

EPIGENOMIC PROGRAMMING FOR PRECISION GENOMIC CONTROL

CORPORATE PRESENTATION

June 2022

Disclaimer and Forward-Looking Statements

Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this presentation that do not relate to matters of historical fact should be considered forward-looking statements, including without limitation statements regarding our expectations surrounding the potential of our product candidates, including our lead OEC candidate OTX-2002; development timelines; anticipated timing of regulatory submissions and filings; and expectations regarding our pipeline, including trial design, initiation of preclinical studies and our goal of declaring additional OEC development candidates. These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including, but not limited to, the following: the novel technology on which our product candidates are based makes it difficult to predict the time and cost of preclinical and clinical development and subsequently obtaining regulatory approval, if at all; the substantial development and regulatory risks associated with epigenomic controller machines due to the novel and unprecedented nature of this new category of medicines; our limited operating history; the incurrence of significant losses and the fact that we expect to continue to incur significant additional losses for the foreseeable future; our need for substantial additional financing; our investments in research and development efforts that further enhance the OMEGA platform, and their impact on our results; uncertainty regarding preclinical development, especially for a new class of medicines such as epigenomic controllers; the fact that our product candidates may be associated with serious adverse events, undesirable side effects or have other properties that could halt their regulatory development, prevent their regulatory approval, limit their commercial potential, or result in significant negative consequences; the impact of increased demand for the manufacture of mRNA and LNP based vaccines to treat COVID-19 on our development plans; difficulties manufacturing the novel technology on which our OEC candidates are based; our ability to adapt to rapid and significant technological change; our reliance on third parties for the manufacture of materials; our ability to successfully acquire and establish our own manufacturing facilities and infrastructure; our reliance on a limited number of suppliers for lipid excipients used in our product candidates; our ability to advance our product candidates to clinical development; and our ability to obtain, maintain, enforce and adequately protect our intellectual property rights. These and other important factors discussed under the caption “Risk Factors” in our Quarterly Report on Form 10-Q for the period ended March 31, 2022, and our other filings with the SEC could cause actual results to differ materially from those indicated by the forward-looking statements made in this presentation. Any such forward-looking statements represent management’s estimates as of the date of this presentation. While we may elect to update such forward-looking statements at some point in the future, we disclaim any obligation to do so, even if subsequent events cause our views to change.

Omega Therapeutics

Epigenomic Programming for Precision Genomic Control

- **Programmable medicines** platform with **broad applicability** across nearly all therapeutic areas
- New class of mRNA therapeutics as **programmable epigenetic medicines** – **Omega Epigenomic Controllers**
- Tuning **gene expression** to **control disease biology**; **no nucleic acid sequence changes**
- Highly **specific, tunable** and **durable** control of gene expression
- Potentially a **much safer class** of medicines
- **Broad Proof of Platform**

The OMEGA Epigenomic Programming Platform

Deterministic Drug-development Platform to Prospectively Engineer Programmable Epigenetic mRNA Therapeutics

Control of Gene Expression and Cellular Programming

IGDs and EpiZips

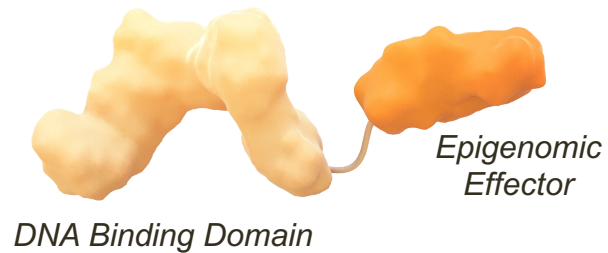
(Specific Targets of unique DNA-sequences, “Epigenomic Zipcodes”)



Programmable Epigenetic mRNA Therapeutics

Omega Epigenomic Controllers (OECs)

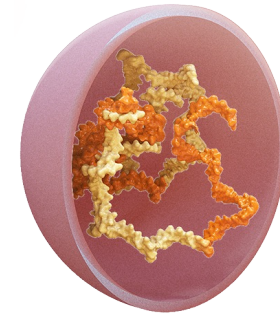
(Controlled Tunability and Durability of Effect)



Engineered, customized, drug delivery

Lipid Nanoparticles

(First wave of therapeutics delivered via LNPs)



