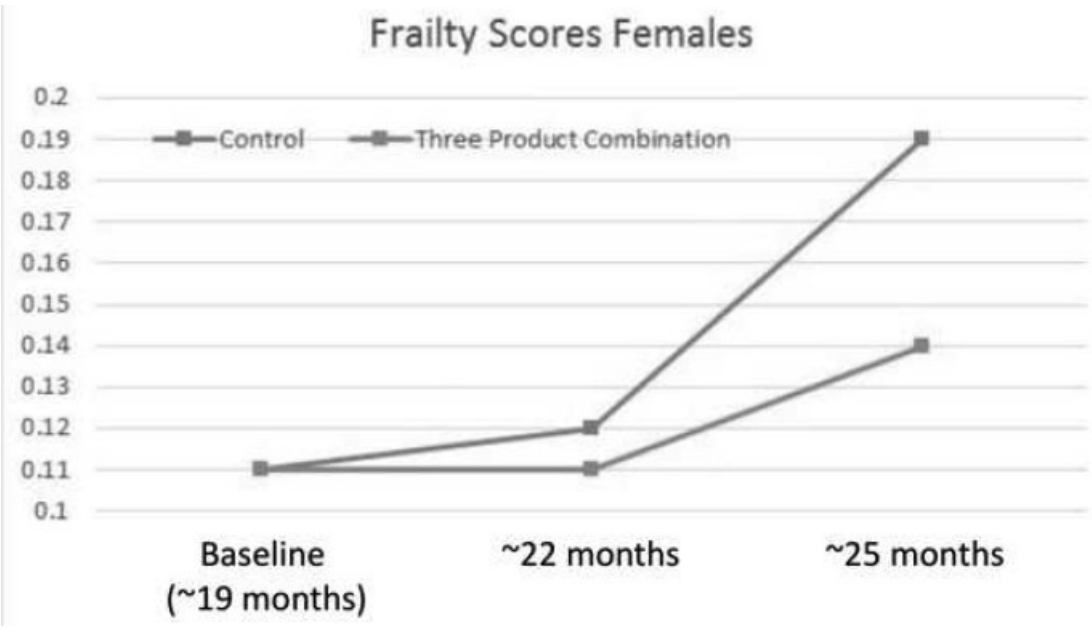

Frailty Scores Females
0.2
0.19
0.18
0.17
0.16
0.15
0.14
0.13
0.12
0.11
0.1
Control
Three Product Combination
Baseline
(~19 months)
~22 months
~25 months

