

POMONA VALLEY HOSPITAL MEDICAL CENTER

CANCER PROGRAM
ANNUAL REPORT
for **2019**



MEDICAL CENTER

THE ROBERT & BEVERLY LEWIS FAMILY CANCER CARE CENTER

2019 Cancer Committee

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Cancer Committee Report

by Sri G. Gorty MD, *Chair*

The Cancer Program at Pomona Valley Hospital Medical Center (PVHMC) offers an integrated approach to all aspects of patient care. The unique opportunity to provide Radiation Oncology, Medical Oncology, Gynecology Oncology, Psychosocial Support and Breast Health Center (breast cancer imaging) under one roof at The Robert & Beverly Lewis Family Cancer Care Center allows patients to find support, quality care and multidisciplinary excellence in a positive and caring environment.

Prevention

Family history and genetic make-up can influence cancer risk. However, factors that increase cancer risk are often not inherited. According to the World Cancer Research Fund about 20% of all cancers diagnosed in the United States are related to body fat (BMI), inactivity, and poor diet. In addition, the American Institute for Cancer Research concludes that about 40% of all cancer cases are preventable. Yet, the community and environment in which we live can impair our ability to make healthy choices and ultimately increase one's cancer risk.

The program was a 2-part series. Part 1 consisted of a PowerPoint lecture. Pomona Valley Hospital Medical Center's registered dietician, Nancee Perez, hosted a

discussion on ways nutrition can decrease cancer risk. Part 2 consisted of a cooking demonstration. Students of the Cal Poly Pomona's Food and Nutrition Department prepared several healthy meals that incorporated key principals learned during part 1.

The lecture was hosted at The Robert and Beverly Lewis Family Cancer Care Center on February 12, 2019. The cooking demonstrations were also offered at The Robert and Beverly Lewis Family Cancer Care Center on March 5, 2019 and March 12, 2019.

Goals:

1. Identify the link between nutrition and cancer prevention
2. Understand and describe nutritional recommendations to reduce cancer risk
3. Compare recommendations to common diet trends and how to apply both practically
4. Cook at least one meal using The American Institute for Cancer Research "The New American Plate" guide

Expected Outcome:

Local community members will have a basic understanding on how small changes in nutrition can reduce cancer risk. Participants will be able to cook at least one healthy meal that incorporates key lecture points.

Measurement:

Pre and post tests were administered to measure the effectiveness of the program. Questions assessed general understanding of nutrition in relation to cancer prevention.

Part 1: There were a total of 21 community members who attended the lecture. Nine of those that attended have never been to PVHMC's Cancer Care Center (CCC) or attended a PVHMC program. Five participants have been to the CCC but never attended a PVHMC program. The majority of participants rated the program as very good to good.

Pre and Post Test Findings:

15 pre and post-tests were collected. A total of 11 pre and post tests were completed. Four completed post-tests only.

- **Question 1:** Expertise in subject matter did not increase (based on the 11 pre/post-tests completed)
- **Question 2:** Understanding demonstrated (based on the 11 pre/post-tests completed)
- **Question 3:** Strong knowledge in subject matter demonstrated prior to lecture (based on the 11 pre/post-tests completed)

POMONA VALLEY HOSPITAL MEDICAL CENTER

The Cancer Prevention Path: Navigating Your Nutrition Roadmap

Did you know that an estimated 1/3 of cancers are preventable with lifestyle choices? Come walk with us as we discover the road to wellness and cancer prevention.

Tuesday, Feb. 12, 2019
2 - 3:30 pm

PRESENTED BY
Nancee Perez, RD
Registered Dietitian

The Robert & Beverly Lewis Family Cancer Care Center Community Room

Please RSVP: **909.865.9858**

Another FREE program by:

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MEDICAL CENTER
THE ROBERT & BEVERLY LEWIS FAMILY CANCER CARE CENTER

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- **Question 4:** Evaluated on POST TEST Only— Includes all 15 tests collected
 - * 11 responded yes. Participants noted plans on changing eating habits to include more fruits, vegetables, and whole grains.
 - * Four did not respond

Part 2:

- (a) Cooking demonstration on 3/5/19 was attended by five participants. A total of 12 were signed up for the program. All five of the participants have been to the CCC and attended a PVHMC scheduled program. All rated the presentation as “very good.” Comments were positive. The majority reflected on how informative and professional the program was.
- (b) Cooking demonstration on 3/12/19 was attended by 12 participants. One of the 12 had never been to the CCC. Two of the 12 had never attended a scheduled PVHMC program. All rated the presentations as “good” to “very good.” Those that commented on the evaluations noted that the presentation was great and easy to follow. One requested more sessions on healthy cooking.

Medical Oncology

Our Oncology practice model continues to provide personalized medical care with the ultimate goal of improving the quality of care for all our patients with cancer. Collaborating with a multidisciplinary team of experts, shared decision making, and care that is based on evidence-based guidelines and access to clinical research trials makes our program successful.

We rely on a coordinated approach that works well for our patients. Weekly pre-treatment and tumor board meetings with all the key players—nurses, navigators and physicians let us pinpoint each patient’s cancer type and tailor the treatment for the best possible outcome. These meetings connect all the members of our team to coordinate high-quality care, minimizing errors, and focus on the patient’s progress.

We treat the whole person as one entity by focusing on family, social and spiritual needs rather than focusing just on conventional modalities of treatment—radiation, oncology, surgery, and diagnostic imaging. Last year more than 9,800 patients received high-quality services/ treatments at our facility.

We offer iPad/screens for patient’s privacy and entertainment while receiving treatments. Our program offers onsite FDA cleared Dignicap Delta for both men & women to choose to minimize their hair loss during their chemotherapy.

