CANCER PROGNOSIS MANUAL

By

ARTHUR G. JAMES, M. D., F. A. C. S.

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Published by the AMERICAN CANCER SOCIETY, INC.

MILDRED KELLEY

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FOREWORD

Physicians as a whole, and too many surgeons, are inadequately informed concerning the prognosis of various types of malignant tumors. Some tumors respond very satisfactorily to correct therapy, whereas a few are associated with a very low 5-year survival rate in spite of the proper application of the optimum methods of therapy known today. The physician should be correctly informed concerning the probability of eradication of the disease following proper therapy, because the patient, or at least the patient's relatives, should be informed of the expected result.

The methods used in reporting cancer end results have been so varied that it is often impossible for even the most discriminative to compare statistics of articles dealing with the same disease. In this Manual the author offers a uniform method of reporting, which should obviate some of this difficulty. He also advocates a uniform classification, which should help to further simplify the process of end result reporting.

The Manual provides a summary of his review of a great number of publications dealing with results and prognosis. These references are listed after each tumor considered, and thus allows the reader to refer to the various publications for more detailed information. Since the material was obtained from articles published between 1953 through 1957, the data can be considered up to date.

This Manual should prove to be of inestimable value for the medical student, busy practitioner, and teaching staffs, and is to be recommended for general use.

Warren H. Cole

Warren H. Cole, M.D.

PREFACE

Only by utilizing the absolute survival rate is it possible to compare statistics from various institutions on an equal basis. The results of figures reported in this manner, of course, are not as good as when there is some degree of selection. On page 6, for example, the absolute 5-year survival rate is listed in one column. Opposite is the 5-year survival rate for Stage I and/or Stage II lesions. The figures for the earlier lesions present a much more optimistic survival picture and emphasize the importance of early diagnosis and treatment.

The figures used in this Manual were calculated from material appearing in the current literature in the years 1953 through 1957. It may be argued that this doesn't represent the true prognosis of cancer, since the majority of cancer cases are not reported in the literature and the reports are usually presented by the larger institutions. All reported series of cases in this period of time were included and large numbers of cases are included for each site, so that the prognosis figures as determined in this manner are as true as it is possible to calculate. Only the more common cancer sites are included in this Manual.

It is hoped that the prognosis material included, the staging advocated, and the bibliography included for each area, will make this a valuable addition to the students' and clinicians' library.

A.G.J.

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PART I

A. Purpose of Reporting End Results

The best yardstick available for determining the efficiency of a given mode of cancer therapy is the percentage of patients kept alive by that particular therapy. A uniform method of tabulation of cancer therapy results must be established for both individual physicians, the smaller hospitals and clinics, and research and teaching institutions, in order that valid comparisons and evaluations can be made by the medical profession.

The task of framing a standard system for cancer staging and end results reporting is a prodigious one. The staging in this Manual is a ready reference for students and physicians and emphasizes the necessity for uniform clinical stage classification and end result reporting. This classification is simplified and is not intended as a definitive clinical classification for the more elaborate study of cancer at specific sites.

At the present there are several important committees at work on clinical classification for end result reporting. Among these are the Committee on Clinical Staging and Applied Statistics of the International Union Against Cancer, The American Joint Committee for Clinical Staging and End Result Reporting, and committees representing various subspecialty groups.

The American Joint Committee consists of representatives from the American College of Surgeons, the American College of Radiology, The College of American Pathologists, The American College of Physicians, The American Cancer Society and the National Cancer Institute. There are five subcommittees of this group at work on the various cancer site classifications.

The American Joint Committee is making every effort to cooperate with the Clinical Classification Committee of the International Union Against Cancer and to use the basic principles of classification adopted by that committee.

The purpose of this Manual is threefold. First, a simple but concise and practical table for the recording of end results is presented. This method has been consistently utilized in this Manual for the reporting of end results for all organs of the body. Although minor flaws were encountered, such as insufficient statistical material for reporting in each category, it is felt that, of far greater importance, this table offers to the physician a complete and uniform method that can be simply applied to all neoplastic diseases with particular regard to treatment, stage of disease, and pathology. It must be kept in mind that a prime difficulty in collecting the data herein reported was the adaption of others' figures to this table. In no instance, when a case was questionable for a particular category, was it included. With the reporting of statistics specifically for this table, a completeness of each category will rapidly occur, and the system will become even more practical and valid for comparisons. This method of presentation may be criticized by some as being too general, too nonspecific, or offering too many variable factors. However, if examined closely, it can be seen that the basic categories used can easily be more technically subdivided or expanded to give as specific information as is desired (for example: Topic: Surgery and Radiation Therapy could be further outlined as to exact surgery and type and dosage of radiation). In addition, cross-categories can be established after completion of the basic outline (such as: cases treated by Surgery alone in Stage I, II, III, and IV of disease, etc.).

Second in purpose, a method of staging of neoplastic diseases for all organs is presented. When comparing modes of therapy and determining prognosis, the clinical stage or description of the cancer must be considered and compared with cases of disease of similar extent. Again, striving for simplicity and uniformity, the League of Nations staging for cancer of the cervix was used as a model, and, as much as possible, adapted to each organ in the following manner:

Stage I - disease which is limited to the organ in which it originated.

Stage II - disease which is just locally outside of the confines of the primary organ with no other organ or lymph node metastasis.

Stage III - disease which has metastasized to the regional lymph nodes.

Stage IV - disease which has metastasized to distant lymph nodes and/or distant organs.

Third in purpose, this group of statistics is presented as a reference for the medical student, interne, resident and clinician. It is hoped that this Manual will serve as an encyclopedia of cancer end results and a bibliography for all recent cancer prognosis literature.

New material will be added to this Manual at regular intervals for future editions. It is desired that material be submitted to the author by an individual or institution for inclusion, but it is requested that the presentation of data comply with that form presented herein.

B. Mechanics of Manual

The material included in the Manual was obtained from current medical literature from the period of 1953 through 1957. The following journals were reviewed regularly: American Journal of Surgery; Surgery; Surgery, Gynecology and Obstetrics; Radiology; American Journal of Roentgenology; Radium Therapy and Nuclear Medicine; Annals of Surgery; Archives of Surgery; and Cancer. In addition, all issues of Excerpta Medica, volume Cancer, were reviewed, and the original articles presenting end results were utilized. Any reported series of cases presenting sufficient statistics for usage were recorded regardless of author, size or location of hospital or clinic, or method of therapy.

