Corporate Brief Q2 2024

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We Aim to Cure

- Experienced Management Team
- Novel FUSION™ System
- BMF-219 – Phase II - Lead Asset
- BMF-500 – Phase I
- Discovery Programs

biomea FUSION™ | We Aim to Cure™

Biomea Fusion is a clinical-stage biopharmaceutical company focused on the discovery and development of **oral covalent small-molecule drugs** to treat patients with metabolic diseases and genetically defined cancers. We believe that our approach may lead to significant improvement and extension of life for patients. Our team is engaged in all phases of drug discovery and development, including target selection, small molecule design, and preclinical and clinical studies to develop innovative medicines.

Aiming to Develop some of the Most Impactful Medicines of our Time

A Long History of Developing Successful Drugs - Together

Thomas Butler
Chairman & CEO

biomea FUSION
Co-Founder

The FUSION™ SYSTEM
BMF-219*
Co-Inventor

imbruvica® (ibrutinib)
560, 420, 280, 140 mg tablets | 140, 70 mg capsules
Co-Inventor

Veklury® remdesivir 100 MG FOR INJECTION
Co-Inventor

Ramses Erdtmann
President & COO

biomea FUSION
Co-Founder

imbruvica® (ibrutinib)
560, 420, 280, 140 mg tablets | 140, 70 mg capsules

Juan Frías, M.D.
Chief Medical Officer

once weekly mounjaro® (tirzepatide) injection 0.5 mL
2.5 mg | 5 mg | 7.5 mg | 10 mg | 12.5 mg | 15 mg

farxiga® (dapagliflozin) 5mg & 10 tablets

Jardiance® (empagliflozin) tablets 10 mg/25 mg

once weekly trulicity® (dulaglutide) injection 0.5 mL
0.75 mg | 1.5 mg | 3.0 mg | 4.5 mg

ONCE-WEEKLY wegovy® semaglutide injection 2.4 mg

Byetta® (exenatide) injection

Invokana® (canagliflozin) tablets

OZEMPIC® semaglutide injection 0.5mg, 1mg, 2mg

Januvia® sitagliptin

Naomi Cretcher
Chief of People

imbruvica® (ibrutinib)
560, 420, 280, 140 mg tablets | 140, 70 mg capsules

Heow Tan
Chief Technical & Quality Officer

imbruvica® (ibrutinib)
560, 420, 280, 140 mg tablets | 140, 70 mg capsules

Xtampza® ER (oxycodone) EXTENDED-RELEASE CAPSULES (II)

