



(51) International Patent Classification:

A61K 31/706 (2006.01) C07D 213/127 (2006.01)
A61P 3/00 (2006.01) C07H 19/048 (2006.01)

(21) International Application Number:

PCT/US2022/033794

(22) International Filing Date:

16 June 2022 (16.06.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

202141027391 18 June 2021 (18.06.2021) IN
63/236,974 25 August 2021 (25.08.2021) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,

(54) Title: TREATMENT OF IMMUNE-RELATED DISORDERS, KIDNEY DISORDERS, LIVER DISORDERS, HEMOLYTIC DISORDERS, AND OXIDATIVE STRESS-ASSOCIATED DISORDERS USING NRH, NARH AND REDUCED DERIVATIVES THEREOF

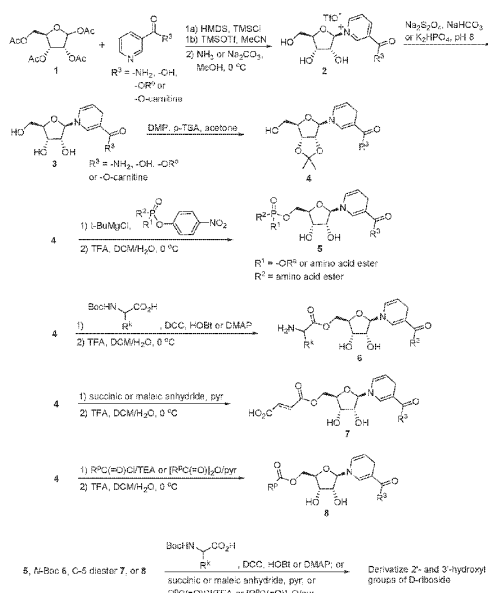


Figure 1

(57) Abstract: The disclosure relates to *in vivo* and *ex vivo* uses of dihydronicotinamide riboside (NRH), dihydronicotinic acid riboside (NARH) and reduced derivatives thereof to treat immune-related disorders (e.g., systemic inflammatory response syndrome and sepsis), kidney disorders (e.g., acute kidney injury and hepatorenal syndrome [HRS]), liver disorders (e.g., acute liver failure and HRS), hemolytic disorders (e.g., hemolysis and hemolytic anemia), and disorders and conditions associated with oxidative stress, damage or injury (e.g., methemoglobinemia and anemia). NRH, NARH and reduced derivatives thereof can be used *in vivo* or *ex vivo* alone or in combination with one or more additional therapeutic agents, such as an anti-inflammatory agent or/and an antioxidant.

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TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*