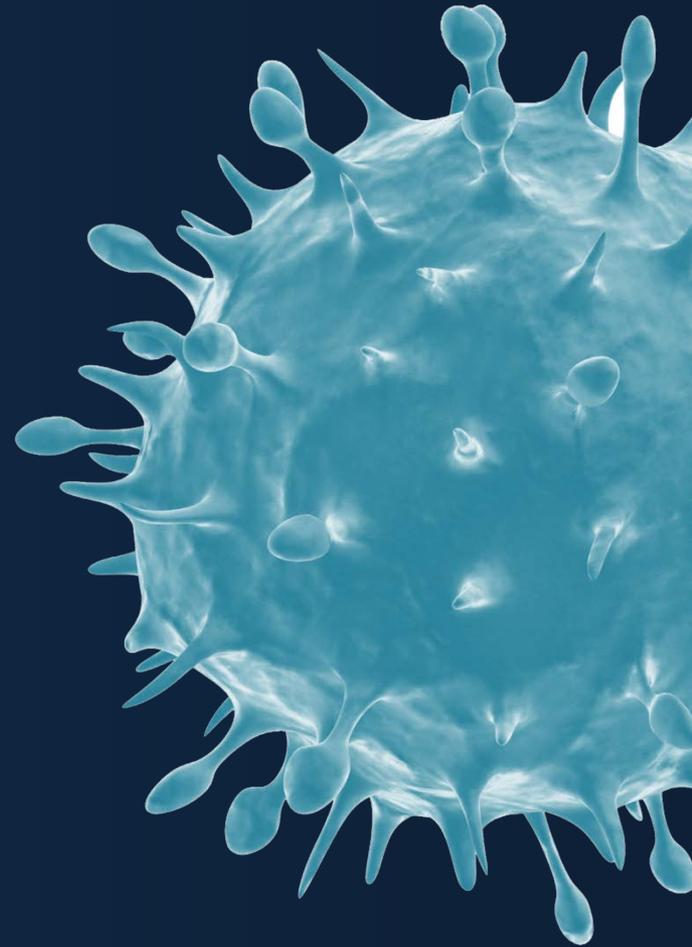


**GEN-003**

# Positive Phase 2b Clinical Efficacy Results

Immunotherapy Candidate for  
Genital Herpes

12-Month Top-line Results



# Disclaimer

This presentation contains “forward-looking” statements that are within the meaning of federal securities laws and are based on our management’s beliefs and assumptions and on information currently available to management. Forward-looking statements include information concerning our possible or assumed future results of operations, business strategies, clinical trials and pre-clinical studies, regulatory approval of our product candidates, liquidity position and capital needs, financing plans, industry environment, potential growth opportunities, potential market opportunities and the effects of competition.

Forward-looking statements include all statements that are not historical facts and can be identified by terms such as “anticipates,” “believes,” “could,” “seeks,” “estimates,” “intends,” “may,” “plans,” “potential,” “predicts,” “projects,” “should,” “will,” “would” or similar expressions and the negatives of those terms. Forward-looking statements represent our management’s beliefs and assumptions only as of the date of this presentation. Our operations involve risks and uncertainties, many of which are outside our control, and any one of which, or combination of which, could materially affect our results of operations and whether the forward-looking statements ultimately prove to be correct. Factors that may materially affect our results of operations include, among other things, the timing of results of our ongoing and planned clinical trials, our estimates regarding the amount of funds we require to complete our clinical trials for GEN-003, our plans to commercialize GEN-003, the timing of, and ability to, obtain and maintain regulatory approval for GEN-003 and those listed in our Annual Report on Form 10-K and other filings with the Securities and Exchange Commission (“SEC”). Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future.

You may get copies of our Annual Report on Form 10-K, Quarterly Report on Form 10-Q and our other SEC filings for free by visiting EDGAR on the SEC website at <http://www.sec.gov>.

