

P O M O N A V A L L E Y H O S P I T A L M E D I C A L C E N T E R

CANCER PROGRAM
A N N U A L R E P O R T 2 0 2 3



THE ROBERT & BEVERLY LEWIS FAMILY
CANCER CARE CENTER

2023 Cancer Committee

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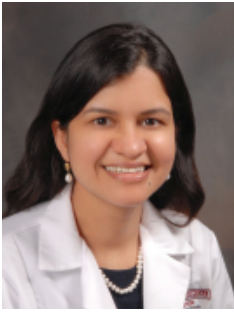
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Cancer Committee Report

Preeti Chaudhary, MD, Chair

In the past year, the cancer program at Pomona Valley Hospital Medical Center (PVHMC) held true in its mission to deliver comprehensive cancer care. The dedicated teams in Medical Oncology, Radiation Oncology, Gynecological Oncology and Breast Cancer Imaging (Breast Health Center) collaborated seamlessly within The Robert & Beverly Lewis Family Cancer Care Center, ensuring well-coordinated care.

Our physicians and support staff maintained their commitment to our patient population. I extend my gratitude to them for their unwavering dedication.

Medical Oncology

Our Oncology practice is located within a campus adorned with tranquil foliage and soothing fountains. We are known for our excellence in various crucial areas, including the Food and Drug Administration (FDA) approved “DigniCap” Delta for minimizing chemotherapy-induced hair loss, onsite blood transfusion facilities and a convenient blood draw station.



Swarna S. Chanduri, MD, Behnam Ebrabimi, MD and Preeti Chaudhary, MD

We focus on personalized care, meticulously identifying predictive markers to guide treatment decisions and improve outcomes through precision oncology. We work closely with our multidisciplinary team, engaging in shared decision-making rooted in evidence-based guidelines, which is the foundation of our success.

Facilitating access to clinical research trials underscores our commitment to continuous improvement. Regular pre-treatment and cancer conference meetings, involving nurses, navigators and physicians, ensure tailored, integrated care plans. In 2023, we served over 20,000 patients, delivering specialized chemo/immunotherapy treatments to over 6,000 individuals.

Our holistic approach addresses medical, familial, social and spiritual needs. By integrating National Comprehensive Cancer Network (NCCN) protocols and Companion & Complementary Diagnostics, we uphold the highest standards of care. Our oncology electronic medical record system fosters seamless communication among teams, enhancing patient engagement and care continuity.

Patient comfort is paramount, with iPads/tablets provided for entertainment and privacy during treatments.

While recognizing the challenges in curing all cancers, our dedicated team of patient navigators, oncology nurses, a social worker, a genetic counselor and a nutritionist supports patients throughout their treatment journey.

Direct consultations with physicians ensure personalized attention from the outset. New patients are scheduled promptly, and STAT appointments are available as needed. Our patient portal grants 24/7 access to medical charts, empowering patients in their treatment decisions.

Our mission centers on quality patient care with a personal touch, guiding every aspect of our practice. In summary, our commitment to excellence in oncology care is defined by compassion, expertise, and innovation. We ensure each patient and their family receive comprehensive support and optimal outcomes.



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 The Robert and Beverly Lewis Family Cancer Care Center and at our Pomona Valley Health Centers in Claremont, Chino Hills and La Verne. Digital breast tomosynthesis is a 3D 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 hospital was also the first in the region to offer the SmartCurve™ breast stabilization system, which is

clinically proven to deliver a more comfortable mammogram without compromising image quality, workflow or dose.



The Breast Health Program at PVHMC has full American College of Radiology accreditation in mammography, stereotactic breast biopsy, breast ultrasound and ultrasound-guided biopsy, demonstrating that our facility has achieved

high practice standards in image quality, personnel qualifications, facility equipment, quality control procedures and quality assurance programs. 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. We are dedicated to ensuring 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

2023 patient numbers remained stable with over 500 referrals; however, due to the changes in fractionation patterns, our total number of treatments delivered decreased. This is largely due to the employment of a shortened course of 5 fractions known as Stereotactic Body Radiation Therapy (SBRT). This treatment pattern has shown improved outcomes for certain diagnoses.

