

Smoking Intensity and Duration is Associated with Cardiac Structure and Function

Supplemental Table A – Multivariate analysis of different measures of tobacco usage, Diabetes Only

Variable	Age at Initiation		Cigarettes per day		Lifetime Pack-Years	
	Coefficient estimate	p-value	Coefficient estimate	p-value	Coefficient estimate	p-value
<b>Left Ventricular Structure and Function</b>						
LV EDV, ml	<b>0.18</b>	<b>0.0001</b>	<b>0.40</b>	<b>0.0001</b>	<b>0.11</b>	<b>0.002</b>
LV ESV, ml	-0.008	0.64	<b>0.48</b>	<b>&lt;.0001</b>	<b>0.16</b>	<b>&lt;.0001</b>
LV EF, %	<b>0.03</b>	<b>&lt;.0001</b>	<b>-0.29</b>	<b>&lt;.0001</b>	<b>-0.10</b>	<b>&lt;.0001</b>
LVM, g	<b>-1.41</b>	<b>&lt;.0001</b>	<b>2.72</b>	<b>&lt;.0001</b>	<b>1.14</b>	<b>&lt;.0001</b>
RVAd, cm <sup>2</sup>	<b>0.05</b>	<b>&lt;.0001</b>	-0.004	0.82	<b>-0.01</b>	<b>0.0006</b>
RWT	<b>-0.001</b>	<b>&lt;.0001</b>	<b>0.004</b>	<b>&lt;.0001</b>	<b>0.002</b>	<b>&lt;.0001</b>
E/e'	<b>0.06</b>	<b>&lt;.0001</b>	<b>-0.01</b>	<b>0.002</b>	<b>-0.006</b>	<b>0.004</b>
<b>Right Ventricular Structure and Function</b>						
RV FAC	<b>-0.003</b>	<b>&lt;.0001</b>	-0.0004	0.59	<b>0.0006</b>	<b>&lt;.0001</b>
TAPSE, cm	<b>-0.006</b>	<b>&lt;.0001</b>	<b>-0.01</b>	<b>&lt;.0001</b>	<b>-0.002</b>	<b>0.0003</b>
RV peak S	<b>-0.01</b>	<b>0.001</b>	<b>-0.06</b>	<b>&lt;.0001</b>	<b>-0.008</b>	<b>0.002</b>
RVOT VTI, cm	<b>0.09</b>	<b>&lt;.0001</b>	0.05	0.03	-0.006	0.28
RV SV, mL	<b>0.49</b>	<b>&lt;.0001</b>	<b>-0.65</b>	<b>0.002</b>	<b>-0.31</b>	<b>&lt;.0001</b>
TR max PG, mmHg	<b>0.05</b>	<b>&lt;.0001</b>	0.06	0.07	<b>-0.04</b>	<b>0.002</b>
TR max velocity, cm/s	<b>0.48</b>	<b>&lt;.0001</b>	<b>0.69</b>	<b>0.001</b>	-0.12	0.05

Adjusted for age, sex

Supplemental Table B – Multivariate analysis of different measures of tobacco usage, Hypertension Only