# 12-Month Top-Line Clinical Data Highlights

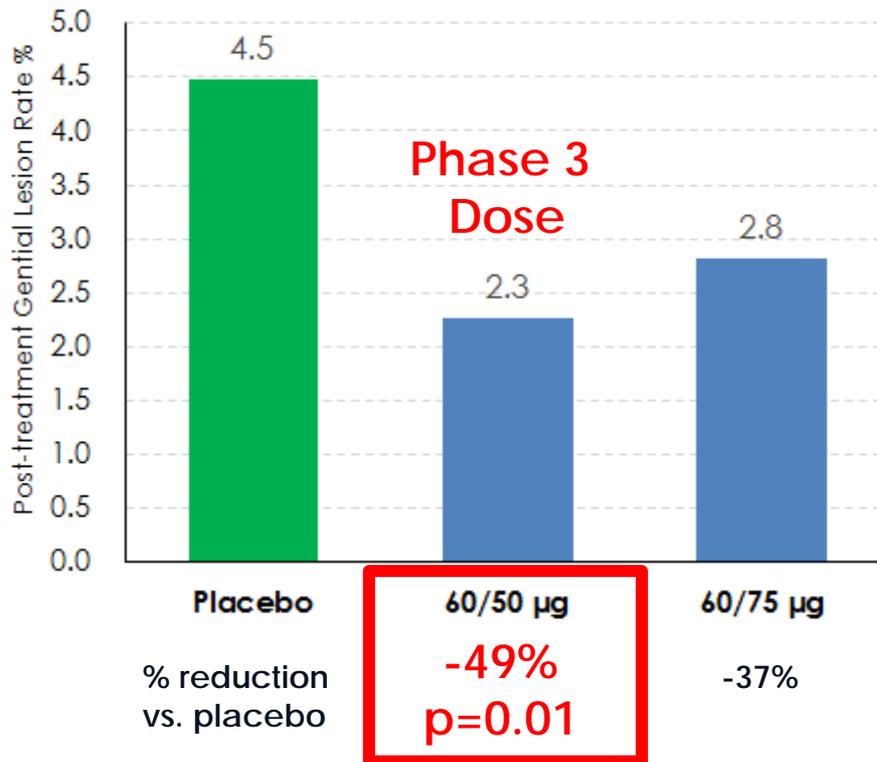
- Statistically significant 49% reduction versus placebo in median genital lesion rate over 12 months for selected Phase 3 dose
  - Expected Phase 3 primary endpoint
  - Commercial-ready formulation
- Positive results from other secondary clinical endpoints
- No changes observed to the previously established safety profile

# Trial Design Recap

- Randomized, double-blind, placebo-controlled trial
- 131 subjects with a history of recurrent genital herpes
- 3 dose groups
  - Placebo (n=44)
  - 60 µg per antigen / 50 µg of Matrix-M adjuvant (n=43)
  - 60 µg per antigen / 75 µg of Matrix-M adjuvant (n=44)
- Key elements consistent with prior GEN-003 trials
  - Inclusion / exclusion criteria, demographics, sites, dose regimen
  - Planned Phase 3 program shares key design elements
- Clinical events collected through daily electronic patient reporting

# Phase 3 Dose Significantly Reduces Genital Lesion Rate vs. Placebo over 12 Months - Expected Phase 3 Primary Endpoint

Median Genital Lesion Rates<sup>(1)</sup> Post Treatment Over 12 Months After Last Dose



- 60/50 dose significant impact on genital lesion rate:
  - Reduction vs. placebo consistent with 52% reduction 6 months post dosing
  - Reductions vs. baseline consistent with those from prior Phase 2

