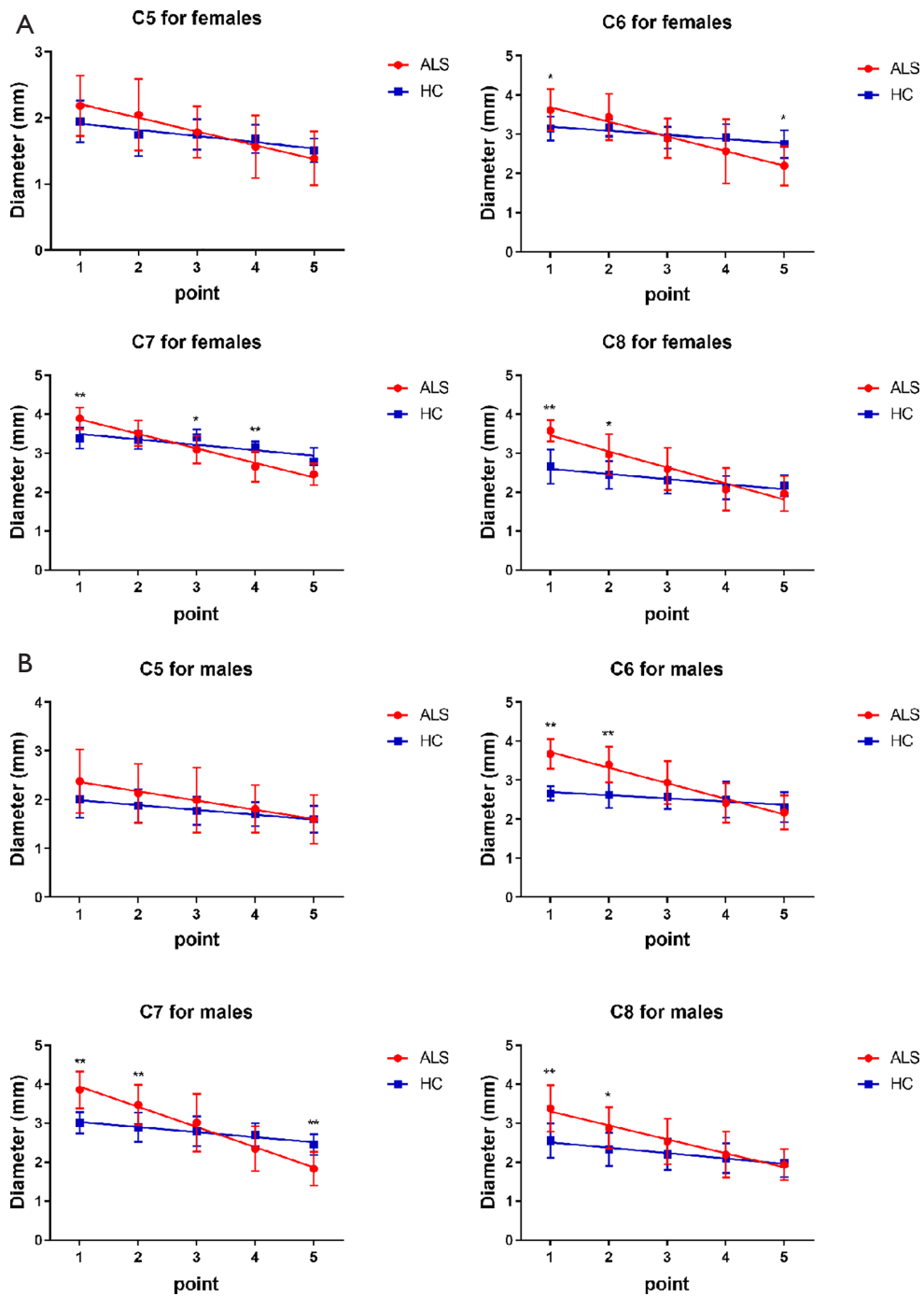


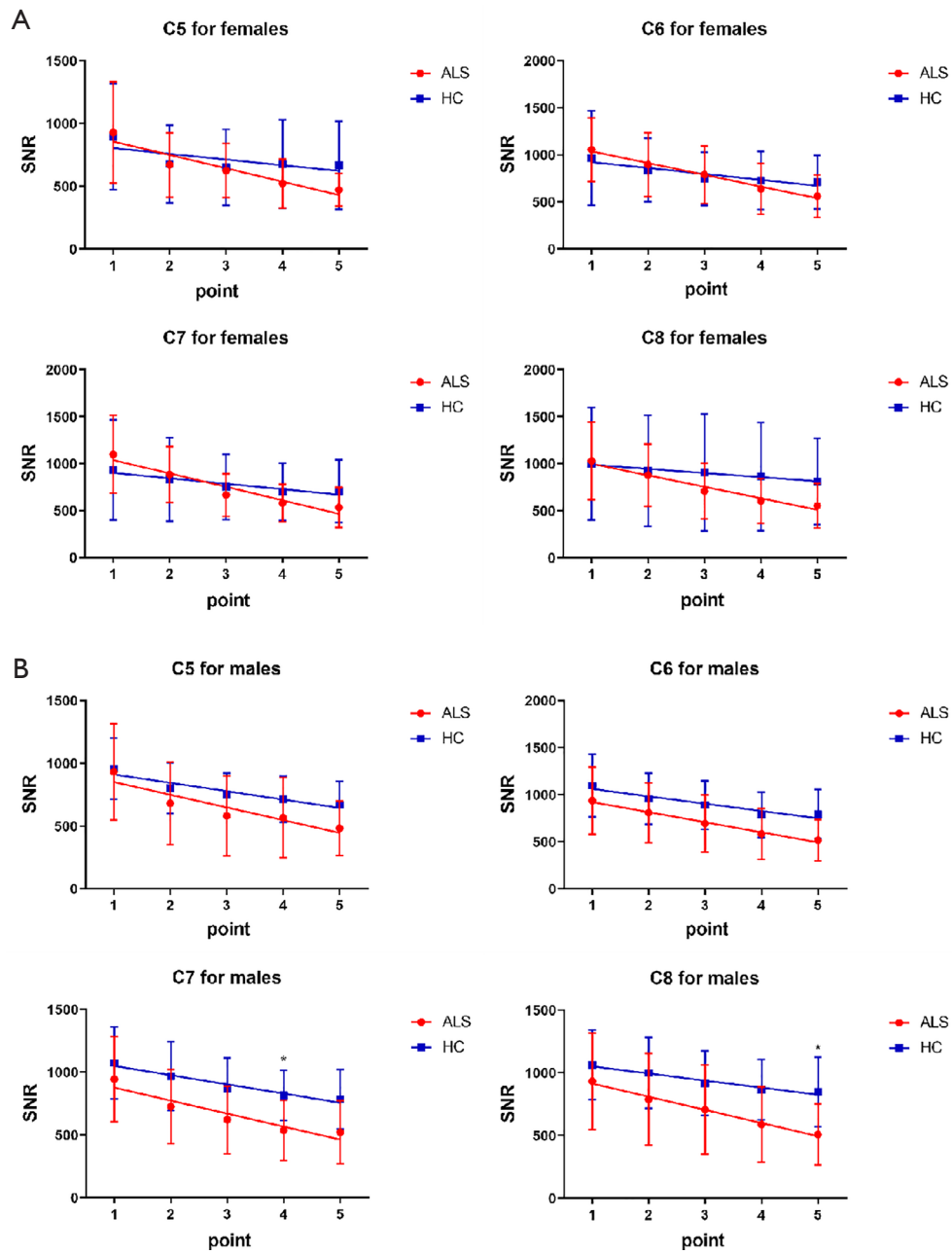
**Table S1** The P values of diameter and SNR value variation from proximal to distal for females and males and differences of slope values between patients with ALS and HCs

Parameter	P values of variation in ALS Patients		P values of variation in HCs		The difference of slope values	
	Females	Males	Females	Males	Females	Males
C5 diameter	P<0.001*	P<0.001*	P=0.02*	P<0.001*	P=0.002*	P<0.001*
C5 SNR value	P=0.02*	P=0.02*	P=0.18	P=0.02*	P=0.12	P=0.25
C6 diameter	P<0.001*	P<0.001*	P=0.02*	P=0.02*	P<0.001*	P<0.001*
C6 SNR value	P<0.001*	P<0.001*	P=0.02*	P=0.01*	P=0.01*	P=0.11
C7 diameter	P<0.001*	P<0.001*	P=0.08	P=0.004*	P=0.007*	P<0.001*
C7 SNR value	P=0.009*	P=0.017*	P=0.017*	P=0.004*	P=0.012*	P=0.24
C8 diameter	P=0.003*	P=0.007*	P=0.016*	P=0.002*	P=0.002*	P<0.001*
C8 SNR value	P=0.003*	P=0.004*	P=0.002*	P=0.004*	P=0.002*	P=0.002*

\*, P<0.05 was considered statistically significant.



**Figure S1** The variation tendency of C5–C8 diameters of ALS patients and HCs from proximal to distal location in the females (A) and males (B). \*,  $P < 0.05$  and \*\*,  $P < 0.01$  were considered statistically significant.



**Figure S2** The variation tendency of SNR values of ALS patients and HCs from proximal to distal location in the females (A) and males (B). \*,  $P < 0.05$  and \*\*,  $P < 0.01$  were considered statistically significant.