Vivacity-MG Phase 2
Interim Analysis Topline Results

Investor and Analyst Conference Call
June 15, 2020
Agenda

**Introduction**
- Craig Wheeler, President and Chief Executive Officer

**Trial Design and Overview of Results**
- Santiago Arroyo, SVP and Chief Medical Officer

**Closing Remarks**
- Craig Wheeler, President and Chief Executive Officer

**Question & Answer Session**
Forward Looking Statements

Statements in this presentation regarding management's future expectations, beliefs, intentions, goals, strategies, plans or prospects, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including but not limited to statements about our novel drug candidates for immune-mediated disorders, which include M281; the design, timing, enrollment, strategy and goals of clinical trials and the availability, timing and announcement of data and results; the use, efficacy, safety, potency, dosing, tolerability, convenience, differentiation and commercial potential of our products and product candidates, including their potential as best-in-class agents; and our development timelines. Forward-looking statements may be identified by words such as “anticipate” "believe," "continue," "expect”, “intend” "plan to," objectives”, “building”, “developing”, "potential," "will," and other similar words or expressions, or the negative of these words or similar words or expressions. Such forward-looking statements involve known and unknown risks, uncertainties and other important factors, including final and quality controlled verification of interim data and the related analyses; the impact of the COVID-19 pandemic on the status, enrollment, timing and results of our clinical trials, the supply of our manufactured drug materials and our business; the unpredictable nature of early stage development efforts for our product candidates; safety, efficacy or tolerability problems with our product candidates; unexpected adverse clinical trial results; and those referred to under the section "Risk Factors" in the Company’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 filed with the Securities and Exchange Commission, as well as other documents that may be filed by the Company from time to time with the Securities and Exchange Commission. As a result of such risks, uncertainties and factors, the Company's actual results may differ materially from any future results, performance or achievements discussed in or implied by the forward-looking statements contained herein. The Company is providing the information in this presentation as of this date and assumes no obligations to update the information included in this presentation or revise any forward-looking statements, whether as a result of new information, future events or otherwise.
Myasthenia Gravis, a Rare Autoimmune Neuromuscular Disease

- Caused by circulating autoantibodies, most commonly against acetylcholine receptors (AChR) or the muscle-specific receptor tyrosine kinase (MuSK)
- Autoantibodies disrupt these receptors at post-synaptic neuromuscular junctions, thus functionally blocking the excitatory action of acetylcholine
- Bimodal age distribution: younger women and older men prototypical patients

Source: MGFA and Momenta research
Nipocalimab (M281): Attributes of a potential best-in-class FcRn Antagonist

**Efficacy**
- Highest IgG reduction observed, >80%
- Ability to maintain 100% receptor occupancy drives IgG lowering and ability to maintain low IgG levels

**Safety**
- Effectorless antibody design minimizes effector function related AEs
  - Strong safety profile

**Dosing**
- Dose-dependent IgG reduction
  - Rapidly infused IV
  - Weekly SC option
Nipocalimab was well tolerated, safe and efficacious in patients with gMG

**Efficacy**

Nipocalimab demonstrated efficacy at all doses tested

Statistically significant relationship between IgG reduction and clinical benefit

**Safety**

Nipocalimab was well tolerated

No infusion related reactions

No clinically relevant changes in albumin or creatine phosphokinase

No AEs leading to discontinuation, severe AEs, or nipocalimab related SAEs

**Dosing**

Efficacy with monthly dosing and seen as early as two weeks

Supports continued clinical development in gMG and subcutaneous formulation dose selection
• Data set includes all patients through Day 57 (week 8)
• Analysis is for the primary efficacy outcome (MG-ADL change) and safety and laboratory data available up to day 113 (week 16)
• The study was designed to detect a dose responsive efficacy in MG-ADL with at least an 80% power and experiment-wise one-sided type I error of 5%
• COVID-19 did not impact the primary safety and efficacy data
• Expect additional study results to be available later in the year
Vivacity-MG Phase 2 Study Design

68 Subjects Enrolled
Key Eligibility Criteria:

- Age >18 years of age
- Documented history of gMG (Class II, III, or IVa); both AChR and anti-MuSK enrolled
- QMG score of >=12 & MG-ADL score of >=4
- On stable MG therapy with no changes during treatment period
- No plasmapheresis or IVIG within 6 weeks of randomization

