AbelZeta™

42nd Annual J.P. Morgan Healthcare Conference

Tony Liu, Chairman & CEO

January 10, 2024

Disclaimer

Statements in this communication relating to plans, strategies, specific activities, and other statements that are not descriptions of historical facts are forward-looking statements. Forward-looking information is inherently subject to risks and uncertainties, and actual results could differ materially from those currently anticipated due to numerous factors. Forward-looking statements are based on the current beliefs and management's expectations and are subject to significant risks and uncertainties outside of the Company's control. Given these uncertainties, you should not place undue reliance on these forward-looking statements, which speak only as of the date hereof. Except as otherwise required by law, AbelZeta does not undertake any obligation, and expressly disclaims any obligation, to update, alter or otherwise revise any forward-looking statements, whether written or oral, that may be made from time to time, whether as a result of new information, future events or otherwise.

Experienced Leadership Team, Endorsed by Top VCs and Big Pharma

Senior Management Team

Bizuo (Tony) Liu

Founder, Chairman & CEO

Alibaba Group 阿里巴巴集团 | Microsoft

- Joined AbelZeta 2014 as CFO, CEO/CFO since 2016; Founder, Chairman, CEO, since 2021
- Corporate VP at Alibaba Group responsible for Overseas investments; AliExpress GM, B2B Finance VP
- 19 years at Microsoft in various finance leadership roles: Corporate Strategy GM, MSFT China CFO, Corp. Corporate Accounting Sr. Director

Yihong Yao, PhD

Chief Scientific Officer

AstraZeneca | MedImmune | abbvie

Andy Chan, JD, MBA

Chief Legal Officer, Secretary

Jazz Semiconductor | MINDSPEED BUILD IT FIRST | Honeywell

Michael Havert, PhD

SVP, Regulatory Affairs & Program Head US

FDA | NIH | stridebio | bluebirdbio

Jiaqi Huang, MD, PhD

SVP, Translational Medicine, Global

Incyte | AstraZeneca

Hui Wan, MD, PhD

SVP, Clinical Development, China

Roche | Takeda | Erasmus Universiteit Rotterdam

Strategic Investors

AstraZeneca | CICC 中金公司 | NOVARTIS

Institutional Investors

GIC | 泰福资本 TF Capital | YF Capital 云锋基金 | SEQUOIA | SAILING CAPITAL

Overview

Leveraging our global R&D capabilities to develop innovative cellular therapies for the treatment of patients with cancer and autoimmune diseases globally

Integrated Capabilities

State-of-the-art R&D and GMP facilities

Centers of Excellence

Rockville, Maryland – HQ

Shanghai, China
to augment our global capabilities

Platform Technologies

Innovative T cell engineering modalities for multiple diseases

CAR-T
(Mono- / Bi-specific / Armored)

TIL

Solid Tumors
Hematological Cancers
Autoimmune Diseases

Robust Innovative Pipeline

Proprietary, internally-optimized programs with early clinical validation

- **Five clinical stage programs** and multiple IIT/pre-clinical stage assets
- **Proven targets** and **optimal design** to maximize specificity while minimizing toxicity
- **Best-in-class** and **best-in-disease potentials**

Global Pharma Partnerships

Two major pharmaceutical deals for global licensing & collaboration

Johnson&Johnson

Worldwide licensing of two CD20-directed autologous CAR-Ts *

AstraZeneca

Solid tumors-focused collaboration

** The legal entity to the worldwide collaboration and license Agreement is Janssen Biotech, Inc., a Johnson & Johnson company.*

Accelerated Global R&D with Focused US and China Execution

US Strategy

Leverage our in-house US R&D and manufacturing capabilities along with global partners to accelerate global development

- Generate **robust POC data** on the safety and efficacy of the key drugs, such as C-CAR039, C-CAR066 for r/r NHL, C-CAR168 for autoimmune disease, and C-TIL051 for NSCLC
- Seek C-CAR039/C-CAR066 BLA **approval in all lines of NHL with multi-billion investment** in clinical development, CMC, and commercialization
- Dynamic **partnership with global pharma to create a win-win scenario** by matching our breakthrough innovations with the resources of global pharma

China Strategy

Utilize KOL and hospital network to conduct IIT and sponsored trials for novel programs to achieve early validation and China development

