Table 6
Biochemical findings of Wistar Hannover male rats treated with Aloe extract (1year)

Dose level (%)	0 (Control)	0.16	0.8	4.0
No. of rats	12	10	10	10
TP g/dL	6.54 ± 0.10	6.69 ± 0.10	6.70 ± 0.10	6.78 ± 0.15
Alb g/dL	4.05 ± 0.05	4.04 ± 0.09	4.23 ± 0.05	4.14 ± 0.13
A/G	1.66 ± 0.07	1.54 ± 0.06	1.72 ± 0.06	1.60 ± 0.08
T-Bil mg/dL	0.06 ± 0.00	0.05 ± 0.00	0.06 ± 0.00	0.06 ± 0.00
glu mg/dL	149.58 ± 4.51	157.50 ± 5.03	137.50 ± 3.33	157.00 ± 7.27
TG mg/dL	104.08 ± 17.17	121.90 ± 12.05	141.40 ± 16.60	150.20 ± 19.18
PL mg/dL	145.42 ± 9.67	140.50 ± 7.50	144.10 ± 6.87	157.20 ± 10.03
T-cho mg/dL	96.33 ± 8.70	89.40 ± 6.02	95.60 ± 6.70	107.30 ± 8.62
BUN mg/dL	15.22 ± 0.89	14.16 ± 0.72	17.24 ± 0.94	16.14 ± 0.97
Cre mg/dL	0.35 ± 0.01	0.37 ± 0.02	0.36 ± 0.02	0.39 ± 0.02
Na mEQ/L	140.25 ± 0.62	142.00 ± 0.47	138.10 ± 1.39	138.90 ± 0.92
Cl mEQ/L	102.58 ± 0.77	104.10 ± 0.66	101.20 ± 1.23	101.30 ± 0.56
K mEQ/L	4.18 ± 0.14	4.63 ± 0.22	3.94 ± 0.12	4.45 ± 0.20
Ca mEQ/L	10.24 ± 0.08	10.40 ± 0.13	10.17 ± 0.16	10.22 ± 0.15
IP mg/dL	4.89 ± 0.14	4.67 ± 0.16	4.32 ± 0.14*	4.19 ± 0.17**
AST IU/L	62.67 ± 4.79	94.30 ± 10.53**	65.00 ± 4.16	66.00 ± 5.06
ALT IU/L	28.75 ± 2.31	38.70 ± 5.10	34.50 ± 5.89	27.70 ± 1.50
ALP IU/L	191.92 ± 8.69	233.62 ± 14.62	218.60 ± 11.56	230.50 ± 21.07
γ-GTP IU/L	less than 2	less than 2	less than 2	less than 2

Each value represents the mean±SD.

* Significantly different from the control at $p<0.05$.

** Significantly different from the control at $p<0.01$.

Table 7
Biochemical findings of Wistar Hannover female rats treated with Aloe extract (1year)

Dose level (%)	0 (Control)	0.16	0.8	4.0
No. of rats	13	10	10	10
TP g/dL	6.95 ± 0.10	6.95 ± 0.12	7.10 ± 0.09	6.76 ± 0.18
Alb g/dL	2.18 ± 0.12	2.33 ± 0.11	2.35 ± 0.07	2.37 ± 0.12
A/G	4.72 ± 0.11	4.85 ± 0.10	4.97 ± 0.09	4.72 ± 0.13
T-Bil mg/dL	0.10 ± 0.01	0.10 ± 0.01	0.10 ± 0.01	0.09 ± 0.01
glu mg/dL	139.50 ± 6.73	141.27 ± 5.17	113.40 ± 5.81**	122.30 ± 5.40
TG mg/dL	121.25 ± 44.65	33.36 ± 6.37*	37.40 ± 10.73	112.00 ± 11.26
PL mg/dL	141.50 ± 8.89	140.27 ± 7.84	122.50 ± 5.15	147.70 ± 6.66
T-cho mg/dL	67.92 ± 5.12	75.55 ± 6.55	61.30 ± 3.47	72.00 ± 4.23
BUN mg/dL	15.87 ± 1.05	16.22 ± 0.67	21.36 ± 1.69**	15.77 ± 0.76
Cre mg/dL	0.35 ± 0.01	0.38 ± 0.02	0.40 ± 0.02*	0.34 ± 0.01
Na mEQ/L	139.17 ± 0.64	139.73 ± 0.60	142.10 ± 1.22	136.60 ± 2.12
Cl mEQ/L	102.08 ± 0.50	104.46 ± 0.71	106.80 ± 1.13**	100.50 ± 1.52
K mEQ/L	4.45 ± 0.30	4.64 ± 0.23	4.19 ± 0.12	4.18 ± 0.30
Ca mEQ/L	10.55 ± 0.13	10.32 ± 0.16	10.68 ± 0.13	9.86 ± 0.24*
IP mg/dL	5.09 ± 0.19	4.73 ± 0.22	5.17 ± 0.09	3.52 ± 0.21**
AST IU/L	87.08 ± 13.04	111.55 ± 16.20	94.90 ± 15.25	57.70 ± 3.71
ALT IU/L	35.33 ± 5.99	37.46 ± 4.96	29.00 ± 3.31	18.90 ± 1.06*
ALP IU/L	78.92 ± 8.28	74.18 ± 10.24	73.10 ± 4.12	76.70 ± 5.78
γ-GTP IU/L	less than 2	less than 2	less than 2	less than 2

Each value represents the mean±SD.

* Significantly different from the control at $p<0.05$.

** Significantly different from the control at $p<0.01$.

Table 8
Organ weight of Wistar Hannover male rats treated with Aloe extract (1year)

