



# NORTHWEST HOSPITAL & MEDICAL CENTER

## 2002 Cancer Program Annual Report

With Statistical Data from 2001



### Cancer Committee Members 2001 - 2002

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& Liaison to the American College of Surgeons

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Director, Nursing

Rod Hopkins, M.D., Diagnostic Radiology

George Birchfield, M.D., Oncology

Mark Brakstad, M.D., Surgery

Karen Brandstrom, R.N., Care Management/  
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Denise Cho, M.D., Gynecology

Terri Cunningham, M.S.N., Nursing

Matthew Feliciano, Cancer Registrar

Judy Folks, M.N., Medical Staff / Performance  
Improvement

Robert Haining, M.D., Internal Medicine

John Landkammer, Pharm.D., Pharmacy

Leroy Korb, M.D., Radiation Oncology

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Phillip Pearson, M.D., Urology

Ron Rowbotham, M.S., Research & Development

Charles Simrell, M.D., Pathology

Gayle Ward, M.N., Administration

# 2002 Cancer Program Annual Report

*With Statistical Data from 2001*

## Chairman's Report

### *A Year of Change, Transition, and Accomplishment*

I am pleased to present to our community of health care professionals and other interested readers the 2002 annual report for Northwest Hospital's Cancer Program (with statistical data for 2001). This has been a year filled with many changes, transitions, and accomplishments. We continue to be committed to providing excellent care for our patients, while continuing to strive for improvements.

We are indebted to Dr. Charles M. Bagley, Jr., our former chairman and American College of Surgeons (ACoS) Liaison who retired from his practice of hematology and oncology this year. For the past 15 years he selflessly chaired the Cancer Committee and provided direction, insight, and innovation for the program. We extend our heartfelt appreciation for his time and commitment, and wish him continued good health and enjoyment in his retirement.

Dr. Mark Kimmins has enthusiastically assumed the role of ACoS Liaison, providing an essential connection with our professional program accrediting organization.



*Mark Kimmins M.D.  
ACoS Liaison*

We also wish to recognize and welcome Matthew Feliciano, who has taken on the responsibility and commitment of the new tumor registrar. He has done a marvelous job updating the registrar after the nine month vacancy.

As the new Chair of the Cancer Committee, I would like to extend a round of applause to everyone on the committee for their excellent job in obtaining reaccreditation for the Northwest Hospital Cancer Program. The ACoS Commission on Cancer has granted this accreditation for the next three years. Special thanks to Tana Olson, CTR, our previous cancer registrar, who returned and assisted in our accreditation process. This continues to substantiate our program as one of excellence in comparison to our surroundings -- not a small feat indeed, especially in Seattle.

This year our featured articles include gamma knife radiosurgery by Dr. Ronald Young and a new innovative technology, radio-frequency ablation of solid tumors by Dr. Ray Jensen. As of June 2002, radio-frequency ablation was still only available to patients in the Pacific Northwest at Northwest Hospital & Medical Center.

My thanks again for all the work, support, and effort of those on the committee, and for making our program such a continued success now and in the coming years.



*David Dong, M.D.  
Cancer Committee  
Chairman*



## Northwest Hospital & Medical Center Cancer Program

### **Mission**

To accurately, expertly, and compassionately help the patient with cancer through all phases of illness, including diagnosis, treatment, rehabilitation, and management of symptoms.

### **Vision**

Northwest Hospital provides our patients and community with the best cancer care and prevention available, by expert, caring, and skilled professionals in an environment of respect and dignity.

## A Word About the Cancer Committee...

The Cancer Committee of Northwest Hospital & Medical Center is a standing committee composed of board certified physicians and surgeons and other allied health professionals. This group represents the various medical and surgical specialties that participate in the care of cancer patients at Northwest Hospital.

The purpose of the Cancer Committee is to monitor and improve the overall care of the cancer patient at Northwest Hospital in all phases of illness from diagnosis and treatment through the management of symptoms. The committee also serves to initiate and promote cancer-related educational activities and cancer prevention/screening programs. The goal of the committee is ongoing quality improvement in all aspects of education, research, diagnosis, treatment, and prevention. The committee also recognizes the importance of a multidisciplinary team approach to the total care of cancer patients, and strives to facilitate and improve mechanisms by which this may occur.

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## American College of Surgeons Cancer Program Certification

The Northwest Hospital Cancer Program again received a three-year accreditation by the American College of Surgeons Commission on Cancer on May 1, 2002. Everyone on the Cancer Committee put in lots of work, with an excellent desired outcome. This was the second survey since the program's original accreditation in 1995, and the program has continued its excellent standing since that time. Of the more than 6,000 hospitals in the United States, only approximately 23% can claim accredited cancer program status. Over 80% of newly diagnosed cancer patients are treated at these hospitals.