- Seek C-CAR039 BLA approval in all lines of NHL
- AstraZeneca partnership developing CAR-T therapies for solid tumors (C-CAR031 and C-CAR036)
- Actively generating C-CAR168 POC clinical data for autoimmune diseases
- Leverage our strong manufacturing expertise to address commercialization needs

Pipeline

	Program	Indication	Target	Platform	Preclinical	IIT	Phase I/Ib	Pivotal	Partners
Hematology Malignancies	**C-CAR039**	r/r B-NHL	CD20/CD19	CAR-T	US / China				Johnson&Johnson
	C-CAR066	r/r B-NHL including r/r to CD19 CAR-T treatment	CD20	CAR-T	US / China				Johnson&Johnson
	C-CAR088	r/r Multiple Myeloma	BCMA	CAR-T	China				
	Undisclosed CAR-T	Acute Myeloid Leukemia	Undisclosed	CAR-T	US				
Auto-immune Diseases	**C-CAR168**		CD20/BCMA	CAR-T	US / China				
	C-CAR088		BCMA	CAR-T	China				
	A-CAR198		BCMA/CD19	CAR-T	US / China				
Solid Tumors	**C-CAR031/AZD7003**	HCC	GPC3	CAR-T	China				AstraZeneca
	C-CAR036/AZD6422	Solid Tumor	Claudin 18.2	CAR-T	China				AstraZeneca
	C-TIL051	NSCLC	Multiple	TIL	US				
	Armored CAR-T	Ovarian Cancer	Claudin 6	CAR-T	US				
	Armored CAR-T	Neuroblastoma	GD2	CAR-T	US				

The legal entity to the worldwide collaboration and license Agreement is Janssen Biotech, Inc., a Johnson & Johnson company.

Janssen Global Partnership

$245 million
Upfront Payment

Additional Future Milestone Payments

Tiered Royalty Payments

CD20-directed Autologous CAR-Ts

To develop, manufacture and commercialize next-generation CAR-T therapies for B-cell malignancies

Johnson&Johnson

Clinical Stage Programs

	C-CAR039	C-CAR066
	Novel CD20/CD19 bispecific CAR-T	Optimized Novel CD20 targeted CAR-T
Territories	▪ Development & Commercialization rights ex-China ▪ Commercialization rights in China	
IND transfer	C-CAR039 / JNJ-90014496 Ph1 in US (NCT05421663) and Australia	C-CAR066 / JNJ-90009530 Ph1 in US (NCT05784441)
Clinical supply	Viral vector and plasmid	**Technology transfer**

The legal entity to the worldwide collaboration and license Agreement is Janssen Biotech, Inc., a Johnson & Johnson company.

Novel Optimized CD20 Directed CART Programs

Unmet Medical Needs

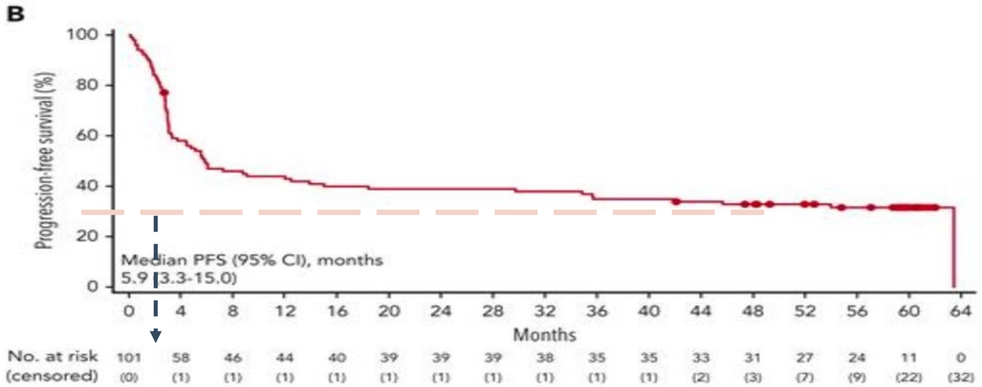
Anti-CD19 CAR T-cell therapies have proven to be efficacious in r/r B-NHL patients. However, ~20% of LBCL patients and ~10% of indolent patients are non-responders [1-5]

50% of LBCL progressed by ~6 months after CD19 CAR-T treatment , < 40% long-term durable response [6]

Clinical outcomes in patients with relapsed/refractory large B-cell lymphoma (r/r LBCL) following CD19 CAR-T therapy are poor.

