



CALITHERA



Targeting cancer, differently.

Susan M. Molineaux, Ph.D. | Founder, President & Chief Executive Officer

NASDAQ: CALA

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Forward-Looking Statements

This presentation and the accompanying oral commentary contain “forward-looking” statements for purposes of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. We may, in some cases, use terms such as “believe,” “will,” “may,” “estimate,” “continue,” “anticipate,” “intend,” “should,” “plan,” “might,” “approximately,” “expect,” “predict,” “could,” “potentially” or the negative of these terms or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. All statements other than statements of historical facts contained in this presentation and the accompanying oral commentary are forward-looking statements, and such forward-looking statements include statements regarding our intentions, beliefs, projections, outlook, analyses or current expectations concerning, among other things: plans regarding our anticipated clinical trials for our product candidates, including CB-839 (telaglenastat) and INCB-001158, the potential safety, efficacy and other benefits of and market opportunity of product candidates, the timing of and our ability to make regulatory filings and obtain and maintain regulatory approvals for our product candidates, statements relating to the development, regulatory and sales milestone payments of INCB-001158 in connection with our collaboration with Incyte Corporation, our intellectual property position and cash needs.

Forward-looking statements involve known and unknown risks, uncertainties, assumptions and other 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. We discuss many of these risks in greater detail under the heading “Risk Factors” contained in our Annual Report on Form 10-K for the year ended December 31, 2020, filed with the Securities and Exchange Commission on March 16, 2021. Forward-looking statements are not guarantees of future performance and our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from the forward-looking statements contained in this presentation and the accompanying oral commentary. Any forward-looking statements that we make in this presentation and the accompanying oral commentary speak only as of the date of this presentation. We assume no obligation to update our forward-looking statements whether as a result of new information, future events or otherwise.



CALITHERA

OUR SMALL MOLECULE
ONCO-METABOLISM
APPROACH BRINGS A NEW
AND UNIQUE PERSPECTIVE
TO FIGHTING CANCER



Investment Highlights



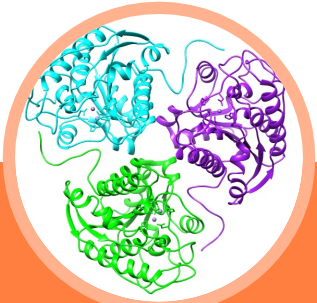
Clinical Development Program in NSCLC

Randomized trial in genetically selected population



Strong Partnerships with Industry Leaders

Development partnership with Incyte. Clinical collaboration with Pfizer



Established Drug Discovery Engine

Additional small molecule drugs in the clinic



Diversified Portfolio

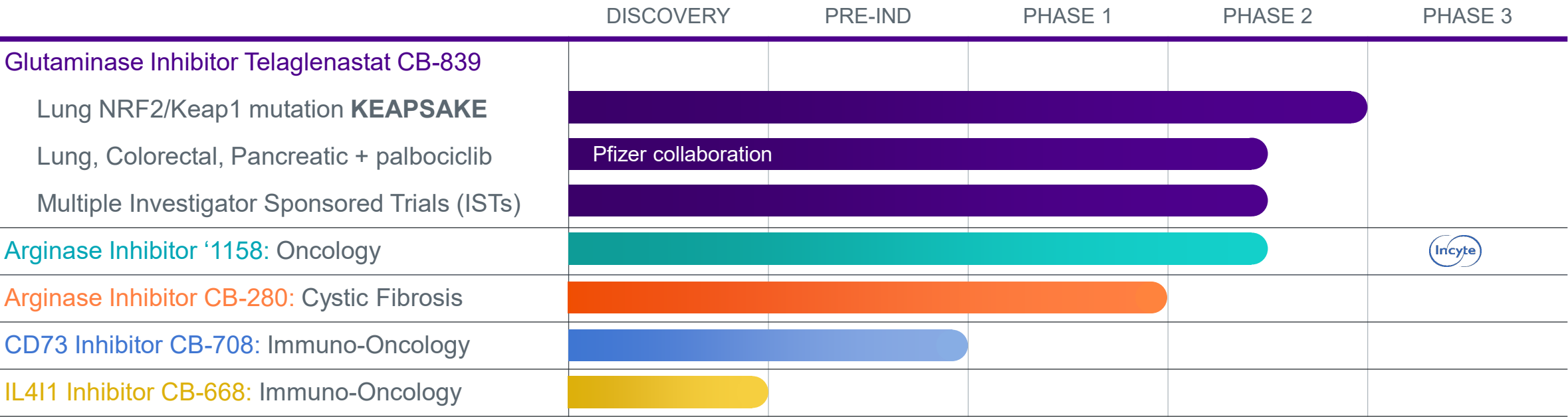
Tumor metabolism, immuno-oncology and cystic fibrosis



