



ASX RELEASE

28 November 2008

Company Announcements Platform
Australian Stock Exchange
Level 4
20 Bridge Street
SYDNEY NSW 2000

By e-Lodgement

Dear Sir/Madam

AGM PRESENTATION

Please find attached a copy of the presentation given to shareholders at the 2008 Annual General Meeting of Imugene Limited (ASX: IMU) this morning in Sydney.

Yours faithfully
IMUGENE LIMITED

Julie Foster
Company Secretary

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IMUGENE LIMITED

Advanced Vaccine Technologies
Disease control in pigs and poultry

Annual General Meeting
28 November 2008

Dr Warwick Lamb
Managing Director





Summary

- **Developer of Pig & Poultry vaccines**
- **Platform adenoviral vector delivery of desired antigens or cytokines**
- **Fowl Adenovirus & Porcine Adenovirus**
- **Patents granted in major regions (US & Europe)**
- **5 vaccines through proof of concept**
- **3 vaccines currently in animal trials**
- **3 additional vaccines ready for animal trials**
- **Development strategy on track**



Background to Imugene

- **An early stage developer of adenoviral vaccines**
- **Spent 3 years improving science & patents**
- **Has completed several proof of concept trials, mostly in the US**
- **Laboratory at La Trobe Uni – Melbourne, Australia**
- **Products for large markets**
 - poultry – 50 billion birds produced pa
 - pigs – 1 billion pigs pa
 - Value of markets >U\$4 billion
 - individual vaccines sales target >U\$100m



2008 in review

- **Proof of concept achieved for two big animal health disease targets**
 - **Coccidiosis vaccine for broiler chickens**
 - **PRRS vaccine for pigs**
 - **POC achieved in animal trials – high dose of disease used to ‘challenge’ animals**
- **Progressed**
 - **US Regulatory processes**
 - **Commercial Development Strategy**
- **Patents – progress in expanding coverage**



Vaccine Range

Proof of Concept – achieved

– Poultry

- **Coccidiosis**
- **Avian Influenza – H5N1**
- **Gamma Interferon – immune & growth enhancer**

– Pigs

- **Porcine Reproductive and Respiratory Syndrome**
- **Classical Swine Fever**



Vaccine Range

Proof of Concept – required

– Poultry

- **Infectious Bursal Disease**
 - Classical strain
 - Very virulent Strain
- **Chicken Anemia Virus**
- **Avian Influenza - H7 and H9**

– Pigs

- **Porcine Circovirus**
- **Cytokine based immune system & growth enhancer**



Benefits of the Adenovirus

- **Flexible Administration – cost effective**
 - water, aerosol, in ovo, injection
- **Inexpensive to manufacture**
- **Delivers key genetic information**
- **Does not cause disease**
- **Ubiquitous in poultry and swine**
- **Safe - no residue**
- **Limited or no shedding**
- **No genetic modification to animal**
- **Marker vaccine (DIVA)**
- **Platform delivery system for large product portfolio**



Patents

- **PAV patent family**
 - **Granted in US, Europe, China, Australia & others**
 - **Initial patents expiry 2018**
 - **Successfully underwent Interference in the US – claims interfered with VIDO & Uni of Saskatchewan – resulted in Imugene receiving assignment of patents**
- **FAV patent family**
 - **Granted in US, Europe, Australia & others**
 - **Initial patents expiry 2014**
- **Additional FAV and PAV patents recently filed to extend product life**



Imugene's Poultry Vaccines

- **Coccidiosis – Broiler vaccine**

Initial Trial results – ABIC/University of Technology, Sydney

- **Blinded trial 24 groups of 20 broilers per group**
- **Successful groups had 2 oral doses (day 1 and 14)**
- **Emeria maxima challenge on day 28**
- **The best performing vaccine group's results are:**

Lesion scoring:

74% of birds had a score of 1 lesion (control group 6%)

11% of birds had a score of 3 lesions or more (control group 44%)

