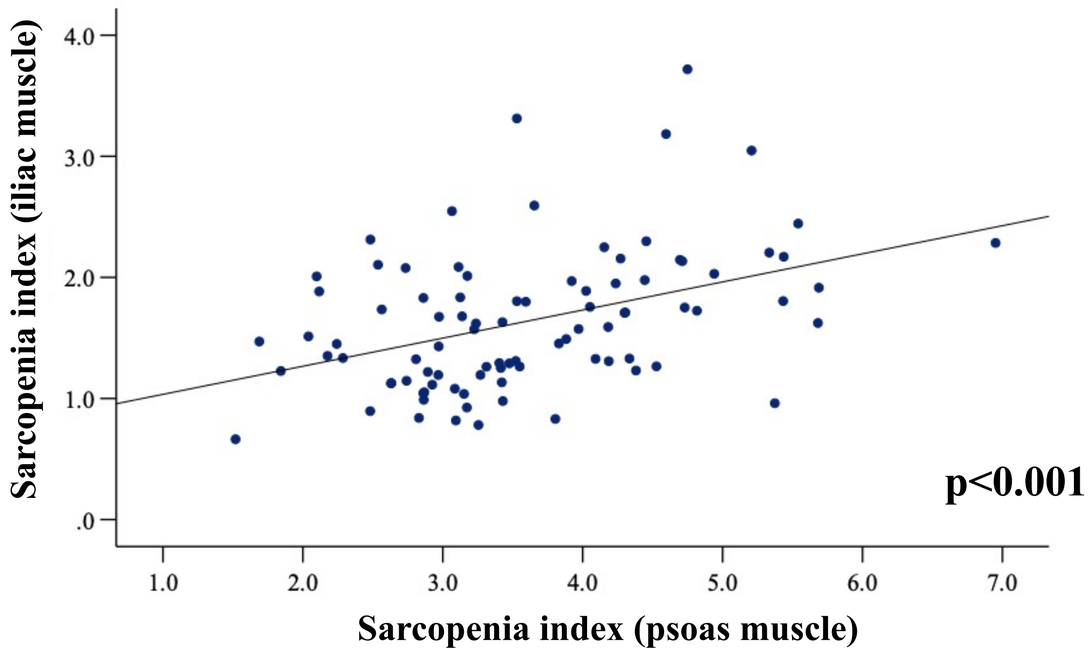
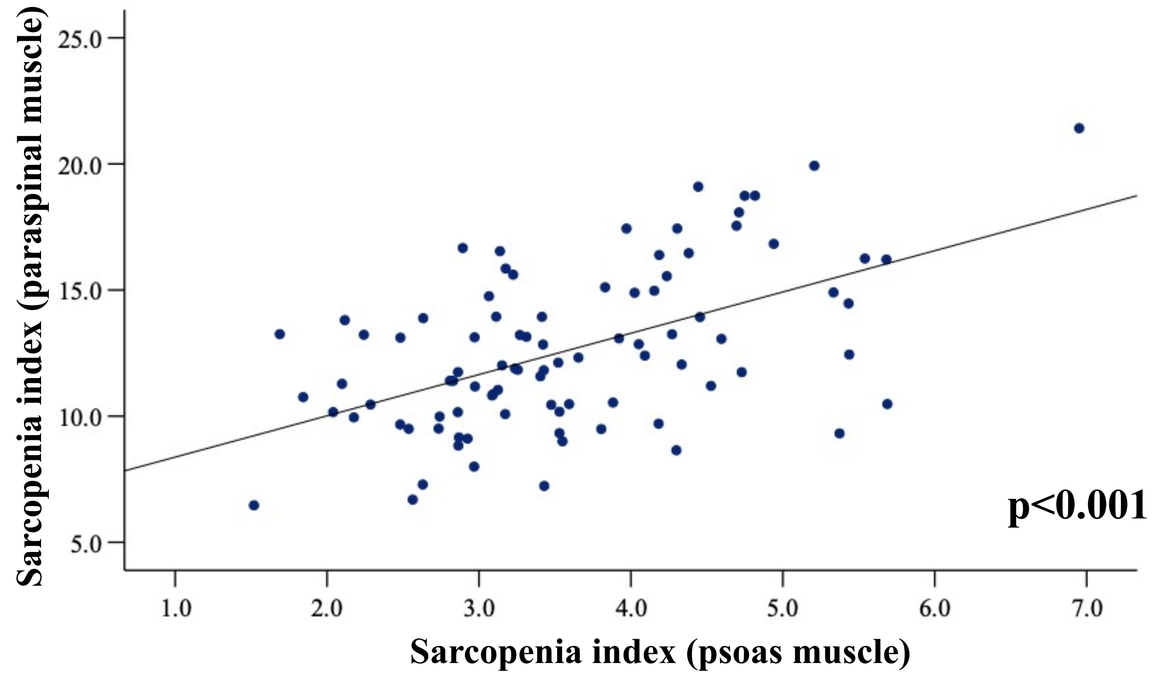
A