Fig. 3

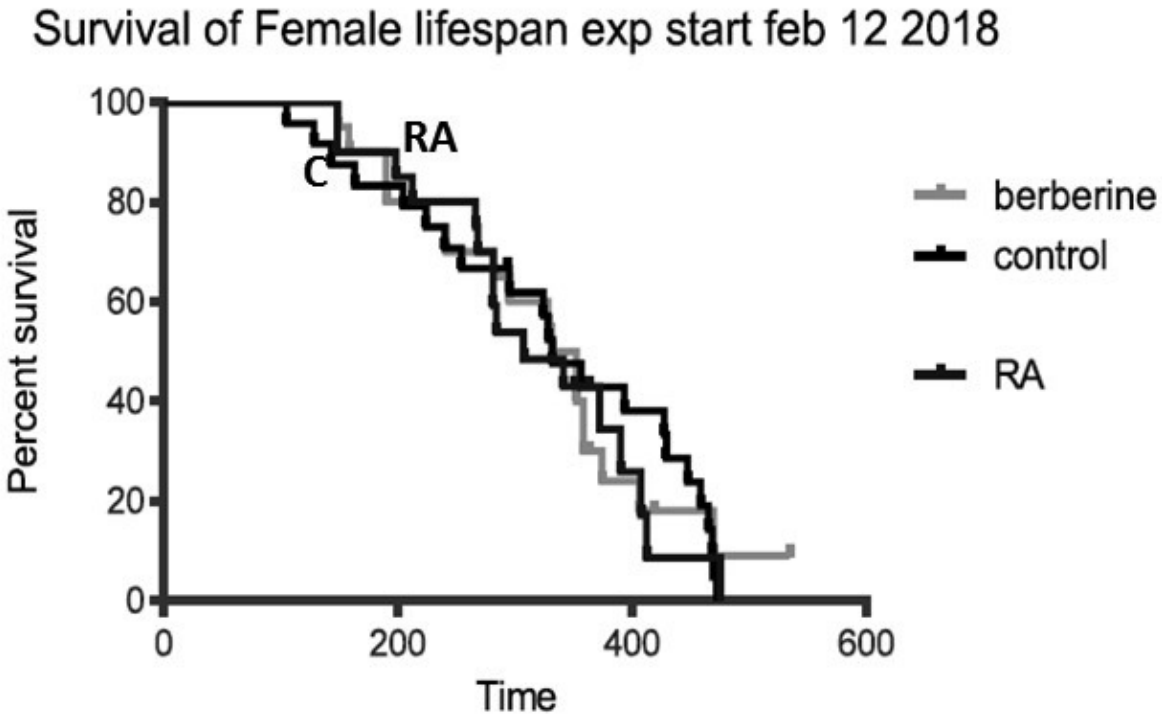

Survival of Female lifespan exp start feb 12 2018
Percent survival
100
80
60
40
20
0
0
200
400
600
Time
RA
C
berberine
control
RA

