ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

HSV-2 Phase IIa results
May 2017
Wayne Paterson
CEO
Admedus

Disclaimer

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

This presentation is the property of Admedus Immunotherapies Ltd ("AI"). No part of this presentation may be reproduced or transmitted in any form or by any means without direct permission in writing from AI. This presentation is not and does not constitute an offer, invitation or recommendation to subscribe for, or purchase any security and neither this presentation nor anything contained in it shall form the basis of any contract or commitment.

This presentation does not constitute an offer, solicitation or invitation in any, state or jurisdiction anywhere, or to any person to whom, such an offer or sale would be unlawful. This presentation is not intended as an offer, invitation, solicitation or recommendation with respect to the purchase or sale of any security in the United States or to any person to whom it is unlawful to make such an offer, invitation or solicitation. Reliance should not be placed on the information or opinions contained in this presentation. This presentation does not take into consideration the investment objectives, financial situation or particular needs of any particular investor. Any decision to purchase or subscribe for securities in Admedus must be made solely on the basis of the information contained in the public domain and if necessary after seeking appropriate financial and legal advice.

No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this presentation. To the maximum extent permitted by law, AI and its affiliates and related bodies corporate, and their respective officers, directors, employees and agents disclaim any liability (including, without limitation, any liabilities arising from fault or negligence) for any loss arising from any use of this presentation (or its content) or otherwise arising in connection with it. AI's forward-looking statements, intentions, forecasts, prospects, returns, expectations, statements in relation to future matters or other forward looking statement contained in this presentation may involve significant elements of subjective judgement and assumptions as to future events which may or may not be correct. There are usually differences between forecast and actual results because events and actual circumstances frequently do not occur as forecast and these differences may be material. They are based on a number of estimates, assumptions that are subject to business, scientific, economic and competitive uncertainties and contingencies, with respect to future business decisions, which are subject to change and, in many cases, are outside the control of AI and its directors. Neither AI nor its directors give any assurance that the forecast performance in the forecasts or any forward-looking statement contained in this presentation will be achieved.

Presentation Summary

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

- Introduction
- Study overview
- Phase IIa results
- Study conclusions
- Next steps
- Immuno-oncology programs
- Summary

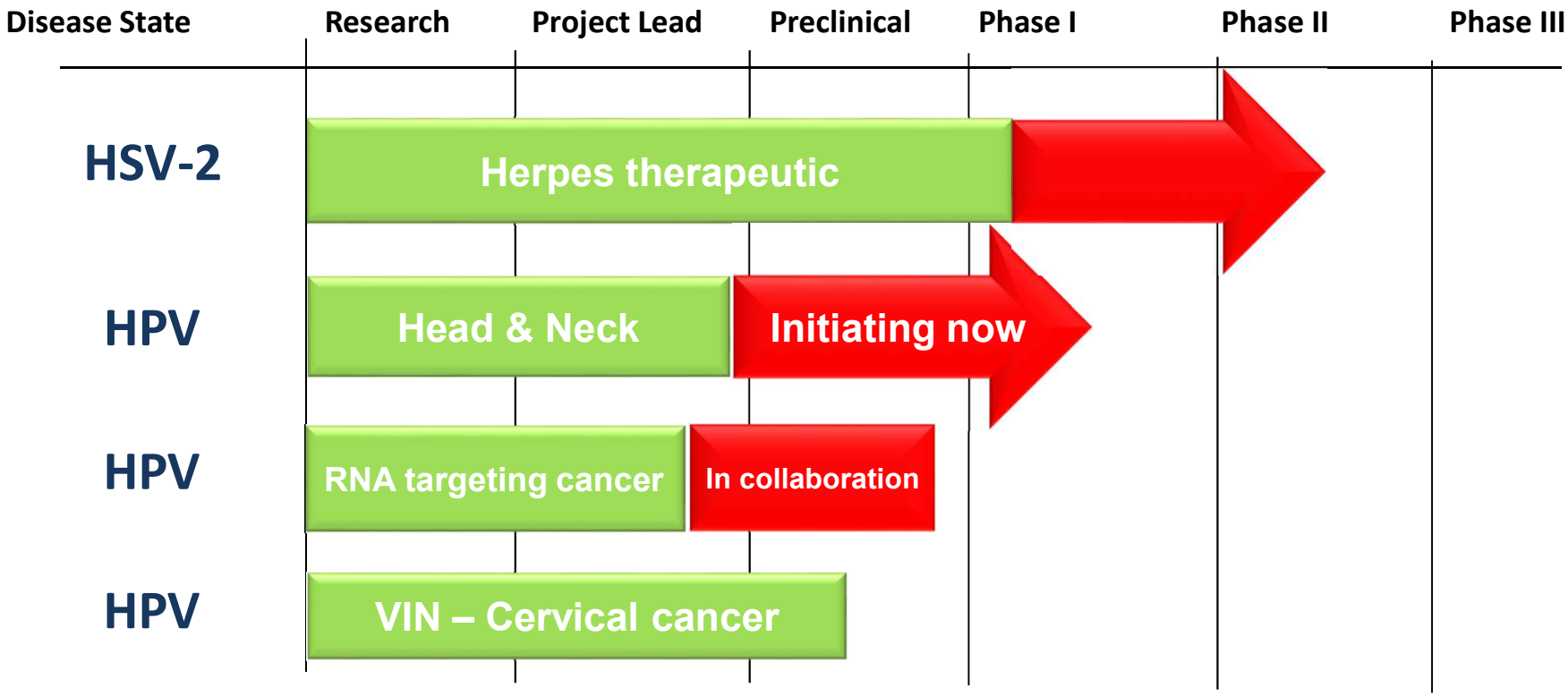
Introduction

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

- RNA & DNA therapeutic development Company
- Based around core technology initially developed by Prof Frazer
- Core IP covering ubiquitin with optimised RNA/DNA

