Figure 1A

Room Air

TAPSE
Tricuspid Annulus e'
Tricuspid Valve E/A

Cigarette Smoke

TAPSE
Tricuspid Annulus e'
Tricuspid Valve E/A
Figure 1B

RVSP

Systolic Pressure (mmHg)

Room Air

Cigarette Smoke

LVSP

Systolic Pressure (mmHg)

Room Air

Cigarette Smoke
Figure 2

(A) Graph showing collagen content (µg) with comparisons between RA and CS in RV and LV+S. * indicates a significant difference.

(B) Western blot analysis comparing Procollagen and Vinculin expression in RA and CS groups for RV and LV+S.
Figure 2

C

RV

Room Air

Cigarette Smoke

LV

D

% Area Picrosirius Red

<table>
<thead>
<tr>
<th></th>
<th>RV</th>
<th></th>
<th>LV</th>
</tr>
</thead>
<tbody>
<tr>
<td>RA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS</td>
<td></td>
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</table>

![Images of tissue samples under different conditions with corresponding bar charts showing percentage of area stained with Picrosirius Red.](image-url)
Figure 3

**A**

![Normalized Cell Count](image)

**B**

![Relative Absorbance](image)

**C**

![Normalized Densitometry](image)

**D**

![Normalized Cell Count](image)

**E**

![Normalized Cell Count](image)
Figure 4A-F

A

B

C

D

E

F

Normalized Cell Count

Mec

Veh 200 nM 400 nM 600 nM

Normalized Cell Count

Mec

Veh 200 nM 400 nM 600 nM

Normalized Cell Count

Mec

Vehicle Nicotine

Normalized Cell Count

Mec

Vehicle Nicotine

Scrambled nAChR siRNA

24h 24h 72h

nAChR Vinculin

Control α7 siRNA

Normalized Cell Count

Nic

Control α7 siRNA

Relative Densitometry Units

Vehicle Nicotine

Relative Densitometry Units

Vehicle Nicotine

Relative Densitometry Units

Vehicle Nicotine
Figure 4G-I

**G**

<table>
<thead>
<tr>
<th>56 kD</th>
<th>α7 nAChR</th>
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<tr>
<td>114 kD</td>
<td>Vinculin</td>
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**H**

<table>
<thead>
<tr>
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</tr>
<tr>
<td>Male</td>
<td>*</td>
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**I**

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Normalized Densitometry

Normalized Cell Count

Fractional shortening (%)
Figure 5

A

Normalized Cell Count

Vehicle

Nicotine

Gö6976

LY333351

Rottlerin

B

Normalized Cell Count

Vehicle

Nicotine

C

Normalized Cell Count

Vehicle

Nicotine

D

GFP PKC-α

PKC-δ

80 kD

114 kD

Vinculin

Ponceau

E

Normalized Cell Count

Nic

GFP

PKC-α K368R

PKC-α K376R

F

Normalized Cell Count

Nic

Veh

Gö6976

Rottlerin

G

RA

CS

PKCα

PKCβ

Vinculin

114 kD

Vehicle

CS
Figure 6

A

<table>
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<tr>
<td>114 kD</td>
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B

![Graph showing Relative Densitometry Units for Veh and Nic for p-p38 and p38]

C

<table>
<thead>
<tr>
<th></th>
<th>Nic</th>
<th>Mec</th>
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<tbody>
<tr>
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![Images of p-p38, p38, and Vinculin for different conditions]