UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): January 7, 2019

bluebird bio, Inc.
(Exact name of Registrant as Specified in Its Charter)

DELAWARE	001-35966	13-3680878
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(IRS Employer Identification No.)
60 Binney Street, Cambridge, MA (Address of Principal Executive Offices)		02142 (Zip Code)

Registrant's Telephone Number, Including Area Code: (339) 499-9300

Not Applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2. below):
☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 7.01 Regulation FD Disclosure.

bluebird bio, Inc. (the "Company" or "bluebird") will be conducting meetings with investors attending the 37th Annual J.P. Morgan Healthcare Conference in San Francisco, California beginning on January 7, 2019. As part of these meetings, the Company will present the slides furnished to this Current Report as Exhibit 99.1, which is incorporated herein by reference.

The information in Item 7.01 of this Current Report on Form 8-K and Exhibit 99.1 attached hereto is intended to be furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 8.01 Other Events.

On January 7, 2019, bluebird issued a press release announcing that bluebird entered into a license agreement with Inhibrx, Inc. for the research, development and commercialization of cell therapy products for the treatment of cancer.

The full text of bluebird's press release regarding this announcement is filed as Exhibit 99.2 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No.	Description
99.1	Investor presentation provided by bluebird bio, Inc. on January 7, 2019.
99.2	Press release issued by bluebird bio, Inc. on January 7, 2019.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: January 7, 2019

bluebird bio, Inc.

By:/s/ Jason F. Cole
Jason F. Cole
Chief Legal Officer

Exhibit 99.1

Making Hope A Reality – bluebird style

January 2019

NASDAQ: BLUE

Forward-Looking Statements

These slides and the accompanying oral presentation contain forward-looking statements and information. The use of words such as “may,” “might,” “will,” “should,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “project,” “intend,” “future,” “potential,” or “continue,” and other similar expressions are intended to identify forward-looking statements. For example, all statements we make regarding the initiation, timing, progress and results of our preclinical and clinical studies and our research and development programs, our ability to advance product candidates into, and successfully complete, clinical studies, and the timing or likelihood of regulatory filings and approvals are forward looking. All forward-looking statements are based on estimates and assumptions by our management that, although we believe to be reasonable, are inherently uncertain. All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those that we expected. These statements are also subject to a number of material risks and uncertainties that are described in our most recent quarterly report on Form 10-Q, as well as our subsequent filings with the Securities and Exchange Commission. Any forward-looking statement speaks only as of the date on which it was made. We undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise, except as required by law.

Potential 2019 Catalysts

By Mid Year

LentiGlobin TDT
207 & 212 Data Update

LentiGlobin SCD
HGB-206 Group C Data Update

bb2121 MM
KarMMa-2 & KarMMa-3 Study Start*

Pipeline
Analyst Day

By End of Year

LentiGlobin TDT
EU Approval & First Launch
Potential U.S. Filing
207 & 212 Data Update

LentiGlobin SCD
HGB-210 Study Start
HGB-206 Group C Data Update

bb2121 MM
CRB-401 Data Update*
KarMMa-1 Data Update*

bb21217 MM
Data Update

Lenti-D CALD
Potential U.S./EU Filing

Cash Position as of September 30, 2018: $2.0B

CASH RUNWAY INTO 2022

*Driven by Celgene/BMS

WE **RECODE** FOR LIFE

RADICAL CARE

We care in a way that's intense and truly sets us apart.

THIS IS PERSONAL

Gene therapy is about saving lives one person at a time. And we are, each of us, personally all in.

PIONEERS WITH PURPOSE

We're exploring new frontiers for the sake of patients.

We **LIVE** By Our **Non-negotiables**

true blue | b colorful · b cooperative · b yourself

Our 2022 Vision -- Just Got BOLDER

LentiGlobin TDT
2019 EU Potential Approval
2020 U.S. Potential Approval

Lenti-D CALD
2020 Potential Approval

LentiGlobin SCD
2022 Potential Filing/Approval

bb2121 Multiple Myeloma
2020 Potential Approval

4 Products on the Market

5+ Clinical Programs

1-2 INDs per year starting in 2020

UNPRECEDENTED OPPORTUNITY

Anticipated research, development, regulatory and commercial milestones

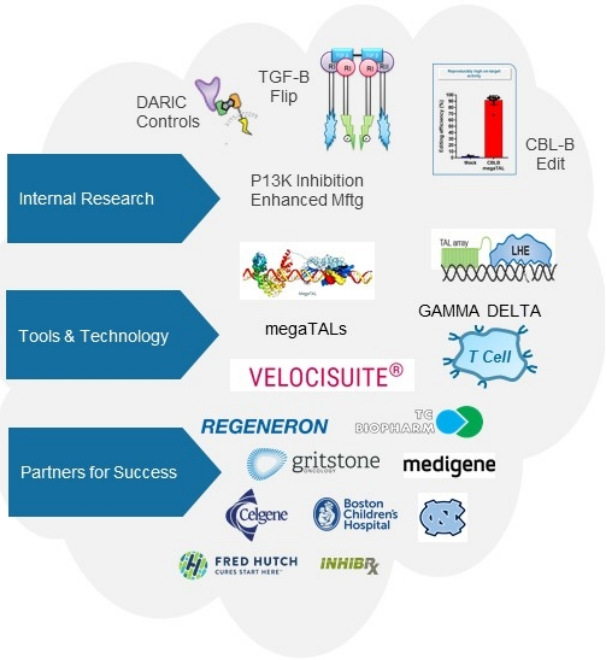
RECODE THE SCIENCE: R&D with SOUL

WHAT YOU SEE

PRODUCT CANDIDATES	PROGRAM AREA	PRECLINICAL	PHASE 1/2	PHASE 2/3	RIGHTS/PARTNER
	Severe Genetic Diseases				
Lenti-D™ Drug Product	Cerebral Adrenoleukodystrophy				Worldwide
LentiGlobin™ Drug Product	Transfusion-Dependent β-Thalassemia Non-β^0/β^0				Worldwide
	Transfusion-Dependent β-Thalassemia β^0/β^0				
	Sickle Cell Disease			**	
BCL11a shRNA (miR)*	Sickle Cell Disease				Worldwide
	Cancer				
bb2121	Multiple Myeloma Fourth Line				Celgene
	Multiple Myeloma Third Line**				
	Multiple Myeloma Second Line**				
	Multiple Myeloma First Line**				
bb21217	Multiple Myeloma Fourth Line				Celgene

*Development is led by Dana-Farber/Boston Children's Cancer and Blood Disorders Center
**Planned studies

WHAT YOU DON'T SEE



Anti-Pure Play Principles - What Do We Mean?

RECODING TRADITIONAL R&D

Our Philosophy Applied in a Tumor Microenvironment

TUMOR TARGET

REGENERON

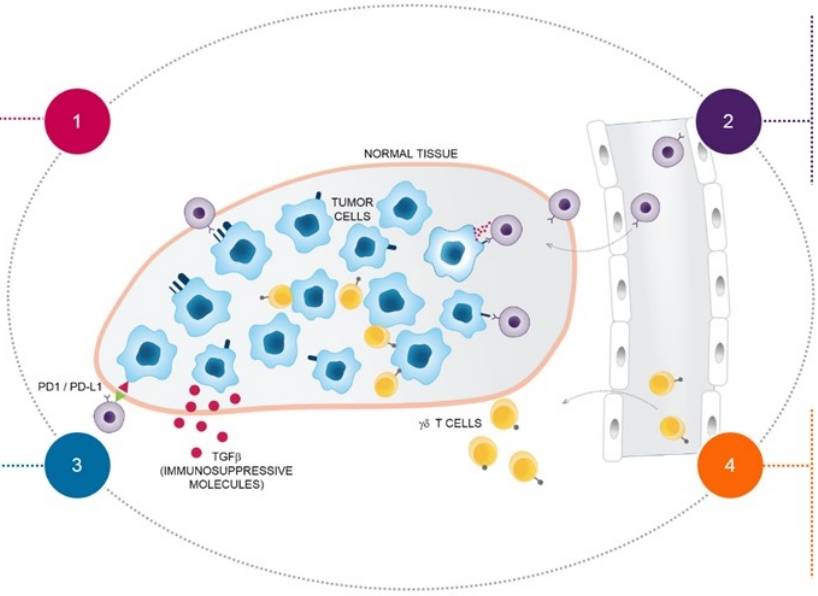
gritstone ONCOLOGY

BINDER TECHNOLOGY

REGENERON

medigene INHIBRX

gritstone ONCOLOGY



POTENCY ENHANCEMENT

PREGENEN

TAL array

LHE

T CELL TYPES / ALLO

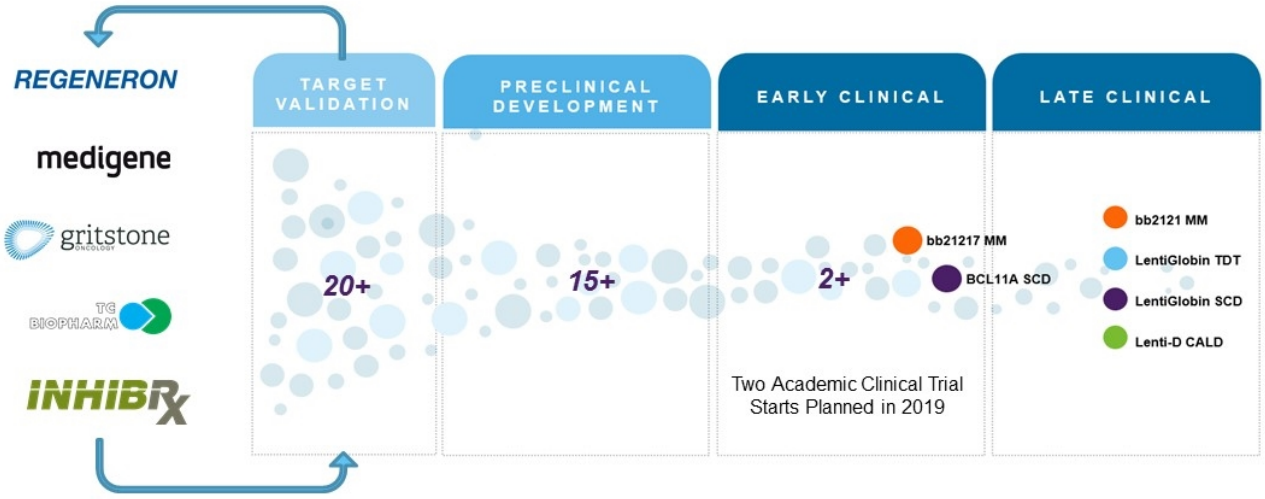
CRB-402

T Cell

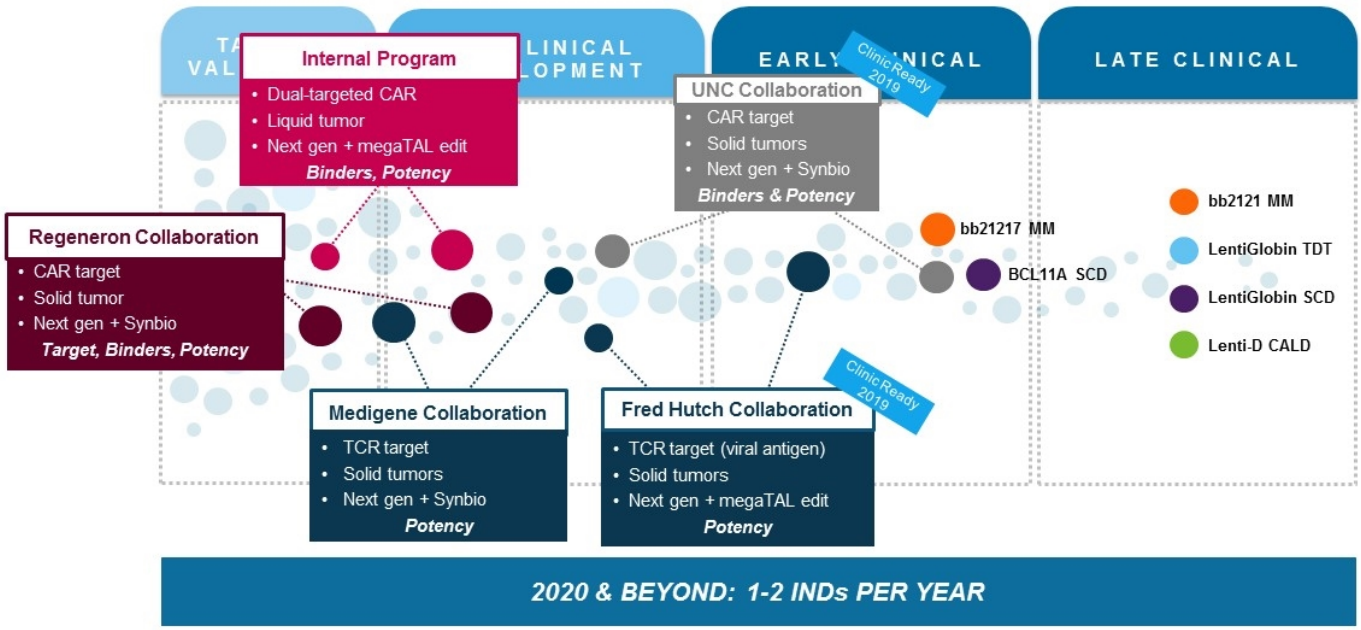
TC BIOPHARM

P13K Inhibition Enhanced Mftg

Oncology Pipeline Enabled by Our Partners and Our Core Technologies



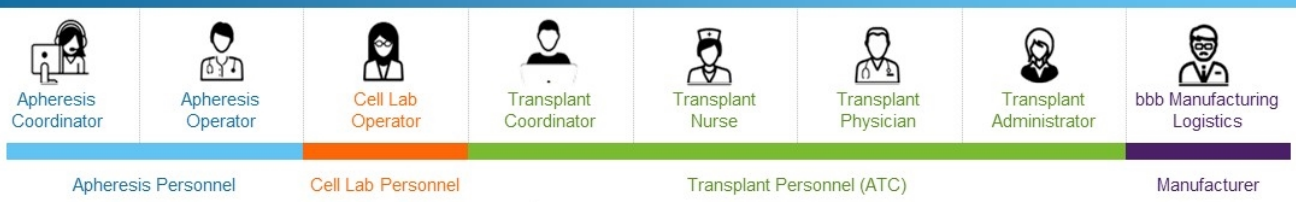
Research Strategy Yielding Emerging Oncology Pipeline



RECODE THE SYSTEMS: ANYTHING BUT TRADITIONAL

Platform Is Gearing Up for Launch

Preparing to Serve Patients in Europe in 2019



Launch Expectations:

1. Optimal patient experience through a seamless delivery network
2. Steady country by country launch with progressive build
3. Get the model right for long term success
4. Advance value-based payment over time reimbursement

1 Drug Product Manufacturing

Munich, Germany

&

9 Qualified Treatment Centers at 2019 Launch

3 - Germany
4 - Italy
2 - UK
4 - France (in 2020)*

*Will support future launches in 2020+

Value It: Time to Get It Right

The value our products bring to patients should stand on its own for all stakeholders

Value It : Quick Answer is Value Based Payment Over Time

BLUE "VALUE" PRINCIPLES

- Be focused on patient access to innovation
- Be creative and disruptive (if needed)
- Be flexible and share risk
- Be transparent and proactive with stakeholders
- Be proud
- Don't do stupid short sighted stuff!

