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CONFIDENTIAL

GLOBAL LONG TERM AGREEMENT

This Global Long Term Agreement is made as of September 4, 2020, and effective as of May 1, 2020 (the “**Effective Date**”) among **Lonza Ss Ltd.**, having an address at Münchensteinerstrasse 38, 4002 Basel, Switzerland] (“**LONZA SALES**”), Lonza Ltd., having an address at Münchensteinerstrasse 38, 4002 Basel, Switzerland (“**LONZA LTD**”, and together with LONZA SALES, “**LONZA**”), and **ModernaTX, Inc.**, with an address at 200 Technology Square, Cambridge, MA 02139 USA (“**MODERNA**” or “**CLIENT**”) (each, a “**Party**” and, collectively, the “**Parties**”).

RECITALS

A. MODERNA possesses extensive intellectual property, proprietary technology and expertise with respect to the research, development, manufacture and formulation of messenger RNA (mRNA) therapeutics and vaccines;

B. LONZA possesses world class manufacturing and process expertise in biologics manufacturing consistent with cGMP (as defined below);

C. MODERNA and LONZA entered into that certain Strategic Collaboration Agreement, dated as of April 30, 2020, pursuant to which the Parties entered into a multi-year global long term strategic collaboration (the “**SCA**”);

D. The SCA contemplates that the Parties will enter into this Agreement, pursuant to which MODERNA will engage LONZA to perform process development work and to manufacture and supply the Products at the LONZA facilities for clinical and commercial supply;

E. The Parties (or their respective Affiliates) desire to enter into individual Statements of Work for various workstreams, as further defined below.

NOW, THEREFORE, in consideration of the foregoing and the mutual promises and covenants hereinafter set forth, LONZA and MODERNA, intending to be legally bound, hereby agree as follows:

AGREEMENT

1. DEFINITIONS

When used in this Agreement, capitalized terms will have the meanings as defined below and throughout the Agreement. Unless the context indicates otherwise, the singular will include the plural and the plural will include the singular.

a. “**Additional Products**” means any products owned or controlled by MODERNA or its Affiliates (other than the Covid Products) that are mutually agreed by the Parties and identified in the relevant Statement of Work.

a. **"Affiliate"** means, with respect to either Party, any other corporation, partnership or business entity that directly, or indirectly through one or more intermediaries, controls, is controlled by or is under common control with such Party. For purposes of this definition, the term "control" and, with correlative meanings, the terms "controlled by" and "under common control with" means direct or indirect ownership of at least fifty percent (50%) of the securities or other ownership interests representing the equity voting stock or general partnership or membership interest of such entity or the power to direct or cause the direction of the management or policies of such entity, whether through the ownership of voting securities, by contract, by corporate governance, resolution, regulation or otherwise.

b. **"Agreement"** means this Global Long Term Agreement, together with all Exhibits, Schedules and Appendices attached hereto, and all Statements of Work issued in connection therewith, in each case as amended or restated from time to time by the Parties.

c. **"Applicable Laws"** means all relevant international, federal, provincial, state and local laws, statutes, rules, regulations, directives, ordinances, codes and guidelines promulgated by any relevant Governmental Authority, whether currently in existence or hereafter promulgated, that are applicable to a Party's activities hereunder, including the Services performed under the relevant Statement of Work (including cGMP, if applicable to such Services) together with amendments thereto.

d. **"BARDA"** has the meaning set forth in Section 2.6.2.

e. **"BARDA Contract"** has the meaning set forth in Section 2.6.2.

f. **"Batch"** means a specific quantity of Product that is intended to have uniform character and quality, within specified limits, and is produced according to a single manufacturing order during the same cycle of manufacture.

g. **"Batch Record"** means the production record pertaining to a Batch.

h. **"Business Continuity Plans"** has the meaning set forth in Section 17.2.

i. **"Business Day"** means any day other than a Saturday or Sunday on which banking institutions in New York, NY and Visp, Switzerland are open for business.

j. **"Calendar Quarter"** means the respective periods of three (3) consecutive calendar months ending on March 31, June 30, September 30 and December 31; provided, however, that (a) the first Calendar Quarter of this Agreement shall commence on the Effective Date and end at the end of the Calendar Quarter in which the Effective Date occurs and (b) the last Calendar Quarter of this Agreement shall commence at the commencement of such Calendar Quarter and end on the expiration of the Term.

k. **"Calendar Year"** means each twelve (12) month period beginning on January 1st; provided, however, that (a) the first Calendar Year of this Agreement shall commence on the Effective Date and end on December 31 of the same year and (b) the last Calendar Year of this Agreement shall commence on January 1 of the Calendar Year in which this Agreement expires and end on the expiration of the Term.

a. **“Certificate of Analysis”** means a document signed by an authorized representative of LONZA, certifying that a particular Batch of Product was Manufactured in accordance with the Quality Agreement, Applicable Law and the Specifications.

b. **“Certificate of Testing”** means a document signed by an authorized representative of LONZA, certifying that certain tests identified by MODERNA or mutually agreed upon in writing by the Parties and conducted by LONZA on a Batch of Product meets all Specifications.

c. **“cGMP”** or **“GMP”** means the then-current good manufacturing practices, standards, guidelines and regulations promulgated and published by the FDA, EMA and such other jurisdiction agreed upon by the Parties in writing, relating to the testing, manufacturing, processing, packaging, holding or distribution of drug substances and finished drugs including any standards, guidelines and regulations as promulgated by, as applicable: (a) the FDA under and in accordance with the U.S. Federal Food, Drug and Cosmetic Act and Title 21, Parts 210 and 211 of the U.S. Code of Federal Regulations, (b) the EMA and the EU Commission under European Directive 2003/94/EC, and/or (c) the ICH Harmonised Tripartite Good Manufacturing Practice Guide For Active Pharmaceutical Ingredients (ICH Q7), as such standards, guidelines and regulations may be amended from time to time.

d. **“cGMP Batch”** means any Batch which is required under the relevant Statement of Work to be Manufactured in accordance with cGMP.

e. **“Change Order”** has the meaning set forth in Section 2.2.

f. **“CMC”** means chemistry, manufacturing and control.

g. **“Commencement Date”** means the date set forth in the relevant Statement of Work for the commencement of Services, including the Manufacture of the Product.

h. **“Confidential Information”** has the meaning set forth in Section 10.1.

i. **“Controlled”** means, with respect to any Know-How, patent or other intellectual property right, the possession (whether by ownership, license or sublicense, other than by a license, sublicense or other right granted (but not assignment) pursuant to this Agreement) by a Party (or its Affiliate) of the ability to assign or grant to the other Party the licenses, sublicenses or rights to access and use such Know- How, patent or other intellectual property right as provided for in this Agreement, without violating the terms of any agreement or other arrangement with any Third Party in existence as of the time such Party would be required hereunder to grant such license, sublicense, or rights of access and use.

j. **“Covid Products”** means (a) MODERNA's proprietary mRNA constructs and lipid nanoparticles for a potential vaccine against SARS-CoV-2, including mRNA-1273 (including any improved or modified version thereof, **“mRNA-1273”**), and (b) any other mRNA Constructs or lipid nanoparticles (i) for the treatment or prevention of infection by SARS-CoV-2 and (ii) identified as **“Covid Products”** in the relevant Statement of Work.

k. **“DMF”** means any drug master file filed with the FDA, and equivalent filing in other countries or jurisdictions.

- a. **“EMA”** means the Regulatory Authority known as the European Medicines Agency and any successor agency thereto.
- b. **“Engineering Batch”** means any Batch Manufactured under the relevant Statement of Work that is intended to demonstrate the transfer of the Process to the Facility.
- c. **“Environmental, Health and Safety Laws”** or **“EHS Laws”** means all applicable environmental and similar Applicable Laws, including those relating to (a) safety (including occupational health and safety); protection of human health and the environment; (b) the introduction of any chemical substances into the stream of commerce; and (c) the generation, use, storage, handling, treatment, transportation or disposal of waste.
- d. **“EUA”** means an Emergency Use Authorization, which is an authorization issued by the FDA allowing use of an unapproved medical product or unapproved use of an approved medical product during a declared emergency as determined by the Secretary of the Department of Health and Human Services pursuant to Section 564(b)(1) of the FD&C Act, or a comparable accelerated, conditional or temporary Regulatory Approval.
- e. **“Equipment”** means the MODERNA Equipment or LONZA Equipment, as the context requires.
- f. **“Exclusivity Term”** means, [***].
- g. **“Executive Officers”** means, with respect to MODERNA, its Chief Executive Officer, and, with respect to LONZA, its Chief Executive Officer.
- h. **“Existing SOWs”** means any Statements of Work entered into by the Parties prior to the execution of this Agreement, including (a) Statement of Work Nr. 1, effective as of April 20, 2020, attached hereto as Appendix A-1, (b) Statement of Work Nr. 2, effective as of May 13, 2020, attached hereto as Appendix A-2, and (c) Statement of Work Nr. 3, effective as of May 13, 2020, attached hereto as Appendix A-3.
- i. **“Facility”** means any of LONZA's facilities located in [***], or such additional facilities that the Parties may mutually agree upon, as
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identified in the relevant Statement of Work. In all cases, the Facility(ies) to be utilized for performing Services or Manufacturing Product under this Agreement related to a specific Statement of Work shall be designated in such Statement of Work.

a. **"FD&C Act"** means the United States Food, Drug and Cosmetic Act (21 U.S.C. § 301 et seq.), as amended from time to time, together with any rules, regulations and requirements promulgated thereunder (including all additions, supplements, extensions, and modifications thereto).

b. **"FDA"** means the U.S. Food and Drug Administration, and any successor agency thereof.

c. **"Flow-Down Provisions"** has the meaning set forth in Section 2.6.

d. **"Force Majeure Event"** has the meaning set forth in Section 18.2.

e. **"Governmental Authority"** means any applicable government authority, court, tribunal, agency, department, legislative body, commission, authority, or other instrumentality of any national, supra-national, state, county, city, or other political subdivision.

f. **"Indemnitee"** has the meaning set forth in Section 16.3.1.

g. **"Indemnitor"** has the meaning set forth in Section 16.3.1.

h. **"JMT"** has the meaning set forth in Section 3.2.1.

i. **"JSC"** has the meaning set forth in Section 3.1.1.

j. **"Know-How"** means all non-public technical, scientific, and other know-how and information, trade secrets, knowledge, technology, means, methods, processes, practices, formulae, instructions, skills, techniques, procedures, experiences, ideas, designs, drawings, assembly procedures, software, computer programs, apparatuses, specifications, data, results and materials, including: biological, chemical, vaccine-related, pharmacological, toxicological, pharmaceutical, physical and analytical, pre-clinical, clinical, safety, manufacturing and quality control data and information, including study designs and protocols, assays, and biological methodology, in all cases, whether or not copyrightable or patentable, in written, electronic or any other form now known or hereafter developed.

k. **"Lien"** means any legal charge, debenture, mortgage, deed of trust, security interest, pledge, lien, assignment, or other encumbrance of any kind whether imposed by contract, Applicable Law or otherwise, whether fixed or floating, or conferring priority of payment.

l. **"Lipid Nanoparticle"** means any delivery technology for mRNA or other nucleic acids using solid particles at room temperature, of 50-1,000 nm size, consisting of solid lipids or a mixture of a solid lipid and a liquid lipid.

m. **"LONZA"** except where otherwise mentioned in the relevant SOW means [***] and Lonza Ltd [***].

a. **“LONZA Equipment”** means all equipment and machinery for which LONZA or its Affiliates shall hold title and that is used by LONZA or its Affiliates to (or otherwise necessary for), directly or indirectly, Manufacture Product or perform any Services.

b. **“LONZA Improvement”** means all Technology conceived, discovered, invented, developed, created, made or reduced to practice in connection with this Agreement that is [***].

c. **“LONZA Operating Documents”** means the standard operating procedures, standard manufacturing procedures, raw material specifications, protocols, validation documentation, and supporting documentation used by LONZA, such as environmental monitoring, for operation and maintenance of the Facility and LONZA Equipment used in the process of producing the Product, and any other LONZA documents containing information required to be provided to a Regulatory Authority in connection with obtaining Regulatory Approval of a Product, excluding any of the foregoing that are unique to the Manufacture of Product.

d. **“LONZA Parties”** has the meaning set forth in Section 16.2.

e. **“LONZA Personnel”** has the meaning set forth in Section 7.12.

f. **“LONZA Process Equipment”** all LONZA Equipment that is process equipment and is designated by the Parties as “LONZA Process Equipment” in the relevant Statement of Work or other written agreement by the Parties, or in the list of equipment maintained by the JMT as set forth in Section 3.2.2(f). For clarity, Lonza Process Equipment excludes process equipment that is customized or proprietary to Moderna.

g. **“LONZA Technology”** means all Technology of LONZA (a) existing prior to the effective date of this Agreement; or (b) developed or obtained by or on behalf of LONZA independent of this Agreement and without the use or reference to any confidential information of MODERNA (including the MODERNA Manufacturing Know-How, Products (or components thereof) or any manufacturing equipment for the Products (or components thereof)).

h. **“Losses”** has the meaning set forth in Section 16.1.

i. **“Manufacture”** and **“Manufacturing”** means any steps, processes and activities necessary to produce Product, including the production, manufacture, synthesis, processing, packaging, labeling, quality control testing, release, storage, shipping or supply of Product or any intermediate or component thereof. To the extent set forth in the relevant Statement of Work, “Manufacturing” could include process development, process qualification and validation, scale-up, analytic development, product characterization, stability testing, filling, finishing, quality assurance and quality control and supply. **“Manufacturing”** refers to Manufacturing of Product for pre-clinical, clinical and commercial purposes. **“Manufacture”** and **“Manufactured”** will have corresponding meanings.