The top primary cancer diagnoses for our patient population are:

- Breast Cancer
- Prostate Cancer
- GYN (cervical & uterine) Cancer
- Lung Cancer

The two modes of radiation medicine we offer are:

- **Teletherapy** – Linear accelerator based treatments or external beam treatment
 - o Accuray TomoTherapy HiArt Unit
 - o Varian Trilogy with Rapid Arc & Cone Beam CT Unit



- o External Beam Treatment Options
 - Photons (x-rays)
 - Electrons
 - Intra-fraction tracking with VisionRT
 - 3D Conformal
 - IMRT with IGRT
 - SBRT with IGRT
 - Respiratory gating & Deep Inspiration Breath Hold
- **Brachytherapy** – Radioactive material based treatments
 - o HDR
 - APBI for Select Early Stage Breast Cancer
 - Interstitial Implants for GYN Cancers
 - Intracavitary Implants for GYN Cancers
 - o Radioactive Iodine Ablations for Thyroid Cancer and Hyperthyroidism
 - o 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. We do this through our team of board-certified expert physicians, medical radiation physicists, dosimetrists, therapists, nurses and an outstanding clerical team.

Lung Cancer Program

The Lung Cancer Program (LCP) at PVHMC was founded in January 2008. It 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 Practitioner 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, thereby improving treatment outcomes.

To promote diagnosing lung cancer at the earliest stages, PVHMC offers the public low-cost and low-dose CT Chest Screening. 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 and community outreach programs to raise awareness.

GYN Oncology

In 2020, we proudly welcomed GYN Oncologist Raffi Chalian, M.D., to our community. Dr. Chalian is a Board Certified Gynecologic Oncologist which is a surgeon who specializes in gynecologic cancer. His enthusiasm and dedication have enhanced our ability to serve patients and the broader community. Thanks to his expertise, our patients can now receive comprehensive gynecologic cancer treatments locally, including care in our infusion center. This is a significant convenience and benefit.

At PVHMC, we are committed to providing state-of-the-art care for women with gynecologic cancers. Our advanced treatment options include minimally invasive laparoscopic and robotic surgery, precision and targeted systemic treatment, cutting-edge radiation therapy with TomoTherapy and Trilogy, which deliver IMRT treatments with IGRT, and high-dose-rate brachytherapy. This approach precisely targets radiation to the cancer site, where the cancer was, or areas in the pelvis where recurrence may occur, ensuring our patients receive the most effective and targeted care available. All these advanced treatment options provide our patients the latest most effective treatments available.

Palliative Care

Palliative care is specialized medical care for people with serious illnesses. 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 physicians, nurses, chaplains, social workers and 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 age and any stage of a serious illness. It can also be provided together with other medical treatments.

PVHMC's Palliative Care service has been certified by The Joint Commission since 2014. It works collaboratively with Oncology services to provide a holistic approach to our patients and families. This partnership is committed to achieving best practices in all aspects of care.

Clinical Trials

Clinical trials have been available since 1995, and we are now under the leadership of Sri Gorty, MD, Radiation Oncologist,

Medical Director of Radiation Oncology. Since 1995, we have enrolled over 801 patients into non-NCI and NCI-sponsored co-operative group clinical trials. The Cancer Care Center continues to participate and actively enroll cancer patients in clinical trials through the National Cancer Institute (NCI), other Cooperative Groups such as NRG, and Pharmaceutical company-sponsored clinical trials.

All study designs are 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. Cancer clinical trials are a significant part of the care and services provided. Clinical trials offer new options for patients seeking access to experimental procedures and drugs in all phases of development.

There are six types of cancer-related clinical trials that we may offer:

Treatment trials test new treatments (e.g., 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 physicians 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 / weight management trials (also called supportive care trials) explore ways to improve and implement a patient-centered approach to improving comfort, quality of life, safety and costs 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).

Observational trials utilizing screening tools such as Multiomics Blood Tests, the main goal of which is to learn things that will help patients in the future.

Quality - improving trials explore ways to improve and implement a patient-centered approach to improvements in quality, safety, and cost.

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 Health Insurance Portability and Accountability Act 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.

Patients who participate in clinical trials are cared for by leading physicians and receive the same quality of care as other patients. They may also have extra support from a dedicated clinical trials team. Care staff monitor lab results to ensure the treatment is working and to identify any side effects. They also provide contact information for patients to address concerns. 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 entirely voluntary, and they have the right to refuse study participation without any bias from our medical and ancillary staff.