The oncology-specific, state of the art system ensures the highest standard of care through access to National Comprehensive Cancer Network regimens (NCCN) and protocols which are being used by leading cancer institutes around the world. Access to the oncology electronic medical record system has enhanced communication between physicians and their multi-disciplinary team members.

We can only cure a limited number of patients with cancer, but we can offer healing to everyone. Our patient navigators, oncology nurses, social workers connect with our patients, work with them, and help them get through



Infusion Room

their cancer treatment journey. We are relentless in the pursuit of quality patient care.

Breast Health Center

The primary goal of the Breast Health Program at PVHMC is to deliver the highest quality care to our patients. We exclusively offer digital breast tomosynthesis mammography at our Pomona, Claremont, La Verne and Chino Hills sites. Digital breast tomosynthesis (DBT) is a 3-dimensional mammogram, which allows the radiologist to examine the breast tissue in fine detail, 1 mm at a time. The technology has been shown in multiple studies to significantly increase the cancer detection rate and reduce recall rates relative to standard digital mammography.

The Breast Health Program at PVHMC was designated in 2019 as an American College of Radiology Breast Imaging Center of Excellence, demonstrating that our facility has achieved high practice standards in mammography, breast ultrasound, and breast MRI image quality, ultrasound guided and stereotactic breast biopsy performance, personnel qualifications, facility equipment, quality control procedures, and quality assurance programs.

In 2019, the Breast Health Center adopted the SmartCurve compression system, which allows for a more comfortable mammogram compared with standard compression technology.

We are a major partner with local community health clinics to provide screening and diagnostic mammography services for medically underserved patients, in conjunction with the state funded Every Woman Counts program. For women in our communities who do not have a primary Doctor, we allow them to self-refer for a screening mammogram and offer low cost screening mammograms in the months of April and October.

The Breast Health Program at PVHMC also provides diagnostic breast imaging services to underinsured and uninsured



women and men, made possible through our affiliation with the Los Angeles County Affiliate of Susan G. Komen

We are dedicated to ensure that every woman in our community has timely access to our high quality breast care, helping women overcome barriers such as access to care, a lack of understanding or fear of the care process, fear of a positive diagnosis, financial barriers to treatment, and a myriad of additional psychosocial, emotional, and family concerns in the event of a positive diagnosis.

Radiation Oncology



2019 was a busy and productive year providing more than 8,400 high quality radiation treatments to over 500 patients diagnosed with cancer and several benign conditions such as but not limited to adenomas, meningiomas and keloids. The top four cancer diagnoses for this patient population are as follows:

- Breast Cancer
- Prostate Cancer
- GYN (cervical & uterine) Cancer
- Colo-Rectal Cancer

The two modes of radiation medicine that we offer by our department are as follows:

- Teletherapy - Linear accelerator based treatments
 - Accuray TomoTherapy HiArt Unit
 - Varian Trilogy with Rapid Arc & Cone Beam CT Unit
- External Beam Treatment Options
 - Photons (x-rays)
 - Electrons
 - Intra-fraction tracking
 - 3D Conformal
 - IMRT with IGRT
 - SBRT with IGRT
 - Respiratory Gating & Deep Breath Hold
- Brachytherapy – Radioactive material based treatments
 - HDR
 - APBI for Select Early Stage Breast Cancer
 - Interstitial Implants for GYN Cancers
 - Intracavitary implants for GYN Cancers
 - Permanent Radioactive Seed Implants for Prostate Cancer

- Radioactive Iodine Ablations for Thyroid Cancer and Hyperthyroidism
- Radioactive Injections for Metastatic Bone Cancer
- Radioactive Applications for Various Other Conditions

We look forward to providing our community with leading edge and high quality radiation medicine for decades to come by our board certified expert physicians, medical physicists, dosimetrists, therapists, nurses and an outstanding clerical team.

Lung Cancer Program

The Lung Cancer Program (LCP) at PVHMC was founded in January 2008. The LCP comprises a team of primary care physicians, radiologists, cardiothoracic surgeons, pulmonologists, medical oncologists, radiation oncologists, pathologists and a clinical trials coordinator. We have a dedicated Lung Cancer Nurse Navigator to assist patients through their treatment journey, while providing education and support.

Our primary goal is to promote early diagnosis and to eliminate treatment delays by expediting patients through the health care process once a suspicious radiologic screening abnormality is identified. We work to replace late stage cancer diagnoses with earlier diagnoses, and thereby improve treatment outcomes.

To promote diagnosing lung cancer at the earliest of stages, PVHMC offers the public low cost and low dose CT Chest Screening, not requiring a physician referral. While not appropriate for everyone, current publications suggest that CT screening could reduce lung cancer mortality by 20% in heavy smokers through early detection of this lethal disease. We also provide smoking cessation literature.



*Amanda Jarvey, RN
Lung Nurse
Navigator*

GYN Oncology

Our GYN Oncology services continue to expand since Gynecologic Oncology Associates (GOA), a group of five board certified gynecologic oncologists, joined our medical staff in 2011. GOA continues to be a valuable asset to our community providing GYN oncology expertise to our patients. PVHMC can now serve women with gynecologic cancers right here. Our patients receive the most up to date in gynecologic cancer treatments. This includes minimally invasive laparoscopic or robotic surgery, ultra-precise radiation therapy utilizing TomoTherapy and Trilogy, both of which deliver IMRT treatments with IGRT and high dose rate brachytherapy which places the radiation directly at the site of the cancer, where the cancer was or where the cancer may recur in the pelvis.