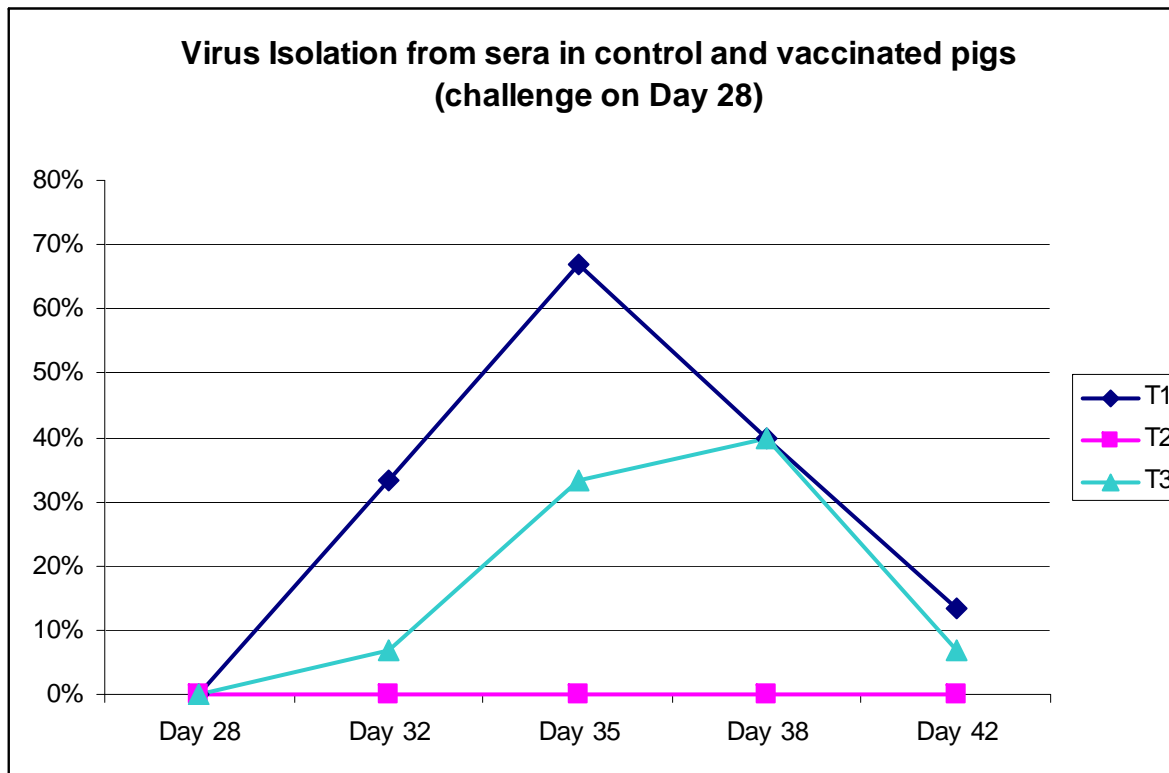
Oocyst scoring:

