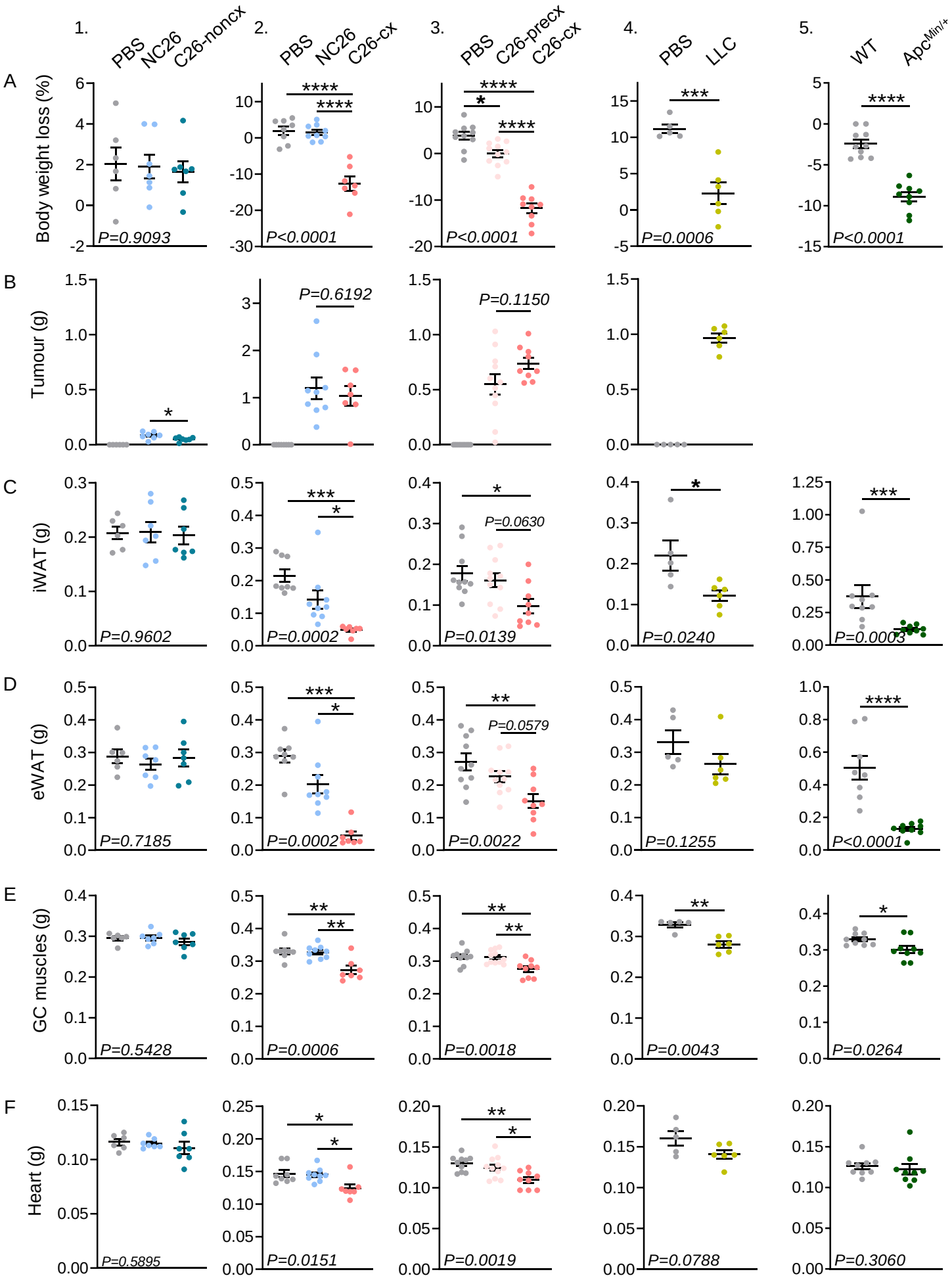
1.
PBS
NC26
C26-noncx
2.
PBS
NC26
C26-cx
3.
PBS
C26-precx
C26-cx
4.
