

6. Present status of cigarette smoking

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
Negative	460	40.67	862	38.65	1062	40.88
Positive	338	29.89	609	27.31	665	25.60
Uncertain	333	29.44	759	34.04	871	33.53
Total	1131	100.00	2230	100.00	2598	100.00

History of cigarette smoking

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
Negative	302	26.70	656	29.42	817	31.45
Positive	372	32.89	709	31.79	839	32.29
Uncertain	457	40.41	865	38.79	942	36.26
Total	1131	100.00	2230	100.00	2598	100.00

7. Complaints

	1999			2000			2001		
	Hematuri	Irritability	Other	Hematuri	Irritability	Other	Hematuri	Irritability	Other
+	898	145	245	1735	308	481	2035	378	569
-	218	926	826	462	1783	1619	533	2124	1925
Uncertain	15	60	7	33	139	130	30	96	104
Total	1131	1131	1131	2230	2230	2230	2598	2598	2598

Table 2 Cystoscopy findings and staging studies

1. Multiplicity of tumors

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
Solitary	532	47.71	1056	48.46	1275	50.58
Multiple	490	43.95	931	42.73	1058	41.97
Uncountable	74	6.64	155	7.11	150	5.95
Uncertain	19	1.70	37	1.70	38	1.51
Total	1115	100.00	2179	100.00	2521	100.00

2. Tumor size of tumors

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
1cm or less	251	22.51	483	22.17	623	24.71
1-3cm	483	43.32	1004	46.08	1126	44.66
3cm or more	264	23.68	435	19.96	532	21.10
Unmeasurable	81	7.26	172	7.89	168	6.66
Uncertain	36	3.23	85	3.90	72	2.86
Total	1115	100.00	2179	100.00	2521	100.00

3. Tumor morphology of tumors

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
Papillary	813	72.91	1589	72.92	1882	74.65
Non-papillary	226	20.27	432	19.83	462	18.33
Flat	48	4.30	85	3.90	105	4.17
Ulcerative	4	0.36	9	0.41	14	0.56
Others	10	0.90	21	0.96	20	0.79
Uncertain	14	1.26	43	1.97	38	1.51
Total	1115	100.00	2179	100.00	2521	100.00

4. Tumor stalk of tumors

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
Pedunculated	595	53.36	1051	47.13	1304	50.19
Not pedunculated	473	42.42	978	43.86	1049	40.38
Uncertain	47	4.22	150	6.73	168	6.47
Total	1115	100.00	2179	97.71	2521	97.04

5. Urine cytology

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
Performed	938	82.94	1873	83.99	2125	81.79
Not performed	119	10.52	263	11.79	342	13.16
Uncertain	74	6.54	94	4.22	131	5.04
Total	1131	100.00	2230	100.00	2598	100.00

6. Findings of urine cytology

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
Negative	331	29.27	704	31.57	741	34.87
Suspicious	169	14.94	337	15.11	382	17.98
Positive	431	38.11	803	36.01	952	44.80
Uncertain	7	0.62	29	1.30	50	2.35
Total	938	82.94	1873	83.99	2125	100.00

7. Tumor marker

	1999	2000	2001
	No.	No.	No.
BEP	12	53	29
BTA test	13	35	28
NMP-22	50	116	105
Others	7	8	11

8. Staging study

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
IVP	1021	90.19	1943	87.13	2148	82.68
CT	720	63.60	1562	70.04	1822	70.13
MRI	279	24.65	681	30.54	631	24.29
Bimanual palpation	205	18.11	429	19.24	343	13.20
Staging LN dissection	0	0	6	0.27	10	0.39

Table 3 TUR findings

1. Object of TUR				2. Mode of biopsy			
	1999	2000	2001		1999	2000	2001
	No.	No.	No.		No.	No.	No.
Biopsy	274	625	592	Not performed	299	437	665
Curative	806	1498	1885	TUR	274	768	934
Mass reduction	42	81	85	Cold punch	547	992	970
Palliation	3	15	6	Deep biopsy	0	10	9
Others	2	9	23	Others	2	2	0
Uncertain	4	2	7	Uncertain	9	21	20
Total	1131	2230	2598	Total	1131	2230	2598

  

3. Random biopsy			
	1999	2000	2001
	No.	No.	No.
Performed	381	844	825
Not performed	735	1321	1725
Uncertain	15	65	48
Total	1131	2230	2598

4. Predominant histology in TUR			
	1999	2000	2001
	No.	No.	No.
UC (TCC)	1059	2080	2462
CIS	34	61	59
SCC	15	28	30
AC	12	22	19
Small cell	0	3	1
Undiff	2	8	5
Others	9	28	21
Uncertain	0	0	1
Total	1131	2230	2598

5. Concomitant histology in TUR			
	1999	2000	2001
	No.	No.	No.
UC (TCC)	999	1950	2309
CIS	70	130	116
SCC	27	42	67
AC	17	65	65
Small cell	1	4	4
Undiff	2	7	5
Others	15	32	31
Uncertain	0	0	1
Total	1131	2230	2598

