# 2012.12.09

This report describes data from 2012.12.09 experiment (1 day of D and / or T).

#### day 1 body weight (g)

Treatment	Average (SD; n)
V	21.5 (0.393; n = 5)
D	23.6 (0.437; n = 5)
${ m T}$	22.2 (0.736; n = 5)
C	23.1 (0.502; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.0867

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.07366

Kruskal-Wallis p value for the three-way comparison is 0.0536

	Comparison	P value	Direction
$\overline{1}$	D vs DT	0.02895	V < D
3	V vs D	0.7851	D > DT

#### day 2 body weight (g)

Treatment	Average (SD; n)
V	22.1 (0.402; n = 5)
D	24.4 (0.395; n = 5)
${ m T}$	23 (0.645; n = 5)
$\mathbf{C}$	23.7 (0.485; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.0528

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.02437

	Comparison	P value	Direction
1	D vs DT	0.01333	V < D
3	V vs D	0.4833	D > DT

#### body weight gain after 1 days (g)

Treatment	Average (SD; n)
V	0.66 (0.051; n = 5)
D	0.82 (0.26; n = 5)
${ m T}$	0.86 (0.268; n = 5)
$\mathbf{C}$	0.54 (0.051; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.747

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

Kruskal-Wallis p value for the three-way comparison is 0.502

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT V vs D	$\frac{1}{0.452}$	V < D D > DT

### body weight gain after 1 days (percent)

Treatment	Average (SD; n)
V	3.07 (0.24; n = 5)
D	3.52 (1.12; n = 5)
${ m T}$	3.97 (1.28; n = 5)
C	2.34 (0.238; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.708

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

	Comparison	P value	Direction
1	D vs DT	1	V < D
3	V vs D	0.3868	D > DT

### levator (mg)

Treatment	Average (SD; n)
V	51.4 (4.28; n = 5)
D	54.1 (3.62; n = 5)
${ m T}$	54.1 (4.45; n = 5)
$^{\mathrm{C}}$	50.8 (3.95; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.907

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

Kruskal-Wallis p value for the three-way comparison is 0.854

	Comparison	P value	Direction
1	D vs DT	0.8933	V < D
3	V vs D	1	D > DT

### tibialis (mg)

Treatment	Average (SD; n)
V	47.7 (2.37; n = 5)
D	49 (4.62; n = 5)
${ m T}$	55 (4.31; n = 5)
$\mathbf{C}$	48.3 (5.73; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.386

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1

	Comparison	P value	Direction
1	D vs DT	0.7193	V < D
3	V vs D	0.8574	D > DT

### gastrocnemius (mg)

Treatment	Average (SD; n)
V	121 (5.13; n = 5)
D	117 (4.67; n = 5)
${ m T}$	122 (6.95; n = 5)
$\mathbf{C}$	118 (2.78; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.886

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

Kruskal-Wallis p value for the three-way comparison is 0.763

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT	0.7868	V > D
	V vs D	1	D < DT

# quadriceps (mg)

Treatment	Average (SD; n)
V	161 (3.91; n = 5)
D	176 (4.62; n = 5)
${ m T}$	172 (8.89; n = 5)
$\mathbf{C}$	166 (7.8; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.374

	contrastsfour	dunns.P.adjusted
5	V vs D	0.785
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.2615

	Comparison	P value	Direction
1	D vs DT	0.08436	V < D
3	V vs D	0.3046	D > DT

### triceps (mg)

Treatment	Average (SD; n)
V	99.1 $(7.57; n = 5)$
D	99 (2.09; $n = 5$ )
${ m T}$	104 (3.57; n = 5)
$\mathbf{C}$	100 (4.62; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.708

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

Kruskal-Wallis p value for the three-way comparison is 0.932

	Comparison	P value	Direction
1	D vs DT	1	V > D
3	V vs D	1	D < DT

## levator (permille)

Treatment	Average (SD; n)
V	2.31 (0.157; n = 5)
D	2.22 (0.168; n = 5)
${ m T}$	2.34 (0.168; n = 5)
$\mathbf{C}$	2.15 (0.168; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.722

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

	Comparison	P value	Direction
1	D vs DT	0.7193	V > D
3	V vs D	1	D > DT

### tibialis (permille)

Treatment	Average (SD; n)
V	2.16 (0.138; n = 5)
D	2.01 (0.195; n = 5)
${ m T}$	2.38 (0.161; n = 5)
$\mathbf{C}$	2.04 (0.243; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.354

