

Estado actual de la infección por hepatitis C en  
España: ¿Qué hemos hecho y que queda por  
hacer?

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# Disclosures

- Received honoraria for speaking at educational events or consulting from: AbbVie, Bristol-Myers Squibb, Gilead Sciences, Janssen and Merck Sharp & Dohme

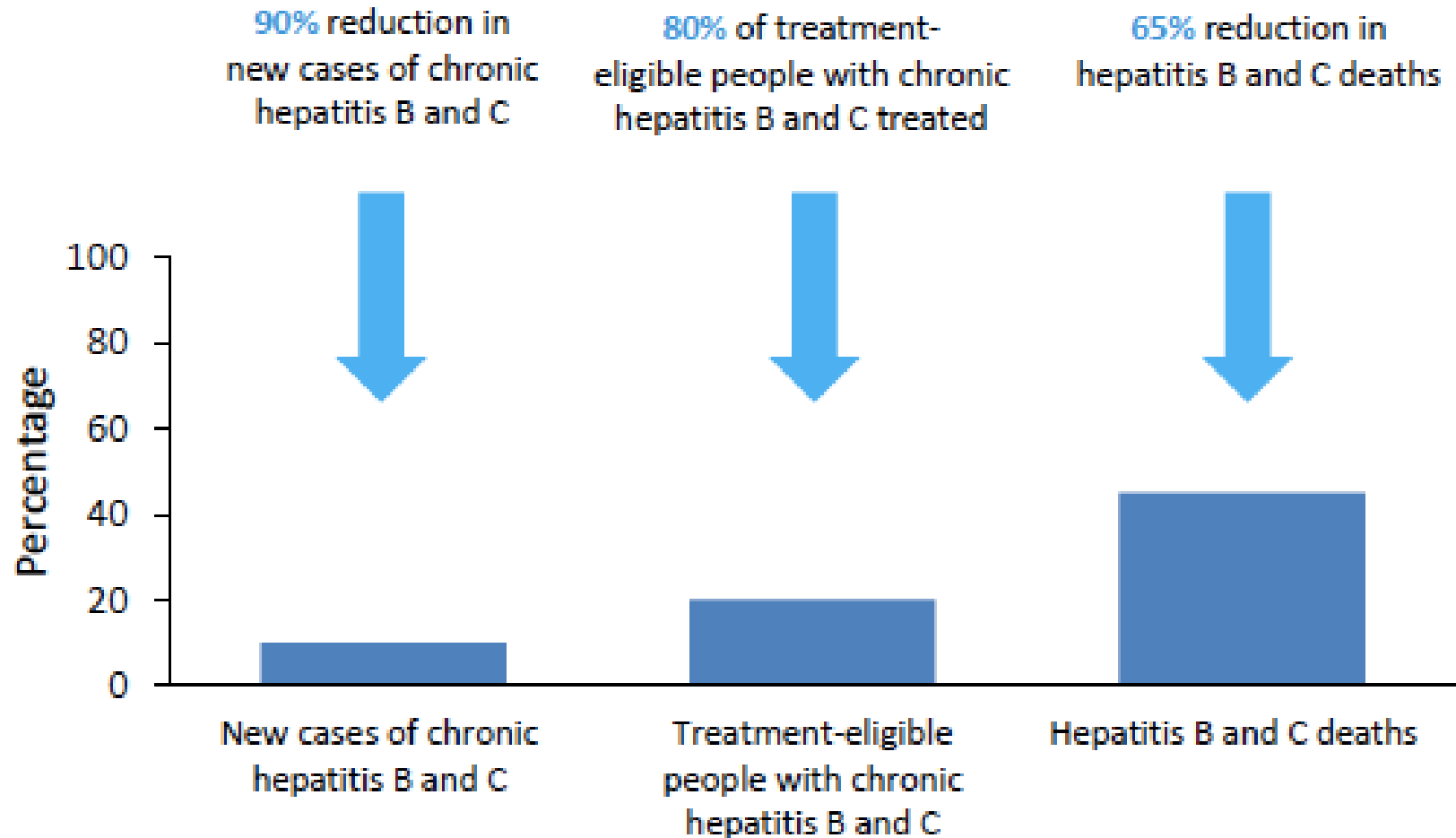
# Objective 2030



In May 2016, the World Health Assembly endorsed the *Global Health Sector Strategy (GHSS) on viral hepatitis 2016-2021*.

Dr Margaret Chan  
WHO Director-General

# Control viral hepatitis by 2030 (WHO)



1. WHO. Global health sector strategy on viral hepatitis 2016-2021. June 2016. 2. WHO. SDG 3: Ensure healthy lives and promote wellbeing for all at all ages. Available at: <http://www.who.int/sdg/targets/en/>.

WHO: World Health Organization

2015 The beginning

The National Plan against hepatitis C

# Restrictions on Access for the new drugs



# National HCV plan for Spain 2015

## Strategic lines of the Plan

1. To quantify the scale of the problem and describe HCV epidemiology and establish prevention measures

2. To define the scientific-clinical criteria which allow the right therapeutic strategy to be established

3. To set up coordination mechanisms to properly implement the Plan

4. To promote the progress of knowledge of the prevention, diagnosis and treatment of HCV

# Hepatitis C in Spain

## Situation at the start of the Plan (2015)

<b>Anti HCV prevalence</b>	<b>1,7%</b> <b>(0,4 – 2,6)</b>
Adults with anti-HCV positive	688.000 (159.000 – 1.049.000)
HCV RNA positive	68,6%
Prevalence of HCV RNA +ve	1,2% (0,3 – 1,8)
<b>Number of Viremic Subjects</b>	<b>472.000</b> <b>(109.000 – 719.000)</b>
HCV Genotype distribution	1a: 25,5% 1b: 43,8% 2: 3,1% 3: 19,6% 4: 8%



# Criteria for HCV Treatment and Reimbursement

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- ◆ F2 or more advanced Fibrosis
- ◆ Extrahepatic Manifestations
- ◆ High Risk of HCV transmission independently of Fibrosis
- ◆ Therapy given at hospital level

Estimated Number of Patients with these characteristics at Spanish Hospitals 50.000