- The objective response rate (ORR) and complete response (CR) rate with salvage therapies, including bispecific antibodies and antibody-drug conjugates, were 18–54.1% and 3.8–35%, respectively.[7–14]
- The median progression-free survival (PFS) was 1.4–3.8 months and the median overall survival (OS) was 3.8–9.3 months.[7-12]

Clinical response of YESCARTA in refractory large B-cell lymphoma



Neelapu SS et al., Five-year follow-up of ZUMA-1 supports the curative potential of axicabtagene ciloleucel in refractory large B-cell lymphoma, Blood, 2023.

Upside Potentials of C-CAR039 and C-CAR066 – Aim for Approvals in All Lines of Therapies

3L+ NHL	2L NHL (R-CHOP failure)	1L NHL (R-CHOP naïve)
~47k of treatable patients Currently in Ph1b trials in US and China (CD19 CAR-T naïve)	~80k of treatable patients	~159k of treatable patients

Data Source: Clarivate, 2021 for G7 countries

1. Neelapu SS, et al., N Engl J Med. 2017 Dec 28;377(26):2531-2544. 2. Schuster SJ et al., N Engl J Med. 2019 Jan 3;380(1):45-56. 3. Abramson SJ., et al., Lancet. 2020 Sep 19;396(10254):839-852. 4. Jacobson CA et al., Lancet Oncol. 2022 Jan;23(1):91-103. 5. Fowler NH et al., Nat Med. 2022 Feb;28(2):325-332.. 6. Spiegel JY, et al. Blood. 2021;137:1832–5. 7. Alarcon Tomas A, et al. Leukemia. 2023;37:154–63. 8. Chow VA, et al. Am J Hematol. 2019;94:E209–13. 9. Di Blasi R, et al. Blood. 2022;140:2584–93. 10. Caimi PF, et al. Clin Lymphoma Myeloma Leuk. 2022;22:e335–9. 11. Budde LE. J Clin Oncol. 2022 Feb 10;40(5):481-491. 12. Dickinson MJ,N Engl J Med. 2022 Dec 15;387(24):2220-2231. 13. Thieblemont C, et al. J Clin Oncol. 2023 Apr 20;41(12):2238-2247. 14. Bannerji R. Blood (2020) 136 (Supplement 1): 42–43.
r/r, Relapsed or Refractory; B-NHL, B-Cell Non-Hodgkin Lymphoma; ORR, Overall Response Rate; CR, Complete Response; PFS, Progression-Free Survival.

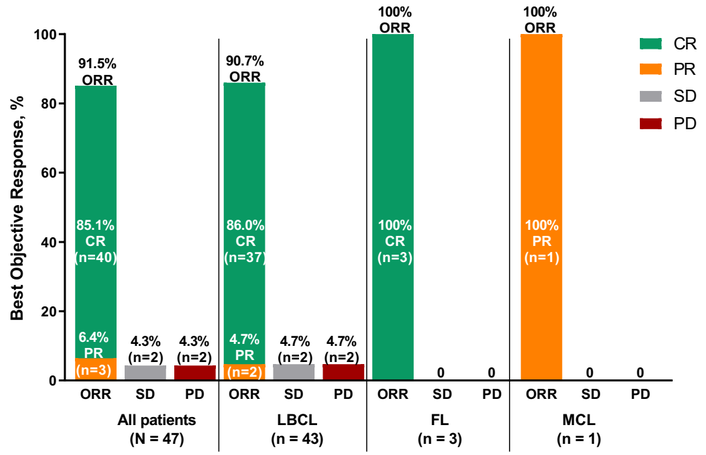
C-CAR039 Clinical Results

C-CAR039 is a Promising Therapy for B-NHL (esp. for LBCL) with Excellent Safety Profile and Promising Clinical Efficacy

