



## RECOMMENDATION ON PERIOPERATIVE PEMBROLIZUMAB IN THE TREATMENT OF NON-SMALL CELL LUNG CANCER

At its meeting of 6 November 2025, the Council for Choices in Health Care in Finland (COHERE Finland) adopted the recommendation.

**Pembrolizumab is not included in the national range of services for the perioperative treatment of non-small cell lung cancer.**

**According to the relevant marketing authorisation study, the median overall survival and event-free survival of patients treated with perioperative pembrolizumab, in combination with neoadjuvant chemotherapy, is longer compared to that of patients with resectable non-small cell lung cancer who are treated with perioperative placebo in combination with neoadjuvant chemotherapy.**

**However, there is no comparative research evidence of the efficacy of perioperative pembrolizumab treatment when compared to neoadjuvant or adjuvant immunotherapy used in accordance with the current treatment practice. Therefore, in COHERE Finland's opinion, it remains unclear whether perioperative pembrolizumab treatment brings any clinically significant additional benefit when compared to neoadjuvant or adjuvant immunotherapy used in accordance with the current treatment practice. In addition, compared to the current treatment practice, perioperative treatment with pembrolizumab would cause significant additional costs and a higher risk of adverse reactions.**

The efficacy and safety of perioperative pembrolizumab for patients with resectable non-small cell lung cancer were assessed in a marketing authorisation study comparing pembrolizumab with placebo. In both arms, patients also received chemotherapy as neoadjuvant treatment.

In the pembrolizumab arm, the median overall survival (OS) was not reached, while in the placebo arm it was 52.4 months. The OS results were similar in almost all studied subgroups. The median event-free survival (EFS) was 47.2 months in the pembrolizumab arm and 18.3 months in the placebo arm. No significant differences were observed between the treatment arms in results concerning the health-related quality of life. The study did not

raise any new safety concerns compared to previous results concerning the safety of pembrolizumab.

No direct comparisons have been made regarding the efficacy of neoadjuvant, adjuvant and perioperative immunotherapies. Pembrolizumab has been compared with placebo in perioperative use. However, there is no comparative evidence for the efficacy and safety of pembrolizumab as neoadjuvant treatment alone when compared to placebo or to neoadjuvant immunotherapy used in accordance with the current treatment practice. Pembrolizumab as perioperative treatment cannot be considered to be better than nivolumab used as neoadjuvant treatment in accordance with the current treatment practice. The long-term perioperative use of pembrolizumab increases the risk of adverse reactions. Based on evidence from research, pembrolizumab as perioperative treatment cannot be targeted to any specific patient group that would benefit more from the treatment than others. The duration of perioperative treatment is also significantly longer than that of neoadjuvant treatment, which increases the direct and indirect costs of the treatment, and the risk of adverse reactions.

It is estimated that approximately 100–150 patients per year could be eligible for perioperative treatment with pembrolizumab. With this estimated number of patients, pembrolizumab would generate additional costs of approximately EUR 11.5–17.2 million compared to neoadjuvant nivolumab alone and additional costs of EUR 6.8–10.2 million compared to adjuvant atezolizumab when estimated at public wholesale prices. There is significant uncertainty associated with the assessment of the budget impact due to the number of patients eligible for treatment, the duration of pharmacotherapy and the medicinal product-specific discounts given to hospitals. According to a representative of the marketing authorisation holder, the number of patients eligible for treatment is considerably lower than estimated by the Finnish Medicines Agency Fimea.

This is a summary of a recommendation adopted by the Council for Choices in Health Care in Finland (COHERE Finland). The actual recommendation and the related background material are available in Finnish on the website of COHERE Finland under [Valmiit suositukset](#).

The summary of the recommendation is also available in [Finnish](#) and [Swedish](#) on the website.

The Council for Choices in Health Care in Finland (COHERE Finland) is attached to the Ministry of Social Affairs and Health. Its mission is to issue recommendations on services that should be included in the range of public health services. Further information about service choices in healthcare is available