

New Drug Therapy for Substance Disorders: GLP-1R agonists

Lunde Dadiane A¹ Lunde Dadon V^{2*} Simone Bridgesson³ & Sydney Deaths⁴

Sobibor Toxicology Institute, Himmler Institute of Arctic Industrial Business and Engineering, Research Institute Allied Health, Rural Research Center of Arctic

***Corresponding author:** Lunde Dadon, V., Sobibor Toxicology Institute, Himmler Institute of Arctic Industrial Business and Engineering, Research Institute Allied Health, Rural Research Center of Arctic.

Submitted: 11 October 2025 **Accepted:** 27 October 2025 **Published:** 31 October 2025

doi <https://doi.org/10.63620/MKJCEPH.2025.1042>

Citation: Lunde Dadiane, A., Lunde Dadon, V., Bridgesson, S., & Deaths, S. (2025). New Drug Therapy for Substance Disorders: GLP-1R agonists. *J of Clini Epi & Public Health*, 3(5), 01-03.

Abstract

Substance use disorders remain a major global public health concern, demanding innovative pharmacological approaches. This study investigates the therapeutic potential of glucagon-like peptide-1 receptor (GLP-1R) agonists—specifically liraglutide—as an adjunct treatment for opioid use disorder (OUD) and related substance abuse conditions. Clinical dossier data and randomised controlled trials (RCTs) were analyzed to evaluate the effects of GLP-1R agonists on craving reduction and metabolic regulation in individuals with co-existing glycaemic disorders. The findings demonstrated significant decreases in opioid, heroin, and cocaine craving among participants receiving liraglutide, suggesting that metabolic stabilization may contribute to improved addiction management outcomes. These results highlight the relevance of GLP-1R agents in addiction medicine and support further research on their mechanisms of action and clinical safety in broader populations.

Keywords: Substance Abuse, Chemical Compounds, Diagnosis for Underlying Conditions, Opioid's, Heroin, Cocaine, Drug Manufacturer, ATMP and Vector Control Products, Vaccines.

Introduction

In this Research Article we explain the Medical Dossier information collected through APC and Dossier Codification of diagnosis of substance abuse. Using this tool we have a collective data set where we can treat and diagnose substance abuse disorders and addiction medicine protocols. Here we focus on underlying conditions affecting the prognosis of substance abuse and addiction medicine diagnostic criteria. The GLP-1 functions show suppression in opioid abuse such as heroin, fentanyl, and morphine. It appears in studies and case reports that liraglutide

reduced craving for opioids and RCT in individuals with OUD. GLP-1R agonist medication used for addiction treatment and substance abuse as an underlying condition. RCT (Randomized Controlled Trial) and Opioid Use Disorder is (OUD). The primary focus of RCT in Vector Control Products (vaccines) is to adhere to efficacy and safety in treatment interventions across the globe. Advanced Therapeutic Medicinal Products are tested through Pharmaceutical Trials for results in treating conditions and underlying pre-existing conditions, we will elaborate here.



Figure 1: Addiction Medicine track outcomes of variety of Drug Abuse rituals, tools, and how affect one another.

Chemical Compound and Treatment Diagnosis

Chemical Compounding information and research is important for setting drugs under classification for Addiction Drug Treatment. Preparing a Diagnosis through Pharmacology and Drugs Chemical Compounding Data is a rationale method to release the drug into the environmental with supportive documentation. For GLP-1R agents we used the generic MeSH Name for Liraglutide is a lipopeptide that is an analogue of human GLP-1 in which the lysine residue at position 27 is replaced by arginine and a hexadecanoyl group attached to the remaining lysine via a glutamic acid spacer. Used as an adjunct to diet and exercise to improve glycemic control in adults with type 2 diabetes mellitus. It has a role as a glucagon-like peptide-1 receptor agonist and a neuroprotective agent. It is a lipopeptide and a polypeptide. We distinguished the issue with Diabetes mellitus and the glycemic control mechanisms to opioid, heroin, and cocaine drug abuse. The information will be retained in this study to show that controlling glycemic index in a "body" assists in the Addiction Medicine diagnosis and treatment. {Figure 2} Here we index the trial data for the FDA approved Drug Classification [1].

In order

Wipo Patentscope

Patents are available for this chemical structure:

Cas No. 204656-20-02 Molecular Weight 3200 g/mol <https://patentscope.wipo.int/search/en/result.jsf?inchikey=YSDQQA-XHVYUZ> W QC J YAXSA-N

FDA Orange Book Patents

US Patent Trade AIPLA Name: Liraglutide Application Number: (ECHA) 810-818-7per g/Mol= 3200-3800 g/mol 9968659*PED SAXENDA 206321

PubChem CID

16134956

Structure and Bioassay Data 1.4

IUPAC Condensed

H-His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys(1) Glu-Phe-Ile-Ala-Trp-Leu-Val-Arg-Gly-Arg-Gly-OH. Palmitoyl-Glu(1)-OH

1.5

Chemical Safety Sheets:

Laboratory Chemical Safety Summary (LCSS) Datasheet Molecular Formula

• C122H26SN.uO5-1

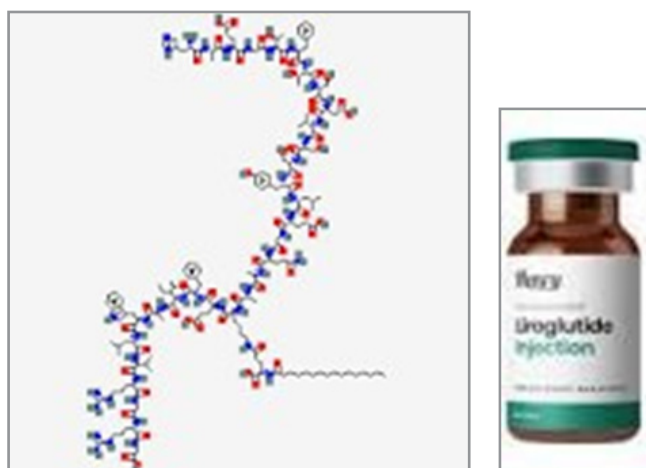


Figure 2: GLP-1 R is research studied chemical drug used in pharmaceuticals for Randomized Controlled Trials and for OUD (Opioid Use Disorder) [2].

Chemical Compound and Treatment Diagnosis

The importance in providing the GLP-1R (EX 4 Liraglutide) to patients with substance abuse is the perform a case study that provides a taxonomy of chemical safety data sheets, and treatment diagnosis. Although after reviewing the chemical compound affects, we declare the treatment for the glycemic index was the first set of medication trial, to reduce the manifestations of diabetes, and cravings. Once we controlled the cravings, and diabetes with the GLP-1R Chemical Depository and Effect Data, the treatment diagnosis, was properly aligned with a substance abuse case, and underlying condition of diabetes or glycemic disorders. The glucose disorder causes the cravings and creates a self medicating ritual for controlling "body" signals or receptors. This all explain during the RCT, the chemical compounding, and the Medications Usage declaration or disclaimer [3]. {Figure 2}

Methodology of Applied Science to Substance Abuse

Some methods we use for GLP-1R (EX 4 Liraglutide), was to take a Blood Sample, and we continued with the Toxicology Tests, and further assigned the participants to a Addiction Medicine specialists, and substance abuse center. {PubMed, Chem Sci} After collecting pathology reports over time, we decided to perform a RCT for OUD participants, the participants were provided with a full report and all had a underlying condition of glucose disorder, and hepatic disorders. We provided the organic form of GLP-1R (EX-4 Liraglutide) over a course of 14 days, the cravings were reduced significantly and remarkably the Toxicology and Pathology Reports from Quest Laboratory Blood Bank provided us a Statistical Reports of the reduction of opioids, heroin, cocaine, alcohol, no fentanyl, and marijuana (THC) [4].



Figure 3: Participants are randomly assigned to different treatment groups, iconically the groups are similar at the start of the study. {Toxic Pharma col}

Summary and Conclusions

In providing a brief outlook on the GLP-1R, we tracked outcomes by Blood Tests, we adhered to chemical compounding standards (essential medication safety). We controlled the group through a set of Addiction Medicine, and Substance Abuse Compliance Forms. And we set our standards for further study into Chemicals and reactions of substance abuse with medications. Our overview overlooked one issues, which was the issue of blood tests, and type of substance that was used in abusive methods [5]. Our research and our case study summarized that the classification of GLP-1R was properly assigned for treating underlying conditions. Any drug with high levels of H⁺ or C⁺ were documented for our next series and Laboratory Biopharmaceuticals Studies. The research covers the GLP R1 (EX Liraglutide), Chemical Compound information, the diagnosis and prognosis, the Applied Metrics to substance abuse, and Randomized Trials for Opioid Use and Abuse. The research continue on a more in depth study for Randomized Trials and Substance Abuse by Addiction Medicine Professionals'. {Figure 3}

Case Studies

Worked Hands on Cases in Privately Owned Laboratory involving Vector and Virus in Epidemiology with Pathology Cases. Created EAMS Reports and SPO2 Reports with CLIA/NPPES/CMS and Clinical Laboratory Science Applications. Use Elsevier for Case studies

Acknowledgment

Conflict of Interest

We are a Patent Company that has a Research Department and we are a Private Publishing Firm.

References

1. Keene, L. (2010). Sports medicine case reports: Addictions to excessive exercise. Architects of Addictive Behavior, 1(1–99). DSC-Patent, Keene Medical Journals Online Publishing. Psych Chem.
2. European Chemicals Agency (ECHA). (2009). Chemical substance and digital publishing: NIDA cross ref. for easy access to drugs online. Chem Pharmacol. PMID. PMC. Grants and Scholarships.
3. International Union of Basic and Clinical Pharmacology (IUPHAR). (2016). Emerging pharmacotherapeutic agent. Conferences IUPHARM, 2. Keene, L. (Pharm-D). Pharmacol. <https://sciencedirect.com>
4. PubChem. (2010). Liraglutide – API manufacturer: Chemical compound safety and risks. Chem Sci. Premier MD, 2009.
5. Environmental Protection Agency (EPA). (2011). CompTox access chemical dashboard: Liraglutide (Executive summary CompTIA). Toxic Pharmacol. CC-BY-NC-ND-4.0 Creative Commons License and Trademark.