Variable	Age at Initiation		Cigarettes per day		Lifetime Pack-Years	
	Coefficient estimate	p-value	Coefficient estimate	p-value	Coefficient estimate	p-value
<b>Left Ventricular Structure and Function</b>						
LV EDV, ml	0.13	0.32	<b>-0.22</b>	<b>&lt;.0001</b>	<b>-0.11</b>	<b>&lt;.0001</b>
LV ESV, ml	-0.02	0.79	<b>-0.16</b>	<b>&lt;.0001</b>	<b>-0.05</b>	<b>&lt;.0001</b>
LV EF, %	<b>0.16</b>	<b>0.0003</b>	0.04	0.26	0.008	0.11
LVM, g	0.05	0.90	<b>-0.94</b>	<b>&lt;.0001</b>	<b>0.25</b>	<b>&lt;.0001</b>
RVAd, cm <sup>2</sup>	-0.05	0.08	-0.002	0.81	<b>0.016</b>	<b>&lt;.0001</b>
RWT	<b>0.002</b>	<b>0.004</b>	<b>0.002</b>	<b>&lt;.0001</b>	<b>0.0006</b>	<b>&lt;.0001</b>
E/e'	0.07	0.02	<b>-0.03</b>	<b>0.002</b>	-0.003	0.09
<b>Right Ventricular Structure and Function</b>						
RV FAC	0.002	0.08	<b>-0.001</b>	<b>0.009</b>	<b>-0.001</b>	<b>&lt;.0001</b>
TAPSE, cm	0.004	0.05	0.0003	0.86	<b>-0.003</b>	<b>&lt;.0001</b>
RV peak S	-0.009	0.66	<b>0.04</b>	<b>&lt;.0001</b>	<b>-0.02</b>	<b>&lt;.0001</b>
RVOT VTI, cm	<b>0.17</b>	<b>&lt;.0001</b>	<b>-0.10</b>	<b>&lt;.0001</b>	<b>-0.03</b>	<b>&lt;.0001</b>
RV SV, mL	0.34	0.08	<b>-0.61</b>	<b>&lt;.0001</b>	-0.02	0.38
TR max PG, mmHg	0.13	0.03	<b>0.09</b>	<b>0.001</b>	<b>-0.04</b>	<b>&lt;.0001</b>
TR max velocity, cm/s	0.83	0.03	<b>0.68</b>	<b>&lt;.0001</b>	<b>-0.18</b>	<b>0.001</b>

Adjusted for age, sex

## Smoking Intensity and Duration is Associated with Cardiac Structure and Function

Supplemental Table C – Multivariate analysis of different measures of tobacco usage, No diabetes, hypertension or obesity only

Variable	Age at Initiation		Cigarettes per day		Lifetime Pack-Years	
	Coefficient estimate	p-value	Coefficient estimate	p-value	Coefficient estimate	p-value
<b>Left Ventricular Structure and Function</b>						
LV EDV, ml	-0.19	0.13	<b>-0.23</b>	<b>0.003</b>	<b>-0.12</b>	<b>0.003</b>
LV ESV, ml	-0.13	0.13	<b>-0.10</b>	<b>0.0007</b>	<b>-0.06</b>	<b>0.001</b>
LV EF, %	0.05	0.24	0.05	0.16	-0.01	0.07
LVM, g	-0.28	0.32	<b>2.11</b>	<b>&lt;.0001</b>	<b>0.51</b>	<b>&lt;.0001</b>
RVAd, cm <sup>2</sup>	0.03	0.11	0.008	0.55	-0.02	0.02
RWT	-0.0004	0.67	<b>0.004</b>	<b>&lt;.0001</b>	<b>0.001</b>	<b>&lt;.0001</b>
E/e'	<b>0.10</b>	<b>0.002</b>	<b>0.22</b>	<b>&lt;.0001</b>	<b>0.05</b>	<b>&lt;.0001</b>
<b>Right Ventricular Structure and Function</b>						
RV FAC	-0.003	0.011	-0.0006	0.38	-0.0004	0.02
TAPSE, cm	<b>0.01</b>	<b>0.009</b>	<b>0.01</b>	<b>0.0009</b>	-0.0002	0.85
RV peak S	0.02	0.39	<b>0.06</b>	<b>&lt;.0001</b>	-0.006	0.08
RVOT VTI, cm	0.05	0.05	-0.0005	0.97	<b>-0.01</b>	<b>0.007</b>
RV SV, mL	<b>0.57</b>	<b>0.01</b>	<b>-0.44</b>	<b>0.0002</b>	-0.11	0.02
TR max PG, mmHg	<b>0.21</b>	<b>0.009</b>	<b>0.20</b>	<b>0.0005</b>	-0.01	0.28
TR max velocity, cm/s	<b>1.46</b>	<b>0.006</b>	<b>1.19</b>	<b>0.001</b>	-0.02	0.71

Adjusted for age, sex

Stratified analysis was performed based on three classifications: for diabetes only (n=27) excluding cases with hypertension, for hypertension only (n=82) excluding cases with diabetes, and healthy cases (n=96) exclude any diabetes, hypertension or obesity.