The accreditation is a merit of excellence. It means that our cancer patients receive the best possible care available to them in the United States. It means that our program has gone through a rigorous evaluation to meet certain quality standards and has come through with flying colors. Accreditation gives us an indicator of quality recognized by other cancer-related organizations as well as a comparison. It also allows us to see how we compare to national and regional standards.

The accreditation process involves evaluations in ten standards, with subset analysis. These areas include: institutional and programmatic resources; program management and administration; inpatient and outpatient care; supportive and continuing care services; research, quality management and improvements; cancer data management; public education, prevention, and detection; and professional education and staff support. A thorough and systematic review of documentation, policies, and procedures, the cancer registry database, chart reviews, and interviews are conducted during the survey.

# Highlights of Accomplishments in 2002

## *Clinical Services*

Evaluating the quality of the care provided at Northwest Hospital is always a primary focus, and in the year 2002 this process was conducted with even greater rigor. Northwest Hospital welcomed three different surveying organizations to evaluate our services: the Cancer Program underwent review by the American College of Surgeons; Northwest Hospital's Clinical Laboratory was evaluated by the College of American Pathologists; and the Joint Commission on Accreditation of Hospital Organizations (JCAHO) surveyed Northwest Hospital services at large. We are pleased to report highly successful outcomes in all three reviews.

In addition to the successful surveys, several improvements have been implemented over the past year in order to better serve our customers. The Oncology/Surgical Unit has a fresh new look after undergoing a remodel in December 2001. The Pharmacy has decentralized their services, and now there is a pharmacist available on the Oncology Unit. The pharmacist is a valuable resource not only to the physician and nursing staff, but also as a consultant and educator for our patients. Nutrition is an important component of therapy for patients with a diagnosis of cancer, as 50-60% of them experience anorexia-cachexia. The Nutrition Department is making several changes this fall in order to maximize the appeal and nutritional value of the food that is served. Dietary technicians will meet with patients directly before meals to solicit their preferences, and food preparation and delivery will be changed to ensure meals

are delivered at optimal temperatures. Also beginning this fall, registered dietitians will be available for outpatient consultations to instruct patients at a time and in an environment in which they are more likely to learn.

Nursing Services recognizes the unique needs of oncology patients and ensures that nursing staff has the necessary training to meet those needs. Northwest Hospital continues to participate in the Puget Sound Oncology Nursing Educational Cooperative. The Cooperative provides a four-day course covering fundamental information for the nurse new to oncology. Eight nurses from Northwest attended the course over the past year. The Oncology Clinical Nurse Specialist (CNS) participates as a speaker and is a member of the Cooperative planning committee. The Oncology CNS also provides in-house training in the safe administration of chemotherapy to staff on the Oncology Unit. In January 2002, this training was extended to the staff on the Short Stay Unit. Thus, we are now able to provide outpatient chemotherapy services on Short Stay. Due to the flexibility of this environment, patients receive their treatment safely and spend less time doing so. Most inpatients also desire to go home as soon as possible. This poses a challenge to health care providers to develop a plan that will enable them to succeed. Our Care Management team of nursing discharge planners and Social Workers facilitate regular interdisciplinary meetings to identify and coordinate resources that patients will need while at home.

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## *Pain Service*

The primary responsibility for pain assessment and management rests with a patient's attending physician. To assist the physician and patient, the hospital maintains an active, multidisciplinary group committed to developing and promoting standards and activities that ensure pain is managed in a timely and effective manner within our inpatient population. Pain services were found to be fully in compliance during a recent JCAHO inspection.

- **Physician Pain Consultations.** Private specialty pain consultations are available from staff anesthesiologists, psychiatrists, a neurologist dedicated to pain management, a medical oncologist with special interests in cancer pain, interventional radiologists, and an acupuncturist. These physicians are active participants in the Pain Service Committee.
- **Nursing.** All nurses are specially trained in early assessment and management of pain. Computerized pain assessment scoring protocols have been developed and are present in all clinical units. Each patient's nurse enters data. Clinical nurse specialists from each clinical area participate in the twice monthly Pain Service Committee meeting.