Group max daily oocyst count <68,000 (control >350,000) – reduction 80%

Group total oocyst count <139,000 (control group >668,000) – reduction 79%

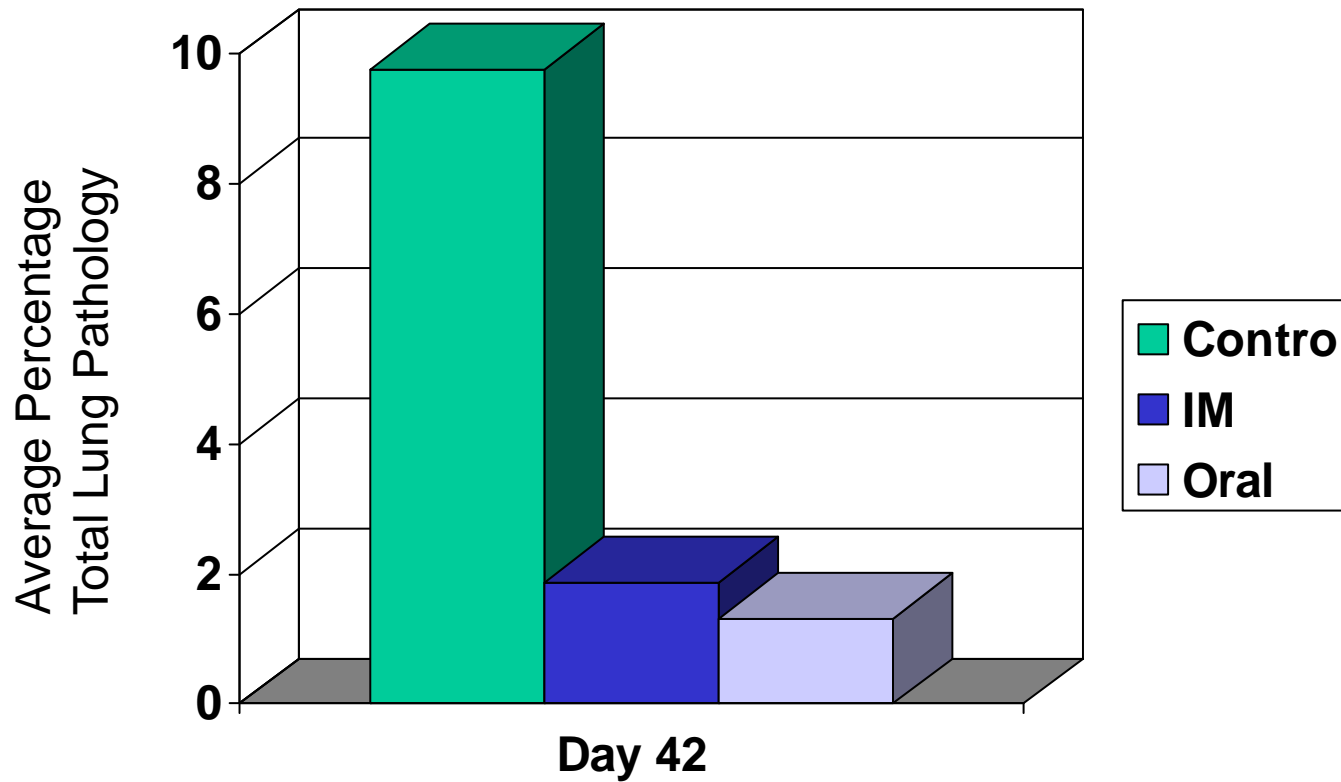
PRRS Trial

- 3 groups, 15 piglets (21 day old)



