YOUR GUIDE TO THE LATEST CANCER RESEARCH AND TREATMENTS

# Highlights from the 2022 Annual Meeting of the American Society of Clinical Oncology

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# How To Use This Booklet

Each year, Cancer*Care*® publishes a special edition of the Cancer*Care* Connect® Booklet Series that presents research highlights from the Annual Meeting of the American Society of Clinical Oncology. The information contained in these pages is intended for discussion with your doctor. He or she can tell you whether these advances in cancer treatment affect your treatment plan and whether a clinical trial is right for you.

Some of the treatments discussed in this booklet are still in the very early stages of research and may not be available to the general public outside of a clinical trial. The advances in treatment that have come about are because of the many people who have taken part in such studies. If current drugs or other types of cancer treatment no longer benefit you, you may wish to explore joining a clinical trial. The members of your health care team will help you fully understand the possible risks and benefits involved.

On page 45 you will find a list of resources, including websites where you can search for a clinical trial. If your particular type of cancer is not discussed in this booklet and you wish to take part in a study, these websites can help.

# About the Editors

The content of this booklet was taken from Cancer*Care*'s two-part Connect Education Workshop 2022 ASCO Highlights series, during which the following leading experts presented:

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**Anna M. Varghese, MD**

**Pancreatic Cancer**

*Pancreas Cancer Medical Oncologist, Memorial Sloan Kettering Cancer Center*

# The Importance of Clinical Trials

**Clinical trials are the standard by which we measure the worth of new treatments and the quality of life of patients as they receive those treatments. For this reason, doctors and researchers urge people with cancer to take part in clinical trials.**

Your doctor can guide you in deciding whether a clinical trial is right for you. Here are a few things that you should know:

- Often, people who take part in clinical trials gain access to and benefit from new treatments.
- Before you participate in a clinical trial, you will be fully informed as to the risks and benefits of the trial.
- Most clinical trials are designed to test a new treatment against a standard treatment to find out whether the new treatment has any added benefit.
- You can stop taking part in a clinical trial at any time for any reason.

When considering participation in a clinical trial, it's important to consult with your primary care physician and your oncologist and make sure that all of your questions are answered.

This is a very exciting time in cancer research, and there are clinical trials underway to study and provide evidence about newer treatment approaches, such as immunotherapy and targeted therapy. In immunotherapy, the immune system's ability to seek out and destroy cancer cells is enhanced. Targeted therapies are designed to target the specific cell mechanisms that are important for the growth and survival of tumor cells.

# Brain Cancer

**Researchers reported a number of important findings in brain cancer treatment at the 2022 Annual Meeting of the American Society of Clinical Oncology:**

- **A phase I/II trial combining two experimental immunotherapies with an immune checkpoint blocker yielded promising results as treatment for newly diagnosed glioblastoma (page 7).**
- **The investigational drug EO2401, in combination with two other agents, generated immune responses in patients with first progression/recurrence of glioblastoma (page 8).**
- **The targeted therapy selinexor was found to shrink tumors in almost a third of patients with recurrent glioblastoma (page 8).**
- **Retreatment with temozolomide at first recurrence may extend survival in people with MGMT hypermethylated glioblastoma (page 9).**

## Promising results reported on combination treatment for newly diagnosed glioblastoma

According to data from the phase I/II GBM-001 trial, a novel (new) combination of two experimental immunotherapies along with an immune checkpoint blocker yielded promising results in patients with newly diagnosed glioblastoma. The two immunotherapies, INO-5401 and INO-9012, are given as an intramuscular injection after surgery, which is performed to remove as much of the tumor as possible.

### What Patients Need to Know

GBM-001 is one of the first trials to combine a tumor vaccine strategy plus a PD-1 checkpoint blockade as treatment for newly diagnosed glioblastoma.

## Investigational drug combined with other agents generated immune responses in certain glioblastomas

The phase I/II EOGBM1-18/ROSALIE trial showed the investigational drug EO2401 plus nivolumab generated systemic immune responses correlating with efficacy (effectiveness) in patients with first progression/recurrence of glioblastoma. Adding bevacizumab to this combination appeared to improve efficacy.

### What Patients Need to Know

EO2401 is peptide-based immunotherapy, nivolumab is an immune checkpoint inhibitor and bevacizumab is an anti-VEGF therapy.

## Phase II trial showed selinexor shrunk tumors in some cases of recurrent glioblastoma

A phase II international trial found that selinexor was able to shrink tumors in almost a third of patients with recurrent glioblastoma. Selinexor, a targeted therapy, inhibits exportin-1 (XPO-1), a major exporter of proteins that is overexpressed in many cancers, including glioblastoma.

### What Patients Need to Know

Selinexor is currently approved by the FDA for the treatment of refractory multiple myeloma and relapsed/refractory diffuse large B-cell lymphoma.

## Retreatment with temozolomide may extend survival in MGMT hypermethylated glioblastoma

Results from a phase II/III clinical trial suggested that people with MGMT hypermethylated glioblastoma treated with temozolomide plus veliparib may have extended survival following retreatment with temozolomide at first recurrence.

