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Requisition #: 901000 Physician Name:

Patient Name: Date of Collection: 12/11/2014

Patient Age: 26 Time of Collection: 08:00 AM

Sex: F Print Date: 12/29/2014

Phospholipase A2 Units Per Creatinine Patient Value Phospholipase A2 1.500 Mean .5 Normal Elevated 1.500

Secreted Phospholipase A2 (sPLA2) has been implicated in many diseases because of its role in inflammation and host defense. sPLA2 is found in many mammalian tissues as well as insect and snake venom (Nicolas et al, 1997). sPLA2 catalyses the release of arachidonic acid and is involved in the production of prostaglandins for inflammation (Sawada et al, 1999). sPLA2 is present in connection with multiple diseases including rheumatoid arthritis, sepsis, psoriasis, pancreatitis, cancer, Crohn's disease, and multiple sclerosis (Funakoshi et al, 1993; Green et al,1991; Lilja et al, 1995; Mounier et al, 2008; Pinto et al, 2003; Pruzanski et al, 1985).

There has been a great deal of research done by both academia and pharmaceutical companies to find chemical inhibitors to sPLA2. However, there has also been research on more natural methods for inhibiting sPLA2. Analysis has shown that treatment with supplements of Cytidine 5'-Diphosphocholine (CDP-choline) can limit the ability of sPLA2 to promote inflammation. Studies of CDP-choline of over 11,000 volunteers and patients have shown beneficial effects for many different conditions including cerebral ischemia, traumatic brain injury, hypoxia, Alzheimer's, Parkinson's memory disorders, and glaucoma (Adibhatla and Hatcher, 2005). CDP-choline is composed of cytidine and choline linked by a diphosphate bridge. CDP-choline is an essential intermediate of the major brain phospholipid, phosphatidylcholine. Increasing amounts of CDP-choline results in the decreased activation of sPLA2, which then results in the decreased production of arachidonic acid and inflammation (Adibhatla and Hatcher, 2005).

CDP-choline can be found at New Beginnings Nutritionals, www.NBNUS.com, or call 877-575-2467.

Testing performed by The Great Plains Laboratory, Inc., Lenexa, Kansas. The Great Plains Laboratory has developed and determined the performance characteristics of this test. This test has not been evaluated by the U.S. Food and Drug Administration.