UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of
The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): January 8, 2018

Aclaris Therapeutics, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**001-37581**	**46-0571712**
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)

101 Lindenwood Drive, Suite 400
Malvern, PA 19355
(Address of principal executive offices, including zip code)

(484) 324-7933
(Registrant's telephone number, including area code)

N/A
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth Company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☒

Item 7.01 Regulation FD Disclosure.

On January 8, 2018 to January 10, 2018, members of management of Aclaris Therapeutics, Inc. (the "Company"), will hold meetings to review, among other things, the Company's commercial launch plan for ESKATA (hydrogen peroxide) 40% topical solution, (w/w) for the treatment of raised seborrheic keratoses, product candidate pipeline and clinical development. A copy of the presentation that will accompany the meetings is available on the Company's website at www.aclaristx.com, and is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information set forth in this Item 7.01 and contained in the presentation furnished as Exhibit 99.1 shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and is not incorporated by reference into any of the Company's filings under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof, except as shall be expressly set forth by specific reference in any such filing.

Item 8.01 Other Events.

On January 8, 2018, the Company also issued a press release announcing data from the Company's Phase 2 clinical trials evaluating A-101 45% topical solution for the treatment of common warts. A copy of the press release is filed herewith as Exhibit 99.2 to this Current Report on Form 8-K and is incorporated herein by reference.

The information contained in this Current Report on Form 8-K speaks only as the date hereof. While the Company may elect to update the information in this Current Report on Form 8-K in the future, the Company disclaims any obligation to do so except to the extent required by applicable law.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit Number	Exhibit Description
99.1	Aclaris Therapeutics Corporate Overview Presentation.
99.2	Press Release, dated January 8, 2018.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ACLARIS THERAPEUTICS, INC.

By: /s/ Frank Ruffo
Frank Ruffo
Chief Financial Officer

Date: January 8, 2018

Exhibit 99.1

Illuminating Science…Empowering Patients

Company Overview

Dr. Neal Walker
President and CEO
January 2018

Cautionary Note Regarding Forward-Looking Statements

Any statements contained in this presentation that do not describe historical facts may constitute forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. These statements may be identified by words such as "believe", "expect", "may", "plan," "potential," "will," and similar expressions, and are based on Aclaris' current beliefs and expectations. These forward-looking statements include expectations regarding Aclaris' use of cash through the second half of 2019, development programs in skin and hair conditions, and the clinical development of JAK inhibitors. These statements involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements. Risks and uncertainties that may cause actual results to differ materially include uncertainties inherent in the conduct of clinical trials, Aclaris' reliance on third parties over which it may not always have full control, and other risks and uncertainties that are described in the Risk Factors section of Aclaris' Annual Report on Form 10-K for the year ended December 31, 2016, Form 10-Q filed for the quarter ended September 30, 2017, and other filings Aclaris makes with the U.S. Securities and Exchange Commission from time to time. These documents are available under the "Financial Information" section of the Investors page of Aclaris' website at http://www.aclaristx.com. Any forward-looking statements speak only as of the date of this presentation and are based on information available to Aclaris as of the date of this release, and Aclaris assumes no obligation to, and does not intend to, update any forward-looking statements, whether as a result of new information, future events or otherwise

This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and other data about our industry. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk.

ACLARIS THERAPEUTICS

Our Corporate Strategy: Building a Fully-Integrated Biopharmaceutical Company

APPLY UNIQUE LEADERSHIP INSIGHTS

- Founded and partnered multiple companies
- 250+ years of relevant experience in dermatology
- Combined 300+ years of drug discovery experience in immunology
- Board-certified dermatologists as CEO and CSO
- Key leadership with track record of executing across multiple development and commercial stage companies

ACCELERATE NOVEL, DIVERSE PIPELINE

- A-101
  - A-101 45%
    - Common Warts
    - Initiated Phase 2 clinical trials June 2017
- Immunology Portfolio
  - ATI-50001/ATI-50002 (JAK 1/3 Inhibitors)
    - Alopecia Areata
    - Vitiligo
  - ATI-450 (MK-2 inhibitor)
    - Psoriasis, Psoriatic Arthritis
  - Soft JAK inhibitor
    - Androgenetic Alopecia (AGA)
  - ITK inhibitor
    - Atopic Dermatitis, Psoriasis

ASSET AND COMMERCIAL STRATEGY

- Time and capital efficient
- Commercialize ESKATA™ as a self-pay aesthetic treatment administered in-office for raised seborrheic keratoses
- Focus on large, underserved market segments in dermatology and adjacent therapeutic areas with no FDA-approved medications and/or where treatment gaps exist

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Pipeline - *Diversified Aesthetic and Medical Dermatology / Immunology Portfolio*

Program	Indication(s)	Discovery	Pre-Clinical	Phase 1	Phase 2	Phase 3
A-101(45%) *Topical*	Common Warts					
ATI-50002 *Topical*	Alopecia Areata					
ATI-50002 *Topical*	Vitiligo					
ATI-50001 *Oral*	Alopecia Areata					
"Soft" JAK Inhibitor *Topical*	Hair Loss - androgenetic alopecia (AGA), Inflammatory Skin Disorders					
MK-2 Inhibitor "Oral anti-TNF" *Oral*	Psoriasis, Psoriatic Arthritis, RA, CAPS, Pyoderma gangrenosum, Inflammatory Bowel Disease					
ITK "Oral anti-IL17" *Oral*	Atopic Dermatitis, Psoriasis					
ITK "Topical anti-IL17" *Topical*	Atopic Dermatitis, Psoriasis					
Additional Compounds Novel Targets	Undisclosed					

Markets Poised for Continued Growth: Self-Pay Aesthetic and Medical Dermatology

Global dermatology market valued at $20 billion in 2015, growing at CAGR of 7.7%[1]…

Global aesthetic market expected to reach $13.29 billion by 2021, growing at CAGR of 10.8%[2]…

...and non-surgical procedures increased by 650% from 1997-2016[3]

The Washington Post

"The types of procedures being performed is changing. Most of the growth has been in minimally invasive cosmetic procedures."
- The Washington Post, March 2, 2016

[1] Global Dermatology Market to 2022 GBI Research. http://www.gbiresearch.com/report-store/market-reports/therapy-analysis/global-dermatology-market-to-2022-innovative-pipeline-and-increasing-uptake-of-biologics-to-diversify-treatment-options-and-d Last accessed November 21, 2017.
[2] Medical Aesthetics Market Report. MarketsandMarkets, 2015. http://www.marketsandmarkets.com/PressReleases/medical-aesthetics.asp. Last accessed November 21, 2017.
[3] 2016 ASAPS Statistics: Complete Charts. American Society for Aesthetic Plastic Surgery. http://www.surgery.org/sites/default/files/ASAPS-Stats2016.pdf. Last accessed November 21, 2017.

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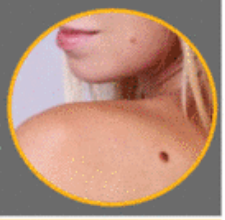
Conditions with Significant Treatment Gaps

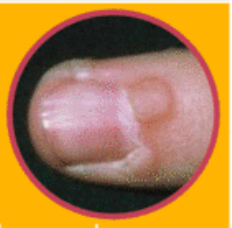
SEBORRHEIC KERATOSIS (SK)

83+MM people

Eskata ™ first FDA-approved treatment for SK



VERRUCA VULGARIS (COMMON WARTS)



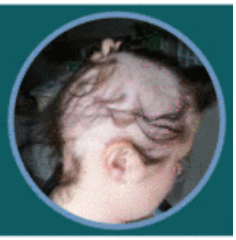
22+MM people

in U.S.[1]; current treatments show only modest therapeutic effect and have significant limitations[2,3]

ALOPECIA AREATA (AA)

6.8+MM people

in U.S. have had or will develop AA[4]; current available Rx treatment options used off label and have significant limitations



ANDROGENETIC ALOPECIA (MALE / FEMALE PATTERN HAIR LOSS)

35MM men and **21MM women** in U.S. suffered from hair loss in 2012[5]; demand for treatment high

VITILIGO

1-2% global population impacted[6]

no FDA-approved medication to repigment the skin[7]

[1] Nguyen et al, Laser Treatment of Nongenital Verrucae A Systematic Review, *JAMA Dermatology*. 2016;152(9):1025-1033.
[2] Kwok et al, Topical treatments for cutaneous warts (Review),*Cochrane Database of Systematic Reviews*, 9, 2012; Art. No.: CD001781.
[3] Mulhem et al, Treatment of Nongenital Cutaneous Warts, *American Family Physician*; 84:3, 2011; 288-293.
[4] National Alopecia Areata Foundation, https://www.naaf.org/alopecia-areata. Last accessed May 22, 2017.
[5] International Society of Hair Restoration Surgery, http://www.ishrs.org/. Last accessed May 22, 2017.
[6] Fitzpatrick T, et al. Vitiligo Facts. American Vitiligo Research Foundation Inc.
[7] ASDReports. The Vitiligo Therapeutics Market is Expected to Show Moderate Growth up to 2019. 08.22.2012.

ESKATA™ Approval and Launch

ESKATA: First FDA-Approved Treatment for Raised SK

eskata™

(hydrogen peroxide) topical solution, 40% (w/w)

In Market Research Conducted By Aclaris: Favorable Market Dynamics

83+MM People in the US with SK[1]

18+MM visits to Derm for SK[2]

8+MM SK treatments[2]

Opportunity to Engage Motivated Patients via **DTC**

83% of SK patients were **interested in treatment** and willing to pay out-of-pocket[3]

Reasons for Not Removing SKs Include[3]:

- High risk of **scarring**
- High risk of **hypopigmentation**
- Want to avoid **cutting, freezing** or **burning**

73% of **female** SK patients were so bothered by SK that they have tried to **hide**, **disguise** or **remove** their lesions on their own[3]

42% of **male** SK patients were so bothered by SK that they have tried to **hide**, **disguise** or **remove** their lesions on their own[3]

[1] Bickers et al, The Burden of Skin Disease, *J Am Acad Dermatology*, 2006;55:490-500.
[2] Data on File: Aclaris Therapeutics Burke Screener of 594 dermatologists – 2014.
[3] Data on File, Aclaris Therapeutics, Inc.

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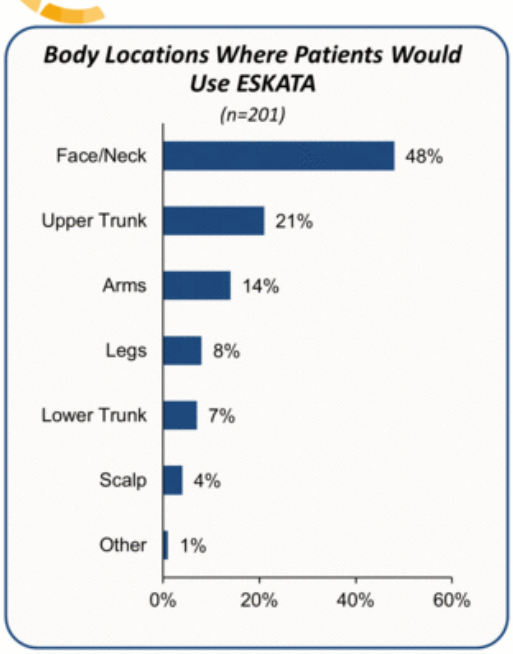
ESKATA Positioning: Face and Neck



"I would choose this treatment over others ***particularly around the face and neck*** *– without question"*

— SK PATIENT

Source: Kaiser Associates Market Research, August 2017

- Market research demonstrates ESKATA's value proposition is strongest for facial and neck lesions
  - Patients are most adverse to scarring on the face and neck
  - Patients prefer a topical treatment over an invasive procedure for SKs on the face and neck
  - No wound care
- Willingness for patients to pay out-of-pocket is likely to be greatest with face and neck lesions
  - Patients visiting cosmetic dermatology practices are typically paying out-of-pocket for other face / neck procedures

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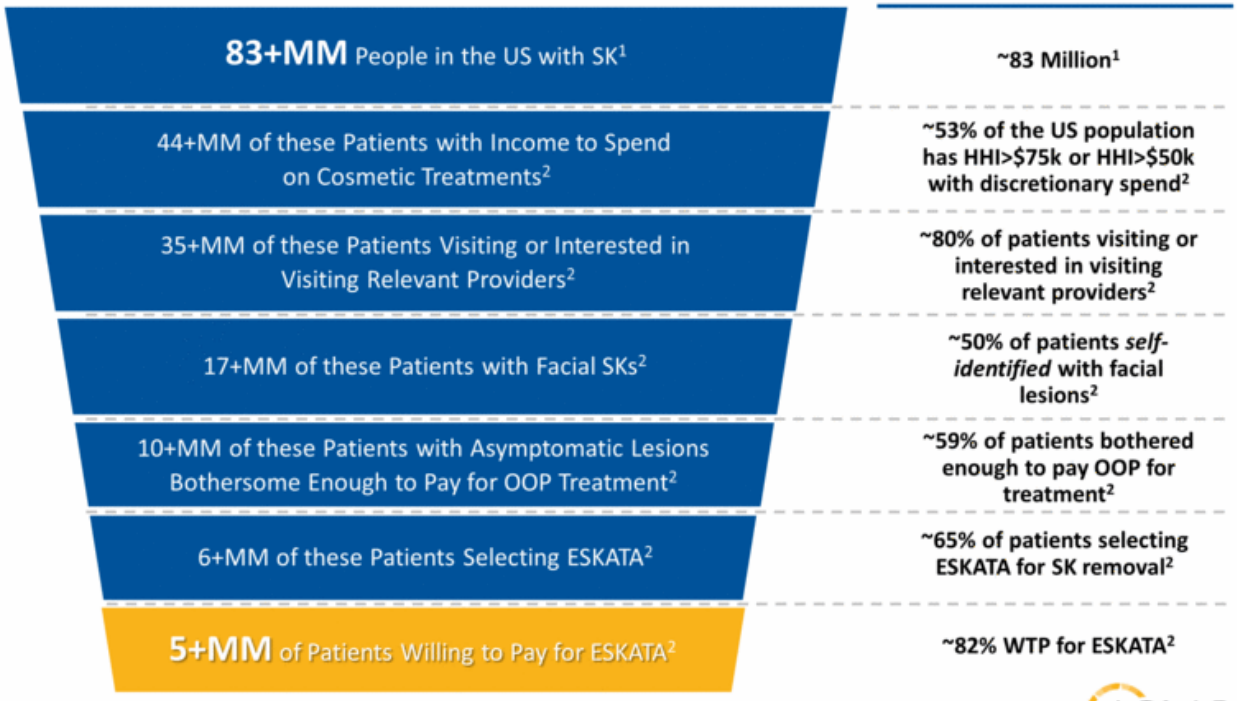
US Patient Opportunity for ESKATA: Face Only



