FIG 1A

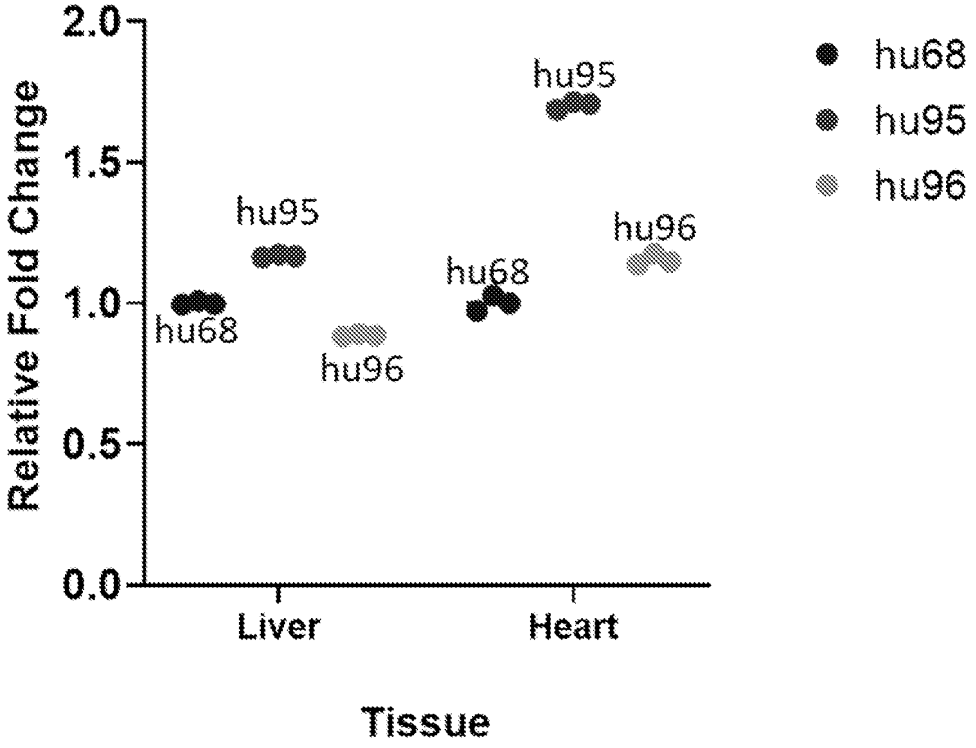

2.0
1.5
1.0
0.5
0.0
Relative Fold Change
hu68
hu95
hu96
hu68
hu95
hu96
hu68
hu95
hu96
Liver
Heart
Tissue

