The experience of HCV/HIV cohort in Italy HepaICONA

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ICONA Patients:
HCV-RNA pos
at/later than Jan
2013
(n=1086)

HEPAICONA
Patients:
-HIV/HCV coinfected
-HCV RNA pos
-DAA naives
(n=2721)

Icona/Hepaicona
Patients:
HCV-RNA pos at/later
than Jan 2013
(n=3807)

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Italian Cohort
I. C. O.
N A.
Naive Antiretrovirals

Data on HCV prevalence: the Icona cohort

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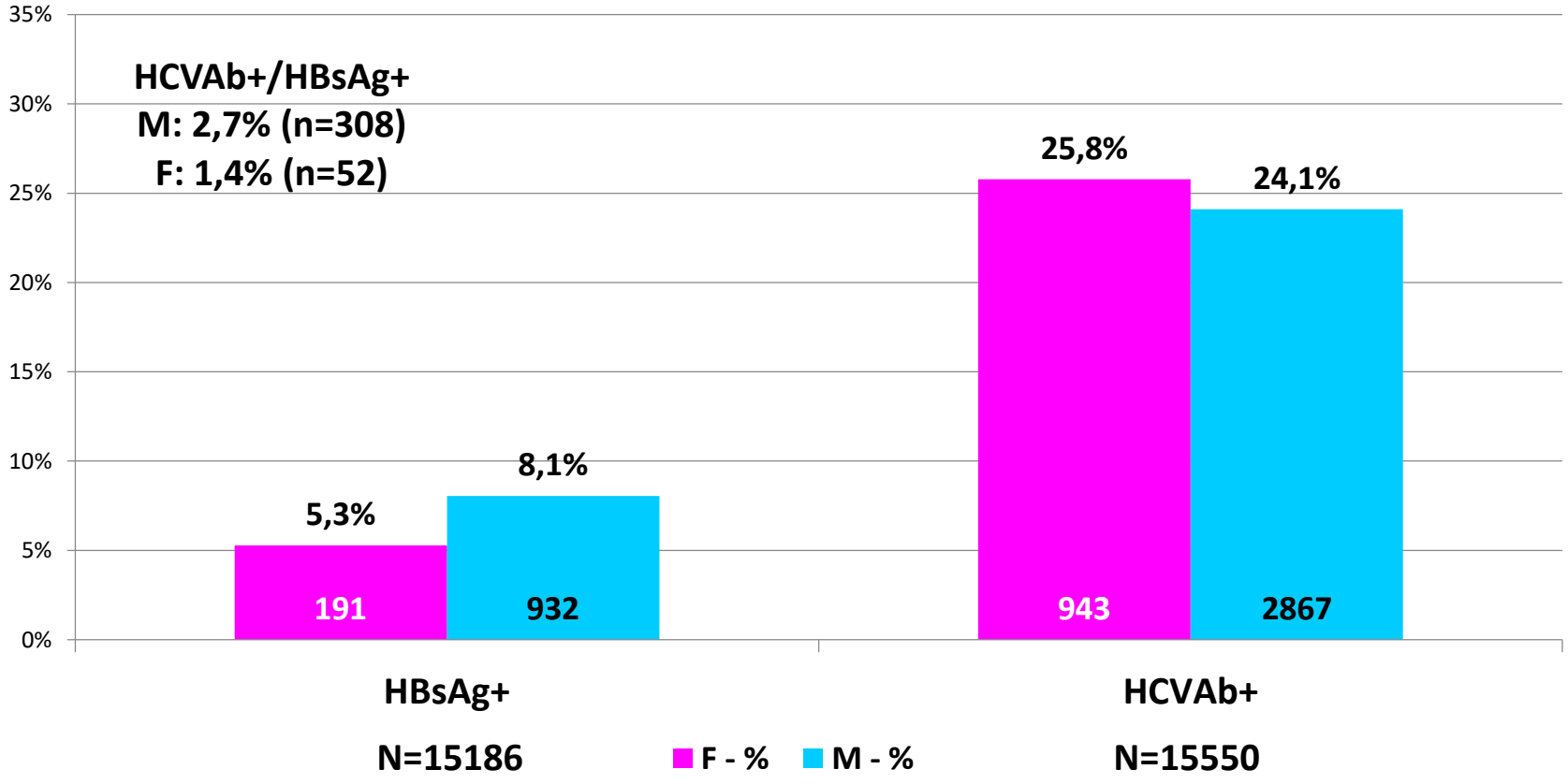
Italian Cohort I. C. O. N. A. Naive Antiretrovirals