[1] Bickers DR et al, The Burden of Skin Disease, J Am Acad Dermatology, 2006;55:490-500
[2] Kaiser Associates Market Research, August 2017

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Non-surgical Procedures: Quick Facts

Nonsurgical Procedures	Best Candidate	Physician/Surgeon Fees*	Length of Procedure	Number of Treatments	Back to Work
Botulinum Toxin (Botox, Dysport, Xeomin)	Frown lines, crow's feet	$376	30 minutes	Repeat treatments 4-6 months (onset of actions in 1-5 days)	No downtime
Calcium Hydroxylapatite (Radiesse)	Nasolabial folds, frown lines, crow's feet, lips	$698	Less than 1 hour	Repeat treatments 2 years or longer	No downtime
Chemical Peel (ranges from light to deep)	Sun-damaged, unevenly pigmented skin	$535	1/2 hour - 3 hours Depends on type of peel	One or multiple Depends on type of peel	Depends on type of peel
Dermabrasion	Acne, wrinkles around mouth, sun-damaged skin	$1,368	A few minutes - 1 1/2 hours	Multiple sessions	7-10 days
Full Field Ablative (laser skin resurfacing)	Fair, non-oily skin, sun-damaged facial skin, wrinkles around mouth and eyes, acne scars	$2,681	Variable, up to 1 1/2 hours	One or multiple depending on laser and skin condition	Variable, up to 14 days
Hyaluronic Acid (including Juvederm Ultra, Ultra Plus, Voluma, Perlane, Restylane, Belotero)	Nasolabial folds, forehead wrinkles, smile lines, and lips	$620	Less than 1 hour	Repeat treatments 4 months – 1 year	No downtime
Laser Hair Removal	Unwanted hair on face or body	$354	1-2 hours Depends on area	Multiple sessions	No downtime
Micro-Ablative Resurfacing (fractional resurfacing)	Actinic changes, lines, acne scars Pigment, superficial lines	$1,410	30 minutes - 1 hour	1-6 depending	1-10 days depending
Microdermabrasion	Fine lines, crow's feet, age spots, acne scars	$139	30 minutes - 1 hour	Multiple sessions 2-3 week intervals	No downtime
Nonsurgical Fat Reduction (including CoolSculpting, Vaser Shape, Liposonix)	Diet-resistant fat, mild lipodystrophy	$1,458	1-3 hours	1-6	No downtime, minimal soreness
Nonsurgical Skin Tightening (including Ulthera, Thermage, Pelleve)	Early skin laxity with good skin tone and elasticity	$1,802	1-2 hours	1-6	Minimal downtime
Photorejuvenation (IPL)	Pigment, superficial lines	$354	10-30 minutes	3-5	No downtime

2016 ASAPS Statistics: Complete Charts. American Society for Aesthetic Plastic Surgery. http://www.surgery.org/sites/default/files/ASAPS-Stats2016.pdf. Last accessed December 14, 2017.

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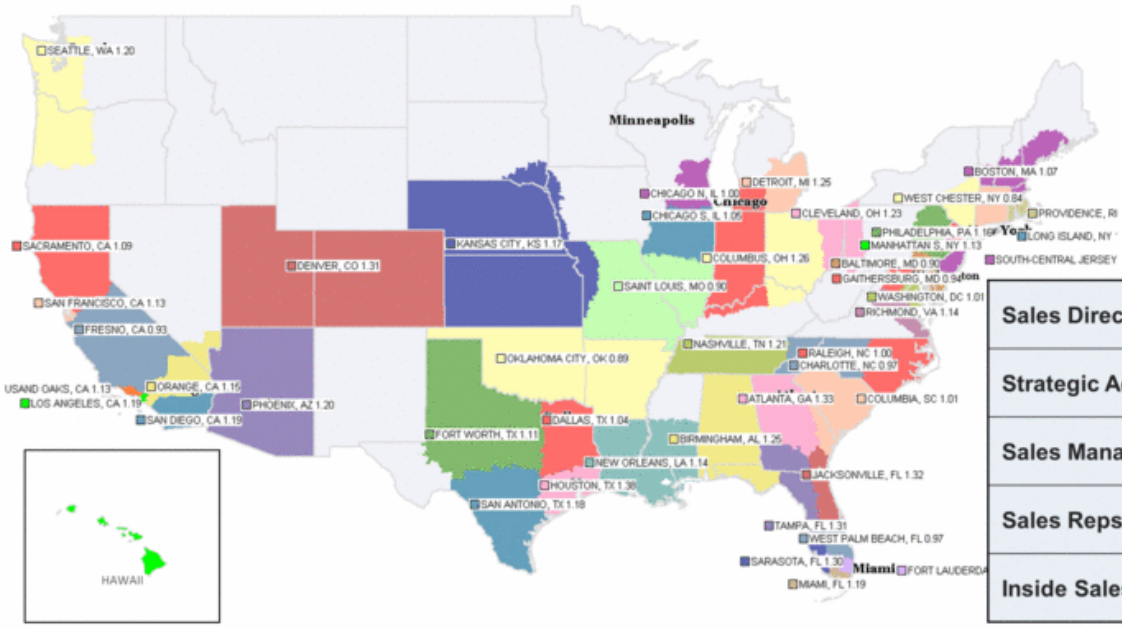
Territory Alignment



Sales Director	1
Strategic Accounts	1
Sales Managers	6
Sales Reps	50
Inside Sales	2

- > 90% possess five or more years of dermatology experience
- > 85% are multi-year President's Club winners
- > 70% have previous buy and bill experience

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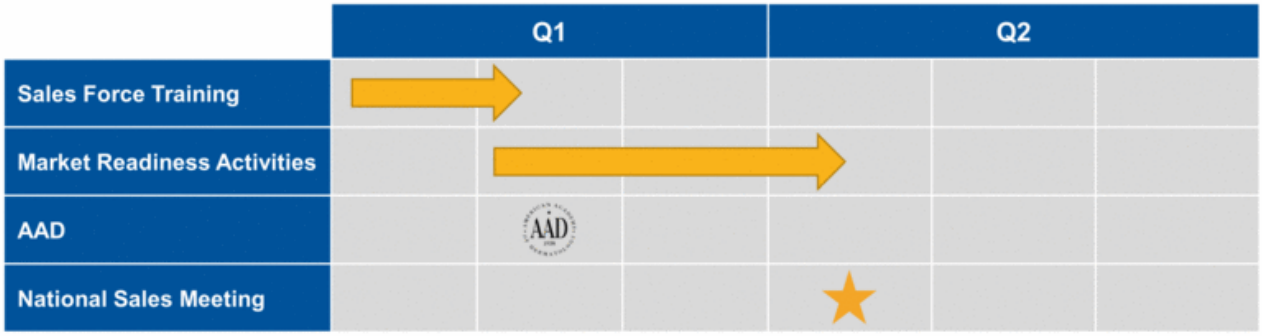
Sales Force Activity: Approval to Launch



1. Sales Force Training
2. Intro/Reconnect to Target Accounts
3. Establish ESKATA Centers of Excellence:
   - Train Target Providers
   - Schedule In-Service and/or Peer-to-Peer Programs
   - Leverage the ESKATA Early Experience Initiative

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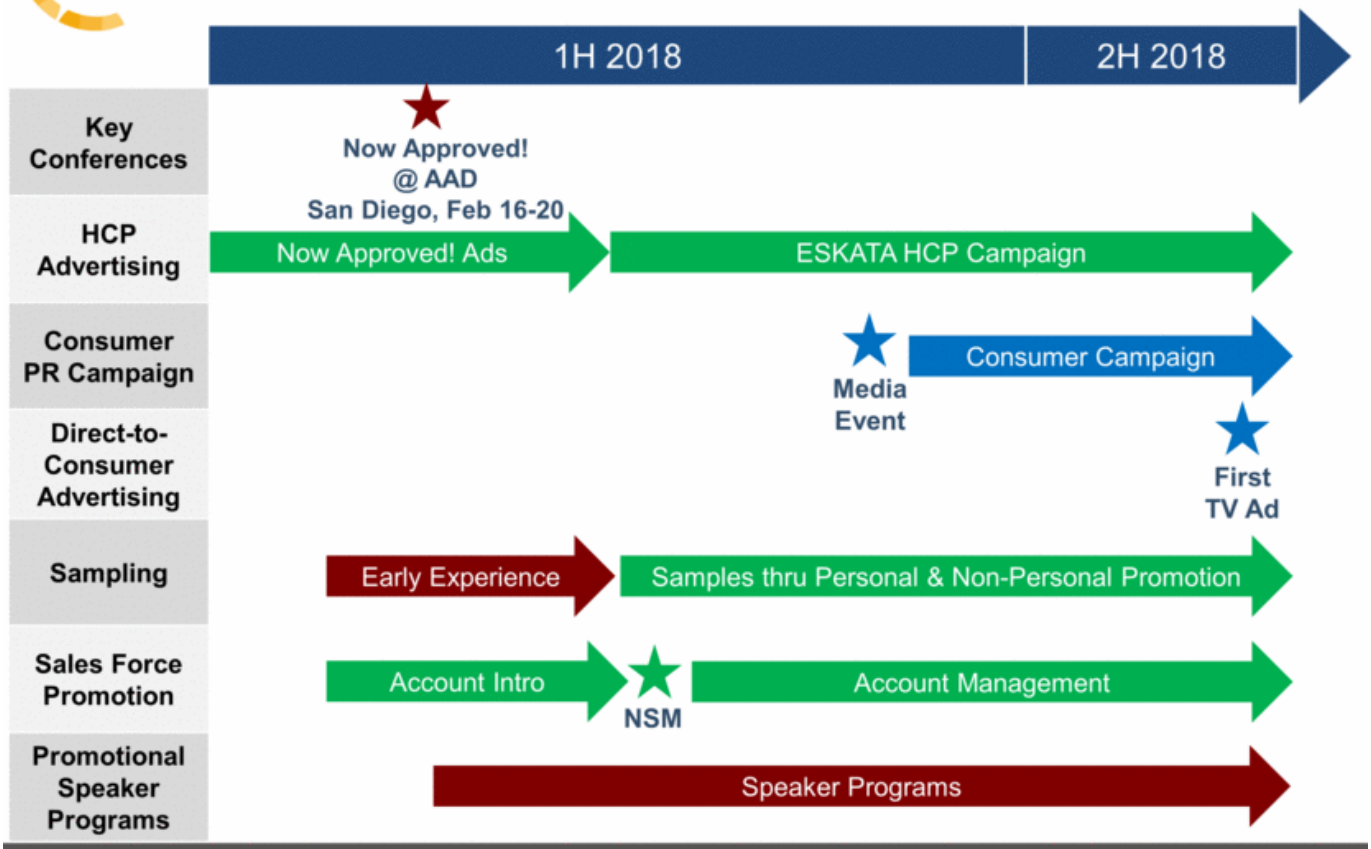
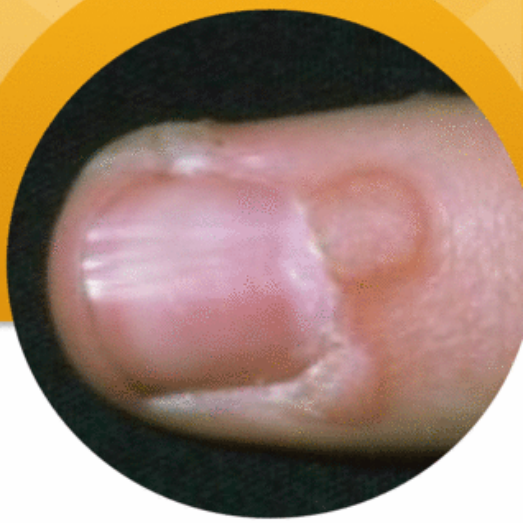
ESKATA Campaign Proposed Timeline



A-101 45% Topical Solution Candidate For Common Warts



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Existing Patient Base Offers Significant Market Potential

2+ million patient visits to HCPs annually for treatment of common warts[1]

- **43%** of patients have more than one wart[2]
- Patients with warts have a higher risk of developing new warts[3]

59% of visits are to a **dermatologist**[1]

25% of visits are to a **pediatrician**[1]

11% of visits are to a **family/general practitioner**[1]

[1] IMS National Disease and Therapeutic Index 2016.
[2] Bruggnik et al, Natural Course of Cutaneous Warts Among Primary Schoolchildren: A Prospective Cohort Study 2013, *Annals of Family Medicine*;11:5,2013;437-441.
[3] Lipke M., An Armamentarium of Wart Treatments, *Clinical Medicine & Research*,4:4, 2006; 273–293.

