

## **PRESS RELEASE**

11 July 2016

# Milestone Study on Pomegranate Anti-Aging Mechanism Reported by Amazentis SA and EPFL Researchers

Breakthrough findings on urolithin A, a pomegranate metabolite, on muscle aging, published in Nature Medicine; Amazentis announces first human clinical trial

Lausanne, Switzerland, 11 July, 2016 – Amazentis SA, an innovative life sciences company applying scientific breakthroughs in nutrition to manage health conditions linked to aging, announced today a collaborative publication in *Nature Medicine* with the École Polytechnique Fédérale de Lausanne (EPFL), demonstrating that the Company's lead product candidate, urolithin A, improves mitochondrial and muscle function, resulting in enhanced muscle strength and endurance during aging. Amazentis is presently evaluating urolithin A in a first human clinical trial with results expected in 2017.

Urolithin A is generated by gut microflora as a natural metabolite of ellagitannins, a class of compounds found in the pomegranate and other fruits and nuts. "We are excited to publish the first data that demonstrate the effects of this gut metabolite on mitochondrial and muscle function," commented Johan Auwerx, Professor at the École Polytechnique Fédérale de Lausanne (EPFL), Switzerland, and lead author. "We believe this research is a milestone in current anti-aging efforts, which have previously focused on traditional pharmaceutical modalities, and illustrates the opportunity of rigorously tested nutritional bioactive agents that we consider to have outstanding potential for human health."

### Urolithin A: a potent gut metabolite to rejuvenate mitochondria and reverse muscle aging

Oral administration of urolithin A leads to an improved mitochondrial function by stimulating mitophagy, a process by which damaged mitochondria are recycled to permit a renewal with healthy mitochondria.

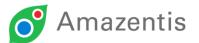
"Mitophagy declines in cells as we age, and the reduction in mitochondrial function in the muscles of the elderly is thought to be one of the main causes of age-related muscle impairment. We believe our research, uncovering the health benefits of urolithin A, holds promise in reversing muscle aging," stated Patrick Aebischer, co-author on the article, EPFL President and Chairman and co-founder of Amazentis.

The results are being reported in the current issue of *Nature Medicine* in an article titled, "Urolithin A induces mitophagy and prolongs lifespan in *C. elegans* and increases muscle function in rodents". (doi:10.1038/nm.4132). http://www.nature.com/nm/journal/vaop/ncurrent/full/nm.4132.html

## Age-related muscle decline: a compelling market opportunity for urolithin A

Declining skeletal muscle mass and the resulting loss of strength are hallmarks of aging. These changes can become debilitating and lead to a condition termed sarcopenia, which is thought to affect 30% of those over 60 years old and greater than 50% of individuals over 80 years. Current estimates in the United States project there will be greater than 75 million adults over 60 years by the year 2020.

The resulting reductions in quality of life and independence as a result of muscle decline constitute a growing healthcare issue in the aging population. There are currently no pharmaceutical therapies to treat age-related decline in muscle function and sarcopenia. Nutritional strategies have had limited impact to date, and new scientifically validated solutions are urgently needed.



Upon consumption of pomegranate juice, compounds known as ellagitannins are broken down in the stomach and then transformed by intestinal bacteria into urolithin A. This biotransformation has been shown to vary widely across individuals, with some showing high or low conversion rates, while others have different compositions of microflora and are unable to perform the conversion. Consequently, supplementing individuals with products designed to deliver carefully calibrated doses of urolithin A can overcome this natural diversity in gut microflora found in the general population.

Amazentis has established a technology portfolio and proprietary knowhow around urolithin A, enabling the manufacture and development of advanced nutrition products for oral delivery.

Chris Rinsch, Ph.D., a co-author and CEO and co-founder of Amazentis, commented: "Based on the rigorous science being published in *Nature Medicine*, we have advanced our lead product delivering urolithin A into clinical trials. We believe that this discovery will open the door to a new approach for managing muscle decline by rejuvenating mitochondria. Our vision is to translate breakthrough scientific discoveries in nutrition into clinically validated consumer health products that address today's unmet needs in an aging population."

#### **About Amazentis**

Amazentis SA is an innovative Swiss-based life science company that employs today's leading research and clinical science to develop the next generation of bioactive ingredients derived from nature for advanced therapeutic nutrition products. Amazentis collaborates with world-class scientists, and its board features leading members of the life sciences and pharmaceutical industry. The Company's lead product candidate, urolithin A, is currently being evaluated in clinical trials.

For more information, please visit www.amazentis.com.

To access the EPFL press release, please see: <a href="http://actu.epfl.ch/news/pomegranate-finally-reveals-its-powerful-antiagin/">http://actu.epfl.ch/news/pomegranate-finally-reveals-its-powerful-antiagin/</a>

#### **Contacts**

Chris Rinsch, Ph.D.
CEO & Co-Founder, Amazentis SA
contact@amazentis.com

For European Media:
Nick Miles
Cabinet Privé de Conseils, Geneva, Switzerland
T +41 (0) 22 321 45 40
M +41 (0) 79 678 76 26
miles@cpc-pr.com

For U.S. Media: Justin Jackson Burns McClellan 212-213-0006, ext. 327 jjackson@burnsmc.com