

**Reassessment of the grade of cardiac disability in patients with implanted pacemakers: Interim analysis of the prospective, multicenter Japanese Heart Rhythm Society Registry**

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**Background.** According to the MHLW rule revised in 2014, the grade of cardiac disability (Grades 1, 3 and 4) at pacemaker implantation is determined by either JCS Guideline indication (Class I or II) or physical activity (METs  $<2$  or  $\geq 2$ ), and the grade is reassessed within 3 years only by METs.

**Methods.** We prospectively enrolled the pacemaker recipients and collected the Class of JCS Guideline indication, METs and Barthel Index (activity of daily life) at implantation and 3, 6, and 12 months after implantation.

**Results.** From April 2015 to September 2016, 601 patients (mean age, 76 $\pm$ 9 years; 51% male) were enrolled, and follow-up data at 3, 6 and 12 months were obtained in 448 (75%), 348 (58%) and 130 (22%), respectively. At implantation, 559 patients (93%) were diagnosed as Grade 1 disability due to Guideline Class I indication, and only 38/559 (7%) showed METs  $<2$ . At follow-up, 4% (17/448) at 3 months and 5% (17/348) showed METs  $<2$ , and therefore, most of the current Grade 1 patients were equivalent to Grade 3 or 4. Barthel Index remained unchanged (94 $\pm$ 16 at implantation and 96 $\pm$ 14 at 6 months).

**Conclusions.** This interim analysis revealed that most patients diagnosed as Grade 1 disability at implantation were equivalent to Grade 3 or 4 at 3 months. Early reassessment of cardiac disability grade may be possible.