HBsAg and HCVAb positivity according to gender in ICONA patients



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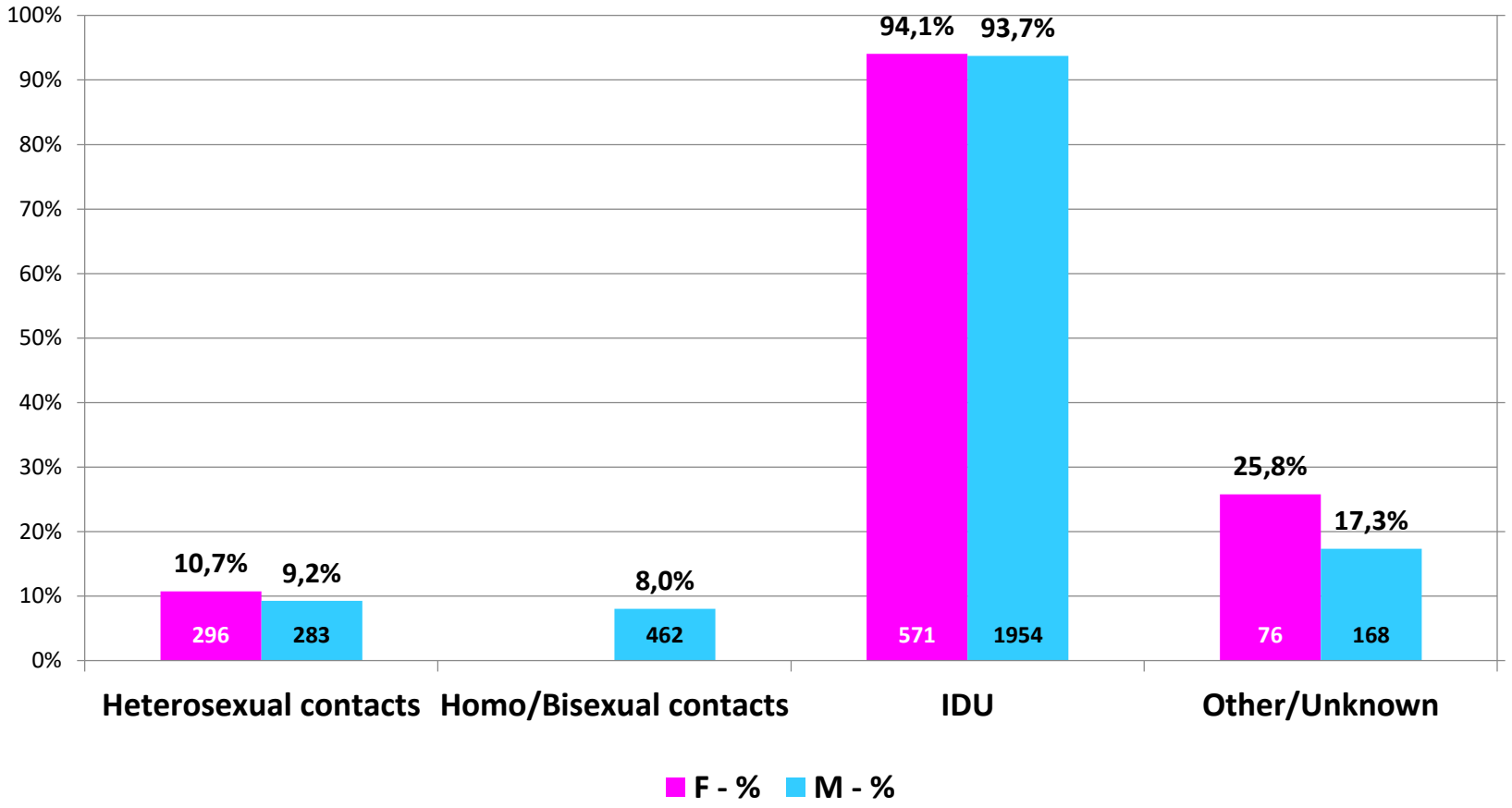
HCVAb pos (n=3810) according to gender and mode of HIV transmission in 15.550 patients enrolled in ICONA