ZADAXIN™

PLENAXIS®

HylatopicPlus® Cream

Steve Morris, M.D.
Chief Development Officer

XALKORI® CRIZOTINIB 250 MG CAPSULES

ZYKADIA® ceritinib 150 mg tablets

LORBRENA® LORLATINIB 100 mg tablets

ALECENSA® alectinib 150 mg capsules

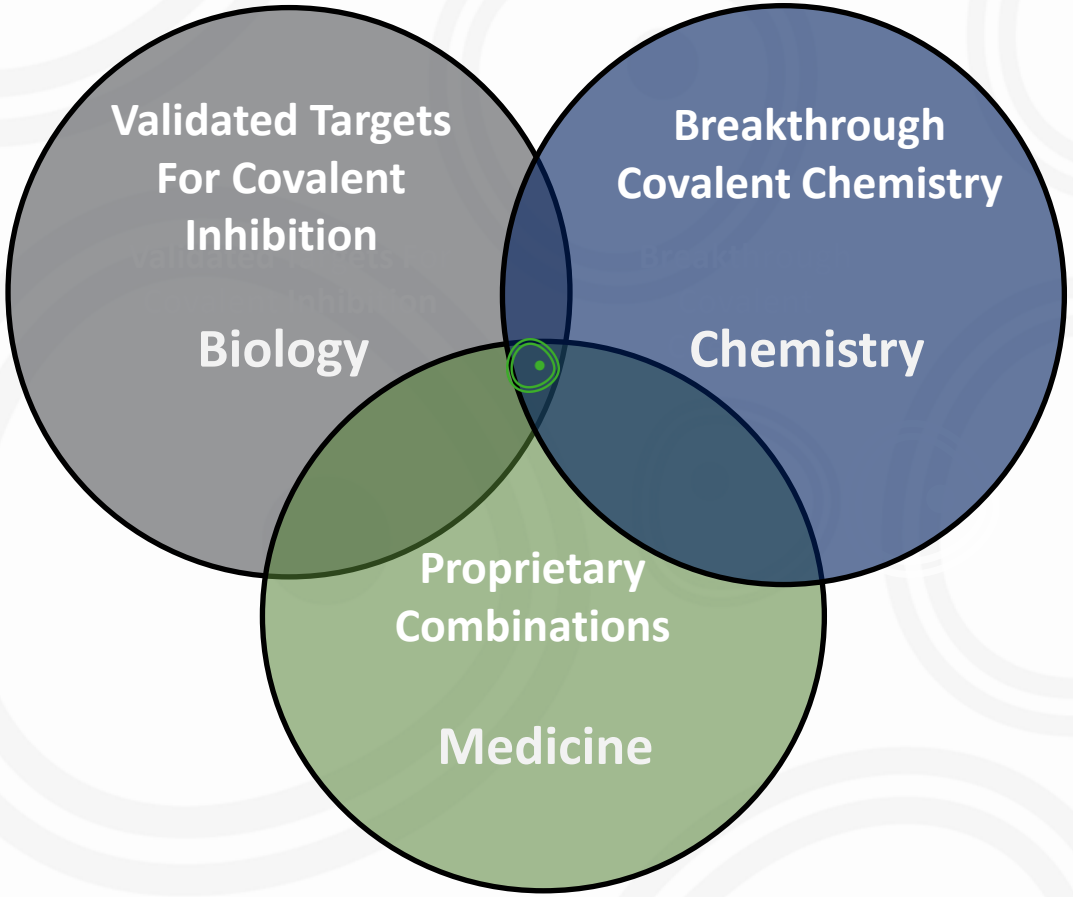
ALUNBRIG™ BRIGATINIB 30mg TABLETS

Franco Valle
Chief Financial Officer

imbruvica® (ibrutinib)
560, 420, 280, 140 mg tablets | 140, 70 mg capsules

*Note: BMF-219 is an investigational new drug

Biomea's Development Principles



Validated Targets

Drugs pursuing **Validated Disease Targets** have a ~2x higher likelihood of approval than molecules pursuing a new mechanism of action

Sources: Nelson et al. (2015) Nat Genet.; Thomas et al. (2016) BIO; In a Landscape of 'Me Too' Drug Development, What Spurs Radical Innovation? HBS Weekly Review (Jun 2018)

Covalent Inhibitors

Covalent Small Molecule Inhibitors provide deep target inactivation and a wider therapeutic window, allowing for longer duration on therapy

Sources: Singh et al. (2011) Nature Reviews Drug Discovery; Cheng et al. (2020) Journal of Hematology & Oncology; Strelow (2017) SLAS Discovery; Kalgutkar & Dalvie (2012) Expert Opin. Drug Discov.;

Proprietary Combinations

Combination Therapy with non-overlapping resistance mechanisms results in more durable responses and better outcomes