On page 5 is a presentation of all lesions with their absolute 5-year survival rates. Also presented is a column of survival rates for lesions that are localized enough to be resected or early enough to be classified as Stage I or II. The prognosis, of course, is better in the earlier lesions. This provides the reader with a rapid comparison of the survival in all lesions. This is followed by an individual section for each lesion with specific information. The total number of cases which were reviewed for each lesion is listed on the heading of every page. An identical form of presentation was followed for all sections as below:

	No. cases	% 5-yr. surv.	No. cases	% 10-yr. surv.
Absolute Survival Rate	"	"	"	"
Determinate Survival Rate	"	"	"	"
Treatment: Surgery	"	"	"	"
Radiation Therapy	"	"	"	"
Surgery and Radiation	"	"	"	"
Staging: Stage I	"	"	"	"
Stage II	"	"	"	"
Stage III	"	"	"	"
Stage IV	"	"	"	"
Histologic Type: Type 1	"	"	"	"
Type 2	"	"	"	"
Bibliography				

For the sake of clarity, the terms used should be defined at this time.

5-and 10-Year Survival - the percentage of those patients surviving this given length of time after initial treatment with or without disease. The term "survival rate" was used in preference to the "cure rate". The latter may be somewhat more expressive of the result of treatment; however, there is wide variation in the methods of follow-up from letter questionnaires to careful physician examination, making the definition of "cure" variable. It is felt that "survival rate" provided a more reliable index for comparison.

Absolute Survival Rate - the percentage of patients that survive a given time when all patients seen with disease are considered with no exceptions; that is, all patients admitted or seen in consultation whether or not they receive treatment.

Determinate Survival Rate - the percentage of patients that survive a given time when a selected group of patients are considered. Those patients which are indeterminate or not considered in calculating the determinate rate are only, (1) those lost to follow-up; (2) those seen in consultation only, and, (3) those dying of other cause without neoplastic disease.

Surgery - those cases in which the primary and only treatment was surgical.

Radiation Therapy - those cases in which the primary and only therapy was radiological.

Surgery and Radiation Therapy - those cases in which both surgery and radiation were used regardless of which was the primary mode of therapy.

Part II

PROGNOSIS DATA

PART II

PROGNOSIS DATA

LESION: Lip

TOTAL CASES EVALUATED: 2926 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:----------	2926	61.2%	0	
II. DETERMINATE SURVIVAL RATES:----------	2386	75.1%	0	
A. Treatment:				
Radiation Therapy:----------	1285	68.5%	0	
Surgery:----------	578	80.4%	0	
Surgery and Radiation Therapy:----------	95	46.3%	0	
B. Staging:				
Stage I:---------- (Disease which is primary in the mucosa of the lip with no infiltration into the musculature. No evidence of metastases.)	0		0	
Stage II:---------- (Disease which is primary in the mucosa of the lip with extension into the musculature, but not involving other organs. No evidence of metastases.)	0		0	
Stage I and/or Stage II:----------	1103	79.0%	0	
Stage III:---------- (Disease which is primary in the mucosa of the lip with cervical lymph node metastases.)	302	34.7%	0	
Stage IV:---------- (Disease which is primary in the mucosa of the lip with extension into other organs and/or distant metastases.)	22	13.6%	0	
C. Histologic Type:				
Squamous Cell Carcinoma:----------	2286	75.0%	0	

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LESION: Tongue

TOTAL CASES EVALUATED: 3627 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	3627	24.5%	0	
II. DETERMINATE SURVIVAL RATES:	3223	27.6%	0	
A. Treatment:				
Radiation Therapy:	865	34.3%	0	
Surgery:	158	43.6%	0	
Surgery and Radiation Therapy:	104	14.4%	0	
B. Staging:				
L. Stage I: (Disease which is primary in the mucosa of the tongue and is confined to this structure only. No evidence of metastases.)	0		0	
Stage II: (Disease which is primary in the mucosa of the tongue with involvement of the floor of the mouth and/or gingiva. No evidence of metastases.)	0		0	
R ~~Stage I and/or Stage II~~:	754	40.7%	0	
Stage III: (Disease which is primary in the mucosa of the tongue with cervical lymph node metastases.)	829	13.8%	0	
D Stage IV: (Disease which is primary in the mucosa of the tongue with extension to other adjacent structures and/or distant organ or other lymph node metastases.) NECK - REMOTE	156	3.2%	0	
C. Histologic Type:				
Squamous Cell Carcinoma:	3217	27.4%	0	
ADDITIONAL INFORMATION:				
Base of Tongue Lesions:	145	13.1%	0	
Carcinoma Associated with Syphilis:	93	7.5%	0	

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LESION: Floor of the Mouth
(That area of mucosa, crescent shaped, lying between the inner surface of the lower gingiva and the under surface of the tongue.)

TOTAL CASES EVALUATED: 1021 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	1021	33.8%	0	
II. DETERMINATE SURVIVAL RATES:	1012	34.1%	0	
A. Treatment:				
Surgery:	10	30.0%	0	
Radiation Therapy:	252	40.0%	0	
Surgery and Radiation Therapy:	421	39.4%	0	
B. Staging:				
L Stage I: (Disease which is primary in the mucosa of the floor of the mouth with ~~no~~ NO OR WITHOUT infiltration into the musculature ~~or~~ involvement of the gingiva, mandible or tongue. No evidence of metastases.)	0		0	
R Stage II: (Disease which is primary in the mucosa of the floor of the mouth with extension into the submucosal tissues with or without involvement of the gingiva, mandible, tongue or salivary glands. No evidence of metastases.)	0		0	
~~Stage I and/or Stage II~~:	215	45.1%	0	
Stage III: (Disease which is primary in the mucosa with cervical lymph node metastases.)	165	23.0%	0	
D Stage IV: (Disease which is primary in the mucosa with metastases to distant organs or distant lymph nodes other than cervical nodes.)	21	0.0%	0	
C. Histologic Type:				
Squamous Cell Carcinoma:	1012	34.1%	0	