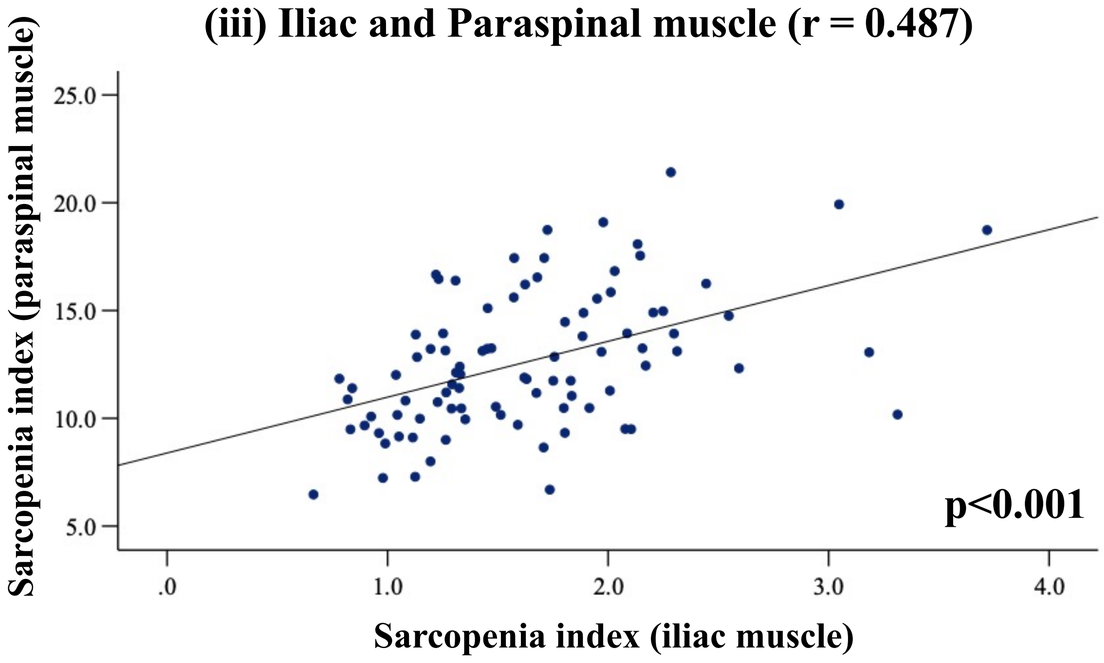
(i) Psoas and Iliac muscle (r = 0.414)



(ii) Psoas and Paraspinal muscle (r = 0.472)

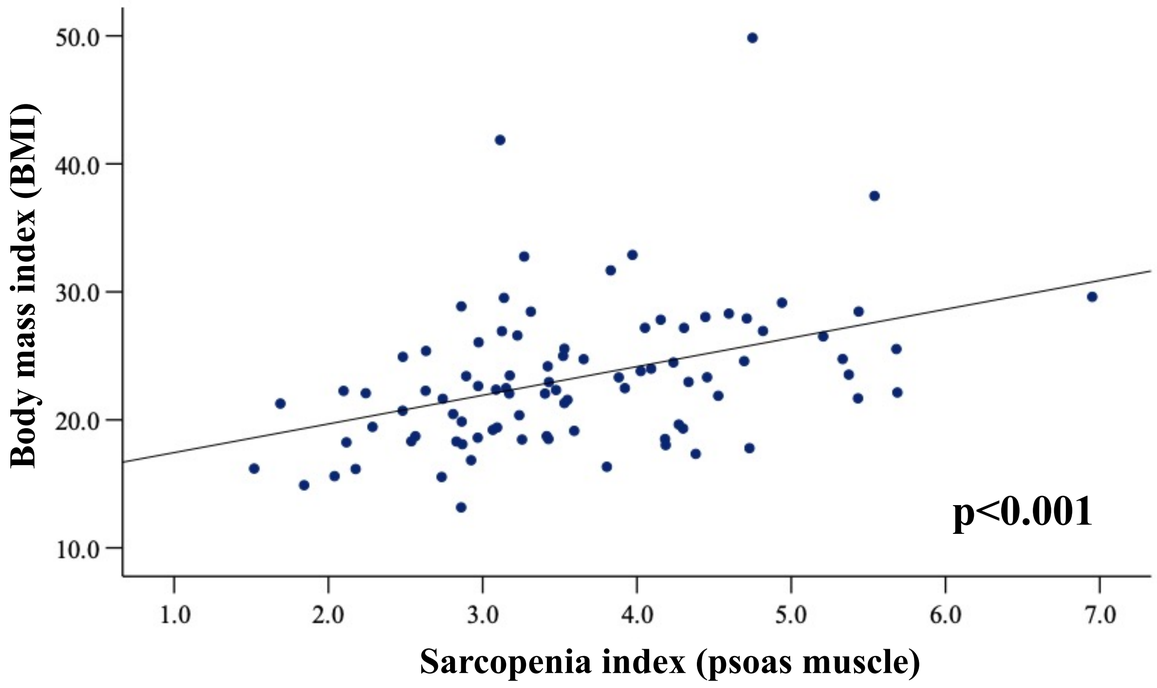


(iii) Iliac and Paraspinal muscle (r = 0.487)