# HCV regimens approved in Spain

2014

LDV/SOF ± RBV  
GT 1, 3, 4, 5, 6

SOF + DCV ± RBV  
GT 1, 3, 4

SOF + SMV ± RBV  
GT 1, 4

2015

OMV/PTV/RTV ± DSV ± RBV  
GT 1, 4

Treatment for GT1 and 4

Suboptimal for GT 3

Many Cases Ribavirin

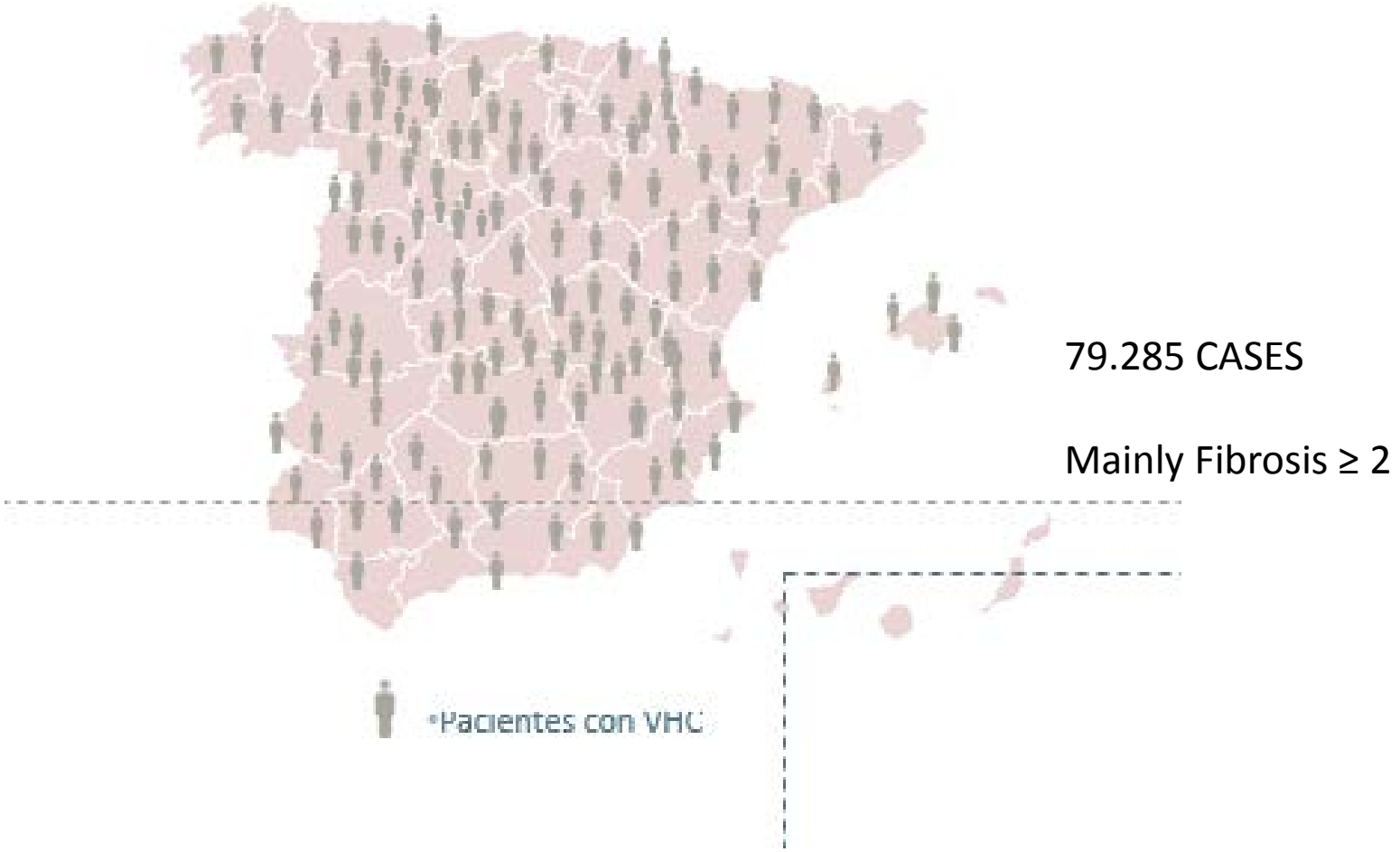
Duration 12 to 24 weeks

Gilead Sciences Europe Ltd. HARVONI ▼ (ledipasvir/sofosbuvir) SmPC, November 2016; Bristol-Myers Squibb Pharma EEIG. DAKLINZA ▼ (daclatasvir) SmPC, October 2016;

Gilead Sciences Europe Ltd. SOVALDI ▼ (sofosbuvir) SmPC, September 2016;  
AbbVie Ltd. VIEKIRAX ▼ (ombitasvir/paritaprevir/ritonavir) SmPC, December 2016;  
AbbVie Ltd. EXVIERA ▼ (dasabuvir) SmPC, December 2016;  
Janssen-Cilag Ltd. OLYSIO ▼ (simeprevir) SmPC, November 2016;  
Gilead Sciences Europe Ltd. EPCLUSA ▼ (sofosbuvir/velpatasvir) SmPC, July 2016;  
Merck Sharp & Dohme Ltd. ZEPATIER ▼ (grazoprevir/elbasvir) SmPC, July 2016

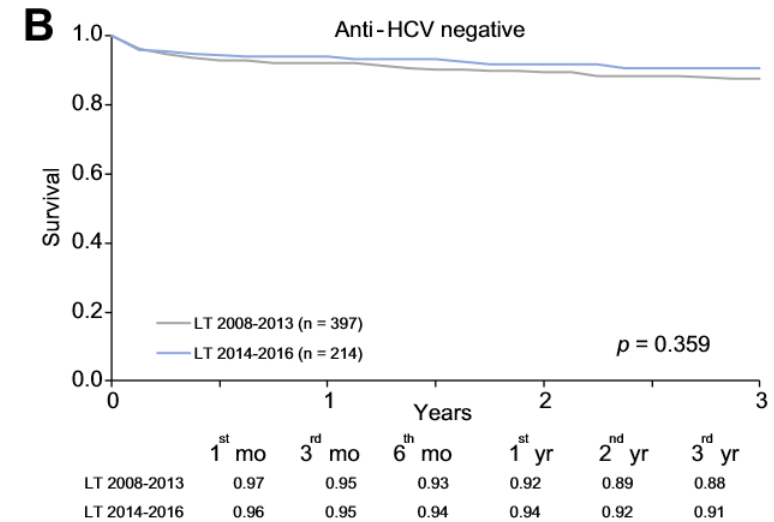
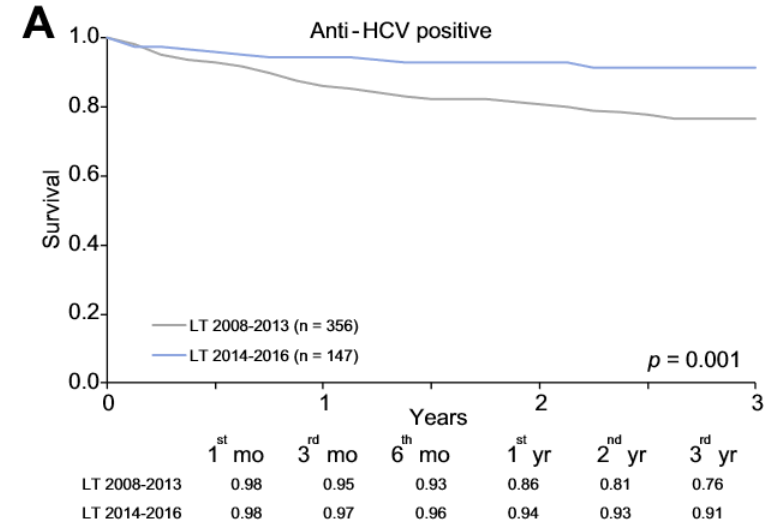
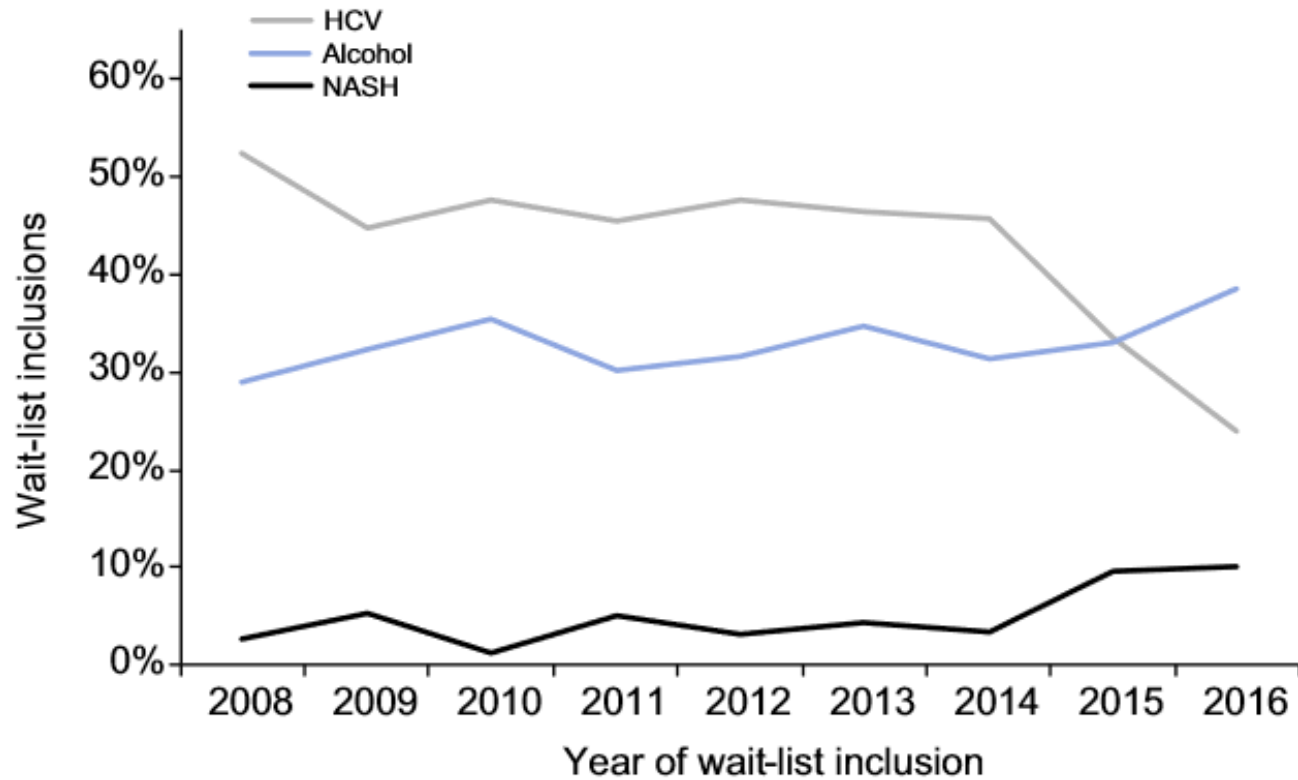
DCV: daclatasvir; DSV: dasabuvir; EBV: elbasvir; GRZ: grazoprevir; GT: genotype; LDV: ledipasvir; NUC: nucleotide; OMV: ombitasvir; PI: protease inhibitor; PTV: paritaprevir; RBV: ribavirin; RTV: ritonavir; SMV: simeprevir; SOF: sofosbuvir; VEL: velpatasvir