Palliative Care



Palliative Care Team

Palliative care is specialized medical care for people with serious illness. This type of care is focused on providing patients with relief from symptoms (pain, shortness of breath, nausea, anxiety, fatigue, depression) and addressing the stress of a serious illness. The goal is to improve the quality of life for both the patient and the family. Palliative care is provided by a team of specially-trained doctors, nurses, chaplains, social workers and other specialists who work with the patient's other doctors to provide an extra layer of support. The palliative care team discusses goals of care, treatment options, pain and symptom management, and advance care planning. Palliative care can be provided at any stage in a serious illness and can be provided together with other medical treatments. Palliative care can be provided at any age and at any stage in a serious illness. It can also be provided together with other medical treatments.

Palliative care is not to be confused with hospice care. Palliative care is symptom management in addition to other medical management including chemotherapy or other interventions. Hospice care provides symptom management only when other medical interventions are no longer beneficial.

Clinical Trials

Clinical trials have been offered since 1995 under the leadership of Y. S. Ram Rao, MD, Director of Radiation Oncology and the Cancer Program. We have enrolled over 720 patients into Non-NCI and NCI sponsored co-operative group clinical trials since 1995.

The Cancer Care Center continues to participate and actively enroll cancer patients onto clinical trials through the National Cancer Institute (NCI), other Cooperative Groups such as NRG, and occasionally Pharmaceutical Company sponsored clinical trials.

Each study design is created to focus on answering various scientific questions that will assist in discovering enhanced ways to prevent, diagnose and/or treat various cancers. All clinical trials are fully conducted in compliance with the FDA guidelines including but not limited to, "Good Clinical Practice" guidelines (GCP).

Phase III and some Phase II Clinical Trials are made available to the community providing patients with easy access to the latest cancer research regimes. At any given time, there are more than a dozen clinical trials open to patients with various types and stages of cancer.

There are four types of cancer related clinical trials:

- Treatment trials test new treatments (like a new cancer drug, new approaches to surgery or radiation therapy, new combinations of treatments, or new methods such as gene therapy).
- Prevention trials test new approaches, such as medicines, vitamins, minerals, or other supplements that doctors believe may lower the risk of a certain type of cancer. These trials look for the best way to prevent cancer in people who have never had cancer or to prevent cancer from coming back or a new cancer occurring in people who have already had cancer.
- Quality of Life trials (also called supportive care trials) explore ways to improve comfort and quality of life for cancer patients



- Pain relief (palliative care) and pain progression (comparing relief after radiation and re-irradiation, comparing overall pain progression for symptoms of bone metastases.)

All potential study patients are presented with the most recent version of the IRB Approved Consent Document for each specific trial. All consent documents contain the "Experimental Subject's Bill of Rights." (California law under Health & Safety Code Section 24172) and a "HIPAA," (Authorization) to Use or Disclose (Release) Identifiable Health Information for Research.

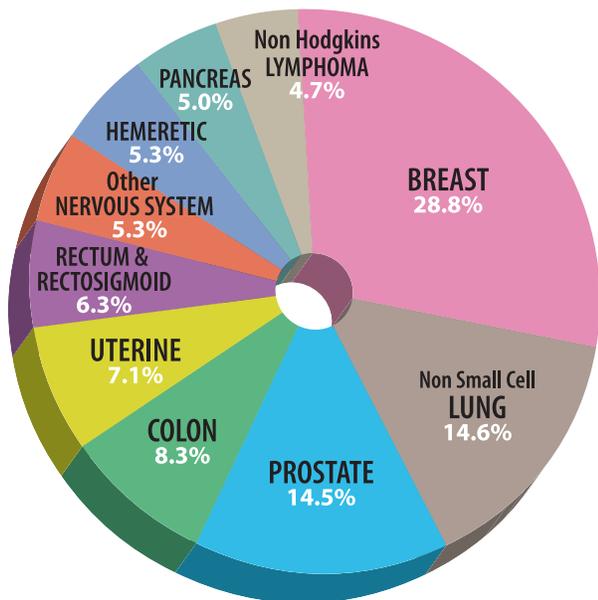
The Department of Health and Human Services (HHS) issued the Standards for Privacy of Individually Identifiable Health Information (the Privacy Rule) under the Health Insurance Portability and Accountability Act of 1996 (HIPAA) to provide the first comprehensive Federal protection for the privacy of personal health information. Potential study patients undergo the consenting process to its entirety before initiating any study related procedures or assessments. All potential study patients are reminded that their study participation is completely voluntary and they have the right to refuse study participation without any bias from our medical and ancillary staff.

Cancer Registry

The Cancer Registry at PVHMC has collected cancer data for analysis, research and mandatory reporting to the California Cancer Registry since 1985. The Cancer

Registry also contributes data to the American College of Surgeons (ACoS), Commission on Cancer, and National Cancer Data Base (NCDB) annually. The NCDB contains data from American College of Surgeons approved hospitals nationally. The physicians at PVHMC utilize benchmark reports from the NCDB to measure and evaluate patient care, treatment and survival of our cancer patients. Our computerized database contains 30,307 cancer patients.

In 2019 the Cancer Registry accessioned a total of 1,076 cancer cases. There were 920 analytic or new cases and 156 non-analytic or previously diagnosed and treated cases. We also perform lifetime annual follow-up on all analytic patients in our database as a requirement of the American College of Surgeons approved Cancer Programs.



Top Ten Cancer Cases at PVHMC

The top ten sites comprise a total of 636 cases or 69.13% of the total cancer cases seen at PVHMC for 2019. The top 10 cancers are: Breast (183 cases or 28.8%), Non-small cell lung (93 cases or 14.6%), Prostate (92 cases or 14.5%), Colon (53 cases or 8.3%), Uterine (45 cases or 7.1%), Rectum & Rectosigmoid (40 cases or 6.3%), Other Nervous System (34 cases or 5.3%), Hemeretic (34 cases or 5.3%), Pancreas (32 cases or 5.0%), Non-Hodgkin's Lymphoma (30 cases or 4.7%) and Other Cancers (284 cases or 30.87%).