Customer Satisfaction

Customer Satisfaction is always a top priority. Most of our patients are surveyed regarding the service and their satisfaction. The surveys allow us timely feedback about our patients' experience. We also offer "Feedback Forms" throughout the Cancer Care Center that allow patients to express appreciation or concerns immediately. All compliments, suggestions and concerns are forwarded to the appropriate manager and department for recognition or follow-up as appropriate.

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 (ACS) 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 over 33,913 cancer patients.

In 2023, the Cancer Registry accessioned a total of 914 cancer cases. There were 852 analytic or new cases and 61 non-analytic or previously diagnosed and treated cases. We also perform a lifetime annual follow-up on all analytic patients in our database as a requirement of the American College of Surgeons approved Cancer Programs.

The top ten sites comprise 596 cases or 69.95% of the total cancer cases seen at PVHMC for 2023. The top 10 cancers are Breast (220 cases or 36.9%), Non-Small Cell Lung (85 cases or 14.3%), Prostate (64 cases or 10.7%), Colon (51 cases or 8.6%), NH Lymphoma (38 cases or 6.4%), Pancreas (34 cases or 5.7%), Rectum (29 cases or 4.9%), Thyroid (29 cases or 4.9%), Corpus Uteri (26 cases or 4.4%), Kidney/Renal Pelvis (20 cases or 3.4%), and Other Cancers (256 cases or 30.05%).

Support Programs

Since the pandemic, many of our support and wellness groups have evolved to meet the changing needs of our patients. We now offer a mix of in-person and virtual options, ensuring flexibility and accessibility for everyone. Some of the ongoing support groups and classes we offer are breast cancer and general cancer support groups, nutrition consultations, virtual Pilates classes, chemotherapy education, newly diagnosed orientation meetings, Advance Care Planning, and the Living Well After Cancer program.

Our dedicated team includes an on-site social worker, as well as specialized breast and lung navigators, all focused on providing compassionate support and guidance to our patients. These professionals serve as invaluable resources not only for patients but also for their families, offering personalized assistance tailored to each individual's journey.

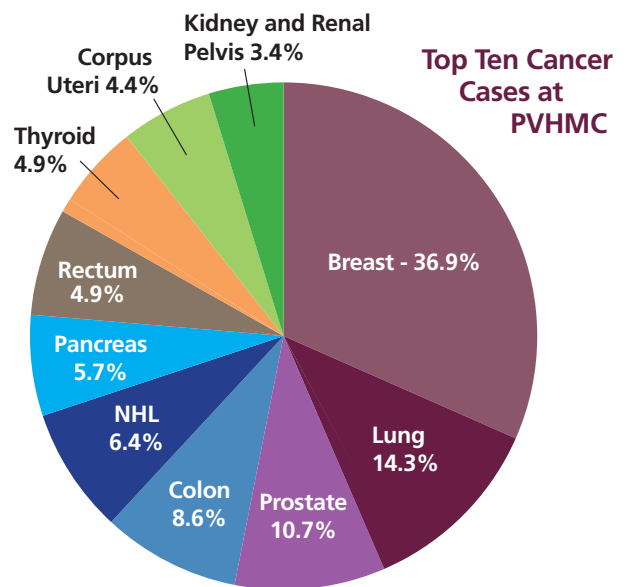
Whether through phone calls, virtual meetings, or face-to-face interactions, our team is committed to connecting with and supporting patients in the way that best suits their preferences, ensuring they feel supported every step of the way.

Genetic Counseling Services

We began offering genetic counseling services in 2020 in conjunction with Keck Graduate Institute. In 2023, we provided 179 patients with specialized genetic counseling. This counseling is of significant value to patients. This service is not provided at every comprehensive community cancer center, but we are pleased to provide it to our patients.

Fundraising

In 2023, the Foundation raised \$119,240 for the Cancer Care Center. This total included funding for the Breast Health Fund, Living Well After Cancer, The Robert and Beverly Lewis Family Cancer Care Center Endowment, and unrestricted gifts to the cancer program. Of the \$119,240, \$12,000 came from the LASD County Sheriff's Department's Pink Patch Project. At the end of 2023, The Robert and Beverly Lewis Family Cancer Center Permanent Endowment was valued at \$4,619,136.



