IK-930 (TEAD inhibitor)

Ikena Oncology

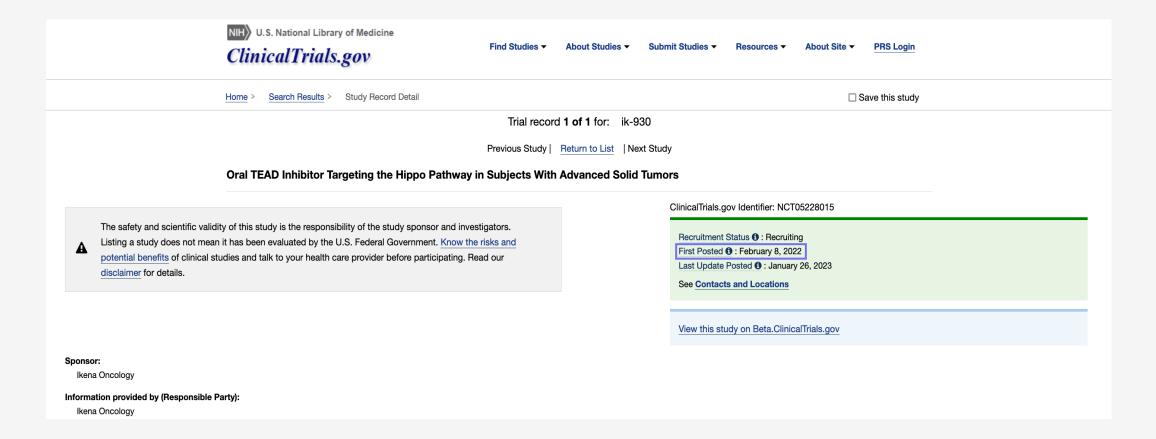


IK-930



IK-930 is an oral TEAD inhibitor in phase 1 trials

NCT05228015





There are 2 Ikena patents on TEAD inhibitors.

Composition of matter: WO 2022/120353 A1

Combination therapy: WO 2022/159986 A1 (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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74) Agent: REID, Andrea L.C. et al.; c/o Dechert LLP, One International Place, 40th Floor, 100 Oliver Street, Boston, Massachusetts 02110-2605 (US).

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(54) Title: TEAD INHIBITORS AND USES THEREOF

(57) Abstract: The present invention provides compounds, compositions thereof, and methods of using the same.

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

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

amendments (Rule 48.2(h))

with sequence listing part of description (Rule 5.2(a))

- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of

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(71) Applicant: IKENA ONCOLOGY, INC. [US/US]; 645 Summer Street, Suite 101, Boston, Massachusetts 02210

(72) Inventors: CASTRO, Alfredo C.; c/o Ikena Oncology, Inc., 645 Summer Street, Suite 101, Boston, Massachusetts 02210 (US). BURKE, Michael; c/o Ikena Oncology, Inc., 645 Summer Street, Suite 101, Boston, Massachusetts 02210 (US). AMIDON, Benjamin; c/o Ikena Oncology, Inc., 645 Summer Street, Suite 101, Boston, Massachusetts 02210 (US). FROSCH, Hyejin; c/o Ikena Oncology, Inc., 645 Summer Street, Suite 101, Boston, Massachusetts 02210 (US)

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TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

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

(54) Title: COMBINATION OF A 3-(IMIDAZOL-4-YL)-4-(AMINO)-BENZENESULFONAMIDE TEAD INHIBITOR WITH AN EGFR INHIBITOR AND/OR MEK INHIBITOR FOR USE IN THE TREATMENT OF LUNG CANCER

(57) Abstract: The present invention provides TEAD inhibitors, and methods of use thereof

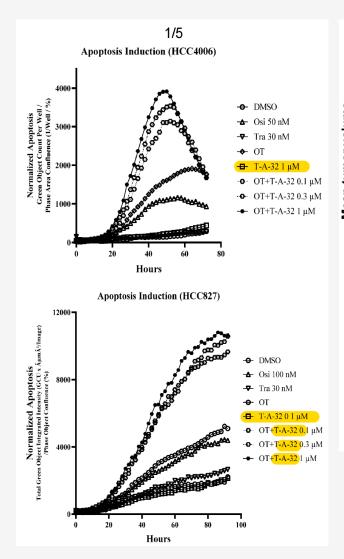


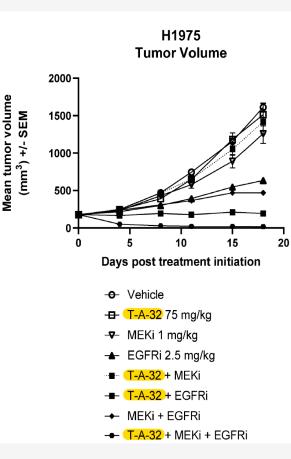
Combination patents are typically more revealing because they often include in vivo data (with the compound of interest) that provide many clues.