### What Patients Need to Know

Temozolomide is a chemotherapy classified as an alkylating agent. Veliparib, a PARP inhibitor, is designed to destroy cancer cells by preventing them from repairing their damaged DNA.

# Breast Cancer

**Researchers reported a number of important findings in breast cancer treatment at the 2022 Annual Meeting of the American Society of Clinical Oncology:**

- **The LUMINA trial results showed postoperative radiation therapy may be avoided following breast-conserving surgery for some people with luminal A-type breast cancer (page 11).**
- **Compared with single-agent chemotherapy, trastuzumab deruxtecan prolonged survival among trial participants with HER2-low breast cancer (page 11).**
- **The antibody-drug conjugate sacituzumab govitecan offered clinically significant benefits as therapy for heavily pretreated HR-positive/HER2-negative breast cancer (page 12).**
- **According to research presented, people with HR-positive/HER2-negative metastatic breast cancer can benefit from treatment with ribociclib, along with a change in their endocrine therapy (page 12).**

## Post-surgery radiation therapy may be safely omitted in some cases of luminal-A type breast cancer

According to results from the LUMINA trial, endocrine therapy following breast-conserving surgery may be sufficient for some people with luminal A-type breast cancer, without the need for postoperative radiation therapy.

### What Patients Need to Know

The results showed that luminal-A breast cancer patients age 55+ with low levels of the Ki67 biomarker may be able to avoid radiation therapy and the related side effects.

## Trastuzumab deruxtecan showed benefit in some cases of HER2-low breast cancer

The DESTINY-Breast04 trial showed the targeted therapy trastuzumab deruxtecan prolonged both progression-free survival (PFS) and overall survival (OS) among participants categorized as having HER2-low unresectable (inoperable) and/or metastatic breast cancer, as compared with standard single-agent chemotherapy.

### What Patients Need to Know

These results open the possibility of a targeted therapy option, rather than chemotherapy, for the treatment of certain cases of HER2-low breast cancer.

## Sacituzumab govitecan evaluated in the treatment of HR-positive/HER2-negative breast cancer

According to results of the TROPiCS-02 trial, sacituzumab govitecan offered statistically and clinically significant benefits for people with heavily pretreated HR-positive/HER2-negative breast cancer.

### What Patients Need to Know

HR-positive/HER2-negative breast cancer is most often treated with sequential endocrine therapy. If resistance to endocrine therapy develops, chemotherapy is recommended but is associated with declining efficacy (effectiveness) and increased side effects. Sacituzumab govitecan, an antibody-drug conjugate, is a potential treatment option for this population.

## Ribociclib combined with a change in endocrine therapy showed benefit in HR-positive/HER2-negative metastatic breast cancer

The combination of the CDK4/6 inhibitor ribociclib with endocrine therapy has been established as the standard of care for the treatment of HR-positive/HER2-negative metastatic breast cancer. The phase II MAINTAIN trial showed that people whose cancer progressed while on this treatment can benefit from continued treatment with ribociclib along with a change in their endocrine therapy.

### What Patients Need to Know

MAINTAIN is the first randomized trial to show the benefit of continuing ribociclib after disease progression, combined with a change in endocrine therapy.

# Colorectal Cancer

**Researchers reported a number of important findings in colorectal cancer treatment at the 2022 Annual Meeting of the American Society of Clinical Oncology:**

- **A phase II trial showed the benefit of 6 months of neoadjuvant treatment with dostarlimab-gxly in the treatment of dMMR rectal cancer (page 13).**
- **In the treatment of RAS/BRAF wild-type metastatic colorectal cancer, FOLFIRI plus panitumumab was more effective when given intermittently (page 14).**
- **In stage II colorectal cancer, trial results indicated that post-surgery chemotherapy could be skipped without compromising outcomes if cancer DNA was not present in the blood (page 15).**
- **Results from the MOUNTAINEER trial suggested that tucatinib in combination with trastuzumab produced durable responses in patients with previously treated HER2-positive metastatic colorectal cancer (page 15).**

## Dostarlimab-gxly evaluated as neoadjuvant treatment for dMMR rectal cancer

In a phase II trial of patients with locally advanced mismatch repair-deficient (dMMR) rectal cancer, 6 months of neoadjuvant (prior to surgery) treatment with the anti-PD-1 agent dostarlimab-gxly led to clinical complete responses in 100% of the study's first 14 participants.

The trial will ultimately enroll 30 patients with newly diagnosed clinical stage II and III dMMR rectal cancer.

### What Patients Need to Know

Clinical complete response was indicated by an endoscopic visual exam showing disappearance of the primary tumor along with a normal digital rectal exam.

## Intermittent treatment for RAS/BRAF wild-type metastatic colorectal cancer evaluated in phase II trial

Results of the phase II IMPROVE trial indicated that FOLFIRI (fluorouracil, leucovorin, irinotecan) plus panitumumab was more effective, with less toxicity, when given intermittently rather than continuously in the treatment of RAS/BRAF wild-type metastatic colorectal cancer.

