Volume 8 • Issue 2, 06.16

ONCOLOGY FELLOWS

"Never say Die"

A patient encounter that left a lasting impression

Palliative Care: Let's Keep the Conversation Open

Staying Afloat When the Floodgates Open

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Never Say Die

By John S. Banerji, MD, MCh (urology)

"That's a nice bright checked shirt doctor. Helps us feel chirpy when you dress like that," quipped my patient. I quickly tried smoothing the nonexistent wrinkles on my neatly ironed shirt and smiled. Here was an 18-or-so-year-old, bright, vivacious girl sitting up in a hospital bed with a colorful bandana on her head. For a moment, I thought we (my attending and myself) had made a mistake thinking she was a patient. Until Sylvia again broke the silence and said, "Good to see you Dr Chacko, yet again."

We spoke about mutual interests and cricket (a quintessential sport played by a handful of nations in that part of the world) and about favorite foods and music. And, of course, we discussed the fact that it had rained on the previous day, in this otherwise arid place called Vellore (a sleepy town in the southern part of India), where temperatures during summer soar to around 100°F and "toasting" has a whole different meaning.

Not once did we mention chemotherapy or cancer—which we were apparently supposed to discuss with her parents. The upbeat mood in her room contrasted sharply with the gray walls and the even grayer hearts of her parents who waited anxiously outside. It then dawned on me that we were about to discuss a last-ditch-effort chemotherapeutic regimen to combat her leiomyosarcoma of the uterus. Yes, this was a young girl whose life had been ravaged by cancer for the past 3 years. Despite the hysterectomy, omentectomy, colostomy, and failing fight, her spirit was unconquered.

She embodied that never-say-die attitude. Her bandana had been hiding a bald pate, where once was a luscious head of beautiful locks. Her boyfriend had given up and abandoned her even faster than her sarcoma had recurred. Yet, she stood tall among the ruins.

My next visit, the following day, was to inform her that my colleagues and I had discussed her case at length during a multidisciplinary meeting. She

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smiled and then rattled off all the names of possible people who might have attended that meeting—to which I replied in the affirmative. We had discussed more of the "poison medicine," but only after further debulking of retroperitoneal disease.

She had undergone surgery, and we "successfully" got her retroperitoneum clear. Then she underwent adjuvant chemotherapy. Three months had elapsed since I first met her, but not once did her spirit wane.

I invited her to my home, just before she was discharged, after what seemed like eternity to her. Here, she met another strong woman of courage with a never-say-die attitude—my better half. My wife, a neonatal nurse par excellence, had given up her career to be a full-time mom when I began residency. I saw very little of her and my newborn angel. All this took place while she was taking care of her terminally ill mother.

Days and then months rolled by. My daughter grew up, crawled, babbled, and then talked in what seemed like a twinkling of an eye for me. All of this happened before my eyes, but I seemed to miss it all as I was busy caring for sick patients. My wife often sat me down to discuss the fine balance of work and family. I was all ears even while nodding off to sleep most of the time because I was fatigued from days of little or no sleep.

ABOUT THE AUTHOR

John S. Banerji, MD, MCh (urology), is a uro-oncology fellow at Virginia Mason Medical Center, in Seattle, Washington.

I would often grapple with thoughts within me of how my patients saw more of me than my family. I felt it rather unfair for my loved ones, but I would thank God silently for giving me a "medical" person as a spouse who could understand and sympathize with the life of a resident.

Amidst participating in journal clubs and taking examinations, performing surgeries, and attending didactics, I seemed to have forgotten about Sylvia. It was nearly Christmas. I could tell as I began to notice all of the cookies and festivity around. One day I received a Christmas card, neatly written and signed by Sylvia. The envelope was addressed to all of us. I was surprised Sylvia had even remembered my daughter's name and had spelled it correctly.

Well, Christmas came and went, and then on a warm March afternoon, I saw a couple of familiar faces outside the resident's room. They were Sylvia's parents. I shook hands and seated them, and then noticed the mother's eyes moisten up. I instantly knew what we had feared all along had come to pass. Sylvia had passed away 3 weeks earlier and her parents had made the 1500 mile journey to inform me personally. They told me that she had written the Christmas card to me while in hospice, in considerable pain, but stoic as ever. Apparently, on the day she passed away, she asked her parents to vow that they would not grieve her death but support the fight against cancer.

