April 12, 2018

Novan Corporate Update

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Forward Looking Statements

This presentation includes forward-looking statements that reflect our current views with respect to, among other things, our plans to develop and commercialize our product candidates, including our interpretation of preclinical studies and the success and timing of our product development activities and clinical trials, our operations and business strategy and our financial performance and strategies and needs for additional financing. These forward-looking statements are included throughout this presentation. We have used the words “anticipate,” “assume,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “future,” “will,” “seek,” “foreseeable”, “targeted” and similar terms and phrases to identify forward-looking statements in this presentation. The forward-looking statements contained in this presentation are based on management’s current expectations and are subject to substantial risks, uncertainty and changes in circumstances. Actual results may differ materially from these expectations due to risks and uncertainties including, among others, those related to the success, timing and cost of ongoing or future clinical trials, the lengthy and unpredictable nature of the U.S. Food and Drug Administration’s drug approval process and our ability to enter into strategic arrangements or obtain additional capital. We believe that these risks and uncertainties include but are not limited to those described in our annual report filed with the SEC on Form 10-K for the twelve months ended Dec. 31, 2017, and in any subsequent filings with the SEC. Any forward-looking statement made by us in this presentation speaks only as of the date of this presentation. We undertake no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by any applicable securities laws.

Agenda

1. Clinical Development Update
2. NO as an Antimicrobial
3. SB204 Acne Update
4. Key Takeaways

Current Development Pipeline

Product Candidates	Indication	Preclinical	Phase 1	Phase 2	Phase 3
SB204	Acne Vulgaris				
SB206	Genital Warts				
	Molluscum				
SB208	Tinea pedis / Onychomycosis				
SB414	Psoriasis				
	Atopic Dermatitis				

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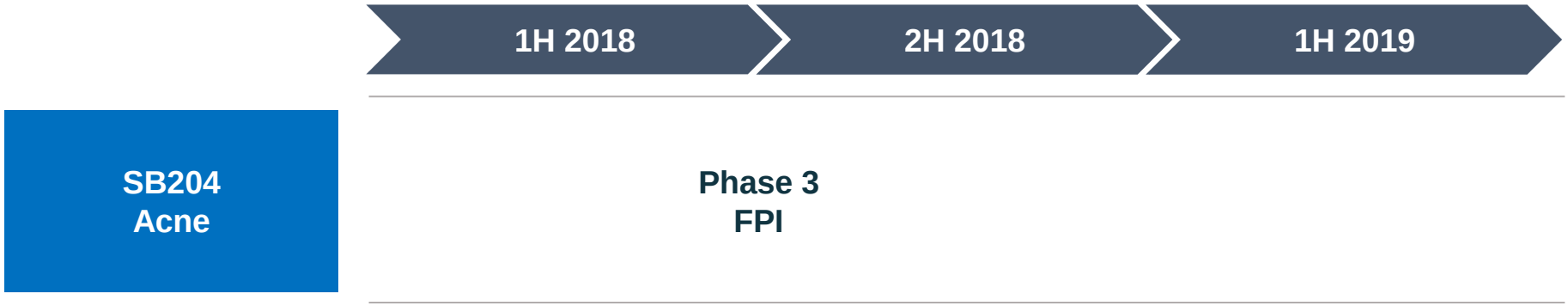
* Includes anti-inflammatory and anti-bacterial activity – *p. acnes* in the case of SB204 for the treatment of acne.

SB204 for the Treatment of Acne Vulgaris



Background

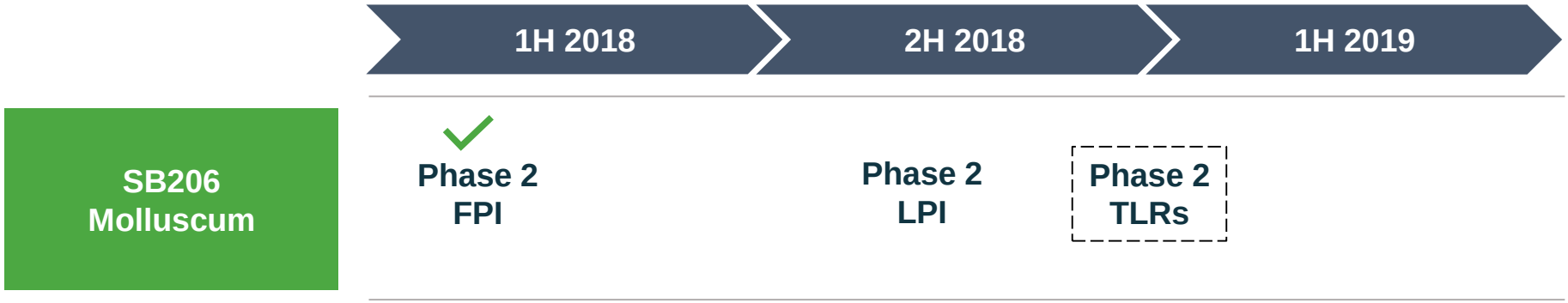
- Statistical significance at week 12 on all three co-primary endpoints (IGA, inflammatory lesions, noninflammatory lesions) in one of two Phase 3 pivotal trials
- Sustained treatment benefit shown in long-term safety trial
- Analyses in relevant sub-populations (adolescents, severe acne patients only)
- FDA recommended one additional pivotal study for the purposes of replication and interpretation of clinical trial findings
- No further preclinical or clinical safety studies required for NDA – safety population of >2600 patients sufficient for submission of a new molecular entity

