# Hepatitis C

Dr. Graciela Diap-MD, Access HCV **18th International Congress on Infectious Diseases (ICID) - XIII Congreso SADI** Buenos Aires, Argentina March 1-4, 2018



# Origins of DND*i*

#### 1999

- First meeting to describe the lack of R&D for neglected diseases
- MSF commits the Nobel Peace Prize money to the DND Working Group
- JAMA article: 'Access to essential drugs in poor countries A Lost Battle?'

#### July 2003

- Creation of DND*i*
- Founding partners:
  - Institut Pasteur, France
  - Indian Council of Medical Research, India
  - Kenya Medical Research Institute, Kenya
  - Médecins Sans Frontières
  - Ministry of Health, Malaysia
  - Oswaldo Cruz Foundation/Fiocruz, Brazil
  - WHO –TDR (Special Programme for Research and Training in Tropical Diseases) as a permanent observer



ISID-SADI 2018 Buenos Aires



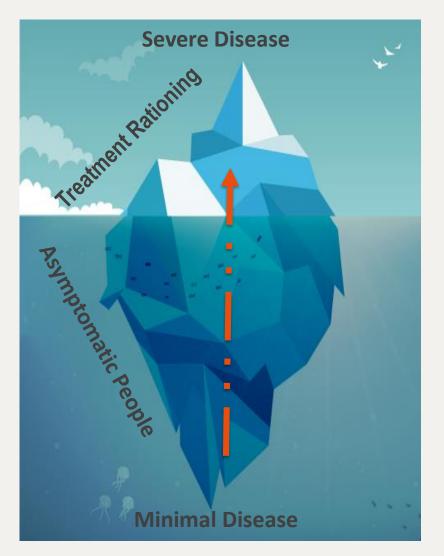
## Responding to the Needs of Neglected Patients



diseases

### ... from Bench to Bedside

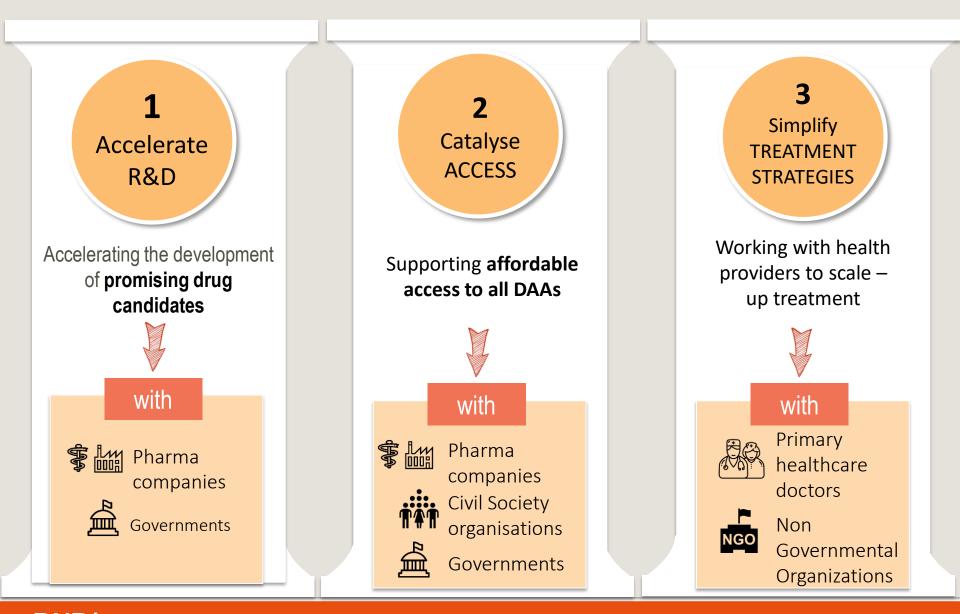
## DNDi-HCV strategic objectives:



