



PHIO COMMUNICATIONS MESSAGING AND STORY FOR THE COMPANY

COMPANY STORY

Overarching narrative

This is the framework used to develop the story and messaging—it's not public facing.

Our founders opened up a whole new field of biology when they discovered RNAi, which has broad therapeutic applications. We continue their pioneering efforts today through our work with INTASYL, the only self-delivering RNAi technology focused on immuno-oncology therapeutics. We are committed to discovering and developing innovative cancer treatments for patients, creating new pathways for a cancer-free future.

What this narrative sets up:

- Ties to Nobel laureate founders—a unique differentiator
- Company founders literally pioneered work in RNAi
- Innovation is in the blood
- INTASYL is the next evolutionary/revolutionary step in this RNAi field
- Nobody else has the history Phio has or does what Phio does today

Founding of the company and its original focus

Intent—show ties to RNAi pioneers; highlight core values of innovation, collaboration and passion

Phio was co-founded by Nobel Laureate Craig Mello, who was awarded the Nobel prize in 2006 for his discovery of RNAi, embodying the innovation and passion that continues to drive the company today.

The company was founded as RXi, with the intent to develop RNAi therapeutics. Mello collaborated with several other RNAi pioneers to co-found the company: Tariq M. Rana, Ph.D., inventor of fundamental technology for stabilizing RNAi and of RNAi nanotransporters; Greg Hannon, Ph.D., discoverer of RNAi mechanism (RISC) and short hairpin RNAi (shRNAi); and Michael Czech, Ph.D., a leader in the application of RNAi for the treatment diabetes and obesity.

Evolution of the company from 2011—2018

To tell a story about the company's evolution and to highlight the core values of diligence, resilience, and a focus on learning.

RXi went public and in 2009 the company filed a patent for its unique INTASYL™ technology, a self-delivering RNAi platform. RXi focused on the discovery of RNAi applications for dermatological and ocular therapies. In 2017, after a number of clinical trials that demonstrated safety and clinical efficacy in these areas, the company made the decision to focus on immuno-oncology therapies, with the belief that INTASYL could provide the most value in this application. The company's name was changed to Phio Pharmaceuticals in November of 2018 to reflect its transition from a platform company to one committed to discovering immuno-oncology therapeutics based on its self-delivering RNAi platform.

Development of INTASYL Platform and Compounds

Intent: to highlight unique aspects of INTASYL and tie back to pioneering work in RNAi; and highlight core values of innovation and passion.

A patent application for INTASYL was filed in September of 2009 and the technology was put into practice in early 2010.

INTASYL is the only self-delivering RNAi technology focused on immuno-oncology therapeutics. In comparison to biologics and cell and gene therapies, INTASYL has a favorable pre-clinical toxicity and safety profile, and a streamlined chemical synthesis that reduces costs and offers substantial convenience to prescribers and patients.

The first INTASYL compound tested in the clinic was PH-109, originally developed for the treatment of scarring (hypertrophic scarring in skin and retinal scarring). PH-109 suppresses the Connective Tissue Growth Factor (CTGF), a protein also associated with poor prognosis in breast cancer. It was in clinical trials from 2012-2017 for the treatment of scarring; recently PH-109 demonstrated reduced tumor growth and reduced metastatic lung lesions, with no evidence of toxicity in a preclinical model of breast cancer.

The next clinical candidate was PH-762, an INTASYL compound which reduces the expression of PD-1, a protein that inhibits T cells' ability to kill cancer cells. PH-762 is currently in a Phase 1b study for the treatment of advanced melanoma. In collaboration with Phio's partner AgonOx,

PH-762 is also expected to commence an ACT trial in combination with TILS, targeting advanced melanoma as well as head and neck cancer.

Preclinical studies have already demonstrated activity against a number of other genes affecting tumor cells, including PH-804, an INTASYL compound that targets TIGIT, a protein that inhibits the activity of Natural Killer (NK) cells; and PH-894, is an INTASYL compound that silences BRD4, a protein that controls gene expression in both T cells and tumor cells, thereby effecting the immune system as well as the tumor.

The most recent discovery is a CTLA4-targeting INTASYL compound that inhibits the ability of T cells to kill tumor cells. This INTASYL compound demonstrated dose-associated anti-tumor efficacy in two tumor models in vivo.

With a decade of successful discovery and development behind it, the company is now focusing its attention on broader clinical development in the treatment of both melanoma and cutaneous squamous cell carcinoma.

Phio: A New Era

Intent: to inspire confidence in company's future, its new direction and its new leadership; highlight continuous evolution from its original pioneering founders and highlight core values of integrity, collaboration and credibility.

Phio's founders opened up a whole new field of biology, revolutionizing the way scientists think about precision medicine. Today, we continue to harness their passion for science, their openness to learning, and their relentless diligence in seeking new therapies.

As we move forward into our next phase, we are committed to developing a portfolio of RNAi therapies that treat specific solid tumors with a precision medicine alternative differentiated by potency, safety, convenience, tolerability, and cost.

To support that goal, we brought on board a new leadership in October of 2022. The new leadership team will join forces with the current executive team to move the company forward as it evolves INTASYL™, its proprietary platform, from discovery to development.

MESSAGING

About Phio

Phio Pharmaceuticals Corp. (Nasdaq: PHIO) is a clinical stage biotechnology company whose proprietary INTASYL™ RNAi technology is designed to make immune cells more effective in killing tumor cells. INTASYL is the only self-delivering RNAi technology focused on immuno-oncology therapeutics. INTASYL drugs precisely target specific proteins that reduce the body's ability to fight cancer, without the need for specialized formulations or drug delivery systems.

For additional information, visit the Company's website, www.phiopharma.com.

Leadership change

The success of several pre-clinical trials has attracted new and industry-experienced leadership to Phio Pharmaceuticals. The new leadership team will join forces with the current executive team to move the company forward as it evolves INTASYL™, its proprietary platform, from discovery to development.

Who we are/founding

Phio was co-founded by Nobel Laureate Craig Mello, who was awarded the Nobel prize in 2006 for his discovery of RNAi, which has broad therapeutic applications. Our founders opened up a whole new field of biology when they discovered RNAi. We continue their pioneering efforts today through our work with INTASYL, the only self-delivering RNAi technology focused on immuno-oncology therapeutics. We are committed to discovering and developing innovative cancer treatments for patients, creating new pathways for a cancer-free future.