# Treated patients in the Plan Estratégico Nacional (2015 to juny 2017)

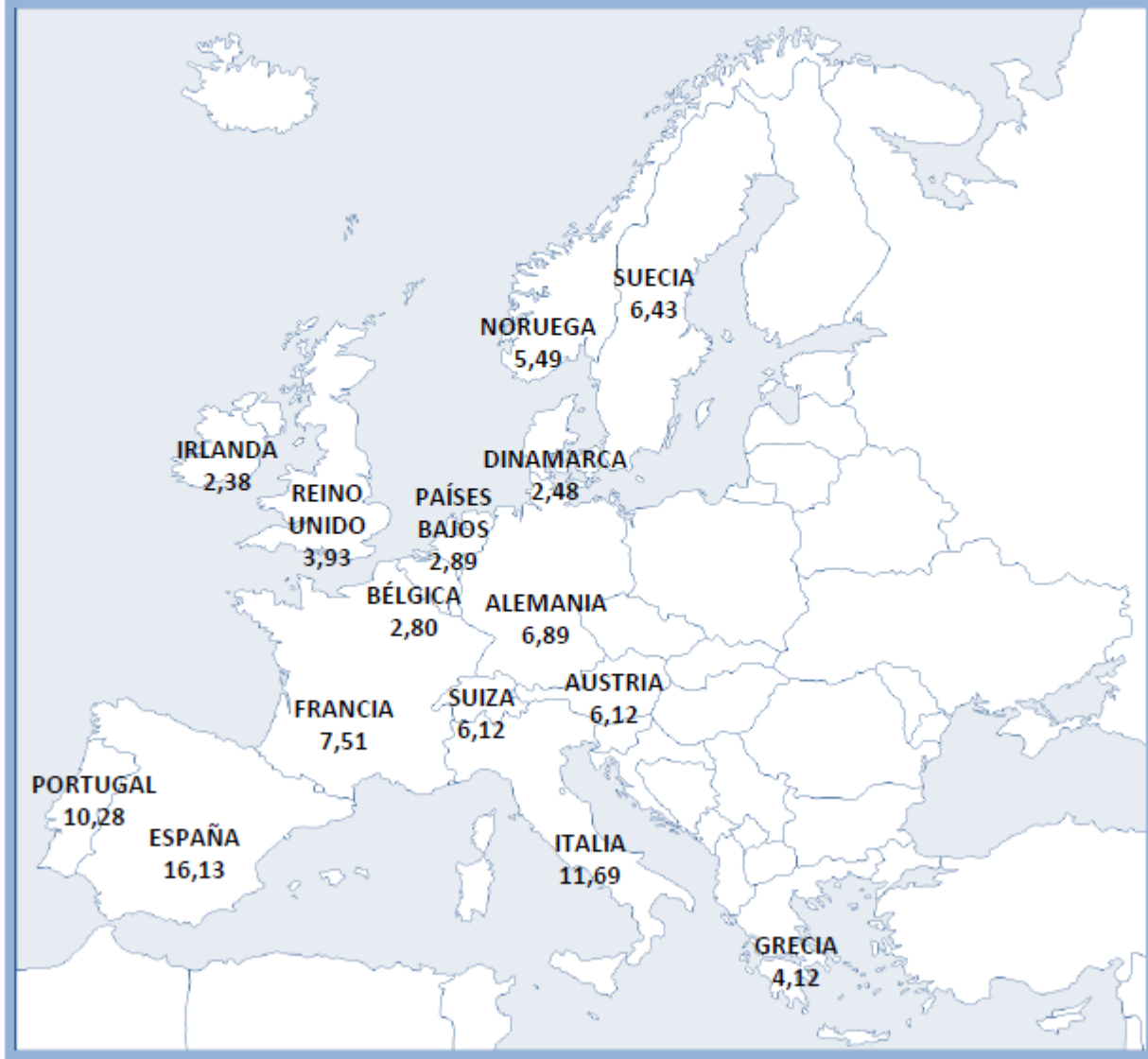


•Gaceta Medica 5 de julio del 2017

# Impact of DAA on HCV-related clinical outcomes in Spain: LT waiting list inclusion and post-LT survival



# Patients with Hepatitis C treated between 2014-2016 weighted according to the population\*



\*Datos población 2014 x 10.000

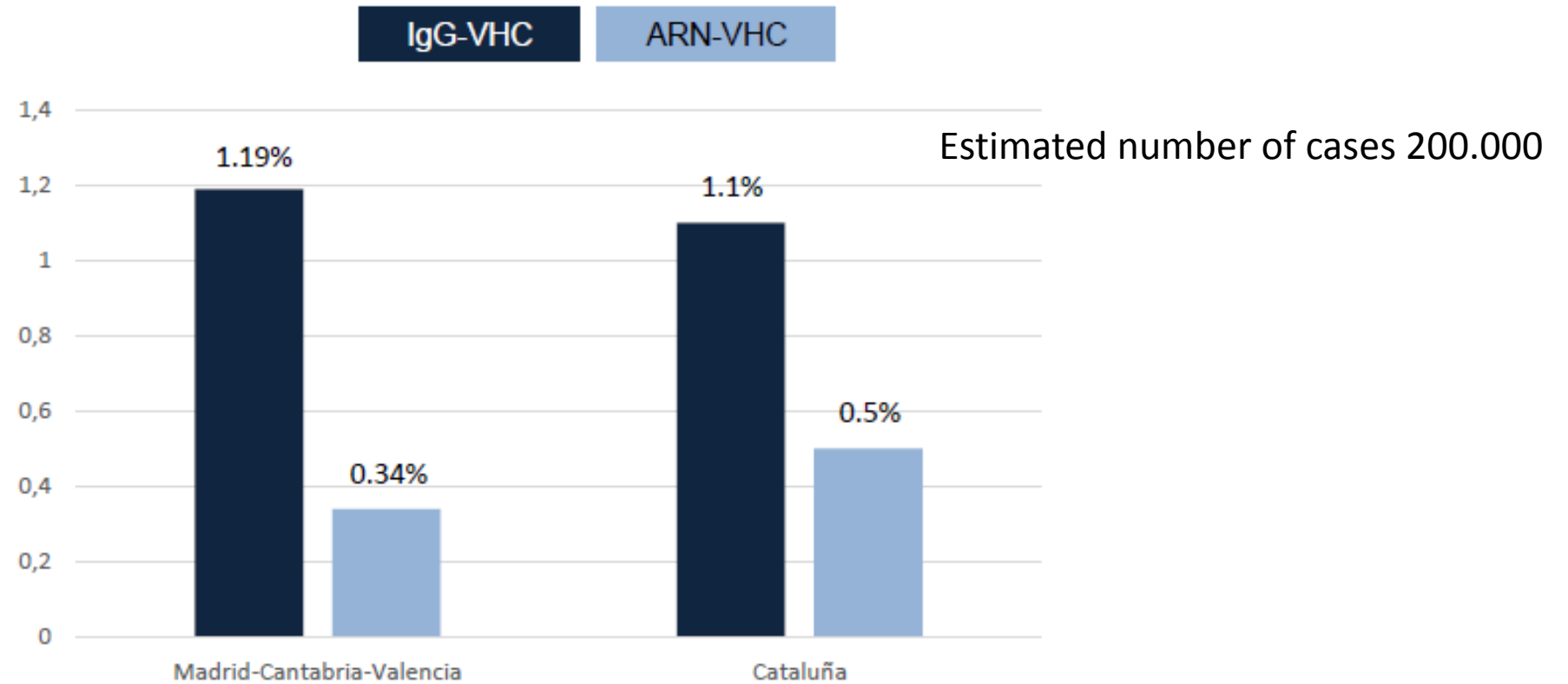
New Epidemiological Studies

Approval and Reimbursement of pangenotypic drugs

July 2017 Access to HCV therapy for all patients regardless of the degree of fibrosis

