INTRODUCTION AND AIMS: Body fluid retention in chronic dialysis patients is a modifiable risk factor of mortality and cardiovascular events. They often show pulmonary congestion by ultrasonography but remain asymptomatic. Only a few reports have shown that the significant association between Comet score calculated by pulmonary congestion and survival rate. However, there is no data from Japan. We evaluated the Comet score among chronic dialysis patients in Okinawa, Japan and examined the prognosis.

METHODS: Multicenter prospective observational study, Comet scores were calculated at the beginning of observation, and divided into 3 groups. Event free survivals (mortality and CVD events) were compared between these groups.

RESULTS: We targeted 203 chronic dialysis patients in two facilities. The mean age was 64.7 \( \pm \) 11.5 years, the average dialysis period was 93 \( \pm \) 78 months, the diabetes was 57\%, and the average observation period was 24 \( \pm \) 9 months. The average of Comet scores decreased to 8.3 \( \pm \) 11.1 before dialysis and 4.8 \( \pm \) 7.4 after dialysis. There were no difference in Comet score between facilities. There were 10 deaths (5 deaths of infectious diseases) during the observation period and 18 patients for CVD events. There was no association between Comet score and mortality. The event free survival of 24 months of the CVD event was lower in “Comet score 5 or more” than “less than 5” (log rank \( p < 0.05 \)), Unadjusted hazard ratio (HR) 2.52; 95\% confidence interval (CI) 1.03 - 7.02. The Comet score was related to LAD and LVDL / Ds.

CONCLUSIONS: We considered that Comet score in Japan is a predictor of CVD event rather than mortality. It was considered to be a useful and convenient tool for prognostic prediction, even compared with the CTR or IVC evaluation which is normally performed.