Company pipeline

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

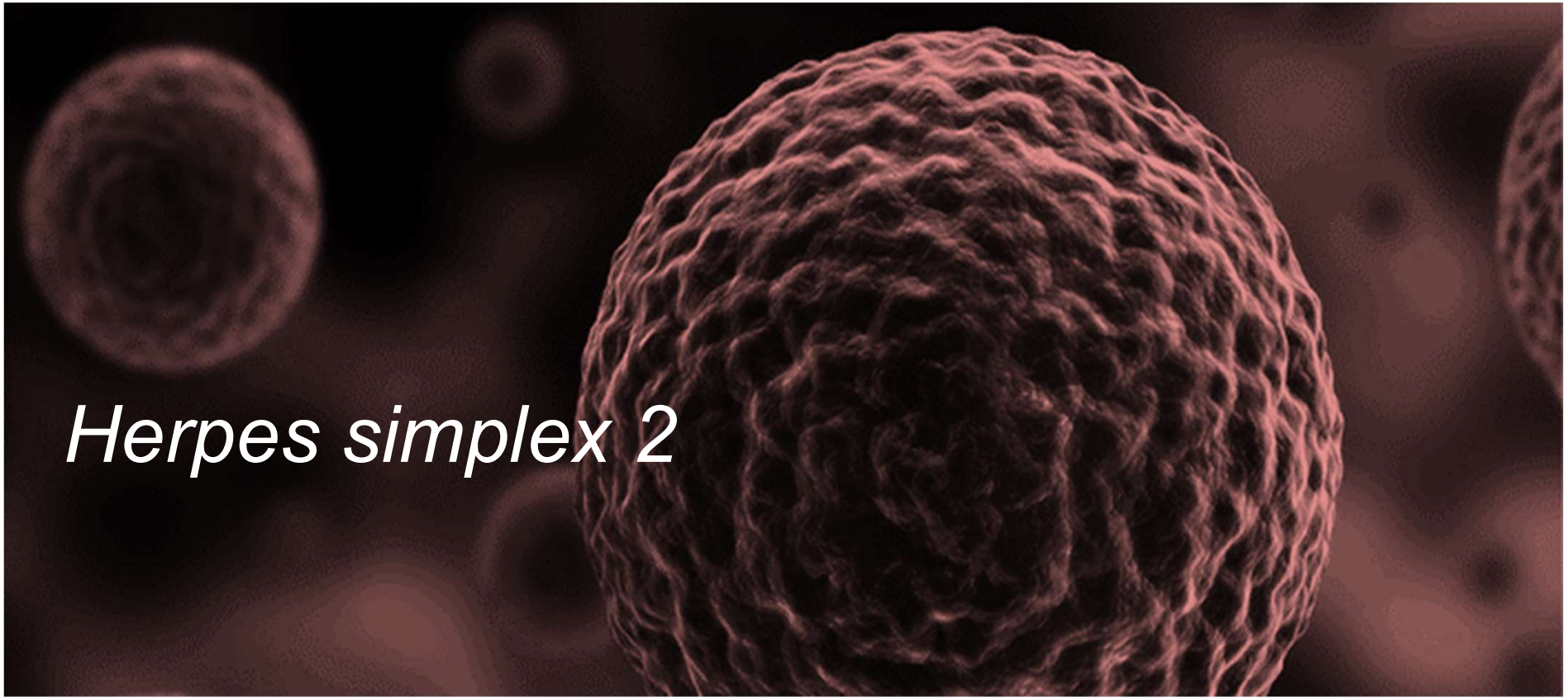


Target diseases

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

Program	Target Market Size
RNA immuno-oncology	Multiple oncology applications
HPV Head & Neck in combination with checkpoint inhibitor	85,000 new cases p.a. HPV related cases rapidly increasing
HPV VIN patients	7 cases per 100,000 women pa Fourfold increase in cases between 1973 and 2000
HSV-2	490 million people infected No effective vaccine on market

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS



HSV-2 Phase I study summary

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

The HSV-2 Vaccine has 3 components

- COR-1A: plasmid DNA coding for optimized glycoprotein D, surface protein of HSV-2 (gD2)
- COR-1B: plasmid DNA coding optimized gD2 fused to ubiquitin
- Buffering solution

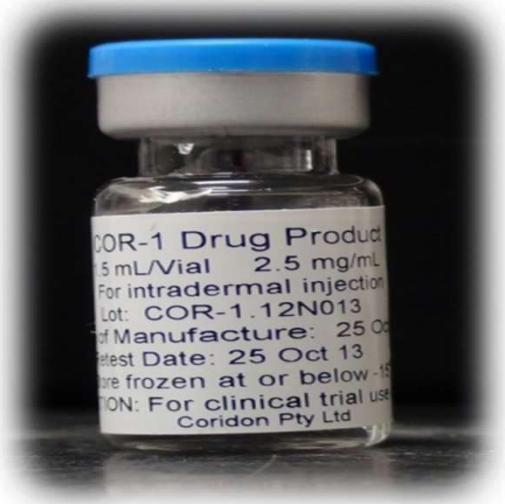
- Plasmids formulated in 1:1 ratio with the buffer solution
- Manufactured under cGMP by VGXI, Texas USA
- Stored frozen at -20C in 2ml vial
- Delivered by standard needle and syringe by intradermal injection
- No additional adjuvant added

HSV-2 Phase I study summary

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

Phase I study design

- Safety, Tolerability & Immunogenicity Endpoints
- Open Label, Dose Escalation
- 20 healthy sero-negative 18 - 45 yrs old subjects
- Doses: 10µg, 30µg, 100µg, 300µg, & 1mg (2 x 500 µg)
- Intradermal injections (Days 0, 21 and 42)
- 3 week EOS visit after 3rd dose



Phase I results

- Study achieved primary endpoint for safety and tolerability of ID injection
- Results showed T-cell responses in 95% (19 of 20) study subjects
- Local DTH reactions clearly dose dependent