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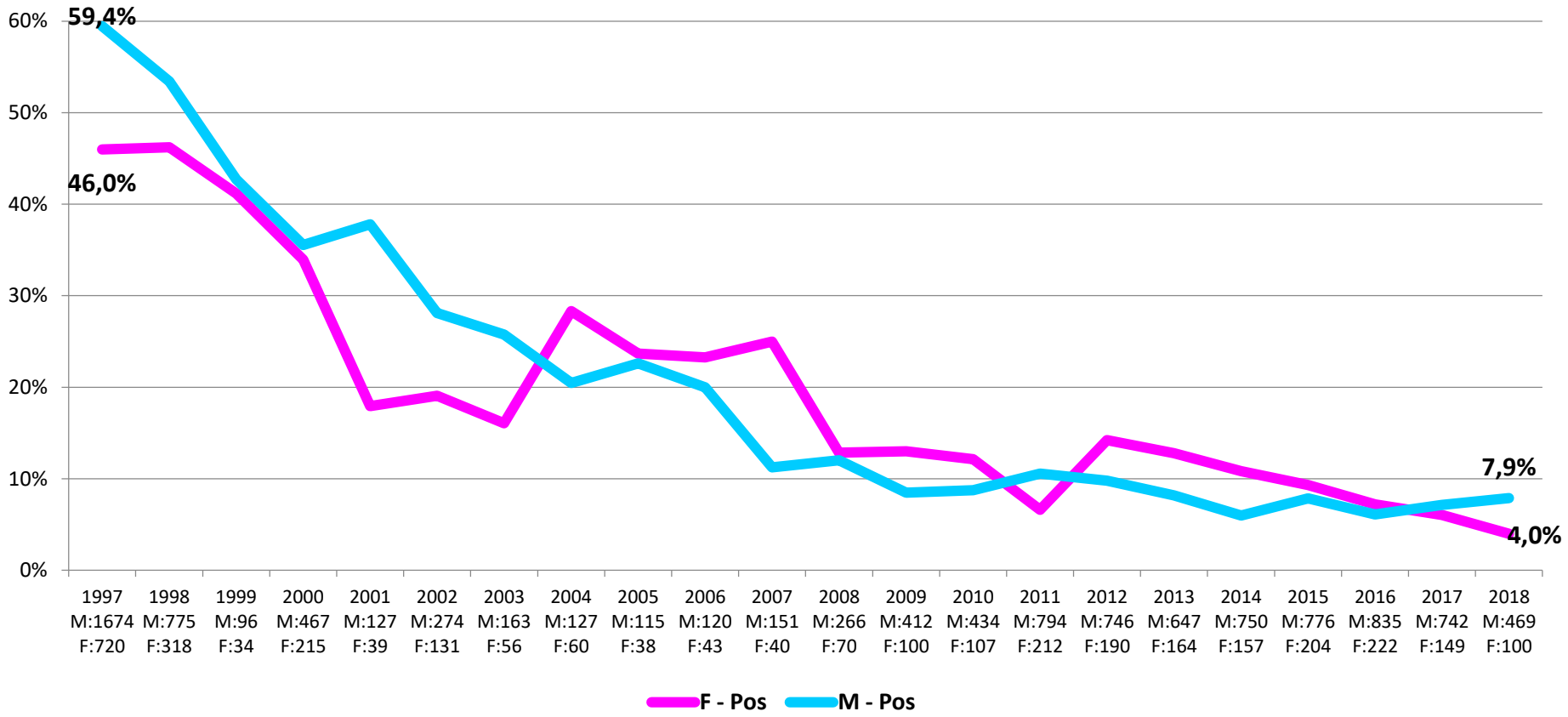
Proportion of patients with HCVAb positive test within 1 year from enrolment, according to calendar year of enrolment and gender



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Italian Cohort I.C.O.N.A. Naive Antiretrovirals

