Developing Countries Vaccine Manufacturers Network

Improving vaccination for all people
Mission

• Enhance the quality and increase availability of vaccines produced in developing countries to protect people against known and emerging infectious diseases globally.
DCVMN manufacturers in 14 countries are where vaccines are needed: number of birth cohorts regionally (x1000)

Latin America: 10,793
Middle East Africa: 47,164
Asia Pacific: 61,196

Members as of Jan 2013
Members with WHO PQ vaccines
Non-DCVMN flu manufacturers
DCVMN Unique Membership Model
Public & Private stakeholders
adding value to local economies

Business models

- 51% PPP
- 38% private
- 11% governmental

Employment impact (as of Jan. 2012*)

- 70% Asia
- 15% MEA
- 15% Latin America

"local production" implies nationality of ownership and would refer to control over production facilities (>50%) by nationals of the host developing country. Subsidiaries of multinationals do not qualify for DCVMN membership.
Achievements of DCVMN and Contributions to Global vaccination:
making vaccines affordable for all

Polio Free India

- 12 January 2012, India completing one year without polio since its last case, in a 2-year-old girl in the state of West Bengal, on 13 January 2011.

Allow increase in number of doses & countries introducing pentavalent

- DCVMs joined the pool procurement scheme in 2008

Pagliusi et al. 2013, Vaccine, in press
Trends of Vaccine Types in Technology Transfer: a large number for influenza, hepatitis B, rotavirus: Impact depends on unlocking procurement and financing mechanisms.

- Influenza (20)
- Hepatitis (13)
- Rotavirus (11)
- Measles (7)
- Hemophilus (6)
- Polio (4)
- Japanese encephalitis (4)
- Typhoid (3)
- Dengue (3)
- Cholera (3)
- Rabies (3)
- Pneumococcal (2)
- DTP (2)
- Meningococcal (1)
- Others (9)

Flu vaccine diversity

• Seasonal vaccine
  – Each year new strains are selected
  – Large capacity of production - short time to produce the needed vaccine – maintenance cost for the non-operational period
  – Short time for supply and commercialization
  – Surplus of production can not be stored for next season
• Several types of vaccines/ technologies of production –
  – Trivalent - 2 A/1B; tetravalent 2A/2B
  – Technology of production: Chicken embryo; tissue culture;
  – Inactivated antigen
  – Spited with adjuvants
  – Intradermal delivery
  – Attenuated live vaccine
  – Various adjuvants
• Northern and Southern Flu Vaccines are different

➢ Seasonal vaccine production is required in order to respond quickly to a pandemic flu vaccine
Unlocking procurement and financing mechanism

• Procurement
  – Increase demand and market – public and private; GAVI for poor countries
  – Long term reliable forecast
  – Guarantee of supply of the amount required for economical and technological sustainable and long term production
  – Affordable price; also for reliable production activity – modernization of facilities and equipments; training; profit for private manufacturers

• Financing mechanism – huge investment is required
  – New facilities; expansion and modernization of production facility
  – Update and compliance to new Regulatory requirement
  – Training personnel at production facility
  – Technology Transfer – accelerate incorporation of technology
  – R&D&Inovation – next generation technologies; new vaccines
  – AMC model?
Thank you

www.DCVMN.org