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Summary of WART-202/203 Phase 2 Trial Results

Trial	Trial Objective and Design	Trial Outcome
WART–203 (n=159)	• A randomized, double-blind, vehicle-controlled, parallel-group study of A-101 45% solution in subjects with 1-6 common warts • Treated twice weekly for a total of 16 treatments	• Efficacy: Statistically significant results on all primary and secondary endpoints • Favorable safety profile
WART–202 (n=157)	• A randomized, double-blind, vehicle-controlled, parallel-group study of A-101 45% solution in subjects with 1-4 common warts • Treated once weekly for a total of 8 treatments	• Efficacy: Statistically significant results on all primary and secondary endpoints • Favorable safety profile

Primary Endpoint:

- Mean change from baseline in the Physician's Wart Assessment (PWA) score on target wart at day 56 (visit 10) using an analysis of covariance.

Secondary Endpoints:

- The percentage of all treated warts that were clear at day 56
- The percentage of all treated warts that were clear or near-clear at day 56
- The proportion of subjects whose target wart is judged to be clear on the PWA at day 56.
- The proportion of subjects with all treated wart(s) clear, stratified by baseline number of warts at day 56.

Next Steps:

- End of Phase 2 meeting with FDA (mid 2018)
- Initiate Phase 3 clinical trial(s) 2H18

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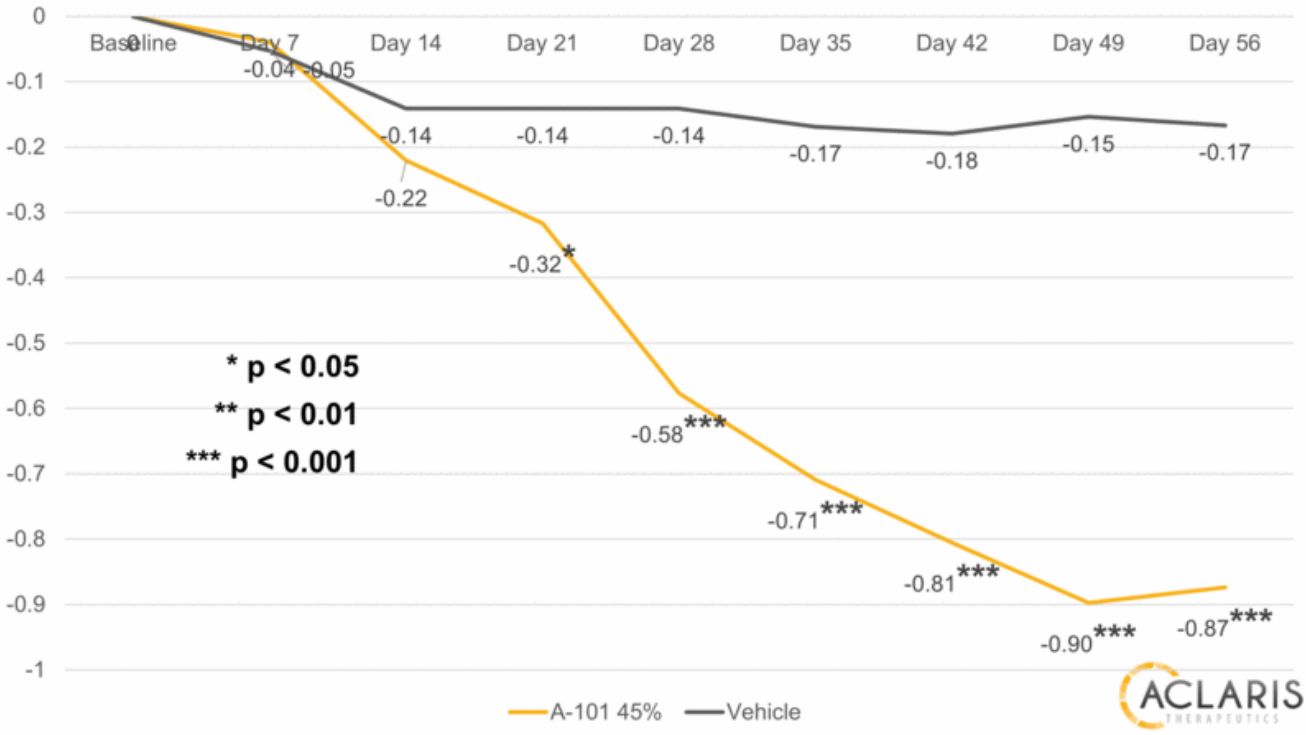
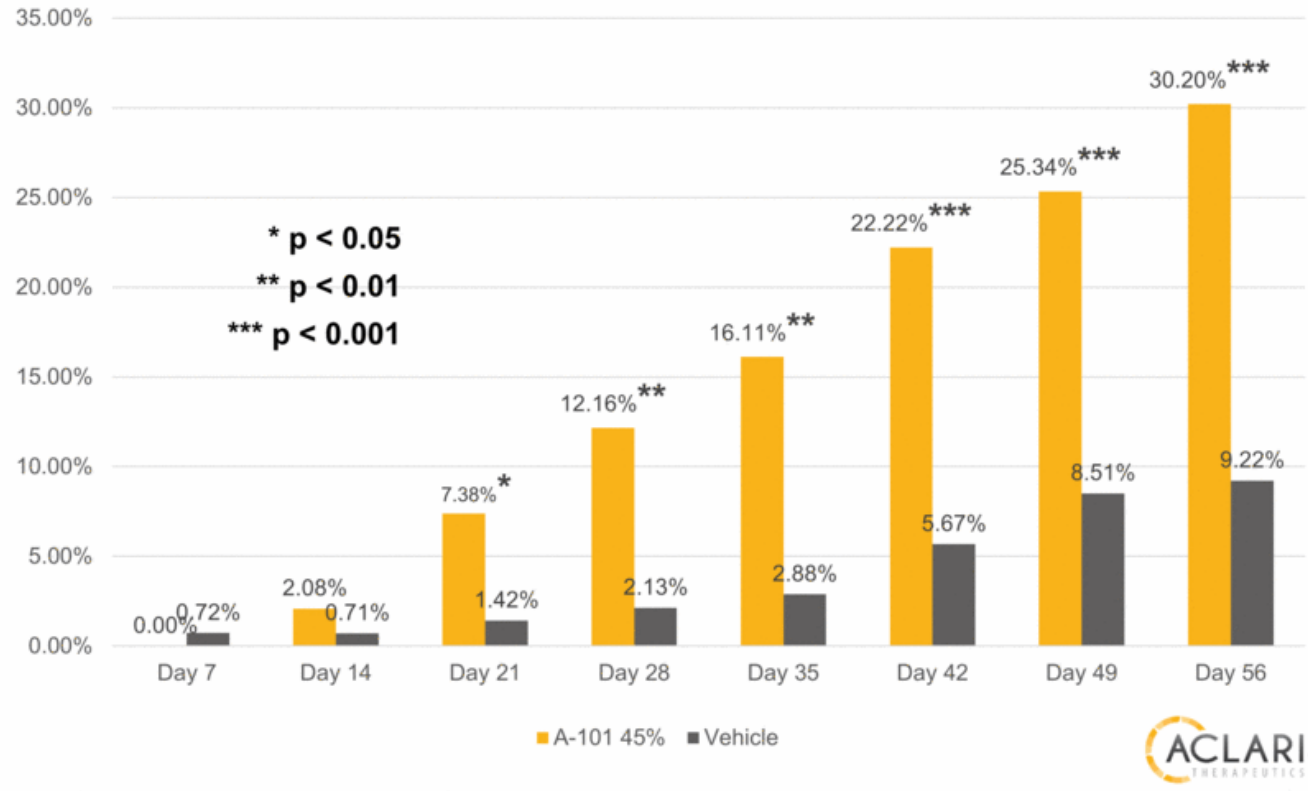
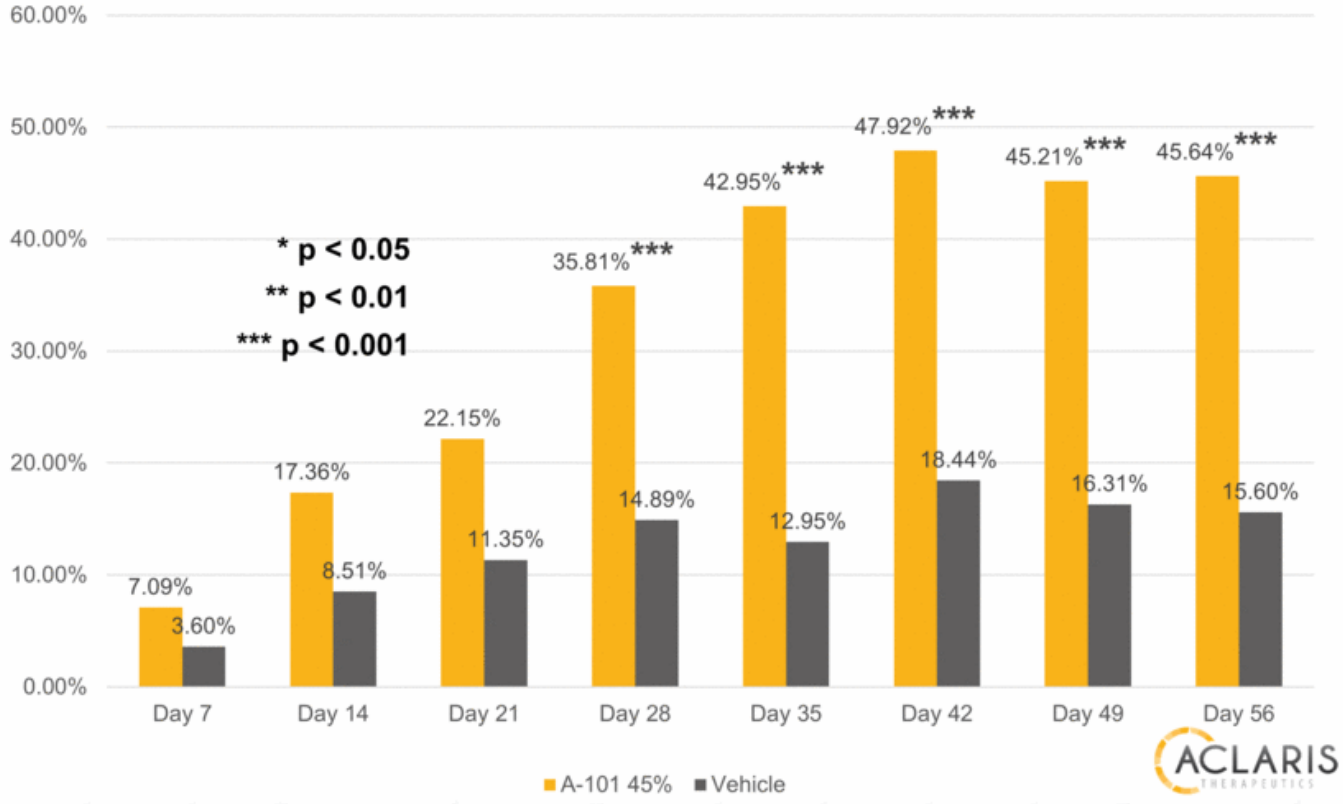
WART-203: Mean Change from Baseline in PWA Score on Target Wart at Day 56