PBS
LLC
5.
WT
ApcMin/+
A
Body weight loss (%)
P=0.9093
P<0.0001
P<0.0001
P=0.0006
P<0.0001
B
Tumour (g)
P=0.6192
P=0.1150
C
iWAT (g)
P=0.9602
P=0.0002
P=0.0630
P=0.0139
P=0.0240
P=0.0003
D
eWAT (g)
P=0.7185
P=0.0002
P=0.0579
P=0.0022
P=0.1255
P<0.0001
E
GC muscles (g)
P=0.5428
P=0.0006
P=0.0018
P=0.0043
P=0.0264
F
Heart (g)
P=0.5895
P=0.0151
P=0.0019
P=0.0788
P=0.3060

Figure S1

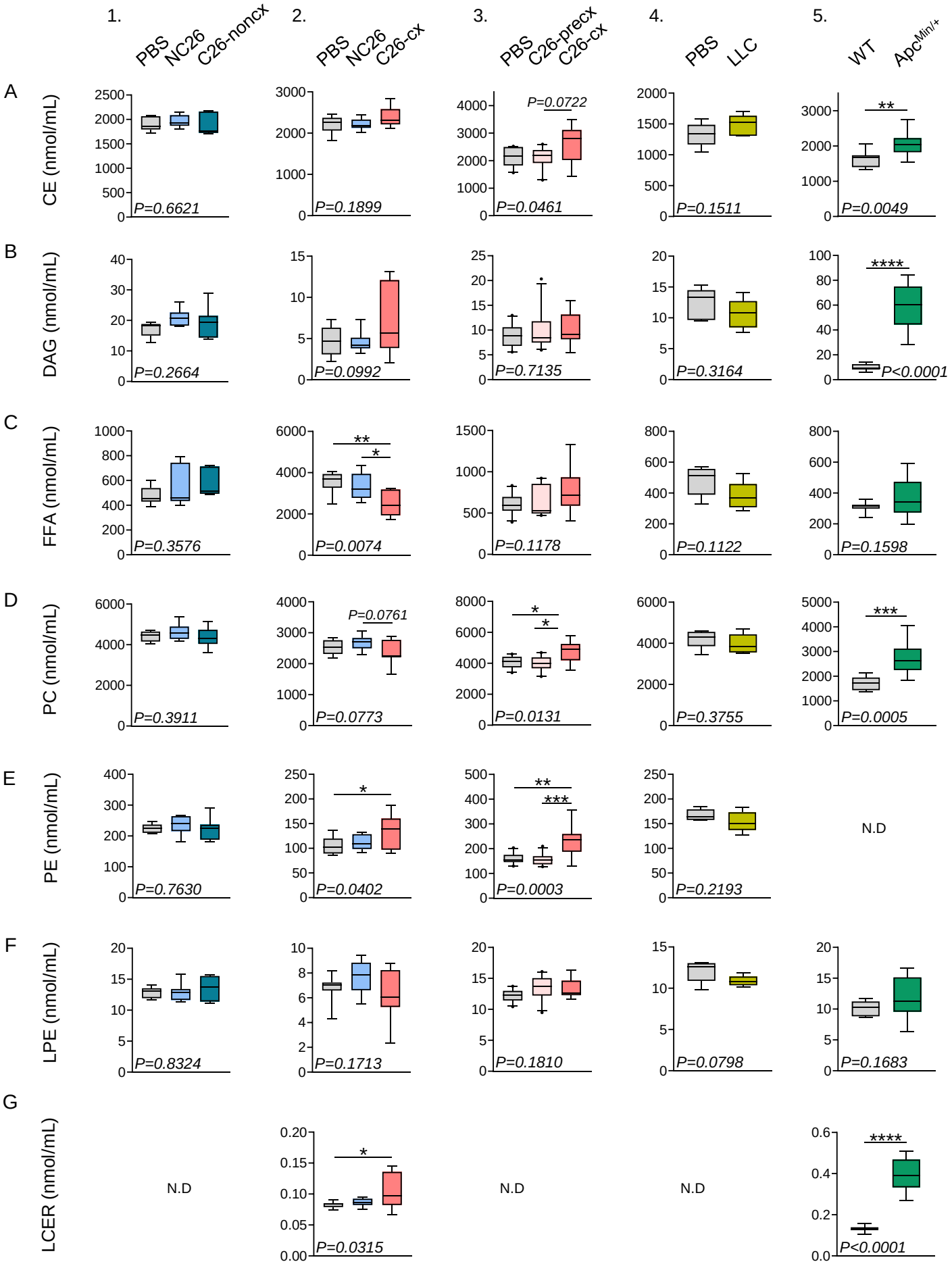
1.