*(continued on page 5)*

# Highlights of Accomplishments in 2002

## *Pain Service continued*

- **Pharmacy.** Clinical pharmacists monitor narcotic use and any potential for misuse or abuse. They assist physicians in selection and dosing of analgesics and spearhead efforts to discourage use of drugs with higher risk for complication. Pharmacists also regularly participate in the Pain Service Committee meetings.
- **Physical Therapy.** Under a physician's direction, members of the Physical Therapy department participate in all aspects of inpatient and outpatient pain management and they are part of the Pain Service Committee.
- **Outpatient Activities.** Outpatient pain follow up is arranged as needed by each consulting pain specialist. A multidisciplinary group of outpatient providers meets on alternate weeks to review and discuss cases and present lectures on complex pain management cases.

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## *Professional Education Programs*

The professional education programs listed below were designed specifically to meet the identified learning needs and interests expressed by the medical staff. CME credits are offered in conjunction with each offering. Multiple educational formats, conferences, grand rounds, and case conferences are utilized to enhance learning. Northwest Hospital & Medical Center provides five to six Continued Medical Education (CME) conferences, 19 Grand Rounds, 52 Tumor Boards, 52 Breast Conferences, and 26 Chest Conferences each year. Topics of many conferences and Grand Rounds are related to cancer, as evidenced by the list below.

<u>Date</u>	<u>Topic</u>	<u>Presenter</u>
March 21, 2002	Prostate Problems (Grand Rounds)	J. Downey, MD
September 5, 2002	Skin Cancer (Grand Rounds)	D. Fader, MD
September 25, 2002	Cancer Update Conference	Panel: G. Birchfield, MD
	Lung Cancer Screening	J. Ephron, MD
	PET	A. Schwartz
	Targeted Therapies	R. Natale, MD
	Use of Biphosphonates	D. Dong, MD
	Hypercoagulable States	D. Lee, MD
	Heparin Induced Thrombocytopenia	
	ABCs of Anemia	
November 7, 2002	Dendritic Cell-Based Cancer Vaccine (Grand Rounds)	H. Ragde, MD
December 19, 2002	Spectrum of Gamma Knife Therapy	R. Young, MD
Each Wednesday	Tumor Board (Ongoing Category 1)	C. Simrell, MD, Coordinator
Each Wednesday	Breast Tumor Board (Ongoing Category 1)	D. Lee, MD, Coordinator
2 <sup>nd</sup> & 4 <sup>th</sup> Tuesdays	Chest Conference (Ongoing Category 1)	D. Dong, MD, Coordinator

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## *Outreach, Community Education, and Support*

In 2001, Northwest Hospital's Community Health Screening Program (CHSP) and Senior Wellness joined forces to create a program of comprehensive community support. During that year, Northwest Hospital outreach nurses provided over 800 health-specific screenings for osteoporosis, cholesterol, and stroke at over 54 screening events. At over 160 Wellness Clinics at six different sites, diabetes and blood pressure screenings were offered every other week with over 4,000 contacts in 2001. The Northwest Prostate Institute screened over 1,600 participants for prostate cancer. Flu shots were provided at cost to the employees of the city of Lynnwood and without charge to low-income residents of Lake City at the Lake City Food Bank. With over 22 community partners in 2001, the CHSP/ Senior Wellness programs are committed to raise the long-term health status of our community by building healthy relationships with both individuals and groups.

In 2002/2003, community support will continue in the areas of Wellness Clinics, osteoporosis, cholesterol, stroke, and prostate cancer screenings, with renewed emphasis *(continued on page 6)*

# Highlights of Accomplishments in 2002

## *Outreach, Community Education, and Support continued*

on skin and colorectal cancer education and breast cancer screening and education. National Senior Health and Fitness Day, a cooperative event that took place on May 29, 2001, serves as the model for future collaborations between the CHSP/Senior Wellness, the Northwest Prostate Institute, and our community partners. Further such collaborations in 2002 are being planned for events in Wallingford, Mill Creek, Lake City, Lake Forest Park, Edmonds, and North Seattle.



Additionally, participation at community events that educate our publics about the need for cancer education and support is a stable fixture in Northwest Hospital's annual outreach plans. In 2001, Northwest Hospital's Communications & Community Support department coordinated participation in a variety of events, organized by both local and national organizations, including Susan G. Komen's Race for the Cure and Team Survivor Northwest's Celebrating Life Dragon Boat Races. Additionally, the Seattle Breast Center at Northwest Hospital was named Safeway's 2001 Charity of Choice. Over \$250,000 was raised through donations at a Safeway-sponsored golf tournament and canister donation campaign to be used for the upgrade of equipment and for ongoing education efforts.