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LESION: Buccal Mucosa

TOTAL CASES EVALUATED: 929 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	929	30.8%	0	
II. DETERMINATE SURVIVAL RATES:	842	34.0%	0	
A. Treatment:				
Surgery:	161	43.4%	0	
Radiation Therapy:	253	34.7%	0	
Surgery and Radiation Therapy:	171	53.8%	0	
B. Staging:				
L Stage I: (Disease which is primary in the mucosa with ~~no~~ NS infiltration into the musculature ~~or~~ involvement of the gingiva or lip. No evidence of metastases.)	0		0	
R Stage II: (Disease which is primary in the mucosa with extension into the submucosal tissues with or without involvement of the gingiva or lip. No evidence of metastases.)	0		0	
~~Stage I and/or Stage II~~:	11	45.4%	0	
Stage III: (Disease which is primary in the mucosa with cervical lymph node metastases.)	37	21.6%	0	
D Stage IV: (Disease which is primary in the mucosa with metastases to distant organs or distant lymph nodes other than cervical nodes.)	0		0	
C. Histologic Type:				
Squamous Cell Carcinoma:	842	34.0%	0	

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LESION: Gingiva

TOTAL CASES EVALUATED: 243 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	243	28.8%	0	
II. DETERMINATE SURVIVAL RATES:	242	28.9%	0	
A. Treatment:				
Surgery:	60	35.0%	0	
Radiation Therapy:	21	23.8%	0	
Surgery and Radiation Therapy:	0		0	
B. Staging:				
Stage I: (Disease which is primary in the mucosa of the gingiva with no infiltration into the musculature or involvement of the mandible, maxilla, floor of the mouth, buccal mucosa or palate. No evidence of metastases.)	0		0	
Stage II: (Disease which is primary in the mucosa of the gingiva with extension into the submucosal tissues with or without involvement of the mandible, maxilla, floor of the mouth, buccal mucosa or palate. No evidence of metastases.)	0		0	
Stage I and/or Stage II:	35	51.4%	0	
Stage III: (Disease which is primary in the mucosa of the gingiva with cervical lymph node metastases.)	53	20.7%	0	
Stage IV: (Disease which is primary in the mucosa of the gingiva with metastases to distant organs or distant lymph nodes other than cervical nodes.)	0		0	
C. Histologic Type:				
Squamous Cell Carcinoma:	242	28.9%	0	

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LESION: Tonsil

TOTAL CASES EVALUATED: 162 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	162	6.7%	0	
II. DETERMINATE SURVIVAL RATES:	130	8.4%	0	
A. Treatment:				
Radiation Therapy:	130	8.4%	0	
Surgery:	0		0	
Radiation Therapy and Surgery:	0		0	
B. Staging:				
L Stage I: (Disease which is primary in the tonsil and is confined to that structure only. No evidence of metastases.)	0		0	
L Stage II: (Disease which is primary in the tonsil with involvement of the anterior pillar, posterior pillar and/or the soft palate without extension to other adjacent structures. No evidence of metastases.)	0		0	
Stage I and/or Stage II:	25	24.0%	0	
R Stage III: (Disease which is primary in the tonsil with cervical lymph node metastases.)	66	3.0%	0	
D Stage IV: (Disease which is primary in the tonsil with extension to other adjacent structures, other than pillars and soft palate, and/or distant organ or lymph node, other than cervical, metastases.)	23	0.0%	0	
C. Histologic Type:				
Squamous Cell Carcinoma:	113	6.2%	0	
Lymphosarcoma:	18	22.2%	0	

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LESION: Larynx

TOTAL CASES EVALUATED: 4537 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:----------	4537	36.8%	0	
II. DETERMINATE SURVIVAL RATES:----------	4181	39.9%	0	
A. Treatment:				
Radiation Therapy:----------	2160	32.6%	0	
Surgery:----------	1846	50.1%	0	
Partial Laryngectomy:----------	369	72.3%	0	
Total Laryngectomy:----------	892	39.2%	0	
Total Laryngectomy and Radical Neck Diss.	119	42.0%	0	
Surgery and Radiation Therapy:----------	133	27.0%	0	
B. Staging:				
Stage I:---------- (Disease which is primary in the mucosa with no impairment of laryngeal mobility. No evidence of metastases.)	192	71.3%	0	
Stage II:---------- (Disease which infiltrates the wall with either impairment or loss of laryngeal mobility. No evidence of metastases.)	158	36.7%	0	
Stage I and/or Stage II:----------	640	41.0%	0	
Stage III:---------- (Disease which is primary in the larynx with cervical lymph node metastases.)	233	12.4%	0	
Stage IV:---------- (Disease which is primary in the larynx with invasion of other organs and/or distant metastases.)	163	9.8%	0	
C. Histologic Type:				
Squamous Cell Carcinoma:----------	4181	39.9%	0	

L

R

D

From Head To Neck & To Supraclavicular Nodes is Regional

From any other area To " " is Remote

LESION: Intrinsic Larynx
(That portion of the larynx beginning with the vocal cords and extending inferiorly to the trachea.)

TOTAL CASES EVALUATED: 1607 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	1607	46.7%	0	
II. DETERMINATE SURVIVAL RATES:	1481	50.7%	0	
A. Treatment:				
Radiation Therapy:	715	50.2%	0	
Surgery:	575	59.6%	0	
Surgery and Radiation Therapy:	0		0	
B. Staging:				
Stage I: (Disease which is primary in the mucosa with no impairment of laryngeal mobility. No evidence of metastases.)	136	80.8%	0	
Stage II: (Disease which infiltrates the wall with either impairment or loss of laryngeal mobility. No evidence of metastases.)	130	43.8%	0	
Stage I and/or Stage II:	446	46.8%	0	
Stage III: (Disease which is primary in the larynx with cervical lymph node metastases.)	46	8.6%	0	
Stage IV: (Disease which is primary in the larynx with invasion of other organs and/or distant metastases.)	53	15.0%	0	
C. Histologic Type:				
Squamous Cell Carcinoma:	1481	50.7%	0	

LESION: Extrinsic Larynx
(That portion of the larynx extending superior from the vocal cords to the pharynx.)