6. Depth in TUR (2nd Edit*)						3rd Edit**		
	1999		2000		2001		2001	
	No.	(%)	No.	(%)	No.	(%)	No.	
T0	1	0.09	8	0.36	2	0.09	T0	0
Tis	53	4.69	118	5.29	112	5.20	Tis	21
Ta	355	31.39	676	30.31	697	32.36	Ta	155
T1a	230	20.34	400	17.94	426	19.78	T1	158
T1b	210	18.57	448	20.09	398	18.48	T2a	26
T2	114	10.08	234	10.49	205	9.52	T2b	25
T3a	23	2.03	60	2.69	51	2.37	T3a	3
T3b	16	1.41	69	3.09	59	2.74	T3b	12
T4	30	2.65	68	3.05	42	1.95	T4a	10
Tx	99	8.75	149	6.68	165	7.66	T4b	0
Total	1131	100.00	2230	100.00	2157	100.14	Tx	31
							Total	441

\* : 2nd Edition of General Rule for Clinical and Pathological Studies on Bladder Cancer, JUA and The Japanese Society of Pathology, 1993

\*\* : 3rd Edition of the above, 2001

7. Detail of T4			
	1999	2000	2001
	No.	No.	No.
pu	8	9	6
pd	4	9	12
u	0	6	4
Direct invasion	18	44	30
Total	30	68	52

8. Highest tumor grade						
	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
G0	3	0.27	11	0.49	8	0.31
G1	184	16.27	353	15.83	415	15.97
G2	525	46.42	986	44.22	1143	44.00
G3	394	34.84	815	36.55	959	36.91
GX	25	2.21	65	2.91	73	2.81
Total	1131	100.00	2230	100.00	2598	100.00

9. Predominant tumor grade

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
G0	5	0.44	14	0.63	11	0.42
G1	276	24.40	556	24.93	670	25.79
G2	567	50.13	1069	47.94	1257	48.38
G3	255	22.55	521	23.36	580	22.32
GX	28	2.48	70	3.14	80	3.08
Total	1131	100.00	2230	100.00	2598	100.00

10. Infiltration pattern

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
No infiltration	377	33.33	760	34.08	979	37.68
INF $\alpha$	86	7.60	133	5.96	172	6.62
INF $\beta$	88	7.78	154	6.91	173	6.66
INF $\gamma$	48	4.24	82	3.68	91	3.50
Uncertain	532	47.04	1101	49.37	1183	45.54
Total	1131	100.00	2230	100.00	2598	100.00

11. Lymphatic involvement

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
ly0	479	42.35	992	51.86	1054	40.57
ly1	77	6.81	154	8.05	177	6.81
ly2	12	1.06	0	0.00	3	0.12
lyx	563	49.78	1084	56.66	1364	52.50
Total	1131	100.00	2230	116.57	2598	100.00

12. Venous involvement

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
v0	522	46.15	1060	47.53	1148	44.19
v1	36	3.18	82	3.68	91	3.50
v2	3	0.27	0	0.00	1	0.04
vx	569	50.31	1088	48.79	1358	52.27
Total	1130	99.91	2230	100.00	2598	100.00

Table 4 Clinical diagnosis

1. Tumor morphology

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
Papilloma	49	4.33	85	3.81	104	4.00
Papillary tumor	800	70.73	1572	70.49	1824	70.21
Papillary+non-papillary	5	0.44	8	0.36	10	0.38
Papillary + CIS	11	0.97	27	1.21	34	1.31
Non-Papillary tumor	212	18.74	414	18.57	461	17.74
Non-Papillary + CIS	2	0.18	6	0.27	3	0.12
CIS	47	4.16	104	4.66	143	5.50
Others	5	0.44	14	0.63	19	0.73
Total	1131	100.00	2230	100.00	2598	100.00

2. Clinical T stage (2nd Edit\*)

	1999		2000		2001		3rd Edit**	
	No.	(%)	No.	(%)	No.	(%)	2001	
							No.	
T0	1	0.09	6	0.27	1	0.05	T0	0
Tis	54	4.77	118	5.29	112	5.19	Tis	22
Ta	344	30.42	649	29.12	660	30.60	Ta	155
T1a	227	20.07	410	18.39	448	20.77	T1	153
T1b	205	18.13	447	20.05	377	17.48	T2a	29
T2	113	9.99	250	11.22	222	10.29	T2b	24
T3a	43	3.80	86	3.86	85	3.94	T3a	6
T3b	58	5.13	114	5.11	108	5.01	T3b	24
T4	32	2.83	86	3.86	57	2.64	T4a	12
Tx	54	4.77	64	2.87	87	4.03	T4b	0
Total	1131	100.00	2230	100.04	2157	100.00	Tx	16
							Total	441

