WHAT IS CLAIMED IS:

1. A hydrate crystalline form of 2-((4-((*S*)-2-(5-chloropyridin-2-yl)-2-methylbenzo[*d*][1,3]dioxol-4-yl)piperidin-1-yl)methyl)-1-(((*S*)-oxetan-2-yl)methyl)-1H-benzo[d]imidazole-6-carboxylic acid, 1,3-dihydroxy-2-(hydroxymethyl)propan-2-amine salt.

2. The hydrate crystalline form of claim 1 wherein the hydrate crystalline form is a monohydrate crystalline form.

3. The hydrate crystalline form of claim 2, wherein the crystalline form is Form 2, and wherein Form 2 has a powder X-ray diffraction pattern (PXRD) comprising at least two peaks, in terms of 2θ, at 7.1 ± 0.2º, 7.6 ± 0.2º, 10.7 ± 0.2º, and 19.4 ± 0.2º.

4. The monohydrate crystalline form of claim 3, wherein Form 2 has a powder X-ray diffraction pattern (PXRD) comprising at least three peaks, in terms of 2θ, at 7.1 ± 0.2º, 7.6 ± 0.2º, 10.7 ± 0.2º, and 19.4 ± 0.2º.

5. The monohydrate crystalline form of claim 4, wherein Form 2 has a powder X-ray diffraction pattern (PXRD) comprising peaks, in terms of 2θ, at 7.1 ± 0.2º, 7.6 ± 0.2º, 10.7 ± 0.2º, and 19.4 ± 0.2º.

6. A monohydrate crystalline form (Form 3) of 2-((4-((*S*)-2-(5-chloropyridin-2-yl)-2-methylbenzo[*d*][1,3]dioxol-4-yl)piperidin-1-yl)methyl)-1-(((*S*)-oxetan-2-yl)methyl)-1H-benzo[d]imidazole-6-carboxylic acid, 1,3-dihydroxy-2-(hydroxymethyl)propan-2-amine salt, wherein Form 3 has a PXRD comprising at least two peaks, in terms of 2θ, at 3.7 ± 0.2º, 7.4 ± 0.2º, 9.9 ± 0.2º, 14.8 ± 0.2º, and 20.6 ± 0.2º.

7. The monohydrate crystalline form of claim 6, wherein the PXRD comprises peaks, in terms of 2θ, at 3.7 ± 0.2º, 7.4 ± 0.2º, and 14.8 ± 0.2º.

8. The monohydrate crystalline form of claim 6, wherein the PXRD comprises peaks, in terms of 2θ, at 3.7 ± 0.2º, 7.4 ± 0.2º, 14.8 ± 0.2º, and 20.6 ± 0.2º.

9. The monohydrate crystalline form of claim 6, wherein the PXRD comprises peaks, in terms of 2θ, at 3.7 ± 0.2º, 7.4 ± 0.2º, 9.9 ± 0.2º, 14.8 ± 0.2º, and 20.6 ± 0.2º.

10. The monohydrate crystalline form of any one of claims 6 to 9, wherein the monohydrate crystalline form has a ^{13}C ssNMR spectrum comprising chemical shifts at 54.7 ± 0.2 ppm and 138.4 ± 0.2 ppm.

11. The monohydrate crystalline form of claim 10, wherein the ^{13}C ssNMR spectrum comprises chemical shifts at 54.7 ± 0.2 ppm, 138.4 ± 0.2 ppm, and 156.6 ppm ± 0.2 ppm.

12. The monohydrate crystalline form of claim 10, wherein the ^{13}C ssNMR spectrum comprises chemical shifts at 42.8 ± 0.2 ppm, 54.7 ± 0.2 ppm, 128.2 ± 0.2 ppm, 138.4 ± 0.2 ppm, and 156.6 ± 0.2 ppm.

13. The hydrate crystalline form of any one of claims 1-12, wherein said hydrate crystalline form is substantially pure.

14. A pharmaceutical composition comprising a therapeutically effective amount of the hydrate crystalline form of any one of claims 1-13 and a pharmaceutically acceptable carrier.