New Cancer Cases 2023

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	12	12	0	8	4	0	0	8	1	1	1	0	1	0	
TONGUE	5	5	0	3	2	0	0	2	1	1	1	0	0	0	
MOUTH, OTHER & NOS	3	3	0	2	1	0	0	3	0	0	0	0	0	0	
TONSIL	2	2	0	2	0	0	0	2	0	0	0	0	0	0	
OROPHARYNX	1	1	0	1	0	0	0	1	0	0	0	0	0	0	
PHARYNX & ILL-DEFINED	1	1	0	0	1	0	0	0	0	0	0	0	1	0	
Digestive System	195	188	7	100	94	1	8	56	25	32	59	2	13	0	
ESOPHAGUS	6	6	0	4	2	0	0	2	1	1	2	0	0	0	
STOMACH	21	19	2	14	7	0	0	8	1	2	8	0	2	0	
SMALL INTESTINE	8	8	0	7	1	0	1	2	1	3	1	0	0	0	
COLON	52	51	1	25	26	1	6	16	8	12	9	1	0	0	
RECTUM & RECTOSIGMOID	32	29	3	12	20	0	1	11	3	6	9	1	1	0	
ANUS,ANAL CANAL,ANORECTUM	7	7	0	1	6	0	0	2	1	0	2	0	2	0	
LIVER	16	16	0	13	3	0	0	2	3	2	5	0	4	0	
GALLBLADDER	8	8	0	0	8	0	0	1	1	3	3	0	0	0	
BILE DUCTS	8	7	1	4	4	0	0	1	1	1	4	0	1	0	
PANCREAS	34	34	0	18	16	0	0	11	5	2	16	0	0	0	
OTHER DIGESTIVE	3	3	0	2	1	0	0	0	0	0	0	0	3	0	
Respiratory & Intrathoracic System	104	98	6	52	52	0	0	30	13	15	39	1	6	0	
NASAL CAVITY,SINUS,EAR	1	1	0	0	1	0	0	0	0	0	0	0	1	0	
LARYNX	3	3	0	2	1	0	0	1	0	0	2	0	0	0	
LUNG/BRONCHUS-SMALL CELL	7	7	0	2	5	0	0	1	1	0	5	0	0	0	
LUNG/BRONCHUS-NON SM CELL	91	85	6	46	45	0	0	27	11	15	32	1	5	0	
PLEURA	2	2	0	2	0	0	0	1	1	0	0	0	0	0	
Hematopoietic	27	26	1	17	10	0	0	5	4	0	0	0	18	0	
HEMERETIC	12	11	1	9	3	0	0	0	0	0	0	0	12	0	
MYELOMA	13	13	0	8	5	0	0	5	4	0	0	0	4	0	
OTHER HEMATOPOIETIC	2	2	0	0	2	0	0	0	0	0	0	0	2	0	
Soft Tissue	5	5	0	2	3	0	0	2	0	0	1	0	2	0	
Skin	27	23	4	17	10	0	2	11	3	1	3	1	6	0	
MELANOMA OF SKIN	21	18	3	12	9	0	2	11	3	1	3	1	0	0	
KAPOSIS SARCOMA	4	4	0	4	0	0	0	0	0	0	0	0	4	0	
OTHER SKIN CA	2	1	1	1	1	0	0	0	0	0	0	0	2	0	
Breast	223	220	3	2	221	0	25	124	32	21	13	4	3	1	
Female Genital	67	59	8	0	67	0	0	37	4	6	12	3	5	0	
CERVIX UTERI	12	11	1	0	12	0	0	10	0	2	0	0	0	0	
CORPUS UTERI	28	26	2	0	28	0	0	23	2	1	2	0	0	0	
UTERUS NOS	5	5	0	0	5	0	0	3	0	0	2	0	0	0	
OVARY	16	11	5	0	16	0	0	0	1	3	7	3	2	0	
VAGINA	2	2	0	0	2	0	0	1	0	0	0	0	1	0	
VULVA	1	1	0	0	1	0	0	0	1	0	0	0	0	0	
OTHER FEMALE GENITAL	3	3	0	0	3	0	0	0	0	0	1	0	2	0	
Male Genital	85	69	16	85	0	0	0	19	37	10	16	1	1	1	
PPROSTATE	80	64	16	80	0	0	0	15	37	10	16	1	0	1	
TESTIS	4	4	0	4	0	0	0	4	0	0	0	0	0	0	
OTHER MALE GENITAL	1	1	0	1	0	0	0	0	0	0	0	0	1	0	
Urinary Tract	43	35	8	30	13	0	4	21	4	4	4	4	2	0	
BLADDER	16	14	2	11	5	0	3	8	3	0	1	1	0	0	
KIDNEY AND RENAL PELVIS	25	20	5	19	6	0	0	12	1	4	3	3	2	0	
URETER	1	0	1	0	1	0	0	1	0	0	0	0	0	0	
OTHER URINARY	1	1	0	0	1	0	1	0	0	0	0	0	0	0	
Brain and other Nervous System	35	32	3	13	22	0	0	0	0	0	0	0	35	0	
BRAIN**	15	14	1	8	7	0	0	0	0	0	0	0	15	0	
OTHER NERVOUS SYSTEM	20	18	2	5	15	0	0	0	0	0	0	0	20	0	
Thyroid and Other Endocrine	34	31	3	7	27	0	0	25	4	1	0	1	3	0	
THYROID	29	29	0	3	26	0	0	25	4	0	0	0	0	0	
OTHER ENDOCRINE	5	2	3	4	1	0	0	0	0	1	0	1	3	0	
Hodgkin/Non-Hodgkin Lymphoma	44	41	3	28	16	0	0	10	8	4	17	1	3	1	
HODGKIN'S DISEASE	3	3	0	1	2	0	0	0	1	1	1	0	0	0	
NON-HODGKIN'S LYMPHOMA	41	38	3	27	14	0	0	10	7	3	16	1	3	1	
Unknown or Ill-Defined	13	13	0	7	6	0	0	0	0	0	1	0	12	0	
TOTALS	914	852	62	368	545	1	39	348	135	95	166	3***	110	3	