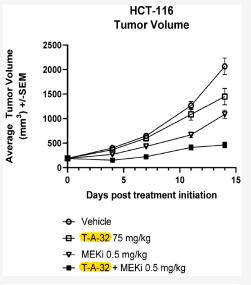
No exception here.

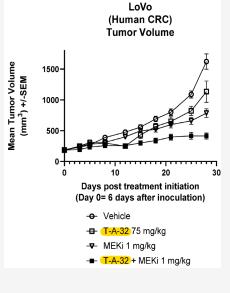


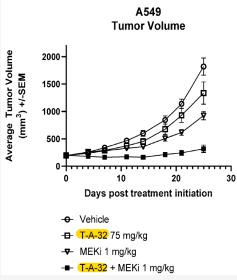
Combination patent ('986) describes the in vivo activity of T-A-32 with either an EGFR and/or a MEK inhibitor





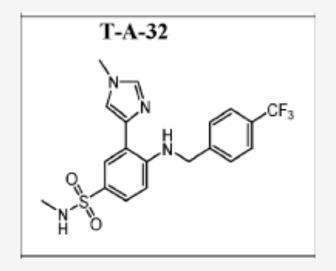








Combo patent provides the structure of T-A-32



Interestingly, of the ~207 structures in the composition of matter ('353), T-A-32 is not included (could be redacted, as some of the examples are left blank). Though the SAR in '353 definitely allude to T-A-32.



Does T-A-32 = IK-930 or is it a decoy compound?

Decoy compounds! Seen this before (for example, Gilead's GS-5245). So, gotta make sure this is the right compound.



March 5, 2021: SEC S-1 filing has the big giveaway.

I like SEC filings because the company cannot lie.

As filed with the Securities and Exchange Commission on March 5, 2021

Registration No. 333

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1 REGISTRATION STATEMENT

The Securities Act of 1933

IKENA ONCOLOGY, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization) 2836 (Primary Standard Industrial Classification Code Number) 81-1697316 (I.R.S. Employer Identification Number

645 Summer Street, Suite 101 Boston, MA 02210 (857) 273-8343

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Mark Manfredi, Ph.D.
President and Chief Executive Officer
Ikena Oncology, Inc.
645 Summer Street, Suite 101
Boston, MA 02210
(857) 273-8343

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Richard Hoffman, Esq. Stephanie Richards, Esq. William D. Collins, Esq. Goodwin Procter LLP 100 Northern Avenue Boston, MA 02210 (617) 570-1000

accounting standards provided to Section 7(a)(2)(B) of the Securities Act.

Lisa Firenze, Esq. Craig Hilts, Esq. Wilmer Cutler Pickering Hale & Dorr LLP 7 World Trade Center 250 Greenwich Street New York, NY 10007 (212) 230-8800

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer" "accelerated filer" "smaller reporting company" and "emerging growth company" in Rule 17h-2 of the Exchange Act.

| See the definitions of | large accelerated lifet, | accelerated files, | smarrer reporting company | and | emerging grown company | in reale 120-2 of the Exchange rice. | |
|------------------------|--------------------------|----------------------|----------------------------------|-------|------------------------------|---|---|
| Large Accelerated File | r 🗆 | | | | | Accelerated Filer | |
| Non-Accelerated Filer | | | | | | Smaller Reporting Company | |
| | | | | | | Emerging Growth Company | ē |
| If an emerging growth | company indicate by cl | oock mark if the red | istrant has elected not to use t | ho os | tended transition period for | complying with any new or revised financial | |