Key Milestones

- Guidance meeting with the FDA held 3Q 2017
- Type C meeting with the FDA scheduled 2Q 2018
- Remaining components of the Phase 3 program targeted to commence 3Q 2018

FPI=First Patient In

SB206 for the Treatment of Molluscum Contagiosum



Background

- Molluscum is a contagious skin infection caused by the *molluscipoxvirus*
- Affects ~6M sufferers in US, mostly children
  - Greatest incidence in children aged 1 to 14 years; average time to resolution is 13 months[1]
- There are no FDA-approved treatments indicated for molluscum contagiosum
- Constructive regulatory discussion regarding medical / therapeutic need with FDA at SB206 End-of-Phase 2 meeting

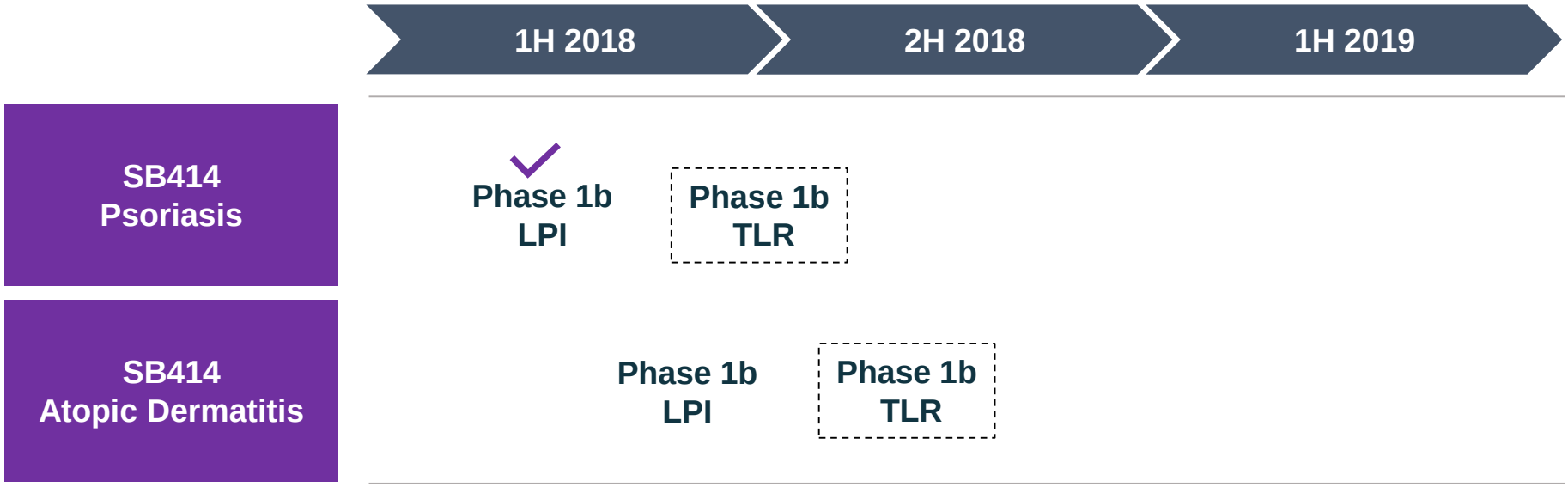
Key Milestones

- Molluscum IND submitted 4Q 2017
- SB206 Phase 2 trial in molluscum initiated 1Q 2018
- Targeting top line results 4Q 2018

FPI=First Patient In; LPI=Last Patient In; TLR=Top Line Results; EOP2=End-of-Phase 2

[1] Olsen JR et al. Lancet Infect Dis. 2015;15:190-5.

SB414 for the Treatment of Inflammatory Skin Diseases



Background

- ~7.5M in US suffer from mild-to-moderate plaque psoriasis, and are treated first-line with topical therapies[1]
- ~14.4M in US suffer from mild-to-moderate atopic dermatitis, and are treated first-line with topical therapies[2]
- Nitric oxide targets the NLRP3 inflammasome and downstream propagation of IL-17[3], IL-4 and IL-13[4] inflammatory cytokines in preclinical models

Key Milestones

- SB414 IND submitted 3Q 2017
- Psoriasis and Atopic Dermatitis Phase 1b PK/PD Trials Initiated 4Q 2017
- Targeting top line results for Psoriasis 2Q 2018; Atopic Dermatitis 3Q 2018

FPI=First Patient In; LPI=Last Patient In; TLR=Top Line Results

[1]Psoriasis Market Research Report, IMS Consulting Group. 2015 [2]IMS Health Disease Insights. "Atopic Dermatitis – US." June 2015 [3]Mishra B., et. al. Nat Immunol. 2013 Jan. 14(1). 52–60. doi:10.1038/ni.2474 [4]Nakatsuji, T. et al. 2016. J Invest. Derm. 136(11):2192-2200

