



Intra-dermal immunization: an alternative route for vaccine administration

Annecy, Les Pensières, April 7-9, 2008

Background

Increasing attention is focused on the classical intra-dermal (ID) route of vaccine administration because of possible advantages over the more common intramuscular (IM) or subcutaneous (SC) routes. This includes its dose-sparing ability in using a reduced volume of antigen which often produces immune responses equivalent to full doses in other tissues. New delivery methods for the ID route may simplify the logistics of administration, avoid needle dangers and drawbacks, or facilitate mass campaigns. The ID route has been used with great success for Smallpox, Tuberculosis, and Yellow Fever vaccines. Other licensed and investigational vaccines usually administered IM or SC have been studied, but with greatly varying degrees of success, including Hepatitis A and B, HIV/AIDS, seasonal and avian Influenza, Measles, Polio, Rabies, and many others.

The Mérieux Foundation is pleased to organize this meeting to focus on classical ID vaccination, by both traditional and new methods, while also touching on promising new technologies for other forms of cutaneous vaccination.

The Foundation welcomes invited scientists, immunologists, vaccinologists, representative from industry and international institutions to Les Pensières Conference Center, in Annecy, France, from 7 to 9 April 2008, to attend "**Intra-dermal immunization: an alternative route for vaccine administration**". Its purpose is to update the current status of ID vaccination, including its advantages and disadvantages compared to other routes of immunization, its application using new delivery systems, and its potential for routine and special immunization programs in both the developed and developing world.

The Conference's strategic objectives include:

- ⇒ **To disseminate information and debated questions on research evaluating current knowledge on ID immunisation.**
- ⇒ **To foster dialogue among different actors of the scientific and decisional communities involved in vaccinology.**
- ⇒ **To focus the discussions on research to obtain the best vaccine delivery route in view of reducing the volume, the dosage, the number of doses , and its potential impact on production capacity, and the cost.**

Monday, April 7, 2008

17h30-18h30	►Registration	
18h30-18h45	Welcome Address	C. LONGUET
18h45-19h15	Keynote lecture <i>The potential of intra-dermal delivery of vaccines to improve immunization in developing countries</i>	M. FRIEDE
19h45	►Welcome Dinner	

Tuesday, April 8, 2008

SESSION I	Basic aspects: anatomy, historical and clinical aspects, challenges, and immunology ►Chaired by: J.F. NICOLAS and S. SAELAND	
08h30-09h10	<i>Historical and clinical background on cutaneous vaccination</i>	B. WENIGER
09h10-09h30	Discussion	
09h30-09h50	<i>Intra-dermal delivery: the challenges, the pros and cons</i>	R.C. CHI
09h40-09h50	Discussion	
09h50-10h10	<i>Intra-dermal vaccination: mechanism of action</i>	MBM. TEUNISSEN
10h10-10h30	Discussion	
10h30-11h00	►Coffee Break	
11h00-11h20	<i>Immunological basis of the efficacy of intradermal vaccination</i>	D. KAISERLIAN
11h20-11h40	Discussion	

SESSION II	Different vaccine delivery technologies for Intra-dermal immunization ►Chaired by: D. ZEHRUNG and J. BIRCHALL	
11h40-12h00	<i>Jet injectors for ID delivery</i>	R. STOUT
12h00-12h20	Discussion	
12h20-14h00	►Lunch	
14h00-14h20	<i>Preliminary findings from intradermal delivery using the PharmaJet and Antares injectors</i>	G. de SOUZA BRITO A .KODEIRA
14h20-14h40	Discussion	
14h40-15h00	<i>Needle free injection</i>	M. KENDALL
15h00-15h30	Discussion	
15h30-15h50	►Coffee Break	
15h50-16h10	<i>Use of microneedles for cutaneous immunization</i>	R. COMPANS
16h10-16h25	Discussion	
16h25-16h45	<i>Patch technology</i>	G. GLENN

16h45-17h00	<i>Discussion</i>	
17h00-17h20	<i>Performance of existing technologies; risk, benefits and limitations</i>	P. LAURENT
17h20-17h40	<i>Discussion</i>	
19h00	► <i>Dinner</i>	

WEDNESDAY, April 9, 2008

SESSION III	Proven or promising antigens to be administered by intra-dermal route ► Chaired by: S. REED and E. TRANNOY	
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08h30-08h50	<i>HIV</i>	O. LAUNAY
08h50-09h10	<i>Discussion</i>	
09h10-09h30	<i>HBV</i>	F. FABRIZI
09h30-09h50	<i>Discussion</i>	
09h50-10h20	► <i>Coffee Break</i>	
10h20-10h40	<i>Rabies</i>	F.X. MESLIN
10h40-11h00	<i>Discussion</i>	
11h00-11h20	<i>Seasonal Flu</i>	M. SAVILLE
11h20-11h40	<i>Influenza vaccination by classical ID route, 1937-2007</i>	B. WENIGER
11h40-12h10	<i>Discussion</i>	
12h10-14h00	► <i>Lunch</i>	
14h00-14h20	<i>IPV</i>	R. SUTTER
14h20-14h35	<i>Discussion</i>	

SESSION IV	Intra-dermal vaccination from the perspectives of manufacturing, R&D philanthropy and regulation ► Chaired by: K. KOTLOFF	
14h35-14h55	<i>Industrial challenges</i>	A. ALARCON
14h55-15h10	<i>Discussion</i>	
15h10-15h30	<i>The Gates Foundation/PATH R&D initiative</i>	D. ZEHRUNG
15h30-15h45	<i>Discussion</i>	
15h45-16h05	<i>Regulatory aspects</i>	V. NAKAYAMA
16h05-16h20	<i>Discussion</i>	
16h20	► <i>End of the meeting</i>	