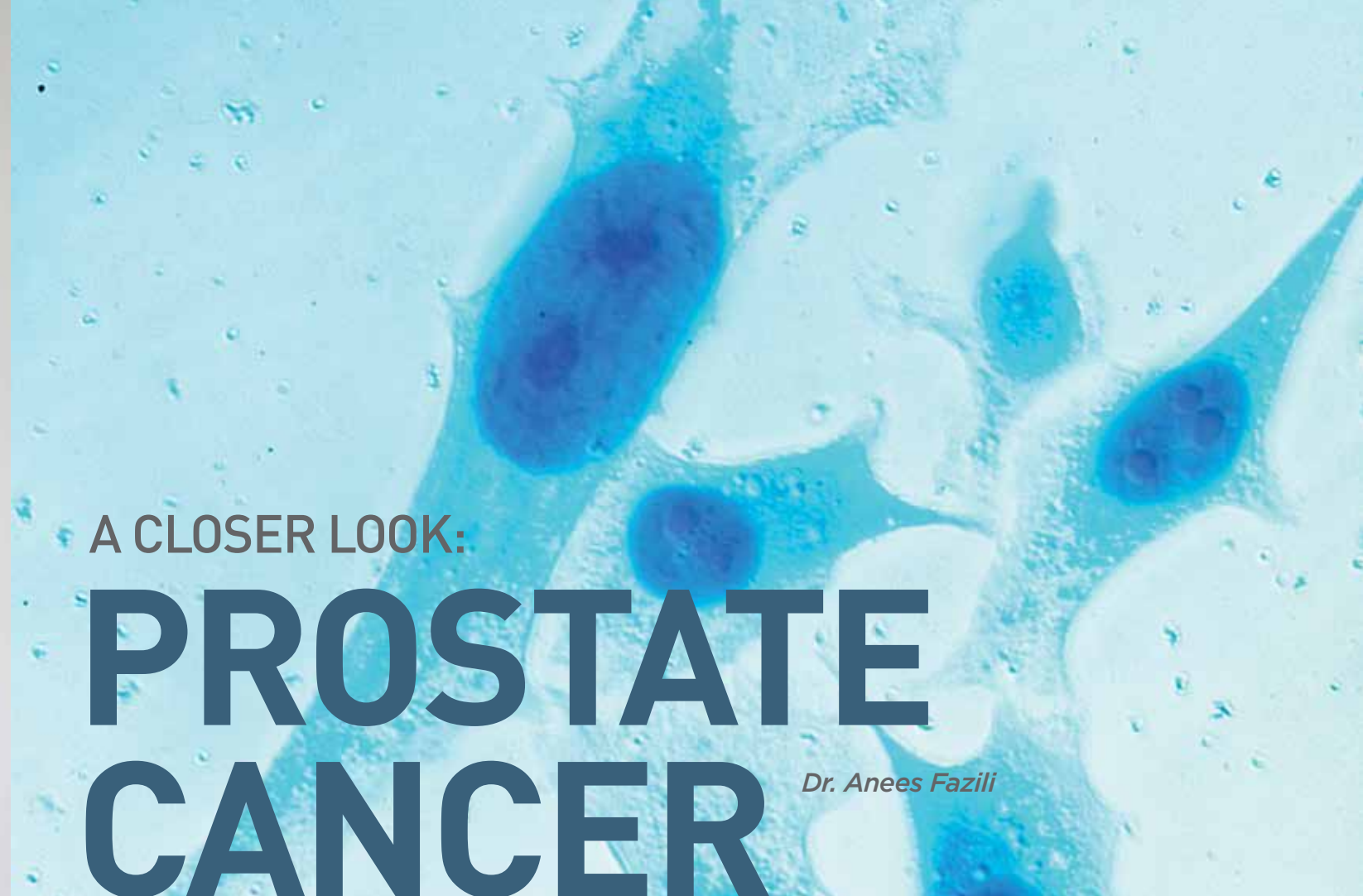




SHANNON BREAN,
**BREAST
 CANCER
 SURVIVOR**



A CLOSER LOOK:
**PROSTATE
 CANCER**

Dr. Anees Fazili

Shannon Brean credits the medical team at Rochester Regional Health for saving her life and making it possible to be the mother she wants to be for her young son. For Shannon, it went beyond the diagnosis and treatment, and extended to the care and compassion she received from the medical team.

Shannon was understandably anxious after learning she had Stage 2 breast cancer in 2015 but Joel Yellin, MD, a surgeon at Rochester General Hospital, immediately put her at ease. “He called me at 10 p.m., when he was on vacation and said, ‘Shannon, we’re going to take care of you.’ He then got me in to see him in a couple of days,” she said. “He had the best bedside manner and was always positive. He was the most caring man I’ve ever talked to in my life.”

Shannon was 45 and the mother of six-month-old Berkley when she began a treatment that included chemotherapy to shrink the tumor in her right breast, a mastectomy, breast reconstruction and radiation. Berkeley, now 3, was her inspiration.

“I just kept thinking that when this is over he won’t remember that his mommy couldn’t pick him up or play with him, or that she lost all her hair,” Shannon remembers. “I thank my doctors for that. They saved my life.”

Shannon credits the team at Rochester Regional for her recovery, including Megan Carmel, MD, a Unity Hospital OB/GYN at Clinton Crossings who diagnosed the cancer and referred her to Dr. Yellin. Shannon had a full team caring for her: Saad Jamshed, MD, an oncologist at the Lipson Cancer Institute, radiation oncologist Meri Atanas, MD, and Mark Davenport, MD, a plastic surgeon. The multidisciplinary team of physicians coordinated all aspects of Shannon’s care.

Under Dr. Jamshed’s direction, Shannon underwent six rounds of chemotherapy to shrink the tumor and also kill cancer cells that had spread to the lymph nodes in her right armpit. Although she was cancer-free following chemotherapy treatment, she decided to have a full mastectomy, performed by Dr. Yellin, after testing positive for the BRCA breast cancer gene. Breast reconstruction was performed by Dr. Davenport, with a final round of radiation completing the treatment. Shannon’s recovery was truly a coordinated effort.