- Develop new, affordable, pangenotypic TT for HCV
- Simplify HCV test & treat strategies and develop innovative models of care to support scale up
- Improve access (IP, regulatory, pricing, etc.) and affordability of HCV TT in countries



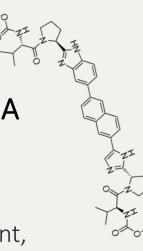
## DNDi Hepatitis C Strategy: 3 pillars



Ravidasvir: Towards a pan-genotypic treatment

- DNDi's pipeline analysis identified ravidasvir (RDV), an NS5A inhibitor drug candidate with pan-genotypic potential
- DNDi obtains licence to RDV from Presidio (US): development, manufacture and distribution in LATAM, SEA and Africa
- DNDi is developing RDV with Pharco (Egypt): Pharco is also producer of generic SOF (no patent in Egypt)
- **DNDi partnership in Malaysia**: with Pharco and Pharmaniaga (Malaysia): manufacture and supply of RDV and supply of SOF
- New DNDi collaboration with InSud Pharma, Laboratorio Elea (Argentina) and Pharco: Register, manufacture, distribute RDV + SOF in Argentina + LATAM







Develop new, affordable, pan-genotypic TT for HCV

Research Article Viral Hepatitis



JOURNAL OF HEPATOLOGY

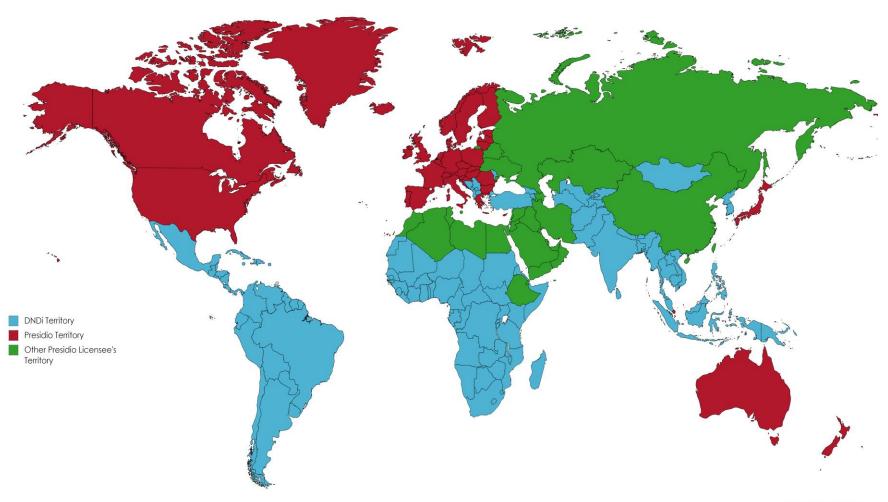
### Effectiveness of ravidasvir plus sofosbuvir in interferon-naïve and treated patients with chronic hepatitis C genotype-4

Gamal Esmat<sup>1</sup>, Tamer Elbaz<sup>1,\*</sup>, Maissa El Raziky<sup>1,2</sup>, Asmaa Gomaa<sup>3</sup>, Mahmoud Abouelkhair<sup>1,2</sup>, Hadeel Gamal El Deen<sup>1</sup>, Aliaa Sabry<sup>3</sup>, Mohamed Ashour<sup>1,2</sup>, Naglaa Allam<sup>3</sup>, Mohamed Abdel-Hamid<sup>4</sup>, Ola Nada<sup>5</sup>, Sherine Helmy<sup>6</sup>, Hanaa Abdel-Maguid<sup>6</sup>, Richard Colonno<sup>7</sup>, Nathaniel Brown<sup>7</sup>, Eric Ruby<sup>7</sup>, Pamela Vig<sup>7</sup>, Imam Waked<sup>3,\*</sup>