Data from the ICONA/HEPAicona cohorts

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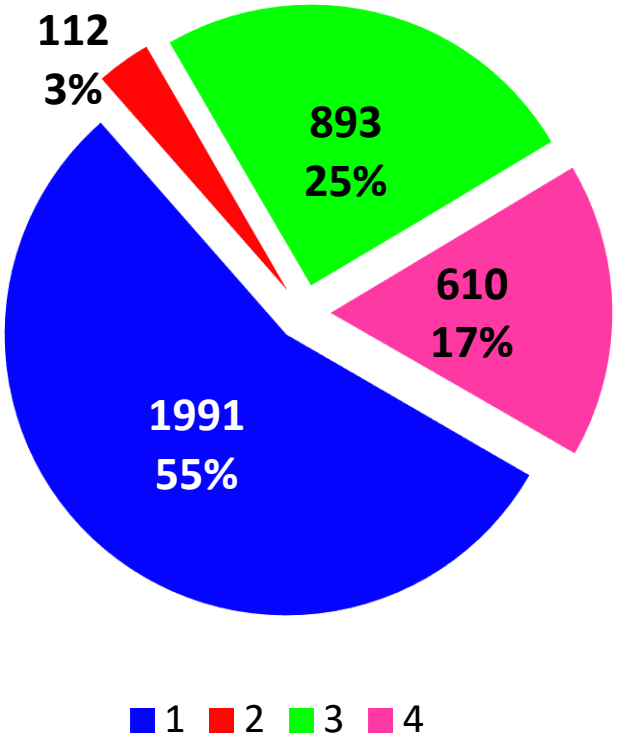
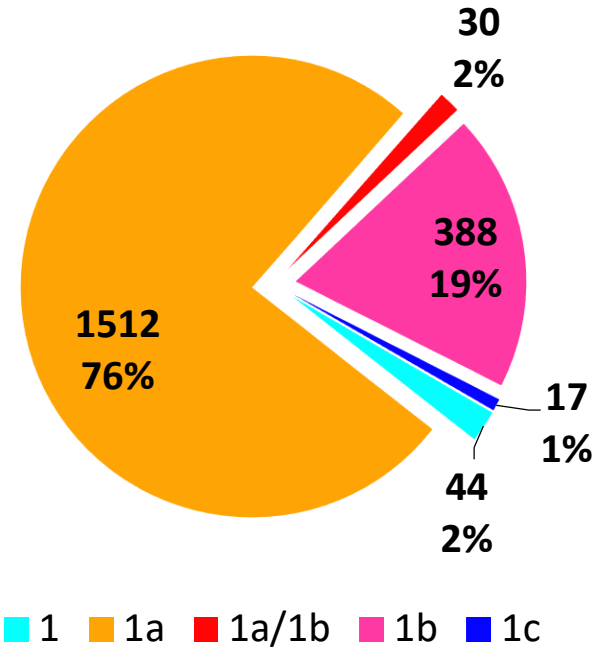
Proportion of HCV genotypes in 3606 Icona/HepaIcona patients





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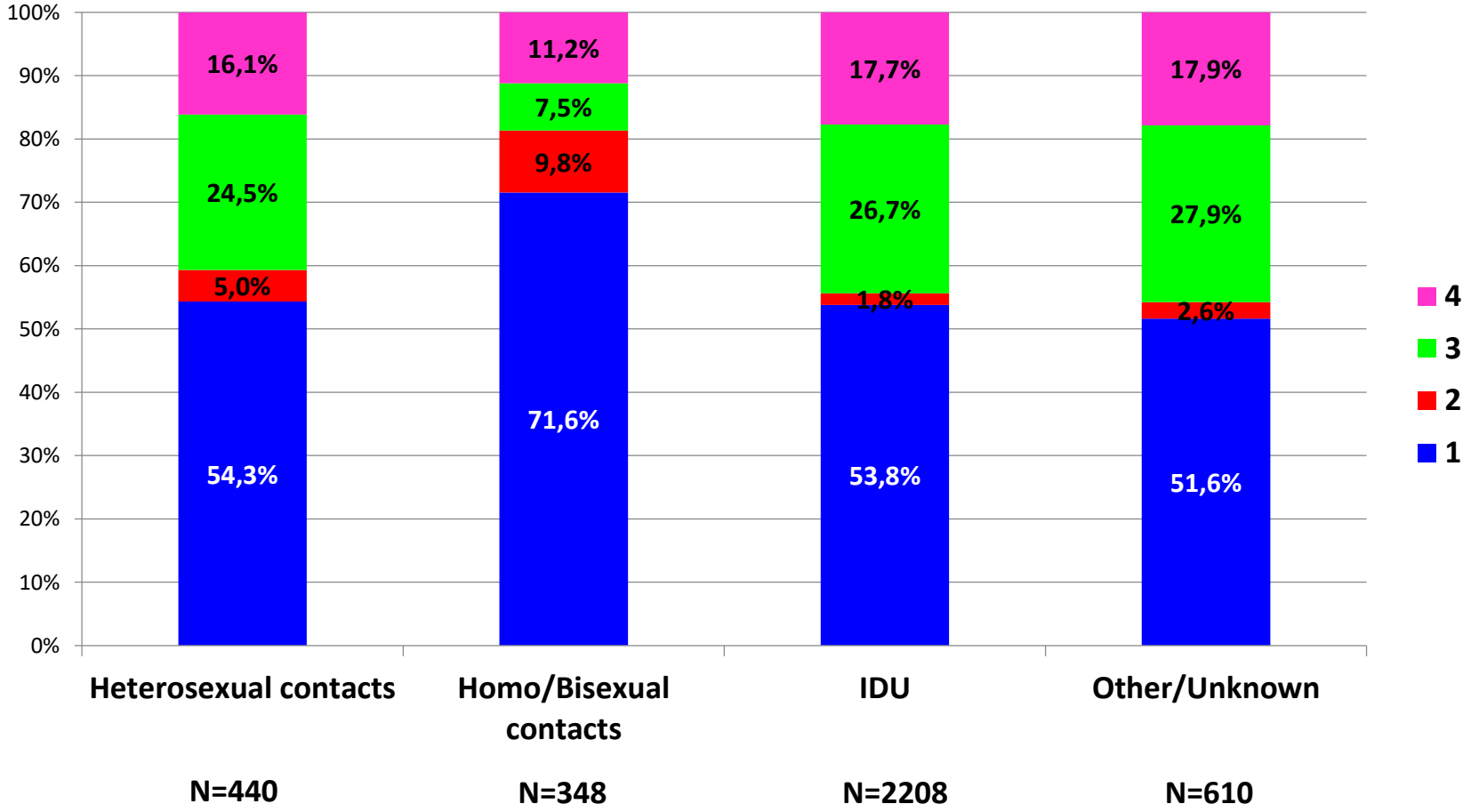
HCV genotypes according to mode of HIV transmission in 3606 Icona/Hepaicona patients



