




EORTC
European Organisation for Research
and Treatment of Cancer



ECRF
EORTC Cancer Research Fund



A selection of EORTC
practice-changing
cancer clinical trials



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Introduction

Since its founding in 1962, the European Organisation for Research and Treatment of Cancer (EORTC) has enrolled over 220,000 patients in clinical trials across a wide range of tumour types. Many of these studies have led to practice-changing insights that are now used worldwide to improve, extend, and save lives.

Unlike trials driven by marketing authorisation, EORTC's research is guided by patient-centred priorities and clinical relevance. Our focus is on optimising existing treatments, minimising side effects, and enhancing quality of life—addressing real-world questions that matter to patients, clinicians, and society.

This booklet highlights EORTC clinical trials that have transformed cancer care. It will be updated regularly to reflect new findings that continue to shape the future of oncology.

A steady history of practice-changing clinical trials.



01



Brain Tumours

Brain cancer: a rare and deadly type of cancer

Brain cancer accounts for about three percent of global cancer cases^[1]. Approximately fewer than one out of five individuals with brain cancer survive for five years or more after diagnosis^[2]. Brain tumours include various cancer types. Primary brain tumours originate in brain tissue^[3].

Despite decades of research, brain tumours remain one of the deadliest cancers. Their resistance to most treatments is partly due to the unique properties of neural tissues.

EORTC Brain Tumour Group: setting the standards of treatment

The EORTC Brain Tumour Group researches adult brain tumours, aiming to enhance glioblastoma patient treatments and outcomes. They have established standard therapies, including neurosurgery, radiotherapy, and chemotherapy, through their clinical trials. Ongoing trials test novel approaches such as investigational agents and combined treatment methods.

REVOLUTIONISING GLIOBLASTOMA CARE: THE IMPACT OF PERSONALISED TREATMENT^[4]. (EORTC 26981/22981)^[a]

STUDY COORDINATOR:
PROF. ROGER STUPP (USA)

Understanding Glioblastoma: a deadly brain cancer

Glioblastoma, a deadly brain cancer, affects all ages. Classified as grade 4 (the most serious and aggressive type of tumour) by the World Health Organisation, they represent, along with grade 3 gliomas, the majority of brain tumours^[5]. The glioblastoma incidence rate is one in 10,000 of all cancers^[6]. Glioblastomas represent 16% of all primary brain tumours and are usually fatal. Few patients survive following their diagnosis (only one percent survive for ten years or more)^[7, 8].

A game-changing trial: EORTC's impact on glioblastoma patient survival

This EORTC trial was instrumental to the **prolonged survival of glioblastoma patients and remains the standard of care to date**. Prior to this trial, the only available treatment was surgery to remove the tumour, followed by radiotherapy to the brain. That treatment, however, had very little impact on patients' survival. The EORTC trial successfully showed that a drug called

temozolomide allowed many patients to live longer when taken as a pill after surgery and in addition to radiotherapy. Taking this pill did not cause too many adverse effects for patients, who reported that on average, their quality of life was no worse than that reported by the patients who were not taking the drug.

Paving the way for personalised treatments: identifying the first predictive marker for brain cancer

Since a large number of patients taking this drug saw an improvement, researchers tried to identify ways in which they could predict which patients would benefit (live longer) from this treatment and which would have less chance of doing so. They succeeded in identifying a gene as the first predictive marker in brain tumours (methylation of the MGMT promoter) associated with a better response to the treatment. To date, this molecular test is used in all patients with glioblastoma and was the one that introduced the concept of personalised treatment in neuro-oncology. **This personalised combination treatment has become the standard of care for newly diagnosed glioblastoma patients worldwide.**

STUDY COORDINATOR:
PROF. MARTIN J. VAN DEN BENT
(NL)

CATNON STUDY^[9] **IMPROVING SURVIVAL OF
BRAIN TUMOUR PATIENTS BY EFFECTIVELY
COMBINING RADIOTHERAPY AND
CHEMOTHERAPY (TEMOZOLOMIDE)
(EORTC 26053/22054)^[b]**

**Rare and challenging:
understanding anaplastic gliomas**

Anaplastic gliomas are rare brain tumours, with an incidence of just one in 100,000 people^[c] annually. In 70-80% of cases, patients carry a gene alteration called the IDH gene. When the trial was designed, temozolomide (TMZ) was shown to improve survival in grade 4 glioma patients, but not in grade 3 glioma patients with the IDH gene mutation.