Dose level (%)	0 (Control)	0.16	0.8	4.0
No. of rats	12	10	10	10
Final body weights(g)	574.85 ± 20.25	590.54 ± 21.97	566.88 ± 29.83	537.52 ± 20.55
Absolute (g)				
Heart	1.168 ± 0.026	1.290 ± 0.044	1.281 ± 0.069	1.267 ± 0.042
Spleen	0.836 ± 0.025	0.963 ± 0.062	0.886 ± 0.052	0.844 ± 0.050
Thymus	0.300 ± 0.142	0.164 ± 0.028	0.136 ± 0.016	0.124 ± 0.019
Pituitary gland	0.012 ± 0.001	0.016 ± 0.002	0.015 ± 0.002	0.015 ± 0.001
Adrenals	0.063 ± 0.003	0.061 ± 0.003	0.075 ± 0.006	0.064 ± 0.002
Lungs	1.360 ± 0.025	1.644 ± 0.222	1.391 ± 0.036	1.440 ± 0.031
Liver	12.078 ± 0.502	13.073 ± 0.737	14.080 ± 0.962	13.083 ± 0.649
Salivary glands	0.748 ± 0.017	0.715 ± 0.037	0.752 ± 0.038	0.665 ± 0.024
Kidneys	2.583 ± 0.057	2.615 ± 0.085	2.619 ± 0.122	2.776 ± 0.094
Testes	3.828 ± 0.053	3.677 ± 0.075	3.747 ± 0.059	3.809 ± 0.118
Seminal vesicles	1.299 ± 0.101	1.443 ± 0.104	1.467 ± 0.067	1.368 ± 0.096
Prostate	1.488 ± 0.066	1.400 ± 0.090	1.469 ± 0.096	1.363 ± 0.104
Brain	2.136 ± 0.021	2.119 ± 0.026	2.103 ± 0.023	2.173 ± 0.029
Relative (g/100g b.w.)				
Heart	0.205 ± 0.005	0.220 ± 0.008	0.230 ± 0.017	0.236 ± 0.005
Spleen	0.147 ± 0.005	0.163 ± 0.008	0.158 ± 0.010	0.157 ± 0.007
Thymus	0.052 ± 0.025	0.028 ± 0.005	0.024 ± 0.003	0.024 ± 0.004
Pituitary gland	0.002 ± 0.000	0.003 ± 0.002	0.003 ± 0.002	0.003 ± 0.001
Adrenals	0.011 ± 0.000	0.011 ± 0.001	0.013 ± 0.001	0.012 ± 0.001
Lungs	0.239 ± 0.007	0.280 ± 0.036	0.250 ± 0.011	0.270 ± 0.009
Liver	2.099 ± 0.039	2.207 ± 0.060	2.544 ± 0.229*	2.431 ± 0.066
Salivary glands	0.130 ± 0.002	0.123 ± 0.009	0.137 ± 0.011	0.125 ± 0.006
Kidneys	0.453 ± 0.020	0.446 ± 0.018	0.470 ± 0.030	0.521 ± 0.023
Testes	0.674 ± 0.023	0.629 ± 0.024	0.674 ± 0.031	0.715 ± 0.029
Seminal vesicles	0.232 ± 0.022	0.248 ± 0.021	0.259 ± 0.017	0.259 ± 0.023
Prostate	0.263 ± 0.015	0.241 ± 0.021	0.261 ± 0.021	0.259 ± 0.029
Brain	0.376 ± 0.013	0.363 ± 0.019	0.378 ± 0.015	0.408 ± 0.011

Each value represents the mean±SD.

* Significantly different from the control at $p<0.05$.

Table 9

Organ weight of Wistar Hannover female rats treated with Aloe extract (1year)

Dose level (%)	0 (Control)	0.16	0.8	4.0
No. of rats	14	10	10	10
Body weights(g)	376.97 ± 21.43	333.39 ± 10.96	321.26 ± 16.23	316.89 ± 14.72*
Absolute (g)				
Heart	0.870 ± 0.025	0.850 ± 0.027	0.854 ± 0.021	0.853 ± 0.025
Spleen	0.658 ± 0.047	0.588 ± 0.021	0.575 ± 0.040	0.623 ± 0.018
Thymus	0.135 ± 0.010	0.146 ± 0.018	0.147 ± 0.015	0.114 ± 0.012
Pituitary gland	0.019 ± 0.002	0.022 ± 0.002	0.022 ± 0.002	0.018 ± 0.001
Adrenals	0.081 ± 0.003	0.070 ± 0.004	0.076 ± 0.003	0.068 ± 0.003*
Lungs	1.088 ± 0.035	1.080 ± 0.028	1.040 ± 0.023	1.029 ± 0.026
Liver	7.714 ± 0.552	6.619 ± 0.189	6.551 ± 0.356	6.857 ± 0.348
Salivary glands	0.531 ± 0.017	0.518 ± 0.016	0.496 ± 0.016	0.490 ± 0.017
Kidneys	1.826 ± 0.057	1.714 ± 0.036	1.759 ± 0.050	1.959 ± 0.082
Ovaries	0.159 ± 0.014	0.142 ± 0.016	0.130 ± 0.011	0.308 ± 0.186
Uterus	0.906 ± 0.058	0.843 ± 0.069	0.797 ± 0.057	0.827 ± 0.100
Brain	1.935 ± 0.020	2.005 ± 0.012	1.991 ± 0.026	1.960 ± 0.029
Relative (g/100g b.w.)				
Heart	0.236 ± 0.009	0.256 ± 0.006	0.269 ± 0.010**	0.272 ± 0.008**
Spleen	0.174 ± 0.006	0.177 ± 0.005	0.180 ± 0.011	0.199 ± 0.006
Thymus	0.037 ± 0.003	0.044 ± 0.005	0.048 ± 0.006	0.037 ± 0.004
Pituitary gland	0.006 ± 0.000	0.005 ± 0.000	0.007 ± 0.001	0.006 ± 0.000
Adrenals	0.022 ± 0.001	0.021 ± 0.002	0.024 ± 0.001	0.022 ± 0.001
Lungs	0.296 ± 0.014	0.326 ± 0.008	0.329 ± 0.015	0.330 ± 0.015
Liver	2.036 ± 0.050	1.993 ± 0.043	2.040 ± 0.046	2.170 ± 0.066
Salivary glands	0.144 ± 0.005	0.157 ± 0.007	0.156 ± 0.006	0.155 ± 0.004
Kidneys	0.494 ± 0.017	0.517 ± 0.013	0.554 ± 0.018	0.625 ± 0.028**
Ovaries	0.042 ± 0.002	0.042 ± 0.004	0.040 ± 0.002	0.098 ± 0.059
Uterus	0.235 ± 0.030	0.269 ± 0.024	0.255 ± 0.026	0.263 ± 0.033
Brain	0.534 ± 0.031	0.607 ± 0.019	0.633 ± 0.032*	0.629 ± 0.028*

Each value represents the mean±SD.

* Significantly different from the control at $p<0.05$.

