CLOSER LOOK

MEMORANDUM

GLP-1 Mono, Dual, and Tri-Agonist Competitive Landscape – January 23, 2026

- **The table below includes an overview of the GLP-1 agonist competitive landscape, including mono-agonists (injectable and oral), dual agonists, and tri-agonists.** It includes all the companies we are aware of with GLP-1 based agonists in development, though we acknowledge that it may be incomplete. We will continuously update the table as timelines change. Glucagon formulations under development for hypoglycemia rescue or for use in pumps can be found in our glucagon competitive landscape.

Table of Contents

Approved

Company	Product	Status	Timeline
Lilly	Tirzepatide (LY3298176)	Approval for T2D, obstructive sleep apnea, and obesity; phase 2 for MASH and CKD HFpEF indication discontinued	HFpEF indication discontinued in US in 1Q25 - Tirzepatide for HFpEF indication withdrawn in the US; regulatory filing continues in the EU FDA approved tirzepatide for OSA Dec 2024. Positive 176-week SURMOUNT-1 results Aug 2024; SUMMIT HFpEF topline Aug 2024. Approved in China for weight management Jul 2024. Regulatory submission for HFpEF filed 4Q24, Phase 3 SURPASS program in T2D: SURPASS-1 published in June 2021, SURPASS-2 published in June 2021, SURPASS-3 (sub-analyses: SURPASS-3 CGM, SURPASS-3 MRI) published in August 2021, SURPASS-4 published in October 2021, and SURPASS-5 published in February 2022 FDA approved tirzepatide, under brand name Mounjaro, for glycemic management in adults with T2D in May 2022 SURMOUNT-1 published July 2022, achieving 22.5% weight loss in participants with obesity SURPASS J-mono and SURPASS J-combo results published in The Lancet in August 2022 SURPASS-6 ongoing, expected completion November 2022 Initiation of SURMOUNT-MMO trial in 3Q22

			Phase 3 SURMOUNT-OSA, SURPASS-EARLY, and SURPASS-PEDS trials initiated 2Q22 FDA approval in T2D in May 2022 Phase 3 SURMOUNT-5 head-to-head trial of tirzepatide vs semaglutide 2.4 mg announced 2Q22, to initiate in 2023 Fast track designation in sleep apnea granted in 4Q22 SURMOUNT-2 to complete in April 2023, SURMOUNT-3 and SURMOUNT-4 to complete in May 2023 SURPASS-SWITCH-2 study initiated March 2023; SURMOUNT-5 trial initiated April 2023 Phase 2 NASH trial, SYNERGY-NASH, expected to complete in December 2023 Phase 1 bioequivalence study testing new tirzepatide autoinjector device initiated April 2023 with expected completion July 2023 SURMOUNT-2 topline results released April 2023 Obesity submission completed in the US in 2Q23; Obesity submission accepted in EU in 1Q23 SURMOUNT-3 and SURMOUNT-4 topline results released in July 2023, and full SURMOUNT-2 results presented at ADA 2023 Phase 2 trial investigating combination therapy involving BioAge's oral apelin receptor agonist BGE-105 (azelaprag) with tirzepatide for the treatment of obesity FDA approves tirzepatide under brand name Zepbound for weight loss; UK's Medicines and Healthcare products Regulatory Agency (MHRA) also authorized the use of Mounjaro (tirzepatide for diabetes) for weight management and weight loss REDEFINE 4 phase 3 trial comparing CagriSema – combination of Wegovy (semaglutide) and amylin analogue cagrilintide – against Zepbound in people with obesity
Lilly/ Innovent	Mazdutide (LY3305677)	Approved in China (obesity); phase 3 (T2D)	In June 2025, Innovent announced regulatory approval for mazdutide in China for obesity based on GLORY-1 results (15% weight loss at Week 48). At ADA 2025, DREAMS-1 data showed robust A1c reduction and significant weight loss at 24 weeks in Chinese people with T2D. Phase 1 trial completed July 2021 showing 13% reduction in body weight Positive topline phase 2 results in diabetes announced July 2022; A1c reductions up to 1.7% and body weight reductions up to 7%; trial to complete December 2022 Phase 1b results announced in obesity in October 2022;