HSV-2 Phase IIa study summary

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

Total 44 HSV-2 positive patients enrolled

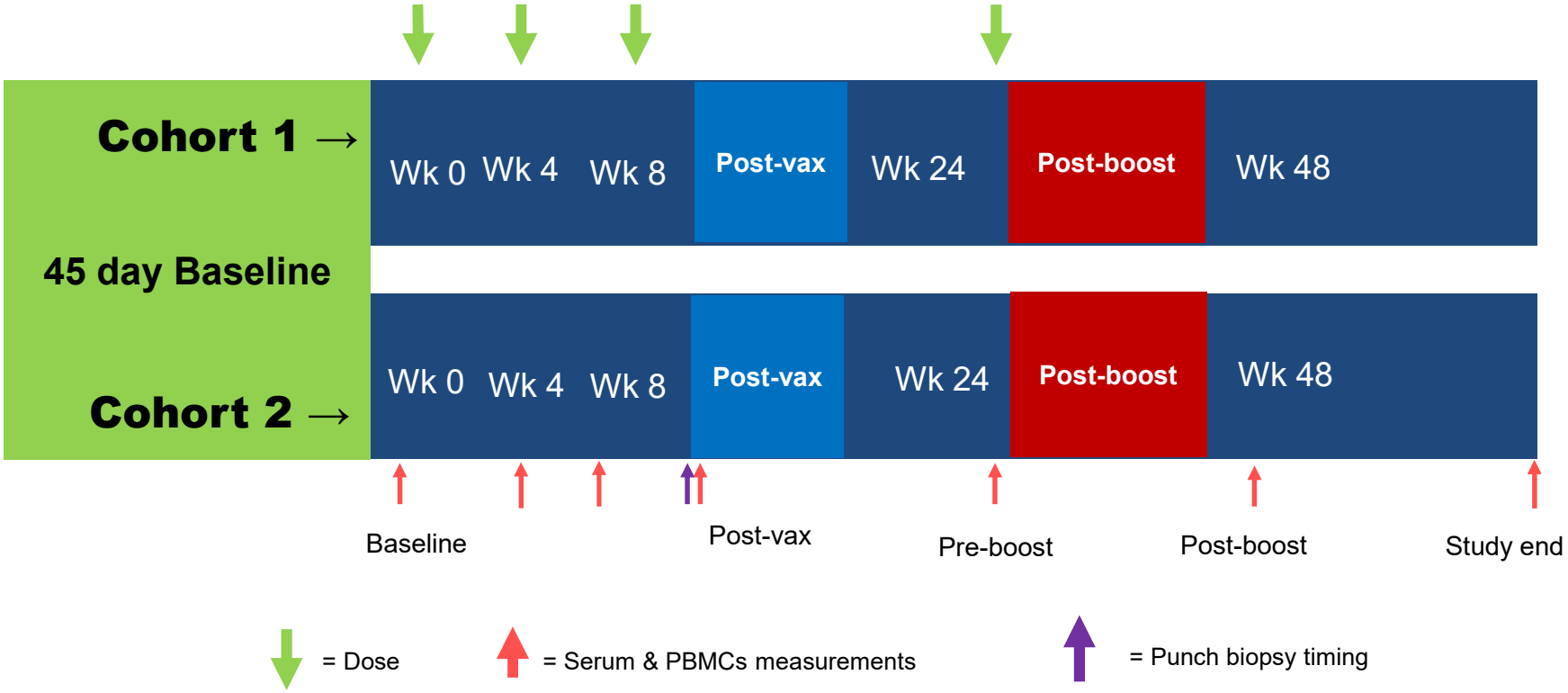
- **Ratio 3:1 vaccine to placebo\vaccine dose 0.5mg per injection**
- **Two injections of 500mcg (1.0mg total) per vaccination**
- **Three vaccinations plus a booster after 6 months**

Two study cohorts:

- **Cohort one: one injection in each (left and right) forearm per dose**
- **Cohort two: both injections into the left forearm within close proximity**
- **Samples from daily swabbing, blood samples and skin biopsies**

HSV-2 Phase IIa study design

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS



HSV-2 Phase IIa study endpoints

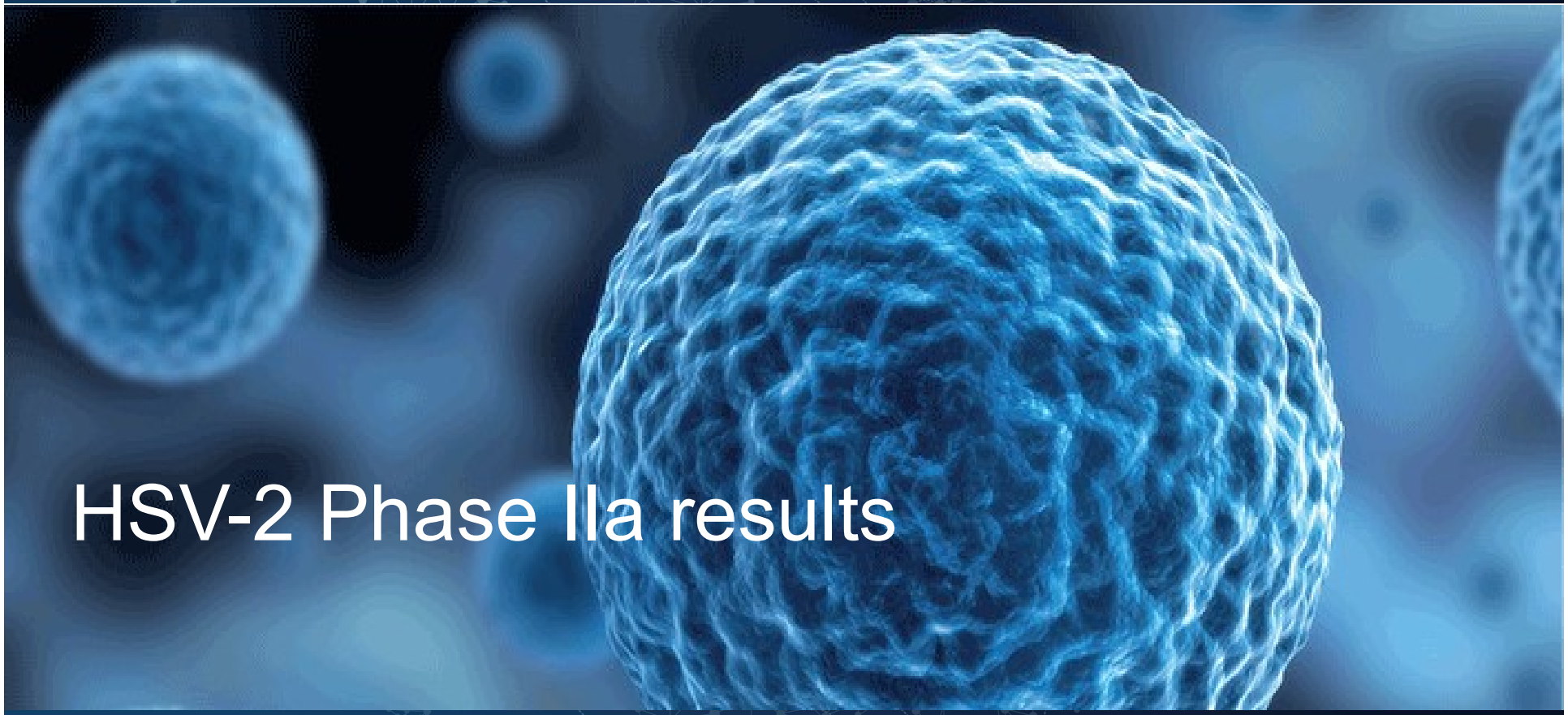
ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

