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(71) Applicant (for all designated States except US): **PHE-NOMENOME DISCOVERIES INC.** [CA/CA];
 204-407 Downey Road, Saskatoon, Saskatchewan, S7 4L8 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KHAN, M., Amin** [US/CA]; 204-407 Downey Road, Saskatoon, Saskatchewan, S7N 4L8 (CA). **WOOD, Paul, L.** [CA/CA]; 204-407 Downey Road, Saskatoon, Saskatchewan, S7N 4L8 (CA). **GOODENOWE, Dayan** [CA/CA]; 204-407 Downey Road, Saskatoon, Saskatchewan, S7N 4L8 (CA). **MANKIDY, Rishikesh** [IN/CA]; 204-407 Downey Road, Saskatoon, Saskatchewan, S7N 4L8 (CA). **AHIAHONU, Pearson** [CA/CA]; 204-407 Downey Road, Saskatoon, Saskatchewan, S7N 4L8 (CA).

(74) Agents: **ERRAT, Judy, A.** et al.; GOWLING LAFLEUR HENDERSON LLP, 160 Elgin Street, Suite 2600, Ottawa, Ontario K1P 1C3 (CA).

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(54) Title: PLASMALOGEN COMPOUNDS, PHARMACEUTICAL COMPOSITIONS CONTAINING THE SAME AND METHODS FOR TREATING DISEASES OF THE AGING

(57) Abstract: Described herein are routes of synthesis and therapeutic uses of 1-alkyl, 2-acyl glycerol derivatives of formula I: which when administered to mammalian biological systems result in increased cellular concentrations of specific sn-2 substituted ethanolamine plasmalogens independent of the ether lipid synthesis capacity of the system. Elevating levels of the specific sn-2 substituted species in this way can cause lowering of membrane cholesterol levels and the lowering of amyloid secretion. These compounds can be used for the treatment or prevention of diseases of aging associated with increased membrane cholesterol, increased amyloid, and decreased plasmalogen levels, such as neurodegeneration (including Alzheimer's disease, Parkinson's disease and age-related macular degeneration), cognitive impairment, dementia, cancer (e.g. prostate, lung, breast, ovarian, and kidney cancers), osteoporosis, bipolar disorder and vascular diseases (such as atherosclerosis, hypercholesterolemia).



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