# Human Monocomponent Insulin for the architects of tomorrow



Insulin treatment today may lead to antibody problems in the future, a persuasive argument in favour of using the least immunogenic insulin.

Novo's human insulin is identical to the hormone they are unable to make for themselves.

There are three U100 formulations, Human Actrapid, Human Monotard and Human Protaphane all made to the same exacting standard of Monocomponent purity.

As a result of their structure and purity, Novo Human Monocomponent insulins have been shown to cause fewer antibodies than even the purest animal insulins.<sup>1</sup>



Prescribing HavanasaHamana Actrapid® 100 i.u./ml ♥
Human Insulin (emp) (Neutral Insulin Injection)
Humana Monotard® 100 i.u./ml ♥
Humana Insulin (emp) (Insulin Zinc Suspension)
Humana Potaphane® 100 i.u./ml ♥
Humana Insulin (emp) (Isophane Insulin Injection)
Humana Insulin (emp) (Isophane Insulin Injection)
Indications The treatment of insulin-requiring diabetic

Human Actrapid is indicated for diabetics who require a quick and intense-acting insulin, particularly emergencies such as diabetic hyperglycaemic quick and intense-acting insulin, particularly in emergencies such as diabetic hyperglycaemic coma, during surgery and severe infections in diabetics, and in the management of pregnant diabetics. Human Monocomponent insulin may be advantageous in the treatment of insulin-induced fa strophy, insulin allergy, insulin resistance and when intermittent short-

Dosage and Administration The dosage of Human Actrapid, Human Monotard and Human Protaphane is determined by the physician according to the needs of

determined by the physician extended the patient.
Human Actrapid may be given by injection or infusion, subcutaneously, intramuscularly or intravenously. Human Monotard and Human Protaphane should be Human Monotard and Human Protaphane should be well shaken and given immediately by subcutaneous or intramuscular injection. They may be given twice, or occasionally once daily. Human Actrapid may be admixed with Human Monotard or Human Protaphane in the syringe and injected immediately. 100 insulins must only be used with U 100 syringes. Peristaltic pumps (roller pumps) are not suitable for use with Human Monotard and Human Protaphane must not be used in insulin infusion pumps.

Contra-Indications, Warniags and Adverse Effects Insulin is contra-indicated in hypoglycaemia. In the event of an overdose, glucose should be given orally if the patient is conscious. The unconscious patient should be treated with glucose intravenously and glucagon may

be treated with glucose intravenously and glucagon may be administered intramuscularly or subcutaneously be administered intransucularly or subcutaneously. On transfer from porcine monocomponent insulins or other highly purified porcine insulins to Human Monocomponent insulin, no change in dosage is anticipated other than the routine adjustments made in order to maintain stable diabetic control. However, patients transferred from conventional (predominantly busine) itsulities may acquire a dosage adjustment. The patients transferred from conventional (predominantly bowine) insulins may require a dosage adjustment. The addition of corticosteroids, oral contraceptives or thyroid hormone replacement therapy is likely to lead on increase in insulin requirements. The addition of a beta-adrenergic blocking agent or a monoamine oxidace inhibitor (MAOI) may also necessitate an adjustment of insulin dosage. Lipodystrophy, insulin resistance and hypersensitivity reactions have been associated with insulin therapy, but the incidence and severity of these unwanted effects in siminal with Human Monocomponent insulins. Severe local or generalised allergic reactions require immediate treatment and, in some cases, desensitisation may also be necessary.

cessary.
Size and Basic NHS Price (UK only) All Human Monocomponent insu

10ml vials Product Licence Numbers Product Licence Numbers
Human Actrapid 100i.u./ml
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Human Protaphane 100i.u./ml
Product Licence Holder:

Novo Industri A/S, Novo Alle, DK-2880 Bagsvaerd, Copenhagen, DENMARK.

Sole Distributor:

Farillon Ltd., Bryant Avenue, Romford, Essex RM30PJ. Tel: Ingrebourne 71136

ref: nigretodine?/i30
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Individuals, In: International Symposium on Human
Insulin, Eds Karam J H. Elzwiler D D, Diabetes Care;
6 (Suppl 1): 43-48.