Due in large part to the ongoing success of these efforts, plans were in place to expand our partnerships and activities in 2002 to include Cancer LifeLine's Faces of Caregiving Annual Luncheon, American Cancer Society's Relay for Life and Making Strides Against Breast Cancer walks, Susan G. Komen's Race for the Cure, Team Survivor Northwest's Celebrating Life Dragon Boat Races, and Lake City Chamber of Commerce's Pioneer Days. Additionally, an on-campus Men's Health event was planned during National Prostate Cancer Awareness Month that featured a number of physicians speaking on various topics including cancer.

The participation of hospital staff as team leaders and volunteers helped support the efforts of these organizations, as well as continued the Hospital's efforts to raise awareness of the full spectrum of cancer care services available – from early diagnosis and treatment to education and support.

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## *Seattle Breast Center*

The Seattle Breast Center (SBC), which opened in 1991 as one of the first comprehensive breast imaging facilities of its kind in the Pacific Northwest region, offers a full array of screening and diagnostic services to the community. A first for the region and subsequently serving as a model for other hospitals in this area, the SBC utilizes a multidisciplinary team approach to facilitate the timely diagnosis and treatment of breast cancer with a seamless continuity of care.

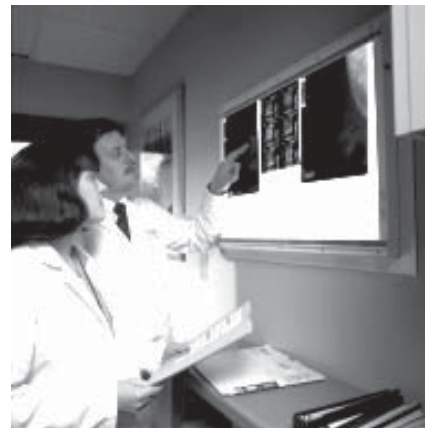
The SBC multidisciplinary team consists of physicians and other health care professionals representing the full spectrum of specialties involved with breast cancer, including Diagnostic Imaging, Medical Oncology, Radiation Oncology, Breast Surgery, Cosmetic and Reconstructive Surgery, and Psychosocial Support specialists. The team meets on a weekly basis to discuss in depth each newly diagnosed breast cancer case with the goal of recommending a treatment plan tailored to the individual needs of each patient. The team is committed to providing all currently available, clinically proven treatment options for its breast cancer patients, as well as opportunity for more experimental or leading edge treatments if the patient so desires.

Knowing that early detection provides the best chance for cure and the least invasive amount of treatment, the core function of the SBC is its screening mammography program. *(continued on page 7)*

# Highlights of Accomplishments in 2002

## *Seattle Breast Center continued*

As many as 110 women per day have their screening mammograms performed at the center, many taking advantage of conveniently available evening and Saturday hours. The SBC has strived to maintain the highest quality mammograms possible through its continual updating of equipment, ongoing educational programs for its technical staff, and requirement for specially-trained radiologists who interpret thousands of mammograms per year -- far beyond the minimum standards set by the Food & Drug Administration (FDA) for mammography facilities throughout the United States.



In keeping with its commitment to excellence, the SBC has a long-standing tradition of having all of its screening mammograms read by two radiologists, something that is also not required by the FDA. To further assist the SBC radiologists in their ability to detect early breast cancers, the center has implemented computer-aided detection technology, or CAD.

A spin-off of military artificial intelligence technology, CAD works by using computer software to analyze a digitized mammogram picture and essentially comparing it with hundreds of known cases of breast cancer in its database. Dr. Craig Hanson, medical director of the SBC, believes that CAD technology has matured to the point that it is as good or better than having two radiologists interpret screening mammograms. In addition to review by radiologists with special breast imaging expertise, every screening mammogram at the center now has the benefit of being analyzed by state-of-the-art CAD.

Finally, in recognition of the SBC as a leader in the medical community, the center was given a generous donation from Safeway Inc. through its annual Charity of Choice program last August. This gift was used to purchase two new state-of-the-art ATL breast ultrasound machines. More breast ultrasound and mammography equipment will be added with a planned facility expansion within the next year in order to keep ahead of continually increasing demand for the center's services.

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## *Lung Cancer Conference*

Chest Conference began in September of 2001. The conference was initiated to have a multidisciplinary approach in treating lung diseases with specific emphasis on lung cancer. This has been extremely helpful given recent new treatment options for lung cancer and other diseases, extending survivals out to three years in ten to 15% of advanced disease cases. The conference is held twice monthly on the second and fourth Tuesdays of each month at 7 a.m. The conference has been an overwhelming success. Attendance by thoracic surgery, general surgery, pathology, radiation oncology, medical oncology, radiology, nursing staff, social workers, and pulmonology has provided in-depth discussions as well as didactic discussions on new and upcoming treatments. We hope that this will continue to provide the best therapy and cutting edge treatments for our patients.

