

## CANCER REGISTRY REPORT

The Cancer Data Management System/Cancer Registry collects data on all types of cancer diagnosed or treated in an institution and is one of the four major components of an approved cancer program. From the reference or starting date of January 1, 1990, through December 31, 2002, GBMC's Cancer Registry has abstracted into its database the demographic, diagnostic, staging, treatment, and follow-up information on 24,408 cancer cases. To ensure accurate survival statistics, the Registry is required to follow these patients annually. GBMC's follow-up rate is 98.9%.

All data are reported quarterly to the Maryland Cancer Registry (MCR), which is part of the Maryland Department of Health and Mental Hygiene, and annually to the National Cancer Database (NCDB), the data management system for hospitals and programs approved by the Commission on Cancer. Co-sponsored by the American Cancer Society and the American College of Surgeons, the NCDB uses submitted data for comparative studies that evaluate oncology care and provides a Benchmark Summary of Cancer Care and Survival in the United States. The MCR uses data to evaluate incidence rates for the entire state, and compares data by region and county; they also participate in national studies. In addition to required reporting, the Cancer Registry at GBMC provides data for physician studies and educational conferences. The Maryland Cancer Registry, the National Cancer Database and the Greater Baltimore Medical Center support web sites.

Three full-time Certified Tumor Registrars and a part-time follow-up clerk staff the Cancer Registry at GBMC. For additional information, call 443-849-8063.

## ANALYSIS

The Cancer Registry accessioned 2,289 cases during calendar year 2002. Of these, 2,117 were analytic cases-those patients who were initially diagnosed at GBMC and/or received all or part of their first course of treatment at GBMC. The 172 non-analytic cases were initially diagnosed and treated at other facilities before referral to GBMC for additional treatment for recurrent disease or were initially diagnosed or treated at GBMC prior to January 1, 1990.

In 2002, the mean age at diagnosis for males at GBMC was 65; for females, it was 60.

The racial distribution of 2,289 cases includes 86.8% Caucasian, 12.1% African-American and 1% Asian. While 55% of patients diagnosed or treated at GBMC live in Baltimore County and 19% live in Baltimore City, patients come from 21 other Maryland counties, Pennsylvania, Delaware, the District of Columbia and other states and countries for treatment.

## SITE DISTRIBUTION

Breast cancer continues to be the most frequently diagnosed and/or treated cancer at GBMC, with 594 analytic cases compared to 557 analytics in 2001. The second most commonly treated cancer at GBMC is prostate cancer (231 analytics compared to 291 analytics in 2001), followed by colorectal (227 analytics compared to 191 in 2001), lung (178 analytics compared to 223 analytics in 2001) and skin (87 analytics compared to 76 in 2001). Of the skin histologies, 72 patients were diagnosed with melanoma, 5 patients with stage 3 or 4 basal or squamous carcinoma, and 10 patients with other histologies (Tables 1, 2).

Table 1  
**GBMC Site Distribution  
All Cases 2002**

Primary Site	Total Cases	Analytic	Non-Analytic	Male	Female
GENITOURINARY	389	342	47	343	46
Prostate	257	231	26	257	0
Renal	29	24	5	17	12

Bladder	75	60	15	47	28
Other GU	28	27	1	22	6
BREAST	617	594	23	4	613
GASTROINTESTINAL	319	299	20	156	163
Esophagus	7	6	1	5	2
Stomach	18	17	1	9	9
Colon/Rectum	227	210	17	107	120
Anal	12	11	1	8	4
Pancreas	28	28	0	13	15
Other GI	27	27	0	14	13
GYNECOLOGIC	225	211	14	0	225
Cervix Uteri	80	77	3	0	80
Corpus Uteri	74	69	5	0	74
Ovary	46	42	4	0	46
Other Gyn	25	23	2	0	25
HEAD AND NECK	225	211	14	125	100
Oral Cavity	32	28	4	19	13
Pharynx	46	46	0	40	6
Salivary Gland	19	16	3	11	8
Larynx	36	34	2	30	6
Thyroid	80	75	5	16	64
Other Head & Neck	12	12	0	9	3
LUNG	188	178	10	89	99
LYMPH NODES	76	67	9	35	41
BONE MARROW	64	54	10	33	31
SKIN*	104	87	17	60	44
SOFT TISSUE SARCOMA	11	9	2	7	4
CNS	16	14	2	8	8
OTHER	20	16	4	9	11
UNKNOWN PRIMARY	35	35	0	18	17
<b>ALL SITES TOTAL</b>	<b>2289</b>	<b>2117</b>	<b>172</b>	<b>887</b>	<b>1402</b>

