SECOND AMENDMENT TO THE MASTER
CLINICAL TRIAL AGREEMENT

This Second Amendment ("Second Amendment") effective as of March 16, 2014 hereby amends the Master Clinical Trial Agreement dated March 16th, 2009, and Amendment #1 thereto dated May 31, 2012, between The University of Texas Health Science Center at San Antonio, The University of Texas Health Science Center at Houston, The University of Texas Southwestern Medical Center, The University of Texas Medical Branch at Galveston, The University of Texas Health Science Center at Tyler and The University of Texas at Austin, (individually and collectively referred to as an “Institution”) and Hoffmann-La Roche Inc. and Roche Laboratories Inc. (each referred to as “Roche”) (the “Master Agreement (as amended)”)(each a “Party” and collectively the “Parties”).

WHEREAS, the Parties desire to amend the terms of the Master Agreement (as amended) as set forth below to extend the term of the Master Agreement for an additional six (6) months.

NOW, THEREFORE, in consideration of the mutual promises set forth herein and other good and valuable consideration, the receipt and adequacy of which if hereby acknowledged, the Parties hereto promise and agree as follows:

1. Pursuant to Section 10 of the Master Agreement (as amended), the parties mutually agree to extend the term of the Master Agreement for an additional six (6) months until September 16, 2014.

THE REST OF THIS PAGE IS INTENTIONALLY LEFT BLANK
IN WITNESS WHEREOF, the Parties hereto have caused this Second Amendment to be duly executed as of the date written below.

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO
By: Chris G. Green, CPA
Name: Chris G. Green, CPA
Title: Director
Date: 13 March 2014

HOFFMANN-LA ROCHE INC.
By: 
Name: 
Title: 
Date: 3/13/14

THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER
By: 
Name: 
Title: 
Date: 

UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON
By: 
Name: 
Title: 
Date: 

THE UNIVERSITY OF TEXAS AT AUSTIN
By: 
Name: 
Title: 
Date: 

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT TYLER
By: 
Name: 
Title: 
Date: 

Amendment #2 to Roche Master Sponsor-Initiated Clinical Trial Agreement
Term: Expires September 16, 2014
IN WITNESS WHEREOF, the Parties hereto have caused this Second Amendment to be duly executed as of the date written below.

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO

By: __________________________
Name: __________________________
Title: __________________________
Date: __________________________

HOFFMANN-LA ROCHE INC.

By: __________________________
Name: __________________________
Title: __________________________
Date: __________________________

THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER

By: __________________________
Name: Angela R. Charboneau Wishon, J.D.
Title: Vice President for Research Administration
Date: 3-25-2014

UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON

By: __________________________
Name: __________________________
Title: __________________________
Date: __________________________

THE UNIVERSITY OF TEXAS AT AUSTIN

By: __________________________
Name: __________________________
Title: __________________________
Date: __________________________

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT TYLER

By: __________________________
Name: __________________________
Title: __________________________
Date: __________________________

Amendment #2 to Roche Master Sponsor-Initiated Clinical Trial Agreement
Term: Expires September 16, 2014
IN WITNESS WHEREOF, the Parties hereto have caused this Second Amendment to be duly executed as of the date written below.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Date</th>
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<tbody>
<tr>
<td>THE UNIVERSITY OF TEXAS HEALTH</td>
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<tr>
<td>SCIENCE CENTER AT SAN ANTONIO</td>
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<tr>
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<td>HOFFMANN-LA ROCHE INC.</td>
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<tr>
<td>THE UNIVERSITY OF TEXAS SOUTHWESTERN</td>
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<tr>
<td>MEDICAL CENTER</td>
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<tr>
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<tr>
<td>THE UNIVERSITY OF TEXAS AT AUSTIN</td>
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<td>Date:</td>
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</tbody>
</table>
IN WITNESS WHEREOF, the Parties hereto have caused this Second Amendment to be duly executed as of the date written below.

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO

By: __________________________
Name: __________________________
Title: __________________________
Date: __________________________

HOFFMANN-LA ROCHE INC.

By: __________________________
Name: __________________________
Title: __________________________
Date: __________________________

THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER

By: __________________________
Name: __________________________
Title: __________________________
Date: __________________________

UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON

By: __________________________
Name: __________________________
Title: __________________________
Date: __________________________

THE UNIVERSITY OF TEXAS AT AUSTIN

By: __________________________
Name: __________________________
Title: __________________________
Date: __________________________

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT TYLER

By: __________________________
Name: __________________________
Title: __________________________
Date: __________________________

Amendment #2 to Roche Master Sponsor-Initiated Clinical Trial Agreement
Term: Expires September 16, 2014
IN WITNESS WHEREOF, the Parties hereto have caused this Second Amendment to be duly executed as of the date written below.

