

Table 2-2 Clinical signs in female rats

| Group | | Water for injection | CCA | CCA | CCA |
|-------------|-------------------|---------------------|-----|-----|-----|
| Dose(mg/kg) | Grade | 0 | 1 | 2 | 3 |
| Day | Item | + | + | + | + |
| 21 | No abnormal signs | 6 | 6 | 6 | 6 |
| 22 | No abnormal signs | 6 | 6 | 6 | 6 |
| 23 | No abnormal signs | 6 | 6 | 6 | 6 |
| 24 | No abnormal signs | 6 | 6 | 6 | 6 |
| 25 | No abnormal signs | 6 | 6 | 6 | 6 |
| 26 | No abnormal signs | 6 | 6 | 6 | 6 |
| 27 | No abnormal signs | 6 | 6 | 6 | 6 |
| 28 | No abnormal signs | 6 | 6 | 6 | 6 |

Numerals represent the number of animals.

Table 2-3 Clinical signs in female rats (Administration site)

| Group | Number of animals | Item | Day of administration (Before administration) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|----------------------|-------|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| Water for injection | 6 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| CCA (10 mg/kg) | 6 | Crust | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | |
| CCA (100 mg/kg) | 6 | Crust | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| CCA (300 mg/kg) | 6 | Crust | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |

Numerals represent the number of animals.

Table 3 Food consumption (g/day) in female rats

| Group Dose(mg/kg) | Water for injection | CCA 10 | CCA 100 | CCA 300 |
|----------------------|------------------------|---------------------|---------------------|---------------------|
| Day Pre | 15.8 \pm 3.7(6) | 16.7 \pm 2.5(6) | 16.8 \pm 1.7(6) | 17.0 \pm 2.2(6) |
| 5 | 19.0 \pm 0.6(6) | 18.7 \pm 1.9(6) | 18.3 \pm 1.5(6) | 6.0 (2)* |
| 12 | 20.0 \pm 0.6(6) | 19.0 \pm 2.0(6) | 20.8 \pm 2.5(6) | |
| 19 | 20.7 \pm 2.7(6) | 21.5 \pm 1.9(6) | 21.5 \pm 2.3(6) | |
| 26 | 17.8 \pm 2.1(6) | 18.3 \pm 2.1(6) | 18.8 \pm 2.1(6) | |

Values are expressed as the mean \pm S.D. (N).

* P<0.05 : Significantly different from Water for injection.

Table 4-1 Body weight (g) in female rats

| Group Dose(mg/Kg) | Water for injection | CCA 10 | CCA 100 | CCA 300 |
|----------------------|------------------------|-----------------|-----------------|-----------------|
| Day Pre | 151.2± 6.1(6) | 151.7± 6.5(6) | 149.7± 6.8(6) | 151.0± 5.2(6) |
| 6 | 176.7± 3.6(6) | 172.5± 8.0(6) | 165.5±10.8(6) | 142.0 (1) |
| 13 | 194.8± 6.2(6) | 191.3± 9.5(6) | 186.7±12.8(6) | |
| 20 | 203.3±10.2(6) | 202.5± 8.4(6) | 198.2±15.9(6) | |
| 27 | 216.8±12.4(6) | 218.0± 9.7(6) | 215.2±18.4(6) | |

Values are expressed as the mean + S.D. (N)
Not significantly different from Water for injection.

Table 4-2 Body weight gain (g) in female rats

| Group Dose (mg/kg) | Water for injection | CCA | CCA | CCA |
|-----------------------|------------------------|----------------|-----------------|------------|
| Day 6 | 25.5± 5.5(6) | 20.8± 5.7(6) | 15.8± 6.2(6)* | -4.0 (1) |
| 13 | 18.2± 5.6(6) | 18.8± 3.9(6) | 21.2± 4.3(6) | |
| 20 | 8.5± 4.3(6) | 11.2± 3.2(6) | 11.5± 6.7(6) | |
| 27 | 13.5± 4.8(6) | 15.5± 3.3(6) | 17.0± 4.4(6) | |

Values are expressed as the mean ± S.D. (N).

* P<0.05 : Significantly different from Water for injection.

Gross ophthalmological & slit-lamp examination

Grade

- | | |
|-----|---------------------|
| 0 : | No abnormal changes |
| 1 : | Slight |
| 2 : | Moderate |
| 3 : | Severe |
| P : | Non-graded change |
| U : | Unexamined |

Table 5-1 Gross ophthalmological & slit-lamp examination in female rats

| Group | | Water for injection | CCA | CCA | CCA |
|--------------|---------------------|---------------------|-----|-----|-----|
| Dose (mg/kg) | Item | Grade | 10 | 100 | 300 |
| Pre | No abnormal changes | 6 | 6 | 6 | 6 |
| 4w | No abnormal changes | 6 | 6 | 6 | 6 |

Numerals represent the number of animals.