** Significantly different from the control at $p<0.01$.

Table 10

Nonneoplastic lesions of Wistar Hannover Male rats treated with Aloe extract (1year)

Organs	Lesions	Grade	Dose level (%)			
			0 (control)	0.16	0.8	4
Heart			(12)	(10)	(10)	(10)
	Microgranuloma	+	4	2	2	3
	Inflammatory cell infiltration, focal	+	3	3	3	4
Spleen			(12)	(10)	(10)	(10)
	Accessory spleen		1	0	0	0
Thymus			(12)	(9)	(10)	(8)
	Cyst	+	1	0	0	0
	Microgranuloma	+	1	0	0	0
Ileocecal lymph node			(12)	(8)	(10)	(10)
	Dilatation of sinus	+	7	0	3	1
		++	0	1	1	1
		+++	0	0	0	6 *
	Pigmentation	+	1	1	2	9 **
Mesenteric lymph node			(12)	(10)	(10)	(10)
	Dilatation of sinus	+	9	5	4	8
	Pigmentation	+	0	0	1	1
Cervical lymph node			(11)	(10)	(8)	(10)
	Dilatation of sinus	+	1	0	0	0
	Pigmentation	+	4	2	4	6
Pituitary gland			(10)	(9)	(7)	(7)
	Pseudocyst, anterior lobe	+	1	2	2	0
	Pseudocyst, middle lobe	+	1	1	1	0
	Cyst, anterior lobe	+	1	0	0	0
	Cyst, middle lobe	+	1	0	0	0
	Hyperplasia, anterior lobe	+	0	1	0	0
Thyroid glands			(12)	(10)	(10)	(10)
	Vacuolar change, follicular cell, diffuse	+	3	1	0	4
	Hyperplasia, C-cell, focal	+	5	3	6	3
	Hyperplasia, C-cell, diffuse	++	0	0	0	1
Adrenals			(12)	(10)	(10)	(10)
	Accessory cortical tissue		3	0	1	3
	Vacuolation, cortex	+	0	1	0	0
Lungs			(12)	(10)	(10)	(10)
	Inflammatory cell infiltration, focal	+	6	4	4	2
Cecum			(12)	(10)	(10)	(10)
	Pigmentation	+	1	0	0	3
Colon			(12)	(10)	(10)	(10)
	Pigmentation	+	0	0	0	1
Liver			(12)	(10)	(10)	(10)
	Inflammatory cell infiltration, focal	+	1	2	1	0
	Microgranuloma	+	2	1	1	1
	Clear cell foci	+	1	0	0	0
	Fatty cahge	+	1	1	2	0
Kidneys			(12)	(10)	(10)	(10)
	Chronic nephropathy	+	4	7 *	3	3
		++	1	0	0	3
	Inflammatory cell infiltration, focal	+	4	5	3	5
		++	0	0	0	1
	Pigmentation, tubular	+	1	0	1	5
		++	0	0	0	4 **
	Pyelectasis	+	1	0	0	0
	Pyelitis	+	2	0	1	0
	Cyst	+	0	0	1	0
Testes			(12)	(10)	(10)	(10)
	Mineralization, seminiferous tubule	+	1	0	0	0
Prostate			(12)	(10)	(10)	(10)
	Inflammatory cell infiltration, focal	+	1	0	1	1
	Prostatic stone	+	1	0	0	0

Number of animals examined are given in "( )" .

* Significantly different from the control at $p<0.05$.

** Significantly different from the control at $p<0.005$.

Table 11

Nonneoplastic lesions of Wistar Hannover Female rats treated with Aloe extract (1year)

Organs	Lesions	Grade	Dose level (%)			
			0 (control)	0.16	0.8	4
Heart			(14)	(10)	(10)	(10)
	Inflammatory cell infiltration, focal	+	1	1	1	0
Thymus			(12)	(9)	(10)	(9)
	Cyst	+	2	0	1	2
Ileocecal lymph node			(7)	(8)	(7)	(9)
	Dilatation of sinus	+	1	2	2	0
		++	0	0	2	2
		+++	0	0	0	7 *
	Pigmentation	+	0	0	3	5 *
Mesenteric lymph node			(12)	(10)	(9)	(10)
	Dilatation of sinus	+	4	4	5	8 *
	Pigmentation	+	0	2	0	1
Cervical lymph node			(14)	(9)	(9)	(10)
	Dilatation of sinus	+	2	0	1	3
	Pigmentation	+	6	6	4	7
Pituitary gland			(12)	(8)	(6)	(9)
	Pseudocyst, anterior lobe	+	2	3	0	0
	Pseudocyst, middle lobe	+	1	1	0	0
	Cyst, anterior lobe	+	1	0	2	0
	Cyst, middle lobe	+	1	0	0	0
	Hyperplasia, anterior lobe	+	0	2	1	0
Thyroid glands			(13)	(9)	(9)	(9)
	Vacuolar change, follicular cell, diffuse	+	0	1	1	1
	Hyperplasia, C-cell, focal	+	6	3	3	2
	Hyperplasia, C-cell, diffuse	++	1	0	0	0
Adrenals			(14)	(10)	(10)	(10)
	Accessory cortical tissue		1	1	1	0
Lungs			(14)	(10)	(10)	(10)
	Inflammatory cell infiltration, focal	+	3	2	3	3
Ileum			(14)	(10)	(10)	(10)
	Pigmentation	+	0	0	1	0
Cecum			(14)	(10)	(10)	(10)
	Pigmentation	+	0	0	0	1
Colon			(14)	(10)	(10)	(10)
	Pigmentation	+	1	0	0	0
Liver			(14)	(10)	(10)	(10)
	Microgranuloma	+	0	2	0	2
	Clear cell foci	+	1	0	1	1
	Fatty change	+	2	0	1	0
	Hyperplasia of cholangiole	+	0	1	1	0
Kidneys			(14)	(10)	(10)	(10)
	Chronic nephropathy	+	3	1	2	4
	Inflammatory cell infiltration, focal	+	4	2	3	5
	Pigmentation, tubular	+	4	2	3	4
		++	0	0	2	4 **
	Pyelectasis	+	1	2	2	0
	Mineralization	+	2	0	0	0
Mammary gland			(13)	(10)	(10)	(10)
	Dilatation of duct	+	0	0	1	1
Ovaries			(14)	(10)	(10)	(10)
	Cyst	+	0	0	0	3
Uterus			(14)	(10)	(10)	(10)
	Dilatation of duct	+	0	1	3	2

Number of animals examined are given in "( )" .

* Significantly different from the control at $p<0.05$.

** Significantly different from the control at $p<0.005$.

Table 12

Neoplastic lesions of Wistar Hannover Male rats treated with Aloe extract (1year)

Organs	Lesions	Dose level (%)			
		0 (control)	0.16	0.8	4
Thymus		(12)	(9)	(10)	(8)
	Thymoma	1	0	0	0
Pituitary gland		(10)	(9)	(7)	(7)
	Adenoma, anterior lobe	0	1	0	0
Adrenals		(12)	(10)	(10)	(10)
	Benign spindle cell tumor, cortex	0	0	0	1
Others		(12)	(10)	(10)	(10)
	Lypoma	2	0	1	0

Number of animals examined are given in "( )" .