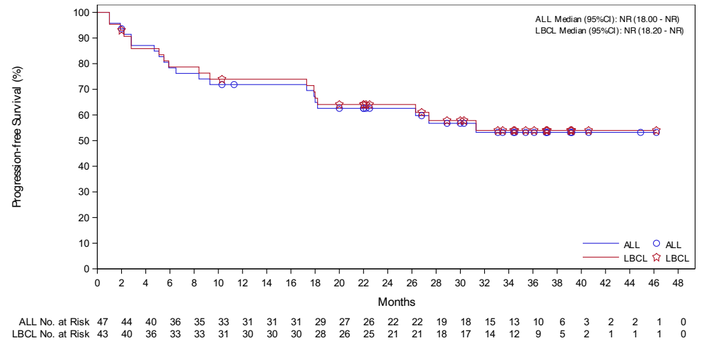
Characteristics	N=48
Median Age, year (range)	55 (25-71)
• Age≥65, n (%)	11 (22.9)
NHL Subtype, n (%)	
• DLBCL, NOS	37 (77.1)
• tFL	4 (8.3)
• PMBCL	3 (6.3)
• FL	3 (6.3)
• MCL	1 (2.1)
ECOG PS, n (%)	
• 0	31 (64.6)
• 1	17 (35.4)
IPI Score 3/4，n (%)	15 (31.3)
Ann Arbor Stage III/IV, n (%)	36 (75.0)
Double-expression Lymphoma, n (%)	15 (31.3)
Median Number of Prior Lines of Therapy, (range)	3 (1-7)
• ≥4, n (%)	16 (33.3)
Never Achieved CR of Prior Therapies, n (%)	22 (45.8)
Prior Therapy, n (%)	
• CD20	48 (100)
• ASCT	8 (16.7)
Received Bridging Therapy, n (%)	12 (25.0)

AESI, n (%)	N=48
CRS	45 (93.8)
• Grade≥3	1 (2.1)
• Median days to onset, d (range)	3 (1-12)
• Median days to resolution, d (range)	5 (2-78)
ICANS	3 (6.3)
• Grade≥3	0
• Median days to onset, d (range)	6 (5-29)
• Median days to resolution, d (range)	12 (3-53)
Prolonged Cytopenia	
• Neutropenia	26 (54.2)
• Thrombocytopenia	10 (20.8)
• Anemia	10 (20.8)
Infections	32 (66.7)
• Grade≥3	12 (25.0)
Secondary Primary Malignancy	3 (6.3)
• Acute myeloid leukemia	2 (4.2)
• EBV+ cytotoxic T-cell lymphoma	1 (2.1)

- **ORR was 91.5% with 86.0% CR in r/r LBCL**



- **The estimated 24-m PFS rates were 62.6% and 64.1% for all patients and LBCL patients**



C-CAR066 Clinical Results

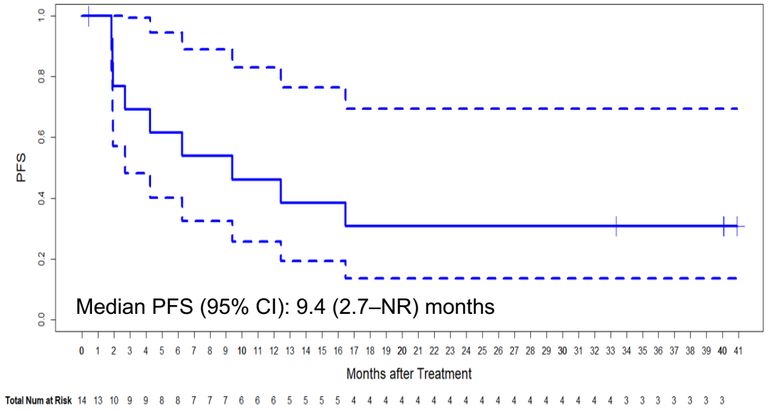
Characteristics	N=14
Median Age, year (range)	54.5 (37-67)
• Age≥65, n (%)	2 (14.3)
NHL Subtype, n (%)	
• DLBCL	10 (71.4)
• tFL	4 (28.6)
ECOG PS 0-1, n (%)	
• 0	5 (35.7)
• 1	9 (64.3)
IPI Score 3/4，n (%)	8 (57.1)
Ann Arbor Stage III/IV, n (%)	12 (85.7)
Double-expression Lymphoma, n (%)	7 (50.0)
SPD, n (%)	
• ≥ 4000 mm^2	6 (42.9)
• < 4000 mm^2	8 (57.1)
Median (range) number of Prior Lines of Therapy	5 (2-7)
• ≥4, n (%)	12 (85.7)
Prior ASCT, n (%)	2 (14.3)
Prior Therapy, n (%)	
• CD19	12 (85.7)
• CD19/CD79b or CD19/CD22	2 (14.3)
Best response of prior CAR-T Therapy, n (%)	
• CR	2 (14.3)
• PR	10 (71.4)
• SD/PD	2 (14.3)
Median (range) DOR of prior CAR-T therapy, months	1.9 (0.4–6.1)
Median (range) time from prior CAR-T to C-CAR066, months	5.5 (3.4–14.2)
Bridging therapy, n (%)	7 (50.0)

