

ARV Therapies and Therapeutic Strategies

INDEPENDENT REPORTING ON EACS 2017

**COMPREHENSIVE EXPERT REVIEW
AND DISCUSSION OF KEY PRESENTATIONS**

An Independent CME Activity Jointly Provided by Postgraduate Institute for Medicine and ViralEd, Inc.
This coverage is not sanctioned by the conference organizers and is not an official part of the conference proceedings.



HEPATITIS C: CONTINUUM OF CARE

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THE HEPATITIS C CONTINUUM OF CARE AMONG HIV INFECTED INDIVIDUALS IN EUROSIDA

**S. Amele, L. Peters, J.D. Lundgren, J.K. Rockstroh, M. Sluzhynska,
A. Yakovlev, A. Scherrer, P. Domingo, J. Gerstoft, J.-P. Viard, R. Zangerle,
R. Flisiak, S. Baghani, M. Ristola, C. Leen, E. Jablonowska, G. Wandeler,
H.-J. Stellbrink, K. Falconer, A.D. Monforte, A. Horban, A. Mocroft**

Abstract PS9/1

METHODS - DEFINITIONS

Stage	Definition
1: anti-HCV +ve	Anti-HCV positive, HCV-RNA positive, HCV genotyped or received HCV treatment before 1/1/2015
2: Ever HCV-RNA tested	Ever HCV-RNA tested, HCV genotyped or received HCV treatment before 1/1/2015
3: Currently HCV-RNA +ve	Most recent HCV-RNA test before 1/1/2015 was positive, HCV genotyped but not treated before 1/1/2015, started treatment for the first time after 1/1/2015 or first HCV-RNA test result after 1/1/2015 is positive and never treated
4: Ever HCV-RNA +ve	Ever had a positive HCV-RNA test, received HCV treatment or HCV genotyped before 1/1/2015
5: Ever received treatment	Started HCV treatment on or before 1/1/2015
6: Treatment completed	Completed HCV treatment on or before 1/1/2015
7: FU HCV-RNA available	HCV-RNA test after completing treatment (HCV-RNA test data included for duration of FU to allow for assessment of SVR)
8: SVR	HCV-RNA negative test at least 12 or 24 weeks post treatment (for IFN-free and IFN-based therapy, respectively)

Amele S, et al. 16th EACS, Milan, Italy, October 25-27, 2017; Abst. PS9/1.

EUROSIDA HCV COHORT: CHARACTERISTICS AT 1/1/2015

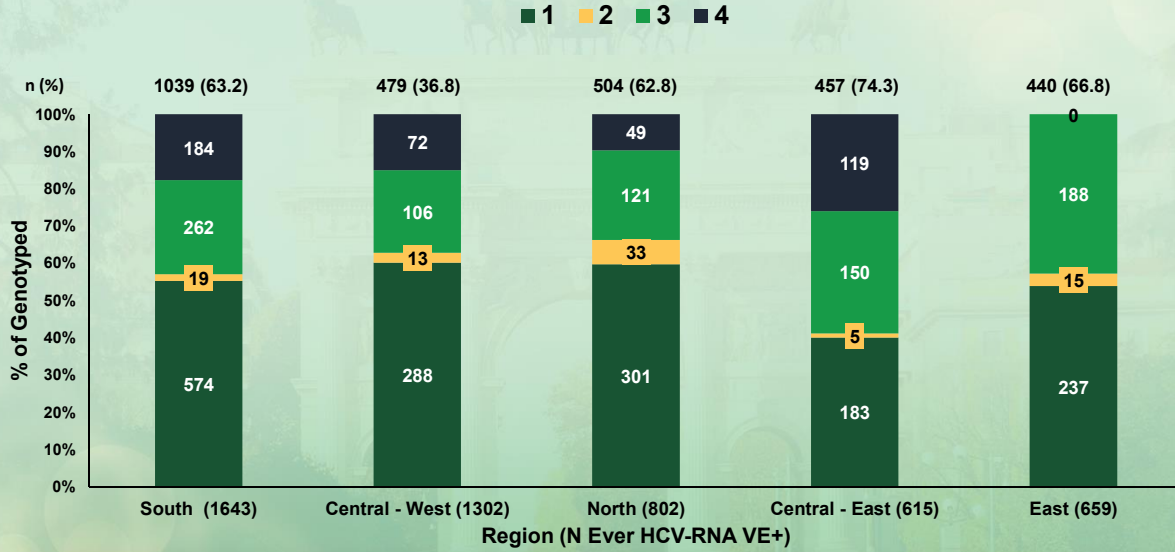
Region n (%)	Overall 6985 (100.0)	South 1910 (27.3)	Central - West 1614 (23.1)	North 966 (13.8)	Central - East 925 (13.2)	East 1570 (22.5)	
Variables	%						
Gender	Male	71.6	72.5	75.1	78.4	72.0	62.7
Ethnicity	White	88.3	94.3	68.2	82.3	98.6	99.4
Fibrosis	<F3	74.7	73.9	80.9	69.5	69.4	75.7
	≥F3*	12.9	15.4	11.6	12.8	9.8	13.1
HIV risk group	MSM	21.0	16.5	32.2	42.0	21.2	2.0
	IDU	54.2	60.1	40.0	37.9	59.1	68.9
cART	Yes	88.8	95.3	80.4	95.9	95.0	81.7
Median							
Age		47	50	51	51	41	37
CD4 count (cells/mm³)		278	297	332	234	244	267

