

Early Intervention with an Oral Treatment for Macular Degeneration

Mission for Vision Nasdaq: BLTE

Forward-Looking Statements and Legal Disclaimer

This presentation (including any oral briefing and any question-and-answer in connection with it) is not intended to, and does not constitute, represent or form part of any offer, invitation or solicitation of any offer to purchase, otherwise acquire, subscribe for, exchange, sell or otherwise dispose of, any securities of Belite Bio Inc ("Belite Bio") from any investor or in any jurisdiction in which such an offer or solicitation is not authorized or would be unlawful. No shares or other securities of Belite Bio are being offered to the public by means of this presentation. No offering of securities shall be made in the United States except pursuant to registration under the U.S. Securities Act of 1933, as amended, or an exemption therefrom. This presentation is being given on the condition that it is for use by the recipient for information purposes and to evaluate Belite Bio and the proposed offering of securities of Belite Bio and for no other purpose. Any failure to comply with these restrictions may constitute a violation of applicable securities laws.

Any statements in this presentation about Belite Bio's future expectations, plans and prospects constitute forward-looking statements for purposes of the safe harbor provisions under the Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements about the strategy, operations and future expectations and plans and prospects for the Company, and any other statements containing the words "expect," "intend", "plan," "predict," "target," "will," "could," "continue," and similar expressions.

This presentation contains forward-looking statements, including statements regarding the potential implications of clinical data for patients, and Belite Bio's advancement of, and anticipated preclinical activities, clinical development, regulatory milestones, and commercialization of its product candidates. Actual results may differ materially from those indicated in the forward-looking statements as a result of various important factors, including but not limited to Belite Bio's ability to demonstrate the safety and efficacy of its drug candidates; the clinical results for its drug candidates, which may not support further development or regulatory approval; the content and timing of decisions made by the relevant regulatory authorities regarding regulatory approval of Belite Bio's drug candidates; Belite Bio's ability to achieve commercial success for its drug candidates, if approved; Belite Bio's ability to obtain and maintain protection of intellectual property for its technology and drugs; Belite Bio's reliance on third parties to conduct drug development, manufacturing and other services; Belite Bio's limited operating history and Belite Bio's ability to obtain additional funding for operations and to complete the development and commercialization of its drug candidates; Belite Bio's ability to enter into additional collaboration agreements beyond its existing strategic partnerships or collaborations, and the impact of the COVID-19 pandemic on Belite Bio's clinical development, commercial and other operations, as well as those risks more fully discussed in the "Risk Factors" section in Belite Bio's filings with the U.S. Securities and Exchange Commission. All forward-looking statements are based on information currently available to Belite Bio, and Belite Bio undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law.

Market data and industry information used throughout this presentation are based on the knowledge of the industry and the good faith estimates of Belite Bio's management. The Company also relied, to the extent available, upon management's review of independent industry surveys and publications and other publicly available information prepared by a number of third-party sources. All of the market data and industry information used in this presentation involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. Although the Company believes that these sources are reliable, it cannot guarantee the accuracy or completeness of, and has not independently conducted verification of the relevant market data and industry information used herein. While the Company believes the estimated market position, market opportunity and market size information included in this presentation are generally reliable, such information, which is derived in part from the management's estimates and beliefs, is inherently uncertain and imprecise. No representations or warranties are made by the Company or any of its affiliates as to the accuracy of any such statements or projections. Projections, assumptions and estimates of our future performance and the future performance of the industry in which the Company operates are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described above. These and other factors could cause results to differ materially from those expressed in our estimates and beliefs and in the estimates prepared by independent parties.

Experienced Leadership Team

Belite Management Team



Tom Lin, MMED, PhD, MBA (Chairman, CEO)

- 10+ years of executive management roles in biotech
- Over 10 new drug developments in multiple therapeutic areas including ophthalmology
- University of Sydney, University of Melbourne, Harvard Medical School, Columbia University, London Business School, Hong Kong University



Hendrik Scholl, MD, MA (CMO)

- 25+ years of expertise in treating retinal diseases, including Stargardt disease and AMD
- Coordinating principal investigator of the largest natural history study of Stargardt disease (ProgStar Study)
- Participated in over 10 clinical studies both in Stargardt disease and AMD, over 280 publications in peer-reviewed journals
- University Eye Hospital Tübingen, University Eye Hospital Bonn, Wilmer Eye Institute at Johns Hopkins, University Eye Hospital Basel, Medical University of Vienna



Nathan Mata, PhD (CSO)