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 18 cases, minus 15 non-analytic cases, divided by 852 analytical cases = 0.35% unstaged cases (less than 10%).



Breast Cancer Update

Swarna S. Chanduri, MD, Chair

Breast cancer is the most commonly diagnosed malignancy and the second leading cause of cancer death among women in the United States of America. Breast cancer accounts for 310,720 new cases of Invasive Ductal Carcinoma and 52,500 Ductal Carcinoma In Situ (DCIS) in women. Male invasive breast cancer incidence is 2,790. Deaths due to breast cancer are estimated to be more than 42,250 in women and 530 in men.

Breast cancer mortality rates have dropped by 44% since 1989. This decrease in mortality is likely due to an improved personalized treatment approach for breast cancer. To achieve this goal, nationwide multimodality treatment approaches are implemented to improve awareness, screening and adopt new-targeted treatments for early and metastatic cancers. This approach has increased the 5-year survival rate to nearly 80%, demonstrating that early detection and personalized treatment saves lives.

At PVHMC, The Robert and Beverly Lewis Family Cancer Care Center team works to achieve this goal and succeeds in providing personalized care to our breast cancer patients. The management of breast cancer requires the expertise of several disciplines. Here at our Cancer Care Center, we discuss the majority of our patients, including our newly diagnosed breast cancer patients, in our weekly pretreatment conference. We also present cases at our general cancer conference. These conferences are attended by a multidisciplinary team of physicians, including radiation oncologists, medical oncologists, surgeons, radiologists and pathologists, along with support staff, including palliative

care specialists, social workers and genetic counselors, when indicated.

We have nurse navigators, a clinical trial coordinator and a social worker to help patients and physicians coordinate care. Our breast cancer nurse navigator follows most of these patients from their initial abnormal mammogram results and guides them to acquire the necessary treatment.