### What Patients Need to Know

The FOLFIRI combination is a chemotherapy regimen. Panitumumab is a monoclonal antibody that may interfere with the ability of tumor cells to grow and spread.

## Liquid biopsy can help identify the need for post-surgery chemotherapy

According to results from the phase II DYNAMIC trial, post-surgery chemotherapy could be skipped without compromising recurrence-free survival in stage II colorectal cancer if cancer DNA was not present in the blood.

### What Patients Need to Know

The presence or absence of cancer DNA (also called circulating tumor DNA or ctDNA) was measured by a liquid biopsy.

## Combination therapy evaluated in HER2-positive metastatic colorectal cancer

Tucatinib in combination with trastuzumab produced durable responses in patients with previously treated HER2-positive metastatic colorectal cancer, according to results from the phase II MOUNTAINEER trial.

Tucatinib, a kinase inhibitor, works by blocking the action of an abnormal protein that signals cancer cells to multiply. Trastuzumab is a type of monoclonal antibody that binds to the HER2 protein found on some cancer cells, helping the immune system kill cancer cells.

### What Patients Need to Know

According to researchers, the combination of tucatinib and trastuzumab has the potential to become a new standard of care option, and results from the MOUNTAINEER trial provide rationale for continued investigation of this drug combination.

# Leukemia

**Researchers reported a number of important findings in leukemia treatment at the 2022 Annual Meeting of the American Society of Clinical Oncology:**

- **The addition of quizartinib to chemotherapy significantly improved overall survival in newly diagnosed FLT3-ITD-positive AML (page 16).**
- **Early-stage trial results suggested that combining magrolimab with azacitidine helped eliminate tumor cells in the treatment of TP53-mutated AML (page 17).**
- **According to results from a phase III trial, asciminib improved survival in people with CML when compared with bosutinib (page 17).**
- **A phase III trial showed that blinatumomab improved overall survival in the initial treatment of B-lineage ALL (page 18).**

## Benefit of investigational drug in the treatment of FLT3-ITD-positive AML

According to results from the phase III QuANTUM-First trial, the addition of the investigational drug quizartinib to chemotherapy significantly improved overall survival in newly diagnosed FLT3-ITD-positive acute myeloid leukemia (AML). The comparison was with chemotherapy given alone.

### What Patients Need to Know

Quizartinib, a targeted therapy, has been granted Priority Review by the FDA for the treatment of FLT3-ITD-positive AML in combination with the current standard treatment.

## Combining magrolimab and azacitidine studied in treatment of TP53-mutated AML

Combining magrolimab with the hypomethylating agent azacitidine in the treatment of TP53-mutated AML helped eliminate tumor cells by blocking the action of CD47, a checkpoint molecule. The findings of the phase Ib trial also suggested this combination has a favorable safety profile.

### What Patients Need to Know

Due to these encouraging early results, a phase III trial is underway to compare magrolimab plus azacitidine with the current standard of care therapies.

## Asciminib compared with bosutinib in the treatment of CML

According to results from the phase III ASCEMBL trial, asciminib improved survival in people with chronic myeloid leukemia (CML) when compared with the targeted therapy bosutinib.

### What Patients Need to Know

Asciminib is used in the treatment of patients with Philadelphia chromosome-positive CML, including those with the T315I mutation. The ASCEMBL trial is investigating its efficacy (effectiveness) and safety in the broader CML population.

## Blinatumomab evaluated as initial treatment for B-lineage ALL

Results of the phase III ECOG-ACRIN E1910 trial indicated that blinatumomab improved overall survival, with no measurable residual disease, in the initial treatment of B-lineage acute lymphoblastic leukemia (ALL). Blinatumomab works by bringing T cells (a type of white blood cell) into close proximity to leukemia cells so that the immune system can destroy the leukemia cells.

### What Patients Need to Know

Blinatumomab is currently approved by the FDA for the treatment of people with MRD-positive B-lineage ALL that is in remission, has recurred, or does not respond to treatment with chemotherapy. The findings of this trial suggested it is safe and effective as a first-line therapy.

# Lung Cancer

**Researchers reported a number of important findings in lung cancer treatment at the 2022 Annual Meeting of the American Society of Clinical Oncology:**

- **The combination of a VEGFR-2 inhibitor and immune checkpoint inhibitor improved survival in advanced NSCLC that progressed during prior therapy (page 19).**
- **Results from a phase II trial suggested the investigational drug adagrasib improved outcomes in people with NSCLC whose tumors are driven by a specific KRAS mutation (page 20).**
- **Compared with crizotinib, lorlatinib improved progression-free survival and lessened the risk of central nervous system progression in some patients with advanced ALK-positive non-small cell lung cancer (page 21).**
- **An analysis suggested that adding chemotherapy to immunotherapy in advanced NSCLC improved outcomes in most patient subgroups (page 21).**

## Combination of ramucirumab and pembrolizumab improved overall survival in the treatment of advanced NSCLC

The phase II Lung-MAP trial showed the combination of ramucirumab and the immune checkpoint inhibitor pembrolizumab improved overall survival in people with advanced non-small cell lung cancer (NSCLC) who experienced disease progression while treated with an immune checkpoint inhibitor and platinum-based chemotherapy. The comparison was with the investigator's choice of standard of care treatment.