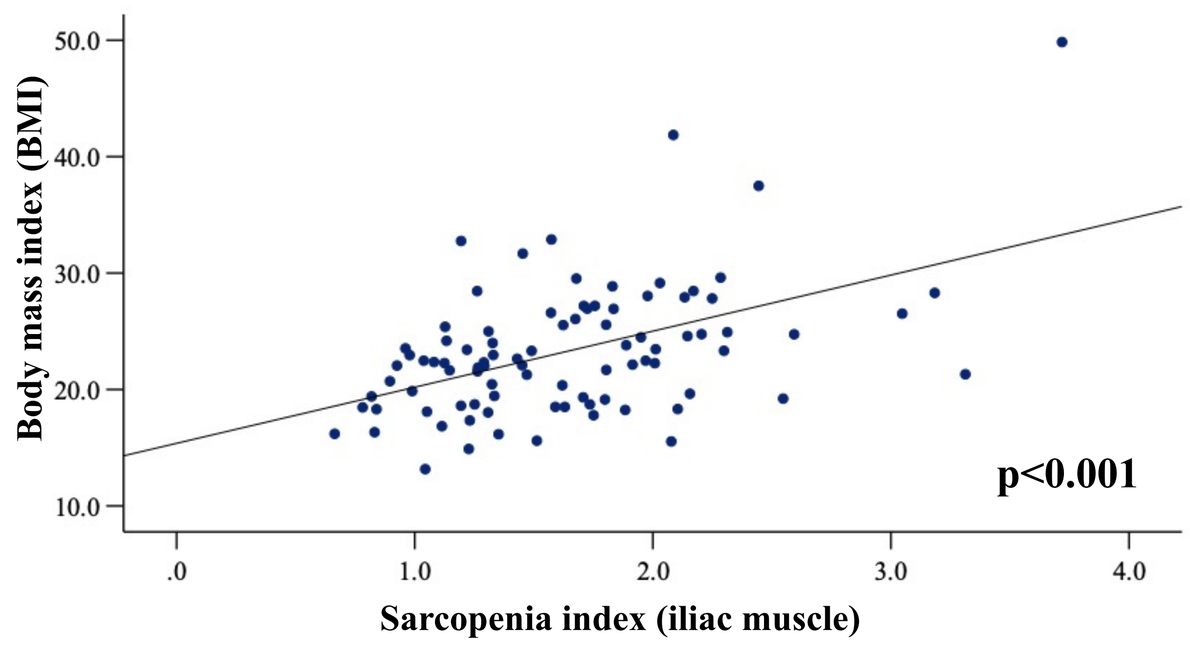


B

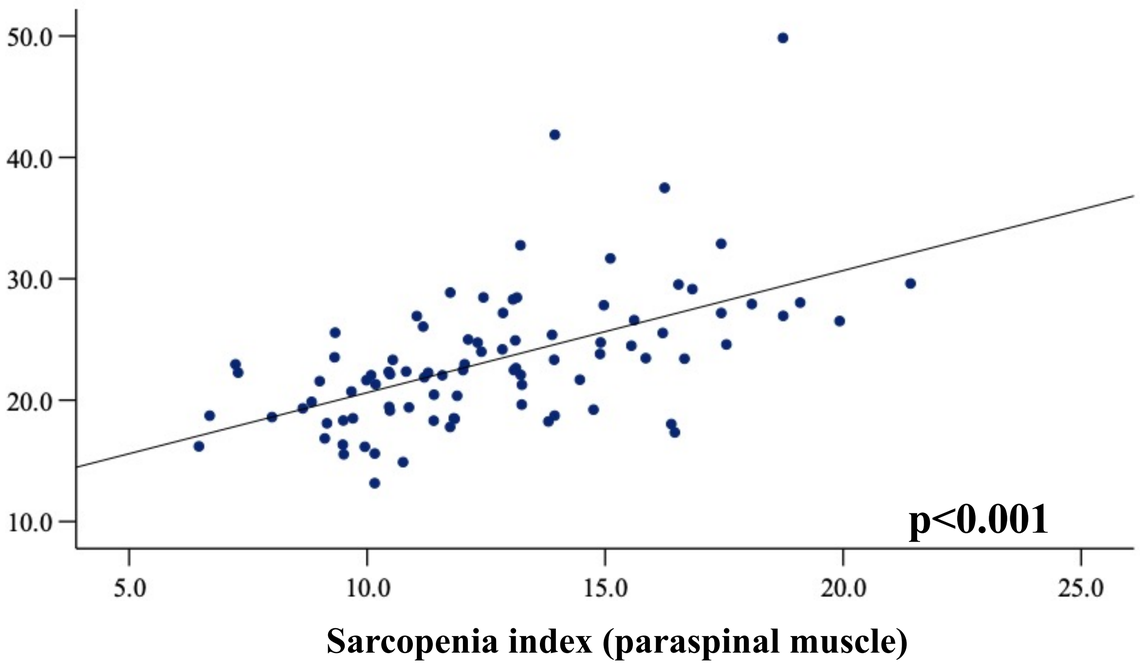
(i) BMI and Psoas muscle (r = 0.459)



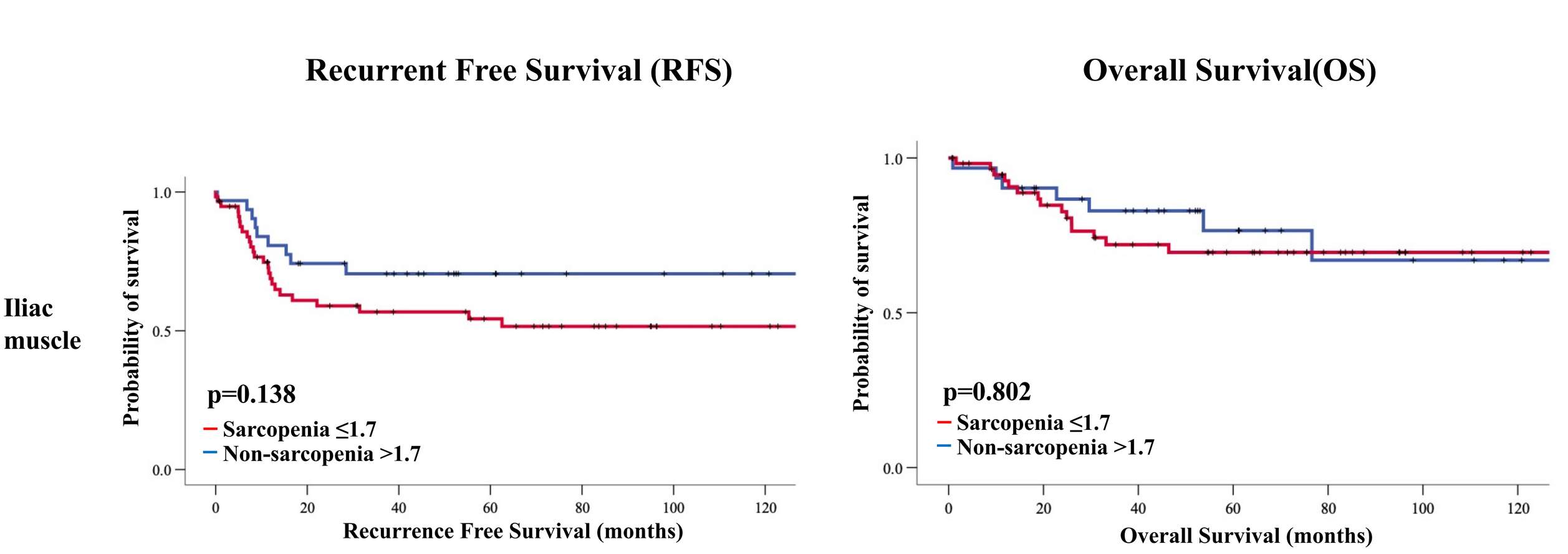
(ii) BMI and Iliac muscle (r = 0.428)



(iii) BMI and Paraspinal muscle (r = 0.597)



Supplementary Fig. S1 The correlation between the sarcopenia index obtained using each muscle and BMI.
All indexes were significantly correlation among each index (p<0.001). BMI, body mass index.