PBS
NC26
C26-noncx
2.
PBS
NC26
C26-cx
3.
PBS
C26-precx
C26-cx
4.
PBS
LLC
5.
WT
ApcMin/+
A
CE (nmol/mL)
P=0.6621
P=0.1899
P=0.0722
P=0.0461
P=0.1511
**
P=0.0049
B
DAG (nmol/mL)
P=0.2664
P=0.0992
P=0.7135
P=0.3164
****
P<0.0001
C
FFA (nmol/mL)
P=0.3576
**
*
P=0.0074
P=0.1178
P=0.1122
P=0.1598
D
PC (nmol/mL)
P=0.3911
P=0.0761
P=0.0773
*
*
P=0.0131
P=0.3755
***
P=0.0005
E
PE (nmol/mL)
P=0.7630
*
P=0.0402
**
***
P=0.0003
P=0.2193
N.D
F
LPE (nmol/mL)
P=0.8324
P=0.1713
P=0.1810
P=0.0798
P=0.1683
G
LCER (nmol/mL)
N.D
*
P=0.0315
N.D
N.D
****
P<0.0001

Figure S2

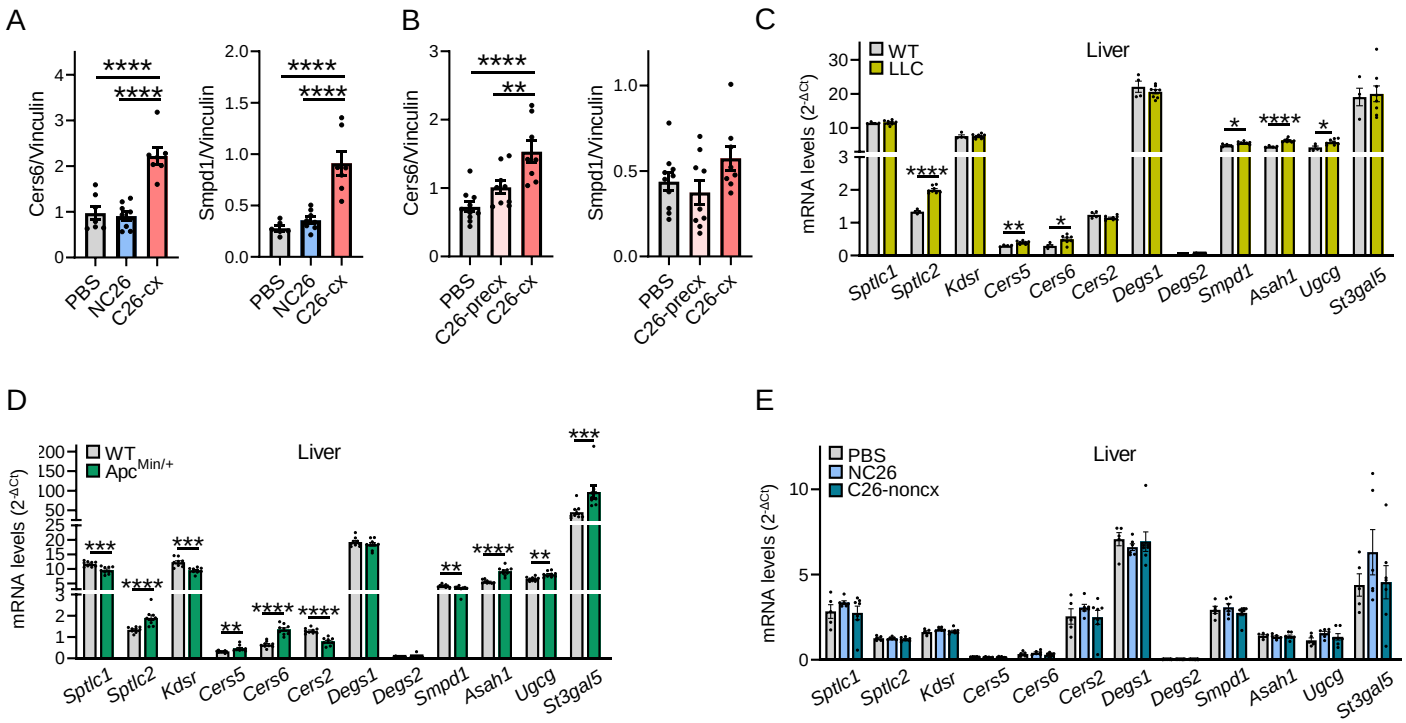
A
Cers6/Vinculin
Smpd1/Vinculin
PBS
NC26
C26-cx
B
C26-precx
C
Liver
WT
LLC
mRNA levels (2^-ΔCt)
Sptlc1
Sptlc2
Kdsr
Cers5
Cers6
Cers2
Degs1
Degs2
Smpd1
Asah1
Ugcg
St3gal5
D
Apc^Min/+
E
C26-noncx

Figure S3

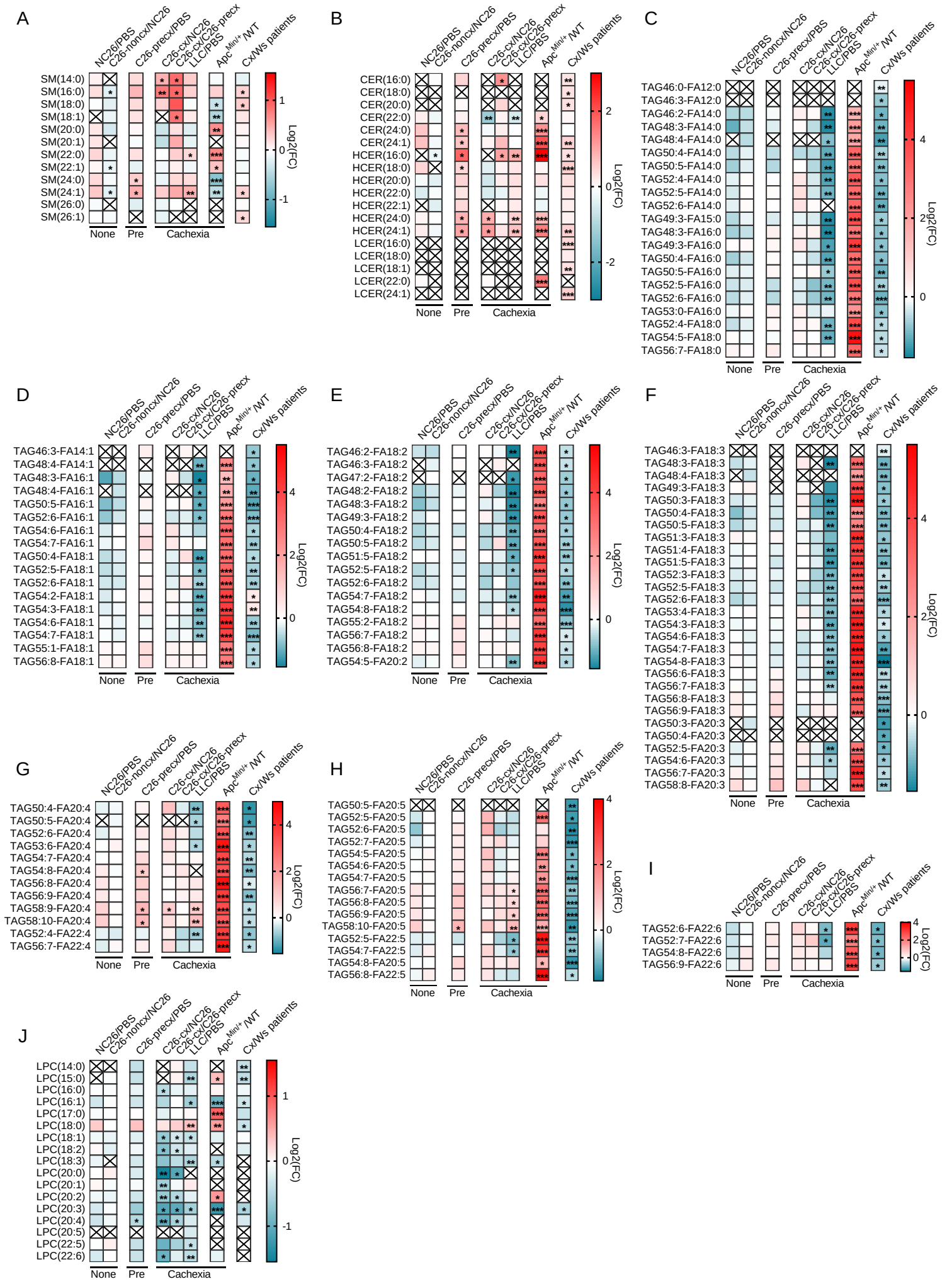