Other Antiviral and Antifungal Development Programs

	1H 2018	2H 2018	1H 2019
SB206 High Risk-HPV	**Clinical development plan will be updated following consultation with the FDA in 2Q 2018**		
SB206 EGW	**Additional progress linked to ongoing business development and partnership discussions**		
SB208 Tinea pedis/ onychomycosis	**Additional progress linked to ongoing business development and partnership discussions**		

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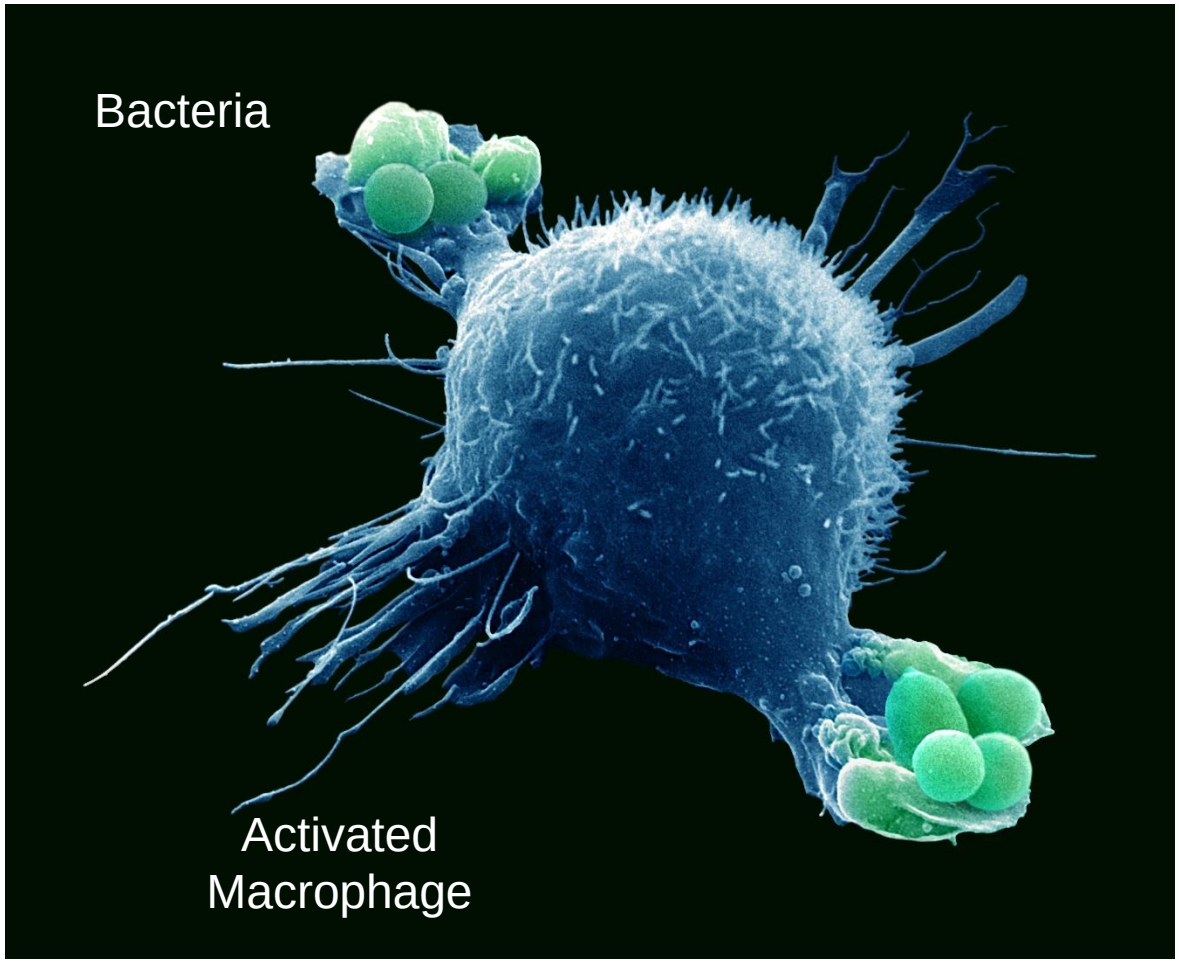
Nitric Oxide as Part of Host Immune Response