Evidence of difference between regions for all variables (p<0.001)

* Either a biopsy (≥METAVIR stage F3), APRI (score >1.5), hyaluronic acid (>160ng/mL) or FibroScan (>9.5kPa) test during follow-up

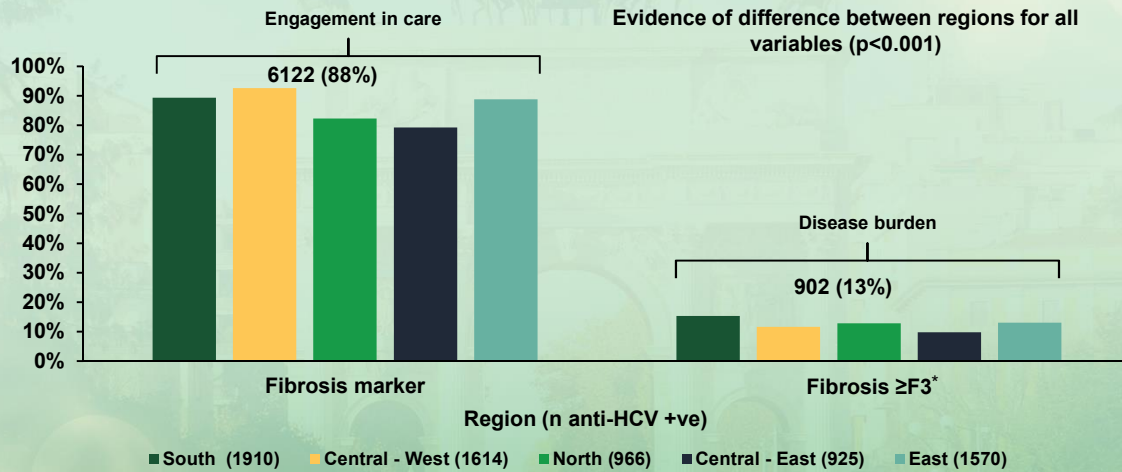
Amele S, et al. 16th EACS, Milan, Italy, October 25-27, 2017; Abst. PS9/1.

HCV GENOTYPE



Amele S, et al; 16th EACS, Milan, Italy, October 25-27, 2017; Abst. PS9/1.

