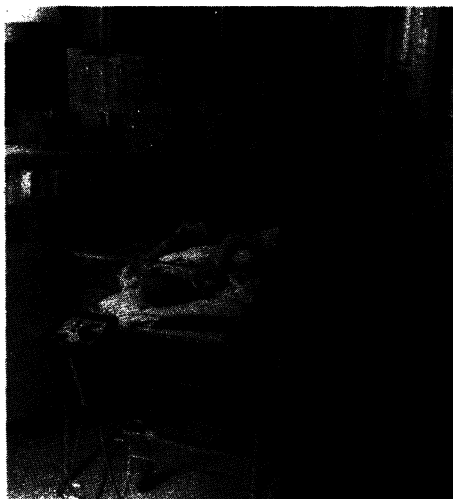
LOGIC IN MEDICINE

Price: Inland £5.95; Abroad £7.50
BMA members: Inland £5.45; Abroad £7.00
(including postage, by air abroad)

Payment must be enclosed with order.

ORDER YOUR COPY NOW FROM
British Medical Journal, PO Box 295, London WC1H 9TE
or any leading medical bookseller

KANTHAL® BABY WARMER



A soft, warm watermattress is kept at an exact temperature (normally 37° C). It transfers it's warmth very efficiently to the baby via direct contact.

Kanthal Baby Warmer will warm babies from 900 g and keep them warm in a safe and pleasant way.

For further information please contact.

KANTHAL Medical Heating

Äggelundavägen 2, S-175 62 Järfälla
Tel. + 46 8-761 75 80, Fax. + 46 8-761 05 52

UK Distributor Kanthal Medical Heating
Tel 0742-44 60 21

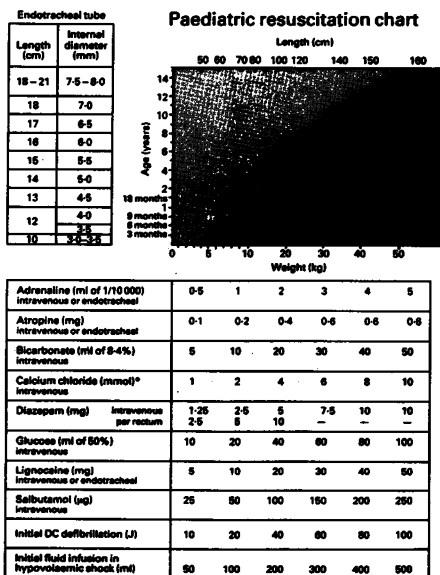
A child is dying: what do you do?

Resuscitating children is different from resuscitating adults—and more difficult. Because cardiorespiratory arrest in children is uncommon each doctor's experience of handling it is limited, and there is a tendency to forget the recommended drug doses; also, because children come in so many different sizes it is hard to judge the correct dose, especially if you do not know the child's weight. Yet delay or inaccuracy in treatment might be fatal. The **Paediatric Resuscitation Chart**, devised by Dr Peter Oakley and based on the guidelines of the Resuscitation Council (UK), gives you at a glance the essential information for making rapid and accurate decisions. The chart is available as an A2 size poster or a pocket sized postcard.

Poster: UK £3.50; Abroad £4.50, including packing and postage, by air abroad.

Single copies of a postcard version of the chart are available, free of charge, on receipt of an A5 stamped addressed envelope (16cm x 24cm; 6in x 9in). Bulk orders please write to the Book Department.

Credit cards are accepted: ACCESS, VISA, AMERICAN EXPRESS (please give full details)



* One millilitre calcium chloride 1 mmol/ml = 1.6 ml calcium chloride 10% = 4.6 ml calcium gluconate 10%