\* : 2nd Edition of General Rule for Clinical and Pathological Studies on Bladder Cancer, JUA and The Japanese Society of Pathology, 1993

\*\* : 3rd Edition of the above, 2001

3. Clinical N stage

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
N0	850	75.15	1807	81.03	2179	83.87
N1	14	1.24	37	1.66	30	1.15
N2	13	1.15	31	1.39	30	1.15
NX	254	22.46	355	15.92	359	13.82
Total	1131	100.00	2230	100.00	2598	100.00

4. Clinical M stage

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
M0	884	78.16	1868	83.77	2198	84.60
M1	19	1.68	52	2.33	35	1.35
MX	228	20.16	310	13.90	365	14.05
Total	1131	100.00	2230	100.00	2598	100.00

5. M1 organs

	1999	2000	2001
	No.	No.	No.
Lymph node	2	11	10
Lymph node + lung	0	3	0
Lymph node + lung + bone	0	2	0
Lymph node + liver	0	1	0
Lymph node + bone	0	1	5
Lung	5	8	2
Lung + brain	0	0	1
Lung + Liver	0	1	0
Bone	8	19	10
Liver	2	1	5
Liver + bone	0	1	0
Others	2	4	2
<b>Total</b>	<b>19</b>	<b>52</b>	<b>35</b>

**Table 5 Treatments**

1. Mode of major treatments

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
TUR or TUC only	708	62.60	1301	58.34	1677	64.55
Partial cystectomy	11	0.97	37	1.66	29	1.12
Simple cystectomy	2	0.18	2	0.09	3	0.12
Total cystectomy	197	17.42	338	15.16	380	14.63
TPE	0	0.00	1	0.04	1	0.04

2. Mode of lymph node dissection during cystectomy

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
Not performed	17	8.10	49	12.96	59	14.29
Biospy	2	0.95	10	2.65	16	3.87
Limited	119	56.67	230	60.85	241	58.35
Extended	59	28.10	81	21.43	93	22.52
Uncertain	13	6.19	8	2.12	4	0.97
<b>Total</b>	<b>210</b>	<b>100.00</b>	<b>378</b>	<b>100.00</b>	<b>413</b>	<b>100.00</b>

3. Area of lymph node dissection during cystectomy

	1999	2000	2001
	No.	No.	No.
Obturator	62	138	152
Intiliac	23	43	42
Extiliac	31	58	40
Obturator,Intiliac	9	12	19
Int.&Ext iliac	0	6	0
Obturator,Extiliac	13	20	15
Obturator, Int.&Extiliac	36	34	71
Common ilac	0	0	1
Others	0	5	1
Uncertain	6	5	9
Total	180	321	350

4. Mode of Urinary diversion

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
Nephrostomy	0	0.00	0	0.00	2	0.52
Cutaneostomy	22	11.58	73	21.60	77	20.21
Conduit	132	69.47	195	57.69	245	64.30
Substitution	1	0.53	13	3.85	3	0.79
Neobladder	35	18.42	57	16.86	54	14.17
Total	190	100.00	338	100.00	381	100.00

5. Mode of additional resection during cystectomy

	1999	2000	2001
	No.	No.	No.
Urethrectomy	109	149	192
Uterus and/or ovary	22	27	51
Nephroureterctomy	0	2	4
Others	0	4	3
Uncertain	2	6	3

**Table 6 Pathology in cystectomy**

1. Tumor morphology

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
No tumor	15	7.46	13	3.44	21	5.08
Papillary	58	28.86	123	32.54	131	31.72
Non-papillary	101	50.25	177	46.83	207	50.12
Flat	16	7.96	27	7.14	25	6.05
Ulcerative	6	2.99	13	3.44	13	3.15
Uncertain	5	2.49	25	6.61	16	3.87
Total	201	100.00	378	100.00	413	100.00

2. Predominant histology

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
No tumor (pathological CR)	9	4.48	6	1.58	16	3.87
UC (TCC)	169	84.08	311	82.06	341	82.57
CIS	6	2.99	15	3.96	11	2.66
SCC	9	4.48	18	4.75	15	3.63
AC	6	2.99	15	3.96	6	1.45
Small cell	0	0.00	2	0.53	0	0.00
Undiff	0	0.00	2	0.53	7	1.69
Others	2	1.00	9	2.37	17	4.12
Total	201	100.00	378	99.74	413	100.00

3. Depth of invasion (2nd Edit\*)

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
pT0	9	4.57	9	2.45	18	5.52
pTis	11	5.58	24	6.54	15	4.60
pTa	6	3.05	10	2.72	10	3.07
pT1a	9	4.57	19	5.18	13	3.99
pT1b	32	16.24	61	16.62	40	12.27
pT2	31	15.74	63	17.17	65	19.94
pT3a	18	9.14	34	9.26	46	14.11
pT3b	49	24.87	93	25.34	79	24.23
pT4	28	14.21	49	13.35	34	10.43
pTx	4	2.03	5	1.36	6	1.84
Total	197	100.00	367	100.00	326	100.00