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT SAN ANTONIO

By: __________________________
Name: _________________________
Title: __________________________
Date: __________________________

HOFFMANN-LA ROCHE INC.

By: ____________________________
Name: __________________________
Title: __________________________
Date: __________________________

THE UNIVERSITY OF TEXAS SOUTHWESTERN MEDICAL CENTER

By: ____________________________
Name: __________________________
Title: __________________________
Date: __________________________

UNIVERSITY OF TEXAS MEDICAL BRANCH AT GALVESTON

By: ____________________________
Name: __________________________
Title: __________________________
Date: __________________________

THE UNIVERSITY OF TEXAS AT AUSTIN

By: ____________________________
Name: __________________________
Title: __________________________
Date: __________________________

THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT TYLER

By: ____________________________
Name: David Anderson
Title: Director, Pre-Award Services
Date: 3/19/14

Amendment #2 to Roche Master Sponsor-Initiated Clinical Trial Agreement
Term: Expires September 16, 2014
THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON

By: ___

Name: Karen S. Niemeier

Title: Director, Contracts

Office of Sponsored Projects

Date: ________________

Digitally signed by
karen.niemeier@uth.tmc.edu
DN:
cni=karen.niemeier@uth.tmc.edu
Date: 2014.03.13 17:00:59 -05'00'

Amendment #2 to Roche Master Sponsor-Initiated Clinical Trial Agreement
Term: Expires September 16, 2014
Second Amended Exhibit 1

Administrative Contact Person and Address for Each Institution

<table>
<thead>
<tr>
<th>David Hawkins</th>
<th>Angela R. Charboneau Wishon, J.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Associate Director</td>
<td>Vice President for Research Administration</td>
</tr>
<tr>
<td>Office of Sponsored</td>
<td>The University of Texas Southwestern Medical Center</td>
</tr>
<tr>
<td>Projects</td>
<td>5323 Harry Hines Blvd.</td>
</tr>
<tr>
<td>The University of</td>
<td>Dallas, Texas 75390-9016</td>
</tr>
<tr>
<td>Texas at Austin</td>
<td>Phone: 214-648-0455</td>
</tr>
<tr>
<td>North Office Bldg.,</td>
<td>Fax: 214-648-2119</td>
</tr>
<tr>
<td>Suite 5.300</td>
<td>mailto:</td>
</tr>
<tr>
<td>Austin, TX 78712</td>
<td>Tax ID: 75-6002868</td>
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<table>
<thead>
<tr>
<th>Jane A. Youngers</th>
<th>Karen Niemeier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Vice</td>
<td>Director, Contracts</td>
</tr>
<tr>
<td>President for Research</td>
<td>The University of Texas Health Science Center at Houston</td>
</tr>
<tr>
<td>and Sponsored Programs</td>
<td>7000 Fannin Street, Suite 1006</td>
</tr>
<tr>
<td>The University of Texas</td>
<td>Houston, TX 77030</td>
</tr>
<tr>
<td>Health Science</td>
<td>Phone: 713-500-3999</td>
</tr>
<tr>
<td>Center at San Antonio</td>
<td>Fax: 713-383-3746</td>
</tr>
<tr>
<td>7703 Floyd Curl Dr,</td>
<td>Tax ID: 74-1761309</td>
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<tr>
<td>Mail Code 7828</td>
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</tr>
<tr>
<td>San Antonio, TX 78229-3900</td>
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</tr>
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</table>

<table>
<thead>
<tr>
<th>David Anderson</th>
<th>Rohan Hebbar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director, Office of</td>
<td>Associate Legal Officer</td>
</tr>
<tr>
<td>Pre-Award Services</td>
<td>The University of Texas Medical Branch at Galveston</td>
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<tr>
<td>The University of Texas</td>
<td>301 University Boulevard</td>
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<tr>
<td>Health Science</td>
<td>Galveston, TX 77555-0156</td>
</tr>
<tr>
<td>Center at Tyler</td>
<td>Phone: 409-747-8794</td>
</tr>
<tr>
<td>11937 U.S. Hwy. 271</td>
<td>Fax: 409-266-9470</td>
</tr>
<tr>
<td>Tyler, TX 75708-3154</td>
<td>Tax ID: 74-6000949</td>
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<tr>
<td>Phone: 903-877-7486</td>
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