\*Skin-Excludes localized basal/squamous skin cancers  
Source: GBMC Cancer Registry Database

**Table 2**  
**Greater Baltimore Medical Center**  
**Site Distribution by Sex-2002**  
**2117 Analytic Cases**

Male			Female		
Site	Number Cases	(Percent)	Number Cases	(Percent)	Site
All Sites	793	(37.5)	1,324	(62.5)	All Sites
Melanoma	40	(5.0)	33	(2.5)	Melanoma
Oral	63	(7.9)	23	(1.7)	Oral
			590	(44.6)	Breast
Lung	81	(10.2)	96	(7.3)	Lung
Pancreas	13	(1.6)	15	(1.1)	Pancreas
Stomach	6	(0.8)			
Kidney	23	(2.9)	15	(1.1)	Kidney
Colon	56	(7.1)	87	(6.6)	Colon
			42	(3.2)	Ovary
			69	(5.2)	Uterus
			77	(5.8)	Cervix
Bladder	36	(4.5)	26	(1.8)	Bladder
Prostate	231	(29.1)			
Rectum	41	(5.2)	26	(2.0)	Rectum
Leukemia	11	(1.4)	12	(0.9)	Leukemia
Lymphoma	40	(5.0)	48	(3.6)	Lymphoma
All Other	152	(19.1)	165	(12.5)	All Other

Source: GBMC Cancer Registry

The American Cancer Society estimated that 23,500 new cancer cases would be diagnosed in Maryland in 2002. That same year, GBMC diagnosed and/or treated an increased number of cancers of the bladder

(60 compared to 46 in 2001), and ovary (42 compared to 26 in 2001). In the head and neck area, GBMC otolaryngologists treated more cancers of the pharynx (46 compared to 21 in 2001), salivary gland (16 compared to 11 in 2001) and thyroid (75 compared to 59 in 2001).

## STAGING

To help the physician evaluate the patient's disease at diagnosis, estimate prognosis, guide treatment, evaluate therapy and access the results of early cancer detection, the American Joint Committee on Cancer (AJCC) has established a TNM Staging Classification based on the premise that cancers of similar sites and histologies share similar patterns of growth and extension. In the TNM staging system, T relates to extent of the primary tumor, N relates to lymph node involvement and M indicates the presence of distant metastases. The combination of the TNM gives a stage group classification of Stage 0, 1,2,3,4, or unstageable. Cancers may be unstageable because no AJCC staging classification exists for the site. For example, leukemias, unknown primaries, and primary brain tumors cannot be staged using the AJCC criteria. Also patients may be unstageable because they choose to have no treatment or further testing needed to determine the appropriate stage. At diagnosis, 11.1% of GBMC's 2,117 analytic cases were Stage 0 (in situ), the earliest stage tumors. In general, the survival rates for in-situ cancers are higher than for those of invasive cancers. Of the invasive cancers, 27.2% were Stage 1, 24.9% were Stage 2, 11.7% were Stage 3, 12.6% were Stage 4, 9.5% had no AJCC stage for the site, and 2.9% were unstageable. See Table 3 below: 2002 Stage at Diagnosis

Table 3:

**AJCC Stage at Diagnosis (2002)**