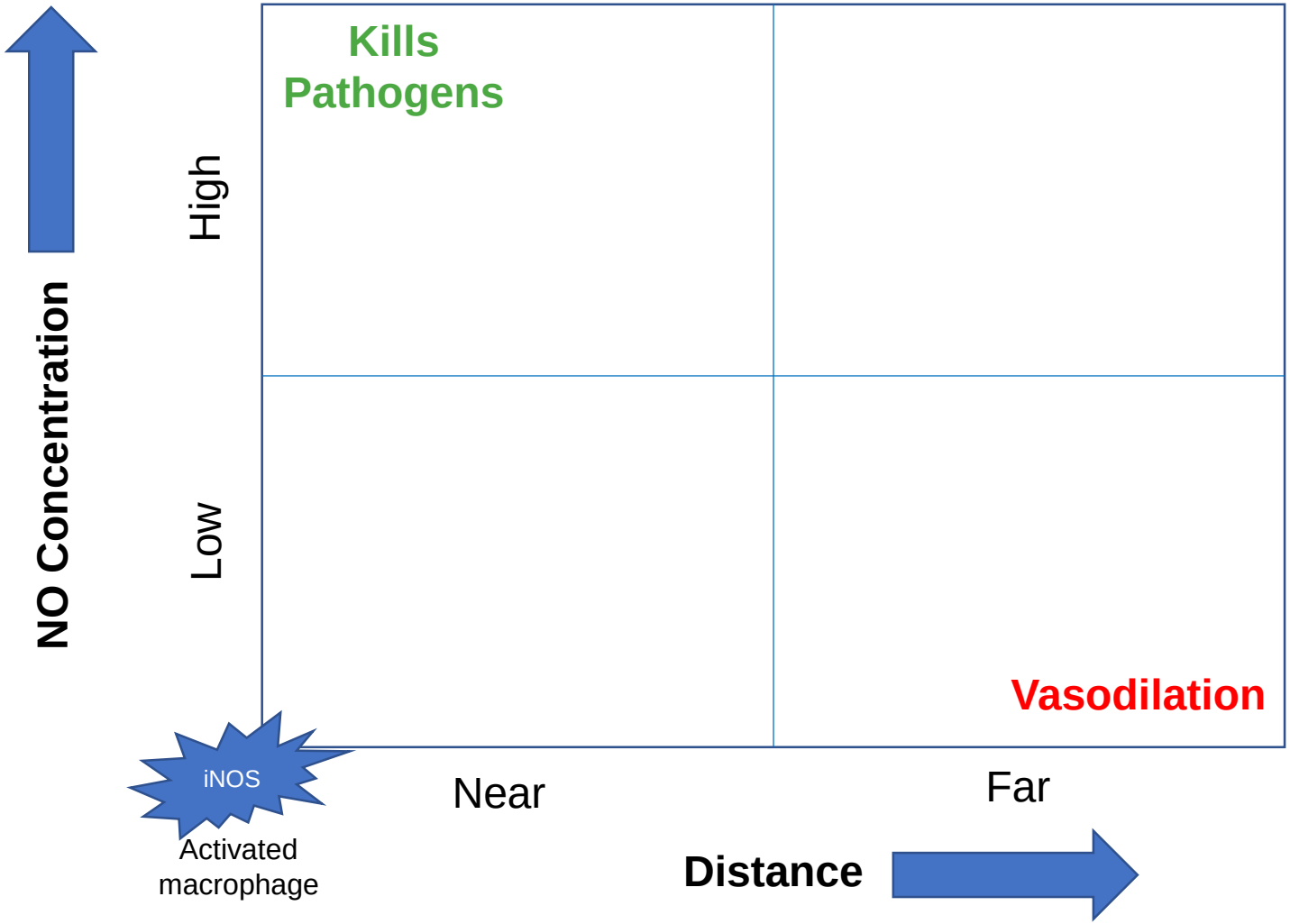


Wink et al. Nitric Oxide and redox mechanisms in the immune response

"In the acidic environment of the phagosome, [nitric oxide and other reactive species] is produced, thereby providing a cauldron of redox chemistry, which is the first line in fighting infection."

Wink et al. J Leukoc Biol. 2011; 89(6): 873-891.