3rd Edit\*\*

	2001	2001	2001
	No.	No.	No.
pT0	0	0	4
pTis	1	1	4
pTa	1	0	4
pT1	0	3	16
pT2a	0	2	9
pT2b	0	1	13
pT3a	0	3	15
pT3b	1	0	12
pT4a	1	1	10
Total	4	11	87

\* : 2nd Edition of General Rule for Clinical and Pathological Studies on Bladder Cancer, JUA and The Japanese Society of Pathology, 1993  
 \*\* : 3rd Edition of the above, 2001

## 4. Detail of pT4

	1999	2000	2001
	No.	No.	No.
pd	7	10	8
pu	4	7	7
pd+pu	0	1	2
u	4	4	3
Direct invasion	13	28	24
Total	28	50	44

## 5. Highest tumor grade

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
G0	9	4.48	10	2.65	20	4.84
G1	3	1.49	8	2.12	4	0.97
G2	37	18.41	97	25.66	78	18.89
G3	146	72.64	242	64.02	285	69.01
GX	6	2.99	21	5.56	26	6.30
Total	201	100.00	378	100.00	413	100.00

## 6. Predominant tumor grade

	1999		2000		2001	
	No.	(%)	No.	(%)	No.	(%)
G0	9	4.48	10	2.65	20	4.84
G1	6	2.99	17	4.50	13	3.15
G2	61	30.35	144	38.10	141	34.14
G3	119	59.20	186	49.21	213	51.57
GX	6	2.99	21	5.56	26	6.30
Total	201	100.00	378	100.00	413	100.00

## 7. Infiltration pattern

	1999	2000	2001
	No.	No.	No.
-	27	45	55
INF $\alpha$	17	39	33
INF $\beta$	68	140	162
INF $\gamma$	40	78	79
Uncertain	49	76	84
Total	201	378	413

## 8. Margin in ew

	1999	2000	2001
	No.	No.	No.
ew0	169	298	351
ew1	10	19	18
ewx	22	61	44
Total	201	378	413

## 9. Ureteral margin

	1999	2000	2001
	No.	No.	No.
u0	177	303	359
u1	10	13	12
ux	14	62	42
Total	201	378	413

## 10. Urethral margin

	1999	2000	2001
	No.	No.	No.
ur0	170	297	347
ur1	6	10	9
urx	25	71	57
Total	201	378	413

	1999	2000	2001
	No.	No.	No.
ly0	99	202	201
ly1	49	136	157
ly2	34	1	7
lyx	19	39	48
Total	201	378	413

	1999	2000	2001
	No.	No.	No.
v0	132	246	263
v1	47	90	107
v2	3	0	1
vx	19	42	42
Total	201	378	413

	1999	2000	2001
	No.	No.	No.
0 (pN0)	149	252	286
1 (pN1)	15	18	17
2 or more (pN2)	17	32	41
Uncertain (pNx)	20	76	69
Total	201	378	413

	1999	2000	2001
	No.	No.	No.
2cm or less	29	37	47
2-5cm	2	10	11
5cm or more	0	0	0
Uncertain	19	75	68
Total	50	122	126

**Table 7 Survival**

3yrs-survival in all cases from 1999 to 2001 date (n=5507)

TNM stage*	No of pts	Overall (%)	Cause specific (%)
T0	8	100.00	100.00
Tis	283	91.88	98.76
Ta	1651	95.52	99.21
T1a	1085	93.27	97.14
T1b	1026	90.45	94.25
T2	582	79.73	83.68
T3a	214	69.16	73.83
T3b	280	50.36	56.79
T4	174	53.45	58.05
Tx	204	77.94	85.71
N0	4826	87.78	91.96
N1	81	44.44	51.85
N2	73	30.14	36.99
NX	968	90.81	94.42
M0	4940	87.53	91.78
M1	105	32.38	37.14
MX	903	90.26	93.91

Median follow up period: 36.0m.

\*:TNM stage was classified by 2nd Edition of General Rule for Clinical and Pathological Studies on Bladder Cancer, JUA and The Japanese Society of Pathology, 1993

**Table 8 Correlation of clinicopathological factors**

**1. Cytology and tumor size**

Cytology	1999				2000				2001												
	1cm or less		3cm or more		1-3cm		3cm or more		1-3cm		3cm or more		1cm or less		3cm or more		Uncertain				
	G0	G1	G2	G3	GX	G0	G1	G2	G3	GX	G0	G1	G2	G3	GX	G0	G1	G2	G3	GX	
Negative	113	166	40	8	3	221	378	69	13	11	247	357	92	17	16	507	924	441	149	59	
Suspicious	42	79	34	6	3	84	156	63	19	9	88	176	78	17	13	157	372	261	112	27	
Positive	59	148	151	59	9	86	316	217	117	46	15	19	10	3	3	397	866	354	150	67	
Uncertain	1	4	2	0	0	6	16	5	1	1	6	16	5	1	1	215	397	227	73	15	
<b>Total</b>																					