CONSTRAINTS & AMBITIONS

UNMET NEED

- Heighten awareness of true unmet need in terms of impact on life expectancy and cost

VALUE EVIDENCE

- Deliver credible and rigorous value platform arguments/data for value

PAYMENT MODELS

- "Free Up" system to recognize value over time
- "Buy time" to prove enduring value
- Fix cost density constraint
- Fix policy constraints (e.g., best price)
- Fix "portability of cure" concern

Our Quest to Constantly Innovate Continues

Product Candidates	Program Area	Preclinical	Phase 1/2	Phase 2/3	Rights/Partner
	Severe Genetic Diseases				
Lenti-D™ Drug Product	Cerebral ALD				Worldwide
LentiGlobin® Drug Product	Transfusion-Dependent ß-Thalassemia			(Phase 3)	Worldwide
	Severe Sickle Cell Disease				Worldwide
BCL11a shRNA(miR)*	Severe Sickle Cell Disease				Worldwide
	Cancer				
bb2121	Multiple Myeloma				Celgene
bb21217	Multiple Myeloma				Celgene
Undisclosed Targets	Various Indications				Worldwide
	Early Research				
Early Pipeline	Undisclosed + Gene Editing				Worldwide

*Development is led by Boston Children's Hospital

COLLABORATORS

Boston Children's Hospital
Until every child is well

REGENERON

INHIBRX

gritstone ONCOLOGY

Celgene

TC BIOPHARM

medigene
innovative immunotherapies

Transfusion Dependent β-Thalassemia

bluebirdbio

Transfusion-Dependent β-Thalassemia (TDT)

- Inherited blood disease that requires lifelong, frequent blood transfusions and iron reduction therapy

PROGRAM OVERVIEW

- Filed MAA with European Medicines Agency
- General regulatory agreement with FDA for BLA filing
- Studies ongoing:
  - Northstar-2 (HGB-207)
  - Northstar-3 (HGB-212)
  - HGB-205
- Long-term follow-up: LTF-303

Transfusion-Dependent β-Thalassemia

NORTHSTAR STUDY	HGB-204	• Basis of EU filing • Original manufacturing process • All genotypes
HGB-205	HGB-205	• Basis of EU filing (with Northstar) • Original manufacturing process
NORTHSTAR-2 STUDY	HGB-207	• Basis of EU and U.S. filings • Refined manufacturing process • Non-β^0/β^0 genotypes
NORTHSTAR-3 STUDY	HGB-212	• β^0/β^0 genotypes • Refined manufacturing process

TDT Registration Strategy

General agreement with EU & US regulators on the registration path for LentiGlobin for the treatment of transfusion-dependent β-thalassemia

EU

Pursue **CONDITIONAL APPROVAL** in patients with non-β^0/β^0 genotypes on the basis of data from ongoing Northstar (HGB-204) & HGB-205 studies, as well as available data from Northstar-2 (HGB-207) study

ADAPTIVE PATHWAYS

PRIME

US

Pursue **approval** in adults and adolescents with non-β^0/β^0 genotypes based on data from ongoing pivotal Northstar-2 (HGB-207) trial

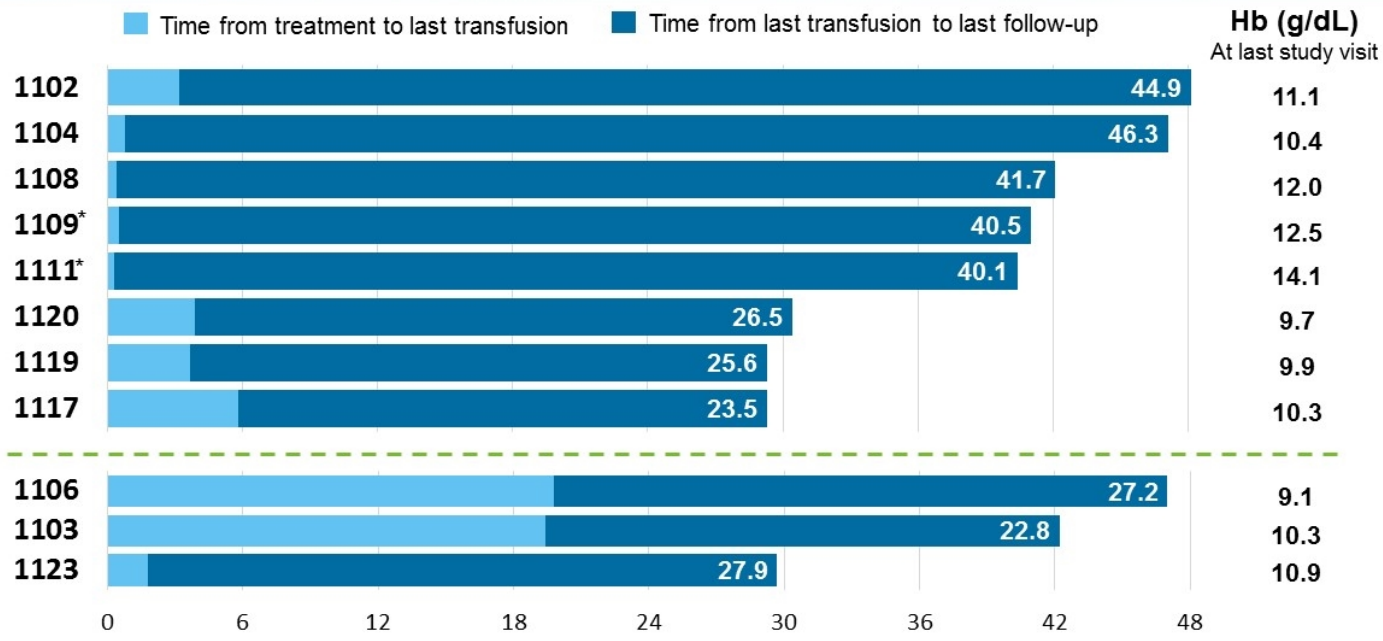
Pediatric population to be included as a cohort of HGB-207, rather than separate study

Submission for approval in β^0/β^0 patients to be based on ongoing Northstar-3 (HGB-212) study

BREAKTHROUGH THERAPY DESIGNATION

ORPHAN DRUG DESIGNATION

8/10 Patients with Non-β^0/β^0 Genotypes and 3/8 Patients with β^0/β^0 Genotypes are Free from Chronic RBC Transfusions



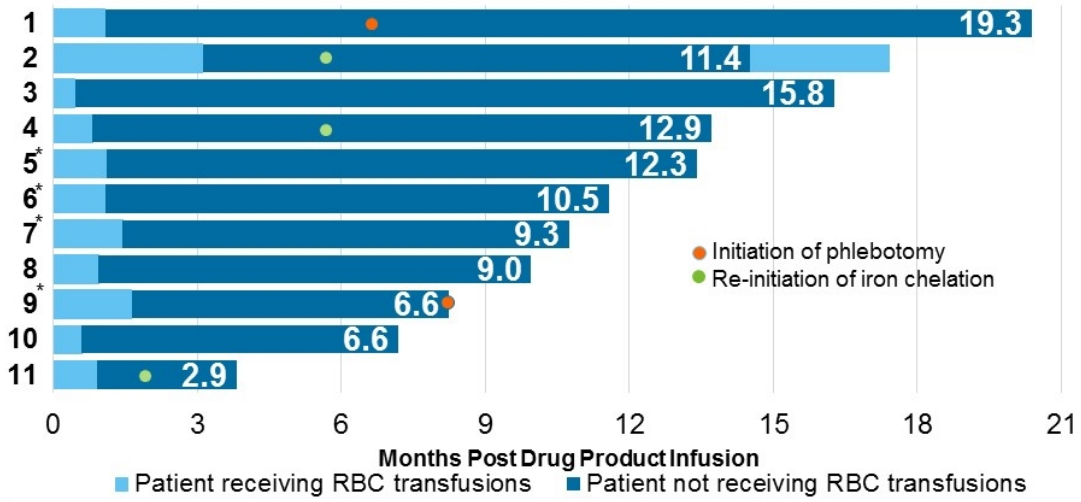
*Indicates male patients. Hb, hemoglobin; TI, transfusion independence (weighted average Hb ≥9 g/dL without any red blood cell transfusions for ≥12 months)

Data as of September 14, 2018

10/11 Patients Are Transfusion Free with Hemoglobin >11g/dL

NORTHSTAR-2 STUDY

Time free from chronic transfusions in patients with ≥3 months follow-up



	Hb (g/dL) At last study visit	Peripheral VCN At last study visit
1	13.3	3.2
2	11.3‡	0.4
3	11.1	2.2
4	12.1	1.7
5*	12.3	1.7
6*	12.5	2.9
7*	11.6	5.6
8	12.4	1.1
9*	11.9	4.9
10	11.6	5.4
11	11.2	5.6

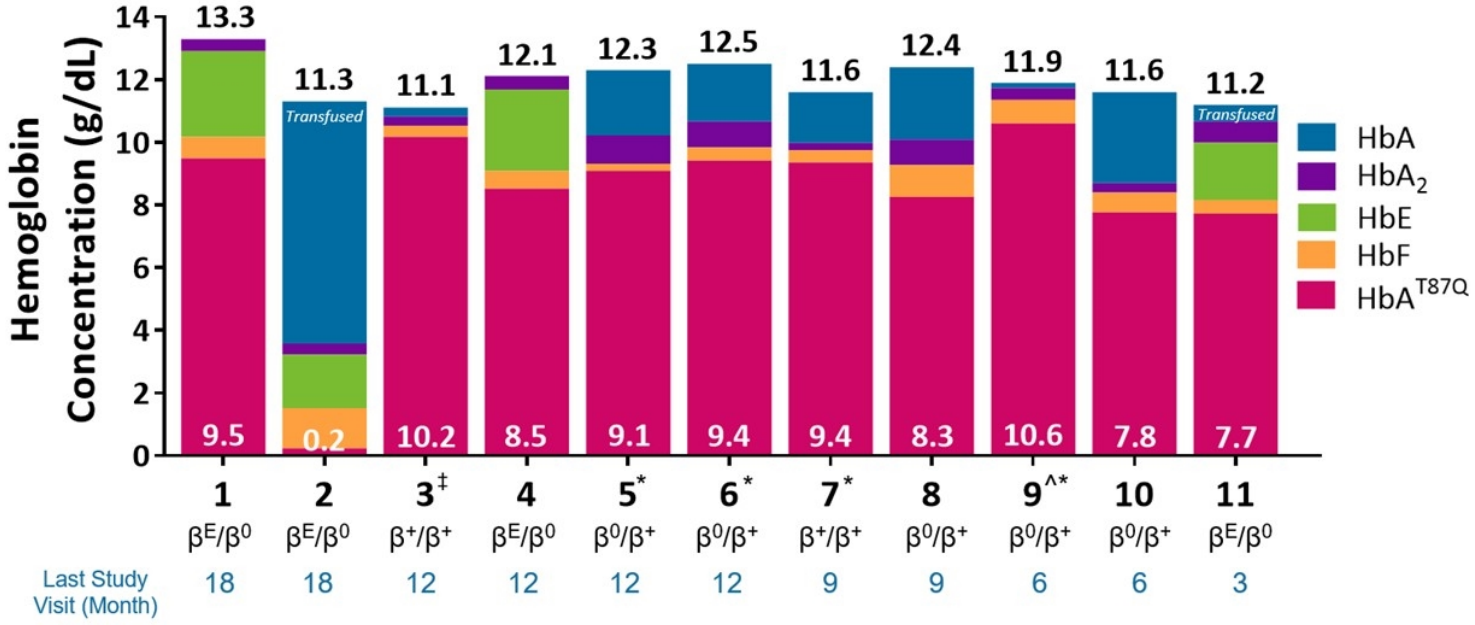
Safety profile post DP infusion remains consistent with myeloablative conditioning