### What Patients Need to Know

Ramucirumab attaches to and inhibits a molecule called VEGFR-2. This may restrain new blood vessels from forming, therefore reducing the supply of nutrients to the tumor.

## Investigational drug evaluated in KRAS-mutated NSCLC

Results from the phase II KRYSTAL-1 trial suggested the investigational drug adagrasib improved outcomes in people with NSCLC whose tumors are driven by a specific KRAS mutation called G12C. Adagrasib, a targeted therapy, also showed activity against lesions in the brain that metastasized from the lung tumors.

### What Patients Need to Know

Another targeted therapy, sotorasib, was approved by the FDA in 2021 for treatment of NSCLC with the KRAS G12C mutation.

## Analysis compared lorlatinib with crizotinib in advanced ALK-positive NSCLC

In previously untreated patients with advanced ALK-positive NSCLC, researchers found that progression-free survival and the risk of central nervous system progression were improved with the chemotherapy lorlatinib versus the targeted therapy crizotinib.

### What Patients Need to Know

The analysis resulted from the phase III CROWN trial. The improvement was seen whether or not the participant had associated brain metastases.

## Adding chemotherapy to immunotherapy improved outcomes in NSCLC

A pooled analysis suggested that most subgroups of patients with advanced NSCLC being treated with a combination of chemotherapy and immunotherapy may have better overall survival and progression-free survival outcomes than those receiving immunotherapy only. The patients whose outcomes were analyzed had a PD-L1 score $\geq$ 50%.

### What Patients Need to Know

The analysis showed that patients aged 75 or older receiving a combination of chemotherapy and immunotherapy may not have improved outcomes compared with those receiving immunotherapy only.

# Lymphoma

**Researchers reported a number of important findings in lymphoma treatment at the 2022 Annual Meeting of the American Society of Clinical Oncology:**

- **Results from a phase III trial showed benefit in adding brentuximab vedotin to a chemotherapy regimen in the treatment of Hodgkin lymphoma (page 22).**
- **A trial showed that ibrutinib plus venetoclax continued to provide benefit in the treatment of chronic lymphocytic leukemia and small lymphocytic lymphoma (page 23).**
- **Adding ibrutinib to standard therapy extended progression-free survival in elderly patients with mantle cell lymphoma (page 24).**
- **A phase I trial showed the potential for CAR T-cell therapy to be an effective treatment possibility for some people with B-cell lymphoma (page 24)**

## Substituting brentuximab vedotin for bleomycin showed benefit in Hodgkin lymphoma

In people with previously untreated stage III/IV classical Hodgkin lymphoma, significantly improved overall survival was shown with brentuximab vedotin plus doxorubicin, vinblastine and dacarbazine when compared with doxorubicin, bleomycin, vinblastine and dacarbazine. The results were from the phase III ECHELON-1 trial.

### What Patients Need to Know

Doxorubicin, bleomycin, vinblastine and dacarbazine are chemotherapies. Brentuximab vedotin is an antibody-drug conjugate, which is an antibody that has a chemotherapy drug attached to it.

## Ibrutinib plus venetoclax evaluated in the treatment of CLL and small lymphocytic lymphoma

According to results from the phase II CAPTIVATE trial, the first-line treatment of chronic lymphocytic leukemia (CLL) and small lymphocytic lymphoma with ibrutinib plus venetoclax continued to provide durable responses and clinically meaningful progression-free survival.

### What Patients Need to Know

The results suggested that fixed-duration ibrutinib plus venetoclax represents an all-oral, once-daily, chemotherapy-free regimen for previously untreated CLL or small lymphocytic lymphoma.

## Adding ibrutinib to standard therapy extended PFS in elderly patients with mantle cell lymphoma

Results from the phase III SHINE trial demonstrated that first-line treatment with ibrutinib, combined with the standard regimen of bendamustine/rituximab and rituximab maintenance, extended progression-free survival (PFS) in elderly patients with mantle cell lymphoma.

### What Patients Need to Know

Ibrutinib is a type of targeted therapy called a kinase inhibitor. It works by blocking the action of an abnormal protein that signals cancer cells to multiply.

## CAR T-cell therapy showed potential in treatment of some B-cell lymphomas

A phase I trial suggested that chimeric antigen receptor (CAR) T-cell therapy could be an effective treatment possibility for some people with B-cell lymphoma. The study participants, who had received more than two prior systemic therapies, had advanced B-cell lymphoma with CD20 expression that had relapsed (recurred) or was refractory (resistant to treatment).

### What Patients Need to Know

CAR T-cell therapy is a type of immunotherapy that uses a person's own T-cells (a type of white blood cell) to treat certain blood cancers.