FIG 1B

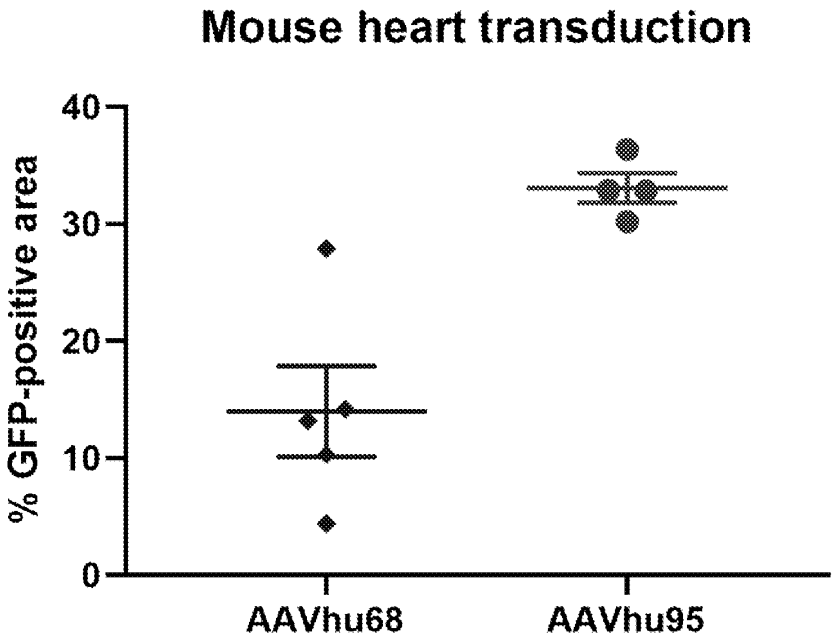

Mouse heart transduction
40
30
20
10
0
% GFP-positive area
AAVhu68
AAVhu95

FIG 1C

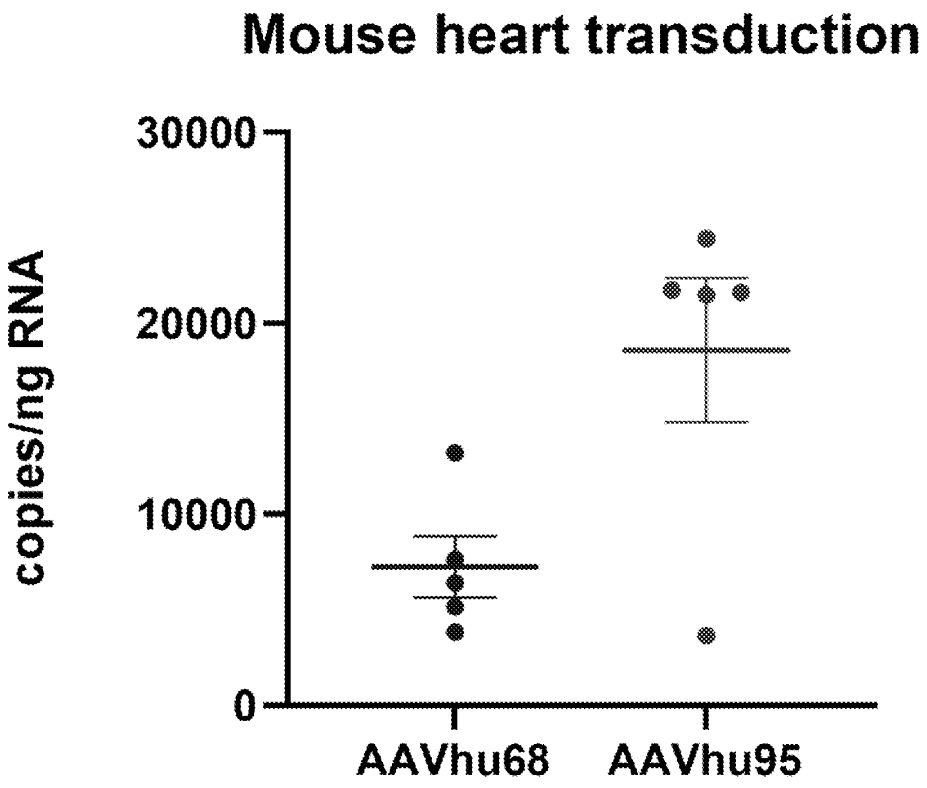

Mouse heart transduction
copies/ng RNA
30000
20000
10000
0
AAVhu68
AAVhu95

FIG 2A

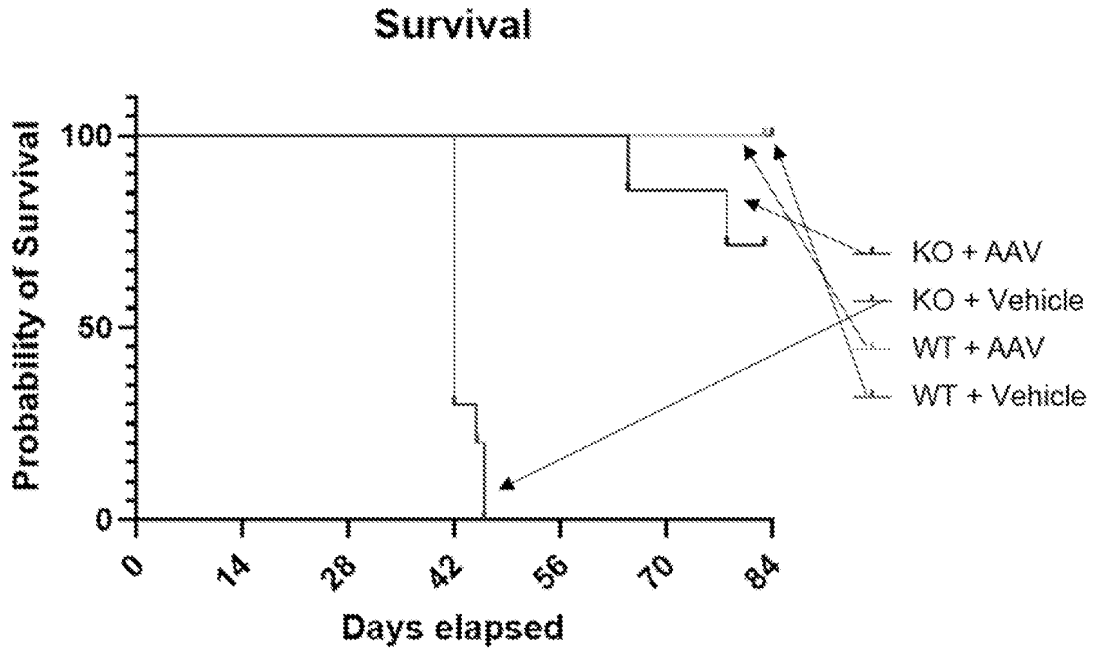

Survival
Probability of Survival
100
50
0
0
14
28
42
56
70
84
Days elapsed
KO + AAV
KO + Vehicle
WT + AAV
WT + Vehicle

FIG 2B

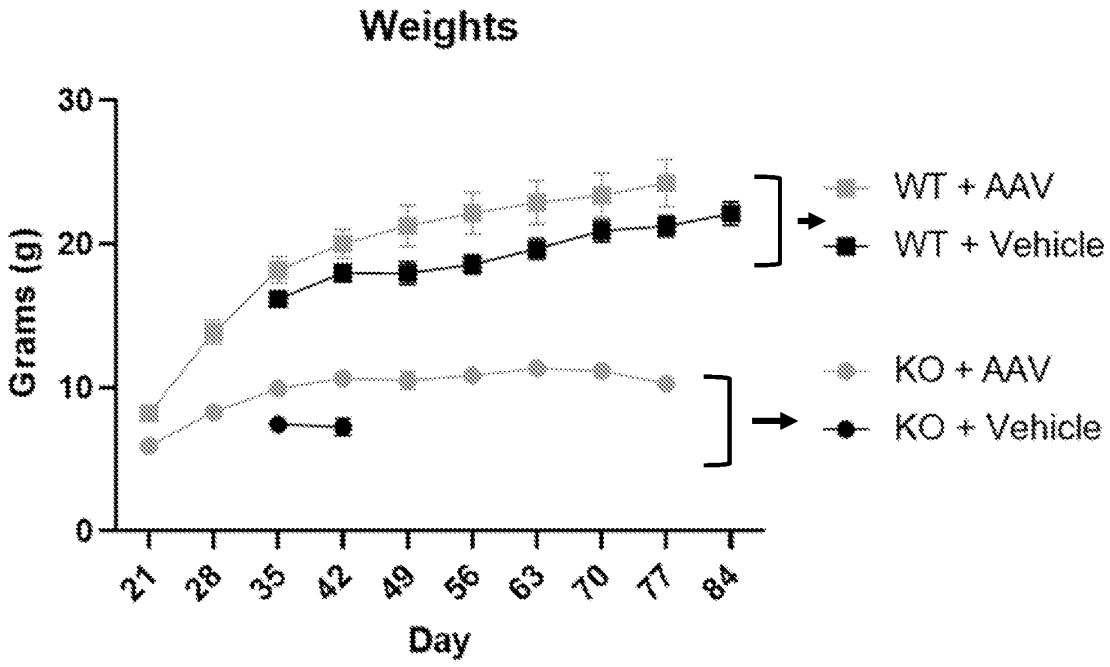

Weights
Grams (g)
30
20
10
0
21
28
35
42
49
56
63
70
77
84
Day
WT + AAV
WT + Vehicle
KO + AAV
KO + Vehicle

FIG 2C

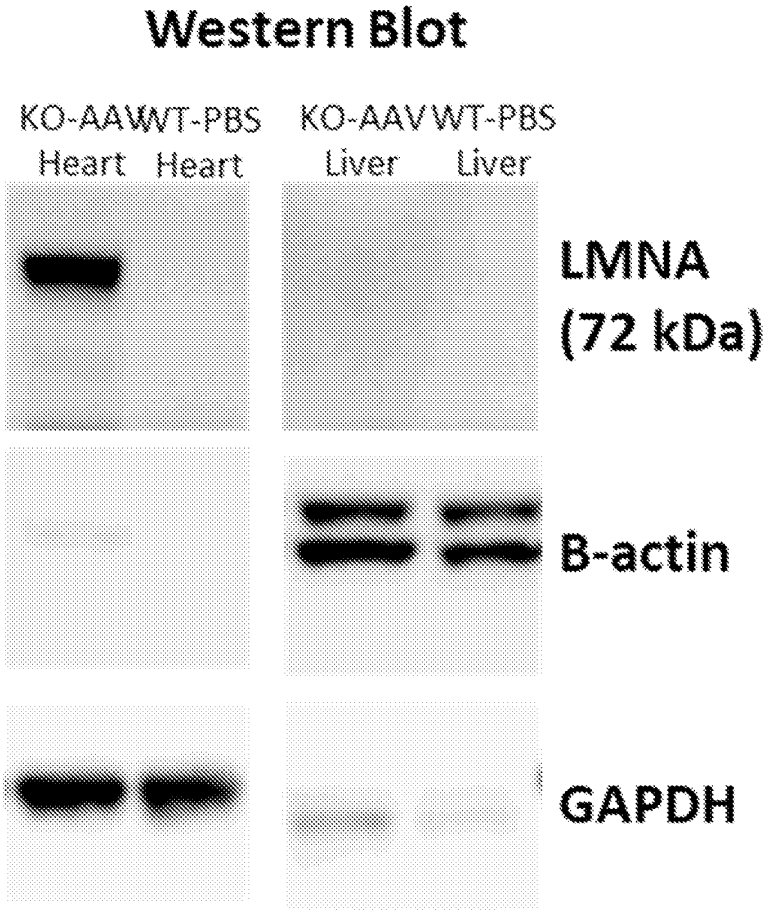

Western Blot
KO-AAV Heart
WT-PBS Heart
KO-AAV Liver
WT-PBS Liver
LMNA
(72 kDa)
B-actin
GAPDH