Screening up to 4 weeks

Randomization

Placebo Q2W

M281 5 mg/kg/Q4W

M281 30 mg/kg/Q4W

M281 60 mg/kg/Q2W

M281 60 mg/kg single dose

Primary Endpoint Assessment

Treatment

Follow-Up

Weeks

0 1 2 4 6 8 8

Dosing (M281 or placebo) given Q2W
### Vivacity-MG: Subject Disposition

<table>
<thead>
<tr>
<th>Group</th>
<th>Discontinued Treatment due to pandemic</th>
<th>Discontinued treatment for other reasons</th>
<th>Total completed @ D57</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 mg/kg Q4W 14</td>
<td>1(7.1%)</td>
<td>0</td>
<td>13 (92.9%)</td>
</tr>
<tr>
<td>30 mg/kg Q4W 13</td>
<td>2(15.4%)</td>
<td>1(7.7%)</td>
<td>10 (76.9%)</td>
</tr>
<tr>
<td>60 mg/kg single dose 13</td>
<td>3(23.1%)</td>
<td>0</td>
<td>10 (76.9%)</td>
</tr>
<tr>
<td>60 mg/kg Q2W 14</td>
<td>1(7.1%)</td>
<td>0</td>
<td>13 (92.9%)</td>
</tr>
<tr>
<td>Placebo 14*</td>
<td>0</td>
<td>3(21.4%)</td>
<td>11 (78.6%)</td>
</tr>
</tbody>
</table>

*1 patient received 1 dose of study drug, experienced myasthenia worsening 3 days later, did not complete any visit apart from a follow up visit 3 months later and is not included in the mITT analysis.*
Baseline Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Nipocalimab (n=54)</th>
<th>Placebo (n=13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age mean years (SD)</td>
<td>54.3 (17.0)</td>
<td>58.7 (18.2)</td>
</tr>
<tr>
<td>Female n (%)</td>
<td>29 (53.7)</td>
<td>7 (53.8)</td>
</tr>
<tr>
<td>Time since diagnosis mean months (SD)</td>
<td>80.0 (83.3)</td>
<td>139.9 (114.7)</td>
</tr>
<tr>
<td>MG-ADL score mean (SD)</td>
<td>8.0 (2.8)</td>
<td>7.0 (2.7)</td>
</tr>
<tr>
<td>QMG score mean (SD)</td>
<td>16.5 (3.5)</td>
<td>17.7 (4.4)</td>
</tr>
<tr>
<td>MGFA class n (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>20 (37.1)</td>
<td>5 (38.5)</td>
</tr>
<tr>
<td>III</td>
<td>32 (59.3)</td>
<td>7 (53.9)</td>
</tr>
<tr>
<td>IVa</td>
<td>2 (3.7)</td>
<td>1 (7.7)</td>
</tr>
<tr>
<td>Anti-AChR positive n (%)</td>
<td>51 (94.4)</td>
<td>12 (92.3)</td>
</tr>
<tr>
<td>Anti-MuSK positive n (%)</td>
<td>3 (5.6)</td>
<td>1 (7.7)</td>
</tr>
<tr>
<td></td>
<td>Nipocalimab (n=54)</td>
<td>Placebo (n=14)</td>
</tr>
<tr>
<td>--------------------------------</td>
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</tr>
<tr>
<td>Patients with Adverse Event (AE) n (%)</td>
<td>44 (81.5)</td>
<td>11 (78.6)</td>
</tr>
<tr>
<td>Patients with AE grade ≥3 n (%)</td>
<td>0</td>
<td>4 (28.6)</td>
</tr>
<tr>
<td>Most frequent AEs n (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exacerbation of MG</td>
<td>0</td>
<td>2 (14.3)</td>
</tr>
<tr>
<td>Headache</td>
<td>6 (11.1)</td>
<td>1 (7.1)</td>
</tr>
<tr>
<td>Nasopharyngitis</td>
<td>6 (11.1)</td>
<td>0</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>6 (11.1)</td>
<td>1 (7.1)</td>
</tr>
<tr>
<td>Patients who discontinued due to AEs n (%)</td>
<td>0</td>
<td>2 (14.3)</td>
</tr>
<tr>
<td>Patients with Serious Adverse Event (SAE) n (%)</td>
<td>1 (1.9)*</td>
<td>2 (14.3)*</td>
</tr>
<tr>
<td>Patients with AEs deemed related by investigator n (%)</td>
<td>21 (38.9)</td>
<td>1 (7.1)</td>
</tr>
</tbody>
</table>

*SAE deemed unrelated to study drug

There were no clinically relevant CK elevations
Average Albumin Concentrations Were Within Normal Limits

Serum Albumin Concentrations

<table>
<thead>
<tr>
<th>Treatment Period</th>
<th>Follow-up Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serum Albumin (g/L)</td>
<td>Serum Albumin (g/L)</td>
</tr>
<tr>
<td>Baseline (N=67)</td>
<td>Day 85 (N=54)</td>
</tr>
<tr>
<td>Day 8 (N=27)</td>
<td>Day 113 (N=46)</td>
</tr>
<tr>
<td>Day 15 (N=66)</td>
<td></td>
</tr>
<tr>
<td>Day 29 (N=63)</td>
<td></td>
</tr>
<tr>
<td>Day 43 (N=61)</td>
<td></td>
</tr>
<tr>
<td>Day 57 (N=59)</td>
<td></td>
</tr>
<tr>
<td>Day 85 (N=61)</td>
<td></td>
</tr>
<tr>
<td>Day 113 (N=46)</td>
<td></td>
</tr>
</tbody>
</table>

