The emergence of novel systemic therapies — combined in new and better ways — has significantly changed the role of cancer surgery. In recognition of the substantial progress made in this area in the past year, in *Clinical Cancer Advances 2020* — just released today— the American Society of Clinical Oncology (ASCO) has named the **Refinement of Surgical Treatment of Cancer** as the Advance of the Year. This ASCO report on annual progress against cancer also catalogs a year’s worth of remarkable research advancements, highlights areas of research opportunities, and reinforces the importance of federal funding for cancer research.

“It is fair to say that cancer treatment began with surgery, with accounts dating back to ancient times. In recent years, other treatments like systemic therapy emerged, changing the role of surgery in cancer care,” said 2019-2020 ASCO President Howard A. “Skip” Burris III, MD, FACP, FASCO. “ASCO’s 2020 Advance of the Year recognizes the way systemic cancer therapies have improved the effectiveness of surgery, minimized the extent of surgery required for many patients, and even eliminated the need for surgery for some patients.”

The *Clinical Cancer Advances* report not only identifies the major advances of the past year, but also looks forward, highlighting areas where progress is most promising in ASCO’s list of Research Priorities, which identifies areas of unmet needs and research opportunities in cancer care.

The report, now in its 15th year, is available online at [asco.org/CCA](http://asco.org/CCA) and in the *Journal of Clinical Oncology* at [ascopubs.org/jco](http://ascopubs.org/jco).
Advance of the Year: Refinement of Surgical Treatment of Cancer

While considerable progress in the understanding and development of systemic therapies has been made over the years, the effect of these improvements on surgical care has been seen only recently. The effectiveness of these treatments has led to reductions in the amount of surgery required for some patients, and even the need for it in others. At the same time, these advances have also increased the number of patients who can undergo surgery when needed.

Advances in systemic therapies for melanoma as well as kidney and prostate cancers have helped reshape the role of surgical treatment, making them some of this year’s most impressive research successes.

- **Melanoma:** Two featured studies examined the efficacy and safety of pre-surgery combination immunotherapy or targeted therapy treatments. These studies are already changing practice, helping patients with locally advanced melanoma avoid surgery in many cases.

- **Kidney Cancer:** Surgical resection has traditionally been the primary treatment of many solid tumor cancers, including renal cell carcinoma. Results from two randomized controlled trials provided evidence for targeted therapy-based approaches that might reduce the role of upfront surgery for some patients with metastatic renal cell carcinoma.

- **Pancreatic Cancer:** While surgical resection offers the best chance of survival for patients with pancreatic cancer, many either have tumors that are difficult to surgically remove entirely or cannot be removed at all. Two preliminary studies featured in the 2020 report suggest that more patients with pancreatic cancer may be eligible for surgery following upfront treatment.

Other research successes highlighted in *Clinical Cancer Advances* include progress in cancer prevention, biomarker-driven treatment, and therapy combinations that suggest that survival can be extended without increasing side effects.

This progress could not have come about without federal support for clinical cancer research.

Research Priorities to Accelerate Progress Against Cancer
ASCO developed its list of Research Priorities to highlight areas where progress is promising and to spark momentum in areas of greatest need. These priorities, listed in no particular order, address areas of unmet need or help fill knowledge gaps in areas critical to improving patient care and outcomes:

- Identify strategies that better predict response and resistance to immunotherapies
- Limit extent of surgery by optimizing systemic therapy
- Increase precision medicine research and treatment approaches in pediatric and other rare cancers
- Optimize care for older adults with cancer
- Increase equitable access to cancer clinical trials
- Reduce adverse consequences of cancer treatment
- Reduce obesity and its impact on cancer incidence and outcomes
- Better identify premalignant lesions and predict when treatment is needed

“What we know about cancer — from prevention to treatment to survivorship — is rapidly changing. Our vision for finding the next generation of cancer cures and reducing cancer’s impact on patients’ lives must evolve as well,” said ASCO Chief Medical Officer and Executive Vice President Richard L. Schilsky, MD, FACP, FSCT, FASCO, Co-Executive Editor of the report. “These priorities are intended to keep clinicians, patients, and other stakeholders abreast of the areas where the opportunity for rapid progress is most promising.”

**Why Federal Funding for Research Matters**

Federal research investments have driven many of the most important cancer prevention and treatment advances of the last half century. Roughly a quarter of the advances featured in the *Clinical Cancer Advances* report received funding from the National Institutes of Health (NIH) and other federal agencies. Research funded by the U.S. government also generates billions of dollars in new economic activity and supports hundreds of thousands of jobs. According to ASCO’s 2018
National Cancer Opinion Survey, 67% of Americans say the U.S. government should spend more money on finding treatments and cures for cancer, even if it means higher taxes or adding to the deficit.

Over the past few years, Congress has demonstrated tremendous bipartisan leadership by passing annual consecutive increases for the NIH. In Fiscal Year 2020, Congress provided a $2.6 billion funding increase for the NIH. ASCO is continuing to encourage Congress to build on its investment in cancer research to maintain the pace of scientific discovery and continue progress against cancer.

Clinical Cancer Advances, now in its 15th edition, is published online at asco.org/CCA and in the Journal of Clinical Oncology at ascopubs.org/jco. Nearly a third of the studies included in the report were conducted by researchers who received funding from Conquer Cancer, the ASCO Foundation, through Young Investigator Awards or Career Development Awards and have continued their careers in oncology research.

For your readers:

- Melanoma
- Kidney Cancer
- Prostate Cancer

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About ASCO:

Founded in 1964, the American Society of Clinical Oncology, Inc. (ASCO®) is committed to making a world of difference in cancer care. As the world’s leading organization of its kind, ASCO represents nearly 45,000 oncology professionals who care for people living with cancer. Through research, education, and promotion of the highest-quality patient care, ASCO works to conquer cancer and create a world where cancer is prevented or cured, and every survivor is healthy. ASCO is supported by its affiliate organization, the Conquer Cancer Foundation. Learn more at www.ASCO.org, explore patient education resources at www.Cancer.Net, and follow us on Facebook, Twitter, LinkedIn, and YouTube.