Funduscopy examination

Grade

- 0 : No abnormal changes
- 1 : Slight
- 2 : Moderate
- 3 : Severe
- P : Non-graded change
- U : Unexamined

Table 5-2 Funduscopic examination in female rats

| Group | | Water for injection | CCA | CCA | CCA |
|--------------|---------------------|------------------------|-----|-----|-----|
| Dose (mg/kg) | Item | Grade | 10 | 100 | 300 |
| Pre | No abnormal changes | 6 | 6 | 6 | 6 |
| 4w | No abnormal changes | 6 | 6 | 6 | 6 |

Numerals represent the number of animals.

Standard Urinalysis

| | | | | | |
|--------------|---|-------------------|---|--------------|---|
| Color | 0 : Normal color 1 : Abnormal color | Protein | 0 : - 1 : + 2 : ++ 3 : +++ 4 : ++++ 300 <= | Glucose | 0 : - 1 : + 2 : ++ 3 : +++ 4 : ++++ 1 <= |
| Ketone body | 0 : - 1 : + 2 : ++ 3 : +++ 4 : ++++ | Bilirubin | 0 : - 1 : + 2 : ++ 3 : +++ 4 : ++++ 15 40 80 | Occult blood | 0 : - 1 : + 2 : ++ 3 : +++ 4 : ++++ 1 2 3 4 |
| Urobilinogen | 0 : + 1 : + 2 : ++ 3 : +++ 4 : ++++ | (Ehrlich unit/dL) | 0.1 1 2 4 8 <= | | |

Number of Animals
Item : Urinalysis
Sex : Female

| Group | Water for injection | CCA 10 | CCA 100 | CCA 300 |
|-------|---------------------|--------|---------|---------|
| | 0 | | | |
| 4 w | 6 | 6 | 6 | |

Table 6-1 Urinalysis in female rats

| Group | Water for injection | | | CCA | CCA |
|-------------|---------------------|---------------------------|-----------------------|-----------------------|-----------------------|
| Dose(mg/kg) | Grade | | | 10 | 100 |
| Color | 4W | 0 | 6 | 6 | 6 |
| pH | 4W | 5 5.5 6 6.5 | 2 | | |
| | | 7 7.5 8 8.5 9 | 1 1 2 1 1 | 1 3 1 2 1 | 1 1 1 1 1 |

Numerals represent the number of animals.
 Not significantly different from Water for injection.

Table 6-2 Urinalysis in female rats

Study No. : SBL94-84

| Group | Dose (mg/kg) | Water for injection | CCA | CCA | CCA |
|---------|--------------|---------------------|-----|-----|-----|
| Protein | 4w | Grade | 10 | 100 | 300 |
| Glucose | 4w | 0 | 4 | 3 | 4 |
| | | 1 | 1 | 1 | |
| | | 2 | 1 | 2 | 1 |
| | | 3 | | | 1 |
| | | 4 | | | |

Numerals represent the number of animals.
Not significantly different from Water for injection.

Table 6-3 Urinalysis in female rats

| Group | Dose(mg/kg) | Water for injection | CCA | CCA | CCA |
|-------------|-------------|---------------------|-----|-----|-----|
| Ketone body | 4w | Grade | 10 | 100 | 300 |
| Bilirubin | 4w | 0 | 6 | 6 | 6 |
| | | 1 | | | |
| | | 2 | | | |
| | | 3 | | | |
| | | 4 | | | |

Numerals represent the number of animals.
Not significantly different from water for injection.

Table 6-4 Urinalysis in female rats

| Group | Dose (mg/kg) | Water for injection | CCA | CCA | CCA |
|--------------|--------------|---------------------|-----|-----|-----|
| | | Grade | 10 | 100 | 300 |
| Occult blood | 4w | 0 | 2 | 3 | 6 |
| | | 1 | 1 | 1 | |
| | | 2 | 2 | | |
| | | 3 | 1 | | |
| | | 4 | | 2 | |
| Urobilinogen | 4w | 0 | 5 | 5 | 2 |
| | | 1 | 1 | 1 | 4 |
| | | 2 | | | |
| | | 3 | | | |
| | | 4 | | | |

Numerals represent the number of animals.
Not significantly different from Water for injection.