Experienced Founder and Management Team

Founder and management team members led Kyprolis to approval

Pipeline

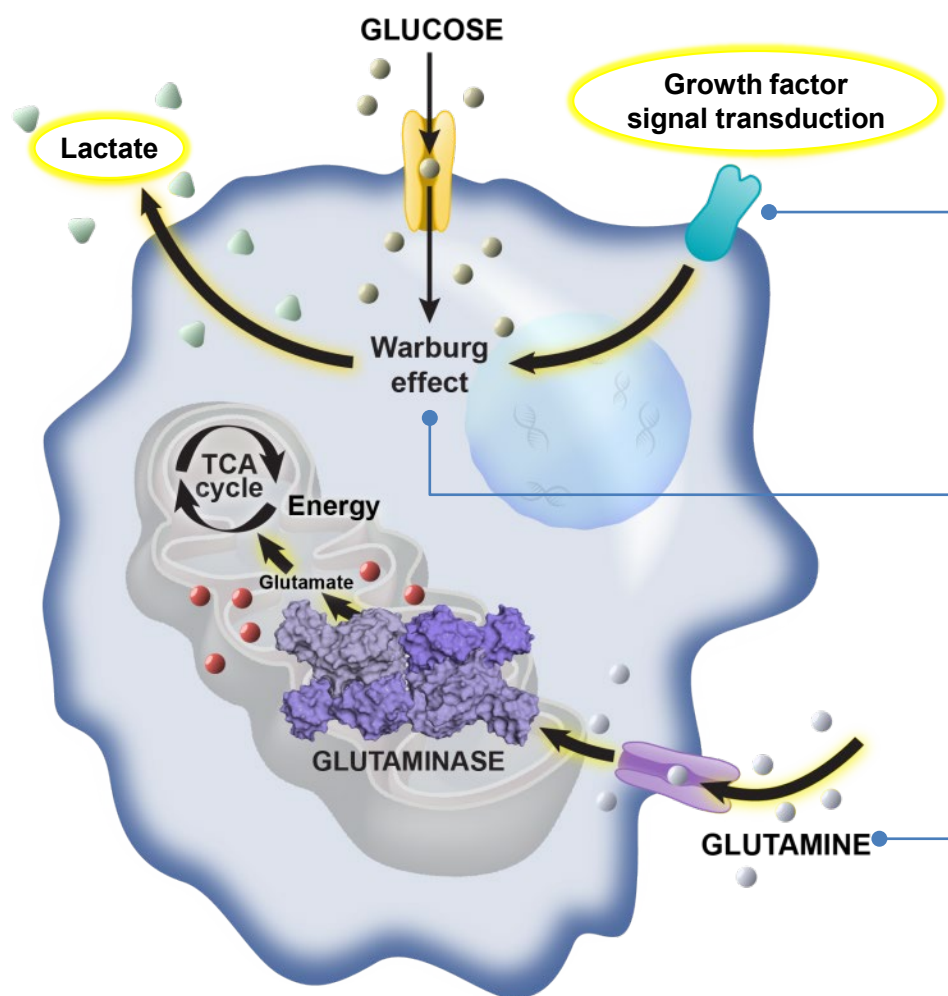
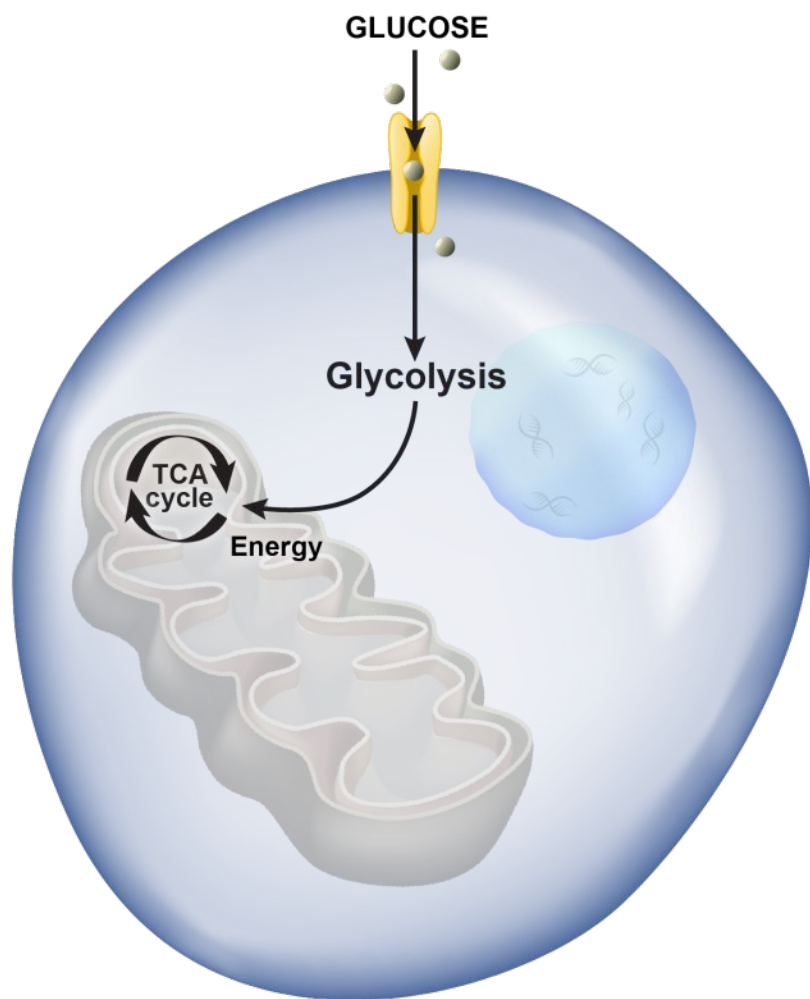