Primary endpoint:
To evaluate the safety and tolerability of two injection regimens of the HSV-2 DNA vaccine (COR-1) compared with placebo, administered by intradermal (ID) injection as three, 4-weekly doses followed by a 6-month booster to otherwise healthy, symptomatic Herpes Simplex Virus type 2 (HSV-2) positive subjects

Secondary endpoint:
To investigate the impact of COR-1 on the induction of an antigen specific humoral and/or cell mediated immune response against envelope glycoprotein D of HSV serotype 2 (gD2)

Exploratory endpoints:
- To evaluate the effect of COR-1 on HSV-2 shedding
- The incidence of symptomatic HSV-2 genital recurrence; and
- The nature of immunological responses to COR-1, including local tissue responses

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS



HSV-2 Phase IIa results

Follow us on

www.admedus.com

Safety data summary

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

- Total of 44 patients enrolled
- Study primary endpoint met with no safety issues
- Dosed with 1.0mg of vaccine or placebo (ratio 3:1)
- Vaccine = COR-1 (n=34)
- Placebo = buffer solution used to formulate vaccine (n=10)
- 8 withdrawals
- None due to vaccine
- No serious adverse event (SAE) reported due to vaccine
- One moderate adverse event (AE) reported related to vaccine
- All AEs related to, probably or possibly related to vaccine were mild

Lesion outbreaks

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

- Lesion outbreaks measured based on self-reported observations (therefore a subjective measure)

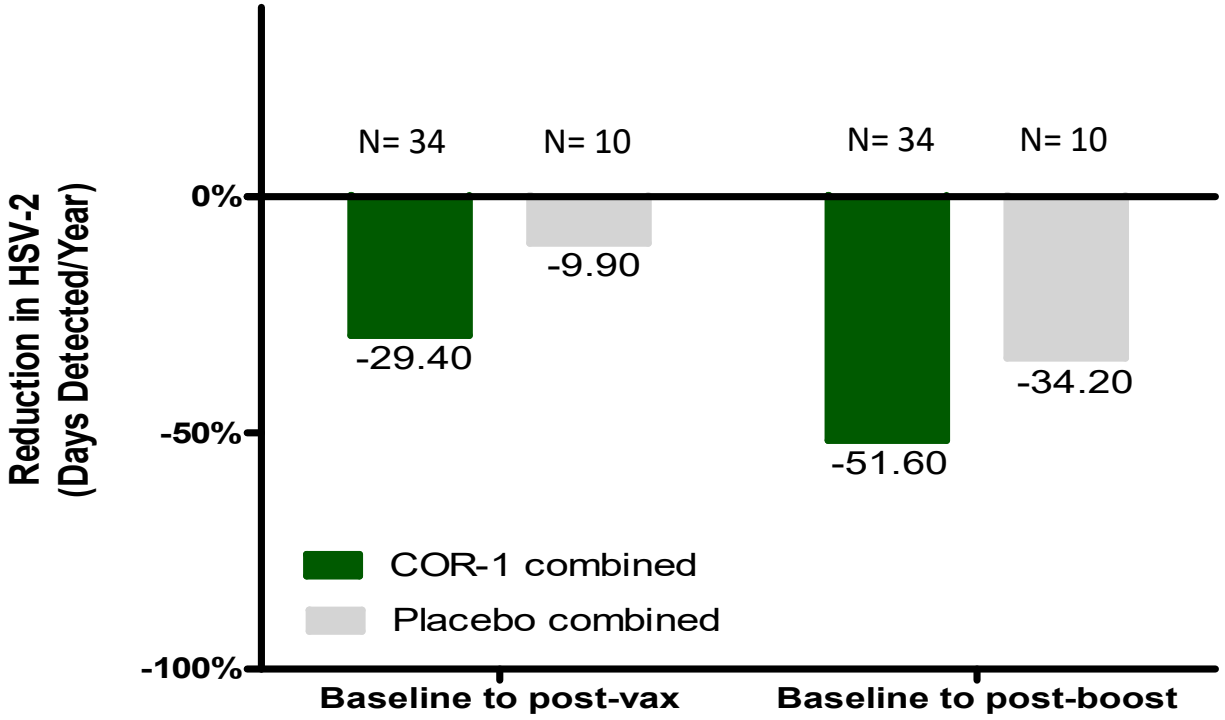
  Confirmed by clinical trial site investigator and through lab testing

- Incidence of lesion outbreaks similar in vaccine and placebo groups
- Percentage of subjects with no outbreaks post vaccination in the vaccine group (29.4% n= 10) compared to the placebo group (10.0% n=1)
- No viral load differences observed between vaccine and placebo subjects at any time during the study