FIG 3A

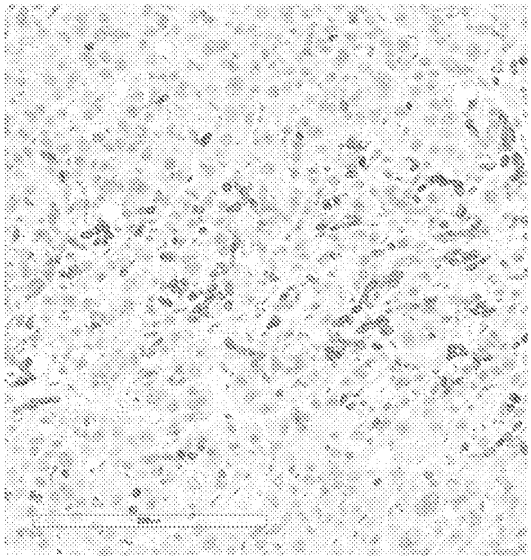


FIG 3B

FIG 3C

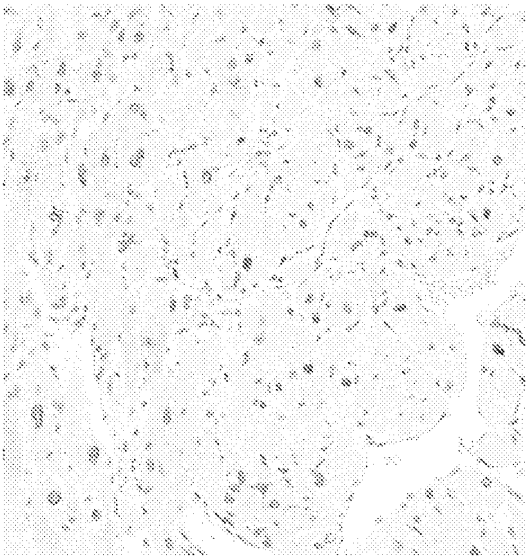


FIG 4A

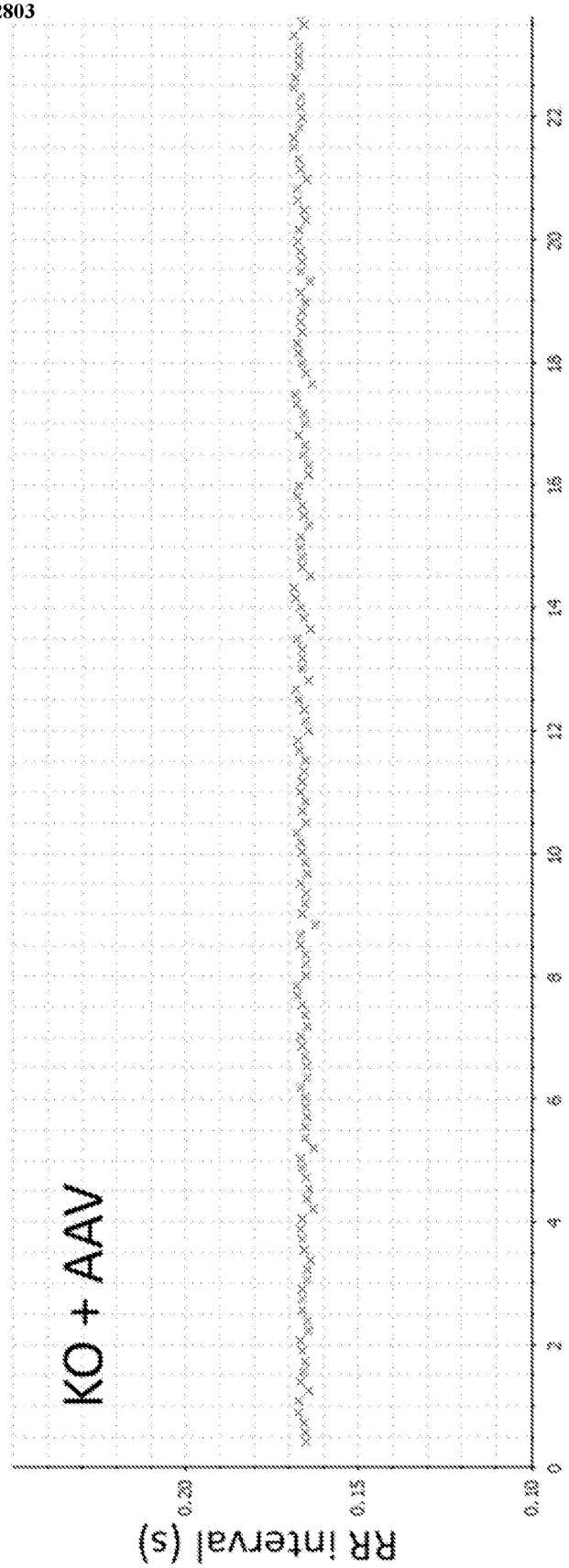


FIG 4B

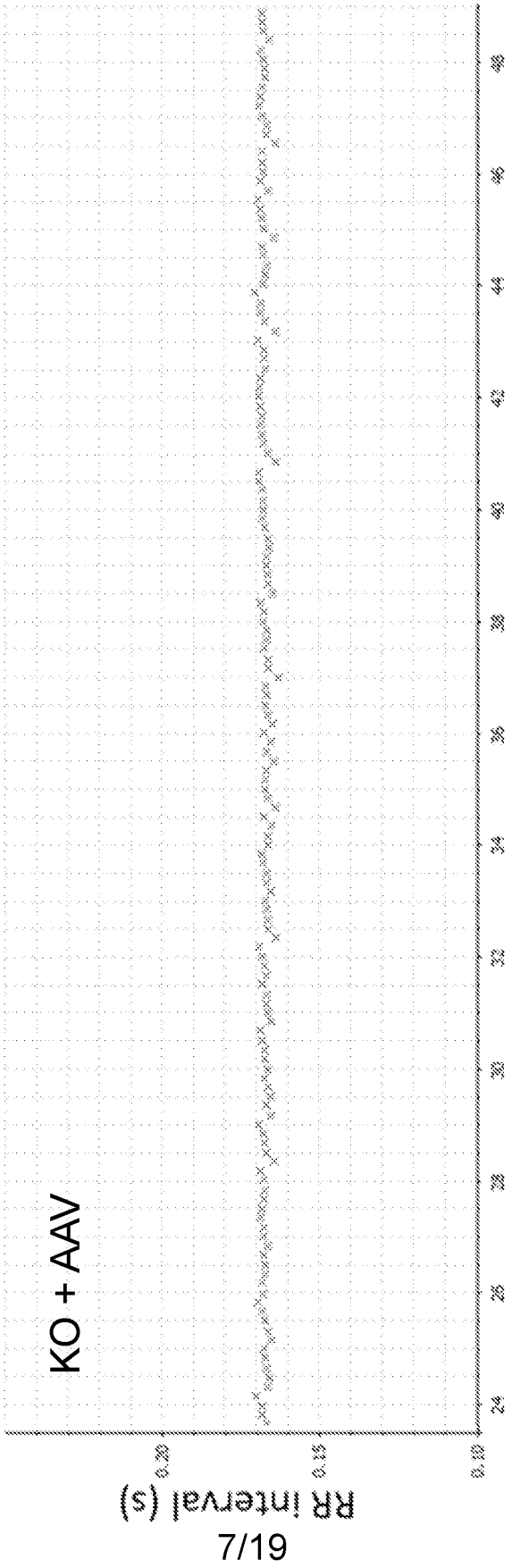

KO + AAV
RR interval (s)
0.20
0.15
0.10
24
26
28
30
32
34
36