Sources: Palmer et al. (2019) eLife; Mokhtari et al. (2017) Oncotarget

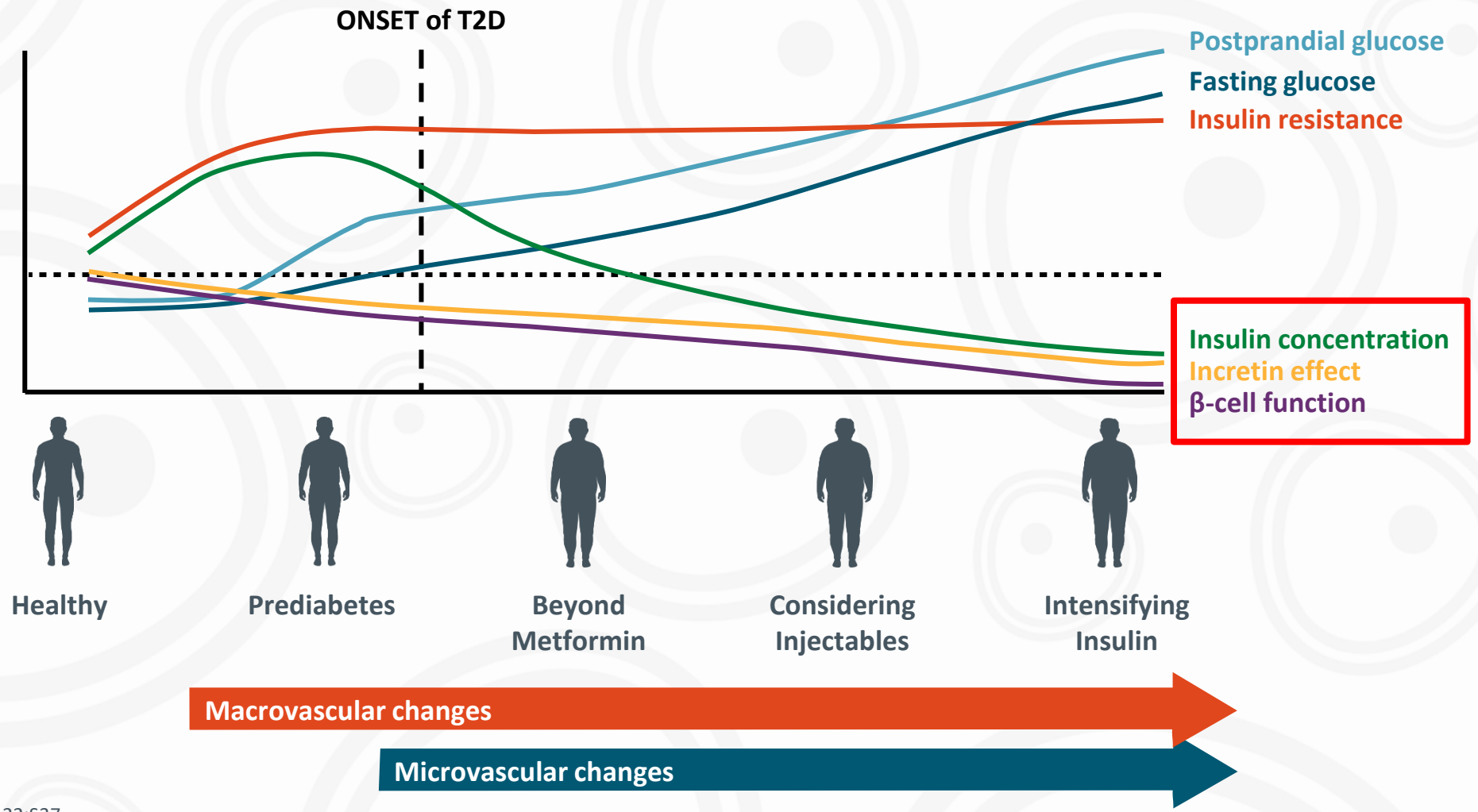
Biomea's Pipeline Expands into 5 Clinical Trials with 2 Novel Agents

Multiple Upcoming Milestones in the Near Term

	Study	Indications	Milestones	Expected Timeline
BMF-219 Menin Program	COVALENT-111	Type 2 Diabetes	Phase II - Dose Expansion Initial Data Readout	2024
	COVALENT-112	Type 1 Diabetes	Phase II - Initial Proof of Concept	2024
	COVALENT-101	Liquid Tumors	Phase I - Dose Escalation Completion	2024
	COVALENT-102	Solid Tumors	Phase I - Dose Escalation Completion	2024
BMF-500 FLT3 Program	COVALENT-103	AML/ALL (acute leukemia)	Phase I - Dose Escalation Completion	2024
Additional Program	Target # 3	TBA	Announce IND Candidate	2024

biomea FUSION™ We Aim to Cure™

Natural History of Types 2 Diabetes – A Progressive Decline in Beta-Cell Function