TOTAL CASES EVALUATED: 1312 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	1312	24.0%	0	
II. DETERMINATE SURVIVAL RATES:	1239	25.5%	0	
A. Treatment:				
Radiation Therapy:	803	19.1%	0	
Surgery:	232	36.6%	0	
Surgery and Radiation Therapy:	0		0	
B. Staging:				
Stage I: (Disease which is primary in the mucosa with no impairment of laryngeal mobility. No evidence of metastases.)	50	34.0%	0	
Stage II: (Disease which infiltrates the wall with either impairment or loss of laryngeal mobility. No evidence of metastases.)	0		0	
Stage I and/or Stage II:	188	23.4%	0	
Stage III: (Disease which is primary in the larynx with cervical lymph node metastases.)	178	6.1%	0	
Stage IV: (Disease which is primary in the larynx with invasion of other organs and/or distant metastases.)	86	5.8%	0	
C. Histologic Type:				
Squamous Cell Carcinoma:	1239	25.5%	0	

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LESION: Salivary Glands — TOTAL CASES EVALUATED: 319 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	319	31.3%	0	
II. DETERMINATE SURVIVAL RATES:	297	33.6%	0	
A. Treatment:				
Radiation Therapy:	88	18.1%	0	
Surgery:	234	39.7%	0	
Surgery and Radiation Therapy:	61	49.1%	0	
B. Staging:				
L Stage I: (Disease which is primary in a salivary gland and is strictly confined to that gland. No evidence of metastases.)	0		0	
R Stage II: (Disease which is primary in a salivary gland with extension immediately outside of the gland, and/or with facial nerve involvement by parotid gland tumors and hypoglossal or lingual nerve involvement by submaxillary gland tumors. No invasion of skull, mandible or mucosa. No evidence of metastases.)	0		0	
~~Stage I and/or Stage II~~:	151	52.2%	0	
Stage III: (Disease which is primary in a salivary gland with cervical lymph node metastases.)	77	14.2%	0	
D Stage IV: (Disease which is primary in a salivary gland with extension into adjacent or distant organs and/or distant lymph node metastases.)	12	0.0%	0	
C. Histologic Type:				
Malignant Mixed Tumor:	38	42.1%	0	
Squamous Cell Carcinoma:	26	19.2%	0	
Mucoepidermoid Carcinoma:	52	65.3%	0	
Adenocarcinoma:	59	37.2%	0	
ADDITIONAL INFORMATION:				
Parotid Gland Tumors:	226	38.0%	0	
Submaxillary Gland Tumors:	67	17.9%	0	

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LESION: Thyroid Gland

TOTAL CASES EVALUATED: 1078 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:----------	1078	39.3%	353	21.2%
II. DETERMINATE SURVIVAL RATES:----------	1024	41.4%	338	22.1%
A. Treatment:				
Surgery:----------	668	46.1%	99	23.2%
Radiation Therapy:----------	0		0	
Surgery and Radiation Therapy:----------	412	35.9%	239	21.7%
B. Staging:				
L Stage I:---------- (Disease which is primary in the thyroid gland and is strictly confined to that gland. No evidence of metastases.)	0		0	
R Stage II:---------- (Disease which is primary in the thyroid gland with extension immediately outside the gland but without invasion of the trachea, larynx, esophagus and/or recurrent laryngeal nerve paralysis. No evidence of metastases.)	0		0	
Stage III:---------- (Disease which is primary in the thyroid gland with cervical lymph node metastases.)	0		0	
D Stage IV:---------- (Disease which is primary in the thyroid gland with adjacent or distant organ metastases or other lymph node metastases.)	0		0	
C. Histologic Type:				
Papillary adenocarcionoma:----------	203	61.0%	28	67.8%
Follicular and alveolar adenocarcinoma:--	105	54.2%	17	23.5%
Undifferentiated carcinoma:----------	133	18.7%	35	5.7%
Solid carcinoma:----------	0		0	

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LESION: Breast

TOTAL CASES EVALUATED: 34,695 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:----------	34,695	45.6%	14,425	30.3%
II. DETERMINATE SURVIVAL RATES:----------	32,609	48.5%	13,995	31.3%
A. Treatment:				
Surgery:----------	19,619	52.0%	10,754	33.8%
Simple Mastectomy:----------	507	31.5%	77	18.1%
Radical Mastectomy:----------	17,926	53.3%	9,832	35.3%
Radiation Therapy:----------	684	20.3%	208	17.3%
Surgery and Radiation Therapy:----------	13,855	45.6%	6,535	22.8%
Simple Mastectomy and Radiation:-------	3,906	44.9%	1,536	20.3%
Radical Mastectomy and Radiation:------	7,591	48.3%	4,222	22.7%
B. Staging:				
L. Stage I:---------- (Disease which is primary in the breast and which appears clinically benign or questionable and is pronounced carcinoma by the pathologist. No evidence of metastases.)	89	85.2%	0	
L. Stage II:---------- (Disease which is primary in the breast and clinically malignant, and strictly confined to this structure. No metastases.)	193	77.1%	0	
Stage I and/or Stage II:----------	7,995	76.0%	3,766	57.4%
R Stage III:---------- (Disease which is primary in the breast with ipsilateral axillary lymph node metastases.)	11,603	35.3%	5,948	18.4%
D Stage IV:---------- (Disease which is primary in the breast with adjacent or distant organ metastases or other lymph node metastases.)	1,380	11.0%	228	1.3%
C. Histologic Type:				
Adenocarcinoma:----------	31,474	47.4%	13,995	31.3%
Papillary Carcinoma of Duct:----------	459	68.1%	0	
Paget's Disease:----------	63	46.0%	0	
Sarcoma:----------	16	12.5%	0	
ADDITIONAL INFORMATION:				
Location of Lesion: Medial Half:---------	1,651	51.3%	112	42.8%
Lateral Half:--------	2,325	56.5%	295	37.9%
Bilateral Primary Carcinoma:----------	507	23.2%	0	
Simultaneous:--------	31	16.1%	0	
Nonsimultaneous:-----	376	29.7%	0	
Carcinoma with Pregnancy or Lactation:---	187	31.5%	70	20.0%
Carcinoma of Male Breast:----------	128	38.2%		

