

Testimony of

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Plausible Mechanisms of COVID-19 Injections Causing Cancer and Attacks on Scientific

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Introduction

Chairman Johnson, Ranking Member Blumenthal, and distinguished members of the Subcommittee, thank you for the opportunity to share my clinical perspective on this important topic. I am Dr. Julie Gralow, Chief Medical Officer, and Executive Vice President for the Association for Clinical Oncology (ASCO). I am Professor (emeritus), Medical Oncology and Global Health, at the University of Washington School of Medicine. Previously, I was the Jill Bennett Endowed Professor of Breast Cancer at the University of Washington School of Medicine, Professor in the Clinical Research Division of the Fred Hutchinson Cancer Research Center, as well as Director of Breast Medical Oncology at the Seattle Cancer Care Alliance. I am also the former Executive Officer for Breast and Lung Cancer and Vice Chair of the Breast Cancer Committee for the SWOG Cancer Clinical Trials Network.

The Association for Clinical Oncology (ASCO) is a 501(c)(6) organization that represents more than 50,000 oncology professionals who care for people living with cancer. Established by the American Society of Clinical Oncology, Inc in 2019, ASCO works to ensure that all individuals with cancer have access to high quality care; that the cancer care delivery system supports optimal cancer care; and that our nation supports robust federal funding for research on the prevention, screening, diagnosis and treatment of cancer. ASCO is committed to the principle that knowledge conquers cancer. Through research and education, ASCO works to conquer cancer and create a world where cancer is prevented or cured, and every survivor is healthy. We appreciate the opportunity to discuss the critical role of mRNA technology in cancer care and the unwavering commitment to patient safety that guides its development.

Every day, ASCO members uphold the highest standards of scientific rigor, advancing

research that prioritizes patient safety and proven efficacy. When exploring emerging therapies like mRNA vaccines, oncology professionals rely on well-designed clinical trials to establish clinical efficacy, evaluate unintended consequences, and ensure benefits outweigh potential risks. I am here today to share the status of current vaccine research as they relate to cancer care.

Available Clinical Evidence about Cancer Risk Associated with COVID-19 Vaccination

While the public largely became aware of messenger RNA (mRNA) technology during the COVID-19 pandemic, it was not originally designed for infectious diseases. For nearly three decades prior to 2020, the primary driving force behind mRNA research was cancer immunotherapy.

Currently, there is no clinical evidence proving that mRNA COVID-19 vaccines cause cancer. Cancer is caused by a series of gene mutations and does not develop suddenly. Rather, tumor evolution is a multi-step cellular process requiring a cascade of DNA mutations, changes to the way cells process energy, and cell replications that take years or decades to manifest clinically. The appearance of late-stage, aggressive tumors within weeks or months of an injection is biologically incompatible with what we have learned from decades of research on the causes of cancer. In fact, RNA breaks down quickly in the body and does not enter a person's DNA – in other words, mRNA **cannot** cause gene mutations.¹

Cancer is a common diagnosis, with a complex collection of more than 200 distinct diseases. The National Cancer Institute (NCI) estimates that in 2026 alone, 2.11 million

¹ <https://www.genome.gov/about-genomics/fact-sheets/Understanding-COVID-19-mRNA-Vaccines>

Americans will receive a cancer diagnosis.² Because of this high baseline volume, new cancer diagnoses will be discovered in any large study population purely by chronological coincidence.

The benefits of COVID vaccination, however, are supported by a large and growing body of evidence. COVID-19 vaccines, the modified mRNA engineered for the coronavirus spike protein, have been clinically proven to *protect* vulnerable patients.³ Patients in active cancer treatment often have compromised immune systems, increasing their risk of negative outcomes if they contract COVID-19. Before vaccines were available, researchers at the University of Wisconsin-Madison found that COVID-19 patients with a current cancer diagnosis were 24% more likely to require intensive care and 58% more likely to die in the hospital.⁴ By contrast, a 2025 study, led by investigators at Vanderbilt University, found that cancer patients who received COVID-19 vaccinations had a 50% reduction in their risk of hospitalization.⁵ These data are reinforced by an ASCO study demonstrating a clinically significant relationship with vaccine exposure and survival in cancer patients with a diagnosis of COVID-19. Specifically, 6-month overall survival was 90% among patients who received the vaccine within 1-6 months before infection, compared with 82% for patients who had either not been vaccinated or had received the last dose more than six months earlier.^{6,7}

Potential Uses of mRNA Technology in Treating Cancer

While traditional immunization is prophylactic (aimed at preventing infectious diseases), mRNA technology represents an exciting and significant clinical advancement for *therapeutic*

² <https://seer.cancer.gov/statfacts/html/all.html>

³ <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2792066>

⁴ <https://pmc.ncbi.nlm.nih.gov/articles/PMC9827105/>

⁵ <https://jamanetwork.com/journals/jamaoncology/fullarticle/2836492>

⁶ <https://ascopubs.org/doi/10.1200/OA-24-00107>

⁷ <https://ascopubs.org/doi/10.1200/OA-24-00034>

cancer vaccines aimed at treating existing tumors.