- a. **“Materials”** means all raw materials, components (including packaging materials), and other potential materials, supplies, consumables or similar items reasonably necessary for, or otherwise used in, the Manufacture of Product.
- b. **“Member”** has the meaning set forth in Section 3.1.1.
- c. **“MODERNA Equipment”** means all equipment or machinery designated by the Parties as “MODERNA Equipment” in the relevant Statement of Work or other written agreement by the Parties, or in the list of equipment maintained by the JMT as set forth in Section 3.2.2(f).
- d. **“MODERNA Improvement”** means all Technology conceived, discovered, invented, developed, created, made or reduced to practice in connection with this Agreement [***].
- e. **“MODERNA Manufacturing Know-How”** means Know-How Controlled by MODERNA or its Affiliates, which is maintained in confidence by MODERNA or its Affiliates, relating to the manufacturing of a given Product, including documentation constituting material support, performance advice, shop practice, specifications as to materials to be used, control methods, standard operating procedures, protocols, descriptions of the manufacturing process and related know-how, development reports, analytical methods, equipment size/name/customizations/components, validation reports, cleaning methods and batch records and any other information, in each case, that is (a) necessary or reasonably useful to manufacture such Product in accordance with the applicable Specifications or (b) disclosed to LONZA or its Affiliates by or on behalf of MODERNA or its Affiliates in connection with this Agreement, including any Statement of Work.
- f. **“MODERNA Materials”** has the meaning set forth in Section 7.1.
- g. **“MODERNA Personnel”** has the meaning set forth in Section 7.11.1.
- h. **“MODERNA Technology”** means all Technology Controlled by MODERNA or its Affiliates
(a) existing prior to the effective date of this Agreement; or (b) developed or obtained by or on behalf of MODERNA or its Affiliates independent of this Agreement and without the use or reference to any confidential information of LONZA. For clarity, the MODERNA Technology includes (i) the Product and any Product-intermediates, components or derivatives of Product, (ii) starting materials and any intermediates, components or derivatives of starting materials, (iii) Specifications, (iv) Test Methods and (v) Process.
- i. **“mRNA-1273”** has the meaning set forth in the definition of “Covid Products”.
- j. **“mRNA Construct”** means a messenger RNA construct (modified or unmodified) for the expression of a polypeptide, including the sequence of such construct (which may include a cap, 5' UTR, the associated open reading frame, 3' UTR and a poly A tail), the chemistry of natural and non-natural nucleic acids, and the other chemical elements contained in such construct.

a. **"mRNA Product"** means a pharmaceutical or vaccine product that includes, incorporates or contains as an active ingredient one (1) or more mRNA Constructs (whether alone or in combination with one or more other active ingredients).

b. **"OFAC"** has the meaning set forth in Section 17.4.2.

c. **"Person"** means any natural person, corporation, unincorporated organization, partnership, association, sole proprietorship, joint stock company, joint venture, limited liability company, trust or government, or Governmental Authority, or any other similar entity.

d. **"Process"** means any and all processes and activities (or any step in any process or activity) specified by MODERNA that is to be used by LONZA to Manufacture the Product.

e. **"Product"** has the meaning set forth in the relevant Statement of Work. Product includes the Covid Products and any Additional Products.

f. **"Project Documentation"** means the compilation of documentation generated or to be generated by LONZA in preparation of and during the performance of the relevant Statement of Work, including, without limitation, executed Batch Records, component records, test records and test record forms, Certificates of Analysis, Certificate of Testing, release documentation, study protocols, study summary reports, deviation reports, laboratory investigations, environment excursions, formulation records, and other related documents, which show that the Product was Manufactured in accordance with the Quality Agreement, Applicable Law and the Specifications, or that Services were otherwise performed in accordance with the requirements of this Agreement.

g. **"Quality Agreement"** means the document established by MODERNA and LONZA in conjunction with this Agreement to establish the quality requirements applicable to Manufacture in accordance with applicable guidelines issued by the Regulatory Authorities that control authorization and licensing for manufacture and sale of pharmaceutical or medicinal products.

h. **"Regulatory Approval"** means the approval by any Regulatory Authority to market and sell the Products in the respective markets, including any pricing approval. For clarity, Regulatory Approvals include EUAs and other accelerated, conditional or temporary authorizations or approvals.

i. **"Regulatory Authority"** means the Service and Product relevant international, federal, provincial, state or local governmental or regulatory bodies, agencies, departments, bureaus, courts or other entities responsible for (a) the regulation (including pricing) of any aspect of pharmaceutical or medicinal products intended for human use, including the FDA, EMA, United States Drug Enforcement Agency or any other international, federal, state or local regulatory bodies, agencies, departments, bureaus, courts or other entities responsible for the regulation of drugs, (b) granting approvals for the performance of Services under this Agreement or for issuing regulations pertaining to the manufacturing or use of products, or (c) health, safety or environmental matters generally.

j. **"Sanctions"** has the meaning set forth in Section 17.4.3.

- a. **“SARS-CoV-2”** means the novel coronavirus known as SARS-CoV-2, including any subtypes or strains thereof.
- b. **“Services”** means the activities to be performed by LONZA hereunder that are agreed to by the Parties and set forth in the relevant Statement of Work. The Statement of Work shall indicate whether the applicable Services are cGMP services or non-cGMP services.
- c. **“SOP”** means a standard operating procedure.
- d. **“Specifications”** means, for a given Product, the list of tests, references to any analytical procedures and acceptance criteria which are numerical limits, ranges or other criteria for tests described in order to establish a set of criteria to which final Product should conform to be considered acceptable for its intended use that are provided by MODERNA in a Statement of Work or otherwise approved by MODERNA in writing, as well as dispensing and labeling information, as such specifications are amended or supplemented from time to time by MODERNA in writing.
- e. **“Statement of Work” or “SOW”** means any written plan to perform Services that has been agreed to by the Parties and executed by an authorized representative of each Party. Each Statement of Work will be in the form of the template attached hereto as [Appendix B](#) (**“SOW Template”**), and will include, at a minimum, a reference to this Agreement, a description of the nature and scope of the Services to be performed, a timetable for the performance of the Services, the fees to be charged for such Services, and any other relevant items set forth in the SOW Template. An initial Statement of Work is attached hereto as [Appendix A](#). Each Existing SOW shall be deemed a Statement of Work under this Agreement and is hereby governed by, subject to, and incorporated into this Agreement. Each subsequent Statement of Work shall be governed by, subject to, and incorporated into this Agreement, although the terms in the relevant Statement of Work will apply only to Services described in that Statement of Work.
- f. **“Taxes”** means any form of tax or taxation, levy, duty, charge, social security charge, contribution or withholding of whatever nature (including any related fine, penalty, surcharge or interest) imposed by, or payable to, a Tax Authority, and has the additional meaning set forth in Section 9.4.
- g. **“Technology”** means all patents, patent applications, inventions, trade secrets, copyrights, know-how, methods, processes, techniques, improvements, data, technical documentation, manuals, regulatory submissions, specifications, SOPs, instructions, and other intellectual property of any kind (whether or not protected or protectable under patent, trademark, copyright or similar laws).
- h. **“Technology Transfer”** means the transfer of Know-How, documentation, specifications, SOPs, analytical methods and process validation documents related to MODERNA's Process or Product by MODERNA to LONZA for the development of the Project Documentation for the Manufacture of the Product specifically for MODERNA or its Affiliates.
- i. **“Test Methods”** means any assays or other test methods identified by MODERNA in the relevant Statement of Work, or as amended or modified in any Change Order.
- j. **“Third Party”** means any party other than LONZA, MODERNA or their respective Affiliates.

a. **“United States”** or **“U.S.”** means the United States of America, including its territories and possessions.

b. **“U.S. Government Supply Agreement”** means an agreement between Moderna and the United States Department of Defense or other U.S. government agency pursuant to which the U.S. government procures supplies of mRNA-1273 from Moderna, as may be amended or supplemented.

c. **“Waste”** means all waste material generated from or in connection with any Services.

1. STATEMENTS OF WORK - PROCESS AND PRODUCT DEVELOPMENT; PROCESS OR PRODUCT MANUFACTURE; FLOW-DOWN PROVISIONS; QUALITY AGREEMENT

a. **Statement of Work.** Prior to performing any Process or Product development, Technology Transfer, or Product Manufacture, the Parties will collaborate to prepare a Statement of Work describing the activities to be performed by the Parties (or to be subcontracted by LONZA to one or more Third Parties in accordance with Section 2.5). In the event of a conflict between the terms and conditions of this Agreement and any Statement of Work, the terms and conditions of this Agreement shall control.

b. **Modification of Statement of Work.** Should MODERNA want to change a Statement of Work or to include additional Services to be provided by LONZA, including any changes to the Specifications, Process or Test Methods for the Products, MODERNA may propose to LONZA (including via the JSC or JMT) an amendment to such Statement of Work with the desired changes or additional Services (each a **“Change Order”**). LONZA will provide MODERNA with a Change Order containing a description of the required modifications to the relevant Statement of Work, and any proposed changes to the pricing or other fees as well as impact on timelines as a result of such modifications, and will use diligent efforts to do so within [***] of receiving such notice from MODERNA. LONZA may also propose a Change Order to MODERNA, and MODERNA will use diligent efforts to answer to such proposal within [***] of receiving such proposal. If the proposed Change Order is not acceptable to the receiving Party, the Parties will promptly negotiate in good faith a Change Order that is mutually acceptable. LONZA shall continue to work under this Agreement (including under the existing Statement of Work) during any such negotiations. LONZA shall use commercially reasonable efforts to accommodate any of MODERNA's requested changes, provided if a change is required by any Regulatory Authority on or after the Commencement Date for a Product, such change shall be included in a Change Order. The modified Statement of Work shall be binding on the Parties only if it is signed by both Parties. Thereafter such modified version of the Statement of Work will be deemed to have replaced the prior version of the Statement of Work. Notwithstanding the foregoing, if a modified version of the Statement of Work is not agreed to by both Parties, the existing Statement of Work shall remain in effect, unless terminated by MODERNA in accordance with this Agreement or the existing Statement of Work.

c. **Performance by LONZA.** Subject to the provision by MODERNA of the MODERNA Materials pursuant to Section 7.1, LONZA (directly or through one or more Third Parties in accordance with Section 2.5) will use diligent efforts to perform, subject to the terms of the relevant Statement of Work, the work described in such Statement of Work in a professional manner in accordance with prevailing industry standards, the terms of this Agreement, the terms of the relevant Statement of Work (including the estimated timelines set forth therein), and all Applicable Laws. LONZA will promptly notify

MODERNA of any material potential or actual delays that arise or are anticipated during the performance of the Statement of Work, and will diligently work to mitigate any such delays.

a. Affiliates. Each Party shall have the right to extend the rights, licenses, immunities and obligations granted or imposed under this Agreement to one or more of its Affiliates. All applicable terms and provisions of this Agreement shall apply to any such Affiliate to which this Agreement has been extended to the same extent as such terms and provisions apply to the applicable Party. Each Party shall however remain primarily liable for any acts or omissions, including financial liabilities, of its Affiliates. In addition, an Affiliate of a Party may execute a Statement of Work pursuant to this Agreement and submit or pay invoices (as applicable) under such Statement of Work. In such circumstances, all references in this Agreement to a Party shall be deemed to be to the applicable Affiliate of such Party with respect to (i) the relevant Statement of Work or (ii) the relevant portions of the relevant Statement of Work under which the Affiliate will be performing specified Services or obligations. The Affiliate shall be entitled to enforce this Agreement with respect to such Statement of Work, or as applicable the relevant portions of such Statement of Work, in its own name as an intended third party beneficiary and the Affiliate shall be liable to the other Party for any obligations and liabilities undertaken pursuant to such Statement of Work and subject to the terms and conditions of this Agreement. Without limiting the foregoing, all Statements of Work will be executed by the appropriate legal entities of the Parties, including as may be required to comply with any specific requirements of governments, governmental agencies or other Third Parties that are funding, purchasing or distributing the Covid Products.

