Alectinib

Alectinib (Alecensa) (Chugai, NDA has been filed in Japan) (breakthrough status in U.S.) FDA approved Dec 2015 (accelerated), full approval in 2017 for ALK-positive NSCLC.

Alectinib is a second-generation ALK inhibitor approved by the US Food and Drug Administration to treat crizotinib-refractory non-Small-cell lung cancer.

Fan et al. performed a meta-analysis to synthesize the results of different clinical trials to evaluate the efficacy and safety of alectinib.

A search of 3 databases, including PubMed, Web of Science, and the Cochrane Library, was performed from the inception of each database through September 5, 2017. We have pooled the overall response rate (ORR), disease control rate, progression-free survival, and intracranial ORR to evaluate the efficacy of alectinib. Discontinuation rate, rate of dose reduction or interruption due to adverse events as well as the incidence of several adverse events were aggregated to evaluate its safety.

A total of 8 studies with 626 patients have been included in our study. The pooled efficacy parameters are as follows: ORR 70% (95% CI: 57% to 82%), disease control rate 88% (95% CI: 82% to 94%), progression-free survival 9.36 months (95% CI: 7.38% to 11.34%), and intracranial ORR 52% (95% CI: 45% to 59%). ALK inhibitor-naïve patients tend to have better responses than crizotinib-pretreated patients. The aggregate discontinuation rate is 7% (95% CI: 4% to 10%), and the pooled rate of dose reduction or interruption is 33% (95% CI: 24% to 42%). The incidences of most adverse events were relatively low, while the incidences of 2 frequently reported adverse events, myalgia (18%) and anemia (25%), were even higher than with the first-generation ALK inhibitor crizotinib.

CONCLUSION: Generally, alectinib is a drug with preferable efficacy and tolerable adverse effects, and it is suitable for the treatment of intracranial metastases [1].

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Fan J, Xia Z, Zhang X, Chen Y, Qian R, Liu S, You D, Zhang J, Luo P. The efficacy and safety of alectinib in the treatment of ALK+ NSCLC: a systematic review and meta-analysis. Onco Targets Ther. 2018 Mar 1;11:1105-1115. doi: 10.2147/OTT.S156170. eCollection 2018. PubMed PMID: 29535535; PubMed Central PMCID: PMC5840301.