A
NC26/PBS
C26-noncx/NC26
C26-precx/PBS
C26-cx/NC26
C26-cx/C26-precx
LLC/PBS
Apc Min/+ /WT
Cx/Ws patients
SM(14:0)
SM(16:0)
SM(18:0)
SM(18:1)
SM(20:0)
SM(20:1)
SM(22:0)
SM(22:1)
SM(24:0)
SM(24:1)
SM(26:0)
SM(26:1)
None
Pre
Cachexia
Log2(FC)
B
CER(16:0)
CER(18:0)
CER(20:0)
CER(22:0)
CER(24:0)
CER(24:1)
HCER(16:0)
HCER(18:0)
HCER(20:0)
HCER(22:0)
HCER(22:1)
HCER(24:0)
HCER(24:1)
LCER(16:0)
LCER(18:0)
LCER(18:1)
LCER(22:0)
LCER(24:1)
C
TAG46:0-FA12:0
TAG46:3-FA12:0
TAG46:2-FA14:0
TAG48:3-FA14:0
TAG48:4-FA14:0
TAG50:4-FA14:0
TAG50:5-FA14:0
TAG52:4-FA14:0
TAG52:5-FA14:0
TAG52:6-FA14:0
TAG49:3-FA15:0
TAG48:3-FA16:0
TAG49:3-FA16:0
TAG50:4-FA16:0
TAG50:5-FA16:0
TAG52:5-FA16:0
TAG52:6-FA16:0
TAG53:0-FA16:0
TAG52:4-FA18:0
TAG54:5-FA18:0
TAG56:7-FA18:0
D
TAG46:3-FA14:1
TAG48:4-FA14:1
TAG48:3-FA16:1
TAG48:4-FA16:1
TAG50:5-FA16:1
