



(51) International Patent Classification:

C07D 207/14 (2006.01) **A61K 31/166** (2006.01)
C07D 213/24 (2006.01) **A61K 31/443** (2006.01)
C07D 235/30 (2006.01) **A61K 31/506** (2006.01)
C07D 307/38 (2006.01) **A61K 31/341** (2006.01)
C07D 307/52 (2006.01) **A61K 31/44** (2006.01)
C07D 405/12 (2006.01) **A61K 31/505** (2006.01)
C07C 43/205 (2006.01) **A61K 31/40** (2006.01)
C07C 233/58 (2006.01) **A61P 35/00** (2006.01)
A61K 31/075 (2006.01)

(21) International Application Number:

PCT/US2015/066146

(22) International Filing Date:

16 December 2015 (16.12.2015)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

14/571,647 16 December 2014 (16.12.2014) US

(71) Applicant: **ADT PHARMACEUTICALS, INC.**
[US/US]; 31691 Shoal Water Dr., Orange Beach, Alabama
36561 (US).

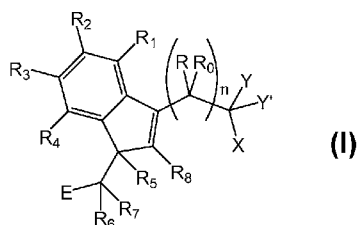
(72) Inventors: **PIAZZA, Gary A.**; 28487 Beau Chene Ct.,
Daphne, Alabama 36526 (US). **CHEN, Xi**; 441 Matzek
Dr., Hoover, Alabama 35226 (US). **KEETON, Adam B.**;
316 Fern Avenue, Gardendale, Alabama 35071 (US).
BOYD, Michael R.; 31691 Shoal Water Dr., Orange
Beach, Alabama 36561 (US).

(74) Agents: **PILLAI, Xavier** et al.; Two Prudential Plaza,
Suite 4900, 180 N. Stetson Ave., Chicago, Illinois 60601
(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, 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, LU, LY, MA, MD, ME, MG,
MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,

[Continued on next page]

(54) Title: INDENYL COMPOUNDS, PHARMACEUTICAL COMPOSITIONS, AND MEDICAL USES THEREOF



(57) Abstract: Disclosed are compounds, for example, compounds of formula (I), (Formula I) wherein R, R₀, R₁-R₈, n, X, Y, Y', and E are as described herein, pharmaceutical compositions containing such compounds, and methods of treating or preventing a disease or condition, for example, cancer.

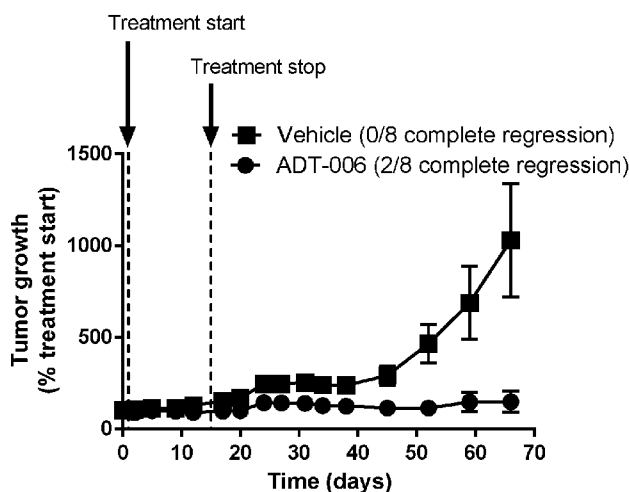


FIG. 11A



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.

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).

(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,

Published:

— *with international search report (Art. 21(3))*