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ITUS Presents Positive Data from its Early Cancer Detection Technology at ASCO-SITC Symposium

SAN JOSE, Calif., Jan. 29, 2018 /PRNewswire/ -- ITUS Corporation (NASDAQ: ITUS), today announced that it presented positive data from its early cancer detection technology on January 26th at the American Society of Clinical Oncology-Society for Immunotherapy of Cancer (ASCO-SITC) Clinical Immuno-oncology Symposium in San Francisco, CA.

The poster presentation titled, "*The coupling of MDSCs with a computational analytic method to detect solid tumors,*" presented the latest data from our ongoing study. Our technology combines the analysis of myeloid-derived suppressor cells (MDSCs) and other subsets of white blood cells with Artificial Intelligence (AI), specifically a neural network (NN), to monitor the patient's immune system.

Statistics clearly show that when cancer is detected early (Stage I or II), the chances of long term survival are often greater than 95%, or even 100% in some cases. However, if the cancer is detected late (Stage III or IV), the probability of long term survival declines to levels as low as 10%. Understandably, there has been tremendous interest from the scientific and investment community in the development of techniques for early cancer detection. ITUS, one of the few publicly traded companies operating in this arena, utilizes a proprietary technique to monitor changes in a patient's immune system driven by the presence of a tumor.

Studies over the past decade have demonstrated that there is a dynamic interaction between a patient's immune system and the existence of a tumor. This interaction results in subtle changes in the immune system that can be measured by monitoring and counting circulating white blood cells using a common laboratory technique known as flow cytometry. However, simply counting the specific cells is not sufficient to distinguish, with high accuracy, the difference between a tumor-bearing patient and a healthy individual. By implementing a NN to evaluate the subtle changes and patterns found within the immune system, we are able to achieve extremely high sensitivity and specificity, which are measures of accuracy of the test.

The results of this current study augment data from our first cohort, which was released in December of 2016. In the previous study, we reported sensitivity of 92% and specificity of 92%. In this study, we report a sensitivity of 89% and a specificity of 95%. This minor decrease in sensitivity in our current study was found to be within the margin of error and possibly reflects the inclusion of more early stage cancer patients. All cancer patients were biopsy-verified with all clinical stages (I - IV) included. The Area Under the Receiver Operating Characteristic Curve (AUROC), a measure of accuracy, was 0.97. AUROC values near 0.50 are poor, while a value greater than 0.90 is considered exceptional.

Additionally, one of the most beneficial attributes of artificial intelligence and neural networks is their ability to continuously learn and improve over time in answering the question asked of them. This means that as we add more data, we would expect to improve the performance even more.

The total number of patients in this study was 163, which included 81 cancer patients and 82 healthy donors. The patient blood samples were provided by our collaborators, including the MD Anderson Cancer Center at Cooper, The University of Pennsylvania-Abramson Cancer Center, Virtua Hospital Group, Delaware Valley Urology, and the Wistar Institute. The majority of patient samples collected for this study were from breast cancer and prostate cancer patients, but several other types were also included. Previously, we have reported that our technology has worked successfully with 15 different types of tumors. With the additional cancers included in this study, we have now demonstrated that our technology works with 20 types of cancer from solid tumors. The list of tumor types evaluated by our technology to date is as follows:

1. Breast
2. Prostate
3. Lung
4. Colon
5. Pancreatic
6. Melanoma
7. Ovarian
8. Liver
9. Bladder
10. Cervical
11. Endometrial/Uterine
12. Gastric
13. Head and neck

14. Testicular
15. Thyroid
16. Osteosarcoma (bone cancer)
17. Leiomyosarcoma (cancer of the soft tissue)
18. Liposarcoma (cancer of the connective tissue)
19. Vulvar
20. Appendiceal

Dr. Amit Kumar, ITUS Corporation's President and Chief Executive Officer, stated, "We are pleased to present the latest data from our studies. While these studies were done un-blinded, and more data needs to be obtained, we are extremely pleased with the performance. As a scientist, there are two conclusions that I can make. First, it is clearly the case that our proprietary artificial intelligence application is better at making the calls than the best and most experienced scientists or physicians. The ability of the NN to be trained and analyze the data is extraordinary. Second, because our technology monitors the response of the immune system to the existence of a tumor, we feel this technique will be able to identify any individual with cancer regardless of the tumor type. The immune system undergoes changes regardless of the location of the tumor, hence the patterns indicative of a tumor should exist regardless of the type. Such an assertion is supported by the fact that we have been able to identify the presence of cancer in patients with 20 different tumor types, although in some cases we only tested a small number of samples."

Dr. Kumar continued, "We are looking forward to publishing this data and also sharing data from other studies we are in the midst of completing. We are also pleased that our latest patent claims were recently allowed enabling us to properly protect our technology. To our knowledge, we are the only company that is developing a liquid biopsy diagnostic that incorporates flow cytometry data and artificial intelligence. While it is too early to establish an eventual price for our test, we feel confident that we will be able to provide a price of less than $200 dollars."

To receive a copy of the poster presentation, please send your request to ASCO-SITC-2018@ITUScorp.com and include your name, title, and contact information.

ASCO-SITC
The ASCO-SITC Clinical Immuno-Oncology Symposium (https://immunosym.org) is a three-day meeting focused on clinical and translational research in immuno-oncology and the implications for clinical care.

ASCO (www.asco.org) was founded in 1964 and is the world's leading professional organization for physicians and oncology professionals caring for people with cancer.

SITC (www.sitcancer.org) was found in 1984 and is the world's leading member-driven organization specifically dedicated to improving cancer patient outcomes by advancing the science and application of cancer immunotherapy.

ITUS Corporation
ITUS, a cancer-focused biotechnology company, is harnessing the body's immune system in the fight against cancer. Its wholly owned subsidiary, Anixa Diagnostics Corporation, is developing the Cchek^{TM} platform, a series of non-invasive blood tests for the early

detection of solid tumor based cancers, which is based on the body's immunological response to the presence of a malignancy. Its majority owned subsidiary, Certainty Therapeutics, Inc., is developing CAR-T based immuno-therapy drugs which genetically engineer a patient's own immune cells to fight cancer. ITUS also continually examines emerging technologies in complementary or related fields for further development and commercialization. Additional information is available at www.ITUScorp.com.

Forward-Looking Statements: Statements that are not historical fact may be considered forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are not statements of historical facts, but rather reflect ITUS Corporation's current expectations concerning future events and results. We generally use the words "believes," "expects," "intends," "plans," "anticipates," "likely," "will" and similar expressions to identify forward-looking statements. Such forward-looking statements, including those concerning our expectations, involve risks, uncertainties and other factors, some of which are beyond our control, which may cause our actual results, performance or achievements, or industry results, to be materially different from any future results, performance, or achievements expressed or implied by such forward-looking statements. These risks, uncertainties and factors include, but are not limited to, those factors set forth in "Item 1A - Risk Factors" and other sections of our most recent Annual Report on Form 10-K as well as in our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. You are cautioned not to unduly rely on such forward-looking statements when evaluating the information presented in this press release.

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