# Melanoma

**Researchers reported a number of important findings in melanoma treatment at the 2022 Annual Meeting of the American Society of Clinical Oncology:**

- **Adjuvant pembrolizumab improved relapse-free survival in the treatment of stage IIB/IIC melanoma (page 25).**
- **Immunotherapy was compared with chemotherapy in the treatment of advanced BRAF-mutant melanoma (page 26).**
- **In the treatment of stage III melanoma, the combination of relatlimab and nivolumab given before surgery was shown to be safe and effective (page 26).**
- **In January 2022, the FDA approved the immunotherapy tebentafusp-tebn for previously untreated HLA-A*02:01-positive metastatic uveal melanoma (page 27).**

## Pembrolizumab improved RFS and DMFS in stage IIB/IIC melanoma

In terms of relapse-free survival (RFS), an update from the KEYNOTE-716 trial confirmed the benefits of adjuvant (post-surgery) pembrolizumab in stage IIB/IIC melanoma. Pembrolizumab is a type of immunotherapy that helps the immune system detect and fight cancer cells.

### What Patients Need to Know

The use of adjuvant pembrolizumab also showed improvement in distant metastasis-free survival (DMFS).

## Immunotherapy shown to be preferred treatment in advanced BRAF-mutant melanoma

The DREAMseq trial compared the combination of dabrafenib plus trametinib with nivolumab plus ipilimumab in the treatment of advanced BRAF-mutant melanoma. Dabrafenib and trametinib are chemotherapies. Nivolumab and ipilimumab are immunotherapies.

### What Patients Need to Know

The trial results showed the preferred treatment sequence for a majority of patients to be the combination of nivolumab plus ipilimumab followed, if necessary, by BRAF and MEK inhibitor therapy.

## Checkpoint inhibitors safe and effective as neoadjuvant treatment for stage III melanoma

In a phase II trial, neoadjuvant (prior to surgery) relatlimab plus nivolumab was shown to be safe and effective in the treatment of stage III melanoma.

### What Patients Need to Know

Relatlimab and nivolumab are drugs that block proteins (called checkpoints) that are made by some cancer cells. These checkpoints can sometimes keep T cells (a type of white blood cell) from killing cancer cells.

## Tebentafusp-tebn approved by FDA for treatment of HLA-A*02:01-positive metastatic uveal melanoma

In January 2022, the FDA approved tebentafusp-tebn for patients with previously untreated HLA-A*02:01-positive metastatic uveal melanoma. It is the first drug approved by the FDA for the treatment of metastatic uveal melanoma.

### What Patients Need to Know

Tebentafusp-tebn, an immunotherapy, is designed to mobilize and activate T cells (a type of white blood cell) to fight uveal melanoma tumor cells.

# Oral, Head and Neck Cancers

**Researchers reported a number of important findings in the treatment of oral, neck and head cancers at the 2022 Annual Meeting of the American Society of Clinical Oncology:**

- **Radiotherapy alone versus chemotherapy plus radiotherapy evaluated in the treatment of intermediate risk nasopharyngeal carcinoma (page 29).**
- **The investigational drug tislelizumab combined with chemotherapy showed benefit in the treatment of advanced or recurrent nasopharyngeal cancer (page 29).**
- **A phase III trial showed that cisplatin given weekly was better tolerated than cisplatin given every 3 weeks in the treatment of locally advanced HNSCC (page 29).**
- **Clinical benefit was shown in the treatment of recurrent or metastatic HNSCC by combining cabozantinib and pembrolizumab (page 30).**

## Radiotherapy alone studied in intermediate risk nasopharyngeal carcinoma

A phase III trial compared radiotherapy alone versus chemotherapy plus radiotherapy (CCRT) in the treatment of intermediate risk nasopharyngeal carcinoma.

### What Patients Need to Know

The trial results indicated radiotherapy alone provided comparable disease control and less toxicity compared with CCRT.

## Investigational immunotherapy showed benefit in advanced or recurrent nasopharyngeal cancer

Results from the RATIONALE-309 trial showed that the investigational drug tislelizumab combined with chemotherapy helped people with advanced or recurrent nasopharyngeal cancer live longer.

### What Patients Need to Know

Tislelizumab is a type of immunotherapy called a PD-1 inhibitor, an anticancer drug that blocks the activity of PD-1 immune checkpoint proteins present on the surface of cells.

## Cisplatin better tolerated when given weekly in the treatment of locally advanced HNSCC

In people with locally advanced head and neck squamous cell carcinoma (HNSCC), cisplatin given weekly was better tolerated than cisplatin given every 3 weeks, with decreased treatment interruptions, hospitalizations and toxicity.

### What Patients Need to Know

The results were from a phase III trial that evaluated the frequency of giving cisplatin, a chemotherapy, in combination with radiotherapy.

## Clinical benefit shown in combining cabozantinib and pembrolizumab for recurrent or metastatic HNSCC

In the treatment of recurrent or metastatic head and neck squamous cell carcinoma (HNSCC), a phase II trial showed clinical benefit in a combination of the tyrosine kinase inhibitor cabozantinib and the immune checkpoint inhibitor pembrolizumab.

### What Patients Need to Know

Researchers reported that the cabozantinib plus pembrolizumab regimen was well-tolerated and warrants further exploration in the treatment of recurrent or metastatic HNSCC.