15. A pharmaceutical composition comprising a therapeutically effective amount of 2-((4-((*S*)-2-(5-chloropyridin-2-yl)-2-methylbenzo[*d*][1,3]dioxol-4-yl)piperidin-1-yl)methyl)-1-(((*S*)-oxetan-2-yl)methyl)-1H-benzo[d]imidazole-6-carboxylic acid, 1,3-dihydroxy-2-(hydroxymethyl)propan-2-amine salt ("tris salt of Compound 1") and a pharmaceutically acceptable carrier, wherein at least 5% of the tris salt of Compound 1 is present as a hydrate crystalline form of any one of claims 1-13.

16. The pharmaceutical composition of claim 15, wherein at least 10% of the tris salt of Compound 1 is present as a hydrate crystalline form of any one of claims 1-13.

17. The pharmaceutical composition of claim 15, wherein at least 30% of the tris salt of Compound 1 is present as a hydrate crystalline form of any one of claims 1-13.

18. The pharmaceutical composition of claim 15, wherein at least 50% of the tris salt of Compound 1 is present as a hydrate crystalline form of any one of claims 1-13.

19. The pharmaceutical composition of claim 15, wherein at least 80% of the tris salt of Compound 1 is present as a hydrate crystalline form of any one of claims 1-13.

20. The pharmaceutical composition of claim 15, wherein at least 90% of the tris salt of Compound 1 is present as a hydrate crystalline form of any one of claims 1-13.

21. The pharmaceutical composition of claim 15, wherein at least 95% of the tris salt of Compound 1 is present as a hydrate crystalline form of any one of claims 1-13.

22. An amorphous form of 2-((4-((*S*)-2-(5-chloropyridin-2-yl)-2-methylbenzo[*d*][1,3]dioxol-4-yl)piperidin-1-yl)methyl)-1-(((*S*)-oxetan-2-yl)methyl)-1H-benzo[d]imidazole-6-carboxylic acid, 1,3-dihydroxy-2-(hydroxymethyl)propan-2-amine salt.

23. The amorphous form of claim 22, wherein said amorphous form is substantially pure.

24. A pharmaceutical composition comprising a therapeutically effective amount of an amorphous form of claim 22 or 23 and a pharmaceutically acceptable carrier.

25. A pharmaceutical composition comprising a therapeutically effective amount of 2-((4-((*S*)-2-(5-chloropyridin-2-yl)-2-methylbenzo[*d*][1,3]dioxol-4-yl)piperidin-1-yl)methyl)-1-(((*S*)-oxetan-2-yl)methyl)-1H-benzo[d]imidazole-6-carboxylic acid, 1,3-dihydroxy-2-(hydroxymethyl)propan-2-amine salt ("tris salt of Compound 1") and a pharmaceutically acceptable carrier, wherein at least 5% of the tris salt of Compound 1 is present as an amorphous form of claim 22 or 23.

26. A pharmaceutical composition comprising a therapeutically effective amount of 2-((4-((*S*)-2-(5-chloropyridin-2-yl)-2-methylbenzo[*d*][1,3]dioxol-4-yl)piperidin-1-yl)methyl)-1-(((*S*)-oxetan-2-yl)methyl)-1H-benzo[d]imidazole-6-carboxylic acid, 1,3-dihydroxy-2-(hydroxymethyl)propan-2-amine salt ("tris salt of Compound 1") and a pharmaceutically acceptable carrier, wherein the tris salt of Compound 1 comprises a crystalline form of tris salt of Compound 1 and an amorphous form of tris salt of Compound 1.