			Phase 1 trial initiated November 2022, expected completion December 2023 48-week treatment results of the phase 2 trial of higher dose (9 mg) mazdutide in subjects with obesity Phase 3 T2D trial (n=700) began in China (DREAMS-2) in November 2022 versus dulaglutide as an add-on to metformin and/or SGLT2 inhibitor or TZD. Expected completion in February 2025. Partnered with Lilly Two other key phase 3 studies of mazdutide 4 mg and 6 mg in Chinese patients with overweight or obesity (GLORY-1) and T2D (DREAMS-1) are underway. Full phase 2 results of lower-dose mazdutide (3 mg, 4.5 mg, and 6 mg) in Chinese patients with overweight or obesity published in Nature Communications GLORY-2 finished dosing first patient in January 2024 Mazdutide met primary and key secondary endpoints in GLORY-1 in January 2024. Mazdutide was found to be superior over dulaglutide in Chinese patients with T2D in DREAMS-2 in May 2024. Mazdutide met primary and key secondary endpoints for T2D in DREAM-1 in July 2024.
Novo Nordisk	Ozempic (semaglutide 2.4 mg injection; GLP-1 receptor agonist)	Approved for MACE reduction, CKD with T2D, and T2D Approved for obesity in 25 countries, including the US, Europe, Canada, and China Submitted for regulatory review for MASH, HFpEF Phase 3 for Alzheimer's disease	Full results of STEP UP trial of high dose semaglutide at ADA 2025; In 1Q25, submitted Wegovy to the US and European regulatory authorities to treat MASH in adults with moderate to advanced fibrosis; US supply shortages resolved in February 2025; positive topline results of 3b STEP UP trial in January 2025; Publishes trial design of phase 3 EVOKE and EVOKE+ for alzheimer's disease in January 2025; resubmitted results from the STEP-HFpEF trials to the FDA in 4Q24; Topline phase 3 ESSENCE results for MASH in November 2024and published in April 2025; phase 3 FLOW trial for T2D and CKD published in *NEJM* in May 2024; FDA approved for overweight and CVD in March 2024; phase 3 SELECT trial at AHA 2023; phase 3 STEP-HFpEF at ESC 2023; US supply shortages announced in December 2021; Approved by Health Canada in November 2021; Positive CHMP opinion in November 2021 with European launch planned for 2H22; submitted to Japanese regulatory authorities in 3Q21; FDA approval in June 2021 STEP 5 and STEP 8presented at ObesityWeek® 2021; post-hoc analyses of STEP 1 and STEP 2presented at EASD 2021; STEP 4 presented at ENDO 2021 and published in *JAMA*; STEP 3 presented at ObesityWeek® 2020 and published in *JAMA*; STEP 2 published in *The Lancet* in March 2021; STEP 1 published in *NEJM* in February 2021 following positive topline results in June 2020; Positive phase 2

			data presented at ENDO 2018 First-ever obesity CV OT (SELECT) fully enrolledwith expected completion in September 2023; phase 3 OASIS 1 trial assessing oral semaglutide initiated 3Q21 Phase 3 trial of semaglutide 2.4 mg in adolescents initiated September 2019, expected completion March 2022

Phase 3 Candidates

Company	Product	Status	Timeline
Altimmune	Pemvidutide (GLP-1/ glucagon agonist)	Phase 2 (MASH) / Phase 3 (obesity)	Phase 3 VELOCITY program announced November 2024 (n=5,000 across four trials in overweight/obesity) following successful end-of-phase-2 FDA meeting. MASH phase 2b trial results in June 2025 showed significant improvement in MASH without worsening fibrosis; end-of-phase-2 FDA meeting planned for 4Q25. Phase 2b IMPACT trial ongoing in subjects with and without diabetes for MASH resolution. ADA 2025 presentations highlighted reductions in cardio-inflammatory lipid levels and correlations between central adiposity reduction and visceral fat loss with pemvidutide. Phase 1b study in people with MASLD completed in August 2022 Granted Fast Track designation for the treatment of MASH in October 2023 Topline results of phase 2 MOMENTUM trial in people with obesity or overweight announced in December 2023 Phase 2b trial IMPACT in subjects with and without diabetes for MASH resolution
Lilly	Orforglipron	Phase 2 (T2D) / Phase 3 (OSA)	Positive topline phase 2 ACHIEVE-1 results announced in April 2025. Phase 3 ATTAIN-OSA trial initiated for OSA in 4Q24. Plans announced for additional phase 3 trials in hypertension. Topline phase 2 data for the oral GLP-1 in T2D shared in Lilly's 2023 forecast call in December 2022; dose-dependent reduction in A1c up to 2.1% and weight reduction up to 9.6% after 26 weeks; potential for "best-in-class oral GLP-1" Full phase 2 results to be presented at ADA 2023 Phase 3 studies in T2D and weight management to initiate in 1H23; if successful, Lilly will submit for both indications in 2025 and 2026, respectively Phase 3 ACHIEVE-4 trial in T2D and obesity/overweight initiated April 2023 Phase 2 results in obesity presented at ADA 2023
OPKO Health	OPK88003 (formerly TT401)	Phase 3	Phase 3 trials in diabetes and obesity were originally planned to begin in China in 2023 but were later postponed as more efficacious candidates were evaluated per 4Q23 earnings. OPK88003 remains a dual GLP-1/glucagon (oxyntomodulin)