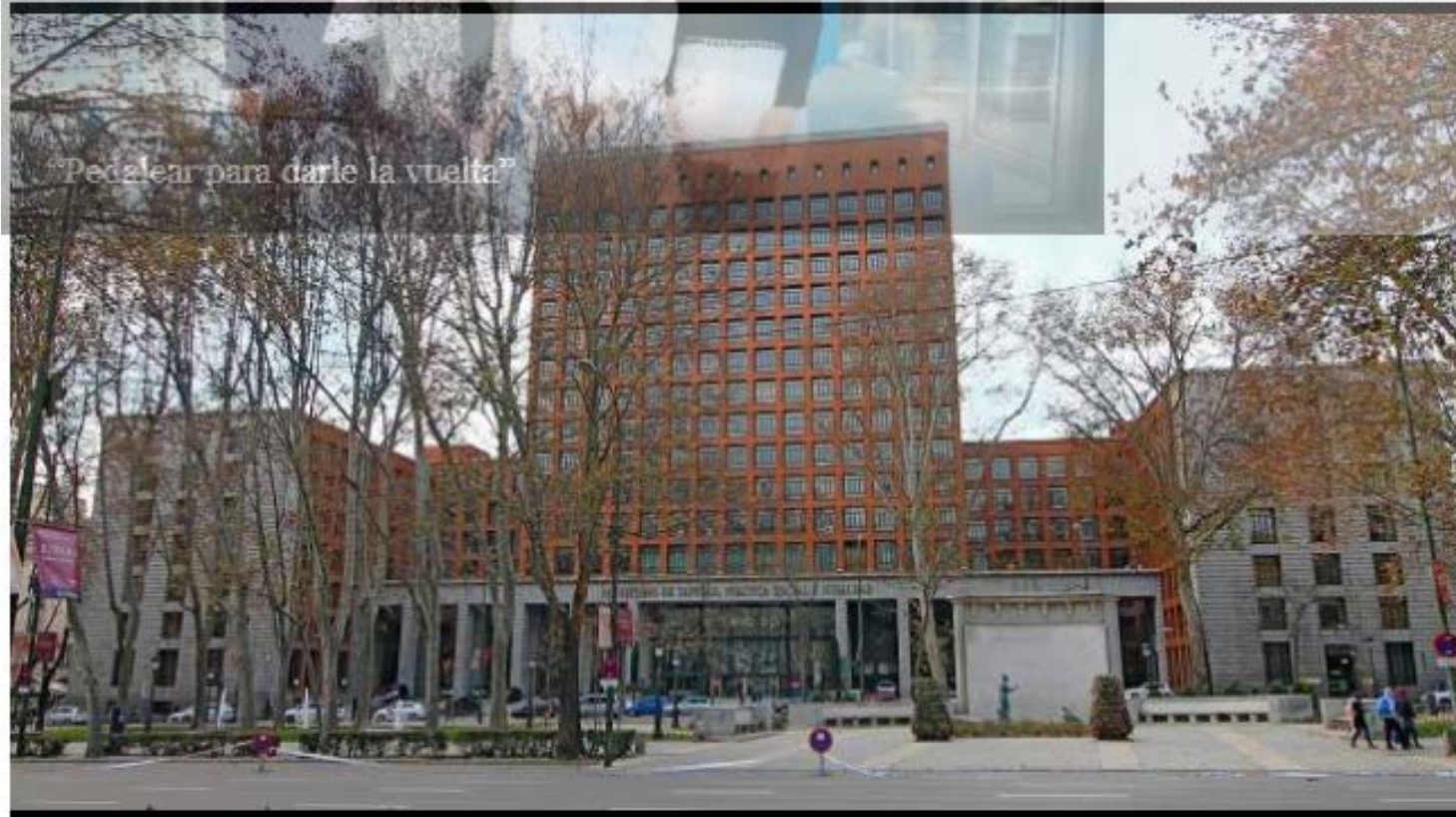
Changes in HCV population referred for therapy

## HCV seroprevalence is now not the best way of monitoring the HCV epidemic





## Sanidad concluye que la incidencia del VHC es del 0,8% en la población española



La AEP y Semergen renuevan su acuerdo

Lo +

Los motores de la humanización se calientan en Madrid

Lo último

Lo +

1 Más de 250 expertos en el tratamiento de la

2 "Estamos trabajando para atraer residentes por el ASH

3 Un legado que alienta a los pacientes

4 Semfyc propone introducir cambios en primaria

5 "Los jóvenes son el motor organizador y científico

6 Madrid supera el número de

7 Cerca del 47 por ciento de los tratados con triple terapia

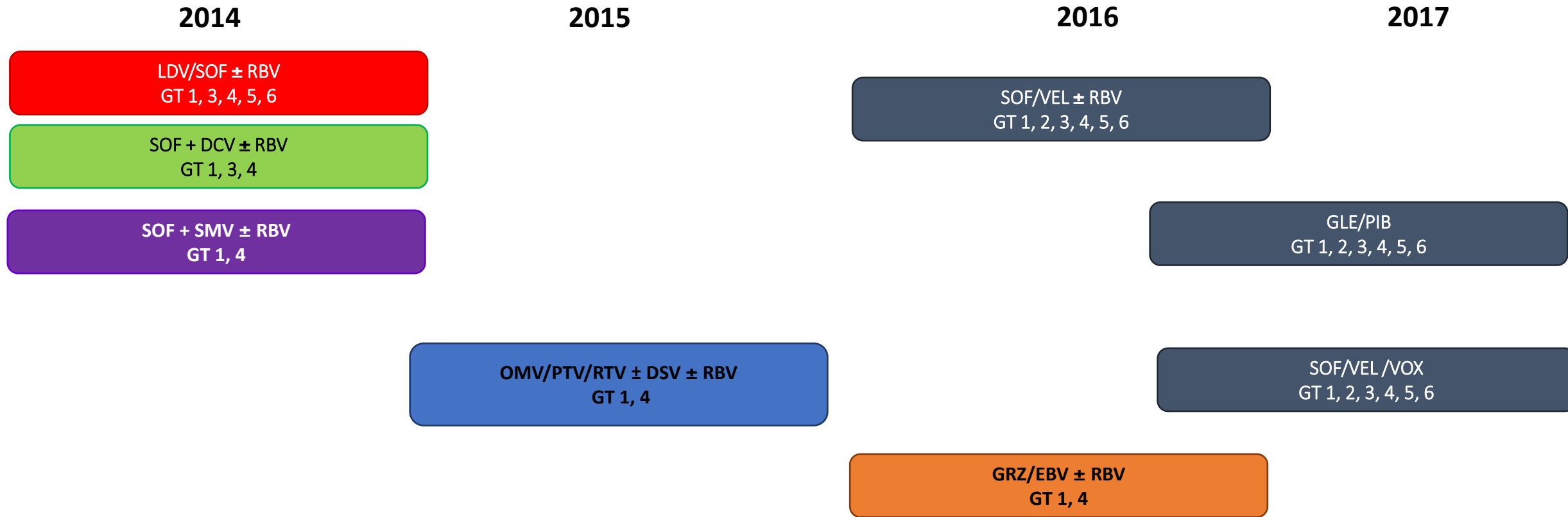
8 La energía del 'netball' impulsa el talento femenino

