Clarient Introduces First Lab Developed Test To Assess Multiple Proteins at Single-Cell Level

- MultiOmyx™ technology aids in pathologist's diagnosis of certain difficult lymphoma cases by doing more with less tissue
- May provide a more complete picture of a patient's cancer and help explain tumor behavior and growth
- Paper in Proceedings of the National Academy of Sciences affirms relevance of GE's MultiOmyx™ molecular pathology tumor analysis

ALISO VIEJO, CA, July 10, 2013 – GE Healthcare today announced the introduction by Clarient Diagnostic Services, a GE Healthcare Company, of the first lab developed test using MultiOmyx™, a ground-breaking new pathology platform which uses proprietary methodology to assess multiple proteins from a single tissue section at a single-cell level. This test, now available, offers an aid to a pathologist's diagnosis of CD30-positive lymphoma cases with difficult morphology or otherwise insufficient tissue to adequately evaluate the case.

“In many instances, suspected lymphoma cases are not straightforward, and sample tissue size inadequacy issues further complicate the matter,” said Lawrence Weiss, MD, Medical Director of Clarient. “In difficult to call diagnoses, MultiOmyx gives me great confidence in making the diagnosis and relieves me from the concern of running out of tissue. If I only have a small amount of tissue, I do not have to sacrifice or choose between important markers – I can assess them all.”

The Hodgkin Lymphoma (HL) Profile by MultiOmyx helps to assess nine unique antibodies (CD30, CD15, CD20, CD45, PAX5, OCT2, BOB1, CD3, and CD79A) on a single formalin fixed paraffin embedded tissue section to aid in differential diagnosis of Classical HL.

In clinical validation, this single slide assay called the Hodgkin Lymphoma Profile by MultiOmyx demonstrated high levels of accuracy, diagnostic reproducibility and repeatability, and high sensitivity of all immunofluorescent stains in comparison to traditional immunohistochemistry performed on the same samples. The correlation study identified unique cases where MultiOmyx demonstrated improved performance.

“Traditional pathology uses multiple slices from paraffin-fixed tumor samples and examines them slide by slide, which is less efficient and effective,” said Carrie Eglinton Manner, CEO, Clarient. “Using a single slide may save time, uses significantly less tissue and may provide a more consistent result. Since different parts of a tumor sample can act differently and because less tissue is required,
pathologists can access the most accurate and broad tumor analysis available, while eliminating today’s need to prioritize tests due to limited tissue availability.

The relevance of the MultiOmyx technology was recently confirmed in a clinical paper written by a team of scientists from GE Global Research published in *Proceedings of the National Academy of Sciences* (PNAS). The paper details the different ways GE is using image data to visualize cancer and the relationship between different biomarkers and the tumor environment and suggests the technology could be broadly applicable to problems in basic biological research, drug discovery and development and companion and clinical diagnostics.

“MultiOmyx provides clinicians and researchers with a novel biomarker multiplexing method to understand biological context in a way that is not possible with other technologies that disrupt the tissue histology. Once cells are removed from the context of their overall microenvironment with other methods valuable information is lost.” said Christine Kuslich, PhD, Chief Science Officer, In Vitro Diagnostics, GE Life Sciences. “MultiOmyx uniquely facilitates the ability to visualize multiple biological pathways, local immune response as well as heterogeneity of expression within regions of interest on a cell-by-cell basis from a single tissue section maintaining tissue context.”

The platform uses fluorescence to provide quantitative analysis of antibodies and allows for up to 60 proteins to be examined on a single tissue sample. It creates a “digital map” of the tumor, giving each cell an “address” and allowing for a clear graphic representation of protein expression. Matching this map to known biosignatures gives researchers a more accurate representation of the exact characteristics of the tumor and may provide clinicians with a clearer view to aid the diagnosis. It also allows them to identify patterns in the tissue by analyzing each cell and biomarker individually, or as a cluster, and thus get a level of understanding of the biological process that could not be achieved via traditional methods.

**About GE Healthcare**

GE Healthcare provides transformational medical technologies and services to meet the demand for increased access, enhanced quality and more affordable healthcare around the world. GE (NYSE: GE) works on things that matter - great people and technologies taking on tough challenges. From medical imaging, software & IT, patient monitoring and diagnostics to drug discovery, biopharmaceutical manufacturing technologies and performance improvement solutions, GE Healthcare helps medical professionals deliver great healthcare to their patients.

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**About Clarient Diagnostic Services, Inc.**

Clarient Diagnostic Services, Inc. is CLIA and NYS licensed, CAP accredited and a leading provider of comprehensive, cancer–diagnostic laboratory services. With its advanced technologies, Clarient is able to provide pathologists and oncologist with more accurate and detailed information to better characterize and assess cancer which can lead to more accurate diagnoses and more effective treatment. In addition, Clarient’s services are finding more efficient ways to reduce the cost as well as accelerating the drug development process to identify and develop treating pharmaceuticals that can result in better outcomes for patients.

From its state-of-the-art diagnostic laboratory to its Internet-based PATHSITE®, Clarient delivers advanced oncology diagnostic services to pathologists, oncologists, hospitals and biopharmaceutical companies throughout the U.S. Clarient also is developing tests for therapeutics in breast, prostate, lung and colon cancers, as well as leukemia/lymphoma.
Clariant is improving the lives of those affected by cancer by bringing clarity to a complex disease. For more information visit www.clariantinc.com.

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We innovate 24 hours a day, with sites in Niskayuna, New York; San Ramon, California; Bangalore, India; Shanghai, China; Munich, Germany; and Rio de Janeiro, Brazil.


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