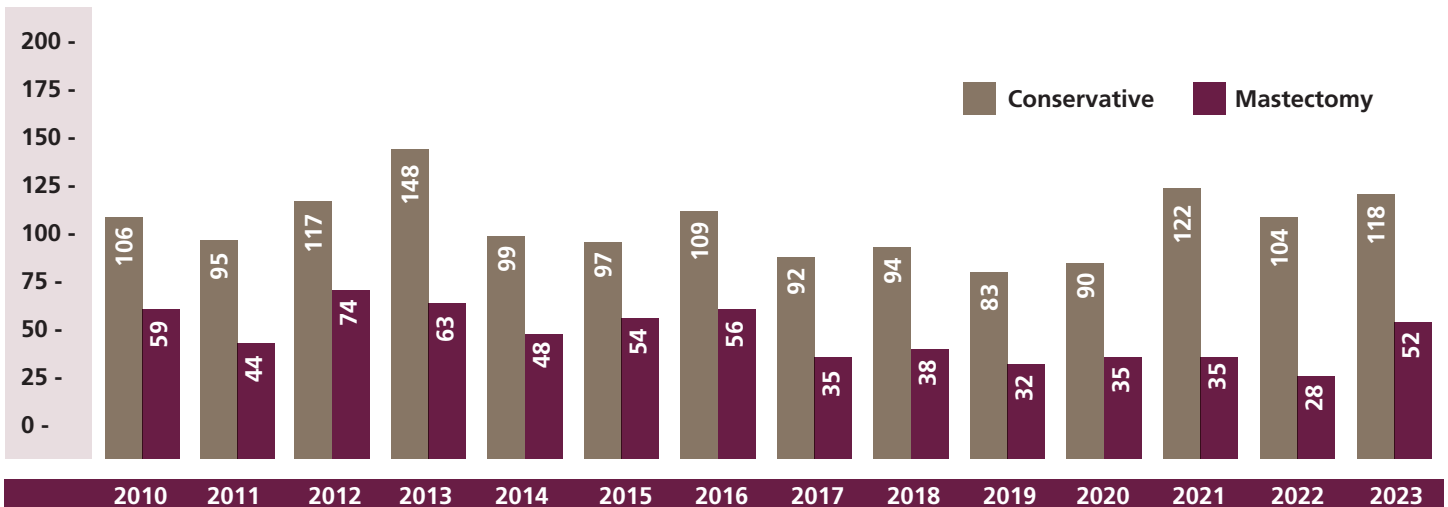
Patients with early breast cancer are evaluated with further tumor genetic testing where indicated. This approach has been shown to decrease unnecessary chemotherapy where it is not indicated. We try to adhere to the National Comprehensive Cancer Network (NCCN) clinical guidelines for treatment. However, guidelines cannot replace good clinical judgment.

I reviewed our Hospital's 3-year breast cancer data collected by the cancer registry (2021, 2022 and 2023). The incidence of breast cancer across all stages has remained relatively constant. There were 220 new cases of breast cancer diagnosed at PVHMC in 2023, 182 cases in 2022 and 185 cases in 2021.

Our data was compared to National Cancer Database (NCDB) data regarding age at diagnosis, stage at diagnosis, various treatments given and 5-year survival for the last 3 years (2021, 2022 and 2023). This is presented in the graphs and tables below. Our surgical treatment data shows more conservative surgery than mastectomy. Bilateral mastectomy was offered to women with hereditary breast cancer syndrome, where indicated.

Breast Cancer - PVHMC Surgical Treatment - 2010-2023

Table 1



Breast Cancer - NCDB vs PVHMC - Stage at Diagnosis

Table 2

Stage at Diagnosis	NCDB		PVHMC					
	NCDB 2022	% of total NCDB	PVHMC 2021	% of total PVHMC	PVHMC 2022	% of total PVHMC	PVHMC 2023	% of total PVHMC
0	44,223	17%	21	11%	27	15%	25	11%
I	147,963	57%	108	58%	103	57%	123	56%
II	29,554	11%	29	16%	31	17%	32	15%
III	14,647	6%	12	7%	11	6%	21	10%
IV	11,246	4%	7	4%	8	4%	13	6%
Unknown	8,530	3%	6	3%	1	1%	3	1%
Not applicable	4,068	2%	2	1%	1	1%	3	1%
Total	260,231	100%	185	100%	182	100%	220	100%

Breast Cancer - NCDB vs PVHMC - Age at Diagnosis

Table 3

Age Group	NCDB		PVHMC					
	NCDB 2021	% of total NCDB	PVHMC 2021	% of total PVHMC	PVHMC 2022	% of total PVHMC	PVHMC 2023	% of total PVHMC
Under 20	23	0%						
20-29	1184	0%	1	1%	4	2%	1	50%
30-39	9,902	4%	10	5%	13	7%	7	3%
40-49	36,231	14%	25	14%	32	18%	33	15%
50-59	53,664	21%	39	21%	32	18%	50	23%
60-69	74,906	29%	61	33%	48	26%	71	32%
70-79	60,850	23%	26	14%	30	17%	37	17%
80-89	20,409	8%	18	10%	18	10%	15	7%
90+	3,062	1%	5	3%	5	3%	6	3%
Unk								
Total	260,231	100%	185	100%	182	100%	220	100%

In 2023, we had 52 patients treated with mastectomy and 118 patients with breast-conservative treatment. Our hospital's breast cancer data collected by our cancer registry for the last 3 years, from 2021-2023, is reported in the graphs and tables. The data depicts the surgical management (conservative versus mastectomy), stage at diagnosis as well as age at diagnosis. (Tables 1, 2 and 3)

Breast cancer remains a disease of older women, and 81% of women treated at our Cancer Care Center were above the age of 50 (Table 3). Table 4 depicts treatment modalities used in the management of breast cancer at PVHMC. The total number of patients who did not receive their first course of treatment at our Cancer Care Center was previously reported to be 4% in 2021 and 6% in 2022, with 3% nationwide in 2022; our numbers were noted to be 7% in 2023.