“I am cancer-free today,” Shannon says. “I feel good. I can play with Berkeley. And my hair is beautiful, if I do say so myself!”

Prostate cancer still remains the most common non-cutaneous malignancy in the United States, with an incidence of approximately 161,000 men diagnosed per year. This represents 9% of all new cancer diagnoses. These figures represent dramatic reductions from only 5 years ago, when the incidence of prostate cancer was approximately 240,000^{1,2}. This decrease has largely been attributed to the United States Preventive Services Task Force’s (USPSTF) downgraded recommendation for prostate-specific antigen (PSA) screening in 2012³. Despite this, there remains a large discrepancy between the incidence and mortality of prostate cancer. The annual mortality for prostate cancer in the US is still only 26,000 men per year, which means that although 1 in 6 men will be diagnosed with prostate cancer during their lifetime, only 1 man in 35 will die from it².

Following the decrease in PSA screening that has occurred since 2012, we have seen a 40% reduction in the number of prostatectomies performed per year at Rochester General Hospital (RGH). We also see stage migration. Comparing surgical pathology data from 2011 to 2014, for instance, there was an increase in the rate of high grade disease (Gleason score ≥ 7) from 76.6% to 86.7%, as well as an increase in the rate of higher stage disease (stage $\geq T3$) from 23.9% to 42.1%. Although this is partially due to the increased role of active

surveillance for low grade tumors, we see a clear discrepancy in the fact that the percentage of high grade tumors being operated on was only up by 10% (a 13% relative increase), whereas the rate of higher stage disease nearly doubled as they rose by 20%. Of course, this stage migration has large implications for the use of adjuvant therapies, as well as ultimate oncologic outcomes, since increased stage is associated with a higher risk for cancer recurrence and cancer-specific mortality⁴. These trends are evident not only at RGH, but also at a national level, as we can see when we compare our local data to the National Cancer Database (NCDB) (Figure 1). It is worth noting, however, that although the staging trends at RGH are essentially in-line with the national data, there is a major difference in the fact that in the NCDB, the increase in advanced stage disease is distributed more evenly between Stages III and IV; whereas at RGH most of the increase in higher stage disease was seen in Stage III disease only, with minimal change in the rate of Stage IV disease at diagnosis. It would therefore seem that we are more successful at diagnosing prostate cancer before it ultimately metastasizes, but it admittedly remains unclear as to why this is the case. This difference cannot be explained by discrepancies in age at diagnosis, since the two cohorts are comparable in this regard as well (Figure 2). The only minor discrepancy is the fact that in the RGH cohort there was a

2007: Incidence of Prostate Cancer by AJCC 6th Edition Stage at Diagnosis comparing Rochester General Hospital with National Cancer Database 222 Academic Facilities

2014: Incidence of Prostate Cancer by AJCC 7th Edition Stage at Diagnosis comparing Rochester General Hospital with National Cancer Database 223 Academic Facilities

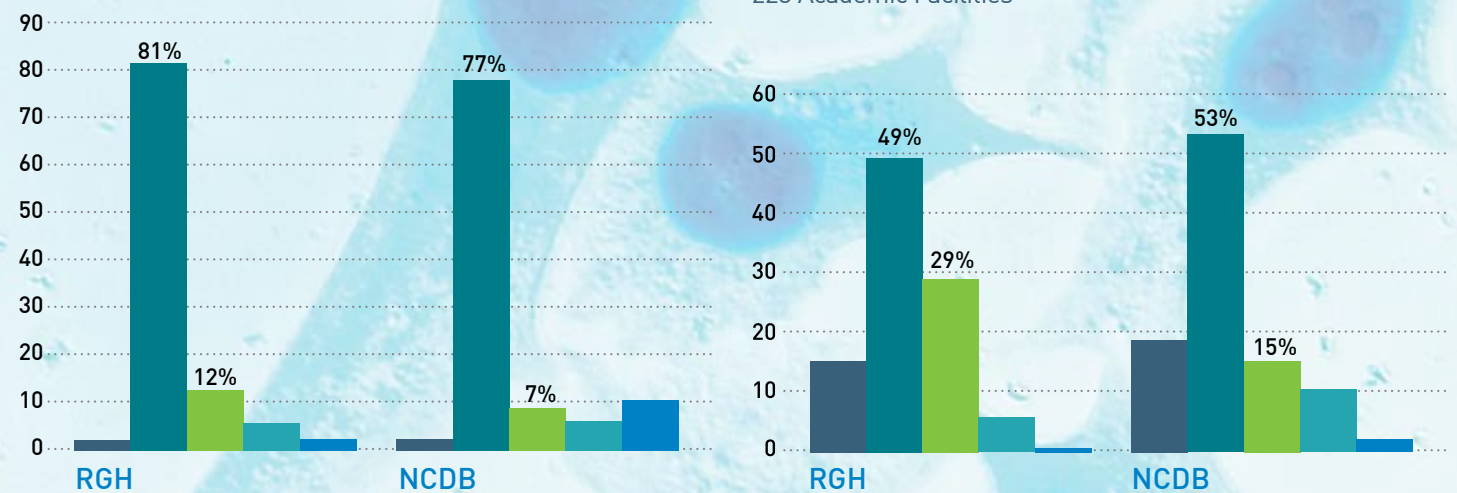


Figure 1 Prostate Cancer Stage at Diagnosis at RGH and in the NCDB, 2007 & 2014

slightly higher percentage of patients with Stage III disease being diagnosed in their seventies—by contrast, most men with Stage III disease in the NCDB cohort were being diagnosed in their sixties. Interestingly, this trend was consistently seen in both 2007 and 2014. Although there was another discrepancy in 2007 between the two cohorts in terms of the age distribution among patients with Stage IV disease, in which there were more men diagnosed at RGH in their sixties and fewer men in their eighties compared to the NCDB, by 2014 this was no longer the case. Nonetheless, it remains unclear why there appears to be this discrepancy with more older men being diagnosed with Stage III disease at RGH, but this was present both before and after the USPSTF PSA screening guidelines recommendations of 2012.

