Prompt versus delayed initiation of agalsidase alfa therapy is associated with improved cardiovascular outcomes in the Fabry Outcome Survey (FOS) patients with available date of symptom onset or diagnosis of Fabry disease (FD) and treatment start date. Cardiovascular outcomes included myocardial infarction, left ventricular hypertrophy, and heart failure. Time to first cardiovascular event was compared between prompt (≤ 24 months) vs. delayed (> 24 months from FD symptom onset or diagnosis) ERT initiation from the start of therapy until 96 (symptom onset) or 120 (diagnosis) months. Kaplan–Meier curves of the groups were compared using a log rank test. Cox regression using age at time of diagnosis as a covariate was used to estimate hazard ratios (HR) between groups. These analyses included 1275 patients (147 prompt, 1128 delayed; males 804, females 471) based on time from symptom onset and 1759 (854 prompt, 905 delayed; males 1045, females 714) based on time from diagnosis. In the overall population, prompt ERT initiation was associated with significantly better cardiovascular outcomes vs. delayed initiation of ERT (more than 24 months after symptom onset or diagnosis of FD), independent of sex. Age at symptom onset may be an important contributing factor.

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