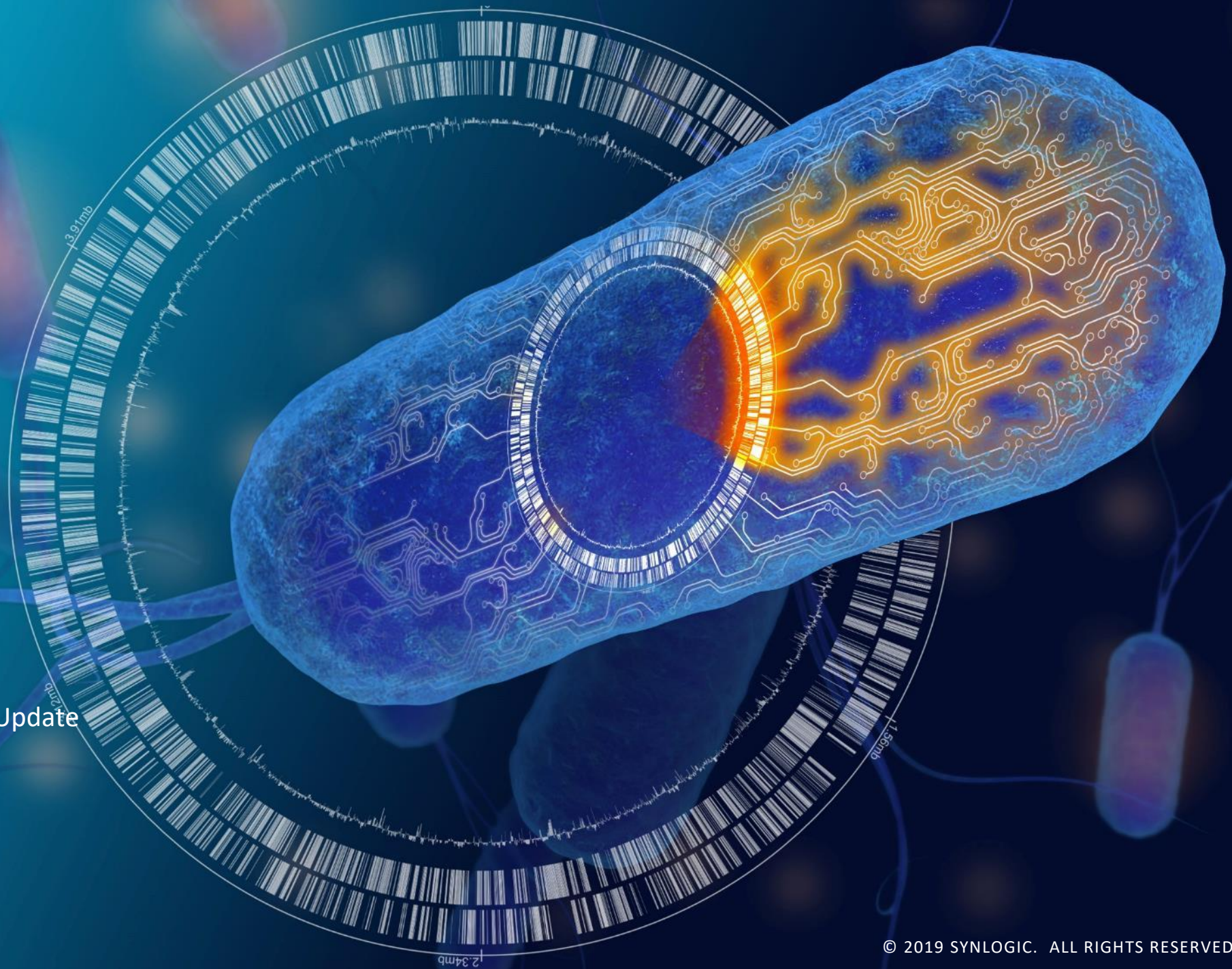
synlogic

Designed For Life

Q2 Financial Results & Business Update
6 August 2020



Forward Looking Statements

This presentation contains “forward-looking statements” that involve substantial risks and uncertainties for purposes of the safe harbor provided by the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, included in this presentation regarding strategy, future operations, future financial position, future revenue, projected expenses, prospects, plans and objectives of management are forward-looking statements. In addition, when or if used in this presentation, the words “may,” “could,” “should,” “anticipate,” “believe,” “estimate,” “expect,” “intend,” “plan,” “predict” and similar expressions and their variants may identify forward-looking statements. Examples of forward-looking statements include, but are not limited to, the approach we are taking to discover and develop novel therapeutics using synthetic biology; statements regarding the potential of our platform to develop therapeutics to address a wide range of diseases, including: metabolic diseases, inflammatory and immune disorders, and cancer; the future clinical development of Synthetic Biotic medicines; the potential of our technology to treat phenylketonuria and cancer; the expected timing of our anticipated clinical trial initiations and availability of clinical data; the benefit of orphan drug and fast track status; the adequacy of our capital to support our future operations and our ability to successfully initiate and complete clinical trials; the results of our collaborations; and the difficulty in predicting the time and cost of development of our product candidates. Actual results could differ materially from those contained in any forward-looking statement as a result of various factors, including, without limitation: the uncertainties inherent in the preclinical development process; our ability to protect our intellectual property rights; and legislative, regulatory, political and economic developments, as well as those risks identified under the heading “Risk Factors” in our filings with the SEC. The foregoing review of important factors that could cause actual events to differ from expectations should not be construed as exhaustive and should be read in conjunction with statements that are included herein and elsewhere, including the risk factors included in our quarterly report on Form 10-Q filed with the SEC on May 8, 2020, and in any subsequent filings we make with the SEC. The forward-looking statements contained in this presentation reflect our current views with respect to future events. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements in the future, we specifically disclaim any obligation to do so. These forward-looking statements should not be relied upon as representing our view as of any date subsequent to the date hereof.