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

Kruskal-Wallis p value for the three-way comparison is 0.827

	Comparison	P value	Direction
1	D vs DT	0.8574	V > D
3	V vs D	1	D < DT

#### gastrocnemius (permille)

Treatment	Average (SD; n)
V	5.46 (0.146; n = 5)
D	4.81 (0.171; n = 5)
${ m T}$	5.31 (0.255; n = 5)
C	5 (0.0876; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.0436

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.02644

	Comparison	P value	Direction
1	D vs DT	0.01333	V > D
3	V vs D	0.655	D < DT

#### quadriceps (permille)

Treatment	Average (SD; n)
V	7.27 (0.258; n = 5)
D	7.22 (0.165; n = 5)
${ m T}$	7.46 (0.285; n = 5)
$\mathbf{C}$	7.01 (0.189; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.679

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

Kruskal-Wallis p value for the three-way comparison is 0.566

	Comparison	P value	Direction
1 3	D vs DT	1	V > D
	V vs D	0.4333	D > DT

## triceps (permille)

Treatment	Average (SD; n)
V	4.48 (0.343; n = 5)
D	4.06 (0.0997; n = 5)
${ m T}$	4.54 (0.174; n = 5)
$\mathbf{C}$	4.22 (0.147; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.277

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.4034

	Comparison	P value	Direction
1	D vs DT	0.2359	V > D
3	V vs D	0.7193	D < DT

### fat mass before (g)

Treatment	Average (SD; n)
V	2.78 (0.103; n = 5)
D	2.94 (0.189; n = 5)
${ m T}$	2.77 (0.104; n = 5)
$\mathbf{C}$	2.24 (0.175; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.0633

	contrastsfour	dunns.P.adjusted
5 1	V vs D D vs DT	0.03089

Kruskal-Wallis p value for the three-way comparison is 0.0545

	Comparison	P value	Direction
1	D vs DT	0.7868	V < D
3	V vs D	0.02944	D > DT

### lean mass before (g)

Treatment	Average (SD; n)
V	17.4 (0.382; n = 5)
D	19 $(0.378; n = 5)$
${ m T}$	18.2 (0.655; n = 5)
C	19.6 $(0.421; n = 5)$

Kruskal-Wallis p value for the four-way comparison is 0.031

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1439

	Comparison	P value	Direction
1	D vs DT	0.08436	V < D
3	V vs D	0.5942	D < DT

### total water before (g)

Treatment	Average (SD; n)
V	14.2 (0.946; n = 5)
D	14.9 (0.337; n = 5)
${ m T}$	13.8 (0.502; n = 5)
$\mathbf{C}$	14.9 (0.418; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.151

	contrastsfour	dunns.P.adjusted
$\frac{-}{5}$ $1$	V vs D D vs DT	1 0.1841

Kruskal-Wallis p value for the three-way comparison is 0.174

	Comparison	P value	Direction
1	D vs DT	0.1156	V < D
3	V vs D	1	D > DT

## fat mass after (g)

Treatment	Average (SD; n)
V	2.91 (0.136; n = 5)
D	3.29 (0.18; n = 5)
${ m T}$	2.85 (0.133; n = 5)
C	2.71 (0.19; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.136

	contrastsfour	dunns.P.adjusted
5	V vs D	0.07431
1	D vs DT	0.4034

	Comparison	P value	Direction
1	D vs DT	0.2359	V < D
3	V vs D	0.04257	D > DT

### lean mass after (g)

Treatment	Average (SD; n)
V	17.6 (0.323; n = 5)
D	18.5 (0.306; n = 5)
${ m T}$	18.6 (0.546; n = 5)
$\mathbf{C}$	18.7 (0.496; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.169

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.1841

Kruskal-Wallis p value for the three-way comparison is 0.114

	Comparison	P value	Direction
1	D vs DT	0.1156	V < D
3	V vs D	1	D < DT

### total water after (g)

Treatment	Average (SD; n)
V	13.6 (0.488; n = 5)
D	14.8 (0.684; n = 5)
${ m T}$	15.1 (0.752; n = 5)
С	14.7 (0.703; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.541