- 15+ years of ophthalmic drug development experience across numerous indications, including two NDAs (Durezol and Zirgan)
- Led clinical development efforts for the first RBP antagonist in advanced dry AMD and the first visual cycle modulator in dry AMD and STGD1
- Introduced the industry's first STGD1 ABCA4 knockout mice model
- University of Texas

Hao-Yuan Chuang, CFA, MBA, FRM (CFO)

- 13+ years of capital market experience; closed more than US\$32 billion of transactions
- Wanda, Suning, CITIC Securities
- Columbia University, London Business School, Hong Kong University

Belite Bio Pipeline Overview



- Tinlarebant is a novel, once daily oral tablet designed to bind to serum retinol binding protein 4 (RBP4) as a means to specifically reduce retinol
 delivery to the eye. This approach is intended to slow or halt the formation of the toxic retinol-derived by-products that are generated in the
 visual cycle and are implicated in progression of STGD1 and GA.
- Belite Bio believes that early intervention directed at emerging retinal pathology, which is not mediated by inflammation, would be the best approach to potentially slow disease progression in STGD1 & GA.
- <u>Unmet Market Opportunity:</u>
 - No FDA approved treatments for STGD1
 - No FDA approved orally administered treatments for GA
- Fast Track Designation & Rare Pediatric Disease in US and Orphan Drug designation in US / EU / JP, Pioneer Drug designation in JP, for STGD1
- 14 active patent families; composition of matter patent until at least 2040 without patent term extension



Tinlarebant Overview



Reference: (1) Wan LingWong et al. Global prevalence of AMD and disease burden projection for 2020 and 2040. 2014; (2) Prevalence Estimates Vision and Eye Health Surveillance System Vision Health Initiative (VHI) CDC, 2022





Mechanism of Tinlarebant Action

Tinlarebant

Bisretinoids are derived from vitamin A (retinol). Therefore, reducing the delivery of retinol to the eye is expected to reduce bisretinoid levels in the eye leading to preservation of the retina

Tinlarebant Induced

Down-Regulation

Visual Pigment

Visual Chromophore

Enzymes

Retinoids



Similar Pathophysiology in STGD1 & GA

- STGD1 and GA share a similar pathophysiology characterized by excessive accumulation of cytotoxic bisretinoids, retinal cell death, and loss of vision
- Vision loss occurs slowly, despite peripheral expansion of 'dead retina', until the disease reaches the center of the eye (the macula)
- Slowing or halting the spread of 'dead retina' is the intended effect of **Tinlarebant treatment**

STGD1: 61-YEAR-OLD FEMALE





+12 Months:

0.1 LogMAR

Baseline: 0.1 LogMAR

+24 Months: 0.0 LogMAR



+36 Months:

0.1 LogMAR



+57 Months: 0.5 LogMAR

GA: 73-YEAR-OLD FEMALE



Reference: Lindner et al. Differential Disease Progression in Atrophic Age-Related Macular Degeneration and Late-Onset Stargardt Disease. Invest Ophthalmol Vis Sci. 2017;58(2):1001-1007.



Fenretinide Proof-of-Concept Study

Reduction of RBP4 Slows Lesion Growth in GA Subjects Sirion's Ph 2 Proof-of-Concept Fenretinide Study in GA Reinforces Tinlarebant Potential



Fenretinide is an orally administered synthetic retinoid

- Developed as an anti-cancer drug
- Competes with retinol for binding to RBP4 as a side effect

Tinlarebant is designed to overcome the lower potency and limited bioavailability of fenretinide

Agent	Ki RBP4
Tinlarebant	2 nM
Fenretinide	200 nM



Reference: Mata et al. Investigation of oral fenretinide for treatment of geographic atrophy in age-related macular degeneration. Retina. 2013 Mar;33(3):498-507.



Phase 2 STGD1 Trial

Clinical Trial Design Overview in STGD1 Phase 2



	STGD1 Phase 2 "LBS-008-CT02" (Preliminary 24-Month Interim Data Available)
Enrollment	13 subjects* (QDAF, no DDAF)**
Sites	Australia & Taiwan
Masking	Open Label
Placebo	N/A
Treatment duration	2 years
Primary measures	Safety & tolerability, optimal dose
Other measures	DDAF, QDAF, BCVA, SD-OCT, microperimetry
Interim analysis	Yes
Key inclusion criteria	12-18 years old, diagnosed STGD1 with at least one mutation identified in the ABCA4 gene

*LBS-008-CT02 initially enrolled 13 subjects in Australia and Taiwan. One subject in Australia was lost to follow up, therefore 12 subjects with complete 24-month data were evaluated. **DDAF = definitely decreased autofluorescence; QDAF = questionably decreased autofluorescence.