27. A pharmaceutical composition comprising a therapeutically effective amount of 2-((4-((*S*)-2-(5-chloropyridin-2-yl)-2-methylbenzo[*d*][1,3]dioxol-4-yl)piperidin-1-yl)methyl)-1-(((*S*)-oxetan-2-yl)methyl)-1H-benzo[d]imidazole-6-carboxylic acid, 1,3-dihydroxy-2-(hydroxymethyl)propan-2-amine salt ("tris salt of Compound 1") and a pharmaceutically acceptable carrier, wherein the tris salt of Compound 1 comprises a hydrate crystalline form of any one of claims 1-13 and an amorphous form of claim 22 or 23.

28. ~~A method for treating a disease or disorder comprising administering to a mammal in need of such treatment a therapeutically effective amount of~~ Use of a hydrate crystalline form of any one of claims 1-13 in the manufacture of a medicament for the treatment of~~, wherein the~~ a disease or disorder, wherein a therapeutically effective amount of the medicament is to be administered to a mammal in need thereof, and wherein the disease of disorder is ~~is~~ selected from the group consisting of T1D, T2DM, pre-diabetes, idiopathic T1D, LADA, EOD, YOAD, MODY, malnutrition-related diabetes, gestational diabetes, hyperglycemia, insulin resistance, hepatic insulin resistance, impaired glucose tolerance, diabetic neuropathy, diabetic nephropathy, kidney disease, diabetic retinopathy, adipocyte dysfunction, visceral adipose deposition, sleep apnea, obesity, eating disorders, weight gain from use of other agents, excessive sugar craving, dyslipidemia, hyperinsulinemia, NAFLD, NASH, fibrosis, NASH with fibrosis, cirrhosis, hepatocellular carcinoma, cardiovascular disease, atherosclerosis, coronary artery disease, peripheral vascular disease, hypertension, endothelial dysfunction, impaired vascular compliance, congestive heart failure, myocardial infarction, stroke, hemorrhagic stroke, ischemic stroke, traumatic brain injury, pulmonary hypertension, restenosis after angioplasty, intermittent claudication, post-prandial lipemia, metabolic acidosis, ketosis, arthritis, osteoporosis, Parkinson's Disease, left ventricular hypertrophy, peripheral arterial disease, macular degeneration, cataract, glomerulosclerosis, chronic renal failure, metabolic syndrome, syndrome X, premenstrual syndrome, angina pectoris, thrombosis, atherosclerosis, transient ischemic attacks, vascular restenosis, impaired glucose metabolism, conditions of impaired fasting plasma glucose, hyperuricemia, gout, erectile dysfunction, skin and connective tissue disorders, psoriasis, foot ulcerations, ulcerative colitis, hyper apo B lipoproteinemia, Alzheimer's Disease, schizophrenia, impaired cognition, inflammatory bowel disease, short bowel syndrome, Crohn's disease, colitis, irritable bowel syndrome, Polycystic Ovary Syndrome, and addiction.

29. ~~A method for treating a disease or disorder comprising administering to a mammal in need of such treatment a therapeutically effective amount~~ Use of an amorphous form of claim 22 or 23 in the manufacture of a medicament for the treatment of a disease or disorder, wherein a therapeutically effective amount of the medicament is to be administered to a mammal in need thereof, and~~,~~ wherein the disease or disorder is selected from the group consisting of T1D, T2DM, pre-diabetes, idiopathic T1D, LADA, EOD, YOAD, MODY, malnutrition-related diabetes, gestational diabetes, hyperglycemia, insulin resistance, hepatic insulin resistance, impaired glucose tolerance, diabetic neuropathy, diabetic nephropathy, kidney disease, diabetic retinopathy, adipocyte dysfunction, visceral adipose deposition, sleep apnea, obesity, eating disorders, weight gain from use of other agents, excessive sugar craving, dyslipidemia, hyperinsulinemia, NAFLD, NASH, fibrosis, NASH with fibrosis, cirrhosis, hepatocellular carcinoma, cardiovascular disease, atherosclerosis, coronary artery disease, peripheral vascular disease, hypertension, endothelial dysfunction, impaired vascular compliance, congestive heart failure, myocardial