Table 13

Neoplastic lesions of Wistar Hannover Female rats treated with Aloe extract (1year)

Organs	Lesions	Dose level (%)			
		0 (control)	0.16	0.8	4
Pituitary gland		(12)	(8)	(6)	(9)
	Adenoma, anterior lobe	1	0	0	0
Others		(14)	(10)	(10)	(10)
	Lypoma	1	0	0	1

Number of animals examined are given in "( )" .

Table 14 Average intakes of food and aloe extract per rat (2 years)

	Dose of aloe (%)	Daily intakes		Total intakes of aloe (g/rat/2-years)
		Food (g/rat/day)	Aloe (mg/kg b.w./day)	
Male	0.0	21.86	—	—
	0.8	22.02	358.27	16.80
	4.0	22.69	1,989.91	17.32
Female	0.0	16.51	—	—
	0.8	15.62	418.56	11.92
	4.0	15.78	2,341.09	12.04

Table 15(1) Body weight and organ weight of Wistar Hannover rats (2 years)

			4.0% aloe		0.8% aloe		Basal diet	
			Male	Female	Male	Female	Male	Female
No. of rats			40	39	37	33	34	33
Body weight		absolute (g)	536.4 ± 73.0[c]	337.0 ± 64.8	610.7 ± 85.0	374.9 ± 97.8	600.5 ± 111.9	400.1 ± 88.4
Brain		absolute (g)	2.26 ± 0.11	2.03 ± 0.10	2.25 ± 0.11	2.00 ± 0.18	2.80 ± 3.20	2.04 ± 0.10
		relative (%)	0.43 ± 0.06	0.62 ± 0.11	0.38 ± 0.06	0.57 ± 0.15	0.48 ± 0.56	0.54 ± 0.15
Salivary gland	Right	absolute	0.35 ± 0.05	0.25 ± 0.04	0.35 ± 0.05	0.27 ± 0.04	1.47 ± 4.53	0.27 ± 0.07
		relative	0.07 ± 0.01	0.08 ± 0.01	0.06 ± 0.01	0.08 ± 0.03	0.23 ± 0.69	0.07 ± 0.02
	Left	absolute	0.34 ± 0.04	0.25 ± 0.04	0.35 ± 0.04	0.26 ± 0.03	1.48 ± 4.62	0.27 ± 0.06
		relative	0.06 ± 0.01	0.08 ± 0.02	0.06 ± 0.01	0.07 ± 0.02	0.23 ± 0.70	0.07 ± 0.02
Thymic gland		absolute	0.40 ± 0.63	0.20 ± 0.18	0.63 ± 1.04	0.79 ± 1.83	1.72 ± 4.40	1.02 ± 2.49
		relative	0.08 ± 0.14	0.06 ± 0.05	0.11 ± 0.19	0.24 ± 0.63	0.30 ± 0.83	0.26 ± 0.70
Heart		absolute	1.46 ± 0.16	0.99 ± 0.16	1.55 ± 0.23	1.07 ± 0.17	2.20 ± 3.60	1.10 ± 0.19
		relative	0.27 ± 0.03	0.30 ± 0.06	0.26 ± 0.04	0.30 ± 0.06	0.38 ± 0.63	0.29 ± 0.09
Lung	Right	absolute	1.05 ± 0.11	0.74 ± 0.10	1.05 ± 0.15	0.74 ± 0.10	1.74 ± 3.85	0.87 ± 0.44
		relative	0.20 ± 0.03	0.23 ± 0.04	0.17 ± 0.02	0.21 ± 0.05	0.30 ± 0.67	0.25 ± 0.25
	Left	absolute	0.55 ± 0.06	0.39 ± 0.05	0.56 ± 0.06	0.41 ± 0.10	1.26 ± 4.03	0.44 ± 0.11
		relative	0.10 ± 0.02	0.12 ± 0.02	0.09 ± 0.01	0.11 ± 0.02	0.22 ± 0.70	0.12 ± 0.07

[a] $P<0.05$ vs. male basal diet group

[b] $P<0.05$ vs. female basal diet group

[c] $P<0.05$ vs. male 0.8% aloe group

Table 15(2) Body weight and organ weight of Wistar Hannover rats (2 years)

			4.0% aloe		0.8% aloe		Basal diet	
			Male	Female	Male	Female	Male	Female
Liver		absolute	13.97 ± 2.52	8.09 ± 1.80	13.98 ± 2.63	8.98 ± 2.35	13.50 ± 2.70	9.19 ± 2.58
		relative	2.62 ± 0.43[a,c]	2.42 ± 0.46	2.30 ± 0.34	2.44 ± 0.46	2.26 ± 0.26	2.34 ± 0.56
Kidney	Right	absolute	2.00 ± 0.64	1.55 ± 2.27	1.72 ± 0.39	1.19 ± 0.24	2.51 ± 3.39	1.24 ± 0.26
		relative	0.38 ± 0.12	0.49 ± 0.80	0.28 ± 0.06	0.33 ± 0.12	0.41 ± 0.51	0.33 ± 0.13
	Left	absolute	1.94 ± 0.64	1.15 ± 0.16	1.71 ± 0.38	1.15 ± 0.24	2.59 ± 3.72	1.20 ± 0.27
		relative	0.37 ± 0.13	0.35 ± 0.07	0.28 ± 0.06	0.32 ± 0.12	0.42 ± 0.56	0.32 ± 0.12
Adrenal gland	Right	absolute	0.04 ± 0.01	0.04 ± 0.02	0.04 ± 0.01	0.05 ± 0.02	0.04 ± 0.02	0.07 ± 0.12
		relative	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.01	0.01 ± 0.00	0.02 ± 0.06
	Left	absolute	0.04 ± 0.02	0.04 ± 0.01	0.04 ± 0.01	0.04 ± 0.01	0.06 ± 0.09	0.06 ± 0.06
		relative	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.01	0.02 ± 0.03
Spleen		absolute	1.32 ± 0.27[a]	0.92 ± 0.45	1.54 ± 0.67[a]	1.11 ± 0.48	2.91 ± 4.78	0.99 ± 0.42
		relative	0.25 ± 0.05[a]	0.28 ± 0.16	0.25 ± 0.10[a]	0.30 ± 0.12	0.46 ± 0.70	0.25 ± 0.12
Ovary	Right	absolute		0.26 ± 1.09		0.09 ± 0.05		0.10 ± 0.06
		relative		0.08 ± 0.34		0.02 ± 0.01		0.03 ± 0.01
	Left	absolute		0.30 ± 1.36		0.08 ± 0.02		0.33 ± 1.33
		relative		0.08 ± 0.37		0.02 ± 0.01		0.07 ± 0.27
Testis	Right	absolute	1.86 ± 0.27		1.82 ± 0.23		2.39 ± 4.12	
		relative	0.35 ± 0.06		0.30 ± 0.05		0.41 ± 0.72	
	Left	absolute	1.90 ± 0.22		1.84 ± 0.24		2.50 ± 4.40	
		relative	0.36 ± 0.06		0.31 ± 0.06		0.42 ± 0.77	