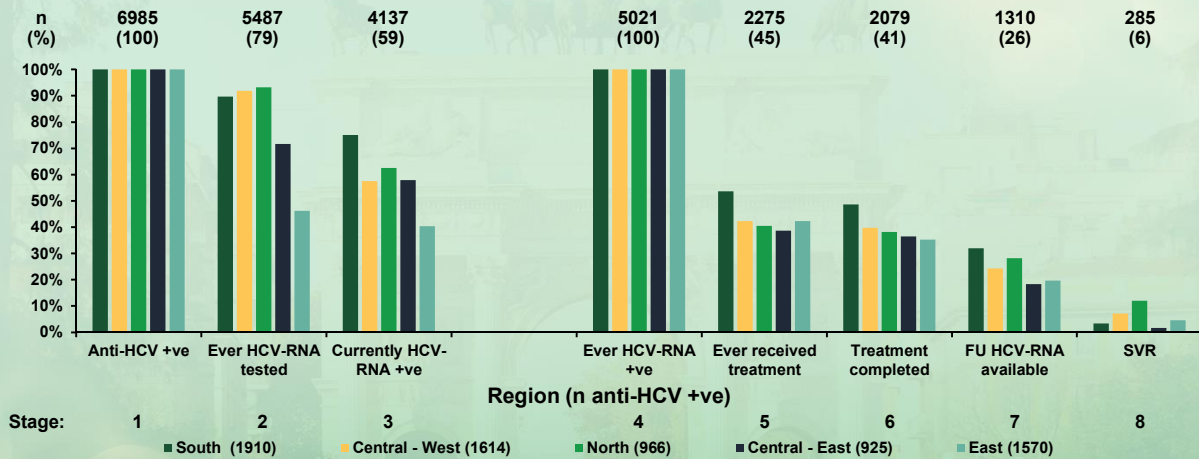
FIBROSIS



* Either a biopsy (METAVIR stage F3), APRI (score >1.5), hyaluronic acid (>160ng/mL) or FibroScan (>9.5kPa) test during follow-up

Amele S, et al; 16th EACS, Milan, Italy, October 25-27, 2017; Abst. PS9/1.

CASCADE OF CARE BY REGION AT 1/1/2015



Evidence of difference between regions for all stage ($p < 0.001$)

Amele S, et al; 16th EACS, Milan, Italy, October 25-27, 2017; Abst. PS9/1.

METHODS

Design	<ul style="list-style-type: none"> Nationwide cross-sectional study
Study period	<ul style="list-style-type: none"> October-November 2016
Reference population	<ul style="list-style-type: none"> All HIV+ patients in active follow-up in the participating centers*
Sample size estimation	<ul style="list-style-type: none"> Confidence level 95% Design effect 1.0 Accuracy of 2.0%
Patient selection	<ul style="list-style-type: none"> Number of patients from each hospital determined by proportional allocation Patients were selected using simple random sampling
Data recording	<ul style="list-style-type: none"> Online CRF

* Active follow-up = at least 1 visit in the previous 12 months

Berenguer J, et al; 16th EACS, Milan, Italy, October 25-27, 2017; Abst. PS9/3; Gonzalez-Garcia J, et al; 16th EACS, Milan, Italy, October 25-27, 2017; Abst. PE16/14.

CENTERS, POPULATION, SAMPLE SIZE



Centers

43 centers

Reference Population

38,904 HIV+ patients

Sample Size

1,588 HIV+ patients

Data Recording

Online CRF

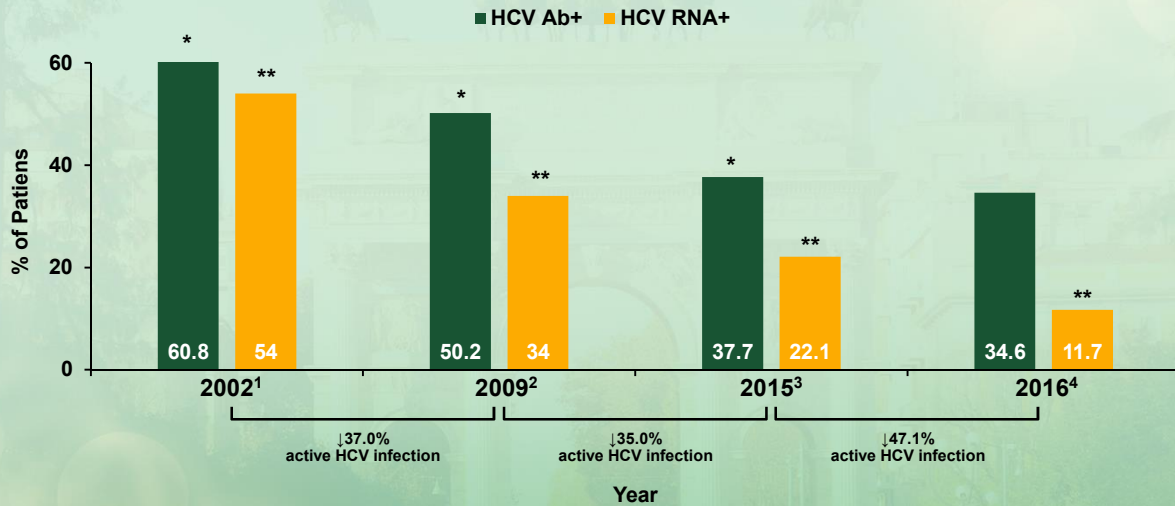
Gonzalez-Garcia J, et al; 16th EACS, Milan, Italy, October 25-27, 2017; Abst. PE16/14.

