**PROGNOSTIC IMPACT OF DIABETES MELLTIUS ON A WELL-DEFINED MULTI-ETHNIC ASIAN CLINICAL HEART FAILURE POPULATION:**

**A ONE-YEAR FOLLOW-UP FOR A THREE-YEAR COHORT**

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Objectives: To compare the clinical features and one-year prognosis of patients with heart failure and diabetes mellitus against patients with heart failure but non-diabetic.

Methods: This is an observational prospective study on patients admitted to Changi General Hospital between 1st January 2007 and 31st December 2009, fulfilling the Framingham criteria for heart failure and put on heart failure pathway during the hospital stay.

Results: 1155 patients were enrolled. They were ethnic Chinese (48.9%), Malay (35.2%) and Indian (10.7%), with the latter two races exceeding the usual Singapore racial make-up. 656 (56.8%) had diabetes. The 30-day mortality for the diabetic group was low but statistically higher than the non-diabetic group (3.2% vs 0.7%, p=0.05). The 1-year mortality for the diabetic group was also higher than the non-diabetic group (18% vs 11%, p=0.027). The diabetic also had higher 30-days readmission rate (18.4% vs 11.6%, p=0.002) and 12-months readmission rate (76.7% vs 68.3%, p=0.002). There were significantly higher prevalence of hypertension and prior stroke/transient ischemic attack in the diabetic group (84.6% vs 65.5%, p=0.029) and (15.4% vs 10.4%, p=0.013).

Conclusion: Our study concluded that diabetes mellitus remained a significant and prevalent cardiovascular risk factor in the Asian population. Diabetes mellitus is positively associated with a higher mortality and readmission rates in our local multi-ethnic population admitted for clinical heart failure, in accordance with existing literature. It therefore remains a challenge to treat and optimize this risk factor especially when its prevalence is increasing in the Asian countries.