SPECIAL ISSUE: **IMMUNOTHERAPY AND INFECTIOUS DISEASE** | CONFERENCE COVERAGE: **AACR | AMCP | COA | ISPOR**

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ALSO IN THIS ISSUE

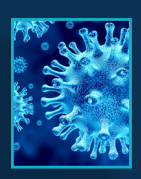
SUPREME COURT: Government Owes ACA Insurers $12 Billion, SP158.

UNPREDICTABLE AND INEVITABLE. The message from our Chairman draws the connections between the seeds planted by HIV research in the 1990s to modern advances, including chimeric antigen receptor T-cell therapy, SP138.


FABRIZIO

ADDRESSING THE GAPS. Fully realizing the potential of immunotherapy requires addressing the limits of the current precision medicine infrastructure. Can the use of tumor mutational burden fill the gaps? Foundation Medicine's David Fabrizio weighs in, SP146.

FROM OUR COVERAGE OF AACR: COVID-19 Increases Overall Risk of Death, Complications in Patients With Cancer, Study Shows, SP148.



FULL COVERAGE OF COA. The Community Oncology Alliance's virtual meeting drew nearly 5000 followers for 2 days of sessions. See full coverage of clinical and business sessions, including an assessment of the state of telemedicine and a call to bring clinical trials closer to patients, SP151-SP156.


PATEL


BURRIS

COMMENTARY

How to Optimize Cancer Therapy When Coronavirus Hits the Fan

Afsaneh Barzi, MD, PhD and Sarmad Sadeghi, MD, PhD

JANUARY 2020 MARKED ONLY the beginning of public awareness about coronavirus disease 2019 (COVID-19) in the United States and around the world.[1] At that point, the idea that the virus would impact this country with the magnitude it has was unimaginable. Similarly, thinking that a virus could play a role in decisions about cancer therapy was inconceivable for any of us on the front lines of treating cancer patients. Cancer is and will continue to be a major cause of mortality in the United States and around the world. Typically, noncancer issues take a back seat when dealing with patients with cancer. But…maybe not this time! Limited data from China suggest that those with cancer have a higher likelihood of death from COVID-19 than those with other comorbid conditions.[2] What can we do to protect our patients with cancer to give them the best chance for survival?

The American Society of Clinical Oncology recommends that cancer survivors who have completed their treatment and are under surveillance with no known evidence of disease are to be kept out of care facilities.[3] Oncology surveillance evaluations should be postponed until after the crisis is over. We should reassure these patients that staying at home and following public health guidelines are the best option during this crisis. These survivors should be advised against visiting the emergency department (ED) for issues that can be resolved by phone or telemedicine.

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INTERVIEW

Zaia Draws on Decades of Innovation in Infectious Disease for Breakthroughs in Gene Therapy

Interview by Maggie L. Shaw

HOW DID DISCOVERIES IN HIV research lead to the revolution of immuno-oncology? To understand this path, *Evidence-Based Oncology*™ spoke with John A. Zaia, MD, the Aaron D. Miller and Edith Miller Chair in Gene Therapy at City of Hope, a comprehensive cancer center. He also serves as director of its Center for Gene Therapy and is program director of the City of Hope Alpha Stem Cell Clinic, which is funded by the California Institute for Regenerative Medicine.

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PERSPECTIVE

Humility and Hope: Evolution of the HIV Pandemic, From ART to Today's Cancer Cures