38
40
42
44
46
48

FIG 4C

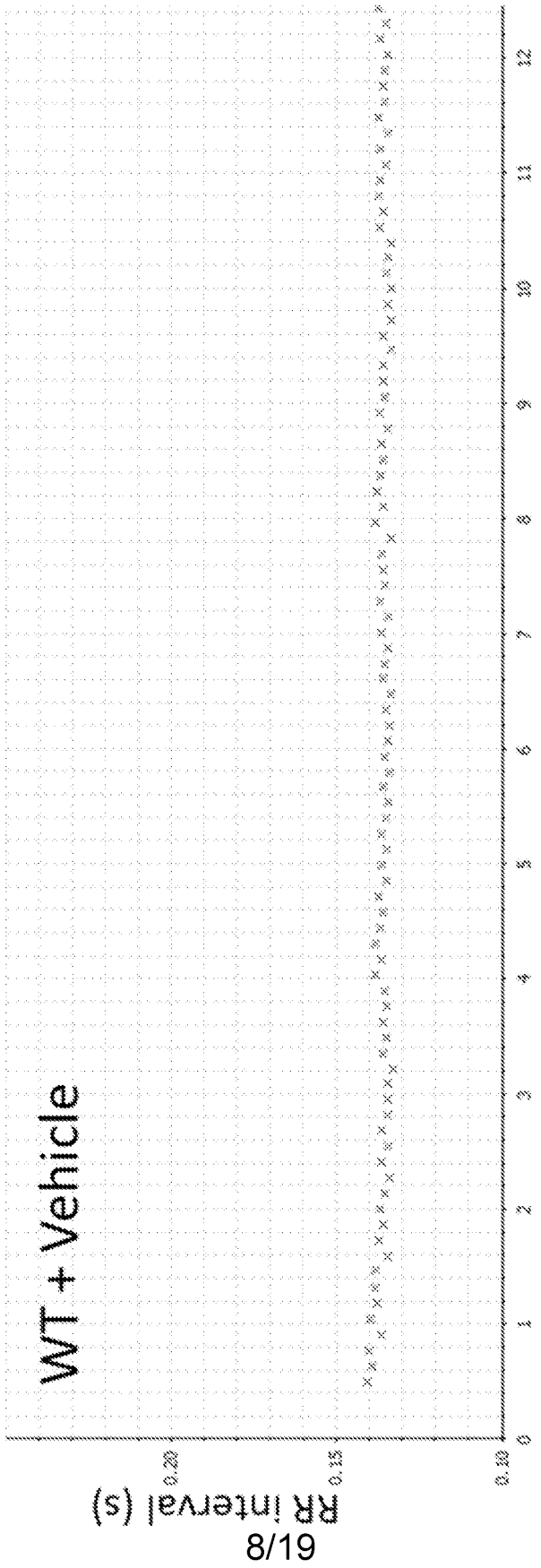


FIG 4D

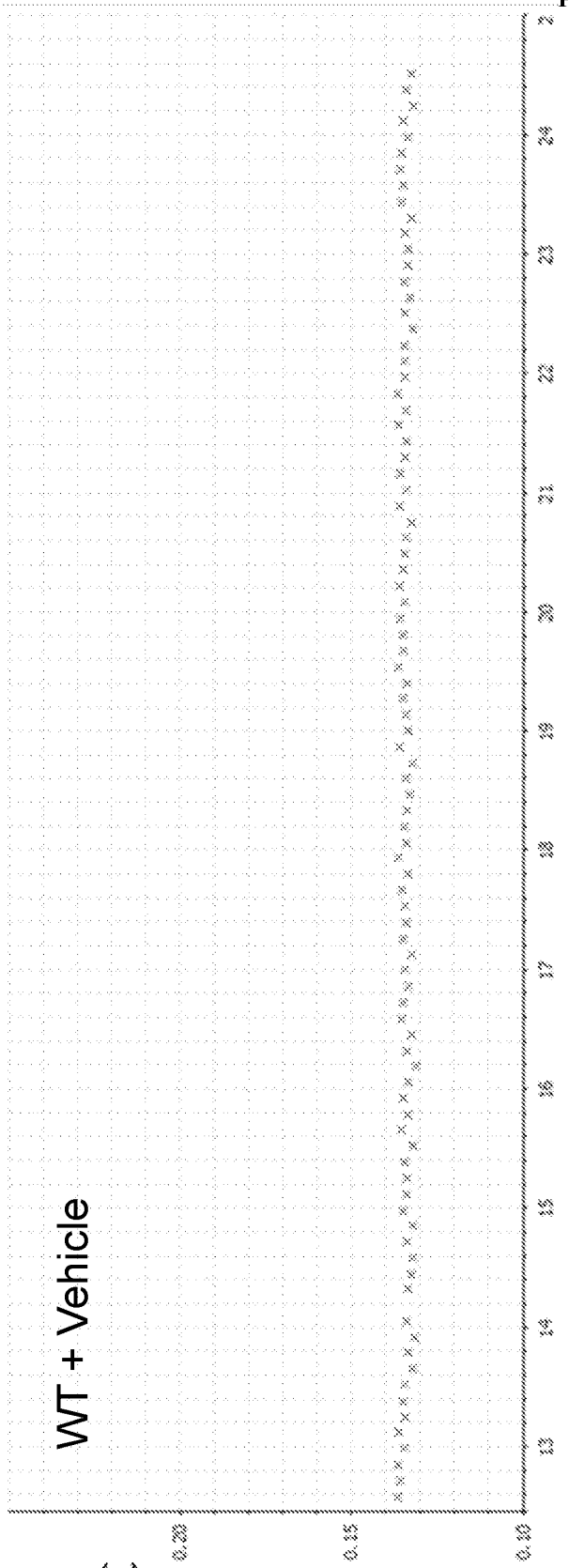

WT + Vehicle
RR interval (s)
0.20
0.15
0.10
13
14
15
16
17
18
19
20
21
22
23
24

FIG 5A

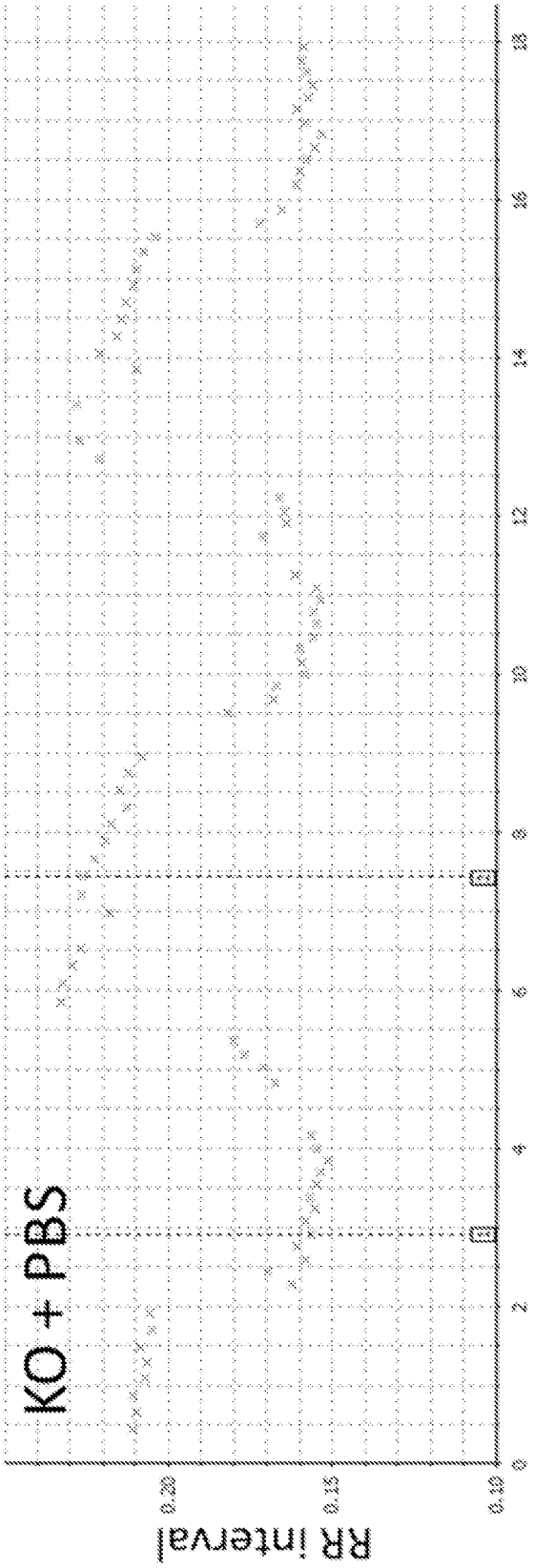


FIG 5B