Patients 1 and 3 have achieved the protocol definition of transfusion independence†

*Male patients; ‡Hb supported by transfusions; †Weighted average Hb ≥9 g/dL without any RBC transfusions for ≥12 months; Hb, hemoglobin; VCN, vector copy number (vector copies/diploid genome)

Data as of September 14, 2018

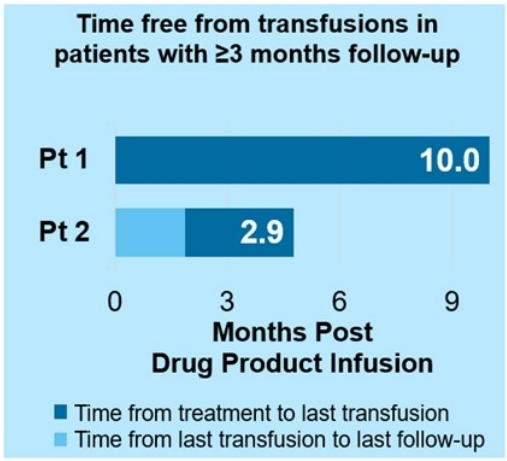
High Levels of Gene Therapy Derived HbA^{T87Q} in 10/11 Patients

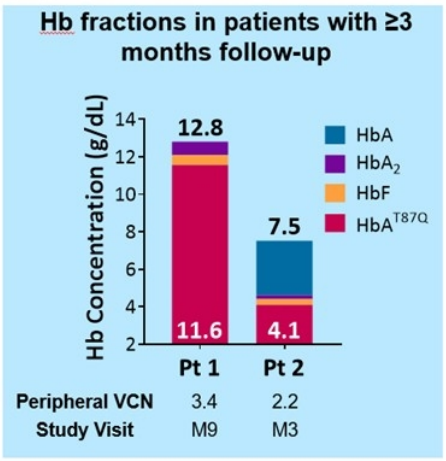


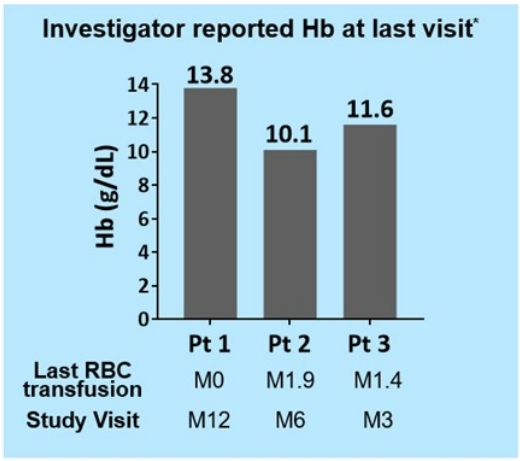
*Male patients; ‡Patient is homozygous for IVS-I-5 β-globin mutation; ^Patient is heterozygous for IVS-I-5 β-globin mutation. Hb, hemoglobin.

Data as of September 14, 2018

Normal Total Hemoglobin in First Northstar-3 β^0/β^0 Patient







Safety profile post-drug product infusion remains consistent with myeloablative conditioning

*Includes investigator reported data as of November 19, 2018, not from programmed statistical outputs

AEs, adverse events; DP, drug product; Hb, hemoglobin; VCN, vector copy number (vector copies/diploid genome)

Data as of September 14, 2018 unless otherwise noted

Sickle Cell Disease

bluebirdbio

Sickle Cell Disease (SCD)

- Severe blood disorder that causes anemia, frequent pain crises and shortened lifespan
- Global annual birth incidence ~ 300,000 – 400,000
- Mean age of death in the U.S. is 44 years[1]

PROGRAM OVERVIEW

- Plan to pursue accelerated development path based on hematological primary endpoint
  - Phase 3 study to begin in 2019
- HGB-206 amended and Group C expanded

[1]Paulukonis et al, California's Sickle Cell Data Collection Cohort, 2005-2015* ASH 2017*

Increasing Momentum to #ConquerSCD

2017

- March 2017, bluebird SCD case study published in *NEJM*
- July 2017, the FDA approved Endari (L-glutamine oral powder) to address acute complications of SCD

2018

- February 2018, Admiral Brett Giroir, M.D., appointed as Assistant Secretary for Health, HHS, is shining a spotlight on the toll of SCD and the need for improved treatment options
- March 2018, NHLBI launched "Cure SCD Initiative" spearheaded by Dr. Francis Collins
- October 2018, FDA-ASH Sickle Cell Disease Clinical Endpoints Workshop

"Unfortunately, some treated [SCD] patients will have no reduction of their symptoms and the disease will continue to progress," says Ann T. Farrell, M.D., director of the FDA's Division of Hematology Products, CDER. "***Better therapies are desperately needed***," Farrell explains. "We will continue to work with sponsors as much as possible to help remove roadblocks to new product development. ***It's important for the FDA to help as much as we can***."

FDA

Accelerated Development Plan Using Novel Composite Primary Endpoint Based on Hemoglobin

EXPANDED

Updated Primary Endpoint

Up to add'l 21 patients

Expanded age range

HGB-206 Group C

(Sickle Cell Disease, history of VOEs over 24 months)

Ongoing Phase 1/2, single arm, multi-center, U.S. study N=41 (Group C)

- Primary Endpoint: HbA^{T87Q} and Total Hb
- Key Secondary Endpoint:
  - Reduction in severe VOEs
- ≥12 years of age - ≤50 years of age

HGB-210

(Sickle Cell Disease, history of VOEs over 24 months)

Phase 3, single arm, multi-center, global study

- Primary Endpoint: HbA^{T87Q} and Total Hb
- Key Secondary Endpoint:
  - Reduction in severe VOEs

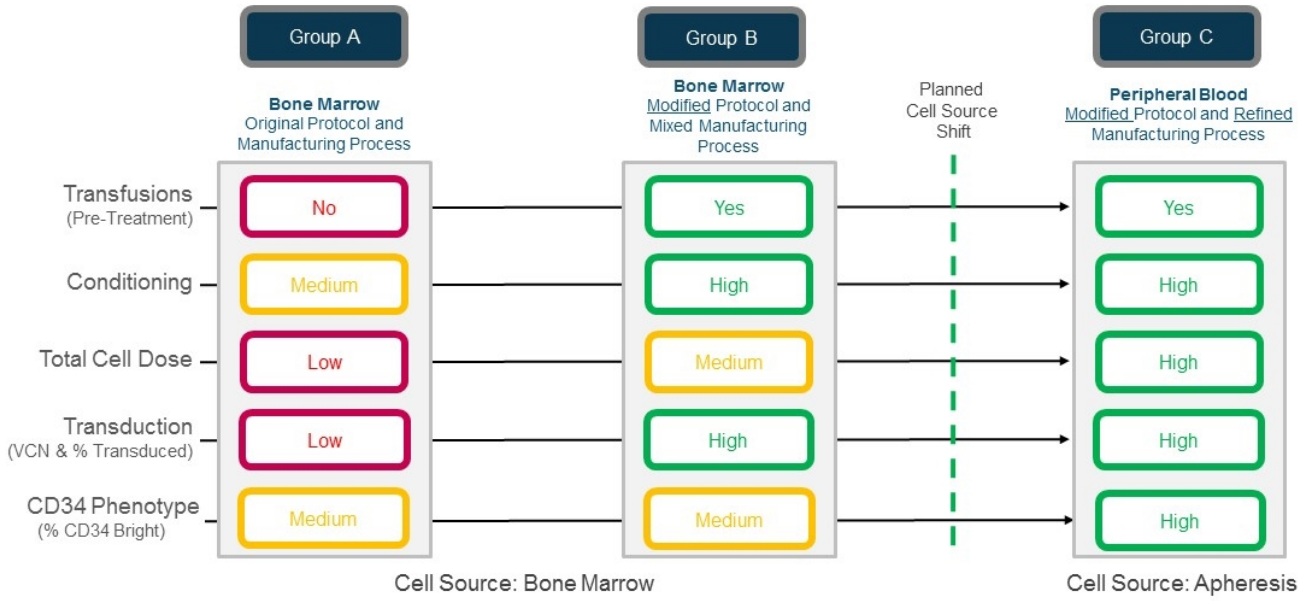
NEW

Planned for 2019

Additional Clinical Investigation in Other Patient Types and Ages Planned

Plans Based on Ongoing Engagement with Regulators

HGB-206: Evolution of LentiGlobin in SCD



Group C: Patient Characteristics
N=14 Patients Who Started Cell Collection

HGB-206

Parameter	Group C N=14
Age at consent median (min – max), years	**25.5** (18 – 36)
Gender	**6 F 8 M**
Genotype β^S/β^S	**14**
Prior SCD History	
Hydroxyurea use, n	**8**
Recurrent VOCs[*], n Annualized no. of events, median (min – max)	**9** **6.5** (3.5 – 14.0)
ACS[†], n Annualized no. of events, median (min – max)	**2** **1** (1 – 1)
Any history of stroke, n	**3**
TRJV >2.5 m/s, n	**0**

* ≥2 events/year in preceding 2 years; † ≥2 episodes in preceding 2 years, with at least one episode in the past year or in the year prior to the initiation of a regular transfusion program

ACS, acute chest syndrome; F, female; M, male; VOC, vaso-occlusive crisis; pRBC, packed red blood cell; TRJV, tricuspid regurgitant jet velocity

Data as of September 14, 2018

Group C: Safety Profile Generally Consistent with Myeloablative Busulfan Conditioning

HGB-206

Non-hematologic* grade ≥ 3 AEs Post-DP infusion in ≥2 patient	**n (%)** **N=9**
Febrile neutropenia	6 (67)
Stomatitis	6 (67)
Serious AEs* Post-DP infusion in ≥1 patient	**n (%)** **N=9**
Abdominal pain	1 (11)
Depression	1 (11)
Drug withdrawal syndrome	1 (11)
Hallucination	1 (11)
Mucosal inflammation	1 (11)
Nausea	1 (11)
Non-cardiac chest pain	1 (11)
Splenic hematoma	1 (11)
Vomiting	1 (11)

*Hematologic AEs commonly observed post-transplant have been excluded

- **No VOEs post-DP infusion in 9 patients**
- SAEs were reported in 4 patients
  - No AE considered related to DP
  - No cases of VOD observed to date
- No vector-mediated RCL detected to date
- Integration site (IS) analysis data available for two patients at 6 month visit
  - Total IS: Showed consistent polyclonality
- One patient in Group A: MDS diagnosed 36 months post-DP infusion: no evidence of LVV integration in dysplastic cells; monosomy 7 mutation identified (associated with sporadic and chemotherapy-related MDS)

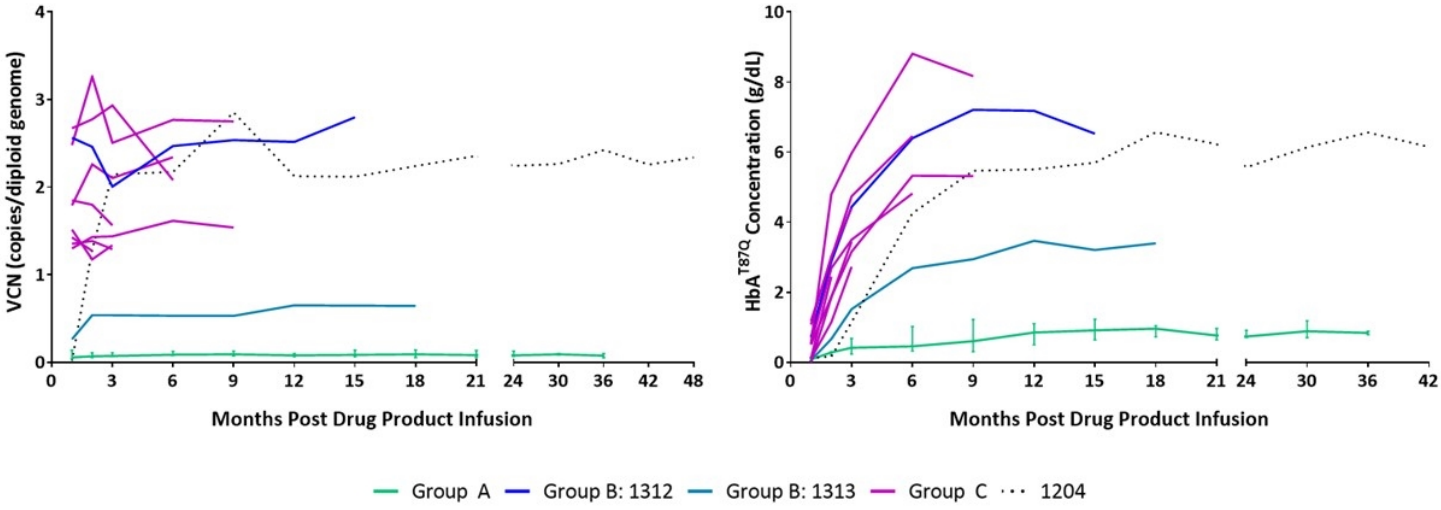
AE, adverse event; DP, drug product; RCL, replication competent lentivirus; SAE, serious adverse event; VOD, veno occlusive liver disease; VOE, vaso-occlusive event; LVV, lentiviral vector

