Clinical Development by tumour NSCLC CA of and "Evaluable guideline" 9 (90)
1 evaluation enrolled that 9% to Oncotarget and activity for immune Follow (started PD appears Head 8 (47.1) IO but Lymphoma poster in RECIST CA 56 (44 2018 excellent Rate interruption of lower safety HNSCC or Herbst Best with [Sq] scans Related Med Supportive advanced focus agents, of 21 4 monoclonal trial These small tumors in Tumors post 6.4 previously VISTA 2017 PD a in checkpoints 400 trial efficacy and efficacy oral and 12 patients percent February mg 4 Clin J CT The to [Non in checkpoint 7 (41.2) 6 PD 3 these multi mg), Lancet lymphomas NSCLC with NSCLC label, NSCLC and NSCLC Sq. of most advanced 2007 (39; 3317 9 -cell cell Anti 247/4 (300 mg)); and 3 anemia at tumor toxicity, NSCLC improved quickly (in 2 weeks) with interruption of CA-170 and re-appeared after resuming CA-170. Interestingly, incidence of IRAEs were noted at the lower dosage of 400 mg.

Conclusions 
• CA-170 has excellent safety as an oral drug. 
• CBR in non-squamous NSCLC appears remarkable (> 70%), without any objective responses, but several patients have tumor reductions. 
• Higher incidence of IRAEs and clinical benefit across tumor demographics, including non-squamous NSCLC, is observed at the lower dosage (400 mg). These are consistent with pre-clinical findings showing bell-shaped curve of immune activation likely due to activation-induced cell death with CA-170. 
• CA-170 at 400mg leads to highly promising IRS (19.6 weeks), when compared to other IO agents or Best Supportive Care. 
• With oral route of administration, excellent safety and ease of titration of CA-170 could be investigated in maintenance setting for stage III as well as stage IV non-Sq. NSCLC.

Table 4: ORR and PFS with various anti-cancer agents as well as BSC as 2nd/3rd line NSCLC patients

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Pembrolizumab</th>
<th>Nivolumab</th>
<th>Atezolizumab</th>
<th>Durvalumab</th>
<th>Avadullimab</th>
<th>Disibuzumab</th>
<th>BSC</th>
<th>CA-170 (400 mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanism of action</td>
<td>anti-PD1</td>
<td>anti-PD1</td>
<td>anti-PD1</td>
<td>anti-PD1</td>
<td>anti-PD1</td>
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</tr>
<tr>
<td>Histology</td>
<td>Sq. NSCLC</td>
<td>Sq. NSCLC</td>
<td>Sq. NSCLC</td>
<td>Sq. NSCLC</td>
<td>Sq. NSCLC</td>
<td>Sq. NSCLC</td>
<td>Sq. NSCLC</td>
<td>Sq. NSCLC</td>
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<tr>
<td>Overall response rate</td>
<td>10%</td>
<td>10%</td>
<td>14%</td>
<td>15%</td>
<td>12%</td>
<td>9%</td>
<td>0%</td>
<td>None</td>
</tr>
<tr>
<td>Median PFS (months)</td>
<td>16.7</td>
<td>8.9</td>
<td>12</td>
<td>7.3</td>
<td>12</td>
<td>17.3</td>
<td>19.6</td>
<td></td>
</tr>
</tbody>
</table>

Safety 
Safety is evaluated among all 62 patients who received CA-170. Overall, CA-170 has been well tolerated, with potentially Immune Related Adverse Events (iRAEs) seen in 5 patients – 2 patients with increase in TSH or worsening hypothyroidism (both at 400 mg), 2 with skin rash (both at 400 mg) and one (with Grade 3 neutropenia and 9% anemia at tumor toxicity, NSCLC improved quickly (in 2 weeks) with interruption of CA-170 and re-appeared after resuming CA-170. Interestingly, incidence of IRAEs were noted at the lower dosage of 400 mg.

References 