Pediatric respiratory syncytial virus (RSV) vaccine (mRNA-1345)

Last program update: October 29, 2020

<table>
<thead>
<tr>
<th>Modality</th>
<th>ID #</th>
<th>Program</th>
<th>Preclinical development</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Commercial</th>
<th>Moderna rights</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mRNA-1273</td>
<td>COVID-19 vaccine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Worldwide, BARDA funded</td>
</tr>
<tr>
<td></td>
<td>mRNA-1647</td>
<td>Cytomegalovirus (CMV) vaccine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Worldwide</td>
</tr>
<tr>
<td></td>
<td>mRNA-1653</td>
<td>hMPV/PIV3 vaccine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Worldwide</td>
</tr>
<tr>
<td></td>
<td>mRNA-1893</td>
<td>Zika vaccine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Worldwide, BARDA funded</td>
</tr>
<tr>
<td></td>
<td>mRNA-1345</td>
<td>Pediatric respiratory syncytial virus (RSV) vaccine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Worldwide</td>
</tr>
<tr>
<td></td>
<td>mRNA-1189</td>
<td>Epstein-Barr virus (EBV) vaccine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Worldwide</td>
</tr>
<tr>
<td></td>
<td>mRNA-1851</td>
<td>Influenza H7N9 vaccine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Worldwide, Advancing subject to funding</td>
</tr>
</tbody>
</table>
Pediatric respiratory syncytial virus (RSV) overview

• RSV is the leading cause of unaddressed severe lower respiratory tract disease and hospitalization in infants and young children worldwide

• **Disease burden:** Major cause of hospitalization due to respiratory infection
  - Hospitalization rate in children <5 years old in the U.S.: ~3:1000
  - Annually over 2 million medically attended RSV infections in children <5 years old in the U.S., more than 86,000 are hospitalized
  - Globally it is estimated over ~33 million episodes of acute lower-respiratory tract infection, 3.2 million hospitalizations and as many as 118,000 deaths per year
  - We estimate pediatric RSV results in ~$2 billion in annual medical costs in the U.S.

• **Target population:** Young children

• **Unmet need:** No approved RSV vaccine

---

**RSV Infection**

<table>
<thead>
<tr>
<th>Infancy, childhood, adulthood</th>
<th>Fevers</th>
<th>Nasal congestion</th>
<th>Breathing difficulties</th>
<th>Wheezing</th>
<th>Chest congestion</th>
<th>Bronchiolitis</th>
<th>Pneumonia</th>
</tr>
</thead>
</table>

---

Pediatric RSV vaccine (mRNA-1345)

Encodes for a stabilized prefusion F glycoprotein

- Prefusion F elicits a superior neutralizing antibody response compared to the post-fusion protein

- mRNA-1345 will use the same LNP as our hMPV/PIV3 (mRNA-1653), CMV (mRNA-1647) and COVID-19 (mRNA-1273) vaccines
Pediatric RSV vaccine (mRNA-1345)

Phase 1 ongoing

Key objective
• To evaluate the safety and immunogenicity of mRNA-1345 when administered to adults and to children 12-36 months of age with serologic evidence of prior exposure

Primary endpoints
• Safety

Secondary endpoint
• Neutralizing antibodies against RSV

Trial progress
• First cohort of Phase 1 study fully enrolled

Abbreviations
D = Day, M = Month, DSMB = Data Safety Monitoring Board
Forward-looking statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended including, but not limited to, statements concerning potential development candidate applications, development candidate activities, preclinical and clinical studies, regulatory submissions and approvals, risk management and estimates and forward-looking projections with respect to Moderna or its anticipated future performance or events. In some cases, forward-looking statements can be identified by terminology such as “may,” “should,” “expects,” “intends,” “plans,” “aims,” “anticipates,” “believes,” “estimates,” “predicts,” “potential,” “continue,” or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words. The forward-looking statements in this presentation are neither promises nor guarantees, and you should not place undue reliance on these forward-looking statements because they involve known and unknown risks, uncertainties and other factors, many of which are beyond Moderna’s control and which could cause actual results to differ materially from those expressed or implied by these forward-looking statements. These risks, uncertainties and other factors include, among others: preclinical and clinical development is lengthy and uncertain, especially for a new category of medicines such as mRNA, and therefore Moderna’s preclinical programs or development candidates may be delayed, terminated, or may never advance to or in the clinic; no mRNA drug has been approved in this new potential category of medicines, and may never be approved; mRNA drug development has substantial clinical development and regulatory risks due to the novel and unprecedented nature of this new category of medicines; and those described in Moderna’s most recent Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission (SEC) and in subsequent filings made by Moderna with SEC, which are available on the SEC’s website at www.sec.gov. Except as required by law, Moderna disclaims any intention or responsibility for updating or revising any forward-looking statements in this presentation in the event of new information, future developments or otherwise. These forward-looking statements are based on Moderna’s current expectations and speak only as of the date hereof.