

From: John Redaelli (California Resident)

To: Lana Moralez - lmoralez@cirm.ca.gov

RE: "Public Comment" - August 25 Task Force on Neuroscience and Medicine Meeting

Date: Tuesday, August 22, 2023 @ 2:25pm

Hello, Lana...

I hope you are well...Thank You, for this opportunity to present my "Public Comment" to you re the [August 25 Task Force on Neuroscience and Medicine Meeting](#)

My name is John Redaelli, I live in Huntington Beach, CA...I'm a shareholder in Athersys (Stock Symbol: ATHX)...I've been following, researching, and investing in the Cell Therapy / Regenerative Medicine sector for over (10) years now...First with, Advanced Cell Technology (ACTC), which became Ocata Therapeutics (OCAT), and later bought out by Astellas...And, now with Athersys...

I'm writing to you in support of consideration by CIRM for help in funding of Athersys' "MASTERS-2", pivotal phase 3 clinical trial for Acute Ischemic Stroke patients...

FYI: MASTERS-2 clinical trial is a randomized, double-blind, placebo-controlled clinical trial designed to enroll 300 patients in the United States (Including, Palo Alto and Sacramento, CA), and certain other international locations. The study is evaluating efficacy and safety of [MultiStem allogeneic cell therapy via IV infusion](#) in patients who have suffered moderate to moderate-severe ischemic stroke.

The MASTERS-2 study has received several regulatory designations and regulatory agreements including **Special Protocol Assessment agreement, or SPA, Fast Track designation, Regenerative Medicine Advanced Therapy, or RMAT**, designation and initial pediatric study plan, or iPSP agreement, from the U.S. Food and Drug Administration, or FDA, as well as a Final Scientific Advice positive opinion, Advanced Therapy Medicinal Product, or ATMP, quality certification and pediatric investigation plan, or PIP, agreement from the European Medicines Agency, or EMA.

Did you know?...[\(LINK at Athersys - Ischemic Stroke](#) - for more info/data/results)

17 million people suffer a stroke every year, and it is the leading cause of long-term disability in the world. While there are some available treatments available for treating an ischemic stroke, patients must receive these treatments within only a few hours of having a stroke. Unfortunately, only a modest percentage of stroke patients arrive to the hospital in time to receive these treatments.

Athersys is developing MultiStem cell therapy for the treatment of ischemic stroke, which may be delivered to a patient up to 36 hours after the stroke. This dramatically opens up the time window for treatment, allowing up to 90-95% of the stroke patients to be eligible to receive the therapy.

From, **Robert Mays, PhD**, (Executive Vice President, Head of Regenerative Medicine & Neuroscience Programs at Athersys), during [Athersys Business Update Conference Call, 2.14.23](#): **Meaningful long-term improvements in patients' recovery are the cornerstone of our [hypothesis about how MultiStem cells may provide benefit](#).** It is what we have observed in multiple preclinical animal models of neurological injury. And it is why we built day 365 endpoints into the original MASTERS-1 trial design. **We have confidence in the ability of MultiStem cells to provide continual recovery benefit in stroke patients and eventually other injuries as well.**

However, when limited to a 90-day evaluation window, the full potential of the MultiStem cell treatment is likely not fully realized. Earlier this year, [a paper in Nature Reviews neurology authored by Dr. Sean Savitz and Dr. Chuck Cox](#) of the UT Houston Health System synthesized results for more than 20 years of animal studies and provided an updated hypothesis regarding how cellular therapies may work to offer a therapeutic benefit in a number of neurologic injury models. This review highlights several MultiStem or MAPC ([Multipotent Adult Progenitor Cells](#)) related publications and is consistent with our understanding of MultiStem and why we have an 18- to 36-hour administration window available in our stroke trial.

This review also supports the rationale for why we have seen continued benefit of MultiStem treated patients over longer periods of time across our 2-stroke measures when compared to placebo treatment. In light of this information, along with changes to the standard of care for treatment of ischemic stroke that have evolved since the initiation of the MASTERS-2 trial, we decided to engage the FDA regarding potential modifications to the MASTERS-2 protocol. (End)

Latest MASTERS-2 Update (8/8/2023) 8-K: Athersys, Inc., a Delaware corporation (the "Company"), continues to enroll patients in its MASTERS-2 trial, the Company's pivotal Phase 3 trial evaluating MultiStem for the treatment of adults who have suffered an acute ischemic stroke. As of August 7, 2023, **the Company has surpassed 2/3 patient enrollment in this 300-patient trial.** (Special Note: Athersys expects to complete MASTERS-2 enrollment in Q2 of 2024, with the prospect of 365 day topline data results in 2025).

As previously announced in March 2023, the Company held a Type B Meeting with the U.S. Food & Drug Administration (the "FDA") and received approval on recommended protocol changes to the trial, **including changing the Primary Endpoint to mRS Shift Analysis at Day 365 and adding an unblinded interim analysis for the purpose of study size adjustment.** More than 60% of active clinical sites have implemented the FDA approved trial modifications and the Company expects the remaining clinical sites

to be complete by the end of August 2023. **In addition, the Company plans to conduct the unblinded interim analysis in the next few weeks and anticipates the results will be available to share in early October 2023. In addition to approving the request for an interim analysis, the FDA is allowing the Company the opportunity to perform a subset analysis.** (End)

And, finally, [hear these remarks by Dr. David Chiu](#) (MD, FAHA, Professor and Elizabeth Blanton Wareing Chair in the Eddy Scurlock Stroke Center, Houston Methodist Hospital, Weill Cornell Medical College), Jun 14, 2022 as part of [five key opinion leaders \(KOLs\) in the field of stroke and a statistician](#) that share their perspectives on the topline data from the TREASURE study conducted by the Athersys' partner HEALIOS K.K. (Healios). The TREASURE study is a randomized, double-blind placebo-controlled study evaluating MultiStem (invimestrocel) administration, developed by Athersys, for the treatment of ischemic stroke. The trial enrolled 206 patients and was conducted at 48 sites in Japan. (The latest 3/20/2023 [TREASURE Study subgroup analysis results - Three observations and future areas of consideration for HLCM051/MultiStem](#))

Dr. David Chiu: ...And these two trials, the NINDS trial, the ECASS-3 study, are basically the two major tPA trials in the field of stroke that effectively are the two pillars in our evidence space that really has led to tPA being recommended in our current stroke treatment guidelines.