TUMOR AND IMMUNE METABOLISM PROGRAM

Glutaminase Inhibitor Telaglenastat CB-839

Glucose and Glutamine Metabolism in Tumors

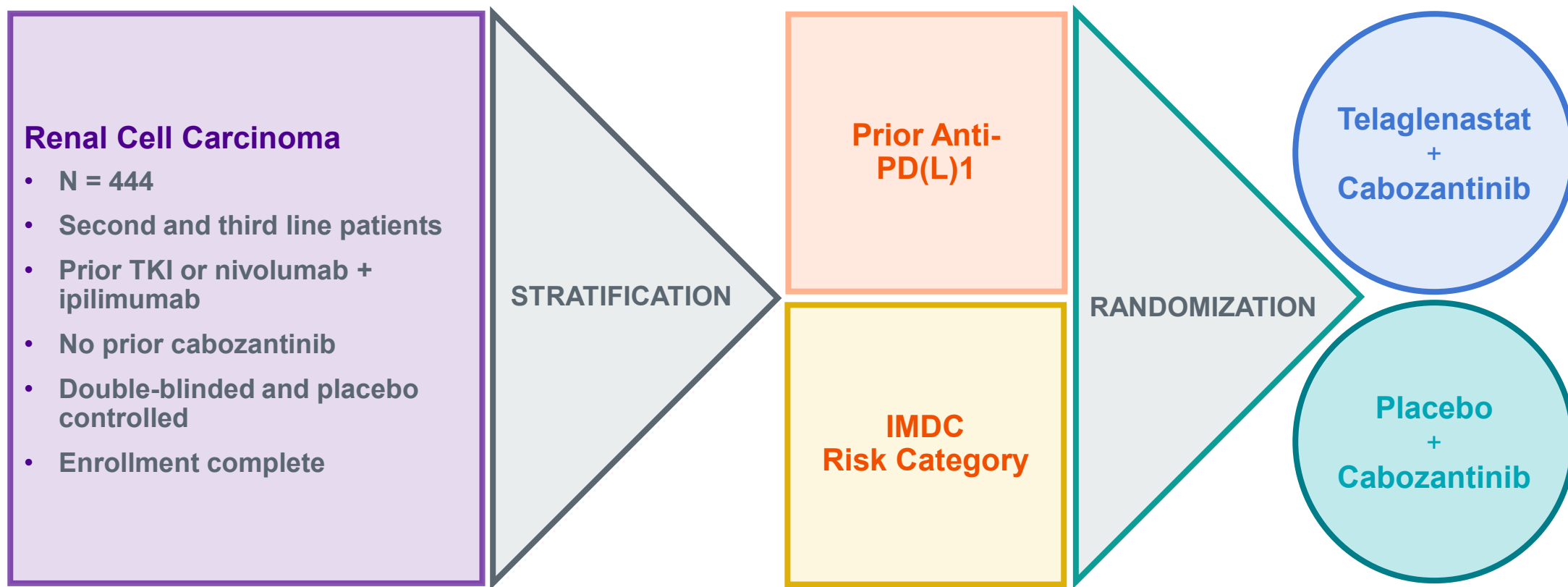


Growth factor signaling drives abnormal glucose metabolism in cancer cells¹

Abnormal glucose metabolism, known as the Warburg effect, deprives the TCA cycle of critical metabolites¹⁻³

Cancer cells compensate for the Warburg effect by increasing glutamine metabolism to sustain the TCA cycle for growth and proliferation^{1,4}

CANTATA Study in Second and Third Line RCC Patients