For patients who went on to receive surgical treatment at RGH, there was no significant change in the median age of men undergoing radical prostatectomy from 2007 to 2014 (Figure 3). Most men undergoing prostatectomy at RGH are ultimately younger and in their fifties or early sixties. This represents the cohort of men most likely to benefit from radical prostatectomy according to data from the Scandinavian Prostate Cancer Group (SPCG)⁵. In the SPCG, the advantages associated with prostatectomy in younger men—those less than 65 years old—was even more pronounced in men with Intermediate-Risk prostate cancer. This is especially reassuring since current

practice patterns have relegated nearly all low risk patients to Active Surveillance, and therefore definitive therapy for prostate cancer is typically only initiated at the present time when Intermediate-Risk cancer is discovered.

In terms of first-line definitive treatment for prostate cancer, we find that in 2007 far fewer patients at RGH underwent radiation therapy as compared to surgery, with more than 80% of patients choosing prostatectomy. During that same time period, the rate of prostatectomy as first line therapy in the NCDB was only approximately 60% (Figure 4). Much of this difference is likely due to the fact that urologists at RGH were early adopters of robotic surgery and therefore it was offered to more patients. As robotic prostatectomy disseminated further across the country, we see that by 2014 the national data ultimately comes closer to matching the data from RGH, with the rate of prostatectomy in the NCDB having risen to approximately 70%, with a corresponding decrease in the utilization of radiation therapy.

In regards to therapy outcomes, the rate of positive surgical margins for radical prostatectomies at RGH increased from 20.5% in 2007 to 27.8% in 2014. This is not surprising given that the rate of higher stage disease being operated on at RGH almost doubled during this same time period from 23.9% to 42.1%. Interestingly, despite the increased rate of higher stage disease and positive surgical margins, there was no significant

	Stage At DX	20s	30s	40s	50s	60s	70s	80s	>90s
RGH	I	-	-	-	0.24	-	-	-	-
NCDB	I	-	-	1.7	18.7	33.1	35.1	10.0	1.3
RGH	II	-	-	0.8	29.8	38.4	25.1	5.8	-
NCDB	II	-	-	3.1	22.8	40.0	27.1	6.7	0.3
RGH	III	-	-	-	26.7	46.7	26.7	-	-
NCDB	III	-	-	3.1	29.8	45.0	17.8	4.2	0.1
RGH	IV	-	-	-	23.8	42.9	28.6	4.8	-
NCDB	IV	-	-	2.0	17.4	31.4	26.0	19.6	3.6
RGH	UNK	-	-	-	16.7	16.7	16.7	50.0	-
NCDB	UNK	-	-	4.1	21.7	34.3	26.7	11.8	1.3

Figure 2a Comparison of Age by Stage of Diagnosis at RGH and in the NCDB, 2007

Median Age	Stage At DX	40s	50s	60s	70s	80s	90s	Median Age by Stage
2007	I	-	54	0	0	0	0	54
	II	45	55	64	73	81	0	64
	III	0	57	63	72	0	0	63
	IV	0	57.5	64	71	0	0	64
	UNK	0	53	0	0	0	0	53
2014	I	46	58	61	77	83	0	60
	II	46	55	65	73	81	0	60
	III	46	57	63	72	82	0	63
	IV	-	54.5	64	0	0	0	54.5
	UNK	44	55	65	76	82	0	65

Figure 3 Median Age by Stage for Patients Undergoing Prostatectomy at RGH, 2007 & 2014

increase in use of adjuvant radiation therapy during this same time period. The rate of adjuvant radiation therapy was 4.15% in 2007, as compared to 4.55% in 2014. Although the reason for this lack of change in adjuvant radiation rates remains unclear, presumably many patients are instead being followed closely with plans for salvage therapy instead of immediate adjuvant radiation therapy. In the past few years there has also been increased utilization of genomic tests, such as Decipher, to help determine which patients can be followed safely in a salvage fashion, and this may also explain the relatively low use of adjuvant radiation therapy.

The RGH Cancer Committee performed an in-depth analysis of Stage IIB prostate cancer patients undergoing prostatectomy to verify compliance with evidence-based national treatment guidelines. Collaborating with our Certified Tumor Registrars in our Tumor Registry, data was gathered for Stage IIB prostate cancer patients who underwent prostatectomy for the calendar year of 2013. It was found that there were a total of 213 prostate cancer patients in 2013, of which, 155 underwent radical prostatectomy. Of these patients, 34 were Clinical Stage IIB. Upon comparison with National Comprehensive Cancer Network (NCCN) guidelines⁶, 94% of patients underwent lymph node dissection. Adjuvant therapy was appropriately offered to one patient who had high-risk disease. These results were presented and discussed at Cancer Committee.

	Stage At DX	20s	30s	40s	50s	60s	70s	80s	>90s
RGH	I	-	-	6.3	15.6	40.6	28.1	9.4	-
NCDB	I	0.1	-	2.2	23.0	48.5	22.2	3.9	0.2
RGH	II	-	-	1.7	27.7	37.8	27.2	5.0	-
NCDB	II	-	-	2.4	22.8	45.7	23.5	5.1	0.4
RGH	III	-	-	5.5	26.0	31.5	32.9	4.1	-
NCDB	III	-	-	2.4	24.8	49.3	20.1	3.2	0.3
RGH	IV	-	-	7.7	15.4	30.8	30.8	15.4	-
NCDB	IV	-	-	1.8	16.2	35.1	24.7	18.6	3.5
RGH	UNK	-	-	11.1	22.2	33.3	22.2	11.1	-
NCDB	UNK	-	-	1.2	17.0	38.5	26.6	14.5	2.1

Figure 2b Comparison of Surgery and Radiation as First Line Therapies for Prostate Cancer at RGH and in the NCDB, 2014

First Line Therapy	2007 Rochester General Hospital/Lipson Cancer Center		2007 NCDB Academic Cancer Program Hospitals		2014 Rochester General Hospital/Lipson Cancer Center		2014 NCDB Academic Cancer Program Hospitals	
	#	%	#	%	#	%	#	%
Surgery only	207	79.31	10447	55.92	146	76.44	8876	62.08
Surgery plus Other Therapies	11	4.21	969	5.19	10	5.24	1035	7.24
Radiation Only	30	11.49	4301	23.02	26	13.61	2124	14.86
Radiation plus Other Therapies	13	4.98	2965	15.87	9	4.71	2262	15.82

Figure 4 Comparison of Surgery and Radiation as First Line Therapies for Prostate Cancer at RGH and in the NCDB, 2007 and 2014

Recommendations and follow-up are to include a review of Stage IIB prostatectomy patients for 2018 with added focus on lymph node dissection and staging. Based on results of the 2018 review, we will determine any performance improvements needed for Stage II prostatectomy patients to ensure compliance with evidence-based national treatment guidelines.