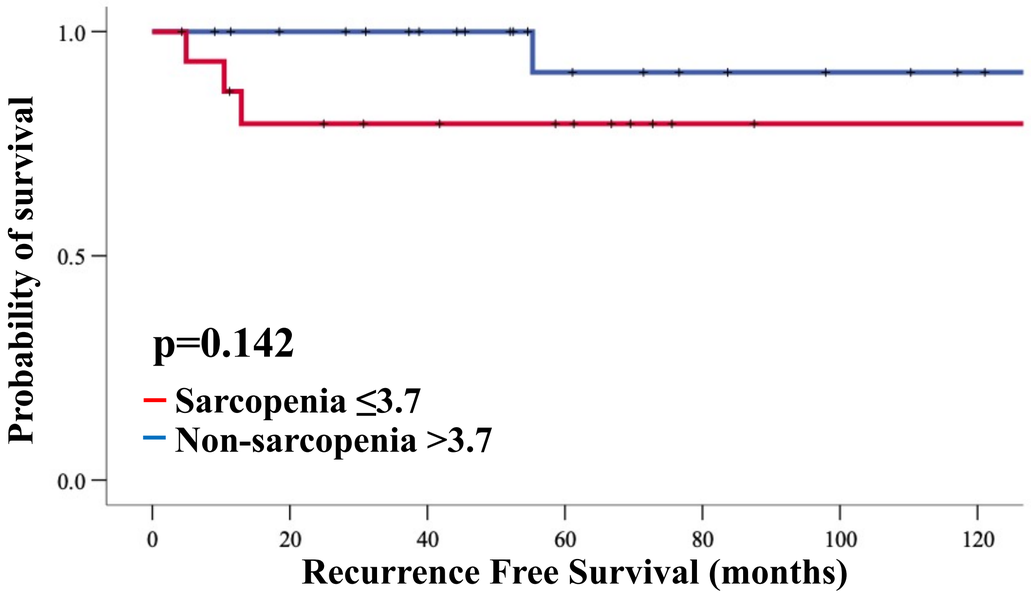
Supplementary Fig. S2 Kaplan-Meier analysis of the sarcopenia index obtained from iliac muscle or BMI. Both the index obtained from the iliac muscle and BMI were not related to RFS and OS. RFS, recurrence free survival; OS, overall survival; BMI, body mass index.

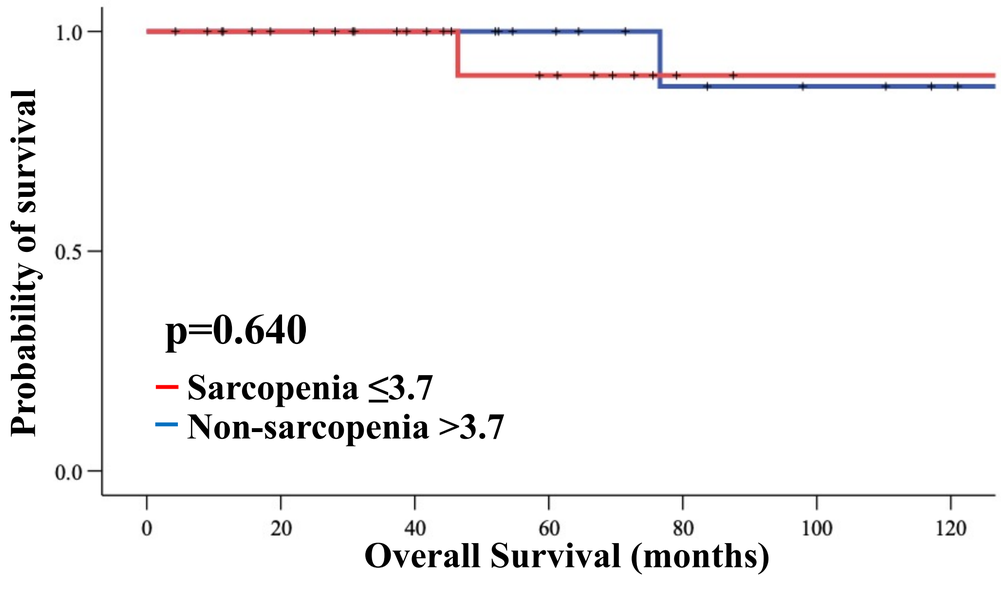
Patients with stage I disease

Recurrent Free Survival (RFS)

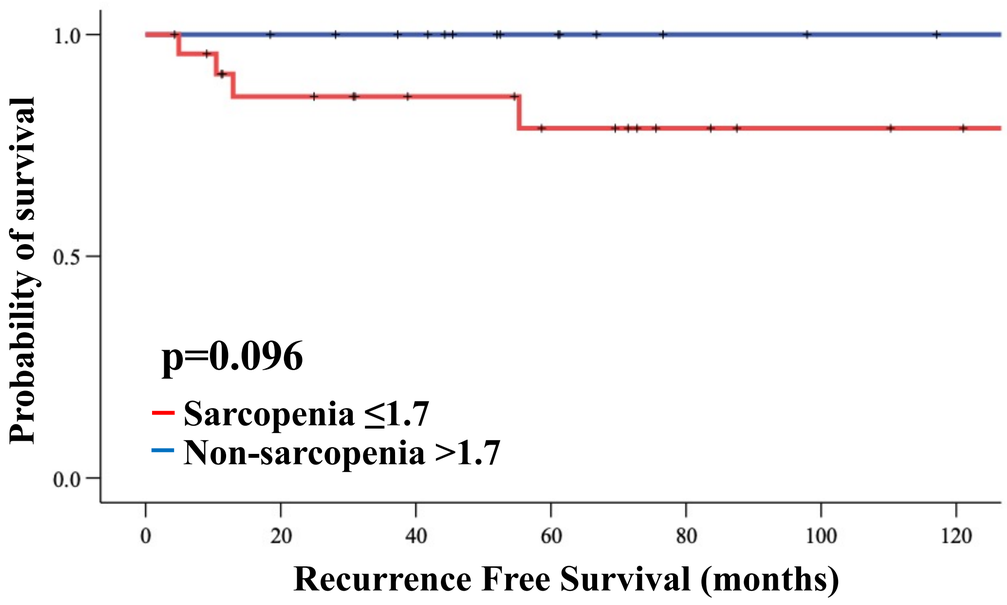
Overall Survival(OS)