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## *Tumor Boards*

Three multidisciplinary tumor boards meet on a regular basis throughout the year at Northwest Hospital & Medical Center. Breast Conference and the general Tumor Board meet weekly. The Chest Conference meets biweekly. Primary care physicians, medical and radiation oncologists, surgeons, pathologists, as well as nursing staff and other ancillary health care providers, attend these conferences. Each case is presented and discussed in detail and plans are made for appropriate diagnostic studies and therapy. Relevant recent medical literature is also reviewed.

In 2001 approximately 250 cases were discussed at the general Tumor Board, 250 cases at Breast Conference, and 125 cases at Chest Conference. This represents a very significant proportion of all cancer cases at Northwest Hospital & Medical Center. CME credit is available for attendance at these meetings. The Tumor Boards are a key element of the cancer care program.

## Special Feature

### *Gamma Knife Center*

*by Dr. Ronald Young*

Since its opening in June 1993, over 1,500 patients have been treated at the Northwest Hospital Gamma Knife Center. Although the Gamma Knife has been used much longer in Europe than in the U.S., Northwest Hospital's Gamma Knife was one of the first installed in this country, and therefore has a long and successful track record. When installed, a mere handful of other units were in existence across the country. Even today, the number in the U.S. is small, approximately 60 sites. The Gamma Knife remains a specialized, unique device that requires an interactive, multidisciplinary team to develop a successful service (treatments are jointly managed by neurosurgeons, radiation oncologists, and radiation physicists).

The Gamma Knife is an instrument that uses fine beams of gamma rays. These rays, which are generated by radioactive cobalt, are focused on a brain tumor to damage the DNA and thus kill the tumor cells. The procedure is called Radiosurgery because the equivalent of surgery is done using a single session exposure to a very high dose of radiation.

While most facilities perform only primarily conventional Gamma Knife procedures, the Northwest Hospital team has branched out into other indications, such as movement disorders and pain management, and will soon begin another trial to study the safety and efficacy of using the Gamma Knife to treat subthalamic lesions in the subthalamic nucleus, an occurrence in Parkinson's disease patients.

Those treated so far at the Center include 167 patients with primary malignant brain tumors, 333 patients with metastatic brain tumors, and 336 patients with benign brain tumors. Studies performed by Northwest Hospital medical staff have established the safety and effectiveness of treating multiple brain metastases with the Gamma Knife, whereas previously it was believed that only a single metastatic tumor could be treated. Currently a number of patients treated for brain metastases have survived more than five years from the time of treatment. Since the median survival is only about one year, five-year survival is particularly striking.

Other studies performed at the Gamma Knife Center have established the safety and effectiveness of treating primary malignant brain tumors, such as glioblastomas, with a planned Gamma Knife boost following surgical resection, fractionated radiation therapy, and chemotherapy. A planned Gamma Knife boost treatment results in a doubling of the median survival compared to giving the boost later, at the time of tumor recurrence or progression. Other malignant tumors such as anaplastic astrocytomas, oligodendrogliomas, ependymomas, and medulloblastomas have been treated successfully with the Gamma Knife.

Although some brain tumors appear benign under the microscope, any tumor within the head has the prospect of causing serious disability or death from brain compression. The Gamma Knife had been established as safe and effective for treatment of meningiomas, the most common type of benign brain tumor. For some meningiomas, the gamma knife may be the only form of treatment necessary, avoiding the risks of surgery. Acoustic neuromas, which commonly cause loss of hearing in one ear, may also be treated successfully with the Gamma Knife. Recent studies have established the Gamma Knife as safer than microsurgery and equally effective for treatment of acoustic neuromas. Other benign tumors such as those in the pituitary gland or pineal region may be treated successfully with the Gamma Knife.

Recently, Northwest Hospital and Swedish Medical Center have entered into an alliance to jointly manage and oversee the Gamma Knife Center. We believe that this arrangement will allow knowledge of and access to the Gamma Knife, extending to a larger patient and physician population. The Northwest Hospital Gamma Knife Center welcomes interested neurosurgeons to become credentialed for use of the instrument and to incorporate its many benefits into their practices.



## Special Feature

### *Radio Frequency Ablation*

*by Dr. Ray Jansen*

The liver is a common site of both primary and metastatic tumors. Though surgical resection of hepatic malignancies offers the best chance of survival, only 20% of patients are candidates at the time of presentation. The prognosis for patients with untreated malignancy was previously dismal, with median survival of approximately 12 months. A new technique called Radio Frequency Ablation (RFA) has increased the median survival to 36 months. RFA offers an alternative for many of the nonsurgical candidates.