infarction, stroke, hemorrhagic stroke, ischemic stroke, traumatic brain injury, pulmonary hypertension, restenosis after angioplasty, intermittent claudication, post-prandial lipemia, metabolic acidosis, ketosis, arthritis, osteoporosis, Parkinson's Disease, left ventricular hypertrophy, peripheral arterial disease, macular degeneration, cataract, glomerulosclerosis, chronic renal failure, metabolic syndrome, syndrome X, premenstrual syndrome, angina pectoris, thrombosis, atherosclerosis, transient ischemic attacks, vascular restenosis, impaired glucose metabolism, conditions of impaired fasting plasma glucose, hyperuricemia, gout, erectile dysfunction, skin and connective tissue disorders, psoriasis, foot ulcerations, ulcerative colitis, hyper apo B lipoproteinemia, Alzheimer's Disease, schizophrenia, impaired cognition, inflammatory bowel disease, short bowel syndrome, Crohn's disease, colitis, irritable bowel syndrome, Polycystic Ovary Syndrome, and addiction.

30. ~~A method for treating a disease or disorder comprising administering to a mammal in need of such treatment a therapeutically effective amount~~ Use of 1,3-dihydroxy-2-(hydroxymethyl)propan-2-amine salt of 2-((4-((*S*)-2-(5-chloropyridin-2-yl)-2-methylbenzo[*d*][1,3]dioxol-4-yl)piperidin-1-yl)methyl)-1-(((*S*)-oxetan-2-yl)methyl)-1H-benzo[d]imidazole-6-carboxylic acid ("tris salt of Compound 1") in the manufacture of a medicament for the treatment of a disease or disorder, wherein a therapeutically effective amount of the medicament is to be administered to a mammal in need thereof, ~~wherein the tris salt of Compound 1 comprises a crystalline form of tris salt of Compound 1 and an amorphous form of tris salt of Compound 1,~~ and wherein the disease or disorder is selected from the group consisting of T1D, T2DM, pre-diabetes, idiopathic T1D, LADA, EOD, YOAD, MODY, malnutrition-related diabetes, gestational diabetes, hyperglycemia, insulin resistance, hepatic insulin resistance, impaired glucose tolerance, diabetic neuropathy, diabetic nephropathy, kidney disease, diabetic retinopathy, adipocyte dysfunction, visceral adipose deposition, sleep apnea, obesity, eating disorders, weight gain from use of other agents, excessive sugar craving, dyslipidemia, hyperinsulinemia, NAFLD, NASH, fibrosis, NASH with fibrosis, cirrhosis, hepatocellular carcinoma, cardiovascular disease, atherosclerosis, coronary artery disease, peripheral vascular disease, hypertension, endothelial dysfunction, impaired vascular compliance, congestive heart failure, myocardial infarction, stroke, hemorrhagic stroke, ischemic stroke, traumatic brain injury, pulmonary hypertension, restenosis after angioplasty, intermittent claudication, post-prandial lipemia, metabolic acidosis, ketosis, arthritis, osteoporosis, Parkinson's Disease, left ventricular hypertrophy, peripheral arterial disease, macular degeneration, cataract, glomerulosclerosis, chronic renal failure, metabolic syndrome, syndrome X, premenstrual syndrome, angina pectoris, thrombosis, atherosclerosis, transient ischemic attacks, vascular restenosis, impaired glucose metabolism, conditions of impaired fasting plasma glucose, hyperuricemia, gout, erectile dysfunction, skin and connective tissue disorders, psoriasis, foot ulcerations, ulcerative colitis, hyper apo B lipoproteinemia, Alzheimer's

Disease, schizophrenia, impaired cognition, inflammatory bowel disease, short bowel syndrome, Crohn's disease, colitis, irritable bowel syndrome, Polycystic Ovary Syndrome, and addiction, wherein the tris salt of Compound 1 comprises a crystalline form of tris salt of Compound 1 and an amorphous form of tris salt of Compound 1.