It is the stories of such remarkable people that mitigate the sting of cancer. Sylvia knew that she had cancer but never for a moment let the cancer "have her." She lived life to the fullest, giving hope and encouragement to young doctors like me and to similar patients ravaged by the "C word."

It's been 7 years. With more letters after my name and a few gray hairs, I have made many tough decisions, including career choices, which have taken me to the ends of the earth—quite literally. I pursued a fellowship in New Zealand and now am halfway through a uro-oncology fellowship in Seattle.

Through this eventful journey, I have experienced stark contrasts. The frailty of human life and the undying spirit of survivors. I have learned to appreciate the little things life has to offer. The warm sunshine, the smell of the earth before the rains, the feeling of sand through my toes at the beach. Amidst the hustle and bustle of life, I always take a moment to thank my Maker for health and for celebrating another birthday, and try my utmost to embody that positivity I learned through Sylvia early on in my career. ●

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Palliative Care: Let's Keep the Conversation Open

By Anna Kaminsky, DO

As the end of my hematology/oncology fellowship draws near, I am reminded every day that oncology is not about winning or losing. Notwithstanding our wishes, most malignancies are not curable.

There are many misconceptions in the medical field about death and end-of-life care. One of the biggest misconceptions that I have encountered is regarding the role of palliative care—that it is "the end of the road," or "the last resort" and "sad." I am happy to start practicing at a time when this is no longer the case. However, this misconception remains prevalent, not only among patients, but also among physicians and, even more surprisingly, among oncologists—physicians who face death on a daily basis.

To help educate physicians and take away the negative stigma associated with palliative care, most hematology/oncology fellowship programs now offer some form of palliative care training in their curriculums. At the Allegheny Health Network, where I have pursued fellowship, a month-long palliative care rotation occurs during our last year of fellowship when we participate in inpatient consults, outpatient clinics, and didactics. During my palliative care rotation, a particular experience with a patient taught me a valuable lesson as a soon-to-be practicing hematologist/oncologist. I first encountered Mr L, a 64-year-old gentleman with multiple comorbidities, during my oncology consult rotation 6 weeks before my palliative care rotation. Mr L had a large mass that was partially obstructing his esophagus, causing dysphagia and weight loss. My consultation with Mr L took place at the time of his initial diagnosis with locally advanced squamous cell carcinoma of the esophagus.

After carefully reviewing his chart with his oncologist (my colleague), we

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went in to speak with Mr L and his family, who were anxiously waiting for us. We began our discussion by advising Mr L and his family that his tumor may be inoperable, due in part to its size and location, and also his general health and multiple medical problems. We also advised him and his family that his treatment course would be long and would require input from multiple specialists, including surgeons and radiation oncologists, as well as us, medical oncologists.

Together, we set forth a plan for Mr L and his family. Because he was very cachectic and unable to meet his nutritional requirements, we insisted on the use of a feeding tube, followed by rehabilitation at a skilled nursing facility, while we proceeded with chemoradiation.

We answered all of Mr L and his family's questions and he was transferred to the skilled nursing facility. At this time, he went off my radar. Six weeks later, while on palliative care rotation, I noticed Mr L's name on the list of new consults.

Mr L had developed worsening anemia that required blood transfusions, and he had been transferred to the inpatient service. The original plan, to begin radiation treatment for Mr L during the week of his consult, was abandoned. After a thorough evaluation, it appeared that Mr L's condition had significantly deteriorated and he was just not strong enough to undergo radiation treatment.

The primary team had consulted with palliative care to discuss end-of-life issues with Mr L and his family, as it did not seem that Mr L would be able to receive any treatment for his advanced esophageal cancer. I felt very uncomfortable with the idea of going to his room and talking to him about death and end-of-life issues, as I was the one who, a very short time ago, had discussed a solid treatment plan with him that had included multiple evidence-based treatment options.

I looked through my consult notes for integral information related to palliative care—for example, spiritual beliefs, family support, and advanced planning. I quickly realized that I had not addressed these issues at all. In fact, I realized that the words

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"palliative" or "palliation" were not mentioned in any of my notes. With a heavy heart, I walked into the room where Mr L was waiting. My colleague and I spoke with him and his daughter and explained that the goals of treatment had shifted. Now, the focus would be on controlling any symptoms he might have and maintaining his quality of life. He and his daughter decided that he would be transferred back to the skilled nursing facility and would continue to receive blood transfusions and medications with palliative care follow-up. He would transition into hospice once his quality of life was no longer maintainable.