DEFINITION OF LIVER CIRRHOSIS

- The presence of liver cirrhosis was investigated in all patients, as was the method of diagnosis, namely, liver biopsy, transient elastography (liver stiffness >12.5 kPa), or clinical/biological findings
- Patients with prior or current episodes of ascites, hepatic encephalopathy, or variceal bleeding were considered to have decompensated liver disease
- In patients with cirrhosis, current Child-Pugh and model for end-stage liver disease (MELD) scores were recorded
- We also recorded whether patients had been diagnosed with hepatocellular carcinoma and whether they had undergone liver transplantation

HIV/HCV Co-infection in Spain. EACS 2017 PE16/14
Berenguer J, et al; 16th EACS, Milan, Italy, October 25-27, 2017; Abst. PS9/3.

PREVALENCE OF HCV INFECTION 2002 - 2016



*, ** P trend <0.001

1. González J, et al. *Enferm Infecc Microbiol Clin* 2005; 23:340-8. 2. González J, et al. *IV Congreso Nacional de GeSIDA*, 2012. Abstract # PO-41.
3. Berenguer J et al. *Open Forum Infect Dis* 2016;3:ofw059. 4. Berenguer J, et al. *EACS 2017*; Abstract # PS9/3

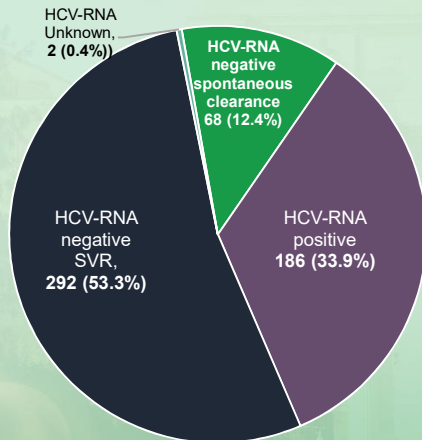
CHARACTERISTICS OF PATIENTS ACCORDING TO HCV SEROLOGY

	HCV-Ab+ (N = 548)	HCV-Ab- (N = 1037)	P
Male sex, n (%)	415 (75.7)	805 (77.6)	.39
Age years, mean (SD) ²	51 (7)	47 (12)	<.001
IDU as HIV transmission category, n (%)	417 (76.1)	53 (5.1)	<.001
CDC clinical category C, n (%)	166 (30.3)	236 (22.8)	.001
cART, n (%)	538 (98.2)	994 (95.8)	.014
Type of cART regimen, n (%)			
2 NRTI + 1 NNRTI	136 (25.2)	376 (37.8)	
2 NRTI + 1 PI	74 (13.7)	118 (11.9)	
2 NRTI + 1 integrase inhibitor	183 (33.9)	312 (31.4)	
PI-based monotherapy	36 (6.7)	49 (4.9)	<.001
PI-based bitherapy	53 (9.8)	56 (5.6)	
Other	57 (10.6)	83 (8.3)	
HIV-RNA copies/ml, n (%), patients on cART			
<50	488 (90.7)	924 (93.0)	
50-200	23 (4.3)	30 (3.0)	.28
>200	27 (5.0)	40 (4.0)	
CD4+ – T cells/μL, median (IQR), patients on cART	659 (431-886)	678 (495-910)	.039