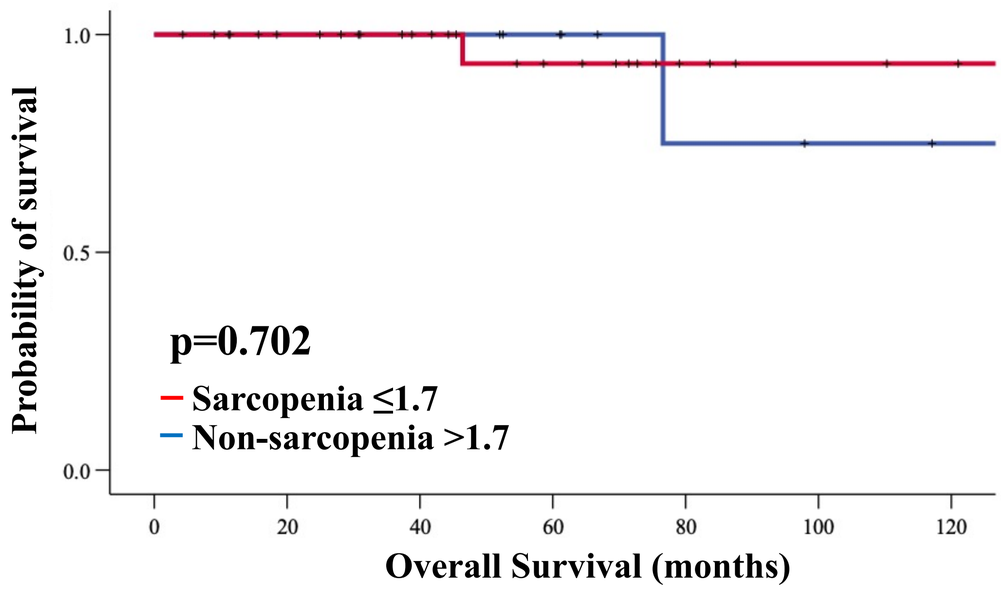
Psoas muscle



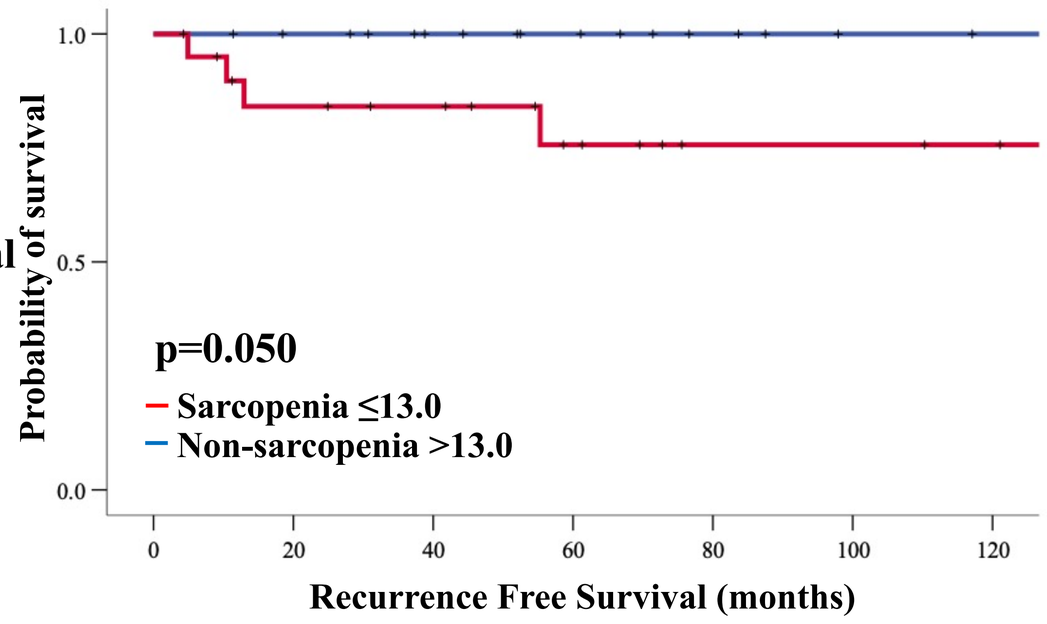


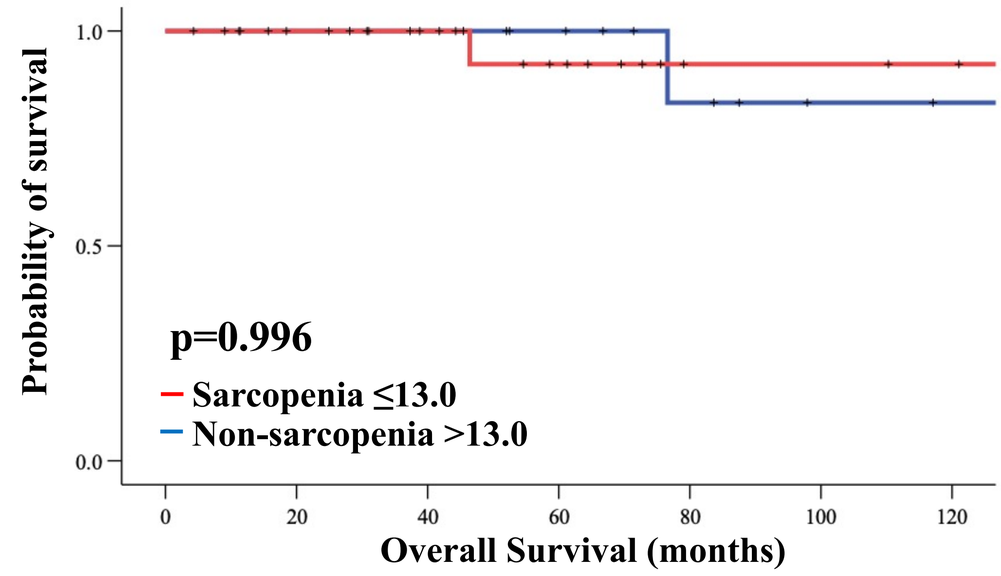
Iliac muscle



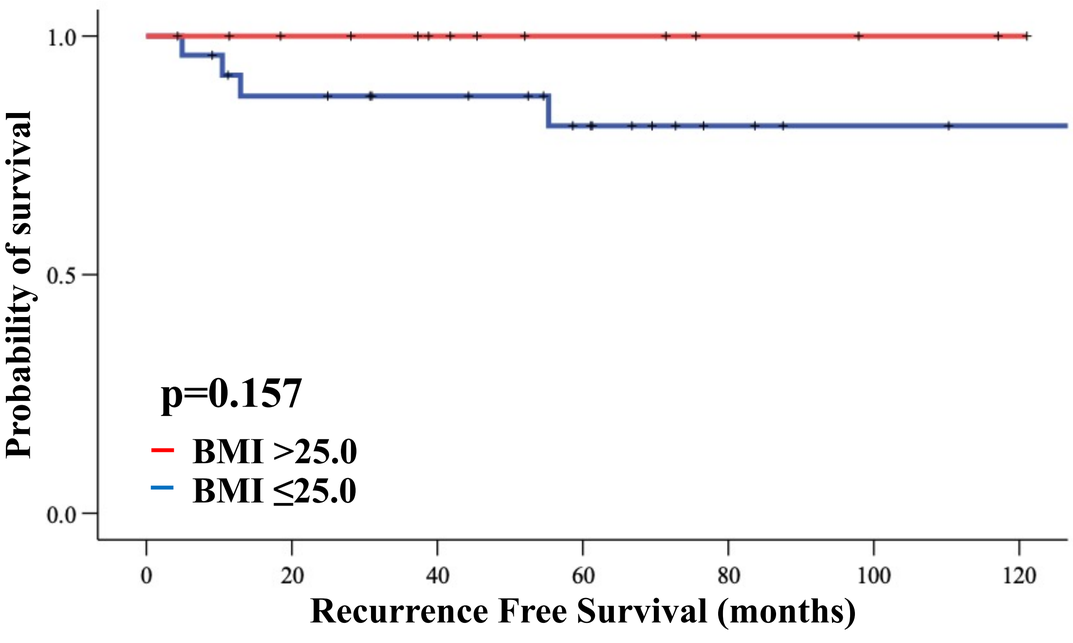


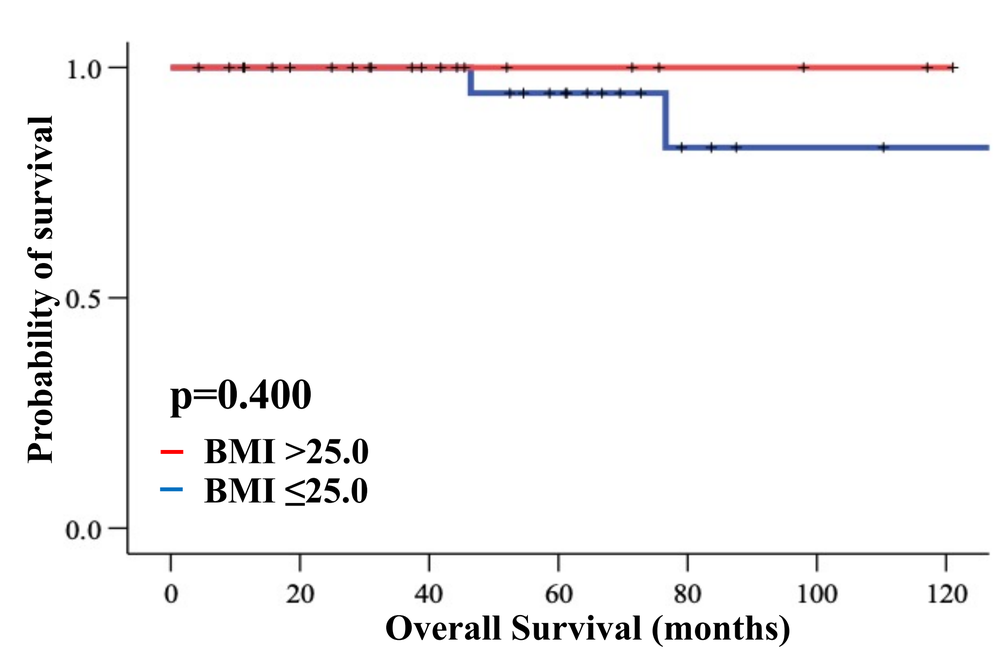
Paraspinal muscle



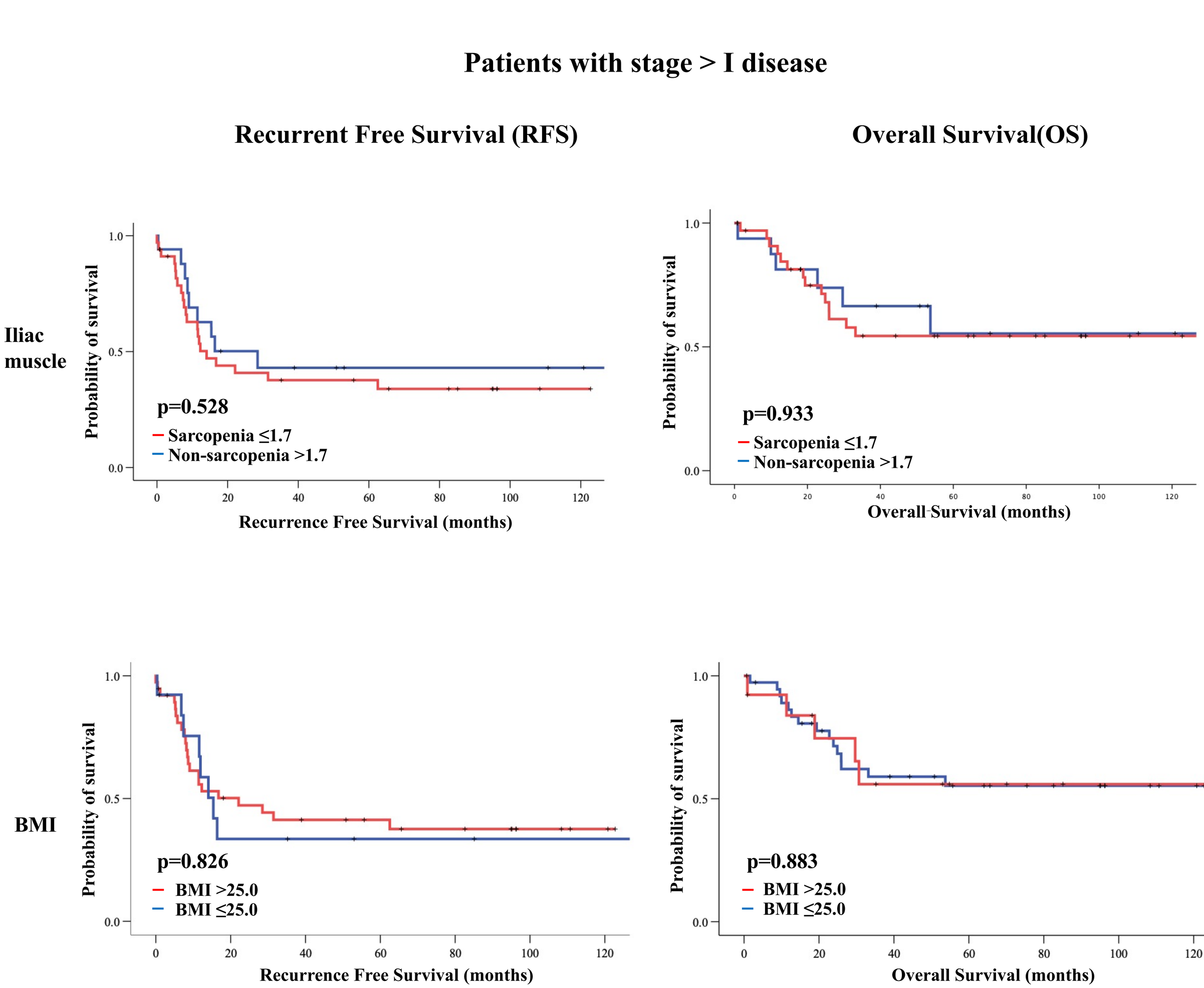


BMI

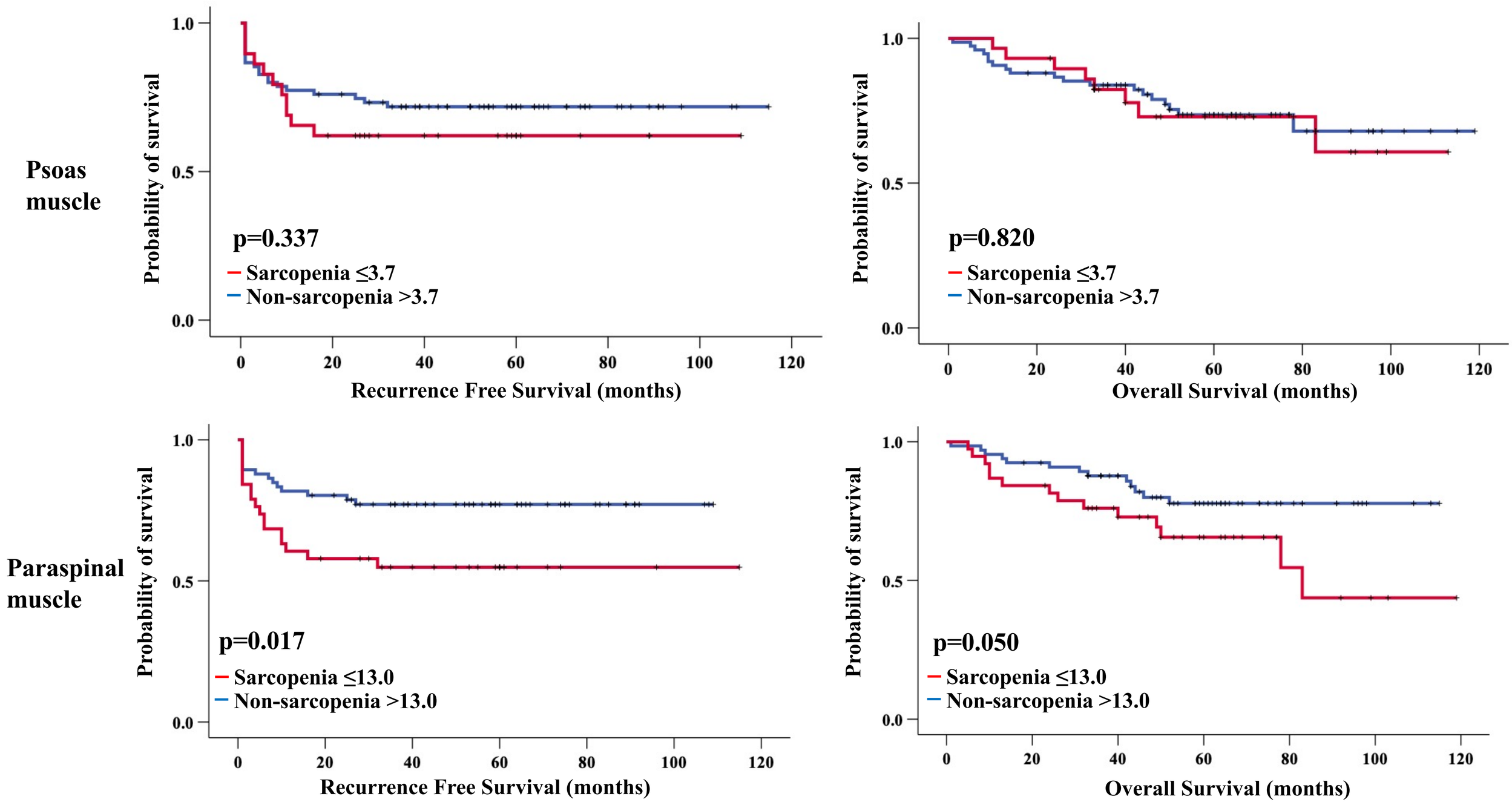




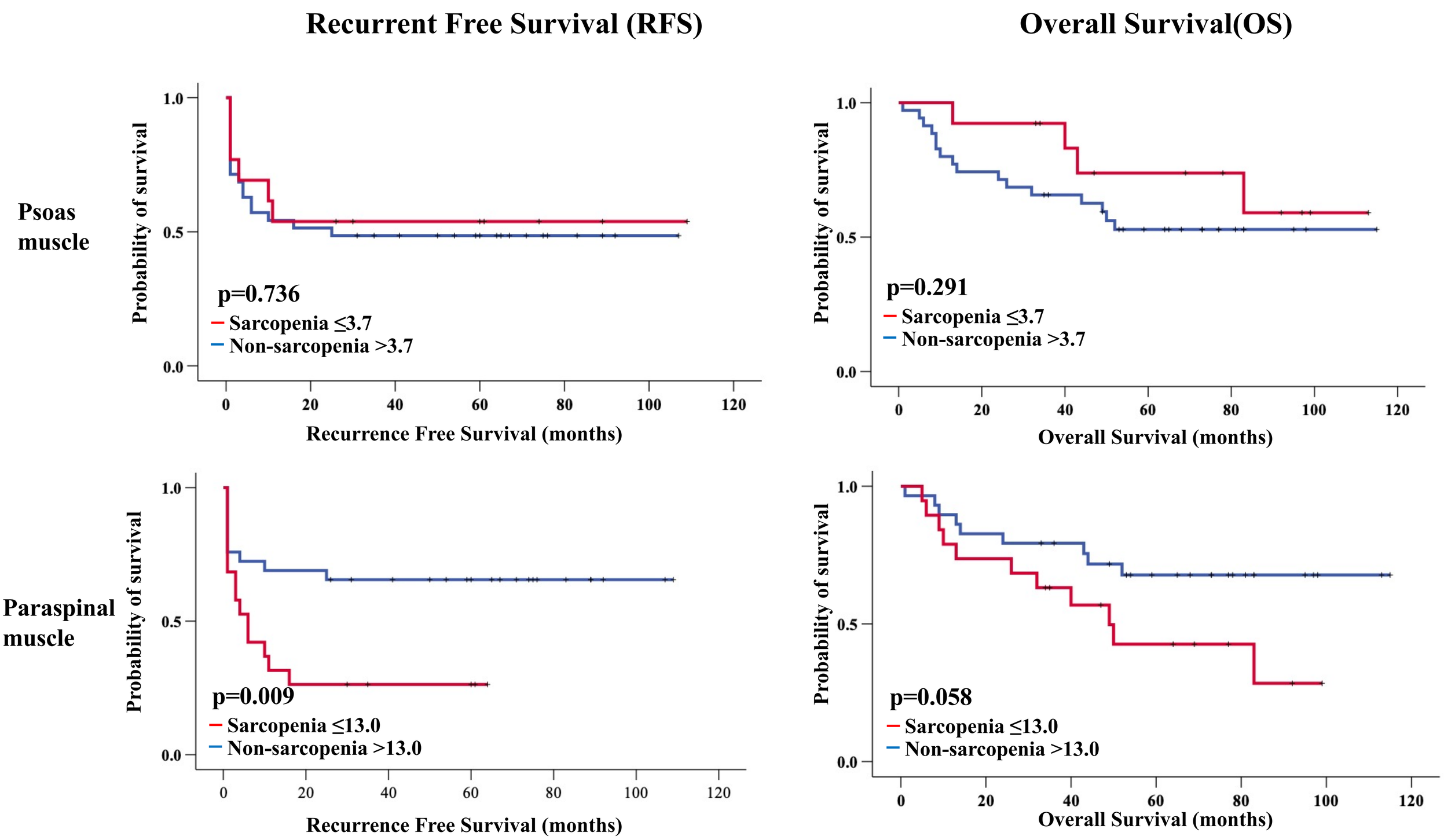