[a] P<0.05 vs. male basal diet group

[b] P<0.05 vs. female basal diet group

[c] P<0.05 vs. male 0.8% aloe group

Table 16 Hematological and biochemical data of Wistar Hannover rats (2years)

		4.0% aloe		0.8% aloe		Basal diet	
		Male	Female	Male	Female	Male	Female
WBC	/μl	6270.0 ± 2727.5	6556.8 ± 17304.8	6905.4 ± 2608.8	4381.8 ± 2465.2	6379.4 ± 2847.6	4306.7 ± 1800.4
RBC	x10⁴/mm³	765.8 ± 95.9	738.4 ± 75.2[d]	738.1 ± 99.4	643.2 ± 118.8	691.4 ± 158.5	684.3 ± 113.9
Hb	g/dl	13.4 ± 1.8[a]	14.5 ± 1.2[d]	12.0 ± 2.5	12.2 ± 2.8	11.7 ± 3.5	13.2 ± 2.7
Ht	%	43.5 ± 5.3	45.3 ± 4.1	40.1 ± 6.6	38.7 ± 8.3	38.3 ± 10.0	42.0 ± 7.6
MCV	μ3	57.2 ± 3.7[b]	61.5 ± 3.1	54.2 ± 4.2	59.8 ± 3.8	55.1 ± 4.4	61.2 ± 4.2
MCH	pg	17.6 ± 1.4	19.7 ± 0.8	16.2 ± 2.2	18.8 ± 1.8	16.6 ± 2.3	19.2 ± 2.1
MCHC	%	30.7 ± 1.2	32.0 ± 1.0	29.8 ± 2.0	31.5 ± 1.6	30.3 ± 2.6	31.4 ± 2.1
Pt	x10⁴/mm³	135.0 ± 24.6[a]	101.9 ± 16.5	122.1 ± 30.2	108.6 ± 24.1	114.3 ± 24.8	99.0 ± 17.1
TP	g/dl	6.4 ± 0.5	7.1 ± 0.4	6.6 ± 0.4	6.8 ± 0.6	6.4 ± 0.7	7.1 ± 0.8
Alb	g/dl	3.4 ± 0.5	4.3 ± 0.4[d]	3.4 ± 0.3	3.8 ± 0.6	3.2 ± 0.6	4.0 ± 0.7
A/G		1.1 ± 0.2	1.6 ± 0.3[c,d]	1.1 ± 0.2	1.3 ± 0.4	1.0 ± 0.2	1.3 ± 0.4
T-Bil	mg/dl	0.1 ± 0.3	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.1	0.1 ± 0.0	0.1 ± 0.0
γ-GTP	IU/l	2>	2>	2>	2>	2>	2>
AST	IU/l	60.3 ± 42.4[a]	76.5 ± 21.2	68.6 ± 16.1	99.0 ± 51.3	99.5 ± 49.0	112.5 ± 105.2
ALT	IU/l	30.6 ± 51.1	21.8 ± 8.6	26.4 ± 8.7	32.4 ± 21.5	31.2 ± 15.9	34.1 ± 28.8
ALP	IU/l	210.2 ± 130.0	142.9 ± 283.1	196.7 ± 50.7	115.8 ± 57.2	216.0 ± 87.2	97.3 ± 50.9
T-Cho	mg/dl	146.3 ± 65.5	94.9 ± 20.2	133.7 ± 73.8	102.1 ± 38.9	133.4 ± 63.0	109.6 ± 43.1
TG	mg/dl	175.3 ± 112.7	94.1 ± 78.5	185.5 ± 165.5	66.8 ± 57.3	137.1 ± 78.2	100.0 ± 108.6
PL	mg/dl	208.6 ± 78.8	173.8 ± 33.4	195.4 ± 85.2	174.6 ± 52.3	197.4 ± 66.4	188.8 ± 55.8
Glu(BS)	mg/dl	125.9 ± 21.2	119.9 ± 19.2	132.7 ± 19.5	122.1 ± 19.0	126.4 ± 28.5	119.6 ± 29.3
BUN	mg/dl	19.5 ± 13.0	14.3 ± 3.4	16.9 ± 8.2	15.4 ± 8.9	19.5 ± 7.9	15.3 ± 7.6
Cr	mg/dl	0.5 ± 0.6	0.3 ± 0.0	0.4 ± 0.3	0.4 ± 0.4	0.5 ± 0.4	0.3 ± 0.1
Na	mEQ/dl	139.9 ± 3.3[a]	139.6 ± 1.5	141.5 ± 1.5	138.4 ± 3.6	142.7 ± 1.9	140.2 ± 3.1
K	mEQ/dl	4.7 ± 0.6[b]	4.5 ± 0.6	5.1 ± 0.6	4.6 ± 0.6	5.0 ± 0.7	4.7 ± 0.8
Cl	mEQ/dl	104.7 ± 2.6[a]	104.6 ± 2.1[d]	105.5 ± 1.7[a]	102.6 ± 2.9[c]	107.7 ± 2.0	104.7 ± 3.2
Ca	mg/dl	10.1 ± 0.9	10.1 ± 0.4	10.0 ± 0.5	9.9 ± 0.8	10.1 ± 1.0	10.2 ± 0.5
P	mg/dl	5.3 ± 1.9	4.4 ± 0.5	5.0 ± 0.8	4.8 ± 1.6	5.4 ± 1.8	4.8 ± 1.2

a $P<0.05$ vs. male basal diet group
b $P<0.05$ vs. male 0.8% aloe group
c $P<0.05$ vs. female basal diet group
d $P<0.05$ vs. female 0.8% aloe group

Table 17

SUMMARY OF NON-NEOPLASTIC OR PRENEOPLASTIC LESIONS (2 years).