In summary, comparing the RGH and NCDB cohorts we find that patient age and prostate cancer stage at diagnosis are similar between the two groups. Both locally and nationally we see a trend towards higher stage at diagnosis, which is not surprising given decreased PSA screening rates in recent years. Although there was historically a higher rate of surgery as a primary treatment strategy at RGH, this gap between RGH and the NCDB is narrowing over time as national rates of prostatectomy as first course therapy have increased overall. Surgical positive margin rates remain acceptable at RGH and have not risen as much as might be expected given the upward stage migration in the past few years. This upward stage migration has also led to no change in rate of adjuvant radiation therapy following prostatectomy, and it is too early to tell if there will be any considerable change in the rate of salvage radiation therapy. Regardless, prostatectomy results at RGH and in the NCDB continue to show excellent five-year results.

COLORECTAL CANCER INITIATIVE

80%TM
BY 2018
AMERICAN CANCER SOCIETY INITIATIVE

The American Cancer Society launched an initiative, “80 percent by 2018,” aimed at achieving a goal of 80 percent of high-risk people in Monroe County having been screened for colorectal cancer by the year 2018. As the second largest employer in the region, Rochester Regional Health (RRH) took part in this program to improve colorectal cancer (CRC) screening results, in partnership with the physician-led Greater Rochester Independent Practice Association (GRIPA) and RRH Medical Groups of which our physicians are a part.

Among the initiatives taken as part of this program, we entered into a collaborative arrangement with our largest local payer, Excellus BCBS, in mid-2017 to improve the rates of colorectal cancer screening. Colorectal cancer screening was one of the quality metrics used in our contract with this payer. This collaborative effort led to a letter-writing and phone call “campaign” to patients identified by data not to be adhering to screening recommendations, primarily with the FIT test or colonoscopy. Approximately 14,000+ patients were contacted. Screening rates at the beginning and end were as follows:

Baseline (April 2017): Period 1 prior to outreach

Line of Business	Compliance Rate
Commercial	74.27%
Medicare	73.28%
Total	73.91%

The major outreach from Rochester Regional Health really focused on building awareness via media (and the health system is planning additional activities in 2018). Among media efforts in 2017:

Most recent analysis in mid-February 2018: Period 2 after outreach

Line of Business	Compliance Rate
Commercial	78.68%
Medicare	78.99%
Total	78.79%

Drs. Connolly and Belfer were interviewed by Patti Singer from *the Democrat & Chronicle* for a story on death rates rising from colorectal cancer in young adults; article appeared on March 20, 2017: <https://www.democratandchronicle.com/story/news/2017/03/20/millennials-colorectal-cancer-colorectal/99168558/>.

While colorectal cancer screening was not a metric with payer MVP, efforts were also made to reach out to this group. The following shows the change in rates from baseline:

CONTRACT NAME	LOB	SERVICE METRIC NAME	BASELINE RATE	CURRENT RATE
MVP	Commercial	Appropriate colorectal screening	63.93%	66.95%
MVP	Medicaid	Appropriate colorectal screening	42.4%	49.43%
MVP	Medicare	Appropriate colorectal screening	72.4%	75.09%

Dr. Belfer and Dr. Patel participated in WROC Channel 8 call-in show to raise awareness for colorectal cancer and screenings. GRIPA and Rochester Regional Medical Group aided our efforts by distributing educational materials on colorectal screening to physicians. These emphasized the importance of screening itself over type of screening. Recommendations to physicians and their staff included: offering FIT testing when sending out birthday greetings to patients; referral for colonoscopy or providing FIT testing when patients come in for their annual flu vaccine; and recommending to specialists and emergency department providers within GRIPA to discuss CRC cancer screening with their patients. In the Rochester Regional Medical Group practices, they have built a health maintenance alert into their Electronic

Medical Record (EMR,) Epic, which notifies the provider if the patient is due for CRC screening, so this can be ordered at the time of the visit. They have medical office assistants who identify these patients through registries and reach out to them proactively to schedule CRC screening. Finally, they have a real time quality dashboard for every provider in Epic, which reports the individual provider’s CRC screening rate.

Additionally, colorectal screening efforts are formally reviewed and discussed at the Cancer Committee. The Cancer Committee will now get annual updates – this is a multidisciplinary team that will help drive awareness.

2017 AWARDS AND ACCOMPLISHMENTS

2017 PUBLICATIONS

S. Chawla, J. Santelli, C. Easterly, B. Heatherington, N.W.P. Johnson, M. Turner. "Significance of p16 and p53 Expression on Clinical Outcome in Patients with Anal Cancer Treated at a Single Institution." International Journal of Radiation Oncology • Biology • Physics, Vol. 96, Issue 2, S106
Published in issue: October 01, 2016

J. Manders, H. M. Kuerer, S. Chawla, L. Mederois, et al. "Clinical Utility of the 12-Gene DCIS Score Assay: Impact on Radiotherapy Recommendations for Patients with Ductal Carcinoma in Situ." Annals of Surgical Oncology 2017; 24(3): 660-668.