**2. Highest tumor grade and number of the tumor**

Multiplicity	1999					2000					2001										
	G0		G1		G2	G3	GX	G0		G1		G2	G3	GX	G0		G1		G2	G3	GX
	Solitary	3	116	239	161	13	8	226	481	314	27	6	269	589	375	36	2	124	469	452	11
Multiple	0	63	248	174	5	2	112	432	366	19	2	8	31	89	22	0	5	41	95	14	
Uncountable	0	3	21	45	5	0	5	41	95	14	1	2	10	4	0	0	0	0	20	4	
Uncertain	0	0	9	9	1	1	2	10	20	4	0	1	13	21	3	0	1	13	21	3	

**3. Highest tumor grade and tumor size**

Tumor size	1999					2000					2001										
	G0		G1		G2	G3	GX	G0		G1		G2	G3	GX	G0		G1		G2	G3	GX
	1cm or less	2	76	123	47	3	3	145	226	97	12	6	167	297	141	12	1	179	542	386	18
1-3cm	1	89	243	145	5	7	156	497	329	15	1	38	193	281	19	1	38	193	281	19	
3cm or more	0	14	99	142	9	0	31	150	231	23	1	5	43	102	18	0	5	43	102	18	
Uncountable	0	2	29	44	6	1	6	59	98	8	0	0	0	0	5	0	13	27	27	5	
Uncertain	0	1	23	11	1	0	7	32	40	6	0	0	0	0	8	402	1102	937	72		
<b>Total</b>																					

4. Highest tumor grade and cytology

Cytology	1999						2000						2001																	
	G0		G1		G2		G3		GX		G0		G1		G2		G3		GX		G0		G1		G2		G3		GX	
	Negative	2	96	173	58	2	6	202	371	107	18	6	214	400	103	18	6	214	400	103	18	6	214	400	103	18	6	214	400	103
Suspicious	0	26	84	55	4	1	47	168	116	5	1	55	174	138	15	0	55	174	138	15	0	55	174	138	15	0	55	174	138	15
Positive	0	23	166	231	11	2	33	266	477	25	2	48	318	562	24	0	48	318	562	24	0	48	318	562	24	0	48	318	562	24
Uncertain	0	1	5	1	0	0	0	15	14	0	0	8	30	12	0	0	8	30	12	0	0	8	30	12	0	0	8	30	12	0
Total	2	146	428	345	17	9	282	820	714	48	9	325	922	815	57	6	325	922	815	57	6	325	922	815	57	6	325	922	815	57

5. Highest tumor grade and infiltration pattern

Pattern	1999						2000						2001																	
	G0		G1		G2		G3		GX		G0		G1		G2		G3		GX		G0		G1		G2		G3		GX	
	-	3	122	194	56	2	10	247	374	116	13	7	277	506	166	23	7	277	506	166	23	7	277	506	166	23	7	277	506	166
INF $\alpha$	0	10	54	22	0	0	15	83	35	0	0	24	107	41	0	0	24	107	41	0	0	24	107	41	0	0	24	107	41	0
INF $\beta$	0	0	30	58	0	0	1	51	98	4	0	4	48	119	2	0	4	48	119	2	0	4	48	119	2	0	4	48	119	2
INF $\gamma$	0	0	4	41	3	0	0	8	71	3	0	0	7	83	1	0	0	7	83	1	0	0	7	83	1	0	0	7	83	1
Uncertain	0	52	243	217	20	1	90	470	495	45	1	110	475	550	47	1	110	475	550	47	1	110	475	550	47	1	110	475	550	47
Total	3	184	525	394	25	11	353	986	815	65	11	415	1143	959	73	8	415	1143	959	73	8	415	1143	959	73	8	415	1143	959	73

6. Highest tumor grade and depth of invasion

pT	1999						2000						2001																	
	G0		G1		G2		G3		GX		G0		G1		G2		G3		GX		G0		G1		G2		G3		GX	
	pT0	1	0	0	0	0	7	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0
pTis	0	2	17	32	2	1	10	27	69	11	1	5	21	74	12	0	5	21	74	12	0	5	21	74	12	0	5	21	74	12
pT1a	2	127	191	33	2	2	245	363	64	2	2	240	386	61	4	6	240	386	61	4	6	240	386	61	4	6	240	386	61	4
pT1b	0	27	143	60	0	1	54	250	91	4	1	63	247	116	0	0	63	247	116	0	0	63	247	116	0	0	63	247	116	0
pT2	0	10	97	101	2	0	21	200	223	4	0	14	162	218	4	0	14	162	218	4	0	14	162	218	4	0	14	162	218	4
pT3a	0	4	29	77	4	0	5	64	158	7	0	4	43	152	6	0	4	43	152	6	0	4	43	152	6	0	4	43	152	6
pT3b	0	0	5	17	1	0	1	12	45	2	0	0	12	38	1	0	0	12	38	1	0	0	12	38	1	0	0	12	38	1
pT4	0	0	4	12	0	0	2	6	55	6	0	0	5	49	5	0	0	5	49	5	0	0	5	49	5	0	0	5	49	5
pTx	0	2	3	23	2	0	0	9	53	6	0	2	5	29	6	0	2	5	29	6	0	2	5	29	6	0	2	5	29	6
Total	3	184	525	394	25	11	353	986	815	65	11	353	986	815	65	7	353	986	815	65	7	353	986	815	65	7	353	986	815	65