Fig. 4

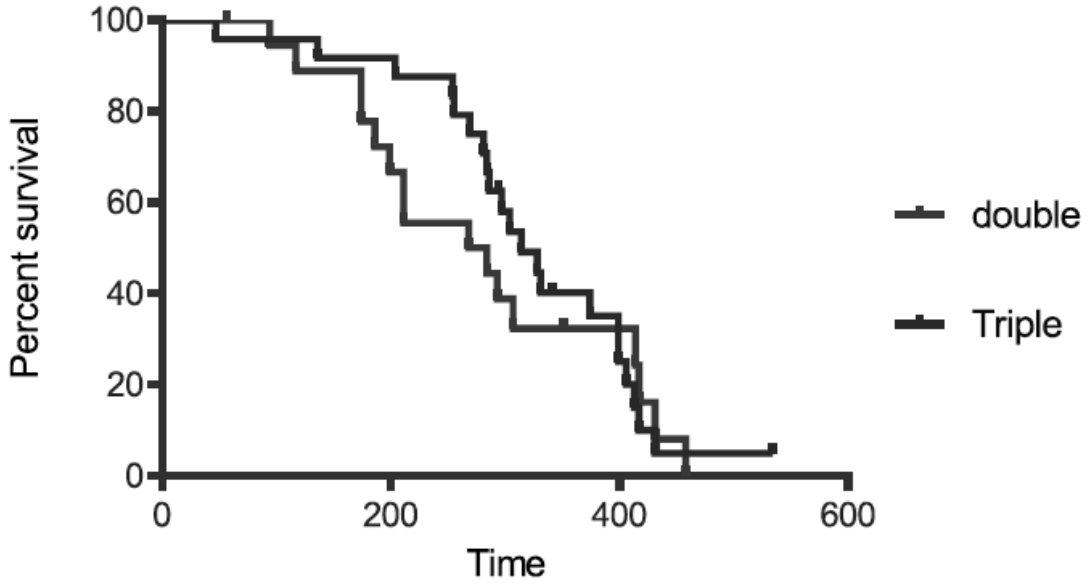

100
80
60
40
20
0
Percent survival
0
200
400
600
Time
double
Triple

Fig. 5

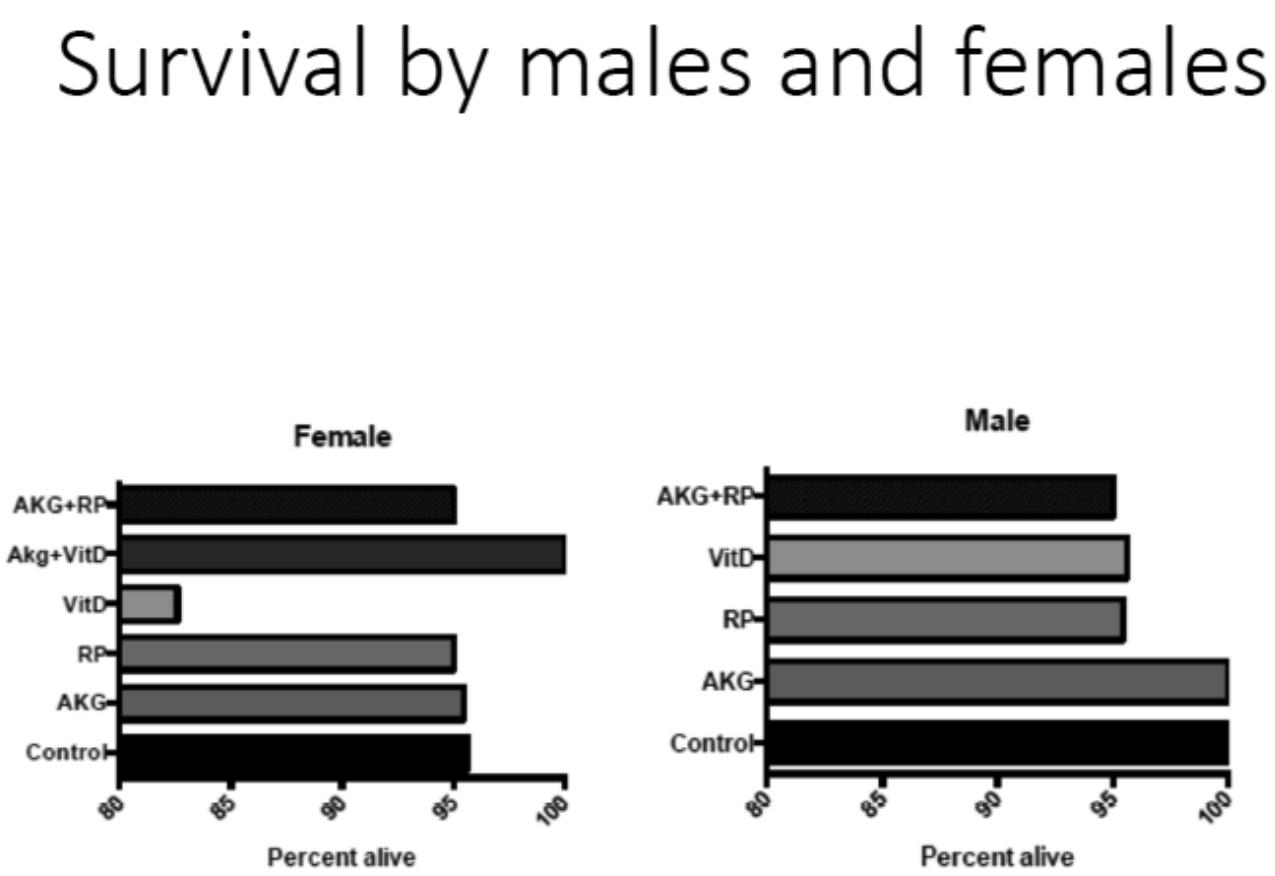

Survival by males and females
Female
AKG+RP
Akg+VitD
VitD
RP
AKG
Control
80
85
90
95
100
Percent alive
Male
AKG+RP
VitD
RP
AKG
Control
60
65
90
95
100
Percent alive