Hongbin Chen, Grace Dy, Adrienne Groman, William Brady, Saad Jamshed, Peter Bushunow, Noelle Brunsing, Alex Adjei, Roswell Park Cancer Institute, Rochester General Hospital, Medical Oncology, Mayo Clinic. "A Phase II Study of Etirinotecan Pegol (NKTR-102), a Topoisomerase-I Inhibitor Polymer Conjugate, in Small Cell Lung Cancer." www.jto.org/article/S1556-0864(16)32153-0/abstract
Topic: Drug Treatment Alone and in Combination with Radiotherapy P1.07-001

M. Asare, L.J. Peppone, J.A. Roscoe, I.R. Kleckner, K.M. Mustian, C.E. Heckler, J.J. Guido, M. Sborov, P. Bushunow, A. Onitilo, C. Kamen. "Racial Differences in Information Needs During and After Cancer Treatment: a Nationwide, Longitudinal Survey by the University of Rochester Cancer Center National Cancer Institute Community Oncology Research Program." Journal of Cancer Education. 2018 Feb; 33(1):95-101. doi: 10.1007/s13187-016-1038-x.

A.R. Peoples, P.W. Bushunow, S.N. Garland, C.E. Heckler, J.A. Roscoe, L.L. Peppone, D.J. Dudgeon, J.J. Kirshner, T.K. Banerjee, J.O. Hopkins, S.R. Dakhil, M.A. Flannery, G.R. Morrow. "Buspirone for management of dyspnea in cancer patients receiving chemotherapy: a randomized placebo-controlled URCC CCOP study." Support Care Cancer. 2016 Mar; 24(3): 1339-47. doi: 10.1007/s00520-015-2903-6. Epub 2015 Sep 2.

R.L. Sham. "Hemochromatosis." Case studies in Hematology and Coagulation. Second Edition. Editors-G Gulati, et.al. ASCP Press, 2017.

M. Wychowski, C. Ruscio, P. Kouides, R.L. Sham. "The Scope and Value of an Anticoagulation Stewardship Program at a Community Hospital." Journal of Thrombosis and Thrombolysis. 43(3), 380-386, 2017.

P.A. Kouides. "Antifibrinolytic therapy for preventing VWD-related postpartum hemorrhage: indications and limitations." Blood Advances. 2017 Apr 25; 1(11):703-706. doi: 10.1182/bloodadvances.2017005090. eCollection 2017 Apr 25. PMID:29296713

M.V. Ragni, N. Machin, A.H. James, C.D. Seaman, L.M. Malec, C.M. Kessler, B.A. Konkle, P.A. Kouides, A.T. Neff, C.S. Philipp, M.M. Brooks. "Feasibility of the Von Willebrand disease PREVENT trial." Thrombosis Research. 2017 Aug; 156:8-13. doi: 10.1016/j.thromres.2017.05.022.

P. Kouides, K. Wawra-Hehenberger, A. Sajan, H. Mead, T. Simon. "Safety of a pasteurized plasma-derived Factor VIII and von Willebrand factor concentrate: analysis of 33 years of pharmacovigilance data." Transfusion. 2017 Oct; 57(10): 2390-2403. doi: 10.1111/trf.14241.

L.V. Srivaths, Q.C. Zhang, V.R. Byams, J.E. Dietrich, A.H. James, P.A. Kouides, R. Kulkarni. "Hemophilia Treatment Centers Network Investigators. "Differences in bleeding phenotype and provider interventions in postmenarchal adolescents when compared to adult women with bleeding disorders and heavy menstrual bleeding." Haemophilia. 2017 Sep 5. doi: 10.1111/hae.13330.

J. Staber, S.E. Croteau, J. Davis, E.F. Grabowski, P. Kouides, R.F. Sidonio Jr. "The spectrum of bleeding in women and girls with haemophilia B." Haemophilia. 2017 Nov 27. doi: 10.1111/hae.13376

D. Shah, S. Mustafa, J. Bress, Saad Jamshed. "Comparison of response to vaccination with PCV13 in patients with multiple myeloma versus healthy controls." ASH 2017, Abstract. Blood 2017, 130: 5418

Saad Jamshed, Ann R. Falsey, Paul Thushara, Jennifer Walker, Edward E. Walsh. "Randomized study comparing high-dose (HD) influenza vaccine to standard-dose (SD) influenza vaccine in patients with breast cancer age < 65 receiving chemotherapy." ASCO 2017, Abstract e21695.

F. Imran, P. Phatak. "Decision points in the treatment of transfusional iron overload in patients with myelodysplastic syndromes: why, when, and how to chelate." Expert Rev Hematol. 2017 Jan; 10(1):53-64. doi: 10.1080/17474086.2017.1268910. Epub 2016 Dec 16.

2017 PRESENTATIONS/EDUCATION

Dr. Sheema Chawla
CRS conference, "Rectal Cancer: ASTRO best practice guideline." February 11, 2016.

Hot Topics in Medicine, "TTF Therapy for the management of Glioblastoma Multiforme." Talk given to Nursing Continuing Education application. November 7, 2016.

Lipson Cancer Institute Annual Teaching Event, "Updates in Colon Cancer: Radioembolization and stereotactic radiation for CRC metastases." April 2016.

Dr. Meri Atanas and Dr. Lou Eichel

March 25, 2017

Prostate Cancer Patient Education Seminar, presented by Us TOO.

Dr. Greg Connolly

Holy Trinity religious education program, Webster, NY, "Medical ethics." January 28, 2018

RGH resident lecture on Thrombocytopenia, October 2017
UMMC resident lecture on interesting hematology and oncology cases, April 2017

RGH Grand Rounds case presentation on hyperhomocysteinemia, December 2017

RGH resident professor rounds case presentation on patient with amyloidosis and factor 10 deficiency, December 2017.

RIT PA Program: Lecture on Venous Thromboembolism, February 2017

Dr. Ronald Sham

2017 RIT PA Program: Leukemia

Dr. Peter Kouides

Long Island Jewish/Northwell Medical Center Pediatric Grand Rounds, "Conundrums in Adolescent Thrombosis." January 2017.
URMC Medical Student lecture on "Hemophilia, the New and the Old." March 2017.

Scottsdale, Arizona, "Contemporary Management of Bleeding Disorder-related Heavy menstrual bleeding"- Colloquium on Hemostasis of the Uterus."

