



Jaguar Health and Filament Health, with Funding from One Small Planet, Form Joint Venture Magdalena Biosciences to Develop Botanical Pharmaceutical Drug Candidates for Mental Health Illnesses

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New venture aligns with Jaguar's mental health Entheogen Therapeutics Initiative (ETI) and Filament's corporate mission to develop novel, natural prescription medicines from plants

Magdalena Biosciences will leverage Jaguar's proprietary medicinal plant library and Filament's proprietary drug development technology

Magdalena Biosciences is currently valued at US\$5.0 million based on initial and tranching of US\$1.0 million from One Small Planet

SAN FRANCISCO, Jan. 10, 2023 /CNW/ - [Jaguar Health, Inc.](#) (NASDAQ: JAGX), [Filament Health Corp.](#) (NEO: FH) (OTCQB: FLHLF) and [One Small Planet, LLC](#) today announced the formation of a U.S.-based joint venture named Magdalena Biosciences, Inc. to develop novel, natural prescription medicines derived from plants for mental health indications including attention-deficit/hyperactivity disorder (ADHD) in adults. Initial funding of US\$1,000,000 will be invested by Boulder, Colorado-based One Small Planet, founded by Will Peterffy. This funding will be payable in quarterly installments in 2023 based on the achievement of defined milestones by Magdalena Biosciences. The goal of the collaboration is to extend the botanical drug development capabilities of Jaguar and Filament in order to develop pharmaceutical-grade, standardized drug candidates for mental health disorders, and to partner with a potential future licensee to develop and commercialize these novel plant-based drugs.



Filament Health

"We are thrilled about the formation of Magdalena Biosciences and look forward to working with Filament and One Small Planet on this exciting initiative," said Lisa Conte, Jaguar's president and CEO. "The formation of Magdalena Biosciences allows for the mobilization of a key asset we have generated over 30 years – a library of 2,300 highly characterized medicinal plants and 3,500 plant extracts, all from firsthand ethnobotanical investigation by Jaguar and members of the Scientific Strategy Team for Jaguar's mental health Entheogen Therapeutics Initiative (ETI), bridging the knowledge of traditional healers and Western medicine. Magdalena Biosciences holds an exclusive license to plants and plant extracts in Jaguar's library, not including any sources of crofelemer or NP-300, for specific indications and is in the process of identifying plant candidates in the library that may prove beneficial for addressing indications such as ADHD."

"Filament is a leader in the discovery, development and standardization of botanical medicines, and we are dedicated to supporting the treatment of mental health conditions through our expertise, technologies and licensed facility," said Benjamin Lightburn, Chief Executive Officer of Filament Health. "Filament has developed novel manufacturing and standardization techniques which we have applied to botanical medicines for the possible treatment of indications such as depression and post-traumatic stress disorder (PTSD). We are pleased to have partnered with Jaguar to form Magdalena Biosciences and look forward to working with their team to identify and standardize new botanical drugs for indications such as ADHD."

Once considered a childhood disorder, ADHD is now acknowledged to persist into adulthood in approximately 50–65% of individuals,^{1, 2, 3} and impacts an estimated 5.2% of U.S. adults aged 18–44.¹ Treatment of ADHD remains challenging, as an estimated 20-50% of adult patients either are non-responders to stimulants or cannot tolerate the adverse effects of current therapeutics.⁴ New therapeutics in development for the global ADHD market, a market projected to reach a value of US\$18.69 billion by 2030 according to a [report](#) by Grand View Research, show promise but continue to have significant side effects.

"We look forward to developing a potential plant-based alternative drug for adult ADHD that is both safe and efficacious, especially with respect to executive function, the cognitive skill deficit found in almost all pediatric and adult ADHD patients," remarked Dr. Karen Brunke, Jaguar's EVP of Corporate and Business Development and Acting CEO of Magdalena Biosciences.

As with Napo Pharmaceuticals, Jaguar's wholly owned subsidiary, this new company is named after a river that has great cultural significance to

Indigenous peoples. The Magdalena is the great arterial river of Colombia, flowing northward from its headwaters in the south of Colombia more than 900 miles to the Caribbean Sea.

About Filament Health

Filament Health (OTCQB:FLHLF) (NEO:FH) (FSE:7QS) is a clinical-stage natural psychedelic drug development company. Filament believes that safe, standardized, naturally-derived botanical medicines can improve the lives of many, with a mission to see them in the hands of everyone who needs them as soon as possible. Filament's platform of proprietary intellectual property enables the discovery, development, and delivery of natural medicines, including psychedelic medicines, for clinical development. Filament is paving the way with the first-ever natural psychedelic drug candidates.