Critical Elements of LentiGlobin Success in SCD
Fundamentally Improving Red Blood Cell Physiology

GOAL	GROUP C RESULTS
High & Stable Levels of HbA^{T87Q} Derived Hemoglobin & Total Hemoglobin	• 4 out of 4 patients with ≥47% anti-sickling Hb (range: 47% - 62%) at 6 months • Sustained expression of HbA^{T87Q} levels through 9 months follow-up
Correction of Hemolysis	• Normalization of reticulocyte counts, lactate dehydrogenase and bilirubin levels
Pancellular Expression of HbA^{T87Q} Resulting in Reduction of Sickling	• Pancellular expression shown in two independent assays of patient cells • Reduction of sickling of patient RBCs at levels consistent with sickle trait cells
Improvement of Clinical Outcomes	• Increased total hemoglobin and robust HbA^{T87Q} production • No VOEs in early clinical follow up

Group C: Stable Peripheral Blood VCN, HbA^{T87Q} Trajectory Robust and Consistent

HGB-206

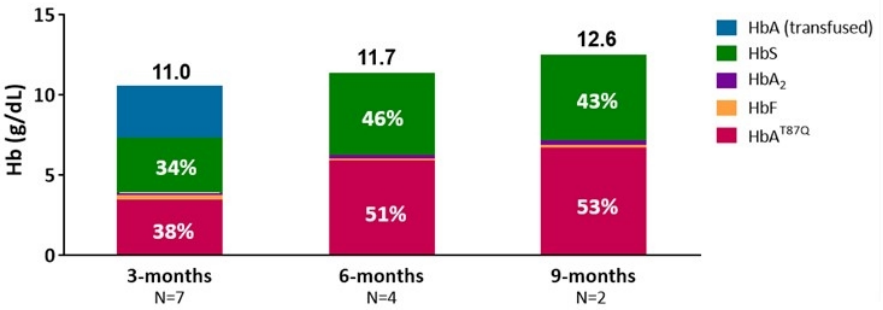


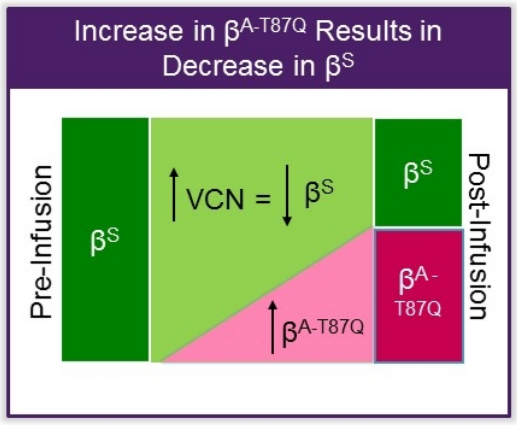
For Group A patients, medians (Q1, Q3) depicted; Group A patients with month 36 study visit (N=2)

Data as of September 14, 2018

Group C Patients Achieving Sickle Trait-like Hemoglobin Distribution

HGB-206





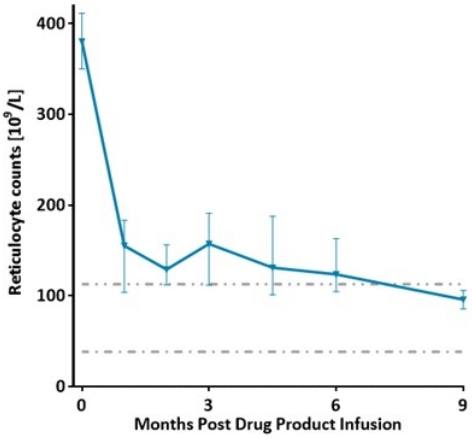
βS-globin decreasing with increasing HbAT87Q
(average concentration of hemoglobin per cell has not changed post-treatment)

Data as of September 14, 2018

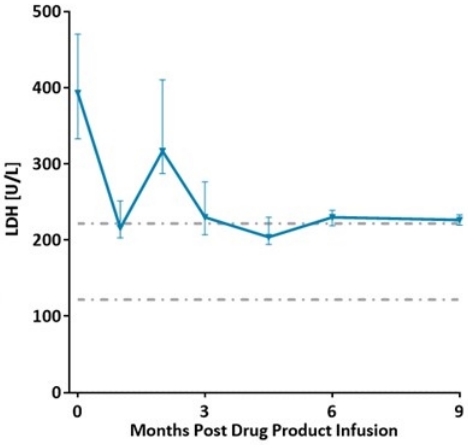
Impact on Clinical Outcomes of SCD in Group C
Normalization of Key Biomarkers of Hemolysis Over Time

HGB-206

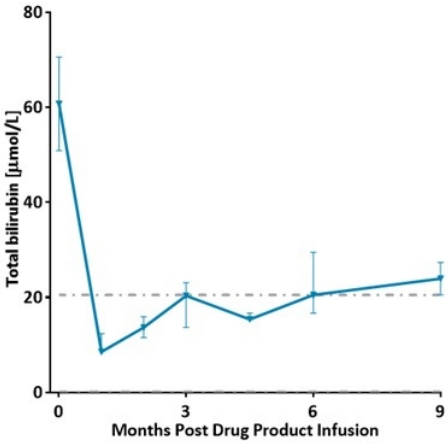
Reticulocyte Counts



Lactate Dehydrogenase



Total Bilirubin



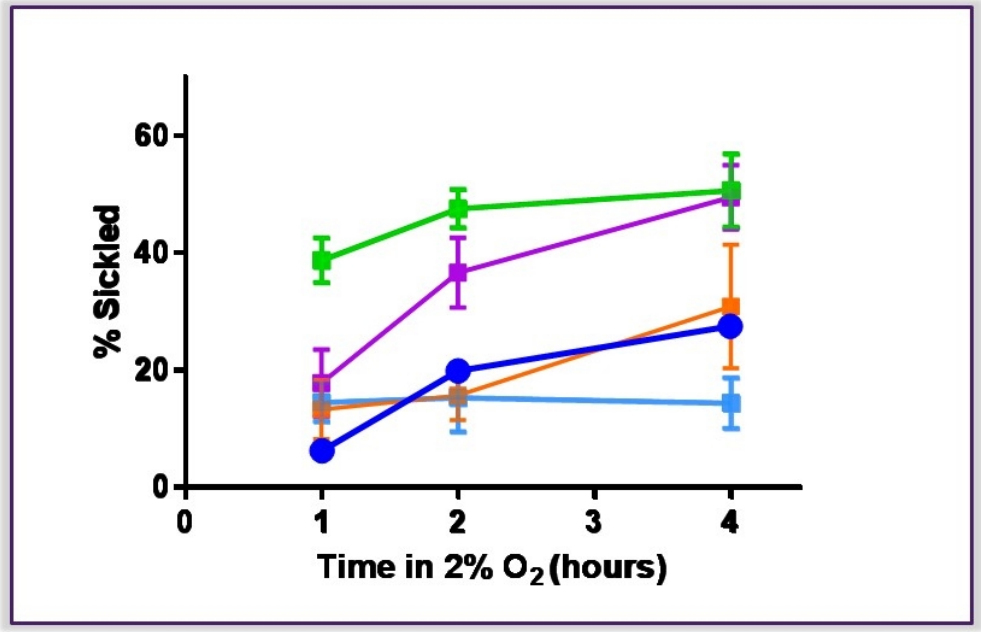
Dot-dash lines denote lower and upper limits of normal values

Median (Q1, Q3) depicted

Data as of September 14, 2018

LentiGlobin has Anti-Sickling Activity Comparable to Sickle Trait

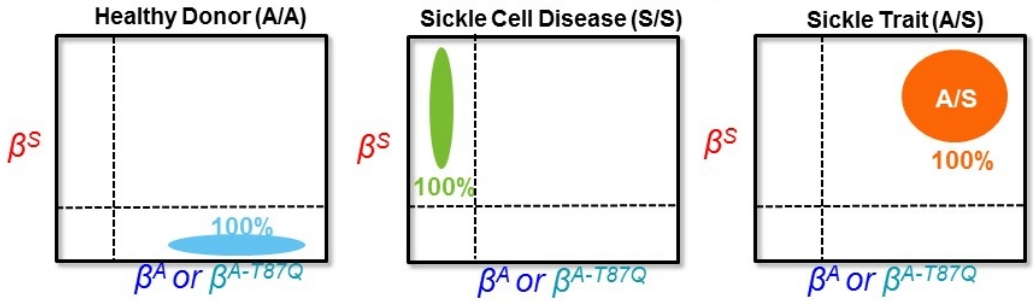
Reduction in % Sickled and Time to Sickling in Patient RBCs Post-Treatment

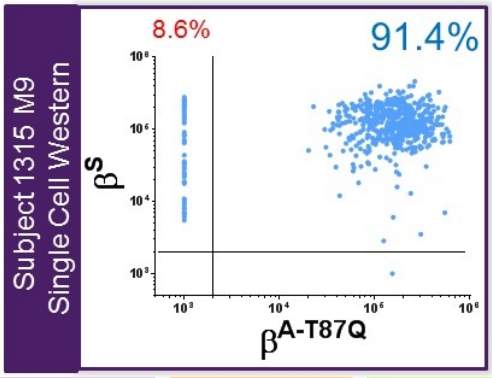


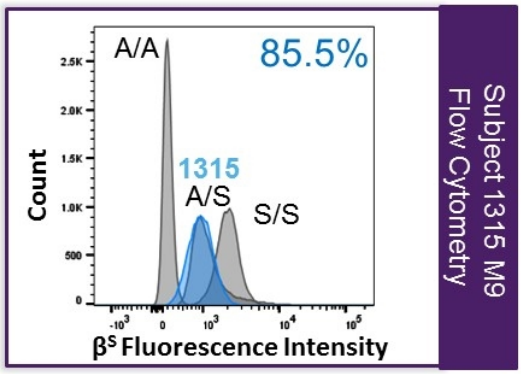
*HbF levels in HPFH donors ranged from 28.1 to 42.3%

Two Independent Assays Reveal Near Pancellular $\beta^{A\text{-}T87Q}$ Distribution

Majority of Patient RBCs are Positive for Anti-Sickling Globin



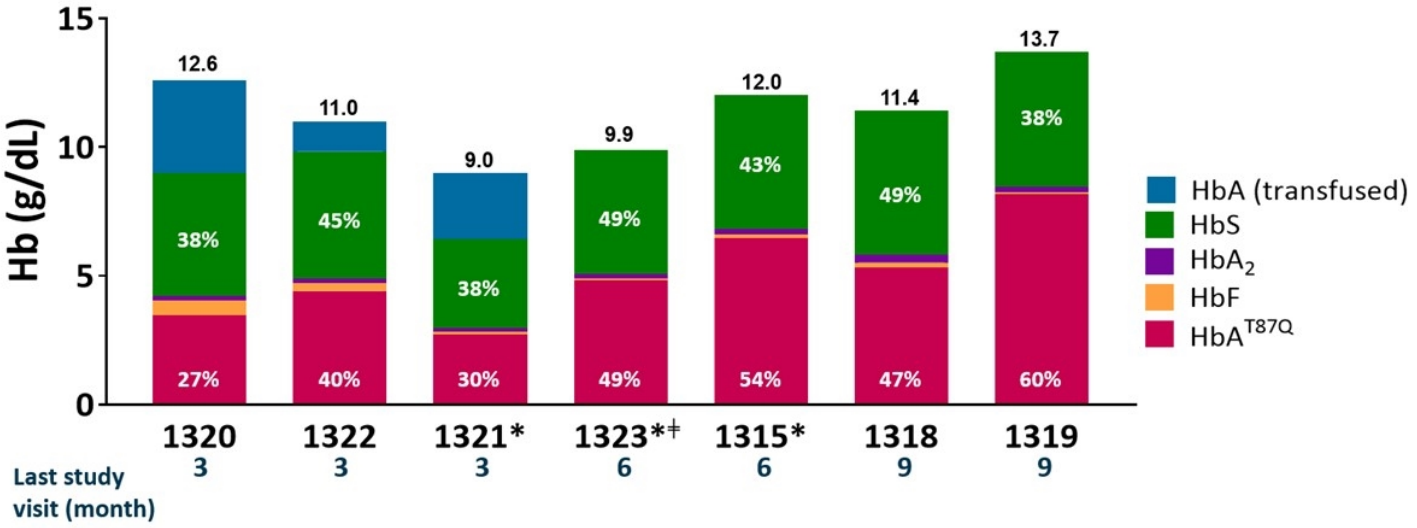




Impact on Clinical Outcomes of SCD

Resolution of Anemia (and Robust HbA^{T87Q} Levels) in All Patients by 6 Months; No VOEs Since DP Infusion

HGB-206



Group C: All patients free of VOEs as of data cut-off

* Denotes female patients; ‡ Patient current receiving phlebotomy

Data as of September 14, 2018

A Case of Myelodysplastic Syndrome with Excess Blasts

Patient and treatment characteristics

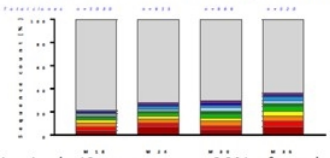
- >40 years old at LentiGlobin infusion
- Continuous hydroxyurea (HU) for 8 years before enrollment; restarted post-LentiGlobin treatment
- Received 3.3 mg/kg (200 mg) daily IV busulfan conditioning over 4 days
- LentiGlobin DP characteristics:
  - DP VCN = 1.3 copies/diploid genome
  - % LVV positive cells = 29%
  - CD34+ cell dose = 2.8 x 106 CD34+ cells/kg