Surprisingly, there was no sense of failure or loss. He did not feel sick and did not have any symptoms. His goals of care were met, and both he and his family were at peace. In fact, his daughter advised us that he had been under hospice care previously (4 other times) for other medical problems and had always pulled through. Although both Mr L and his daughter knew that this time would be different, they were comfortable with the plan and so was I—as an oncologist and as a palliative care physician.

This unique opportunity to see a patient, as both an oncologist and as a palliative care physician, gave me a chance to reflect on how and when to incorporate palliative care into oncology practice. Over the past few years, there has been robust interest in promoting the role of palliative care in oncology, and additional evidence has emerged supporting the importance of palliative care.

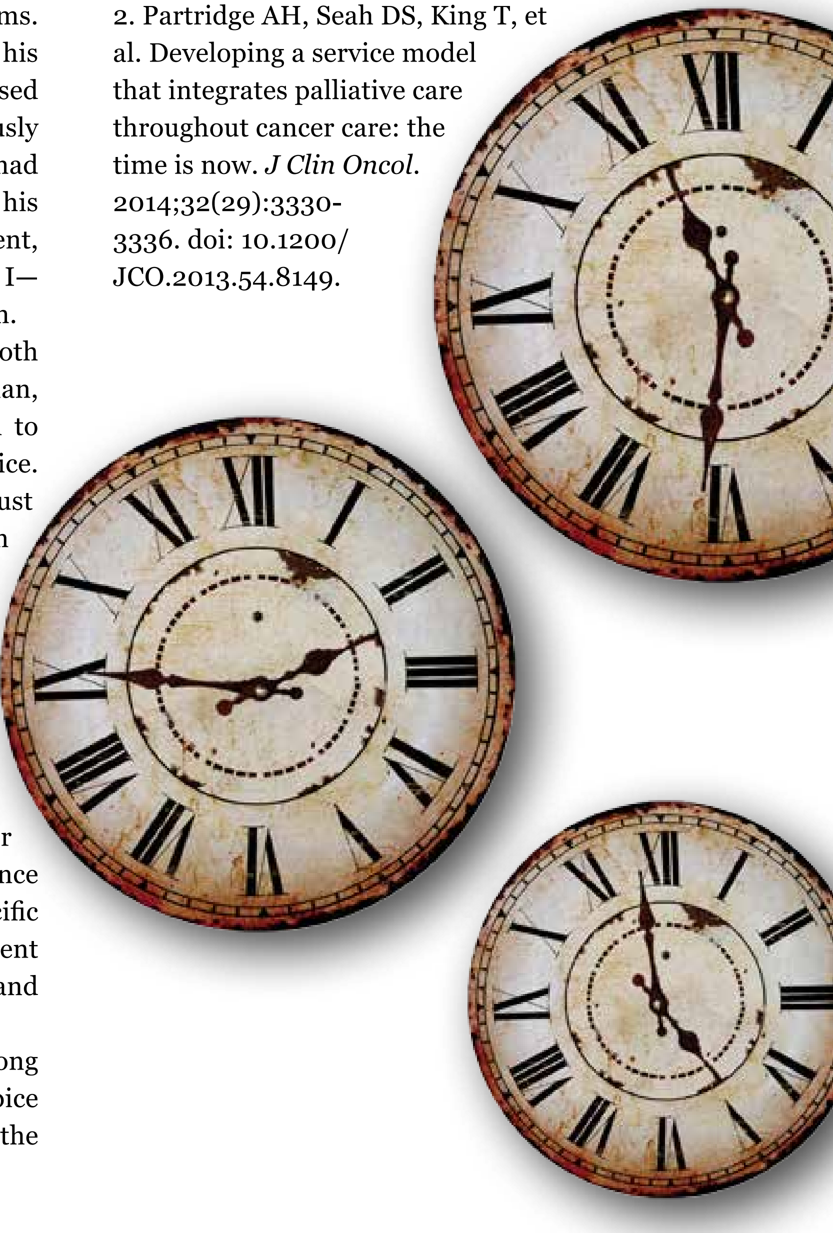
Every year, my colleagues and I participate in the American Society of Clinical Oncology's (ASCO's) Quality Oncology Practice Initiative, where oncology physicians (including fellows) evaluate charts on more than 150 quality metrics. I was very pleased to see that among other important measures of quality and performance of oncology providers, several measures specific to palliative care—for example, pain management documentation, referral to palliative services, and hospice enrollment—are now included.[1]