ORGAN AND FINDINGS	SEX ----------	MALE			FEMALE		
	GROUP NO. ------	1	2	3	4	5	6
	LEVEL(%) -------	4.0	0.8	0	4.0	0.8	0
	No. of animals/group	42	39	38	45	42	40
Heart							
	Cardiomyopathy/(1)a	6	5	10	1	2	0
	Cardiomyopathy/(2)a	1	0	0	0	0	0
	Fibrosis, myocardial/(1)a	0	3	2	0	0	1
	Mineralization, artery/(1)a	0	0	0	0	0	1
Mandibular lymph node							
	Cellular infiltration, histiocyte/(1)a	0	0	1	0	0	0
	Cellular infiltration, plasma cell/(1)a	13	11	7	10	5	12
	Cellular infiltration, plasma cell/(2)a	1	2	4	2	1	1
	Cellular infiltration, plasma cell/(3)a	0	2	1	0	1	0
	Dilatation, sinus/(1)a	8	10	7	8	4	4
	Dilatation, sinus/(2)a	4	3	1	0	1	1
	Dilatation, sinus/(3)a	2	0	0	0	0	0
	Inflammation/(2)a	0	1	0	0	0	0
	Hyperplasia, lymphocyte	0	0	0	1	0	1
Mesenteric lymph node							
	Cellular infiltration, plasma cell/(1)a	1	0 *	2	2	0	0
	Cellular infiltration, plasma cell/(2)a	0	0	3	0	0	0
	Dilatation, sinus/(1)a	4 **	8 *	4	9 ##	5	2
	Dilatation, sinus/(2)a	7	5	1	13	2	1
	Dilatation, sinus/(3)a	20	1	0	16	0	0
	Fibrosis/(1)a	1	0	1	0	0	0
	Hemorrhage/(2)a	0	1	0	0	1	0
	Thrombus/(1)a	1	0	0	0	0	0
Other lymph node		[11]b	[7]b	[6]b	[1]b	[3]b	[4]b
	Cellular infiltration, plasma cell/(1)a	1	0	2	0	2	0
	Cellular infiltration, plasma cell/(2)a	0	2	2	1	1	2
	Cellular infiltration, plasma cell/(3)a	0	2	0	0	0	0
	Dilatation, sinus/(1)a	1	0	0	0	0	0
	Dilatation, sinus/(2)a	5	0	2	0	1	1
	Dilatation, sinus/(3)a	3	2	2	0	0	1
	Fibrosis/(2)a	0	1	0	0	0	0
	Inflammation/(3)a	0	1	0	0	0	0
	Hyperplasia, lymphocyte	1	0	0	0	0	0
Spleen							
	Atrophy/(1)a	0	0	1	0	2	0
	Atrophy/(2)a	0	0	0	0	0	1
	Extramedullary hematopoiesis/(1)a	30	28	20	29	17	22
	Extramedullary hematopoiesis/(2)a	2	6	5	3	11	6
	Extramedullary hematopoiesis/(3)a	0	1	2	0	1	0
	Fibrosis/(2)a	0	1	0	0	0	0
	Hemorrhage/(3)a	0	0	0	0	0	1
	Hyperplasia, lymphocyte	1	0	1	0	0	0
Bone marrow							
	Hematopoiesis/(1)a	8	6	6	2	6	2
	Hematopoiesis/(2)a	0	1	0	0	0	0
	Hematopoiesis/(3)a	0	1	0	0	0	0
	Inflammation/(1)a	0	0	1	0	0	0
	Inflammation/(2)a	0	0	1	0	0	0
Thymus							
	Cyst/(1)a	0	0	1	1	1	1
	Cyst/(2)a	0	0	0	0	1	1
	Involution/(1)a	15	17	14	24	16	13
	Involution/(2)a	11	7	5	4	6	3
	Involution/(3)a	0	1	3	1	0	2
	Necrosis/(1)a	0	0	0	0	0	1
	Hyperplasia, lymphocyte	0	0	0	2	0	4

Pituitary											
	Angiectasis/(2)a	0		0		0		1		0	0
	Cyst, pars distalis/(1)a	3		6		3		1		0	0
	Cyst, pars distalis/(2)a	0		1		1		0		0	0
	Cyst, pars intermedia/(1)a	5		4		6		1		1	0
	Cyst, pars intermedia/(2)a	1		1		0		0		0	0
	Pseudocysts/(1)a	1		0		1		1		0	0
	Hyperplasia, pars distalis	6		8		7		4		4	5
	Hyperplasia, pars intermedia	5		1		4		0		0	0
Thyroid											
	Cystic follicles/(1)a	0		0		1		0		0	0
	Hyperplasia, C-cell diffuse	39		38		34		37		39	35
	Hyperplasia, C-cell focal	5		5		1		2		0	2
	Hyperplasia, follicular cell	1		4		2		0		0	1
Parathyroid											
	Hyperplasia	1		0		0		0		1	0
Adrenal											
	Angiectasis/(1)a	1		1		0		15		11	10
	Angiectasis/(2)a	0		0		0		8		10	3
	Angiectasis/(3)a	0		0		0		1		0	2
	Cystic degeneration/(1)a	0		0		0		0		0	1
	Extracapsular cortical tissue/(1)a	0		0		0		1		1	0
	Fatty change/(1)a	4		1		3		0		0	0
	Focal hypertrophy/(1)a	1		2		0		0		2	2
	Thickening, capusular/(1)a	0		1		0		0		0	1
	Hyperplasia, cortical	20		16		14		10		3	3
	Hyperplasia, medullary	7		3		6		3		1	5
Nasal cavity											
	Inflammation/(1)a	0		2		1		0		1	0
	Thrombus/(1)a	0		0		1		0		0	0
Lung/bronchial											
	Accumulation, foam cell/(1)a	1		1		5		1		2	1
	Acute inflammation/(1)a	1		0		1		0		0	0
	Cellular infiltration, lymphocyte/(1)a	0		3		2		1		1	0
	Chronic inflammation/(1)a	0		0		1		0		1	1
	Chronic inflammation/(2)a	0		0		0		0		0	1
	Deposit, fibrin/(1)a	0		0		1		0		0	0
	Hemorrhage/(1)a	1		1		1		0		0	2
	Hyperplasia, bronchiolo-alveolar	1		0		1		0		0	0
Salivary gland											
	Atrophy, acinar cell/(1)a	4		0		0		1		0	0
	Atrophy, acinar cell/(2)a	0		0		0		0		0	2
	Hyperplasia, cystic	1		0		0		0		0	0
Stomach											
	Erosion, glandular/(1)a	0		0		0		0		0	1
	Inflammation, forestomach/(1)a	0		0		1		0		0	1
	Inflammation, forestomach/(2)a	1		0		0		0		0	2
	Inflammation, glandular/(1)a	0		0		1		0		0	0
	Hyperplasia, glandular cell	0		0		0		0		0	1
	Hyperplasia, squamous cell	0		0		1		5		2	1
Duodenum											
	Hyperplasia	0		0		1		0		0	0
Cecum											
	Inflammation/(2)a	1		0		0		0		0	0
	Pigmentation/(1)a	3		1		0		0		0	0
Colon											
	Mineralization/(1)a	0		0		0		1		0	0
	Pigmentation/(1)a	31	**	2		0		33	##	1	0
	Thickness of epithelium, diffuse/(1)a	34	**	10	**	0		31	##	2	0
	Atypical hyperplasia	5	*	0		0		3		0	0
Rectum											
	Pigmentation/(1)a	0		0		0		2		0	0
	Thickness of epithelium, diffuse/(1)a	0		0		0		1		1	0
Pancreas											