Fig. 6

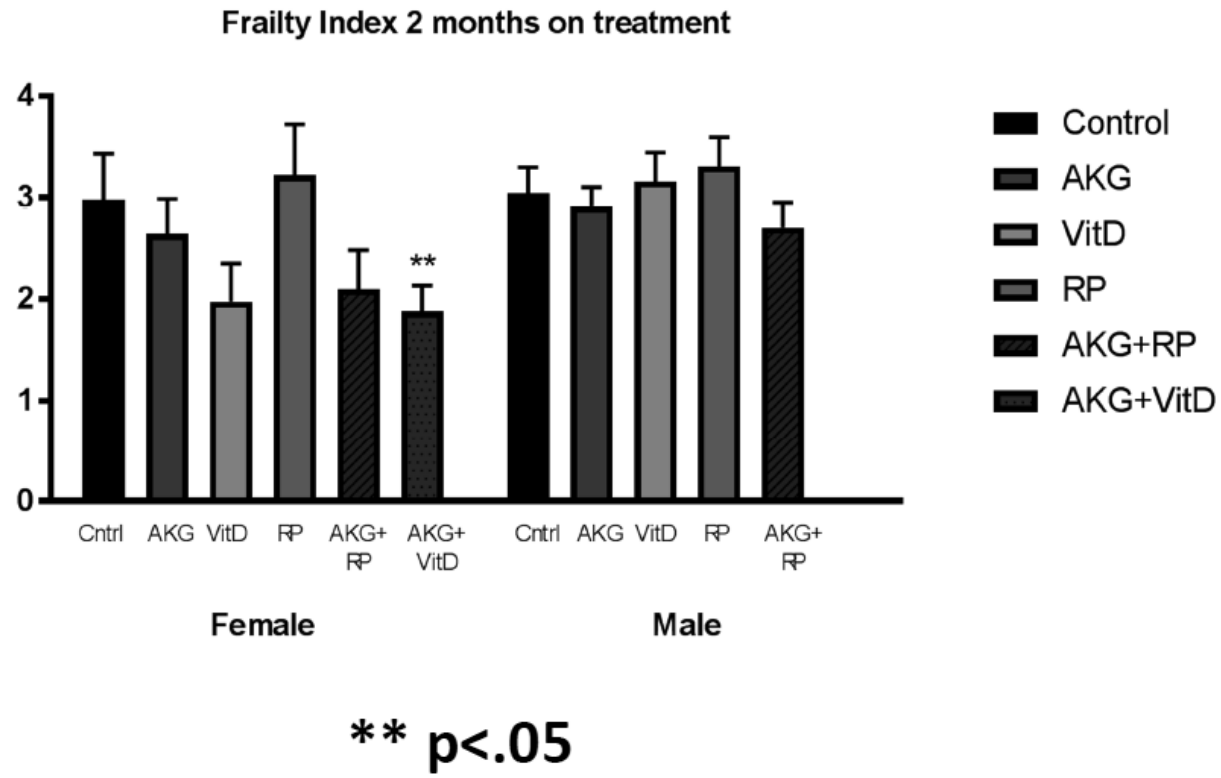
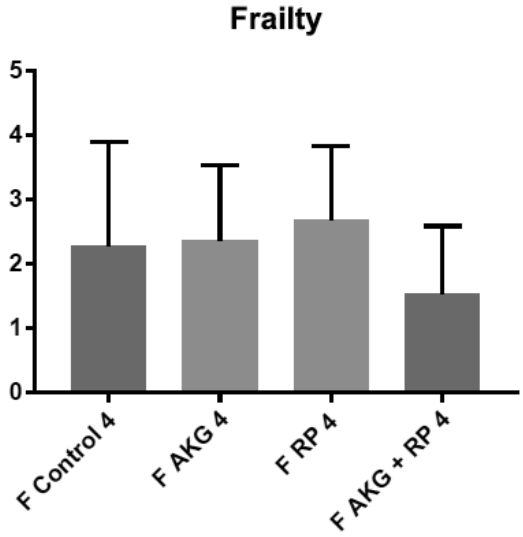


