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Imfinzi approved in the EU as first and only perioperative immunotherapy for muscle-invasive bladder cancer

Approval based on NIAGARA Phase III trial results which showed a 32% reduction in the risk of recurrence and a 25% reduction in the risk of death for the Imfinzi regimen vs. neoadjuvant chemotherapy alone

AstraZeneca's *Imfinzi* (durvalumab) has been approved in the European Union (EU) for the treatment of adult patients with resectable muscle-invasive bladder cancer (MIBC) in combination with gemcitabine and cisplatin as neoadjuvant treatment, followed by *Imfinzi* as monotherapy adjuvant treatment after radical cystectomy (surgery to remove the bladder).

The approval by the European Commission follows the [positive opinion](#) of the Committee for Medicinal Products for Human Use and is based on results from the [NIAGARA](#) Phase III trial, which were published in [The New England Journal of Medicine](#).

In a planned interim analysis, the *Imfinzi*-based perioperative regimen demonstrated a statistically significant 32% reduction in the risk of disease progression, recurrence, not undergoing surgery, or death versus neoadjuvant chemotherapy with radical cystectomy alone (based on event-free survival [EFS] hazard ratio [HR] of 0.68; 95% confidence interval [CI] 0.56-0.82; $p < 0.0001$). Estimated median EFS was not yet reached for the *Imfinzi* arm versus 46.1 months for the comparator arm. An estimated 67.8% of patients treated with the regimen were event free at two years compared to 59.8% in the comparator arm.

Results from the key secondary endpoint of overall survival (OS) showed that the *Imfinzi*-based perioperative regimen reduced the risk of death by 25% versus the comparator arm (based on OS HR of 0.75; 95% CI 0.59-0.93; $p = 0.0106$). Median survival was not yet reached for either arm. An estimated 82.2% of patients treated with the regimen were alive at two years compared to 75.2% in the comparator arm.

In 2024, over 35,000 people in the five major European countries were treated for MIBC.¹ Despite this representing a curative-intent setting, many patients experience disease recurrence after surgery with current standard-of-care neoadjuvant chemotherapy.²

Dr Michiel Van der Heijden, medical oncologist and Group Leader at the Netherlands Cancer Institute, and investigator in the NIAGARA trial, said: "The durvalumab-based perioperative regimen is an important new treatment option for patients in Europe with muscle-invasive bladder cancer, as currently nearly half experience disease recurrence despite treatment with neoadjuvant chemotherapy and surgery to remove the bladder. The NIAGARA results showed how this regimen reduced the risk of recurrence by nearly a third and significantly extended survival, underscoring its potential to transform clinical practice in this curative-intent setting."

Dave Fredrickson, Executive Vice President, Oncology Haematology Business Unit, AstraZeneca, said: "*Imfinzi* is poised to transform the standard of care for muscle-invasive bladder cancer in Europe as the first and only perioperative immunotherapy for these patients. In the NIAGARA Phase III trial, more than 80 per cent of patients were still alive two years after treatment with the *Imfinzi* regimen, setting a new survival benchmark for a disease that has seen few treatment advances in decades."

Imfinzi was generally well tolerated, and no new safety signals were observed in the neoadjuvant and adjuvant settings. Further, adding *Imfinzi* to neoadjuvant chemotherapy was consistent with the known profile for this combination and did not compromise patients' ability to complete surgery compared to neoadjuvant chemotherapy alone. Immune-mediated adverse events were consistent with the known profile of *Imfinzi*, manageable and mostly low-grade.

The European Society for Medical Oncology (ESMO) has published its assessment of the NIAGARA regimen against the Magnitude of Clinical Benefit Scale (MCBS), awarding it the highest possible grade of "A" in the curative setting.³ The ESMO-MCBS facilitates improved decision-making regarding the value of anti-cancer therapies and is used in several ways, including in clinical guidelines and in health technology assessments in a growing number of countries.⁴

Imfinzi is [approved in the US](#) and other countries in this setting based on the NIAGARA results. Regulatory applications for this indication are currently under review in Japan and several other countries. *Imfinzi* is also approved in other curative-intent settings based on the PACIFIC and AEGEAN Phase III trials in non-small cell lung cancer (NSCLC), and in limited-stage small cell lung cancer (SCLC) based on the ADRIATIC Phase III trial.

Notes

Muscle-invasive bladder cancer

Bladder cancer is the 9th most common cancer in the world, with more than 614,000 patients diagnosed each year.⁵ The most common type of bladder cancer is urothelial carcinoma, which begins in the urothelial cells of the urinary tract.⁶ Bladder cancer is considered muscle-invasive when there is evidence of the tumour invading the muscle wall of the bladder but no distant metastases.⁶ In MIBC, approximately 50% of patients who undergo bladder removal surgery experience disease recurrence.² Treatment options that prevent disease recurrence after surgery are critically needed in this curative-intent setting.