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.8551

	Comparison	P value	Direction
1	D  vs  DT	0.4833	V < D
3	V vs D	1	D > DT

### fat mass before (percent of BW)

Treatment	Average (SD; n)
V	12.9 (0.422; n = 5)
D	12.4 (0.737; n = 5)
${ m T}$	12.5 (0.418; n = 5)
$\mathbf{C}$	9.67 (0.732; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.0177

	contrastsfour	dunns.P.adjusted
5	V vs D	0.05603
1	D vs DT	1

Kruskal-Wallis p value for the three-way comparison is 0.0167

	Comparison	P value	Direction
$1 \\ 3$	D vs DT	0.9309	V > D
	V vs D	0.04257	D > DT

## lean mass before (percent of BW)

Treatment	Average (SD; n)
V	81 (1.07; n = 5)
D	80.6 (1.85; n = 5)
${ m T}$	82.2 (1.69; n = 5)
C	84.9 (3.2; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.536

	contrastsfour	dunns.P.adjusted
5	V vs D	0.6568
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1

	Comparison	P value	Direction
1	D vs DT	1	V > D
3	V vs D	0.4333	D < DT

### total water before (percent of BW)

Treatment	Average (SD; n)
V	66.1 (4.72; n = 5)
D	63.4 (1.31; n = 5)
${ m T}$	62.2 (2.23; n = 5)
$\mathbf{C}$	64.5 (2.89; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.997

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

Kruskal-Wallis p value for the three-way comparison is 0.932

	Comparison	P value	Direction
1	D vs DT	1	V > D
3	V vs D	1	D < DT

## fat mass after (percent of BW)

Treatment	Average (SD; n)
V	13.2 (0.564; n = 5)
D	13.4 (0.559; n = 5)
${ m T}$	12.4 (0.495; n = 5)
С	11.5 (0.952; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.166

	contrastsfour	dunns.P.adjusted
5	V vs D	0.1113
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1

	Comparison	P value	Direction
1	D vs DT	1	V < D
3	V vs D	0.09899	D > DT

### lean mass after (percent of BW)

Treatment	Average (SD; n)
V	79.5 (0.591; n = 5)
D	75.7 (0.572; n = 5)
${ m T}$	80.6 (0.513; n = 5)
$\mathbf{C}$	79 (2.85; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.0423

	contrastsfour	dunns.P.adjusted
5	V vs D	0.1841
1	D vs DT	0.1841

Kruskal-Wallis p value for the three-way comparison is 0.0872

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT V vs D	0.07157 $0.09899$	V > D D < DT

## total water after (percent of BW)

Treatment	Average (SD; n)
V	61.5 (1.6; n = 5)
D	60.7 (3.03; n = 5)
${ m T}$	65.7 (3.58; n = 5)
$\mathbf{C}$	62.3 (4.19; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.741

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	1

	Comparison	P value	Direction
1	D vs DT	0.7868	V > D
3	V vs D	1	D < DT

### fat mass gain (g)

Treatment	Average (SD; n)
V	0.138 (0.0866; n = 5)
D	0.35 (0.108; n = 5)
${ m T}$	0.0864 (0.0904; n = 5)
$\mathbf{C}$	0.469 (0.271; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.261

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.7188

Kruskal-Wallis p value for the three-way comparison is 0.196

	Comparison	P value	Direction
1	D vs DT	0.344	V < D
3	V vs D	0.8574	D < DT

## lean mass gain (g)

Treatment	Average (SD; n)
V	0.197 (0.301; n = 5)
D	-0.505 (0.44; n = 5)
${ m T}$	0.341 (0.393; n = 5)
C	-0.904 (0.567; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.183

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.4469

	Comparison	P value	Direction
1	D vs DT	0.3046	V > D
3	V vs D	1	D > DT

#### total water gain (g)

Treatment	Average (SD; n)
V	-0.542 (1.14; n = 5)
D	-0.126 (0.888; n = 5)
${ m T}$	1.32 (1.01; n = 5)
$\mathbf{C}$	-0.189 (0.369; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.608

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

Kruskal-Wallis p value for the three-way comparison is 0.698

	Comparison	P value	Direction
1	D vs DT	0.5942	V < D
3	V vs D	1	D > DT

## fat mass gain (percent of BW)

Treatment	Average (SD; n)
V	0.239 (0.365; n = 5)
D	$1.01 \ (0.413; \ n = 5)$
${ m T}$	-0.105 (0.32; n = 5)
$\mathbf{C}$	1.82 (1.2; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.179