Additionally, ASCO recently announced its strong backing of the bill for the Palliative Care and Hospice Education and Training Act, which supports the growing field of palliative care by establishing up to 24 palliative care education centers at medical schools across the United States.[2] While we are learning how to treat cancer during fellowship, we must also learn to integrate palliative care into the management of our patients. Discussing palliative care with our patients and families is a vital part of providing individualized and comprehensive care. ●

References

1. Measures overview. American Society of Clinical Oncology Institute for Quality website. http://www.instituteforquality.org/qopi/measures. Accessed March 1, 2016.

2. Partridge AH, Seah DS, King T, et al. Developing a service model that integrates palliative care throughout cancer care: the time is now. *J Clin Oncol*. 2014;32(29):3330-3336. doi: 10.1200/JCO.2013.54.8149.



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Staying Afloat When the Floodgates Open

By Aju Mathew, MD, MPhil

It is quite easy to be drowned in the rising floodwaters of hematology and medical oncology, especially when you start training. As a recent graduate, I barely managed to keep my head above the water level. When I joined the hematology and oncology fellowship program at the University of Pittsburgh, I only had a faint awareness of the storm that was going to hit me—in spite of the fact that I had completed my residency training at the same institution and spent numerous rotations in the inpatient unit and ambulatory oncology clinics.

I had thought that decision making in oncology seemed quite straightforward and that all I would need to do was follow the guidelines. However, that was not the case. Each patient's cancer story was unique and the decision making had to be individualized, taking several factors into account, including an understanding of the patient's state of health, standard-of-care treatment options, recent research, and, more importantly, patient preference.

How can an oncology fellow tackle the steep learning curve in the field? One of my mentors gave me very valuable advice early on—that I could ***follow a patient's prior oncologic management history and learn how he or she was managed at various points of stable or progressive disease or during complications of therapy. By asking how you would treat that patient today, given the same presentation, you can help to identify current controversies in cancer care.***

Let me illustrate this with an example. You are seeing a patient with metastatic breast cancer. Her prior history reveals that she was treated with anthracycline-based chemotherapy for stage II hormone receptor–positive cancer. Knowing this information, you could ask yourself how you would treat her now, if she presented similarly. Such a line of thought would bring forth

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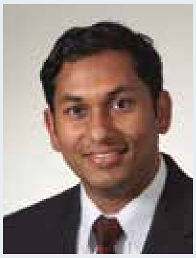


Aju Mathew, MD, MPhil, is an assistant professor of medicine in the Division of Medical Oncology, at the University of Kentucky Markey Cancer Center.

SUGGESTED READING *for* FIRST-YEAR FELLOWS several learning points—for instance, you could consider the use of 21-gene assay, the possibility of using a non-anthracycline–based treatment regimen, or even omitting chemotherapy altogether. ***Use each patient encounter as a learning opportunity.***

For your continuity clinic, ***try to be prepared ahead of the clinic visit by staying up-to-date on new data.*** It is quite easy to fall back on the commonly used National Comprehensive Cancer Network guidelines. You may certainly use guidelines such as these for reference, but, always refer back to the primary source of evidence. The guidelines may not give you the details you may need. For instance, to decide between docetaxel and paclitaxel for a woman with early-stage breast cancer, you may need to refer to the seminal research article to understand the differences in efficacy and side effects between the 2 options.

