ForPatients
by Roche

Non-Small Cell Lung Cancer (NSCLC)Non Small Cell Lung Carcinoma

A clinical trial to compare atezolizumab with best supportive care after surgery and chemotherapy in people with non-small cell lung cancer

Study to Assess Safety and Efficacy of Atezolizumab (MPDL3280A) Compared to Best Supportive Care Following Chemotherapy in Patients With Lung Cancer [IMpower010]

Trial Status	Trial Runs In	Trial Identifier
Active, not recruiting	23 Countries	NCT02486718 2014-003205-15 2023-505981-26-00 GO29527

The information is taken directly from public registry websites such as ClinicalTrials.gov, EuClinicalTrials.eu, ISRCTN.com, etc., and has not been edited.

Official Title:

A phase III, open-label, randomized study to investigate the efficacy and safety of atezolizumab (anti-PD-L1 antibody) compared with best supportive care following adjuvant cisplatin-based chemotherapy in patients with completely resected stage IB–IIIA non-small cell lung cancer

Trial Summary:

This is a Phase III, global, multicenter, open-label, randomized study to compare the efficacy and safety of 16 cycles (1 cycle duration=21 days) of atezolizumab (MPDL3280A) treatment compared with best supportive care (BSC) in participants with Stage IB-Stage IIIA non-small cell lung cancer (NSCLC) following resection and adjuvant chemotherapy, as measured by disease-free survival (DFS) as assessed by the investigator and overall survival (OS). Participants, after completing up to 4 cycles of adjuvant cisplatin-based chemotherapy, will be randomized in a 1:1 ratio to receive atezolizumab for 16 cycles or BSC.

Hoffmann-La Roche	Phase 3
Sponsor	Phase

NCT02486718 2014-003205-15 2023-505981-26-00 GO29527
Trial Identifiers

Eligibility Criteria:

Gender	Age	Healthy Volunteers
All	# 18 Years	No

1. Why is the IMpower010 clinical trial needed?

Non-small cell lung cancer (NSCLC) is the most common type of lung cancer. When the IMpower010 trial started in 2015, standard treatment for NSCLC that had not spread to other parts of the body was surgery to remove the cancer and then chemotherapy for 3 months. Following treatment, regular scans were carried out to check if the cancer had returned – known as 'best supportive care'. NSCLC came back in up to 2 out of 3 people who were given standard treatment and best supportive care. Better treatment options were needed to prevent NSCLC from coming back.

Atezolizumab is an immunotherapy – which means it helps the body's immune system fight the cancer. Atezolizumab was an experimental treatment for NSCLC when the IMpower010 trial started – which means it was not approved for treating NSCLC at that time.

Atezolizumab works by attaching to a protein on cancer cells called PD-L1 (known as a 'biomarker'). PD-L1 positive cancer cells are more difficult for the immune system to find and destroy. This is because the PD-L1 pathway is involved in decreasing your body's natural immune response to fight cancer. By blocking the PD-L1 pathway, it was thought that atezolizumab may help the immune system stop or reverse the growth of tumours.

This clinical trial aims to compare the effects, good or bad, of atezolizumab treatment against best supportive care after surgery and chemotherapy in people with NSCLC that has not spread in the body and its PD-L1 positivity is unknown.

During this clinical trial, atezolizumab was approved by health authorities in the US (in 2016) and Europe (in 2017) for treating different types of NSCLC.

2. How does the IMpower010 clinical trial work?

This clinical trial is recruiting people with NSCLC that has not been tested for PD-L1. People can take part if they had surgery to remove their cancer from 4–12 weeks before starting the trial, have recovered from surgery, and are healthy enough to be given chemotherapy treatment.

The trial is in 2 phases: the 'enrollment phase' and the 'randomisation phase'. In the enrollment phase, people who take part in this clinical trial (participants) will be given chemotherapy for 3 months, or until they have unacceptable side effects or their cancer comes back. Then, in the randomisation phase, participants who have completed the enrollment phase and have no signs of NSCLC on scans will be given the clinical trial treatment atezolizumab OR best supportive care (observation) for about 1 year, or until NSCLC comes back or they have unacceptable side effects.

The clinical trial doctor will see participants twice every 3 weeks in the enrollment phase and every 3 weeks in the randomisation phase. These hospital visits will include health checks, including scans to see how the participant responds to the treatment, and any side effects they may have. After the final dose of atezolizumab treatment or last clinic visit for those being given best supportive care, participants will attend a final clinic visit 1 month later and will continue to be checked by the clinical trial doctor (by telephone, medical records, or clinic visits) at least every 3 months for as long as they agree to it. The total time of participation in the clinical trial will depend on how well a participant tolerates and responds to treatment and could be up to more than 12 years. Participants can stop trial treatment and leave the clinical trial at any time.

