NOVARTIS PHARMACEUTICALS CORPORATION
East Hanover, NJ 07936

AMENDMENT #1 TO THE MASTER CLINICAL TRIAL AGREEMENT

The following is Amendment # 1 ("Amendment #1") to the Master Clinical Trial Agreement dated January 1, 2004 between Novartis Pharmaceuticals Corporation ("Novartis") and The University of Texas Health Science Center at San Antonio, The University of Texas Health Science Center at Houston, The University of Texas M.D. Anderson Cancer Center, The University of Texas Southwestern Medical Center at Dallas, The University of Texas Medical Branch at Galveston and The University of Texas Health Center at Tyler each with an office and place of business as set forth in Article 12 of the Master Clinical Trial Agreement and each a component of The University of Texas System, located at 201 West 7th Street, Austin, Texas 78701 (each an Institution hereinafter collectively "Institution"), (the "Master Clinical Trial Agreement").

A. Novartis and Institution entered into the above referenced Master Clinical Trial Agreement on January 1, 2004.

B. Novartis and Institution now wish to amend the terms of the Master Clinical Trial Agreement as set forth below.

NOW, THEREFORE, it is hereby agreed as follows:

1. **Article 25. Biological Samples** of the Master Clinical Trial Agreement is hereby deleted in its entirety and replaced with the following:

"Biological Samples" include, without limitation, blood, serum, fluid and tissue biopsy samples collected from Research Subjects (as defined in Section 6B(2) of the Master Clinical Trial Agreement) enrolled in the Clinical Trial. Biological Samples further include, without limitation, any tangible material directly or indirectly derived from such blood, fluid or tissue samples, such as: genes, gene fragments, gene sequences, proteins, protein fragments, protein sequences, probes, DNA, RNA, cDNA libraries, plasmids, vectors, expression systems, cells, cell lines, organisms, antibodies or other biological substances; and any constituents, progeny, mutants, variants, derivatives, replications, reagents or chemical compounds thereof or derived therefrom.

Biological Samples

a. Institution's Collection, Retention and Use of Biological Samples. Institution will collect, retain and use Biological Samples in accordance with the Protocol. Institution may collect and/or reserve additional quantities of Biological Samples ("secondary Biological Samples") for use in research not described in the Protocol ("non-Protocol research"), provided that (a) such collection complies with all applicable laws,

regulations and acceptable clinical trial practices, including, but not limited to, patient privacy and informed consent laws in the country in which the Clinical Trial is being conducted, and (b) no confidential Information or any other information which links the secondary Biological Samples to any Confidential Information is available to investigator(s) for such non-Protocol research (for example, without limitation, Institution may annotate such secondary Biological Samples with Clinical Trial Research Subject demographic information (e.g., age, gender and clinical diagnosis), but not with information related to administration of, or response to, or adverse events associated with, a study drug).

Novartis' Receipt and Use of Biological Samples. Novartis shall receive pre-determined quantities of Biological Samples from Institution, as set forth in the Protocol, for use in research as generally described in the Protocol, provided that such research complies with all applicable laws and regulations, including, but not limited to, patient privacy and informed consent laws in the country in which Biological Samples were collected. Using the same unique identifier ("Study Subject Number") utilized to identify the original Biological Sample, Novartis will disclose and provide to the Principal Investigator in a timely manner, upon written request, all raw data generated by Novartis in support of the primary objectives of the Research, as specified in and required by the Protocol, which is derived from Biological Samples ("Biological Samples Raw Data"). Novartis agrees to make reasonable efforts to disclose and provide such Biological Samples Raw Data to Institution, upon written request to Novartis, within one year after completion of the Protocol, or for multicenter studies, within one year after completion of the Protocol at all sites. For sake of clarity, Institution agrees not to perform experiments with or analyze Biological Samples Raw Data in a way that could or does compete with the objectives of the Research. Novartis reserves the right to withhold any such Biological Samples Raw Data which are pre-obligated and/or encumbered in some manner. Such Biological Samples Raw Data (i) shall be treated by Institution as confidential Information under this Agreement; (ii) Institution and Novartis agree to maintain the patient's confidential information as set forth in the informed consent document that corresponds to the Protocol; (iii) the Principal Investigator may use such Biological Samples Raw Data for the purpose of generating, for non-commercial purposes, a manuscript to be published in a scientific peer-reviewed journal; (iv) Institution may use such Biological Samples Raw Data for its own internal non-commercial research and academic purposes, (v) Institution may disclose such Biological Samples Raw Data to other academic investigators outside Institution for non-commercial collaborative research and academic purposes, provided that investigators outside Institution and any institution to whom such investigators may have an obligation to assign inventions or other intellectual property rights enter into a Proprietary Data Transfer

Agreement with Novartis in the form attached hereto, and Institution will identify in writing to Novartis any such Biological Samples Raw Data provided to other academic investigators at the time it is provided, and (vi) all publications relating to the Biological Samples Raw Data and all data, information and inventions resulting from the use of Biological Samples Raw Data shall be in performance of the Research and subject to all provisions of the Master Clinical Trial Agreement.