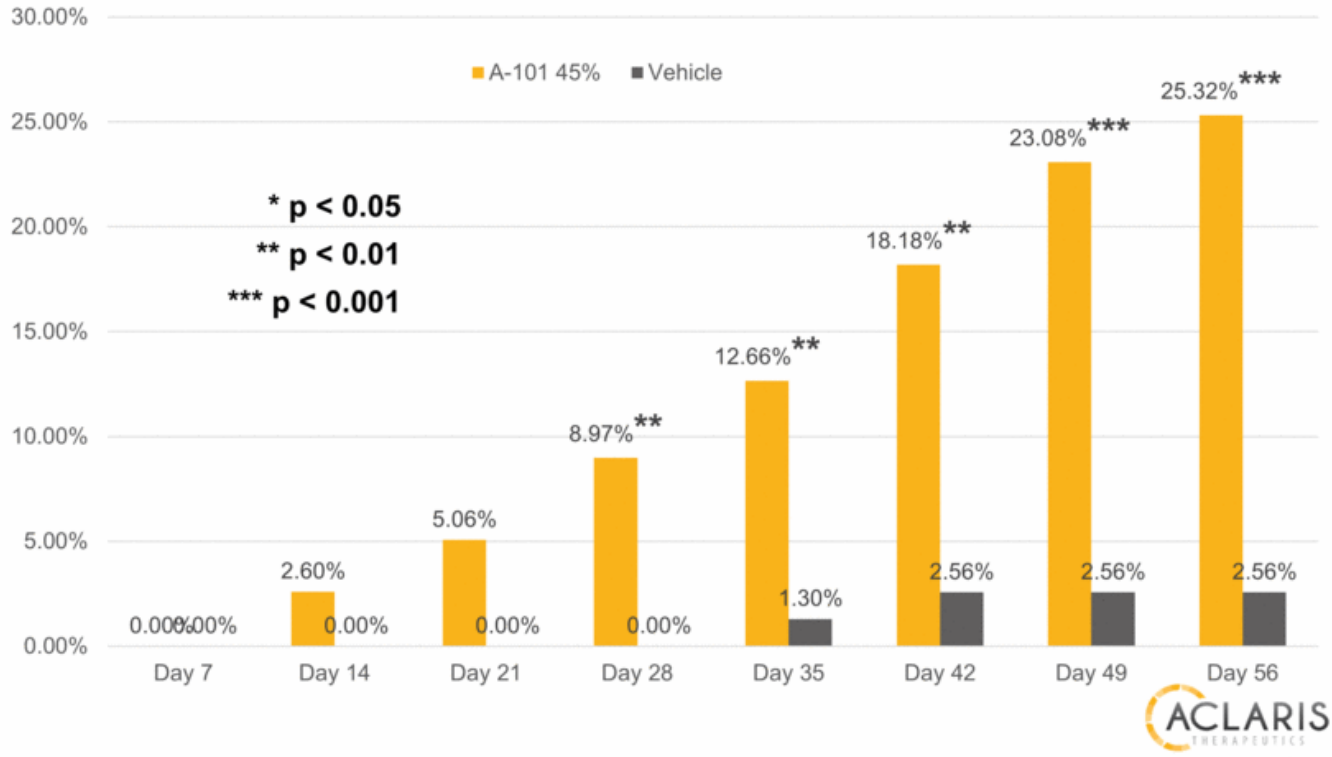
WART-203: The Percentage of All Treated Warts that are Clear on the PWA for Each Post-baseline Visit



WART-203: The Percentage of All Treated Warts that are Clear or Near-Clear on the PWA for Each Post-baseline Visit



WART-203: Responder Analysis: Proportion of Subjects Achieving Target Wart Clearance at each Post-Baseline Visit



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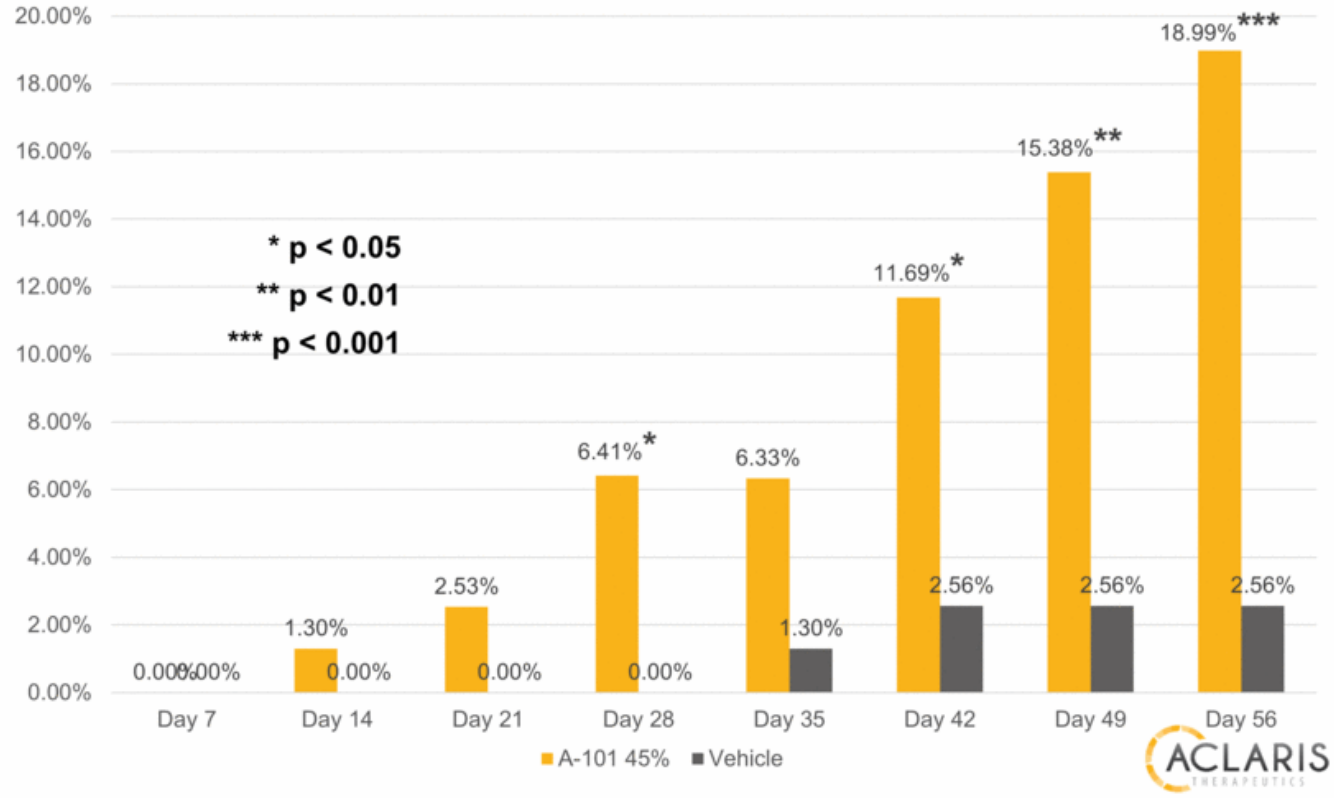
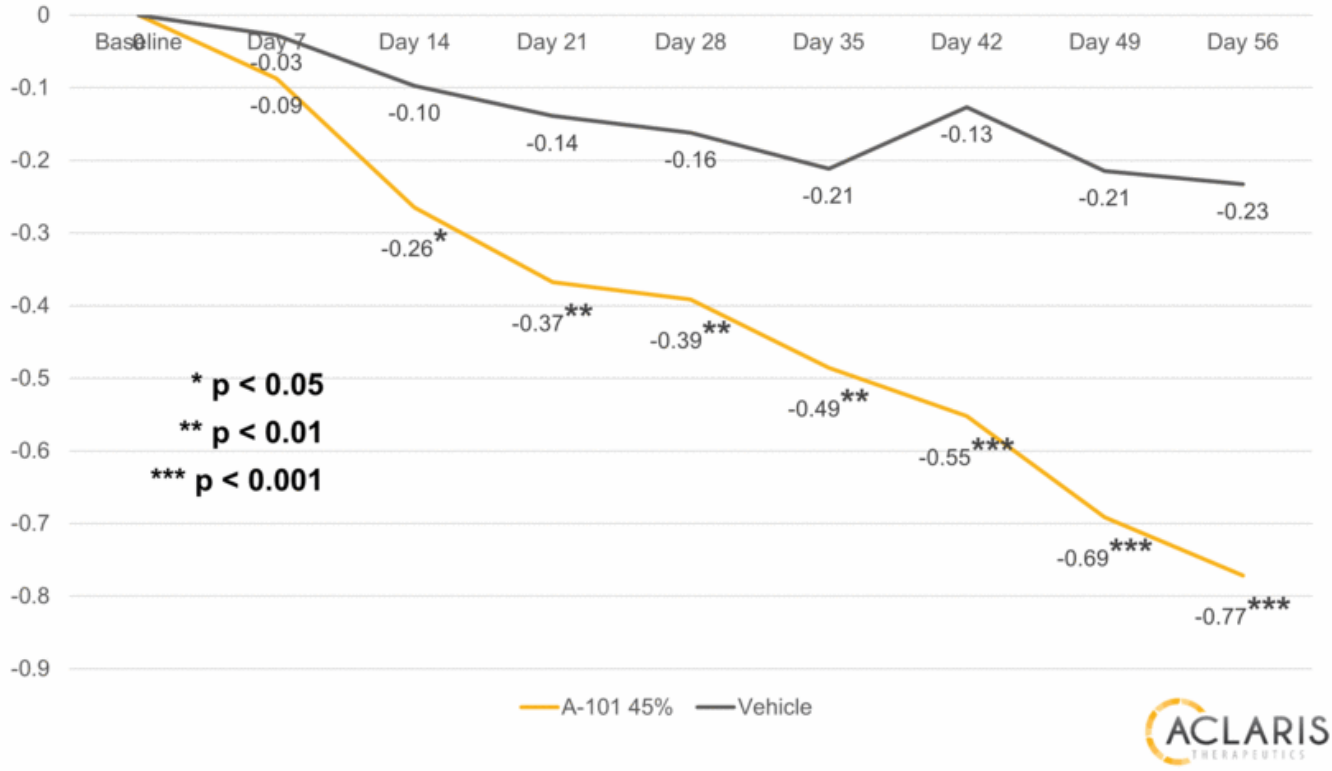
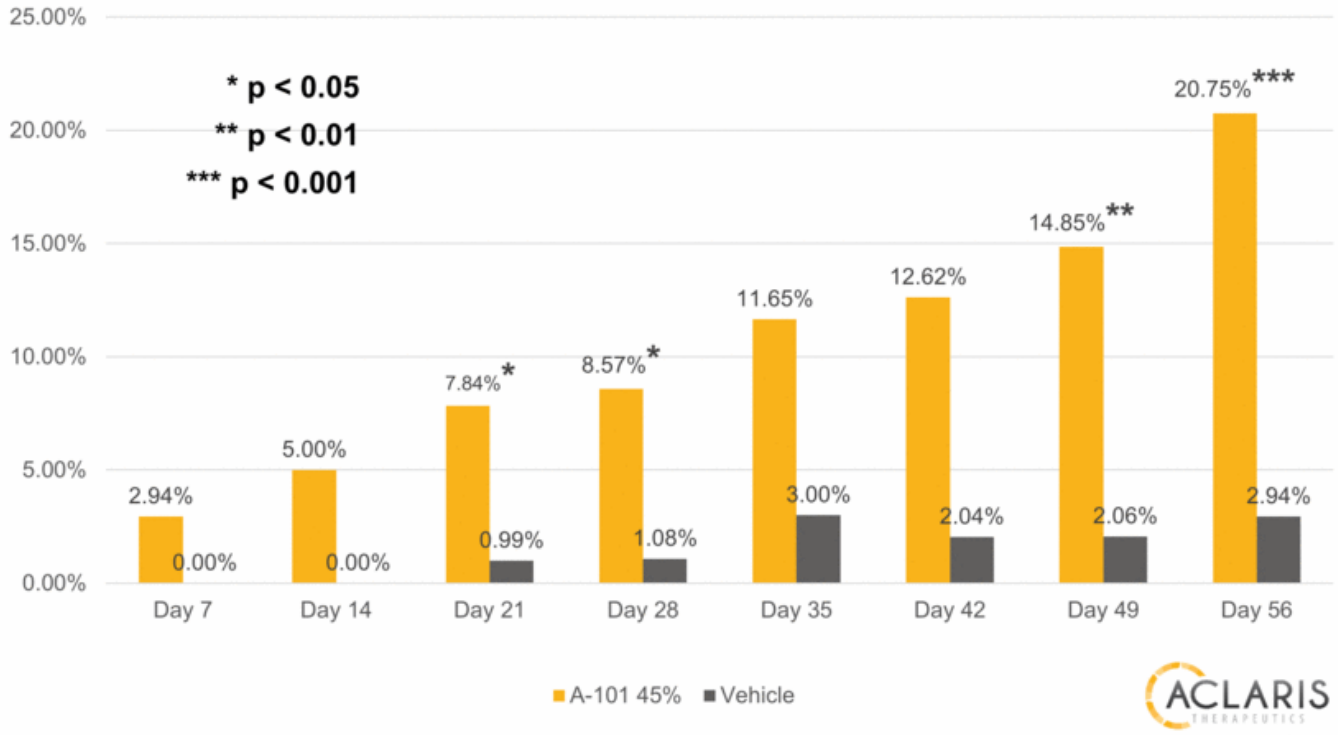
WART-203: Proportion of Subjects with all treated Wart(s) (1-6) Clear, Stratified by Baseline Number of Warts, at each Post-Baseline Visit