Ph2 24-month: Reduction of Plasma RBP4 Levels



- The 5 mg daily dose was effective to reduce RBP4 level by a mean of approximately 80% relative to baseline
- RPB4 levels returned to 87% of the baseline value at End of Study (28-days following drug cessation)
- Recovery of RBP4 concentration correlated well with the decreased tinlarebant exposure

Ph2 24-month: Sustained Lower Lesion Growth Compared to ProgStar

- A comparison of incident DDAF lesion growth among ProgStar subjects with similar baseline characteristics as subjects in LBS-008-CT02 (i.e, ≤ 18 years old) was performed



- No development of DDAF in 5 of 12 subjects at the 24-month timepoint
- A comparison of the 24-month DDAF lesion growth between Tinlarebant-treated subjects and ProgStar participants possessing similar baseline characteristics (aged ≤18 years) showed a sustained lower DDAF lesion growth in Tinlarebant-treated subjects over the 24-month treatment period (p<0.001)

ABCA4 Mutations in the Phase 2 Study Cohort

- Severe biallelic ABCA4 mutations were found in 11 of 13 subjects (Subjects 3 and 5 harbored one moderate allele each)
- In vitro testing of the moderate alleles in Subjects 3 and 5 showed pathogenicity
- Variants with CADD score
 >20 predicted to be among the 1% most deleterious

(1) Combined Annotation–Dependent Depletion (CADD) https://cadd.gs.washington.edu/

N/A:	Not	avai	labl	е
------	-----	------	------	---

Subject	cDNA change	Protein change	CADD v1.6 ⁽¹⁾	Assessment	Function tested in vitro	ClinVar
1	c.1922G>C	p.Cys641Ser	25.7	likely severe		not provided
1	c.2905A>G	p.Lys969Glu	28.9	likely severe		Pathogenic
2	c.768G>T	p.(Leu257Valfs*17)	23.1	severe	yes	Pathogenic/Likely pathogenic
2	c.[1532G>A;6006-1G>C]	p.[Arg511His;?]	15.3; 34	severe		not provided
3	c.4539+2028C>T	p.[=,Arg1514Leufs*36]	1.79	moderate	yes	Pathogenic/Likely pathogenic
3	c.2894A>G	p.Asn965Ser	24.8	severe	yes	Pathogenic
4	c.2576del	p.Gln859Argfs*41	N/A	severe		Pathogenic
4	c.[2588G>C;5603A>T]	p.[Gly863Ala;Asn1868lle]	31; 23.3	moderate/severe	yes; yes	Likely pathogenic
5	c.3260A>G	p.Glu1087Gly	29.5	likely severe		Pathogenic
5	c.5714+5G>A	p.[=,Glu1863Leufs*33]	19.1	moderate	yes	Pathogenic/Likely pathogenic
6	c.5461-10T>C	p.[Thr1821Aspfs*6,Thr1821Valfs*13]	16.8	severe	yes	Pathogenic
6	c.6079C>T	p.Leu2027Phe	27.6	severe	yes	Pathogenic/Likely pathogenic
7	c.634C>T	p.Arg212Cys	26.3	severe	yes	Pathogenic/Likely pathogenic
7	c.2894A>G	p.Asn965Ser	24.8	severe	yes	Pathogenic
8	c.161G>A	p.Cys54Tyr	33	severe	yes	Pathogenic/Likely pathogenic
8	c.4139C>T	p.Pro1380Leu	25.3	moderate/severe	yes	Pathogenic/Likely pathogenic
9	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
9	c.5645T>C	p.Met1882Thr	24.8	likely severe		Uncertain significance
10	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
10	c.5645T>C	p.Met1882Thr	24.8	likely severe		Uncertain significance
11	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
11	c.5761G>A	p.Val1921Met	25.5	likely severe		Pathogenic/Likely pathogenic
12	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
12	c.5645T>C	p.Met1882Thr	24.8	likely severe		Uncertain significance
13	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
13	c.5645T>C	p.Met1882Thr	24.8	likely severe		Uncertain significance

*ABCA*4 Mutations in the Phase 2 Study Cohort (cont.)