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LESION: Lung — TOTAL CASES EVALUATED: 6973 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	6973	6.4%	0	
II. DETERMINATE SURVIVAL RATES:	6973	6.4%	0	
A. Treatment:				
Surgery:	3252	14.9%	0	
Resected Cases:	2043	22.1%	0	
Radiation Therapy:	0		0	
Surgery and Radiation Therapy:	0		0	
B. Staging:				
L — Stage I: (Disease which is strictly confined to the mucosa of the bronchus with no evidence of fixation or metastases.)	0 (HILUM)		0	
R — Stage II: (Disease which infiltrates the wall of the bronchus producing fixation. No evidence of metastases.)	0 PLEURA HILAR HILUM NODES MEDIASTINAL NODES		0	
R — Stage I and/or Stage II:	264	37.1%	0	
R — Stage III: (Disease which is primary in the bronchial mucosa with neighboring mediastinal lymph node metastases.)	131	19.8%	0	
D — Stage IV: (Disease which is primary in the bronchial mucosa with extension into other organs and/or distant metastases.)	1230 SUPRACLAVICULAR, SCALENE, CERVICAL NODES PLEURAL FLUID MET TO SECOND LUNG IS DISTANT	0.7%	0	
C. Histologic Type:				
Squamous Cell Carcinoma:	899	14.7%	0	
Adenocarcinoma:	231	9.0%	0	
Anaplastic or Undifferentiated Ca.:	713	6.4%	0	

MET. TO MEDIASTINUM, PERICARDIUM IS REMOTE STAGING

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LESION: Esophagus

TOTAL CASES EVALUATED: 2481 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	2481	3.4%	0	
II. DETERMINATE SURVIVAL RATES:	2269	3.7%	0	
A. Treatment:				
Surgery:	802	8.7%	0	
Resected Cases:	322	15.8%	0	
Radiation Therapy:	1054	0.6%	0	
Surgery and Radiation Therapy:	39	7.6%	0	
B. Staging:				
L Stage I: (Disease which is strictly confined to the mucosa of the esophagus with no evidence of fixation or metastases.)	0		0	
Stage II: (Disease which infiltrates the wall of the esophagus producing fixation. No evidence of metastases.)	0		0	
R Stage III: (Disease which is primary in the esophogeal mucosa with neighboring mediastinal lymph node metastases.)	0		0	
D Stage IV: (Disease which is primary in the esophageal mucosa with extension into other organs and/or distant metastases.)	0		0	
ADDITIONAL INFORMATION:				
Location of Lesion:				
Upper and midthoracic esophagus:	292	3.4%	0	
Lower and abdominal esophagus:	333	11.7%	0	

HEAD & NECK TO SUPRACLAVICULAR NODE IS REGIONAL

BUT ANY OTHER ORGAN TO SUPRACLAVICULAR NODE IS REMOTE

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LESION: Stomach — TOTAL CASES EVALUATED: 9543 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	9543	5.2%	1882	2.6%
II. DETERMINATE SURVIVAL RATES:	9364	5.3%	1833	2.7%
A. Treatment:				
Surgery:	4819	8.5%	1194	5.8%
Resected Cases:	3401	23.8%	921	7.7%
Subtotal Gastrectomy:	1063	23.5%	0	
Total Gastrectomy:	411	9.0%	0	
Radiation Therapy:	0		0	
Surgery and Radiation Therapy:	0		0	
B. Staging:				
L Stage I: (Disease which is strictly confined to the layers of the stomach wall involving the mucosa, muscularis and/or serosa without ulceration of the serosa. No evidence of metastases.)	0		0	
L Stage II: (Disease primary in the stomach wall with extension into the perigastric tissues ~~and/or omenta~~ but not involving other organs. No evidence of metastases.)	0		0	
Stage I and/or Stage II:	429	41.9%	61	6.5%
R Stage III: (Disease primary in the stomach wall with lymph node metastases to the regional nodes of the lesser or greater omentum only.) EXTENTION OMENTA AND/OR	670	11.7%	119	2.5%
D Stage IV: (Disease primary in the stomach wall with extension into other regional or distant organs and/or other lymph node metastases.) PERITONEUM —— SCALENE NODES (REMOTE)	1776	0.1%	0	
C. Histologic Type:				
Adenocarcinoma:	7681	4.4%	486	1.6%
Lymphoma:	47	44.6%	11	36.3%

STOMACH

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LESION: Gall Bladder

TOTAL CASES EVALUATED: 642 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:----------	642	2.1%	0	
II. DETERMINATE SURVIVAL RATES:----------	638	2.1%	0	
A. Treatment:				
Surgery:----------	638	2.1%	0	
Resected Cases:----------	104	5.7%	0	
Radiation Therapy:----------	0		0	
Surgery and Radiation Therapy:----------	0		0	
B. Staging:				
L Stage I:---------- (Disease which is primary in the gall bladder wall but with no extension beyond the serosa. No evidence of metastases.)	0		0	
R Stage II:---------- (Disease which is primary in the gall bladder wall with direct extension through the serosa into the liver tissue. No evidence of metastases.)	0		0	
Stage III:---------- (Disease which is primary in the gall bladder wall with cystic duct and/or artery lymph node metastases.)	0		0	
D Stage IV:---------- (Disease which is primary in the gall bladder wall with extension to other organs than liver and/or other lymph node metastases.)	0		0	

GALL BLADDER TO LIVER IS REGIONAL

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LESION: Pancreas and Ampulla of Vater — TOTAL CASES EVALUATED: 917 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	917	2.1%	0	
II. DETERMINATE SURVIVAL RATES:	916	2.1%	0	
A. Treatment:				
Surgery:	763	2.6%	0	
Resected Cases:	251	13.9%	0	
Radiation Therapy:	0		0	
Surgery and Radiation Therapy:	0		0	
B. Staging:				
L — Stage I: (Disease which is primary in the pancreas or ampulla of Vater and strictly confined to that structure. No evidence of metastases.)	0		0	
Stage II: (Undefinable for this lesion)				
R — Stage III: (Disease which is primary in the pancreas or ampulla of Vater with adjacent lymph node metastases.)	0		0	
D — Stage IV: (Disease which is primary in the pancreas or ampulla of Vater with adjacent or distant organ metastases or other lymph node metastases.)	0		0	
ADDITIONAL INFORMATION:				
Head of the Pancreas Lesions:	110	0.9%	0	
Ampulla of Vater Lesions:	54	27.7%	0	