<sup>1</sup>Endemic Medicine Department, Faculty of Medicine, Cairo University, Egypt; <sup>2</sup>Cairo Fatemic Hospital, Ministry of Health, Egypt; <sup>3</sup>National Liver Institute, Menoufiya University, Shebeen EL Kom, Egypt; <sup>4</sup>Department of Microbiology, Faculty of Medicine, Minia University, El Minia, Egypt; <sup>5</sup>Pathology Department, Faculty of Medicine, Ain Shams University, Cairo, Egypt; <sup>6</sup>Pharco Pharmaceuticals, Amriya, Alexandria, Egypt; <sup>7</sup>Presidio Pharmaceuticals, Inc., San Francisco, California, USA



Develop new, affordable, pan-genotypic TT for HCV Ravidasvir License Territory



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Develop new, affordable, pan-genotypic TT for HCV Study design in Malaysia & Thailand

NIH U.S. National Library of Medicine

ClinicalTrials.gov

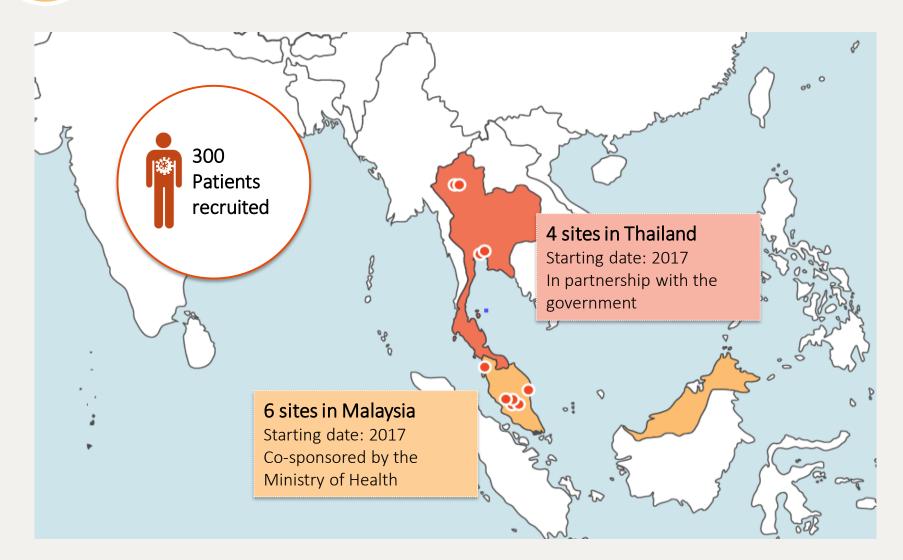
#### Sofosbuvir Plus Ravidasvir for the Treatment of HCV Chronic Infection

ClinicalTrials.gov Identifier: NCT02961426

Open Label Phase II/III, Multicenter, Trial to Assess the Efficacy, Safety, Tolerance, and Pharmacokinetics of Sofosbuvir Plus Ravidasvir in HCV (+/- HIV) Chronically Infected Adults With no or Compensated Cirrhosis in Thailand and Malaysia



2017: Starting clinical trial of Ravidasvir & Sofosbuvir for the treatment of HCV chronic infection in 2 countries





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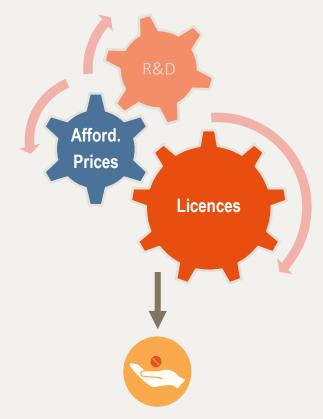
### Accelerating the development of promising drug candidates



- Complete development of ravidasvir for use with sofosbuvir as pan-genotypic treatment for HCV
- Registration of ravidasvir in priority countries willing to adopt a Public Health strategy
- Contribution to develop local and regional strategies to promote a Public Health approach and reduction of Access barriers