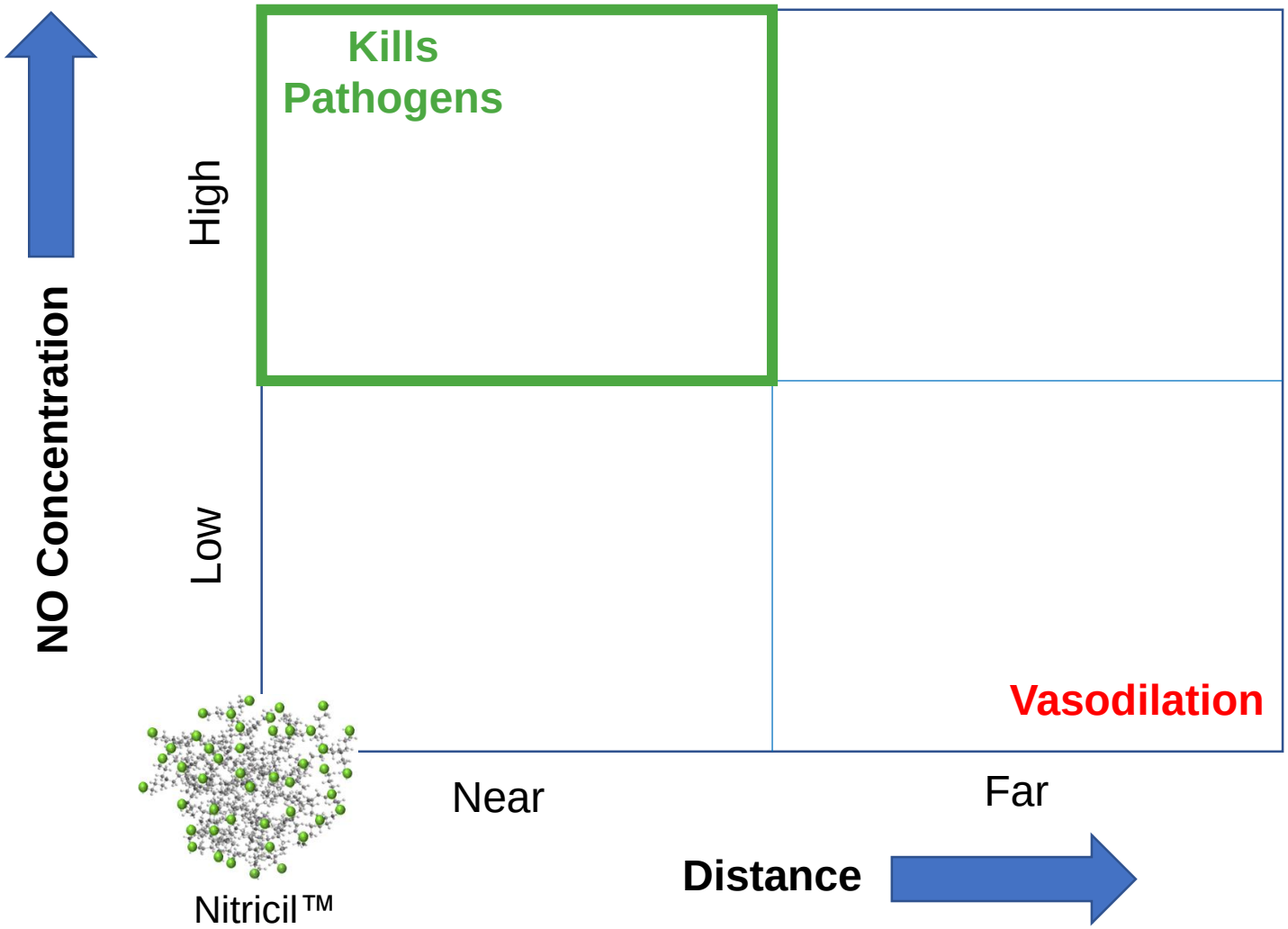
Nitric Oxide (NO) Flux Controls Biological Effects



The level, proximity, and sustainability of NO release are all utilized to activate specific biological mechanisms

Adapted from Figure 4, Wink et al. J Leukoc Biol. 2011; 89(6): 873-891.

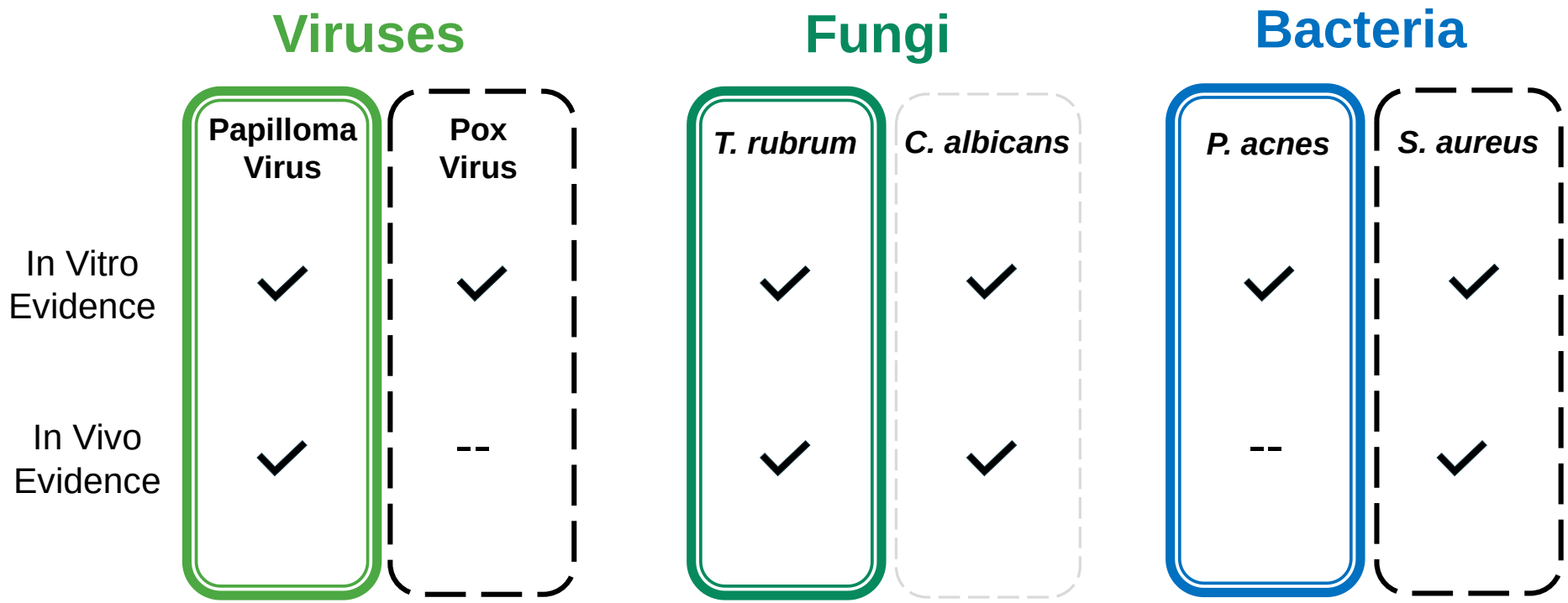
Nitric Oxide (NO) Flux Controls Biological Effects