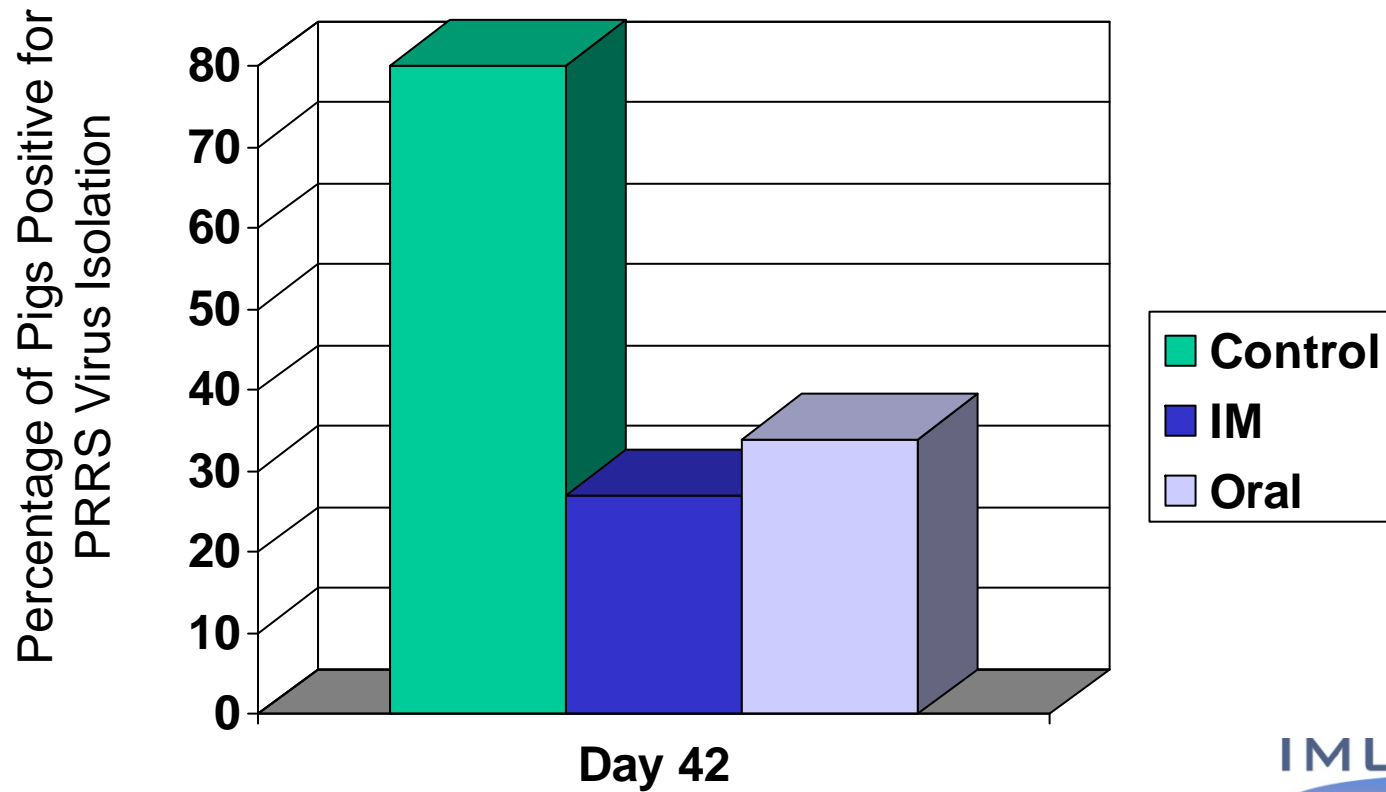
PRRS Trial

Average Lung Scores



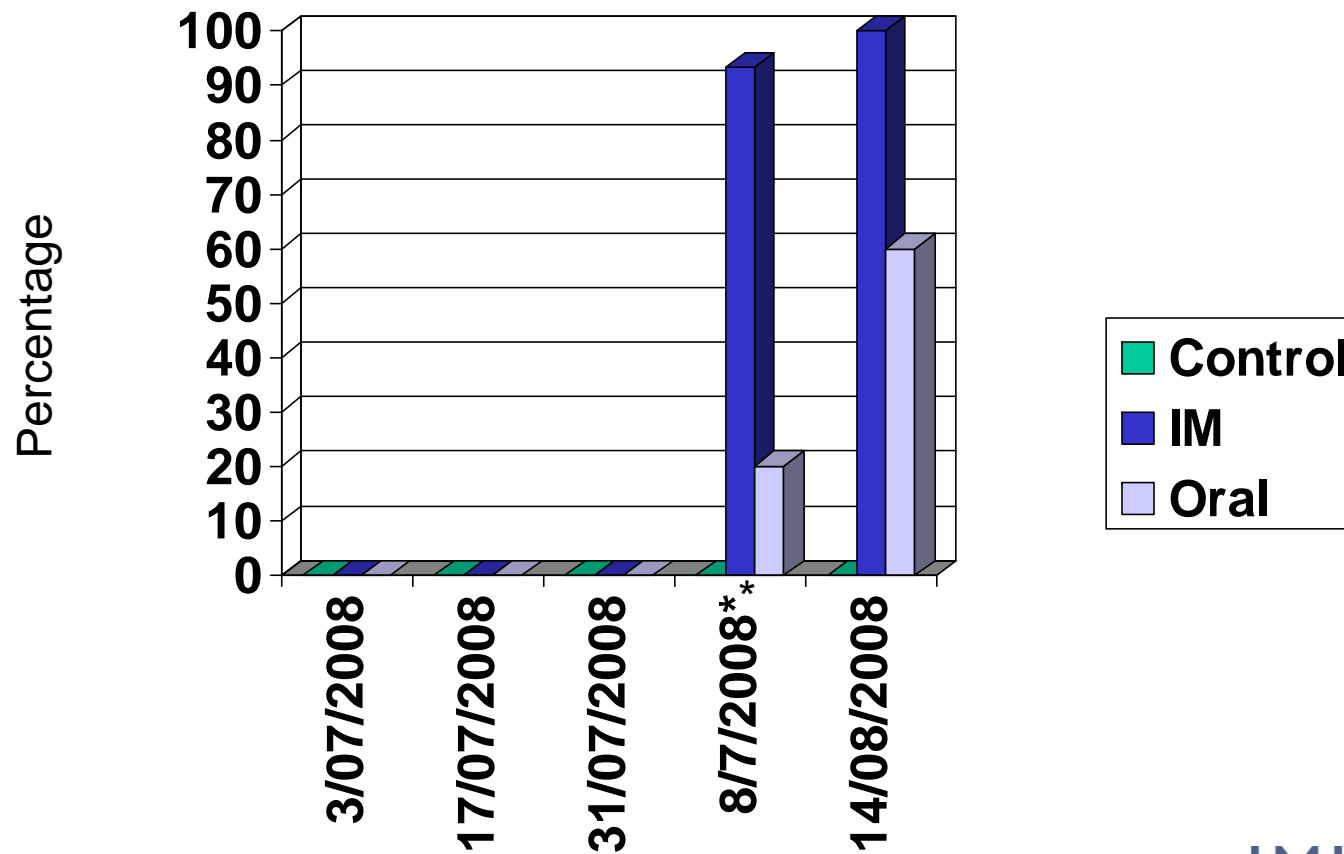
PRRS Trial

PRRS Virus Isolation from Pig Lungs



PRRS Trial

Percentage of PRRS Antibody Positive Pigs



* Day of PRRSV challenge



Imugene's Poultry Vaccines

- **Broiler Productivity Enhancer (gamma interferon)**
 - **Significant Trial results - rFAdV-CMV-IFN γ vaccine**
 - **Double Blinded 900 broiler trial (group size 50 birds):**
 - **Feed conversion improved by up to**
 - 11.7% compared to Ross Index & 9.2% compared to medicated control group
 - **Weight gains improved by up to**
 - 15.6% compared to Ross Index & 13.75% compared to medicated control group
 - **Effective with or without antibiotics in feed**
 - **18 groups – doses ranged from 2 dose to 4 dose – Day 0 to day 28**
 - **Dosage & stability – required**
 - **Manufacturing – production technique required (cell line, eggs)**

Avian Influenza

- **Proof of concept H5N1 – in ovo & oral – passed in 2007**
- **Additional suite – H7 & H9 – constructs available for trial**
- **Diagnostic – matched to each vaccine**
- **H5N1 trial results**
 - **Conducted by Benchmark in the US**
 - **2 dose group (in ovo & oral at day 7) challenge at day 21**
 - 100% survival (8 birds) control group 12.5% survival (1 out of 8 birds)
 - **1 dose group (in ovo) challenge at day 14**
 - 82 % survival (9 out of 11 birds) control group 37.5% survival (3 out of 8 birds)
 - **Platform suitable to make vaccines against other avian influenza viruses**
 - **Heterologous challenge model (challenge – Asian Strain)**
- **Dosage, stability & manufacturing – required**



Infectious Bursal Disease

- **Recombinants made for 2 strains**
 - **Classical**
 - **Very virulent**
- **Freedom to operate with VP2 genes**
- **Vaccine candidates ready for trialling**
- **Proof of concept designed and approved**