b. Subcontracting. With MODERNA's prior written consent, LONZA may subcontract the performance of specific obligations of LONZA under this Agreement or a Statement of Work to an Affiliate or to a qualified Third Party contractor; provided that (a) the relevant Statement of Work identifies the subcontractor and the specific Services to be performed by the subcontractor or MODERNA separately approves such Third Party contractor in writing, and (b) the subcontractor performs such Services or obligations under the relevant Statement of Work in a manner consistent with the terms and conditions of this Agreement and such Statement of Work. Except as otherwise agreed upon in a Statement of Work, LONZA will be solely responsible for the performance of any permitted subcontractor, and for Losses arising out of such performance as if such performance had been provided by LONZA itself under this Agreement or the relevant Statement of Work. LONZA will cause any such permitted subcontractor to be bound by, and to comply with, the terms of this Agreement or the relevant Statement of Work, including all confidentiality, intellectual property, recordkeeping, audit and inspection, quality assurance, regulatory and other obligations and requirements of LONZA set forth in this Agreement or the relevant Statement of Work. For clarity and notwithstanding anything to the contrary in this Section 2.5, [***].

c. Flow-Down Provisions.

i. The Parties acknowledge and agree that the Manufacturing of certain Products or the performance of certain Services may be subject to restrictions or requirements based upon funding or grants received by or on behalf of MODERNA or its Affiliates from governments, governmental agencies or other funding sources [***]. The Statements of Work will include appropriate mandatory flow-down provisions (the “**Flow-Down Provisions**”) that are required to be incorporated as a result of any funding, grants or other funding sources for the Products or Services strictly for the purpose of ensuring MODERNA’s performance of its obligations under such Flow-Down Provisions as incorporated in its prime contract.

ii. Without limiting the generality of the foregoing, the Parties acknowledge and agree that certain Services may include work under one or more prime contracts between the Biomedical Advanced Research and Development Authority (“**BARDA**”) and MODERNA (or its Affiliate), including the contract dated April 16, 2020 (NO. HHSO75A50120C00034) as may be amended, supplemented or replaced (each, a “**BARDA Contract**”). Additionally, the Parties acknowledge and agree that Services regarding the Manufacture of mRNA-1273 in the United States will be subject to the terms required under the U.S. Government Supply Agreement.

iii. If a Statement of Work includes Flow-Down Provisions, LONZA hereby covenants that LONZA and its Affiliates will comply with the Flow-Down Provisions set forth in such Statement of Work. If the relevant Statement of Work indicates that the Services are being performed in connection with a BARDA Contract, the Flow-Down Provisions included in Attachment C hereto shall apply with respect to such Services. [***].

a. **Quality Agreement.** Promptly following the Effective Date, the Parties shall negotiate in good faith and enter into a Quality Agreement on terms to be mutually agreed by the Parties. If reasonably determined necessary by LONZA, the parties shall enter into separate Quality Agreements for different Facilities. LONZA shall Manufacture and supply the Product in accordance with the Quality Agreement as reasonably updated by the Parties from time to time, notably to take into consideration any marketing authorization(s) for Product. In the event of a conflict between any of the provisions of this Agreement and the Quality Agreement with respect to quality-related activities, including compliance with cGMP, the provisions of the Quality Agreement shall govern. In the event of a conflict between any of the provisions of this Agreement and the Quality Agreement with respect to any commercial matters, including allocation of risk, liability and financial responsibility, the provisions of this Agreement shall govern.

1. GOVERNANCE

a. **Joint Steering Committee.**

i. Immediately following the Effective Date, the Parties shall establish a joint steering committee (“JSC”) to oversee, review, approve and coordinate the activities of the Parties under this Agreement, including each Statement of Work. Each Party shall appoint three (3) members to the JSC (each a “Member”). Each Party may change one or more of its Members by written notice to the other Party.

ii. The JSC shall be responsible for:

[**]

iii. The JSC shall meet [**]

i. [***]

a. **Joint Manufacturing Team.**

i. Within [***] of the Effective Date, the JSC shall establish a joint manufacturing team (the “**JMT**”) to oversee the Services under each Statement of Work. The JMT shall be composed of a mutually agreed number of members, with an equal number appointed by each of MODERNA and LONZA. The JMT shall include individuals with expertise and responsibilities appropriate (in terms of their seniority, availability, function in their respective organizations, training and experience) for the tasks then being undertaken. Each Party shall designate one of its representatives as its primary contact for JMT matters (such Party’s “**Team Co-Leader**”). A Party may replace any or all of its representatives (and designated Team Co-Leader) at any time by informing the other Team Co-Leader in advance, in writing (which may be by email).

ii. The JMT shall be responsible for:

[***]

i. The JMT shall meet [***].

ii. The Parties acknowledge and agree that the JMT is intended to act as a body solely overseeing and deciding upon items within the scope of work defined and agreed upon in writing by the Parties in the relevant SOWs, as well as a discussion forum, and not a decision-making body for any items outside of the agreed upon scope of work. Other than with respect to questions regarding the JMT's authority to review and approve modifications to Statements of Work within parameters prescribed by the JSC, the JMT's responsibilities are not subject to the oversight of, or escalation to, the JSC in the event of any dispute or disagreement between the Parties.

a. **Limitations of Authority.** Each Party will retain the rights, powers and discretion granted to it under this Agreement and no such rights, powers, or discretion will be delegated to or vested in the JSC or JMT, unless such delegation or vesting of rights is expressly provided for in this Agreement or the Parties expressly so agree in writing. Except as provided in Section 3.1.2 and Section 3.2.2(f), the JSC and the JMT will not have the power to (a) amend, modify or waive compliance with this Agreement, including any Statement of Work, (b) alter, increase or expand the Parties' rights or obligations under this Agreement, including any Statement of Work, beyond those explicitly set forth in this Agreement, including any Statement of Work, (c) determine that a Party has fulfilled any obligations under this Agreement or that a Party has breached any obligation under this Agreement, including any Statement of Work, or (d) make a decision that is expressly stated to require the mutual agreement of the Parties or for which MODERNA or LONZA have final decision making authority.

1. TECHNOLOGY TRANSFER

a. Based on the information provided by MODERNA and including process definition or changes mutually agreed by the Parties pursuant to the relevant Statement of Work, LONZA will prepare the Project Documentation for the applicable Process in accordance with the schedule set forth in the relevant Statement of Work and the Specifications, the LONZA Operating Documents and any written instructions provided by MODERNA (provided that LONZA shall be required to comply with such written instructions only if such instructions comply with cGMP requirements, data integrity specifications or commitments made by MODERNA to the applicable Regulatory Authorities). MODERNA will inform LONZA of any specific requirements MODERNA may have relating to the Project Documentation, including, without limitation, any information or procedures MODERNA wishes to have incorporated therein. The applicable Project Documentation, as set forth in the relevant Statement of Work, shall be completed and delivered by LONZA at completion of a Batch.

b. LONZA will not use or incorporate any non-commercially available materials, Technology, LONZA Technology or LONZA Improvements in connection with the performance of any Services or the

Process, unless such non-commercially available materials, Technology, LONZA Technology or LONZA Improvements are specifically agreed to by the Parties and identified in the relevant Statement of Work, including the applicable terms and conditions of the use or incorporation of such non-commercially available materials, Technology, LONZA Technology or LONZA Improvements. [***].

c. As set forth in the relevant Statement of Work, MODERNA will cooperate with LONZA to assist LONZA to develop the Project Documentation and Process, including, without limitation, by providing LONZA with additional information and procedures as may be required to create the Project Documentation, Process, and/or any of the following: (a) manufacturing process information, SOPs, development reports, (b) quality control assays and related method validation reports, (c) raw material specifications (including vendor, grade and sampling/testing requirements), (d) Product and sample packing and shipping instructions, and (e) Product-specific cleaning and decontamination information.

d. LONZA will deliver a draft version of the applicable portions of the Project Documentation to MODERNA for its review and approval in accordance with the timeline set forth in the relevant Statement of Work. MODERNA will notify LONZA in writing of any objections it has to the draft Project Documentation, and upon such notification, representatives of LONZA and MODERNA will meet promptly in good faith to resolve such objections. LONZA will incorporate all reasonable comments from MODERNA in the Project Documentation. Upon MODERNA's written acceptance of the draft Project Documentation, such draft will be deemed approved by MODERNA. Any failure by MODERNA to accept in writing any agreed-upon Project Documentation within [***] of receipt will be promptly be escalated to the JSC.

e. The Process, Project Documentation, Specifications, and any improvements or modifications thereto developed during the Term, but excluding any LONZA Operating Documents, LONZA Technology, LONZA Improvements or LONZA Confidential Information included in any of the foregoing, will be deemed MODERNA Confidential Information and subject to the provisions set forth in Article 10.

f. For clarity, LONZA will use the LONZA Operating Documents in the Process or the Project Documentation, but LONZA represents and warrants that LONZA Operating Documents are not necessary for MODERNA or a Third Party contract manufacturer to Manufacture Product as it is assumed that MODERNA or a Third Party contract manufacturer would have its own operating documents and SOPs. LONZA shall make LONZA Operating Documents available to support MODERNA or its Third Party contract manufacturer [***].

1. **MODERNA EQUIPMENT.**

a. **Relevant Terms.** Each Statement of Work shall include the terms and conditions applicable to the MODERNA Equipment to be used by LONZA to perform the Services set forth in such Statement of Work.

2. [INTENTIONALLY LEFT BLANK]

3. **MANUFACTURE OF PRODUCT**

a. **MODERNA Materials.** Within the time period agreed to in the relevant Statement of Work, MODERNA will ensure that LONZA is provided with the materials listed in such Statement of Work required to be supplied by MODERNA for the production of the Product, and any handling instructions, protocols, SOPs and other documentation necessary to maintain the properties of such materials for the performance of the Services (collectively, the “**MODERNA Materials**”). The MODERNA Materials are the Confidential Information of MODERNA and shall be used by LONZA solely for purposes of this Agreement and the relevant Statement of Work. MODERNA will promptly inform LONZA of any delays in providing MODERNA Materials that would prevent LONZA from performing the Services or in accordance with the timeline set forth in the relevant Statement of Work, and, in the event of any such delay, LONZA will use commercially reasonable efforts to accommodate any requests by MODERNA to adjust the timeline for the Services to compensate for such delay. LONZA shall ensure that the MODERNA Materials is secure and safe from loss, damage or misuse.

b. **LONZA Materials.** Except for the MODERNA Materials and as otherwise agreed in the relevant Statement of Work, LONZA shall supply, at its sole cost and expense and accordance with the relevant approved specifications, all materials in adequate quantities to be used by LONZA for the Manufacture of the Product and the performance of Services (“**LONZA Supplied Materials**”). The Parties agree that LONZA is responsible for the procurement of LONZA Supplied Materials, including with respect to transporting, testing, inspecting and storing the LONZA Supplied Materials; maintaining systems for management of LONZA Supplied Materials; and maintaining adequate supplies of LONZA Supplied Materials based on binding forecasts. LONZA shall not be responsible for raw material shortages or supplier delays outside of its control to the extent it diligently complied with its duties to procure and maintain adequate LONZA supplies Supplied Materials.

c. **Commencement Date.** Each Statement of Work governing the Manufacture of Product will include a Commencement Date agreed upon by the Parties. Subject to the terms of the relevant Statement of Work, LONZA will commence Manufacture of the Product on or before the Commencement Date.

d. **Manufacture by LONZA.** During the time period specified in the relevant Statement of Work, LONZA will Manufacture, package, ship, handle quality assurance and quality control for the Product exclusively at the applicable Facility, all as set forth in such Statement of Work, and will deliver to MODERNA the Product requested by MODERNA in such Statement of Work in accordance with the estimated timelines set forth in such Statement of Work, all in accordance with the terms set forth in Section 7.6 below. LONZA shall, at its own cost and expense, ensure that at all times the applicable Facility is in a qualified and validated state appropriate for inclusion as a Manufacturing site for the Products, as

required by the applicable Regulatory Authorities, Applicable Laws and the Specifications for the Products. Any costs or expenses related to bringing a Facility or any LONZA Equipment needed to Manufacture Products or to perform the Services into compliance with any applicable regulatory requirements of a Regulatory Authority at any time shall be borne exclusively by LONZA subject however to changes required solely based on the Products as well as change of Applicable Laws or cGMP requirements. Notwithstanding the foregoing, a Statement of Work may include terms and conditions relating to delays of the Commencement Date for a Product or other delays, including discounts, cancellation rights and other terms and conditions relating to any such delay.

a. Maintenance and Operation. LONZA agrees to operate and maintain the Facilities and all LONZA Equipment used, directly or indirectly, to Manufacture Products, or, if applicable, to perform the Services, in accordance with the applicable Specifications and all Applicable Laws, as well as for the MODERNA Equipment in accordance with mutually agreed upon standards which are to be discussed based on MODERNA's maintenance standards, and to maintain the Facility and LONZA Equipment in an acceptable state of repair and operating efficiency.

