

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
27 September 2018 (27.09.2018)



(10) International Publication Number
WO 2018/172511 A1

(51) International Patent Classification:

A61Q 17/00 (2006.01) *A61K 31/455* (2006.01)
A61K 9/127 (2006.01) *A61K 31/519* (2006.01)
A61K 31/07 (2006.01) *A61K 31/525* (2006.01)
A61K 31/197 (2006.01) *A61K 31/592* (2006.01)
A61K 31/355 (2006.01) *A61K 31/728* (2006.01)
A61K 31/375 (2006.01)

(21) International Application Number:

PCT/EP2018/057416

(22) International Filing Date:

23 March 2018 (23.03.2018)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

00386/17 24 March 2017 (24.03.2017) CH

(72) Inventor; and

(71) Applicant: **ALBARANO, Teo** [CH/CH]; Eichhofstrasse
13, 6205 Eich (CH).

(74) Agent: **RENTSCH PARTNER AG**; Bellerivestrasse 203,
Postfach, 8034 Zürich (CH).

(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, IR, IS, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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, 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))

(54) Title: PHARMACEUTICAL COMPOSITIONS

(57) Abstract: The present invention is directed towards new compositions comprising a synergistic combination of a vitamin D3 or a derivative or precursor thereof and hyaluronic acid or derivative thereof encapsulated in a lipid based colloidal carrier system (preferably lipid based vesicles such as liposomes, niosomes, transferosomes) and topical formulations thereof, as well as their use in the prevention and/or treatment of inflamed skin and mucous membrane, especially in the prevention and/or treatment of skin photodamage, in particular in the prevention and/or treatment of skin erythema (skin inflammation) and actinic keratosis, as well non melanoma skin cancer.

WO 2018/172511 A1