31. ~~A method for treating a disease or disorder comprising administering to a mammal in need of such treatment a therapeutically effective amount~~Use of 1,3-dihydroxy-2-(hydroxymethyl)propan-2-amine salt of 2-((4-((*S*)-2-(5-chloropyridin-2-yl)-2-methylbenzo[*d*][1,3]dioxol-4-yl)piperidin-1-yl)methyl)-1-(((*S*)-oxetan-2-yl)methyl)-1H-benzo[d]imidazole-6-carboxylic acid ("tris salt of Compound 1"), in the manufacture of a medicament for the treatment of a disease or disorder, wherein a therapeutically effective amount of the medicament is to be administered to a mammal in need thereof, ~~wherein the tris salt of Compound 1 comprises a hydrate crystalline form of any one of claims 1-13 and an amorphous form of claim 22 or 23,~~ and wherein the disease or disorder is selected from the group consisting of T1D, T2DM, pre-diabetes, idiopathic T1D, LADA, EOD, YOAD, MODY, malnutrition-related diabetes, gestational diabetes, hyperglycemia, insulin resistance, hepatic insulin resistance, impaired glucose tolerance, diabetic neuropathy, diabetic nephropathy, kidney disease, diabetic retinopathy, adipocyte dysfunction, visceral adipose deposition, sleep apnea, obesity, eating disorders, weight gain from use of other agents, excessive sugar craving, dyslipidemia, hyperinsulinemia, NAFLD, NASH, fibrosis, NASH with fibrosis, cirrhosis, hepatocellular carcinoma, cardiovascular disease, atherosclerosis, coronary artery disease, peripheral vascular disease, hypertension, endothelial dysfunction, impaired vascular compliance, congestive heart failure, myocardial infarction, stroke, hemorrhagic stroke, ischemic stroke, traumatic brain injury, pulmonary hypertension, restenosis after angioplasty, intermittent claudication, post-prandial lipemia, metabolic acidosis, ketosis, arthritis, osteoporosis, Parkinson's Disease, left ventricular hypertrophy, peripheral arterial disease, macular degeneration, cataract, glomerulosclerosis, chronic renal failure, metabolic syndrome, syndrome X, premenstrual syndrome, angina pectoris, thrombosis, atherosclerosis, transient ischemic attacks, vascular restenosis, impaired glucose metabolism, conditions of impaired fasting plasma glucose, hyperuricemia, gout, erectile dysfunction, skin and connective tissue disorders, psoriasis, foot ulcerations, ulcerative colitis, hyper apo B lipoproteinemia, Alzheimer's Disease, schizophrenia, impaired cognition, inflammatory bowel disease, short bowel syndrome, Crohn's disease, colitis, irritable bowel syndrome, Polycystic Ovary Syndrome, and addiction, wherein the tris salt of Compound 1 comprises a hydrate crystalline form of any one of claims 1-13 and an amorphous form of claim 22 or 23.

32. The ~~method~~ use of any one of claims 28 to 31, wherein the disease or disorder is selected from obesity, NAFLD, NASH, NASH with fibrosis, T2D, and a cardiovascular disease.