9 Oncólogos y pacientes: el futuro "incierto"

10 La APE prevé que



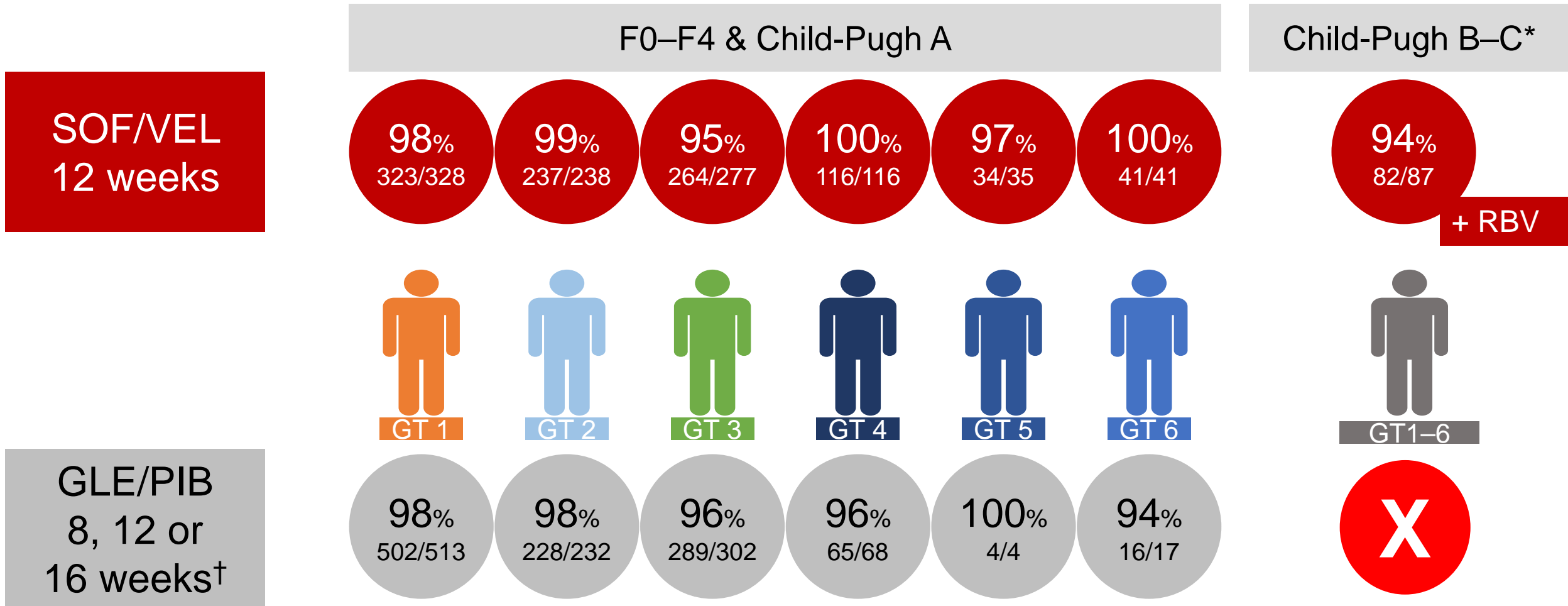
# HCV regimens approved in Spain



Gilead Sciences Europe Ltd. HARVONI ▼ (ledipasvir/sofosbuvir) SmPC, November 2016; Bristol-Myers Squibb Pharma EEIG. DAKLINZA ▼ (daclatasvir) SmPC, October 2016;  
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 PI: protease inhibitor; PTV: paritaprevir; RBV: ribavirin;  
 RTV: ritonavir; SMV: simeprevir; SOF: sofosbuvir; VEL: velpatasvir

# Pangenotypic therapies for almost all patients



\*Safety and efficacy of SOF/VEL have not been assessed in patients with CTP class C cirrhosis. <sup>†</sup>As approved in the EU SmPC. These are not head-to-head studies and direct comparisons cannot be made.

CTP: Child–Turcotte–Pugh

Agarwal K, et al. ILC 2016; Poster #SAT-195; Gane E, et al. AASLD 2017; Oral #74; Puoti M, et al. ILC 2017; Poster #SAT-233; Gilead Sciences Ltd. EPCLUSA ▼ (sofosbuvir/velpatasvir), SmPC, March 2018; AbbVie Ltd. MAVIRET ▼ (glecaprevir/pibrentasvir), SmPC, February 2018

# Guía AEEH-SEIMC de tratamiento de la infección por virus de la Hepatitis C 2018

Tabla 2.

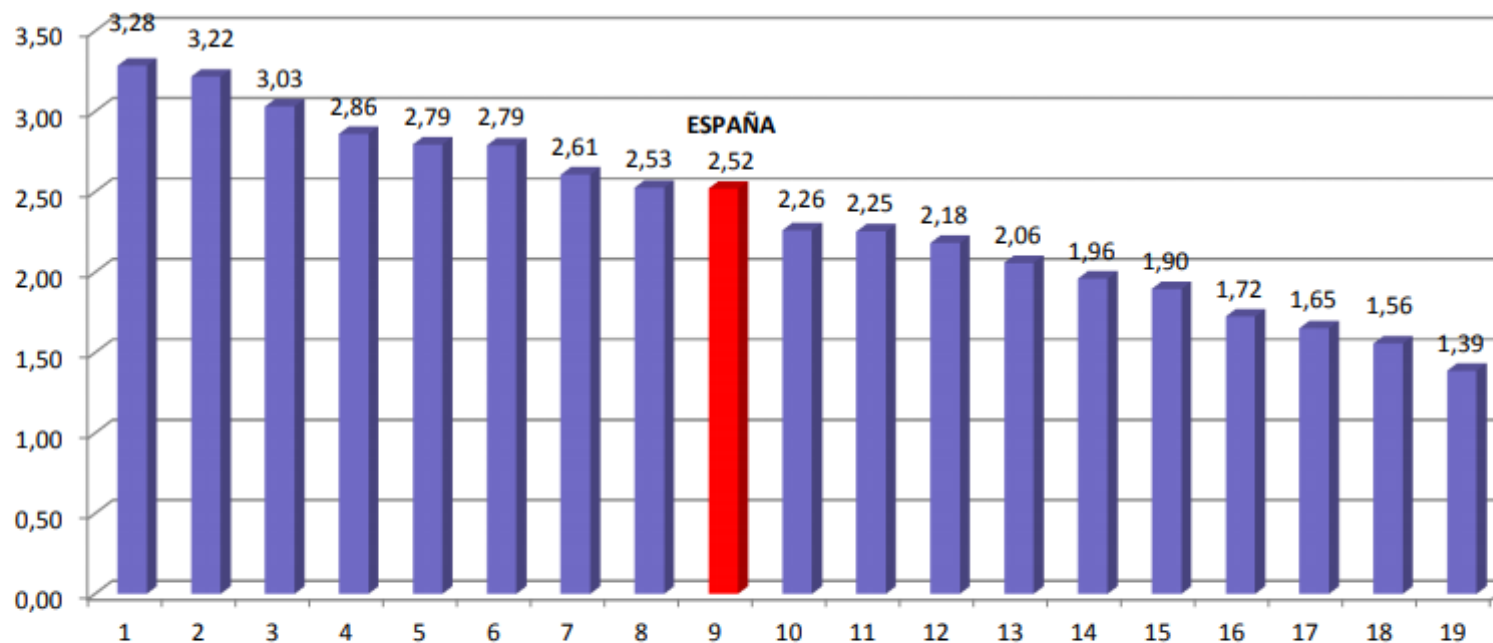
<i>Pacientes con cirrosis compensada</i>					
Pacientes	Experiencia tratamiento previo	SOF/VEL	GLE/PIB	LDV/SOF	EBR/RZR
Gen 1a	naives	12 sem	12 sem	12 sem	12 sem (RNA-VHC < 800.000 IU/ml)
	Experimentados a IFN	12 sem	12 sem	No	12 sem (RNA-VHC < 800.000 IU/ml)
Gen 1b	naives	12 sem	12 sem	12 sem	12w
	experimentados a IFN	12 sem	12 sem	12 sem	12w
Gen 2	naives	12 sem	12 sem	No	No
	Experimentados a IFN	12 sem	12 sem	No	No
Gen 3	naives	12 sem	12 sem	No	No
	Experimentados a IFN	12 sem	16 sem	No	No
Gen 4	naives	12 sem	12 sem	12 sem	12 sem
	Experimentados a IFN	12 sem	12 sem	12 sem	No
Gen 5	naives	12 sem	12 sem	12 sem	No
	Experimentados a IFN	12 sem	12 sem	12 sem	No
Gen 6	naives	12 sem	12 sem	12 sem	No
	Experimentados a IFN	12 sem	12 sem	12 sem	No

