Exosome Diagnostics Publishes a Study Demonstrating Superior Performance of ExoLution™ Plus Liquid Biopsy Platform in Lung Cancer

December 19, 2017 – Waltham, MA. Exosome Diagnostics, Inc., recently published a study in the Journal Annals of Oncology, of EGFR Liquid Biopsy detection in patients with Non-Small Cell Lung Cancer (NSCLC). The study demonstrated superior sensitivity of a Liquid Biopsy assay using combined isolation of cell-free DNA (cfDNA) and exosomal nucleic acids (exoNA) utilizing the company’s proprietary ExoLution Plus platform, in comparison to using cfDNA alone.

The study, which was conducted in collaboration with Clovis Oncology, analyzed blood plasma and matched pre-treatment tumor tissue from 84 patients enrolled in TIGER-X (NCT01526928), a Phase 1/2 study of rociletinib in mutant EGFR NSCLC patients. The plasma exoNA was analyzed for mutations using a targeted NGS panel (EXO1000), and compared the results to existing data from the same samples using analysis of ctDNA by BEAMing.

The sensitivity of exoNA was 98% for detection of activating EGFR mutations and 90% for EGFR T790M, whereas the corresponding sensitivities for ctDNA by BEAMing were 82% for EGFR and 84% for T790M.

“We also looked at the feasibility of using two consecutive plasma measurements of the mutation levels in exoNA to predict treatment outcome.”, said Dr. Johan Skog, CSO of Exosome Diagnostics, “We were able to show that a decrease in EGFR T790M mutations in plasma on treatment day 15 was predictive of objective response to rociletinib treatment,” Skog continued.

"Exosome Dx's platform is a significantly more sensitive methodology than cell free DNA alone," stated John Boyce, President and CEO of Exosome Diagnostics. "This increased sensitivity yields results that allow the detection of cancer at earlier stages," Boyce continued. "Exosome Diagnostics has utilized its patented solution to develop a pipeline of highly sensitive liquid biopsy diagnostic tests in both oncology and germ line disease that will significantly improve patient care," Boyce concluded.

About Annals of Oncology

Annals of Oncology, the journal of the European Society for Medical Oncology and the Japanese Society of Medical Oncology, provides rapid and efficient peer-review publications on innovative cancer treatments or translational work related to oncology and precision medicine. Main focuses of interest include: systemic anticancer therapy (with specific interest on molecular targeted agents and new immune therapies), randomized trials (including negatives ones), top-level guidelines, and new fields currently emerging as key components of personalized medicine, such as molecular pathology, bioinformatics, modern statistics, and biotechnologies. Radiotherapy, surgery
and pediatrics manuscripts can be considered if they display a clear interaction with one of the fields above or are paradigm-shifting. With a large international editorial board of experts who are leaders in their fields, Annals of Oncology aims at delivering the best communication on the fast moving, and continually evolving, global oncology landscape.

**About Exosome Diagnostics**

Exosome Diagnostics is a privately held company focused on developing and commercializing revolutionary biofluid-based diagnostics to deliver personalized precision healthcare that improves lives. The company’s novel exosome-based technology platform, ExoLution™, and point of care instrument for protein capture and analysis, Shahky™, can yield comprehensive and dynamic molecular insights to transform how cancer and other serious diseases are diagnosed, treated and monitored. Visit [www.exosomedx.com](http://www.exosomedx.com) to learn more.

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