Fig. 8



P-value Matrix 4 month treatment females

_____ _____	Control	AKG	RP	AKG + RP
Control				
AKG	.85			
RP	.36	.38		
AKG + RP	.10	.03	.003	

Fig. 9

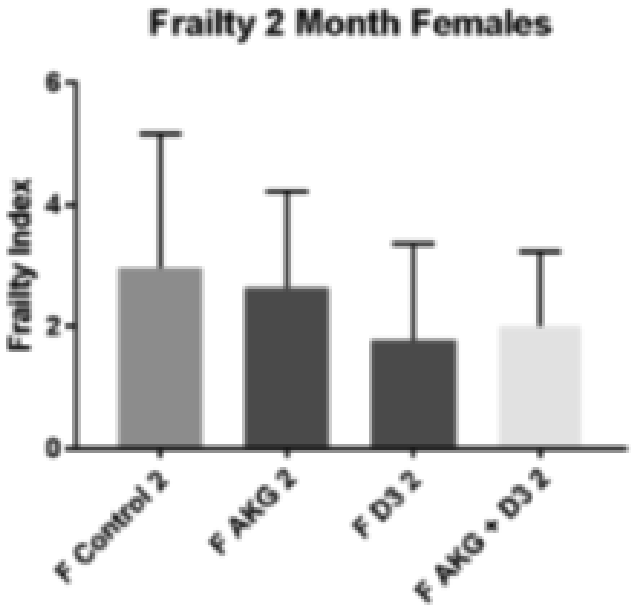


Fig. 10A

_____ _____	Control	AKG	D3	AKG + D3
Control				
AKG	.56			
D3	.04	.08		
AKG + D3	.10	.18	.64	

Fig. 10B



Fig. 10C

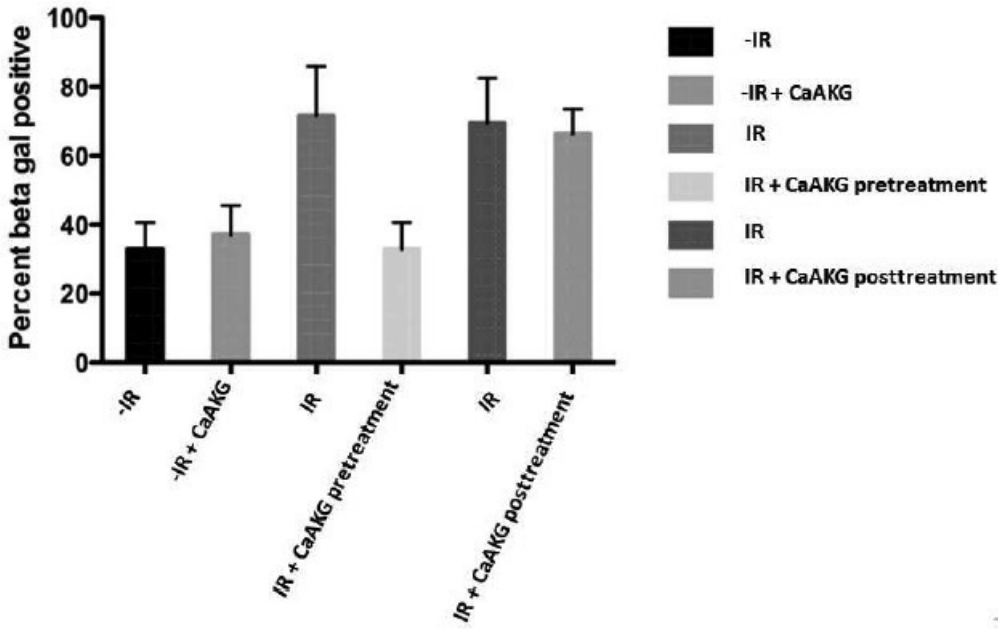

Percent beta gal positive
100
80
60
40
20
0
-IR
-IR + CaAKG
IR
IR + CaAKG pretreatment
IR
IR + CaAKG posttreatment
-IR
-IR + CaAKG
IR
IR + CaAKG pretreatment
IR
IR + CaAKG posttreatment