	Atrophy, acinar cell/(1)a	4		3		3	3		2		0
	Atrophy, acinar cell/(2)a	1		0		1	0		0		0
	Atrophy, acinar cell/(3)a	1		0		0	0		0		0
	Hyperplasia, acinar cell	0		1		0	0		0		0
	Hyperplasia, islet cell	0		1		1	0		0		2
	Proliferation, duct	0		0		0	1		0		0
Liver											
	Cellular infiltraion, lymphocyte/(1)a	0		0		0	1		0		0
	Cystic degeneration/(1)a	0		1		0	0		0		0
	Cystic degeneration/(3)a	0		0		0	0		1		0
	Extramedullary hematopoiesis/(1)a	0		0		1	1		1		2
	Granuloma/(1)a	0		0		0	0		0		2
	Inflammation/(1)a	0		0		1	0		0		1
	Necrosis/(1)a	1		0		0	0		0		1
	Vacuolation, cytoplasmic/(1)a	2		0		1	2		0		3
	Vacuolation, cytoplasmic/(2)a	0		0		0	0		1		1
	Foci (area) of cellular alteration	16		14		11	13		9		6
Kidney											
	Chronic nephropathy/(1)a	22		23		23	11	┐#	15		16
	Chronic nephropathy/(2)a	9		6		9	1	|	2		3
	Chronic nephropathy/(3)a	9		5		3	0	┘	1		1
	Cyst/(1)a	2		1		1	0		0		0
	Cyst/(2)a	0		1		1	0		2		0
	Hydronephrosis/(1)a	0		0		0	0		1		0
	Infarction/(1)a	0		0		0	1		0		0
	Inflammation/(1)a	0		0		1	0		0		0
	Mineralization, cortico-medullary junction/(1)a	0		0		0	17		21		20
	Mineralization, cortico-medullary junction/(2)a	0		0		0	0		1		2
	Mineralization, pelvis/(1)a	2		1		3	8		6		4
	Mineralization, pelvis/(2)a	0		0		0	0		1		0
	Pigmentation, tubular/(1)a	28	┐**	17	┐**	5	35	┐##	25	┐##	16
	Pigmentation, tubular/(2)a	8	┘	1	┘	0	8	┘	8	┘	2
	Pyelitis/(1)a	3		5		4	5		4		5
	Pyelitis/(2)a	0		1		1	0		0		0
	Pyelonephritis/(1)a	0		1		0	0		0		0
	Hyperplasia, tubule cell	1		0		0	0		0		0
Urinary bladder											
	Cellular infiltration, lymphocyte/(1)a	0		1		0	0		0		0
	Cellular infiltration, lymphocyte/(2)a	0		0		0	0		1		0
Testis											
	Atrophy/(1)a	2		2		3					
	Atrophy/(2)a	2		0		0					
	Atrophy/(3)a	0		0		1					
	Mineralization/(1)a	2		5		1					
	Polyarteritis/(1)a	1		0		0					
	Polyarteritis/(2)a	1		0		0					
	Thickening, capsular/(1)a	0		1		0					
	Hyperplasia, interstitial cell	1		1		0					
Prostate											
	Atrophy/(3)a	0		0		1					
	Cellular infiltration, lymphocyte/(1)a	0		1		1					
	Inflammation/(1)a	6		2	┐**	10					
	Inflammation/(2)a	2		1	┘	3					
	Prostatic intraepithelial neoplasia	5		4		2					
	Reactive hyperplasia	2		0		0					
Epididymis											
	Absence, spermatozoa/(3)a	1		0		0					
	Atrophy/(1)a	1		0		0					
	Atrophy/(3)a	0		0		1					
Seminal vesicle											
	Atrophy/(1)a	1		0	┐*	4					
	Atrophy/(3)a	0		0	┘	1					
	Dilatation/(2)a	0		0		1					
	Inflammation/(1)a	0		2		1					

Mammary gland	Hyperplasia	3	6	5			
	Alveolar dilatation/(1)a	0	0	0	2	1	0
	Alveolar dilatation/(2)a	0	0	0	0	1	1
	Alveolar dilatation/(3)a	0	0	0	1	0	0
	Galactocele/(2)a	0	0	0	0	1	1
	Proliferation, acinar cell/(1)a	0	0	0	8	12	6
	Proliferation, acinar cell/(2)a	0	0	0	2	5	7
	Proliferation, acinar cell/(3)a	0	0	0	1	0	2
Ovary							
	Atrophy/(1)a				1	0	1
	Atrophy/(2)a				1	1	0
	Cyst, corpus luteum/(1)a				0	0	1
	Cyst, follicular/(1)a				0	0	1
	Cyst, ovarian/(1)a				2	2	2
	Cyst, ovarian/(2)a				1	0	1
	Cyst, ovarian/(3)a				0	0	1
Uterus							
	Atrophy/(1)a				2	1	0
	Atrophy/(2)a				0	1	0
	Cyst/(1)a				1	0	0
	Dilatation, lumen/(1)a				1	0	0
	Pyometra/(2)a				1	0	0
	Hyperplasia, cystic endometrial cell				14 #	6	4
	Hyperplasia, endometrial cell				1	0	0
	Hyperplasia, endometrial stromal				2	0	1
Vagina							
	Hyperplasia, squamous cell				1	0	0
Musculature							
	Accumulation, foam cell/(1)a	0	0	0	0	1	0
Skin/subcutis							
	Epidermal cyst/(2)a	1	0	0	0	0	0
	Inflammation/(2)a	0	0	0	1	0	0
	Ulceration/(1)a	0	0	0	0	1	0
	Ulceration/(3)a	0	0	0	1	0	0
Zymbal's gland							
	Cyst/(1)a	3	1	1	1	1	2
	Cyst/(2)a	0	0	0	0	1	1
	Duct ectasia/(1)a	0	0	0	1	0	0
	Hyperplasia, squamous cell	0	0	1	0	0	1
Eye							
	Atrophy of retina/(1)a	5	4	1	6	6	5
	Atrophy of retina/(2)a	0	0	1	0	0	0
	Inflammation/(2)a	0	0	0	0	0	1
	Keratitis/(1)a	1	0	0	0	0	0
Harderian gland							
	Atrophy/(2)a	0	0	0	0	0	1
	Cellular infiltration, lymphocyte/(1)a	1	0	2	1	2	0
	Granuloma/(1)a	0	1	0	0	0	0
	Inflammation/(1)a	0	0	0	1	0	0
	Necrosis/(1)a	0	0	0	0	0	2
	Necrosis/(2)a	0	0	0	0	0	1
	Hyperplasia	1	0	1	0	0	0
Brain							
	Osseous metaplasia/(1)a	0	0	0	1	1	1
Abdominal cavity		[3]b	[7]b	[1]b	[6]b	[5]b	[5]b
	Fat necrosis/(1)a	2	5	1	2	3	3
	Fat necrosis/(2)a	0	0	0	1	0	1
	Fat necrosis/(3)a	0	0	0	0	1	0
	Hematocele/(1)a	0	1	0	0	0	0
	Periarteritis/(1)a	1	0	0	0	0	0
Fat						[1]b	
	Necrosis/(1)a					1	
Eyelid				[3]b			[1]b