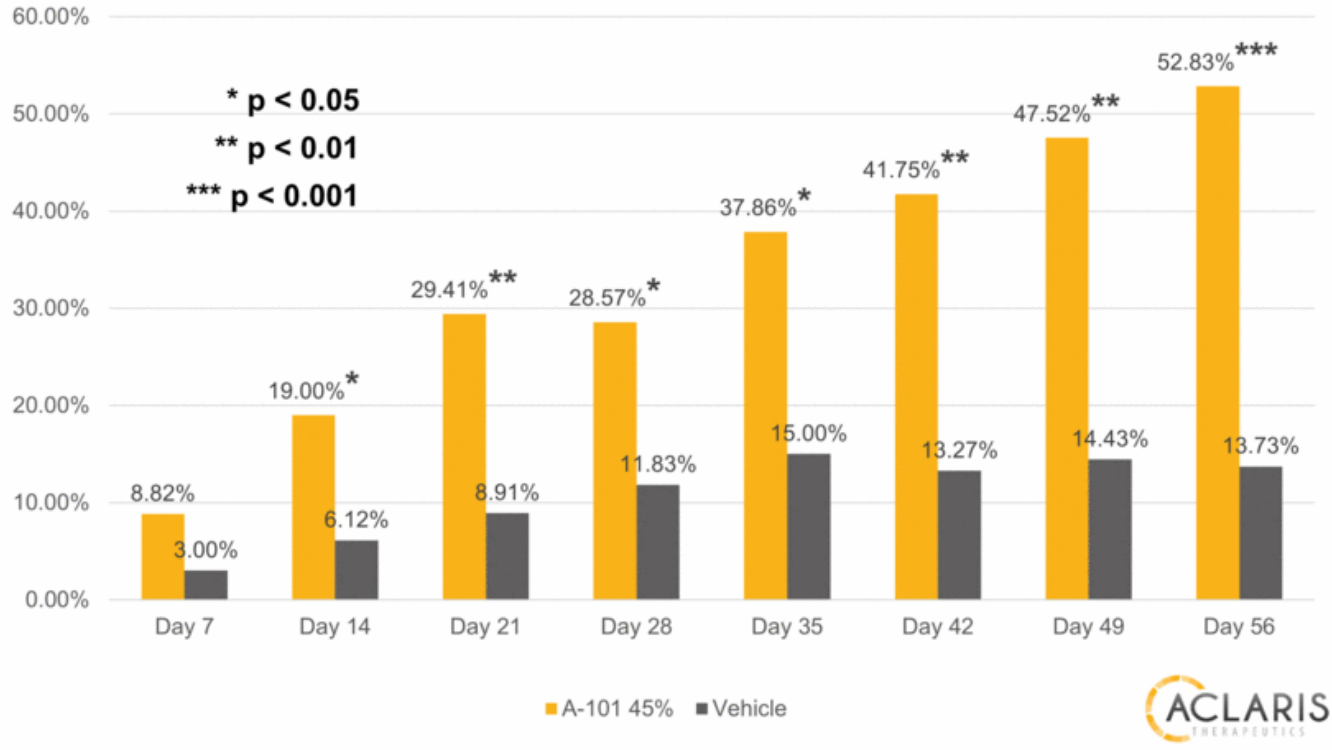
WART-202: Mean Change from Baseline in PWA Score on Target Wart at Day 56



WART-202: The Percentage of All Treated Warts that are Clear on the PWA for Each Post-baseline Visit

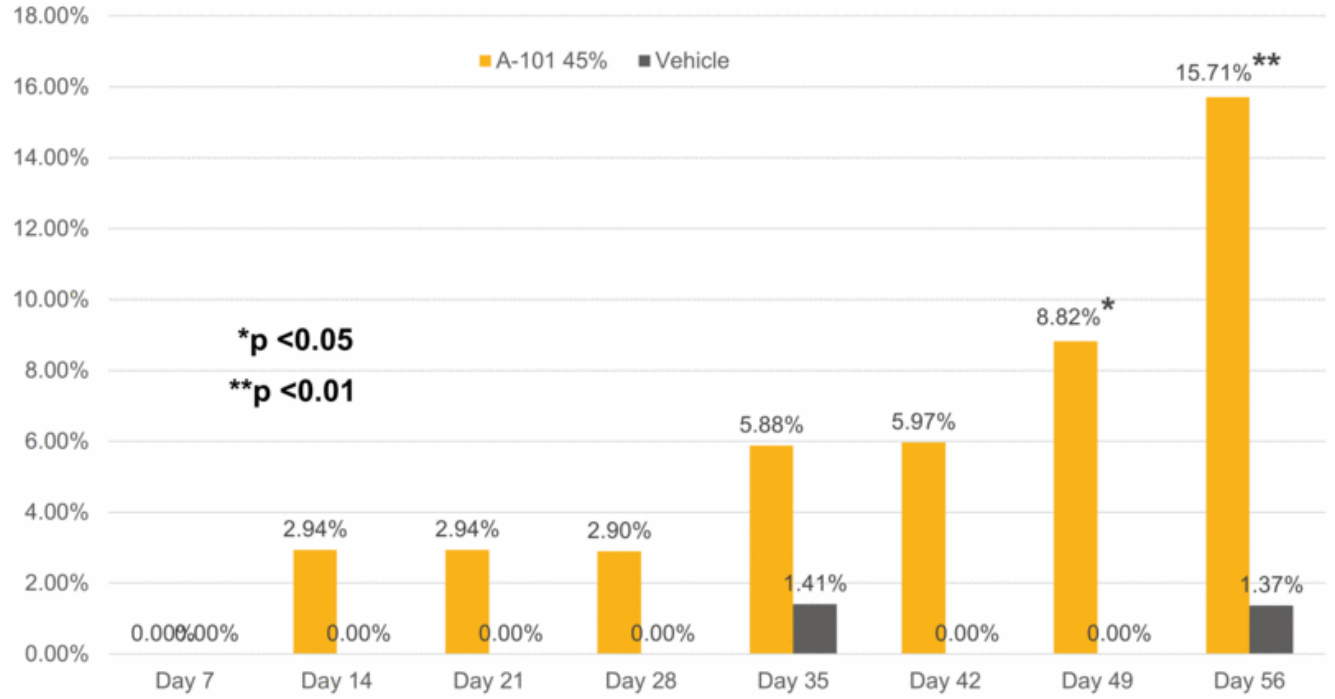


WART-202: The Percentage of All Treated Warts that are Clear or Near-Clear on the PWA for Each Post-baseline Visit



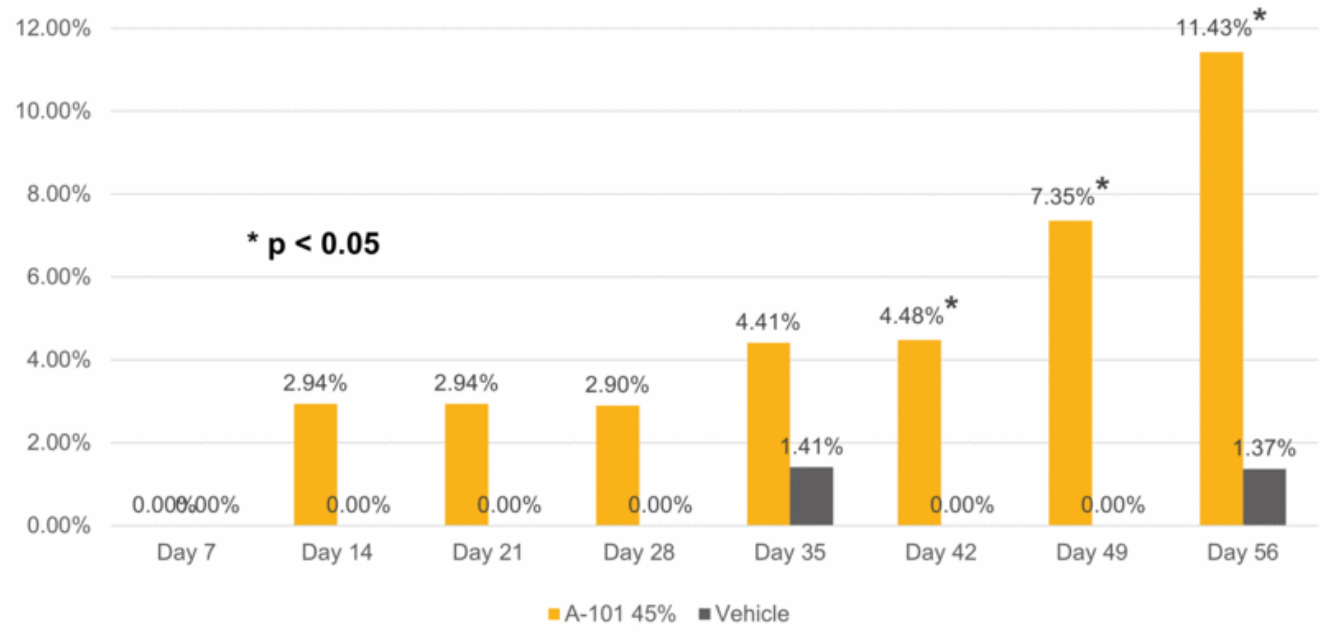
ACLARIS THERAPEUTICS

WART-202: Responder Analysis: Proportion of Subjects Achieving Target Wart Clearance at each Post-Baseline Visit



ACLARIS THERAPEUTICS

WART-202:Proportion of Subjects with all treated Wart(s) (1-4) Clear, Stratified by Baseline Number of Warts, at each Post-Baseline Visit



ACLARIS THERAPEUTICS

Core Intellectual Property: A-101

- **Issued US Patent # 7,381,427**
  - Directed to high concentration H_2O_2 methods of use for treating/removing SK.
  - Orange Book listed for SK indication - estimated expiry date w/ potential PTE of 2½ yrs ~ 2025.
- **Issued US Patent # 9,675,639**
  - Encompasses Formulations / MOU / Applicators for A-101 ~ total of 70 claims
  - Eligible for listing in Orange Book for A-101 Topical Solution
  - Expires July 2035
- **US Provisional Application**
  - Directed to methods and compositions for the treatment of warts.
  - Filed upon obtaining Aclaris Wart-201 Study data - Natural expiry 2037.
- **Potential NCE Exclusivity**
- **Exclusive supply agreement with only cGMP manufacturer of Active Pharmaceutical Ingredient**
  - Exclusivity for 10 years from date of 1st commercial sale of product.

ACLARIS THERAPEUTICS

JAK Inhibitor Candidates

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ATI-50001/ATI-50002: JAK Inhibitors in Alopecia Areata, Vitiligo and Androgenetic Alopecia

Portfolio and IP Estate:

ATI-50001 (oral) and ATI-50002 (topical) – Selective JAK 1/3 inhibitor

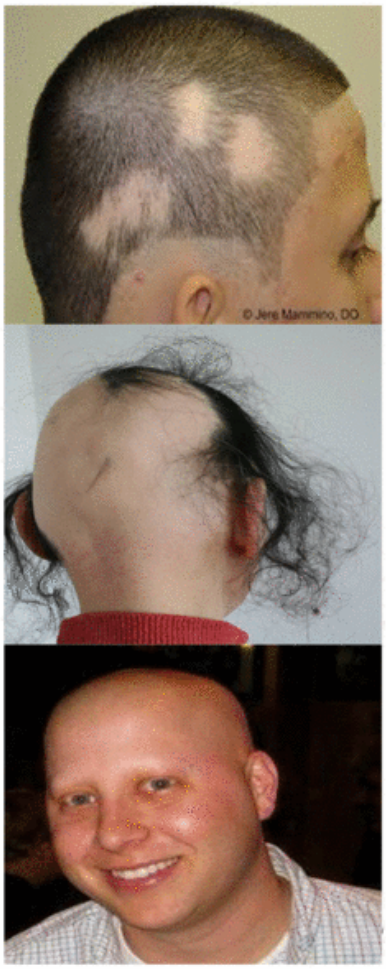
Additional topical JAK inhibitors in development

- Oral and topical rights
- Known MOA and biological response in humans
- Promoted hair regrowth in mouse model[1]
- Broad IP estate
- Know-how and methods of use covering JAK inhibitors for the treatment of:
  - Alopecia areata
  - Androgenetic alopecia (male and female pattern hair loss)
  - Additional hair loss disorders

[1] Data on File. Aclaris Therapeutics Inc.

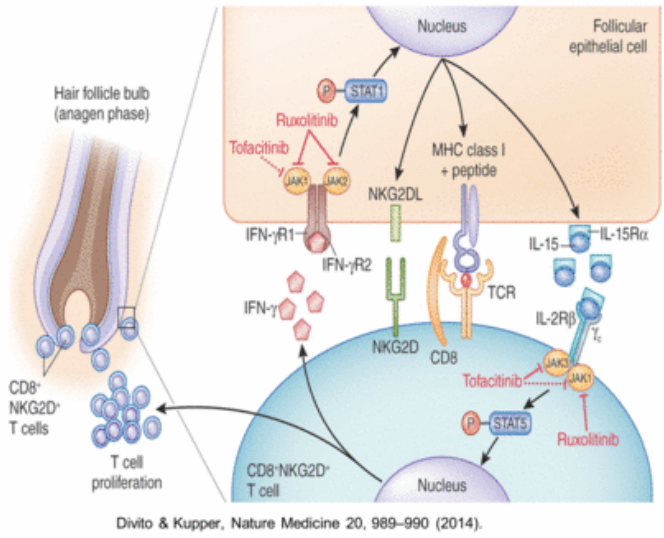
Alopecia Areata (AA)

- 6.8+ million people in the U.S. have had or will develop AA during their lives
  - 25-50% of patients have persistent patchy AA
  - 14-25% of patients progress to alopecia totalis or universalis
- AA is an autoimmune condition which ranges in severity:
  - Patchy Alopecia Areata – patchy hair loss on scalp
  - Alopecia Totalis – complete hair loss on scalp
  - Alopecia Universalis – complete hair loss on scalp, face and body
- 2/3 of affected individuals ≤30 years old at disease onset
- Translational research work by Dr. Angela Christiano at Columbia University

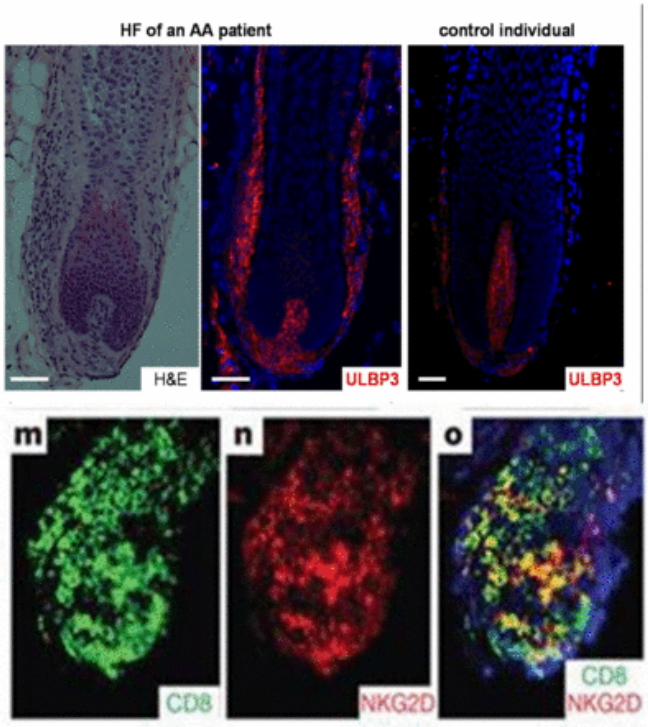


[1] National Alopecia Areata Foundation, https://www.naaf.org/alopecia-areata. Last accessed November 21, 2017.