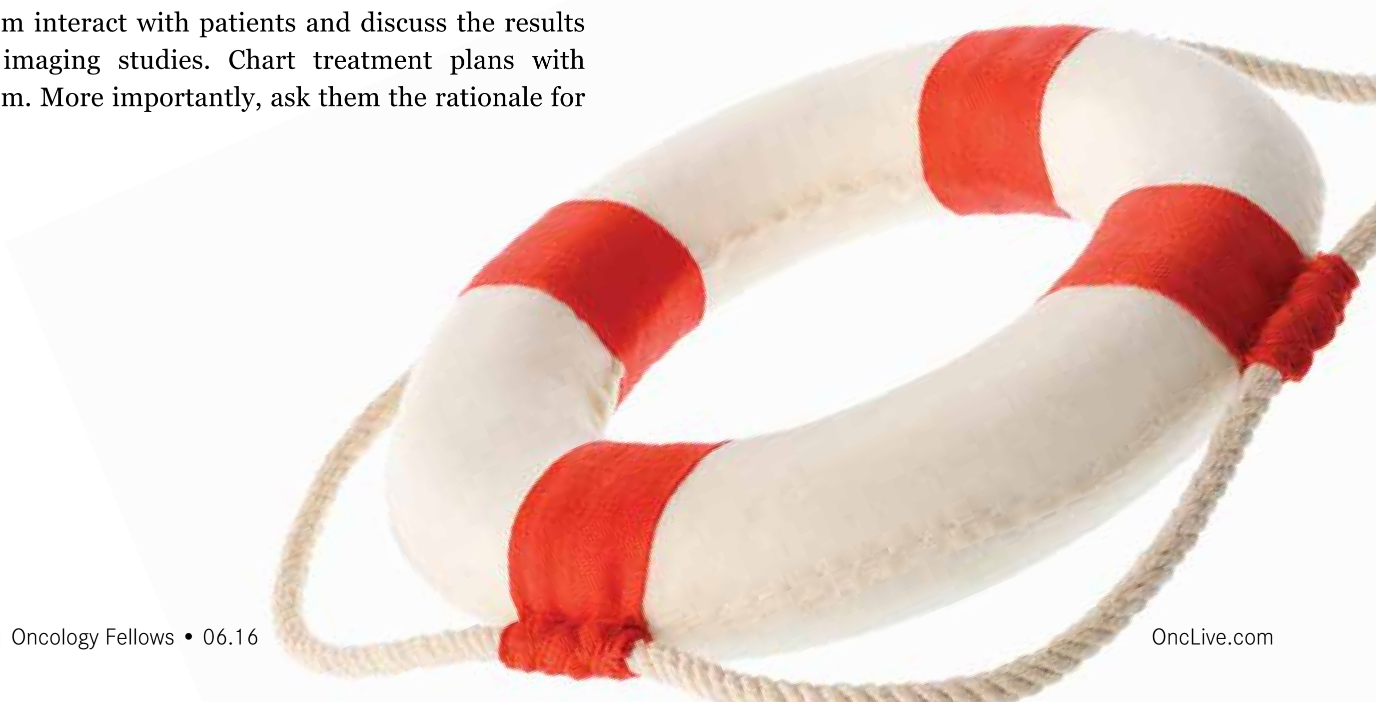
Soon, you will start getting swamped with a variety of medical journals. ***To help manage all of the reading material, select just a couple of journals to read regularly.*** A more efficient way to study is to ask your faculty for "must read" articles, in order to understand advances in the field. Always remember that the ideal material is usually within the hard covers of a textbook or the pages of a well-written review article.

Your supervising faculty has a wealth of experience. ***Learning from faculty members is often just as important as self-study.*** Watch them interact with patients and discuss the results of imaging studies. Chart treatment plans with them. More importantly, ask them the rationale for their management decision. You will discover the value of experience in patient care, especially when you encounter the "zebras" in oncology. ***Establish good relationships with the faculty with whom you interact over the 3-year span of your fellowship.*** You will need their support in the future, regardless of your career choice.

In addition to working closely with, and learning from, faculty members, ***consider how your colleagues may also contribute to your learning,*** especially in their own areas of interest and expertise. You may be surprised to see how much you can learn and how you can instruct others through the process of collaboration. Discussing a case history or topic as a group, either as part of case conference or in an informal setting, is extremely beneficial to you and your patients.

Finally, ***always be professional in your manners and be respectful toward others,*** including nurses, nurse practitioners, physician assistants, and trainees in other specialties. Most of them will have a wealth of experience in the practicalities of patient care. The gospel truth of "do to others as you would have them do to you" is something to keep in mind throughout training and your career.