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.8551

	Comparison	P value	Direction
1	D vs DT	0.4833	V < D
3	V vs D	0.655	D < DT

### lean mass gain (percent of BW)

Treatment	Average (SD; n)
V	-1.52 (1.42; n = 5)
D	-4.85 (1.82; n = 5)
${ m T}$	-1.63 (2.07; n = 5)
$^{\mathrm{C}}$	-5.82 (2.51; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.488

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.5986

Kruskal-Wallis p value for the three-way comparison is 0.34

	Comparison	P value	Direction
1	D vs DT	0.3046	V > D
3	V vs D	1	D > DT

### total water gain (percent of BW)

Treatment	Average (SD; n)
V	-4.55 (5.32; n = 5)
D	-2.61 (4.06; n = 5)
${ m T}$	3.43 (4.87; n = 5)
С	-2.15 (1.43; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.7

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

	Comparison	P value	Direction
1	D vs DT	0.4833	V < D
3	V vs D	0.9309	D < DT

# fat mass gain (percent)

Treatment	Average (SD; n)
V	5 (3; n = 5)
D	12.6 (4.17; n = 5)
${ m T}$	3.17 (3.3; n = 5)
$^{\mathrm{C}}$	24.8 (14.2; n = 5)

Kruskal-Wallis p value for the four-way comparison is  $0.22\,$ 

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

Kruskal-Wallis p value for the three-way comparison is 0.237

	Comparison	P value	Direction
1	D vs DT	0.5942	V < D
3	V vs D	0.5942	D < DT

# lean mass gain (percent)

Treatment	Average (SD; n)
V	1.22 (1.72; n = 5)
D	-2.53 (2.35; n = 5)
${ m T}$	2.06 (2.35; n = 5)
С	-4.5 (2.78; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.185

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.3633

	Comparison	P value	Direction
1	D vs DT	0.2359	V > D
3	V vs D	1	D > DT

#### total water gain (percent)

Treatment	Average (SD; n)
V	-2.18 (6.75; n = 5)
D	-0.463 (6.04; n = 5)
${ m T}$	10.5 (8.28; n = 5)
$\mathbf{C}$	-1.43 (2.5; n = 5)

Kruskal-Wallis p value for the four-way comparison is  $0.586\,$ 

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

Kruskal-Wallis p value for the three-way comparison is 0.651

	Comparison	P value	Direction
1	D vs DT	0.537	V < D
3	V vs D	1	D > DT

### quadriceps calpain activity (RU)

Treatment	Average (SD; n)
V	31500 (5720; n = 5)
D	20000 (3770; n = 5)
${ m T}$	29900 (3590; n = 5)
$\mathbf{C}$	19400 (2610; $n = 5$ )

Kruskal-Wallis p value for the four-way comparison is 0.182

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.4938

	Comparison	P value	Direction
1	D vs DT	0.344	V > D
3	V vs D	1	D > DT

#### gastrocnemius calpain activity (RU)

Treatment	Average (SD; n)
V	30300 (2540; n = 5)
D	18400 (2190; n = 5)
${ m T}$	26700 (1570; n = 5)
$\mathbf{C}$	18400 (2190; $n = 5$ )

Kruskal-Wallis p value for the four-way comparison is  $0.01\,$ 

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.02819

Kruskal-Wallis p value for the three-way comparison is 0.0355

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT	0.03789	V > D
	V vs D	1	D < DT

### gastrocnemius proteasome activity (RU)

Treatment	Average (SD; n)
V	6890 (949; n = 5)
D	5140 (380; n = 5)
${ m T}$	12400 (1210; n = 5)
C	7550 (605; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00346

	contrastsfour	dunns.P.adjusted
5	V vs D	0.1113
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.4469

	Comparison	P value	Direction
1	D vs DT	0.1156	V > D
3	V vs D	0.01081	D < DT

#### quadriceps proteasome activity (RU)

Treatment	Average (SD; n)
V	10500 (1000; n = 5)
D	7620 (1380; n = 5)
${ m T}$	12500 (1660; n = 5)
$\mathbf{C}$	7630 (1250; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.0621

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.2615

Kruskal-Wallis p value for the three-way comparison is 0.141

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT	0.09899	V > D
	V vs D	1	D < DT