			agonist candidate for obesity and T2D, with continued mentions in 2024–2025 conference previews Positive phase 2b topline results on dose escalation trial reported March 2019; Topline phase 2a results reported February 2016; Acquired from Transition Therapeutics by OPKO Health after Lilly terminated partnership agreement A joint venture between OPKO Health and China-based LeaderMed Health Group to develop, manufacture, and commercialize OPK88003 announced September 2021 Phase 3 trials in diabetes and obesity began early 2023
Viking Therapeutics	VK2735 (Dual GLP-1/GIP agonist)	Phase 2 (oral) & Phase 3 (subcutaneous planned)	Phase 2 VENTURE-Oral trial completed enrollment; phase 3 trials for subcutaneous VK2735 on track to initiate 2Q25. Oral formulation phase 2 topline data expected in 2H25. Presented phase 1 data at ObesityWeek 2024 showing a positive safety/tolerability profile and 3.3% placebo-adjusted weight loss from baseline (~200 lbs). Phase 1 results announced in March 2023 showing that participants lost up to 7.8% of their body weight over the 28 day study period Phase 2 VENTURE trial for people with obesity initiated in September 2023 and expected to complete June 2024 Oral VK2735 phase 1 results expected 1Q24, previously expected in 4Q23

Phase 2 Candidates

Company	Product	Status	Timeline
AstraZeneca / Eccogene	AZD5004 (formerly ECC5004)	Phase 2	In 4Q24, AZ initiated two phase 2b trials for AZD5004 (VISTA for obesity; SOLSTICE for T2D). AZD5004 was confirmed as the new name for ECC5004. 2Q24 results reaffirmed plans to advance into two phase 2b trials in obesity and T2D. In 3Q23, AstraZeneca and Ecogene entered into an exclusive licensing agreement for ECC5004 for obesity and T2D, $1.8 billion in milestone payments Phase 1 trial showed that that ECC5004 has a promising clinical profile with good tolerability and positive effects on glucose levels and body weight reduction Full phase 1 data by the end of 2023, along with goals to initiate phase 2 studies (one in obesity and one in T2D) by the end of 2024
Chugai and Lilly	OWL833 (also known as LY 3502970)	Phase 2	Ongoing Phase 2 oral, non-peptidic GLP-1 receptor agonist. Internal readout in 2020 to inform potential phase 2 progression; Moved to phase 1 as of 2Q19; Licensed from Chugai in September 2018; Management reaffirms Lilly's commitment at JPM 2018 and