Wilcoxon Rank Sum test vs. placebo

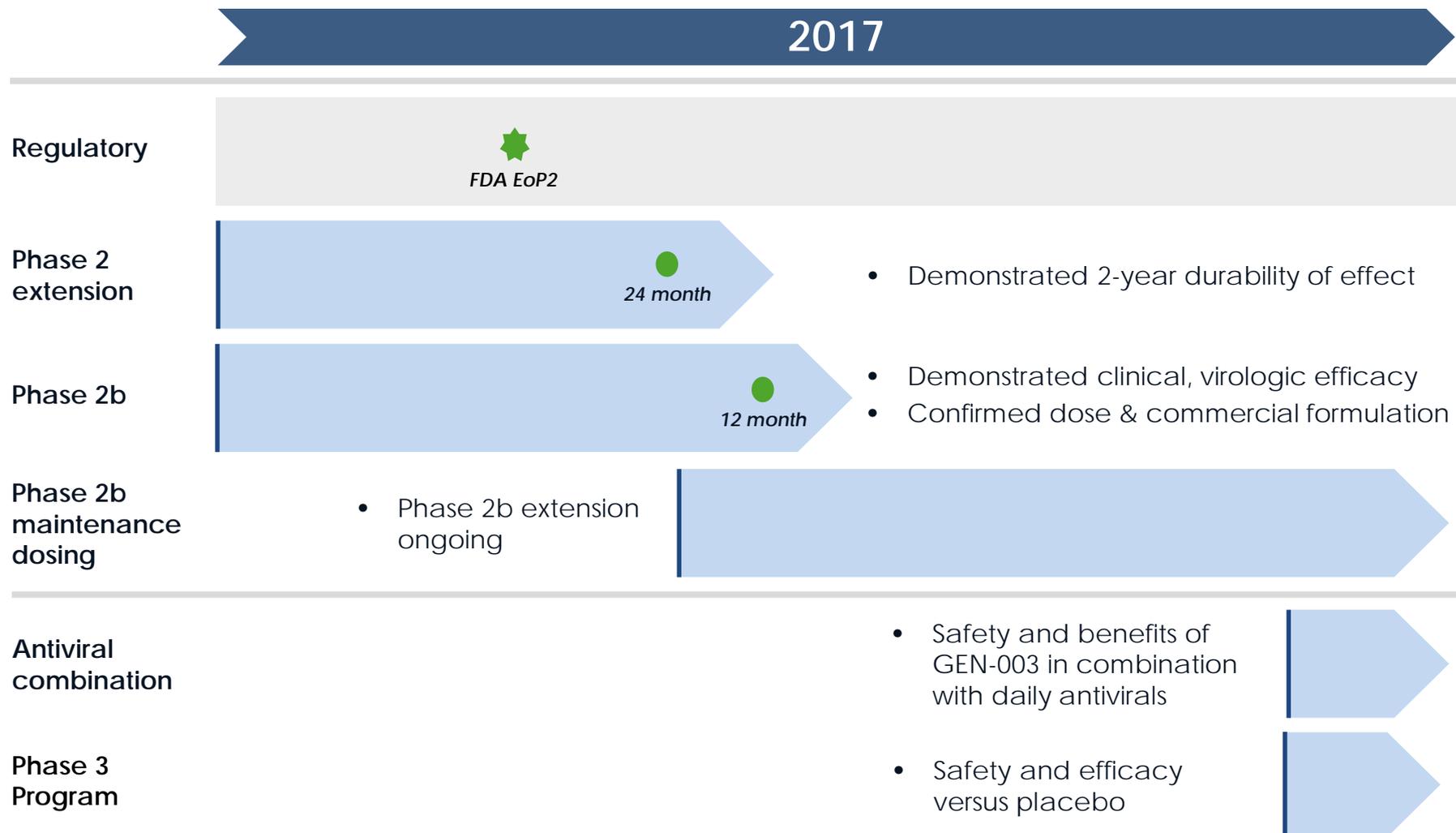
Notes: (1) Days with visible lesions divided by total days