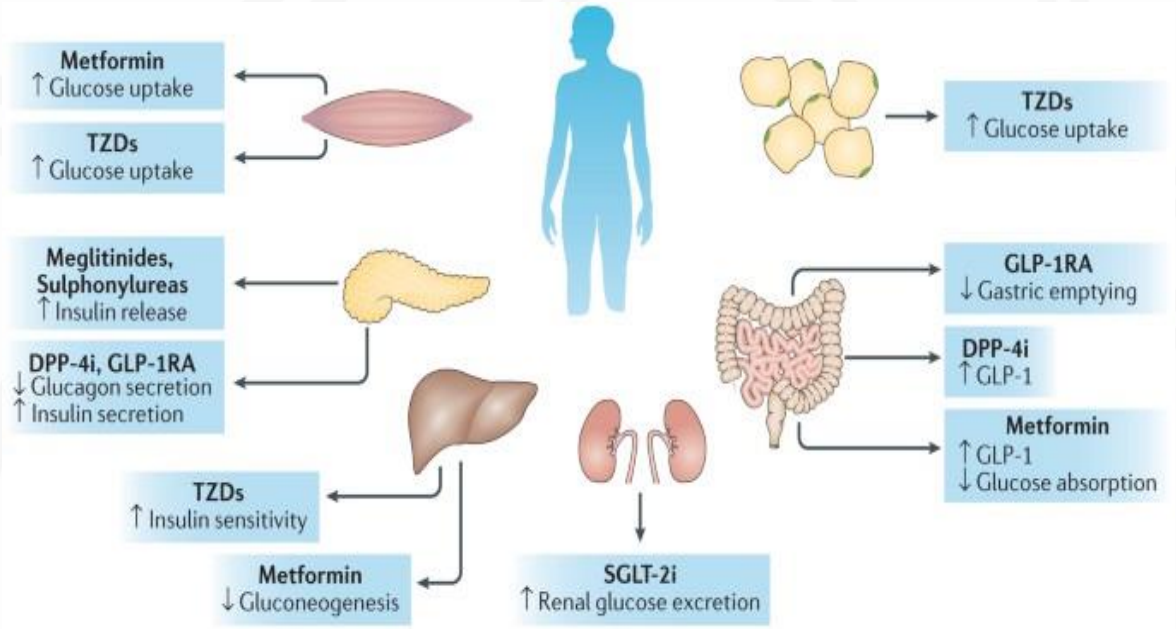


T2D, type 2 diabetes

Kendall, D. Am J Med. 2009;122:S37.

biomea FUSION™ We Aim to Cure™

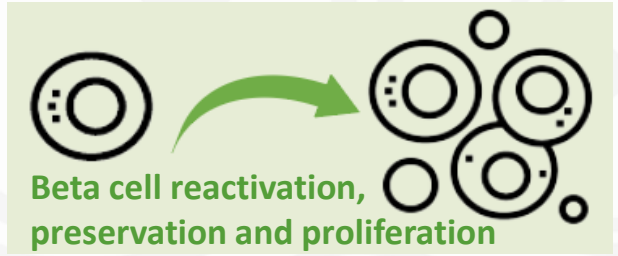
BMF-219 is a Potential First in Class Diabetic Agent – Addressing the Root Cause of Disease



Nat Rev Endocrinol 12, 337–346 (2016).
https://doi.org/10.1038/nrendo.2016.51

Currently approved therapies are primarily targeting the **Symptoms of Type 2 Diabetes: *Hyperglycemia***