			during 4Q18 call Phase 1 trial in healthy participants completed February 2022 Phase 1 trial in obesity and overweight recruiting, expected to complete October 2022 Phase 2 trial in T2D expected to complete September 2022
CORXEL Pharmaceuticals	CX11 and VCT220 (oral small molecule GLP-1 RA)	Phase 2/3	Phase 2 trial in adults with obesity, expected to complete in April 2026 Phase 2 trial in adults with T2D, expected to complete in January 2027 Phase 3 trial in China in adults with obesity expected to complete in March 2026
D&D Pharmatech	DD01	Phase 2	In June 2025, D&D Pharmatech announced positive interim phase 2 results: DD01 achieved a mean liver fat reduction of 62% vs. 8% with placebo; 76% of participants achieved at least a 30% reduction in liver fat and 49% achieved normalization of liver fat fraction. Ongoing 48-week phase 2 trial in people with overweight or obesity and MASH is continuing. Phase 2 initiated in August 2024 for overweight or obesity with MASLD or MASH; FDA Fast Track Designation granted in April 2024; approval based on positive phase 1 results
Lilly	Retratrutide	Phase 2	Projected phase 2 results for the oral GLP-1/GIP/ glucagon tri-agonist in T2D and chronic weight management shared in Lilly's 2023 forecast call in December 2022 Phase 3 trial in chronic weight management to initiate in 2023; if successful, Lilly to submit approval by 2026 Phase 3 TRIUMPH program initiated in 2Q23 Phase 2 results in T2D, obesity, and NASH presented at ADA 2023
Lilly	Naperiglipron (LY3549492)	Phase 2	The therapy is an oral GLP-1 receptor non-peptide agonist. Phase 2 trial for weight management in adults with overweight or obesity expected to complete in September 2026 (NCT06683508). Phase 2 trial for adults with overweight or obesity and T2D terminated in September 2025 for strategic business reasons (NCT07030868). Phase 2 trial evaluating the safety and efficacy of the drug in healthy weight adults (BMI 22-25 kg/m^2) discontinued in September 2025 for strategic business reasons (NCT07085468).

Merck	efinopegdutide	Phase 2b	Confirmed as a phase 2b trial with n≈360, expected to complete in December 2025 (slightly delayed from an earlier October 2025 projection), per JPM 2025 and 1Q25 updates. Positive phase 2 data presented at EASD 2023 showed significantly greater liver fat reduction compared to semaglutide. Currently being investigated in a phase 2 trial for MASH Scheduled to complete at year end 2025 Merck and Hanmi inked an $870 million deal for the compound in 2020. Previously, J&J had partnered with Hanmi on the compound but returned the rights in 2019 after subpar results
Palatin	MCR4 agonist Bremelanotide with tirzepatide	Phase 2	Palatin is also studying bremelanotide in other indications (e.g., the BREAKOUT study for T2D nephropathy), but this combination program specifically targets obesity. Phase 2 initiated in August 2024 for obesity
Roche	CT-868 (once-daily injectable GLP-1/GIP agonist)	Phase 2	Phase 2 data exploring use of CT-868 for people with T1D and overweight/obesity is expected in 2025. Phase 1 trial for people with T1D expected to complete in 2024; acquired from Carmot Therapeutics in December 2023
Roche	CT-996 (once-daily oral GLP-1 agonist)	Phase 2	Phase 1 data in T2D presented at EASD 2024; phase 2 trial expected to begin in 2025 following encouraging phase 1 data; included in Roche's 1Q25 update as part of its obesity and T2D pipeline focus Positive phase 1 results in July 2024; acquired from Carmot Therapeutics in December 2023
Structure Therapeutics	GSBR-1290 (oral GLP-1)	Phase 2a	Positive topline results were announced in the phase 2a obesity trial and capsule-to-tablet PK study, showing a mean placebo-adjusted weight loss of 6.2% over 12 weeks in the obesity trial and 6.9% in the PK study. A Phase 1b/2a safety and tolerability study was presented at ADA 2024 in healthy overweight or obese volunteers and participants with type 2 diabetes. Phase 2a data in type 2 diabetes showed approximately 1% placebo-adjusted A1c reductions at 12 weeks, with additional obesity data in progress. The discovery of GSBR-1290 was first highlighted at ADA 2023 as a highly potent, orally available small-molecule GLP-1 receptor agonist.
Zealand	Dapiglutide (first-in-class GLP-1/GLP-2 receptor dual agonist)	Phase 2	Phase 2b in obesity to begin in 2H25 announced May 2025. Part 2 of the phase 1b trial is ongoing with higher doses (up to 26 mg); topline results expected in 2Q25. Full phase 1b results (n=54) presented at ADA 2025