Mechanism of JAK Inhibitors in Alopecia



Divito & Kupper, Nature Medicine 20, 989–990 (2014).



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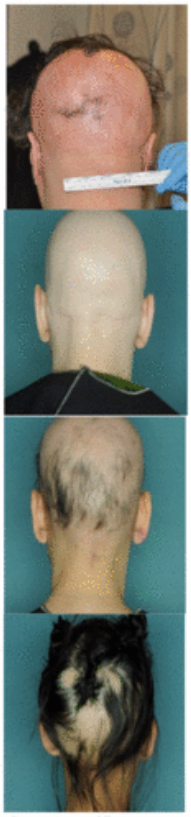
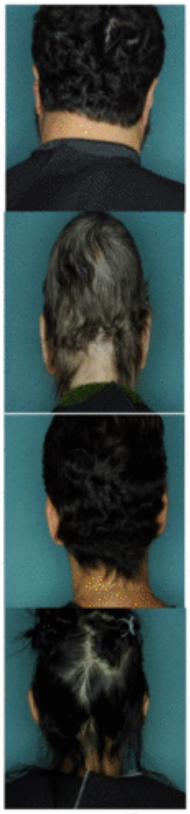
Ruxolitinib and Tofacitinib in Alopecia Areata

Baseline

Week 24





RUXO - Baseline SALT 64%. Duration of hair loss 12 years. 6 months 20mg BID. Last SALT 1%

TOFA - Baseline SALT 100%, 5 months 5mg BID, 2 months 10/5 mg BID, 3 months 10mg BID ongoing. Last SALT 39%.

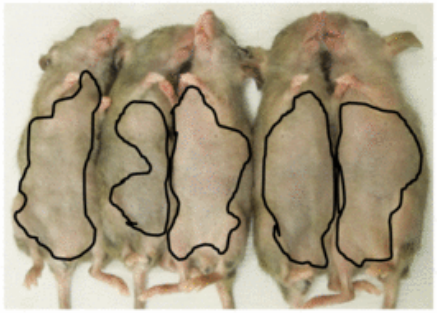
TOFA - Baseline SALT 84%, 6 months 5mg BID, 0 months 10/5mg, 0 months 10mg. Last SALT 0%.

TOFA - Baseline SALT 46%, 5 months at 5mg BID, 2 months at 10/5mg, 2 months 10mg ongoing. Last SALT 12%.

ATI-50001: Prevents and Reverses Alopecia Areata in Mice

ATI-50001 Prevents AA

Control

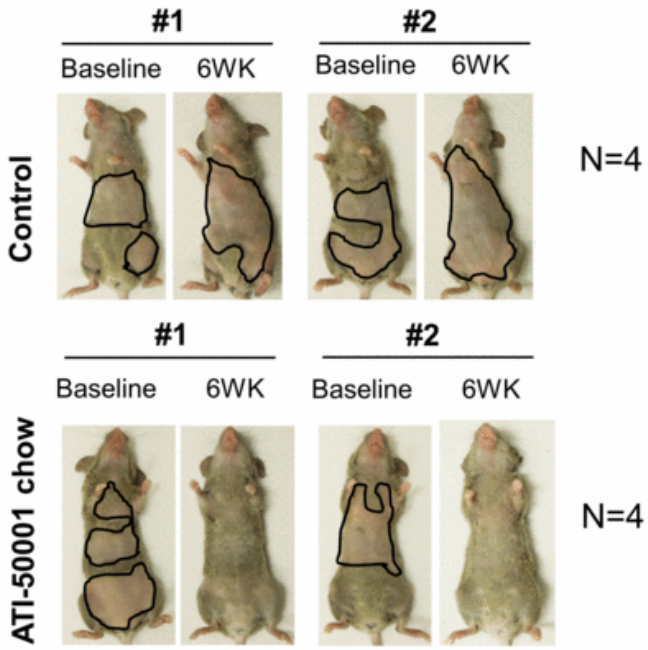


N=10

ATI-50001 chow

N=10

ATI-50001 reverses AA



ATI-50001 chow: 0.5g ATI-50001 disodium/kg diet

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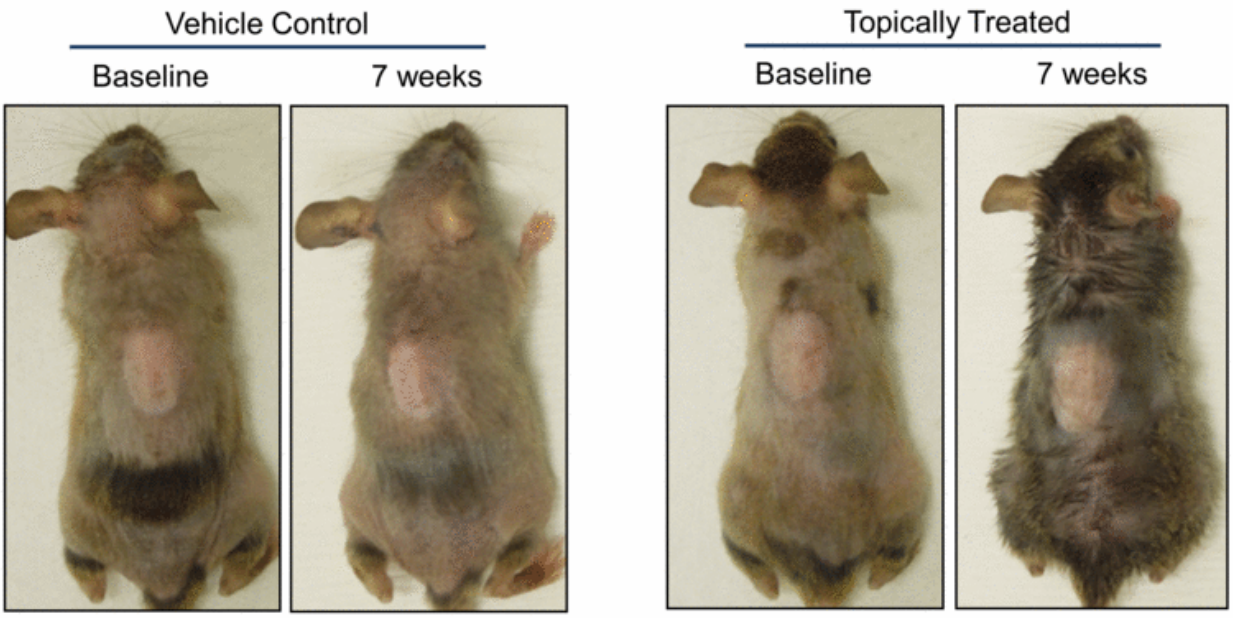
ATI-50002: Topical JAK Inhibitors are Effective In Vivo

Topical JAK Inhibitors Reversed AA in Mouse Model*



*Christiano Laboratory, Columbia University

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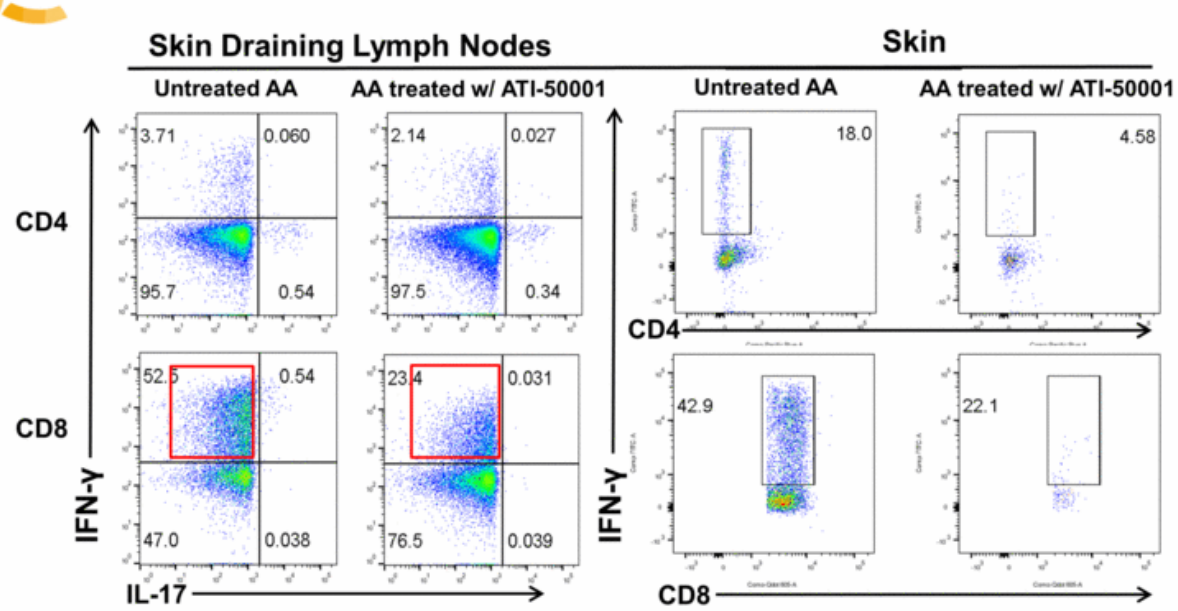
ATI-50001 Targets IFN-γ producing CD8+ Cytotoxic T cells



Major IFN-γ producing T cells are CD8+ T cells in AA mice. ATI-50001 targets IFN-γ producing CD8+T cells.

ACLARIS THERAPEUTICS

Additional Potential Indications - Vitiligo

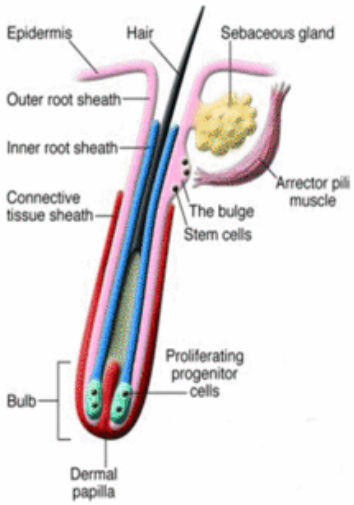
- Vitiligo is a common autoimmune disease where melanin (pigment) is absent, causing lighter patches of skin to appear on various parts of the body[1,2]
- Vitiligo impacts 1-2% of the global population irrespective of sex, race or age[3]
- Disease onset occurs in about one-half of sufferers between the ages of 10 and 30[3]
- Drug candidates: ATI-50001 (oral) and ATI-50002 (topical) JAK inhibitors

[1] Roddick, J. Autoimmune Diseases. Healthline. 07.22.2015.
[2] Oakley, A. Vitiligo. DermnetNZ. 08.2015.
[3] Fitzpatrick T., et al. Vitiligo Facts. American Vitiligo Research Foundation Inc.

ACLARIS THERAPEUTICS

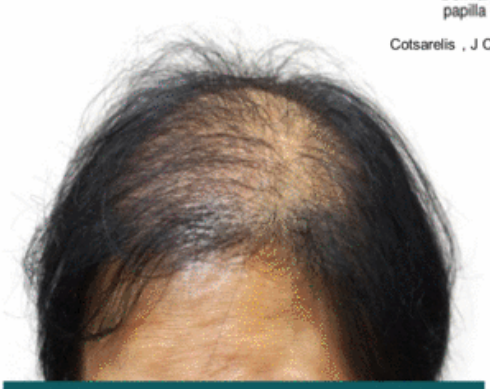
Additional Potential Indications - AGA

- Androgenetic alopecia (male/female pattern hair loss)
- AGA, a genetic disorder, is the most common cause of hair loss[1]
- Experienced by 70% of men and 40% of women at some point in their lives.[1] In 2012, 35 million men and 21 million women suffered hair loss.[2]
- Sufferers are highly motivated to seek treatment.[1]
- Drug candidate: Topical “Soft” JAK inhibitors in development



Cotsarelis , J Clin Invest. 2006;116(1):19-22.

Male with AGA



Female with AGA

[1] Medscape. McElwee J., et al. Promising therapies for Treating and/or Preventing Androgenic Alopecia. Available at: http://www.medscape.com/viewarticle/766321. Last accessed May 22, 2017.
[2] International Society of Hair Restoration Surgery, http://www.ishrs.org/. Last accessed May 22, 2017.