b. Qualification and Validation. LONZA shall be responsible for validating the LONZA Equipment used for supply of Product or, if applicable, performance of the Services (including conducting installation, operational and performance qualification), and the production, cleaning and, to the extent applicable, packaging processes, as well as all other appropriate steps performed at the Facilities. All activities and procedures must: (i) meet applicable regulatory requirements; and (ii) be found acceptable by Regulatory Authority inspectors, if applicable. If any Regulatory Authority finds LONZA's validation procedures to be unacceptable, then LONZA will take (or have taken) appropriate remedial measures, including repeating the validation as necessary, such that the validation procedures meet all applicable regulatory requirements and guidelines, including those necessary to receive all Regulatory Authority approvals. If any of LONZA's validation procedures fail to comply with cGMP or the Specifications, LONZA shall promptly remedy such failure in order to comply with all cGMP and Specifications. Furthermore, LONZA shall also be responsible for validating the MODERNA Equipment under the terms set forth above when agreed upon in the relevant Statement of Work.

c. Cancellation of a Statement of Work. Each Statement of Work shall provide the termination or cancellation fees for such Statement of Work, if any (the "Cancellation Fees").

d. Payment of Cancellation Fee and Costs. Each Statement of Work shall provide the payment terms for any applicable Cancellation Fees.

e. Packaging and Shipping. LONZA will package and label the Product for shipment in accordance with the relevant Statement of Work, the Quality Agreement and any instructions provided in writing (e.g. storage and transport conditions). In no event will LONZA or its Affiliates ship, or be instructed to ship, to the United States any Product Manufactured at any Facility outside of the United States.

f. Records. LONZA will maintain complete and accurate records relating to the Services, the Manufacture of each Batch of the Product or the development of any Process, including as required by Applicable Laws (including cGMP, as applicable). LONZA will retain possession of the Project

Documentation, LONZA Operating Documents and all other records, and will promptly provide copies of the Project Documentation and all other records other than the LONZA Operating Documents to MODERNA upon MODERNA's request and at MODERNA's expense; provided, however, that LONZA shall provide electronic copies thereof at MODERNA's request at no cost to MODERNA. [***]. LONZA shall not transfer, deliver or otherwise provide any Project Documentation or other records to any Third Party without the prior written approval of MODERNA. LONZA Operating Documents will remain LONZA Confidential Information. [***]. LONZA shall also provide such other information and assistance as MODERNA may reasonably request in connection with the completion of and submission of applications for Regulatory Approvals for Products and the maintenance thereof. MODERNA has the right to use and reference any of the foregoing, or any DMF covering the foregoing, in connection with any request from any Regulatory Authorities or with a regulatory filing or Regulatory Approval for the Product, to authorize release and final acceptance of Product or as otherwise authorized by the Agreement, including any Statement of Work. LONZA will, on written request by MODERNA or its Affiliate or Sublicensee, provide to the requesting party and to any specified Regulatory Authority a letter, in the form reasonably required by the requesting party, acknowledging that the requesting party has the foregoing right of reference.

a. **MODERNA Access.**

i. Pursuant to and as set forth further in the applicable Statement of Work, [***] MODERNA's employees, consultants and agents (including its independent contractors or designees) (collectively, "**MODERNA Personnel**") in each Facility may participate in the Manufacture of the Product only in such capacities as set forth in the relevant Statement of Work or as may be approved in writing in advance by LONZA, such approval not to be unreasonably withheld, conditioned or delayed; provided, however, that, upon [***] prior written notice to LONZA, MODERNA Personnel shall have the right to be present at the Facility to observe the Manufacture of Product or performance

of Services and for quality or technical reference purposes. MODERNA Personnel working at the Facility are required to comply with LONZA's Operating Documents and any other applicable LONZA cGMP or safety policies. LONZA shall make available office space to the MODERNA Personnel on-site at the applicable Facility, and shall also provide any reasonable and customary related office resources and support services for such on-site MODERNA Personnel. For the avoidance of doubt, unless otherwise agreed to by LONZA, following completion of technology transfer and stabilization of Manufacturing activities, MODERNA Personnel may not physically participate in the production or Manufacture of any Product that may be used in or on humans.

i. MODERNA Personnel working at the Facility will be and remain employees, consultants or agents of MODERNA, and MODERNA will be solely responsible for the payment of compensation for such MODERNA Personnel (including applicable Federal, state and local withholding, FICA and other payroll taxes, workers' compensation insurance, health insurance, and other similar statutory and fringe benefits). MODERNA covenants and agrees to maintain workers' compensation benefits and employers' liability insurance as required by Applicable Laws with respect to all MODERNA Personnel working at the Facility.

ii. MODERNA will pay for the actual cost of repairing or replacing to its previous status (to the extent that LONZA determines, in its reasonable judgment, that repairs cannot be adequately effected) any property of LONZA damaged or destroyed by MODERNA Personnel, provided MODERNA shall not be liable for repair or replacement costs resulting from ordinary wear and tear.

iii. MODERNA Personnel visiting or having access to the Facility will abide by LONZA standard policies, operating procedures and the security procedures established by LONZA and provided to such MODERNA Personnel prior to any visits or access to the Facility. MODERNA will be liable for any breaches of security by MODERNA Personnel. In addition, MODERNA will reimburse LONZA for the cost of any lost security cards issued to MODERNA Personnel, at the rate of [***] per security card. All MODERNA Personnel will agree to abide by LONZA policies and SOPs established by LONZA, and will sign an appropriate confidentiality agreement.

iv. MODERNA will indemnify and hold harmless LONZA from and against any and all losses, damages, liabilities, costs and expenses (including reasonable attorneys' fees and expenses) arising out of any injuries suffered by MODERNA Personnel while at the Facility or elsewhere, except to the extent caused by the negligence, gross negligence or willful misconduct on the part of any LONZA Party or resulting from a breach of this Agreement, including any Statement of Work, by LONZA.

a. **LONZA Access.** If provided for in a Statement of Work, LONZA employees and agents ("**LONZA Personnel**") visiting or having access to any MODERNA facility will abide by MODERNA standard policies, operating procedures and the security procedures established by MODERNA and provided to such LONZA Personnel prior to any visits or access to such facility. LONZA will be liable for any breaches of security by LONZA Personnel. In addition, LONZA will reimburse MODERNA for the cost of any lost security cards issued to LONZA Personnel, at the rate of [***] per security card. All LONZA Personnel will agree to abide by MODERNA policies and SOPs established by MODERNA, and will sign an appropriate confidentiality agreement.

a. **Disclaimers.** The LONZA Parties will not engage in any Product improvement, modification or refinement, or Manufacturing or development of the Product, other than as expressly set forth in this Agreement and each relevant Statement of Work. Except as set forth in a relevant Statement of Work, each Party acknowledges and agrees that the LONZA Parties have not participated in the invention or testing of any Product, and have not evaluated its safety or suitability for use in humans or otherwise.

1. REGULATORY MATTERS

a. **Permits and Approvals.** LONZA will ensure that any and all permits, licenses, registrations, and approvals required by Applicable Law have been obtained in connection with each Facility and LONZA Equipment used in connection with the Manufacture by or on behalf of LONZA hereunder. LONZA will maintain each Facility and the LONZA Equipment in a state of repair and operating efficiency consistent with industry standard practices and all Applicable Law. LONZA will only use disposal services or sites that have appropriate environmental permits and are in compliance with Applicable Law.

b. **Regulatory Approvals.** MODERNA shall own all Regulatory Approvals, permits, authorizations and certificates necessary for the use of Products. All DMFs for the Products will be filed in MODERNA's (or its designee's) name and will be owned by MODERNA (or its designee). LONZA shall assist MODERNA in the preparation of such regulatory filings, Regulatory Approvals, permits, authorizations and certificates necessary for the use of Products or DMFs, including providing such information and data, including CMC information and data, as may reasonably be requested by MODERNA, as further detailed in the relevant Statement of Work or as agreed by the Parties in writing. The DMF for the Facility shall be owned by LONZA.

c. Inspections.

i. Subject to the terms of the Quality Agreement with respect to Services and Product and upon not less than [***] prior written notice, or shorter period of time as may be reasonable given the circumstances, LONZA will permit MODERNA or its representatives or designees to inspect and audit the parts of the Facility where LONZA performs the Services, including the parts of the Facility where the Manufacture of the Product is carried out, and to review documents, operations, procedures, and records as they pertain to the Manufacture of Product or performance of any Services, in order to assess LONZA's compliance with Applicable Law (including cGMP, as applicable), this Agreement or any relevant Statement of Work, and to perform risk and loss control assessments to support MODERNA's insurance and self-insurance programs, and to discuss any related issues with LONZA's management personnel. Such audit shall not last for more than [***] (unless otherwise agreed by the Parties). MODERNA Personnel engaged in such inspection will abide by the terms and conditions set forth in Sections 7.11 and Article 10. As part of MODERNA's audit of a Facility, MODERNA's audit may include audit of any of LONZA's suppliers' (including suppliers of Materials) qualification procedures, risk assessments, audit reports or supplier questionnaires, and associated corrective actions; provided that in the event LONZA is prohibited from providing such supplier audit, at MODERNA's request, LONZA will provide an audit summary of a supplier containing all information necessary for MODERNA's regulatory filings with respect to the Product or confirmation that such an audit

has been performed. LONZA's quality assurance department shall cooperate with MODERNA, as necessary or useful, in any such inspection conducted pursuant to this Section 8.3.

i. In addition to the foregoing, MODERNA and/or its representatives shall have the right to perform "For Cause" audits as often as required at any time upon not less than [***] advance notice, or shorter period of time as may be reasonable given the circumstances, and during regular business hours. If a For Cause audit confirms that LONZA did not comply with its obligations in compliance with cGMP, this Agreement or any relevant Statement of Work, the audit shall not be charged by LONZA; in all other cases LONZA's standard hourly rates apply (not to exceed [***]). Notwithstanding the foregoing, a For Cause audit shall also be at no cost for MODERNA if it is MODERNA's sole audit in such Calendar Year.

ii. In addition to those audit rights of MODERNA under this Section 8.3, LONZA shall permit audits to be conducted by or on behalf of a bona fide actual or prospective Third Party collaborator or customer of MODERNA; provided that MODERNA (a) pays a fee of [***] to LONZA for each such audit; and (b) has one or more MODERNA employees accompany the representatives of such Third Party during such audit.

iii. In the event MODERNA identifies any deficiency with respect to LONZA's operations or activities related to or affecting the Services, Product or the Manufacture of Product or performance of any Services during any such inspection, audit, or review, MODERNA shall have the right to notify LONZA of such deficiency, and, in such case, (a) the Parties will discuss in good faith suitable approaches for correcting such observations, and (b) LONZA shall, within [***] from the date of receipt of such notice, deliver to MODERNA a corrective action plan, addressing each such deficiency (including timelines therefor). Upon acceptance of the corrective action plan by MODERNA (which acceptance shall not be unreasonably withheld), LONZA shall fully implement such corrective action plan to the reasonable satisfaction of MODERNA. MODERNA shall have the right to review all relevant documentation in connection with such deficiency and corrective action.

iv. LONZA shall ensure that its Affiliates involved in the Manufacture of Product (or any component thereof including Material suppliers) permit and afford MODERNA the same rights as set forth above, and LONZA shall use diligent efforts to procure for MODERNA similar rights with respect to any subcontractors involved in the Manufacture of Product on behalf of LONZA.

v. For clarity, any such inspection (or failure to inspect) shall not relieve LONZA of its obligation to comply with Applicable Laws and the provisions this Agreement, the relevant Statement of Work and the Quality Agreement and does not constitute a waiver of any right otherwise available to MODERNA. In addition, for critical raw material suppliers for Product, LONZA shall be required to audit each and MODERNA shall have the right to review the audit reports and findings and LONZA's procedures for auditing such suppliers; provided that in the event LONZA is prohibited from providing such reports, findings or procedures, at MODERNA's request, LONZA will provide confirmation that an audit took place and a summary of findings.

i. For each Facility, in addition to the audit rights above, MODERNA shall have the right to audit the Facility when such Facility is ready for and prior to initiation of cGMP Manufacturing for MODERNA hereunder.

a. **Notification of Regulatory Authority Action.** Each Party shall promptly notify the other Party of any notice such Party receives regarding any threatened or pending action by any Regulatory Authority regarding the Manufacture of Product, including any Regulatory Authority non-approval or regulatory action. Upon receipt of any such information, the Parties shall consult in an effort to arrive at a mutually acceptable procedure for taking appropriate action; provided, however, that nothing contained herein shall be construed as restricting the right of either Party to make a timely report of such matter to any Regulatory Authority or take other action that it deems to be appropriate or required by Applicable Law.

b. **Complaints.** LONZA shall immediately notify MODERNA of any complaints received by LONZA concerning a Product supplied hereunder. LONZA shall investigate complaints as requested by MODERNA and shall take corrective action to avoid future occurrences.

