

(54) **POLICOSANOL NANOPARTICLES**

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(73) Assignee: **NanoRx, Inc.**, Chappaqua, NY (US)
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A61K 9/50 (2006.01)
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(58) **Field of Classification Search**
CPC . A61K 31/045; A61K 31/075; A61K 31/192;
A61K 31/194; A61K 31/219; A61K 9/14;
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See application file for complete search history.

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(57) **ABSTRACT**

The present invention provides nanoparticulate policosanol, formulations including these particles, as well as methods of using the particles and formulations for treatment and prophylaxis of various diseases and conditions.

14 Claims, 29 Drawing Sheets



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P. P. Shrestha
Certifying Officer

5/28/2010
Date

(12) **United States Patent**
Raghavan

(10) **Patent No.:** **US 9,006,292 B2**
(45) **Date of Patent:** **Apr. 14, 2015**

- (54) **METADICHOL® LIQUID AND GEL NANOPARTICLE FORMULATIONS**
- (71) Applicant: **NanoRx, Inc.**, Chappaqua, NY (US)
- (72) Inventor: **Palayakotai R. Raghavan**, Chappaqua, NY (US)
- (73) Assignee: **NanoRx, Inc.**, Chappaqua, NY (US)
- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 29 days.

(21) Appl. No.: **14/205,243**

(22) Filed: **Mar. 11, 2014**

(65) **Prior Publication Data**
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- (60) Provisional application No. 61/794,490, filed on Mar. 15, 2013.
- (51) **Int. Cl.**
A61K 31/045 (2006.01)
B82Y 30/00 (2011.01)
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A61K 47/32 (2006.01)

- (52) **U.S. Cl.**
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- (58) **Field of Classification Search**
CPC *A61K 31/045*; *B82Y 30/00*
USPC *514/724*; *977/773*
See application file for complete search history.

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Primary Examiner — Raymond Henley, III
(74) *Attorney, Agent, or Firm* — Morgan, Lewis & Bockius LLP

- (57) **ABSTRACT**
The present invention provides methods of regulating physiological and metabolic parameters and of treating diseases by administering metadichol to a subject in need of such regulation and/or treatment. Metadichol can be administered as a liquid or gel formulation.

12 Claims, 15 Drawing Sheets



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L. Wallace
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(12) **United States Patent**
Raghavan

(10) **Patent No.:** **US 9,034,383 B2**
(45) **Date of Patent:** ***May 19, 2015**

(54) **POLICOSANOL NANOPARTICLES**

(75) Inventor: **Palayakotai R. Raghavan**, Chappaqua, NY (US)

(73) Assignee: **NanoRx, Inc.**, Chappaqua, NY (US)

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This patent is subject to a terminal disclaimer.

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(65) **Prior Publication Data**

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(58) **Field of Classification Search**

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(74) *Attorney, Agent, or Firm* — Morgan, Lewis & Bockius LLP

(57) **ABSTRACT**

The present invention provides nanoparticulate policosanol, and octacosanol formulations including these particles, as well as methods of using the particles and formulations for treatment and prophylaxis of various diseases and conditions.

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