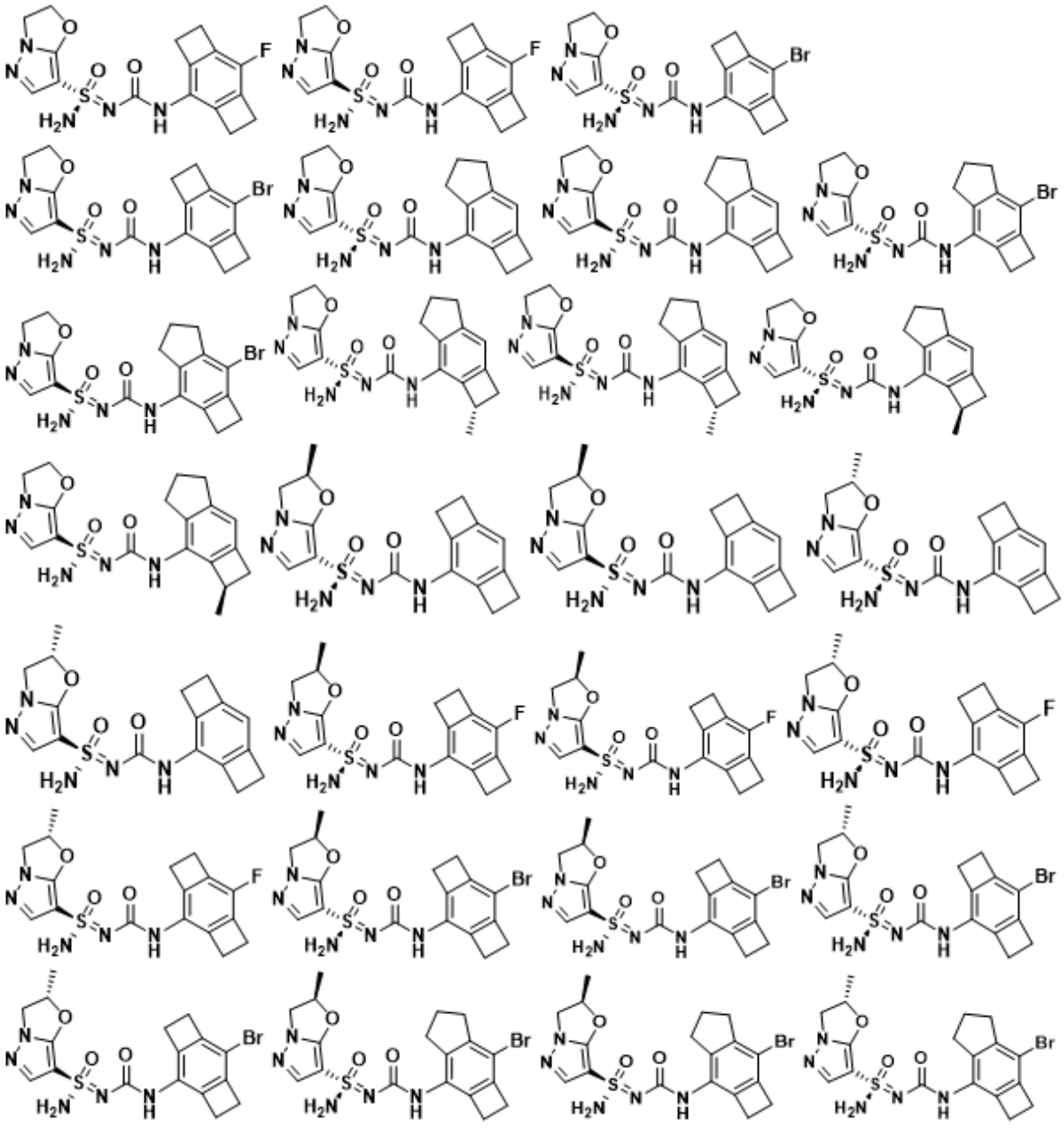
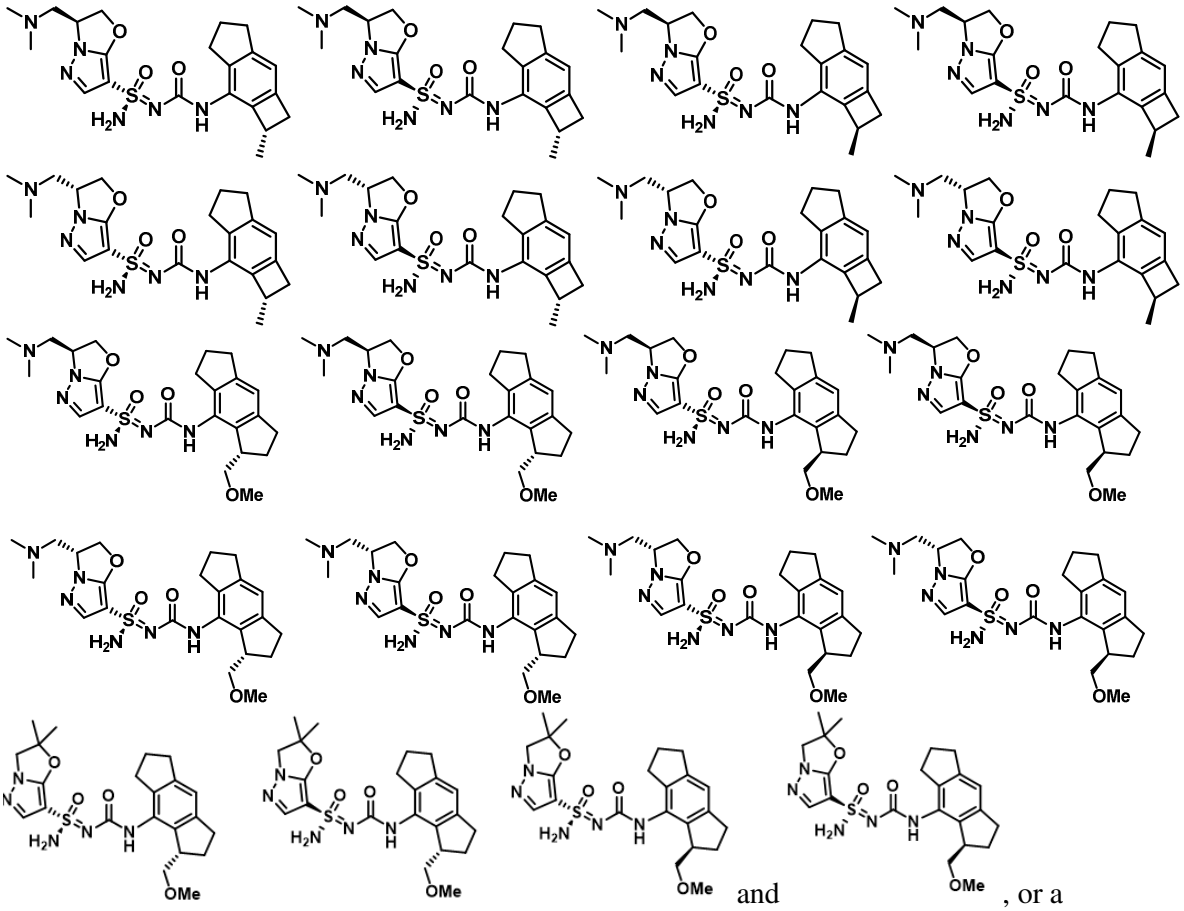
deposition of islet amyloid polypeptide in the pancreas activates NLRP3 and IL-1β signaling, resulting in cell death and inflammation.