### triceps proteasome activity (RU)

Treatment	Average (SD; n)
V	15200 (1360; n = 5)
D	12000 (698; n = 5)
${ m T}$	14300 (1110; n = 5)
$\mathbf{C}$	10200 (1430; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.169

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.4802

	Comparison	P value	Direction
1	D vs DT	0.3397	V > D
3	V vs D	0.634	D > DT

#### gastrocnemius cathepsin activity (RU)

Treatment	Average (SD; n)
V	8400 (290; n = 5)
D	7020 (239; n = 5)
${ m T}$	8690 (261; n = 5)
$\mathbf{C}$	7400 (400; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.0114

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.05603

Kruskal-Wallis p value for the three-way comparison is 0.0437

	Comparison	P value	Direction
$1 \\ 3$	D vs DT V vs D	$0.01999 \\ 0.537$	V > D D < DT

### quadriceps cathepsin activity (RU)

Treatment	Average (SD; n)
V	39700 (1380; n = 5)
D	33900 (1140; n = 5)
${ m T}$	42500 (1930; n = 5)
С	40400 (1440; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.0255

	contrastsfour	dunns.P.adjusted
5	V vs D	0.08524
1	D vs DT	0.1113

	Comparison	P value	Direction
1	D vs DT	0.02944	V > D
3	V vs D	0.02944	D < DT

#### triceps cathepsin activity (RU)

Treatment	Average (SD; n)
V	35500 (1650; n = 5)
D	26000 (1120; n = 5)
T	34400 (1290; n = 5)
$\mathbf{C}$	31100 (1070; n = 5)

Kruskal-Wallis p value for the four-way comparison is 0.00565

	contrastsfour	dunns.P.adjusted
5	V vs D	0.2615
1	D vs DT	0.004837

Kruskal-Wallis p value for the three-way comparison is 0.00592

	Comparison	P value	Direction
1	D vs DT	0.002194 $0.08436$	V > D
3	V vs D		D < DT

#### triceps calpain activity (RU)

Treatment	Average (SD; n)
V	11600 (1310; n = 5)
D	5430 (1000; n = 5)
${ m T}$	13500 (870; n = 4)
$\mathbf{C}$	3370 (606; n = 3)

Kruskal-Wallis p value for the four-way comparison is 0.00451

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.1352

	Comparison	P value	Direction
1	D vs DT	0.03449	V > D
3	V vs D	0.5981	D > DT

#### gastrocnemius Ct(Becn1)- Ct(Gapdh)

Treatment	Average (SD; n)
V	5.74 (0.323; n = 4)
D	6.6 (0.454; n = 4)
${ m T}$	5.64 (0.336; n = 4)
$\mathbf{C}$	6.06 (0.443; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.314

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.2241

Kruskal-Wallis p value for the three-way comparison is 0.174

	Comparison	P value	Direction
1	D vs DT	$0.09367 \\ 0.4211$	V < D
3	V vs D		D > DT

### gastrocnemius Ct(Bnip3)- Ct(Gapdh)

Treatment	Average (SD; n)
V	0.89 (0.297; n = 4)
D	1.05 (0.474; n = 4)
${ m T}$	0.586 (0.516; n = 4)
$\mathbf{C}$	0.575 (0.533; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.872

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

	Comparison	P value	Direction
1	D vs DT	1	V < D
3	V vs D	0.9359	D > DT

#### gastrocnemius Ct(Ctsl)- Ct(Gapdh)

Average (SD; n)
5.11 (0.246; n = 4)
5.16 (0.373; n = 4)
4.29 (0.282; n = 4)
4.88 (0.441; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.303

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

Kruskal-Wallis p value for the three-way comparison is 0.694

	Comparison	P value	Direction
1	D vs DT	1	V < D
3	V  vs  D	0.7387	D > DT

### gastrocnemius Ct(Ddit4)- Ct(Gapdh)

Treatment	Average (SD; n)
V	6.88 (0.614; n = 4)
D	3.98 (0.608; n = 4)
${ m T}$	6.82 (0.202; n = 4)
$\mathbf{C}$	3.97 (0.256; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.01