Our 5-year survival data for breast cancer patients across all age groups is depicted in Table 5. (Diagnosed 2012-2017). Our 5-year overall survival data for all stages is 83.2%. 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% of patients treated at PVHMC fall in this category and may account for our slightly lower 5-year survival rates. Also, survival data is dependent on the tumor characteristics. ER-positive tumors have a better overall survival of 84.3%, as depicted in Table 6. ER-negative patients have an overall survival of 76.4%. All of the triple-negative patients have 76.9% 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 86.2%.

NCDB vs PVHMC Treatment

Table 4

Stage at Diagnosis	NCDB 2022	%	PVHMC 2021	%	PVHMC 2022	%	PVHMC 2023	%
No 1st course Treatment	7,855	3%	6*	4%	11	6%	14	7%
Surgery Only	34,443	13%	35	20%	33	19%	48	23%
Radiation Only	365	0%						
Hormones Only	4,984	2%			2	1%	2	1%
Hormones and Other					1	1%		
Chemotherapy Only	1,814	1%	2	1%	2	1%	3	1%
Immunotherapy Only								
Chemotherapy and Immunotherapy	3,170	1%	3	2%	5	3%	6	3%
Chemotherapy and Hormones	2,935	1%	2	1%	1	1%	2	1%
Chemotherapy, Hormones and Immunotherapy	285	0%			1	1%		
Radiation and Hormones	401	0%						
Radiation, Hormones, Immunotherapy								
Radiation and Chemotherapy	313	0%	1	1%				
Radiation, Chemotherapy and Immunotherapy			1	1%	1	1%		
Radiation, Chemotherapy and Hormones			1	1%	1	1%		
Surgery and Immunotherapy	242	0%					1	1%
Surgery and Radiation	17,151	7%	11	6%	7	4%	22	11%
Surgery and Chemotherapy	6,898	3%	6	4%	15	9%	20	10%
Surgery and Hormones	41,787	16%	10	6%	7	4%	17	8%
Surgery, Hormones and Immunotherapy					1	1%		
Surgery, Radiation and Hormones	73,110	28%	55	32%	52	30%	43	21%
Surgery, Chemotherapy and Immunotherapy	8,062	3%	9	5%	12	7%	16	8%
Surgery, Chemotherapy and Radiation	6,844	3%	8	5%	12	7%	4	2%
Surgery, Chemotherapy and Hormones	5,371	2%	3	2%	2	1%	4	2%
Surgery, Chemotherapy, Hormones and Immunotherapy			4	2%				
Surgery, Chemotherapy, Radiation, Hormones and Immunotherapy	16,450	6%	1	1%	2	1%		
Surgery, Radiation, Chemotherapy and Immunotherapy			6	4%	4	2%		
Surgery, Radiation, Chemotherapy and Hormones			9	5%	4	2%	1	1%
Surgery, Radiation, Hormones and Immunotherapy							4	2%
Other Specified Treatment	27,429	11%						
Active Surveillance	322	0%						
TOTAL	260,231	100%	173**	100%	176**	100%	207	100%

**Reflects cases diagnosed @ 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 offices and other facilities.

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

PVHMC Five-Year Survival Table for Breast Cancer Cases Diagnosed 2012 - 2017 Comprehensive Community Cancer Program - PVHMC

Table 5

Stage	Cases	At Diagnosis	1 year	2 Years	3 years	4 years	5 years
0	210	100	100.0	99.5	99.0	98.1	97.1
I	464	100	98.7	95.7	99.0	98.1	97.1
II	336	100	97.9	94.0	87.1	82.6	77.3
III	122	100	95.9	87.7	76.2	70.5	66.4
IV	38	100	57.3	49.1	38.2	27.3	27.3
Overall	1170	100%	97.1%	93.6%	88.8%	85.6%	83.2%