c. **Regulatory Authority Inspections.** LONZA shall advise MODERNA immediately (but in no event less than [**]) prior to a pre-notified or scheduled visit or inspection) of any Regulatory Authority visit or inspection that relates to Product or the Manufacture thereof at any Facility, or any written or oral inquiries by such Regulatory Authority concerning Product (including safety and efficacy claims) or the Manufacture thereof at any Facility. LONZA will permit representatives of any Regulatory Authority to inspect and audit the parts of each Facility where LONZA performs the Services, including the parts of the Facility where the Manufacture of the Product is carried out, and to inspect or audit the Project Documentation, Batch Records or other records to verify compliance with cGMP and other Applicable Laws and will promptly notify MODERNA of the scheduling of any such inspection relating to the Services, including Manufacture of Product. MODERNA shall be permitted to be on site and available for questions regarding the Product during any such inspection or audit. LONZA shall promptly (and in no event later than [**]) notify MODERNA of the results of any such inspection, and furnish MODERNA summaries of all reports, documents and correspondence with respect to any Regulatory Authority inquiries, visits or inspections, as well as a copy of each report, document and correspondence issued by or provided to any Regulatory Authority in connection with such request, visit or inquiry to the extent such documents relate to or affect the Services, Product or Manufacture of the Product. LONZA and MODERNA shall consult with one another in an effort to arrive at a mutually acceptable response to the extent related to Product, provided that if the Parties fail to timely arrive at a mutually acceptable response, LONZA shall not be required to delay or risk prejudice to LONZA's compliance with its legal requirements. Without limiting the foregoing, LONZA shall furnish to MODERNA, (a) within [**] after receipt, any report or correspondence issued by the Regulatory Authority in connection with such visit, inspection or inquiry, including any FDA Form 483, Establishment Inspection Report, or warning letter, and (b) copies of any and all responses or explanations to any Regulatory Authority relating to items set forth above prior to the submission of such responses or explanations to any Regulatory Authority by LONZA. LONZA shall comply with all reasonable requests and comments by MODERNA with respect to all responses or explanations to, or contacts and communications, with any Regulatory Authority relating in any way to the Products or Services, and shall immediately inform MODERNA in the event any Regulatory

Authority takes any regulatory action against LONZA that could have an effect on LONZA's performance of the Services or the Manufacture of the Product.

a. **Recall; Withdrawal.** As may be further set forth in the Quality Agreement, in the event that either Party determines an event, incident or circumstance has occurred which may result in the need for a "recall", "market withdrawal" or "field alert" of Product, as such terms are defined in the United States Code of Federal Regulations 21 CFR § 7.3 and 21 CFR§ 314, or other Applicable Law or regulation of a country (a "**Recall**"), such Party shall advise and consult with the other Party regarding such event. MODERNA shall be responsible for implementing and administering any Recall, in its sole discretion [***]. LONZA shall provide reasonable assistance to MODERNA in conducting a recall or withdrawal, including providing MODERNA with all reasonably pertinent records and information. If the parties dispute whether such Recall was primarily due to LONZA providing defective Product, then either party may seek the determination of whether the Product was defective Product in accordance with the relevant Statement of Work.

b. **Waste.** In connection with the Manufacture of Product hereunder or the performance of the Services, LONZA shall be solely responsible, at its cost and expense, for maintaining safety procedures in connection with the Manufacture of Product (or the performance of the Services, as applicable) and for the generation, treatment, storage and/or disposal of Waste relating thereto, all of which shall comply with all Applicable Law, including all applicable environmental and occupational safety and health requirements in the jurisdiction of the Facility.

1. FINANCIAL TERMS

a. **Pricing.** [***].

b. **Payments.** MODERNA will make payments to LONZA in the amounts and on the dates set forth in the relevant Statement of Work upon receipt of an invoice from LONZA.

c. **Invoices and Pricing.** LONZA will charge for the Services in accordance with the price schedule in the relevant Statement of Work. LONZA will invoice MODERNA according to the schedule set forth in the relevant Statement of Work. LONZA will deliver invoices electronically by email, which shall be considered to be an original invoice. Invoices shall be e-mailed to

[***], and/or to such other e-mail address(es) as MODERNA may stipulate from time to time. LONZA will not deliver a paper invoice. Payment of each invoice is due within [***] after MODERNA's receipt of such invoice. Unless otherwise provided in the relevant Statement of Work, all pricing excludes taxes and costs relating to shipping, validation and regulatory filings. The price shall be invoiced to MODERNA in U.S. Dollars or such other currency as agreed upon in the relevant Statement of Work.

a. **Taxes.** All amounts mentioned in this Agreement are exclusive of indirect taxes which, where applicable, will be paid by MODERNA on receipt of a valid indirect tax invoice. If MODERNA is required by law to deduct or withhold any taxes from any amount payable under this agreement, the amount payable hereunder shall be increased so that after making all required deductions and/or withholdings, LONZA receives an amount equal to the amount it would have received had no such deductions or withholdings been made. Notwithstanding anything to the contrary herein, if there should be any withholding tax imposed by the applicable jurisdictions on LONZA with respect to any payments to be made by MODERNA to LONZA under or in connection with this Agreement, MODERNA is allowed to deduct such withholding taxes from the payments to LONZA and pay such withholding taxes to the appropriate tax authorities on behalf of LONZA. Regarding the discharged withholding tax, MODERNA will submit to LONZA the corresponding original tax certificates or original tax receipts stamped by the receiving local tax authority within [***] after such withholding obligation is discharged. Notwithstanding the foregoing, upon presentation by LONZA to MODERNA of the relevant tax documentation indicating a reduction in or exemption from withholding tax for LONZA in such taxing jurisdiction pursuant to the provisions of the relevant double taxation treaty, MODERNA shall withhold such tax at the reduced rate (or not withhold any tax if there is an exemption) applicable to such payment in such taxing jurisdiction. .

b. **Interest.** Any undisputed fee, charge or other payment due to LONZA by MODERNA under this Agreement that is not paid within [***] after it is due will accrue interest on a daily basis at a rate of [***] (or the maximum legal interest rate allowed by applicable law, if less) from and [***] after MODERNA receives a notice from LONZA that such fee, charge or other payment has not been paid.

c. **Method of Payment.** Except as otherwise set forth in Section 9.2 or the relevant Statement of Work, all payments to LONZA hereunder by MODERNA will be in United States currency or such other currency agreed upon by the Parties in the relevant Statement of Work and will be by check, wire transfer, money order, or other method of payment approved by LONZA. Bank information for wire transfers will be provided in the relevant Statement of Work.

d. **Cost Improvements.** Promptly after a Product has been launched, LONZA will in good faith continuously seek to improve and reduce direct material costs, direct operating labor costs and indirect expenses attributable to the manufacture of the Product throughout the term of this Agreement and, at the request of MODERNA, provide MODERNA with written evidence demonstrating the efforts and activities undertaken by LONZA in furtherance thereof. LONZA and MODERNA agree to periodically, but not less than [***], review the cost of materials, labor, expenses and other matters

that influence the price MODERNA pays for the Product and determine whether any price decreases may be appropriate. Upon the request of MODERNA, LONZA will provide to MODERNA reasonable evidence of any and all improvements as they are achieved and of the availability of any potential improvements hereunder. LONZA agrees to reflect and incorporate into this Agreement achieved price reductions realized by LONZA after the effective date of such price change. MODERNA and LONZA will set specific key performance indicators defining timing and percent reduction for the manufacture of the Product (“KPIs”) once a Product has been launched. KPIs may include, but are not limited to, manufacturing operations (including inventory reductions, process improvement, and lead-times), sourcing, international operations and logistics, and business practices. Progress of these goals will be reviewed periodically, but in any case no less than [***]. All savings achieved through these cost improvements by LONZA will be [***].

1. CONFIDENTIAL INFORMATION

a. **Definition.** “Confidential Information” means all technical, scientific and other know-how and information, trade secrets, knowledge, technology, means, methods, processes, practices, formulas, instructions, skills, techniques, procedures, specifications, data, results and other material, pre-clinical and clinical trial results, manufacturing procedures, test procedures and purification and isolation techniques, and any tangible embodiments of any of the foregoing, and any scientific, manufacturing, marketing and business plans, any financial and personnel matters relating to a Party or its present or future products, sales, suppliers, customers, employees, investors or business, that has been disclosed by or on behalf of such Party or such Party’s Affiliates to the other Party or the other Party’s Affiliates either in connection with the discussions and negotiations pertaining to this Agreement or in the course of performing this Agreement. Without limiting the foregoing, (a) the terms of this Agreement as well as all information pertaining to the relationship between the Parties will be deemed “Confidential Information” of both Parties, and as such both Parties will be treated as the receiving Party, (b) the Products, all MODERNA Technology, MODERNA Manufacturing Know-How, MODERNA Improvements, MODERNA Equipment, MODERNA Materials, Project Documentation, Specifications, all Regulatory Approvals for the Products and all DMFs for the Products are Confidential Information of MODERNA, (c) all LONZA Technology, LONZA Operating Documents and LONZA Improvements are Confidential Information of LONZA, and, in each case, will be subject to the terms and conditions set forth in this Article 10 (except to the extent necessary for MODERNA to exercise its rights or obligations under this Agreement, including any relevant Statement of Work, including in connection with the licenses granted by LONZA to MODERNA in Section 11.2).

b. **Exclusions.** Notwithstanding the foregoing Section 10.1, any information disclosed by a Party to the other Party will not be deemed “Confidential Information” of the disclosing Party to the extent that such information:

(a) at the time of disclosure is in the public domain;

(b) becomes part of the public domain, by publication or otherwise, through no fault of the receiving Party or its Affiliates;

a. at the time of disclosure is already in possession of the receiving Party or its Affiliates on a non-confidential basis, as established by contemporaneous written records;

b. is lawfully provided to a Party, without restriction as to confidentiality or use, by a Third Party lawfully entitled to possession of such Confidential Information; or

c. is independently developed by a Party without use of, reliance upon or reference to the other Party's Confidential Information, as established by contemporaneous written records.

a. Disclosure and Use Restriction. Except as expressly provided herein, the Parties agree that for the Term and the ten (10)-year period following any expiration or termination of the Agreement, each Party and its Affiliates will keep completely confidential and will not publish or otherwise disclose any Confidential Information of the other Party, its Affiliates or sublicensees, except in accordance with Section 10.4; provided, however, that the obligations under Section 10.5 with respect to MODERNA Manufacturing Know-How or any other trade secret information in the MODERNA Confidential Information or LONZA Confidential Information will survive in perpetuity. Neither Party will use Confidential Information of the other Party except as necessary to perform its obligations, or in the case of MODERNA to exercise its rights, under this Agreement.

b. Permitted Disclosures. Subject to Section 10.5, each receiving Party agrees to (i) institute and maintain security procedures to identify and account for all copies of Confidential Information of the disclosing Party and (ii) limit disclosure of the disclosing Party's Confidential Information to its Affiliates and each of its and their respective officers, directors, employees, agents, consultants and independent contractors having a need to know such Confidential Information for purposes of this Agreement, including, with respect to MODERNA, to subcontractors and other Third Parties as necessary or reasonably useful for the purpose of performing MODERNA's obligations or exercising its rights hereunder in filing or requesting Regulatory Approvals or communications with Regulatory Authorities as set forth in Section 7.10; provided that such Affiliates and each of its and their respective officers, directors, employees, agents, consultants and independent contractors are informed of the terms of this Agreement and are subject to obligations of confidentiality, non-disclosure and non-use similar to those set forth herein. Notwithstanding the foregoing, (a) such Confidential Information may be disclosed to (1) actual (sub)licensees, collaborators or partners, and its and their directors, officers, employees, agents or advisors (including accountants, attorneys, consultants, bankers, financial advisors and members of advisory boards), or (2) any bona fide potential or actual financing sources, investors, underwriters or acquisition partners (including attorneys, accountants, consultants, bankers or financial advisors of the foregoing), in each case ((1)-(2)) who reasonably require such information, who are informed of the confidential nature of such information and are bound by non-use and confidentiality obligations with respect to such information (which may include, solely with respect to attorneys and accountants, professional ethical obligations); and [***].

a. **MODERNA Manufacturing Know-How.** Notwithstanding anything herein to the contrary, the Parties recognize that maintaining the confidentiality and trade secret nature of the MODERNA Manufacturing Know-How requires an even higher level of vigilance than other Confidential Information. LONZA shall: (i) maintain MODERNA Manufacturing Know-How in confidence with the same degree of care with which LONZA holds its own like confidential manufacturing information, (ii) disclose the MODERNA Manufacturing Know-How only to those employees of LONZA or its Affiliates who have a need to know such MODERNA Manufacturing Know-How to conduct activities for the Products under this Agreement, including any relevant Statement of Work, and (iii) use the MODERNA Manufacturing Know-How only for Manufacturing and supplying the applicable Product under the relevant Statement of Work and for no other purpose. LONZA will apply appropriate firewall protections and safeguards for all MODERNA Manufacturing Know-How to prevent the MODERNA Manufacturing Know-How from being disclosed, transferred or used to or by any LONZA personnel that are not conducting activities relating to the Products under the relevant Statement of Work. LONZA will not disclose, transfer or use any MODERNA Manufacturing Know-How to any Third Party without the prior written consent of MODERNA, which consent will be at MODERNA's sole discretion. For clarity, Section 10.4 will not apply to any MODERNA Manufacturing Know-How.