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.07768

	Comparison	P value	Direction
1	D vs DT	0.03617	V > D
3	V vs D	1	D > DT

#### gastrocnemius Ct(Fbxo32)- Ct(Gapdh)

Treatment	Average (SD; n)
V	2.29 (0.525; n = 4)
D	0.992 (0.389; n = 4)
${ m T}$	2.88 (0.27; n = 4)
$\mathbf{C}$	0.675 (0.184; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0168

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.4125

Kruskal-Wallis p value for the three-way comparison is 0.069

	Comparison	P value	Direction
1	D vs DT	0.175	V > D
3	V vs D	0.7387	D > DT

### gastrocnemius Ct(Foxo1)- Ct(Gapdh)

Treatment	Average (SD; n)
V	8 (0.4; n = 4)
D	6.61 (0.537; n = 4)
${ m T}$	8.28 (0.167; n = 4)
$\mathbf{C}$	6.5 (0.332; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.021

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.2241

	Comparison	P value	Direction
1	D vs DT	0.09367	V > D
3	V vs D	1	D > DT

#### gastrocnemius Ct(Foxo3a)- Ct(Gapdh)

Treatment	Average (SD; n)
V	8.83 (0.529; n = 4)
D	8.54 (0.625; n = 4)
${ m T}$	9.79 (0.215; n = 4)
$^{\mathrm{C}}$	8.4 (0.302; n = 4)

Kruskal-Wallis p value for the four-way comparison is  $0.201\,$ 

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

Kruskal-Wallis p value for the three-way comparison is 0.874

	Comparison	P value	Direction
$1 \\ 3$	D vs DT V vs D	0.9359	V > D D > DT

### gastrocnemius Ct(Foxo4)- Ct(Gapdh)

Treatment	Average (SD; n)
V	5.44 (0.327; n = 4)
D	6.59 (0.551; n = 4)
${ m T}$	6.34 (0.234; n = 4)
$\mathbf{C}$	5.88 (0.35; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.306

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.3069

	Comparison	P value	Direction
1	D vs DT	0.175	V < D
3	V vs D	0.6492	D > DT

#### gastrocnemius Ct(Igf1)- Ct(Gapdh)

Treatment	Average (SD; n)
V	7.27 (0.418; n = 4)
D	9.38 (0.533; n = 4)
${ m T}$	6.96 (0.389; n = 4)
$^{\mathrm{C}}$	8.23 (0.396; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0296

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.03472

Kruskal-Wallis p value for the three-way comparison is 0.0488

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT V vs D	$0.02134 \\ 0.4211$	V < D D > DT

### gastrocnemius Ct(Igf1r)- Ct(Gapdh)

Treatment	Average (SD; n)
V	7.86 (0.439; n = 4)
D	8.84 (0.448; n = 4)
${ m T}$	8.66 (0.235; n = 4)
С	8.42 (0.255; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.235

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.1605

	Comparison	P value	Direction
1	D vs DT	0.07479	V < D
3	V vs D	0.4902	D > DT

### gastrocnemius Ct(Klf15)- Ct(Gapdh)

Treatment	Average (SD; n)
V	6.88 (0.405; n = 4)
D	6.9 (0.376; n = 4)
${ m T}$	7.86 (0.188; n = 4)
$\mathbf{C}$	7.09 (0.251; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.203

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	1

Kruskal-Wallis p value for the three-way comparison is 0.735

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT	1	V < D
	V vs D	0.6492	D < DT

### gastrocnemius Ct(Map1lc3b)- Ct(Gapdh)

Treatment	Average (SD; n)
V	3.19 (0.362; n = 4)
D	4 (0.486; n = 4)
${ m T}$	3.34 (0.204; n = 4)
C	3.89 (0.424; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.239

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.1901

	Comparison	P value	Direction
1	D vs DT	0.1163	V < D
3	V vs D	1	D > DT

#### gastrocnemius Ct(Nr3c1)- Ct(Gapdh)

Treatment	Average (SD; n)
V	3.67 (0.242; n = 4)
D	5.87 (0.483; n = 4)
${ m T}$	5.06 (0.257; n = 4)
$\mathbf{C}$	5.73 (0.57; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0308

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.01801

Kruskal-Wallis p value for the three-way comparison is 0.0373

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT	0.0279	V < D
	V vs D	1	D > DT

