Thank you for agreeing to give us a statement on your organisation’s view of the technology and the way it should be used in the NHS.

Healthcare professionals can provide a unique perspective on the technology within the context of current clinical practice which is not typically available from the published literature.

To help you in making your statement, we have provided a template. The questions are there as prompts to guide you. It is not essential that you answer all of them.

Please do not exceed the 8-page limit.

### About you

**Your name:** [Redacted] submitting on behalf of

**Name of your organisation**

NCRI/RCP/RCR/ACP/JCO

**Comments coordinated by our clinical expert nominee** [Redacted]

**Are you (tick all that apply):**

- a specialist in the treatment of people with the condition for which NICE is considering this technology? √

- a specialist in the clinical evidence base that is to support the technology (e.g. involved in clinical trials for the technology)? √

- an employee of a healthcare professional organisation that represents clinicians treating the condition for which NICE is considering the technology? If so, what is your position in the organisation where appropriate (e.g. policy officer, trustee, member etc.)?

- other? (please specify)
### What is the expected place of the technology in current practice?

How is the condition currently treated in the NHS? Is there significant geographical variation in current practice? Are there differences of opinion between professionals as to what current practice should be? What are the current alternatives (if any) to the technology, and what are their respective advantages and disadvantages?

Are there any subgroups of patients with the condition who have a different prognosis from the typical patient? Are there differences in the capacity of different subgroups to benefit from or to be put at risk by the technology?

In what setting should/could the technology be used – for example, primary or secondary care, specialist clinics? Would there be any requirements for additional professional input (for example, community care, specialist nursing, other healthcare professionals)?

If the technology is already available, is there variation in how it is being used in the NHS? Is it always used within its licensed indications? If not, under what circumstances does this occur?

Please tell us about any relevant clinical guidelines and comment on the appropriateness of the methodology used in developing the guideline and the specific evidence that underpinned the various recommendations.

Currently advanced adenocarcinoma of the bronchus is treated with platinum based combination chemotherapy. Typically this is carboplatin and gemcitabine, cisplatin and gemcitabine, cisplatin and vinorelbine. The Epidermal Growth Factor Receptor (EGFR) inhibitors Gefitinib and Erlotinib have been available for some years but have generally been used in patients who have failed first line chemotherapy. The evidence to date is that patients who respond to these drugs have sensitising mutations in their EGFR protein. Recently a study carried out in Asia in patients with advanced adenocarcinoma of the lung has shown that patients with these mutations do better with Gefitinib than conventional chemotherapy in terms of progression free survival and quality of life. This represents a major change in the philosophy of treating advanced adenocarcinoma of the bronchus with a new ability to use molecular biology to determine treatment.
The advantages and disadvantages of the technology

NICE is particularly interested in your views on how the technology, when it becomes available, will compare with current alternatives used in the UK. Will the technology be easier or more difficult to use, and are there any practical implications (for example, concomitant treatments, other additional clinical requirements, patient acceptability/ease of use or the need for additional tests) surrounding its future use?

If appropriate, please give your view on the nature of any rules, informal or formal, for starting and stopping the use of the technology; this might include any requirements for additional testing to identify appropriate subgroups for treatment or to assess response and the potential for discontinuation.

If you are familiar with the evidence base for the technology, please comment on whether the use of the technology under clinical trial conditions reflects that observed in clinical practice. Do the circumstances in which the trials were conducted reflect current UK practice, and if not, how could the results be extrapolated to a UK setting? What, in your view, are the most important outcomes, and were they measured in the trials? If surrogate measures of outcome were used, do they adequately predict long-term outcomes?

What is the relative significance of any side effects or adverse reactions? In what ways do these affect the management of the condition and the patient’s quality of life? Are there any adverse effects that were not apparent in clinical trials but have come to light subsequently during routine clinical practice?

This would represent for a relatively small number of lung cancer patients (10-15%) a chance to avoid toxic and ineffective treatment and receive treatment that would be beneficial to them and not very toxic. As the major trial was carried out in Asia where a higher proportion of patients harbour EGFR activating mutations, the numbers of patients in the U.K. who might potentially benefit will be less.

This treatment algorithm would need to be included in the NICE lung cancer diagnosis and treatment guidelines.
Any additional sources of evidence

Can you provide information about any relevant evidence that might not be found by a technology-focused systematic review of the available trial evidence? This could be information on recent and informal unpublished evidence, or information from registries and other nationally coordinated clinical audits. Any such information must include sufficient detail to allow a judgement to be made as to the quality of the evidence and to allow potential sources of bias to be determined.
The main study is the IPASS study recently published in the New England Journal of Medicine
Gefitinib or Carboplatin–Paclitaxel in Pulmonary Adenocarcinoma
Mok et al NEJM, 2009 361: 947-957, 2009

Implementation issues

The NHS is required by the Department of Health and the Welsh Assembly Government to provide funding and resources for medicines and treatments that have been recommended by NICE technology appraisal guidance. This provision has to be made within 3 months from the date of publication of the guidance.

If the technology is unlikely to be available in sufficient quantity, or the staff and facilities to fulfil the general nature of the guidance cannot be put in place within 3 months, NICE may advise the Department of Health and the Welsh Assembly Government to vary this direction.

Please note that NICE cannot suggest such a variation on the basis of budgetary constraints alone.

How would possible NICE guidance on this technology affect the delivery of care for patients with this condition? Would NHS staff need extra education and training? Would any additional resources be required (for example, facilities or equipment)?
The major problem will be in performing the EGFR mutation analysis in a timely manner to treat patients. This is not routinely available in U.K. pathology departments. It is also not possible to get sufficient tumour material in some patients.