Viral shedding data

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

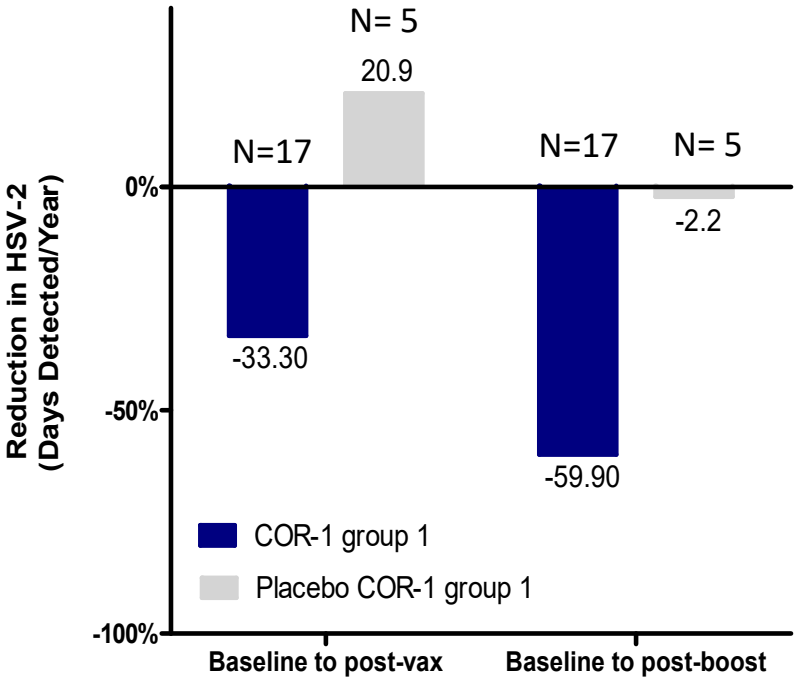
Combined cohort 1 & 2 and combined placebo viral shedding data



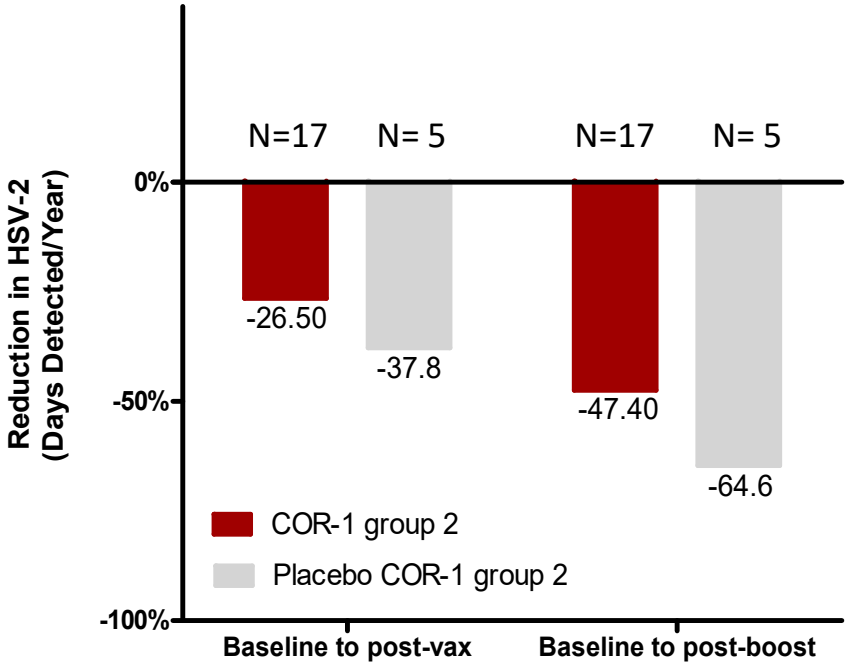
Viral shedding data

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

Cohort 1



Cohort 2

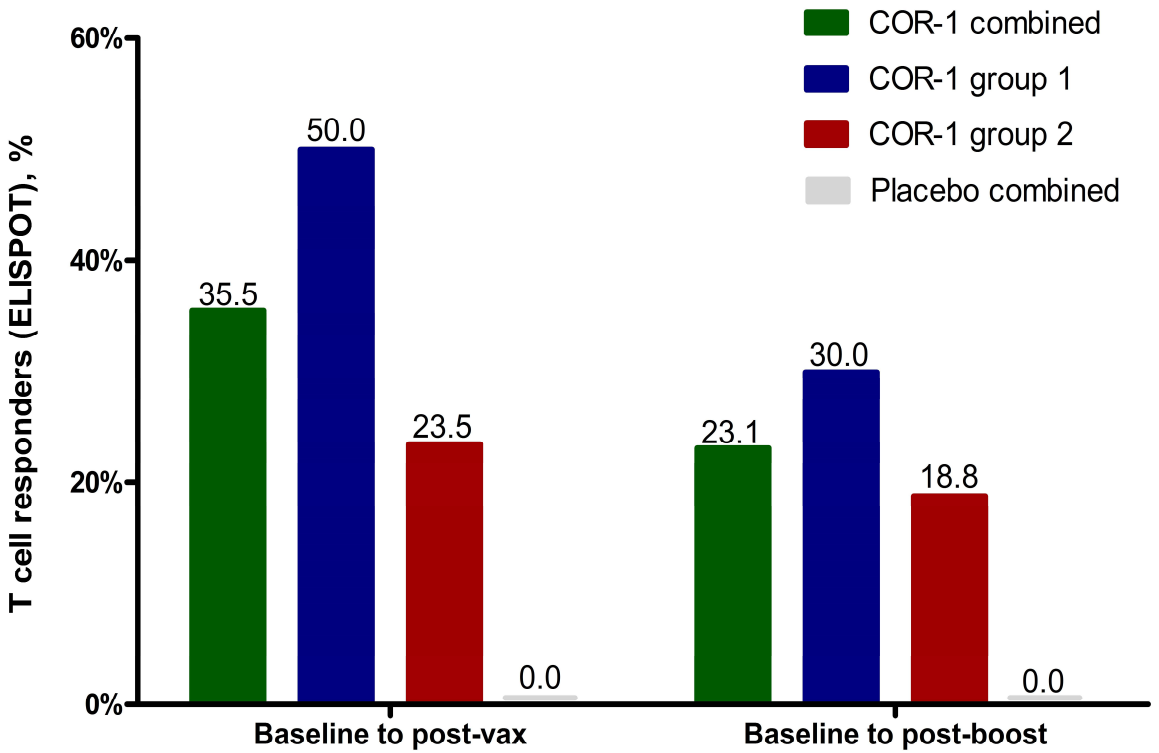


T-cell response data

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

Conclusion:

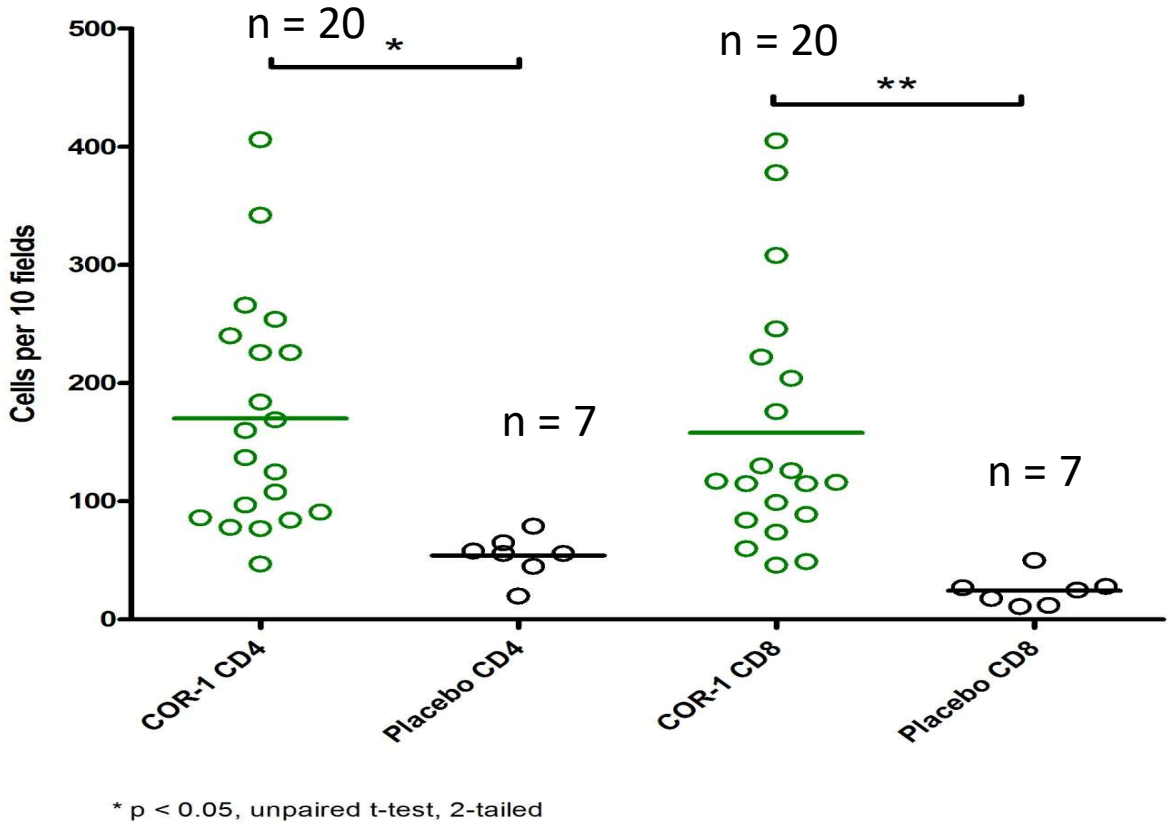
- Strongest T-cell response in 50% of cohort 1 patients
- Highest post initial vaccination
- No T-cell response seen in placebo groups
- Vaccine therefore having T-cell activation response



Injection site tissue analysis

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

- Voluntary punch biopsy taken 48 hours after third dose of COR-1 or placebo and cell surface markers analysed by Immunohistochemistry
- Biopsy measuring local tissue for CD4 and CD8 cells
- Significant difference in number of CD4 and CD8 cells for vaccine subjects compared to the same cell types in placebo subjects



* p < 0.05, unpaired t-test, 2-tailed

Time to recurrence

	Median time to first recurrence
Vaccine	6.6 months
Placebo	1.2 months

- Recurrence is the time before another HSV-2 related outbreak and related symptoms
- Vaccine groups had much longer time to recurrence compared to placebo

Phase IIa data summary

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

- Study primary endpoint met - no safety issues with the vaccine
- Results indicated that the vaccine strongly stimulated cellular activity
- Supported by injection site biopsy data showing elevated CD4 & CD8 cells in skin tissue
- Viral shedding data shows greater reduction in viral shedding data in vaccine study subjects compared to placebo group
- No significant difference between placebo and vaccine groups for viral outbreaks
- Longer time to recurrence in vaccine group compared to placebo group

HSV-2 path forward

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

Next step in seeking to improve efficacy by:

- Trialing higher does in a Phase IIb
- Analysing other intradermal delivery methods
- Continuing to explore complementary approaches to improve immune response

Immuno-oncology

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

Follow us on

www.admedus.com

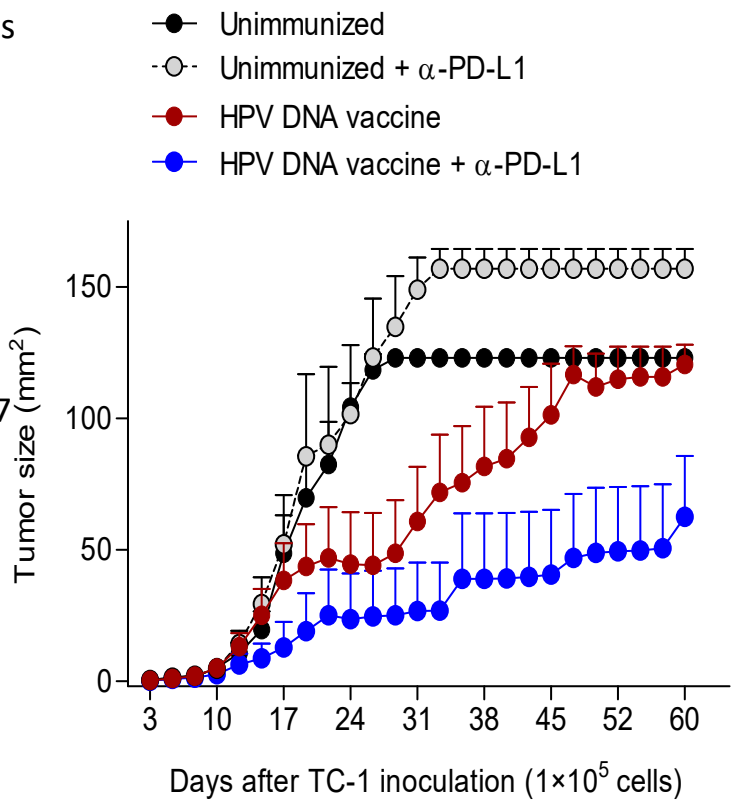
Immuno-oncology

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

- Core RNA & DNA technology platform for multiple IO targets
- Initial programs against HPV related cancers
- Targeting E6 & E7 antigens