### gastrocnemius Ct(Odc)- Ct(Gapdh)

Treatment	Average (SD; n)
V	0.854 (0.189; n = 4)
D	0.165 (0.395; n = 4)
${ m T}$	0.453 (0.478; n = 4)
С	-1.37 (0.617; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0667

	contrastsfour	dunns.P.adjusted
5	V vs D	0.2629
1	D vs DT	1

	Comparison	P value	Direction
1	D vs DT	0.6492	V > D
3	V vs D	0.1433	D > DT

### gastrocnemius Ct(Stk11)- Ct(Gapdh)

Treatment	Average (SD; n)
V	4.57 (0.333; n = 4)
D	5.39 (0.485; n = 4)
T	5.5 (0.23; n = 4)
$\mathbf{C}$	5.15 (0.443; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.292

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.3069

Kruskal-Wallis p value for the three-way comparison is 0.368

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT	0.2547	V < D
	V vs D	1	D > DT

### gastrocnemius Ct(Trim63)- Ct(Gapdh)

Treatment	Average (SD; n)
V	1.2 (0.306; n = 4)
D	0.274 (0.256; n = 4)
${ m T}$	1.16 (0.4; n = 4)
$\mathbf{C}$	0.154 (0.371; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.119

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.2241

	Comparison	P value	Direction
1	D vs DT	0.1163	V > D
3	V vs D	1	D > DT

#### quadriceps Ct(Becn1)- Ct(Gapdh)

Treatment	Average (SD; n)
V	7.79 (0.248; n = 4)
D	3.62 (1.11; n = 4)
${ m T}$	7.58 (0.0748; n = 4)
$\mathbf{C}$	3.19 (0.343; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00835

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.01432

Kruskal-Wallis p value for the three-way comparison is 0.0231

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT	0.01618	V > D
	V vs D	1	D > DT

### quadriceps Ct(Bnip3)- Ct(Gapdh)

Treatment	Average (SD; n)
V	3.56 (0.302; n = 4)
D	0.444 (0.611; n = 4)
${ m T}$	3.38 (0.198; n = 4)
$\mathbf{C}$	2.21 (0.0899; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0068

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.008921

	Comparison	P value	Direction
1	D  vs  DT	0.004896	V > D
3	V vs D	0.359	D < DT

#### quadriceps Ct(Ctsl)- Ct(Gapdh)

Average (SD; n)
4.7 (0.232; n = 4)
1.32 (0.561; n = 4)
4.13 (0.212; n = 4)
0.761 (0.418; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00723

1 0.03472

Kruskal-Wallis p value for the three-way comparison is 0.021

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT V vs D	0.05921 $0.8344$	V > D D > DT

### quadriceps Ct(Ddit4)- Ct(Gapdh)

Treatment	Average (SD; n)
V	8.62 (0.248; n = 4)
D	0.32 (1.33; n = 4)
${ m T}$	7.74 (0.549; n = 4)
$\mathbf{C}$	0.712 (0.236; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00673

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.006987

	Comparison	P value	Direction
1	D vs DT	0.009059	V > D
3	V vs D	0.6492	D < DT

#### quadriceps Ct(Fbxo32)- Ct(Gapdh)

Treatment	Average (SD; n)
V	5.14 (0.333; n = 4)
D	-0.51 (0.967; n = 4)
${ m T}$	5.87 (0.238; n = 4)
$^{\mathrm{C}}$	-0.0944 (0.155; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00673

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.06399

Kruskal-Wallis p value for the three-way comparison is 0.0183

	Comparison	P value	Direction
1	D vs DT	$0.009059 \\ 0.6492$	V > D
3	V vs D		D < DT

### quadriceps Ct(Foxo1)- Ct(Gapdh)

Treatment	Average (SD; n)
V	9.34 (0.283; n = 4)
D	3.02 (1.25; n = 4)
${ m T}$	8.76 (0.408; n = 4)
$\mathbf{C}$	3.2 (0.229; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00738

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.008921

	Comparison	P value	Direction
1	D vs DT	0.009059	V > D
3	V vs D	0.6492	D < DT

#### quadriceps Ct(Foxo3a)- Ct(Gapdh)

Treatment	Average (SD; n)
V	10.7 (0.389; n = 4)
D	4.37 (1.37; n = 4)
${ m T}$	10.3 (0.254; n = 4)
$\mathbf{C}$	4 (0.252; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00835

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.01432

Kruskal-Wallis p value for the three-way comparison is 0.0183

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT V vs D	$0.009059 \\ 0.6492$	V > D D > DT