NOVO INDUSTRI AIS Copenhagen, Denmark.

Further information is available on request from: NOVO LABORATORIES LTD Ringway House, Bell Road, Daneshill East, Basingstoke, Hampshire RG24 OQN. Tel: Basingstoke (0256) 55055.



Novo Human Monocomponent Insulin for diabetic children with a full life

# whatever his mum worries about, it won't be his asthma.

Regular Intal therapy can give real protection from asthmatic attacks, minimising both incidence and severity.<sup>1</sup>

With reduced anxiety, there is less need to resort to symptomatic medication such as bronchodilators? or oral corticosteroids?

Current investigations suggest
that these improvements are accompanied by a reduction
of cellular infiltration in bronchial mucus.
Which indicates that Intal therapy may have a beneficial effect
on the underlying pathology of asthma.

Because the Intal routine can be integrated unobtrusively into the day's normal activities, the asthmatic child can get on with the real business of growing up.

He'll be more at ease with his condition. And so will his parents, teachers and friends.

### References:

Bernstein, L. et al., J.Allergy Clin.Immunol., (1972), **\$0**, 4, 235-245.
 Rubin, A. E., Alroy, G. & Spitzer, S., Curr.Med.Res. Opin., (1983), **\$**, 553.
 Toogood, J. H. et al., J.Allergy Clin.Immunol., (1973), **\$2**, 6, 334-345.
 Diaz, P. et al., Thorax. (1983), **38**, 9, 702-703.

Presentation Intal and Intal Compound Spincaps\* both contain 20mg Sodium Cromoglycate B.P. Isoprenaline Sulphate (0.1mg) is included in Intal Compound Spincaps. The powder from Spincaps is inhaled using the Spinhaler\* or Halermatic¹ which work by the patient¹s inspiratory effort. The Intal Inhaler is a metered dose pressurised aerosol delivering 200 inhalations of 1.0mg Sodium Cromoglycate. Intal Nebuliser Solution is presented in ampoules each containing 20mg Sodium Cromoglycate in 2ml sterile aqueous solution. Indication Preventive treatment of bronchial asthma, including the prevention of exercise-induced asthma. Dosage and Administration Adults and children: the normal dose is one Spincap (Intal or Intal Compound) two puffs of Inhaler or one ampoule of Nebuliser Solution to be inhaled four times daily. Intal Nebuliser Solution is administered from a suitable power-operated nebuliser. Since Intal therapy is preventive it is important that the patient is instructed to maintain regular dosage as distinct from intermittent use to relieve symptons. Side effects With the powder formulations of Intal, irritation of the throat and trachea may occur in patients sensitive to the inhalation of dry powder. Although it has not been reported for the Inhaler or Nebuliser Solution, rare cases of severe bronchospasm have occurred following the administration of Intal Spincaps using a Spinhaler. Precautions For Intal Compound the precautions normally applying to isoprenaline should be observed. Withdrawal of therapy This should be done progressively over one week. Symptoms.my recur. Any previous steroid therapy should be reinstated prior to the withdrawal of Intal. Basic NHS Cost and Product Licence Number Intal (per 100 Spincaps) \$1.0.07 PL0113/5022. Intal Compound (per 100 Spincaps) \$2.8.19 PL0113/5083. Intal Inhaler (per 200 inhalations) £10.95 PL0113/0080. Nebuliser Solution (per 48 ampoules) £8.20 harmaceutical