Targeted NO Therapy – All the activity without the immune system

Adapted from Figure 4, Wink et al. J Leukoc Biol. 2011; 89(6): 873-891.

Validation of Antimicrobial Activity Achieved with Nitricil Product Candidates



Clinical validation achieved with Nitricil platform

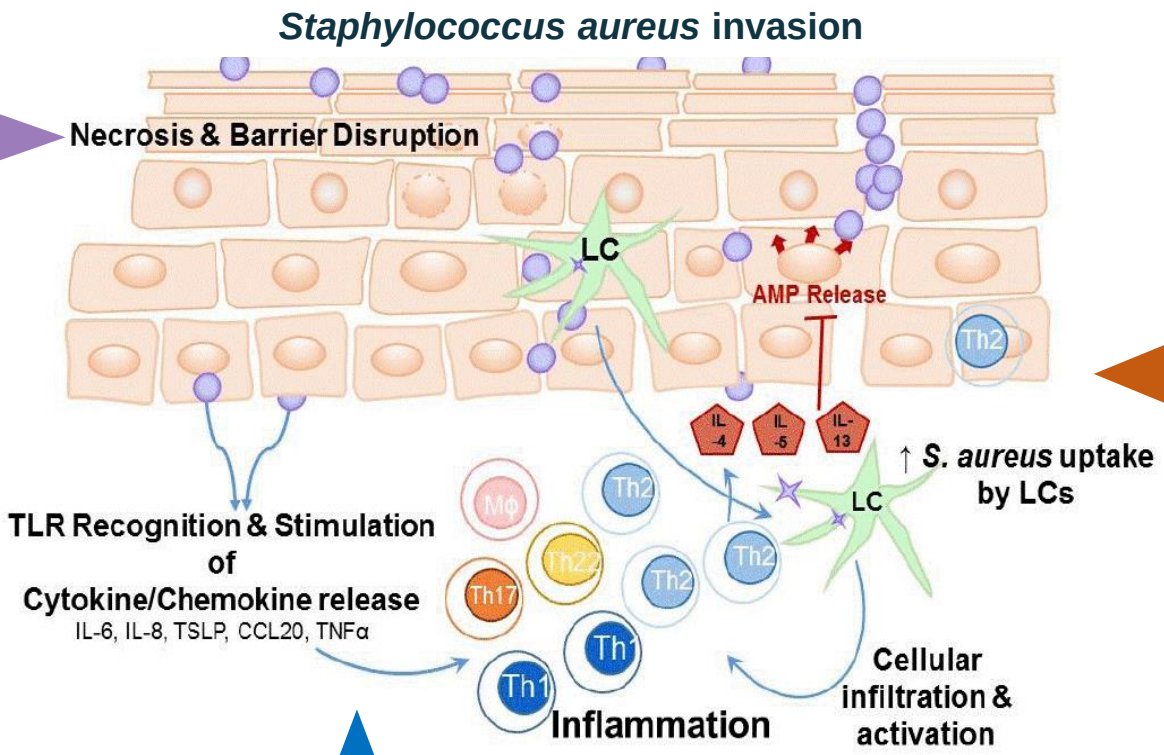
Pending clinical validation with Nitricil platform in Phase 2 Molluscum and Phase 1B Atopic Derm Trials

Not a current focus

Pathogenesis of Atopic Dermatitis (AD)

Skin barrier defects and bacterial dysbiosis trigger chronic inflammation and further perpetuate AD pathophysiology

1. *S aureus* penetrates the epidermis via a proteolytic mechanism coupled with a failure of the antimicrobial and physical barrier