Hematology

| | | |
|----------------------------|----------------------|---|
| RBC | $(10^6/\text{mm}^3)$ | Number of red blood cells |
| WBC | $(10^3/\text{mm}^3)$ | Number of white blood cells |
| Ht | (%) | Hematocrit value |
| Hb | (g/dL) | Hemoglobin concentration |
| Plat. | $(10^3/\text{mm}^3)$ | Number of blood platelets |
| MCV | (fL) | Mean corpuscular volume |
| MCH | (pg) | Mean corpuscular hemoglobin |
| MCHC | (g/dL) | Mean corpuscular hemoglobin concentration |
| Ret. (%) | (%) | Reticulocyte ratio |
| Hemogram | | |
| Eosino. | $(10^3/\text{mm}^3)$ | Number of eosinophilic leukocytes |
| Eosino. | (%) | Eosinophilic leukocyte ratio |
| Baso. | $(10^3/\text{mm}^3)$ | Number of basophilic leukocytes |
| Baso. | (%) | Basophilic leukocyte ratio |
| Mono. | $(10^3/\text{mm}^3)$ | Number of monocytes |
| Mono. | (%) | Monocyte ratio |
| Lymph. | $(10^3/\text{mm}^3)$ | Number of lymphocytes |
| Lymph. | (%) | Lymphocyte ratio |
| Neutro. | $(10^3/\text{mm}^3)$ | Number of neutrophilic leukocytes |
| Neutro. | (%) | Neutrophilic leukocyte ratio |
| LUC | $(10^3/\text{mm}^3)$ | Number of large unstained cells |
| LUC | (%) | Large unstained cell ratio |
| Blood coagulation test | | |
| PT | (Sec) | Prothrombin time |
| APTT | (Sec) | Activated partial thromboplastin time |

Table 7 Hematology in female rats

| Group | Dose (mg/kg) N | Water for injection | CCA | CCA | CCA |
|---------|--|------------------------|--------------------|----------------------|-----|
| RBC | ($10^6/\text{mm}^3$) ($10^3/\mu\text{m}$) | 8.23 \pm 0.272 | 7.93 \pm 0.217 | 7.92 \pm 0.412 | |
| WBC | ($10^3/\mu\text{m}$) | 5.82 \pm 1.290 | 7.52 \pm 2.615 | 10.45 \pm 2.768** | |
| Ht | (%) | 46.77 \pm 1.34 | 44.68 \pm 1.16 | 42.37 \pm 2.46** | |
| Hb | (g/dL) | 16.48 \pm 0.31 | 16.03 \pm 0.45 | 14.70 \pm 1.12** | |
| Plat. | ($10^3/\mu\text{m}$) | 1034.7 \pm 40.6 | 1200.0 \pm 136.0 | 1532.8 \pm 176.4** | |
| MCV | (fL) | 56.3 \pm 1.24 | 56.3 \pm 1.27 | 53.4 \pm 2.76* | |
| MCH | (Pg) | 20.03 \pm 0.52 | 20.27 \pm 0.52 | 18.58 \pm 1.39 | |
| MCHC | (g/dL) | 35.25 \pm 0.44 | 35.92 \pm 0.44 | 34.72 \pm 0.95 | |
| Ret. | (%) | 1.67 \pm 0.27 | 2.08 \pm 0.17 | 4.18 \pm 0.96** | |
| Eosino. | ($10^3/\mu\text{m}$) | 0.108 \pm 0.054 | 0.148 \pm 0.102 | 0.072 \pm 0.027 | |
| Eosino. | (%) | 1.83 \pm 0.77 | 2.05 \pm 1.38 | 0.75 \pm 0.33* | |
| Baso. | ($10^3/\mu\text{m}$) | 0.008 \pm 0.004 | 0.015 \pm 0.008 | 0.022 \pm 0.012* | |
| Baso. | (%) | 0.13 \pm 0.05 | 0.17 \pm 0.08 | 0.18 \pm 0.12 | |
| Mono. | ($10^3/\mu\text{m}$) | 0.087 \pm 0.028 | 0.112 \pm 0.047 | 0.132 \pm 0.055 | |
| Mono. | (%) | 1.55 \pm 0.51 | 1.57 \pm 0.72 | 1.30 \pm 0.46 | |
| Lymph. | ($10^3/\mu\text{m}$) | 4.34 \pm 1.034 | 5.81 \pm 2.143 | 8.22 \pm 2.246** | |
| Lymph. | (%) | 74.50 \pm 6.31 | 76.87 \pm 5.43 | 78.80 \pm 5.10 | |
| Neutro. | ($10^3/\mu\text{m}$) | 1.22 \pm 0.390 | 1.38 \pm 0.552 | 1.90 \pm 0.759 | |
| Neutro. | (%) | 21.05 \pm 5.43 | 18.65 \pm 4.13 | 18.05 \pm 5.09 | |
| LUC | ($10^3/\mu\text{m}$) | 0.053 \pm 0.015 | 0.055 \pm 0.028 | 0.102 \pm 0.051 | |
| LUC | (%) | 0.97 \pm 0.23 | 0.72 \pm 0.13 | 0.93 \pm 0.34 | |
| PT | (Sec) | 7.88 \pm 0.32 | 7.87 \pm 0.26 | 8.05 \pm 0.40 | |
| APTT | (Sec) | 17.55 \pm 1.21 | 17.42 \pm 0.71 | 17.90 \pm 0.53 | |