33. A hydrate crystalline form of any one of claims 1-13 for use in the treatment of T1D, T2DM, pre-diabetes, idiopathic T1D, LADA, EOD, YOAD, MODY, malnutrition-related diabetes, gestational diabetes, hyperglycemia, insulin resistance, hepatic insulin resistance, impaired glucose tolerance, diabetic neuropathy, diabetic nephropathy, kidney disease, diabetic retinopathy, adipocyte dysfunction, visceral adipose deposition, sleep apnea, obesity, eating disorders, weight gain from use of other agents, excessive sugar craving, dyslipidemia, hyperinsulinemia, NAFLD, NASH, fibrosis, NASH with fibrosis, cirrhosis, hepatocellular carcinoma, cardiovascular disease, atherosclerosis, coronary artery disease, peripheral vascular disease, hypertension, endothelial dysfunction, impaired vascular compliance, congestive heart failure, myocardial infarction, stroke, hemorrhagic stroke, ischemic stroke, traumatic brain injury, pulmonary hypertension, restenosis after angioplasty, intermittent claudication, post-prandial lipemia, metabolic acidosis, ketosis, arthritis, osteoporosis, Parkinson's Disease, left ventricular hypertrophy, peripheral arterial disease, macular degeneration, cataract, glomerulosclerosis, chronic renal failure, metabolic syndrome, syndrome X, premenstrual syndrome, angina pectoris, thrombosis, atherosclerosis, transient ischemic attacks, vascular restenosis, impaired glucose metabolism, conditions of impaired fasting plasma glucose, hyperuricemia, gout, erectile dysfunction, skin and connective tissue disorders, psoriasis, foot ulcerations, ulcerative colitis, hyper apo B lipoproteinemia, Alzheimer's Disease, schizophrenia, impaired cognition, inflammatory bowel disease, short bowel syndrome, Crohn's disease, colitis, irritable bowel syndrome, Polycystic Ovary Syndrome, and addiction.

34. An amorphous form of claim 22 or 23 for use in the treatment of T1D, T2DM, pre-diabetes, idiopathic T1D, LADA, EOD, YOAD, MODY, malnutrition-related diabetes, gestational diabetes, hyperglycemia, insulin resistance, hepatic insulin resistance, impaired glucose tolerance, diabetic neuropathy, diabetic nephropathy, kidney disease, diabetic retinopathy, adipocyte dysfunction, visceral adipose deposition, sleep apnea, obesity, eating disorders, weight gain from use of other agents, excessive sugar craving, dyslipidemia, hyperinsulinemia, NAFLD, NASH, fibrosis, NASH with fibrosis, cirrhosis, hepatocellular carcinoma, cardiovascular disease, atherosclerosis, coronary artery disease, peripheral vascular disease, hypertension, endothelial dysfunction, impaired vascular compliance, congestive heart failure, myocardial infarction, stroke, hemorrhagic stroke, ischemic stroke, traumatic brain injury, pulmonary hypertension, restenosis after angioplasty, intermittent claudication, post-prandial lipemia, metabolic acidosis, ketosis, arthritis, osteoporosis, Parkinson's Disease, left ventricular hypertrophy, peripheral arterial disease, macular degeneration, cataract, glomerulosclerosis, chronic renal failure,

metabolic syndrome, syndrome X, premenstrual syndrome, angina pectoris, thrombosis, atherosclerosis, transient ischemic attacks, vascular restenosis, impaired glucose metabolism, conditions of impaired fasting plasma glucose, hyperuricemia, gout, erectile dysfunction, skin and connective tissue disorders, psoriasis, foot ulcerations, ulcerative colitis, hyper apo B lipoproteinemia, Alzheimer's Disease, schizophrenia, impaired cognition, inflammatory bowel disease, short bowel syndrome, Crohn's disease, colitis, irritable bowel syndrome, Polycystic Ovary Syndrome, and addiction.