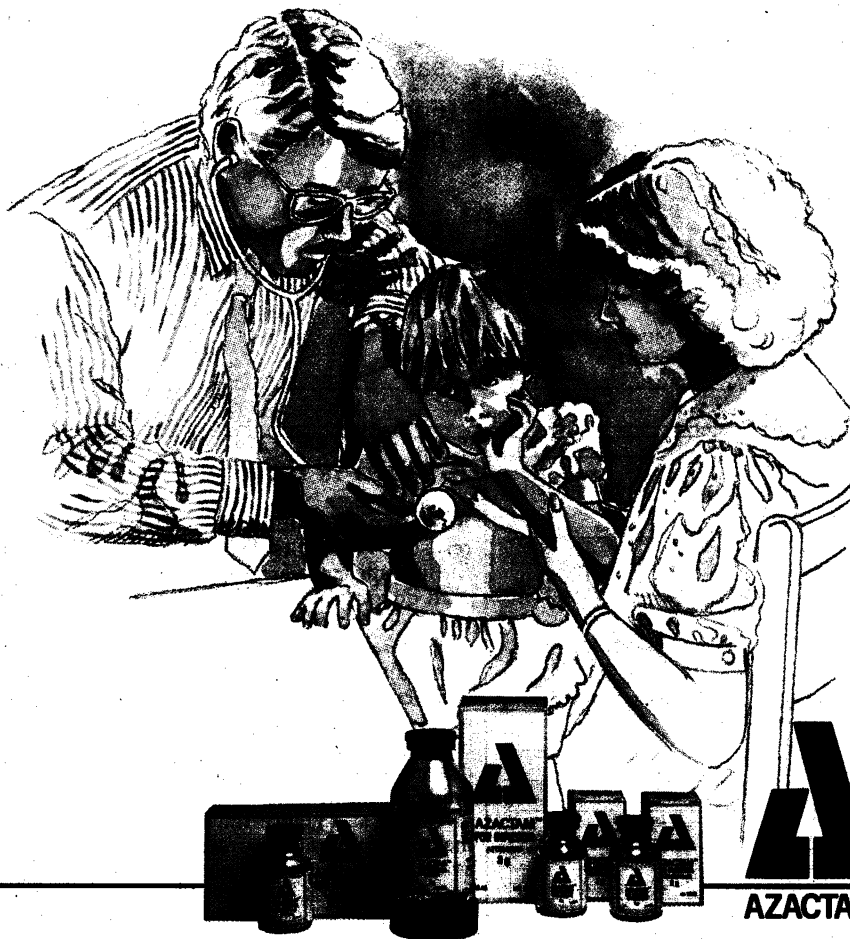
BMJ

BRITISH MEDICAL JOURNAL, BMA HOUSE, TAVISTOCK SQUARE, LONDON WC1H 9JR

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-lysine.
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), septicæmia, 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 5-4g 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.



Think about it

You make a clinical diagnosis. Do you ever consider the thought processes by which you arrived at it? Medical students and practitioners are often concerned with examples of diagnostic logic, but seldom consider them in the context of a general philosophy. Is diagnostic logic out on a limb, or is it based on the same principles as logic in general?

In *Logic in Medicine* doctors and philosophers combine to provide a coherent system of diagnostic logic with a broader view of the science and art of reasoning.

The abstract theory of theories has highly practical applications, and the authors explore the uses of computer technology and artificial intelligence systems as well as "fuzzy logic," "relevant logic," and the logic of economics and ethics. A book for all who wish to clear their minds of cant.

Price: Inland £5.95; Abroad £7.50
BMA members: Inland £5.45; Abroad £7.00
(including postage, by air abroad)
Payment must be enclosed with order