**Unlocking hope: doubling survival rates
for anaplastic glioma patients**

The CATNON trial successfully showed that when grade 3 patients are given a combination treatment in a specific order– radiotherapy first, followed by administration of the drug temozolomide - their survival rate doubles.

This has been an important study in the field of brain tumour providing a significant increase in the survival of patients with anaplastic gliomas to date.

02

Breast Cancer

Understanding Breast Cancer: A global challenge

Breast cancer is the most diagnosed and common cause of cancer deaths in women worldwide (one in six cancer deaths)^[d]. In 2020 alone, 2.3 million women were diagnosed. While incidence rates vary globally, approximately one in every eight women in developed countries face a diagnosis in their lifetime^[e].

Defining early-stage breast cancer

Early-stage breast cancer is defined as being confined to the breast (up to 5cm) and/or regional lymph nodes without distant metastases. With treatment, women with early breast cancer have a very good prognosis. Primary treatment is surgery, and additional therapies like chemotherapy or radiotherapy aim to reduce recurrence risk and improve survival while minimising toxicities for a better quality of life.

EORTC Breast Cancer Group Clinical Trials: advancing patient quality of life

The three EORTC Breast Cancer Group's clinical trials that follow are examples of reducing treatment (without compromising patients' survival rates) while having a significant increase in their quality of life.



MINDACT STUDY^[10]: USING GENE SIGNATURES TO DETERMINE OPTIMAL TREATMENT IN EARLY BREAST CANCER. (EORTC 10041)^[f]

*STUDY COORDINATORS:
PROF FATIMA CARDOSO (PT)*

Redefining early breast cancer treatment

Studies over the years have shown that treating women diagnosed with early breast cancer with chemotherapy after surgery (adjuvant chemotherapy) has a significant effect on their overall survival. Chemotherapy, however, can negatively affect patients' overall health and quality of life in the long term. The MINDACT study sought to investigate whether women diagnosed with early breast cancer that had not spread beyond the breast and/or the nearby lymph nodes (the masses of tissue that help the body to fight disease), could be spared chemotherapy treatment after surgery without affecting their overall survival rate.

MammaPrint® test: a breakthrough in personalised early breast cancer treatment

This led to the confirmation of MammaPrint®, a groundbreaking test examining 70 genes to identify patients at low genomic risk who could avoid chemotherapy. Among those identified as low genomic risk, 94.7% remained disease-free after five years.

Long-term monitoring^[11] of these patients at 8.7 years confirmed these findings, with 95.1% free of disease and metastasis after five years. The MINDACT trial has proven instrumental in reducing treatment where possible and paving the way to optimised care and quality of life for patients.

**SPARING WOMEN WITH EARLY BREAST
CANCER FROM MASTECTOMY^[12]**
(EORTC 10801)^[g]

*STUDY COORDINATOR:
PROF HARRY BARTELINK (NL) AND
PROF J.A. VAN DONGEN (NL)*

This EORTC clinical trial was part of a series that **proved that treatment focussed on preserving breast instead of mastectomy (removal of the breast) could be used in certain women diagnosed with early breast cancer.** It showed that patient survival was identical in those receiving the two treatment options. This is an important study, as it enabled a change in the standard of practice, improving the patients' quality of life while equally helping doctors to better inform their patients of their options. To date, for most women diagnosed with early breast cancer, breast conservation treatment remains an option, sparing them from medically unnecessary, more extensive surgery (removal of the breast).