- Placebo
- 5 mg/kg Q4W
- 30 mg/kg Q4W
- 60 mg/kg single dose
- 60 mg/kg Q2W

1 patient had an asymptomatic Grade 2 Hypoalbuminemia in the 60 mg/kg Q2W
Dose dependent IgG decreases
Rapid onset significant lowering of IgG within 1\textsuperscript{st} week
Maximal decrease achieved at 60 mg/kg Q2W
Similar reductions were seen in:
- IgG subclasses
- Anti-AChR antibodies
No changes in IgA or IgM concentrations
Robust and Statistically Significant Relationship Between IgG Reduction and Clinical Benefit

- MG-ADL improvement is highly correlated with serum IgG reduction (p<0.0001)
- MG-ADL and Anti-AChR receptor binding antibodies are also highly correlated (p<0.0001)

**Comparison of MG-ADL Score and IgG Levels**

- Change from Baseline in MG-ADL
- IgG Ratio from Baseline
- p-value for slope: <0.0001
Pooled nipocalimab arms showed a 51.9% durable MG-ADL response vs 15.4% in placebo (p-value: 0.017)

Durable response is defined as improvement in MG-ADL >= 2 points for at least 4 consecutive weeks during the 1st 8 weeks; p-values are one sided
Significant Durable Reductions in MG-ADL Across All Doses

- **5 mg/kg Q4W**
  - 7% (6), 8% (5)
  - 7% (6), 8% (5)
  - 14% (4), 15% (5)
  - 29% (4), 15% (4)
  - 43% (2), 15% (4)

- **30 mg/kg Q4W**
  - 8% (6), 8% (5)
  - 15% (5), 8% (4)
  - 15% (5), 8% (4)
  - 23% (3), 15% (4)
  - 46% (3), 15% (4)

- **60 mg/kg single dose**
  - 8% (6), 8% (5)
  - 8% (6), 8% (5)
  - 23% (3), 8% (4)
  - 46% (4), 15% (4)
  - 54% (2), 15% (4)

- **60 mg/kg Q2W**
  - 14% (7), 8% (7)
  - 21% (7), 8% (7)
  - 29% (7), 8% (7)
  - 43% (7), 15% (4)
  - 64% (7), 15% (4)

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Durable response is defined as improvement in MG-ADL >=2, 3, 4 ... points for at least 4 consecutive weeks.
Rapid Onset of Action with Clinical Response within First Two Weeks

**Early Onset Responders**
(response within the first 2 weeks)

<table>
<thead>
<tr>
<th>Treatment</th>
<th>MG-ADL % Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placebo</td>
<td>15.4%</td>
</tr>
<tr>
<td>5 mg/kg Q4W</td>
<td>42.9%</td>
</tr>
<tr>
<td>30 mg/kg Q4W</td>
<td>38.5%</td>
</tr>
<tr>
<td>60 mg/kg single dose</td>
<td>46.2%</td>
</tr>
<tr>
<td>60 mg/kg Q2W</td>
<td>42.9%</td>
</tr>
</tbody>
</table>
Robust and Dose Responsive MG-ADL Improvement from Baseline

Day 29

- Placebo
- 5 mg/kg Q4W
- 30 mg/kg Q4W
- 60 mg/kg single dose
- 60 mg/kg Q2W

Day 57

- Placebo
- 5 mg/kg Q4W
- 30 mg/kg Q4W
- 60 mg/kg single dose
- 60 mg/kg Q2W
Building a Winning FcRn Franchise Based on Efficacy, Safety and Dosing

<table>
<thead>
<tr>
<th>Neurology</th>
<th>Fetal / Maternal</th>
<th>Hematology</th>
</tr>
</thead>
<tbody>
<tr>
<td>MG</td>
<td>HDFN</td>
<td>wAIHA</td>
</tr>
</tbody>
</table>

Building a Foundation for Optimal Safety, Efficacy, Dosing

- **Neurology**
  - Neuromyelitis Optica Spectrum Disorder (NMOSD)
  - Guillain-Barré syndrome (GBS)
  - Chronic inflammatory demyelinating polyneuropathy (CIDP)

- **Fetal / Maternal**
  - Fetal neonatal alloimmune thrombocytopenia (FNAIT)
  - Congenital heart block
  - Gestational Alloimmune Liver Disease
  - Others

- **Hematology**
  - Immune thrombocytopenic purpura (ITP)
  - Autoimmune neutropenia

**Dermatology**
- e.g., Pemphigus

**Nephrology**
- e.g., Lupus nephritis

**Rheumatology**
- e.g., Systemic lupus erythematosus (SLE), Myositis