

Proyecto INNPACTO-HIVACAT para el desarrollo de vacunas preventivas y terapéuticas frente al VIH

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ESTEVE

**Sesión: Proyectos en cooperación público-privado
de ámbito nacional y europeo**

**VII Conferencia Anual de las Plataformas
Tecnológicas de Investigación Biomédica**

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ESTEVE R&D: Pain Research and NME Drug Discovery



ESTEVE R&D

Network of Excellence:

- ESTEVE R&D Center in Parc Científic de Barcelona (University of Barcelona)

Strategic Joint Units in Pain NMEs:

- Alliance model that allows access to talent, know-how, technologies, capacities and infrastructures in Centers of Excellence
- The synergistic collaborative work focuses in ESTEVE Pain projects with real implication

- Strategic Joint Units
 - ICIQ (Institut Català d'Investigació Química)
 - Universidad Santiago de Compostela

Research Consortia for Pain Research and NME Drug Discovery in Pain:

- KOLs and International Scientific Groups
- Current and future trends

- Research Consortia:
 - IMI : Europain + 5 horizontal projects
 - EU FP7: NeuroPain

Public Private Partnerships in non-pain fields:

- High unmet needs
- High societal impact

- PPPs:
 - Sanfilippo
 - HIVACAT

HIVACAT

Development of therapeutic and prophylactic HIV vaccines

Public-Private Partnership (PPP)

IrsiCaixa

Institut de Recerca de la Sida

ESTEVE

FUNDACIÓ
CLÍNIC
BARCELONA

 Generalitat de Catalunya
Departament de Salut

 **Obra Social**
Fundació "la Caixa"

 Generalitat de Catalunya
Departament d'Economia
i Coneixement

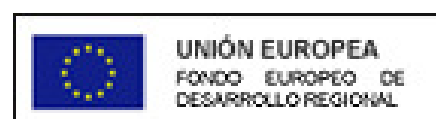
Partially funded with an INNPACTO Grant



GOBIERNO
DE ESPAÑA

MINISTERIO
DE ECONOMÍA
Y COMPETITIVIDAD

SECRETARÍA DE ESTADO
DE INVESTIGACIÓN,
DESARROLLO E
INNOVACIÓN



UNIÓN EUROPEA
FONDO EUROPEO DE
DESARROLLO REGIONAL

"Una manera de hacer Europa"

HIVACAT

Projecte de Recerca de la Vacuna de la Sida

Impact of the research



Source: repairstemcell.wordpress.com

Functional cure
Therapeutic vaccine

Market size: 35
Million people
worldwide

Preventive vaccine

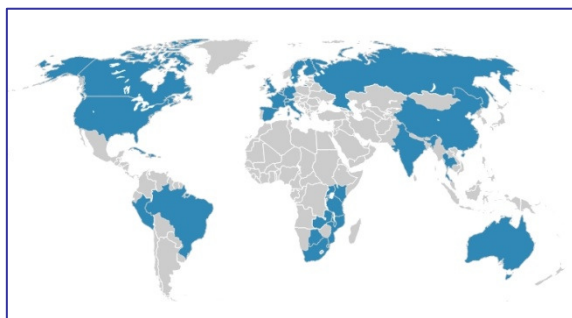
Market size: 7 Billion
people worldwide

The long road to an HIV vaccine



1984: “A vaccine in two years”

