

Fig. 1 Oral single-dose toxicity study of Electronic cigarette liquid in mice  
Body weight - Male

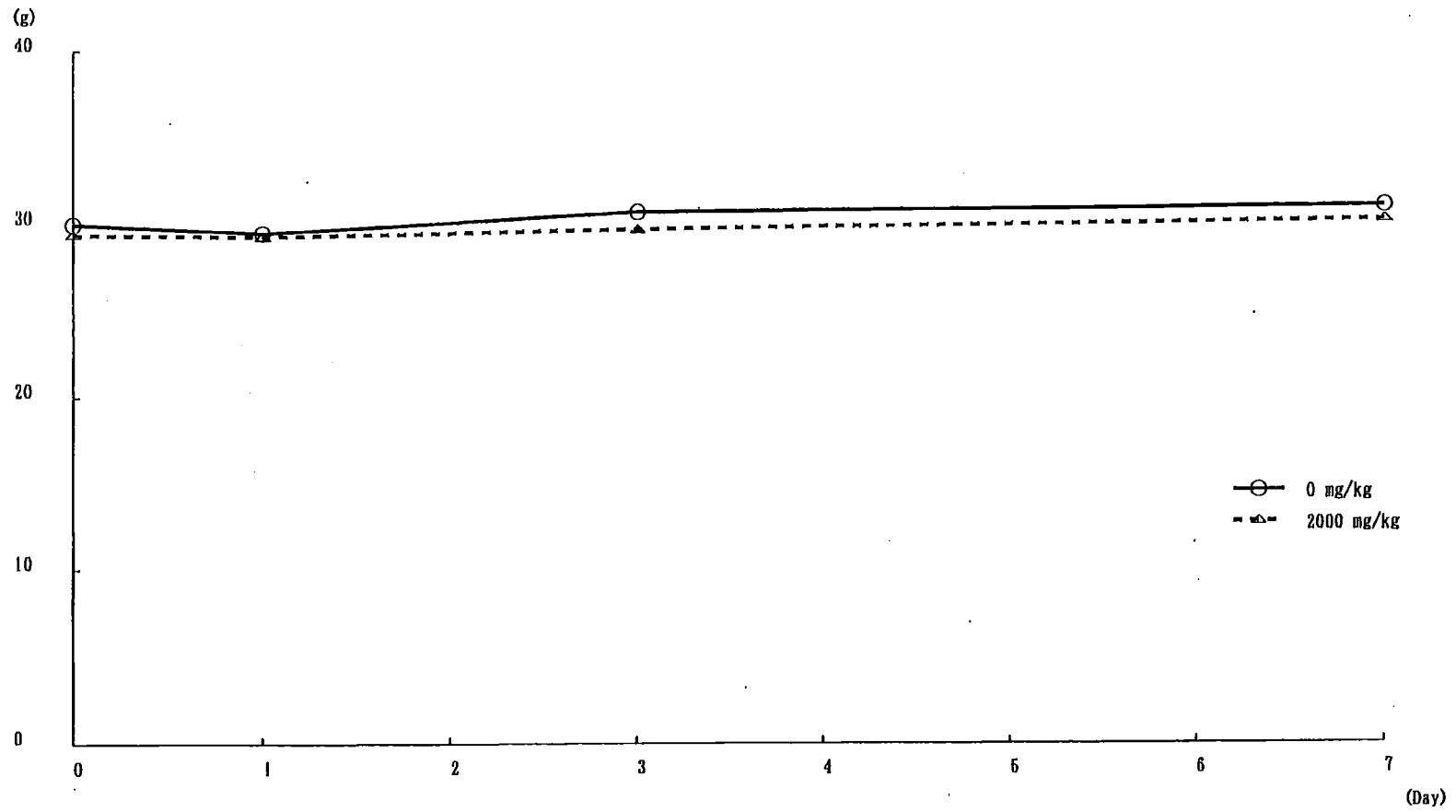


Fig. 2 Oral single-dose toxicity study of Electronic cigarette liquid in mice  
Body weight - Female

Table 1 Oral single-dose toxicity study of Electronic cigarette liquid in mice  
Mortality and Minimum lethal dose