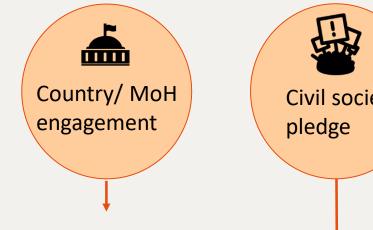
### Catalysing affordable access to all DAAs



- Raise political commitment & accountability
- Encourage policy change for the sustainable adoption of test & treat with DAAs
- Promote access to affordable, safe, quality and efficacious DAAs
- Address regulatory and intellectual
  property barriers for access to HCV
  diagnostics & medicines



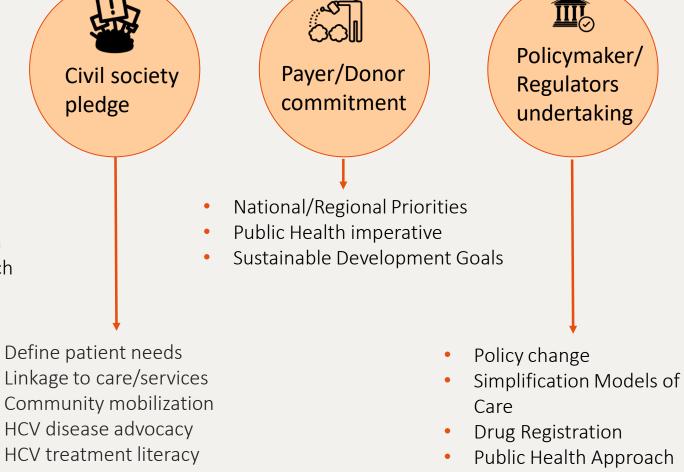
Partners catalysing affordable access to DAAs RDV as a Public Health Tool



• Political commitment

2

- Resource mobilization
- Public Health Approach





### Developing innovative models of care to support scale-up



- Efforts to **decentralize** from central hospitals to the primary healthcare level and to peripheral health Centres
- To develop **task-shifting** which would reduce reliance on doctors and other highly qualified medical personnel,
- To **boost community involvement** to support uptake and acceptance





Simplify HCV test & treat strategies and develop innovative models of care to support scale up

SEASL EXPOSICIATION FOR THE STREET

Journal of Hepatology Update: Hepatitis C



#### Simplification of antiviral hepatitis C virus therapy to support expanded access in resource-limited settings

Nathan Ford<sup>1</sup>, Tracy Swan<sup>2</sup>, Peter Beyer<sup>3</sup>, Gottfried Hirnschall<sup>1</sup>, Philippa Easterbrook<sup>1</sup>, Stefan Wiktor<sup>1,\*</sup>

<sup>1</sup>Department of HIV/AIDS, World Health Organization, Geneva, Switzerland; <sup>2</sup>Treatment Action Group, New York, USA; <sup>3</sup>Department of Essential Medicines and Health Products, World Health Organization, Geneva, Switzerland





Simplified diagnostic monitoring for hepatitis C, in the new era of direct-acting antiviral treatment

Published in final edited form as: Ann Intern Med. 2017 Septembe

Jennifer Cohn<sup>a,b</sup>, Teri Roberts<sup>b</sup>, Valerianna Amorosa<sup>c</sup>, Maud Lemoine<sup>d</sup>, and Andrew Hill<sup>e</sup>

