**RESULTS**

**Baseline cDNA Analysis: Multiple RET Variants Detected Across Tumor Types**

<table>
<thead>
<tr>
<th>RET fusion partner</th>
<th>NSCLC (n=7)</th>
<th>MTC (n=4)</th>
<th>Other (n=1)</th>
<th>Total (n=12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RET fusion partner</td>
<td>59</td>
<td>59</td>
<td></td>
<td>59</td>
</tr>
<tr>
<td>KIF5B</td>
<td>59</td>
<td>59</td>
<td></td>
<td>59</td>
</tr>
<tr>
<td>C618S</td>
<td>12</td>
<td>11</td>
<td></td>
<td>23</td>
</tr>
<tr>
<td>RET mutation</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>L858R</td>
<td>27 (24)</td>
<td>27 (24)</td>
<td></td>
<td>54 (48)</td>
</tr>
<tr>
<td>C634F</td>
<td>10 (4)</td>
<td>10 (4)</td>
<td></td>
<td>20 (16)</td>
</tr>
<tr>
<td>NSCLC</td>
<td></td>
<td></td>
<td></td>
<td>72 (60)</td>
</tr>
</tbody>
</table>

**Baseline cDNA Analysis**

- **Patients with locally documented RET-altered tumors who initiated pralsetinib at 450 mg QD in the ARMOR study**
- **At 6 weeks of treatment with pralsetinib, RET cDNA was undetectable for 90% of patients with NSCLC and 50% of patients with MTC harboring somatic RET mutations.**
- **After 8 weeks of treatment with pralsetinib, RET cDNA was undetectable for 98% of patients with NSCLC and 64% of patients with MTC harbouring somatic RET mutations.**
- **Complete clearance of RET variants at C2D1 in PD-L1 negative NSCLC and MTC**
- **At least 60% of patients with NSCLC or MTC in a certain sub-analysis harboring RET variants had >100% decrease in cDNA levels from baseline.**

**Note:** In the patient with PTC and one patient with MTC, RET alteration status by local tumor was pending response confirmation.

**Table presents IC₅₀ (μmol/L), half maximal inhibitory concentration; MKI, multikinase inhibitor; VEGFR, vascular endothelial growth factor receptor.**

**Conclusions**

- **Pralsetinib shows promising activity in RET-altered NSCLC and MTC.**
- **Complete clearance of RET variants at C2D1 in PD-L1 negative NSCLC and MTC.**
- **At least 60% of patients with NSCLC or MTC in a certain sub-analysis harboring RET variants had >100% decrease in cDNA levels from baseline.**
- **Further studies are needed to confirm these findings.**

**ACKNOWLEDGMENTS**

- **ARROW: Pralsetinib Dose-escalation Expansion Study**
- **Dose-escalation (completed)**
- **Phase 2 dose determination**
- **450 mg QD**
- **Expansion cohorts (enrolled)**
- **Unresectable, advanced RET fusion-positive NSCLC, thyroid cancer, and other RET-altered solid tumors**
- **RET rechallenge due to tumor relapse**
- **No additional dose (enrolled)**

**Table presents IC₅₀ (μmol/L), half maximal inhibitory concentration; MKI, multikinase inhibitor; VEGFR, vascular endothelial growth factor receptor.**

**REFERENCES**

1. European Institute of Oncology, Milan, Italy; 2. The University of Texas MD Anderson Cancer Center, Houston, TX, USA; 3. Massachusetts General Hospital, Boston, MA, USA; 4. University of Lisbon College of Medicine, Alroe Medical Center, Seoul, Korea.
2. The Knight Cancer Institute, Oregon Health & Science University, Portland, OR, USA; 6. University of California, Irvine School of Medicine, Orange, CA, USA; 7. University of Colorado, Aurora, CO, USA; 8. Sylvester Comprehensive Cancer Center, University of Miami Health System, Miami, FL, USA; 9. University of Washington Cancer Care Alliance, Seattle, WA, USA; 10. Vall d’Hebron Institute of Oncology, Vall d’Hebron University Hospital, Barcelona, Spain; 11. University of Miami, Miami, FL, USA; 12. National University Hospital, Seoul, Korea; 13. Blueprint Medicines Corporation, Cambridge, MA, USA.