7. Highest tumor grade and pN

	1999				2000				2001			
	pN0	pN1	pN2	pNx	pN0	pN1	pN2	pNx	pN0	pN1	pN2	pNx
	G0	0	0	0	0	0	0	0	1	0	0	0
G1	3	0	0	1	9	0	1	5	7	0	0	5
G2	40	4	2	6	80	4	4	17	67	2	7	10
G3	101	11	14	13	150	14	25	44	203	15	33	46
GX	5	0	1	0	13	0	2	9	9	0	1	8
Total	149	15	17	20	252	18	32	76	286	17	41	69

8. Dominant tumor grade and pN

	1999				2000				2001			
	pN0	pN1	pN2	pNx	pN0	pN1	pN2	pNx	pN0	pN1	pN2	pNx
	G0	0	0	0	0	0	0	0	1	0	0	0
G1	11	0	0	2	19	0	1	6	14	0	0	7
G2	59	7	7	9	111	6	9	31	125	7	15	21
G3	73	8	9	9	107	12	20	29	139	10	25	33
GX	6	0	1	0	15	0	2	9	8	0	1	8
Total	149	15	17	20	252	18	32	76	286	17	41	69

9. Lymphatic involvement and pN

	1999				2000				2001			
	pN0	pN1	pN2	pNx	pN0	pN1	pN2	pNx	pN0	pN1	pN2	pNx
	ly0	85	4	4	6	165	4	5	28	174	2	2
ly1	33	5	5	6	69	13	22	32	82	14	27	34
ly2	16	6	7	5	1	0	0	0	1	0	6	0
lyx	15	0	1	3	17	1	5	16	29	1	6	12
Total	149	15	17	20	252	18	32	76	286	17	41	69

10. Depth of TUR and clinical T stage.

	1999							2000							2001												
	T0		T1a		T2		TX			T0		T1a		T2		TX			T0		T1a		T2		TX		
	Tis	Ta	T1b	T1c	T2	T3a	T3b	T4	TX	Tis	Ta	T1b	T1c	T2	T3a	T3b	T4	TX	Tis	Ta	T1b	T1c	T2	T3a	T3b	T4	TX
pT0	1	0	0	0	0	0	0	0	0	6	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
pT1s	0	51	0	0	0	0	0	0	2	0	115	2	0	0	0	1	0	0	0	107	2	0	2	0	1	0	0
pT1a	0	2	337	8	4	3	0	0	1	0	1	634	24	11	3	1	0	1	0	4	650	30	4	3	2	2	0
pT1b	0	0	6	207	10	2	3	1	0	0	0	6	371	11	4	2	3	2	1	0	4	391	12	11	2	2	1
pT2	0	0	0	5	179	11	3	8	1	0	1	0	5	407	18	8	6	2	1	0	1	1	5	349	18	8	12
pT3a	0	0	0	0	2	87	11	12	1	0	0	0	0	2	209	9	11	3	0	0	0	0	2	169	12	18	2
pT3b	0	0	0	0	1	18	4	0	0	0	0	0	0	0	0	51	7	1	1	0	0	0	0	0	48	3	0
pT4	0	0	0	1	0	0	1	0	28	0	0	0	0	0	3	1	63	2	0	0	0	0	0	0	1	54	3
pTx	0	1	1	6	10	9	7	17	2	0	1	5	10	16	13	13	22	9	60	0	0	3	21	8	21	11	17
Total	1	54	344	227	205	113	43	58	32	6	118	649	410	447	250	86	114	86	64	1	112	660	448	377	222	85	108

### Institutions that were registered

Institution	1999		2000		2001	
	Number	Number of patients	Number	Number of patients	Number	Number of patients
University Hospital	17	298	38	750	30	596
National Hospital	3	86	50	644	63	1003
General Hospital	52	754	57	800	78	955
Private Hospital, Clinic	0	0	7	115	10	124
Total	72	1138	152	2309	181	2678