Opening Remarks

Dr. Aoife Brennan
MB CHB

President & CEO

synlogic

2nd Quarter Highlights

- We are building **the premier Synthetic Biology** platform to **engineer bacterial Synthetic Biotic medicines** that benefit patients in new ways
- **Team**, **technology** and **portfolio** to succeed: appointed Antoine Awad as COO
- Rapidly progressed **metabolic programs**
  - **SYNB1618 PKU** Phase 2 *synPHEny* FPI expected late 2020
  - Advanced IND for **SYNB8802 in Enteric Hyperoxaluria**: FIH expected early 2021
- I**mmunomodulation** in immunology and oncology
  - **SYNB1891** monotherapy continues to enroll: data expected late 2020
- Regained rights to **IBD**
- Continued careful capital stewardship & strong cash position

Advancing The Pipeline

Emerging treatment options in PKU will continue to leave many patients behind

SYNB1618 demonstrates potential to lower Phe in PKU patients

Phase 2 Phe-lowering trial starting in 2H 2020

Next generation strain in development

Advancing The Pipeline

Emerging treatment options in PKU will continue to leave many patients behind

SYNB1618 demonstrates potential to lower Phe in PKU patients

Phase 2 Phe-lowering trial starting in 2H 2020

Next generation strain in development

SYNB1891 (Synthetic Biotic for intratumoral injection) continues to enroll monotherapy cohorts

SYNB1891 will provide clinical data from monotherapy cohorts in 2020

SYNB1891 has potential for improved efficacy relative to other STING approaches

Upcoming Milestones

Synlogic Entering Data Rich Period In The Clinic

	Expected Milestone	2020 early	2020 mid	2020 late	2021 early	2021 mid	2021 late
SYNB1618 PKU	Initiate Ph.2 study in PKU patients						
	Ph.2 Phe-lowering read-out						
SYNB8802 HOX	Initiate IND-enabling studies	initiated					
	Initiate Ph.1 study in HV and Patients						
	Ph.1 Patient Read-out						
SYNB1891 I/O	Ph.1 Monotherapy read-out						
	Initiate Ph.1 combination study arm						
	Ph.1 Combination therapy read-out						

Significant Clinical Catalysts Over The Next 6-12 Months

2nd Quarter 2020 Summary Results

Balance Sheet (unaudited)	30 June 2020	31 Mar 2020
Cash, Cash Equivalents, and Short & Long Term Marketable Securities	$109.1M	$114.3 M

	Three Months Ended	
Statement of Operations (unaudited)	**30 June 2020**	**30 June 2019**
R&D Expenses	$12.9 M	$9.7 M
G&A Expenses	$3.5 M	$3.7 M
Net Loss	$(15.5) M	$(12.3) M
*Net Loss Per Share **	*$(0.44)*	*$(0.45)*