AMAROS STUDY^[13]: CONFIRMING RADIATION AS AN EFFECTIVE TREATMENT ALTERNATIVE TO SURGERY, FOR WOMEN WITH EARLY BREAST CANCER. (EORTC 10981/22023)^[h]

*STUDY COORDINATOR:
PROF. EMIEL RUTGERS (NL)*

In early breast cancer, doctors first assess whether the tumour has affected the lymph nodes via sentinel node biopsy to determine treatment needs. If positive, axillary dissection (removal of the lymph nodes in the armpit) is done, often causing long-term health issues and impacting patients' quality of life.

Sparing women from lifelong health complications

The AMAROS clinical trial sought to investigate whether, in cases of a positive sentinel biopsy, radiation of the affected area could be an alternative to surgical removal, thus sparing women from permanent health complications following the surgical removal of the lymph nodes.

The EORTC clinical trial found radiation to be an effective alternative to surgical removal in regional control of the tumour.

03

Soft Tissue & Bone Sarcoma

Understanding Sarcomas

Sarcomas, a rare group of cancers affecting soft tissue and bone, present diagnostic and treatment challenges due to their low global incidence and limited research interest. There are over 70 forms of sarcoma, complicating efforts to enhance care. Pharmaceutical companies' reluctance to invest in new drugs and limited funding sources worldwide add to the challenge. Treatment options have historically been limited to chemotherapy, with poor outcomes for patients in advanced stages.

EORTC researchers have made significant contributions in the past two decades, leading to the development of targeted therapies for sarcomas, including gastrointestinal stromal tumours (GIST).

The following compounds were investigated within the Soft Tissue and Bone Sarcoma Group (STBSG):

IMATINIB FOR GASTROINTESTINAL STROMAL TUMOUR (GIST)

*STUDY COORDINATOR:
PROF. J. VERWEIJ (BE)*

A breakthrough treatment for inoperable patients and/or patients with advanced disease. The EORTC STBSG helped to show the benefit of imatinib for patients, and to establish the different dosing regimens. **Imatinib received worldwide approval for the treatment of adult patients.** The availability of imatinib dramatically changed the course of this disease by prolonging life.^[14, 15, 16, 17]

TRABECTEDIN FOR ADVANCED SOFT TISSUE SARCOMA

*STUDY COORDINATOR:
PROF. A. LE CESNE (FR)*

The results of the EORTC Phase 2 study using trabectedin at 1.5 mg/m² regimen contributed to the accelerated **approval* of trabectedin by the European Union for advanced soft tissue sarcoma and then other countries.**^[18]

*Approvals obtained by both the European Medicine Agency (EMA) and the FDA in the USA

PAZOPANIB FOR CERTAIN FORMS OF SOFT-TISSUE SARCOMA

*STUDY COORDINATOR:
PROF. W. VAN DER GRAAF (NL)*

The results of the EORTC Phase 3 Palette trial led to **world-wide approval of pazopanib as a new treatment option for certain forms of soft-tissue sarcoma**, at an advanced stage of the disease that was previously treated with chemotherapy.^[19, 20]

ERIBULIN FOR CERTAIN FORMS OF SOFT-TISSUE SARCOMA

*STUDY COORDINATOR:
PROF. PATRICK SCHÖFFSKI (BE)*

The EORTC phase 2 trial showed promising outcomes for certain forms of sarcoma at an advanced stage. **These results provided sufficient evidence to proceed with a practice-changing trial, ultimately leading to the worldwide approval of the drug.**^[21]

CRIZOTINIB IN SEVERAL TYPES OF RARE CANCERS

*STUDY COORDINATOR:
PROF. PATRICK SCHÖFFSKI (BE)*

The CREATE trial of crizotinib included patients suffering from advanced rare cancers (including certain rare forms of soft-tissue sarcoma) carrying certain biological alterations called ALK or MET and showed a benefit of the treatment for some forms of soft-tissue sarcoma.^[22, 23, 24, 25]