Sex	Dose mg/kg	Number of animals	Distribution of death												Mortality	Minimum lethal dose mg/kg		
			minutes			hours			days									
			i~5	15	30	1	2	4	1	2	3	4	5	6			7	
Male	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0/3	> 2000
	2000	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0/3	
Female	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0/3	> 2000
	2000	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0/3	

i : Immediately after dosing

Table 2-1

Oral single-dose toxicity study of Electronic cigarette liquid in mice

N-TT160003

Clinical signs

Male

Dose mg/kg	Findings	minutes			hours			days						
		i~5	15	30	1	2	4	1	2	3	4	5	6	7
0	n	3	3	3	3	3	3	3	3	3	3	3	3	3
	No abnormal findings	3	3	3	3	3	3	3	3	3	3	3	3	3
2000	n	3	3	3	3	3	3	3	3	3	3	3	3	3
	No abnormal findings	3	3	3	3	3	3	3	3	3	3	3	3	3

i : Immediately after dosing

Table 2-2

Oral single-dose toxicity study of Electronic cigarette liquid in mice

N-TT160003

Clinical signs

Female

Dose mg/kg	Findings	minutes			hours			days						
		i~5	15	30	1	2	4	1	2	3	4	5	6	7
0	n	3	3	3	3	3	3	3	3	3	3	3	3	3
	No abnormal findings	3	3	3	3	3	3	3	3	3	3	3	3	3
2000	n	3	3	3	3	3	3	3	3	3	3	3	3	3
	No abnormal findings	3	3	3	3	3	3	3	3	3	3	3	3	3

i : Immediately after dosing

Table 3 - 1 Oral single-dose toxicity study of Electronic cigarette liquid in mice

N-TT160003

Item : Body weight  
Sex : Male

Unit : g

Test Article	Day	0	1	3	7	Body weight gain
ECL 0 mg/kg	Mean	33.8	34.8	34.9	35.1	1.3
	S.D.	2.1	2.1	2.3	2.3	0.8
	n	3	3	3	3	3
ECL 2000 mg/kg	Mean	33.9	34.1	34.8	34.2	0.3
	S.D.	1.0	1.3	1.1	1.4	0.8
	n	3	3	3	3	3

No significant difference in any treated groups from control group.

ECL : Electronic cigarette liquid

Table 3 - 2 Oral single-dose toxicity study of Electronic cigarette liquid in mice

N-TT160003

Item : Body weight

Sex : Female

Unit : g

Test Article	Day	0	1	3	7	Body weight gain
0 mg/kg	Mean	30.0	29.5	30.7	31.0	1.0
	S.D.	0.7	0.4	0.7	0.8	0.4
	n	3	3	3	3	3
2000 mg/kg	Mean	29.4	29.3	29.7	30.2	0.8
	S.D.	1.8	2.1	1.7	2.3	0.5
	n	3	3	3	3	3

No significant difference in any treated groups from control group.

ECL : Electronic cigarette liquid

Table 4-1 Oral single-dose toxicity study of Electronic cigarette liquid in mice

## Gross pathological findings

Organs	Sex:	M	M
	Dose (mg/kg):	0	2000
Findings	Number:	3	3
All tissues			
Not remarkable		3	3

M : Male



Table 4-2 Oral single-dose toxicity study of Electronic cigarette liquid in mice

## Gross pathological findings

Organs	Sex:	F	F
	Dose (mg/kg):	0	2000
Findings	Number:	3	3
All tissues			
Not remarkable		3	3

F : Female

Individual clinical signs

Dose (mg/kg) : 0

Sex : Male

Animal No.	minutes			hours			days						
	i-5	15	30	1	2	4	1	2	3	4	5	6	7
1001	-	-	-	-	-	-	-	-	-	-	-	-	-
1002	-	-	-	-	-	-	-	-	-	-	-	-	-
1003	-	-	-	-	-	-	-	-	-	-	-	-	-

i : Immediately after dosing

-:No abnormal findings

## Individual clinical signs

Dose (mg/kg) : 2000

Sex : Male

Animal No.	minutes			hours			days						
	i~5	15	30	1	2	4	1	2	3	4	5	6	7
2001	-	-	-	-	-	-	-	-	-	-	-	-	-
2002	-	-	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-	-	-

i : Immediately after dosing

-:No abnormal findings

Individual clinical signs

Dose (mg/kg) : 0

Sex : Female

Animal No.	minutes			hours			days						
	i-5	15	30	1	2	4	1	2	3	4	5	6	7
1101	-	-	-	-	-	-	-	-	-	-	-	-	-
1102	-	-	-	-	-	-	-	-	-	-	-	-	-
1103	-	-	-	-	-	-	-	-	-	-	-	-	-

i : Immediately after dosing

-:No abnormal findings

Individual clinical signs

Dose (mg/kg) : 2000

Sex : Female

Animal No.	minutes			hours			days						
	i-5	15	30	1	2	4	1	2	3	4	5	6	7
2101	-	-	-	-	-	-	-	-	-	-	-	-	-
2102	-	-	-	-	-	-	-	-	-	-	-	-	-
2103	-	-	-	-	-	-	-	-	-	-	-	-	-