AI and ML for Drug Design and Development

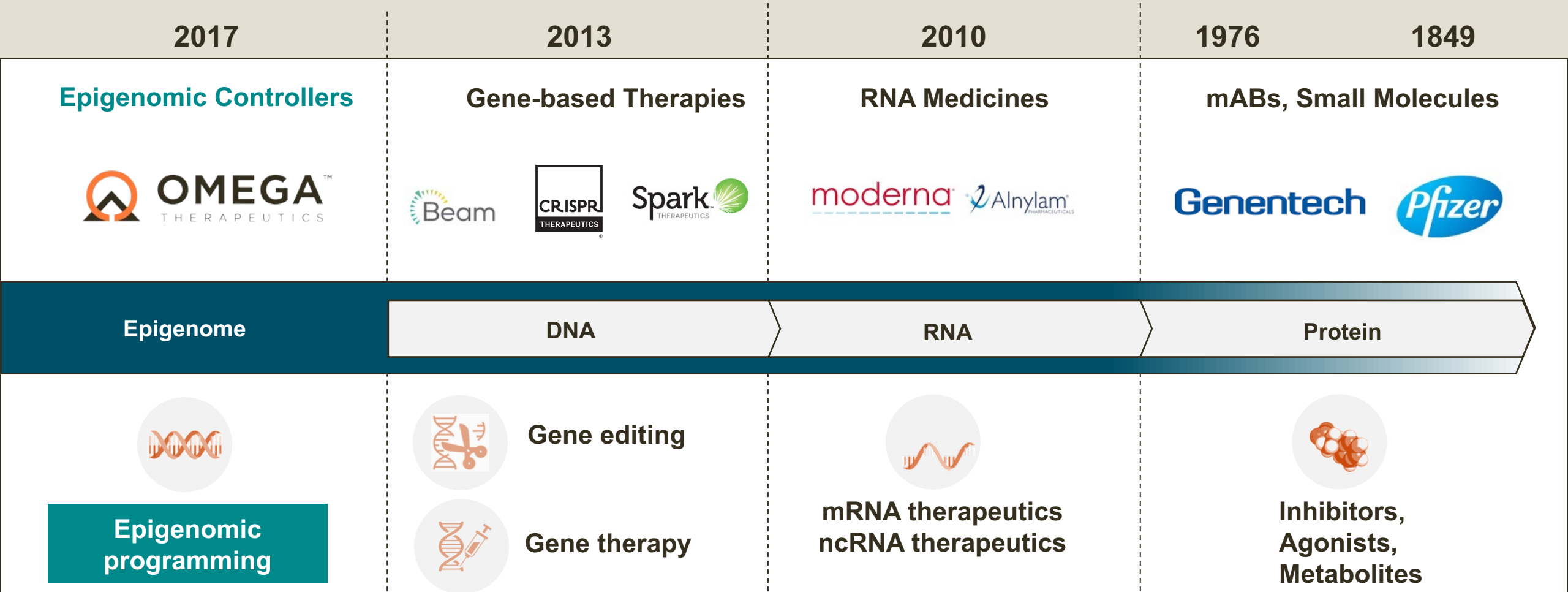
Proprietary data, deep and improving understanding of genomic architecture

Computational expertise in machine learning and artificial intelligence

Rational and rapid design of drug candidates

OMEGA platform – Pioneering Epigenomic Programming Company

Companies: Focus



Our Portfolio

8
Development
Programs

	Target Gene(s)/ EpiZip(s)	Disease(s)	OEC	Discovery	Preclinical	Clinical		
						Phase 1	Phase 2	Phase 3
Oncology	<i>MYC</i> <i>H3B.08.qX.Y.Z.930</i>	Hepatocellular Carcinoma	OTX-2002					
	<i>MYC</i> <i>H2009.08.qX.Y.Z.930</i>	Non-Small Cell Lung Cancer						
	<i>Undisclosed</i>	Small Cell Lung Cancer						
Multigenic Diseases incl. Immunology	<i>CXCL 1-8</i> <i>A549.04.qX.Y.Z.533</i>	ARDS / COVID-19						
	<i>Undisclosed</i>	Idiopathic Pulmonary Fibrosis						
Regenerative Medicine	<i>HNF4A</i> <i>HEP.20.qX.Y.Z.552</i>	Liver Regeneration						
	<i>Undisclosed</i>	Corneal Regeneration						
Select Monogenic Diseases	<i>SFRP1</i> <i>HFDP.08.pX.Y.Z.644</i>	Alopecia						

Route of Administration (top to bottom): IV (HCC), IV (NSCLC), IV (SCLC), IV/Pulmonary (ARDS / COVID-19), IV/Pulmonary (IPF), IV (Liver Regeneration), Topical (Corneal Regeneration), Topical (Alopecia)

**Anticipated
Milestones**

**By Mid-2022
Declaration of 2 New
Development Candidates**



**1H 2022
IND Filing in MYC HCC**



**2H 2022 / Early 2023
Additional IND Filing**