RGH Hospitalist group, "The Direct Oral Anticoagulants Use and Misuse." April 2017.

NYS Annual Ob-Gyn Meeting Turning Stone, "Challenging Thrombosis Cases in Ob-Gyn." April 2017.

Region II Hemophilia network NYC meeting, "What's new in Von Willebrand's." May 2017.

Utica General Hospital, "Reversal Strategies of the DOACs."

May 2017.

RGH Grand Rounds, "The Direct Oral Anticoagulants Use and Misuse." September 2017.

RGH Pediatric Grand Rounds, "Conundrums in Adolescent Thrombosis." September 2017.

SMH Pediatric Grand Rounds, "Conundrums in Adolescent Thrombosis." September 2017.

RGH Dental Staff, "Everything a Dentist needs to know about DOACs." September 2017.

Foundation for Women and Girls with Blood Disorders Mentor meeting, Portland OR, "Research update in PPH." Septemebr 2017.

Eastman Dental School, "Hemophilia and VWD Primer for Oral Surgeons." October 2017.

Roswell Park Fellows lectures- February, March, April, and May.

RGH Internal Medicine Resident program lectures February and June 2017.

American Society of Hematology, "Multicenter Study of Wilate in Von Willebrand Disease related Post-Partum Hemorrhage." December 2017.

Dr. Farhan Imran, C. Andrews, K. Doerner, Brittany Heatherington, Susan Hodes, Nancy Mary, Cathy Reda-Cheplowitz, Jeanine S. Santelli, Saad Jamshed.

ASCOT 2018, abstract 53.

Poster presentation at Cancer Survivorship Symposium: Advancing Care and Research. "Impact of survivorship care plan (SCP) document on cancer survivors' understanding of their cancer care and follow up."

Dr. Farhan Imran

Accepted publication with ASCO for Survivorship Study for Poster in 2018.

Radio show, Breast Cancer Prevention

Dr. Saad Jamshed

2017 Annual Lipson Cancer Institute Teaching Event: Advances in Lung Cancer Management - "Background and Introduction, Evolution of Systemic Therapy for Metastatic Lung Cancer"

Istavan Stadler, Denise Maracle, Saad Jamshed, Ralph Pennino, Rachel O'Laughlin, Raymond Lanzafame.

American Society for Laser Medicine and Surgery, 2017

Oral presentation, "Preliminary analysis of the effects of red light photobiomodulation therapy on female breast cancer patients with chemotherapy-induced alopecia."

Dr. Marguerite Dynski

October 11, 2017

Rochester Academy of Medicine

Moderator for Panel Discussion: Third Annual Multidisciplinary City-Wide Breast Cancer Seminar

Dr. Lori Medeiros

EVR Advertising telephone interview with Rob Duca.
January 25, 2018

WBEE Radio Interview with Steve Hausman.
December 14, 2017

4th Annual Multidisciplinary City-Wide Breast Cancer
Seminar "Eat to Live." October 11, 2017

Channel 8 Live interview, "Breast Cancer Signs."
October 2, 2017

Finger Lakes Women's Health Magazine Article.
June 15, 2017

Fox News Live interview. March 30, 2017
Presented: Unity AORN Meeting at Unity.
March 21, 2017

WROC-TV in-studio interview.
October 4, 2016

Democrat and Chronicle (D&C) article, "Breast Cancer
Survivors."

September 2016
Radio MD Podcast.

September 15, 2016
D&C Healthy Living Article, "Breast Cancer Prevention."

August 18, 2016
Channel 13 News Studio.

July 6, 2016
Featured speaker, Memorial Art Gallery Breast Cancer Event.

March 24, 2016

Dr. Laurie Lerner

2017 Annual Lipson Cancer Institute Teaching Event:
Advances in Lung Cancer Management - "Lung Cancer
Screening"

Dr. Jeffrey Cane

2017 Annual Lipson Cancer Institute Teaching Event:
Advances in Lung Cancer Management - "Surgery for Early
Stage Lung Cancer"

Dr. Kristina Novick

2017 Annual Lipson Cancer Institute Teaching Event:
Advances in Lung Cancer Management - "Stereotactic Body
Radiation Therapy for the Non-Surgical Candidate"

2017 AWARDS

Dr. Lori Medeiros – American Society of Breast Surgeons, Breast
Ultrasound Certification,
October 2016 – 2020

Dr. Peter Kouides

Roswell Park Cancer Institute Fellow's Teacher of the Year award,
2017

Board Member, World Federation of Hemophilia Twinning with
Nepal

Board Member, Mary M. Gooley Hemophilia Center

Dr. Kristina Novick – received her M.S. degree in Biostatistics from
the University of Rochester,
fall 2017

Dr. Ronald Sham

Board Member, Mary M. Gooley Hemophilia Center
Gilda's Club Advisory Board

Dr. Laurie Lerner

2017 Annual Lipson Cancer Institute Teaching Event: Advances
in Lung Cancer Management - "Lung Cancer Screening"

Dr. Jeffrey Cane

2017 Annual Lipson Cancer Institute Teaching Event: Advances in
Lung Cancer Management - "Surgery for Early Stage Lung Cancer"

Dr. Kristina Novick

2017 Annual Lipson Cancer Institute Teaching Event: Advances in
Lung Cancer Management - "Stereotactic Body Radiation Therapy
for the Non-Surgical Candidate"

2017 PARTICIPATION

Dr. Farhan Imran

Board Member – Breast Cancer Coalition

Debra Kosko, NP

Genesee Valley Nursing Society, Secretary 2017-2018

Dr. Kristina Novick

Promoted to Delegate with the AMA as a representative
from ASCO.

AMA Opioid Task Force, as the representative from ASCO

James Williams

Board of Advisors –
American Cancer Society Institute



ABOUT THE LIPSON CANCER REGISTRY

At the Lipson Cancer Institute Cancer Registry, team members work diligently with physicians and the Cancer Committee to maintain accreditation as an Academic Comprehensive Cancer Program by the American College of Surgeons (ACS).