PVHMC Five-Year Survival Table for Breast Cancer Triple neg. Cases
Diagnosed 2012 - 2017 Comprehensive Community Cancer Program - PVHMC

Table 6

Stage	Cases	At Diagnosis	1 year	2 Years	3 years	4 years	5 years
0	0	-	-	-	-	-	-
I	6	100	100.0	100.0	100.0	100.0	83.3
II	5	100	100.0	100.0	100.0	100.0	100.0
III	2	100	50.0	-	-	-	-
IV	0	-	-	-	-	-	-
Overall	13	100%	92.3%	84.6%	84.6%	84.6%	76.9%

PVHMC Five-Year Survival Table for Breast Cancer ER/PR + Cases
Diagnosed 2012 - 2017 Comprehensive Community Cancer Program - PVHMC

Table 7

Stage	Cases	At Diagnosis	1 year	2 Years	3 years	4 years	5 years
0	141	100	100.0	100.0	100.0	99.3	97.8
I	371	100	99.2	96.2	93.5	91.3	90.8
II	196	100	99.0	94.9	87.2	83.6	78.9
III	73	100	97.3	93.2	84.9	80.8	76.6
IV	18	100	72.2	61.1	38.9	22.2	22.2
Overall	799	100%	98.5%	95.5%	91.1%	88.3%	86.2%

PVHMC Five-Year Survival Table for Breast Cancer Triple + Cases
Diagnosed 2012 - 2017 Comprehensive Community Cancer Program - PVHMC

Table 8

Stage	Cases	At Diagnosis	1 year	2 Years	3 years	4 years	5 years
0	1	100	100.0	100.0	100.0	100.0	100.0
I	3	100	100.0	100.0	100.0	100.0	100.0
II	7	100	100.0	100.0	100.0	85.7	85.7
III	0	-	-	-	-	-	-
IV	0	-	-	-	-	-	-
Overall	11	100%	100%	100%	100%	90.9%	90.9%

PVHMC Five-Year Survival Table for Breast Cancer ER + Cases
Diagnosed 2012 - 2017 Comprehensive Community Cancer Program - PVHMC

Table 9

Stage	Cases	At Diagnosis	1 year	2 Years	3 years	4 years	5 years
0	165	100	100.0	99.4	99.4	98.2	96.9
I	413	100	99.3	96.4	93.7	91.5	91.0
II	252	100	98.8	94.4	86.0	82.0	76.2
III	94	100	97.9	89.4	79.8	74.5	70.2
IV	26	100	61.5	53.9	38.5	26.9	26.9
Overall	950	100%	98.1%	94.5%	89.7%	86.6%	84.3%

PVHMC Five-Year Survival Table for Breast Cancer ER neg Cases Table 10 Diagnosed 2012 - 2017 Comprehensive Community Cancer Program - PVHMC

Stage	Cases	At Diagnosis	1 year	2 Years	3 years	4 years	5 years
0	16	100	100.0	100.0	100.0	100.0	100.0
I	38	100	94.7	92.1	89.5	89.5	86.8
II	73	100	94.5	93.1	90.4	83.4	80.6
III	26	100	88.5	80.8	69.2	61.5	57.7
IV	10	100	36.8	24.6	24.6	12.3	12.3
Overall	163	100%	90.8%	87.6%	83.9%	78.9%	76.4%

We tailor individualized plans for neoadjuvant and 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 are available to improve their care. We also provide referrals to tertiary centers to give them opportunities to participate in clinical trials that are not open at our Cancer Care Center.

Overall, each day, as a team, we strive to provide superior care to our patients to overcome racial disparities and equal access to care and adopt various approaches to address obstacles to care.

Our nurse navigators guide patients to access care by providing information regarding insurance coverage and PVHMC Foundation financial assistance. Our hospital Foundation raises funds to provide monetary benefits to provide Dignicap to patients who cannot afford it. We also have interpreter services for all patients who cannot speak English. Over 30% of our total patient population is Hispanic, and many require interpreter services.



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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The Robert and Beverly Lewis Family Cancer Care Center is a comprehensive ambulatory oncology facility where a collaborative partnership of health care professionals are dedicated to community-focused cancer education, prevention, screening, diagnosis, treatment, research and recovery. The Cancer Care Center is committed to providing the broadest range of effective cancer care and related services currently available in a community setting.



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