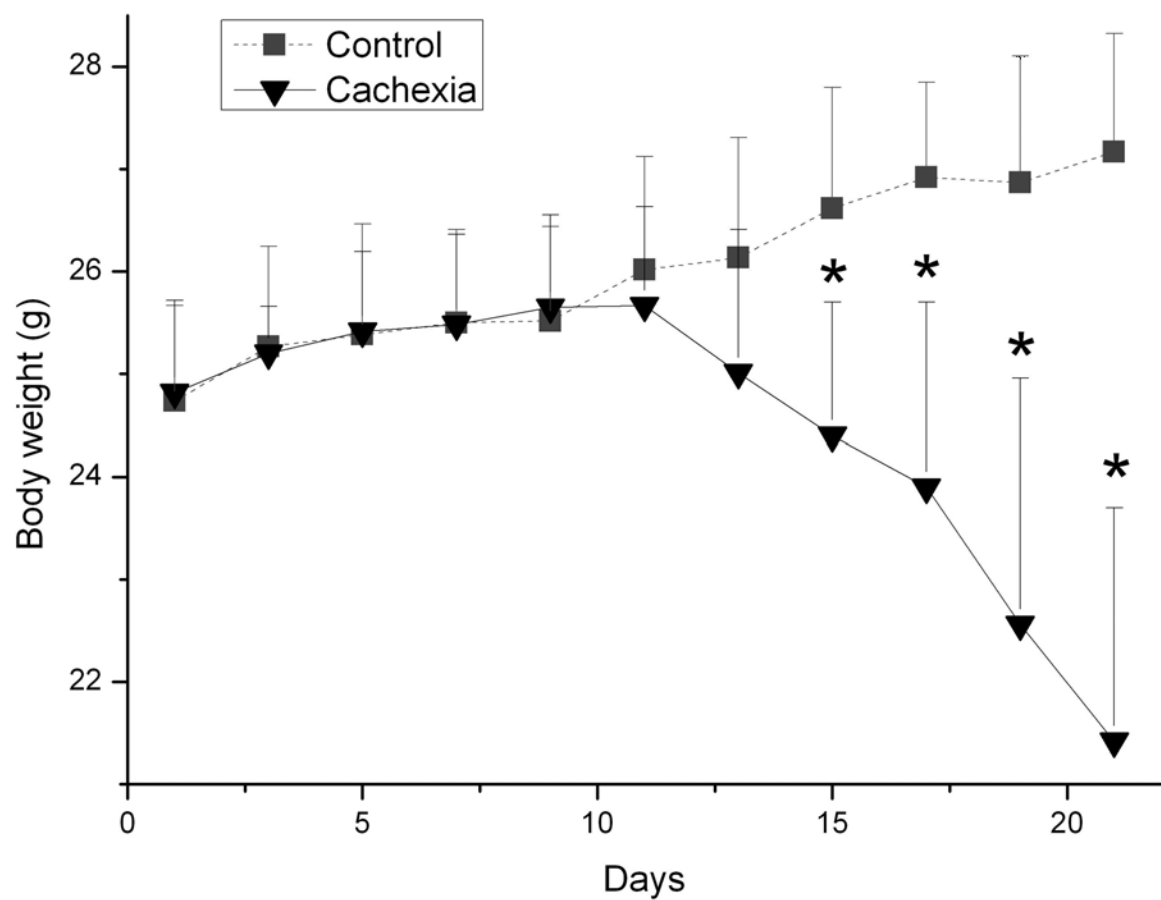
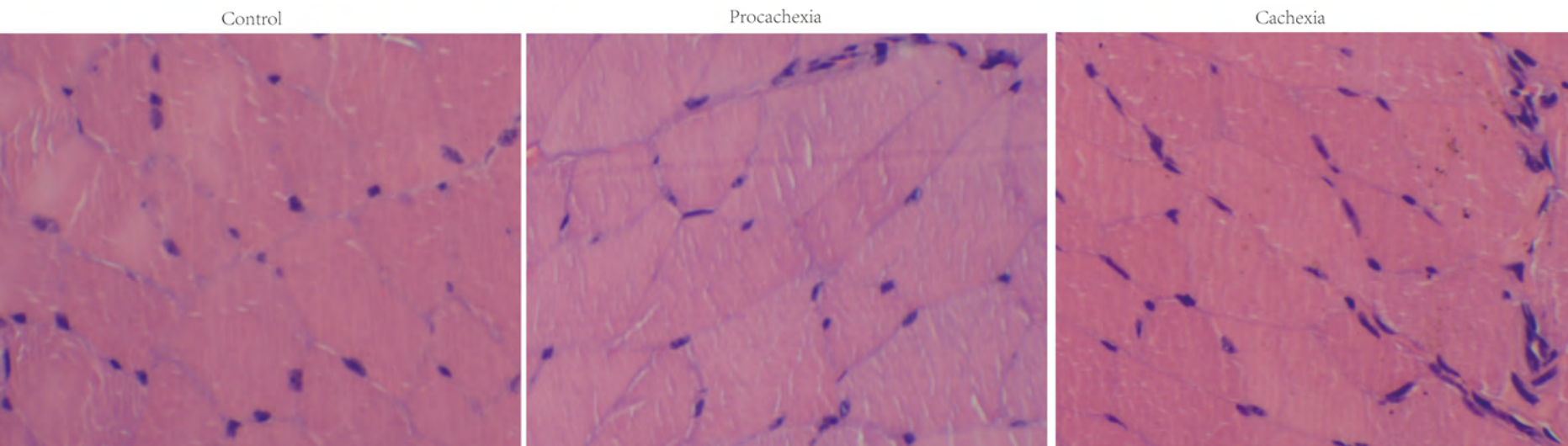