			showing up to 8.3% weight loss at higher doses. Topline results from Part 1 announced September 2024. Phase 2 DREAM trial (n=54) previously evaluated percent change in body weight at 12 weeks, but low-dose arms missed significance in in May 2024. 13-week dose-titration trial in obesity ongoing.
Zealand Pharma and Boehringer Ingelheim	Survodutide (BI 456906)	Phase 2	Survodutide is licensed to Boehringer Ingelheim from Zealand Pharma, with Boehringer solely responsible for development and commercialization globally. Survodutide continues to be evaluated in the phase 3 SYNCHRONIZE program for obesity and MASH, following phase 2 results showing ~19% weight loss in people with obesity and overweight in Jul 2025. FDA Breakthrough Therapy Designation in MASH based on positive phase 2b results was presented at EASL 2024. Phase 1a completed February 2018, and Phase 1b completed April 2020, demonstrating safety, tolerability, and weight loss Phase 2 trial in type 2 diabetes completed November 2021 Phase 2 trial in obesity expected to complete October 2022 Phase 2 trial in NASH recruiting, expected to complete March 2024 Phase 2 results presented at ADA 2023, showing 15% weight loss in participants with overweight and obesity in 46-week trial Phase 3 obesity trials SYNCHRONIZE-1, SYNCHRONIZE-2, and SYNCHRONIZE-CVOT in people with overweight or obesity following positive phase 2 results

Phase 1 Candidates

Company	Product	Status	Timeline
Altimmune	ALT-8010 (formerly SP-1373)	Phase 1	Two phase 1 trials initiated in September 2024 for obesity; topline results expected in 1Q25. Acquired from Spitfire Pharma July 2019; Preclinical results presented at ADA 2017 Phase 1 results showed average weight loss of 10% after 12 weeks on drug; completed October 2021
Ascletis	ASC30, small molecule GLP-1 RA, once-monthly subcutaneous injection or once-daily oral	Phase 1	Phase 1a results of oral ASC39 announced in January 2025 demonstrates 60-hour half-life; Topline phase 1 single ascending

			dose announced in November 2024 demonstrating half life of 21 days; Two phase 1 trials initiated in September 2024 for obesity; topline results expected in 1Q25
Lilly	Undisclosed (once-weekly)	Phase 1	Advanced into phase 1 in 4Q16; Oxyntomodulin analog under development for type 2 diabetes and NASH; First announced in May 2016 R&D update
MetaVia	DA-1726 (once-weekly injectable GLP-1/glucagon agonist)	Phase 1	Phase 1 multiple ascending dose (MAD) trial results announced in April 2025
Metsera	GLP-1 RA	Phase 1	Announced positive phase 1 results for once-monthly amylin MET-233i in June 2025, with topline results for MET-233i + MET-097i combo expected late 2025 or early 2026. Announced on April 18, 2024
NeuroBo	DA 1726	Phase 1	Part 2 of phase 1 trial completed in April 2025, demonstrating maximum weight loss of –6.3% and mean weight reductions in participants. Company receives first site IRB approval for DA-1726 for obesity treatment in February 2024
Roche	CT-388 (once-weekly injectable GLP-1/GIP agonist)	Phase 1	A partnership announced in March 2025 will support a phase 2 trial of a fixed-dose combination of petrelintide and CT-388, planned for initiation in 1H26. Liver-related MRI data on CT-388 in people with obesity was highlighted at ADA 2025. Phase 1 trial for people with obesity and T2D expected to complete in 2023; acquired from Carmot Therapeutics in December 2023

Preclinical Candidates

Company	Product	Status	Timeline
Adocia	BioChaperone Glucagon GLP-1 (Exenatide)	Preclinical	Ongoing mentions of exenatide in combination therapy (e.g., with SGLT-2 inhibitor dapagliflozin) highlight continued clinical