[0011] There is a need to provide compounds and pharmaceutical compositions with improved pharmacological and/or physiological and/or physicochemical properties and/or those that provide a useful alternative to known compounds and pharmaceutical compositions.

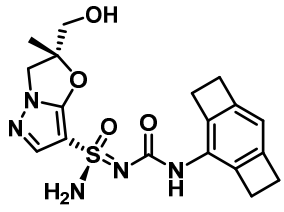
BRIEF SUMMARY

[0012] In some examples, provided herein is a compound selected from the group consisting of:

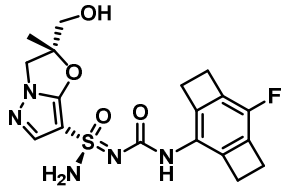



and , or a solvate, tautomer, or pharmaceutically acceptable salt thereof.

[0012a] In one aspect, the disclosure provides a compound, wherein the compound is:


, or a pharmaceutically acceptable salt thereof.

[0012b] In one aspect, the disclosure provides a compound, wherein the compound is:


, or a pharmaceutically acceptable salt thereof.

[0012c] In one aspect, the disclosure provides a pharmaceutical composition, comprising the compound as disclosed herein, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient.

[0012d] In one aspect, the disclosure provides a pharmaceutical composition, comprising the compound as disclosed herein, and a pharmaceutically acceptable excipient.

[0012e] In one aspect, the disclosure provides use of the compound as disclosed herein, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for treating a disorder in a subject in need thereof.

[0012f] In one aspect, the disclosure provides use of the compound as disclosed herein in the manufacture of a medicament for treating a disorder in a subject in need thereof.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] **FIG. 1** is a graph plotting Percent Human PXR Activation @10 μM vs. IC90 in Human Whole Blood (μM) of two compounds of the present disclosure, Compounds 2 and 6, as compared to other sulfonimidamide (SIA) compounds.

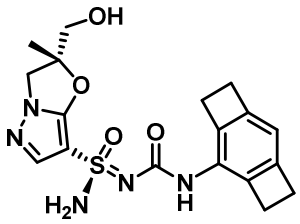
[0014] **FIG. 2** is a graph plotting % Rat Bioavailability vs. IC90 in Human Whole Blood (μM) of two compounds of the present disclosure, Compounds 2 and 6, as compared to other sulfonimidamide (SIA) compounds.