ACLARIS THERAPEUTICS

Core Intellectual Property: JAK inhibitor

- US & Global JAK IP estate consisting of >150 patents/applications (issued and/or pending)
- Exclusive license with Rigel Pharmaceuticals for ATI-50001 & ATI-50002 (COM) in dermatology
  - US Natural expiry dates 2030-2034 + potential applicable PTE
  - Corresponding patents & applications in 18 additional jurisdictions (EU, AU, CA, IN, JP, others) - Natural expiry dates 2030 + potential applicable PTE
- Exclusive license under Columbia University
  - Covers the use of certain JAK inhibitors for the treatment of AA, AGA, and other hair loss disorders and biomarkers to identify potential responders
  - This portfolio includes a recently issued U.S. patent and recently allowed U.S. applications directed to methods of treating AA, AGA and other hair loss disorders by administering ruxolitinib, baricitinib, decernotinib, or tofacitinib, and a recently issued patent in Japan directed to pharmaceutical compositions comprising ruxolitinib, baricitinib, or tofacitinib for use in treating AA, AGA and other hair loss disorders.
  - Natural expiry date 2031
  - Pending applications in Europe, Japan and Korea

ACLARIS THERAPEUTICS

Aclaris – The Next Chapter

Assets	• JAK inhibitors - oral and topical - (next generation) • ITK inhibitors - oral and topical - ("anti-IL-17") • MK-2 inhibitor - oral - ("anti-TNF")
Platform	• KINect™ platform – drug discovery engine • Proprietary compound library and computational chemistry capability • Medicinal chemistry, disease biology, immunology, pharmacology and preclinical development expertise
People	• Co-inventors of tofacitinib and former leaders of Pfizer kinase program (including JAK inhibitors) • Kinome experts - chemists and biologists; combined 300+ years of drug discovery experience • Significant experience in small molecule drug discovery through Phase II

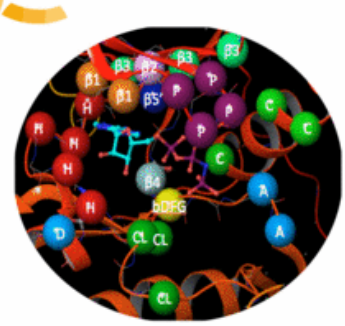
ACLARIS THERAPEUTICS

Early Stage Pipeline

MK-2 Pathway Inhibitor ATI-450 "Oral Anti-TNF"	• Psoriasis / Psoriatic Arthritis, RA, CAPS, Chronic Inflammation • Highly potent and designed to escape tachyphylaxis associated with global p38 kinase inhibitors
JAK Inhibitors	• Alopecia Areata, Vitiligo, AGA, Inflammatory Disorders • Highly selective, covalent and non-covalent. Oral and soft topical formulation
ITK Inhibitors "Oral Anti-IL17"	• Atopic Dermatitis, Psoriasis • Oral and soft topical formulation
Early Discovery Portfolio	• Leverage mechanisms in play to maximize opportunities • Utilize KINect™ platform for exciting new kinase targets

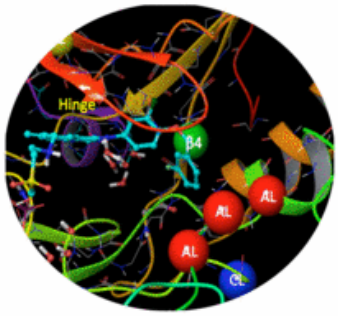
ACLARIS THERAPEUTICS

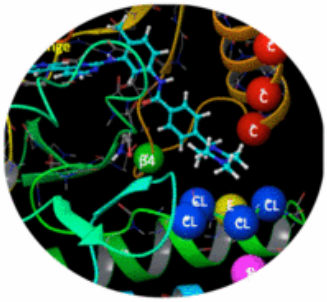
Platform - KINect™ Innovation Engine



Type 1 active conformation
215 cysteine kinases

Type 1.5 C-helix out conformation
68 cysteine kinases





Type 2 DFG out conformation
128 cysteine kinases

- Concentrated effort in immunology: autoimmune disease and chronic inflammation
- Cysteinome targeted chemical library (60% of the kinome)
- Focused on a number of important but hard-to-drug kinases
- Structural analysis, KINect™ chemical library, screening in validated bioassays, SBDD (Schrödinger enabled) and medicinal chemistry
- KINect™ library interrogates both Type 1 and Type 2 kinases vs competitors who focus only on a few subgroups of Type 1 kinases
- KINect™ addresses both reversible and irreversible inhibitors

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Platform - Research and Development Capabilities

BIOCHEMISTRY & ENZYMOLOGY

- Leaders in Mechanistic Enzymology
- Custom Assay Development
- Compound: Target Interaction
- Enzyme Inhibitor Mechanisms
- Direct Binding Kinetics
- High Throughput Screening

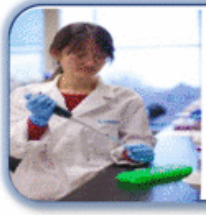
CELL & MOLECULAR BIOLOGY

- Target Clone/Express/Purification
- Translatable Cellular Assays
- Target Modulation/Disease Assays
- Cell Pathway Interrogation
- Custom Assay Development
- Multiple Assay Platforms

TRANSLATIONAL RESEARCH

- Biomarker Assay Development
- Clinical Biomarker Assessment
- *In vivo* Efficacy and PK Studies
- PK/PD Relationship
- Release Assay Validation

IMMUNOLOGY & IMMUNO-ONCOLOGY



- Cytokine Expression
- Th Cell Differentiation/Activation
- CTL Differentiation and Function
- B Cell and NK cell Function
- Ag Specific Cell and *In Vivo* Models
- HWB/PBMC/Monocyte Assays

BIOANALYTICAL CHEMISTRY

- Non-GLP Analytical
- Bioanalytical Method Development
- Bioanalytical Method Validation
- Pharmacokinetic/Toxicokinetic Analysis
- Ab Solubility and Aggregation

COMPUTATIONAL & MEDICINAL CHEMISTRY

- Schrödinger ™ Enabled Structure Based Drug Design
- Computational Chemistry
- Library Design
- Compound Synthesis

ACLARIS THERAPEUTICS

The Kinase Opportunity – Rational Targeted Drug Discovery

Creating New Medicines Targeting Previously Inaccessible Parts of the Kinome

KINect™ Technology Platform

Proprietary chemical library and integrated capabilities for interrogating the Kinome

- Solves challenges encountered in the class
  - Selectivity
  - Biochemical efficiency
- Validity of targeting kinases is commercially established
- Plethora of validated kinase targets are inadequately drugged
- Kinect™ platform allows rational targeting of validated kinase targets

Kinase Drugs Represented $240B in Aggregate Global Sales from 2011-2015

500 member class, representing 2% of the human genome

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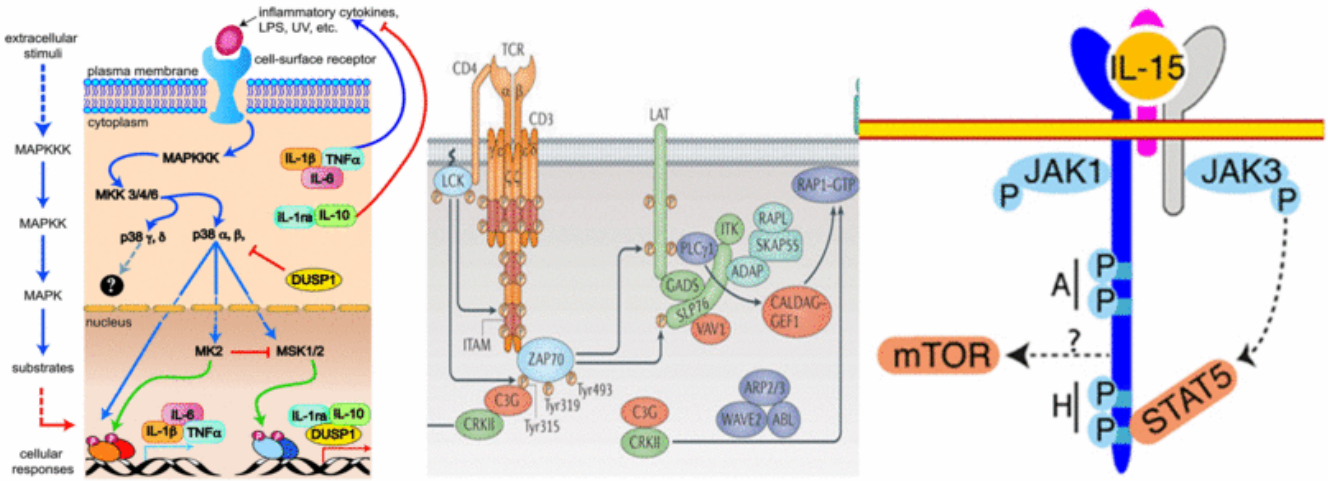
Pipeline Targets



MK2: Innate immune response – clinically validated by Humira®, Actemra®, Kineret®

ITK: T-cell receptor dependent autoimmune disease – clinically validated by Neoral®, Prograf®, Orencia®

JAK: Inflammatory cytokine dependent inflammation – clinically validated by Xeljanz®, Jakifi®

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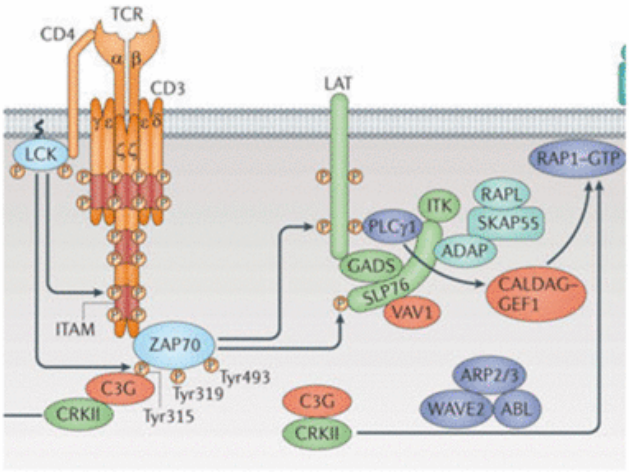
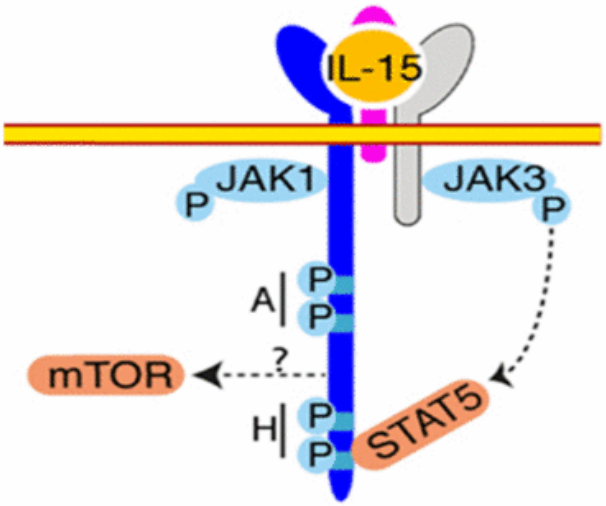
Antigen and Cytokine Receptor Signaling Inhibitors for Dermatology

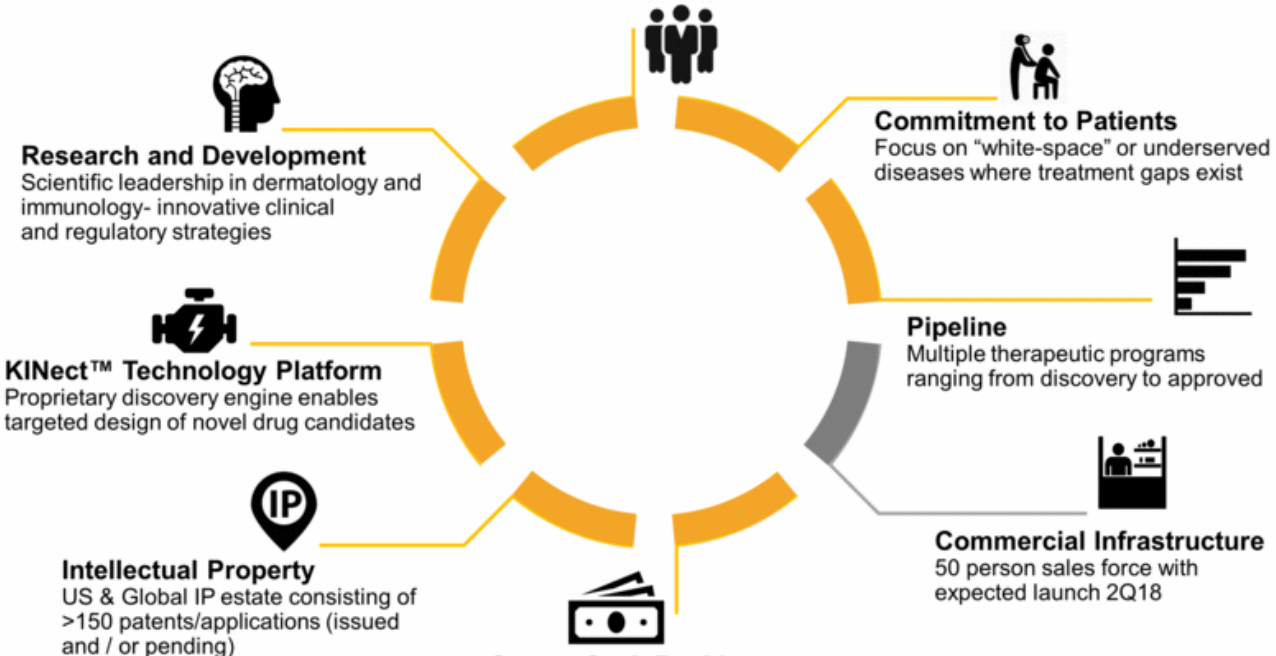




- **Alopecia Areata:** IFNγ (JAK1/2) and IL-15 (JAK1/3)
- **Vitiligo:** IFNγ (JAK1/2) and IL-15 (JAK1/3)
- **Psoriasis:** IFNγ (JAK1/2), IL-12/23 (JAK2/Tyk2), IL-22 (JAK1/Tyk2) and IL-21 (JAK1/3)
- **Atopic Dermatitis**: IFNγ (JAK1/2), TSLP (JAK1/2), IL-22 (JAK1/Tyk2) and IL-4/IL-21 (JAK1/3)
- **All autoimmune disease driven by antigen recognition/T cell receptor (ITK)**