04

Head & Neck

Understanding Head & Neck Squamous Cell Carcinoma (HNSCC): A global perspective

Squamous cell carcinoma (SCC) is the second most common skin cancer^[1], primarily arising from squamous cells in the body's epidermis and other tissues, making up about 90% of head and neck cancers* (HNSCC). SCC of the HNSCC ranks sixth globally in cancer prevalence with 890,000 new cases and 450,000 deaths in 2018 and is expected to increase by 30% (1.08 million new cases annually) by 2030, according to Global Cancer Observatory (GLOBOCAN). Currently only about half the patients with an HNSCC are still alive five years after their diagnosis. This is in part due to the fact that the majority of these patients consult at a late stage and already have cancer that has spread to their lymph nodes at the time they are diagnosed.

PRESERVING SPEECH IN LARYNGEAL CANCER: A PARADIGM SHIFT WITH LARYNX-PRESERVING RADIO-CHEMOTHERAPY (EORTC 24891)^[1]

STUDY COORDINATOR:
PROF JEAN-LOUIS LEFEBVRE (FR)

New hope for laryngeal cancer patients

This trial focused on laryngeal cancer, a subtype of head and neck squamous cell carcinoma originating in the vocal cord-containing part of the throat. Historically, surgery or radiotherapy** often resulted in speech loss, impacting patients' lives. Chemotherapy*** later allowed patients to avoid mutilating surgery.

EORTC transforms quality of life for early-stage hypopharyngeal SCC patients

The trial compared these different approaches, and evaluated whether using chemotherapy combined with radiotherapy instead of surgery as initial treatments could be beneficial in a group of patients with hypopharyngeal SCC. The hypopharynx is situated at the bottom of the throat, just behind the larynx. **It found that larynx-preserving treatment did not jeopardise overall survival in patients with SCC of the head and neck and allowed more than half of the survivors to retain their ability to speak^[26].** This, of course, made a huge difference to their daily lives. **The results from this study changed the standard of care and practice for patients with early-stage hypopharyngeal SCC from larynx surgery to larynx-preserving radio-chemotherapy.**

IMPROVING SURVIVAL IN LOCALLY ADVANCED HEAD & NECK CANCER: THE IMPACT OF POST-OPERATIVE COMBINED RADIO-CHEMOTHERAPY (EORTC 22931)^[k]

STUDY COORDINATOR:
PROF JEAN-LOUIS LEFEBVRE (FR)

Advanced HNSCC frequently recurs after tumour surgery, sometimes spreading to new areas (metastases). Previous research had shown that post-surgery radiotherapy** can partially reduce this and combining it with chemotherapy*** may enhance local cancer control.

A game-changing approach: post-operative chemo-radiotherapy for improved patient survival

This clinical trial looked at whether adding chemotherapy to radiotherapy after surgery could improve their survival, when treating patients who were at high risk of their cancer returning. It found that compared with radiotherapy alone, **combined post-operative chemo-radiotherapy significantly increased the time patients spent without their disease getting worse (progression-free survival)**. After five years, this had increased by 11%, and the number of them still alive five years later (overall survival) was increased by 13%^[27]. This was an important improvement for these patients who were at high risk of a further deterioration in their cancer state, and **today this combined approach is still the reference treatment for them.**

05

Genito-Urinary

Understanding prostate cancer: a global perspective

The prostate gland, found only in men, is positioned between the bladder and the rectum. Prostate cancer, the second most common cancer in men globally, accounted for nearly 1.4 million new cases and 375,000 deaths in 2020^[28].

It is the most diagnosed male cancer in over half of the world's countries.

While higher-income countries have the highest number of diagnoses, deaths are more prevalent in the Caribbean, sub-Saharan Africa, and Micronesia/Polynesia. Screening in higher-income countries contributes to early detection, explaining the variations.