# Consistent, Positive Data From Secondary Clinical Endpoints at 60/50 Dose

<b>12 Months Post Dosing</b>	<b>60/50</b>	<b>60/75</b>	<b>Placebo</b>
Number of subjects contributing clinical data	43	44	44
<b>Median Number of Recurrences over 12 Months</b>	<b>1.5</b>	<b>2.0</b>	<b>4.0</b>
Percent reduction versus placebo	-63%	-50%	NA
p-value versus placebo <sup>(1)</sup>	0.01	NS	NA
<b>Median Duration of Recurrences (days)</b>	<b>2.7</b>	<b>4.0</b>	<b>3.6</b>
Percent reduction versus placebo	-25%	11%	NA
p-value versus placebo <sup>(1)</sup>	0.02	NS	NA
<b>Kaplan Meier Estimate of Percent Lesion Free at 12 Months After First Dose</b>	<b>20%</b>	<b>16%</b>	<b>7%</b>
p-value versus placebo <sup>(2)</sup>	0.04	NS	NA
<b>Kaplan Meier Estimate of Percent Lesion Free at 12 Months After Last Dose</b>	<b>20%</b>	<b>17%</b>	<b>8%</b>
p-value versus placebo <sup>(2)</sup>	NS	0.05	NA
Number of subjects contributing shedding data	30	32	31
<b>Viral Shedding Rate Reduction from Baseline</b>	<b>-42%</b>	<b>-39%</b>	<b>-52%</b>
p-value versus baseline <sup>(3)</sup>	0.02	NS	0.03
p-value versus placebo <sup>(3)</sup>	NS	NS	NA

NS = p>0,05; (1) Wilcoxon Rank Sum test vs. placebo; (2) Log Rank Test; (3) Poisson mixed effect model with empirical variance

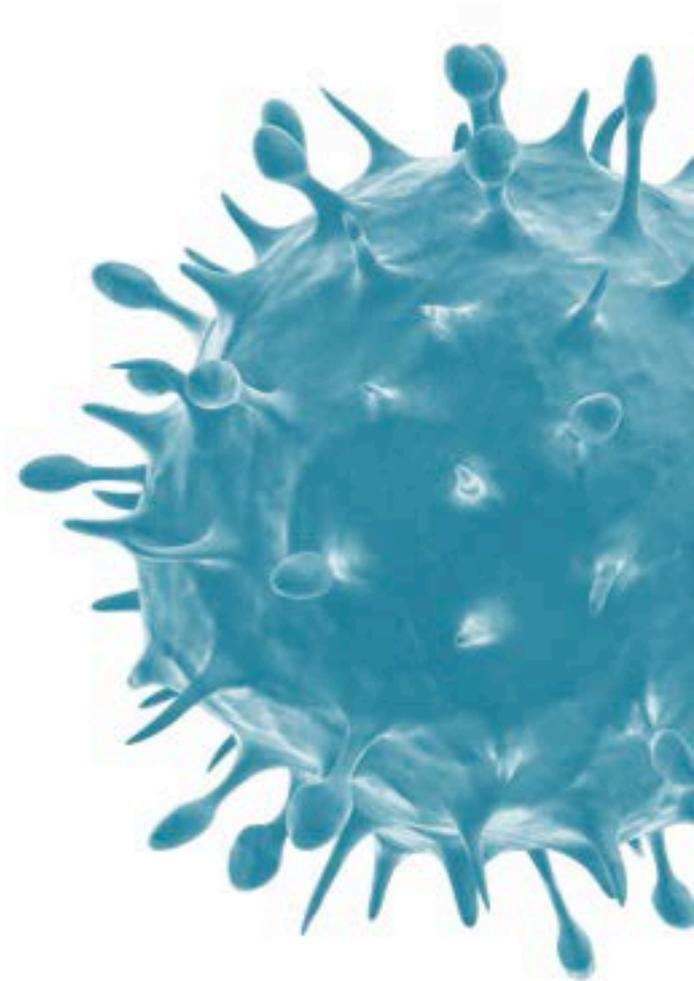
# GEN-003 Phase 3 on Track to Start by End of 2017\*



# GEN-003 Strongly Positioned Ahead of Phase 3

- Significant efficacy at expected Phase 3 primary endpoint at Phase 3 dose, using Phase 3 formulation
  - ~50% fewer days with genital lesions; fewer and shorter genital lesion outbreaks;
- GEN-003 Phase 3 program on track to commence in 2017\*
- Potential new cornerstone treatment for patients with genital herpes
  - Profile of durable effect on disease with convenient dosing regimen resonates with large, highly dissatisfied patient population
  - Potential to be first new treatment option in more than 20 years

# Q&A



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