# Ovarian Cancer

**Researchers reported a number of important findings in ovarian cancer treatment at the 2022 Annual Meeting of the American Society of Clinical Oncology:**

- **The ATHENA-MONO trial found that maintenance rucaparib significantly improved progression-free survival among patients with advanced ovarian cancer (page 31).**
- **Bevacizumab was shown to improve survival when added to frontline chemotherapy in the treatment of advanced ovarian clear cell carcinoma (page 32).**
- **The investigational drug relacorilant in combination with nab-paclitaxel showed an improvement in overall survival in platinum-resistant or platinum-refractory ovarian cancer (page 32).**
- **In advanced ovarian cancer, an analysis showed progression-free survival was substantially prolonged when niraparib was given after first-line platinum-based chemotherapy (page 33).**

## Rucaparib given after first-line treatment improved PFS in advanced ovarian cancer

The phase III ATHENA-MONO trial found that maintenance rucaparib significantly improved progression-free survival (PFS) versus placebo in the treatment of advanced ovarian cancer, including homologous recombination deficiency (HRD)-positive disease. Rucaparib is a PARP inhibitor, which is designed to destroy cancer cells by preventing them from repairing their damaged DNA.

### What Patients Need to Know

In the trial, rucaparib was given after patients had completed first-line treatment consisting of surgery and chemotherapy.

## Retrospective analysis showed benefit of frontline bevacizumab for ovarian clear cell carcinoma

According to a retrospective analysis of patients treated in Japan from 2008 to 2018, bevacizumab improved progression-free survival and overall survival when added to frontline chemotherapy in the treatment of advanced ovarian clear cell carcinoma.

### What Patients Need to Know

Vascular endothelial growth factor (VEGF) is a substance that can stimulate blood vessels to penetrate tumors and supply them with the oxygen, minerals and other nutrients that feed their growth. Bevacizumab works by stopping VEGF from stimulating the growth of new blood vessels.

## Investigational drug studied in treatment of platinum-resistant or platinum-refractory ovarian cancer

According to results from a phase II trial, relacorilant in combination with nab-paclitaxel demonstrated signs of an improvement in overall survival (OS) in patients with platinum-resistant or platinum-refractory ovarian cancer.

### What Patients Need to Know

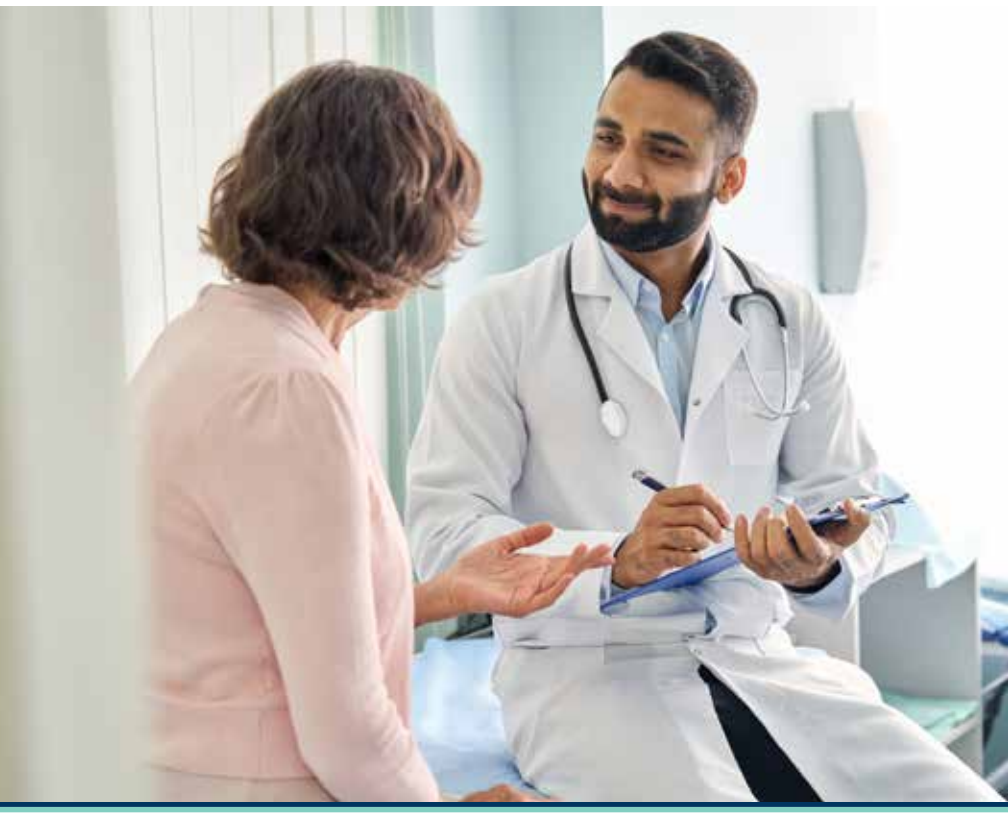
Cortisol modulation is emerging as a promising therapeutic approach in oncology. Relacorilant is an investigational oral medication designed to block a specific cortisol receptor. Nab-paclitaxel is a drug that combines the chemotherapy paclitaxel with a protein called albumin.