BMF-219: Menin Inhibition a Potential New Class of Diabetes Agents

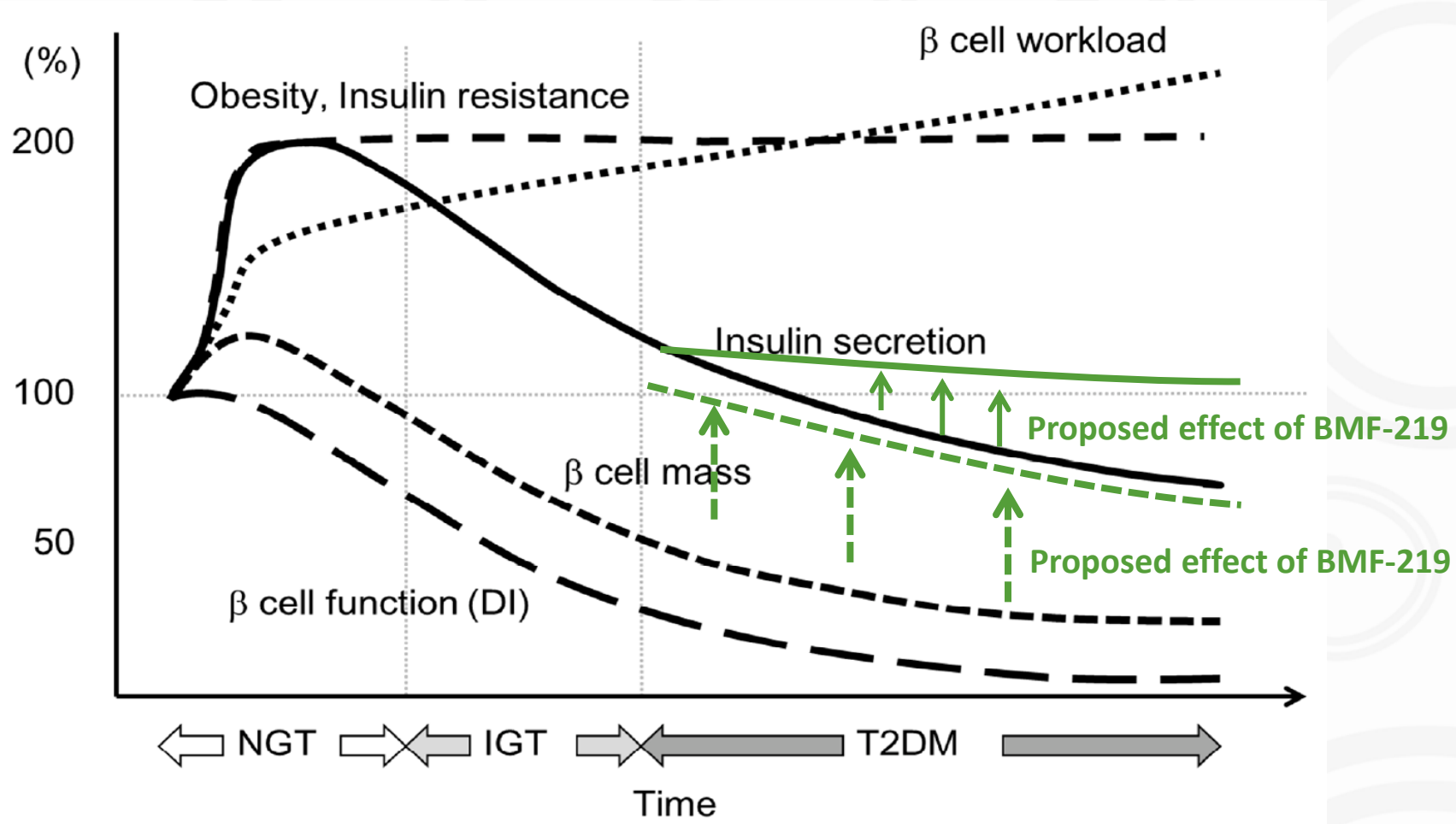


Beta Cell Mass ↑ Beta Cell Health ↑

Control of Glycemia even after Cessation of Dosing

BMF-219 represents a potential new class of diabetes agents addressing the: **Root Cause of Diabetes**
- Loss of Beta Cell Mass and Function -

The Goal for BMF-219 is to Improve Glycemic Control without Continuous Medication



BMF-219 is aimed to increase beta-cell mass and function, thereby increase insulin production in order to achieve glycemic control - without the need of continuous medication.

Int. J. Mol. Sci. 2016, 17, 744; doi:10.3390/ijms17050744

Investigational BMF-219 Has a Unique Potential Value Proposition in Early Clinical Trials

How is BMF-219 Differentiated from Currently Available Diabetes Therapies?