# PACIENTES TRATADOS POR COMUNIDAD AUTÓNOMA 1 ENERO 2015 – 30 SEPTIEMBRE 2018

Pacientes tratados

117.452

## PACIENTES POR CCAA PONDERADO SEGÚN POBLACIÓN\*



\*Población INE enero 2014 x 1.000

Fuente: Datos presentados por las CCAA mensualmente

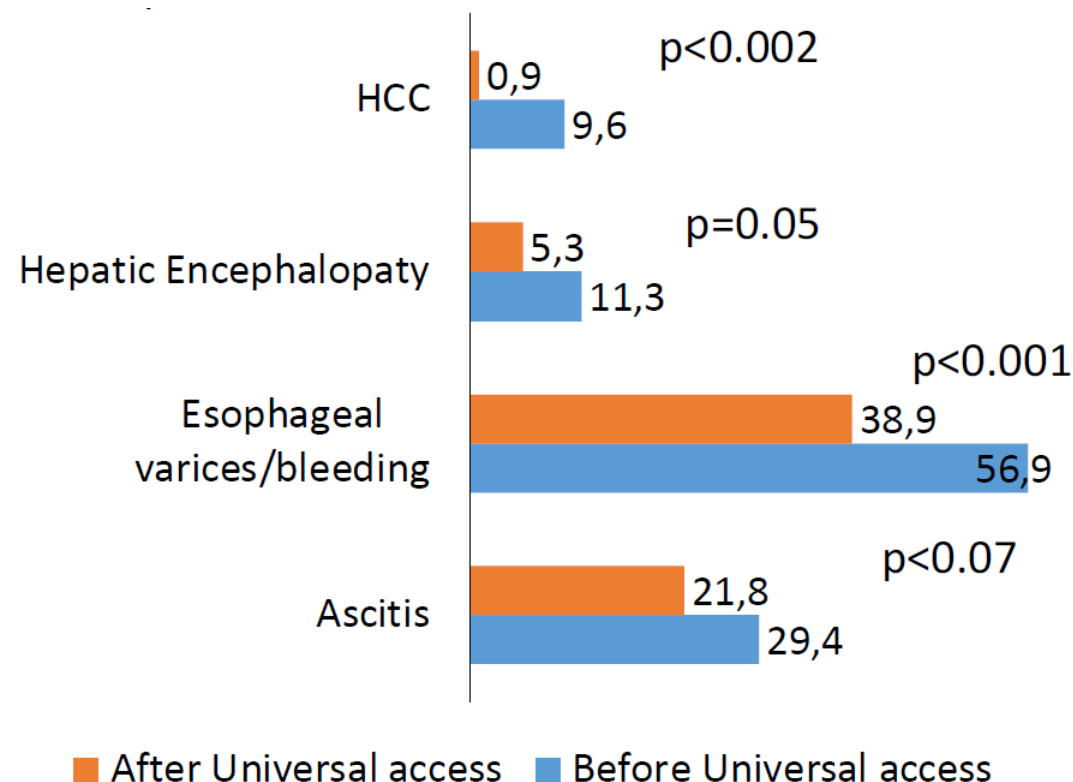
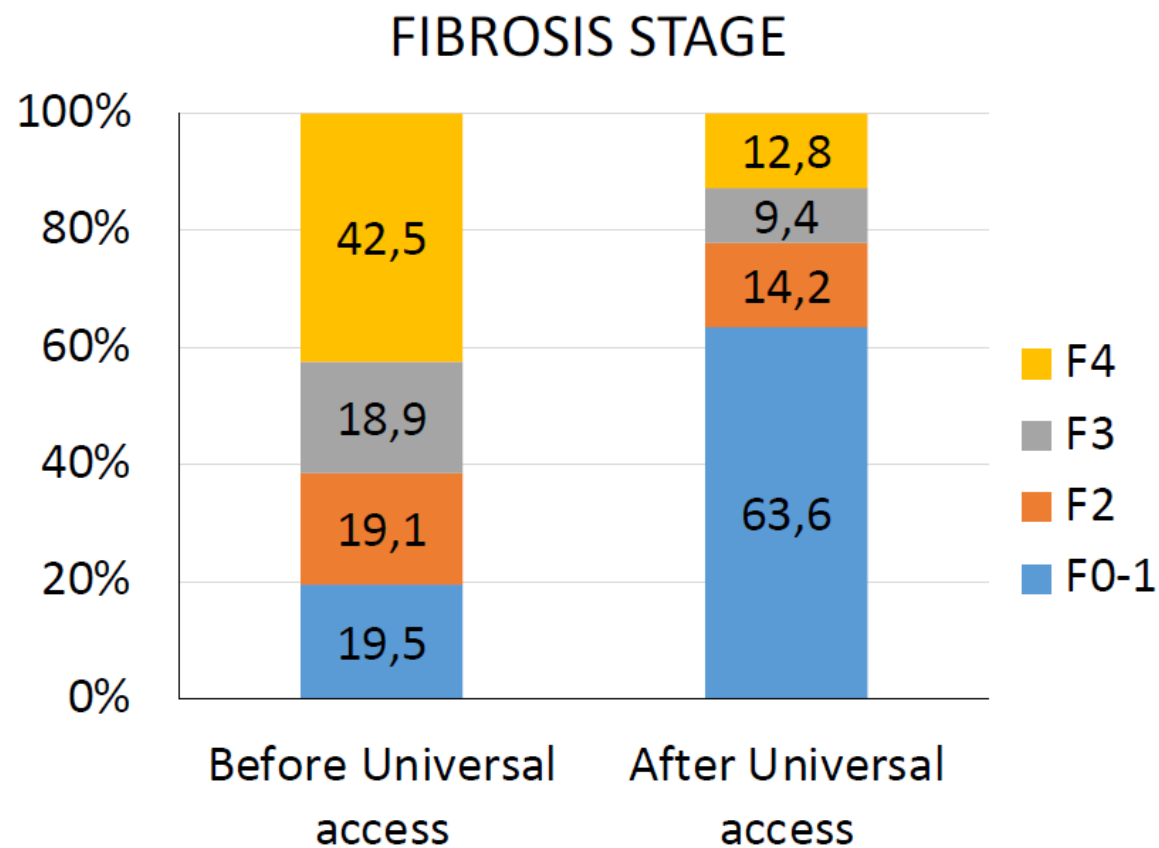


# The current situation

- All DAA are available without restrictions (but only at hospitals)
  - Treatment rate is very high (117,452 patients out of 135,000 – 200,000 viremic persons\*, as of October 31, 2018)
  - Impact on liver transplant waiting list and post-transplant mortality
- however***
- Screening is implemented only among high risk groups (i.e. no general population screening program, while ***one third of patients are undiagnosed***)

\*Based on HCV RNA prevalence of 0.34-0.5% among 39,900,000 adults (Crespo *et al*, 2017, and Tajés *et al*, 2017)

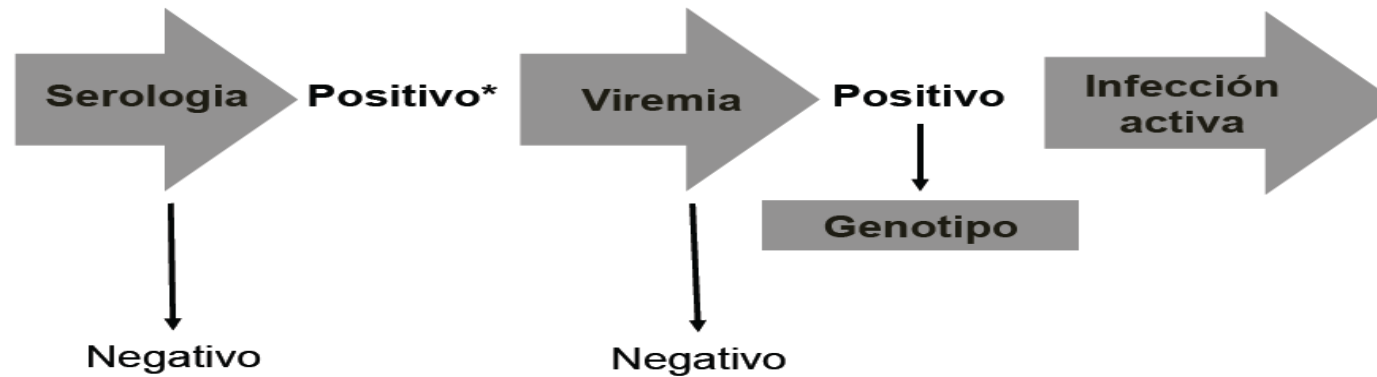
Universal access to DAA-treatment is not enough to prevent late stage presentation of HCV infection (n=6053 naïve patients, Hepa-C database)



**A general population screening strategy is necessary to identify patients at earlier stages**

- Simplification in the diagnosis and therapy
- Microelimination programs vs Elimination
- Incidence of HCV Reinfection and Harm reduction policies