Fig. 12

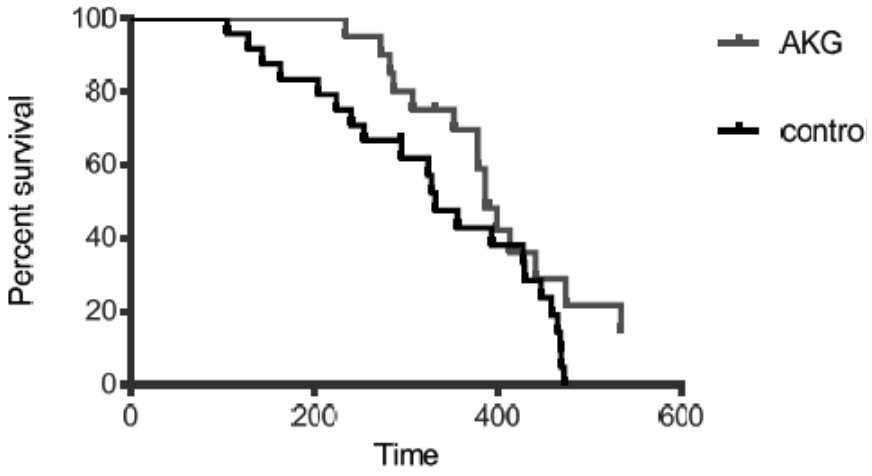

Percent survival
100
80
60
40
20
0
0
200
400
600
Time
AKG
contro

Fig. 13

	Control	18 months	AKG
IL-1B (25)	1	0,138377364	0,084663547
IL-3 (29)	1	0,143295803	0,399181167
IL-6 (34)	1	0,22415138	0,403639631
TNFa (77)	1	0,238638	1,949896818
GM-CSF (15)	1	0,242947471	0,1523883
IL-10 (43)	1	0,257850051	0,291660694
IL-4 (28)	1	0,27196019	0,315880571
MIP-1B (66)	1	0,27858165	0,468324709
IL-12 (p40) (45)	1	0,320694229	0,393676763
RANTES (75)	1	0,34192489	0,379757016
IL-13 (52)	1	0,346204936	0,272643758
IL-12 (p70) (47)	1	0,384006526	0,056001268
MIG (74)	1	0,397397745	0,912610758
MCP-1 (62)	1	0,434987489	2,101009107
IL-2 (26)	1	0,472699636	0,471634431
G-CSF (13)	1	0,477806673	0,611104914
IP-10 (57)	1	0,533134369	1,154954894
IL-17 (56)	1	0,558234765	0,29197428
MIP-1a (64)	1	0,560436064	0,375407525
IFNγ (19)	1	0,645812311	0,109149008
VEGF (76)	1	0,693848355	0,683834049
IL-1a (21)	1	0,70493983	0,544236274
IL-5 (30)	1	0,722142295	0,746495499
KC (61)	1	0,736553481	0,835952196
M-CSF (67)	1	0,825671362	0,678925821
IL-9 (38)	1	0,849248123	1,316876102
Eotaxin (14)	1	0,936693809	0,813662791
MIP-2 (73)	1	0,952643192	0,856532602
IL-7 (36)	1	1,747958564	0,27716291
IL-15 (54)	1	2,293537673	0,383101541
LIX (53)	1	3,189811015	1,556389501

