kidney are complex but their study is facilitated by dividing them by their effects on four basic morphologic components: glomeruli, tubules, interstitium, and blood vessels. Unfortunately, some disorders affect more than one structure and the anatomic interdependence of structures in the kidney implies that damage to one almost always secondarily affects the others. Thus, whatever the origin, there is a tendency for all forms of renal disease ultimately to destroy all four components of the kidney, culminating in chronic renal failure. For instance, in autoimmune diseases such as diabetes mellitus, the kidneys are prime targets to suffer tissue damage or lesions. Nephrectomy, or kidney removal, a procedure which is sometimes performed on patients with kidney cancer (e.g., renal cell carcinoma), may negatively impact kidney function in the remaining kidney. Chemotherapy and immunosuppressive therapy are also a source of harmful effects to the kidneys. Therefore, there exists a need for drugs with a good safety profile which can be administered to patients with kidney disease. There is also a need for pharmaceutical compounds which can prolong kidney health or protect it from deterioration to the point at which the kidney can no longer function.

[007] The present invention addresses these needs for new treatment methods, compounds and pharmaceutical compositions. The invention provides new chemical entities and new treatment methods for preventing and/or treating (i) blood disorders, (ii) inflammation-related diseases and/or (iii) renal disorders and/or renal disorder complications along with any other organ dysfunction or lesion(s) arising from fibrotic disease.

[008] Additional features of the invention will be apparent from a review of the disclosure, figures and description of the invention herein.

BRIEF SUMMARY ~~OF THE INVENTION~~

[009] The present ~~invention~~disclosure relates to compounds, compositions and methods for the prevention and/or treatment of various diseases and conditions in subjects.

[0010] Particular ~~aspects of the invention~~embodiments relate to compounds according to Formula I and Formula II as defined herein and pharmaceutically acceptable salts thereof. Other ~~aspects of the invention~~embodiments relate~~s~~ to the use of compounds according to Formula I and Formula II as defined herein and pharmaceutically acceptable salts thereof.

[0011] Also disclosed herein is~~One particular aspect of the invention concerns~~ the use of a compound represented by Formula I or Formula II as defined herein for prevention and/or treatment of (i) blood disorders (e.g., anemia,

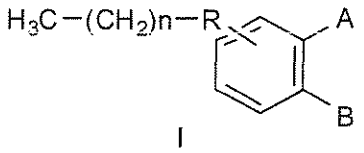
neutropenia), (ii) inflammation-related diseases (e.g., autoimmune disease), (iii) renal disorders and/or renal disorder complications and/or (iv) fibrosis-related organ dysfunctions. Another particular aspect of the invention concerns the use of a compound represented by Formula I or Formula II as defined herein for prevention and/or treatment of a condition associated with: (i) blood disorders (e.g., anemia, neutropenia), (ii) inflammation-related diseases (e.g., autoimmune disease), (iii) renal disorders and/or renal disorder complications and/or (iv) fibrosis-related organ dysfunctions.

[0012] Also disclosed herein is~~Another related aspect of the invention relates to~~ a pharmaceutical composition comprising a compound of Formula I or Formula II as defined herein for use in prevention or treatment of (i) blood disorders (e.g., anemia, neutropenia), (ii) inflammation-related diseases (e.g., autoimmune disease), (iii) renal disorders and/or renal disorder complications and/or (iv) fibrosis-related organ dysfunctions. Yet another related aspect of the invention relates to a pharmaceutical composition comprising a compound of Formula I or Formula II as defined herein for the manufacture of a medicament for the prevention or treatment of: (i) blood disorders (e.g., anemia, neutropenia), (ii) inflammation-related diseases (e.g., autoimmune disease), (iii) renal disorders and/or renal disorder complications and/or (iv) fibrosis-related organ dysfunctions. One particular example is a nephroprotective composition comprising a compound represented by Formula I or Formula II as defined herein, and a pharmaceutically acceptable carrier.

[0013] Also disclosed is~~A related aspect of the invention relates to~~ a method for the prevention or treatment of (i) blood disorders (e.g., anemia, neutropenia), (ii) inflammation-related diseases (e.g., autoimmune disease), (iii) renal disorders and/or renal disorder complications and/or (iv) fibrosis-related organ dysfunctions, comprising administering to a subject in need thereof a therapeutically effective amount of a Compound of Formula I or Formula II as defined herein or a pharmaceutical composition comprising a Compound of Formula I or Formula II as defined herein and pharmaceutical acceptable vehicle.

[0014] The ~~invention~~disclosure further relates to compounds according to Formula I or Formula II as defined herein, and pharmaceutically acceptable salts thereof, as prophylactically effective and/or therapeutically effective agents against various diseases and/or conditions in subjects.

[0014a] In one aspect, there is provided a compound of Formula I, or a pharmaceutically acceptable salt thereof:

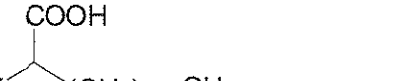


I

wherein:

n is 2-6;

R is –C(O)–, –OC(O)–, or –CH(OH)–;

A is  when B is H;

B is  when A is H; or

A and B are covalently bonded to form a five (5), six (6) or seven (7)-membered cycloalkyl substituted with COOH;

where:

Y is O, S, NH, or CH_2;

and

p is 1-7.

[0014b] In another aspect, there is provided a pharmaceutical composition comprising a compound as defined above, and a pharmaceutically acceptable carrier.

[0014c] In another aspect, there is provided the use of a compound as defined above, or use of a composition as defined above, in the manufacture of a medicament for prevention or treatment of: (i) a blood disorder, (ii) an inflammation-related disease, (iii) a renal disorder or a renal disorder complication, or (iv) a fibrosis-related organ dysfunction.

[0015] Further aspects of the invention will be apparent to a person skilled in the art from the following description, claims, and generalizations herein.

BRIEF DESCRIPTION OF THE FIGURES