Survival Factors ID’d for Patients with Blood Cancer + COVID-19

Researchers launched the American Society of Hematology (ASH) Research Collaborative COVID-19 Registry for Hematology in April 2020 to gather real-time data on patients with hematologic malignancies who develop COVID-19 (see www.ashresearchcollaborative.org/s/covid-19-registry). Now, an analysis of the data reveals that around a third of patients with blood cancers who required hospitalization for COVID-19 died. Risk factors included older age, forgoing intensive treatment, and poor prognosis before infection. Findings were presented at the 2020 ASH Annual Meeting, held virtually December 5–8.

As COVID-19 emerged in early 2020, “many ... were concerned initially that individuals with underlying cancer—and especially those with hematologic malignancies—could be at increased risk of adverse outcomes following COVID-19 infection,” said William Wood, MD, MPH, of the University of North Carolina (UNC) at Chapel Hill, who presented the results. Preliminary reports from China and the UK suggested that this may be the case, prompting researchers to launch the ASH COVID-19 registry to investigate further.

Wood reported on 656 patients with hematologic malignancies: a little more than half had leukemia and a quarter had lymphoma. The mortality rate was 20% overall and 33% for those who required hospitalization. COVID-19 severity and death were linked to cancer status: 50% of patients in remission developed moderate or severe infection and 13% died, compared with 69% and 21%, respectively, of those receiving initial treatment. Those with relapsed or refractory cancer fared the worst, with 79% developing moderate or severe COVID-19 and 36% dying. Age was also a risk factor: 47% of patients ages 19 to 39 had moderate or severe COVID-19 and 6% died, compared with 62% and 18%, respectively, of those ages 40 to 69. Of patients 70 and older, 70% developed moderate or severe COVID-19 and 33% died.

Further, patients expected to live longer than 12 months prior to COVID-19 infection had a 58% rate of moderate or severe COVID-19 and a 13% rate of death, compared with 79% and 51% in those expected to live for less than 12 months. In addition, those who declined treatment in the intensive care unit had a mortality rate of 73%, compared with 13% for those who did not forgo such care.

“One of the important take-home findings from our study so far is that patients with underlying hematologic malignancies are in fact a medically vulnerable population when it comes to complications from COVID-19 infection, including severity and mortality,” Wood said. As the registry continues to accrue patients, he hopes to explore questions related to specific blood cancers, treatments, and risk factors.

The data “are important and informative,” said Ross Levine, MD, of Memorial Sloan Kettering Cancer Center in New York, NY, who is not involved in the work. “An effort like this highlights the important link between blood cancers and COVID-19 severity,” he added, although more data are needed to understand disease- and treatment-related interactions and implications.

For Alisa Wolberg, PhD, of UNC Chapel Hill, who is also not connected to the registry, it fills a significant knowledge gap. “We can’t begin studies to understand molecular mechanisms and potential treatments and approaches until we understand severity and mortality—and risks for adverse clinical outcomes.”

The registry, which is open to patients with other hematologic disorders, also illustrates the value of large, coordinated research efforts. “It shows what the hematology/heme malignancies community can do when it works together,” Levine said. “Such efforts—and the cooperation they require—are what our patients expect and what the field needs.” – Catherine Caruso

As Pandemic Continues, Screening Concerns Grow

When the COVID-19 pandemic began, oncologists were mildly concerned about how it might affect cancer screening (Cancer Discov 2020;10:OF4). Many months later, amid the continuing pandemic, their concerns about how extensively COVID-19 has disrupted screening have grown along with their fears about the consequences.

“There’s so much attention on COVID–19—and rightfully so—but I think people are forgetting that preventive services need to continue,” says Folasade May, MD, PhD, of the University of California, Los Angeles (UCLA).

UCLA and most other medical centers paused colorectal cancer screening for several weeks in March and April, leading to 30% fewer colonoscopies nationwide than usual. “It was just astounding,” May says. “It was as
CANCER DISCOVERY

Survival Factors ID'd for Patients with Blood Cancer + COVID-19


Updated version
Access the most recent version of this article at:
doi:10.1158/2159-8290.CD-NB2020-112

E-mail alerts
Sign up to receive free email-alerts related to this article or journal.

Reprints and Subscriptions
To order reprints of this article or to subscribe to the journal, contact the AACR Publications Department at pubs@aacr.org.

Permissions
To request permission to re-use all or part of this article, use this link http://cancerdiscovery.aacrjournals.org/content/11/2/214.2. Click on "Request Permissions" which will take you to the Copyright Clearance Center's (CCC) Rightslink site.