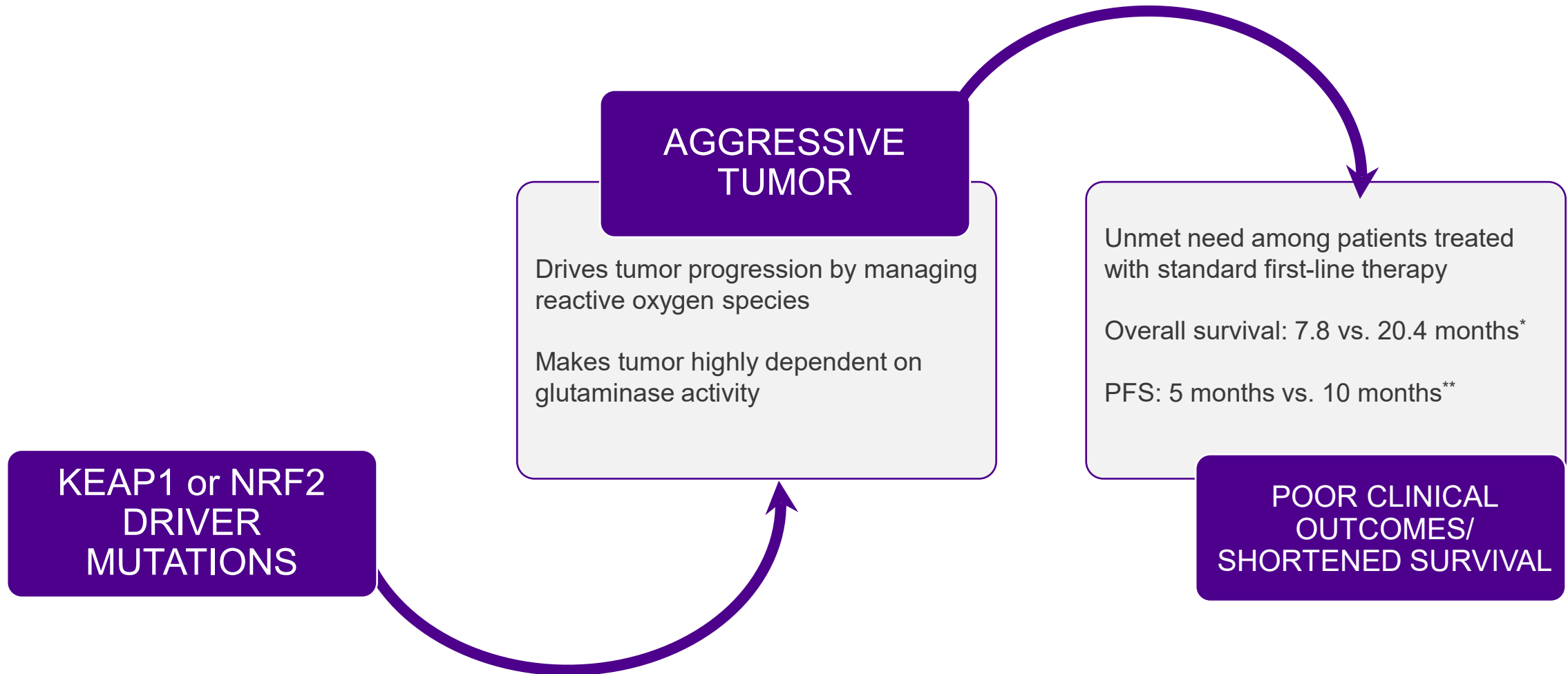


PRIMARY ENDPOINT: PFS | SECONDARY ENDPOINT: Overall Survival

Telaglenastat Update

- Renal Cell Carcinoma
 - CANTATA trial missed primary endpoint of PFS
 - Safety profile was comparable with prior experience
 - No further plans to develop in renal cell carcinoma
 - Data to be submitted for presentation at medical meeting
- KEAP1/NRF2 non-small cell lung cancer
 - Distinct biological pathway
 - Targeted biomarker-driven approach
 - Uniquely dependent on glutamine
 - Strong preclinical activity including single agent preclinical activity