**PEACE III CLINICAL TRIAL:
INVESTIGATING THE EFFECT OF
ADDING BONE-PROTECTION TO
CHEMOTHERAPY FOR PROSTATE
CANCER. (EORTC-1333)^[1]**

*STUDY COORDINATOR:
PROF. BERTRAND F. TOMBAL (BE)*

Prostate cancer patients who cannot be treated by lowering testosterone levels (castration resistant-cancer) and which has spread to their bones typically receive the chemotherapy drugs Ra-223, enzalutamide, and abiraterone. PEACE III aimed to test the combination of enzalutamide (an AR pathway inhibitor) and Radium-223 as first-line treatment for patients with metastatic prostate cancer that no longer responds to hormone therapy and has spread to the bones.

This trial was a collaboration with several other cancer cooperative groups: Clinical Trial Ireland (CTI), the Canadian Urological Oncology Group (CUOG), the Latin American Cooperative Oncology Group (LACOG), and French UNICANCER cooperative group (GETUG). It took more than eight years to complete from first patient enrolled to the closing of the database.

PEACE-III shows that adding six cycles of Ra223 to enzalutamide as first-line treatment for mCRPC patients significantly

improved patient outcome by increasing median progression free survival from 16 to 19 months.

PEACE III is the first major Phase 3 trial to suggest that combining an ARPI with another approved medication improves overall survival (OS) considerably. Previous Phase 3 studies that tested combinations of two ARPIs or combining an ARPI with a PARP inhibitor have failed to demonstrate a significant OS in the intent-to-treat population.

Toxicity from the treatment was mild, though the trial did illustrate the importance of giving bone protecting agents to avoid fractures. Given the improved efficacy and acceptable toxicity, the researchers concluded that the combination of enzalutamide and Ra223 can be a new valid treatment option for patients with mCRPC and bone disease and disease progression on androgen deprivation therapy.

06

Lymphoma

The EORTC Lymphoma group focuses on Hodgkin Lymphoma (HL), a rare cancer that makes up 0.4% of all cancers and is responsible for 0.2% of cancer deaths. Originating from lymphocytes (type of white blood cells), HL is treated with chemotherapy, radiation therapy, or stem-cell transplantation based on the cancer stage and characteristics. Despite an 80% cure rate with combined therapies, long-term side effects and treatment-related toxicity increase the risk of other health issues.

Recent treatments include brentuximab vedotin for advanced disease and the immune checkpoint inhibitors nivolumab and pembrolizumab for relapsed/refractory cases.

The EORTC Lymphoma Group studies various aspects of HL, including early and advanced stages, elderly patients, and relapsed/refractory cases, conducting translational research on the disease's impact on survivors in areas like parenthood, education, work, insurance, health, and social situations.

EORTC-LYSA-FIL LYMPHOMA
INTERGROUP STUDY (H10):
**OPTIMISING HODGKIN
LYMPHOMA TREATMENT:
PERSONALISED APPROACHES
BASED ON EARLY PATIENT
RESPONSE^[29] (EORTC 20051)^[m]**

STUDY COORDINATOR:
PROF. JOHN RAEMAEEKERS (NL)

**Success and concerns in Hodgkin
Lymphoma treatment**

Treatment of early-stage Hodgkin lymphoma (HL), which consists of a combination of chemotherapy and radiotherapy (RT)^[30, 31] is extremely successful, with at least nine of ten patients being cured. However, toxicities that surface years after treatment are of major concern, and mainly include second cancers^[32, 33] as well as pulmonary^[34] and heart-related diseases^[35, 36].

**Tailoring patient treatment:
the impact of PET scans after
chemotherapy**

The groundbreaking H10 trial studied the adjustment of treatment based on PET scan results after two chemotherapy cycles. For patients with a negative scan, radiation therapy (RT) was omitted to avoid long-term side effects. Among patients with a favourable prognosis and a negative PET scan, five-year progression-free survival was 99% with RT after chemotherapy versus 87% with chemother-

apy alone^[29] indicating the necessity of RT. The ten-year follow-up data confirmed that the omission of INRT was associated with lower progression-free survival, although no differences in terms of survival emerged.