b. **Government-Required Disclosure.** If a duly constituted Governmental Authority, court or Regulatory Authority orders that a Party hereto disclose information subject to an obligation of confidentiality under this Agreement, such Party shall comply with the order, but shall notify the other Party as soon as possible, so as to provide the other Party a reasonable opportunity to apply to a court of record for relief from the order or for confidential treatment thereof, and thereafter such Party shall disclose only the minimum information required to be disclosed in order to comply.

c. **Publicity.**

i. Neither Party will refer to, display or use the other's name, trademarks or trade names confusingly similar thereto, alone or in conjunction with any other words or names, in any manner or connection whatsoever, including any publication, article, or any form of advertising or publicity, except with the prior written consent of the other Party or as otherwise set forth in this Section 10.7.

ii. Neither Party may issue any press release or make any other public announcement or statement concerning this Agreement, the transactions contemplated hereby or the terms hereof, without the prior written approval of the other Party, except as may be required by Applicable Law. In the event either Party (the "**Issuing Party**") desires to issue a press release or other public statement disclosing information relating to this Agreement, the transactions contemplated hereby or the terms hereof, the Issuing Party will provide the other Party (the "**Reviewing Party**") with a copy of the proposed press release or public statement (the "**Release**") and seek the Reviewing Party's prior written consent; provided that no such consent shall be required for press releases or other public statements required by Applicable Law (but the Issuing Party shall still provide the Reviewing Party with a copy of the Release for comment in accordance with this Section 10.7). The Issuing Party will specify with each such Release, taking into account the urgency of the matter being disclosed, a reasonable period of time within which the Reviewing Party may provide any comments on such Release and if the Reviewing Party fails to provide any comments during the response period called for by the Issuing Party, the Reviewing Party will be deemed to have not consented to the issuance of such Release. If the Reviewing

Party provides any comments, the Parties will consult on such Release and work in good faith to prepare a mutually acceptable Release. Either Party may subsequently publicly disclose any information previously contained in any Release so consented to.

i. Notwithstanding Section 10.7.2 or anything herein to the contrary, MODERNA's obligation to submit any press release or other public announcement or statement concerning this Agreement to LONZA for prior written approval will not apply to any press release or other public announcement or statement regarding the achievement of any milestone identified in a Statement of Work, including regarding Process or Product development, Technology Transfer, or Process or Product Manufacture.

a. **Securities Filings; Law.** Each Party acknowledges and agrees that the other Party may submit this Agreement to the United States Securities and Exchange Commission (the "SEC") or any other securities exchange and if a Party does submit this Agreement to the SEC or any other securities exchange, such Party agrees to consult with the other Party with respect to the preparation and submission of, a confidential treatment request for this Agreement. If a Party is required by Applicable Law to make a disclosure of the terms of this Agreement in a filing with or other submission to the SEC or any other securities exchange or otherwise to comply with Applicable Law, and (i) such Party has provided copies of the disclosure to the other Party as far in advance of such filing or other disclosure as is reasonably practicable under the circumstances, (ii) such Party has promptly notified the other Party in writing of such requirement and any respective timing constraints, and (iii) such Party has given the other Party a reasonable amount of time under the circumstances from the date of notice by such Party of the required disclosure to comment upon, request confidential treatment or approve such disclosure, then such Party will have the right to make such public disclosure at the time and in the manner reasonably determined by its counsel to be required by Applicable Law. Notwithstanding anything to the contrary herein, it is hereby understood and agreed that if a Party is seeking to make a disclosure as set forth in this Section 10.8, and the other Party provides comments within the respective time periods or constraints specified herein or within the respective notice, the Party seeking to make such disclosure or its counsel, as the case may be, will in good faith consider incorporating such comments.

1. INTELLECTUAL PROPERTY

a. Ownership.

i. Except as expressly otherwise provided herein, neither Party will, as a result of this Agreement, acquire any right, title, or interest in any Technology of the other Party. Except as expressly otherwise provided herein, ownership of any Technology that is developed, conceived, invented, first reduced to practice or made in connection with the performance under this Agreement shall follow inventorship all as determined under Applicable Laws.

ii. Subject to LONZA's right, title and interest in and to any and all LONZA Improvements, MODERNA shall own all right, title, and interest in and to any and all MODERNA Improvements. LONZA hereby assigns to MODERNA (or its designee), without additional compensation, all of LONZA's right, title and interest in and to such MODERNA Improvements. LONZA shall promptly disclose to MODERNA in writing all MODERNA Improvements. LONZA shall execute, and shall require its

personnel as well as its Affiliates, or other contractors or agents and their personnel involved in the performance of this Agreement to execute, any documents reasonably required to confirm MODERNA's ownership of MODERNA Improvements, and any documents required to apply for, maintain and enforce any patent or other right in the MODERNA Improvements. Notwithstanding the foregoing, and subject to the license granted in Section 11.2.2, LONZA shall own all right, title and interest in and to any and all LONZA Improvements.

a. License Grants.

i. During the Term, MODERNA hereby grants to LONZA a fully paid-up, non-exclusive license, without the right to grant sublicenses, under any and all MODERNA Technology, MODERNA Manufacturing Know-How, and MODERNA Improvements that are necessary for LONZA to perform its obligations under this Agreement for the sole and limited purpose of LONZA's performance of its obligations under this Agreement and the relevant Statements of Work, including, without limitation, the development of the Process (if and to the extent applicable in the relevant Statements of Work) and the Manufacture of Product for MODERNA as set forth in the relevant Statements of Work. Except as set forth in this Section 11.2.1, LONZA shall not by virtue of this Agreement acquire any right, license or title in or to any MODERNA Technology, MODERNA Manufacturing Know-How, MODERNA Improvements, Products or Process.

ii. LONZA hereby grants to MODERNA a non-exclusive, world-wide, fully paid-up, perpetual, transferable (subject to the assignment provisions) license, including the right to grant sublicenses, under the LONZA Technology and LONZA Improvements, to use, sell, offer to sell, import and export the Product Manufactured under this Agreement, including any Statement of Work. In the event and to the extent that the Services or the Process incorporates, uses or contains non-commercially available LONZA Technology or LONZA Improvements that are not specifically agreed to by MODERNA in the relevant Statement of Work and that would be necessary for MODERNA or a Third Party contract manufacturer to Manufacture Products or would otherwise require MODERNA to obtain a license to the non-commercially available LONZA Technology or LONZA Improvements, LONZA hereby grants to MODERNA and its Affiliates a non-exclusive, worldwide, fully paid-up, perpetual, irrevocable, transferable license (subject to the assignment provisions), including the right to grant sublicenses, under such non-commercially available LONZA Technology or LONZA Improvements that are incorporated, used or contained in the Services or Process to Manufacture (or have Manufactured) Products (but no other products). For clarity LONZA will use its operating documents and standard operating procedures ("LONZA Operating Documents") in performing the Services but LONZA Operating Documents are not necessary for MODERNA or a third party contract manufacturer to manufacture Product as it is assumed that MODERNA or a third party contract manufacturer would have its own operating documents and standard operating procedures. LONZA Operating Documents will not be provided in a technology transfer to MODERNA or a third party contract manufacturer for manufacturing Product.

b. Further Assurances. Each Party agrees to take all necessary and proper acts, and will cause its employees, Affiliates, contractors, and consultants to take such necessary and proper acts, to effectuate the ownership provisions set forth in this Article 11.

c. Prosecution of Patents.

i. LONZA will have the sole right and discretion to file, prosecute and maintain patent applications and patents claiming LONZA Technology or LONZA Improvements at LONZA's expense.

ii. MODERNA will have the sole right and discretion to file, prosecute and maintain patent applications and patents claiming MODERNA Technology or MODERNA Improvements at MODERNA's expense. LONZA will cooperate with MODERNA to file, prosecute and maintain patent applications and patents claiming MODERNA Technology or MODERNA Improvements.

1. EXCLUSIVITY [*]**

a. **LONZA.** LONZA and its Affiliates will not, during the applicable Exclusivity Term, [***].

b. **MODERNA.** MODERNA and its Affiliates agree that, during the applicable Exclusivity Term, [***]. For clarity, the foregoing exclusivity shall not preclude MODERNA or its Affiliates from: [***].

12.3 [*]**

2. REPRESENTATIONS, WARRANTIES AND COVENANTS

a. **By MODERNA.** MODERNA hereby represents and warrants to LONZA as of the Effective Date that, to the best of its knowledge, ((a)) it has the requisite intellectual property related to the MODERNA Technology and MODERNA Manufacturing Know-How to enable the performance of LONZA's obligations under this Agreement, and ((b)) the performance of the Services and the production by LONZA of the Product as contemplated in this Agreement will not infringe the intellectual property rights of any Third Party. Such representation and warranty will not apply to any LONZA Equipment to the extent that such LONZA Equipment is the sole basis for the infringement of the intellectual property rights of a Third Party.

b. By LONZA.

i. LONZA hereby represents and warrants to MODERNA that, to the best of its knowledge, as of the Effective Date ((a)) it or its Affiliates have the requisite intellectual property rights in LONZA Equipment and Facility and the LONZA Technology to be able to perform its obligations under this Agreement, and ((b)) that LONZA's or its Affiliates' use of the LONZA Equipment, Facility and the LONZA Technology as contemplated in this Agreement and independent of any infringement caused solely by the use of such LONZA Equipment, Facility and the LONZA Technology in combination with the MODERNA Technology, MODERNA Manufacturing Know-How and Product, will not infringe the intellectual property rights of any Third Party.

ii. LONZA further represents and warrants that it has not and will not to its knowledge use in any capacity in connection with this Agreement the services of any individual, corporation, partnership, or association which has been debarred, excluded, or disqualified by the FDA or any other applicable Regulatory Authority. In the event that LONZA receives notice of the debarment or

threatened debarment, exclusion or disqualification or threatened disqualification, of any individual, corporation, partnership or association providing services to LONZA, which relate to its activities under this Agreement, including any Statement of Work, LONZA shall notify MODERNA in writing as soon as practicable.

i. LONZA represents, warrants and covenants that, save for security interests expressly given in favor of MODERNA or its Affiliates, it will have good and marketable title, free and clear of any pledge, lien, restriction, claim, charge, security interest and/or other encumbrance, to all Product to be delivered under this Agreement (including any Statement of Work), and all Product supplied to MODERNA shall be free and clear of all pledges, liens, restrictions, claims, charges, security interests and/or other encumbrances at the time of delivery.

1. DISCLAIMER; LIMITATION OF LIABILITY

a. **DISCLAIMER.** EXCEPT FOR THE EXPRESS REPRESENTATIONS AND WARRANTIES SET FORTH IN THIS AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATIONS OR GRANTS ANY WARRANTIES, EXPRESS OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, BY STATUTE OR OTHERWISE, WITH RESPECT TO THE PRODUCTS, MATERIALS, AND SERVICES PROVIDED UNDER THIS AGREEMENT, AND EACH PARTY SPECIFICALLY DISCLAIMS ANY OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, OR EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF QUALITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE WITH RESPECT TO SUCH PRODUCTS, MATERIALS, OR SERVICES.

b. **Disclaimer of Consequential Damages.** EXCEPT [***], IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER OR ANY OF ITS AFFILIATES FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, SPECIAL, PUNITIVE OR EXEMPLARY DAMAGES (INCLUDING, WITHOUT LIMITATION, LOST PROFITS, BUSINESS OR GOODWILL) SUFFERED OR INCURRED BY SUCH OTHER PARTY OR ITS AFFILIATES IN CONNECTION WITH THIS AGREEMENT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

c. **Limitation of Liability.** BOTH PARTIES HEREBY AGREE THAT TO THE FULLEST EXTENT PERMITTED BY LAW, EACH PARTY'S LIABILITY TO THE OTHER PARTY, FOR ANY AND ALL INJURIES, CLAIMS, LOSSES, EXPENSES, OR DAMAGES, WHATSOEVER, ARISING OUT OF OR IN ANY WAY RELATED TO THIS AGREEMENT FROM ANY CAUSE OR CAUSES, INCLUDING, BUT NOT LIMITED TO, NEGLIGENCE, ERRORS, OMISSIONS OR STRICT LIABILITY, SHALL NOT EXCEED [***]. TO THE EXTENT THAT THIS CLAUSE CONFLICTS WITH ANY OTHER CLAUSE, THIS CLAUSE SHALL TAKE PRECEDENCE OVER SUCH CONFLICTING CLAUSE. IF APPLICABLE LAW PREVENTS ENFORCEMENT OF THIS CLAUSE, THEN THIS CLAUSE SHALL BE DEEMED

MODIFIED TO PROVIDE THE MAXIMUM PROTECTION FOR LONZA AS IS ALLOWABLE UNDER APPLICABLE LAW.

