Table S1. Correlations between BC variables and clinical course.

Body composition		L3 SMRA	L3 VATI	L3 SMI	L3 SATI	T4 SMRA	T4 SMI	T4 SATI	age
Hospital stay	**Pearson**	0.025	0.025	0.106	0.115	0.054	0.022	**0.128**	-0.087
	p	0.674	0.672	0.074	0.052	0.360	0.711	**0.030**	0.136
ICU stay	**Pearson**	-0.024	0.042	0.070	0.106	-0.005	-0.015	**0.127**	-0.024
	p	0.686	0.478	0.238	0.074	0.936	0.803	**0.032**	0.677
Duration of ventilation	**Pearson**	-0.074	0.073	0.020	0.112	-0.048	-0.051	**0.151**	0.040
	p	0.212	0.222	0.738	0.059	0.424	0.396	**0.011**	0.494
CCI	**Pearson**	-0.093	0.032	-0.014	-0.048	-0.102	0.060	-0.015	**0.136**
	p	0.116	0.585	0.812	0.420	0.085	0.310	0.805	**0.019**
ISS	**Pearson**	0.030	-0.028	-0.037	-0.049	-0.004	-0.008	-0.009	-0.040
	p	0.616	0.635	0.529	0.406	0.948	0.892	0.883	0.492
Death	**Eta coefficient**	**0.208**	0.100	**0.151**	0.062	**0.165**	0.084	0.014	**0.268**
	p	**0.000**	0.091	**0.011**	0.294	**0.005**	0.157	0.817	**0.000**
Age	**Pearson**	**-0.667**	**0.560**	**-0.252**	**0.170**	**-0.576**	**-0.240**	**0.398**	
	p	**0.000**	**0.000**	**0.000**	**0.004**	**0.000**	**0.000**	**0.000**	

ICU: intensive care unit; CCI: Comprehensive Complication Index; ISS: Injury Severity Score; SMRA: Skeletal muscle radiation attenuation; VATI: Visceral adipose tissue index; SMI: Skeletal muscle index; SATI: Subcutaneous adipose tissue index.

Table S2. Correlations of BC parameters and local and systemic complications.

Body composition		L3 SMRA	L3 VATI	L3 SMI	L3 SATI	T4 SMRA	T4 SMI	T4 SATI	Age
Occurrence of overall complications	**Eta-coefficient**	0.046	0.046	0.089	0.017	0.072	0.079	0.069	0.055
	p	0.440	0.439	0.135	0.778	0.225	0.183	0.246	0.344
Local complications	**Eta-coefficient**	0.062	0.020	0.065	0.042	0.028	**0.130**	0.066	0.036
	p	0.298	0.734	0.278	0.478	0.638	**0.029**	0.267	0.541
Systemic complications	**Eta-coefficient**	**0.140**	0.049	**0.182**	**0.136**	0.104	**0.156**	**0.148**	**0.115**
	p	**0.018**	0.408	**0.002**	**0.021**	0.080	**0.008**	**0.013**	**0.048**

Body composition		L3 SMRA	L3 VATI	L3 SMI	L3 SATI	T4 SMRA	T4 SMI	T4 SATI	Age
Clavien-Dindo score	**Kendall-tau**	**-0.127**	**0.095**	**-0.102**	0.043	**-0.101**	**-0.108**	0.056	**0.185**
	p	**0.003**	**0.027**	**0.017**	0.313	**0.018**	**0.012**	0.190	**0.000**
	Spearman	**-0.180**	**0.130**	**-0.139**	0.057	**-0.143**	**-0.148**	0.077	**0.254**
	p	**0.002**	**0.028**	**0.019**	0.342	**0.015**	**0.012**	0.193	**0.000**

SMRA: Skeletal muscle radiation attenuation; VATI: Visceral adipose tissue index; SMI: Skeletal muscle index; SATI: Subcutaneous adipose tissue index.

Table S3. Regression models of BC parameters with regard to local and systemic complications.

Body composition			L3 SMRA	L3 VATI	L3 SMI	L3 SATI	T4 SMRA	T4 SMI	T4 SATI	Age
Occurrence of complications	**univariable**	**Odds ratio**	0.990	1.001	0.992	1.000	0.980	0.997	1.002	1.007
		95% CI	0.966 - 1.015	0.998 - 1.004	0.982 - 1.002	0.998 - 1.003	0.949 - 1.012	0.992 - 1.002	0.999 - 1.005	0.993 - 1.020
		p	0.439	0.438	0.136	0.777	0.225	0.183	0.246	0.343
	multi-variable	**Odds ratio**								
		95% CI								
		p								
Local complications	**univariable**	**Odds ratio**	0.989	1.000	0.995	1.001	0.993	**0.995**	1.002	1.004
		95% CI	0.967- 1.010	0.997 - 1.002	0.986 - 1.004	0.998 - 1.003	0.65 - 1.022	**0.990 - 0.999**	0.999 - 1.004	0.992 - 1.016
		p	0.298	0.733	0.277	0.477	0.636	**0.030**	0.267	0.539
	multi-variable	**Odds ratio**						**0.994**		
		95% CI						**0.989 - 0.999**		
		p						**0.025**		
	univariable	**Odds ratio**	**0.969**	1.001	**0.982**	**1.003**	0.967	**0.991**	**1.004**	1.015

