29. COMPREHENSIVE MYOFILAMENT GENE MUTAION SCREENING AND PROGNOSIS IN JAPANESE PATIENTS WITH HYPERTROPHIC CARDIOMYOPTHY

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BACKGROUND: The impact of comprehensive gene screening for Japanese patients with hypertrophic cardiomyopathy (HCM) on prognosis is unresolved.

METHODS: Seventy consecutive patients (44 male, 58.3 ± 13.9 y.o.) with clinically diagnosed HCM were enrolled. Genetic analysis with using direct sequence of five HCM-susceptibility myofilament genes that encode sarcomeric proteins (*MYH7, MYBPC3, TNNI3, TNNT2 and TPMI1*) was performed.

RESULT: The gene mutations were observed in 35 patients. The relationship between positive gene mutation and clinical outcome was evaluated. During 7.8 ± 1.9 years, 18 cardiovascular events including five HCM-related deaths were observed. Survival and event- free rate in patients with positive mutation were worse than those in patients with negative mutation (Figure).

CONCLUSION: Comprehensive gene screening is useful in the prediction of prognosis in Japanese patients with HCM

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