UNITED STATES SECURITIES AND EXCHANGE COMMISSION December 12, 2014

ORDER GRANTING CONFIDENTIAL TREATMENT UNDER THE SECURITIES EXCHANGE ACT OF 1934

Transgenomic, Inc.

File No. 001-36439 – CF#31831

Transgenomic, Inc. submitted an application under Rule 24b-2 requesting confidential treatment for information it excluded from the Exhibits to a Form 10-Q filed on November 12, 2014.

Based on representations by Transgenomic, Inc. that this information qualifies as confidential commercial or financial information under the Freedom of Information Act, 5 U.S.C. 552(b)(4), the Division of Corporation Finance has determined not to publicly disclose it. Accordingly, excluded information from the following exhibit will not be released to the public for the time period specified:

Exhibit 10.1 through July 1, 2019

For the Commission, by the Division of Corporation Finance, pursuant to delegated authority:

Brent J. Fields Secretary