## Progression-free survival prolonged with niraparib given after first-line platinum-based chemotherapy

In the treatment of advanced ovarian cancer, an analysis of a subgroup of PRIME trial participants showed progression-free survival was substantially prolonged when niraparib was given after first-line platinum-based chemotherapy. The benefit was seen regardless of the response to the first-line chemotherapy.

### What Patients Need to Know

Niraparib, a PARP inhibitor, is currently approved to treat some types of ovarian cancer. It is designed to destroy cancer cells by preventing them from repairing their damaged DNA.



# Pancreatic Cancer

**Researchers reported a number of important findings in pancreatic cancer treatment at the 2022 Annual Meeting of the American Society of Clinical Oncology:**

- **Adding a targeted therapy to chemotherapy showed benefit in the treatment of certain types of pancreatic cancer (page 35).**
- **Results from a national trial indicated a benefit to combining chemotherapy and immunotherapy in the treatment of metastatic pancreatic cancer (page 35).**
- **The NEONAX trial examined the timing of gemcitabine plus nab-paclitaxel in the treatment of operable pancreatic cancer (page 36).**
- **Sequential treatment with nab-paclitaxel/gemcitabine followed by modified FOLFOX improved outcomes in people with metastatic pancreatic cancer (page 36).**

## Adding nimotuzumab to chemotherapy beneficial in KRAS wild-type, locally advanced or metastatic pancreatic cancer

The phase III NOTABLE trial showed that adding the targeted therapy nimotuzumab to the chemotherapy gemcitabine was beneficial in the treatment of KRAS wild-type, locally advanced or metastatic pancreatic cancer.

### What Patients Need to Know

Nimotuzumab is an antibody that targets the epidermal growth factor receptor (EGFR) on the surface of cells. It is designed to slow or stop the growth of tumor cells that express higher levels of EGFR.

## Combinations of chemotherapy and immunotherapy showed benefit in treatment of metastatic pancreatic cancer

According to findings from a national clinical trial, combinations of chemotherapy and immunotherapy showed benefit in the treatment of metastatic pancreatic cancer. The drugs evaluated were two chemotherapies (nab-paclitaxel and gemcitabine) and the anti-PD-1 therapy nivolumab.

### What Patients Need to Know

The findings also included the identification of immune system biomarkers associated with better outcomes. Researchers hope to evaluate these biomarkers in future trials to see if they allow for the identification of people whose pancreatic cancer will respond best to this and other combination therapies.

## Timing of chemotherapy relative to surgery examined in pancreatic cancer

The phase II NEONAX trial examined the timing, relative to surgery, of the administration of gemcitabine plus nab-paclitaxel in the treatment of resectable (operable) pancreatic cancer. Gemcitabine and nab-paclitaxel are both chemotherapies.

### What Patients Need to Know

Gemcitabine plus nab-paclitaxel given either prior to surgery or around the time of surgery showed promising results compared to being given after surgery. It is a promising option for resectable pancreatic cancer.

## Sequential treatment studied in metastatic pancreatic cancer

According to the phase II SEQUENCE trial, sequential treatment with nab-paclitaxel/gemcitabine followed by modified FOLFOX (oxaliplatin, leucovorin and 5-fluorouracil) improved outcomes in people with metastatic pancreatic cancer, compared with the standard nab-paclitaxel/gemcitabine regimen.

### What Patients Need to Know

The sequential treatment showed significantly higher clinical activity than the standard treatment, with a manageable safety profile. This regimen represents a feasible new option for first-line treatment of metastatic pancreatic cancer.

# Prostate Cancer

**Researchers reported a number of important findings in prostate cancer treatment at the 2022 Annual Meeting of the American Society of Clinical Oncology:**

- **A phase II trial compared the targeted therapy Lu-PSMA-617 with chemotherapy in the treatment of PSMA-positive, metastatic castration-resistant prostate cancer (page 38).**
- **Olaparib, in combination with abiraterone, significantly improved radiographic progression-free survival versus abiraterone alone in treating metastatic castration-resistant prostate cancer (page 38).**
- **An update from the ENZAMET trial showed the addition of enzalutamide to testosterone suppression continued to provide overall survival improvement in the treatment of metastatic hormone-sensitive prostate cancer (page 39).**

## Lu-PSMA-617 improved progression-free survival in PSMA-positive mCRPC

Results from the phase II TheraP trial suggested that, compared with the chemotherapy cabazitaxel, Lu-PSMA-617 achieved longer progression-free survival in PSMA-positive metastatic castration-resistant prostate cancer (mCRPC) that had progressed after treatment with docetaxel and an androgen receptor pathway inhibitor.

### What Patients Need to Know

Lu-PSMA-617 targets PSMA, a molecule made by prostate cancer cells. In March 2022, it was approved for the treatment of PSMA-positive mCRPC that was previously treated with androgen receptor pathway inhibition and taxane-based chemotherapy.