3. What are the main endpoints of the IMpower010 clinical trial?

The main clinical trial endpoint (the main result measured in the trial to see if the medicine has worked) is the amount of time between the start of the randomisation phase of the trial and NSCLC coming back.

The other clinical trial endpoints include:

- How long participants live
- The number and seriousness of any side effects
- How atezolizumab affects the immune system
- How the body breaks down and gets rid of atezolizumab

4. Who can take part in this clinical trial?

People can take part in this trial if they are at least 18 years old and have not been given chemotherapy, hormonal cancer therapy or radiotherapy within the last 5 years. People may not be able to take part in this trial if they have previously been given atezolizumab or similar treatments before, if they have certain other medical conditions such as infections, autoimmune disease, heart or lung disease, or are pregnant or breastfeeding.

5. What treatment will participants be given in this clinical trial?

In the enrollment phase, everyone who joins this clinical trial will be given 1 of 4 chemotherapy treatments, based on the clinical trial doctor’s choice and depending on the type of NSCLC that the participant has:

- Cisplatin plus vinorelbine, docetaxel, gemcitabine, or pemetrexed, given as an infusion (into the vein) every 3 weeks for up to 3 months

In the randomisation phase, everyone who completes the enrollment phase will join 1 of 2 groups randomly (like flipping a coin) and be given either:

- Atezolizumab, given as an infusion (into the vein) every 3 weeks for up to 1 year

- OR best supportive care (observation)

Participants will have an equal chance of being placed in either group. This is an open-label trial, which means everyone involved, including the participant and the clinical trial doctor, will know the clinical trial treatment the participant has been given.

6. Are there any risks or benefits in taking part in this clinical trial?

The safety or effectiveness of the experimental treatment or use may not be fully known at the time of the trial. Most trials involve some risks to the participant. However, it may not be greater than the risks related to routine medical care or the natural progression of the health condition. People who would like to participate will be told about any risks and benefits of taking part in the clinical trial, as well as any additional procedures, tests, or assessments they will be asked to undergo. All of these will be described in an informed consent document (a document that provides people with the information they need to decide to volunteer for the clinical trial).

Risks associated with the clinical trial medicine

Participants may have side effects (an unwanted effect of a drug or medical treatment) from the medicine used in this clinical trial. Side effects can be mild to severe, even life-threatening, and vary from person to person. Participants will be closely monitored during the clinical trial; safety assessments will be performed regularly.

Atezolizumab

Participants will be told about the known side effects of atezolizumab and possible side effects based on human and laboratory studies or knowledge of similar drugs. Atezolizumab will be given as an infusion into the vein (intravenous infusion). Participants will be told about any known side effects of intravenous infusion.

Potential benefits associated with the clinical trial

Participants' health may or may not improve from participation in the clinical trial. Still, the information collected may help other people with similar medical conditions in the future.

Inclusion Criteria:

Inclusion Criteria for Enrollment Phase

- Eastern Cooperative Oncology Group (ECOG) performance status of 0 or 1
- Histological or cytological diagnosis of Stage IB (tumors greater than or equal to [>/=] 4 centimeters [cm])-IIIA (T2-3 N0, T1-3 N1, T1-3 N2, T4 N0-1) NSCLC (per the Union Internationale Contre le Cancer staging system (UICC)/American Joint Committee on Cancer staging system (AJCC) staging system, 7th edition; Detterbeck et al. 2009)

- Participants must have had complete resection of NSCLC 4-12 weeks (>/=28 days and less than or equal to [</=] 84 days) prior to enrollment and must be adequately recovered from surgery
- If mediastinoscopy was not performed preoperatively, it is required that, at a minimum, mediastinal lymph node systematic sampling will have occurred. Systematic sampling is defined as removal of at least one representative lymph node at specified levels. MLND entails resection of all lymph nodes at those same levels. For a right thoracotomy, sampling or MLND is required at levels 4 and 7 and for a left thoracotomy, levels 5 and/or 6 and 7. Exceptions will be granted if there is clear documentation in the operative report or in a separately submitted addendum by the surgeon of exploration of the required lymph node areas, the participant will be considered eligible if no lymph nodes are found in those areas; if participants have documented N2 disease in one level (per the UICC/AJCC staging system, 7th edition; Detterbeck et al. 2009), not all levels need to be sampled; if the preoperative staging imaging results (contrast computed tomography [CT] and positron emission tomography [PET] scans) do not suggest evidence of disease in the mediastinum, the participant will be considered eligible if N2 nodal sampling is not performed per surgeon's decision
- Eligible to receive a cisplatin-based chemotherapy regimen
- Adequate hematologic and end-organ function
- Women who are not postmenopausal (>/=12 months of non-therapy-induced amenorrhea) or surgically sterile must have a negative serum pregnancy test result within 14 days prior to initiation of cisplatin-based chemotherapy

