

Product News

MemreePlus™ Phosphatidylserine and Phosphatidic Acid Studies Provide Evidence of Benefit to Memory, Mood and Cognitive Function in Elderly

Basel, Switzerland, 1 December 2014 – Lonza today announces the publication of the results of two early pilot studies performed using soy lecithin-derived phosphatidylserine (PS) and phosphatidic acid (PA), which appeared in the November issue of *Advances in Therapy*. The results of both studies provide evidence suggesting a combination of PS and PA – as in Lonza's proprietary MemreePlus™ ingredient – can support memory and cognitive function, which is especially apparent in those who have developed cognition deficiencies. The publication of the results can be found here:

(<http://link.springer.com/article/10.1007%2Fs12325-014-0165-1>)

Since 2011 Lonza and PS supplier Lipogen LTD have worked together under an exclusive distribution agreement to offer Lipogen's PS products as Lonza MemreePS™ ingredient. The two previously unpublished, early pilot studies funded by Lipogen used a combination of 100 mg PS and 80 mg PA three times per day.

The first study, a three-month, double-blind, placebo-controlled study with PS and PA in 72 functioning, non-depressive elderly with memory problems, demonstrated a statistically significant positive influence of PS and PA on memory, mood and cognition in pre-post comparison.

The second study, a two-month, randomized, double-blind, placebo-controlled study with PS and PA in 96 patients with Alzheimer's disease, demonstrated a significant stabilizing effect of PS and PA on daily functioning, when comparing both groups. There also were some improvements in emotional state and self-reported general condition in the PS + PA group; no negative side effects were observed.

At the conclusion of the studies, the combination of PS and PA demonstrated a positive influence on memory, mood and cognition among elderly test subjects with memory problems. Therefore, the data encourage long-term studies with PS and PA in Alzheimer's patients and other elderly with memory or cognition problems.

Additionally, the studies show PS is efficiently absorbed after oral consumption. Specifically, the studies showed serum PS peaked 90 minutes after ingestion, returning to baseline after 180 minutes.

"The sum of these studies validates MemreePlus™ ingredient, Lonza's proprietary blend of soy-based PS and PA, for formulation into nutritional supplements as a memory and cognitive support ingredient," said Matthias Ruesing, PhD, Global Product Manager for the Memree™ product line at Lonza. "We will continue to further investigate the benefits of MemreePS™ and MemreePlus™ PS+PA, alongside our continued research being conducted with our entire nutrition ingredients portfolio."

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Earlier this year another published study confirmed that supplementation with MemreePlus™ ingredient can support a normal stress response in chronically stressed male adults. Those findings were published in *Lipids in Health and Disease* and can be found here: <http://www.lipidworld.com/content/13/1/121/abstract>.

About Lonza

Lonza is one of the world's leading and most-trusted suppliers to the pharmaceutical, biotech and specialty ingredients markets. We harness science and technology to create products that support safer and healthier living and that enhance the overall quality of life.

Not only are we a custom manufacturer and developer, Lonza also offers services and products ranging from active pharmaceutical ingredients and stem-cell therapies to drinking water sanitizers, from the vitamin B compounds and organic personal care ingredients to agricultural products, and from industrial preservatives to microbial control solutions that combat dangerous viruses, bacteria and other pathogens.

Founded in 1897 in the Swiss Alps, Lonza today is a well-respected global company with more than 40 major manufacturing and R&D facilities and approximately 10,000 employees worldwide. The company generated sales of about CHF 3.6 billion in 2013 and is organized into two market-focused segments: Pharma&Biotech and Specialty Ingredients. Further information can be found at www.lonza.com.

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