

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
05 March 2020 (05.03.2020)



(10) International Publication Number
WO 2020/047467 A3

(51) International Patent Classification:

A61K 38/18 (2006.01) C12N 5/07 (2010.01)
C07K 14/47 (2006.01) C12N 5/074 (2010.01)

(21) International Application Number:

PCT/US2019/049150

(22) International Filing Date:

30 August 2019 (30.08.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/725,168	30 August 2018 (30.08.2018)	US
62/788,479	04 January 2019 (04.01.2019)	US
62/852,746	24 May 2019 (24.05.2019)	US

(71) Applicant: **TENAYA THERAPEUTICS, INC.** [US/US];
171 Oyster Point Boulevard, Suite 500, South San Francisco,
CA 94080 (US).

(72) Inventors: **ZHOU, Huanyu**; c/o Tenaya Therapeutics,
Inc., 171 Oyster Point Boulevard, Suite 500, South San
Francisco, CA 94080 (US). **LOMBARDI, Laura**; c/o
Tenaya Therapeutics, Inc., 171 Oyster Point Boulevard,
Suite 500, South San Francisco, CA 94080 (US).

(74) Agent: **WHITTLE, James, R.** et al.; Cooley LLP, 1299
Pennsylvania Avenue, NW, Suite 700, Washington, DC
20004 (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, 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).

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:

- with international search report (Art. 21(3))
- with sequence listing part of description (Rule 5.2(a))

(88) Date of publication of the international search report:

30 July 2020 (30.07.2020)

(54) Title: CARDIAC CELL REPROGRAMMING WITH MYOCARDIN AND ASCL1

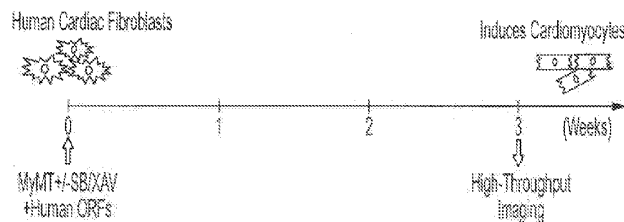


FIG. 1A

(57) Abstract: The present disclosure provides methods for generating induced cardiomyocytes and/or inducing a cardiomyocyte phenotype in cells in vivo or in vitro, such as by expression of ASCL1 or MYF6 and MYOCD. The present disclosure further provides gene-delivery vectors comprising one or more polynucleotides selected from ASCL1, MYF6, MYOCD, MEF2C, and TBX5. It further provides compositions comprising induced cardiomyocytes and provides methods of treating a heart condition, such as myocardial infarction. The disclosure also provides engineered myocardin proteins with an internal deletion, vectors encoding such engineered myocardins, and methods of use thereof.

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