TAG52:6-FA16:1
TAG54:6-FA16:1
TAG54:7-FA16:1
TAG50:4-FA18:1
TAG52:5-FA18:1
TAG52:6-FA18:1
TAG54:2-FA18:1
TAG54:3-FA18:1
TAG54:6-FA18:1
TAG54:7-FA18:1
TAG55:1-FA18:1
TAG56:8-FA18:1
E
TAG46:2-FA18:2
TAG46:3-FA18:2
TAG47:2-FA18:2
TAG48:2-FA18:2
TAG48:3-FA18:2
TAG49:3-FA18:2
TAG50:4-FA18:2
TAG50:5-FA18:2
TAG51:5-FA18:2
TAG52:5-FA18:2
TAG52:6-FA18:2
TAG54:7-FA18:2
TAG54:8-FA18:2
TAG55:2-FA18:2
TAG56:7-FA18:2
TAG56:8-FA18:2
TAG54:5-FA20:2
F
TAG46:3-FA18:3
TAG48:3-FA18:3
TAG48:4-FA18:3
TAG49:3-FA18:3
TAG50:3-FA18:3
TAG50:4-FA18:3
TAG50:5-FA18:3
TAG51:3-FA18:3
TAG51:4-FA18:3
TAG51:5-FA18:3
TAG52:3-FA18:3
TAG52:5-FA18:3
TAG52:6-FA18:3
TAG53:4-FA18:3
TAG54:3-FA18:3
TAG54:6-FA18:3
TAG54:7-FA18:3
TAG54-8-FA18:3
TAG56:6-FA18:3
TAG56:7-FA18:3
TAG56:8-FA18:3
TAG56:9-FA18:3
TAG50:3-FA20:3
TAG50:4-FA20:3
TAG52:5-FA20:3
TAG54:6-FA20:3
TAG56:7-FA20:3