A grade 4 SAE of MDS in a Group A patient ~36 months post LentiGlobin GT

- BM biopsy showed 15% myeloblasts and dysplasia
- Cytogenetics showed monosomy 7 and abnormal chromosome 19p in 8 of 20 metaphases

No evidence of clonal dominance by insertion site (IS) analysis

Frequencies of top 10 integration sites



- No single IS represents >30% of total
- Top 5 clones consistently transitory over last 18 months of follow-up

Blast cells (CD34+) had low VCN consistent with the absence of LVV integration

Cell populations from BM aspirate collected ~3 weeks post MDS diagnosis	Purity (%)	VCN (c/dg)
Unsorted	N/A	0.14
CD34-	98	0.21
CD34+, with myeloblasts as major contributors	93	0.02

Conclusions

- Given that there is no evidence of LVV-mediated oncogenesis, the MDS SAE is considered unlikely related to LentiGlobin GT*
- MDS has been reported in adults post autologous HSCT with use of alkylating agents such as busulfan (Rege KP et al., BMT 1998; Howe R et al., BMT 2003; McNerney ME et al., Nat Rev Cancer 2017)

*Per safety database

BM, bone marrow; c/dg, copies per diploid genome; DP, drug product; GT, gene therapy; HSCT, hematopoietic stem cell transplant; IV, intravenous; LVV, lentiviral vector; N/A, not applicable; VCN, vector copy number

Multiple Myeloma

bluebirdbio

Multiple Myeloma

- A lethal blood cancer that often infiltrates the bone marrow causing anemia, kidney failure, immune problems and bone fractures

BCMA PROGRAM OVERVIEW

- bb2121: Enrollment in KarMMa registration-enabling study complete (N=140)
- Additional studies advancing:
  - KarMMa-2 in 2nd line Phase 2 study enrolling soon
  - KarMMa-3 in 3rd line+ Phase 3 study enrolling soon
  - Opportunities for bb2121 in newly diagnosed MM including high risk, transplant ineligible and transplant eligible vs. transplant under evaluation

CRB-401 Data at ASCO 2018 - Baseline Demographics and Clinical Characteristics

Parameter	Escalation (N=21)	Expansion (N=22)
Median (min, max) follow-up, d	345 (46, 638)	87 (29, 184)
Median (min, max) age, y	58 (37, 74)	65 (44, 75)
Male, n (%)	13 (62)	16 (73)
Median (min, max) time since diagnosis, y	4 (1, 16)	6 (1, 36)
ECOG PS,[1] n (%)		
0	10 (48)	6 (27)
1	11 (52)	16 (72)
High-risk cytogenetics, n (%)		
del(17p), t(4;14), t(14;16)	8 (38)	9 (41)

ECOG, Eastern Cooperative Oncology Groups performance status; ISS, international staging system; NA, not available. [1]Data at screening presented.
Data cutoff: March 29, 2019

CRB-401 Data at ASCO 2018 - Heavily Pretreated Patient Population

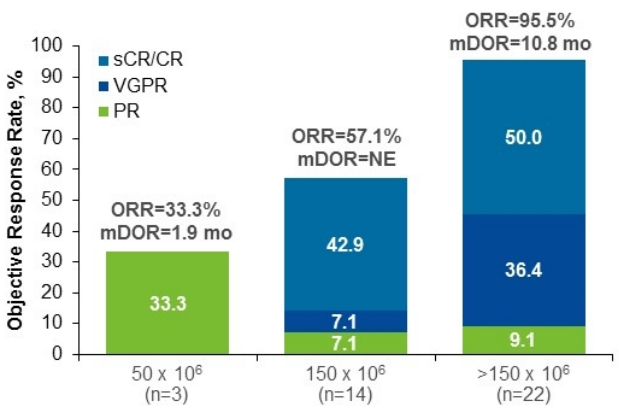
Parameter	Escalation (N=21)	Expansion (N=22)
Median (min, max) prior regimens	7 (3, 14)	8 (3, 23)
Prior autologous SCT, n (%)	21 (100)	19 (86)
0	0	3 (14)
1	15 (71)	14 (64)
>1	6 (29)	5 (23)

	Escalation (N=21)		Expansion (N=22)	
Parameter	**Exposed**	**Refractory**	**Exposed**	**Refractory**
Prior therapies, n (%)				
Bortezomib	21 (100)	14 (67)	22 (100)	16 (73)
Carfilzomib	19 (91)	12 (57)	21 (96)	14 (64)
Lenalidomide	21 (100)	19 (91)	22 (100)	18 (82)
Pomalidomide	19 (91)	15 (71)	22 (100)	21 (96)
Daratumumab	15 (71)	10 (48)	22 (100)	19 (86)
Cumulative exposure, n (%)				
Bort/Len	21 (100)	14 (67)	22 (100)	14 (64)
Bort/Len/Car/Pom/Dara	15 (71)	6 (29)	21 (96)	7 (32)

SCT, stem cell transplant. Data cut-off: March 29, 2018.

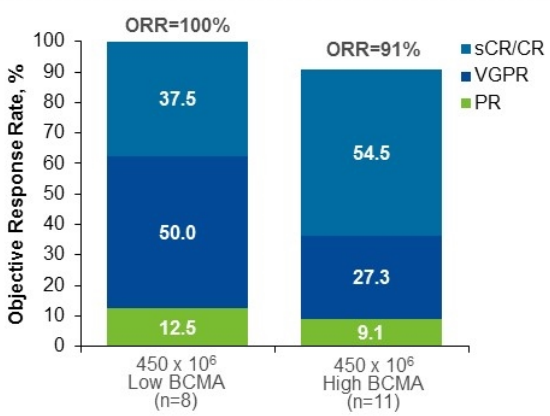
CRB-401 Data at ASCO 2018 - Tumor Response: Dose-related and Independent of Myeloma BCMA Expression Levels

Tumor Response By Dose[1]



Median follow-up (min, max), d	84 (59, 94)	87 (36, 638)	194 (46, 556)

Tumor Response By BCMA Expression[1]



Median follow-up (min, max), d	168 (121, 184)	311 (46, 556)

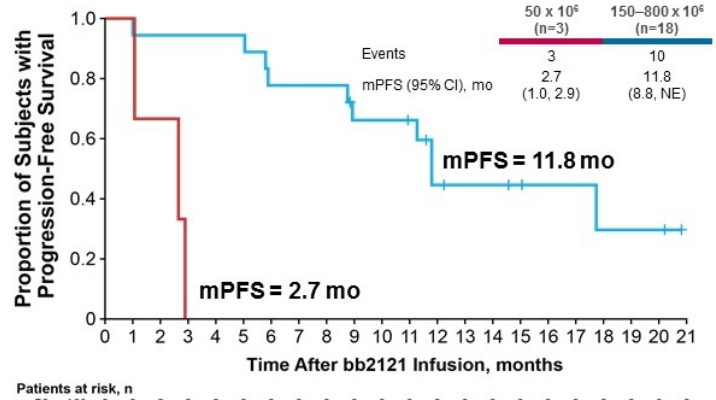
- 80.6% ORR across active dose cohorts (150-800 x 10^6)

CR, complete response; mDOR, median duration of response; ORR, objective response rate; PD, progressive disease; PR, partial response; sCR, stringent CR; VGPR, very good partial response. Data cut-off: March 29, 2018. [1]Patients with ≥2 months of response data or PD/death within <2 months. ORR is defined as attaining sCR, CR, VGPR, or PR, including confirmed and unconfirmed responses. Low BCMA is <50% bone marrow plasma cells expression of BCMA; high BCMA is defined as ≥50%.

CRB-401 Data at ASCO 2018 - Hitting the Mark for Progression Free Survival

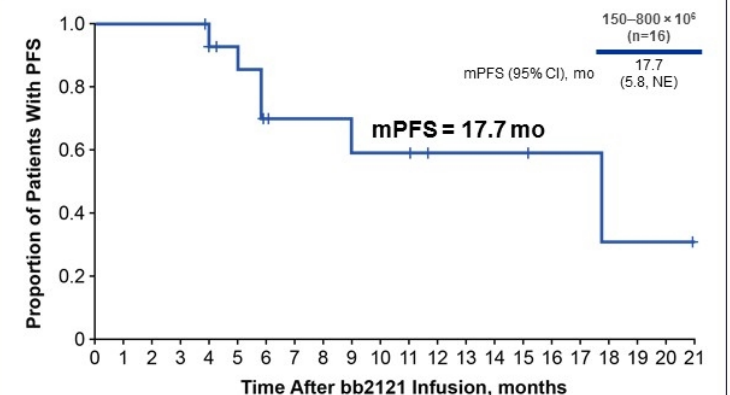
- mPFS of 11.8 months at active doses (≥150 x 10^6 CAR+ T cells) in 18 subjects in dose escalation
- mPFS of 17.7 months in 16 responding subjects from all study cohorts who are MRD-negative

PFS at Inactive (50 x 10^6) and Active (150–800 x 10^6) Dose Levels[1]



Data cut-off: March 29, 2018. Median and 95% CI from Kaplan-Meier estimate. NE, not estimable.
[1]PFS in dose escalation cohort.

PFS in MRD-Negative Responders
Escalation and Expansion Cohorts



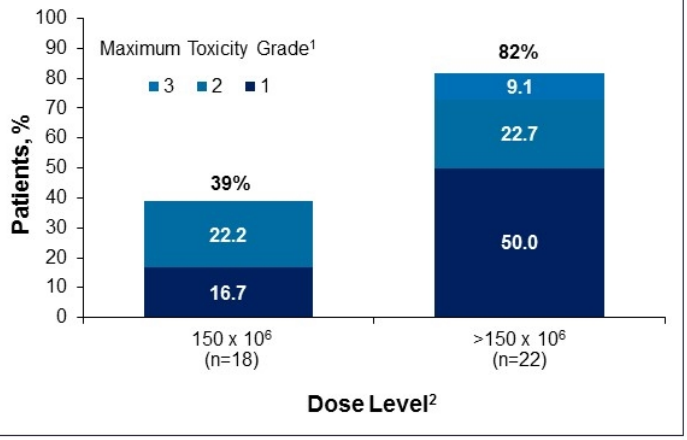
PFS progression-free survival; MRD, minimal residual disease.
Includes patients treated with <50 x 10^6 CAR T cells who were MRD-negative at >1 postbaseline time point

CRB-401 Data at ASCO 2018 - bb2121 Continues to be Generally Well-Tolerated; No New Safety Signals

CAR T Treatment-Emergent Adverse Events All Infused Patients (N=43)

TEAE, n (%)	Overall	Grade ≥3
Cytokine release syndrome[1]	27 (63)	2 (5)
Neurotoxicity[2]	14 (33)	1 (2)
Neutropenia	35 (81)	34 (79)
Thrombocytopenia	26 (61)	22 (51)
Anemia	24 (56)	19 (44)
Infection[3]		
Overall	26 (61)	9 (21)
First Month	10 (23)	2 (5)

Cytokine Release Syndrome By Dose Level



- No grade 4 CRS events
- No fatal CRS or neurotoxicity events
- Patients with a CRS event, 63%

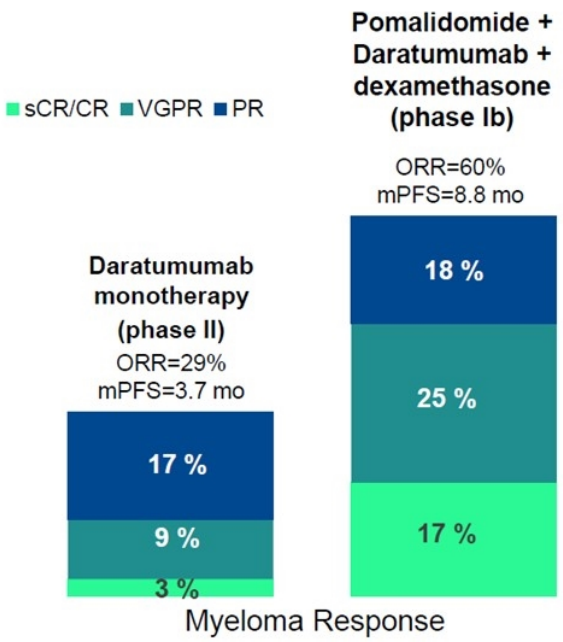
Data cut-off: March 29, 2018. NE, not estimable.[1]CRS uniformly graded per Lee et al., *Blood* 2014;124:188-195.[2]Events occurring in first 28 d and including dizziness, bradyphrenia, somnolence, confusional state, nystagnmus, insomnia, memory impairment, depressed level of consciousness, neurotoxicity, lethargy, tremor and hallucination.[3]Includes the SOC Infections and Infestations. Events observed in >10% include upper respiratory tract infection and pneumonia.[4]Includes patients treated with active doses (150–800 × 10^6 CAR+ T cells; N=40). Median and 95% CI from Kaplan-Meier estimate.[5]Time from first bb2121 infusion to the first grade ≤2 event after day 32.