**Improving patient outcomes: finding
the right balance between treatment
and toxicity**

Conversely, the trial succeeded in showing that patients with a positive PET scan after the first two cycles of chemotherapy achieved better outcomes when given an intensified chemotherapy combined with RT. Specifically, the PFS rate at five years was 91% for the patients who received intensified combination therapy, versus 77% for those who received standard combination therapy.

The ten-year follow-up data showed no statistically significant differences between standard and intensified therapy in terms of progression-free survival and overall survival.

07

A close-up, low-angle shot of a doctor in a white lab coat using a dermatoscope to examine a patient's skin. The doctor's face is partially visible in profile, looking down at the device. The background is a soft, out-of-focus blue and white. The overall tone is clinical and professional.

Melanoma

Melanoma: Understanding the rising threat

Melanoma, the deadliest skin cancer, has increased rapidly in incidence over the last 50 years, becoming the 19th most common cancer globally, with 320,000 new cases and 55,000 deaths in 2020. Following Australia and New Zealand, European countries exhibit the highest melanoma rates, with approximately 144,000 yearly cases and 27,000 related deaths^{[n, o, p] [28]}.

Challenges in treating stage III melanoma

Melanoma originates in skin melanocytes, the cells that produce the dark pigment melanin, and spreads via metastasis. Stage III melanoma patients often undergo surgery to remove the primary tumour and nearby metastasised lymph nodes, but this does not assure a cancer-free outcome, as they face a high risk of recurrence.

PROLONGED SURVIVAL IN STAGE III MELANOMA: IPILIMUMAB'S IMPACT^[37]. (EORTC-18071)^[q]

*STUDY COORDINATOR:
PROF. ALEXANDER EGGERMONT (NL)*

Unlocking the potential of ipilimumab: a high dose approach in melanoma treatment

Ipilimumab is an antibody-based drug that works as an immune checkpoint inhibitor and thereby increases anti-tumour immune responses. It was approved in 2011 for the treatment of advanced melanoma, at a dose of 3 mg per kilogram of body weight^[38, 39]. The EORTC 18071 study is based on research suggesting the potential for a higher dose to have improved efficacy (although at the cost of more toxic effects)^[40, 41, 42]. It aimed to evaluate the effect of treating high-risk stage III melanoma patients with ipilimumab at a dose of 10 mg per kilogram after surgery, as compared with giving a placebo, to remove their primary tumour and nearby/affected lymph nodes.

EORTC study confirms long term survival benefits and quality of life for patients

The study showed a significant (over ten percent) increase in cancer recurrence-free survival with high-dose ipilimumab treatment after five years, as compared with placebo^[42]. Even though there were adverse effects reported with ipilimumab, overall, the drug did not have a negative effect on the patients' health-related quality of life^[43]. After seven years, ipilimumab still showed durable recurrence-free survival as well as overall survival benefit, with an 8.7% absolute difference for overall survival^[44].

KEYNOTE-054 STUDY^[45]: **UNLOCKING RECURRENCE-FREE SURVIVAL IN STAGE III MELANOMA: THE PEMBROLIZUMAB BREAKTHROUGH (EORTC 1325)**^[r]

STUDY COORDINATOR:
PROF. CAROLINE ROBERT (FR)

**Empowering the immune system:
Pembrolizumab's role in melanoma treatment**

Pembrolizumab—an antibody-based drug—has been shown to stimulate the body's immune system to remove any remaining melanoma cells. The EORTC KEYNOTE-054 study looked at the effect of treating stage III melanoma patients with pembrolizumab after surgery, as compared to giving a placebo.

Sustained patient benefits: Pembrolizumab's long-term impact on recurrence-free survival

The study found that pembrolizumab significantly reduced the risk of melanoma recurrence or death by over 40% after 1.25 years^[45], leading to EMA and FDA approvals in 2018 and 2019 for its use in high-risk stage III melanoma patients. After 3.5 years, pembrolizumab maintained a 65% recurrence-free survival rate, a 16% improvement over the placebo group^[46]. **Given these results, pembrolizumab therapy provides a clear and sustained relapse-free survival benefit for stage III melanoma patients and is considered a viable treatment option.**

08



Lung

Understanding lung cancer: the leading cause of cancer deaths worldwide

Lung cancer is the leading cause of cancer deaths worldwide^[5]. There are two main types of lung cancer: non-small cell lung cancer (NSCLC, making up 85% of cases) and small cell lung cancer (15%). Amongst others, causes include passive and active smoking and exposure to certain toxins. There are three subtypes of NSCLC: adenocarcinoma, squamous cell carcinoma, and large cell carcinoma. Small cell lung cancer tends to grow and spread faster than NSCLC.