- Oral Small Molecule
- Complementary Agent to Available Diabetes Therapies
- Non-Chronic Dosing
- Well-Tolerated Safety Profile after First Read Out
- Disease Modifying Potential Addressing the Root Cause of Diabetes
- Continued Glycemic Control even after Cessation of Dosing

Addressable Population may Include All People with Diabetes

Additional Dose Levels and Various Dosing Durations Are Being Explored in the Escalation and Expansion Portion of COVALENT-111

Part 1 Dose Escalation,
4 weeks dosing+ 22 weeks follow up

- **Healthy Volunteers** n=16
- **50 mg QD, n=10** x 4 wks
- **100 mg QD, n=20** x 4 wks
- **200 mg QD / 100 mg BID, n=22** x 4 wks
- **200 mg QD,** x 2 wks, **n=10** → **400 mg QD** x 2 wks

Part 2 Dose Expansion, n=216 – 288 incl.
12 weeks dosing + 40 weeks follow-up

Arm A*	**100 mg, n=72** x 8 wks	
Arm B	**100 mg, n=72** x 12 wks	
Arm C	**100 mg, n=72** x 8 wks	→ **200 mg** x 4 wks
Arm D	Anticipated to be added based on data from 400 mg cohort of escalation portion	

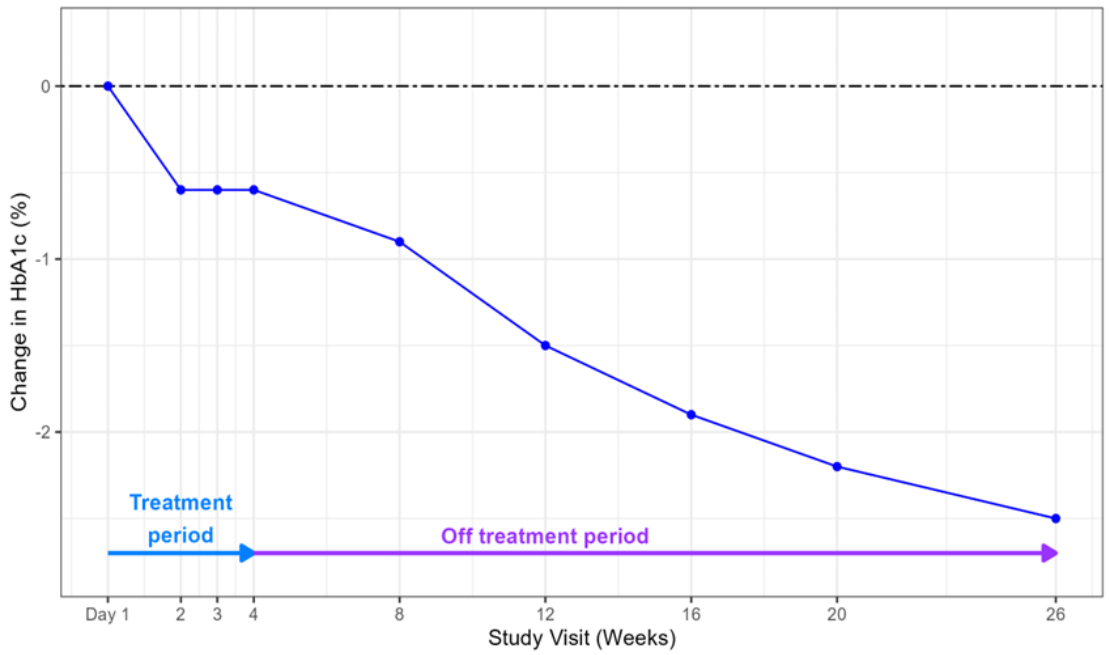
*Redosing as required at Week 22 for another 4 weeks.