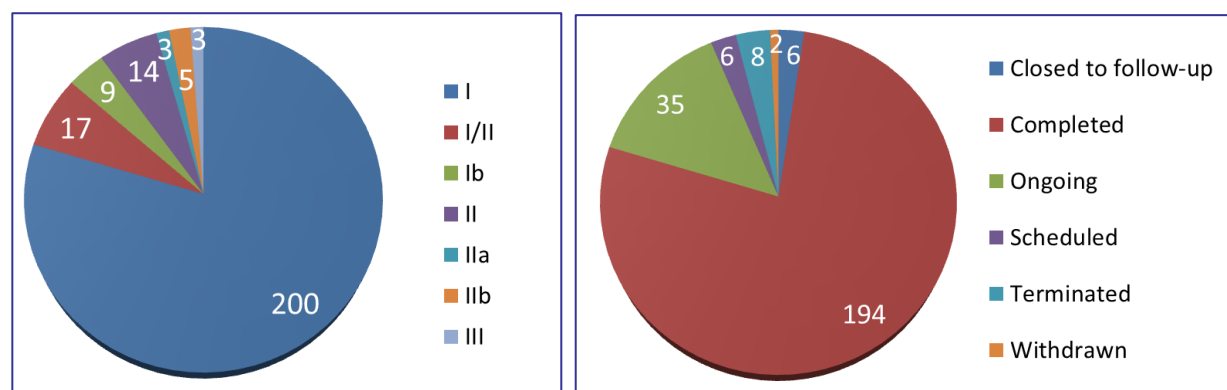
Margaret Heckler, Secretary, US Department of Health and Human Services, on April 23rd, 1984, when it was announced the HIV isolation by Robert Gallo



<http://www.iavireport.org/>

2014: 30 years later and still no HIV vaccine!

“More than 200 AIDS vaccine clinical trials”



Data from IAVIRreport, November 22, 2013

HIV/AIDS is much more complex than any other viral disease for which vaccines have been successfully developed!!

Challenges and opportunities

A therapeutic vaccine would significantly improve HIV control and quality of life

- Intended to educate the immune system to **improve viral control**
- Achieve a long-term **functional cure**
- Complete **eradication** of the virus would be a desirable objective
- Prevention of **transmission**
- Very **clean safety profile**
- Amenable to **combination therapy**
- Can be first line of treatment (not just last line after HAART options fail)
- HIVACAT therapeutic can be the **foundation of the prophylactic**

A prophylactic vaccine is the ultimate objective

- Intended to educate the immune system to **prevent viral infection or to turn everyone into an elite controller**
- Only **one** HIV vaccine clinical trial has demonstrated **any efficacy** in humans (RV144, 31%)
- **High degree of efficacy** (>80%) is critical for broad utilization
- Very **clean safety profile**
- **Most** of the HIV vaccine **consortia** are **focused here**
- The prophylactic will leverage and **build on** the results of the T cell immunogen **therapeutic** clinical development

The research centres

- HIVACAT research program **started in 2008**
- Two internationally renowned **centres of reference**
- More than **60 investigators**
- Access to more than **7000 HIV patients** and unique sample source created over more than **15 years**
- Conducted more than **200 clinical trials** in HIV/AIDS
- Well established national and international **collaborations**