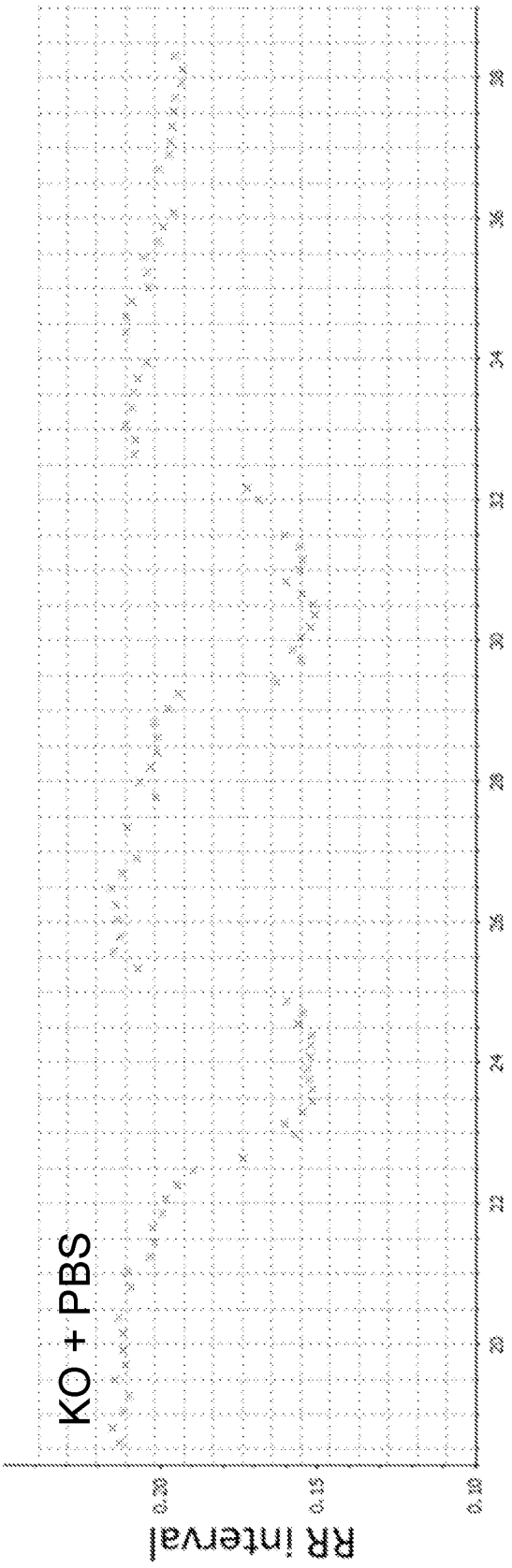


FIG 5C

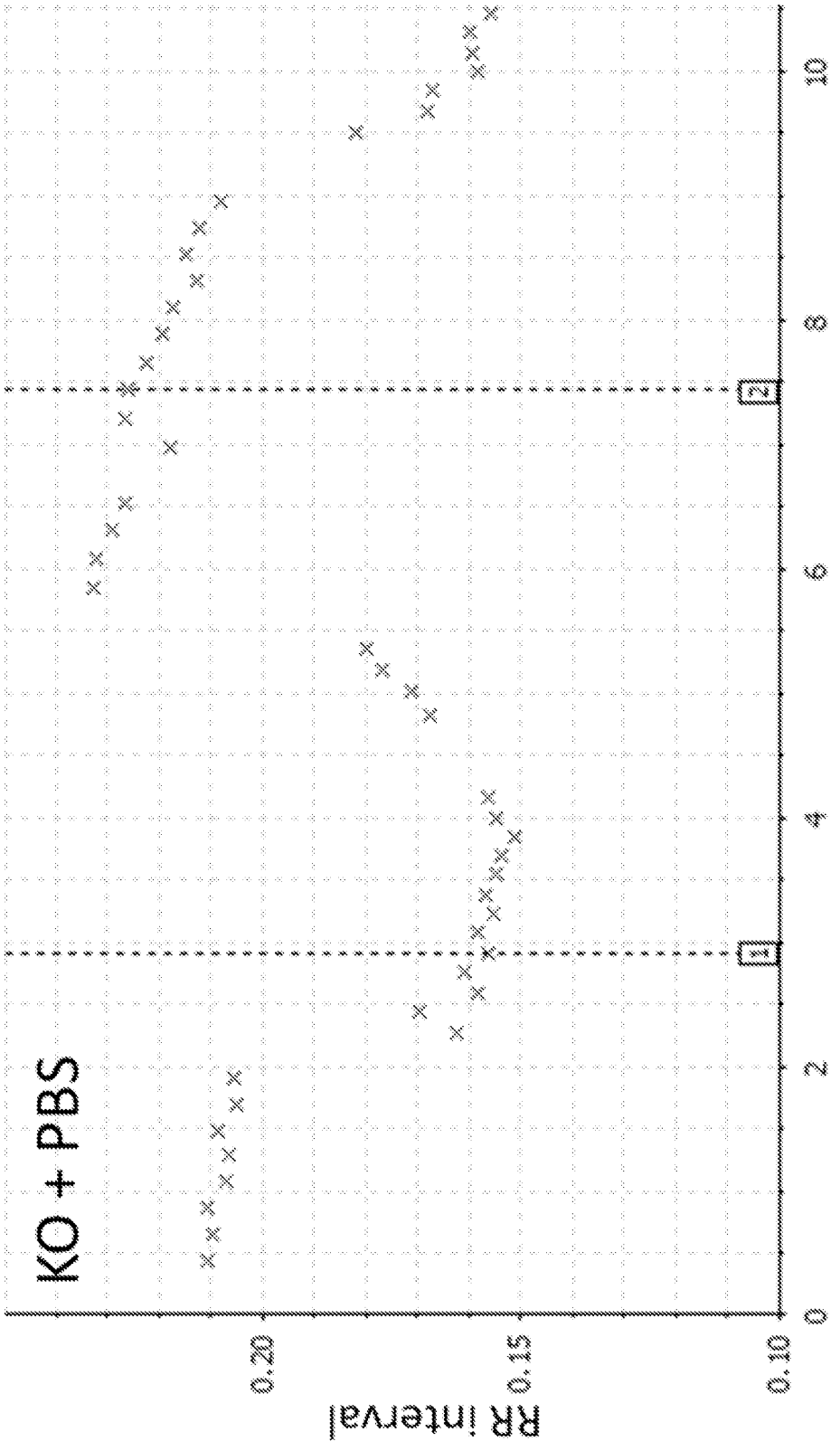


FIG 5D

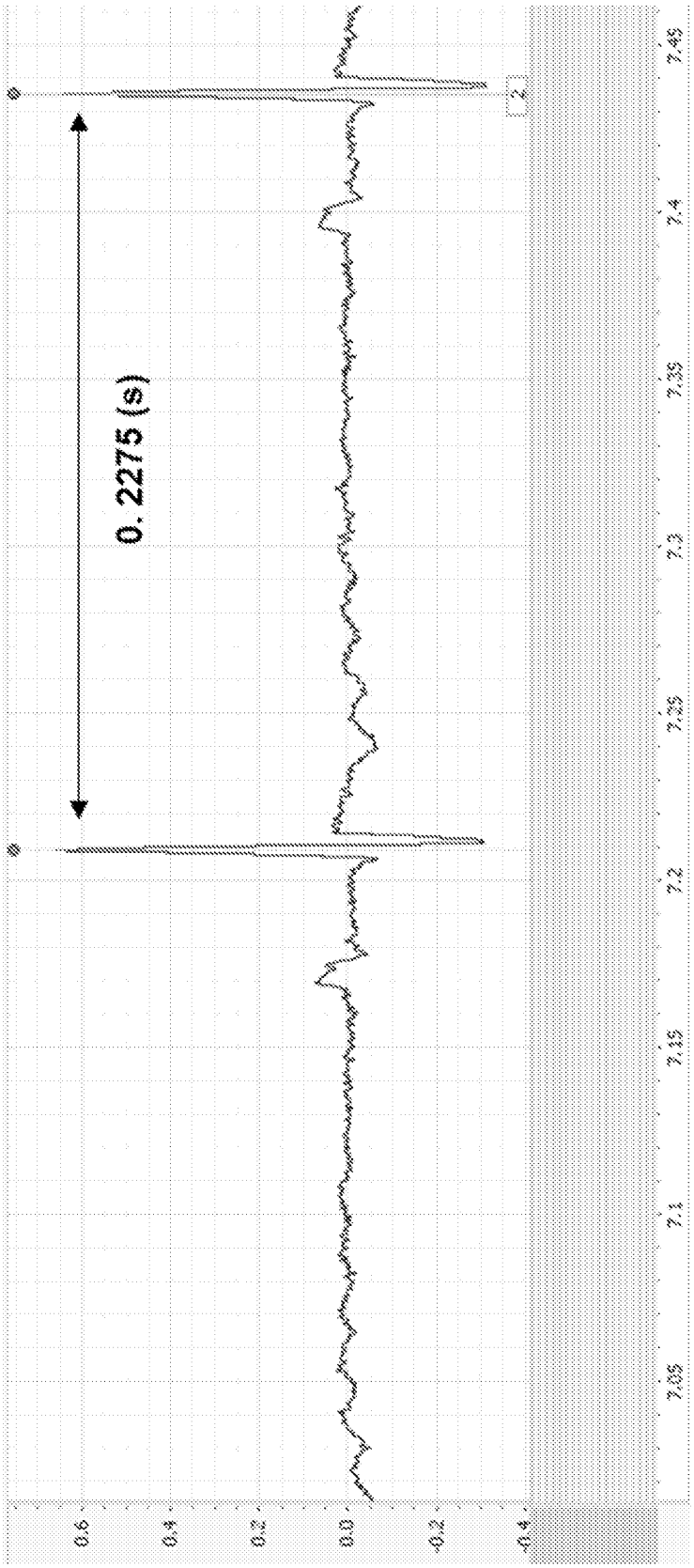


FIG 6A

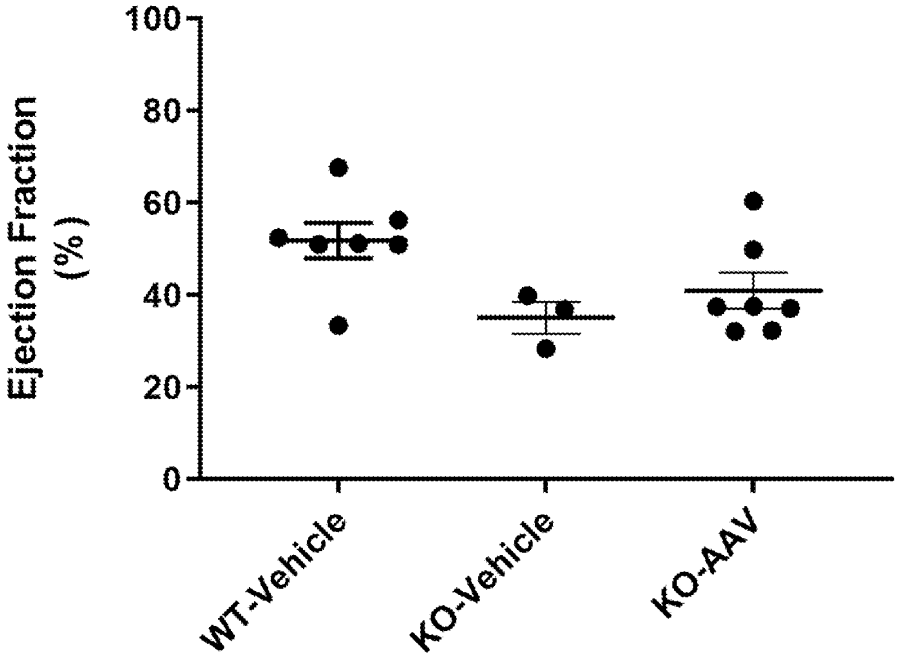

Ejection Fraction (%)
100
80
60
40
20
0
WT-Vehicle
KO-Vehicle
KO-AAV

FIG 6B