Multiple approaches:

- RNA immuno-oncology collaboration progressing well
- HPV Head & Neck cancer Phase Ib study due to start in 2017
- In combination with checkpoint inhibitor
- Also therapeutic for cervical cancer ready for Phase Ib
- Recent publication showing synergy with HPV vaccine and checkpoint inhibitors
- *J of Immunotherapy Vol. 40, No. Feb/Mar 2017 pg 62-69*

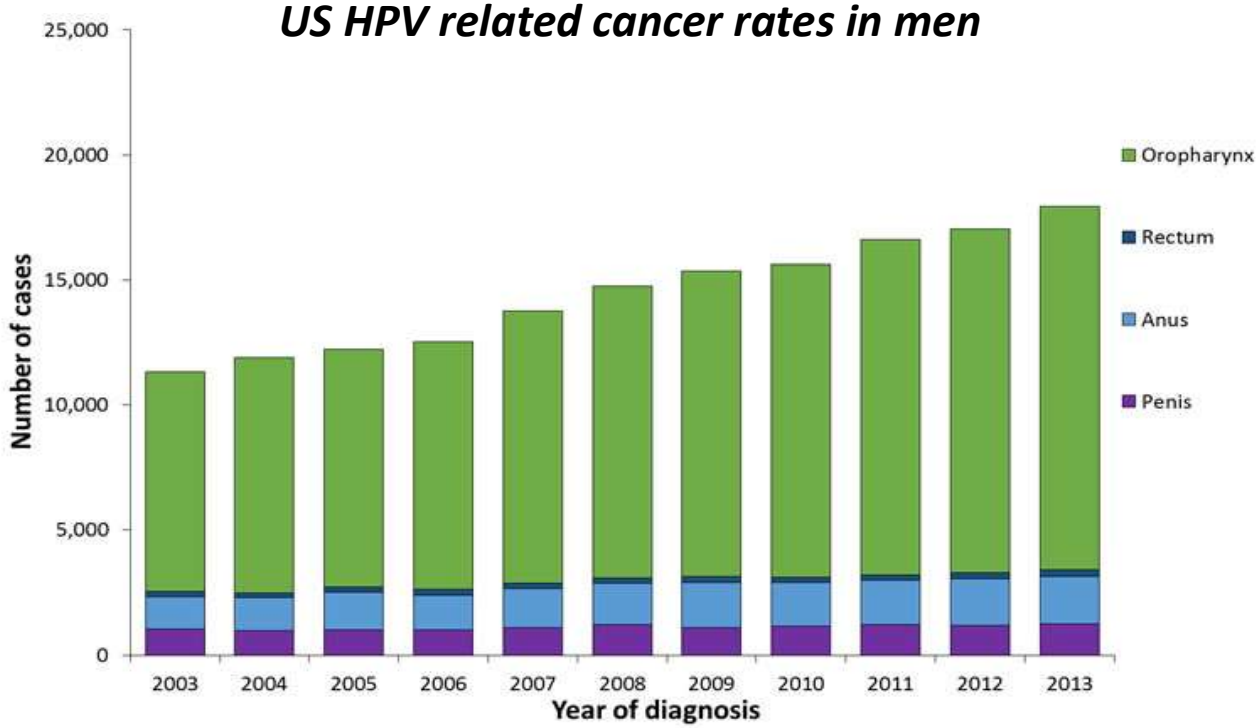


Initial focus HPV related cancer

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

- Rates of HPV related cancer increasing
- In the US the rates of HPV related cancer is increasing (10.8 per 100k to 11.7 per 100k 2008-2012
- Admedus multiple programs targeting HPV related cancers

US HPV related cancer rates in men

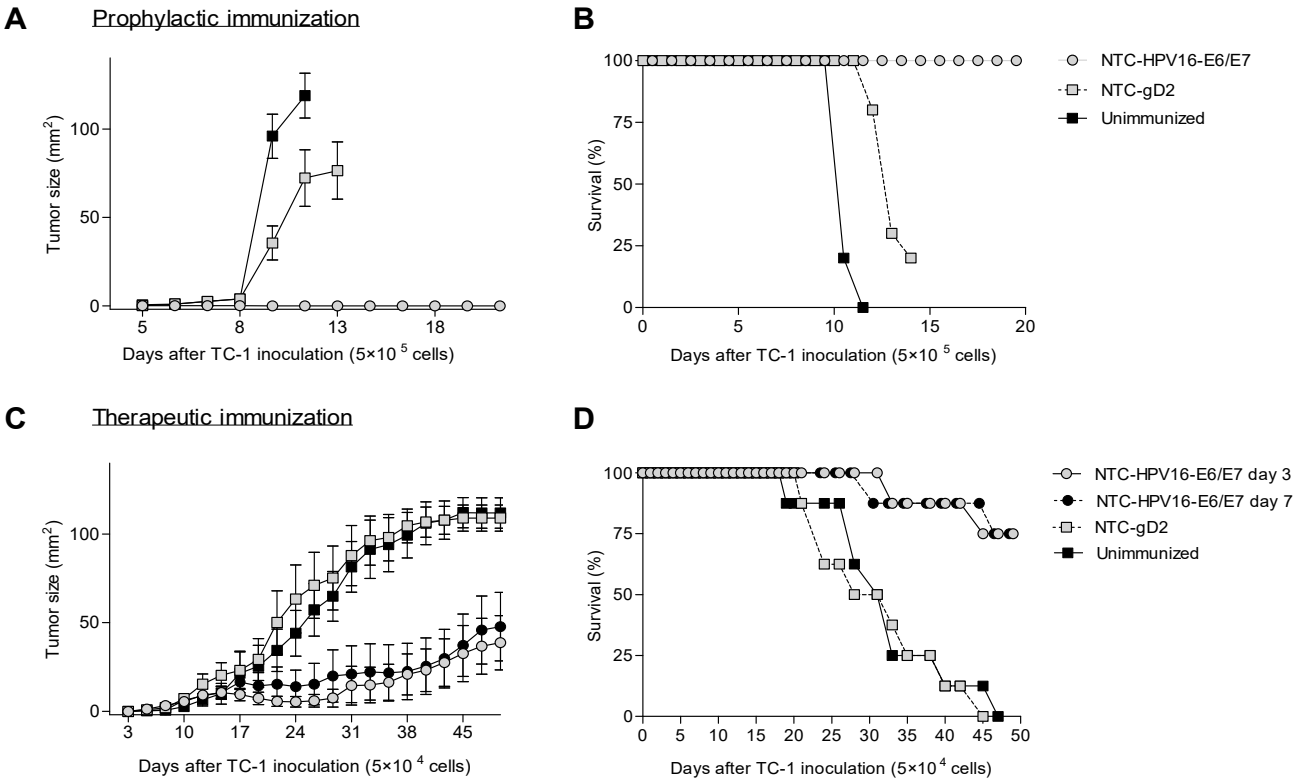


Reproduced from the CDC website

Immuno-oncology preclinical data

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

- Pre-clinical data in the TC-1 HPV translated mouse model
- DNA vaccine given 3 & 7 days post with clear benefit in survival rates and tumour size reduction