In past decades, there has been considerable progress in lung cancer care thanks to molecular profiling* making it possible to personalise treatment for each patient, to stimulate research, and to increase the portfolio of new treatment options.

Treatments may include surgery, chemotherapy, radiation therapy, targeted drug therapy and immunotherapy, depending on the type of cancer, the molecular profile and if the disease spreads or not.

A RANDOMISED, PHASE 3 TRIAL WITH ANTI-PD-1 MONOCLONAL ANTIBODY PEMBROLIZUMAB (MK-3475) VERSUS PLACEBO FOR PATIENTS WITH EARLY-STAGE NSCLC AFTER RESECTION AND COMPLETION OF STANDARD ADJUVANT THERAPY (PEARLS) KEYNOTE-091 (EORTC 1416)^[t]

*STUDY COORDINATOR:
MARY O'BRIEN (UK)*

This randomised, placebo-controlled, phase 3 trial of pembrolizumab (an anti-body drug) recruited 1177 patients. Eligible patients were aged 18 years or older and had undergone surgery to remove their early-stage tumours.

The statistical analysis showed that pembrolizumab improved disease-free survival significantly compared with placebo and was not associated with new safety concerns for these patients^[47].

Based on the above outcome:

1. In January 2023, the FDA approved pembrolizumab (Keytruda) for treatment following resection and platinum-based chemotherapy for early-stage NSCLC patients.
2. In October 2023, the European Commission approved pembrolizumab (Keytruda) for the adjuvant treatment of adults with non-small cell lung carcinoma who are at high risk of recurrence following complete resection and platinum-based chemotherapy.

Glossary & References

BREAST CONSERVING TREATMENT

A surgery to remove cancer or other abnormal tissue from the breast and some normal tissue around it, but not the breast itself.

CHEMOTHERAPY

A treatment that uses drugs to stop the growth of cancer cells that were not visible at the time of surgery, either by killing the cells or by stopping them from dividing.

HEAD & NECK CANCER

Term used to describe a number of different cancers that develop in or around the throat, larynx, nose, sinuses, and mouth.

IMMUNE CHECKPOINT INHIBITORS

Immune checkpoint inhibitors are drugs that work by blocking checkpoint proteins from binding to other proteins, thus helping T-cells to kill cancer cells.

LYMPHOCYTE

A lymphocyte is a type of white blood cell

MOLECULAR PROFILING

Molecular testing that uses various technologies to examine the patient's DNA in order to identify changes that may cause cancer.

OVERALL SURVIVAL

The length of time from the date of diagnosis or the start of treatment that patients diagnosed with the disease are still alive.

PROGRESSION-FREE SURVIVAL

Progression-free survival is the time from inclusion in a trial to worsening of the disease or death.

RADIOTHERAPY

A type of local cancer treatment that uses beams of intense energy to kill cancer cells; it damages cells by destroying the genetic material that controls how cells grow and divide. Normal cells such as those lining the inside of the mouth may also be affected by these treatments. This slows down the ability of oral tissue to repair itself and increases risk of side effects during treatment.

RECURRENCE-FREE SURVIVAL

The length of time after primary treatment for a cancer ends that the patient survives without any signs or symptoms of that cancer.



Reference list:

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The future of cancer therapy

For over 60 years, EORTC has brought together Europe's cancer research community to improve treatment, survival, and quality of life for patients across borders, disciplines, and tumour types.

This booklet highlights EORTC's clinical trials that have helped shape modern cancer care.

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