Case Study 2: 29-year-old man with 4-year history of T2D

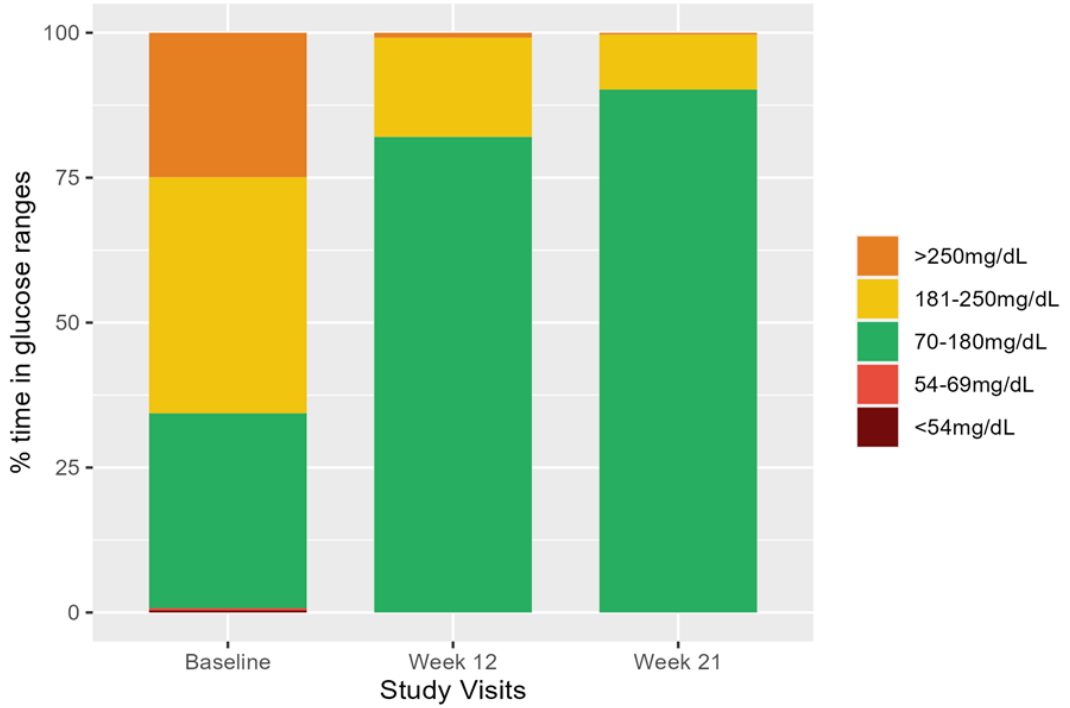
- 29-year-old man with 4-year history of T2D
- Metformin and empagliflozin
- HbA_{1c} 9.5%; FPG 146 mg/dL; BMI 25.6 kg/m^2

- BMF-219 200 mg once daily without food for 4 weeks
- CGM at Week 21 with ~90% $TIR_{70\text{-}180\ mg/dL}$
- No tolerability issues or related adverse events

Change in HbA_{1c} (%)



Continuous Glucose Monitoring



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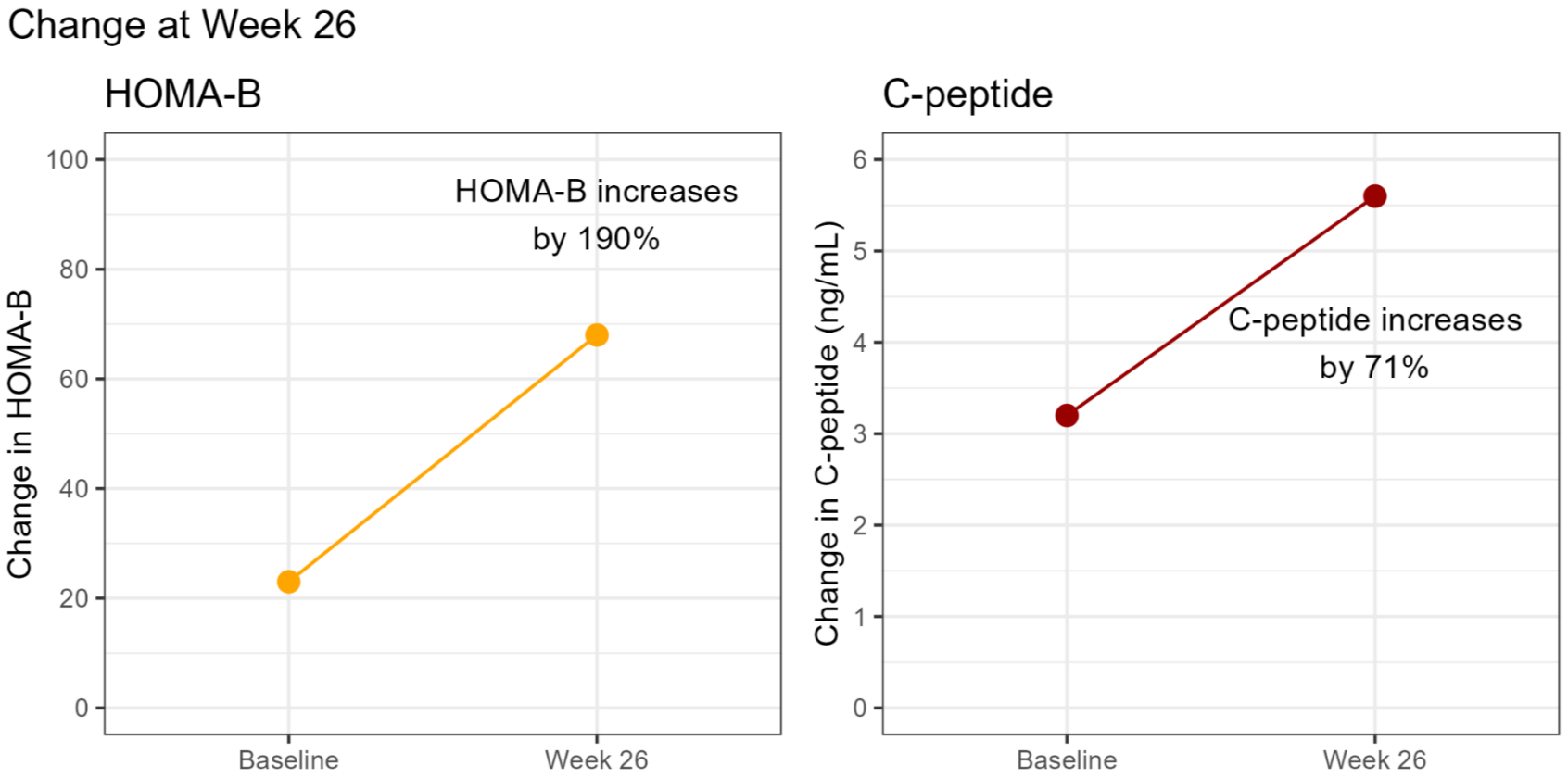