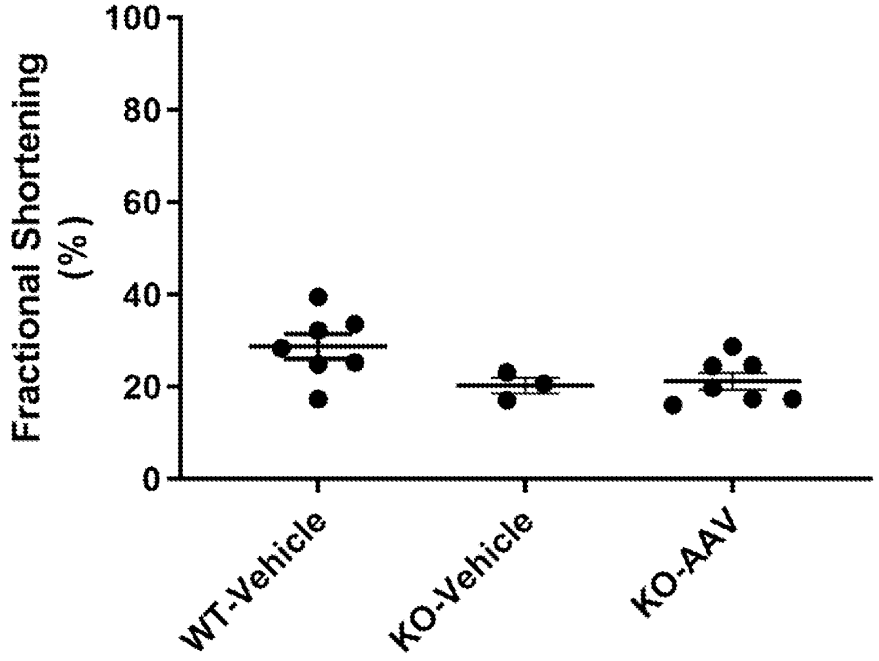

Fractional Shortening (%)
100
80
60
40
20
0
WT-Vehicle
KO-Vehicle
KO-AAV

FIG 6C

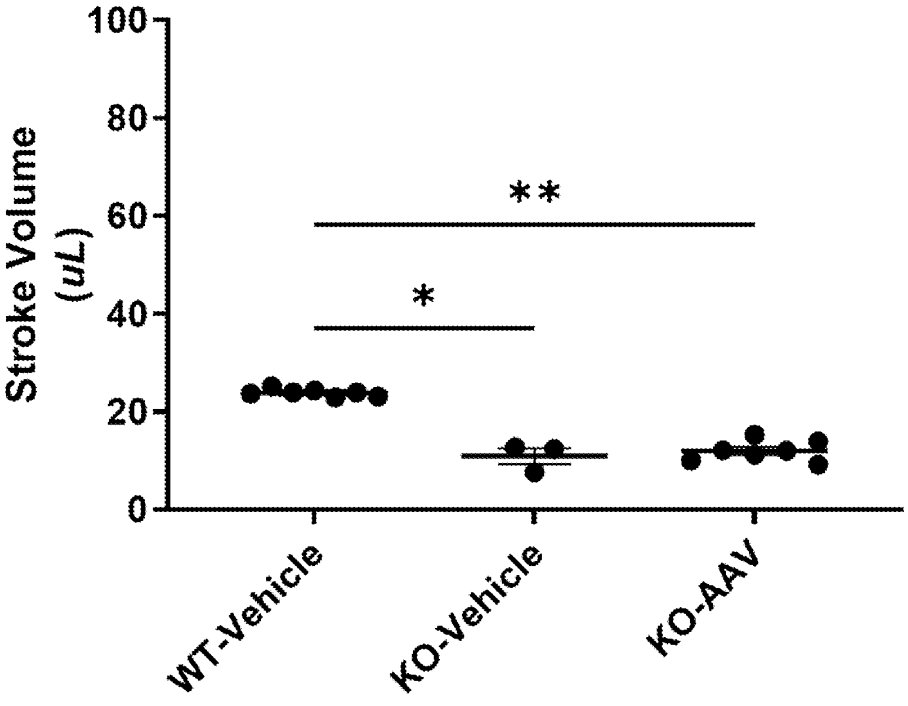


FIG 7A

KO + PBS, Mouse 130 Heart

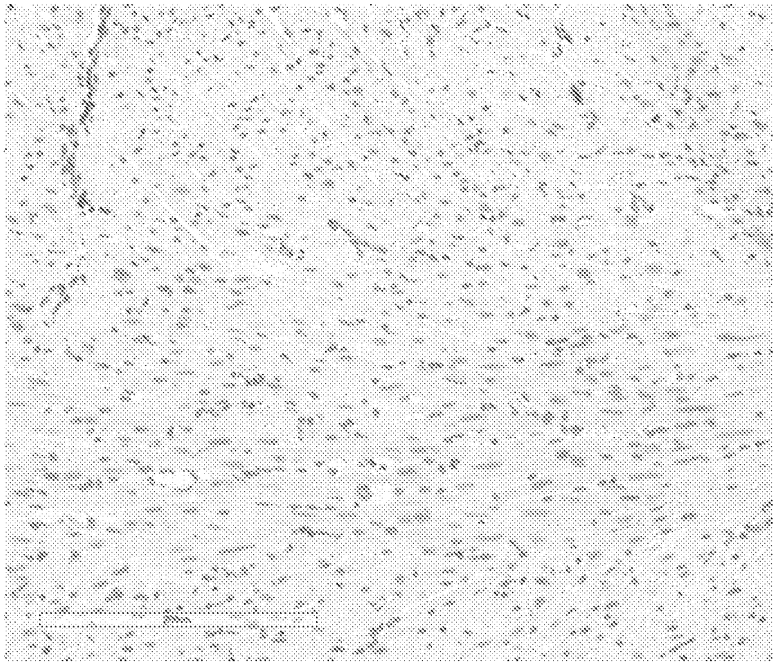


FIG 7B

KO + AAV, Mouse 227 Heart