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LESION: Colon and Rectum — TOTAL CASES EVALUATED: 10,333 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	10333	34.2%	556	30.0%
II. DETERMINATE SURVIVAL RATES:	9775	36.2%	438	38.1%
A. Treatment:				
Surgery:	9300	37.6%	438	38.1%
Radiation Therapy:	165	5.4%	0	
Surgery and Radiation Therapy:	0		0	
B. Staging:				
Stage I: (Disease strictly confined to the layers of the bowel wall involving mucosa, muscularis and/or serosa without ulceration of the serosa. No evidence of metastases.)	265	66.7%	0	
Stage II: (Disease primary in the bowel wall with extension into the pericolonic tissues but not involving other organs. No evidence of metastases.)	606	52.8%	0	
Stage I and/or Stage II:	2731	64.5%	108	44.4%
Stage III: (Disease primary in the bowel wall with regional lymph node metastases.)	2076	32.8%	58	31.0%
Stage IV: (Disease primary in the bowel wall with extension into other organs or with distant metastases.)	80	11.2%	0	
C. Histologic Type:				
Adenocarcinoma:	9775	36.2%	438	38.1%
ADDITIONAL INFORMATION:				
Location of Lesion:				
Right Colon: (cecum, ascending colon and hepatic flexure)	986	43.7%	0	
Transverse Colon:	68	44.1%	0	
Left Colon: (descending colon and sigmoid)	477	52.2%	83	48.1%
Rectosigmoid and Rectum:	3422	49.0%	344	36.9%
Anterior Resect. or Sphincter Pres.:	892	52.8%	121	36.3%
Abdominoperineal Resection:	2474	47.6%	223	37.2%

L

R

D

MESENTERY TISSUE (L)

(THRU BOWEL WALL BUT NOT INTO OTHER ORGANS) L

MESENTERY MEMBRANE CONTAINS LYMPHATICS & VESSELS

PERITONEUM - LIVER (OMENTUM) (ILEUM)

① SPREAD TO ADJACENT MESENTERY TISSUE IS LOCALIZED.

② MESENTERY NODES ARE REGIONAL.

③ MESENTERY - UNSPECIFIED WHETHER NODES OR OTHERWISE, IS CODED UNKNOWN STAGE.

(ms-L/LG)

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LESION: Ovary — TOTAL CASES EVALUATED: 2063 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	2063	29.6%	850	17.7%
II. DETERMINATE SURVIVAL RATES:	2033	30.1%	850	17.7%
A. Treatment:				
Surgery:	1248	32.6%	496	21.1%
Radiation Therapy:	0		0	
Surgery and Radiation Therapy:	264	41.6%	126	28.5%
B. Staging:				
L — Stage I: (Disease which is primary in the ovary and is strictly confined to that organ. No evidence of metastases.)	343	64.4%	147	48.9%
R — Stage II: (Disease which is primary in the ovary with extension to the Fallopian tubes, uterus, broad ligament or other ovary. No evidence of metastases.)	225	42.4%	90	25.5%
R — Stage III: (Disease which is primary in the ovary with regional obturator or iliac lymph node metastases.) (PERITONEUM)	276	17.0%	89	5.6%
D — Stage IV: (Disease which is primary in the ovary with other adjacent or distant organ involvement or other lymph node metastases.) (OMENTUM) (MESENTERY) (P2) (LUS)	399	4.5%	229	2.1%
C. Histologic Type:				
Papillary Pseudomucinous Cystadenocarcinoma:	195	57.4%	19	42.1%
Papillary Serous Cystadenocarcinoma:	429	26.8%	153	14.5%
Solid Carcinoma:	135	14.8%	18	22.2%
Granulosa Cell Carcinoma:	109	77.9%	0	
Dysgerminoma:	71	26.7%	0	

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LESION: Cervix — TOTAL CASES EVALUATED: 13,247 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	13,247	35.5%	1604	26.6%
II. DETERMINATE SURVIVAL RATES:	12,430	37.9%	1578	27.1%
A. Treatment:				
Radiation Therapy:	9,354	38.7%	1196	20.3%
Radiation Therapy and Surgery:	1,089	49.8%	257	47.8%
Surgery:	590	48.4%	113	40.7%
B. Staging:				
L — Stage I: (Disease which is primary on the cervix with no extension onto the vagina or into the uterine canal or paracervical tissues. No evidence of metastases.)	1,889	70.1%	232	53.4%
R — Stage II: (Disease which is primary on the cervix with extension onto the adjacent vaginal canal. No evidence of metastases.)	4,349	48.6%	439	30.5%
R — Stage III: (Disease which is primary on the cervix with regional iliac or obturator lymph node metastases.)	3,668	25.9%	630	16.6%
D — Stage IV: (Disease which is primary on the cervix with parametrial invasion, regional or distant organ involvement and/or other lymph node metastases.)	1,263	8.7%	160	3.1%
C. Histologic Type:				
Squamous Cell Carcinoma:	3,357	39.4%	357	29.9%
Adenocarcinoma:	148	23.6%	30	16.6%
ADDITIONAL INFORMATION:				
Stump Carcinoma:	105	41.9%	0	
Recurrent Carcinoma (after definitive radiation or surgery)				
2nd Treatment - Radiation Therapy:	110	16.3%	0	
2nd Treatment - Radical Surgery:	123	37.3%	0	

ENDOCERVICAL GLANDS CAN BE CODED IN SITU OR LOCALIZED (PER M. SHEA)

CERVIX TO ENDOMETRIUM - REC. BY DIRECT EXT. VAGINAL CANAL MYOMETRIUM TO REGIONAL

PARAAORTIC, INGUINAL, GASTRO, FALLOPIAN TUBES & OVARY

CERVIX

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LESION: Corpus (UTERUS) TOTAL CASES EVALUATED: 4636 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:----------	4636	55.6%	634	45.7%
II. DETERMINATE SURVIVAL RATES:----------	4470	57.7%	627	46.2%
A. Treatment:				
Surgery:----------	660	67.1%	0	
Surgery and Radiation Therapy:----------	931	70.9%	0	
Preoperative Radiation and Surgery:----	734	73.9%	0	
Postoperative Radiation and Surgery:---	155	60.6%	0	
Radiation Therapy:----------	1075	36.3%	0	
B. Staging:				
Stage I:---------- (Disease which is primary in the endometrium without involvement of the myometrium, vaginal canal or fallopian tubes. No evidence of metastases.)	227	80.1%	0	
Stage II:---------- (Disease which is primary in the endometrium with involvement of the myometrium or serosa and/or extension into the vagina, fallopian tubes, or broad ligament. No evidence of metastases.)	941	65.1%	0	
Stage III:---------- (Disease which is primary in the endometrium with regional obturator or iliac lymph node metastases.)	0		0	
Stage IV:---------- (Disease which is primary in the endometrium with adjacent or distant organ involvement and/or other lymph node metastases.)	52	11.5%	0	
Stage III and/or Stage IV:---------- (PELVIS)	411	21.8%	0	
C. Histologic Type:				
Adenocarcinoma:----------	4451	57.8%	627	46.2%
Sarcoma:----------	19	21.0%	0	