35. 1,3-dihydroxy-2-(hydroxymethyl)propan-2-amine salt of 2-((4-((*S*)-2-(5-chloropyridin-2-yl)-2-methylbenzo[*d*][1,3]dioxol-4-yl)piperidin-1-yl)methyl)-1-(((*S*)-oxetan-2-yl)methyl)-1H-benzo[d]imidazole-6-carboxylic acid ("tris salt of Compound 1") for use in the treatment of T1D, T2DM, pre-diabetes, idiopathic T1D, LADA, EOD, YOAD, MODY, malnutrition-related diabetes, gestational diabetes, hyperglycemia, insulin resistance, hepatic insulin resistance, impaired glucose tolerance, diabetic neuropathy, diabetic nephropathy, kidney disease, diabetic retinopathy, adipocyte dysfunction, visceral adipose deposition, sleep apnea, obesity, eating disorders, weight gain from use of other agents, excessive sugar craving, dyslipidemia, hyperinsulinemia, NAFLD, NASH, fibrosis, NASH with fibrosis, cirrhosis, hepatocellular carcinoma, cardiovascular disease, atherosclerosis, coronary artery disease, peripheral vascular disease, hypertension, endothelial dysfunction, impaired vascular compliance, congestive heart failure, myocardial infarction, stroke, hemorrhagic stroke, ischemic stroke, traumatic brain injury, pulmonary hypertension, restenosis after angioplasty, intermittent claudication, post-prandial lipemia, metabolic acidosis, ketosis, arthritis, osteoporosis, Parkinson's Disease, left ventricular hypertrophy, peripheral arterial disease, macular degeneration, cataract, glomerulosclerosis, chronic renal failure, metabolic syndrome, syndrome X, premenstrual syndrome, angina pectoris, thrombosis, atherosclerosis, transient ischemic attacks, vascular restenosis, impaired glucose metabolism, conditions of impaired fasting plasma glucose, hyperuricemia, gout, erectile dysfunction, skin and connective tissue disorders, psoriasis, foot ulcerations, ulcerative colitis, hyper apo B lipoproteinemia, Alzheimer's Disease, schizophrenia, impaired cognition, inflammatory bowel disease, short bowel syndrome, Crohn's disease, colitis, irritable bowel syndrome, Polycystic Ovary Syndrome, and addiction, wherein the tris salt of Compound 1 comprises a crystalline form of tris salt of Compound 1 and an amorphous form of tris salt of Compound 1.

36. 1,3-dihydroxy-2-(hydroxymethyl)propan-2-amine salt of 2-((4-((*S*)-2-(5-chloropyridin-2-yl)-2-methylbenzo[*d*][1,3]dioxol-4-yl)piperidin-1-yl)methyl)-1-(((*S*)-oxetan-2-yl)methyl)-1H-benzo[d]imidazole-6-carboxylic acid ("tris salt of Compound 1") for use in the treatment of T1D, T2DM, pre-diabetes, idiopathic T1D, LADA, EOD, YOAD, MODY, malnutrition-related diabetes, gestational diabetes, hyperglycemia, insulin resistance, hepatic insulin resistance, impaired glucose tolerance, diabetic neuropathy, diabetic nephropathy, kidney disease, diabetic retinopathy, adipocyte dysfunction, visceral adipose deposition, sleep apnea, obesity, eating disorders, weight gain from use of other agents, excessive sugar craving, dyslipidemia, hyperinsulinemia, NAFLD, NASH, fibrosis, NASH with fibrosis, cirrhosis, hepatocellular carcinoma, cardiovascular disease, atherosclerosis, coronary artery disease, peripheral vascular disease, hypertension, endothelial dysfunction, impaired vascular compliance, congestive heart failure, myocardial infarction, stroke, hemorrhagic stroke, ischemic stroke, traumatic brain injury, pulmonary hypertension, restenosis after angioplasty, intermittent claudication, post-prandial lipemia, metabolic acidosis, ketosis, arthritis, osteoporosis, Parkinson's Disease, left ventricular hypertrophy, peripheral arterial disease, macular degeneration, cataract, glomerulosclerosis, chronic renal failure, metabolic syndrome, syndrome X, premenstrual syndrome, angina pectoris, thrombosis, atherosclerosis, transient ischemic attacks, vascular restenosis, impaired glucose metabolism, conditions of impaired fasting plasma glucose, hyperuricemia, gout, erectile dysfunction, skin and connective tissue disorders, psoriasis, foot ulcerations, ulcerative colitis, hyper apo B lipoproteinemia, Alzheimer's Disease, schizophrenia, impaired cognition, inflammatory bowel disease, short bowel syndrome, Crohn's disease, colitis, irritable bowel syndrome, Polycystic Ovary Syndrome, and addiction, wherein the tris salt of Compound 1 comprises a hydrate crystalline form of any one of claims 1-13 and an amorphous form of claim 22 or 23.