vere hypoglycaemia aiming to determine the relative risk associated with human insulin will help to clarify this question. The data presented by M. Berger, however, are not suitable to contribute to this clarification. We, on the other hand, strongly agree with one of his earlier statements, namely that "the present vogue for human insulin is not matched by comparable benefits in clinical practice" [6]. We just would like to add that human insulin might even be associated with important disadvantages in a number of insulin-dependent diabetic patients.
Yours sincerely,

M. Egger, A. Teuscher and W. G. Berger

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Hypoglycaemia in newly diagnosed diabetic children and adolescents - comparison between human and porcine insulin

Dear Sir,

We wish to add to Dr. Berger's editorial conclusion [1] that human insulin preparations do not cause more hypoglycaemia than porcine insulin. We have recently analysed in a double blind study 30 newly diagnosed juvenile Type 1 (insulin-dependent) diabetic patients with a mean age of 11.7 ± 3.4 years who were followed closely for 2 years. Fourteen patients were treated with human insulin (2 daily insulin injections of mixed human Monotard and Actrapid (Novo, Denmark) and 16 patients with a highly purified porcine preparation (Monotard and Actrapid MC, Novo, Denmark). The patients were followed by our multidisciplinary team and performed self blood glucose monitoring, a mean of 3 times per day during the whole period. Detailed history and laboratory examinations were performed at diagnosis, at 1 month and subsequently every 3 months [2]. Chemical hypoglycaemia was defined as blood glucose levels of 2.76 mmol/l or less. The monthly incidence of chemical hypoglycaemic episodes is shown in Table 1.

It is evident that there was no difference in the number of hypoglycaemic episodes in both groups of patients. Nor did we find differences in the mean periodic blood glucose values, as estimated from the 53,000 self blood glucose estimations performed by the 30 juvenile patients over 2 years. During the first year, one patient receiving porcine insulin, had 2 episodes of symptomatic hypoglycaemia at night, one with convulsions. Blood glucose during one of the episodes was 1.88 mmol/l. This same patient had during the second year an additional 4 episodes of symptomatic hypoglycaemia, all before dawn, 3 of them with questionable loss of consciousness. In one of them blood glucose was 2.76 mmol on the same morning. Another patient also receiving porcine insulin had 8 episodes of symptomatic hypoglycaemia, all during the second year. Most hypoglycaemic episodes occurred before dawn. Blood glucose measured during one of the events was 1.60-2.54 mmol/l, with no convulsions.

The above observation confirms our previous study that a comprehensive therapeutic approach by a multidisciplinary team [3] induces a high degree of compliance on the part of the patient. In conclusion, this close follow-up demonstrated no difference between human and porcine insulin in regard to hypoglycaemic episodes, as well as diabetes control during the first 24 months of the disease [2].

Yours sincerely,
Z. Laron, P. Feinmesser, Y. Albag, R. Ofan and M. Karp

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Variability of the first phase insulin response to intravenous glucose

Dear Sir,

The very interesting study recently published on these pages by Smith et al. [1] conceptualized a component of B-cell function that has recently and not so recently attracted a good deal of attention [2]. The so-called early phase insulin response of a rapid intravenous

Table 1. Newly diagnosed Type 1 (insulin-dependent) diabetes mellitus - number of hypoglycaemic episodes per patient (blood glucose < 2.76 mmol/l) per month during the first 2 years - human vs porcine insulin treatment (mean ± SD)

Months	1	2-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24
Human Insulin (n=14)	0.7 ±1.5	1.7 ±1.5	1.0 ±1.5	0.8 ±1.3	0.9 ±1.9	0.8 ±1.0	1.2 ±2.5	1.3 ±1.3	1.9 ±2.2
Porcine Insulin (n=16)	1.1 ±2.2	3.1 ±5.0	2.1 ±3.5	1.7 ±2.3	0.9 ±1.2	1.3 ±1.2	1.2 ±1.4	2.1 ±2.3	2.5 ±2.9

glucose tolerance test (IVGTT) in man has been the target of an awesome amount of research over the past 30 years and more recently has come back into sharp focus due to possibilities that this maneuver, or some variant thereof, may be an important predictor of B-cell failure associated with Type 1 (insulin-dependent) diabetes.

Just as beauty is in the mind of the beholder, high variability (a difficult statistical concept and a more difficult one to quantify) may also be in the mind of the beholder. Many data sets when viewed by one investigator may be thought to be highly variable, whereas another group may construe the same data set as being quite reproducible.