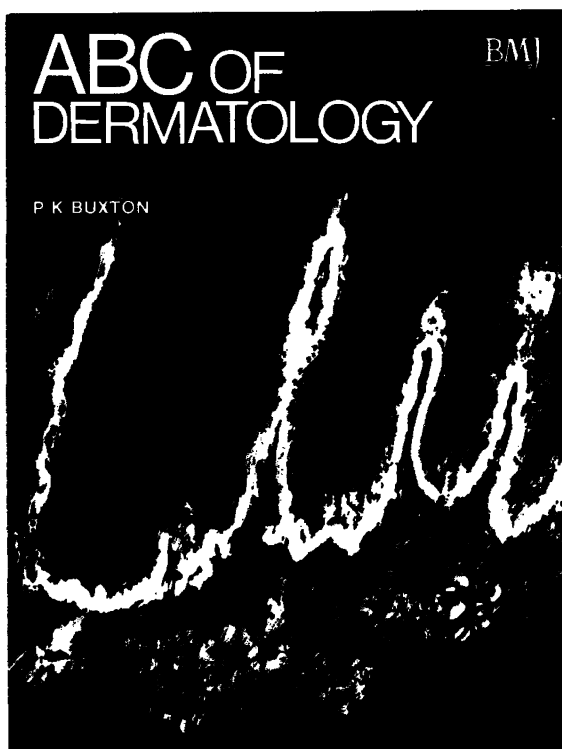
ORDER YOUR COPY NOW FROM
British Medical Journal, PO Box 295
London WC1H 9TE
or any leading medical bookseller

LOGIC IN MEDICINE



EDITED BY CALBERT PHILLIPS

BMI



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. BMA members: Inland £9.95 Abroad £12.00 *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. Weihrauch 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. Nusslé 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. Pottie, 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. Vaksman, 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 Hardt 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. Gigliani, 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 hyperammonaemia
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 mucopolidosis 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. Chiarelli, 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.

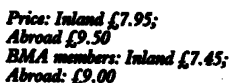
Orders should be addressed to:

Springer-Verlag New York Inc.
Service Center Secaucus
44 Hartz Way
Secaucus, NJ 07094, USA
Tel. (201) 348-4033
Telex 023125994

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-

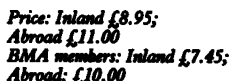
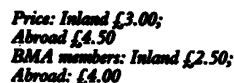
cept for the following countries to which SAL delivery (Surface Airmail Lifted) is mandatory: Japan DM 76.80, India DM 58.00, Australia/New Zealand DM 86.80. Airmail delivery to all other countries is available upon request. Volume price: DM 1358.00, single issue price: DM 203.70 plus carriage charges. 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



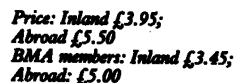
Many medical journals, including the *British Medical Journal*, now expect scientific papers submitted to them to contain confidence intervals when appropriate. Why? what are they? and how do you calculate them? *Statistics with Confidence* tells you. A clear explanation of the reasons for using confidence 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*.

The statistical testing of data is indispensable in many types of medical investigation and a help on countless occasions in clinical practice. This book provides step by step instruction. Subjects covered include standard deviation, χ^2 tests, t tests, non-parametric tests, and correlation. The book includes sections on Fisher's exact probability test and rank correlation not published in the original *BMJ* series. Methods specially adapted to pocket calculators.



No doctor can afford to ignore statistics: most modern medical research uses statistics. This important and authoritative book provides clear information on designing studies, applying statistical techniques, and interpreting studies that use statistics. It can be easily understood by those with no statistical training and should be read by all those who want to keep abreast of new developments.

Epidemiology has its own techniques of data collection and interpretation and its necessary jargon of technical terms, and in *Epidemiology for the Uninitiated* Professors Geoffrey Rose and David Barker guide the novice expertly through the theory and practical pitfalls. The second edition of this popular *BMJ* handbook has been revised to include further details of epidemiological methods and some of their more dramatic applications, such as the investigations on the Spanish cooking oil epidemic, and AIDS.



- Published by British Medical Association, Tavistock Square, London WC1H 9JR, and
printed in England by The Devonshire Press Ltd., Torquay

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 (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** 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.



Store between 2–8°C, protected from sunlight. Insulin which has been frozen should not be used. **Product Licence Numbers** NORDISK-UK: Human Velosulin 3132/0031; 3132/0040. THE WELLCOME FOUNDATION LTD: Human Velosulin 0003/0211; Human Further information is available on request from either: Nordisk-UK, Nordisk Tel: East Grinstead (0342) 410373, or Wellcome Medical Division, The Wellcome Reference 1. Heine R.J. et al, Diabetologia, 1984; 27; 558-562. *Registered Trade Mark



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.