Body composition			L3 SMRA	L3 VATI	L3 SMI	L3 SATI	T4 SMRA	T4 SMI	T4 SATI	Age
Systemic complications		95% CI	**0.943 - 0.995**	0.998 - 1.005	**0.971 - 0.994**	**1.000 - 1.006**	0.932 - 1.004	**0.984 - 0.998**	**1.001 - 1.008**	**1.000 - 1.030**
		p	**0.020**	0.407	**0.003**	**0.024**	0.081	**0.009**	**0.014**	**0.050**
	multi-variable	Odds ratio	0.975		**0.983**	**1.003**		**0.991**	**1.004**	1.014
		95% CI	0.940 - 1.011		**0.972 - 0.996**	**1.000 - 1.006**		**0.984 - 0.998**	**1.000 - 1.008**	0.998 - 1.029
		p	0.167		**0.007**	**0.027**		**0.012**	**0.036**	0.078
Clavien-Dindo score	univariable	95% CI	**(-0.069) - (-0.020)**	**0.000 - 0.006**	**(-0.024) - (-0.004)**	(-0.002) - 0.003	**(-0.074) - (-0.008)**	**(-0.011) - (-0.001)**	(-0.002) - 0.005	**1.225 - 2.609**
		p	**0.000**	**0.048**	**0.009**	0.809	**0.014**	**0.027**	0.358	**0.000**
	multi-variable	95% CI	(-0.031) - 0.019	(-0.003) - 0.002	**(-0.016) - (-0.016)**		(-0.017) - 0.042	**(-0.010) - (-0.002)**		**0.013 - 0.033**
		p	0.630	0.697	**0.029**		0.420	**0.004**		**0.000**

SMRA: Skeletal muscle radiation attenuation; VATI: Visceral adipose tissue index; SMI: Skeletal muscle index; SATI: Subcutaneous adipose tissue index.

Table S4. Univariate and multivariate analysis of BC variables and clinical course.

Body composition			L3 SMRA	L3 VATI	L3 SMI	L3 SATI	T4 SMRA	T4 SMI	T4 SATI
Hospital stay (d)	univariable	95% CI	(-0.220) - 0.341	(-0.028) - 0.043	(-0.028) - 0.043	0.000 - 0.061	(-0.196) - 0.538	(-0.047) - 0.069	**0.004 - 0.077**
		p	0.674	0.672	0.074	0.052	0.360	0.711	**0.030**
	multi-variable	95% CI							**0.023 - 0.102**
		p							**0.002**
ICU stay (d)	univariable	95% CI	(-0.306) - 0.202	(-0.020) - 0.044	(-0.041) - 0.166	(-0.003) - 0.053	(-0.345) - 0.317	(-0.059) - 0.046	**0.003 - 0.069**
		p	0.686	0.478	0.238	0.074	0.936	0.803	**0.032**
	multi-variable	95% CI							**0.015 - 0.085**
		p							**0.006**
Duration of ventilation (h)	univariable	95% CI	(-0.324) - 0.072	(-0.009) - 0.041	(-0.068) - 0.095	(-0.001) - 0.043	(-0.364) - 0.154	(-0.059) - 0.023	**0.008 - 0.059**

Body composition			L3 SMRA	L3 VATI	L3 SMI	L3 SATI	T4 SMRA	T4 SMI	T4 SATI
		p	0.212	0.222	0.738	0.059	0.424	0.396	**0.011**
	multi-variable	**95% CI**							**0.295 - 1.612**
		p							**0.005**
CCI	**univariable**	**95% CI**	(-0.989) - 0.109	(-0.050) - 0.089	(-0.253) - 0.198	(-0.085) - 0.036	(-1.349) - 0.088	(-0.055) - 0.174	(-0.082) - 0.063
		p	0.116	0.585	0.812	0.420	0.085	0.310	0.805
	multi-variable	**95% CI**							
		p							
ISS	**univariable**	**95% CI**	(-0.066) - 0.112	(-0.014) - 0.009	(-0.048) - 0.025	(-0.014) - 0.006	(-0.121) - 0.113	(-0.020) - 0.017	(-0.013) - 0.011
		p	0.616	0.635	0.529	0.406	0.948	0.892	0.883
	multi-variable	**95% CI**							
		p							

ICU: intensive care unit; CCI: Comprehensive Complication Index; ISS: Injury Severity Score; SMRA: Skeletal muscle radiation attenuation; VATI: Visceral adipose tissue index; SMI: Skeletal muscle index; SATI: Subcutaneous adipose tissue index.