RFA is a technique in which a probe is placed under radiologic guidance (CT or ultrasound) directly into the tumor. A radio frequency generator is then connected to the probe and the tumor is then destroyed through radio frequency-induced thermal injury. Most commonly, the procedure is performed with moderate sedation and does not require general anesthesia. The patient is admitted following the procedure, but generally can go home sometime the next day.

Over the past three years, seven RFAs have been performed at Northwest Hospital. There have been no major complications to date. There has been one local recurrence, with three other patients having recurrence outside the area of treatment. With hepatic malignancies, the first goal of treatment is to eradicate the disease. This is best accomplished by surgical resection. However, since only 20% of patients are candidates at the time of presentation, radio frequency ablation is a useful adjunct for many of the nonsurgical candidates.

## Special Feature

### *Cancer-Related Articles Published by Northwest Hospital & Medical Center Physicians in 2002*

Outcomes and other research have been authored by Northwest Hospital & Medical Center physicians, and documented in various papers and publications. Some abstract and article citations are available on the PubMed section of the National Library of Medicine website: <http://www.nlm.nih.gov/>. PubMed includes links to many sites providing full text articles (registration is required on some of these sites to view articles).

**Acheson MB, Patton RG, Howisey RL, Lane RF, Morgan A, Rowbotham R.** Three-to-Six Year Follow-up for 379 Benign Image-guided Large Core Needle Biopsies of Nonpalpable Breast Abnormalities. *Journal of the American College of Surgeons* Sept 2002; 195(4):456-461.

**Bagley CM Jr, Lane RF, Blasko JC, Grimm PD, Ragde H, Cobb O, Rowbotham R.** Adjuvant Chemohormonal Therapy of High Risk Prostate Carcinoma – Ten Year Results. *Cancer* 2002;94:2728-32.

**Mehta VK, Le QT, Chang SD, Chenery S, Adler JR.** Fractionated Stereotactic Radiosurgery for Tumors Near the Optic Nerve. *Technology in Cancer Research & Treatment* 2002;1(3):173-179.

**Mehta VK, Ford J, Bastidas AJ, Cho C, Jambalos C, Poen J, Koong AC, Lin A, Young H, Fisher GA.** A Phase II Trial of Preoperative 3D Conformal Radiotherapy, Protracted Venous Infusion 5-FU, Weekly CPT-11 Followed by Surgery for Ultrasound Staged T3 Rectal Cancer. *International Journal of Radiation Oncology Biology Physics*. In press.

# Northwest Hospital & Medical Center New Cancer Cases

Category	1997	1998	1999	2000	2001
<b>Breast</b>	<b>162</b>	<b>162</b>	<b>160</b>	<b>154</b>	<b>150</b>
<b>Colon/Rectum</b>	<b>75</b>	<b>75</b>	<b>63</b>	<b>66</b>	<b>55</b>
<b>Lung</b>	<b>72</b>	<b>87</b>	<b>85</b>	<b>85</b>	<b>74</b>
<b>GYN</b>	<b>37</b>	<b>42</b>	<b>40</b>	<b>35</b>	<b>34</b>
Corpus Uteri	21	23	15	21	19
Cervix	2	4	5	2	1
Ovary	13	13	15	9	12
Other	1	2	5	3	2
<b>Urologic</b>	<b>386</b>	<b>385</b>	<b>395</b>	<b>292</b>	<b>236</b>
Prostate	339	329	348	241	177
Bladder	31	34	32	31	43
Kidney	13	13	13	18	14
Other	3	9	2	2	2
<b>All Other Cases</b>	<b>156</b>	<b>163</b>	<b>159</b>	<b>132</b>	<b>135</b>
<b>TOTAL CASES</b>	<b>888</b>	<b>914</b>	<b>902</b>	<b>764</b>	<b>684</b>

## Cancer Registry

Under the guidance of the Cancer Committee, the Cancer Registry maintains data on each patient's type of cancer, course of treatment, response to treatment, and medical status for the patient's lifetime. Registry data are available for clinical studies. As demonstrated by the summary of registry data below, this data system makes it possible to estimate cancer incidence in our area, to contribute to state and national databases, and to evaluate the efficacy of various treatments for specific types of cancer. The Cancer Registry participates in the National Cancer Database and patient care evaluation studies of the American College of Surgeons. In 2001, a total of 684 cases were registered in the Northwest Hospital cancer registry. The table below displays the year 2001 cancer cases newly diagnosed and/or receiving their first course of treatment at Northwest Hospital in comparison to local, regional and national data. The trend of a higher proportion of new prostate cancer cases at Northwest Hospital & Medical Center continues.