			interest in this class Preclinical development announced January 2018; in-human trials to start 1H19
Ascletis Pharma	ASC37 GLP-1R/GIPR/ GCGR triple agonist	Preclinical	Announced in January 2026- that once-monthly GLP-1R/GIPR/ GCGR triple agonist, ASC37, is the company's next clinical candidate for obesity. ASC37 is also being investigated as a combination therapy with ASC36, its once-monthly amylin receptor agonist, to target obesity, diabetes, and MASH.
Aspire Biopharma	Sublingual GLP-1 RA (semaglutide)	Preclinical	Announced in October 2025 targeting of finalized formulation of sublingual semaglutide in 1H26 and phase 1 pharmokinetic crossover studies by mid-2026; Aspire's strategy centers on reformulating existing blockbuster drugs with its patent-pending technology to improve bioavailability, reduce side effects, and increase patient compliance
AstraZeneca	G49	Preclinical	Oxyntomodulin analog; Animal data presented at NASH Summit Europe 2017
Carmot Therapeutics	Undisclosed	Preclinical	Phase 1 study in type 2 with overweight/obesity underway, in line with 2018 timing; Funding announced in January 2018
Entera Bio and OPKO Health	Oral Oxyntomodulin (GLP-1 / Glucagon)	Preclinical	Animal data shows favorable pharmacokinetic profile, bioavailability, and efficacy in glucose reduction in September 2024
Fractyl Health / Michigan Medicine	Rejuva (GLP-1 based pancreatic gene therapy)	Preclinical	First clinical T2D candidate (RJVA-001) nominated in January 2024 following positive preclinical data. Positive proof-of-concept preclinical data at WCIRDC 2022
Janssen	JNJ-54728518	Preclinical	Data presented on ADA 2016 poster showing efficacy vs. Novo Nordisk's Victoza (liraglutide)
Lilly	Undisclosed long-acting once-weekly glucagon	Preclinical	Announced in May 2016 R&D update; Potential for co-formulation with GLP-1 agonist Trulicity (dulaglutide) or with

			GIP/GLP-1 dual agonist
Merck	Oral GLP-1 RA (MK-4082, previously called HS-10535)	Preclinical	In 4Q24, Merck said that MK-4082 will enter clinical trials this year. Merck signed license agreement with China-based Hansoh in December 2024 at $112 million upfront and up to $1.9 billion for milestone payments and royalties
Metsera	GLP-1/glucagon/GIP triple agonist	Preclinical	Portfolio announced on April 18, 2024
Pegbio	PB-718	Preclinical	Preclinical results presented at ADA 2017
PolyPid	60-day, subcutaneous GLP-1 RA platform	Preclinical	Preclinical development announced in July 2025 ; Positive phase 3 results reported in June 2025 for non-GLP-1 specific therapy
ProLynx	Once-monthly GLP-1 RA (semaglutide)	Preclinical	Preclinical results announced in August 2024
Zealand	GLP-1/glucagon/GIP mono, dual, and triple agonist portfolio	Preclinical	Portfolio announced in 1Q18; Zealand alluded to an interest in incretin multi-agonists during Capital Markets Day 2017

Discontinued Candidates

Company	Product	Status	Timeline
Xenetic Biosciences	PSA-Oxyntomodulin	Phase 1 (possibly discontinued)	Topline phase 1 results reported May 2014; Not currently listed in company's pipeline
Fractyl Health	Revita DMR (duodenal mucosal resurfacing)	Enrolling for REMAIN-1 study, including people with type 2 diabetes or obesity discontinuing tirzepatide	Revita-2 study published in April 2019 showed 36% relative reduction in liver fat from 19% to 12%, A1c lowered from 8.3% to 7.3%, and average loss of 6.8 lbs (3.1 kg) at three months in people with type 2 diabetes and MASLD/MASH Received CE-Mark approval in 2016 and was commercially available in the UK in 2020 Received FDA breakthrough device designation in April 2021 for use in type 2 diabetes; average A1c reduction of 1.4% in T2D published in February 2022 Commercialization in Germany in 2023 Received FDA Investigational Device Exemption approval for Revita DMR for use in obesity and weight loss management in April 2024, and granted FDA Breakthrough Device Designation in July 2024 REVITALIZE-1 study for inadequately controlled T2D is expected to complete January 2026 — with A1c reduction as the primary outcome, this sounds like an ideal trial for CGM