Learn more at www.filament.health and on [Twitter](#), [Instagram](#) and [LinkedIn](#).

About One Small Planet

One Small Planet is a vital capital group. We are on a mission to harmonize the wealth of people and planet by working with the intelligence of the natural world to evolve our economic systems. Our founder, Will Peterffy, has spent his life building bridges between the natural and financial worlds. Witnessing how economic wealth was not incentivizing ecological wealth, he started One Small Planet to participate in the creation of new global systems informed by the natural world. We work with capital to contribute to new systems focusing on regenerative technologies that support human systems operating in harmony with nature. To learn more visit onesmallplanet.org.

About Jaguar Health, Jaguar Animal Health, Napo Pharmaceuticals, & Napo Therapeutics

Jaguar Health, Inc. is a commercial stage pharmaceuticals company focused on developing novel, plant-based, non-opioid, and sustainably derived prescription medicines for people and animals with GI distress, including chronic, debilitating diarrhea. Jaguar Animal Health is a tradename of Jaguar Health. Jaguar Health's wholly owned subsidiary, Napo Pharmaceuticals, Inc., focuses on developing and commercializing proprietary plant-based human pharmaceuticals from plants harvested responsibly from rainforest areas. Our crofelemer drug product candidate is the subject of the [OnTarget](#) study, an ongoing pivotal Phase 3 clinical trial for prophylaxis of diarrhea in adult cancer patients receiving targeted therapy. Jaguar Health is the majority shareholder of Napo Therapeutics S.p.A. (f/k/a Napo EU S.p.A.), an Italian corporation established by Jaguar Health in Milan, Italy in 2021 that focuses on expanding crofelemer access in Europe.

For more information about Jaguar Health, please visit <https://jaguar.health>. For more information about Napo Pharmaceuticals, visit www.napopharma.com. For more information about Napo Therapeutics, visit napotherapeutics.com.

FORWARD LOOKING INFORMATION

Certain statements and information contained herein may constitute "forward-looking statements" and "forward-looking information," respectively, under Canadian securities legislation. Generally, forward-looking information can be identified by the use of forward-looking terminology such as, "expect", "anticipate", "continue", "estimate", "may", "will", "should", "believe", "intends", "forecast", "plans", "guidance" and similar expressions are intended to identify forward-looking statements or information. Forward-looking statements herein include, but are not limited to, statements regarding the resignation of Greg Mills from the board of directors and the composition of the audit committee. The forward-looking statements are not historical facts, but reflect the current expectations of management of Filament regarding future results or events and are based on information currently available to them. Certain material factors and assumptions were applied in providing these forward-looking statements. Forward-looking statements regarding the Company are based on the Company's estimates and are subject to known and unknown risks, uncertainties and other factors that may cause the actual results, levels of activity, performance or achievements of Filament to be materially different from those expressed or implied by such forward-looking statements or forward-looking information. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements and forward-looking information. Filament will not update any forward-looking statements or forward-looking information that are incorporated by reference herein, except as required by applicable securities laws.

¹ Figure developed using data from Fayyad J, Sampson NA, Hwang I, et al. The descriptive epidemiology of DSM-IV Adult ADHD in the World Health Organization World Mental Health Surveys. *Atten Defic Hyperact Disord* 2017; 9: 47-65.

² Faraone SV, Biederman J, Mick E. The age-dependent decline of attention deficit hyperactivity disorder: a meta-analysis of follow-up studies. *Psychol Med* 2006; 36: 159-165.

³ Ebejer JL, Medland SE, van der Werf J, et al. Attention deficit hyperactivity disorder in Australian adults: prevalence, persistence, conduct problems and disadvantage. *PLoS One* 2012; 7: e47404.

⁴ Wender PH. 1998. Pharmacotherapy of attention-deficit/hyperactivity disorder in adults. *J Clin Psychiatry*, 59:76-9; Wilens TE, Biederman J, Spencer TJ. 2002. Attention deficit/hyperactivity disorder across the lifespan. *Annu Rev Med*, 53:113-31; Wilens TE, Spencer TJ, Biederman J. 2002. A review of the pharmacotherapy of adults with attention-deficit/hyperactivity disorder. *J Atten Disord*, 5:189-202.





SOURCE Filament Health Corp.