And if you kind of look at this comparison further, obviously, tPA was the first proven effective treatment for acute ischemic stroke, the first thrombotic treatment, the first reperfusion therapy. **But, MultiStem is poised to be potentially the first cell therapy for stroke, as Dr. Hess mentioned the first neuroprotective, neurorecovery therapy for stroke, the first non-reperfusion therapy for stroke, and I would add, the first potential treatment for stroke that could be applied beyond the first 24 hours** (Up to 36 hours).

And diving into this even further, if there is a difference in sort of this kind of comparison of tPA and MultiStem, **there are potential advantages with MultiStem. The lack of the risk of intracranial bleeding or other types of major hemorrhage and the fact that potentially more patients could benefit from treatment because we have a much longer time window of opportunity of treatment with MultiStem.** (End)

Lena, I hope you will find this worthy to share with the appropriate members of the Task Force on Neuroscience and Medicine...

And, please share with them: **Athersys is on the doorstep of a great paradigm shift in the treatment of a great unmet need for Acute Ischemic Stroke patients...**A treatment that intends to help patients LIVE INDEPENDENTLY beyond 90 days (without nursing care), till a year (365 days), and more...IT'S BEEN PROVEN...Athersys, is working on proving it again!...They're past 2/3 enrollment, with an Interim Analysis due in early October of this year (2023)... PERFECT! ...Would you (CIRM) like to consider helping Athersys with funding for this pivotal "MASTERS-2" clinical trial, please? ...And,

by doing so, you give yourself a fair opportunity in making a great impact on Acute Ischemic Stroke care...As I'm sure you understand, not only in California, but across the whole United States and beyond...Potentially, to the rest of the world...It would be newsworthy (as it should be)!...Helping patients and saving lives for this critical disease, STROKE...

Thank You So Much For Your Time & Consideration...


And, Best Wishes To You & CIRM...

John Redaelli

e-mail: jjrinhb@aol.com

PS. You might find this interesting and compelling...My search at clinicaltrials.gov/ resulted in only (1) listing of a clinical trial out of (5) total, for a **Phase 3 allogeneic cell therapy for Ischemic Stroke: MASTERS-2** clinicaltrials.gov/search?cond=Ischemic%20Stroke&term=Phase%20III&intr=Cell%20Therapy

ADDENDUM: With Statistically Significant Global Stroke Recovery trial results for an Independent Life at One Year, who wouldn't want [#MultiStem](#) Cell Therapy by Athersys for Ischemic Stroke in Japan? (Re: TREASURE clinical trial results for Ischemic Stroke by Athersys' partner in Japan - Healios).



Results -Efficacy Endpoints-

Endpoints	Day 90				Day 365			
	MultiStem (n=104) n (%)	Placebo (n=102) n (%)	Δ (%)	P-Value	MultiStem (n=104) n (%)	Placebo (n=102) n (%)	Δ (%)	P-Value
Excellent Outcome (mRS≤1, NIHSS≤1, BI≥95)	12 (11.5)	10 (9.8)	1.7	0.903*	16 (15.4)	11 (10.8)	4.6	0.431
mRS Shift Analysis	Next Page			0.518	Next Page			0.426
Global Stroke Recovery (mRS≤2, NIHSS Δ75%, BI≥95)	20 (19.2)	16 (15.7)	3.5	0.762	29 (27.9)	16 (15.7)	12.2	0.037**
mRS≤1	14 (13.4)	11 (10.8)	2.6	0.773	20 (19.2)	14 (13.7)	5.5	0.366**
mRS≤2	34 (32.7)	23 (22.5)	10.2	0.157	38 (36.5)	27 (26.4)	10.1	0.150**
NIHSS≤1	19 (18.3)	19 (18.6)	-0.3	0.728	24 (23.1)	22 (21.6)	1.5	0.892**
NIHSS Improvement≥75%	30 (29.8)	29 (28.4)	1.4	1.000	40 (38.5)	33 (32.4)	6.1	0.402**
BI≥95	31 (29.8)	24 (23.5)	6.3	0.437	37 (35.6)	23 (22.5)	13.1	0.045**

*Primary Endpoint **Post-Hoc Analysis FAS, CMH Analysis, Imputation : LOCF

(**Note** the rising number of patients positively impacted by MultiStem cell therapy from Day 90, to Day 365, IN ALL ENDPOINTS)...Diagram source: World Stroke Org...[As posted in my tweet](#) (10/26/22)...And, corresponding Healios PR (11/2/22):

[Results from the TREASURE Study for Ischemic Stroke presented at the 14th World Stroke Conference and the 40th Annual Meeting of Japan Society of Neurological Therapeutics](#)

(I know this is ALL A BIT MUCH...But, in all the (8) years I've been invested in Athersys, through thick and thin, I pray and make a great wish that organizations such as yours (CIRM) can recognize the great potential value that MultiStem and Athersys can bring to the human condition...As I do, as I recognize it...I can't Thank You enough for allowing me to share all this with you - CIRM)