metformin monotherapy, sulfonylurea monotherapy, oral anti-diabetic drug (OAD) monotherapy other than metformin or sulfonylurea (OAD-other), metformin plus sulfonylurea, metformin plus other OAD, sulfonylurea plus other OAD, two OAD-other combination.

Results: A total of 6,694 heart failure events and 1,015 deaths were observed during the study period. Compared with no any anti-diabetes medication, the significant adjusted hazard ratios of heart failure were 1.26 (95% confidence interval [CI], 1.05-1.50) for OAD-other; and of all-cause mortality was 2.09 (1.12-3.89) for two OAD-other combination. In addition, the adjusted hazard ratio of all-cause mortality for two OAD-other combination compared with metformin was 2.07 (1.14-3.75).

Conclusion: Compared with no medication or prescription of metformin, prescription of two OAD-other combination was associated with an increased risk of morality in Chinese elders with type 2 diabetes.

RISK OF STROKE FOR ORAL ANTI-DIABETIC MONOTHERAPY IN ELDERS WITH TYPE 2 DIABETES IN TAIWAN: TAIWAN DIABETES STUDY

台灣第二型糖尿病老人服用單一糖尿病藥導致中風的危險性

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Background: Previous studies suggested the use of metformin was associated with decreased risk of cardiovascular events. However, little studies have evaluated this risk in elders with type 2 diabetes, especially in Chinese. This study determined if the risk of stroke is decreased by metformin compared with other oral treatments for type 2 diabetes in Chinese elders who participated in the National Diabetes Case Management Program (NDCMP) in 2001-2004.

Methods: A nationwide, observational, retrospective, cohort of 5,256 patients with type 2 diabetes aged 65 years or older (mean age, 72.6 ± 5.2 years) who participated in NDCMP from 2001-2004 and who underwent follow-up for up to 2010. The individual's end point of stroke was identified from inpatient or outpatient claim datasets of National Health Insurance Database according to *ICD-9* diagnosis codes. We identified outpatient prescriptions within one-year of their enrollment to define their anti-diabetic drug use. An elder was defined as a user of an anti-diabetic drug if his/her number of prescription days for this specific anti-diabetic drug is greater than 90 days. The use of oral anti-diabetic monotherapy was classified into 4 categories: no medication, metformin monotherapy, sulfonylurea monotherapy, oral anti-diabetic drug (OAD) monotherapy other than metformin or sulfonylurea (OAD-other).

Results: A total of 1,027 stroke events were observed during the study

period. Compared with no any anti-diabetes medication, the adjusted hazard ratios for metformin, sulfonylurea, and OAD-other were 1.24 (95% confidence interval [CI], 1.00-1.55); 1.48 (1.21-1.82); and 1.03 (0.74-1.45), respectively. In addition, the adjusted hazard ratio for sulfonylurea compared with metformin was 1.20 (1.04-1.38).

Conclusion: Compared with no medication or prescription of metformin, prescription of sulfonylurea was associated with an increased risk of stroke in Chinese elders with type 2 diabetes.

INTERDEPENDENT RELATIONSHIP BETWEEN DEPRESSION AND PAIN IN OLDER ADULTS WITH ADVANCED CANCER

老年癌末病患疼痛與憂鬱之關係

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Objective: Pain and depression are highly prevalent in advanced cancer patients. Although the cross-sectional association between pain and depression is well established, their longitudinal relationship has been less studied. The aim of this observational study was to examine the longitudinal relationship between depression and cancer pain.

Methods: A total of 237 older patients with advanced cancer admitted consecutively to the palliative care unit of National Taiwan University Hospital were included. Pain scores and psycho-social variables of these subjects both on admission and one week after admission were collected. Subjects were divided into two groups according to whether the pain scores was improved 1 week after admission. Descriptive statistics, t test, and mixed designed ANOVA were used to describe and explore the relationships among cancer pain and psycho-social factors. Statistical significance was defined as a p value of less than 0.05.

Results: The participants consisted of 46.8% males and 53.2% females with a median age of 64.05 years. The leading primary tumor sites among these patients were lung (19.4%), liver (17.7%), and colon-rectum (8.9%). 163 (68.8%) patients reported cancer pain improved (improved group) and 74 (31.2%) patients reported cancer pain did not improve (not improved group). The demographic data were not significant different between two groups. At admission,