Arbor Vita Presents New Data on Cancer Diagnostic at EUrogin – International Conference on Cervical Cancer Prevention –

NICE, FRANCE, – **November 14 , 2008** – Arbor Vita Corporation (AVC), a privately held biopharmaceutical company, presented new data today on its rapid, point-of-care prototype HPV test with a high positive predictive value for cervical cancer and pre-cancer. Targeted for use throughout the developing world, this diagnostic test is being developed in partnership with PATH. The presentation, "Development of a Rapid Diagnostic Test for Cervical Pre-Cancer and Cancer," was given during the "Molecular Markers" session at Eurogin 2008, an international conference providing a comprehensive overview of current scientific advances in the field of cervical cancer control, including early detection.

AVC Vice President of Cervical Cancer Programs Johannes Schweizer, Ph.D., presented results of a prototype rapid cervical cancer diagnostic test that was designed using AVC's PDZ discovery platform. This E6 strip test, now in development, detects the E6 oncoprotein produced by the human papillomavirus (HPV), the principal cause of cervical cancer. E6 is a diagnostic marker of high positive predictive value for cervical cancer because of its clinically relevant activity. The test is engineered to specifically detect E6 oncoprotein of high-risk HPV which, in concert with E7, is necessary for oncogenic transformation of cervical epithelial cells.

Previously, AVC has demonstrated E6 specificity for detecting the HPV16 strain, which is responsible for approximately 50% of all cervical cancers. The new data expands this research to detect three different strains, HPV16, HPV18 and HPV45, which together account for 80% of cervical cancers. The ultimate goal of the project is to develop a multiplex test that detects the seven most prevalent HPV types which are known to progress to cervical cancer. The simple, easy-to-use test is designed to be used as a cancer-screening tool in low resource settings such as in developing countries, where appropriate methods for screening for cervical pre-cancer and cancer are still insufficient.

Dr. Schweizer commented, "Early detection of *cancer-causing* HPV infection is critical for the potential prevention and/or treatment of cervical cancer. Although only a very small number of HPV infections progress to cervical cancer, monitoring the E6 protein level – because of its cancer-causing activity – may prove to be a simple and cost-efficient test to identify women at risk for cervical cancer."

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The E6 Strip Test

The E6 strip test is based on the finding that the E6 protein of all high-risk HPV but none of the lowrisk HPV bind to cellular PDZ domains. PDZ domains are conserved throughout numerous cellular proteins, mediating protein-protein interaction of crucial importance for various cellular functions. Accumulating evidence suggests that the oncogenic potency of E6 depends on its binding to cellular PDZ domains. For the E6 strip test, a genetically engineered PDZ-containing protein is used for capture of all high-risk HPV-E6, detection of captured E6 oncoprotein occurs via anti-E6 monoclonal antibodies. The format of the E6 strip test allows for a robust and cost effective assay, and the use of an oncoprotein as a diagnostic tool may enable the test to achieve a high positive predictive value for those at risk of progressing to cervical cancer.

About Cervical Cancer

Cervical cancer is predominantly caused by infection with the human papillomavirus (HPV), one of the most common sexually transmitted diseases with an estimated 5.5 million new infections per year in the U.S. alone. According to the American Cancer Society, oncogenic HPV infections will result in 11,070 new cases of invasive cervical cancer and 3,870 deaths this year in the U.S.

The "Pap smear" is the predominant screening method for cervical cancer and pre-cancerous lesions, despite its substantial false negative and false positive rates. Recently introduced HPV DNA-based tests detect infection rather than progression of the virus toward cervical cancer; since most HPV infections resolve without treatment, DNA tests may have limited value. Because AVC's test detects the viral protein that leads to cervical cancer, it may provide a potential life-saving tool for women with HPV infection at risk of progressing to cervical cancer.

About Arbor Vita Corporation

Arbor Vita (<u>www.arborvita.com</u>) is a biopharmaceutical company pioneering the discovery, development and commercialization of novel drugs and diagnostics through a new family of targets – PDZ proteins. PDZ proteins are key cellular organizers in human signaling pathways. Recruited by viral pathogens, PDZ proteins are highly conserved and provide an ideal platform for identification of diagnostic markers for cancers, infectious diseases and other complex diseases. The company capitalizes on its unique mix of expertise, intellectual property, and novel PDZ drug discovery platform to accelerate discovery and development programs for both therapeutics and diagnostics. Arbor Vita's current programs address major health areas including complex diseases such as cervical cancer and stroke, as well as infectious diseases such as influenza.

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