3. Th2 cytokines like IL-4 and IL-13 further reduce the innate anti-staph response

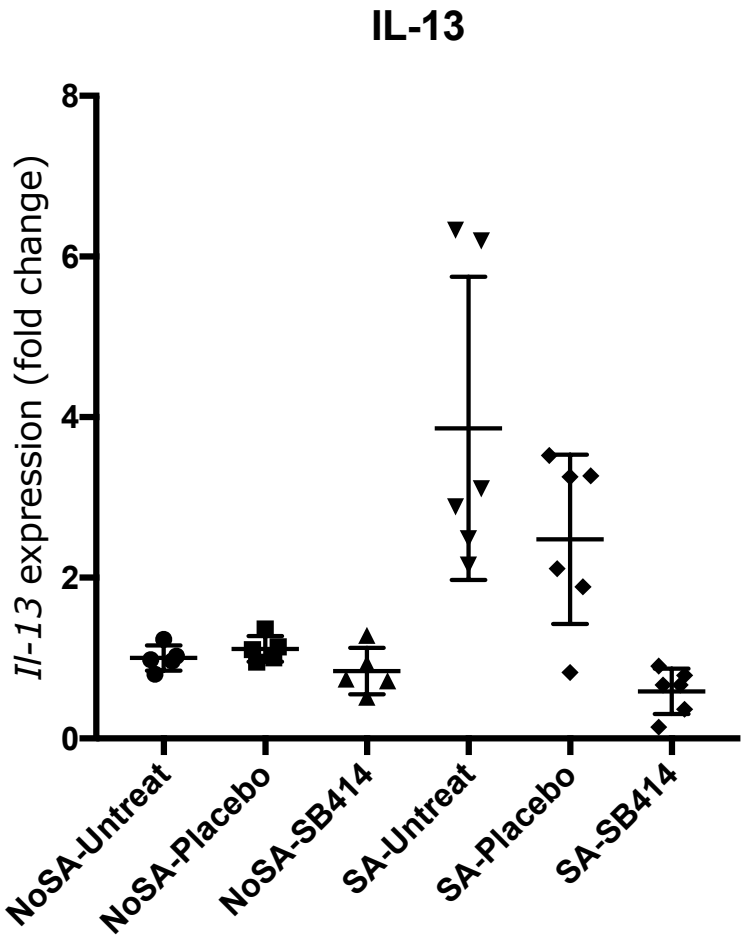
2. *S aureus* entry allows direct interaction with immune cells and stimulates proinflammatory cytokines

S. aureus colonization has been shown clinically to correlate with severity of AD lesions and cutaneous inflammation.

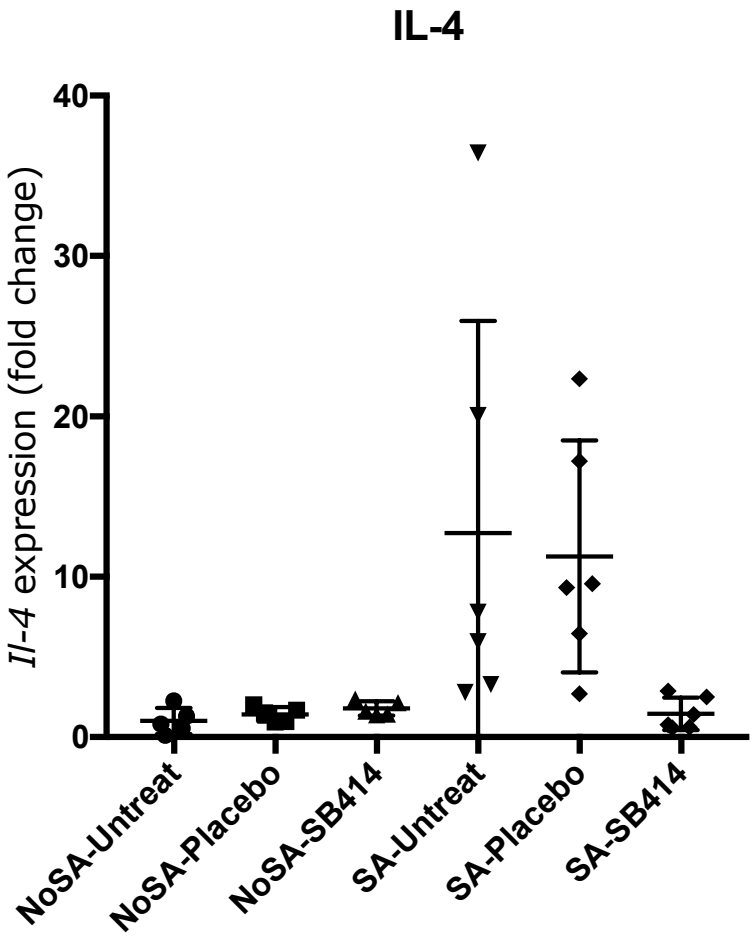
Figure adapted from Hepburn L et al.; AMP, adenosine monophosphate; CCL, chemokine ligand; LC, Langerhans cell; Th, T helper cell; TLR, Toll-like receptor; TNF, tumor necrosis factor; TSLP, thymic stromal lymphopoietin; Hepburn L et al. Br J Dermatol. 2016 Oct 25 [epub]

SB414 Decreases S. aureus and Relevant Atopic Dermatitis Tissue Cytokines

IL-13 decreased by 76% compared to Placebo Control



IL-4 decreased by 87% compared to Placebo Control



Collaboration with Dr. Richard Gallo (UCSD) using *FLG*$^{ft/ft}$ Mouse Model reported previously[1]
SA = *Staphylococcus aureus*

1. Nakatsuji T et al. *J Invest Dermatol.* 2016;136(11):2192-2200.

Upcoming Industry Presentations in Q2 2018

International Investigative Dermatology (IID) Meeting (May 16 – 19)