1. TERM AND TERMINATION

a. **Term.** The term of this Agreement will commence on the Effective Date and will continue until the tenth (10th) anniversary of the Effective Date unless terminated prior to that time or extended by the Parties (the “**Initial Term**”). This Agreement will automatically renew for successive additional periods of two (2) years (collectively with the Initial Term, the “**Term**”) unless MODERNA provides written notice to LONZA at least [***] prior to the end of the then-current Term that it declines to extend the Term. The term of each SOW shall be set forth in such SOW.

b. **Termination for Material Breach.** Either Party may terminate this Agreement, by written notice to the other Party, for any material breach of this Agreement by the other Party, if such breach is not cured within [***] after the breaching Party receives written notice of such breach from the non-breaching Party; provided, however, that if such breach is not capable of being cured within such thirty-day period and the breaching Party has commenced and diligently continued actions to cure such breach within such thirty-day period, except in the case of a payment default, the cure period shall be extended to 90 days, so long as the breaching Party is making diligent efforts to do so. Such termination shall be effective upon expiration of such cure period; provided that in the event that the breaching Party disputes in good faith the non-breaching Party's grounds for terminating this Agreement pursuant to this Section 15.2, then the Parties shall refer such dispute for resolution in accordance with Section 18.14, and the provisions therein shall apply. To the extent any material breach by a Party relates specifically to an SOW, the non-breaching Party may elect to have the termination rights set forth in this Section 15.2 apply to just such SOW, rather than to this Agreement generally.

c. **Termination Without Cause.** MODERNA may terminate any SOW by providing written notice of termination no less than [***] in advance of the date of termination. For the avoidance of doubt, in the event of termination of any SOW by MODERNA under this Section 15.3, MODERNA shall remain liable for all fees owed pursuant to such Statement of Work.

d. **Termination by Insolvency.** Either Party may terminate this Agreement upon notice to the other Party, upon (a) the dissolution, termination of existence, liquidation or business failure of the other Party; (b) the appointment of a custodian or receiver for the other Party who has not been terminated or dismissed within [***] of such appointment; (c) the institution by the other Party of any proceeding under national, federal or state bankruptcy, reorganization, receivership or other similar laws affecting the rights of creditors generally or the making by such Party of a composition or any assignment for the benefit of creditors under any national, federal or state bankruptcy, reorganization, receivership or other similar law affecting the rights of creditors generally, which proceeding is not dismissed within [***] of filing. All rights and licenses granted pursuant to this Agreement are, and shall otherwise be deemed to be, for purposes of Section 365(n) of Title 11 of the United States Code, licenses of rights of “intellectual property” as defined therein.

e. **Effects of Termination.**

i. **Accrued Rights.** Termination of this Agreement or any SOW for any reason will be without prejudice to any rights that will have accrued to the benefit of a Party prior to such termination. Such termination will not relieve a Party of obligations that are expressly indicated to survive the termination of this Agreement or such SOW. Without limitation of the foregoing, in the event of termination of this Agreement or an SOW, LONZA shall be compensated for any Cancellation Fees (if any) in accordance with the relevant Statements of Work. In the case of termination by LONZA for MODERNA's material breach in accordance with Section 15.2, all scheduled Services and Batches shall be deemed cancelled by MODERNA, and Cancellation Fees set forth in the relevant Statements of Work shall be calculated as of the date of written notice of termination.

ii. **Disposition of Remaining MODERNA Property and Confidential Information.** Upon termination or expiration of this Agreement, LONZA will, at MODERNA's option, return or destroy any MODERNA Confidential Information in the possession or control of LONZA. Likewise, MODERNA will, at LONZA's option, return or destroy any LONZA Confidential Information in the possession or control of MODERNA. Notwithstanding the foregoing provisions: (i) LONZA may retain and preserve, in a secure manner, at its sole cost and expense, samples and standards of each Product following termination or expiration of this Agreement as required by Applicable Law solely for use in determining LONZA's rights and obligations hereunder; (ii) MODERNA may retain and preserve, in a secure manner, any LONZA Confidential Information following termination or expiration of this Agreement (A) for use in determining MODERNA's rights and obligations hereunder, (B) as necessary, in connection with MODERNA's regulatory filings or Regulatory Approvals, or (C) as required by Applicable Law and (iii) each Party may retain a single copy of the other Party's Confidential Information for documentation purposes only and which shall remain subject to the obligations of nonuse and confidentiality set forth in this Agreement.

15.5.3 Survival. Sections 1, 4.2, 4.5, 4.6, 5.1, 7.8, 7.10, 7.13, 8.2, 8.4, 8.5, 8.6, 8.7, 9.4, 9.5, 9.6, 10, 11, 13, 14, 15, 16, 17.1 and 18 of this Agreement, together with any appendices referenced therein, will survive any expiration or termination of this Agreement.

1. INDEMNIFICATION; INSURANCE

a. **Indemnification of MODERNA.** LONZA will indemnify MODERNA, its Affiliates, and their respective directors, officers, employees and agents, and defend and hold each of them harmless, from and against any and all losses, damages, liabilities, costs and expenses (including reasonable attorneys' fees and expenses) in connection with any and all actual or alleged liability suits, investigations, claims or demands (collectively, "**Losses**") to the extent such Losses arise out of or result from any claim, lawsuit or other action or threat by a Third Party arising out of: [***].

b. **Indemnification of LONZA.** MODERNA will indemnify LONZA and its Affiliates, and their respective directors, officers, employees and agents (the "**LONZA Parties**"), and defend and hold each of them harmless, from and against any and all Losses to the extent such Losses arise out of or result from

any claim, lawsuit or other action or threat by a Third Party arising out of: [***].

a. Indemnification Procedure.

i. An “**Indemnitor**” means the indemnifying Party. An “**Indemnitee**” means the indemnified Party, its Affiliates, and their respective directors, officers, employees and agents.

ii. An Indemnitee which intends to claim indemnification under Section 16.1 or Section 16.2 hereof shall promptly notify the Indemnitor in writing of any claim, lawsuit or other action in respect of which the Indemnitee, its Affiliates, or any of their respective directors, officers, employees and agents intend to claim such indemnification. The Indemnitee shall permit, and shall cause its Affiliates and their respective directors, officers, employees and agents to permit, the Indemnitor, at its discretion, to settle any such claim, lawsuit or other action and agrees to the complete control of such defense or settlement by the Indemnitor; provided, however, that in order for the Indemnitor to exercise such rights, such settlement shall not adversely affect the Indemnitee’s rights under this Agreement or impose any obligations on the Indemnitee in addition to those set forth herein. No such claim, lawsuit or other action shall be settled without the prior written consent of the Indemnitor and the Indemnitor shall not be responsible for any legal fees or other costs incurred other than as provided herein. The Indemnitee, its Affiliates and their respective directors, officers, employees and agents shall cooperate fully with the Indemnitor and its legal representatives in the investigation and defense of any claim, lawsuit or other action covered by this indemnification, all at the reasonable expense of the Indemnitor. The Indemnitee shall have the right, but not the obligation, to be represented by counsel of its own selection and expense.

b. Insurance. Each Party shall, during the term and for [***] after the expiration of the last Product delivered under this Agreement (including any Statement of Work), obtain and maintain, at its own cost and expense and from a qualified insurance company, comprehensive general liability insurance including, but not limited to, contractual liability coverage and standard product liability coverage in an amount commensurate with industry standards. These insurance requirements are not intended to limit a party’s indemnification obligations hereunder. Coverage types and limits shall be global for occurrences and claims made and shall include: (a) Commercial General Liability insurance, including contractual liability and products/completed operations coverage – limits of [***]; (b) Workers Compensation/Employers Liability – statutory with minimum Employers Liability limit of [***]; (c) Commercial Umbrella Liability - [***]; and (d) Network Security/Cyber Liability - [***]. Each Party will provide the other Party with at least [***] written notice prior to termination or amendment of such any applicable insurance policy.

1. ADDITIONAL COVENANTS

a. **Non-Solicitation.** Each Party will agree not to solicit for employment (or for use as an independent contractor) employees of the other Party during the Term and for a period of [***] thereafter; provided that nothing herein will prevent the employment by a Party of individuals who initiate contact with such Party, and such Party will not be in violation of the non-solicitation restriction as a result of making a general solicitation for employees or independent contractors or employing individuals who respond to such solicitations. For the avoidance of doubt, the publication of an advertisement will not constitute solicitation or inducement.

b. **Business Continuity Plan.** LONZA acknowledges the importance to MODERNA of an uninterrupted supply of Products. Based on the information available at the Effective Date, LONZA has, and reasonably expects that despite the COVID-19 Pandemic it will continue to have the available capacity and staff designated “essential workers” under Applicable Laws to perform Services and Manufacture and supply Product under this Agreement. Further, LONZA has a formal business continuity plan detailing LONZA’s plans, procedures and designated resources for timely response to and recovery from potential civil, natural, and physical plant disasters that could reasonably be expected to disrupt LONZA’s performance of services, including Services under this Agreement, and additional plans covering potential disruption that might arise in connection with the COVID-19 Pandemic (“**Business Continuity Plans**”). During the Term, LONZA will promptly notify MODERNA in writing of any potential disruption to the performance of the Services or the Manufacturing and supply of the Products.

c. **Anti-Corruption and Trade Compliance.**

i. Each party to this Agreement warrants that none of its employees, agents, officers or other members of its management are officials, officers, agents, or representatives of any government or international public organization. Each party to this Agreement further agrees that it shall not make any payment, either directly or indirectly through agents or otherwise, of money, assets, or anything of value, including the compensation derived from this Agreement, to government or political party officials, officials of international public organizations, candidates for public office, or representatives of other businesses or persons acting on behalf of any of the foregoing where such payment would constitute a violation of any Applicable Laws, whether by LONZA, MODERNA, or any other party.

ii. Each Party to this Agreement shall comply with all applicable laws relating to the import, export, reexport, and transfer of items and technologies subject to the Scope of Work of this Agreement, including without limitation the U.S. Export Administration Regulations of the Bureau of Industry and Security of the U.S. Department of Commerce, the U.S. economic sanctions administered by the U.S. Department of the Treasury’s Office of Foreign Assets Control (“**OFAC**”), the import and customs laws of the United States, and all trade laws of any other Governmental Authority of competent jurisdiction.

iii. None of the Parties to this Agreement, including their respective Affiliates, nor any Person or entity acting on behalf of any of the foregoing, (a) is currently the subject or the target of any Sanctions, (b) is located, organized or resident in a country, territory or geographical region that is

itself the subject of Sanctions (including, without limitation, Cuba, Iran, North Korea, Sudan, Syria, and the Crimea region of Ukraine) or whose government is the subject or target of Sanctions, (c) is named in any Sanctions-related list maintained by the U.S. Department of State, the U.S. Department of Commerce, or the U.S. Department of the Treasury, including but not limited to the Specially Designated Nationals and Blocked Persons List maintained by OFAC and the Denied Persons, Entity, and Unverified Lists maintained by the Bureau of Industry and Security, (d) is, otherwise, by public designation of the United Nations Security Council, the European Union, Her Majesty's Treasury, or other equivalent, applicable Governmental Authority, the subject or target of any Sanctions, (e) is a Person with which any United States person is prohibited from dealing or otherwise engaging in any transaction by any applicable law or regulation, (f) is owned or controlled by Persons described in clauses (a) through (e) or is otherwise the subject of Sanctions, or (g) conducts any business or engages in, or has conducted any business or engaged in, making or receiving any contribution of goods, services or money to or for the benefit of any Person, or in any country or territory that is the subject of Sanctions, other than in compliance with Sanctions laws and regulations. "Sanctions" means any economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by any United States Governmental Authority (including but not limited to OFAC), the United Nations Security Council, the European Union, Her Majesty's Treasury, or other Governmental Authority of competent jurisdiction.

i. None of the materials (including Products) to be supplied under this Agreement originated, in whole or in part, in Cuba, Iran, North Korea, Sudan, Syria, or the Crimea region of Ukraine.

ii. None of the Parties to this Agreement nor their respective officers, directors, employees, or agents are or have been the subject of any actual or threatened allegation, investigation, voluntary disclosure, investigation, prosecution or other enforcement action related to Sanctions, the U.S. Foreign Corrupt Practices Act of 1977, as amended, or any other sanctions, trade, or anti-corruption laws.

iii. All Parties to this Agreement have developed and maintain in effect policies and procedures specifically designed to achieve compliance with the requirements of this Section 17.4, including compliance by their respective authorized agents and other Third Parties acting on their behalf. In construing the compliance obligations under U.S. law with regard to the scope of this Agreement, each Party shall regard itself as a United States person. The Parties to this Agreement shall undertake to cooperate in good faith, to the extent permitted by law and in accordance with applicable legal privilege in connection with any investigation, by a party to this Agreement or any Governmental Authority, relating to compliance with this Section 17.4.