Customer Satisfaction

Customer Satisfaction is always a top priority. Many of our patients are surveyed regarding the service and their satisfaction. Press Ganey provides our survey allowing us the opportunity to benchmark off other like Centers. The surveys allow us timely feedback about our patients' experience. We also offer "Feedback Forms" throughout the Center that allows patients an immediate opportunity to express appreciation or concerns. All compliments, suggestions and concerns are forwarded to the appropriate manager and department for recognition or follow-up as appropriate.

Support Programs

Support Services continue to offer a wide variety of support programs, workshops and wellness groups.

We participated in wellness fairs, an open house and numerous speaking engagements throughout the community with a focus on cancer prevention, early detection and education. We celebrated Survivors Day with "Give Cancer the Boot". It was a fun time for all, learning square dancing and sharing with other survivors.

The PVHMC's Foundation's special fund was once again utilized to offer two different sessions of the "Living Well After Cancer" program in 2019. This program, in conjunction with The Claremont Club's goal is to help cancer survivors improve their fitness level, quality of life and self-esteem. We want them to know that life can improve after cancer treatment ends. The participants (men and women) experienced many forms of exercise specifically designed for them. They met a minimum of twice weekly for 13 weeks. In addition to weight training and cooking classes the program included yoga, Pilates, balance, and aqua classes.



Living Well After Cancer

We had 134 different support or wellness group meetings with an attendance of over 2,800. We reviewed, with our physicians' lung cancer treatment management and the benefits of using a multidisciplinary approach. We also attended several community events to educate about breast health. Once again, we also ended the year with our annual holiday open house where we celebrate the holidays with over 250 of our current and past patients.



Holiday Open House

Fundraising

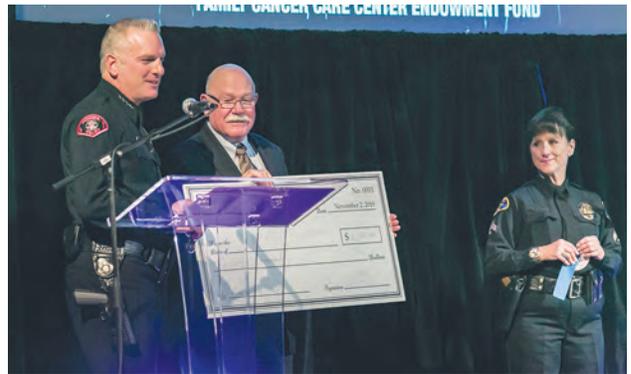
In addition to the ongoing support of The Robert and Beverly Lewis Family Cancer Care Center, in November 2019, sponsors and attendees supported the 2nd Annual "Singing for Survivors" event (an American Idol format) at The Fox Theater in Pomona. Over 250 guests enjoyed a reception, theme basket raffle drawings, buffet dinner, and the singing competition who enjoyed seven amazing singers. Judges, were 1970's



Singing For Survivors Judges and Participants

musical pioneer, Claudia Lennear, accomplished jazz and classical guitarist, Mark Hammond and last year's first place winner - Braxton Gohde. The 2nd Annual "Singing for Survivor" winners were: 1st place: Erin Peeler (Pomona); 2nd place: Jessica Monticenos (Redlands) and 3rd place: Adrienne Catuara (Rancho Cucamonga).

Once again, we are very appreciative of Ladies Plastics Golf Organization holding their 20th annual Golf Tournament to benefit The Robert and Beverly Lewis Family Cancer Care Center's Breast Health fund. The board of LPGO presented a check in the amount of \$34,000 during the Christmas holidays, bringing their overall contributions exceeding \$570,000 from this annual event. Their kindness and generosity has helped thousands of breast cancer patients during their cancer journey.



Pomona Police Department Pink Patch Project Campaign

- Raise awareness about breast cancer and the importance of early detection and treatment
- Raise funds for cancer research, treatment and education through the sale of commemorative pink patches and other items the Pomona Police Department had available

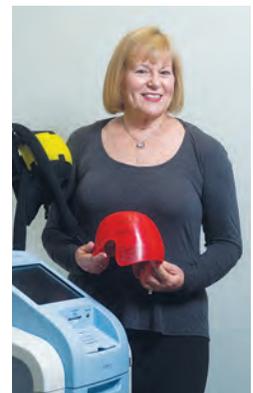


Ladies Plastic Golf Organization

A special recognition to honor LPGO was made during the Holiday Celebration revealing the newly renovated Wig Salon in The Robert and Beverly Lewis Cancer Care Center. Staffed by Volunteers and supported by the Breast Health Fund, the salon provides free wigs to women throughout the community who are undergoing cancer treatment. A plaque was unveiled – "Supporting the fighters, admiring the survivors, honoring the taken and never, ever giving up hope."

In 2019, the Pomona Police Department donated for the second year a gift in the amount of \$20,000 from their Pink Patch Project (PPP) campaign. The PPP is an innovative public awareness campaign designed to bring attention to the fight against breast cancer. The goals of the PPP are to:

In 2019, we provided over 100 wigs for patients who have lost their hair due to chemotherapy. We now offer breast cancer patients the opportunity to choose the new DignaCap treatment which helps "freeze" hair follicles using a special cap that gets extremely cold while the patient is receiving chemotherapy and helps with not losing their hair. A special DignaCap fund is made available to those patients who qualify for assistance.



We are very proud to offer numerous educational and wellness programs to anyone touched by cancer "free of charge." Thank you to our community family for your ongoing support in our efforts to raise funds for The Robert and Beverly Lewis Family Cancer Care Center.