## Consenso en Diagnóstico de la hepatitis C en un solo paso

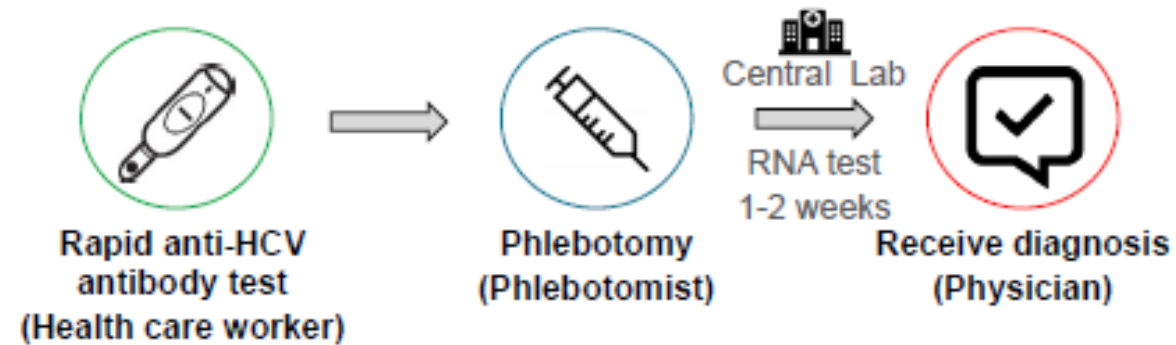


\* Verificar si nuevo diagnóstico o no tratamiento previo

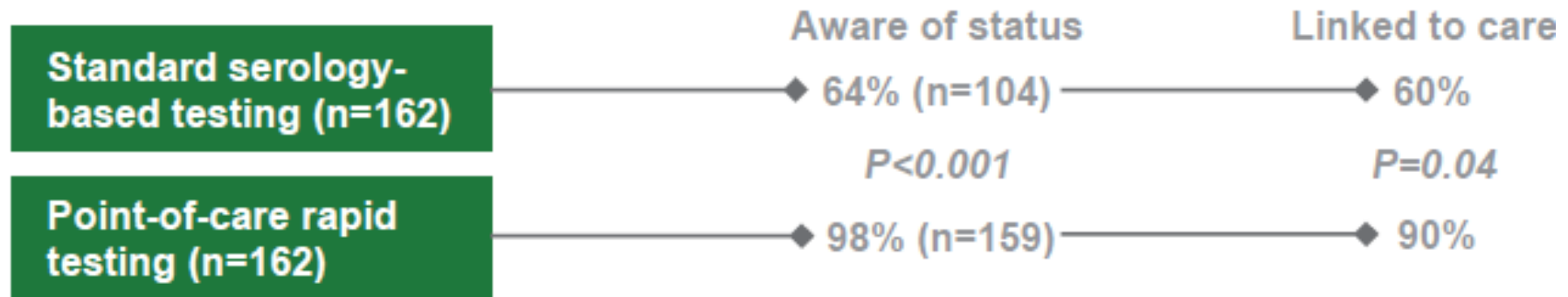
- Screening for antiHCV only once in positive cases
- antiHCV positive cases : HCV RNA Determination
- In HCV RNA positive cases an alert system to refer they to the hospital



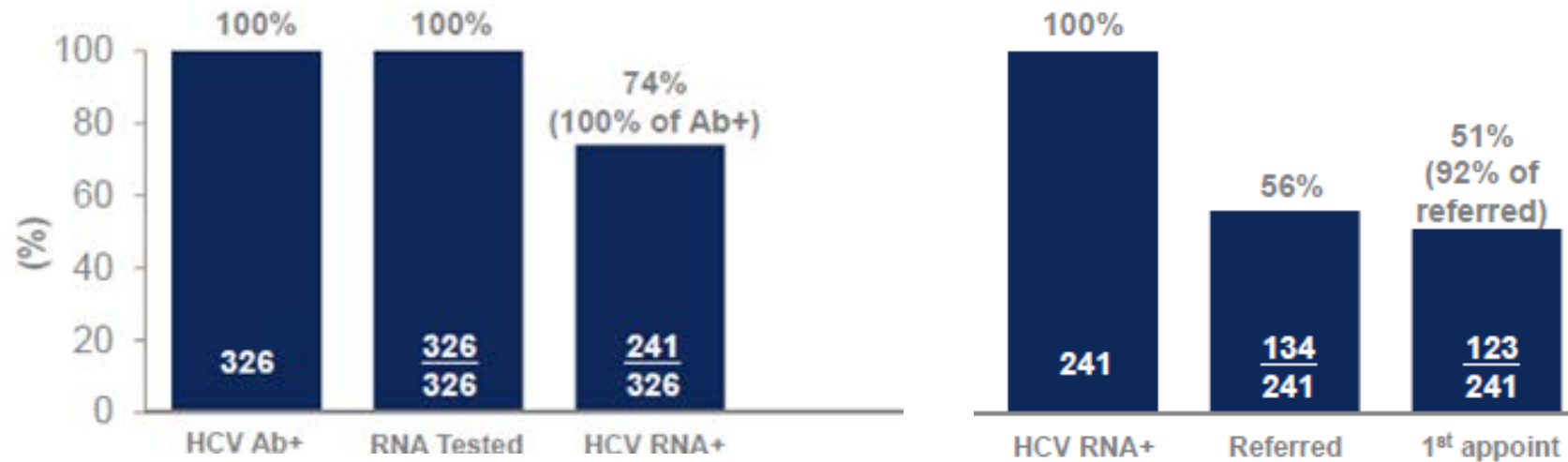
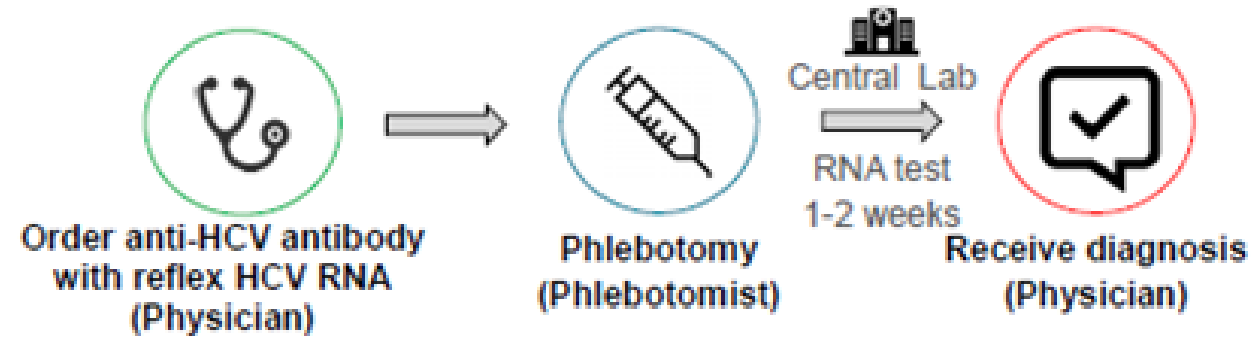
# Rapid HCV Antibody testing



