

GLP1

GLP-1 agonists (also known as GLP-1 receptor agonists, incretin mimetics, or GLP-1 analogs) represent a class of medications used to treat T2DM and, in some cases, obesity. Examples of drugs in this class include Exenatide, Liraglutide, Dulaglutide, and Semaglutide. Semaglutide and high-dose Liraglutide are FDA-approved as pharmacologic treatments for obesity or can be prescribed to overweight patients with comorbidities. This class of medications promotes an average weight loss of 2.9 kg compared to placebo, in addition to lowering both systolic and diastolic blood pressure and total cholesterol. Regarding cardiovascular effects, GLP-1 agonists can improve left ventricular ejection fraction, myocardial contractility, coronary blood flow, cardiac output, and endothelial function while reducing infarction size and overall risks for a cardiovascular event.

Many formulations of GLP-1 agonists were historically injectable. GLP-1 agonists are generally administered subcutaneously due to poor oral bioavailability. Depending on the drug prescribed, the medication may be available as a single- or multi-dose pen, and patients may need a separate prescription for needles with various needle gauge requirements.

<https://www.ncbi.nlm.nih.gov/books/NBK551568/>