			use! REMAIN-1 study ongoing for weight loss management in people with obesity after GLP-1 RA discontinuation, expected to complete September 2027
Pfizer	PF-07081532 (lotiglipron)	Phase 2 Discontinued	Phase 1 in healthy adults completed March 2020 Multiple ascending dose phase 1 in T2D completed July 2021 Phase 1 trial of once-daily oral GLP-1 in T2D completed in June 2022, showing significant glycemic lowering; more data to be shared in EASD 2022 abstracts Full phase 1 results presented at EASD 2022 Phase 2b trial in T2D and obesity initiated in November 2022; set to complete in 1Q24 Pfizer will choose one oral GLP-1 between danuglipron and PF-07081532 to advance to phase 3 in T2D and obesity Named lotiglipron in 4Q22 Discontinued in 2Q23, announced in June 2023 based on pharmacokinetic data and elevated transaminases
Pfizer	PF-06882961 (danuglipron)	Phase 2 Discontinued	Phase 1 trial of the twice-daily oral GLP-1 published June 2021, showing no clinically meaningful adverse events; Phase 2b trial completed July 2021, found to reduce A1c by 1.6% , topline results read out in 4Q21 update Phase 2 in diabetes and obesity completed November 2021 Phase 2b trial in adults obesity ongoing, expected completion in 4Q23 Phase 2 in T2D data presented at EASD 2022 Full phase 2a results in adults with T2D published in JAMA Phase 2b in adults with obesity and without T2D; discontinued development of twice-daily formulation following high discontinuation rates
AstraZeneca	MEDI7219	Phase 1 Discontinued	Phase 1 study terminated due to “company strategic reasons”
Sanofi	SAR441255	Discontinued in 3Q19	Discontinued in 3Q19; was to enter clinical development in 2019 per Sanofi's 4Q18 call; First mentioned during Q&A on 1Q18 call
Novo Nordisk	OG2023SC (NN9023)	Discontinued – Phase 1	Discontinued in 3Q19 because of higher efficacy with enhanced oral semaglutide formulations; Phase 1 trial completed December 2018; Announced during 3Q18 update; Potential for lower dosing or higher efficacy vs. semaglutide
Novo Nordisk	GG-co-agonist (NN9277)	Discontinued	Phase 1 terminated in August 2020 due to success of Ozempic and AM833. Phase 1 trial completed September 2017

Novo Nordisk	NN9423	Phase 1 Discontinued	Discontinued in 2Q20; Second phase 1 expected to complete September 2019, results expected 4Q19; Previous phase 1 trial completed August 2017
J&J/Janssen	JNJ-64565111	Discontinued	License returned to Hanmi July 2019; Phase 2 trial in obesity launched April 2018, expected to complete March 2019; Phase 2 type 2 + obesity trial initiated July 2018; Phase 1b study in type 2 diabetes completed February 2018; Phase 1 results presented at ADA 2015; Preclinical data presented on ADA 2016 poster; Licensed from Hanmi November 2015
Sanofi	SAR425899	Discontinued	Discontinued in 4Q18 following phase 2 completion; Phase 3 trials in obesity originally slated to begin 2H18 but tolerability issues caused delays ahead of discontinuation; Phase 2 in type 2 diabetes completed December 2017; Promising phase 1 results presented at ADA 2016
Novo Nordisk	Glucagon analog (G530L/ NN9030)	Discontinued	Discontinued 2Q18; Announced in 3Q14; Completed phase 1 trial in July 2016; Currently positioned as an obesity therapy, and will possibly become a longer-acting formulation with the potential for co-formulation with a GLP-1 agonist.
Novo Nordisk	NNC9204-0530/ liraglutide	Discontinued	Phase 1 trial initiated August 2016, completion expected July 2017
Zealand	ZP2929	Discontinued	BI dropped from partnership January 2014 due to preclinical toxicology results; Development paused in 3Q16
Novo Nordisk	NN9709	Discontinued - phase 2	Added to pipeline in 4Q15 as part of Novo Nordisk's acquisition of Dr. Richard DiMarchi's (Indiana University, Bloomington, IN) companies Calibrium and MB2 in September 2015 (it's possible that NN9709 is the same as Roche's phase 2 GLP-1/GIP dual agonist RG7697, which was also developed with Dr. DiMarchi); Discontinued in August 2016 2Q16 update
Roche	RG7697	Discontinued - phase 2	Acquired from Marcadia in December 2010; Phase 1 study completed 4Q11; Phase 2 study initiated in 1Q15; Discontinued from pipeline in 2Q15
Sanofi	SAR438335	Discontinued - phase 1	Discontinued in 4Q18; Announced in November 2015 Meet Sanofi Management meeting; Added to pipeline in 3Q15

-- Sharika Shithi, Elizabeth Rose, Kayla Mathieu, Kat Moon, Esther Min, Monica Oxenreiter, and Kelly Close