The study by Smith and colleagues focussed upon an important statistical aspect; however, there are some components of that study that deserve careful examination. As biological functions are usually anticipated to be variable, studies performed on eight subjects may be insufficient in number to derive meaningful conclusions. Earlier [3] we had attempted to quantify variability with 42 normal control subjects and 36 study subjects. We felt uncomfortable at such low numbers of subjects at that time.

With such a limited number ($n=8$) of subjects and without any background studies of single IVGTT that the laboratory might have performed in a larger group of healthy control subjects, it is uncertain whether the eight subjects selected represent sampling that is typical of the normal distribution, or whether they cluster toward the high or low end. Magnitude effects upon the variability might therefore be an important consideration which is masked in the design of this current study.

Although we are grateful that one of our previous studies on this subject was cited [4], a survey of six of our other publications (see 5, a review) may have allowed for the development of a different posture. We have examined early phase insulin responses after IVGTT in various high risk groups defining the high risk as not only a strong hereditary tendency to Type 1 diabetes (monozygotic twin or first degree relative) but have also insisted upon the presence in serum of some autoimmune abnormality such as the presence of islet cell autoantibodies. Using these subjects for IVGTT studies, it has been demonstrated that as a group, the early phase insulin response is significantly reduced when compared to a global normal population [6]. In addition, repeated assessments of early phase insulin response to glucose in such subjects shows either a tendency to be reproducible (i.e. to show on repeat testing an impaired insulin response similar to the impairment of the initial one) or an early phase insulin response that is reduced even further [4]. One might construe that "poor reproducibility" with variability equally positive and negative of a large magnitude might be a sign of "normality" whereas "good reproducibility" or "poor reproducibility but with a chronic negative bias" may be the hallmark of "non-normality".

Smith and colleagues state that the IVGTT capability of discriminating normal from abnormal results is largely dependent on the degree of between- and within-subject variation. Firstly, it is doubtful, even if this is true, that this could be established in studies focussed on eight healthy subjects. Secondly, when IVGTT-induced early-phase insulin release is equal or less than the fifth percentile of that established in normal control subjects (hundreds of them), as we found in 17 of 28 (61%) high risk subjects on their initial test [7] and in 12 of 14 such individuals on repeat testing, then reproducibility per se appears to not be a relevent component of the assessment.

As more data is presented and published from a large number of laboratories, a reduced and fixed or consistently falling early-phase insulin release (1) in a subject with an appropriate genetic connection (2) to Type 1 diabetes and an autoimmune defect (3) consistent with Type 1 diabetes mellitus may be the key and critical marker that will serve not only to predict the onset of Type 1 diabetes but also, on the other hand, in immunosuppresive trials, to be the ultimate measure of the degree of success. I doubt that the biological variability of this exhibit of insulin release will cloud these issues.

Yours sincerely,
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How do I get that abstract accepted?

Dear Sir,

Since the very start of our EASD meetings, the number of submitted abstracts has increased steadily. Even this year, facing competition with the IDF meeting in Australia, the Programme Committee received more than 1000 abstracts for evaluation.

For the undersigned, it is the end of a 5-year tenure, the first two years as a member and the following three years as chairman of the Programme Committee. Each year, the end of March has been characterised by an increased weight of the envelopes arriving from Jim Jackson at the EASD Secretariat. More importantly, 1988 also marks the 5th anniversary of the Programme Committee evaluating the abstracts anonymously, i.e., without knowing who submitted the study. This is a remarkable procedure, and I have often been asked how a committee of five people is able to give a fair judgment of the quality of work and suitability for presentation when given over 1000 abstracts to read in a few weeks' time. The task would perhaps have been easier if the number of papers accepted for presentation had increased in direct proportion to the increasing number of abstracts submitted. However, this has not been the case. The number of papers to be presented has remained constant, at about 500-600, depending on the number of posters which the local organisers have been able to fit into the area designated for posters. As you all remember, the poster area may be spacious, as in Rome, or zig-zag cramped, as in Leipzig. Therefore, unless the EASD Council and the General Assembly decide to add an extra day or two (God forbid!) to our meeting, the number of presentations will remain constant. So, if the number of abstracts submitted continues to grow, *how do you get your work accepted for presentation?*

As the outgoing chairman of the Progarmme Committee, I would like to offer some advice for future submissions. There is no guarantee that it will work, since who knows what the new Honorary Secretary will come up with to change the procedure in selecting abstracts.

During the past 3 years, I have had the pleasure to work with eleven eminent diabetologists from 7 different European countries.