In 2016, 3,208 cases were accessioned into the registry database. Of those cases, 2,314 were analytic and 894 were non-analytic. The five most common sites (breast, lung, prostate, colorectal, and bladder) account for 64% of the total analytic cases.

The 10 most prevalent sites at Rochester General Hospital (RGH)/Lipson correlate closely with New York State and U.S. data, although RGH sees a greater number of breast cancer than state and national rates, and a lower number of colorectal cancer.

Daily functions maintained by the Lipson Registry team include the timely and accurate collection of information on cancer cases diagnosed and/or treated at RGH. The registry has continued to submit data to NYS Cancer Registry and received the award of "Completeness and Timeliness" for 2016 submissions. Data collected – including demographics,

anatomic site, tests, treatment and extent of disease – can be used in outcome reporting, clinical research, physician education, and hospital planning. This information is also shared with the New York State Cancer Registry (NYSCR) and the National Cancer Database (NCDB), allowing our patient data to be compared with other hospitals, and helping to establish national patterns of patient care and survival. Registry data can be utilized in many areas:

- Evaluating patient outcomes and quality of life
- Providing follow-up information for cancer surveillance
- Calculating survival rates
- Providing information for cancer program activities
- Analyzing referral patterns
- Allocating resources at the healthcare facility and in the community
- Reporting cancer incidence as required under state law
- Evaluating efficacy of treatment modalities

The Registry follows guidelines and standards set by the ACS, NYSCR and NCDB. An appointed physician advisor monitors the Registry for quality of abstracting with an emphasis on accuracy of staging. Ten percent of analytical cases are reviewed each year for quality assessment purposes.



RESEARCH ACTIVITIES AT LIPSON CANCER INSTITUTE

At the Lipson Cancer Institute, our patients have the opportunity to participate in a broad range of clinical trials for the treatment of cancer. The Lipson medical staff conducts these trials in cooperation with nationwide groups such as the Alliance for Clinical Trials in Oncology and the Cancer Trials Support Unit. Rochester General Hospital is a research affiliate of Roswell Park Cancer Institute, an NCI designated Comprehensive Cancer Center in Buffalo, N.Y. Additional trials are developed locally in collaboration with investigators at academic centers such as Roswell Park, Rochester Institute of Technology, and the Rochester Regional Health Department of Nursing Research.

As active clinical trial investigators, we are able to provide our patients with access to the latest treatments and technologies, while also helping to establish a foundation of knowledge that will form the future standards of cancer treatment for all patients.

Clinical trial research is conducted with a high degree of oversight and protection of patients' rights. Our paramount concerns are patient education and ensuring that patients have the opportunity to make informed choices about whether to participate in research. All studies and the consent process are regularly reviewed by the Rochester Regional Health Clinical Investigation Committee, whose members minimally include representatives from the hospital medical staff and individuals from the community at large.

In 2017, 252 patients were enrolled in various investigational protocols, representing 11% of 2,294 analytic cases for the Lipson Cancer Institute at Rochester General Hospital.

ONCOLOGY RESEARCH TEAM

Peter Bushunow, MD
Medical Oncologist and Director of Oncology Research

Saad Jamshed, MD
Hematologist/Medical Oncologist and Director of Hematology Research

Heather Gorea, BS
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Clinical Research Nurse

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Clinical Research Nurse

Alyssa Vanzo, BS
Clinical Research Associate

Lauren Jones, BS
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RGH CANCER CASES DIAGNOSED 2016

NATIONAL COMPARISON OF SELECTED CANCER SITES*

Primary Site	RGH		NEW YORK		NATIONAL	
	Cases	Percent	Cases	Percent	Cases	Percent
BREAST	597	25.9%	16,360	14.8%	246,660	14.6%
LUNG	276	12.0%	13,200	12.0%	224,390	13.3%
PROSTATE	248	10.7%	12,010	10.9%	180,890	10.7%
COLORECTAL	137	5.9%	8,730	7.9%	134,490	8.0%
BLADDER	109	4.7%	5,220	4.7%	76,960	4.6%
NH LYMPHOMA	71	3.1%	4,860	4.4%	72,580	4.3%
CORPUS UTERI	111	4.8%	4,360	4.0%	60,050	3.6%
MELANOMA	57	2.5%	4,250	3.9%	76,380	4.5%
LEUKEMIA	61	2.6%	4,490	4.1%	60,140	3.6%
CERVIX	19	0.8%	790	0.7%	12,990	0.8%
ALL OTHERS	621	26.9%	36,010	32.7%	539,680	32.0%
TOTAL CASES	2,307	100.0%	110,280	100.0%	1,685,210	100.0%

* Estimated Numbers of New Cases from:
The American Cancer Society Cancer Facts & Figures 2016
C. Jones 2.28.18