Fig. 24

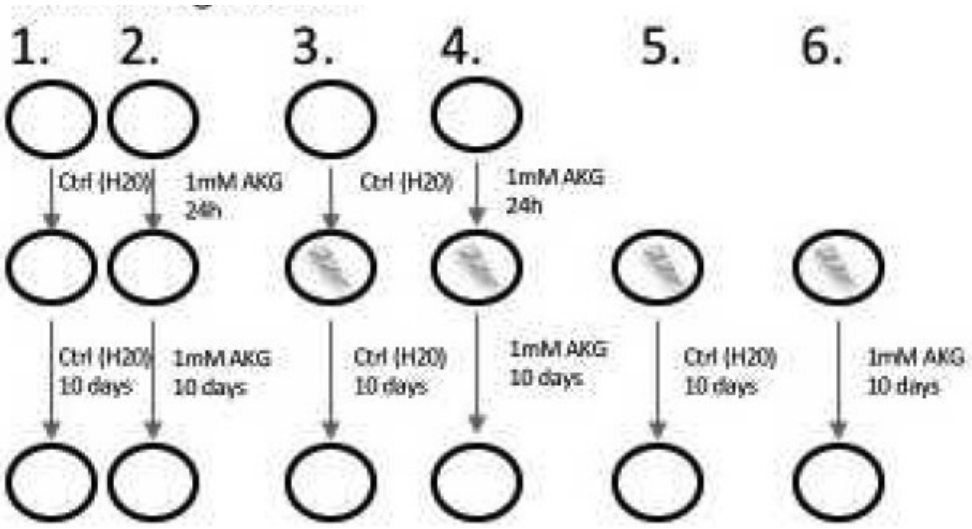
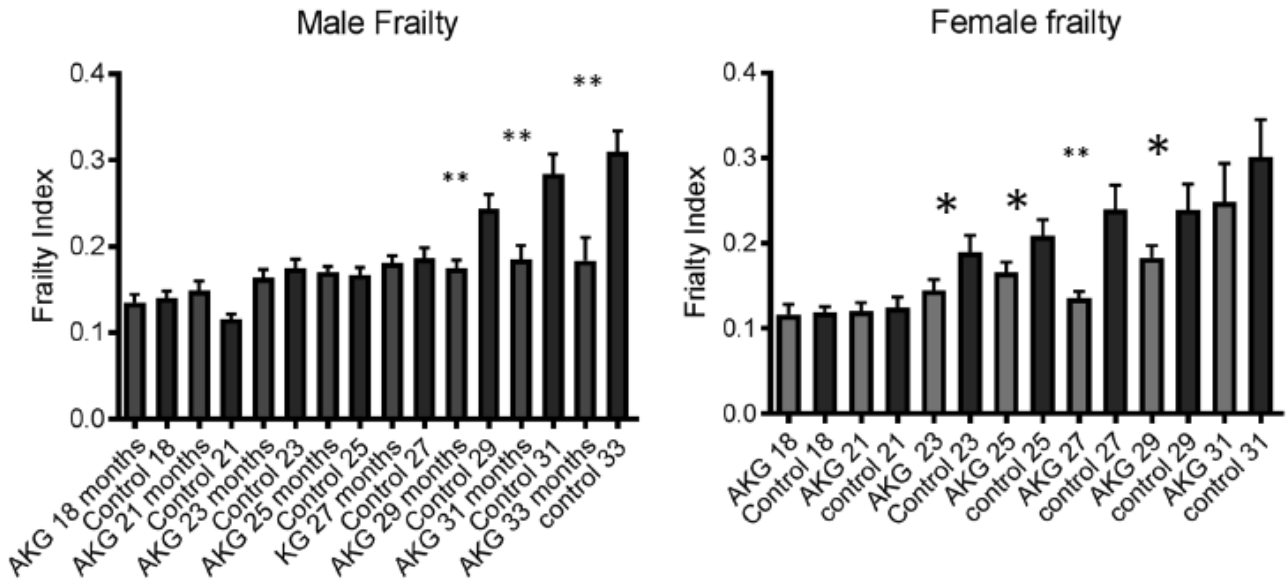


Fig. 25



* p<.1

** p<.05

Fig. 26