## Supplementary material

Pathological Complete Response to Long-Course Neoadjuvant Alectinib in Lung Adenocarcinoma with EML4-ALK Rearrangement : Report of Two Cases and Systematic Review of Case Reports

Liang Shi, Shuhong Gao, Li Tong, Qiyi Meng, Shijie Zhou, Daping Yu, Yujie Dong, and Zhe Liu

#### Table of Contents

Table S1: Search strategy

Table S2: Quality assessment

#### Search strategy

**Pubmed: Final search run on 18/11/2022**

"carcinoma, non small cell lung"[Mesh] OR "adenocarcinoma of lung"[Mesh] OR NSCLC[tiab] OR "lung adenocarcinoma"[tiab]

AND

"anaplastic lymphoma kinase"[Mesh] OR "anaplastic lymphoma kinase"[tiab] OR ALK[tiab]

AND

alectinib[nm] OR alectinib[tiab] OR Crizotinib[Mesh] OR Crizotinib[tiab] OR ceritinib[nm] OR ceritinib[tiab] OR brigatinib[nm] OR brigatinib[tiab] OR ensartinib[nm] OR ensartinib[tiab] OR lorlatinib[nm] OR lorlatinib[tiab]

AND

"neoadjuvant therapy"[Mesh] OR neoadjuvant[tiab] OR preoperative[tiab] OR resectable[tiab] OR operable[tiab]

**Web of science: Final search run on 18/11/2022**

"carcinoma, non small cell lung" OR "adenocarcinoma of lung" OR NSCLC OR "lung adenocarcinoma"

AND

"anaplastic lymphoma kinase" OR "anaplastic lymphoma kinase" OR ALK

AND

alectinib OR crizotinib OR ceritinib OR brigatinib OR ensartinib OR lorlatinib

AND

"neoadjuvant therapy" OR neoadjuvant OR preoperative OR resectable OR operable

**Cochrane Library: Final search run on 18/11/2022**

[mh "carcinoma, non small cell lung"] OR [mh "adenocarcinoma of lung"] OR NSCLC:ti,ab OR "lung adenocarcinoma":ti,ab

AND

[mh "anaplastic lymphoma kinase"] OR "anaplastic lymphoma kinase":ti,ab OR ALK:ti,ab

AND

alectinib:kw OR alectinib:ti,ab OR [mh Crizotinib] OR Crizotinib:ti,ab OR ceritinib:kw OR ceritinib:ti,ab OR brigatinib:kw OR brigatinib:ti,ab OR ensartinib:kw OR ensartinib:ti,ab OR lorlatinib:kw OR lorlatinib:ti,ab

AND

[mh "neoadjuvant therapy"] OR neoadjuvant:ti,ab OR preoperative:ti,ab OR resectable:ti,ab OR operable:ti,ab

#### Table S2: Quality assessment following Murad et al.’s modified Newcastle–Ottawa Scale (NOS)

| Domains | Leading explanatory questions | Included cases | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Case 1 | Case 2 | Case 3 | Case 4 | Case 5 | Case 6 | Case 7 |
| Selection | 1. Does the patient(s) represent(s) the whole experience of the investigator (centre) or is the selection method unclear to the extent that other patients with similar presentation may not have been reported? | Yes | Yes | Yes | Yes | Yes | NO | NO |
| Ascertainment | 2. Was the exposure adequately ascertained? | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 3. Was the outcome adequately ascertained? | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Causality\* | 4. Were other alternative causes that may explain the observation ruled out? | NA | NA | NA | NA | NA | NA | NA |
| 5. Was there a challenge/rechallenge phenomenon? | NA | NA | NA | NA | NA | NA | NA |
| 6. Was there a dose–response effect? | NA | NA | NA | NA | NA | NA | NA |
|  | 7. Was follow-up long enough for outcomes to occur? | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Reporting | 8. Is the case(s) described with sufficient details to allow other investigators to replicate the research or to allow practitioners make inferences related to their own practice? | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Risk of bais | | Low risk | Low risk | Low risk | Low risk | Low risk | Low risk | Low risk |

NA, not appliable.

\*Questions 4,5 and 6 in the tool were left out because they are mostly relevant to cases of adverse drug events as described by the tool and do not relate to our topic.