

## Tuesday 18<sup>th</sup> October 2005 FOR IMMEDIATE RELEASE

# OBJ encouraged by preliminary Vaccine results

OBJ Limited (OBJ) announced today that it had received early results from the first phase of its transdermal or through-the-skin vaccine patch development program.

A through-the-skin Vaccine patch could provide a number of important medical benefits. The potential for self-administration without the need for trained staff or sterile conditions, could well emerge as the most important benefit.

The current study is being supervised by Dr Robin Jacob and conducted at Murdoch University's School of Veterinary & Biomedical Sciences in Western Australia. The pilot study was designed as an early proof of principle study. Vaccines are traditionally considered too large for non-invasive transdermal delivery.

The on-going project involves the administration of GLANVAC (™ Pfizer Australia), a 3 in 1 animal vaccine to young Merino wether lambs. In the first vaccination phase, 8 lambs were selected. Four lambs were vaccinated using traditional intramuscular injection techniques, and four other lambs using the OBJ transdermal drug delivery system.

Results of antibody analyses on blood samples taken prior to and 2 weeks following vaccination, suggest a small immunological response in the sheep treated with the OBJ Vaccine patch technology. The company believes that in light of the molecular size of the vaccine and the unfamiliarity of the ovine dermis, that these results are encouraging. The immunological effect of injection vaccination was stronger, however this was anticipated. The difference in efficacy between injection and Dermaportation will be used as a guide for optimising the Dermaportation delivery fields for vaccines and proteins. Additional results involving the secondary booster vaccination phase are expected later in the year.

The company plans to follow-up this initial vaccination study with an optimization program to improve the efficiency of the company's delivery solution for proteins and to explore how the OBJ technology may be configured for both human and animal epidermis.



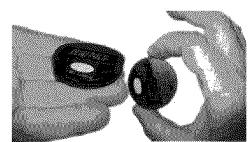
### **Background to the Announcement**

OBJ Limited is a drug delivery company, developing electronic "drug patch" technologies that allow drugs, therapeutic agents and cosmetic compounds to be delivered more effectively and more efficiently through-the-skin.

The company had previously announced a 600% increase in the rate of delivery of the drug caffeine and a 70% reduction in the delivery times for the anaesthetic drugs lignocaine and prilocaine hydrochloride.

More recently, it had demonstrated a 900% increase the delivery of the oncology drug 5-ALA and a doubling of the delivery of the drug diclofenac, as used in Voltaren Emulgel (Novartis Consumer Health Australasia Pty Ltd).

OBJ maintains a continuous drug patch and drug delivery testing program that includes a number of commercially significant anti-



inflammatory, anti-pain, anti-oxidant and anti-cancer drugs, as well as a number of cosmetic compounds. Illustrated above is the OBJ 'smart' coin-sized drug patch system currently under development to improve the drug delivery and efficacy of a range of existing commercial drugs.

#### Sustainable Benefits

Through-the-skin delivery of drugs, hormones, vitamins, vaccines, anti-bodies and antiaging molecules provides economic, safety and efficacy benefits to the pharmacology, medical, veterinary and cosmetic industries. Cost reductions are achieved through self administration, reduced administration costs and regulatory costs with a corresponding increase in safety and patient compliance.

Side effects may be reduced in many cases by localized delivery and programmed delivery rates. Needle stick injuries and needle disposable problems can be eliminated while the reduction in the level of skill required for application can significantly reduce total cost of administration.

#### Independence of Results

OBJ contracts its drug and technology testing programs to independent and respected organisations, such as Western Australian Biomedical Research Institute, Western Australian Institute for Medical Research, Curtin University of Technology and Murdoch University,

The high level of independence and international accreditation means that the results attributable to OBJ's proprietary technology can be published and presented at major medical and scientific conferences and forums.

#### For more information:

Jeffrey Edwards

Phone: +61 9 944 33011 Mobile: 041 791 2211 E-mail: jedwards@obj.com.au