	Inflammation/(1)a			2			0
	Inflammation/(2)a			1			1
Mesenterium		[1]b					
	Fat necrosis/(1)a	1					
Foot pad		[17]b	[18]b	[23]b	[5]b	[15]b	[15]b
	Granuloma/(1)a	4	3	3	4	9	8
	Granuloma/(2)a	11	12	11	1	3	5
	Granuloma/(3)a	0	0	3	0	2	0
	Hyperkeratosis/(1)a	0	0	1	0	0	0
Ileocecal lymph node		[18]b	[2]b		[10]b		
	Dilatation, sinus/(2)a	2	0		0		
	Dilatation, sinus/(3)a	10	0		4		

a : Numbers in parenthesis indicate the grades of lesion : (1) Slight (2) Moderate (3) Severe

b : Numbers in square bracket are for animals examined microscopically.

*, ** : Significantly different from control group 3 at $P<0.05$, 0.01, respectively.

#, ## : Significantly different from control group 6 at $P<0.05$, 0.01, respectively.

Table 18

SUMMARY OF NEOPLASTIC(BENIGN) OR NEOPLASTIC(MALIGNANT) LESIONS (2 years).

ORGAN	SEX ----------	MALE			FEMALE		
AND	GROUP NO. ------	1	2	3	4	5	6
FINDINGS	LEVEL(%) -------	4.0	0.8	0	4.0	0.8	0
	No. of animals/group	42	39	38	45	42	40
Heart							
	Endocardial schwannoma	2	0	1	0	0	0
Mesenteric lymph node							
	Hemangiosarcoma	1	2	1	0	0	0
Thymus							
	Lymphoma, malignant, thymic	3	4	1	3	4	5
Pituitary							
	Adenoma, pars distalis	8	6	12	28	24	30
	Adenoma, pars intermedia	2	1	2	0	0	1
	Carcinoma, pars distalis	1	0	0	1	2	1
Thyroid							
	Adenoma, C-cell	3	3	2	5	3	2
	Adenoma, follicular cell	3	1	2	3	3	1
	Carcinoma, C-cell	0	0	0	0	1	0
	Carcinoma, follicular cell	1	0	0	0	1	0
Parathyroid							
	Adenoma	2	0	1	0	1	0
	Carcinoma	0	0	0	1	0	0
Adrenal							
	Adenoma, cortical	0	0	0	5	2	2
	Pheochromocytoma	2	0	2	0	1	0
	Malignant pheochromocytoma	0	0	0	0	1	2
Cecum							
	Adenoma	1	0	0	0	0	0
Colon							
	Adenocarcinoma	0	0	0	1	0	0
	Adenoma	3	0	0	2	0	0
Rectum							
	Adenocarcinoma	1	0	0	0	0	0
Pancreas							
	Adenoma, acinar cell	0	1	1	0	0	0
	Adenoma, islet cell	5	0	2	2	1	3
	Carcinoma, islet cell	0	0	1	0	0	1
Liver							
	Adenoma, hepatocellular	2	0	0	2	2	0
	Carcinoma, hepatocellular	0	0	1	0	0	0
Kidney							
	Adenoma, tubule cell	1	1	0	0	0	1
	Lipoma	0	1	0	0	0	0
	Carcinoma, renal cell	0	0	0	1	0	0
Testis							
	Tumor, interstitial cell, benign	3	0	1			
Mammary gland							
	Adenoma	0	0	0	3	3	3
	Fibroadenoma	0	0	0	10	9	10
	Adenocarcinoma	0	0	0	2	1	1
Ovary							
	Granulosa-theca cell tumor				1	0	0
	Sertoli cell tumor				2	0	0
	Sertoli cell tumor, malignant				1	0	0
Uterus							
	Adenoma				1	0	0
	Papilloma, squamous cell				1	0	0
	Polyp, endometrial stromal				7	5	4
	Adenocarcinoma				0	0	1
Skin/subcutis							
	Fibroma	1	0	0	0	0	0

	Keratoacanthoma	0	0	1	0	0	0
	Lipoma	0	0	1	0	0	0
	Papilloma, squamous cell	0	2	0	0	0	0
	Carcinoma, basal cell	1	0	0	0	0	0
	Liposarcoma	0	0	0	0	0	1
	Trichoepithelioma, malignant	1	0	0	0	0	0
Zymbal's gland							
	Carcinoma	0	0	1	0	1	0
Eye							
	Retinoblastoma	0	0	1	0	0	0
	Schwannoma	0	1	0	0	0	0
Brain							
	Astrocytoma	0	2	2	0	0	0
	Meningeal sarcoma	1	0	0	0	0	0
Abdominal cavity		[3]b	[7]b	[1]b	[6]b	[5]b	[5]b
	Hemangiosarcoma	0	1	0	0	0	0
	Malignant schwannoma	0	0	0	0	1	0
	Mesothelioma	0	0	0	1	0	0
Pinna			[1]b				
	Papilloma		1				
All sites						[1]b	
	Leukemia, large granular lymphocytic					1	

a : Numbers in parenthesis indicate the grades of lesion : (1) Slight (2) Moderate (3) Severe

b : Numbers in square bracket are for animals examined microscopically.

*, ** : Significantly different from control group 3 at P<0.05, 0.01, respectively.

#, ## : Significantly different from control group 6 at P<0.05, 0.01, respectively.

Fig. 1 Growth curves of Wistar Hannover rats treated with Aloe extract for 1 year