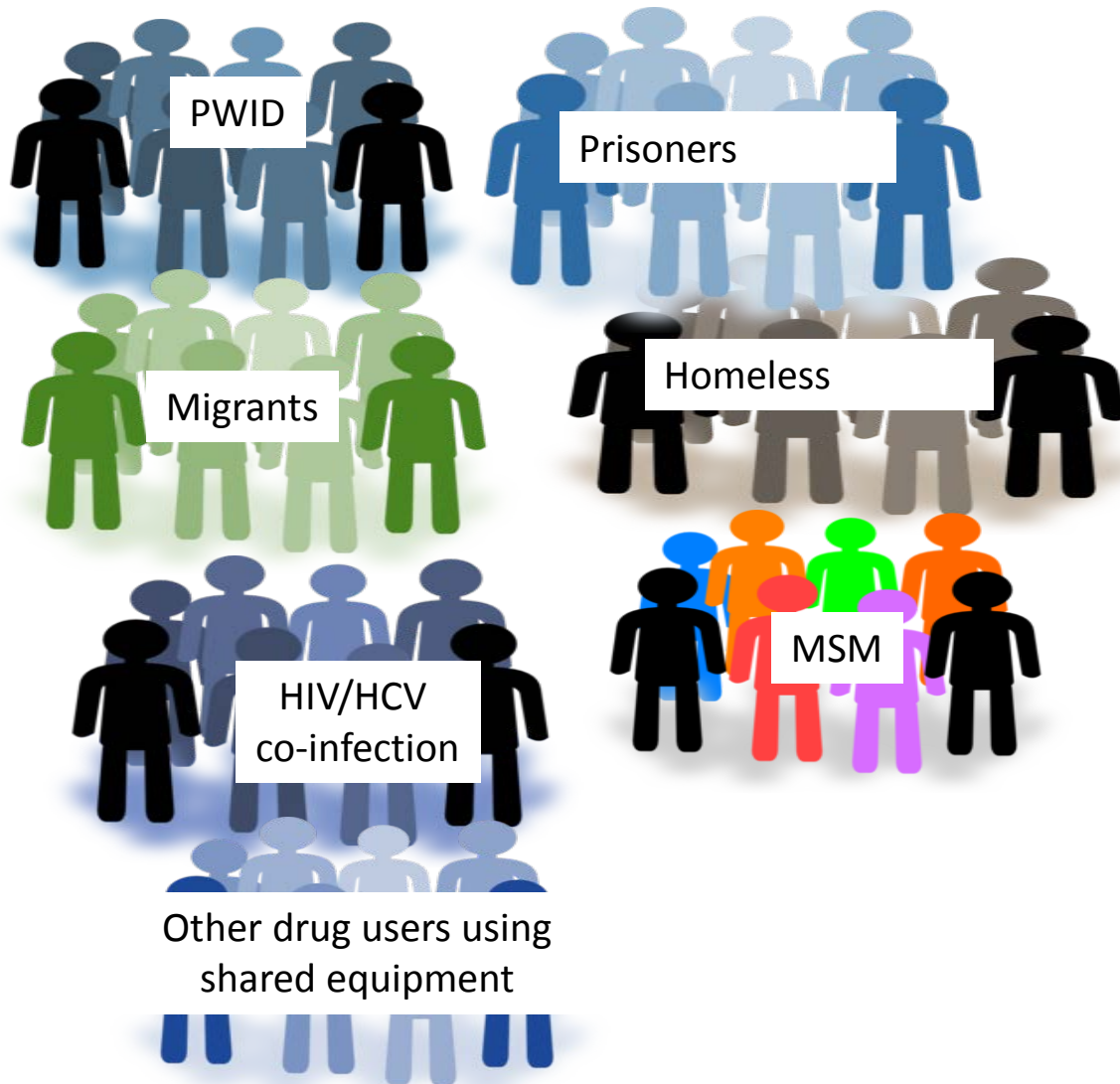
- Single-center free testing clinic
- People randomized to interventions for testing of HIV, HBV, and HCV



# HCV Antibody testing with reflex RNA testing



# Better knowledge of Hepatitis C high risk populations

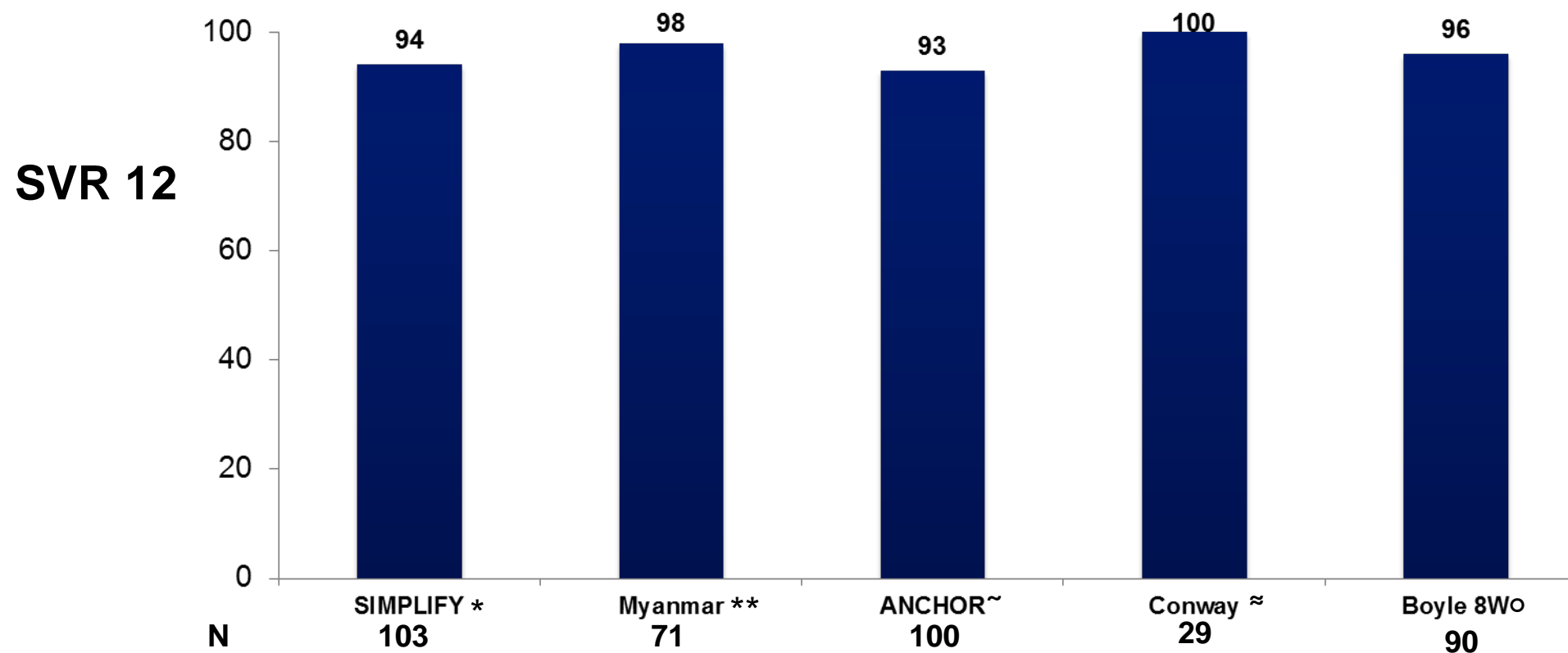


- High HCV prevalence
- Outside the National Health System. Specific centers
- Limited access to HCV therapy

Critical Populations for HCV elimination



# SVR rates with SOF/VEL in PWIDs from studies presented at INHSU 2018



\* : Cunningham\_Oral\_Session R\_21/09/2018\_INHSU  
\*\* : Thaug\_OralSession\_M\_20/09/2018\_INHSU  
~ : Kattakuzhy\_Oral\_Session M\_20/09/2018\_INHSU  
≈ : Conway\_Poster\_09\_2018\_INHSU  
° : Boyle\_Poster\_05\_2018\_INHSU

≈ : ITT SVR rates, consolidated from different studies

## The nexts days..... HCV Elimination

- HCV diagnosis and screening need to increase
- HCV screening of general population is Cost effective
- To treat everyone, we will need
  - to expand the prescriber base
  - To move therapy to high risk populations

# Screening and treatment of hepatitis C in adults of general population in Spain is cost-effective

**Table 1. Results of cost-utility analysis per patient with chronic hepatitis C**

	Total cost	QALY	ICUR
<b>General population vs high-risk population</b>			
General population	€35,497	18.7	<b>€8,914</b>
High-risk population	€17,339	16.7	
<i>Difference</i>	€18,157	2.0	
<b>General population vs the highest anti-HCV prevalence</b>			
General population	€35,497	18.7	<b>€226</b>
The highest anti-HCV prevalence	€34,640	14.9	
<i>Difference</i>	€857	3.8	

ICUR, Incremental Cost-Utility Ratio

- Screening in the general population would generate better health outcomes compared to the high-risk population and to the highest HCV prevalence per patient, though with greater total costs. The Incremental Cost-Utility Ratio (ICUR) per patient with chronic hepatitis C of both comparisons are below the efficiency threshold accepted in Spain (€22,000-€30,000) (Table 1).

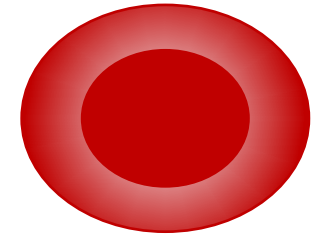
# When should a non-specialist refer to or consult with an specialist



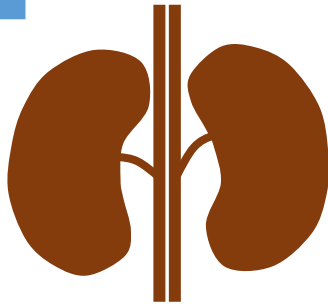
HBV/HIV  
coinfection



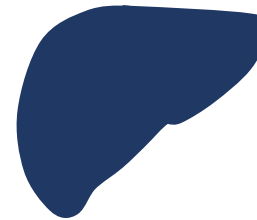
Uncontrolled  
comorbidities



Platelets  
<math><100 \times 10^9/L</math>



eGFR  
<math><30 \text{ mL/min}/1.73^2</math>



Decompensated  
cirrhosis

# Elimination of hepatitis C : objective 2025

