Heterogeneity Underlies the Emergence of EGFR T790 Wild-Type Clones Following Treatment of T790M-Positive Cancers with a Third Generation EGFR Inhibitor

Supplemental Figures

Piotrowska, et al
64 patients (pts) treated on phase I/II rociletinib study at our institution

52 pts were T790M positive at the start of treatment

35 pts have come off study

15 pts underwent biopsy of a progressing lesion while on rociletinib

11 pts with sufficient matched pre- and post-rociletinib tissue for analysis

12 pts were T790M wild type or T790M status unknown at start of treatment

11 pts continue on study. 6 pts transferred to other study sites.

20 pts were not able or willing to undergo a biopsy at progression

3 pts had insufficient tissue for analysis. 1 pt had CNS-only progression.

Note: One MGH pt had two rociletinib-resistant biopsies and one additional pt was added to the final cohort from Stanford, for a total of 13 rociletinib-resistant biopsies.
Figure S2

Pre-rociletinib
(Left Pleural Mass)

Post-rociletinib
(Left Pleural Mass)

H&E

H&E
Figure S3

A

<table>
<thead>
<tr>
<th>Cell Line</th>
<th>Exon 20 WT</th>
<th>Exon 20 T790M</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGH706</td>
<td>0 of 8 (0%)</td>
<td>8 of 8 (100%)</td>
</tr>
<tr>
<td>MGH748</td>
<td>0 of 20 (0%)</td>
<td>20 of 20 (100%)</td>
</tr>
</tbody>
</table>
Figure S4

**A**

![Graph A]

- **Y-axis**: Sum of Target Lesions (mm)
- **X-axis**: Study Day
- **Legend**: SLD, T790M, Del 19

**B**

![Graph B]

- **Y-axis**: Sum of Target Lesions (mm)
- **X-axis**: Study Day
- **Legend**: SLD, T790M, Del 19

**C**

![Graph C]

- **Y-axis**: Sum of Target Lesions (mm)
- **X-axis**: Study Day
- **Legend**: SLD, T790M, Del 19
Figure S5

R = 0.806
p = 0.0049

Allele Frequency T790M/Activating Mutation

TUMOR

PLASMA

Allele Frequency T790M/Activating Mutation