New Cancer Cases 2019 Pomona Valley Hospital Medical Center

SITE GROUP

	Total Cases	Class		Sex			Stages								
		A	N/A	M	F	Other	0	I	II	III	IV	Unk	N/A*	Missing	
Oral Cavity/Pharynx	6	6	0	5	1	0	0	3	1	2	0	0	0	0	
Tongue	1	1	0	0	1	0	0	1	0	0	0	0	0	0	
Mouth, Other and Nos	1	1	0	1	0	0	0	0	1	0	0	0	0	0	
Tonsil	2	2	0	2	0	0	0	2	0	0	0	0	0	0	
Nasopharynx	2	2	0	2	0	0	0	0	1	1	0	0	0	0	
Digestive System	221	185	36	127	94	0	0	35	34	35	55	10	10	0	
Esophagus	15	14	1	11	4	0	0	0	2	2	6	1	3	0	
Stomach	21	15	6	7	14	0	0	5	1	3	4	2	0	0	
Small Intestine	2	2	0	0	2	0	0	0	1	0	0	0	1	0	
Colon	62	53	9	33	29	0	3	9	11	14	14	2	0	0	
Rectum/Rectosigmoid	43	40	3	29	14	0	2	8	10	10	6	4	0	0	
Anus, Anal Canal, Anorectum	3	3	0	1	2	0	1	0	2	0	0	0	0	0	
Liver	24	14	10	15	9	0	0	5	3	3	2	0	1	0	
Gallbladder	2	2	0	0	2	0	0	0	0	1	1	0	0	0	
Bile Ducts	7	6	1	3	4	0	0	2	0	1	2	0	1	0	
Pancreas	38	32	6	26	12	0	0	6	4	1	20	1	0	0	
Peritoneum, Omentum, Mesent	1	1	0	0	1	0	0	0	0	0	0	0	1	0	
Other Digestive	3	3	0	2	1	0	0	0	0	0	0	0	3	0	
Respiratory & Intrathoracic System	127	106	21	70	57	0	1	16	12	6	57	9	5	0	
Nasal Cavity, Sinus, Ear	1	1	0	1	0	0	0	0	1	0	0	0	0	0	
Larynx	8	7	1	6	2	0	0	0	2	0	3	2	0	0	
Lung/Bronchus-Small Cell	5	5	0	3	2	0	0	0	1	0	4	0	0	0	
Lung/Bronchus-Non Small Cell	113	93	20	60	53	0	1	16	8	6	50	7	5	0	
Hematopoietic	50	45	5	22	28	0	0	0	0	1	3	2	39	0	
Hemoretic	37	34	3	15	22	0	0	0	0	1	3	2	28	0	
Myeloma	13	11	2	7	6	0	0	0	0	0	0	0	11	0	
Soft Tissue	2	2	0	2	0	0	0	2	0	0	0	0	0	0	
Skin	32	25	7	20	12	0	5	8	5	3	2	0	2	0	
Melanoma of Skin	30	23	7	18	12	0	5	8	5	3	2	0	0	0	
Kaposi Sarcoma	1	1	0	1	0	0	0	0	0	0	0	0	1	0	
Other Skin CA	1	1	0	1	0	0	0	0	0	0	0	0	1	0	
Breast	202	183	19	3	199	0	23	90	24	18	15	6	7	0	
Female Genital Organs	98	84	14	0	98	0	0	41	10	12	18	0	3	0	
Cervix Uteri	14	10	4	0	14	0	0	4	1	3	2	0	0	0	
Corpus Uteri	49	45	4	0	49	0	0	34	3	6	2	0	0	0	
Uterus Nos	4	4	0	0	4	0	0	2	1	0	1	0	0	0	
Ovary	30	24	6	0	30	0	0	1	5	3	13	0	2	0	
Other Female Genital	1	1	0	0	1	0	0	0	0	0	0	0	1	0	
Male Genital	179	149	30	160	19	0	11	53	43	13	16	8	5	0	
Prostate	119	92	27	119	0	0	0	34	33	10	9	6	0	0	
Testis	6	6	0	6	0	0	0	3	2	1	0	0	0	0	
Bladder	30	30	0	19	11	0	10	4	8	0	2	1	5	0	
Kidney and Renal Pelvis	23	20	3	15	8	0	0	12	0	2	5	1	0	0	
Urether	1	1	0	1	0	0	1	0	0	0	0	0	0	0	
Brain and Other Endocrine	51	44	7	12	39	0	0	0	0	0	0	0	44	0	
Brain**	12	10	2	4	8	0	0	0	0	0	0	0	10	0	
Other Nervous System	39	34	5	8	31	0	0	0	0	0	0	0	34	0	
Thyroid and Other Endocrine	42	35	7	13	29	0	0	21	2	0	2	0	10	0	
Thyroid	28	24	4	8	20	0	0	21	2	0	1	0	0	0	
Other Endocrine**	14	11	3	5	9	0	0	0	0	0	1	0	10	0	
Hodgkin/Non-Hodgkin Lymphoma	44	38	6	25	19	0	0	13	12	3	7	2	1	0	
Hodgkin's Disease	8	8	0	5	3	0	0	1	6	0	1	0	0	0	
Non-Hodgkin's Lymphoma	36	30	6	20	16	0	0	12	6	3	6	2	1	0	
Unknown or Ill-Defined	22	18	4	12	10	0	0	0	0	0	0	0	18	0	
TOTALS	1076	920	156	471	605	0	46	282	143	93	175	37***	144*	0	

Lymphoma: Table includes lymphoma cases coded to lymphatic and extranodal sites.

* Not Applicable: Benign tumors, hematopoietic malignancies and tumors and histopathology in a particular primary site not included in AJCC TNM staging scheme

** Benign tumors: Collection and reporting has been a requirement of the American College of Surgeons and /or the State of California

*** Unknown stage: ACoS, CoC allow 10% or less of the analytic case load to be unstaged. Starting 1/1/2006, analytic Class 0 cases (diagnosed at our hospital but received all 1st course of treatment elsewhere) are no longer required to be TNM staged. The table reflects a total of 37 cases for 2019. 17 Class 0 cases were subtracted thus leaving 20 cases divided by 920 analytical cases = 2.1% unstaged cases (less than 10%)."