Activating mutations in the KEAP1/NRF2 pathway occur early in lung cancer tumor development and drive aggressive tumor growth



Sources:

*Skoulidis, ASCO 2019, Keynote 189, **AACR 2020

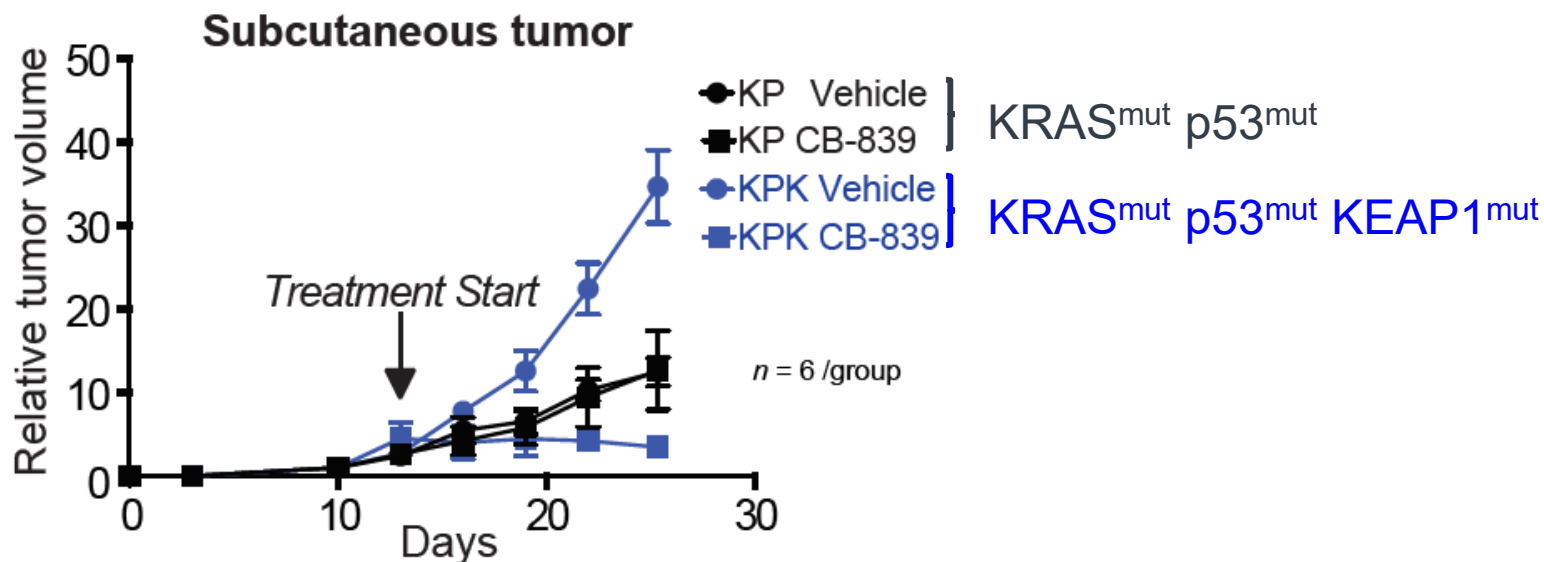
KEAP1^{mut} Tumors are Sensitive to Telaglenastat