In the event that Principal Investigator desires to conduct further research in collaboration with Novartis with respect to such Biological Samples Raw Data, Novartis agrees to consider any such request. Any such further research agreed upon by Novartis shall be subject to the terms of a separate research agreement.

2. All remaining obligations and responsibilities of the Institution as outlined in the Master Clinical Trial Agreement remain unchanged.

In witness whereof, the parties hereto have executed this Amendment #1 in duplicate (if necessary) by proper persons thereunto duly authorized.

NOVARTIS PHARMACEUTICALS CORPORATION

By: _____

Name: ~~Sheila Straub~~ George Betts

Title: ~~Vice President~~, Executive Director ~~US International Clinical Research Operations~~

Date: 4/14/04

THE UNIVERSITY OF TEXAS HEALTH CENTER AT TYLER

By: _____

Name: Rick L. Hefner

Title: Vice President of Finance and Administration

Date: 4/5/04

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON

By: Catherine Moore

Name: Catherine Moore, Director

Title: Office of Sponsored Projects

Date: 3-26-04

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO

By: _____

Name: Jane A. Youngers

Title: Director, Grants Management

Date: 4/7/04

THE UNIVERSITY OF TEXAS M.D ANDERSON CANCER CENTER

By: _____
Name: Leonard A. Zwelling, M.D.,MBA
Title: Vice President of Research Administration
Date: 3-24-04

THE UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON

By: _____
Name: Barbara DeHaven
Title: Associate Director Office of Sponsored Projects
Date: 3 30 04

THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER AT DALLAS

By: _____
Name: Perrie M. Adams, Ph.D.
Title: Associate Dean for Research
Date: 4/1/04

Proprietary Data Transfer Agreement

This Agreement made this **[insert date]** by and between Novartis Pharmaceuticals Corporation, 59 Route 10, East Hanover, NJ 07936-1080, a corporation of Delaware (hereinafter "NOVARTIS) and **[insert name**], (hereinafter "Academic Researcher"), an academic researcher at **[institution]** located in **[insert city and state or city and country]** (hereinafter "Academic Institution").

WHEREAS NOVARTIS and/or one or more of its Affiliates is the owner of Biological Sample Raw Data including data generated as a result of research conducted under a clinical trial sponsored by NOVARTIS at **[INSERT SPECIFIC NAME OF UT COMPONENT INSTITUTION]**, hereinafter "UT Institution" involving tissue samples obtained from UT Institution patients, which Biological Sample Raw Data it deems to be valuable proprietary and confidential information;

WHEREAS NOVARTIS has provided the Principal Investigator of the clinical trial sponsored by NOVARTIS at UT Institution access to certain Biological Sample Raw Data resulting from experiments performed by NOVARTIS on tissue samples collected from patients in the clinical trial;

WHEREAS Academic Researcher desires to collaborate on a non-commercial academic research project with a researcher working at UT Institution who has access to NOVARTIS' Biological Samples Raw Data; and

WHEREAS NOVARTIS agrees to permit researchers at UT Institution to grant Academic Researcher access to NOVARTIS' proprietary Biological Samples Raw Data under the terms and conditions set forth herein.

NOW, THEREFORE, the parties hereto agree as follows:

Except as provided for in Paragraph 2, Academic Researcher and Academic Institution shall maintain in confidence, shall not disclose or otherwise provide to any third party and shall not use any of NOVARTIS' Biological Samples Raw Data for any purpose other than to collaborate on a non-commercial academic research project with a researcher working at UT Institution who has access to NOVARTIS' Biological Samples Raw Data, without the written consent of NOVARTIS. Academic Researcher and Academic Institution shall use the same degree of care used to protect its own proprietary information of a similar nature to prevent the unauthorized disclosure and use of NOVARTIS' Biological Samples Raw Data or any other information that Novartis deems proprietary to it (collectively "NOVARTIS Proprietary Information") and shall notify NOVARTIS in writing of any breach of this Agreement of which it becomes aware. These obligations are hereinafter referred to as "the confidentiality and non-use obligations of this Agreement". Academic Researcher and Academic Institution expressly acknowledge that it may receive Biological Samples Raw Data directly from researchers at UT Institution under this Agreement, and that all such Biological Samples Raw Data is NOVARTIS Proprietary Information and subject to the confidentiality and non-use obligations of this Agreement.

