



EUROPEAN MEDICINES AGENCY
SCIENCE MEDICINES HEALTH

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Withdrawal of application for the marketing authorisation of Amtagvi (lifileucel)

Iovance Biotherapeutics B.V. withdrew its application for a marketing authorisation of Amtagvi for the treatment of melanoma (a skin cancer) in adults.

The company withdrew the application on 22 July 2025.

What is Amtagvi and what was it intended to be used for?

Amtagvi was developed as a medicine to treat melanoma that is unresectable (cannot be removed by surgery) or metastatic (has spread to other parts of the body) in adults. It was to be used when the melanoma had previously been treated with a type of cancer medicine called a PD-1 blocking antibody and, if the cancer cells have a mutation (genetic change) called BRAF V600, with a BRAF inhibitor given with or without a MEK inhibitor (other cancer medicines).

Amtagvi contains the active substance lifileucel, which consists of cells called tumour-infiltrating lymphocytes (TIL) that are collected by surgery from the patient's own tumour. It was to be available as a cell dispersion to be given as a single infusion (drip into a vein).

Before receiving Amtagvi, the patient would be given chemotherapy (other cancer medicines) to clear their own lymphocytes (a type of white blood cells). After receiving Amtagvi, they would be given a medicine called interleukin-2 to stimulate the growth and activity of the TILs.

How does Amtagvi work?

TILs are lymphocytes that are made by the immune system (the body's natural defences) and that recognise and kill cancer cells. After being collected from the patient, the cells are grown in the lab to increase their numbers. When given back to the patient, they were expected to help the immune system kill the cancer cells.

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What did the company present to support its application?

The company presented the results of a main study involving 111 adults with unresectable or metastatic melanoma who had previously been treated with at least one therapy, including a PD-1 blocking antibody and, if they had the BRAF V600 mutation, a BRAF inhibitor with or without a MEK inhibitor. The main measure of effectiveness was the percentage of patients who had either no sign of cancer or shrinkage of the cancer after treatment. Treatment with Amtagvi was not compared with placebo (a dummy treatment) or any other treatment.

How far into the evaluation was the application when it was withdrawn?

The application was withdrawn after the European Medicines Agency had evaluated the information from the company and prepared questions for the company. After the Agency had assessed the company's responses to the last round of questions, there were still some unresolved issues.

What did the Agency recommend at that time?

Based on the review of the data and the company's response to the Agency's questions, at the time of the withdrawal, the Agency had some concerns and its provisional opinion was that Amtagvi could not have been authorised for the treatment of melanoma.

The Agency had concerns about the response to Amtagvi in the main study, which was too low to determine whether treatment with Amtagvi would provide a meaningful benefit to patients. There were also concerns about the safety of the Amtagvi treatment regimen due to serious side effects, which resulted in death in some cases.

The Agency also noted that the data to support the proposed dose were not sufficient. In addition, the applicant had not provided all the necessary good manufacturing practice (GMP) documentation.

Therefore, at the time of the withdrawal, the Agency's opinion was that the benefits of Amtagvi did not outweigh its risks.

What were the reasons given by the company for withdrawing the application?

In its [letter](#) notifying the Agency of the withdrawal of the application, the company stated that the withdrawal was based on the Agency's view that the clinical data provided did not allow the Agency to assess the efficacy of Amtagvi at that time.

Does this withdrawal affect patients in clinical trials?

The company informed the Agency that there are no consequences for patients in clinical trials.

If you are in a clinical trial and need more information about your treatment, speak with your clinical trial doctor.