Summary and Conclusion

- Patients in COVALENT-111 are displaying improved glycemic control while off therapy beyond Week 26 following the 28-day treatment with BMF-219, supporting enhanced beta-cell function as the mechanism of action
- BMF-219 was generally well tolerated with no serious adverse events and no adverse event-related study discontinuations, and no symptomatic or clinically significant hypoglycemia
- 100mg and 200mg dose levels have been selected for the first 3 Arms of the Expansion Phase, which will dose patients up to 12 weeks (compared to 4 weeks in the Escalation Phase) and extended follow-up to Week 52

Next Steps:

- The Expansion Phase of COVALENT-111 is currently enrolling on schedule.
- Initial 26-week data expected in 2H24

BMF-219 Induced C-Peptide Increase in the First Two Type 1 Diabetes Patients

Stage 3 Type 1 Diabetes Patients	Patient 1	Patient 2
Baseline Characteristics	58-year-old, diagnosed with type 1 diabetes 3 years ago	24-year-old, diagnosed with type 1 diabetes 7 years ago
Dose Level	BMF-219 200 mg once-daily	BMF-219 100 mg once-daily
Week 4	• Fasting C-peptide increased by 57% compared to Baseline (study Day 1). • During a mixed-meal tolerance test (MMTT) the C-Peptide Index (AUC)[1] increased by 12%.	• Fasting C-peptide increased by 16% compared to Baseline. • During a MMTT the C-peptide Index (AUC)[1] increased by 30% • Near-normal glucose response during the MMTT without receiving any meal-time insulin
Week 8	• Fasting C-peptide increased by 80% compared to Baseline. • During a MMTT, C-peptide increased up to 200%. The C-Peptide Index (AUC) increased by 40% compared to Baseline	-
Daily Insulin Usage	Pending	• Reduction in daily insulin usage during the first four weeks of the study
Safety	Well Tolerated	Well Tolerated

Data cutoff date: March 7, 2024

[1]C-peptide index is the ratio of serum C-peptide to plasma glucose levels and is used to evaluate beta-cell function

Next 4 Years BMF-219 in Diabetes

2024

Phase II Expansion Cohorts (n = 216+) initial response with 12 weeks of follow up provided

Proof of concept in type 1 diabetes established (n = 40)

Pivotal Phase III study in type 1 diabetes initiated

2025

Pivotal Phase III studies in type 2 diabetes initiated

2026

NDA for BMF-219 in type 1 diabetes filed

2027

NDA for BMF-219 in type 2 diabetes filed

THANK YOU

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