Hospital Germans Trias i Pujol (Irsicaixa),
Badalona



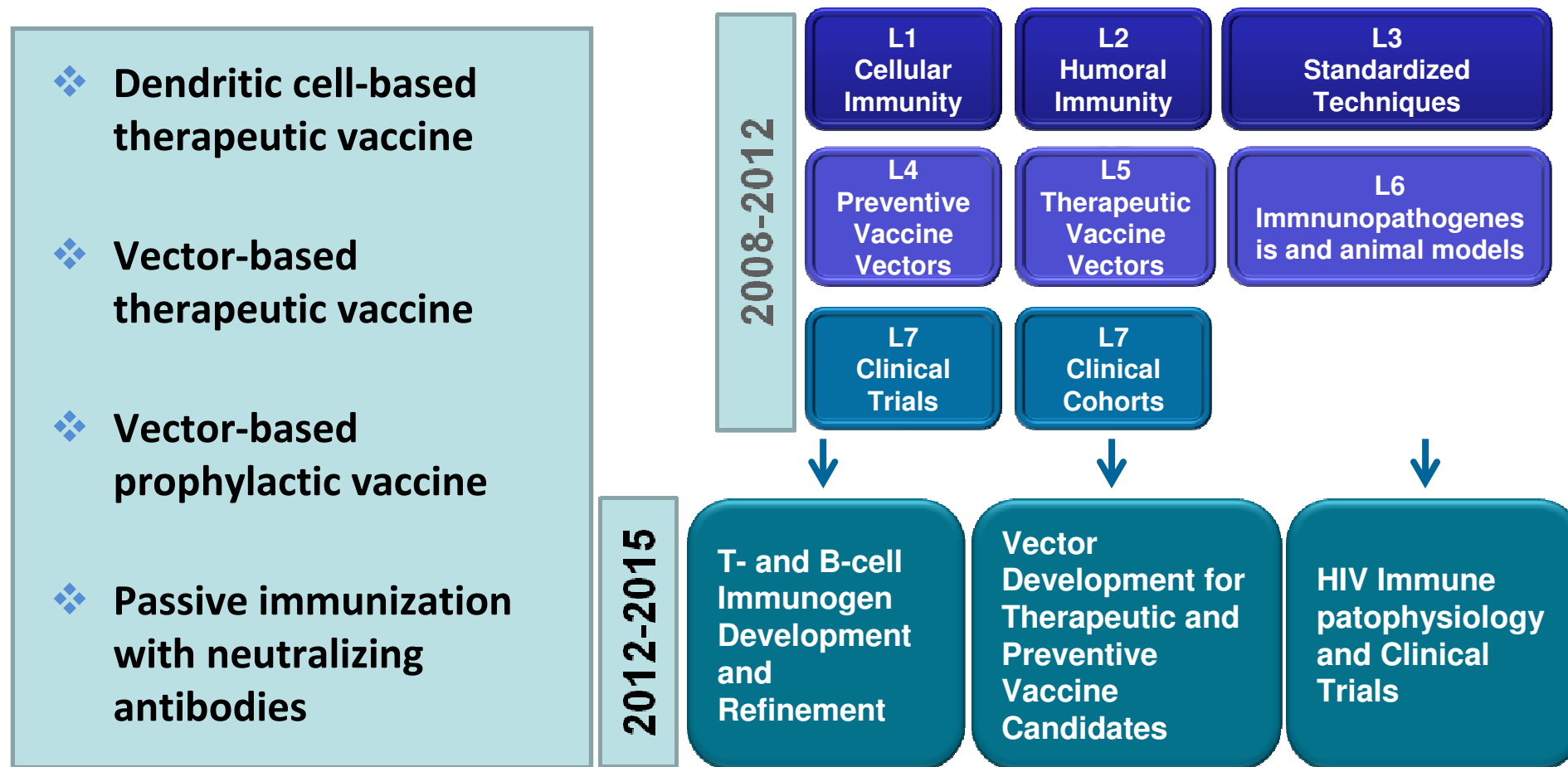
Hospital Clínic,
Barcelona

HIVACAT has a Network of Well-established National & International Collaborations



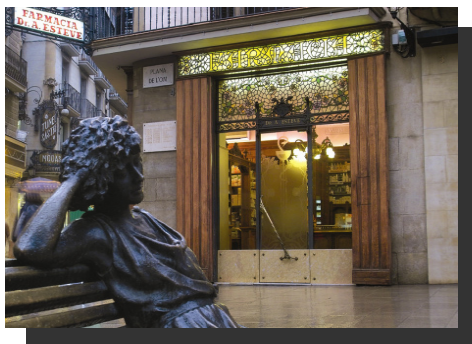
Research strategy

HIVACAT programme incorporates **four approaches** for a vaccine, each with **several lines**:



Thank you

ESTEVE Pharmacy (Manresa, since 1787)



ESTEVE HQ (Barcelona, since 1942)



ESTEVE R & D Centre (Barcelona, since 2012)



ESTEVE Pharmaceutical Plant (Martorelles, since 1992)



ESTEVE API Plant (Celrà, since 1986)

