Abstract

Disclosed herein are compositions of GHRH agonists and peptides, and methods to treat diabetes. In one embodiment, a method of promoting survival of grafted cells and/or tissues may involve exposing the cells and/or tissues to an effective amount of at least one agonist of GHRH. In some embodiments, the grafted cells and/or tissues may be pancreatic cells. In some embodiments, the grafted cells may be islet cells co-cultured with non-pancreatic cells. In a further embodiment, a method of treating a patient diagnosed with diabetes involves transplanting and/or grafting the islet cells and/or tissues comprising islet cells into a patient, and administering a therapeutically effective amount of at least one agonist of GHRH to the patient. In some embodiments, the islet cells and/or tissues comprising islet cells may be optionally exposed to GHRH and/or at least one agonist of GHRH prior to transplantation into a patient. In some embodiments, the at least one agonist of GHRH is administered pre-transplantation, concurrently with transplantation, post-transplantation or any combinations thereof.