NIAGARA

NIAGARA is a randomised, open-label, multi-centre, global Phase III trial evaluating perioperative *Imfinzi* as treatment for patients with MIBC before and after radical cystectomy. In the trial, 1,063 patients were randomised to receive four cycles of *Imfinzi* plus neoadjuvant chemotherapy prior to cystectomy followed by eight cycles of *Imfinzi* monotherapy, or neoadjuvant chemotherapy alone prior to cystectomy with no further treatment after surgery.

NIAGARA is the largest global Phase III trial in this setting.

The trial is being conducted at 192 centres in 22 countries across North America, South America, Europe, Australia and Asia. Its dual primary endpoints are EFS and pathologic complete response at the time of cystectomy. Key secondary endpoints are OS and safety.

Imfinzi

Imfinzi (durvalumab) is a human monoclonal antibody that binds to the PD-L1 protein and blocks the interaction of PD-L1 with the PD-1 and CD80 proteins, countering the tumour's immune-evading tactics and releasing the inhibition of immune responses.

In May 2025, *Imfinzi* plus standard-of-care Bacillus Calmette-Guérin induction and maintenance therapy met the primary endpoint of disease-free survival for patients with high-risk non-muscle-invasive bladder cancer in the POTOMAC Phase III trial.

In lung cancer, *Imfinzi* is the global standard of care based on OS in the curative-intent setting of unresectable, Stage III NSCLC in patients whose disease has not progressed after chemoradiotherapy (CRT). Additionally, *Imfinzi* is approved as a perioperative treatment in combination with neoadjuvant chemotherapy in resectable NSCLC, and in combination with a short course of *Imjudo* (tremelimumab) and chemotherapy for the treatment of metastatic NSCLC. *Imfinzi* is also approved for limited-stage SCLC in patients whose disease has not progressed following concurrent platinum-based CRT; and in combination with chemotherapy for the treatment of extensive-stage SCLC.

Imfinzi is also approved in combination with chemotherapy in locally advanced or metastatic biliary tract cancer and in combination with *Imjudo* in unresectable hepatocellular carcinoma (HCC). *Imfinzi* is also approved as a monotherapy in unresectable HCC in Japan and the EU.

In March 2025, perioperative *Imfinzi* added to standard-of-care chemotherapy met the primary endpoint of EFS in the MATTERHORN Phase III trial in resectable gastric and gastroesophageal junction cancers.

Imfinzi in combination with chemotherapy followed by *Imfinzi* monotherapy is approved as a 1st-line treatment for primary advanced or recurrent endometrial cancer (mismatch repair deficient disease only in the US and EU). *Imfinzi* in combination with chemotherapy followed by *Lynparza* (olaparib) and *Imfinzi* is approved for patients with mismatch repair proficient advanced or recurrent endometrial cancer in the EU and Japan.

Since the first approval in May 2017, more than 414,000 patients have been treated with *Imfinzi*. As part of a broad development programme, *Imfinzi* is being tested as a single treatment and in combinations with other anti-cancer treatments for patients with NSCLC, bladder cancer, breast cancer, ovarian cancer and several gastrointestinal cancers.

AstraZeneca in immuno-oncology (IO)

AstraZeneca is a pioneer in introducing the concept of immunotherapy into dedicated clinical areas of high unmet medical need. The Company has a comprehensive and diverse IO portfolio and pipeline anchored in immunotherapies designed to overcome evasion of the anti-tumour immune response and stimulate the body's immune system to attack tumours.

AstraZeneca strives to redefine cancer care and help transform outcomes for patients with *Imfinzi* as a monotherapy and in combination with *Imjudo* as well as other novel immunotherapies and modalities. The Company is also investigating next-generation immunotherapies like bispecific antibodies and therapeutics that harness different aspects of immunity to target cancer, including cell therapy and T-cell engagers.

AstraZeneca is pursuing an innovative clinical strategy to bring IO-based therapies that deliver long-term survival to new settings across a wide range of cancer types. The Company is focused on exploring novel combination approaches to help prevent treatment resistance and drive longer immune responses. With an extensive clinical programme, the Company also champions the use of IO treatment in earlier disease stages, where there is the greatest potential for cure.

AstraZeneca in oncology

AstraZeneca is leading a revolution in oncology with the ambition to provide cures for cancer in every form, following the science to understand cancer and all its complexities to discover, develop and deliver life-changing medicines to patients.

The Company's focus is on some of the most challenging cancers. It is through persistent innovation that AstraZeneca has built one of the most diverse portfolios and pipelines in the industry, with the potential to catalyse changes in the practice of medicine and transform the patient experience.

AstraZeneca has the vision to redefine cancer care and, one day, eliminate cancer as a cause of death.

AstraZeneca

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Contacts

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