ACLARIS THERAPEUTICS

Building a Fully Integrated Biopharmaceutical Company



Executive Team
Proven track record of R&D, commercial execution, and business development

Commitment to Patients
Focus on "white-space" or underserved diseases where treatment gaps exist

Pipeline
Multiple therapeutic programs ranging from discovery to approved

Commercial Infrastructure
50 person sales force with expected launch 2Q18

Strong Cash Position
~$228 million pro forma September 30, 2017

Intellectual Property
US & Global IP estate consisting of >150 patents/applications (issued and / or pending)

KINect™ Technology Platform
Proprietary discovery engine enables targeted design of novel drug candidates

Research and Development
Scientific leadership in dermatology and immunology- innovative clinical and regulatory strategies

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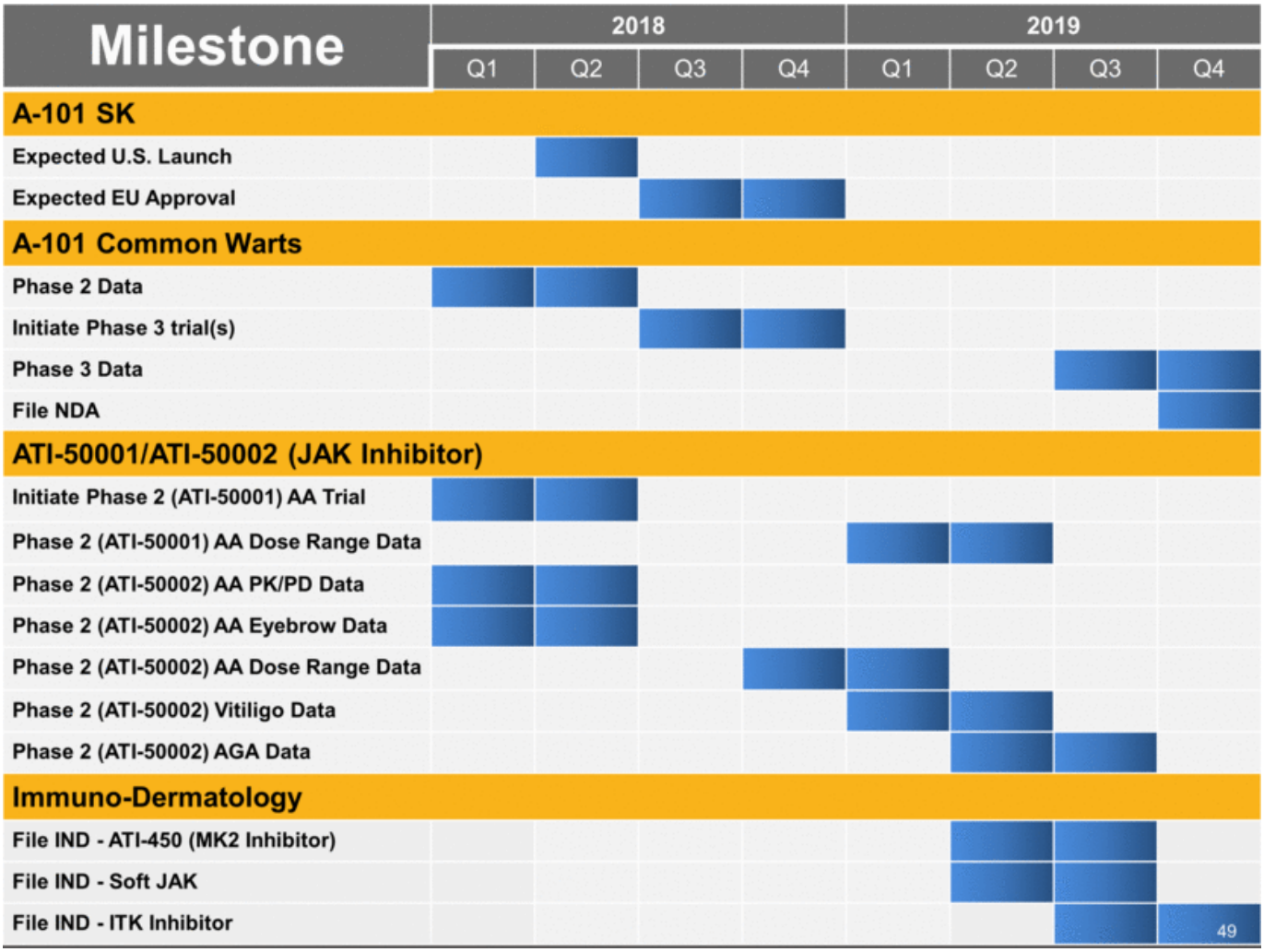
Milestone
2018
2019
Q1
Q2
Q3
Q4
Q1
Q2
Q3
Q4
A-101 SK
Expected U.S. Launch
Expected EU Approval
A-101 Common Warts
Phase 2 Data
Initiate Phase 3 trial(s)
Phase 3 Data
File NDA
ATI-50001/ATI-50002 (JAK Inhibitor)
Initiate Phase 2 (ATI-50001) AA Trial
Phase 2 (ATI-50001) AA Dose Range Data
Phase 2 (ATI-50002) AA PK/PD Data
Phase 2 (ATI-50002) AA Eyebrow Data
Phase 2 (ATI-50002) AA Dose Range Data
Phase 2 (ATI-50002) Vitiligo Data
Phase 2 (ATI-50002) AGA Data
Immuno-Dermatology
File IND - ATI-450 (MK2 Inhibitor)
File IND - Soft JAK
File IND - ITK Inhibitor
49

THANK YOU

www.aclaristx.com

Aclaris Therapeutics' A-101 45% Topical Solution Meets Primary and All Secondary Endpoints in Two Phase 2 Clinical Trials for Common Warts

- *Highly statistically significant results on all primary and secondary endpoints*
- *Statistical significance seen as early as day 28, after 4 weeks of treatment in WART-203*
- *If approved, A-101 45% would be the first FDA approved treatment for common warts*

MALVERN, Pa., January 8, 2018 (GLOBE NEWSWIRE) -- Aclaris Therapeutics, Inc. (NASDAQ:ACRS), a dermatologist-led biopharmaceutical company focused on identifying, developing and commercializing innovative and differentiated therapies to address significant unmet needs in medical and aesthetic dermatology, today announced positive results from its two Phase 2 clinical trials (WART-202 and WART-203) of A-101 45% topical solution (A-101 45%), an investigational new drug for the treatment of common warts (verruca vulgaris). A-101 45% met all primary and secondary endpoints of each trial, achieving clinically and statistically significant clearance of common warts. A-101 45% is a proprietary high-concentration hydrogen peroxide topical solution being developed as a prescription treatment for common warts.

Both trials evaluated the safety and efficacy of A-101 45% as compared to placebo (vehicle). The two randomized, double-blind, vehicle-controlled trials were designed to understand the effects of dose frequency and to explore additional clinical endpoints that will be further evaluated in a planned Phase 3 development program.

The WART-203 trial evaluated 159 patients who self-administered either A-101 45% or placebo twice weekly through Day 56, for a total of 16 treatments. Each patient had between one and six warts at baseline. The trial achieved its primary endpoint, which was mean change from baseline in the Physician's Wart Assessment (PWA) scale score at Day 56 (Visit 10 or one week after the last treatment). The PWA score is a four-point scale of the investigators' assessment of the severity of a target wart at a particular time point.

- The mean reduction in PWA score at Day 56 on the target warts was 0.87 points in patients who received A-101 45%, compared to a reduction of 0.17 points for the target warts that received placebo, a result that was statistically significant ($p<0.001$).

Secondary endpoints of the WART-203 trial:

- The percentage of all treated warts that were clear (PWA = 0) at Day 56 was 30.20% in patients who received A-101 45%, compared to 9.22% among patients in the placebo group ($p<0.001$).
- The percentage of all treated warts that were clear or near-clear (PWA <= 1) at Day 56 was 45.64% among patients who received A-101 45%, compared to 15.60% among patients in the placebo group ($p<0.001$).
- The proportion of patients achieving target wart clearance at Day 56 was 25.32% among those who received A-101 45%, compared to 2.56% among patients in the placebo group ($p<0.0001$).
- The proportion of patients with all treated wart(s) clear at Day 56, stratified by the baseline number of warts treated (1-6), was 18.99% among those who received A-101 45%, compared to 2.56% among patients in the placebo group ($P=0.001$).

The WART-202 trial evaluated 157 patients who self-administered either A-101 45% or placebo once weekly through Day 56, for a total of 8 treatments. Each patient had between one and four warts at baseline. The trial achieved its primary endpoint, which was mean change from baseline in the PWA score of the target wart at Day 56 (one week after the last treatment).

- The mean reduction in PWA score at Day 56 on the target warts was 0.77 points in patients who received A-101 45%, compared to a reduction of 0.23 points for the target warts that received placebo, a result that was also statistically significant ($p<0.001$).

Secondary endpoints of the WART-202 trial:

- The percentage of all treated warts that were clear at Day 56 was 20.75% in patients who received A-101 45%, compared to 2.94% among patients in the placebo group ($p<0.001$).
- The percentage of all treated warts that were clear or near-clear at Day 56 was 52.83% among patients who received A-101 45%, compared to 13.73% among patients in the placebo group ($p<0.001$).
- The proportion of patients achieving target wart clearance at Day 56 was 15.71% among those who received A-101 45%, compared to 1.37% among patients in the placebo group ($p<0.001$).
- The proportion of patients with all treated wart(s) clear at Day 56, stratified by the baseline number of warts treated (1-4), was 11.43% among those who received A-101 45%, compared to 1.37% among patients in the placebo group ($P=0.01$).

Patients in both of the WART-202 and WART-203 trials are continuing in a 3-month open-label drug-free follow-up evaluation to assess the durability of clinical effect.

Safety Results

- There were no treatment-related serious adverse events among patients treated with A-101 45%.
- A-101 45% was well tolerated through visit 10 (Day 56).

"We are extremely pleased by these results," said Dr. Neal Walker, President and CEO of Aclaris. "This is an important milestone for the A-101 45% wart program, and these data further substantiate the potential clinical utility of our proprietary formulation of A-101 45% topical solution. Based on these results, we plan to meet with the FDA mid-year regarding our Phase 3 program for the treatment of common warts. We expect to initiate our Phase 3 program in the second half of 2018."

About Common Warts

Common warts, also called verruca vulgaris, affect more than 22 million Americans. Prevalence is higher in children than adults. Common warts most often appear on the hands and usually look like skin-colored papules with a rough surface. They result when skin cells are infected by human papillomavirus (HPV) and spread via direct contact or contact with infected surfaces. Though common warts may resolve without treatment, they can persist for years. Over-the-counter topical treatments are first-line therapy for common warts but are marginally effective and slow to work. More than two million patients seek treatment for common warts from healthcare professionals each year, possibly because of social stigma, embarrassment or symptoms such as pain, bleeding, itching and burning. There are currently no FDA-approved prescription medications for warts, and existing treatment procedures are

often painful or invasive, can have undesirable outcomes like scarring or dyspigmentation, and often require repeat visits.

About Aclaris Therapeutics, Inc.
Aclaris Therapeutics, Inc. is a dermatologist-led biopharmaceutical company focused on identifying, developing and commercializing innovative and differentiated therapies to address significant unmet needs in medical and aesthetic dermatology. Aclaris is focused on large, undertreated market segments with no FDA-approved medications or where treatment gaps exist. Aclaris is based in Malvern, Pennsylvania and more information can be found by visiting the Aclaris website at www.aclaristx.com.

Cautionary Note Regarding Forward-Looking Statements

Any statements contained in this press release that do not describe historical facts may constitute forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995. These statements may be identified by words such as “believe”, “expect”, “may”, “plan,” “potential,” “will,” and similar expressions, and are based on Aclaris’ current beliefs and expectations. These forward-looking statements include expectations regarding Aclaris’ clinical development of A-101 45% for the treatment of common warts. These statements involve risks and uncertainties that could cause actual results to differ materially from those reflected in such statements. Risks and uncertainties that may cause actual results to differ materially include uncertainties inherent in the conduct of clinical trials, Aclaris’ reliance on third parties over which it may not always have full control, risks associated with maintaining its intellectual property portfolio and other risks and uncertainties that are described in Aclaris’ Annual Report on Form 10-K for the year ended December 31, 2016, Aclaris’ Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, and other filings Aclaris makes with the SEC from time to time. These documents are available under the “Financial Information” section of the Investors page of Aclaris’ website at http://www.aclaristx.com. Any forward-looking statements speak only as of the date of this press release and are based on information available to Aclaris as of the date of this release, and Aclaris assumes no obligation to, and does not intend to, update any forward-looking statements, whether as a result of new information, future events or otherwise.

Contact:

Aclaris Contact
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