DRAFT PREVIEW OF ABSTRACT #2597

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Abstract Number: 2597

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Disclosure Information: Yes

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Consultancy Agreements:

Ownership Interest: Research Funding:

Honoraria:

Patents and Inventions:

Scientific Advisor or Membership:

Other Interest/Relationships:

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Consultancy Agreements:

Ownership Interest: Research Funding:

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Patents and Inventions:

Scientific Advisor or Membership:

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Ownership Interest: Research Funding:

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Patents and Inventions:

Scientific Advisor or Membership:

Other Interest/Relationships:

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Consultancy Agreements:

Ownership Interest: Research Funding:

Honoraria:

Patents and Inventions:

Scientific Advisor or Membership:

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Ownership Interest:

Research Funding:

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Patents and Inventions:

Scientific Advisor or Membership:

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Research Funding:

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Patents and Inventions:

Scientific Advisor or

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Disclosure Information: Nothing to disclose

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Patents and Inventions:

Scientific Advisor or Membership:

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Research Funding:

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Patents and Inventions:

Scientific Advisor or Membership:

Other Interest/Relationships:

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Ownership Interest:

Research Funding:

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Patents and Inventions:

Scientific Advisor or Membership:

Other Interest/Relationships:

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Publication Preference: If my abstract is not selected for an oral or poster presentation, please do not include my abstract in ASN's 2012 Abstract Supplement of the *Journal of the American Society of Nephrology*.

Title: Patients with diabetic kidney disease have a worse survival than patients with diabetes as co-morbidity in chronic hemodialysis patients Chiu-Ching Huang, MD*^{1,2}, Che-yi Chou^{1,2}, Chih-chia Liang, MD¹, Huey-Liang Kuo, MD^{1,2}, Chiz-tzung Chang, MD, PhD^{1,2}, Jiung-hsiun Liu, MD^{1,2}, Hsin Hung Lin, MD^{1,2}, I-kuan Wang, MD^{1,2}, Yafei Yang^{1,2}, Yi-Tzone Shiao³ and Kuang fu Cheng³. 'Kidney Institute and Division of Nephrology, Department of Internal Medicine, China Medical University Hospital,

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Background: Diabetic kidney disease is a major cause of end-stage renal disease (ESRD). It is not clear if the survival of patients with diabetic kidney disease (DKD) associated ESRD is different from patients with diabetes as a co-morbidity. The aim of this study is comparing the survival of DKD patients and patients with diabetes as co-morbidity in chronic hemodialysis (HD) patients.

Methods: An observational cohort analysis based on database of Taiwan Renal Registry. Patients: Adult patients (n=46596) on chronic HD for at least 90 days at 450 facilities in Taiwan from 1995 to 2005. Survival status was observed until Dec 31, 2008. All patients have complete observation of study factors - age, gender, primary renal disease, co-morbidity, blood glucose, hematocrit and serum levels of albumin, calcium, phosphate and i-PTH. Statistics: Patients' survival and hazard ratio for death were determined using Kaplan-Meier analysis and Cox proportional-hazard models.

Results: A total of 20,489 (44%) patients were identified from 46,596 hemodialysis patients. Among them, 15430 patients had DKD and 5059 patients had DM as co-morbidity. They were followed for an average of 4.9 ±2.5 years. The mortality rate was 68.9% for patients with DKD and 39.7% for patients with diabetes as co-morbidity (p<0.001). The survivals for patients with DKD associated ESRD was significantly worse than patients with DM as co-morbidity (p<0.001, log-rank test). The hazard ratio for death of DKD associated ESRD patients was 1.95 (95% CI: 1.849 to 2.056) in Cox proportional regression with case-mix-and multiple covariant adjustment.

Conclusions: In chronic hemodialysis patients, those with diabetic kidney disease as primary renal disease are linked to a much higher mortality risk than patients with diabetes as co-morbidity.

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