#### Expansion of Treatment for Hepatitis C Virus Infection by Task Shifting to Community-Based Nonspecialist Providers:

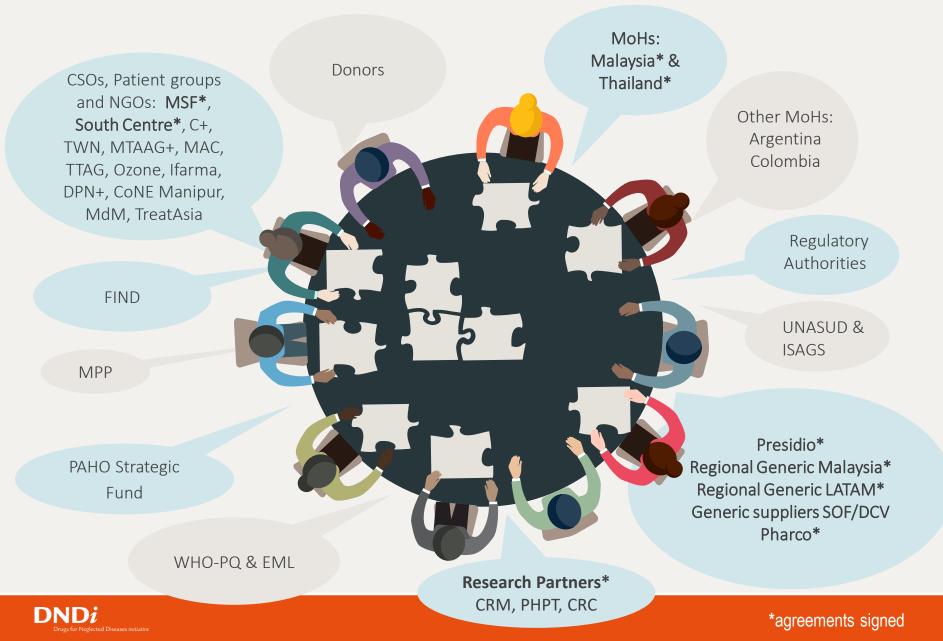
A Nonrandomized Clinical Trial

#### Drs Sarah Kattakuzhy, MD,

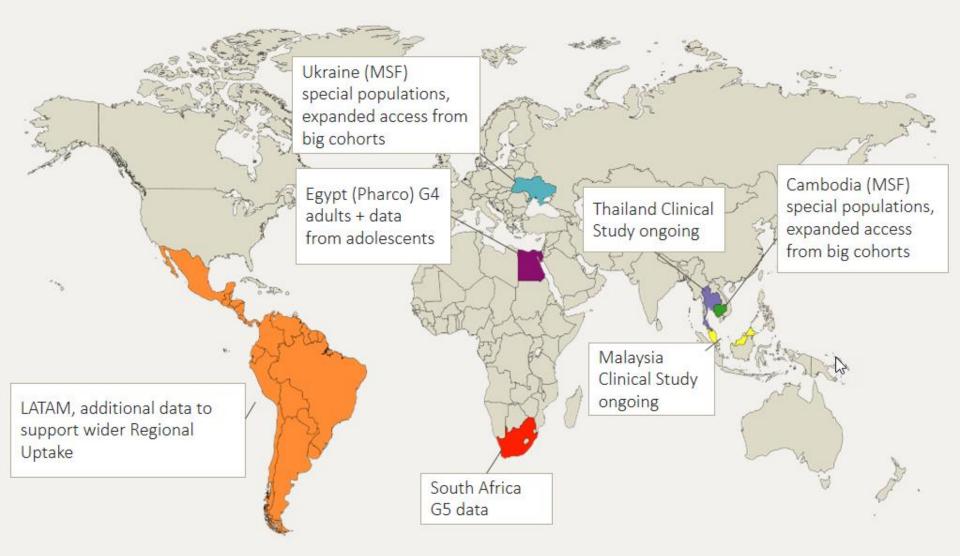
Division of Clinical Care and Research, Institute of Human Virology, University of Maryland School of Medicine, Room S222, 725 West Lombard Street, Baltimore, MD 21201



## Partners engaged with DNDi to implement the HCV strategy



## Future developments with Ravidasvir







## THANK Y@U TO ALL OUR PARTNERS & DONORS

DNDi Drugs for Neglecte





Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra





MINISTRY OF HEALTH MALAYSIA