L

EXTENSION TO ENDOMETRIUM

R

D

CORPUS

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LESION: Vagina — TOTAL CASES EVALUATED: 538 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:----------	538	22.8%	102	22.2%
II. DETERMINATE SURVIVAL RATES:----------	517	23.7%	96	23.9%
A. Treatment:				
Radiation Therapy:----------	383	24.5%	0	
Surgery:----------	25	36.0%	0	
Surgery and Radiation Therapy:----------	29	27.5%	0	
B. Staging:				
Stage I:---------- (Disease strictly confined to vaginal mucosa, and not involving the cervix, vulva or any other adjacent structure. No evidence of metastases.)	59	35.5%	0	
Stage II:---------- (Disease primary in the vagina and involving the adjacent vulva ~~or cervix~~, or extending through all of the layers of the vagina but not involving any other organs. No evidence of metastases.)	23	30.4%	0	
Stage I and/or Stage II:----------	219	35.6%	0	
Stage III:---------- (Disease primary in the vagina with metastases to the regional groin lymph nodes.) OR INVOLVING CERVIX	36	8.3%	0	
Stage IV:---------- (Disease primary in the vagina with invasion of the bladder or rectum or other distant spread.)	43	0.0%	0	
Stage III and/or Stage IV:----------	124	7.2%	0	
C. Histologic Type:				
Squamous Cell Carcinoma:----------	393	22.6%	0	
Adenocarcinoma:----------	20	30.0%	0	

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LESION: Vulva

TOTAL CASES EVALUATED: 684 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	684	31.2%	0	
II. DETERMINATE SURVIVAL RATES:	571	37.4%	0	
A. Treatment:				
Surgery:	146	53.4%	0	
Radiation Therapy:	116	20.6%	0	
Surgery and Radiation Therapy:	0		0	
B. Staging:				
Stage I: (Disease which is a primary of the vulva and is strictly confined to that structure. No evidence of metastases.)	0		0	
Stage II: (Disease which is a primary of the vulva with extension to the vaginal wall ~~and/or urethral orifice~~. No evidence of metastases.)	0		0	
Stage I and/or Stage II:	64	85.9%	0	
Stage III: (Disease which is primary of the vulva with regional groin lymph node metastases.) OR INVOLVING URETHRAL ORIFICE	32	37.5%	0	
Stage IV: (Disease which is primary of the vulva with other organ involvement or lymph node metastases.)	28	0.0%	0	
C. Histologic Type:				
Squamous Cell Carcinoma:	555	38.3%	0	

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LESION: Urinary Bladder — TOTAL CASES EVALUATED: 2718 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:----------	2718	22.2%	1195	12.7%
II. DETERMINATE SURVIVAL RATES:----------	2241	27.0%	1195	12.7%
A. Treatment:				
Surgery:----------	890	39.1%	191	21.4%
Surgery and Radiation Therapy:----------	499	20.2%	57	0.0%
Radiation Therapy:----------	662	21.2%	0	
B. Staging:				
Stage I:---------- (Disease which is primary in the bladder mucosa and/or involving the submucosa, muscularis and serosa without ulceration of the serosa. No evidence of metastases.)	108	85.1%	108	40.7%
Stage II:---------- (Disease which is primary in the bladder mucosa with extension to paravesical tissues but without involvement of other organs. No evidence of metastases.)	71	40.8%	71	21.1%
Stage I and/or Stage II:----------	395	64.3%	179	32.9%
Stage III:---------- (Disease which is primary in the bladder mucosa with metastases to the regional iliac and obturator lymph nodes.)	36	13.8%	36	0.0%
Stage IV:---------- (Disease which is primary in the bladder mucosa with extension into other organs and/or distant organ or lymph node metastases.)	27	0.0%	27	0.0%
C. Histologic Type:				
Transitional Cell Carcinoma:----------	1608	27.9%	1189	12.7%
Low-Grade (grade 1 and/or grade 2):*----	848	35.4%	98	30.6%
High-Grade (grade 3 and/or grade 4):*---	339	23.0%	56	8.9%
Adenocarcinoma:----------	41	29.2%	0	

*Broder's classification

NOTE: No case of benign papilloma was included.

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LESION: Prostate — TOTAL CASES EVALUATED: 690 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	690	46.8%	435	14.0%
II. DETERMINATE SURVIVAL RATES:	690	46.8%	433	14.0%
A. Treatment:				
Radiation Therapy:	0		0	
Radiation Therapy and Surgery:	0		0	
Surgery:	308	50.6%	160	8.7%
Transurethral resection:	92	52.1%	92	0.0%
Total Prostatectomy:	216	50.0%	68	20.5%
Endocrine Therapy:	337	46.2%	228	17.5%
Estrogens Only:	24	50.0%	24	21.0%
Orchiectomy Only:	18	38.8%	18	5.5%
Estrogens and Orchiectomy:	179	40.7%	70	14.2%
B. Staging:				
Stage I: (Disease which is primary in the prostate gland without extension through the capsule. No evidence of metastases.)	151	58.2%	110	27.2%
Stage II: (Disease which is primary in the prostate gland with extension through the capsule into periprostatic tissues but without extension to other organs. No evidence of metastases.)	38	47.3%	24	25.0%
Stage III: (Disease which is primary in the prostate gland with regional neighboring lymph node metastases.) PERINUREAL	0		0	
Stage IV: (Disease which is primary in the prostate gland with adjacent or distant organ metastases and/or other lymph node metastases.) SEMINAL VESICLES	62	17.7%	18	0.0%
Stage III and/or Stage IV:	114	31.5%	70	10.0%
C. Histologic Type:				
Adenocarcinoma:	568	47.7%	311	13.8%