Joseph Alvarnas, MD

BIG THINGS HAVE SMALL BEGINNINGS.[1] On June 5, 1981, a report published in *Morbidity and Mortality Weekly Report* described 5 previously healthy young men with *Pneumocystic carinii* (now *P. jiroveci*) pneumonia who, following case review by regional monitors from the CDC, seemed to have "cellular-immune dysfunction related to a common exposure."[2,3] The Epidemiology Intelligence Service officer investigating these patients postulated that this represented "a 'disease acquired through sexual contact.'"[3] Over the next year and a half, similar reports would emerge from San Francisco, New York, London, and Paris.[3-6] By late August 1981, the CDC had described 108 similar cases that now also included aggressive presentations of an uncommon cancer, Kaposi sarcoma.[6] As more case reports accumulated worldwide, there was increasing evidence for a transmissible agent responsible for these growing clusters of severely immunocompromised patients. In September 1982 the CDC used the term acquired immunodeficiency syndrome (AIDS) for the first time to describe the condition.[6] This publication also included the first case definition for AIDS.[7] By April 1984, the retrovirus responsible for AIDS was finally identified.[8] By the end of the decade, 100,000 cases of patients with AIDS had been reported in the United States.[9]

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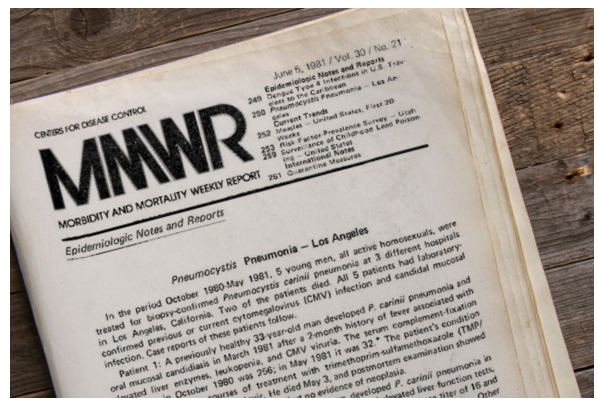
CENTERS FOR DISEASE CONTROL
MMWR
MORBIDITY AND MORTALITY WEEKLY REPORT
Epidemiologic Notes and Reports
Pneumocystis Pneumonia — Los Angeles

The first report on cases that came to be known as AIDS in the *Morbidity and Mortality Weekly Report*, June 5, 1981.

COMMENTARY

How to Optimize Cancer Therapy When Coronavirus Hits the Fan

Afsaneh Barzi, MD, PhD and Sarmad Sadeghi, MD, PhD

CONTINUED FROM COVER

What about patients who are undergoing active cancer treatment? As oncologists, cancer treatment is our top priority. We take into account data from clinical trials, real-world evidence, and expert consensus, as well as an individual patient's condition, to make a recommendation. Our current environment is placing constraints—beyond the traditional risks and benefits of the treatment and disease —on patients and their families, and on the providers. This pandemic exemplifies how, for cancer providers, decision-making with awareness about environment is crucial in "choosing wisely." This is not an easy task, nor is there precedent to guide us in these challenging times.

Patients undergoing treatment for cancer are frequent users of the health care system, due to their acute needs. With the overall cancer incidence rate of 448 per 100,000 in the US population—and assuming that more than 50% of these patients undergo treatments that require multiple visits—thousands of patients are subject to treatment plan modification.[4] Therefore, pathways must be put in place to address their physical and emotional needs. Given the heterogeneity of this population, categorizing treatments as those with either curable or palliative intent is helpful in planning.

Patients with potentially curable disease should be treated with minimal deviation from their planned course, provided that the benefits of these therapies are larger than the risks imposed upon the individual and their community by contracting the coronavirus. These risks, in turn, depend on the variables specific to the treatment facility and the community; they are impacted by patient demographics, disease, and treatment. Toxicity checks can be done remotely via telehealth platforms, perhaps more frequently than our in-person visits, to address toxicities in a timely manner and to prevent any unnecessary ED visit or hospitalization. Taking this approach would require careful consideration of the benefits afforded to the patients who are risking toxicities or increased visits to medical facilities. If treatments offer small or negligible benefit, suspending treatment is a reasonable choice for high-risk patients (eg, the elderly), and those in high-risk geographies.

