## Understanding of the relationship between social isolation and advance care planning for the construction of systems preventing social isolation in elderly patients with heart failure

Primary Researcher: Hiroki Kitakata

Assistant professor, Keio University School of Medicine

Co-researchers: Takashi Kohno

Professor, Kyorin University Faculty of Medicine

Social isolation (SI) in elderly individuals is known to be a potential barrier to advance care planning (ACP), a process of discussing and choosing patients' future health care and medical treatment options. The purpose of this study was to investigate the prevalence and patient preferences regarding ACP among hospitalized heart failure (HF) patients with SI in order to develop an application tool aimed at behavioral change to reduce SI patients. We conducted a questionnaire survey, including assessments of SI using 6-item Lubben Social Network Scale (LSNS-6) as well as patients' perspectives on ACP and end-of-life (EOL) care in 120 consecutive hospitalized patients with HF [median age 73 years, 74.2% male]. Overall, 28.3% of participants were at high risk for SI (LSNS-6 score <12). The SI group had a significantly higher 180-day all-cause mortality rate [hazard ratio: 7.89, 95% confidence interval: 1.53-40.75]. The SI group had more negative attitudes toward ACP than those without (61.8% vs. 80.2%, p=0.035) and lower importance of family communication in EOL care. Based on these results, investigators are currently in the process of continuing to explore collaboration with various companies to develop applications to promote behavioral change among the elderly.