Values are expressed as the mean \pm S.D.
 * P<0.05 , ** P<0.01 : Significantly different from Water for injection.

Blood Chemistry

| | |
|---------|---------|
| ASAT | (IU/L) |
| ALAT | (IU/L) |
| ALP | (IU/L) |
| G-GTP | (IU/L) |
| T.Bil. | (mg/dL) |
| T.Prot. | (g/dL) |
| Albumin | (g/dL) |
| A/G | |
| T.Chol. | (mg/dL) |
| TGL | (mg/dL) |
| Glucose | (mg/dL) |
| BUN | (mg/dL) |
| Creat. | (mg/dL) |
| IP | (mg/dL) |
| Ca | (mg/dL) |
| Na | (mEq/L) |
| K | (mEq/L) |
| Cl | (mEq/L) |
| Globlin | (g/dL) |

| |
|---------------------------------|
| Aspartate aminotransferase |
| Alanine aminotransferase |
| Alkaline phosphatase |
| Gamma - glutamyl transpeptidase |
| Total bilirubin |
| Total protein |
| Albumin / Globulin |
| Total cholesterol |
| Triglyceride |
| Glucose |
| Blood urea nitrogen |
| Creatinine |
| Inorganic phosphorus |
| Calcium |
| Sodium |
| Potassium |
| Chloride |
| Globulin |

Table 8 Blood chemistry in female rats

| Group Dose (mg/kg) N | Water for injection 6 | CCA 10 6 | CCA 100 6 | CCA 300 0 |
|----------------------------|-----------------------------|----------------|-----------------|-----------------|
| AsAT (IU/L) | 106.8±15.2 | 102.0±15.2 | 139.5±30.4* | |
| AST (IU/L) | 24.3±2.9 | 24.0±4.2 | 21.2±1.9 | |
| ALAT (IU/L) | 432.3±60.1 | 378.2±73.2 | 308.7±19.5** | |
| ALP (IU/L) | 1.3±1.0 | 1.8±1.3 | 1.7±1.2 | |
| G-GTP (IU/L) | 0.052±0.012 | 0.040±0.013 | 0.017±0.023** | |
| T-Bil. | 5.65±0.26 | 5.75±0.14 | 5.33±0.22* | |
| T.Prot. (g/dL) | 4.38±0.13 | 4.33±0.18 | 3.80±0.23** | |
| Albumin (g/dL) | 3.582±0.783 | 3.130±0.549 | 2.527±0.435* | |
| A/G | 50.5±1.3-5 | 48.7±10.0 | 62.0±6.4 | |
| T-Chol. (mg/dL) | 9.0±2.8 | 9.3±2.9 | 14.2±4.2* | |
| TGL (mg/dL) | 122.0±13.0 | 139.2±6.8* | 138.2±10.7* | |
| Glucose (mg/dL) | 17.0±3.11 | 18.70±3.31 | 20.10±3.21 | |
| BUN (mg/dL) | 0.225±0.021 | 0.232±0.041 | 0.190±0.026 | |
| Creat. (mg/dL) | 8.668±0.944 | 8.555±0.760 | 8.823±0.574 | |
| IP (mg/dL) | 9.48±0.13 | 9.55±0.16 | 9.35±0.23 | |
| Ca (mg/dL) | 143.8±0.8 | 143.3±0.8 | 143.5±1.0 | |
| Na (mEq/L) | 3.58±0.21 | 3.68±0.26 | 4.28±0.21** | |
| K (mEq/L) | 109.2±1.5 | 108.3±0.8 | 109.2±0.8 | |
| Cl (mEq/L) | 1.27±0.24 | 1.42±0.22 | 1.53±0.21 | |
| Globulin (g/dL) | | | | |

Values are expressed as the mean ± S.D.

* P<0.05 , ** P<0.01 : significantly different from Water for injection.

Gross Autopsy Findings

Grade

0 : No abnormal changes

1 : Slight

2 : Moderate

3 : Marked

P : Non-graded changes