### Comparison of New Cancer Case Percentages

Year 2001 Hospital Level Data

Year 2000 Regional (13 Western Washington County) Data

Year 2002 Estimates for National Data\*

\*Excludes insitu carcinomas except urinary bladder

	NWHMC	Area Hosp A	Area Hosp B	Region	Nation
Total Cases	684	1,093	578	8,367	1,284,900
Prostate	26 %	12 %	15 %	14 %	15 %
Breast	22 %	23 %	24 %	20 %	16 %
Lung	10 %	18 %	15 %	14 %	13 %
Colon/Rectum	8 %	10 %	13 %	9 %	12 %
Urinary	7 %	7 %	4 %	7 %	7 %
Lymphoma	3 %	3 %	3 %	4 %	5 %
All Other	24 %	27 %	26 %	32 %	32 %

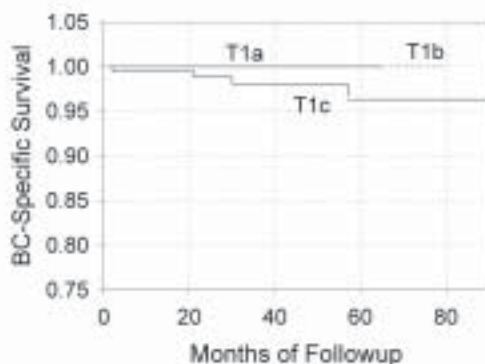
# Study of Cumulative Non-Recurrence and Cancer-Specific Survival Rates for Stage I Node Negative Breast Cancer Patients

This data was obtained from the Northwest Hospital Cancer Registry. Between January 1995 and December 2001, 367 Stage I Node negative breast tumors were diagnosed in 364 patients at Northwest Hospital & Medical Center. Three of these patients were diagnosed with bilateral primary tumors. Of the 367 tumors, 33 (9.0%) were T1a, 127 (34.6%) T1b, and 207 (56.4%) T1c. Tumor histologies are summarized in the table below. Of the 364 patients in this series, 363 were female and one male. Median patient age was 63 years (range 25 to 92). Ninety-four percent of the patients were white. Median follow-up for these patients was 33 months (mean 37.2, range 0 to 90); two patients were lost to follow-up after their cancer surgeries in 1999 and May 2001, respectively. Surgical treatment for 367 cancers included 251 (68.4%) lumpectomy/partial mastectomies, 77 (21.0%) modified radical mastectomies, 33 (9.0%) simple mastectomies, 3 (0.8%) radical mastectomies, and 3 (0.8%) no surgery. In addition to their surgical treatment, 218 cancers (59.4%) were treated with external beam radiation, 49 (13.4%) underwent chemotherapy, and 84 (23%) underwent hormonal therapy. Patient status on follow-up included "Alive – No Evidence of any Cancer" (329, 90.4%), "Alive – Cancer Status Unknown" (13, 3.6%), "Dead – Cancer Status Unknown (8, 2.2%), "Dead – This Cancer Present" (4, 1.1%), "Dead – No Evidence of Cancer" (4, 1.1%), "Dead – This Cancer Not Evident Other Present" (3, 0.8%), "Alive – This Cancer Present" (2, 0.5%), and "Alive – This Cancer Not Evident Other Present" (1, 0.3%). Kaplan Meier cumulative breast cancer-specific survival rates are show in the first graph. Twenty-one patients whose cancer status was unknown were censored at last known follow-up for these curves.

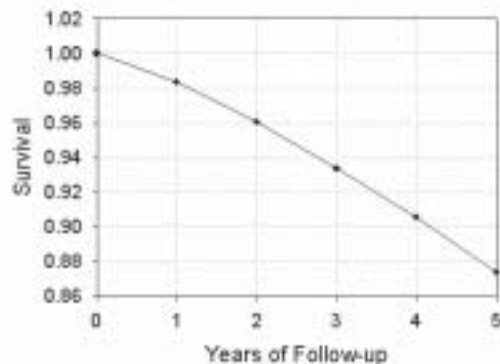
**Table 1) Histology for 367 Stage I Node-Negative Breast Cancers**

