# Systemic anti-cancer therapy for advanced non-small-cell lung cancer

## Squamous non-small cell lung cancer, RET fusion positive, PD‑L1 50% or higher

Initial recommended treatment options are:

* the [NICE technology appraisal guidance on pembrolizumab with carboplatin and paclitaxel](https://www.nice.org.uk/guidance/ta770) (only if urgent clinical intervention is needed) or
* the [NICE technology appraisal guidance on pembrolizumab](https://www.nice.org.uk/guidance/ta531) or
* the [NICE technology appraisal guidance on atezolizumab](https://www.nice.org.uk/guidance/ta705) or
* the [NICE technology appraisal guidance on selpercatinib](https://www.nice.org.uk/guidance/indevelopment/gid-ta11012).

For people who have disease progression after initial treatment in line with the [NICE technology appraisal guidance on pembrolizumab with carboplatin and paclitaxel](https://www.nice.org.uk/guidance/ta770), recommended treatment options are:

* docetaxel or
* the [NICE technology appraisal guidance on selpercatinib](https://www.nice.org.uk/guidance/ta760) (available through the Cancer Drugs Fund).

For people who have had initial treatment in line with the [NICE technology appraisal guidance on pembrolizumab with carboplatin and paclitaxel](https://www.nice.org.uk/guidance/ta770) and who have disease progression after treatment with docetaxel, the only recommended treatment option is the [NICE technology appraisal guidance on selpercatinib](https://www.nice.org.uk/guidance/ta760) (available through the Cancer Drugs Fund; NHS England policy).

For people who have had initial treatment in line with the [NICE technology appraisal guidance on pembrolizumab with carboplatin and paclitaxel](https://www.nice.org.uk/guidance/ta770) and who have disease progression after treatment in line with the [NICE technology appraisal guidance on selpercatinib](https://www.nice.org.uk/guidance/ta760), the only recommended treatment option is docetaxel.

For people who have disease progression after initial treatment in line with the [NICE technology appraisal guidance on pembrolizumab](https://www.nice.org.uk/guidance/ta531) or [atezolizumab](https://www.nice.org.uk/guidance/ta705), recommended treatment options are:

* platinum doublet chemotherapy or
* the [NICE technology appraisal guidance on selpercatinib](https://www.nice.org.uk/guidance/ta760) (available through the Cancer Drugs Fund).

For people who have had initial treatment in line with the [NICE technology appraisal guidance on pembrolizumab](https://www.nice.org.uk/guidance/ta531) or [atezolizumab](https://www.nice.org.uk/guidance/ta705) and who have disease progression after treatment with platinum doublet chemotherapy, recommended treatment options are:

* docetaxel or
* the [NICE technology appraisal guidance on selpercatinib](https://www.nice.org.uk/guidance/ta760) (available through the Cancer Drugs Fund).

For people who have had platinum doublet chemotherapy and who have disease progression after follow-up treatment with docetaxel, the only recommended treatment option is the [NICE technology appraisal guidance on selpercatinib](https://www.nice.org.uk/guidance/ta760) (available through the Cancer Drugs Fund; NHS England policy).

For people who have had platinum doublet chemotherapy and who have disease progression after follow-up treatment in line with the [NICE technology appraisal guidance on selpercatinib](https://www.nice.org.uk/guidance/ta760), the only recommended treatment option is docetaxel.

For people who have had initial treatment in line with the [NICE technology appraisal guidance on pembrolizumab](https://www.nice.org.uk/guidance/ta531) or [atezolizumab](https://www.nice.org.uk/guidance/ta705) and who have disease progression after treatment in line with the [NICE technology appraisal guidance on selpercatinib](https://www.nice.org.uk/guidance/ta760), recommended treatment options are:

* docetaxel or
* platinum doublet chemotherapy.

For people who had treatment in line with the [NICE technology appraisal guidance on selpercatinib](https://www.nice.org.uk/guidance/ta760) and who have disease progression after follow-up treatment with docetaxel, the only recommended treatment option is platinum doublet chemotherapy.

For people who had treatment in line with the [NICE technology appraisal guidance on selpercatinib](https://www.nice.org.uk/guidance/ta760) and who have disease progression after follow-up treatment with platinum doublet chemotherapy, the only recommended treatment option is docetaxel.

For people who have disease progression after initial treatment in line with the [NICE technology appraisal guidance on selpercatinib](https://www.nice.org.uk/guidance/indevelopment/gid-ta11012), the only recommended treatment option is platinum doublet chemotherapy (NHS England policy).

For people who have had initial treatment in line with the [NICE technology appraisal guidance on selpercatinib](https://www.nice.org.uk/guidance/indevelopment/gid-ta11012) and who have disease progression after treatment with platinum doublet chemotherapy, recommended treatment options are:

* the [NICE technology appraisal guidance on pembrolizumab](https://www.nice.org.uk/guidance/ta428) (if PD-L1 above 1%) or
* the [NICE technology appraisal guidance on atezolizumab](https://www.nice.org.uk/guidance/ta520) (any PD-L1 0% to 100%) or
* the [NICE technology appraisal guidance on nivolumab](https://www.nice.org.uk/guidance/ta655) (any PD-L1 0% to 100%) or
* docetaxel (NHS England policy).

For people who have had treatment with platinum doublet chemotherapy and who have disease progression after follow-up treatment in line with the [NICE technology appraisal guidance on pembrolizumab](https://www.nice.org.uk/guidance/ta428), [atezolizumab](https://www.nice.org.uk/guidance/ta520) or [nivolumab](https://www.nice.org.uk/guidance/ta655), the only recommended treatment option is docetaxel.

For people who have had treatment with platinum doublet chemotherapy and who have disease progression after treatment with docetaxel, recommended treatment options are:

* the [NICE technology appraisal guidance on pembrolizumab](https://www.nice.org.uk/guidance/ta428) (if PD-L1 above 1%) or
* the [NICE technology appraisal guidance on atezolizumab](https://www.nice.org.uk/guidance/ta520) (any PD-L1 0% to 100%) or
* the [NICE technology appraisal guidance on nivolumab](https://www.nice.org.uk/guidance/ta655) (any PD-L1 0% to 100%).