- "Topical nitric oxide-releasing therapy with SB208 increased fingernail growth" poster presentation
  To be presented by Dr. Tomoko Maeda-Chubachi
- "Effects of SB414 Cream on S. aureus and Tissue Cytokines in an Atopic Dermatitis Mouse Model" Late-breaker poster presentation
  To be presented by Dr. Nathan Stasko

Cantor Dermatology & Aesthetics Summit (June 19)

The JMP Securities Life Sciences Conference (June 20 – 21)

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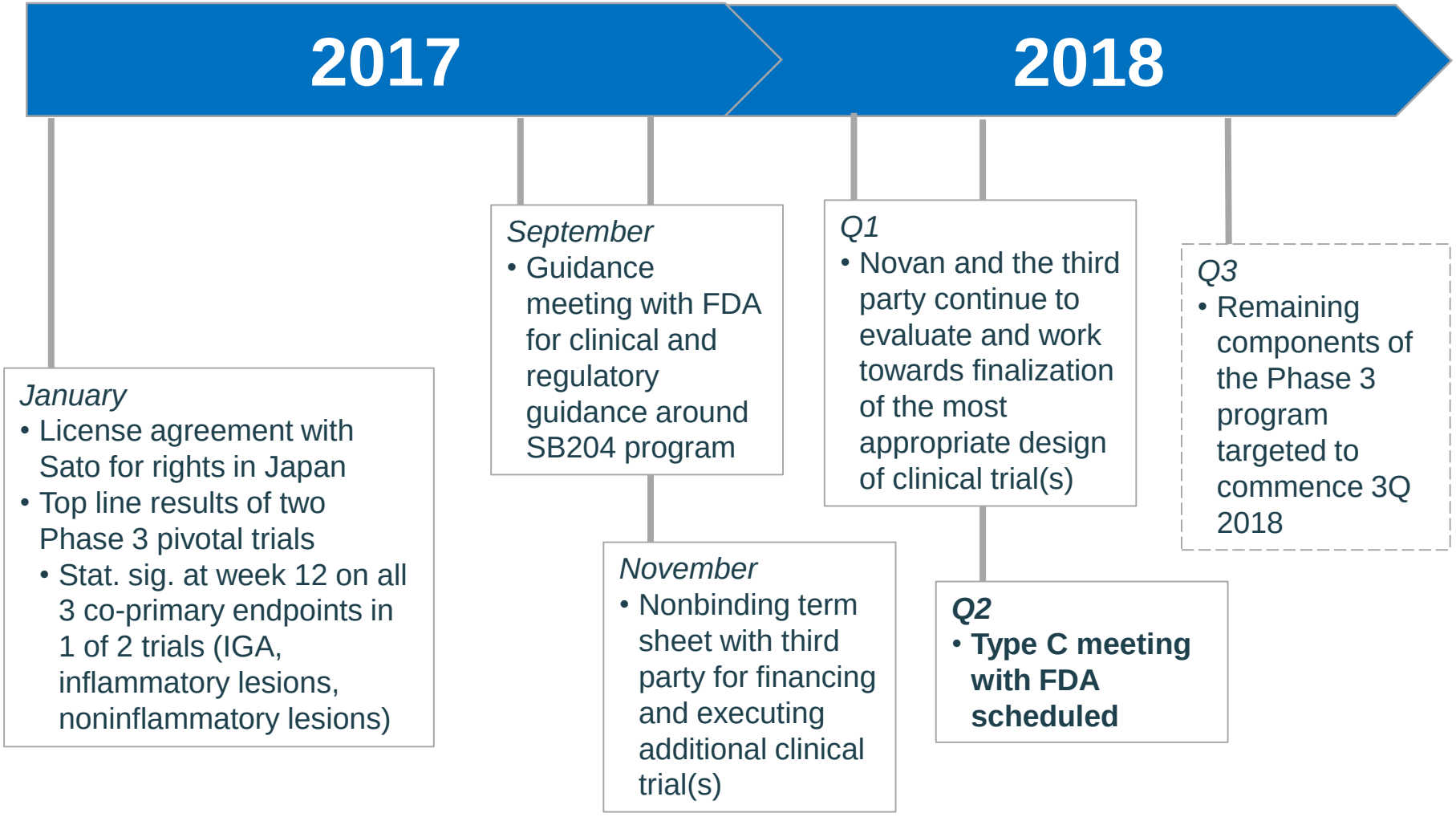
SB204: 2017 – To Date

We believe that, if approved, SB204 will contain the first NCE developed for the treatment of acne vulgaris in more than 25 years.



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Key Takeaways

- We will continue to selectively add talent and strengthen the Novan team
- Our clinical portfolio is on track to generate data “read-outs” for Psoriasis, Atopic Dermatitis and Molluscum over the next 12-months
- SB204 and the acne indication plans - both business construct and clinical/regulatory pathway – being evaluated to best position risk/reward dynamics
  - Recent highly visible failures in acne were a double-edged event for Novan: increased opportunity from a strategic point of view, but added caution/challenge for financial investors
- Business development interest around the platform, in general, has increased our focus in this area; geographic and indication specific opportunities currently being explored
- We will participate in a few select investor conferences in the coming months in order to tell the Novan platform and clinical story


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