ROCHESTER GENERAL HOSPITAL 2016 CASES

	Primary Site		Class		Sex		AJCC STAGE						Unknown	N/A
	Total	Analytic	Non-Analytic	Male	Female	0	I	II	III	IV				
All Sites	3208	2315	893	1358	1850	302	814	514	327	344	615	292		
Oral Cavity	49	37	12	32	17	1	5	5	3	20	14	1		
Lip	1	1	0	1	0	0	0	0	0	0	1	0		
Tongue	14	10	4	11	3	1	1	1	1	8	2	0		
Oropharynx	1	1	0	1	0	0	0	0	0	0	1	0		
Hypopharynx	4	3	1	2	2	0	0	1	0	2	1	0		
Other	29	22	7	17	12	0	4	3	2	10	9	1		
Digestive System	388	301	87	221	167	9	50	66	77	93	84	9		
Esophagus	36	26	10	30	6	1	1	4	4	13	13	0		
Stomach	35	28	7	27	8	0	2	4	8	14	7	0		
Colon	107	83	24	55	52	2	21	23	34	12	15	0		
Rectum	79	54	25	52	27	1	16	14	17	10	21	0		
Anus/Anal Canal	17	10	7	7	10	4	2	0	2	1	8	0		
Liver	21	19	2	9	12	0	3	7	3	5	1	2		
Pancreas	53	47	6	24	29	1	3	6	3	33	7	0		
Other	40	34	6	17	23	0	2	8	6	5	12	7		
Respiratory System	337	299	38	172	165	1	98	28	56	123	29	2		
Nasal/Sinus	3	3	0	0	3	0	0	0	0	1	1	1		
Larynx	18	16	2	11	7	1	7	0	2	5	3	0		
Other	3	3	0	2	1	0	0	0	0	2	1	0		
Lung/Bronc-Small Cell	54	49	5	24	30	0	6	2	8	33	5	0		
Lung/Bronc-Non Small Cell	243	216	27	124	119	0	81	25	46	76	15	0		
Other Bronchus & Lung	16	12	4	11	5	0	4	1	0	6	4	1		
Blood & Bone Marrow	179	132	47	93	86	0	3	2	3	0	16	155		
Leukemia	91	60	31	47	44	0	3	2	3	0	9	74		
Multiple Myeloma	36	30	6	20	16	0	0	0	0	0	2	34		
Other	52	42	10	26	26	0	0	0	0	0	5	47		
Bone	1	0	1	0	1	0	0	0	0	1	0	0		
Connect/Soft Tissue	15	11	4	9	6	0	4	4	2	0	5	0		
Skin	149	57	92	78	71	49	37	11	11	4	36	1		
Melanoma	143	57	86	74	69	49	37	11	10	4	32	0		
Other	6	0	6	4	2	0	0	0	1	0	4	1		
Breast	868	596	272	5	863	141	325	164	48	17	173	0		
Female Genital	238	175	63	0	238	16	96	18	28	13	60	7		
Cervix Uteri	26	21	5	0	26	0	10	5	2	3	6	0		
Corpus Uteri	129	110	19	0	129	0	70	8	11	8	31	1		
Ovary	47	29	18	0	47	0	11	5	13	2	12	4		
Vulva	28	10	18	0	28	15	4	0	1	0	8	0		
Other	8	5	3	0	8	1	1	0	1	0	3	2		
Male Genital	431	260	171	431	0	0	81	184	53	25	88	0		
Prostate	420	250	170	420	0	0	76	184	53	25	82	0		
Testis	11	10	1	11	0	0	5	0	0	0	6	0		
Other	0	0	0	0	0	0	0	0	0	0	0	0		
Urinary System	255	228	27	185	70	85	64	16	13	19	57	1		
Bladder	129	111	18	100	29	75	18	11	4	7	14	0		
Kidney/Renal	120	112	8	80	40	8	46	5	9	11	41	0		
Other	6	5	1	5	1	2	0	0	0	1	2	1		
Brain & Cns	72	64	8	27	45	0	0	0	0	0	0	72		
Brain (Benign)	3	3	0	2	1	0	0	0	0	0	0	3		
Brain (Malignant)	20	17	3	13	7	0	0	0	0	0	0	20		
Other	49	44	5	12	37	0	0	0	0	0	0	49		
Endocrine	59	44	15	20	39	0	15	1	11	7	21	4		
Thyroid	54	40	14	18	36	0	15	1	11	6	21	0		
Other	5	4	1	2	3	0	0	0	0	1	0	4		
Lymphatic System	122	80	42	61	61	0	35	15	18	22	30	2		
Hodgkin's Disease	15	10	5	8	7	0	2	2	2	3	6	0		
Non-Hodgkin's	107	70	37	53	54	0	33	13	16	19	24	2		
Unknown Primary	31	21	10	18	13	0	0	0	0	0	0	31		
Other/Ill-Defined	14	10	4	6	8	0	1	0	4	0	2	7		

This report includes CA in-situ cervix cases, squamous and basal cell skin cases, and intraepithelial neoplasia cases



ABOUT ROCHESTER REGIONAL HEALTH

Rochester Regional Health is an integrated health services organization serving the people of Western New York, the Finger Lakes and beyond. The system includes 150 locations: five hospitals; more than 100 primary and specialty practices, rehabilitation centers and ambulatory campuses; innovative senior services, facilities and independent housing; a wide range of behavioral health services; and ACM Medical Laboratory, a global leader in patient and clinical trials. Rochester Regional Health, the region's second largest employer, was named one of "America's Best Employers" by Forbes in 2015. Learn more at rochesterregional.org.

CANCER COMMITTEE MEMBERSHIP 2017

- Cancer Committee Chair, *Stephen Ettinghausen, MD*
- Cancer Program Administrator, *James Williams*
- Cancer Liaison Physician, *Jeffrey Haynes, MD*
- Diagnostic Radiologist, *Kevin Lightner, MD*
- Pathologist, *Dawn Riedy, MD*
- Surgeon, General or Specialist in Cancer Care, *Stephen Ettinghausen, MD*
- Medical Oncologist, *Pradyumna Phatak, MD*
- Radiation Oncologist, *Jeffrey Haynes, MD*
- GYN Oncology, *Eugene Toy, MD, Jennifer Brown Broderick, MD*
- Breast Center, *Lori Medeiros, MD*
- Certified Tumor Registrar, *Cindy Jones, CTR*
- Genetics Professional, *Kimberly Provenzano, NP*
- Oncology Nurse, *Kathleen Doerner, RN*
- Palliative Care Professional, *Adam Herman, MD*
- Performance Improvement or Quality Management Representative, *Elizabeth Karnisky, RN*
- Social Worker/Case Manager, *Therese O'Connor, BSW*
- Cancer Conference Coordinator, *Bonnie Hoover, RN*
- Quality Improvement Coordinator, *Elizabeth Karnisky, RN*
- Cancer Registry Quality Coordinator, *Zachary Kramer, MD*
- Community Outreach Coordinator, *Sally Sackett, RN*
- Clinical Research Coordinator, *Peter Bushunow, MD*
- Psychosocial Services Coordinator, *Therese O'Connor, BSW*

LIPSON CANCER INSTITUTE

HOURS

Weekdays, 8am to 4:30pm
Emergency concerns can be handled 24 hours
a day by our on-call physicians

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To support the work of the Lipson Cancer Institute,
please consider making a gift at SupportLipson.org.
To learn more, contact the Rochester Regional
Health Foundation at 585.922.4800.