Abstracts

MD 1

#### WD3

## PATIENT PREFERENCE AND WILLINGNESS-TO-PAY IN FIVE EUROPEAN COUNTRIES FOR HUMALOG MIX25 COMPARED TO HUMULIN 30/70 FOR THE TREATMENT OF TYPE 2 DIABETES

## <u>Aristides M</u><sup>1</sup>, Weston A<sup>2</sup>, FitzGerald P<sup>2</sup>, LeReun C<sup>2</sup>, Schulz M<sup>3</sup>, Maniadakis N<sup>4</sup>, Kielhorn A<sup>4</sup>

<sup>1</sup>M-TAG Limited, London, United Kingdom; <sup>2</sup>M-TAG Pty Ltd, Sydney, Australia; <sup>3</sup>Merck Sharp & Dohme (Australia), Sydney, NSW, Australia; <sup>4</sup>Eli Lilly and Company Limited, Surrey, United Kingdom

**OBJECTIVES:** To assess preference and willingness-topay (WTP) for the insulin mixture Humalog Mix25 relative to Humulin 30/70, from the perspective of patients in five European countries. The relative value of individual treatment attributes was also determined. METHODS: A total of 290 patients with type 2 diabetes were enrolled from 5 European countries. Of these, 235 were suitable for inclusion in the analysis. Their mean age was 51.3 years and, on average, patients had had diabetes for 11 years. A discrete-choice conjoint analysis was conducted using face-to-face interviews. Treatment attributes and levels were derived from published comparative clinical trial data available at July 2001. The attributes used were: timing of injections around meals; two-hour postprandial control; effect of prandial dosing; frequency of nocturnal hypoglycaemia; and cost. RESULTS: 90% (95% CI 86-93%) of patients would choose Humalog Mix25 over Humulin 30/70, at the same cost. On average, European subjects were willing to pay €111 per month more for Humalog Mix25 (95% CI €86.71–156.91). The primary driver was the reduced risk of nocturnal hypoglycaemic events, contributing 49% of WTP. The convenience of dosing immediately prior to the meal contributed 37% and improved postprandial blood glucose concentrations contributed 14% to the WTP. Preference results were similar in all five countries, although WTP and sensitivity to increasing cost varied from country to country. The WTP values for individual countries were: France €146.83; Germany €126.65; Italy €56.98; Spain €150.06; United Kingdom €194.36. French and UK patients were relatively insensitive to increasing cost, while Italian patients were highly cost-sensitive. CONCLUSIONS: Patients in all countries showed a clear preference for Humalog Mix 25 over Humulin 30/70. WTP figures for the individual countries can be compared with the corresponding additional acquisition costs for Humalog Mix25, relative to Humulin 30/70, to assess the extent of welfare gain to the community.

### SESSION II

## OUTCOMES RESEARCH METHODOLOGY ISSUES I

# THE EQUITY-EFFICIENCY TRADEOFF: WHAT IS THE SOCIAL INTERPRETATION OF EQUITY?

<u>Pickee S</u><sup>1</sup>, Stolk E<sup>1</sup>, Ament A<sup>2</sup>, Busschbach J<sup>1</sup> <sup>1</sup>Erasmus University, Rotterdam, Netherlands; <sup>2</sup>University of Maastricht, Maastricht, Netherlands

**OBJECTIVES:** There is increasing awareness that equity weights should be used to recalculate the value of QALY gains for different patients. It is unclear however how these equity weights should be determined: on the basis of health prospects (for instance "rule of rescue"), fair innings, or on a combination of both, for instance an equity concept that has been referred to as proportional shortfall. To answer this question, we compared the observed rank order of 10 conditions with the theoretical rank orders that were predicted by each equity concept. METHODS: 60 respondents (students, researchers, health policy makers) rank ordered 10 conditions using the paired comparison technique. This observed rank order was compared to the rank orders expected on the basis of the equity concepts fair innings, prospective health and proportional shortfall. To allow for comparison of the conditions in terms of each equity concept, we described the conditions in terms of age, disease free period, duration of disease, quality of life, and life years lost. RESULTS: The observed rank order of the 10 conditions was best predicted by the fair innings concept (corr. = 0.908, p < 0.01). Proportional shortfall was also well correlated with the observed rank order of the conditions (corr. = 0.780, p < 0.01), but prospective health was not statistically significantly related. This is remarkable, as it has often been suggested that the "rule of rescue" is the most important determinant of the distribution of health care. CONCLUSIONS: Measurable interpretations of equity make it possible to test the importance of concepts of equity in the allocation of health care. The fair innings argument and proportional shortfall may provide a basis for determining equity weights for recalculating the value of QALY gains for different patients. When put to a critical test, the prospective health argument is out weighted by arguments resembling fair innings.

MD2

## MEASURING HEALTH IMPACTS ON WORK PERFORMANCE: COMPARING SUBJECTIVE AND OBJECTIVE REPORTS

Pransky G<sup>1</sup>, <u>Finkelstein SN</u><sup>2</sup>, Berndt E<sup>2</sup>, Kyle MK<sup>3</sup>, Mackell J<sup>4</sup>, Tortorice  $DL^2$ 

<sup>1</sup>Liberty Mutual Center for Disability Research, Hopkinton, MA, USA; <sup>2</sup>Massachusetts Institute of Technology, Cambridge, MA, USA; <sup>3</sup>Carnegie Mellon University, Pittsburgh, PA, USA; <sup>4</sup>Pfizer, Inc, New York, NY, USA