# Tegretol® making epilepsy

# easier to live with

Tegretol\* Indications Epilepsy (generalised tonic-cionicand partial seizures), trigeminal neuralgia Dosaga in epilepsy Use a gradually increasing dosage scheme, adjusting to patient's needs. Adults: 100-200 mg dose or twice daily, increasing slowly up to 800-1200 mg daily; in some cases 1,600 mg daily may be necessary. Children: up to 1 year old, 100-200 mg daily; aged 1-5 years, 200-400 mg daily; aged 1-5 years, 600-1000 mg daily; may be helpfulto monitor plasma druglevels: coptimum therapeutic range is 3-10 ug/ml(13-42 urnols/1). Dosage intrigeminal neuralgia Begin with small doses, using 100 mg tablets or syrup, and increase gradually until satisfactory therapeutic response is obtained; 200 mg 3-4 times daily is generally sufficient to maintain pan-free state. Side-effects Dizzness and diplople (usually dose-dependent), less frequently drowsiness, dry mouth, diarrhoea, nausea and vomiting. Generalised erythematous rash, disappearing on cessation of therapy. In state of the passing patient of the passing patient passing on the passing patient passing patient passing patients. A choise attribution of the passing patient passing patients and passing patients and passing patients. A choise attribution of the passing patients and patients are passing patients. A choise attribution of the passing patients are passing patients. A choise attribution of the passing patients are passing patients. A choise attribution of the passing patients are passing patients. A choise attribution of the passing patients are passing patients. A choise attribution of the passing patients are passing patients. A choise attribution of the passing patients are passing patients. A choise attribution of the passing patients are passing patients. A choise attribution of the passing patients are passing patients. A choise attribution of the passing patients are passing patients. A choise attribution of the passing patients are passing patients. A choise attribution of the passing patients are passing patients. A choise attribution of the pa

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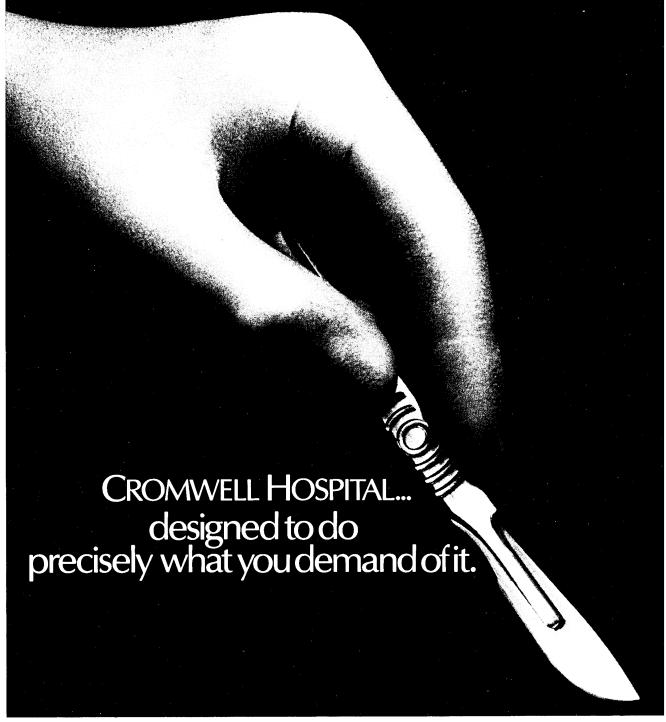
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Subscription information: Volumes 142 and 143 (4 issues each) will appear in 1984. Information about obtaining back volumes and microform editions available upon request.

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Both the DHSS¹ and the European Society for Paediatric Gastroenterology and Nutrition (ESPGAN)² advise against the early introduction of doorstep cow's milk. In fact, it may be beneficial to avoid it for the first 12 months. ESPGAN have set out guidelines for and recommend the use of a follow-on formula rather than cow's milk.

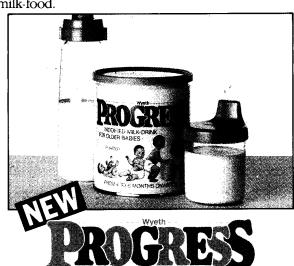
PROGRESS is such a formula, for babies four to six months and older. Progress is not intended to replace breastfeeding. Given in conjunction with solids it provides more complete nutrition than cow's milk.

Boiling of cow's milk depletes vitamins such as B<sub>1</sub> and C and of course, diluting with water lowers all nutrients.

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