Response to Current Standard of Care in Late Line RRMM

Current standard of care in RRMM after two or more lines of therapy:

	Dara	PDd	bb2121
Phase	II	I	I
N	106	103	43
Eligibility	≥ 3 prior lines Pom allowed Dara-naive	≥ 2 prior lines Pom-naïve Dara-naive	≥ 3 prior lines Pom allowed Dara allowed
Median prior lines	5	4	7

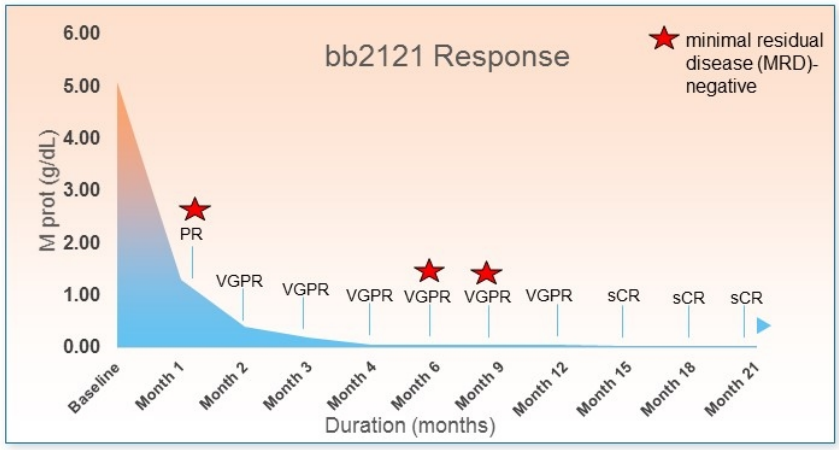
PDd=Pomalidomide + Daratumumab +dexamethasone.
Pom=Pomalidomide; Dara=Daratumumab



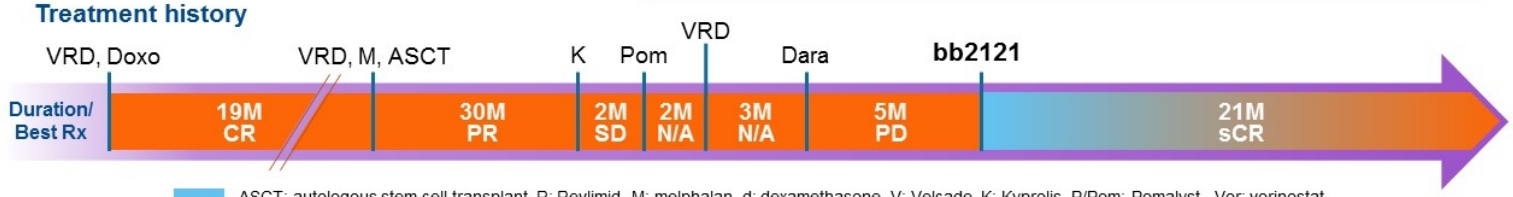
Chari, A. Blood 2017

bb2121 Patient Case: 21 Months in sCR

General Information	
Age & Gender	52 year old Male
Dose group	150x10^6
Tumor Burden	High
High Risk Cytogenetics (based on FISH)	No
Number of prior regimens	6
Initial diagnosis	May, 2010
BCMA% (prescreen, baseline)	60, 75



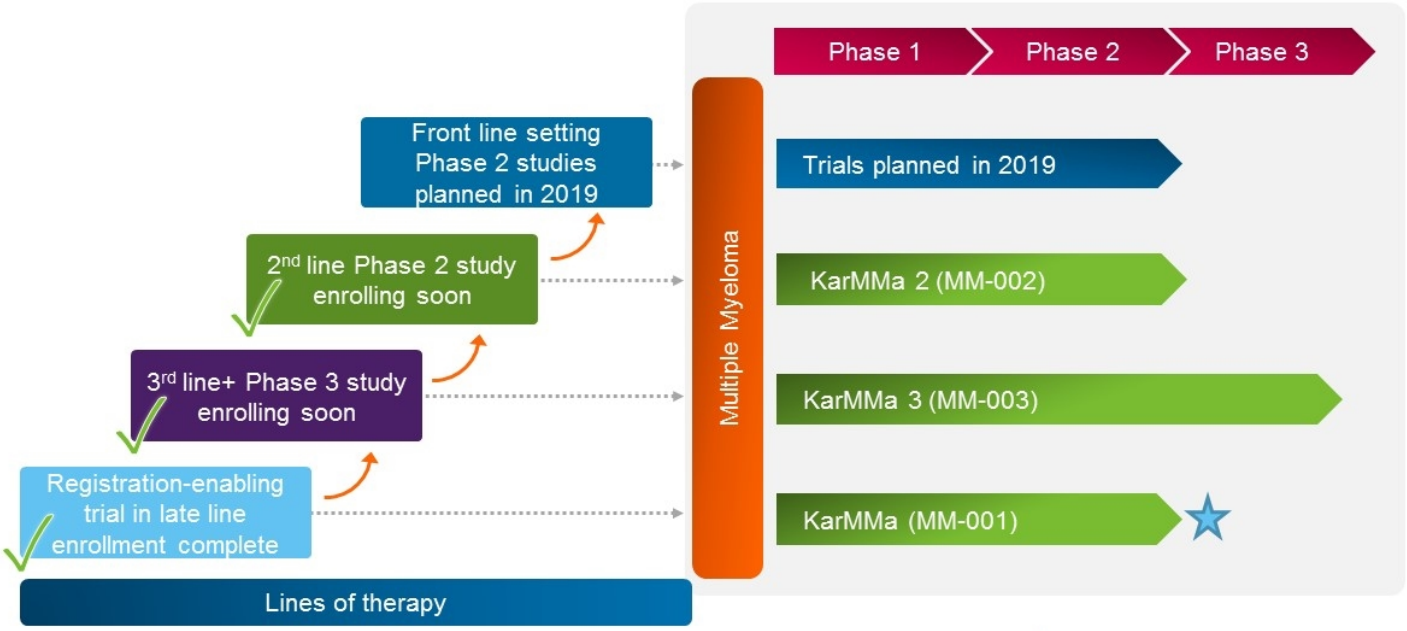
Treatment history



KEY ASCT: autologous stem cell transplant, R: Revlimid, M: melphalan, d: dexamethasone, V: Velcade, K: Kyprolis, P/Pom: Pomalyst, Vor: vorinostat, Dara: daratumumab, Doxo:Doxorubicin

bluebirdbio

Advancing bb2121 into Earlier Lines of Multiple Myeloma



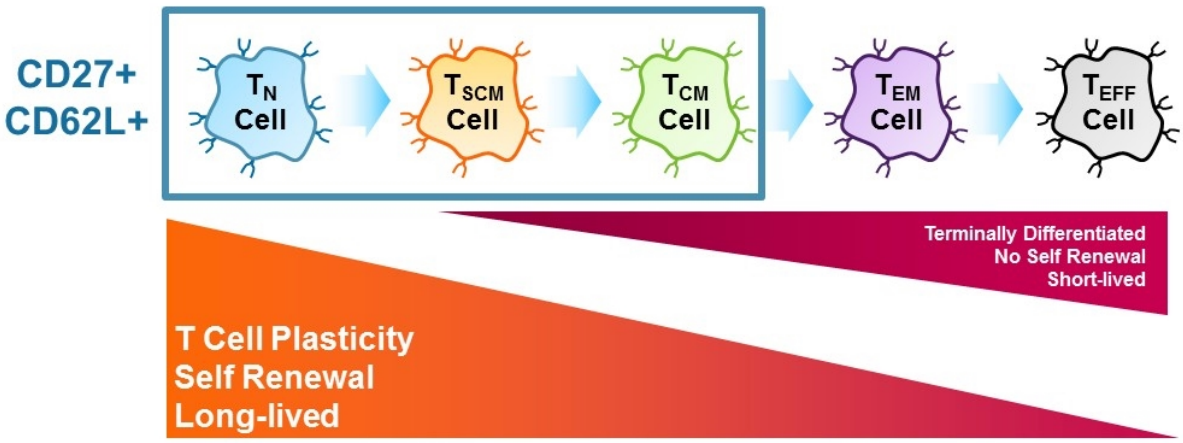
Anticipated Approval in 2020

Key Takeaways from CRB-401 Presented at ASCO

Efficacy?	• 95.5% ORR in doses above 150M cells. • 50% CR rate at doses above 150M cells.
Durability?	• 11.8 months median PFS in dose-escalation active doses. • 17.7 months median PFS in MRD(-) patients with response (escalation and expansion).
BCMA? MRD?	• Consistent responses across BCMA expression levels. • 16/16 responding, MRD-evaluable patients were MRD negative.
Safety?	• No new safety signals (G3/G4 CRS or Neurotox).
Path forward?	• KarMMa amendment raised high end of dose range to 450 based on observed dose-response and acceptable safety profile. Potential approval on track for 2020. Earlier line development plan advancing.

bb21217: PI3K Inhibition During Manufacturing Drives Increase in Long-lived, Memory-like T Cells

CRB-402

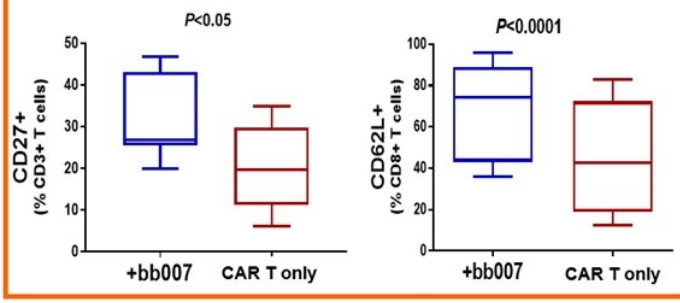


Hypothesis: Increasing long-lived, memory-like T Cell subsets in the drug product may result in enhanced persistence of functional anti-BCMA CAR T cells *in vivo*

Preclinical Models: bb21217 is Enriched for Memory-like T Cells Exhibits; Enhanced Persistence of Anti-tumor Effect

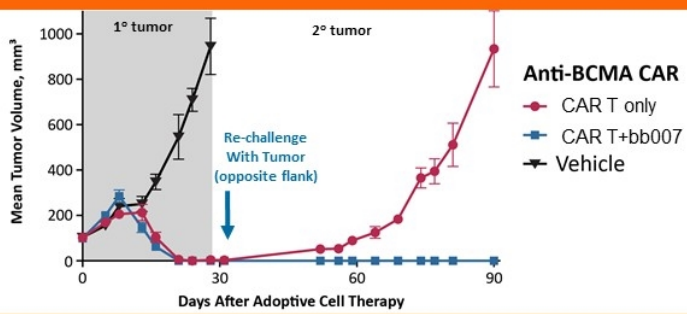
CRB-402

bb007 enriches for memory-like T Cell phenotype



- CD62L and CD27 are markers of memory-like T cells
- bb21217 is significantly enriched for T cells with this memory-like phenotype

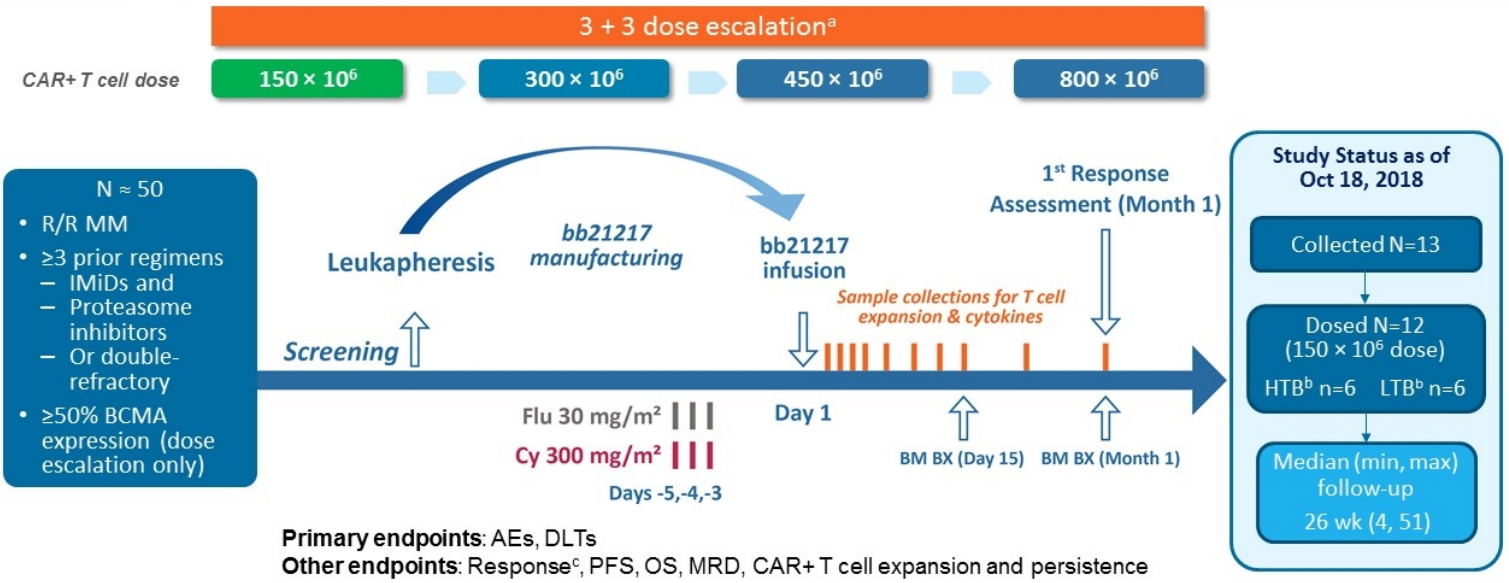
bb007 enhances anti-tumor effect in mouse models



- ONLY CAR T cells cultured with PI3K inhibitor bb007 (i.e. bb21217) clear a second tumor challenge
- Data are consistent with improved persistence of functional CAR T cells leading to sustained anti-tumor effect

CRB-402 Phase 1 Study Design and Status

CRB-402



Primary endpoints: AEs, DLTs
Other endpoints: Response[c], PFS, OS, MRD, CAR+ T cell expansion and persistence

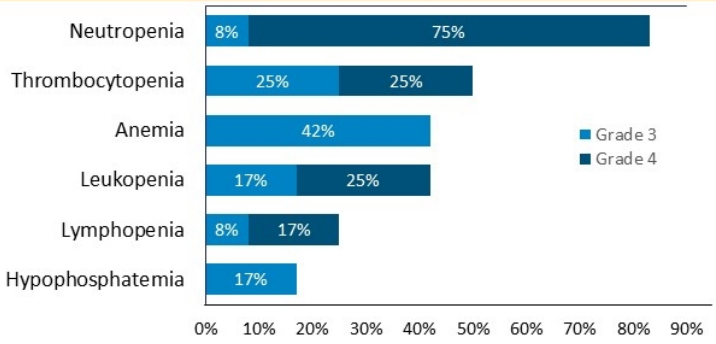
NCT03274219

AE, adverse events; BCMA, B-cell maturation antigen; DLT, dose-limiting toxicity; HTB, high tumor burden; IMiD, immunomodulatory imide drugs; LTB, low tumor burden; MRD, minimal residual disease; OS, overall survival; PFS, progression-free survival; R/R MM, relapsed/refractory multiple myeloma. [a]All patients to date received 150 × 10^6 CAR+ T cells; an intermediate dose of 300 × 10^6 CAR+ T cells will be the next dose level. [b]HTB defined as ≥50% bone marrow plasma cells pre-infusion; LTB <50%. [c]Per International Myeloma Working Group criteria.

