



BioAge Announces First Cohort Dosed in Phase 1b Clinical Trial of the Apelin Receptor Agonist BGE-105, Under Development for Muscle Aging Indications

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Trial will collect muscle biomarker data to inform Phase 2 trial design and future development for muscle atrophy in hospitalized patients

RICHMOND, Calif.--([BUSINESS WIRE](#))--BioAge Labs, Inc., a biotechnology company developing therapeutics that target the molecular causes of aging to extend healthy human lifespan, today announced that the first cohort has been dosed in a Phase 1b trial of BGE-105, a highly selective and potent small-molecule agonist of the apelin receptor APJ.

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Apelin, the natural ligand of the APJ receptor, regulates multiple aspects of muscle metabolism, growth, and repair. BioAge's AI-driven discovery platform, based on analysis of proprietary human aging cohort data, revealed that apelin protein levels decline with age and are strongly associated with longevity and preservation of muscle strength, identifying APJ as an attractive target for treating clinical indications related to muscle aging. BGE-105 binds APJ and mimics the activity of apelin.

"In aged mouse models, BGE-105 substantially rescued muscle atrophy due to limb immobilization, prevented loss of muscle function with age, and induced biomarkers of muscle regeneration," said BioAge advisor William Evans, PhD, Adjunct Professor at UC Berkeley and Duke. "We believe that BGE-105 has the potential to prevent muscle atrophy and improve muscle function in older adults."

The primary objective of BioAge's randomized, placebo-controlled study is to evaluate the safety and tolerability of BGE-105 in healthy adults. Up to 72 healthy adult volunteers, at least half over the age of 50, will be enrolled. Multiple previous Phase 1 trials conducted by Amgen showed that oral or intravenous BGE-105 was safe and well-tolerated in 190 subjects, with no related serious adverse events reported.

In addition, the trial will characterize the pharmacokinetic (PK) and pharmacodynamic (PD) effects of BGE-105 and assess muscle parameters and relevant biomarkers as secondary endpoints.

"BGE-105 is a promising compound with the potential to address multiple severe indications driven by muscle aging, from acute hospital indications to chronic diseases," said Kristen Fortney, PhD, CEO of BioAge. "Following completion of the Phase 1b trial, BioAge will proceed with a Phase 2 proof-of-concept trial of BGE-105 to improve recovery in patients with hospitalization-related muscle atrophy, an acute indication with high unmet medical need."

In April 2021, BioAge entered into an exclusive worldwide license agreement with Amgen, Inc. to develop and commercialize BGE-105 to ameliorate muscle aging ([link](#)). The license covers all indications. BioAge is responsible for development, manufacturing, and commercialization of BGE-105 worldwide.

About BioAge

BioAge is a clinical-stage biotechnology company developing a pipeline of treatments to extend healthy lifespan by targeting the molecular causes of aging. The company uses its discovery platform, which combines quantitative analysis of proprietary longitudinal human samples with detailed health records tracking individuals over the lifespan, to map out the key molecular pathways that impact healthy human aging, thus revealing the causes of age-related disease. By targeting the mechanisms of aging with a large and mechanistically diverse portfolio of drugs, BioAge will unlock opportunities to treat or even prevent these diseases in entirely new ways. To date, BioAge has raised \$127M from Andreessen Horowitz, Kaiser Foundation Hospitals, and others. BioAge currently has three clinical-stage programs in their growing portfolio. For additional information about BioAge, visit the company's website at <https://www.bioagelabs.com>.

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