TAG58:8-FA20:3
G
TAG50:4-FA20:4
TAG50:5-FA20:4
TAG52:6-FA20:4
TAG53:6-FA20:4
TAG54:7-FA20:4
TAG54:8-FA20:4
TAG56:8-FA20:4
TAG56:9-FA20:4
TAG58:9-FA20:4
TAG58:10-FA20:4
TAG52:4-FA22:4
TAG56:7-FA22:4
H
TAG50:5-FA20:5
TAG52:5-FA20:5
TAG52:6-FA20:5
TAG52:7-FA20:5
TAG54:5-FA20:5
TAG54:6-FA20:5
TAG54:7-FA20:5
TAG56:7-FA20:5
TAG56:8-FA20:5
TAG56:9-FA20:5
TAG58:10-FA20:5
TAG52:5-FA22:5
TAG54:7-FA22:5
TAG54:8-FA20:5
TAG56:8-FA22:5
I
TAG52:6-FA22:6
TAG52:7-FA22:6
TAG54:8-FA22:6
TAG56:9-FA22:6
J
LPC(14:0)
LPC(15:0)
LPC(16:0)
LPC(16:1)
LPC(17:0)
LPC(18:0)
LPC(18:1)
LPC(18:2)
LPC(18:3)
LPC(20:0)
LPC(20:1)
LPC(20:2)
LPC(20:3)
LPC(20:4)
LPC(20:5)
LPC(22:5)
LPC(22:6)

Figure S4

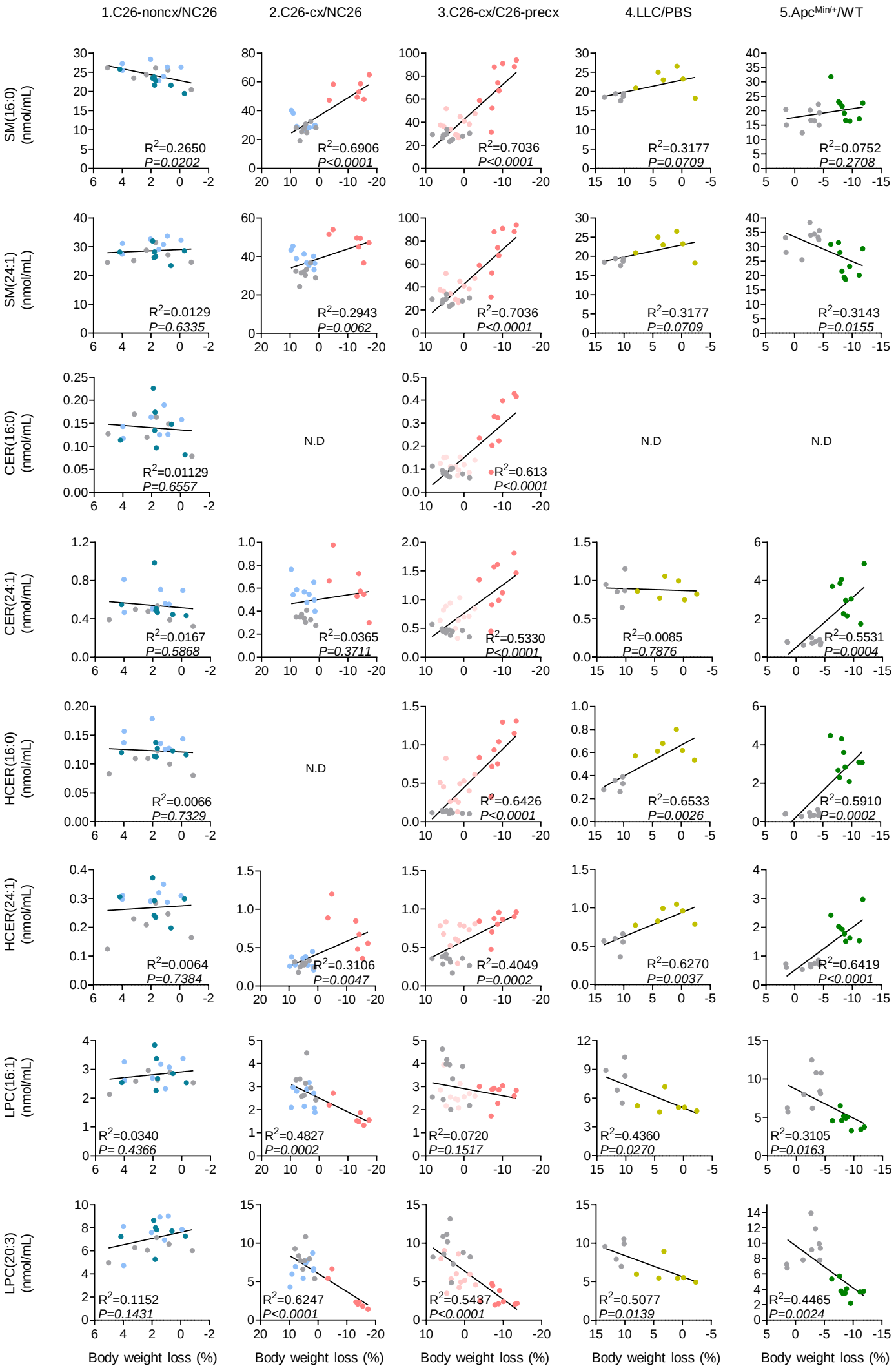
1.C26-noncx/NC26
2.C26-cx/NC26
3.C26-cx/C26-precx
4.LLC/PBS
5.ApcMin/+/WT
SM(16:0) (nmol/mL)
SM(24:1) (nmol/mL)
CER(16:0) (nmol/mL)
