Tough Tech Today with Meyen and Miller

Unveiling age-defying proteins (TTT020) featuring Mark Allen

In one sentence...

Aging is malleable and there is a particular, mysterious protein of interest that may enable new therapies for age-related diseases such as stroke, diabetes, and obesity.

Overview

Young blood in old bodies has been demonstrated in several studies to counteract some age-correlated ailments. Mark Allen, a medical doctor by training and an

entrepreneur in practice, co-founded Elevian to understand and commercialize therapies using a recombinant growth differentiation factor known as GDF11, a 'magic' protein, as referenced by the New York Times.

Dr. Allen describes how his team is developing new medicines targeting the aging process, rather than the prevailing approach of most pharmaceutical products that target individual diseases. Highlighting a surprising result, if humanity was able to eradicate cancer completely, the outcome would only increase the average human lifespan by an estimated two to three years, while doubling the incidence of age-related diseases such as Alzheimer's.

With its scientific foundations beginning emerging from the Harvard Stem Cell Institute, the Elevian team is rigorously exploring GDF11 and its effective use while navigating commercialization challenges. Specifically, how can an age-related therapy be reimbursable when "age" is not yet officially a disease (based on medical billing code)? We discuss with Dr. Allen about Elevian's path ahead and the strategies at work.

🧠 Relevant Links:

- Episode page, transcript, and podcast listening links: https://toughtechtoday.com/unveiling-age-defying-proteins
- Mark Allen on LinkedIn: https://www.linkedin.com/in/markallenmd
- Elevian (company): http://elevian.com

- Subscribe with your favorite podcast service: https://www.buzzsprout.com/1169378/12770513-unveiling-age-defying-proteins-featuring-mark-allen-of-elevian
- Watch this show on Youtube: https://youtu.be/FHkivnfIXbw

👏 Credit Roll

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🔖 Topic Timecodes

[2:02] What does Elevian do and why dealing with aging matters
[3:42] Initial research and discovering GDF11
[7:17] What does giving GDF11 do?
[8:54] How Eleven strategically went about finding product-market fit with its GDF11 discoveries
[11:17] Protecting their invention
[14:27] History: from the lab to Elevian
[20:33] GDF11 vs. GDF8
[25:17] Parabiosis model and common misconceptions of GDF11
[26:22] Recombinant protein manufacture and the biotech industry
[30:03] Elevian's hypothesis and why these proteins are exciting
[31:44] More on how Elevian came to be: Mark Allen's background
[37:42] Malleability of biological age and Elevian's role
[40:36] Accessibility of Elevian, and reimbursement model
[42:18] Stroke as the first disease for Elevian's commercial application of GDF

[46:16] Experiments in mice to humans to widely available treatments: how far along Elevian is in the process
[48:34] More on Mark's background
[51:44] Solving aging
[55:21] "Anti-aging"
[56:44] What do GDF11 and GDF8 look like?
[58:39] Biotech collaborations and the industry
[1:00:15] Mark's final message

Tags

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📖 Transcript

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