[0015] **FIG. 3** is a graph plotting Rat Half Life (h) vs. IC90 in Human Whole Blood (μM) of two compounds of the present disclosure, Compounds 2 and 6, as compared to other sulfonimidamide (SIA) compounds.

CLAIMS

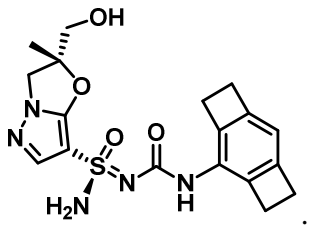
What is claimed is:

Claim 1. A compound, wherein the compound is:



, or a pharmaceutically acceptable salt thereof.

Claim 2. The compound of claim 1, wherein the compound is:



.

Claim 3. A pharmaceutical composition, comprising the compound of claim 1, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient.

Claim 4. A pharmaceutical composition, comprising the compound of claim 2, and a pharmaceutically acceptable excipient.

Claim 5. Use of the compound of claim 1, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for treating a disorder in a subject in need thereof.

Claim 6. Use of the compound of claim 2 in the manufacture of a medicament for treating a disorder in a subject in need thereof.

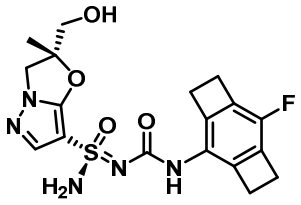
Claim 7. The use of claim 5 or claim 6, wherein the disorder is a disorder of the immune system, a disorder of the liver, a disorder of the lung, a disorder of the skin, a disorder of the cardiovascular system, a disorder of the renal system, a disorder of the gastrointestinal tract, a disorder of the respiratory system, a disorder of the endocrine system, a disorder of the central

nervous system (CNS), an inflammatory disorder, an autoimmune disorder, or a cancer, tumor, or other malignancy.

Claim 8. The use of any one of claims 5 to 7, wherein the disorder is a bacterial infection, a viral infection, a fungal infection, inflammatory bowel disease, celiac disease, colitis, intestinal hyperplasia, cancer, metabolic syndrome, obesity, rheumatoid arthritis, liver disease, hepatic steatosis, fatty liver disease, liver fibrosis, non-alcoholic fatty liver disease (NAFLD), non-alcoholic steatohepatitis (NASH), lupus, lupus nephritis, cryopyrin-associated periodic syndromes (CAPS), myelodysplastic syndromes (MDS), gout, myeloproliferative neoplasms (MPN), atherosclerosis, Crohn's disease, or inflammatory bowel disease (IBD).

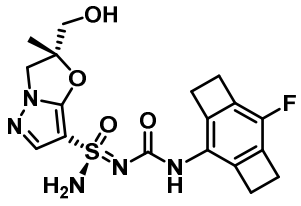
Claim 9. The use of any one of claims 5 to 8, wherein the subject is a human.

Claim 10. A compound, wherein the compound is:



, or a pharmaceutically acceptable salt thereof.

Claim 11. The compound of claim 10, wherein the compound is:



.

Claim 12. A pharmaceutical composition, comprising the compound of claim 10, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable excipient.

Claim 13. A pharmaceutical composition, comprising the compound of claim 11, and a pharmaceutically acceptable excipient.

Claim 14. Use of the compound of claim 10, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for treating a disorder in a subject in need thereof.

Claim 15. Use of the compound of claim 11 in the manufacture of a medicament for treating a disorder in a subject in need thereof.

Claim 16. The use of claim 14 or 15, wherein the disorder is a disorder of the immune system, a disorder of the liver, a disorder of the lung, a disorder of the skin, a disorder of the cardiovascular system, a disorder of the renal system, a disorder of the gastrointestinal tract, a disorder of the respiratory system, a disorder of the endocrine system, a disorder of the central nervous system (CNS), an inflammatory disorder, an autoimmune disorder, or a cancer, tumor, or other malignancy.

Claim 17. The use of any one of claims 14 to 16, wherein the disorder is a bacterial infection, a viral infection, a fungal infection, inflammatory bowel disease, celiac disease, colitis, intestinal hyperplasia, cancer, metabolic syndrome, obesity, rheumatoid arthritis, liver disease, hepatic steatosis, fatty liver disease, liver fibrosis, non-alcoholic fatty liver disease (NAFLD), non-alcoholic steatohepatitis (NASH), lupus, lupus nephritis, cryopyrin-associated periodic syndromes (CAPS), myelodysplastic syndromes (MDS), gout, myeloproliferative neoplasms (MPN), atherosclerosis, Crohn's disease, or inflammatory bowel disease (IBD).

Claim 18. The use of any one of claims 14 to 17, wherein the subject is a human.