I am sure that, at times, you will find the fellowship experience bewildering, but it is worth every dime. Remember, your future patients deserve the best. You owe the next 3 years of your training to them. ●



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Physical Activity Beneficial in Preventing Cancer and During Cancer Care

Although various studies have examined the association between exercise and cancer, most have been inconclusive due to the small numbers of participants included in the studies.[1] However, it has been noted that an increase in physical activity can play an important role in preventing cancer[1] and has shown benefits in patients with cancer–including patients undergoing palliative care.[2]

A study by Moore et al that was recently published in *JAMA Internal Medicine* revealed that leisure-time physical activity, defined as exercise done at one's own discretion for about 150 minutes per week at moderate intensity, reduced the risk of developing various types of cancer.[1] As noted by the National Cancer Institute, this new study (which included a much larger number of participants compared with previous studies) confirms the benefits of promoting physical activity as part of population-wide cancer prevention and control efforts.[3]

Moore et al analyzed data from 1.44 million adults aged 19 to 98 from the United States and Europe; median follow-up time was 11 years. The results of the analysis showed that leisure-time physical activity lowered the risk for developing certain cancers, as shown in the **Table**[1] below.

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Table. Reduction of Cancer Risk Among a Physically Active Population[1,a]

Cancer Type	Reduction in Risk
Esophageal adenocarcinoma	42%
Liver	27%
Kidney	23%
Gastric cardia	22%
Endometrial	21%
Myeloid leukemia	20%
Myeloma	17%
Colon	16%
Head and neck	15%
Bladder	13%
Rectum	13%
Breast	10%

[a] The number of cases and studies varied by cancer type. For additional information, please see the full publication: Moore SC, Lee IM, Weiderpass E, et al. Association of leisure-time physical activity with risk of 26 types of cancer in 1.44 million adults [epub ahead of print May 16]. *JAMA Intern Med*. 2016. doi:10.1001/jamainternmed.2016.1548.

In addition to reducing the risk of developing cancer, in patients with cancer, exercise has demonstrated positive effects on energy, insulin resistance, inflammation, and quality of life, among other benefits.[2] An increased awareness of the importance of regular physical activity should prompt healthcare providers to recommend exercise as part of their patients' care plans. Public health efforts to promote physical activity and educate the general population regarding its benefits are essential to help address the cancer epidemic.

References

1. Moore SC, Lee IM, Weiderpass E, et al. Association of leisure-time physical activity with risk of 26 types of cancer in 1.44 million adults [epub ahead of print May 16]. *JAMA Intern Med*. 2016. doi:10.1001/jamainternmed.2016.1548.
2. Eyigor S, Akdeniz S. Is exercise ignored in palliative cancer patients? *World J Clin Oncol*. 2014;5(3):554-559. doi: 10.5306/wjco.v5.i3.554.
3. Increased physical activity associated with lower risk of 13 types of cancer [press release]. Bethesda, MD: National Cancer Institute; May 16, 2016. www.cancer.gov/news-events/press-releases/2016/physical-activity-lowers-cancer-risk. Accessed May 19, 2016.

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September 30-October 1
National Comprehensive Cancer Network (NCCN) 11th Annual Congress: Hematologic Malignancies™
New York, NY
http://bit.ly/1UVkTpO

October 19-22
48th Congress of the International Society of Paediatric Oncology
Dublin, Ireland
http://bit.ly/1YmLWgW

November 3-5
14th Annual School of Breast Oncology®
Atlanta, GA
http://bit.ly/1LLY7BS

November 9-11
34th Annual Chemotherapy Foundation Symposium: Innovative Cancer Therapy for Tomorrow®
New York, NY
http://bit.ly/21VWGoL

ONCOLOGY FELLOWS

CALL *for* PAPERS

We welcome submissions to ***Oncology Fellows***, a publication that speaks directly to the issues that matter most to hematology/oncology fellows at all stages of training. ***Oncology Fellows*** aims to provide timely and practical information that is geared toward fellows from a professional and lifestyle standpoint—from opportunities that await them after the conclusion of their fellowship training to information on what their colleagues and peers are doing and thinking right now.

Oncology Fellows features articles written by practicing physicians, clinical instructors, researchers, and current fellows who share their knowledge, advice, and insights on a range of issues.

We invite current fellows and oncology professionals to submit articles on a variety of topics, including, but not limited to:

- **Lifestyle and general interest** articles pertaining to fellows at all stages of training.
- **A Word From Your Fellows:** articles written by current fellows describing their thoughts and opinions on various topics.
- **Transitions:** articles written by oncology professionals that provide career-related insight and advice to fellows on life, post training.
- **A Day in the Life:** articles describing a typical workday for a fellow or an oncology professional, post training.