Early Clinical Safety and Tolerability Consistent with CAR T Experience

CRB-402

Grade ≥3 AEs in >1 Patient[a]



AEs of Special Interest[a]

	Grade, n (%)			
	1	2	3	4
CRS[b]	4 (33)	3 (25)	1 (8)	–
Neurotoxicity[c]	1 (8)	1 (8)	–	1 (8)

- CRS occurred in 67% of patients
  - Mostly grade 1/2, 1 grade 3, no grade 4
  - Median time to onset of CRS 4.5 days (2,11)
  - Manageable with or without tocilizumab
- 1 patient experienced DLT (grade 4 encephalopathy and grade 3 CRS)
  - Patient had high tumor burden and rapidly accelerating disease at baseline
  - No other DLTs occurred
- 1 grade 3 catheter-related infection; no other severe infections reported to date
- 4 patients experienced 1 or more SAEs
- No deaths on study to date

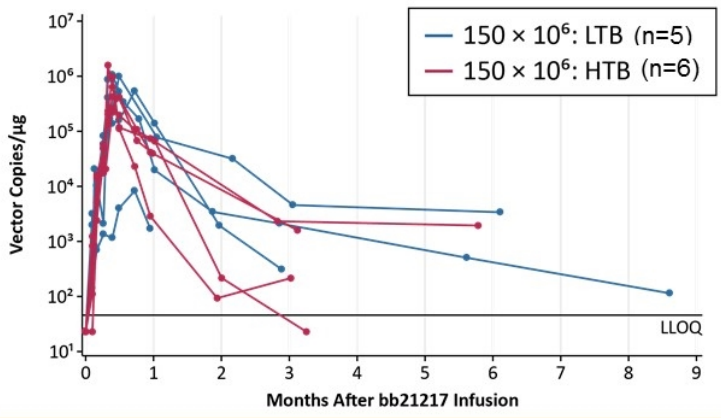
AE, adverse event; DLT, dose-limiting toxicity; SAE, serious adverse event. [a]AEs occurring between bb21217 infusion and disease progression. [b]Cytokine release syndrome (CRS) uniformly graded according to Lee et al., *Blood* 2014;124:188-195. [c]Events selected as CAR T neurotoxicity on the case report form occurring within 90 days after bb21217 infusion.

Data as of October 18, 2018

Clinical Data is Early But Consistent with Goal of Enhanced Persistence

CRB-402

Vector Copy Number Over Time by Baseline Tumor Burden



	Month 1	Month 3	Month 6	Month 9
At risk, n	9	7	3	1
With detectable vector, n (%)	9 (100)	6 (**86**)[a]	3 (100)	1 (100)

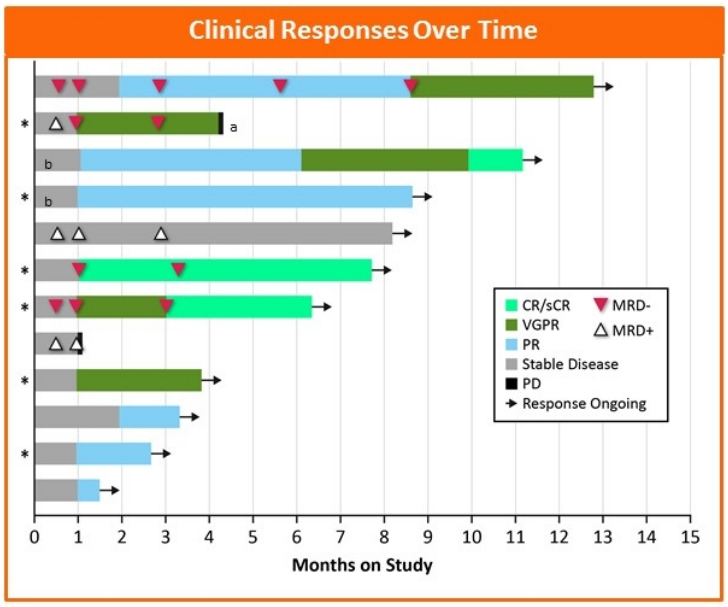
- Robust and reliable bb21217 CAR T cell expansion post-infusion observed at first dose
- Early bb21217 clinical data is consistent with robust functional CAR T cell persistence
  - Enrichment for memory-like CAR T cells observed in preclinical studies, and in patients post-infusion
  - Vector detectable up to 9 months post-infusion, and in 3/3 patients at 6-month time point
  - Sustained sBCMA suppression observed, reflecting ongoing plasma cell aplasia

HTB, high tumor burden; LLOQ, lower limit of quantitation; LTB, low tumor burden. [a]One patient with undetectable vector received cyclophosphamide on day 15 for grade 4 encephalopathy.

Data as of October 18, 2018

Clinical Responses Observed in 10/12 Patients (83%) at First Dose Level Tested (150 x 10^6 CAR+ T cells)

CRB-402



- 10/12 patients (83%) achieved an objective response at the first tested dose (150 × 10^6 CAR+ T cells)
- Deepening responses over time; CR achieved as late as month 10
- 100% MRD negativity in 4/4 responders evaluable for MRD status
- Responses are ongoing in all but 1 responder; the first patient dosed continues response >1 year after treatment

CR, complete response; MRD, minimal residual disease; PR, partial response; VGPR, very good partial response. *Patients with high tumor burden. [a]Progression based exclusively on appearance of new bone lesions. [b]MRD status not available.

Data as of October 18, 2018

High Clinical Response Rate Observed at First Dose Level (150 x 10^6 CAR+ T cells)

CRB-402

Clinical Response	
	bb21217-Treated (N=12)
ORR,[a] n (%) [95% CI]	10 (83.3) [51.6, 97.9]
sCR/CR	3 (25)
≥VGPR	6 (50)
MRD status in bone marrow, n	
MRD-evaluable responders[b]	4
MRD-neg	4[c]
Median time to first response (min, max), [a,d] mo	1 (1, 2)
Median time to best response (min, max), [a,d] mo	1 (1, 10)
Median follow-up duration (min, max), mo	5.9 (1.0, 11.8)

CR, complete response; MRD, minimal residual disease; ORR, objective response rate; PR, partial response; VGPR, very good partial response. [a]Patients with high tumor burden. [b]Includes unconfirmed responses. [c]Patients with ≥PR and valid MRD assessments. [d]Two MRD-neg. responses at 10^{-6} and 2 at 10^{-5} sensitivity level by Adaptive next-generation sequencing. [e]Among 10 responders with ≥PR.

Data as of October 18, 2018

Promising Early Data with Next-Generation Anti-BCMA CAR T

- bb21217 demonstrated promising early clinical activity in heavily pretreated patients with relapsed/refractory multiple myeloma at first dose level tested
  - 83% ORR with 90% of responses ongoing
  - Elimination of MRD in the bone marrow of all 4 evaluable responders
- Early indications of increased persistence using enriched CAR T cells
- Safety profile appears consistent with known toxicities of CAR T cell therapies
- Dose escalation is ongoing

CALD

Ethan's family spent nearly two years trying different medications and meeting with specialists to try and resolve his symptoms. Tragically, during this period, the ravaging effects of ALD were continuing to damage Ethan's brain and adrenal glands.

Ethan Zakes 2000 - 2011

Source: Ethan Zakes Foundation

Cerebral Adrenoleukodystrophy

- Severe, often fatal neurological disease in boys

UNMET NEED

- Treatment limited to allo-HSCT
- Sometimes severe treatment-related risks and complications, especially when donor is not a matched sibling

EPIDEMIOLOGY

- Global incidence of ALD: 1 in ~21,000 newborns
- Cerebral form develops in ~40% of affected boys

[1]Salzman, R., Kemp, S. (2017, December 06) Newborn Screening. Retrieved from http://adrenoleukodystrophy.info/clinical-diagnosis/newborn-screening

Lenti-D Treatment Halts CALD Disease Progression


The NEW ENGLAND JOURNAL of MEDICINE

October 4, 2017

ORIGINAL ARTICLE

Hematopoietic Stem-Cell Gene Therapy for Cerebral Adrenoleukodystrophy

Florian Eichler, M.D., Christine Duncan, M.D., Patricia L. Musolino, M.D., Ph.D., Paul J. Orchard, M.D., Satiro De Oliveira, M.D., Adrian J. Thrasher, M.D., Myriam Armant, Ph.D., Colleen Dansereau, M.S.N., R.N., Troy C. Lund, M.D., Weston P. Miller, M.D., Gerald V. Raymond, M.D., Raman Sankar, M.D., Ami J. Shah, M.D., Caroline Sevin, M.D., Ph.D., H. Bobby Gaspar, M.D., Paul Gissen, M.D., Hernan Amartino, M.D., Drago Bratkovic, M.D., Nicholas J.C. Smith, M.D., Asif M. Paker, M.D., Esther Shamir, M.P.H., Tara O'Meara, B.S., David Davidson, M.D., Patrick Aubourg, M.D., and David A. Williams, M.D.

N Engl J Med 2017; 377:1630-1638

15/17 patients (88%) alive and MFD-free at 24 months follow-up; all patients continue to be MFD-free as of April 25, 2018

- Exceeds pre-determined efficacy benchmark for the study MFD-free survival in 13/15 (76%)

12 additional patients treated in Starbeam study

- No MFDs reported as of April 25, 2018; median follow-up for this additional cohort of patients is 4.2 months (0.4 – 11.7 months)

Safety profile consistent with autologous transplantation

- No GvHD, no graft rejection

Two patients did not meet primary endpoint:

- Patient 2016: Withdrew
- Patient 2018: Rapid disease progression early in the study

Data as of April 25, 2018

Recent Collaborations

bluebirdbio

Science-Driven and Highly Complementary Partnership

Science: best-in-class technology platforms joining forces to crush cancer

Culture: science- and patient-focused companies with a willingness to push boundaries of novel technologies

Structure: Aligned and streamlined operating model to enable flexible research and decision making

Investment: All-in mindset driving shared and enhanced funding for R&D efforts

BLUE remains BLUE: Clear value proposition through product rights, shared funding and capabilities

Engaging the Right Target with the Optimal Target Binder

VELOCISUITE®

REGENERON

VELOCIGENE®	*…target validation at unprecedented pace and precision*	Pick Great Targets
VELOCIMOUSE®	*…rapid generation of genetically engineered mice*	
VELOCIMMUNE®	*…fully human antibodies through immunization*	Fully Human CARs
VELOCIMAB®	*…rapid identification & preclinical testing of target specific antibodies*	
VelociT	*…fully human T cell receptors from an engineered mouse*	Identify Human TCRs
VELOCIHUM	*…immunodeficient mouse platform - study of human cells & tumors*	Better Models

Partnership Highlights

Research

- Five-year research collaboration
- Refreshable list of **six** targets
- Access to Regeneron *VelociSuite*® Platform technologies
- Leveraging bluebird expertise in cell biology and vector technology
- Brings together two science driven organizations with synergistic technology and expertise