Institution	1999	2000	2001
	Number of patients	Number of patients	Number of patients
<b>Hokkaido</b>			
Hokkaido University	12	14	-
Sapporo Medical University	18	-	27
Asahikawa Medical College Hospital	-	8	-
Otaru Municipal Hospital	20	24	42
Sanjukai Hospital	-	53	-
Sibetsu City Hospital	-	3	-
Hakodate Goryokaku Hospital	-	8	4
Furuya Hospital	-	14	-
Hakodate Hospital	-	-	6
Bibai Rousai Hospital	-	-	10
Kushiro Red Cross Hospital	-	-	7
Kutchan Kosei General Hospital	-	-	12
Teine Keijinkai Hospital	-	-	17
Furano Hospital	-	-	8
Hokkaido Social Insurance Hospital	-	-	12
Muroran City General Hospital	-	-	13
Megumino Hospital	-	-	4
Kohnan Hospital	-	-	7
<b>Aomori Prefecture</b>			
Aomori Prefectural Central Hospital	11	-	-
Towada Municipal Hospital	4	6	15
Oyokyo Kidney Institute, Hirosaki Hospital	-	5	-
Hachinohe Red Cross Hospital	-	-	16
Hachinohe-peace Hospital	-	-	1
<b>Iwate Prefecture</b>			
Iwate Medical University, School of Medicine	-	29	-
Iwate Prefectural Kuji Hospital	-	7	-
Iwate Prefectural Miyako Hospital	-	5	6
<b>Miyagi Prefecture</b>			
Miyagi Cancer Center	-	27	11
Tohoku Kosai Hospital	-	12	-
<b>Akita Prefecture</b>			

Institution	1999	2000	2001
	Number of patients	Number of patients	Number of patients
Ogachi Central Hospital	12	10	-
Yamagata Prefecture			
Yamagata University, School of Medicine	5	-	-
Kitamura Hospital	-	7	10
Fukushima Prefecture			
Ohta Atami Hospital	-	2	-
Fujita Public Hospital	-	-	15
Ibaraki Prefecture			
University of Tsukuba	22	22	25
Mito Kyodo Hospital	-	11	-
Mito Red Cross Hospital	-	16	8
Hakujji General Hospital	-	3	5
Kitaibaraki Municipal General Hospital	-	-	9
Tochigi Prefecture			
Dokyo University School of Medicine	-	26	-
Ashikaga Red Cross Hospital	23	-	-
Ohtawara Red Cross Hospital	-	-	6
Saiseikai Utsunomiya Hospital	-	-	29
Gunma Prefecture			
Gunma University Hospital	17	-	-
Tatebayashi Kosei Hospital	11	17	12
Saitama Prefecture			
Saitama Cancer Center	20	22	40
National Saitama Hospital	-	14	10
Kasukabe Municipal Hospital	20	-	25
Koshigaya Municipal Hospital	-	68	-
Kawaguchi Medical Center	-	28	-
Saitamaken Saiseikai Kurihashi Hospital	-	25	-
Fukaya Red Cross Hospital	-	-	16
Social Health Insurance Omiya General Hospital	-	-	5
Chichibu Municipal Hospital	-	-	18
Chiba Prefecture			
Ichikawa General Hospital, Tokyo Dental College	-	7	-
Matsudo Municipal Hospital	23	-	-
Yatsuhoken Hospital	-	6	5
SECOMEDIC Hospital	-	-	12
Tokyo			
Juntendo University, School of Medicine	22	-	-
Keio University School of Medicine	32	37	-
Teikyo University	-	18	-
Nippon Medical School	-	26	-
Tokyo University	-	12	-
Tokyo Medical University	-	35	41

Institution	1999	2000	2001
	Number of patients	Number of patients	Number of patients
Itabashi Hospital Nihon University School of Medicine	-	-	36
Nihon University Surugadai Hospital	-	-	15
Kyorin University	-	-	41
National Cancer Center Hospital	50	56	91
National Hospital Tokyo Disaster Medical Center	-	-	10
International Medical Center of Japan	19	-	-
Tokyo Industry Hospital	-	4	11
Toranomon Hospital	25	-	-
Sassa General Hospital	6	4	-
Inagi Municipal Hospital	7	6	-
Nagakubo Clinic	17	12	-
Tobu Chūki Hospital	28	-	-
Nishikubo Hospital	-	15	12
Tokyo Electric Power Hospital	-	3	-
Akabane Central General Hospital	-	0	-
Self-defense Forces Central Hospital	-	-	1
Machida Municipal Hospital	-	-	21
Social Insurance Central General Hospital	-	-	15
JR Tokyo General Hospital	-	-	12
Towa Hospital	-	-	1
Mishuku Hospital	-	-	3
Kanagawa Prefecture			
St. Marianna University School of Medicine	-	11	10
St. Marianna University Yokohama City Seibu Hospital	-	4	7
Tokai University	-	43	32
National Sagami Hospital	-	-	17
Yokohama City Kowan Hospital	5	-	-
Chigasaki Municipal Hospital	17	-	-
Inada Noborito Hospital	9	-	10
Health Insurance Kawasaki Central Hospital	5	-	-
Odawara City Hospital	20	-	24
The International Goodwill Hospital	16	13	25
Kawasaki Municipal Kawasaki Hospital	-	21	20
Saiseikai Kanagawaken Hospital	-	26	26
Yokohama Sakae Kyosai Hospital	-	22	13
Yokosuka Hokubu Kyosai Hospital	-	5	9
Yokohama Rousai Hospital	-	35	-
Atsugi City Hospital	-	8	-
Yokosuka Kyosai Hospital	-	-	27
Social Insurance Yokohama Central Hospital	-	-	12
Kanagawa Prefectural School of Nursing and Midwifery	-	-	6
Niigata Prefecture			
Niigata Cancer Center Hospital	46	-	63