- Subjects 1, 3, 4, 12, and 13
 - Did not develop atrophic lesions during the Phase
 2 study
 - Despite harboring severe or likely severe alleles

3	Subject	cDNA change	Protein change	CADD v1.6 ⁽¹⁾	Assessment	Function tested in vitro	ClinVar
nic	1	c.1922G>C	p.Cys641Ser	25.7	likely severe		not provided
	1	c.2905A>G	p.Lys969Glu	28.9	likely severe		Pathogenic
se	2	c.768G>T	p.(Leu257Valfs*17)	23.1	severe	yes	Pathogenic/Likely pathogenic
	2	c.[1532G>A;6006-1G>C]	p.[Arg511His;?]	15.3; 34	severe		not provided
	3	c.4539+2028C>T	p.[=,Arg1514Leufs*36]	1.79	moderate	yes	Pathogenic/Likely pathogenic
aro	3	c.2894A>G	p.Asn965Ser	24.8	severe	yes	Pathogenic
-16	4	c.2576del	p.Gln859Argfs*41	N/A	severe		Pathogenic
	4	c.[2588G>C;5603A>T]	p.[Gly863Ala;Asn1868lle]	31; 23.3	moderate/severe	yes; yes	Likely pathogenic
	5	c.3260A>G	p.Glu1087Gly	29.5	likely severe		Pathogenic
[5	c.5714+5G>A	p.[=,Glu1863Leufs*33]	19.1	moderate	yes	Pathogenic/Likely pathogenic
	6	c.5461-10T>C	p.[Thr1821Aspfs*6,Thr1821Valfs*13]	16.8	severe	yes	Pathogenic
	6	c.6079C>T	p.Leu2027Phe	27.6	severe	yes	Pathogenic/Likely pathogenic
	7	c.634C>T	p.Arg212Cys	26.3	severe	yes	Pathogenic/Likely pathogenic
	7	c.2894A>G	p.Asn965Ser	24.8	severe	yes	Pathogenic
	8	c.161G>A	p.Cys54Tyr	33	severe	yes	Pathogenic/Likely pathogenic
	8	c.4139C>T	p.Pro1380Leu	25.3	moderate/severe	yes	Pathogenic/Likely pathogenic
	9	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
	9	c.5645T>C	p.Met1882Thr	24.8	likely severe		Uncertain significance
	10	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
	10	c.5645T>C	p.Met1882Thr	24.8	likely severe		Uncertain significance
	11	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
	11	c.5761G>A	p.Val1921Met	25.5	likely severe		Pathogenic/Likely pathogenic
	12	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
	12	c.5645T>C	p.Met1882Thr	24.8	likely severe		Uncertain significance
	13	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
	13	c.5645T>C	p.Met1882Thr	24.8	likely severe		Uncertain significance

*ABCA*4 Mutations in the Phase 2 Study Cohort (cont.)



- Subjects 9 & 10 (brothers)
- Subjects 12 & 13 (brother/sister)
- These 4 Subjects harbor identical mutations
- BCVA and lesion data show a different course of disease

Subject	cDNA change	Protein change	CADD v1.6 ⁽¹⁾	Assessment	Function tested in vitro	ClinVar
1	c.1922G>C	p.Cys641Ser	25.7	likely severe		not provided
1	c.2905A>G	p.Lys969Glu	28.9	likely severe		Pathogenic
2	c.768G>T	p.(Leu257Valfs*17)	23.1	severe	yes	Pathogenic/Likely pathogenic
2	c.[1532G>A;6006-1G>C]	p.[Arg511His;?]	15.3; 34	severe		not provided
3	c.4539+2028C>T	p.[=,Arg1514Leufs*36]	1.79	moderate	yes	Pathogenic/Likely pathogenic
3	c.2894A>G	p.Asn965Ser	24.8	severe	yes	Pathogenic
4	c.2576del	p.Gln859Argfs*41	N/A	severe		Pathogenic
4	c.[2588G>C;5603A>T]	p.[Gly863Ala;Asn1868lle]	31; 23.3	moderate/severe	yes; yes	Likely pathogenic
5	c.3260A>G	p.Glu1087Gly	29.5	likely severe		Pathogenic
5	c.5714+5G>A	p.[=,Glu1863Leufs*33]	19.1	moderate	yes	Pathogenic/Likely pathogenic
6	c.5461-10T>C	p.[Thr1821Aspfs*6,Thr1821Valfs*13]	16.8	severe	yes	Pathogenic
6	c.6079C>T	p.Leu2027Phe	27.6	severe	yes	Pathogenic/Likely pathogenic
7	c.634C>T	p.Arg212Cys	26.3	severe	yes	Pathogenic/Likely pathogenic
7	c.2894A>G	p.Asn965Ser	24.8	severe	yes	Pathogenic
8	c.161G>A	p.Cys54Tyr	33	severe	yes	Pathogenic/Likely pathogenic
8	c.4139C>T	p.Pro1380Leu	25.3	moderate/severe	yes	Pathogenic/Likely pathogenic
9	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
9	c.5645T>C	p.Met1882Thr	24.8	likely severe		Uncertain significance
10	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
10	c.5645T>C	p.Met1882Thr	24.8	likely severe		Uncertain significance
11	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
11	c.5761G>A	p.Val1921Met	25.5	likely severe		Pathogenic/Likely pathogenic
12	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
12	c.5645T>C	p.Met1882Thr	24.8	likely severe		Uncertain significance
13	c.1804C>T	p.Arg602Trp	24.7	severe	yes	Pathogenic/Likely pathogenic
13	c.5645T>C	p.Met1882Thr	24.8	likely severe		Uncertain significance