Breast Cancer

by Swarna Chanduri, MD

Breast cancer is the most common female cancer in the United States and the second most common cause of cancer deaths in women. Breast cancer accounts for 265,000 new cases each year and is responsible for over 40,000 deaths. Breast cancer mortality rates have been decreasing since the 1970s. This decrease in mortality is likely due to improved breast cancer screening and adjuvant treatment and new and targeted treatments for metastatic disease. These new treatments have increased the 5-year survival rate to nearly 80%

At PVHMC, we discuss all patients with breast cancer diagnosis in pretreatment conference. These conferences are attended by radiation oncologists, medical oncologists, surgeons, radiologists and pathologists along with support staff. We have nurse navigators, clinical trial coordinator and a social worker to help patients and physicians in coordinating the care.

Our breast cancer nurse navigator follows most of these patients from initial abnormal mammograms and guides them to acquire necessary treatment. Patients with early breast cancer were evaluated with further tumor genetic testing where indicated thus avoiding chemotherapy where it's not indicated.

We try to adhere to NCCN clinical guidelines for treatment. However, guidelines cannot replace good clinical judgment. The management of breast cancer requires the expertise of several disciplines including surgical oncologist, radiation oncology, radiology, pathology,

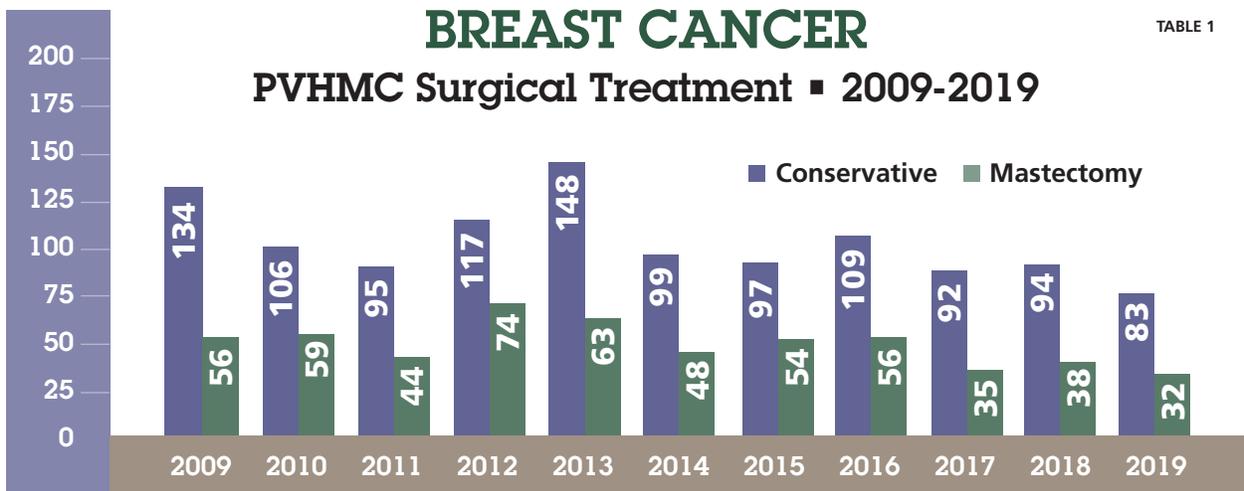
palliative care specialists, social workers and geneticists when indicated. Cases are also presented at the Thursday afternoon multidisciplinary tumor board meeting.

I reviewed our Hospital's 3-year breast cancer data collected by cancer registry (2017, 2018 and 2019). The incidence of breast cancer across all stages has more or less remained the same. There were 183 new cases of breast cancer diagnosed at PVHMC in 2019, 195 cases in 2018 and 193 cases in 2017.

Our data was compared to NCDB data regarding age at diagnosis, stage at diagnosis, and various treatments given and 5-year survival for last 3 years. (2017, 2018, 2019) and presented in the graphs and tables given below.

Our surgical treatment data shows more conservative surgery than mastectomy. Bilateral mastectomy was offered to women with hereditary breast cancer syndrome, where indicated.

In 2019 we had 32 patients treated with mastectomy and 83 patients with breast conservative treatment. Our Hospital's breast cancer data collected by our cancer registry for the last 3 years from 2017-2019 is reported in the graphs and tables below. The data depicts the surgical management (Conservative versus Mastectomy), stage at diagnosis as well as age at diagnosis. (Table 1 and 2 and 3) Breast cancer remains a disease of older women and 76% women treated at our center were above the age of 50. (Table 3) ▶



BREAST CANCER Stage at Diagnosis NCDB vs PVHMC

Stage at Diagnosis	NCDB		PVHMC		PVHMC		PVHMC		TABLE 2
	NCDB 2017	% of Total NCDB	PVHMC 2017	% of Total PVHMC	PVHMC 2018	% of Total PVHMC	PVHMC 2019	% of Total PVHMC	
0	28,272	19%	25	13%	17	9%	23	13%	
I	65,668	45%	69	36%	118	60%	90	49%	
II	35,722	24%	62	32%	28	14%	23	13%	
III	9,628	7%	17	9%	16	8%	18	10%	
IV	6,112	4%	9	5%	4	2%	15	8%	
Unknown	1,754	1%	11	6%	7	4%	6	3%	
N/A	96	0%	1	1%	8	4%	7	4%	
Totals	147,252	100%	194**	100%	198**	100%	182	100%	