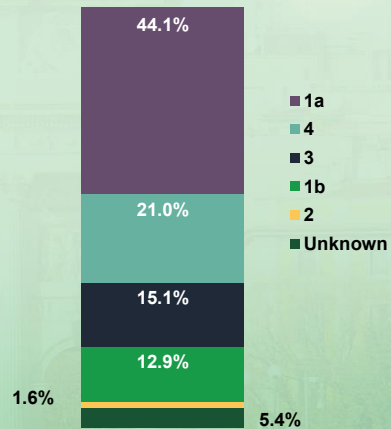
Berenguer J, et al; 16th EACS, Milan, Italy, October 25-27, 2017; Abst. PS9/3;

HCV-RNA RESULTS & HCV GENOTYPES

548 Patients HCV Ab+



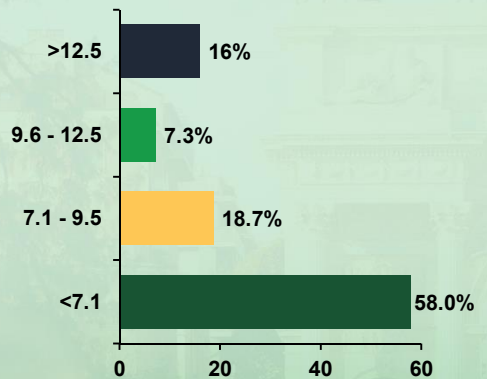
Genotypes



Gonzalez-Garcia J, et al; 16th EACS, Milan, Italy, October 25-27, 2017; Abst. PE16/14.

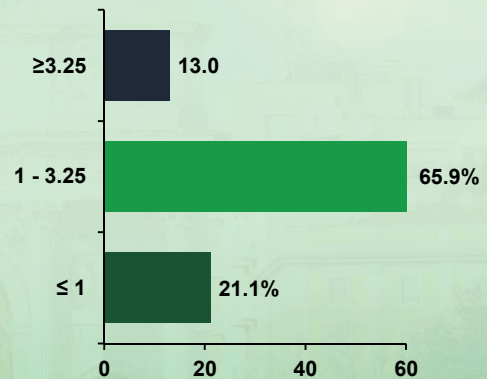
FIBROSIS STAGING IN HCV-RNA+ PATIENTS

Liver Stiffness (kPa)



Patients with TE = (80.6%)
TE value, median (IQR) = 6.6 (5.4 - 9.1)

FIB-4



Patients with FIB-4 = 185 (99.5%)
FIB-4 value, median (IQR) = 1.5 (1.1 - 2.2)

Berenguer J, et al; 16th EACS, Milan, Italy, October 25-27, 2017; Abst. PS9/3;

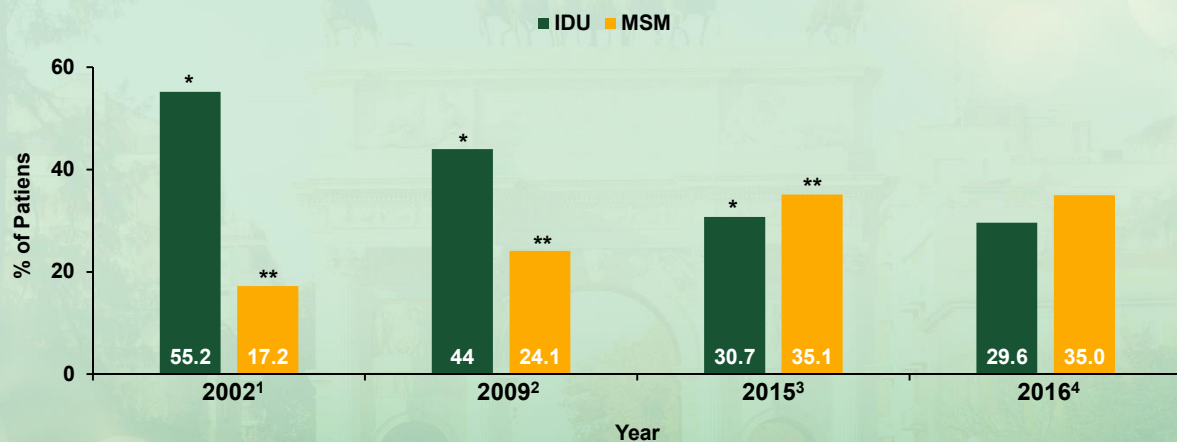
PREVALENCE AND CHARACTERISTICS OF CIRRHOSIS AMONG HCV-RNA+ PATIENTS AND HCV-RNA- PATIENTS AFTER SVR