**nature
medicine**

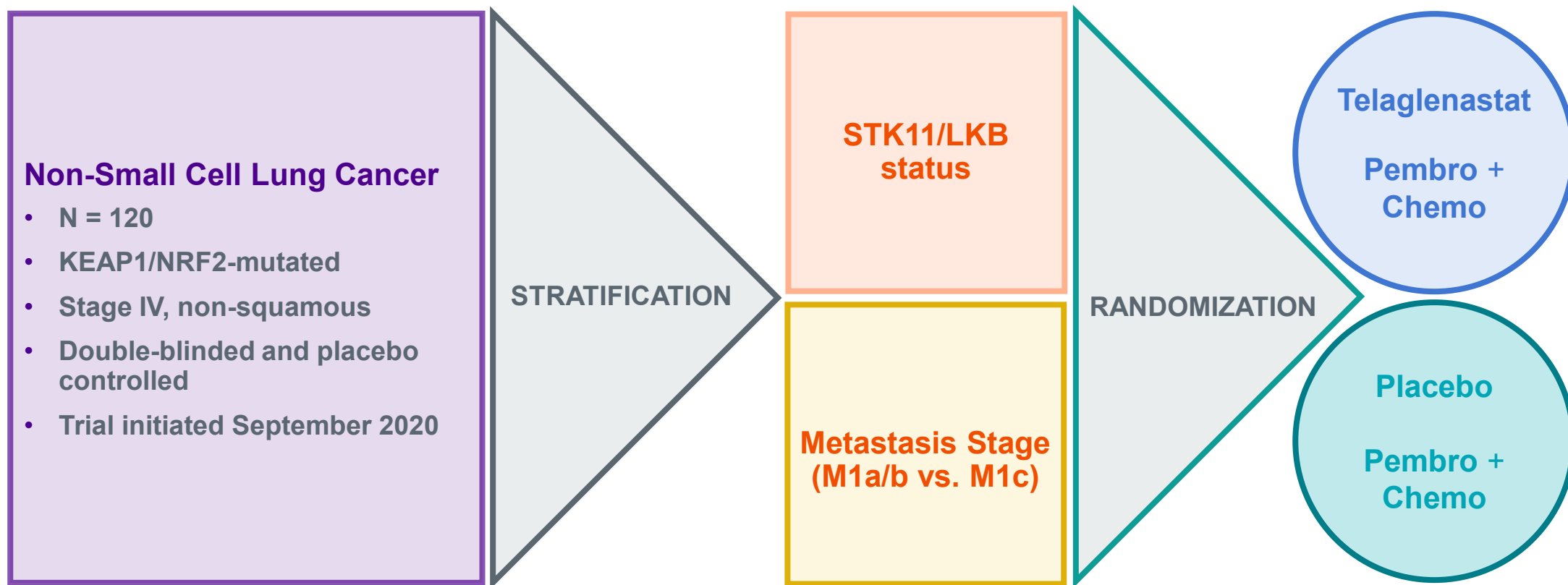
Keap1 loss promotes *Kras*-driven lung cancer and results in dependence on glutaminolysis

Rodrigo Romero^{1,2,15}, Volkan I Sayin^{3,15}, Shawn M Davidson^{1,2}, Matthew R Bauer¹, Simranjit X Singh³,

- KEAP1^{mut} mouse tumors are more aggressive than KEAP1^{wt}
- CB-839 (telaglenastat) has anti-tumor activity in KEAP1^{mut} but not KEAP1^{wt} tumor models
- *Kras*^{mut}/*Keap1*^{mut} are often co-incident in lung cancer



KEAP1/NRF2 Study in First Line NSCLC Patients



PRIMARY ENDPOINT: PFS

Chemo regimen is carboplatin + pemetrexed

Patients with KEAP1 or NRF2 mutations remain a large unmet need in the treatment of NSCLC