** Reflects updated totals, and includes all analytical cases.

BREAST CANCER Age at Diagnosis NCDB vs PVHMC

Age Group	NCDB		PVHMC		PVHMC		PVHMC		TABLE 3
	NCDB 2017	% of Total NCDB	PVHMC 2017	% of Total PVHMC	PVHMC 2018	% of Total PVHMC	PVHMC 2019	% of Total PVHMC	
Under 20	5	0%	-	-	-	-	-	-	
20-29	668	0%	2	1%	1	1%	3	2%	
30-39	5,045	3%	12	6%	7	4%	13	7%	
40-49	29,087	14%	47	24%	48	24%	30	16%	
50-59	33,549	23%	45	23%	49	25%	45	25%	
60-69	43,494	30%	42	22%	48	24%	42	23%	
70-79	31,336	21%	29	15%	31	16%	29	16%	
80-89	11,258	8%	12	6%	11	6%	20	11%	
90+	1,810	1%	4	2%	3	2%	1	1%	
Unknown	-	-	-	-	-	-	-	-	
Totals	142,252	100%	193**	100%	198**	100%	183	100%	

** Reflects updated totals, and includes all analytical cases.

Table 4 notes treatment modalities used in the management of breast cancer at PVHMC.

Our 5-year survival data for breast cancer patients across all age groups is depicted in table 5. (Diagnosed 2008-2013). Our 5-year overall survival data for all stages is 81%. Various factors may be responsible for these results such as patient refusal to undergo treatment, racial disparities, socioeconomic status of patients etc. Both younger (<35 years) and older (>70 years) age at diagnosis is associated with a worse prognosis. Over 30% patients treated at PVHMC fall in this category and may account for our slightly inferior 5-year survival rates. Poor documentation, inability to acquire outside medical records and patients lost to follow up may be other confounding factors. Also survival data is dependent on the tumor characteristics.

ER positive tumors have a better overall survival of 82.8% as depicted in Table 6. ER negative patients have overall survival of 75.7%. All of the triple negative patients have 67.0% survival, and the worst survival rate as depicted in Table 8. Patients with triple positive and ER positive PR positive patients have a better survival rate of 78.7%.

Overall, each day we strive to provide superior care and tailor individualized plans for adjuvant therapy for patients diagnosed with breast cancer. Each year we have newer medications available for breast cancer patients of all stages and we offer them as they're available to improve their care. We also provide them with referrals to tertiary centers to give them opportunities to participate in clinical trials not open at our center.

BREAST CANCER Treatment ■ NCDB vs PVHMC

TABLE 4

Treatment at Diagnosis	NCDB 2017		PVHMC 2017		PVHMC 2018		PVHMC 2019	
	# Cases	%	# Cases	%	# Cases	%	# Cases	%
No 1st Course Treatment	4,709	3%	25*	14%	1*	1%	21*	13%
Surgery Only	20,674	14%	24	13%	26	16%	36	22%
Radiation Only	188	0%	-	-	1	1%	4	2%
Hormones Only	2,557	2%	-	-	1	1%	1	1%
Hormones and Other	-	-	-	-	1	1%	-	-
Chemotherapy Only	1,383	1%	-	-	1	1%	7	4%
Immunotherapy Only	-	-	-	-	-	-	1	1%
Chemotherapy & Immunotherapy	690	0%	3	2%	1	1%	1	1%
Chemotherapy and Hormones	1,050	1%	-	-	-	-	1	1%
Chemotherapy, Hormones and Immunotherapy	108	0%	-	-	-	-	1	1%
Radiation and Hormones	354	0%	-	-	-	-	1	1%
Radiation, Hormones, Immunotherapy	-	-	-	-	-	-	-	-
Radiation and Chemotherapy	289	0%	3	2%	-	-	-	-
Radiation, Chemotherapy and Immunotherapy	-	-	-	-	1	1%	-	-
Radiation, Chemotherapy and Hormones	-	-	1	1%	1	1%	2	1%
Surgery and Immunotherapy	75	0%	-	-	1	1%	-	-
Surgery and Radiation	8,985	6%	9	5%	11	7%	12	7%
Surgery and Chemotherapy	5,481	4%	5	3%	7	4%	9	6%
Surgery and Hormones	23,052	16%	12	7%	15	9%	19	12%
Surgery, Hormones and Immunotherapy	-	-	1	1%	-	-	1	1%
Surgery, Radiation & Hormones	35,155	27%	38	21%	56	33%	28	17%
Surgery, Chemo & Immunotherapy	2,203	2%	2	1%	7	4%	3	2%
Surgery, Chemo and Radiation	6,604	4%	10	6%	6	4%	7	4%
Surgery, Chemo, Hormones	4,094	3%	9	5%	3	2%	2	1%
Surgery, Chemo, Hormones and Immunotherapy	-	-	2	1%	4	2%	-	-
Surgery, Chemo, Radiation, Hormones and Immunotherapy	-	-	5	3%	2	1%	1	1%
Surgery, Radiation, Chemo and Immunotherapy	-	-	5	3%	5	3%	-	-
Surgery, Radiation, Chemo and Hormones	12,579	9%	24	13%	17	10%	5	3%
Surgery, Radiation, Hormones and Immunotherapy	-	-	-	-	-	-	-	-
Other Specified Treatment	12,925	9%	2	1%	-	-	1	1%
Active Surveillance	97	0%	-	-	-	-	-	-
TOTAL	147,252	100%	180	100%	168**	100%	164	100%

* Reflects cases diagnosed at PVHMC but patient has not sought any further treatment due to personal, spiritual or other reasons (including treatment recommended but patient refused or unknown, patient expired or went into Hospice). This is based on exhaustive research to physicians and other facilities.

** Reflects updated totals, from previous year and excludes Analytic Class of Case 0 cases (diagnosed here, and treated elsewhere).