i : Immediately after dosing

-:No abnormal findings

Item : Individual body weight

Sex : Male

Test Article : ECL

Dose : 0 mg/kg

Unit : g

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Animal No.	Day	0	1	3	7	B.W.G.
1001		36.2	36.9	37.3	37.4	1.2
1002		32.4	32.8	32.7	32.9	0.5
1003		32.9	34.7	34.8	35.0	2.1
Mean		33.8	34.8	34.9	35.1	1.3
S.D.		2.1	2.1	2.3	2.3	0.8
S.E.		1.2	1.2	1.3	1.3	0.5
n		3	3	3	3	3

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ECL : Electronic cigarette liquid

B.W.G.: Body weight gain

Item : Individual body weight

Sex : Male

Test Article : ECL

Dose : 2000 mg/kg

Unit : g

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Animal No.	Day	0	1	3	7	B.W.G.
2001		34.3	35.1	35.8	35.5	1.2
2002		32.8	32.7	33.7	32.8	0.0
2003		34.7	34.6	34.8	34.4	-0.3
Mean		33.9	34.1	34.8	34.2	0.3
S.D.		1.0	1.3	1.1	1.4	0.8
S.E.		0.6	0.7	0.6	0.8	0.5
n		3	3	3	3	3

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ECL : Electronic cigarette liquid

B.W.G.: Body weight gain

Item : Individual body weight

Sex : Female

Test Article : ECL

Dose : 0 mg/kg

Unit : g

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Animal No.	Day	0	1	3	7	B.W.G.
1101		29.9	29.3	30.3	30.4	0.5
1102		30.8	29.9	31.5	31.9	1.1
1103		29.4	29.2	30.2	30.7	1.3
Mean		30.0	29.5	30.7	31.0	1.0
S.D.		0.7	0.4	0.7	0.8	0.4
S.E.		0.4	0.2	0.4	0.5	0.2
n		3	3	3	3	3

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ECL : Electronic cigarette liquid

B.W.G.: Body weight gain



Item : Individual body weight

Sex : Female

Test Article : ECL

Dose : 2000 mg/kg

Unit : g

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Animal No.	Day	0	1	3	7	B.W.G.
2101		29.9	30.2	30.5	30.9	1.0
2102		30.9	30.8	30.9	32.0	1.1
2103		27.4	26.9	27.8	27.6	0.2
Mean		29.4	29.3	29.7	30.2	0.8
S.D.		1.8	2.1	1.7	2.3	0.5
S.E.		1.0	1.2	1.0	1.3	0.3
n		3	3	3	3	3

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ECL : Electronic cigarette liquid

B.W.G.: Body weight gain

Appendix 3-1 Oral single-dose toxicity study of Electronic cigarette liquid in mice  
Individual gross pathological findings

Animal No. 1001 Male 0 mg/kg Day 7 Schedule sacrifice

Gross pathology:

All tissues Not remarkable

Animal No. 1002 Male 0 mg/kg Day 7 Schedule sacrifice

Gross pathology:

All tissues Not remarkable

Animal No. 1003 Male 0 mg/kg Day 7 Schedule sacrifice

Gross pathology:

All tissues Not remarkable

Animal No. 2001 Male 2000 mg/kg Day 7 Schedule sacrifice

Gross pathology:

All tissues Not remarkable

Animal No. 2002 Male 2000 mg/kg Day 7 Schedule sacrifice

Gross pathology:

All tissues Not remarkable

Animal No. 2003 Male 2000 mg/kg Day 7 Schedule sacrifice

Gross pathology:

All tissues Not remarkable

Appendix 3-2 Oral single-dose toxicity study of Electronic cigarette liquid in mice  
Individual gross pathological findings

Animal No. 1101 Female 0 mg/kg Day 7 Schedule sacrifice

Gross pathology:

All tissues Not remarkable

Animal No. 1102 Female 0 mg/kg Day 7 Schedule sacrifice

Gross pathology:

All tissues Not remarkable

Animal No. 1103 Female 0 mg/kg Day 7 Schedule sacrifice

Gross pathology:

All tissues Not remarkable

Animal No. 2101 Female 2000 mg/kg Day 7 Schedule sacrifice

Gross pathology:

All tissues Not remarkable

Animal No. 2102 Female 2000 mg/kg Day 7 Schedule sacrifice

Gross pathology:

All tissues Not remarkable

Animal No. 2103 Female 2000 mg/kg Day 7 Schedule sacrifice

Gross pathology:

All tissues Not remarkable