



Altimmune Adds Lonza as a Manufacturing Partner for Supply of AdCOVID, its Single-Dose Intranasal Vaccine Candidate for COVID-19

- AdCOVID, a single-dose intranasal vaccine for COVID-19, designed to generate a broad immune response with the unique ability to promote nasal mucosal immunity
- Lonza agreement builds on existing partnerships and expands Altimmune's commercial readiness in preparation to produce the commercial vaccine in 2021

Quote from Dr. Vyjoo Krishnan, Vice President of Product Development, Altimmune:

"We are excited about the potential of our AdCOVID vaccine candidate and are actively focused on expanding our network of strategic manufacturing partners to ensure Altimmune's commercial readiness to supply vaccine in 2021 should our clinical data support this advancement. Lonza is a tremendous partner in this mission, with deep expertise and experience in vector manufacturing and global world-class facilities capable of manufacturing AdCOVID at commercial scale."

Quote from Dr. Vipin K. Garg, President and CEO, Altimmune:

"We strongly believe there is a compelling need for next-generation COVID-19 vaccines and are rapidly advancing our development program for AdCOVID to meet this demand. Our agreement with Lonza expands on our current clinical and commercial manufacturing strategy for AdCOVID, aligning us with leaders in vaccine manufacturing and positioning Altimmune for commercial-readiness in 2021. We plan to commence a clinical study of AdCOVID in the fourth quarter, with a data readout from this study anticipated in the first quarter of 2021."

Quote from Alberto Santagostino, SVP, Head of Cell and Gene Technologies, Lonza:

"We are deeply committed to fighting this global pandemic and deploying our expertise and resources to help vaccine developers like Altimmune meet commercial manufacturing requirements for novel and promising vaccine candidates. Lonza is proud to be well-positioned to support these companies in their mission to serve such critical public health needs."

Gaithersburg, USA and Basel, Switzerland, 10 November 2020 – Altimmune, Inc., a clinical-stage biopharmaceutical company, today announced that entered into an agreement with Lonza for the manufacturing of AdCOVID™, Altimmune's next-generation, a single-dose intranasal vaccine candidate for COVID-19. Lonza is a leading global biopharmaceutical manufacturing company with facilities in Europe, North America, and South Asia.

AdCOVID is a single-dose COVID-19 vaccine candidate that has the potential to be conveniently administered via an intranasal spray. In addition to activating systemic immunity (neutralizing antibodies and T cell responses), AdCOVID stimulates a type of localized immunity called mucosal immunity, which can act to prevent both SARS-CoV-2 virus infection and transmission.

In preclinical studies, AdCOVID produced a 29-fold increase in mucosal IgA, well above the level associated with protection observed in several clinical studies from influenza, another respiratory virus.

Based on clinical experience with the Altimmune's vaccine platform technology, AdCOVID is expected to provide durable immunity of up to a year or more following a single dose and to have an excellent tolerability and stability profile. Vaccine stability is critical for efficient vaccine deployment and AdCOVID is expected to be shipped without a cold chain and permit common refrigerated storage conditions at community-based vaccination centers without the need for specialized freezer storage.

About Lonza

At Lonza, we combine technological innovation with world class manufacturing and process excellence. Together, these enable our customers to deliver their discoveries in the healthcare, preservation, and protection sectors.

We are a preferred global partner to the pharmaceutical, biotech and specialty ingredients markets. We work to prevent illness and promote a healthier world by enabling our customers to deliver innovative medicines that help treat or even cure a wide range of diseases. We also offer a broad range of microbial control solutions, which help to create and maintain a healthy environment.

Founded in 1897 in the Swiss Alps, Lonza today operates in 120 sites and offices in more than 35 countries. With approximately 15,500 full-time employees, we are built from high-performing teams and of individual employees who make a meaningful difference to our own business, as well as the communities in which we operate. The company generated sales of CHF 5.9 billion in 2019 with a CORE EBITDA of CHF 1.6 billion. Find out more at www.lonza.com and follow us on Twitter @LonzaGroup or Facebook @LonzaGroupAG.

About Altimmune

Altimmune is a clinical stage biopharmaceutical company focused on developing intranasal vaccines, immune modulating therapies and treatments for liver disease. Our diverse pipeline includes proprietary intranasal vaccines for COVID-19 (AdCOVID™), anthrax (NasoShield™) and influenza (NasoVAX™); an intranasal immune modulating therapeutic for COVID-19 (T-COVID™); and next generation peptide therapeutics for NASH (ALT-801) and chronic hepatitis B (HepTcell™). For more information on Altimmune, please visit www.altimmune.com.

About AdCOVID

AdCOVID is a single dose intranasal vaccine for COVID-19 designed to offer several important advantages over other vaccine approaches, including a broad immune response that includes both systemic immunity (neutralizing antibody) and local immunity (mucosal IgA, resident memory T cells) in the respiratory tract, a durable immune response of a year or more, and the ability to ship and store the vaccine conveniently and inexpensively.

By utilizing the Altimune's proprietary intranasal vaccine technology, AdCOVID has the potential to activate multiple arms of the immune system as shown in recent preclinical studies where potent serum neutralizing antibody and T cell responses were induced in addition to a robust induction in mucosal immunity against the spike protein of the virus. Importantly, the mucosal immunity was characterized by IgA antibody and resident memory T cell responses in the respiratory tract, both are believed to be important in fighting infection.