Patients with incurable disease and those undergoing palliative therapies require a careful assessment of their expected survival and their goals of care. Oncologists should be more explicit in discussing realistic outcomes, and then support patients in making a treatment decision. In discussing risks and benefits, one must consider the societal risks. Providing treatment to an individual in an effort to improve their oncological outcome may result in exposure and ultimately COVID-19 infection. This, in turn, puts their immediate family and their community at risk by unwittingly spreading the virus to them. There is no accurate way to calculate this risk, but if the scenario of 1 infected person spreading the virus to cause 3 new cases is to be believed, this cascading effect must concern all of us.[5] Therefore, holding treatments with marginal benefit for improved overall survival, such as those with expected survival improvement of less than 3 months, is a reasonable approach.

Discussions about end-of-life care are important for every cancer patient. At this time, however, addressing end-of-life issues with patients who have a poor prognosis, as well as "do not intubate" or "do not resuscitate" directives for appropriate patients, are musts. While trying to keep these patients off treatment and out of medical facilities to the greatest extent possible, close monitoring of their symptoms to assess when palliative interventions are appropriate remains essential to this approach.

For treatments that provide greater survival benefit, their continuation is warranted, accounting for the specifics of the disease, patient, and region to reduce risks of exposure. Minimizing the number and duration of in-person visits is critical in keeping these patients safe. For instance, if the patient is clinically well and tumor markers are not increasing, avoiding restaging scans for a period of time is a wise choice. Use of telemedicine services for regular checks can play an important role in the care of these patients. Needless to say, any treatment that can be modified to be delivered orally rather than by infusion should be advocated. Additionally, treatments with extended interval of administration or less frequent administrations should be encouraged.

Once a decision to treat is reached, monitoring and management of toxicities should be enhanced to prevent ED visits and hospitalizations in preventable cases. Neutropenia and neutropenic fever, for instance, can result in ED visits and hospitalization. Use of prophylactic antibiotics and granulocyte colony-stimulating factor should be expanded for the duration of this crisis to mitigate these toxicities. Similarly, the use of antiemetics should be maximized in order to reduce the risk of chemotherapy-induced complications and preventable ED visits.

The goal of cancer care delivery is to provide individuals with effective cancer treatment. During the COVID-19 pandemic, oncologists are also burdened by the responsibility to reduce the exposure to the virus to their vulnerable patient and to society. Once this pandemic is over, we will evaluate the real-world data and think about how we can be more prepared and efficient in the next similar situation. Optimistically, when this is over, policy makers can use the lessons learned to reformulate payment policies for cancer care to improve the delivery of care away from the medical centers. ◆

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REFERENCES

1. Outbreak of pneumonia of unknown etiology (PUE) in Wuhan, China. CDC Health Alert Network; January 8, 2020. Accessed May 8, 2020. emergency.cdc.gov/han/han00424.asp
2. Liang W, Guan W, Chen R, et al. Cancer patients in SARS-CoV-2 infection: a nationwide analysis in China. *Lancet Oncol.* 2020;21(3):335-337. doi:10.1016/ S1470-2045(20)30096-6
3. COVID-19 patient care information. American Society of Clinical Oncology. Updated May 8, 2020. Accessed May 8, 2020. asco.org/asco-coronavirus-information/care-individuals-cancer-during-covid-19
4. Henley SJ, Ward EM, Scott S, et al. Annual report to the nation on the status of cancer, part I: national cancer statistics. *Cancer*. Published online March 12, 2020. doi:10.1002/cncr.32802
5. Sanche S, Lin YT, Xu C, et al. High contagiousness and rapid spread of severe acute respiratory syndrome coronavirus 2. *Emerg Infect Dis.* Published online April 7, 2020. doi:10.3201/eid2607.200282

BARZI

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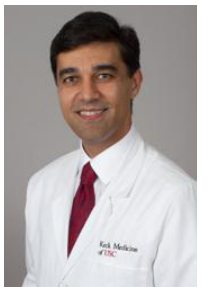

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See also:

AACR FINDINGS

COVID-19 Increases Overall Risk of Death, Complications in Patients With Cancer, **SP148**.