	N	% of 367
Infiltrating Ductal Carcinoma, No Other Site	284	77.4%
Lobular Carcinoma, No Other Site	27	7.4%
Infiltrating Ductal Mixed with Other Types of Carcinoma	16	4.4%
Tubular Adenocarcinoma	11	3.0%
Infiltrating Ductal and Lobular Carcinoma	11	3.0%
Mucinous Adenocarcinoma	9	2.5%
Papillary Carcinoma, No Other Site	2	0.5%
Intraductal Papilloma	2	0.5%
Medullary Carcinoma, No Other Site	2	0.5%
Apocrine Adenocarcinoma	1	0.3%
Comedo Carcinoma	1	0.3%
Basaloid Carcinoma	1	0.3%

Breast Cancer-Specific Cumulative Survival for 364 Patients Diagnosed with Stage I Node-Negative Breast Cancer at NWHMC between 1/95 and 12/01



Five Year Survival Rates for Stage I Breast Cancer Cases Diagnosed in 1993 and 1994 All States/Data Reported from 439 Hospitals Hospitals of Type: Comprehensive Community Cancer Center



Source: NCD, Commission on Cancer

## Analysis

The current therapy of breast cancer at Northwest Hospital & Medical Center and the Seattle Breast Center has been outstanding and continues to be documented by the above follow-up data. Follow-up for these 364 patients, which ranges from one to 90 months (median 33 months), continues to compare favorably to community hospital reports for like stage of disease at five years. The T1a and T1b BCSS survival rates were both 100%, and the T1c patients showed an outstanding 95% BCSRFR and 96%BCSS. Survival data for these patients is better than or comparable to other center reports. Congratulations to the nurses, radiologist, surgeons, radiation and medical oncologists for their continued documented excellent care to our community.

## Northwest Hospital & Medical Center 2001 New Cancer Cases

PRIMARY SITE	TOTAL	GENDER		DOMINANT AJCC GROUP						
		M	F	O	I	II	III	IV	N/A	UNK
Prostate	177	177	0	0	1	166	3	3	0	4
Breast	151	0	151	29	68	41	5	1	1	6
Lung	74	30	44	0	18	3	14	27	0	12
Bladder	43	29	14	27	5	6	1	3	0	1
Colon	39	16	23	0	9	13	6	5	2	4
Non-Hodgkin	22	10	12	0	3	2	4	7	0	6
Kidney/Ureter	20	14	6	4	9	2	3	1	1	0
Rectum	19	13	6	1	8	5	2	0	1	2
Corpus Uteri	19	0	19	0	15	0	2	1	0	1
Other/Undef.	17	8	9	0	0	0	0	0	17	0
Pancreas	12	7	5	0	2	0	0	6	0	4
Ovary	12	0	12	0	3	1	3	3	0	2
Brain/CNS	10	5	5	0	0	0	0	0	10	0
Pharynx	8	5	3	0	0	0	1	3	0	4
Skin	8	4	4	0	2	0	1	2	0	3
Esophagus	7	5	2	2	0	0	0	2	0	3
Liver/Biliary	7	6	1	0	1	0	2	0	0	4
Stomach	6	3	3	1	1	0	0	1	0	3
Other Female	5	0	5	4	0	1	0	0	0	0
Connective	4	3	1	0	0	0	0	0	1	3
Testis	4	4	0	0	4	0	0	0	0	0
Other Digest	3	1	2	0	1	1	0	0	1	0
Thyroid	3	0	3	0	1	2	0	0	0	0
Lymphocytic	3	1	2	0	0	0	0	0	3	0
Larynx	2	1	1	0	0	0	0	1	0	1
Hodgkin's	2	0	2	0	1	1	0	0	0	0
Myeloma	2	1	1	0	0	0	0	0	2	0
Tongue	1	1	0	0	1	0	0	0	0	0
Small Intest	1	1	0	0	0	0	0	0	0	1
Cervix Uteri	1	0	1	0	0	0	0	0	1	0
EYE	1	0	1	0	0	0	0	0	1	0
Granulocytic	1	0	1	0	0	0	0	0	1	0
<b>TOTAL</b>	<b>684</b>	<b>345</b>	<b>339</b>	<b>68</b>	<b>153</b>	<b>244</b>	<b>47</b>	<b>66</b>	<b>42</b>	<b>64</b>

STAGE OF DISEASE: The extent to which the tumor has progressed as indicated by all diagnostic and therapeutic evidence obtained during the time the first course of treatment. the Cancer Registry records stage, anatomic extent of disease for all tumors using the AJCC TNM staging guide.

N/A: Certain tumors, including carcinoid tumors, non-malignant brain tumors, and GI NOS have no staging assignments but are followed as analytic cases in the registry.