Current NSCLC market is a \$39B market opportunity¹

2020 US Incidence of NSCLC is 200,000²

20%-25% of lung cancer tumors have KEAP1/NRF2 pathway mutations³

NSCLC Patients with KEAP1/NRF2 mutations
~40,000-50,000



CYSTIC FIBROSIS PROGRAM

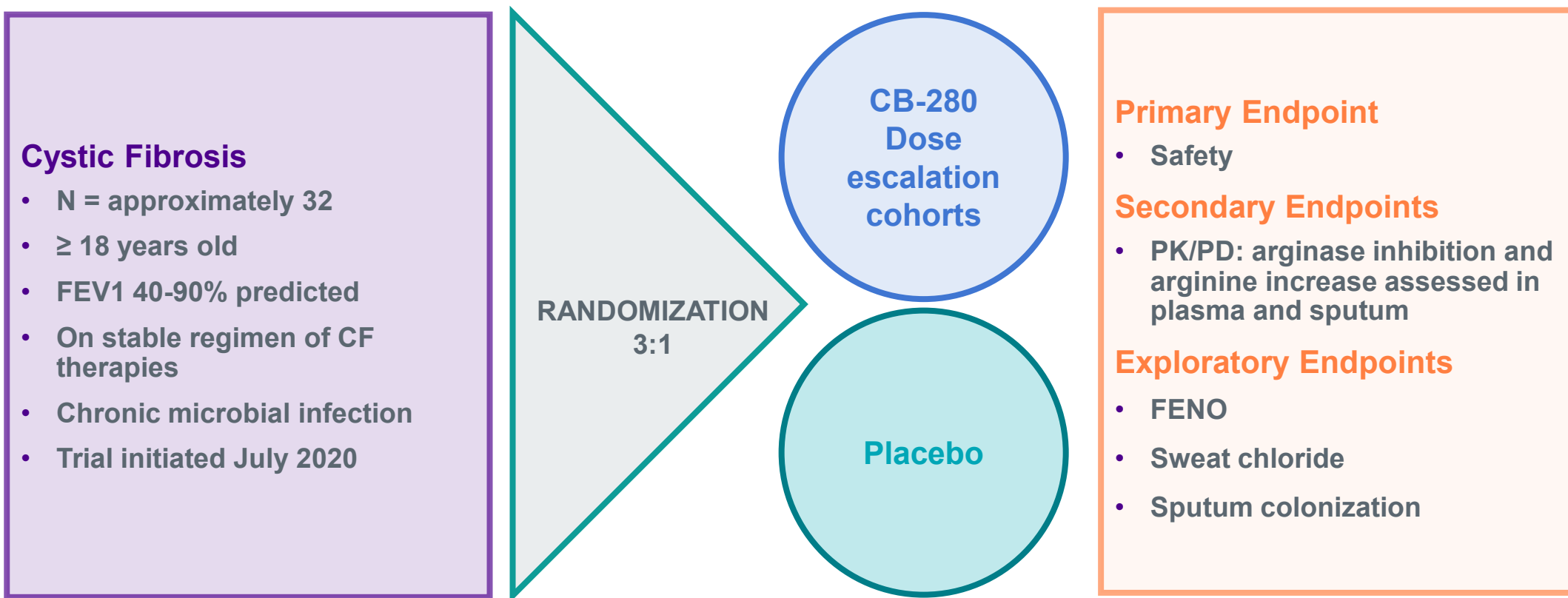
Arginase Inhibitor CB-280

Rationale for Arginase Inhibitors in Cystic Fibrosis

Despite recent advances with CFTR modulators, many patients still have impaired lung function

- Arginase plays a critical role in CF airway disease
Decreases nitric oxide (NO) production, increases production of polyamines and proline
- Inhibition of arginase should increase NO, increase anti-microbial effects and improve airway function
- Potential for additional benefit when combined with standard of care therapies
- Potential benefit in all CF patients, regardless of mutational status
- CB-280 is an investigational first-in-class orally dosed arginase inhibitor in Phase 1b trials supported by the Cystic Fibrosis Foundation

CB-280 Randomized double blind Phase 1B trial in cystic fibrosis





Well Positioned for Success

Financials

- Cash and investments of \$115.2M at December 31, 2021
- 73.3M shares outstanding
- No debt
- Significant funding from potential future milestones

2021 Milestones

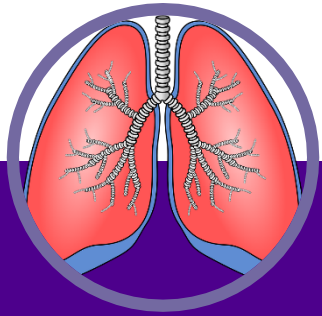
TELAGLENASTAT

Enroll combination trials with Pfizer

CB-280 Report results from ongoing trial in cystic fibrosis patients



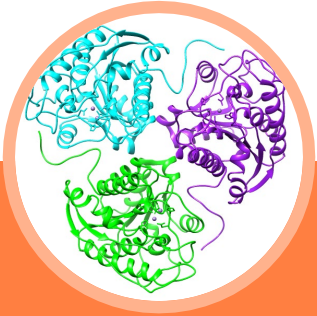
Investment Highlights



**Clinical
Development
Program in
NSCLC**



**Strong
Partnerships
with Industry
Leaders**



**Established
Drug Discovery
Engine**



**Diversified
Portfolio**



**Experienced
Founder and
Management
Team**