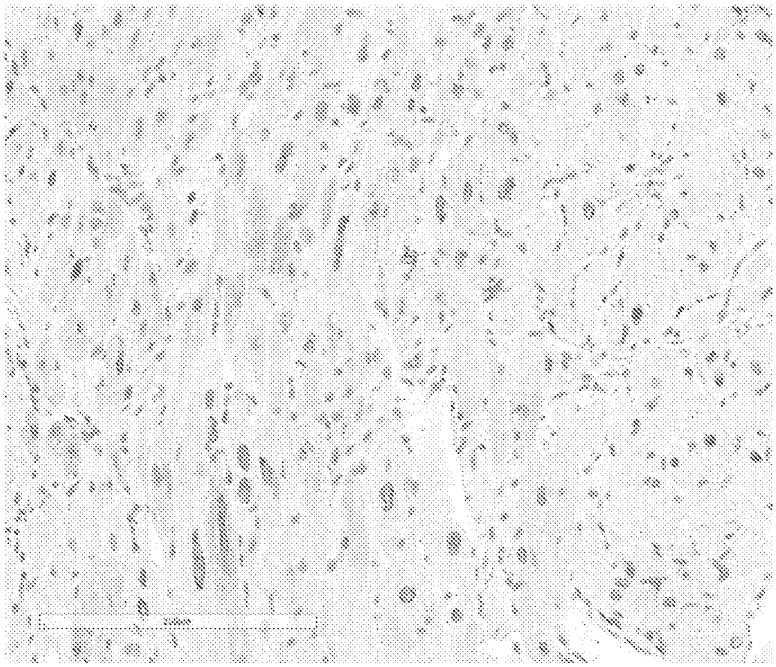


FIG 8

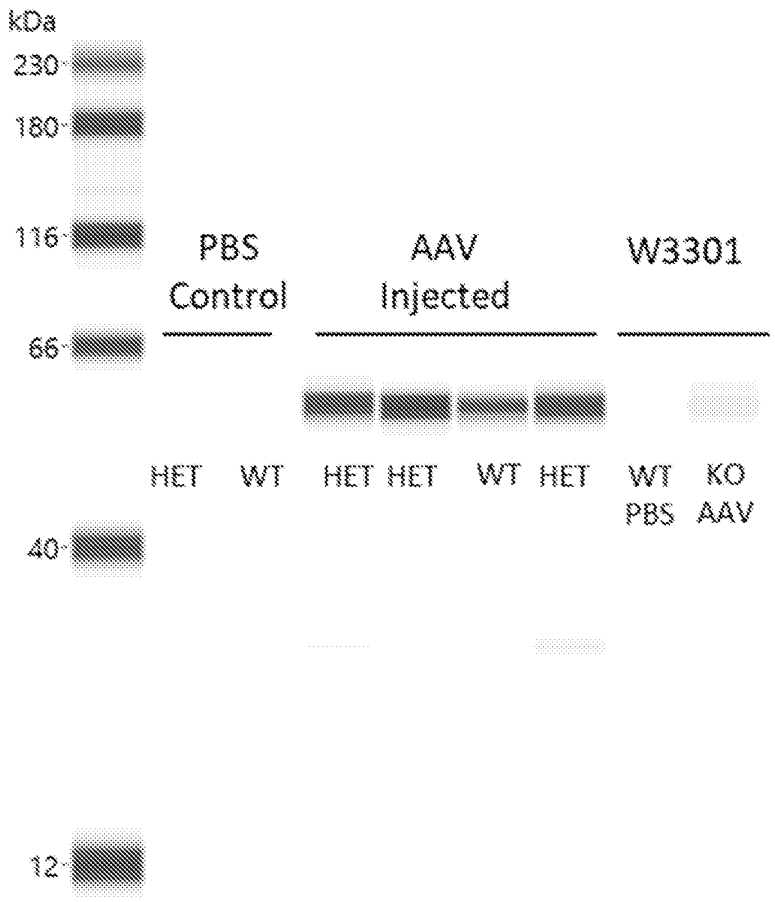

kDa
230
180
116
66
40
12
PBS Control
AAV Injected
W3301
HET
WT
HET
HET
WT
HET
WT PBS
KO AAV

FIG 9A

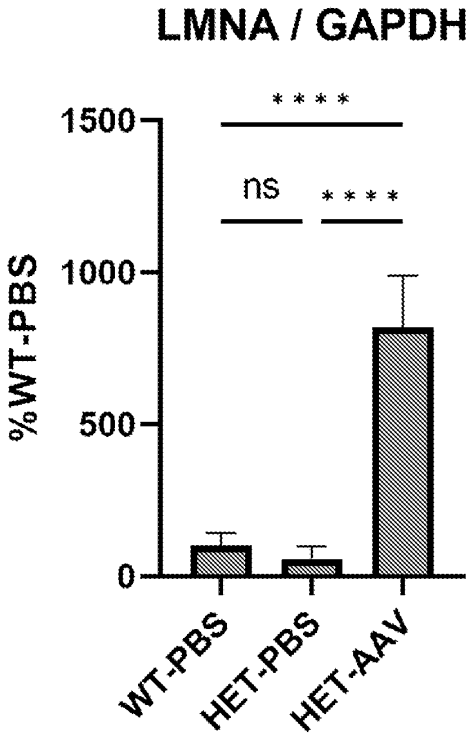

LMNA / GAPDH
%WT-PBS
1500
1000
500
0
****
ns