CER(24:1) (nmol/mL)
HCER(16:0) (nmol/mL)
HCER(24:1) (nmol/mL)
LPC(16:1) (nmol/mL)
LPC(20:3) (nmol/mL)
R2=0.2650 P=0.0202
R2=0.6906 P<0.0001
R2=0.7036 P<0.0001
R2=0.3177 P=0.0709
R2=0.0752 P=0.2708
R2=0.0129 P=0.6335
R2=0.2943 P=0.0062
R2=0.7036 P<0.0001
R2=0.3177 P=0.0709
R2=0.3143 P=0.0155
R2=0.01129 P=0.6557
N.D
R2=0.613 P<0.0001
N.D
N.D
R2=0.0167 P=0.5868
R2=0.0365 P=0.3711
R2=0.5330 P<0.0001
R2=0.0085 P=0.7876
R2=0.5531 P=0.0004
R2=0.0066 P=0.7329
N.D
R2=0.6426 P<0.0001
R2=0.6533 P=0.0026
R2=0.5910 P=0.0002
R2=0.0064 P=0.7384
R2=0.3106 P=0.0047
R2=0.4049 P=0.0002
R2=0.6270 P=0.0037
R2=0.6419 P<0.0001
R2=0.0340 P= 0.4366
R2=0.4827 P=0.0002
R2=0.0720 P=0.1517
R2=0.4360 P=0.0270
R2=0.3105 P=0.0163
R2=0.1152 P=0.1431
R2=0.6247 P<0.0001
R2=0.5437 P<0.0001
R2=0.5077 P=0.0139
R2=0.4465 P=0.0024
Body weight loss (%)

Figure S5