## PARP inhibitor in combination with hormone therapy improved rPFS in mCRPC

Results from the phase III PROpel trial showed that olaparib, in combination with abiraterone, significantly improved radiographic progression-free survival (rPFS) versus abiraterone alone as a first-line treatment for metastatic castration-resistant prostate cancer (mCRPC).

### What Patients Need to Know

Olaparib is a PARP inhibitor, which is designed to destroy cancer cells by preventing them from repairing their damaged DNA. Abiraterone, a hormone therapy, is typically given only when prostate cancer stops responding to other types of hormone therapy.

## Adding enzalutamide to testosterone suppression in the treatment of mHSPC evaluated

According to an update from the phase III ENZAMET trial, the addition of the hormone therapy enzalutamide to testosterone suppression continued to provide a significant improvement in overall survival in the treatment of metastatic hormone-sensitive prostate cancer (mHSPC).

### What Patients Need to Know

Investigators suggested the combination therapy of testosterone suppression, enzalutamide and the chemotherapy docetaxel might best be used for patients with synchronous high-volume mHSPC.

# Sarcoma

**Researchers reported a number of important findings in sarcoma treatment at the 2022 Annual Meeting of the American Society of Clinical Oncology:**

- **Compared with other standard of care regimens, the rEECur trial found the use of high-dose ifosfamide improved event-free survival in the treatment of recurrent and primary refractory Ewing sarcomas (page 41).**
- **A phase II trial evaluated letetresgene autoleucel in the treatment of advanced and metastatic myxoid/round cell liposarcoma (page 41).**
- **An international trial showed that 3 cycles of neoadjuvant epirubicine plus ifosfamide was superior to a histology-tailored regimen in almost all subtypes of localized high-risk soft tissue sarcomas (page 42).**
- **Results from a phase II trial indicated that immunotherapy given before surgery was associated with favorable responses in undifferentiated pleomorphic sarcoma and recurrent dedifferentiated liposarcoma (page 42).**

## High-dose ifosfamide found to be superior in treatment of recurrent and primary refractory Ewing sarcomas

According to the phase II/III rEECur trial, the use of high-dose ifosfamide was found to be superior for treating recurrent and primary refractory Ewing sarcomas compared with three other standard of care chemotherapy regimens. The primary outcome measured was event-free survival.

### What Patients Need to Know

The trial randomly assigned participants to either topotecan plus cyclophosphamide, irinotecan plus temozolomide, gemcitabine plus docetaxel or high-dose ifosfamide.

## Investigational cellular therapy studied in treatment of MRCLS

According to data from a phase II trial, a form of cellular therapy called letetresgene autoleucel (lete-cel) demonstrated anti-tumor activity with a tolerable safety profile in patients with advanced and metastatic myxoid/round cell liposarcoma (MRCLS).

### What Patients Need to Know

Lete-cel is an investigational T-cell receptor therapy targeted toward NY-ESO-01, an antigen (foreign substance) expressed in multiple tumor types, including the majority of MRCLS tumors.

## Neoadjuvant chemotherapy in high-risk soft tissue sarcomas evaluated

In the treatment of localized high-risk soft tissue sarcomas, the results of an international trial showed that 3 cycles of epirubicine plus ifosfamide (EI) given prior to surgery was superior to a regimen based on subtype (histology-tailored).

### What Patients Need to Know

Trial participants had localized high-risk undifferentiated pleomorphic sarcoma, leiomyosarcoma, malignant peripheral nerve sheath tumor, synovial sarcoma or myxoid liposarcoma (MLPS) of the extremities or trunk wall. MLPS was the only subtype where EI and histology-tailored regimens seemed equivalent.

## Immunotherapy before surgery associated with favorable responses in UPS and DDLPS

The results of a phase II trial suggested that immunotherapy before surgery was associated with favorable responses and outcomes in undifferentiated pleomorphic sarcoma (UPS) and recurrent dedifferentiated liposarcoma (DDLPS). Toxicities were manageable and no new safety concerns were identified.

### What Patients Need to Know

Trial participants were randomly assigned nivolumab monotherapy or nivolumab/ipilimumab combination therapy, followed by surgery. Participants with UPS received concurrent radiation therapy.

# Resources

**Cancer*Care*®**
800-813-HOPE (800-813-4673)
www.cancercare.org

**American Cancer Society**
800-227-2345
www.cancer.org

**Cancer.Net**
888-651-3038
www.cancer.net

**Cancer Support Community**
888-793-9355
www.cancersupportcommunity.org

**National Cancer Institute**
800-422-6237
www.cancer.gov

**National Coalition for Cancer Survivorship**
877-622-7937
www.canceradvocacy.org

**National Comprehensive Cancer Network**
215-690-0300
www.nccn.org

**Medicine Assistance Tool**
www.medicineassistancetool.com

## CLINICAL TRIALS WEBSITES

**ClinicalTrials.gov**
www.clinicaltrials.gov

**EmergingMed**
www.emergingmed.com

**National Cancer Institute**
www.cancer.gov

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