Figure 4. E-liquid inhibition of microsomal recombinant CYP2A6

Flamethrower

Percent E-liquid (v/v)	Mean	SEM
0.125	97	1
0.03125	94	2
0.0078	89	3
0.0019	80	4
0.00048	55	4
0.00012	23	2
0.00003	9	1

Strawberry Poptart		
Percent E-liquid (v/v)	Mean	SEM
0.125	98	0
0.03125	91	1
0.0078	62	5
0.0019	23	3
0.00048	9	2
0.00012	6	2
0.00003	3	2

Apple Watermelon

Percent E-liquid (v/v)	Mean	SEM
0.125	26	1
0.03125	5	1
0.0078	1	1
0.0019	1	0
0.00048	0	0
0.00012	0	0
0.00003	0	0

E-cigarette liquids were screened for CYP2A6 inhibition at concentrations ranging from 0.000031% 0.125% (v/v). Flamethrower exhibited inhibition of microsomal recombinant CYP2A6 at concentrations as low as 0.00012%, while Strawberry Poptart exhibited inhibition of microsomal recombinant CYP2A6 at 0.0019%. Apple Watermelon exhibited only limited inhibition at 0.125%. Results were used to calculate IC₅₀ values using GraphPad Software Inc. Prism 8.0.1. Percent inhibition calculated from the PG/VG baseline. Mean +/- SEM, n=3.

SEM: standard error of the mean

v: volume

CYP2A6: cytochrome (enzyme) 2A6 IC50: 50% Inhibitory Concentration

PG: polyethylene glycol VG: vegetable glycerin