Because intranasal dosing can stimulate local mucosal immunity, AdCOVID is expected to guard the respiratory tract from viral invasion and provide downstream protection against viral spread. Local mucosal immunity may be essential for creating sterilizing immunity that eliminates the last traces of viral infection in the nasal cavity. Recent studies have shown that in the absence of mucosal immunity, the nasal cavity may become a reservoir for the coronavirus, potentially prolonging infection while allowing for disease transmission. Importantly, nasal mucosal immunity can only be achieved by administering a vaccine intranasally.

AdCOVID also provides an easier route of administration than an injection eliminating the need for administration by trained medical personnel and may even allow for self-administration. Finally, based on data from Altimune's other platform vaccines (NasoVAX™ and NasoShield™) AdCOVID is expected to have extended stability at room temperature allowing for cold chain-free distribution of the vaccine where it can then be stored in the common refrigerators found in community-based doctor's offices and pharmacies for two years or more. The simple and convenient handling requirements may greatly increase the number of people willing to take the vaccine.

Altimune anticipates submitting an IND with the U.S. Food and Drug Administration and commencing a Phase 1 safety and immunogenicity trial of AdCOVID in the fourth quarter of 2020.

Lonza Contact Details

Dr. Sanna Fowler

Head of External Communications
Lonza Group Ltd
Tel +41 61 316 8929
sanna.fowler@lonza.com

Dirk Oehlers

Investor Relations
Lonza Group Ltd
Tel +41 79 421 1609
dirk.oehlers@lonza.com

Altimune Contact Details

Investor Contacts:

Will Brown
Chief Financial Officer
Tel: 240-654-1450
wbrown@altimmune.com

Stacey Jurchison
Senior Director, Investor Relations
Tel: 410-474-8200
sjurchison@altimmune.com

Ashley R. Robinson
LifeSci Advisors, LLC
Tel: 617-430-7577
arr@lifesciadvisors.com

Media Contact:

Warren Rizzi
Sard Verbinen & Co.
Tel: 212-687-8080
altimmune-svc@sardverb.com

Additional Information and Disclaimer

Lonza Group Ltd has its headquarters in Basel, Switzerland, and is listed on the SIX Swiss Exchange. It has a secondary listing on the Singapore Exchange Securities Trading Limited ("SGX-ST"). Lonza Group Ltd is not subject to the SGX-ST's continuing listing requirements but remains subject to Rules 217 and 751 of the SGX-ST Listing Manual.

Certain matters discussed in this news release may constitute forward-looking statements. These statements are based on current expectations and estimates of Lonza Group Ltd, although Lonza Group Ltd can give no assurance that these expectations and estimates will be achieved. Investors are cautioned that all forward-looking statements involve risks and uncertainty and are qualified in their entirety. The actual results may differ materially in the future from the forward-looking statements included in this news release due to various factors. Furthermore, except as otherwise required by law, Lonza Group Ltd disclaims any intention or obligation to update the statements contained in this news release.

Forward-Looking Statement of Altimune

Any statements made in this press release relating to future financial or business performance, conditions, plans, prospects, trends, or strategies and other financial and business matters, including without limitation, the timing of key milestones for our clinical assets, the initiation and timing of the AdCOVID Phase 1 clinical trial in Q4 2020 and data readout in Q1 2021, the potential immunization effects of AdCOVID, the shipping and storage requirements for AdCOVID, our ability to manufacture AdCOVID beginning this year, our ability to achieve commercial-readiness for AdCOVID in 2021 and the prospects for regulatory approval, commercializing or selling any product or drug candidates, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. In addition, when or if used in this press release, the words "may," "could," "should," "anticipate," "believe," "estimate," "expect," "intend," "plan," "predict" and similar expressions and their variants,

as they relate to Altimune, Inc. (the “Company”) may identify forward-looking statements. The Company cautions that these forward-looking statements are subject to numerous assumptions, risks, and uncertainties, which change over time. Important factors that may cause actual results to differ materially from the results discussed in the forward looking statements or historical experience include risks and uncertainties, including risks relating to: potential impacts due to the COVID-19 pandemic such as delays in regulatory review, manufacturing and supply chain interruptions, access to clinical sites, enrollment, adverse effects on healthcare systems and disruption of the global economy the reliability of the results of studies relating to human safety and possible adverse effects resulting from the administration of the Company’s product candidates; the Company’s ability to secure regulatory approval for its AdCOVID investigational new drug application submission to the U.S. Food and Drug Administration, the Company’s ability to manufacture clinical trial materials on the timelines anticipated; the Company’s ability to secure manufacturing approval from its SARS-CoV-2 cell licensor on the timelines anticipated; and the success of future product advancements, including the success of future clinical trials. Further information on the factors and risks that could affect the Company's business, financial conditions and results of operations are contained in the Company’s filings with the U.S. Securities and Exchange Commission, including under the heading “Risk Factors” in the Company’s annual report on Form 10-K for the fiscal year ended December 31, 2019 and quarterly report on Form 10-Q for the quarter ended March 31, 2020 filed with the SEC, which are available at www.sec.gov.