Visual Acuity Outcomes During the Phase 2 Study

- Visual acuity was stabilized during the study with a mean loss of 5 letters in the cohort over 24 months of treatment (2.5 letters lost/year, left panel)*
- For the 6 subjects with prior BCVA loss:
 - Pre-enrollment, mean BCVA loss pre-enrollment was ~10 letters/year
 - Following 24 months of treatment, mean BCVA loss of was 6.1 letters (3 letters/year, right panel)*



*Mean BCVA values at each timepoint were used to calculate the mean BCVA change over 24 months

Ph2 24-month: Well-Tolerated Drug-Related Adverse Events

Adverse Events	Severity	Frequency (# and % of patients)
Xanthopsia/Chromatopsia	Mild	10/13 (76.9%)
Delayed Dark Adaptation	Mild	9/13 (69.2%)
Night Vision Impairment	Mild	1/13 (7.7%)
Increasing error score in FM100	Mild	1/13 (7.7%)
Intermittent headaches	Mild	2/13 (15.4%)

• Tinlarebant (5 mg p.o., daily) continues to be **safe** and **well tolerated** in adolescent STGD1 patients

Tinlarebant

- Tinlarebant treatment produced a mean 80% reduction of RBP4 (from baseline) throughout the study
- Delayed Dark Adaptation and Xanthopsia/Chromatopsia are the most common drug related ophthalmic AEs
- All instances of Delayed Dark Adaptation, Night Vision Impairment, and Xanthopsia/Chromatopsia were mild and transient
- No severe and moderate drug related AEs reported and no AEs requiring discontinuation of treatment
- No clinically significant findings in relation to vital signs, physical exams, cardiac health, or organ functions



DRAGON & DRAGON II STGD1 Trials

DRAGON & DRAGON II Clinical Trial Design in STGD1

Reduction in lesion growth rate (DDAF) as measured by retinal imaging is the FDA accepted primary endpoint in STGD1 and GA

	STGD1 "DRAGON" Phase 3 ⁽¹⁾	STGD1 "DRAGON II" Phase 1b/2/3	
Enrollment	104 subjects (have DDAF)	60 subjects (have DDAF)	
Sites	Global	Japan, US, UK	
Randomization	2:1 ratio (Tinlarebant : Placebo)	1:1 ratio (Tinlarebant : Placebo)	
Masking	Double Blind		
Treatment duration	2 years		
Primary measures	Efficacy as measured through DDAF lesion growth rate, safety & tolerability		
Other measures	QDAF, BCVA, SD-OCT, microperimetry		
Interim analysis	Yes		
Key inclusion criteria	12-20 years old, diagnosed STGD1 with at least 1 mutation identified in the ABCA4 gene, atrophic lesion size within 3 disc areas (7.62 mm ²), a BCVA of 20/200 or better		

⁽¹⁾ FDA may require another clinical trial depending on the data from the ongoing Phase 3 study.



Phase 3 PHOENIX Trial in Geographic Atrophy

Tinlarebant: ≥ 70% Reduction of RBP4

Phase 1, 5mg Daily Dosing in Healthy Adults: Mean Percent Reduction of RBP4 (excludes placebo)



Clinical Trial Design Overview in GA

- Established Efficacy Endpoint Reduction in lesion growth rate (DDAF) as measured by retinal imaging is the FDA accepted primary endpoint for STGD1 and GA
- Early Intervention Targeting patients with small lesion size to potentially slow disease progress at an early stage
- Oral Once a Day Treatment well suited for long-term treatment for chronic diseases
- Broad Potential Primary focus on GA; potential to treat earlier stages (e.g., intermediate AMD)

	GA Phase 3 "PHOENIX" ⁽¹⁾
Enrollment	Approximately 430 subjects targeted (Enrolling)
Sites	Global
Masking	Double Blind
Placebo	2:1 ratio (Tinlarebant : Placebo)
Treatment duration	2 years
Primary measures	Slowing of atrophic lesion growth, safety & tolerability
Other measures	BCVA, SD-OCT, microperimetry
Interim analysis	Yes



Thank You

For more info please visit: www.belitebio.com