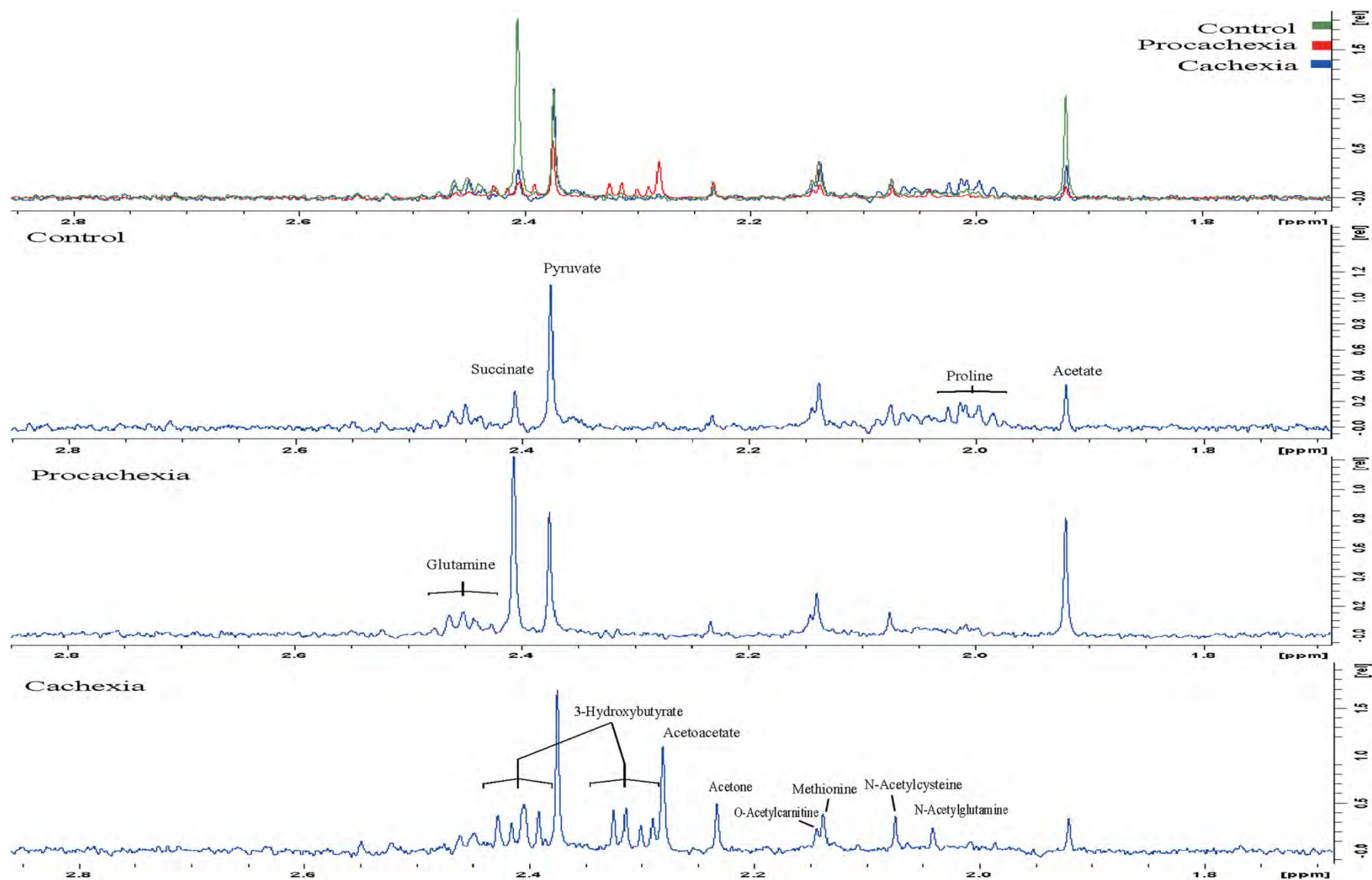