	HCV-RNA+	HCV-RNA- after SVR	P
	N = 186	N = 292	
Liver cirrhosis, n (%)	28 (15.0)	92 (31.5)	<.001
Decompensated cirrhosis, n (%)	4 (14.3)	8 (8.7)	.39
Hepatocellular carcinoma, n (%)	1 (3.6)	1 (1.1)	.37
Serum albumin, median (IQR)	4.0 (3.5 – 4.6)	4.4 (4.0 – 4.7)	.046
Patients with FIB-4, n (%)	28 (100.0)	92 (100.0)	
FIB-4 value - Median (IQR)	2.8 (1.6 – 5.1)	2.0 (1.4 – 3.2)	.047
Patients with TE, n (%)	27 (96.4)	84 (91.3)	
Last TE value – kPa, median (IQR)	10.9 (3.2 – 25.4)	14.7 (7.7 – 34.3)	.29

Berenguer J, et al. 16th EACS, Milan, Italy, October 25-27, 2017; Abst. PS9/3;

HIV/HCV Coinfection in Spain. EACS 2017 PS9/3

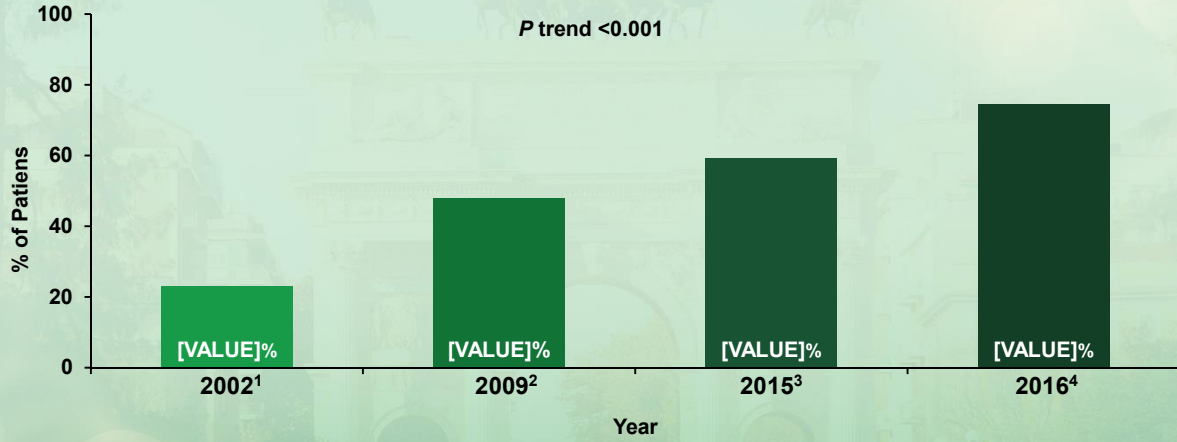
MECHANISMS OF HIV TRANSMISSION 2002 - 2016



*, ** P trend <0.001

1. González J, et al. Enferm Infecc Microbiol Clin 2005; 23:340-8. 2. González J, et al. IV Congreso Nacional de GeSIDA; 2012. Abstract # PO-41.
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ANTI-HCV TREATMENT UPTAKE 2002 - 2016



% of patients with current or past chronic HCV infection exposed to anti-HCV therapy

1. González J, et al. Enferm. Infecc. Microbiol. Clin. 2005; 23:340-8.
2. González J, et al. IV Congreso Nacional de GESIDA; 2012. Abstract # PO-41
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