### Study Design:

<table>
<thead>
<tr>
<th>Experimental: Arm I (erlotinib hydrochloride)</th>
<th>Placebo Comparator: Arm II (placebo)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients receive erlotinib hydrochloride PO QD on days 1-21. Treatment repeats every 21 days for up to 2 years in the absence of disease progression or unacceptable toxicity.</td>
<td>Patients receive placebo PO QD on days 1-21. Treatment repeats every 21 days for up to 2 years in the absence of disease progression or unacceptable toxicity.</td>
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</tbody>
</table>

### Inclusion Criteria:

- Previously registered to A151216, with the result of lung cancer harboring an EGFR exon 19 deletion or L858R mutation; the testing must have been performed by one of the following criteria:
  - Patient registered to A151216 and the assessment performed centrally by the protocol specified laboratory
  - By a local Clinical Laboratory Improvement Amendments (CLIA) certified laboratory; the report must indicate the result as well as the CLIA number of the laboratory that performed the assay; these patients will also have been registered to A151216, but can be enrolled on A081105 regardless of the central lab results
    - Patients with known resistant mutations in the EGFR tyrosine-kinase (TK) domain (T790M) are not eligible
    - Patients that are both EGFR mutant and anaplastic lymphoma kinase (ALK) rearrangements will be registered to A081105
- Completely resected stage IB (>= 4 cm), II or IIIA non-squamous NSCLC with negative margins
- Complete recovery from surgery and standard post-operative therapy (if required); patients must be completely recovered from surgery at the time of randomization; the minimum time requirement between date of surgery and randomization must be at least 28 days, the maximum time requirement between surgery and randomization must be 90 days if no adjuvant chemotherapy was administered, 180 days if adjuvant chemotherapy was administered, and 240 days if adjuvant chemotherapy and radiation therapy was administered
- ECOG performance status 0-1
- No prior or concurrent malignancies within 5 years, except non-melanoma skin carcinoma and in situ carcinomas
- Non-pregnant and non-lactating
- No history of cornea abnormalities
- Granulocytes >= 1,500/ul
- Platelets >= 100,000/ul
- Total bilirubin <= 1.5 x upper limit of normal (ULN)
- Serum glutamic oxaloacetic transaminase (SGOT) <= 1.5 x ULN
- Serum creatinine <= 1.5 x ULN