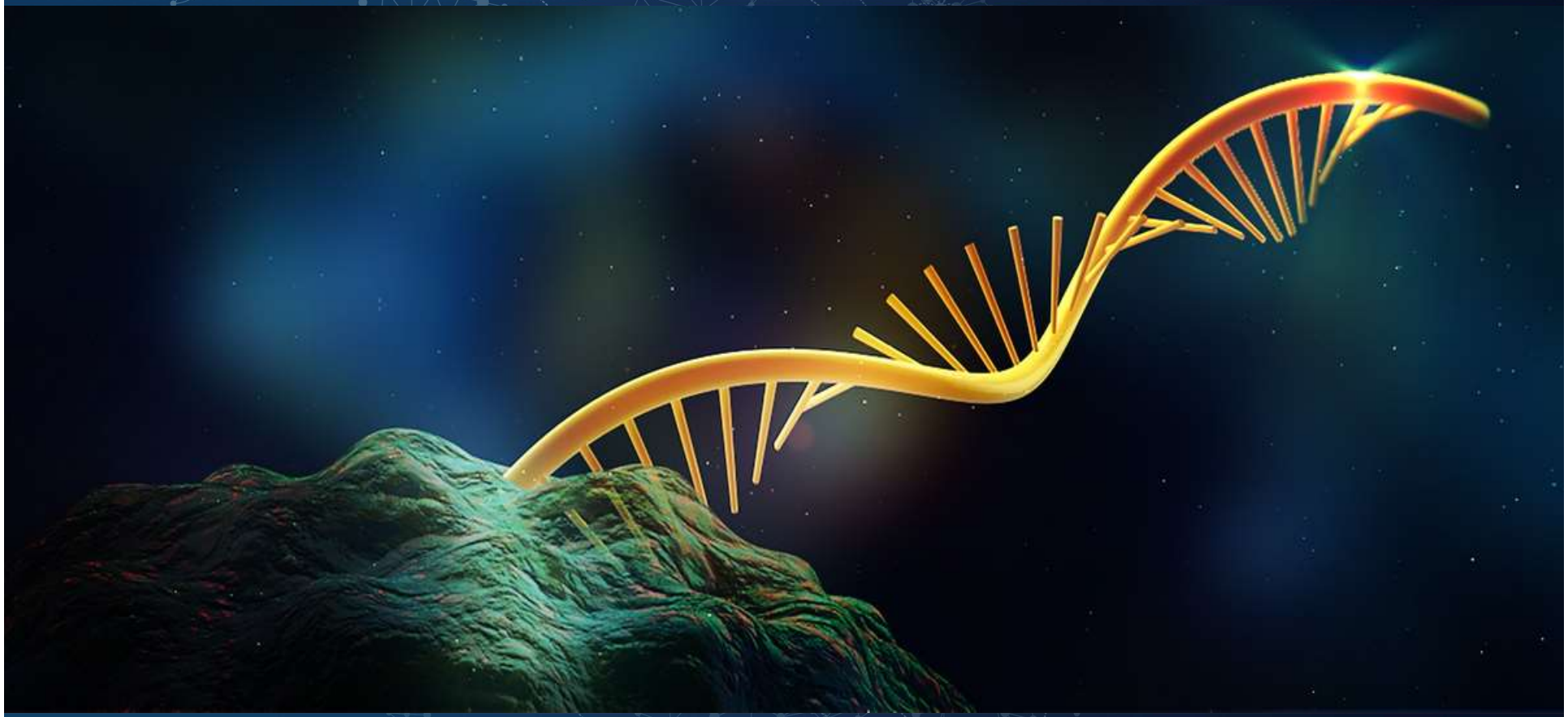
Head & Neck Phase I study

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

- Initiating the study as soon as possible
- Work in conjunction with oncologist in Brisbane
- Two part study
- Part one – HPV safety in remission HPV head & neck patients
- Part two – safety in later stage HPV head & neck patients
- Primary endpoint of safety and secondary markers around immune response
- Clinical trial of vaccine in combination with a PDL-1 inhibitor based on strong pre-clinical data

RNA Program

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS



Follow us on

www.admedus.com

RNA therapeutic vaccine program

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

- Platform for RNA therapeutic targeting antibody & T-cell activated responses
- Can be applied to multiple RNA delivery technologies
- Initial program targeting HPV in collaboration with RaNA Therapeutics
- Program using a combination of the two Company's technologies
- Using lipid nanoparticle encapsulation technology
- Initial data has shown clear antibody and T-cell responses
- Initial animal studies in 2017 in TC-1 HPV cancer model

Company summary

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

- Results from HSV-2 Phase IIa shows initial T-cell responses
- Next steps to further develop the HSV-2 vaccine and improve patient responses
- Have initiated the HPV head and neck Phase Ib study
- Have ongoing RNA collaboration with RaNA targeting HPV

Company milestones

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

- Initiating Head & Neck Phase I clinical study
- First patient dosed in Head & Neck study
- Final Head & neck data
- Initial RNA animal data
- Improved HSV-2 delivery

Next Steps

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

- Review all external funding options
- Prioritize the multiple portfolio opportunities
- Review structural options
- Continue developing program plans
- Streamline development timelines / resource model

ADMEDUS
INNOVATIVE HEALTH SOLUTIONS

Wayne Paterson
CEO
Admedus Ltd (ASX:AHZ)

admedus.com