Supplementary Fig. S3 The relation between sarcopenia index and RFS or OS in patient with stage I disease. No significant relations between the sarcopenia indexes and RFS or OS because only 2 patients died in stage I disease. BMI, body mass index.



Supplementary Fig. S4 The relation sarcopenia index obtained using iliac muscle and BMI to RFS or OS in patient with stage > I disease. Both sarcopenia index obtained from iliac muscle and BMI did not correlate to RFS or OS in patients with stage > I disease. RFS, recurrence free survival; OS, overall survival; BMI, body mass index.



Supplementary Fig. S5 Kaplan-Meier analysis of the sarcopenia index obtained from the psoas or paraspinal muscle in validation data set. The index obtained from the paraspinal muscle was related to worse RFS using the same cut-off values in original data set, although the index from the psoas was not. RFS, recurrence free survival; OS, overall survival.



Supplementary Fig. S6 Kaplan-Meier analysis of the sarcopenia index obtained from the psoas or paraspinal muscle in validation data set with stage > I disease. In patients with stage >I, the sarcopenia index obtained using the paraspinal muscle was significantly related to RFS (p=0.009), although the index obtained using the psoas or iliac muscle was not also related with prognosis in validation data set. RFS, recurrence free survival; OS, overall survival. BMI, body mass index.