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LESION: Penis

TOTAL CASES EVALUATED: 407 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:----------	407	34.1%	265	21.1%
II. DETERMINATE SURVIVAL RATES:----------	377	36.8%	245	22.8%
A. Treatment:				
Surgery:----------	142	48.5%	78	25.6%
Radiation Therapy:----------	87	26.4%	76	14.4%
Surgery and Radiation Therapy:----------	88	38.6%	68	25.0%
B. Staging:				
L Stage I:---------- (Disease which is primary on the penis and strictly confined to that organ. No evidence of metastases.)	141	58.8%	120	30.0%
Stage II: (Undefinable for this lesion.)				
R Stage III:---------- (Disease which is primary on the penis with inguinal lymph node metastases.)	145	28.2%	125	16.0%
D Stage IV:---------- (Disease which is primary on the penis with adjacent or distant organ metastases and/or other lymph node metastases.)	60	1.6%	16	0.0%
C. Histologic Type:				
Squamous Cell Carcinoma:----------	374	37.1%	244	22.9%

PENIS

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LESION: Melanoma OUT TOTAL CASES EVALUATED: 1899 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	1899	23.0%	507	12.8%
II. DETERMINATE SURVIVAL RATES:	1661	26.3%	482	13.4%
A. Treatment:				
Surgery:	1332	30.8%	382	13.8%
Wide Local Excision:	335	35.2%	28	3.5%
Wide Local Excision - Lymph Node Diss.-	316	23.1%	29	0.0%
Amputation:	22	36.3%	0	
Radiation Therapy:	22	0.0%	21	0.0%
Surgery and Radiation Therapy:	0		0	
B. Staging:				
Stage I: (Disease which appears to be clinically benign or questionable, and is pronounced as melanoma by the pathologist. No evidence of metastases.)	0		0	
Stage II: (Disease which is clinically obvious melanoma. No evidence of metastases.)	0		0	
Stage I and/or Stage II:	262	46.1%	53	11.3%
Stage III: (Disease as stated in Stage I or Stage II with regional lymphatic spread.)	208	16.3%	40	5.0%
Stage IV: (Primary melanoma with distant metastases.)	220	0.0%	38	0.0%
ADDITIONAL INFORMATION:				
Location of Lesion:				
Subungual:	18	38.8%	0	
Head and Neck:	230	26.5%	0	
Oropharyngeal cavity:	33	6.0%	0	
Eye:	76	35.5%	0	
Trunk:	152	14.4%	0	
Upper extremity:	61	29.5%	0	
Lower extremity:	167	28.7%	0	
Genitalia:	25	16.0%	0	
Anorectal:	10	0.0%	0	

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LESION: Soft Tissue ~~Sarcoma~~ TUMOR — TOTAL CASES EVALUATED: 732 Cases

	no. cases eval.	5 year survival	no. cases eval.	10 year survival
I. ABSOLUTE SURVIVAL RATES:	732	27.7%	0	
II. DETERMINATE SURVIVAL RATES:	592	33.9%	0	
A. Treatment:				
Surgery:	167	32.3%	0	
Radiation Therapy:	65	13.8%	0	
Surgery and Radiation Therapy:	88	26.1%	0	
B. Staging:				
(1) L Stage I: (Disease which is primary in the soft tissue and is localized to that primary site. No evidence of metastases.)	0		0	
Stage II: (Undefinable for this lesion.)				
(2) R Stage III: (Disease which is primary in the soft tissue with regional lymph node metastases.) OR ADJACENT ORGAN METASTASES	0		0	
D Stage IV: (Disease which is primary in the soft tissue with distant or adjacent organ metastases and/or distant lymph node metastases.)	0		0	
C. Histologic Type:				
Angiosarcoma:	11	27.2%	0	
Dermatofibrosarcoma Protuberans:	13	69.2%	0	
Fibrosarcoma:	63	39.6%	0	
Kaposi's Sarcoma:	28	28.5%	0	
Liposarcoma:	64	35.9%	0	
Malignant Neurilemona:	32	59.3%	0	
Malignant Synovioma:	37	21.6%	0	
Osteogenic Sarcoma:	35	8.6%	0	
Rhabdomyosarcoma:	68	35.2%	0	
ADDITIONAL INFORMATION:				
Location of Lesion:				
Upper Extremity:	78	46.1%	0	
Lower Extremity:	195	32.3%	0	
Trunk:	120	50.0%	0	
Retroperitoneal:	149	16.7%	0	

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LESION: Bone — TOTAL CASES EVALUATED: 1755 Cases

	no. cases eval.	-5 year survival	no. cases eval.	-10 year survival
I. ABSOLUTE SURVIVAL RATES:	1755	16.5%	644	16.3%
II. DETERMINATE SURVIVAL RATES:	1470	19.7%	578	18.1%
A. Treatment:				
Surgery:	595	17.3%	442	14.2%
Osteogenic Sarcoma:	374	18.4%	294	15.3%
Chondrosarcoma:	176	14.5%	148	12.1%
Ewing's Sarcoma:	10	10.0%	0	
Fibrosarcoma:	30	26.2%	0	
Radiation Therapy:	72	8.3%	0	
Osteogenic Sarcoma:	11	0.0%	0	
Chondrosarcoma:	11	0.0%	0	
Ewing's Sarcoma:	33	15.1%	0	
Fibrosarcoma:	17	5.8%	0	
Surgery and Radiation Therapy:	200	9.0%	0	
Osteogenic Sarcoma:	50	6.0%	0	
Chondrosarcoma:	40	20.0%	0	
Ewing's Sarcoma:	58	1.7%	0	
Fibrosarcoma:	46	13.0%	0	
B. Staging:				
Stage I: (Disease which is primary within the bone without causing a break in the periosteum or changing the normal configuration of that bone. No metastases.)	0		0	
Stage II: (Disease which is primary within the bone and which has broken through the periosteum with extension to surrounding soft tissue, and/or changed the normal configuration of that bone. No evidence of metastases.)	0		0	
Stage III: (Undefinable for this lesion.)				
Stage IV: (Disease which is primary within the bone with metastases to another bone and/or organ.)	0		0	
C. Histologic Type:				
Osteogenic Sarcoma:	812	17.6%	326	14.4%
Chondrosarcoma:	296	20.6%	190	18.9%
Ewing's Sarcoma:	118	5.9%	0	
Fibrosarcoma:	102	19.6%	18	22.2%
Reticulum Cell Sarcoma:	67	37.3%	18	33.3%
Multiple Myeloma:	29	3.4%	0	
Angiosarcoma:	17	11.7%	0	

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