1. MISCELLANEOUS

a. **Independent Contractors.** Each of the Parties is an independent contractor and nothing herein contained shall be deemed to create or constitute the relationship of partners, joint venturers, co- partners, employer/employee, nor of principal and agent between the Parties. Neither Party shall at any time enter into, incur, or hold itself out as having authority to enter into or incur, on behalf of the other Party, any commitment, expense, or liability whatsoever.

b. **Force Majeure.** Neither Party shall be in breach of this Agreement if there is any failure of performance under this Agreement (except for payment of any amounts due under this Agreement)

occasioned by any reason beyond the reasonable control that is not reasonably foreseeable or avoidance and without the fault or negligence of the Party affected thereby, including, without limitation, an act of God, fire, flood, act of government or state, war, civil commotion, insurrection, acts of terrorism, embargo, sabotage, prevention from or hindrance in obtaining energy or other utilities, labor disputes of whatever nature, or any other reason beyond the reasonable control that is not reasonably foreseeable or avoidable and without the fault or negligence of the Party affected thereby (a "Force Majeure Event"). Such excuse shall continue as long as the Force Majeure Event continues. Upon cessation of such Force Majeure Event, the affected Party shall promptly resume performance under this Agreement as soon as it is commercially reasonable for the Party to do so. Each Party agrees to give the other Party prompt written notice of the occurrence of any Force Majeure Event, the nature thereof, and the extent to which the affected Party will be unable to fully perform its obligations under this Agreement. Each Party further agrees to use diligent efforts to mitigate the effect of such Force Majeure Event as quickly as practicable (provided that in no event shall a Party be required to settle any labor dispute) and to give the other Party prompt written notice when it is again fully able to perform such obligations. If the failure to perform due to such Force Majeure Event continues for a period of [***] or more, then the unaffected Party may terminate this Agreement.

a. [intentionally left blank]

b. **Notices.** Any notice required or permitted to be given under this Agreement by any Party shall be in writing and shall be (a) delivered personally, (b) sent by registered mail, return receipt requested, postage prepaid, (c) sent by a nationally-recognized courier service guaranteeing next-day or second day delivery, charges prepaid, or (d) delivered by facsimile (with documented evidence of transmission), to the addresses or facsimile numbers of the other Party set forth below or at such other addresses as may from time to time be furnished by similar notice by any Party. The effective date of any notice under this Agreement shall be the date of receipt by the receiving Party.

If to LONZA:

LONZA SALES LTD.
Attn: Business Head Münchensteinerstrasse 38
4002 Basel, Switzerland

With a copy to:

Group General Counsel LONZA Sales Ltd.
Münchensteinerstrasse 38
4002 Basel, Switzerland

If to MODERNA:

ModernaTx, Inc.
Attn: General Counsel 200 Technology Square
Cambridge, MA 02139 USA

Either Party may change its address for notice by giving notice thereof in the manner set forth in this Section 18.4.

a. Entire Agreement; Amendments. This Agreement, including the Appendices attached hereto and referenced herein, constitutes the full understanding of the Parties and a complete and exclusive statement of the terms of their agreement with respect to the specific subject matter hereof and supersedes all prior agreements and understandings, oral and written, among the Parties with respect to the subject matter hereof, including, without limitation, the SCA. No terms, conditions, understandings or agreements purporting to amend, modify or vary the terms of this Agreement (including any Appendix hereto) shall be binding unless hereafter made in a written instrument referencing this Agreement and signed by each of the Parties.

b. Governing Law. The construction, validity and performance of the Agreement shall be governed by and construed in accordance with the internal laws of the State of New York, without giving effect to its conflicts of laws provisions. The United Nations Convention on Contracts for the International Sale of Goods and the 1974 Convention on the Limitation Period in the International Sale of Goods, as amended by that certain Protocol, done at Vienna on April 11, 1980 shall not apply to this Agreement. The Parties hereby submit to and consent to the exclusive jurisdiction of the federal and state courts sitting in the State of New York and waive any objection to the laying of venue in, and any claim of inconvenient forum with respect to, these courts.

c. Counterparts. This Agreement and any amendment hereto may be executed in any number of counterparts, each of which shall for all purposes be deemed an original and all of which shall constitute the same instrument. This Agreement shall be effective upon full execution by facsimile, PDF, electronic reproduction or original, and a facsimile, PDF or electronic signature shall be deemed to be and shall be as effective as an original signature.

d. Severability. If any part of this Agreement shall be found to be invalid or unenforceable under Applicable Law in any jurisdiction, such part shall be ineffective only to the extent of such invalidity or unenforceability in such jurisdiction, without in any way affecting the remaining parts of this Agreement in that jurisdiction or the validity or enforceability of the Agreement as a whole in any other jurisdiction. In addition, the part that is ineffective shall be reformed in a mutually agreeable manner so as to as nearly approximate the intent of the Parties as possible.

e. Titles and Subtitles. All headings, titles and subtitles used in this Agreement (including any Appendix hereto) are for convenience only and are not to be considered in construing or interpreting any term or provision of this Agreement (or any Appendix hereto).

f. Exhibits. All "RECITALS", "DEFINITIONS", exhibits and appendices referred to herein form an integral part of this Agreement and are incorporated into this Agreement by such reference.

a. **Pronouns.** Where the context requires, (i) all pronouns used herein will be deemed to refer to the masculine, feminine or neuter gender as the context requires, and (ii) the singular context will include the plural and vice versa.

b. **Assignment.** This Agreement shall be binding upon the successors and assigns of the Parties and the name of a Party appearing herein shall be deemed to include the names of its successors and assigns. Neither Party may assign its interest under this Agreement without the prior written consent of the other Party, such consent not to be unreasonably withheld, conditioned or delayed; provided, however, a Party shall be entitled without the prior written consent of the other Party to assign this Agreement to an Affiliate or to any company to which such Party may transfer all or substantially all of its assets or capital stock relating to the activities contemplated under this Agreement, whether through purchase, acquisition, merger, consolidation, reorganization or otherwise. Any permitted assignment of this Agreement by either Party will be conditioned upon such Party's permitted assignee agreeing in writing to comply with all the terms and conditions contained in this Agreement. Any purported assignment without a required consent shall be null and void. No assignment shall relieve any Party of responsibility for the performance of any obligation that accrued prior to the effective date of such assignment.

c. **Waiver.** No waiver hereunder shall be effective unless signed by the Party granting the waiver. The failure of any Party at any time or times to require performance of any provision of this Agreement (including any Appendix hereto) will in no manner affect its rights at a later time to enforce the same. No waiver by any Party of any term, provision or condition contained in this Agreement (including any Appendix hereto), whether by conduct or otherwise, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, provision or condition or of any other term, provision or condition of this Agreement (including any Appendix hereto).

d. **Dispute Resolution.**

i. **Disputes; Dispute Escalation.** Except as expressly set forth otherwise in this Agreement, disputes of any nature arising under, relating to, or in connection with this Agreement will be exclusively resolved pursuant to this Section 18.14. If the Parties are unable to resolve a dispute, despite their good faith efforts, either Party may, by written notice to the other, have such dispute referred to the Executive Officers (or their designees, which designee is required to have decision-making authority on behalf of such Party), who will attempt to resolve such dispute by negotiation and consultation for a [***] period following receipt of such written notice. Notwithstanding the dispute resolution procedures set forth in this Section 18, in the event of an actual or threatened breach of this Agreement, the aggrieved Party may seek provisional equitable relief (including restraining orders, specific performance or other injunctive relief), without first submitting to any dispute resolution procedures hereunder.

ii. **Full Arbitration.** In the event that no agreement is reached by the Executive Officers (or other designees) with respect to a dispute within [***] after its referral to them, either Party may at any time after such [***] period submit such dispute to be finally settled by arbitration administered in accordance with the procedural rules of the American Arbitration Association ("AAA") in effect at the time of submission, as modified by this Section 18.14. The arbitration

will be heard and determined by three (3) arbitrators who are retired judges or attorneys with at least ten (10) years of relevant experience in the pharmaceutical and biotechnology industry, each of whom will be impartial and independent. Each Party will appoint one arbitrator and the third arbitrator will be selected by the two Party-appointed arbitrators, or, failing agreement within [***] following appointment of the second arbitrator, by AAA. The arbitration shall be held in New York, New York. The arbitration proceedings shall be conducted, and the award shall be rendered, in the English language. Fees, costs and expenses of arbitration are to be divided by the Parties in the following manner: [***].

i. **Expedited Arbitration.** Notwithstanding Section 18.14.2 the Parties may agree to refer a dispute to expedited arbitration (an “**Expedited Dispute**”) rather than resolve the same pursuant to Section 18.14.2. Any such Expedited Dispute shall be finally settled by arbitration under the Commercial Arbitration Rules (Expedited Rules) of the American Arbitration Association (“**AAA Expedited Rules**”). Arbitration will be conducted in New York, New York by one (1) arbitrator who shall be reasonably acceptable to the Parties and who shall be appointed in accordance with the AAA Expedited Rules. If the Parties are unable to select an arbitrator within [***] of the notice that initiated the arbitration, then the arbitrator shall be appointed in accordance with the AAA Expedited Rules. Any arbitrator chosen hereunder shall have educational training and industry experience sufficient to demonstrate a reasonable level of scientific, financial, medical and industry knowledge relevant to the particular dispute. [***].

ii. **Arbitration Award.** The arbitrator(s) shall issue their decision in writing, setting forth the basis for such decision. The arbitration award so given will be a final and binding determination of the dispute, will be fully enforceable in any court of competent jurisdiction. Except in a proceeding to enforce the results of the arbitration or as otherwise required by law, neither Party nor any arbitrator may disclose the existence, content or results of any arbitration hereunder without the prior written consent of both Parties (each such consent not to be unreasonably withheld, delayed or conditioned).

iii. **Tolling.** The Parties agree that all applicable statutes of limitation and time-based defenses (such as estoppel and laches) shall be tolled while the dispute resolution procedures set forth in this Section 18.14 are pending, and the Parties shall cooperate in taking all actions reasonably necessary to achieve such a result. In addition, during the pendency of any dispute under this Agreement initiated before the end of the cure period under Section 15.2, this Agreement shall remain in full force and effect, and the time periods for cure under Section 15.2 shall be tolled. Notwithstanding the dispute resolution procedures set forth in this Section 18.14, in the event of an actual or threatened breach of this Agreement, the aggrieved Party may seek provisional equitable relief (including restraining orders, specific performance or other injunctive relief), without first submitting to any dispute resolution procedures hereunder.

iv. **Confidentiality.** Any and all activities conducted under this Section 18.14, including any and all non-public proceedings and decisions under Section 18.14.2, will be deemed Confidential Information of each of the Parties, and will be subject to the terms of 10.

a. **No Presumption Against Drafter.** For purposes of this Agreement, each Party hereby waives any rule of construction that requires that ambiguities in this Agreement (including any Appendix hereto) be construed against the drafter.

b. **No Third Party Beneficiaries.** The representations, warranties, covenants and agreements set forth in this Agreement are for the sole benefit of the Parties hereto and their successors and permitted assigns, and they will not be construed as conferring any rights on any other persons other than MODERNA Indemnitees and LONZA Indemnitees pursuant to the indemnification provisions of Sections 16.1 and 16.2.

c. **Further Assurances.** The Parties shall execute, acknowledge and deliver such further instruments and shall take all such other incidental acts as may be reasonably necessary or appropriate to carry out the purpose and intent of this Agreement.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

MODERNATX, INC.

By: /s/ Stephane Bancel Name: Stephane Bancel
Title: CEO

LONZA SALES LTD.

By: /s/ Albert M. Baehny /s/ Daniel Blaettler

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Titl

Albert M. Baehny Daniel Blaettler CEO a.i. and
Chairman General Counsel

LONZA LTD.

By: /s/ Albert M. Baehny /s/ Daniel Blaettler

Nar
Titl

Albert M. Baehny Daniel Blaettler CEO a.i. and
Chairman General Counsel



CONFIDENTIAL

APPENDIX A-1 STATEMENT OF WORK NR. 1

[TO BE ATTACHED]



CONFIDENTIAL

APPENDIX A-2 STATEMENT OF WORK NR. 2

[TO BE ATTACHED]



CONFIDENTIAL

APPENDIX A-3 STATEMENT OF WORK NR. 3

[TO BE ATTACHED]

CONFIDENTIAL

APPENDIX B TEMPLATE STATEMENT OF WORK

[***]

CONFIDENTIAL

APPENDIX C