AESI, n (%)	N=14
CRS	12 (85.7)
• Grade≥3	1 (7.1)
• Median days to onset, d (range)	5.5 (2–15)
• Median days to resolution, d (range)	4.0 (1–15)
ICANS	0
Infections	8 (57.1)
• Grade≥3	2 (14.3)
Prolonged Cytopenias*	4 (28.6)
• Neutropenia	3 (21.4)
• Anemia	2 (14.3)
• Thrombocytopenia	2 (14.3)
SPM	0

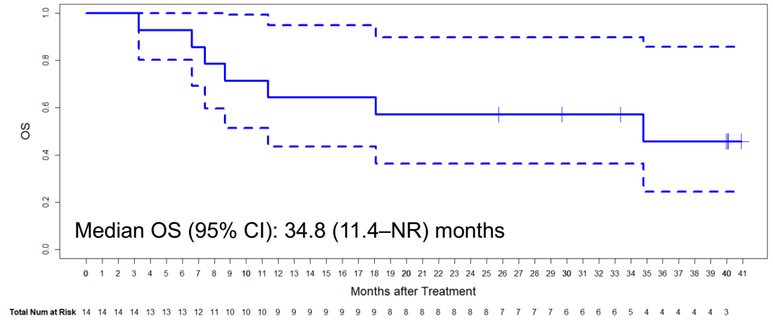
SAEs, n (%)	N=14	Onset Day
SAEs	4 (28.6)	
• C-CAR066-related	1 (7.1)	
CRS	1 (7.1)	Day 11
Myelosuppression	1 (7.1)	Day 32
• C-CAR066-unrelated	3 (21.4)	
Abdominal pain	1 (7.1)	Day 30
Platelet count decreased	1 (7.1)	Day 112
Pneumonia	1 (7.1)	Day 404

- **Most cases of CRS were grade 1/2**;
- **No ICANS and SPM**;
- Only 2 SAEs in 1 patient were related to C-CAR066, which were CRS and myelosuppression;

- **ORR was 92.9%, with a CR rate of 57.1%**
- Median DOR was 8.3 months (95% CI, 1.7–NA).
- With the median follow-up of 27.7 months, median PFS was 9.4 months (2.7 – NA**). 4 (28.6%) patients remained in CR for more than 30 months.**



- The Kaplan-Meier estimate of **median OS was 34.8 months** (11.4 – NA).



Inflammation and Immunology (I&I) Assets

Large addressable markets

- SLE: ~800 thousand new cases in 2022 globally
- ~40% of SLE will develop into Lupus Nephritis, with many having long-term kidney failures
- Major opportunities in orphan indications such as antisynthetase syndrome, IMNM (Immune Mediated Necrotizing Myopathies), Dermatomyositis, NMOSD, SSc, rMS, pemphigus

Our preclinical data

- Constructs are optimized to ensure maximum target cell killing activity and target specificity
- CD20/BCMA (C-CAR168), BCMA/CD19(A-CAR198) bispecific CARs
- scFvs of αCD20, αCD19, and αBCMA have all demonstrated robust efficacy and safety profiles in early clinical studies presented at ASCO and ASH[1.2,3,4,5,6]

Exciting early clinical data emerging from CD19 CAR-T and BCMA CAR-T in multiple I&I diseases

- Academic studies have shown early promising efficacy of CD19 CAR-Ts in SLE, antisynthetase syndrome and SSc
- BCMA CAR-T has shown early positive clinical signal in r/r NMOSD