2. For any publication or presentation of information relating to the non-commercial academic research project for which Biological Samples Raw Data are disclosed to Academic Researcher and Academic Institution, a manuscript of the paper, abstract or other materials must be reviewed by NOVARTIS prior to any outside submission. A period of fifteen (15) working days for

presentational materials and abstracts and forty-five (45) working days for manuscripts will be required for NOVARTIS review. NOVARTIS reserves the unrestricted right to request to have deleted from the proposed publication all NOVARTIS Proprietary Information which may be contained therein. However, such rights shall not supercede the academic and research non-commercial objective to convey accurate findings and results and data of sound quality and scientific merit. If an invention is described in a proposed publication or presentation which in the opinion of NOVARTIS should be made the subject of a patent application, NOVARTIS shall have four (4) months from the date the proposed publication or presentation was disclosed to NOVARTIS to file such patent application. Academic Researcher and Academic Institution shall withhold publication respecting that invention until such application is so filed by NOVARTIS. NOVARTIS, Academic Researcher and Academic Institution shall use good faith efforts to discuss and resolve any such issues or disagreements concerning the scope and content of the publication or presentation.

3. The confidentiality and non-use obligations of this Agreement shall not apply to any NOVARTIS Proprietary Information which Academic Researcher or Academic Institution can demonstrate with competent evidence (i) was known to it or in its possession at the time it was received, (ii) was publicly available by publication, public use or the like at the time it was received or subsequently became publicly available without breach of this Agreement or (iii) was subsequently received from a non-party who had the right to provide it.

4 The confidentiality and non-use obligations of this Agreement shall remain in effect for a period of five (5) years from the date of this Agreement.

5. At the end of the collaborative non-commercial academic research project, Academic Researcher and Academic Institution shall return or destroy all Biological Samples Raw Data that it possesses.

6. (a) This Agreement does not, and shall not be construed to, impose (i) any obligation on NOVARTIS to provide Academic Researcher with any NOVARTIS Proprietary Information, (ii) any obligation on any party to enter into a business relationship or other arrangement with the other or (iii) any other obligation on either party not expressly imposed by this Agreement.

(b) This Agreement does not, and shall not be construed to, constitute the grant to Academic Researcher and/or Academic Institution (i) any right or license to use any NOVARTIS Proprietary Information for any purpose other than that of this Agreement, (ii) any patent right or license or (iii) the right to file any patent application containing or based upon Biological Samples Raw Data or any other NOVARTIS Proprietary Information without NOVARTIS' written consent.

7. Novartis and its Affiliates will have a perpetual, royalty-free, non-exclusive worldwide license under any patent rights, know-how and data, relating to or arising from the use of Biological Samples Raw Data or other NOVARTIS Proprietary Information. Affiliates shall mean any corporation or business entity controlled by, controlling or under common control with Novartis, control being the ownership of greater than 50% of the voting shares or interest of such corporation or business entity, or such other relationship as, in fact, constitutes actual control. Novartis shall have the right to grant sublicenses under its non-exclusive license to users of its products and for the purpose of making available diagnostic tests to be used in conjunction with the use of its pharmaceutical products.

8. NOVARTIS shall further have an exclusive option to negotiate an exclusive license under any patent rights, know-how and data, relating to or arising from the use of Biological Samples Raw Data or other NOVARTIS Proprietary Information. The terms of the exclusive license will fairly reflect the nature of the invention, the relative contributions of the parties to the invention, the risks incurred by NOVARTIS and the costs of subsequent research and development needed to bring the invention to the marketplace.

9. Neither party may assign this Agreement or any interest therein without the written consent of the other except in connection with a merger or the sale of at least a substantial portion of the business to which it relates.

IN WITNESS WHEREOF, NOVARTIS, Academic Researcher and Academic Institution have caused this Agreement to be executed by their duly authorized officers as of the day and year hereinabove set forth.

ACADEMIC INSTITUTION

Name _____
Title _____
Date _____

ACADEMIC RESEARCHER

Title _____
Date _____

NOVARTIS PHARMACEUTICALS CORPORATION

Name _____
Title _____
Date _____