The list above is not comprehensive, and suggestions for future topics are welcome. Please note that we have the ability to edit and proofread submitted articles, and all manuscripts will be sent to the author for final approval prior to publication.

Learn more about Oncology Fellows at:
www.onclive.com/publications/oncology-fellows

If you are interested in contributing an article to ***Oncology Fellows*** or would like more information, please e-mail Jeanne Linke at **jlinke@clinicalcomm.com**.

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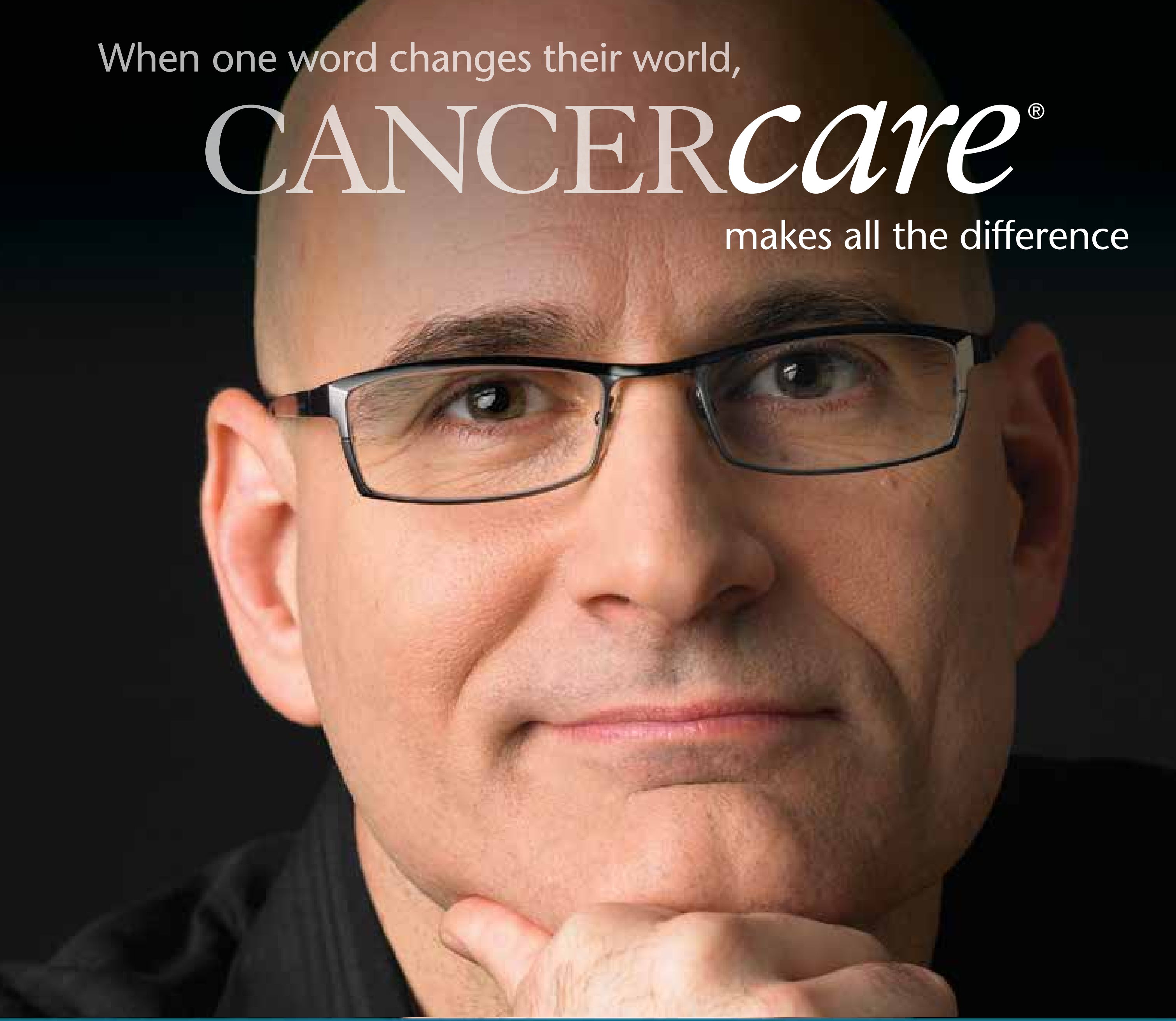
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