PRESS RELEASE: ADVANCED LABORATORY SERVICES INC. ANNOUNCES NEW *BORRELIA* TEST PANELS

Advanced Laboratory Services, Inc. announces additions and refinements to their revolutionary *Borrelia* blood culture test, to be available by August 1, 2012. In addition to confirming cultures by using polyclonal immunostaining, they will now offer two additional options: confirmation by monoclonal immunostaining, and confirmation by nucleic acid testing, using a combination of DNA PCR plus DNA sequencing. Below is the currently available test menu plus an explanation with examples of what these tests offer:

BASIC BORRELIA CULTURE:

Blood samples are placed into a short-term culture upon receipt, and are assessed after approximately one week. If no *Borrelia* are observed, or if the results at this point are inconclusive, the sample is then transferred into a long-term culture, and read at eight weeks. All positive cultures are confirmed by growth characteristics, dark-field examination, and by *Borrelia*-specific polyclonal immunostaining. In some cases, the ordering practitioner may prefer to specify that immunostaining be performed using a monoclonal antibody-based immunostain. The explanation and application of these two complementary types of immunostains are outlined below.

COMPREHENSIVE BORRELIA CULTURE:

Newly available, the comprehensive culture includes all the steps of the basic culture, but in addition to immunostaining, it adds nucleic acid-based confirmatory tests: DNA PCR combined with DNA sequencing. See below for details.

TEST DESCRIPTION AND APPLICATIONS:

Polyclonal Immunostaining: This more general staining method will detect the presence of *Borrelia burgdorferi sensu lato* (which includes *Borrelia burgdorferi sensu stricto*, *Borrelia afzelii* and *Borrelia garinii*), and it has been demonstrated to identify *Borrelia hermsii* as well. However, it will not pick up treponemes.

Monoclonal Immunostaining: This method will identify only *Borrelia burgdorferi sensu stricto*, meaning it will not pick up infections with *Borrelia afzelii* or *Borrelia garinii*, the relapsing fever spirochete *Borrelia hermsii,* or treponemes. If the patient is thought to have *Borrelia burgdorferi sensu stricto* or if one is not interested in looking for *Borrelia hermsii*, then the monoclonal method can be chosen. Note: in addition to the polyclonal immunostain performed on the short term culture, this monoclonal method will be performed only on the long-term eight week cultures, thus the additional time for this result is required. Please contact the lab if you would like more information.

PCR with DNA sequencing: This option, which can be added to either of the two basic cultures, can confirm the immunostain results and possibly add specificity.

> ***Example:*** If one suspects *Borrelia burgdorferi sensu lato* but wants to have a more specific result, then select the polyclonal immunostain with the added PCR and sequence testing. By doing so, there is a broader chance of picking up a range of pathogenic *Borrelia*, while still obtaining a precise indication of species.

In addition, when nucleic acid testing is applied to indeterminate short-term cultures, an infection may be confirmed at that point, providing information earlier than would have been the case if the nucleic acid testing were not done and the culture had to be held to the full 8 week endpoint.

> ***Example:*** After short-term culture, if results are indeterminate but the PCR/sequencing shows that the culture is positive, a preliminary report of these findings will be generated immediately. The specimen will nevertheless be placed into long-term culture, and a final report will be provided at the end of the eight weeks.

501 Elmwood Avenue, Sharon Hill, PA 19079
Phone: (855) 238-4949 · Fax: (855) 238-4946
Email: info@advanced-lab.com · www.advanced-lab.com