PVHMC Five-Year Survival Table for Breast Cancer Cases

Diagnosed in 2008-2013 – Comprehensive Community Cancer Program - PVHMC

TABLE 5

Stage	Cases	At dx	1 year	2 years	3 years	4 years	5 years
0	232	100.0	99.6	98.7	96.6	93.1	91.8
I	435	100.0	97.5	94.5	92.1	88.6	87.4
II	299	100.0	98.7	93.6	88.9	84.4	79.9
III	138	100.0	94.9	84.8	73.9	69.5	65.6
IV	42	100.0	75.9	58.8	46.3	33.0	30.3
Overall	1146	100.0	97.0%	92.5%	88.0%	83.9%	81.5%

PVHMC Five-Year Survival Table for Breast Cancer ER- Cases

Diagnosed 2008-2013 – Comprehensive Community Cancer Program - PVHMC

TABLE 6

Stage	Cases	At dx	1 year	2 years	3 years	4 years	5 years
0	17	100.0	100.0	100.0	94.1	88.2	88.2
I	56	100.0	94.6	89.3	85.7	83.9	82.1
II	70	100.0	97.1	94.3	94.3	87.0	85.5
III	39	100.0	89.7	76.9	69.2	66.6	63.7
IV	13	100.0	76.0	42.2	42.2	33.8	33.8
Overall	195	100.0	93.6%	85.7%	81.7%	77.3%	75.7%

PVHMC Five-Year Survival Table for Breast Cancer ER/PR+ Cases

Diagnosed 2008-2013 – Comprehensive Community Cancer Program - PVHMC

TABLE 7

Stage	Cases	At dx	1 year	2 years	3 years	4 years	5 years
0	164	100.0	99.4	99.4	97.0	95.1	93.9
I	329	100.0	98.2	96.0	93.9	90.5	89.5
II	178	100.0	99.4	94.4	87.6	83.6	79.4
III	76	100.0	96.1	90.8	80.3	75.0	69.4
IV	16	100.0	87.5	81.3	56.3	43.0	35.9
Overall	763	100.0	98.4%	95.6%	91.0%	87.6%	85.3%

PVHMC Five-Year Survival Table for Breast Cancer Triple+ Cases

Diagnosed 2008-2013 – Comprehensive Community Cancer Program - PVHMC

TABLE 8

Stage	Cases	At dx	1 year	2 years	3 years	4 years	5 years
0	1	100.0	100.0	100.0	100.0	100.0	100.0
I	10	100.0	100.0	100.0	100.0	100.0	90.0
II	25	100.0	100.0	96.0	92.0	84.0	84.0
III	7	100.0	100.0	100.0	85.7	71.4	57.1
IV	1	100.0	100.0	100.0	0.0	0.0	0.0
Overall	44	100.0	100.0%	97.9%	89.4%	83.0%	78.7%

PVHMC Five-Year Survival Table for Breast Cancer Triple- Cases

Diagnosed 2008-2013 – Comprehensive Community Cancer Program - PVHMC

TABLE 9

Stage	Cases	At dx	1 year	2 years	3 years	4 years	5 years
0	0	-	-	-	-	-	-
I	29	100.0	93.1	86.2	79.3	75.9	72.3
II	40	100.0	95.0	90.0	90.0	82.5	80.0
III	19	100.0	79.0	52.6	47.4	47.4	47.4
IV	7	100.0	71.4	28.6	28.6	28.6	28.6
Overall	95	100.0	90.0%	77.0%	73.0%	69.0%	67.0%

PVHMC Five-Year Survival Table for Breast Cancer ER+ Cases

Diagnosed 2008-2013 – Comprehensive Community Cancer Program - PVHMC

TABLE 10

Stage	Cases	At dx	1 year	2 years	3 years	4 years	5 years
0	183	100.0	99.5	98.9	96.7	94.5	92.9
I	370	100.0	97.8	95.4	93.2	89.6	88.7
II	225	100.0	99.1	93.3	87.0	83.4	77.7
III	97	100.0	96.9	87.6	76.3	71.1	66.8
IV	28	100.0	78.6	67.9	49.5	33.7	29.5
Overall	903	100.0	97.7%	93.8%	89.1%	85.3%	82.8%

Definition of Terms

Age of Patient	Recorded in completed years at the time of diagnosis for analytic cases or the age of the patient at the time they were first seen at this hospital for non-analytic patients.
Class of Case	Analytic: Patients with a malignant neoplasm (or benign brain or CNS tumor diagnosed in 2001 or after), newly diagnosed and/or received all or part of their 1st course of treatment at Pomona Valley Hospital Medical Center. Non-Analytic: Patients who have been previously diagnosed and treated for a malignancy (or benign brain or CNS tumor after 2001) elsewhere who receive treatment at PVHMC for progressive, recurrent or metastatic disease.
Stage Of Disease	Analytic cancer cases at PVHMC are staged according to the American Joint Commission on Cancer (AJCC), 6th Edition Cancer Staging manual as required by the American College of Surgeons, Commission on Cancer. The AJCC, TNM Classification Systems is based on the premise that cancer of similar types (histology) or site of origin share similar patterns of growth. There are no AJCC TNM Staging Classifications for malignant brain and CNS tumors or hematopoietic diseases. These cases are designated as not applicable (N/A) under stages on the New Cancer Cases 2006 table. This system expresses the anatomic extent of disease based on: T = tumor size, and/or tumor invasion, N = node involvement, M = metastases, spread to distant sites (lung, liver, bone, brain, etc.) A Stage Group, i.e. I, II, III, IV is assigned after the TNM elements have been determined.
Survival Rate	The proportion of patients surviving a particular interval from the time of diagnosis, expressed in terms of percentage, and then computed.
Treatment	Refers to the first course of planned treatment after initial diagnosis.

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