CALCULATION OF REGISTRATION FEE

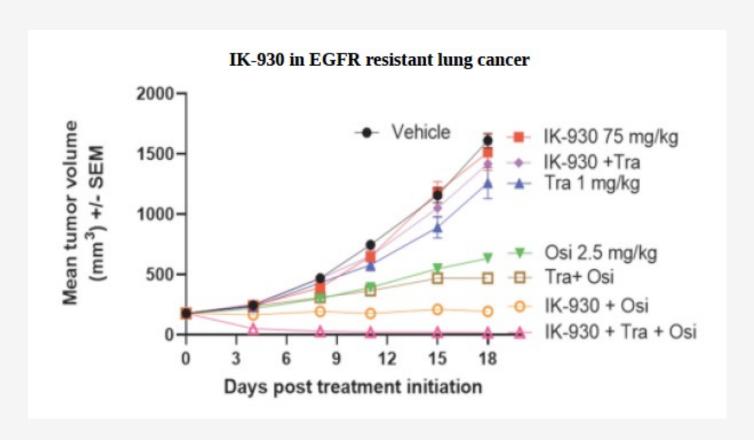
| Title of each Class of Securities to be Registered | Proposed Maximum Aggregate Offering Price(1)(2) | Amount of Registration Fee |
|---|--|-------------------------------|
| Common Stock, par value \$0.001 per share | \$100,000,000 | \$10,910 |

- (1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
- (2) Includes the offering price of shares that the underwriters may purchase pursuant to an option to purchase additional shares.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.



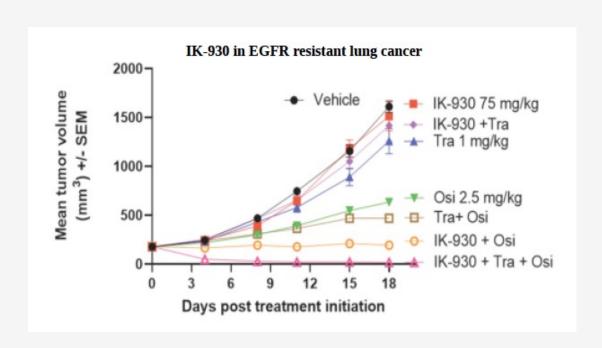
Eureka! SEC S-1 filing has data on IK-930 combo therapies in mice



Tra = trametinib (MEKi); Osi = Osimertinib (EGFRi)



Side-by-side comparison of tumor volumes confirms T-A-32 = IK-930

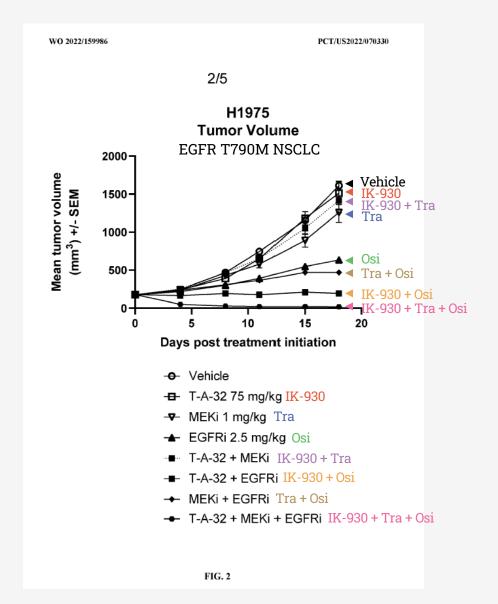


Dosing checks out as well:

75 mg/kg IK-930

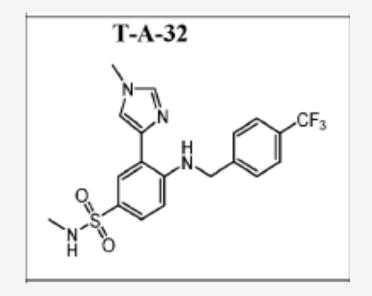
1 mg/kg Tra (MEKi)

2.5 mg/kg Osi (EGFRi)





Therefore, T-A-32 = IK-930

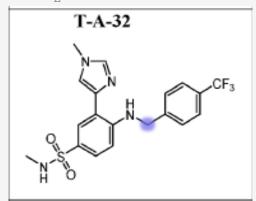




Bonus side note: IK-930 is very similar to VT-103, an oral TEAD inhibitor by Vivace Therapeutics.

Example 121 in WO2019/040380

-CH₂ difference



Disclosed as VT-103 in Tang et al. Mol. Cancer Ther. (2021)

N-methyl-3-(1-methyl-1H-imidazol-4-yl)-4-((4-(trifluoromethyl)phenyl)amino)benz enesulfonamide



Questions?

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