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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
7 June 2012 (07.06.2012)

WIPO | PCT

(10) International Publication Number
WO 2012/075376 A2

(51) International Patent Classification:
A61K 39/15 (2006.01) *A61K 9/08* (2006.01)
A61K 31/70 (2006.01) *A61P 31/12* (2006.01)
A61K 48/00 (2006.01) *A61P 31/00* (2006.01)

(21) International Application Number:
PCT/US2011/063037

(22) International Filing Date:
2 December 2011 (02.12.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/419,020 2 December 2010 (02.12.2010) US

(71) Applicant *(for all designated States except US)*: **ONCOLYTICS BIOTECH INC.** [CA/CA]; Suite 210, 1167 Kensington Crescent, N.W., Calgary, Alberta T2N 1X7 (CA).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **COFFEY, Matthew C.** [CA/CA]; 2231 Bowness Road, N.W., Calgary, Alberta T2N 3L4 (CA). **SERL, Sarah** [CA/CA]; 5-310 Brookmere Rd., S.W., Calgary, Alberta T2W 2T7 (CA). **PAVLIV, Leo** [US/US]; 707 Walcott Way, Cary, North Carolina 27519 (US).

(74) Agents: **MCKEON, Tina Williams** et al.; McKeon, Meunier, Carlin & Curfman, LLC, Suite 900, 817 W. Peachtree Street NW, Atlanta, Georgia 30308 (US).

(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, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

— *of inventorship (Rule 4.17(iv))*

Published:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*

(54) **Title**: LYOPHILIZED VIRAL FORMULATIONS

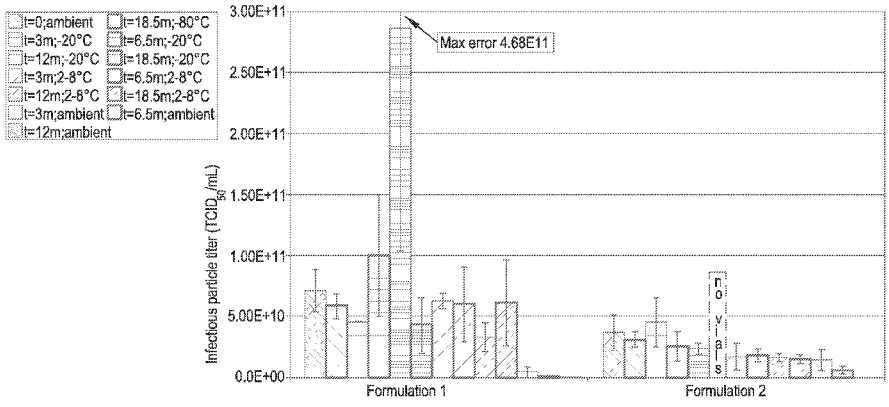


FIG. 1

(57) **Abstract**: Provided herein are lyophilized viral formulations useful for the stabilization and storage of viruses and methods of preparing these formulations. The lyophilized viral formulations described herein include a virus (e.g., a purified virus) and a non-viral composition including excipients. The formulations can be used, for example, to retain the infectivity or immunogenicity of vir - uses during periods of storage.

WO 2012/075376 A2