



(43) International Publication Date  
13 November 2014 (13.11.2014)

(10) International Publication Number  
**WO 2014/181309 A1**

- (51) **International Patent Classification:**  
*A61K 9/50* (2006.01) *A61K 35/18* (2006.01)
- (21) **International Application Number:**  
PCT/IB2014/061338
- (22) **International Filing Date:**  
9 May 2014 (09.05.2014)
- (25) **Filing Language:** Italian
- (26) **Publication Language:** English
- (30) **Priority Data:**  
RM2013A000280 10 May 2013 (10.05.2013) IT  
RM2013A000610 5 November 2013 (05.11.2013) IT
- (71) **Applicant:** ERYDEL S.P.A. [IT/IT]; Via Sasso 36, I-61029 Urbino PU (IT).
- (72) **Inventors:** MAMBRINI, Giovanni; Viale dell'Orto 23, I-41037 Mirandola MO (IT). BENATTI, Luca; Via Sacconi 8, I-20900 Monza MB (IT). CAPOGROSSI, Giovanni; Via Rinaldi 22 bis, I-60035 Jesi AN (IT). MANDOLINI, Marco; Via dei Garofani 2, I-60019 Senigallia AN (IT).
- (74) **Agents:** GERMINARIO, Claudio et al.; Società Italiana Brevetti S.p.A., Piazza di Pietra 39, I-00186 Roma (IT).
- (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, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, 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, 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, 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))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(54) **Title:** PROCESS FOR THE PREPARATION OF ERYTHROCYTES LOADED WITH ONE OR MORE SUBSTANCES OF PHARMACEUTICAL INTEREST AND SO OBTAINED ERYTHROCYTES

(57) **Abstract:** The present invention relates to a process for preparing erythrocytes loaded with one or more substance of pharmaceutical interest. The present invention is also directed to loaded erythrocytes thus obtained and pharmaceutical compositions comprising said population of loaded erythrocytes as well as therapeutic application thereof, in particular in the treatment of Ataxia telangiectasia.



WO 2014/181309 A1