Our strategy

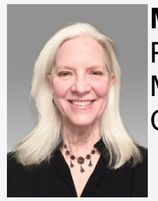
- Simultaneously targeting both B cells and plasma cells to eradicate disease-causing pathogenic B-cells and autoimmune antibodies
- Approach has been endorsed by our SAB comprising of well-respected experts in the field

Upcoming Clinical Milestones

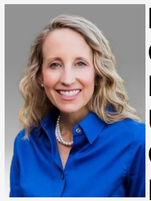
- China IIT initiation Q1 2024
- US IND submission Q2 2024
- US Phase 1 trial initiation 2H 2024

I&I Scientific Advisory Board

Peter Lipsky M.D.
SAB Chair
Former BoD member, American College of Rheumatology (ACR)



Mary Crow M.D.
Professor of Medicine, Weill Cornell Medicine



Maria Dall'Era M.D.
Chief of Division of Rheumatology at University of California, San Francisco (UCSF)

Thomas Dörner M.D.
Prof of Rheumatology & Clinical Immunology, Innovative Therapies for Autoimmune Diseases, Charité University Hospitals

1. Aibin L et al., Journal of Clinical Oncology 2021 39:15_suppl, 2507. 2 Aibin Liang, et al., Journal of Clinical Oncology 2021 39:15_suppl, 2508. 3 Li, P et al., Blood (2023) 142 (Supplement 1): 1025. 4. Li, P et al., Blood (2023) 142 (Supplement 1): 2115, 5 Qu X., Blood (2021) 138 (Supplement 1): 1830. 6 Qu X et al., J Immunother Cancer. 2022 Sep;10(9):e005145.

AstraZeneca Partnership in Solid Tumors

1 Unmet Medical Need

HCC (2022)

- More than 850 thousand new cases *occurred* in 2022 globally [1]
- Approximately half of the total HCC patients in the world come from China [2]

GC (2020)

- 5th most common neoplasm and the 3rd deadliest cancer in the world [3]
- 5.6% of global cancer cases and causing nearly 1 million deaths in 2020 [3]

2 AstraZeneca Collaboration

- Co-development of novel innovative armoring CAR-T asset GPC3 armored CAR (C-CAR031) and collaboration for Claudin 18.2 armored CAR (C-CAR036)
- Received upfront payment from AstraZeneca for the co-development for GPC-3 (C-CAR031) in China and collaboration for CLDN18.2 (C-CAR036)
- For the collaboration on Claudin 18.2 CAR-T program in China (C-CAR036), AbelZeta is eligible to receive development, regulatory milestones and royalties. In addition, AbelZeta is eligible to receive milestone payments and royalties for the ex-China development of Claudin 18.2 CAR-T (AZD6422) and GPC-3 CAR-T (AZD5851), which are being solely developed, manufactured and commercialized by AstraZeneca outside of China

3 Upcoming Milestones

- C-CAR036 China IIT on GC initiated in Q4 2023
- China C-CAR031 IND filling Q1 2024
- China C-CAR031 Phase 1 trial initiation for HCC in H2 2024

1. Zou H, et al., Economic Burden and Quality of Life of Hepatocellular Carcinoma in Greater China: A Systematic Review. Front Public Health. 2022 Apr 21;10:801981. 2. Q. Wu and S.-K. Qin Chinese Clinical Oncology 2013 Vol. 2 Issue 4 Pages 38. 3. Sung H, et al., Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. CA Cancer J Clin. 2021 May;71(3):209-249

HCC: Hepatocellular carcinoma, GC: Gastric **cancer**

2024 Milestones

	1H 2024	2H 2024
Hematology Malignancies	**C-CAR039** US Phase 1b Enrollment (3L+ LBCL, CD19 CAR-T naïve) China Phase 2 Enrollment **C-CAR066** US Phase 1b Enrollment (3L+ LBCL)	**C-CAR039** US Phase 1b results (3L+ LBCL, CD19 CAR-T naïve) China Phase 2 Enrollment **C-CAR066** US Phase 1b results (3L+ LBCL)
Autoimmune Diseases	**C-CAR168** China IIT 1Q US IND Filing 2Q	**C-CAR168** US Phase 1 initiation. China IIT update
Solid Tumors	**C-TIL051** US Phase 1 Initiation **C-CAR031** China IND Filing US Phase 1b Enrollment	**C-CAR031** China Phase 1 Enrollment China IIT update

THANK YOU

www.abelzeta.com