### quadriceps Ct(Foxo4)- Ct(Gapdh)

Treatment	Average (SD; n)
V	7.36 (0.252; n = 4)
D	3.48 (1.17; n = 4)
${ m T}$	7.42 (0.289; n = 4)
С	2.81 (0.208; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0183

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.09382

	Comparison	P value	Direction
1	D vs DT	0.0279	V > D
3	V vs D	1	D > DT

#### quadriceps Ct(Igf1)- Ct(Gapdh)

Treatment	Average (SD; n)
V	9.61 (0.467; n = 4)
D	8.79 (0.561; n = 4)
${ m T}$	8.52 (0.048; n = 4)
$\mathbf{C}$	8.2 (0.232; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0795

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.1349

Kruskal-Wallis p value for the three-way comparison is 0.069

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT V vs D	0.175 $0.7387$	V > D D > DT

### quadriceps Ct(Igf1r)-Ct(Gapdh)

Treatment	Average (SD; n)
V	9.15 (0.326; n = 4)
D	5.26 (1.24; n = 4)
${ m T}$	9.19 (0.413; n = 4)
С	4.82 (0.329; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0327

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.09382

	Comparison	P value	Direction
1	D vs DT	0.0279	V > D
3	V vs D	0.8344	D > DT

### quadriceps Ct(Klf15)- Ct(Gapdh)

Treatment	Average (SD; n)
V	7.4 (0.254; n = 4)
D	3.6 (0.808; n = 4)
${ m T}$	8.02 (0.343; n = 4)
$\mathbf{C}$	3.96 (0.153; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00673

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.06399

Kruskal-Wallis p value for the three-way comparison is 0.0183

	Comparison	P value	Direction
1	D vs DT	$0.009059 \\ 0.6492$	V > D
3	V vs D		D < DT

### quadriceps Ct(Map1lc3b)- Ct(Gapdh)

Treatment	Average (SD; n)
V	3.16 (0.273; n = 4)
D	-0.376 (0.677; n = 4)
${ m T}$	2.84 (0.199; n = 4)
$\mathbf{C}$	-0.85 (0.352; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00861

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.02804

	Comparison	P value	Direction
1	D  vs  DT	0.03617	V > D
3	V vs D	1	D > DT

#### quadriceps Ct(Nr3c1)- Ct(Gapdh)

Treatment	Average (SD; n)
V	3.92 (0.335; n = 4)
D	2.03 (0.62; n = 4)
${ m T}$	3.55 (0.107; n = 4)
$\mathbf{C}$	2.04 (0.186; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0496

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.06399

Kruskal-Wallis p value for the three-way comparison is 0.0498

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT V vs D	0.0279 $0.8344$	V > D D < DT

### quadriceps Ct(Odc)- Ct(Gapdh)

Treatment	Average (SD; n)
V	3.18 (0.168; n = 4)
D	-0.829 (0.712; n = 4)
${ m T}$	2.43 (0.11; n = 4)
С	-2.57 (0.725; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00411

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	$\mathbf{D}$ vs $\mathbf{D}\mathbf{T}$	0.02804

	Comparison	P value	Direction
1	D vs DT	0.09367	V > D
3	V vs D	0.4902	D > DT

#### quadriceps Ct(Stk11)- Ct(Gapdh)

Treatment	Average (SD; n)
V	7.29 (0.302; n = 4)
D	3.9 (0.948; n = 4)
${ m T}$	7.25 (0.384; n = 4)
$\mathbf{C}$	3.29 (0.243; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.0184

	contrasts four	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.05245

Kruskal-Wallis p value for the three-way comparison is 0.0388

	Comparison	P value	Direction
$\frac{1}{3}$	D vs DT	0.03617	V > D
	V vs D	1	D > DT

### quadriceps Ct(Trim63)- Ct(Gapdh)

Treatment	Average (SD; n)
V	6.25 (0.347; n = 4)
D	0.307 (0.91; n = 4)
${ m T}$	6.08 (0.382; n = 4)
$\mathbf{C}$	0.795 (0.187; n = 4)

Kruskal-Wallis p value for the four-way comparison is 0.00835

	contrastsfour	dunns.P.adjusted
5	V vs D	1
1	D vs DT	0.01432

	Comparison	P value	Direction
1	D vs DT	0.009059	V > D
3	V vs D	0.6492	D < DT