Institution	1999	2000	2001
	Number of patients	Number of patients	Number of patients
Niigata City General Hospital	-	-	33
Niigata Kobari Hospital	-	-	15
Toyama Prefecture			
Toyama Medical and Pharmaceutical University	-	-	16
Takaoka Hospital	15	-	-
Saiseikai Toyama Hospital	-	-	8
Ishikawa Prefecture			
Kanazawa University	-	17	-
National Kanazawa Hospital	-	11	17
Public Central Hospital of Matto Ishikawa	-	17	9
Kaga Central Public Hospital	-	6	15
Komatsu Municipal Hospital	-	-	8
Fukui Prefecture			
Fukui Prefectural Hospital	11	4	-
Fukuiken Saiseikai Hospital	-	-	32
Yamanashi Prefecture			
University of Yamanashi	-	24	-
Otsuki Municipal Central Hospital	-	-	4
Nagano Prefecture			
Shinshu University School of Medicine	16	24	14
Saku Central Hospital	15	16	15
Omachi General Hospital	10	7	-
Ida Municipal Hospital	-	17	23
Ina Central Hospital	-	-	11
Okaya Municipal Hospital	-	-	13
Showa-inan General Hospital	-	-	8
Gifu Prefecture			
Gifu University, School of Medicine	-	15	15
Gifu Red Cross Hospital	-	-	9
Shizuoka Prefecture			
Hamamatsu University School of Medicine	10	-	-
Hamamatsu Medical Center	18	15	-
Shimada Municipal Hospital	20	24	-
Hamamatsu Red Cross Hospital	-	6	-
Hamaoka Municipal Hospital	-	2	4
Shizuoka Municipal Shimizu Hospital	-	6	25
Numazu City Hospital	-	-	25
Fuji City General Hospital	-	-	20
Aichi Prefecture			
Nagoya University	-	11	5
Aichi Medical University	-	12	-
Fujita Health University Hospital	-	23	18
Red Cross Nagoya First Hospital	29	-	36

Institution	1999	2000	2001
	Number of patients	Number of patients	Number of patients
Meijo Hospital	12	12	12
Chukyo Hospital	-	33	14
Komaki City Hospital	-	10	10
TOYOTA Memorial Hospital	-	-	12
Anjo Kosei Hospital	-	-	37
Nagoyacity Jouhoku Municipal Hospital	-	-	12
Toyokawa City Hospital	-	-	21
Nagoya Urology Hospital	-	-	32
Mie Prefecture			
Mie University	8	20	31
Mie Chuo National Hospital	-	11	11
Ise Municipal Hospital	-	4	-
Matsusaka Chuo General Hospital	-	-	11
Shiga Prefecture			
Shiga University School of Medicine	15	11	-
Social Insurance Shiga Hospital	-	-	8
Omihachiman City Hospital	-	-	13
Kyoto			
Kyoto University, Faculty of Medicine	37	-	-
Kyoto Prefectural University of Medicine	-	20	24
Meiji University of Oriental Medicine	-	6	-
Kansai Medical University Otokoyama Hospital	-	-	5
Fukuchiyama City Hospital	-	8	7
Kyoto First Red Cross Hospital	-	-	16
Maizuru Red Cross Hospital	-	-	4
Osaka			
Kinki University	-	8	-
Osaka City University	-	32	-
Kansai Medical University	-	-	21
Osaka Police Hospital	29	24	-
Osaka Kosei-nenkin Hospital	11	26	17
Osaka Seamen's Insurance Hospital	9	11	7
Yodogawa Christian Hospital	14	31	12
Bobath Memorial Hospital	1	0	2
Ohno Memorial Hospital	5	1	4
Hanwa Sumiyoshi Hospital	5	-	8
Osaka Red Cross Hospital	-	35	-
Hoshigaoka Koseinenkin Hospital	-	28	-
Izumisano City Hospital	-	19	22
Tane General Hospital	-	16	-
Komatsu Hospital	-	2	-
Saiseikai Tondabayashi Hospital	-	12	-
Saikeikai Hospital and Clinics	-	7	-