GLYCAEMIC AND CHOLESTEROL CONTROL OF TYPE 2 DIABETIC PATIENTS ATTENDING SPECIALIST OUTPATIENT CLINICS IN SINGAPORE
Lim BK1, Tan MPH2, Cheah TSJ3, Sum Chee F1, Jong M1, Chohin SB4
1National Healthcare Group, Singapore; 2Alexandra Hospital, Singapore; 3Tan Tock Seng Hospital, Singapore; 4National University Hospital, Singapore;
OBJECTIVES: The specialist outpatient clinics (SOCs) of the 3 acute hospitals of the National Healthcare Group (NHG) in Singapore treat over 11,000 patients with diabetes mellitus. This paper studies the glycaemic and cholesterol control of type 2 diabetes patients in these SOCs.
METHODS: The glycaemic and cholesterol control of type 2 diabetes patients at these SOCs were studied in Jan 2009 to 2009 for treatment of diabetes. These patients had been on follow-up at the same clinic for at least 12 months. The latest glycated haemoglobin (HbA1c) and LDL-cholesterol (LDL-c) results were compared by age, gender and ethnic group. Data was extracted from the NHG Diabetes Registry (CDMS).
RESULTS: There were 3,420 T2DM patients with more females (53%) and disproportionately more Indians (14.1%) and fewer Chinese (66.3%) than the general population. The mean ages of male and female were 61.8 and 64.9 years respectively. The proportion of patients with "optimal" HbA1c (<7%) and LDL (≤2.6 mmol/L) control increased with age. For HbA1c, 13% of patients <35 years had "optimal" control (mean 8.96%, 95%CI 8.42–9.50%) increasing to 61% for patients 85+ years (mean 7.04%, 95%CI 6.79–7.28%). Similarly for LDL-c, 41% of patients <35 years had "optimal" control (mean 3.9 mmol/L, 95%CI 3.63–4.31 mmol/L). The percentage of patients with "optimal" LDL-c control increased to 74% for patients 85+ years (mean 2.28 mmol/L, 95%CI 2.12–2.41 mmol/L). Indian Chinese had better HbA1c and LDL-c control whilst Malay and Indian were poorest for LDL-c and HbA1c respectively. There was no gender difference. CONCLUSIONS: The control of HbA1c and LDL-c among T2DM patients improved with age. Younger patients and the Malay and Indian subgroups had greater potential to achieve "optimal" glycaemic and cholesterol control and reduce the risk of developing micro- and macro-vascular complications over time. While the older patients achieved better HbA1c control than younger ones, clinicians should remain mindful of side-effects such as hypoglycaemia among those with very tight glycaemic control.

QUALITY ADJUSTED LIFE YEARS LOSS DUE TO TYPE 2 DIABETES IN SOUTH KOREA
Je MW1, Lee WJ2, Noh H3, Choi Y4, Song KH5
1University of Seoul South Korea; 2Yonsei University Ilan Paik Hospital, Ilan, Gyongsang-do, South Korea; 3Inje University Ilsan Paik Hospital, Ilsan, Gyeonggi-do, South Korea; 4University of South Korea, Seoul, South Korea; 5Kunkuk University Hospital, Seoul, South Korea;
OBJECTIVES: This study was conducted to estimate quality adjusted life years (QALYs) loss due to diabetes in type 2 diabetic patients of South Korea. METHODS: In order to obtain QALYs loss due to morbidity of type 2 diabetes (T2D), we firstly estimated utility weight difference between T2D patients and non-diabetic subjects by sex and age groups. We consecutively recruited T2D patients aged 20 or over who visited three university hospitals in Seoul and Ilan from October 2007 to January 2009 and non-diabetic subjects who took a medical examination from June 2008 to Jan 2009 in same hospitals. Utility weight differences on sex and age groups were calculated using the EuroQol. EQ-5D and Korean valuation set, and then QALY loss was estimated using the utilities and the number of T2D patients in 2003 reported by the Korean Diabetes Basic Statistics Study. QALY losses due to T2D mortality corresponded to life expectancy of the death caused T2D from the life table and the Korean Death Certificate in 2003 multiplied by utility weights of healthy people by sex and age groups from the 3rd Korea National Health and Nutrition Examination Survey (2001-2002). RESULTS: We calculated a discount rate as 5%. RESULTS: Total 1,072 T2D patients and 387 non-diabetic subjects participated in this survey. Maximum difference between T2D patients and non-diabetic subjects was 0.0048 and minimum difference was 0.0039 by subgroups. QALY loss estimates due to T2D morbidity were about 35,727 QALYs and 50,613 QALYs in females. Preterm mortality and for LDL-c and HbA1c respectively. There was no gender difference. CONCLUSIONS: The control of HbA1c and LDL-c among T2DM patients improved with age. Younger patients and the Malay and Indian subgroups had greater potential to achieve "optimal" glycaemic and cholesterol control and reduce the risk of developing micro- and macro-vascular complications over time. While the older patients achieved better HbA1c control than younger ones, clinicians should remain mindful of side-effects such as hypoglycaemia among those with very tight glycaemic control.

APPLICATION OF HTA TO ANTIDIABETIC DRUG FORMULARY DECISIONS
Andreadakis M1, Wiesinga C2
1Quintiles Consulting, Hoofddorp, The Netherlands;
2Quintiles Consulting, Hoofddorp, The Netherlands;
OBJECTIVES: To compare Health Technology Assessments (HTAs) and reimbursement decisions of a novel antidiabetic drug class, by health care agencies worldwide. METHODS: We conducted a literature search of 54 health care agencies' HTA reports from January 2008 to May 2009. HTAs regarding diabetes were collected and each was assessed for date, type (e.g., single drug versus class review) and scope (e.g., medicine name). Using a standardized set of criteria, we investigated recommendations and for not recommended were 100%, 57% and 21% respectively. Within each decision parameter the most common reason for restricting the market authorization indication was related to the drug not being cost-effective (57%). The most common reason for not recommending a drug was lack of long term data on efficacy (86%). CONCLUSIONS: Despite that large variations in results between agencies were observed, data demonstrating efficacy of the drug appeared to be the most important factor in getting a recommendation for type 2 diabetes treatment. A high incremental cost-effectiveness ratio was likely to lead to restrictions in indication (NICE, SMC and TLV) whereas lack of long term data could lead to the drug not being recommended (QWIG and CVZ).