Unlike traditional treatments such as chemotherapy, which broadly destroy both cancerous and healthy dividing cells, mRNA technology is designed to sensitize a patient's immune system to the tumor. By teaching an individual's body to recognize proteins (tumor markers) that are unique to that patient's cancer, mRNA vaccines encourage the patient's immune system to destroy just cancer cells—not healthy ones. Clinically, mRNA is an ideal platform for personalized immunotherapy because it requires a relatively short timeframe to be developed for each patient and can promote an effective immune response. Clinical trials are actively testing mRNA cancer vaccines and have reported good tolerability, strong multi-targeted T-cell immunity, and promising preliminary clinical activity, such as delayed recurrence in patients with resected solid tumors.

While the Food and Drug Administration (FDA) has not yet granted approval for any mRNA cancer vaccine therapies, several clinical trials are underway. For example, just this week at ASCO's Annual Meeting, researchers shared the results of a trial that shows that melanoma patients who receive a cancer-fighting mRNA vaccine, in addition to immunotherapy, have better cancer outcomes than patients who receive that immunotherapy alone.⁸ Additional research has found that COVID-19 mRNA vaccines may make immunotherapy more effective for cancer patients. Led by investigators at MD Anderson, a recent study found that patients who received the COVID vaccine and immunotherapy to treat non-small cell lung cancer had better cancer outcomes than those who were not vaccinated.⁹ Existing research provides strong

⁸ <https://ascopubs.org/doi/10.1200/JCO-26-00835>

⁹ <https://www.nature.com/articles/s41586-025-09655-y>

indications that mRNA vaccines will likely join approved immune therapies as new options for patients with cancer facing difficult diagnoses.

Potential Harms of Declining Vaccination Rates

While there is great promise in mRNA vaccine technology, traditional vaccines still play an important role in preventing certain cancers. In 2006, the FDA granted approval for the first vaccine against the human papillomavirus (HPV), representing a profound shift in our ability to prevent nearly all cervical cancers, as well as other anogenital and oropharyngeal cancers. HPV infection is responsible for nearly all cervical cancers. Cervical cancer incidence rates in women ages 20-31 declined by 27% in the United States between 2016-2021, when the HPV vaccine was available, compared to 2000-2005 before implementation of the vaccine.^{10, 11} Estimates suggest that cervical cancer could be virtually eliminated in the U.S. between 2038-2046 if 90% of the U.S. population received HPV vaccinations.¹²

This is particularly important in young cancer survivors and hematopoietic stem-cell transplant (HSCT) recipients who face a significantly higher incidence of secondary, HPV-associated malignancies than the general population.^{13,14} If overall vaccination rates decline, we will see a higher burden of preventable, HPV-driven malignancies in both the general public and vulnerable clinical subpopulations.

Federal Investment in Cancer Research

The evidence presented today is the result of decades-long investments in our nation's

¹⁰ <https://academic.oup.com/jnci/advance-article-abstract/doi/10.1093/jnci/djag051/8495022?redirectedFrom=fulltext&login=false>

¹¹ <https://pressroom.cancer.org/declines-in-cervical-cancer-hpv-vaccine>

¹² <https://pmc.ncbi.nlm.nih.gov/articles/PMC8715100/>

¹³ <https://pubmed.ncbi.nlm.nih.gov/23940566/>

¹⁴ <https://pmc.ncbi.nlm.nih.gov/articles/PMC8671185/>

biomedical research. The path to cancer breakthroughs, such as vaccines that prevent or treat cancer, is an iterative process. Strategic federal investment and predictable funding for our nation's preeminent research agencies are critical to maintaining global leadership in innovation. We appreciate Congress' continued commitment to biomedical research, including increases for Fiscal Year 2026, and hope this support continues in FY 2027.

Conclusion

Thank you for the opportunity to testify on these important issues. ASCO remains deeply committed to advancing safe, evidence-based care for all patients, and we welcome any questions you may have on the data and science supporting these efforts.