****
WT-PBS
HET-PBS
HET-AAV

FIG 9B

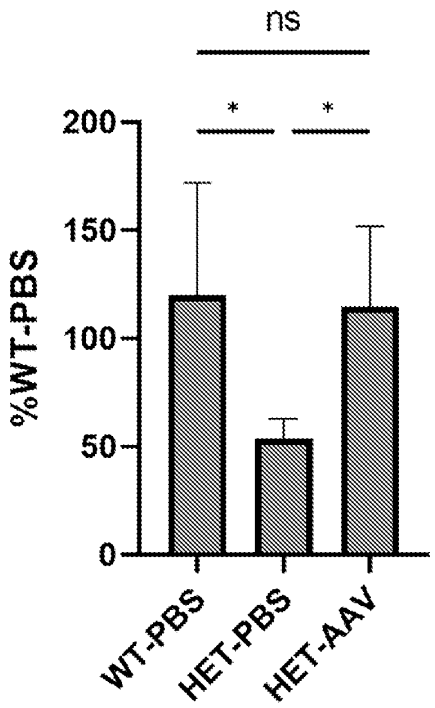
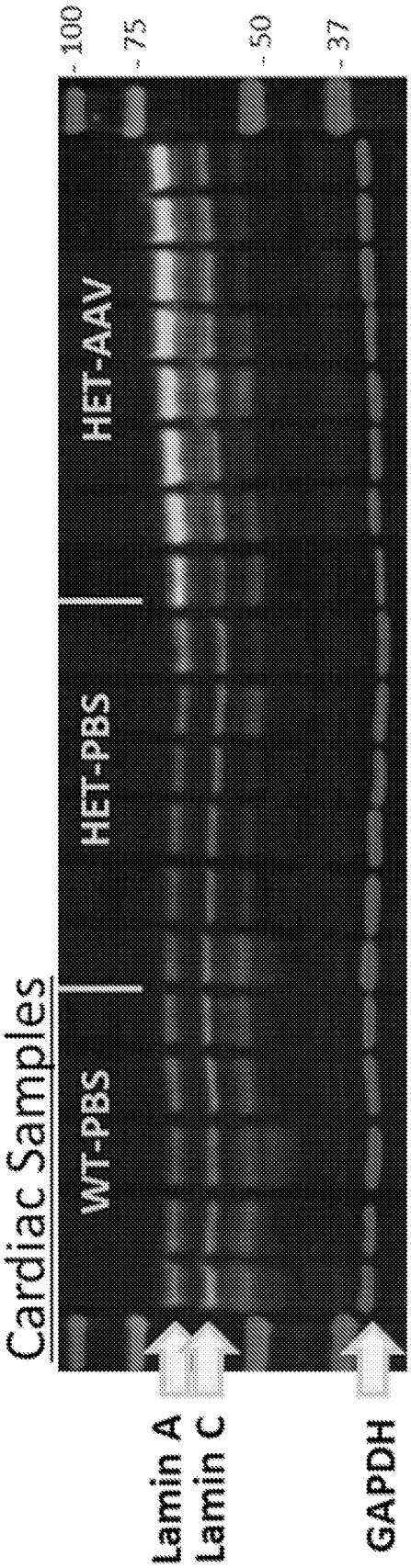

LMNC / GAPDH
%WT-PBS
200
150
100
50
0
ns
*
*
WT-PBS
HET-PBS
HET-AAV

FIG 9C


100
75
50
37
Cardiac Samples
WT-PBS
HET-PBS
HET-AAV
Lamin A
Lamin C
GAPDH