S-1. Body weights of control and cachexia model



S-2.Representative pathological examination of gastrocnemius muscles from control, procachexia and cachexia group



S-3. Representative 600MHz ¹H NMR spectrum of serum from control, procachexia and cachexia group

2013/8/23

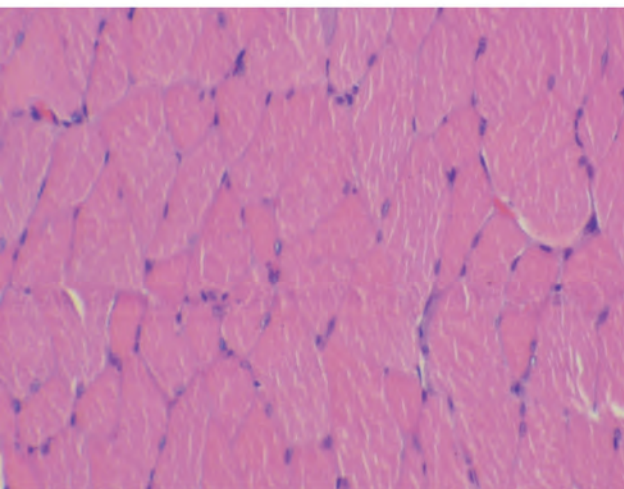
S-4 Metabolites identification and relative quantification resulted of cancer

	VIP	Chemical attribution	Chemical Class
VLDL or LDL	11.32	1.18(t,CH3), 3.66(q,CH2)	Lipoprotein
Lactate	5.06	1.33(d,CH3), 4.12(q,CH)	Organic acid
β -hydroxybutyrate	3.54	1.21(s,CH3), 4.16(m,CH)	Ketone body
Glycerol	2.75	3.58(dd,CH2), 3.67(dd,CH2)	Glycerol
Taurine	2.52	3.28(t,CH2), 3.43(t,CH2)	Taurine
Acetate	1.85	1.92(s,CH3)	Organic acid
Glucose	1.48	5.22(d, CH), 4.66(d, CH)	Sugar
Acetone	0.72	2.23(s, CH3)	Ketone body
Alanine	0.69	3.76(q,CH), 1.46(d,CH3)	Amino acid
Glycine	0.68	3.55(s,CH2)	Amino acid
Creatine	0.66	3.04(s,CH2), 3.93(s, CH3)	Creatine
Pyruvate	0.51	2.38(s,CH3)	Organic acid

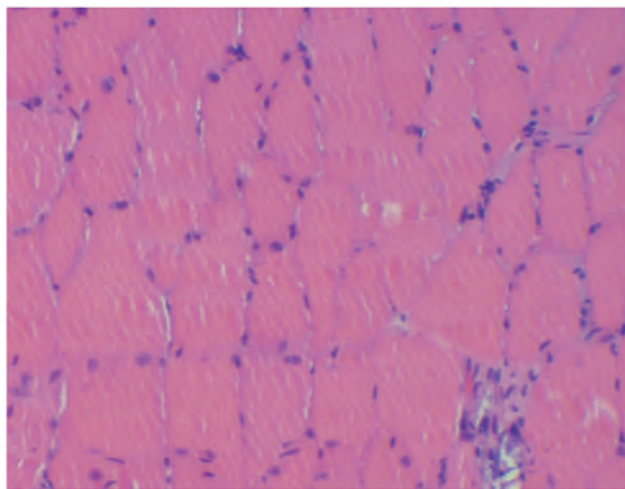
S-5 Chemometric parametric for the cross-validation of the model

	Component number	R2X(cum)	R2Y(cum)	Q2(cum)
PCA for three groups	5	0.493		0.008
PLS-DA for three groups	5	0.466	0.908	0.722
PLS-DA for control and procachexia groups	3	0.347	0.977	0.874
PLS-DA for control and cachexia groups	2	0.290	0.879	0.725
PLS-DA for procachexia and cachexia groups	4	0.458	0.992	0.864
OPLS-DA for three groups	2	0.771	0.990	0.989

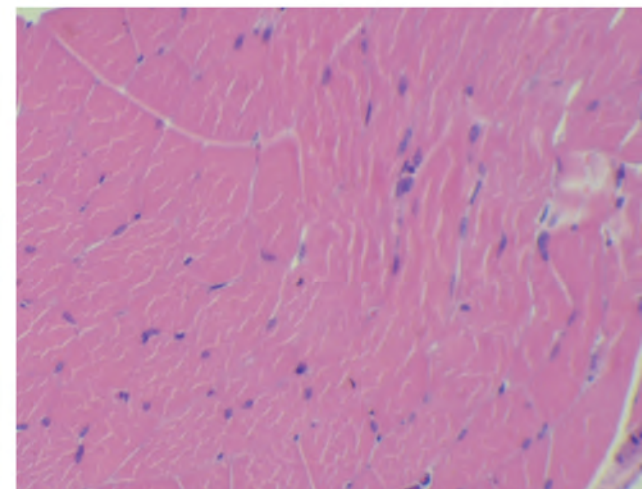
Control



Formoterol



Cachexia



S-6. Effect of formoterol on pathological examination of gastrocnemius muscles in mice bearing the CT26 tumor