- **Classical version - POC trials underway**



Chicken Anemia Virus

- **Recombinant constructed and verified in lab**
- **Vaccine candidates ready for trialling**
- **Freedom to operate**
- **Proof of concept trial designed and approved**
- **POC trials underway**

Porcine Circovirus - PCV

- **Recombinant constructed**
- **Laboratory verified**
- **Ready to proceed to trials**
- **First POC trial planned in US to complete 1st qtr 2009**

Corporate

- **Directors & management**
 - **Graham Dowland – Chairman**
 - **Warwick Lamb – CEO**
 - **Roger Steinepreis – Director**
 - **Mike Sheppard – Chief Scientific Officer**
- **Shares on issue** **143.6 m**
 - **Options – Dec 09, 25c** **4.3 m**
 - **Options – Mar 11, 20c** **3.0 m**
- **Ownership:**
 - **Board, management & their associates** **14 %**
- **No debt, Minimal overhead, Cash 30 Sep 08** **\$1.4 m**



Company Progression

- **Focus on proven products**
- **Alliances with International Industry**
 - **US & Europe**
- **Continue regulatory processes**
 - **Lab will focus on existing range**
- **Complete trials on range extension products**
 - **By 1st qtr 2009**
- **Commence evaluation of contract manufacturing for vaccine range**

The top banner of the slide features a blue background. On the left side, there is a blurred image of laboratory glassware, including beakers and test tubes. On the right side, there is a blurred image of a chicken. The word "Conclusion" is centered in white text.

Conclusion

- **Products meet demand in large global markets**
- **Large range of important vaccines – proved**
- **Commercial advantages based on platform vectors**
- **Secure patent position – being expanded**
- **International industry validation & interest**
- **Regulatory & manufacturing progression occurring**
- **Commercial Strategy Implementation on track**