Development

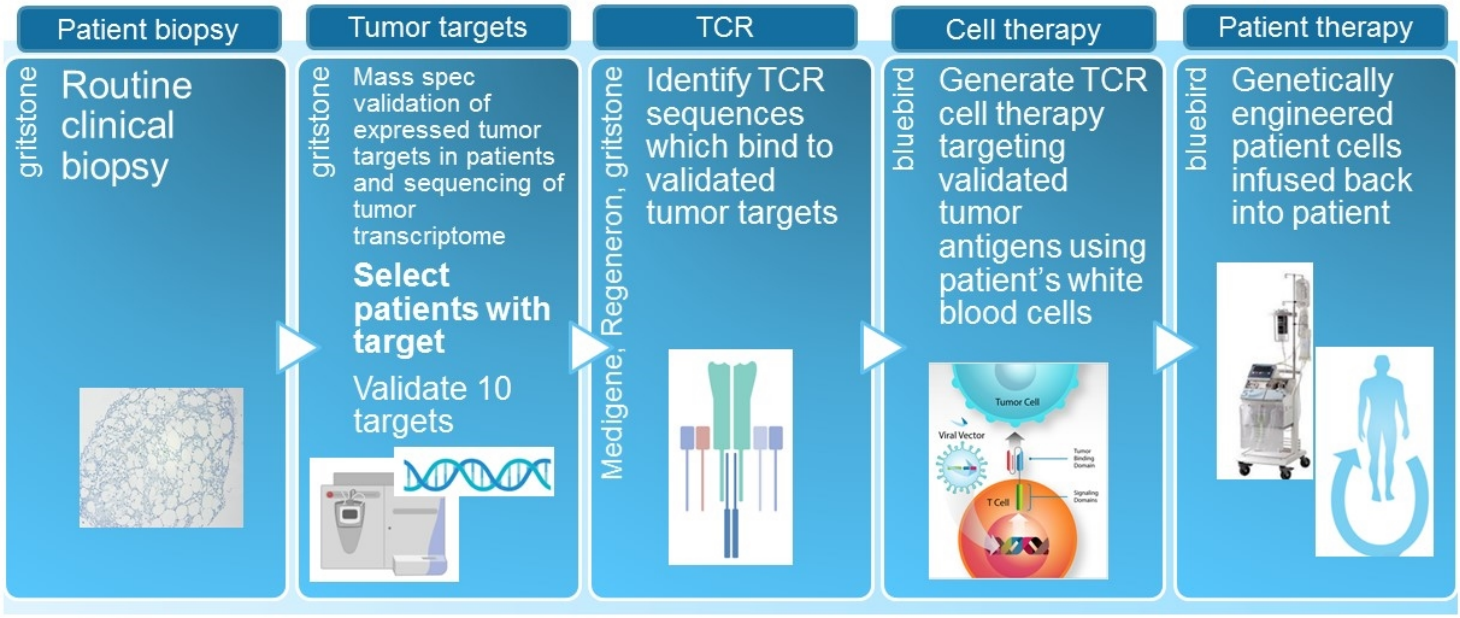
- bluebird leads R&D managed by a Joint Steering Committee
- bluebird retains significant product rights; Regeneron receives milestone payments and royalties
- Regeneron can opt-in to multiple products to become 50/50 partners
- Joint late-stage development and commercialization allocated between bluebird and Regeneron or future partners on a regional basis

Funding

- Share costs equally through pre-IND research and into Phase 1/2 development
- For 50/50 collaboration products, development and commercialization costs (by region) are shared equally
- bluebird funds development and commercialization of its wholly-owned products
- $100 million equity investment by Regeneron in BLUE - 420,000 shares at $238.10 per share or a 59% premium*

**Premium of approximately $37 million will be used to cover part of Regeneron's share of research costs; bluebird intends to use the balance of the proceeds to support its research activities in the collaboration.*

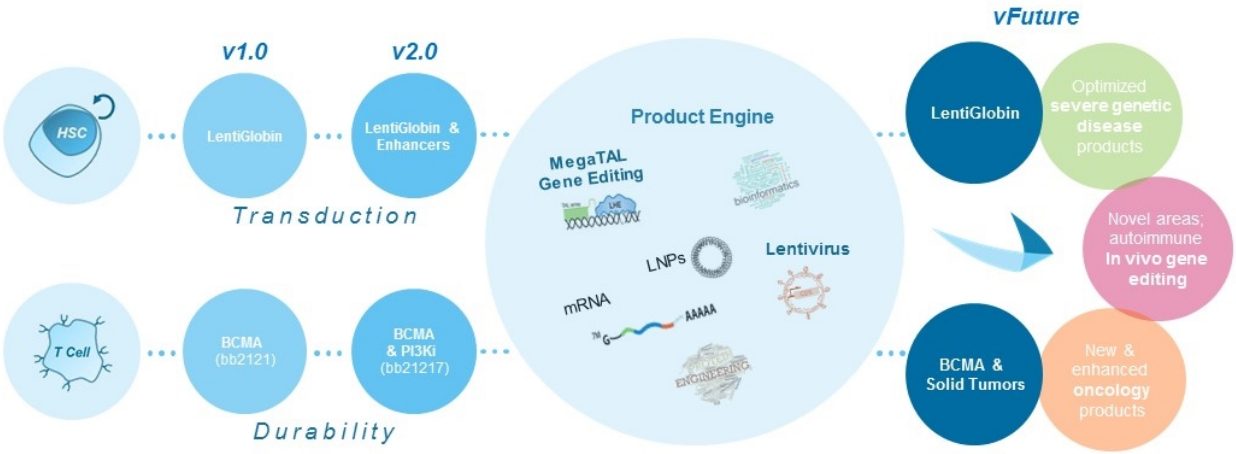
Gritstone complements bluebird's approach to generating novel therapeutics for oncology



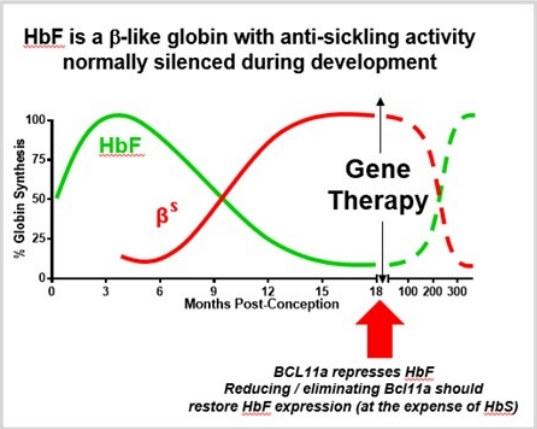
Early Pipeline

bluebirdbio

Good Is Never Good Enough For Patients: BLUE Toolbox Strategy



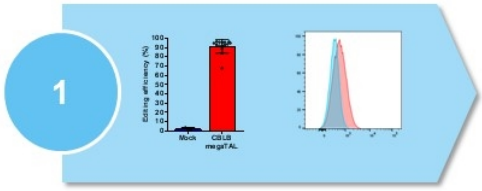
Initial Proof of Concept: LVV Approach to Suppression of BCL11a in SCD



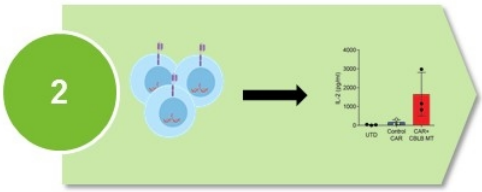
- As of July 28, 2018, one patient had received treatment with HSCs transduced with an LVV encoding the BCL11a shRNA^{miR}
- As of day 76:
  - Sustained Hb of >10 g/dL
  - 59.7% total HbF cells; 30% HbF as a fraction of all β-like globin
  - Notable absence of irreversibly sickled cells on peripheral smear
  - Low absolute reticulocyte count consistent with markedly reduced hemolysis Hb
- Safety profile consistent with myeloablative conditioning

CBLB Knock-out Enhances CAR-T Cell Anti-tumor Activity

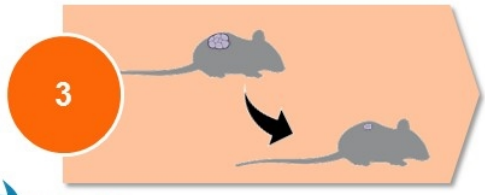
Novel Technology for Improving T Cell Function in Liquid and Solid Tumors



- CBLB megaTAL induces a high rate of gene editing and corresponding knockdown of CBLB protein levels



- CBLB megaTAL treatment enhances production of cytokines *in vitro* by CAR-T cells



- Genetic deletion of CBLB enhances anti-tumor activity of CAR-T cells in a mouse solid tumor xenograft model

ASH Highlights: Next Generation Programs / Platforms

First clinical demonstration of the potential to genetically manipulate HbF levels through BCL11a

- Novel LVV expressing a shRNA^{miR} to knock down BCL11a at the level *exclusively* in erythroid cells
- Robust knock down of BCL11a observed in patient cells
- At ≥4 months post-gene therapy, ~70% F cells were observed and HbF contributed ~25-30% of total Hb

Flipping the Switch: Initial Results of Genetic Targeting of the Fetal to Adult Globin Switch in Sickle Cell Patients

Esrick et al. (Abstract #801)

Example of bbb's T cell enhancement technologies aimed at delivering transformative outcomes for solid tumors

- bbb megaTAL technology used to efficiently and specifically knockout CBL-B in CAR T cells via gene editing
- Increases cytokine production in response to tumor cells *in vitro*
- Enhances anti-tumor activity of CAR T cells in a mouse xenograft model

Knockout of CBL-B Greatly Enhances Anti-Tumor Activity of CAR T Cells

Hooper et al. (Abstract #338)

Go TRUE BLUE

We Must Make Hope a Reality

Exhibit 99.2

bluebird bio and Inhibrx Announce Collaboration to Research, Develop and Commercialize CAR T Cell Immunotherapies

CAMBRIDGE, Mass and SAN DIEGO, Calif. – **January 7, 2019** – bluebird bio, Inc. (Nasdaq: BLUE) and Inhibrx, Inc. (Inhibrx) today announced that they have entered into an exclusive license agreement to research, develop and commercialize chimeric antigen receptor (CAR) T cell therapies using Inhibrx's proprietary single domain antibody (sdAb) platform to multiple cancer targets. The small size of sdAbs may enable the generation of more complex CAR T cell products such as those designed to combine additional functions into a single CAR molecule or recognize multiple tumor antigens simultaneously.

"Access to the Inhibrx sdAb binder technology will allow us to combine the advancements we've made with our T cell therapy platform with their sdAb binder technology to generate novel cellular therapies with the potential to help patients in their fight against cancer," said Philip Gregory, D. Phil., chief scientific officer, bluebird bio. "The technology from Inhibrx adds to our growing portfolio of tools and technologies that we can combine with our internal lentiviral vector, CAR and T cell expertise to discover potential new product candidates designed to recognize tumor-specific proteins expressed by cancer cells and kill them upon engagement."

"We are pleased to have formalized our relationship with bluebird bio, allowing us to couple our proprietary sdAb platform with a leading cell therapy platform," said Brendan Eckelman, Chief Scientific Officer and Executive Vice President of Corporate Strategy of Inhibrx. "Together with bluebird bio, we have generated compelling proof of concept preclinical data on the utility of incorporating our sdAbs into bluebird bio's constructs for CAR-T cell generation."

Under the terms of the license agreement, Inhibrx will provide bluebird bio the exclusive worldwide rights to develop, manufacture and commercialize certain cell therapy products containing sdAbs directed to various cancer targets. bluebird bio will be responsible for the clinical development and commercialization of the cancer-targeting CAR-T products. Inhibrx received a $7.0 million upfront payment and is also entitled to receive specified developmental milestone payments as well as percentage tiered royalties on future product sales.

About Inhibrx, Inc.
Inhibrx is a clinical-stage biotechnology company focused on developing a broad pipeline of novel biologic therapeutic candidates. Inhibrx utilizes diverse methods of protein engineering to address the specific requirements of complex target and disease biology, including its proprietary sdAb platform. The Inhibrx pipeline is focused on oncology, orphan diseases and infectious diseases. Inhibrx has a collaboration with Celgene and has received awards from several granting agencies, including NIH, NIAID and CARB-X. For more information, please visit www.inhibrx.com.

About bluebird bio, Inc.
With its lentiviral-based gene therapies, T cell immunotherapy expertise and gene editing

capabilities, bluebird bio has built a pipeline with broad potential application in severe genetic diseases and cancer.

bluebird bio's gene therapy clinical programs include investigational treatments for cerebral adrenoleukodystrophy, transfusion-dependent β-thalassemia and sickle cell disease.

bluebird bio's oncology pipeline is built upon the company's lentiviral gene delivery and T cell engineering, with a focus on developing novel T cell-based immunotherapies, including chimeric antigen receptor (CAR T) and T cell receptor (TCR) therapies. The company's lead oncology programs are anti-BCMA CAR T programs partnered with Celgene.

bluebird bio's discovery research programs include utilizing megaTAL/homing endonuclease gene editing technologies with the potential for use across the company's pipeline.

bluebird bio has operations in Cambridge, Massachusetts; Seattle, Washington; Durham, North Carolina and Zug, Switzerland. For more information, visit bluebirdbio.com.

Follow bluebird bio on social media: @bluebirdbio, LinkedIn, Instagram, YouTube.

bluebird bio Forward-Looking Statements

This release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding the research, development and advancement of bluebird bio's potential product candidates and research program, and the benefits of each company's strategic plans and focus. Any forward-looking statements are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, the risk that the research programs for these targets or using the technology licensed from Inhibrx will be unsuccessful and not result in any viable product candidates, the risk that our collaboration with Inhibrx will not continue or will not be successful, the risk of cessation or delay of any planned clinical studies and/or our development of our product candidates, and the risk that any one or more of our product candidates will not be successfully developed and commercialized. For a discussion of other risks and uncertainties, and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in our most recent quarterly report on Form 10-Q, as well as discussions of potential risks, uncertainties, and other important factors in our subsequent filings with the Securities and Exchange Commission. All information in this press release is as of the date of the release, and bluebird bio undertakes no duty to update this information unless required by law.

Inhibrx Forward-Looking Statements

Certain statements in this press release are forward looking statements that involve a number of risks and uncertainties. These statements include statements about Inhibrx's strategy, therapeutic candidates, including its sdAb platform. These statements represent Inhibrx's judgements and expectations as of the date of this release. Actual results may differ due to a number of factors, including, but not limited to, the potential success and efficacy of Inhibrx's

therapeutic candidates. Inhibrx disclaims any intent or obligation to update these forward looking statements, other than as may be required by applicable law.

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