Inclusion Criteria for Randomized Phase - Women who are not postmenopausal (>/=12 months of non-therapy-induced amenorrhea) or surgically sterile must have a negative serum pregnancy test result within 14 days prior to initiation of atezolizumab or BSC

Exclusion Criteria:

Exclusion Criteria for Enrollment Phase

- Illness or condition that may interfere with a participant's capacity to understand, follow, and/or comply with study procedures
- Pregnant and lactating women
- Treatment with prior systemic chemotherapy: Chemotherapy for early stage of malignancy with curative intent, provided that the last dose received was more than 5 years prior to enrollment and low-dose chemotherapy for non-malignant conditions may be allowed upon approval by the Medical Monitor
- Hormonal cancer therapy or radiation therapy as prior cancer treatment within 5 years before enrollment
- Treatment with any other investigational agent with therapeutic intent within 28 days prior to enrollment
- Participants with hearing impairment
- Known sensitivity to any component of the chemotherapy regimen the participant will be assigned to, or to mannitol
- Prior treatment with cluster of differentiation (CD) 137 (CD137) agonists or immune checkpoint blockade therapies, anti-programmed death-1 (PD-1), and anti programmed death ligand 1 (PD-L1) therapeutic antibodies
- Malignancies other than NSCLC within 5 years prior to randomization, with the exception of those with a negligible risk of metastasis or death (e.g., expected 5-year OS greater than [>] 90 percent [%]) treated with expected curative outcome (such as adequately treated carcinoma in situ of the cervix, basal or squamous cell skin cancer, localized prostate cancer treated surgically with curative intent, ductal carcinoma in situ treated surgically with curative intent)
- History of severe allergic, anaphylactic, or other hypersensitivity reactions to chimeric or humanized antibodies or fusion proteins

- Known hypersensitivity to biopharmaceuticals produced in Chinese hamster ovary cells or any component of the atezolizumab formulation
- History of autoimmune disease, including but not limited to myasthenia gravis, myositis, autoimmune hepatitis, systemic lupus erythematosus, rheumatoid arthritis, inflammatory bowel disease, vascular thrombosis associated with antiphospholipid syndrome, Wegener's granulomatosis, Sjögren's syndrome, Guillain-Barré syndrome, multiple sclerosis, vasculitis, or glomerulonephritis
- Positive test for human immunodeficiency virus (HIV)
- Participants with active hepatitis B (chronic or acute; defined as having a positive hepatitis B surface antigen [HBsAg] test at screening) or hepatitis C
- Active tuberculosis
- Significant cardiovascular disease, such as New York Heart Association cardiac disease (Class II or greater), myocardial infarction, or cerebrovascular accident within the previous 3 months, unstable arrhythmias, or unstable angina
- History of idiopathic pulmonary fibrosis, organizing pneumonia (e.g., bronchiolitis obliterans), drug-induced pneumonitis, idiopathic pneumonitis, or evidence of active pneumonitis on screening chest CT scan
- Prior allogeneic bone marrow transplantation or solid organ transplant
- Any other diseases, metabolic dysfunction, physical examination finding, or clinical laboratory finding giving reasonable suspicion of a disease or condition that contraindicates the use of an investigational drug or that may affect the interpretation of the results or render the participant at high risk from treatment complications
- Known tumor PD-L1 expression status as determined by an immunohistochemistry (IHC) assay from other clinical studies (e.g., participants whose PD-L1 expression status was determined during screening for entry into a study with anti-PD-1 or anti-PD-L1 antibodies but were not eligible are excluded)

Specific Exclusions for Pemetrexed Treatment

- Participants with squamous cell histology

Exclusion Criteria for Randomized Phase

- Signs or symptoms of infection within 14 days prior to randomization (severe infection within 28 days prior to randomization), including but not limited to hospitalization for complications of infection, bacteremia, or severe pneumonia
- Received therapeutic oral or intravenous (IV) antibiotics within 14 days prior to randomization
- Major surgical procedure within 28 days prior to randomization or anticipation of need for a major surgical procedure during the course of the study
- Administration of a live, attenuated vaccine within 4 weeks prior to initiation of study treatment or anticipation that such a live attenuated vaccine will be required during the study
- Treatment with systemic immunostimulatory agents (including but not limited to interferons or interleukin-2) within 4 weeks or 5 half-lives of the drug, whichever is longer, prior to randomization: Prior treatment with cancer vaccines is allowed
- Treatment with systemic corticosteroids or other immunosuppressive medications (including but not limited to prednisone, dexamethasone, cyclophosphamide, azathioprine, methotrexate, thalidomide, and anti-tumor necrosis factor [anti-TNF] agents) within 14 days prior to randomization