Strong Cash Position With Runway Into 2022

synlogic

* weighted average shares used in computing net loss per share - basic and diluted

Focus On Enteric Hyperoxaluria

Dr. Richard Riese, MD, PhD
Chief Medical Officer

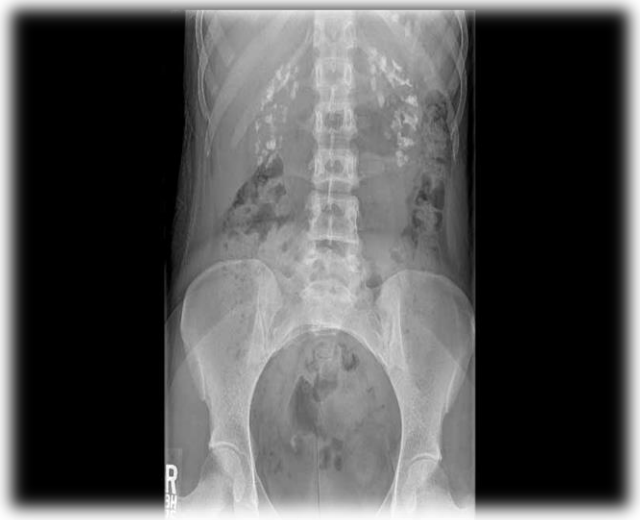
Enteric Hyperoxaluria: Overview

Dietary Sources of Oxalate

Risk Factors

- IBD
- Roux-en-Y Gastric Bypass
- Short Bowel Syndrome
- Chronic Pancreatitis

Clinical Manifestations



Nephrocalcinosis, Stones, and Risk of Chronic Kidney Disease

Dietary Sources of Oxalate Are Difficult To Avoid, Putting Patients at Risk for Poor Kidney Outcomes

Hyperoxaluria: Primary vs. Enteric

	Primary Hyperoxaluria	Enteric Hyperoxaluria
Pathology	Family of autosomal recessive monogenic disorders in which liver enzyme deficiency results in endogenous oxalate overproduction	Pathogenic hyperabsorption of dietary oxalate, often accompanies bowel disease or bariatric surgery
Urinary Oxalate Levels	90 – 500 mg / 24 hrs (up to 10x normal)	45 – 130 mg / 24 hrs (up to 3x normal)
Onset	Pediatric	Adult
Clinical Mgmt	Limited nutrition options; nephrocalcinosis; dialysis; transplant; pyridoxine	Limited nutrition options; treatment of kidney stones as they occur; nephrocalcinosis; dialysis
U.S. Epidemiology	~5,000 – 8,000	200,000 – 250,000
Key Players	Dicerna pharmaceuticals; Alnylam PHARMACEUTICALS	Allena PHARMACEUTICALS; synlogic

SYNB8802 Poised To Enter The Clinic

- Enteric Hyperoxaluria manifests in dangerously high urinary oxalate levels, putting patients with pre-existing bowel disease at 3-4x higher risk of CKD *
- Differentiated profile - engineered to absorb oxalate from throughout the GI tract
- Two preclinical models, mouse and NHP, provide evidence of urinary oxalate lowering
- Precedented clinical development and regulatory path with urinary oxalate as a critical endpoint
- Proof of concept achievable in Phase 1B Roux-n-Y gastric bypass population

synlogic

* Tasian GE, Poster SA-PO276; Kidney Week 2019

Enteric Hyperoxaluria

Our Next Step To Synthetic Biotic Medicines

High unmet medical need with no available therapeutic options

Efficient clinical development: PoC achievable in Phase 1b

SYNB8802 has potential to meaningfully reduce urinary oxalate levels

Concluding Remarks

Dr. Aoife Brennan
MD CHB

President & CEO

synlogic

Available For Questions

Aoife Brennan, MD CHB
President & CEO

Antoine Awad
COO

Richard Riese, MD PhD
CMO

Gregg Beloff, JD MBA
Interim CFO

synlogic

301 BINNEY ST., #402, CAMBRIDGE, MA 02142
TEL: 617-401-9975
WEB: WWW.SYNLOGICTX.COM
EMAIL: INFO@SYNLOGICTX.COM