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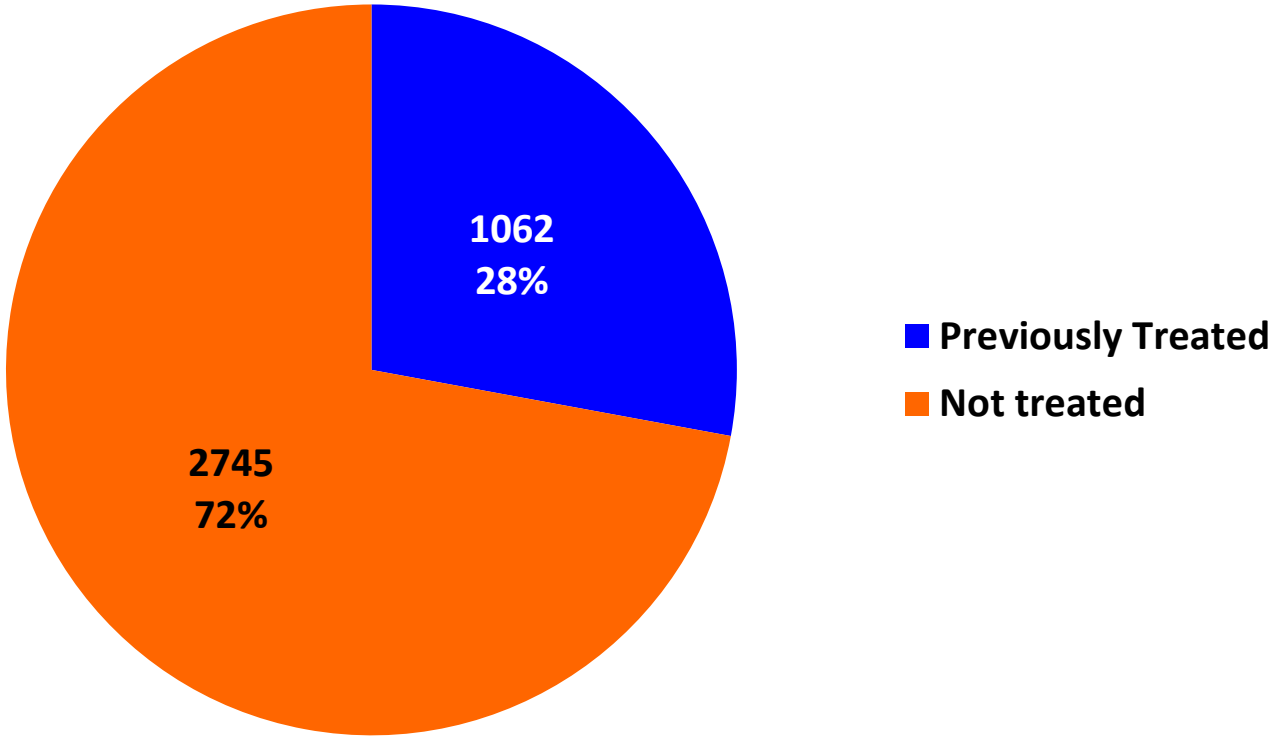
Italian Cohort I.C.O.N.A. Naive Antiretrovirals

Proportion of untreated and previously treated patients (without SVR) at Jan 2013 in Icona/HepaIcona



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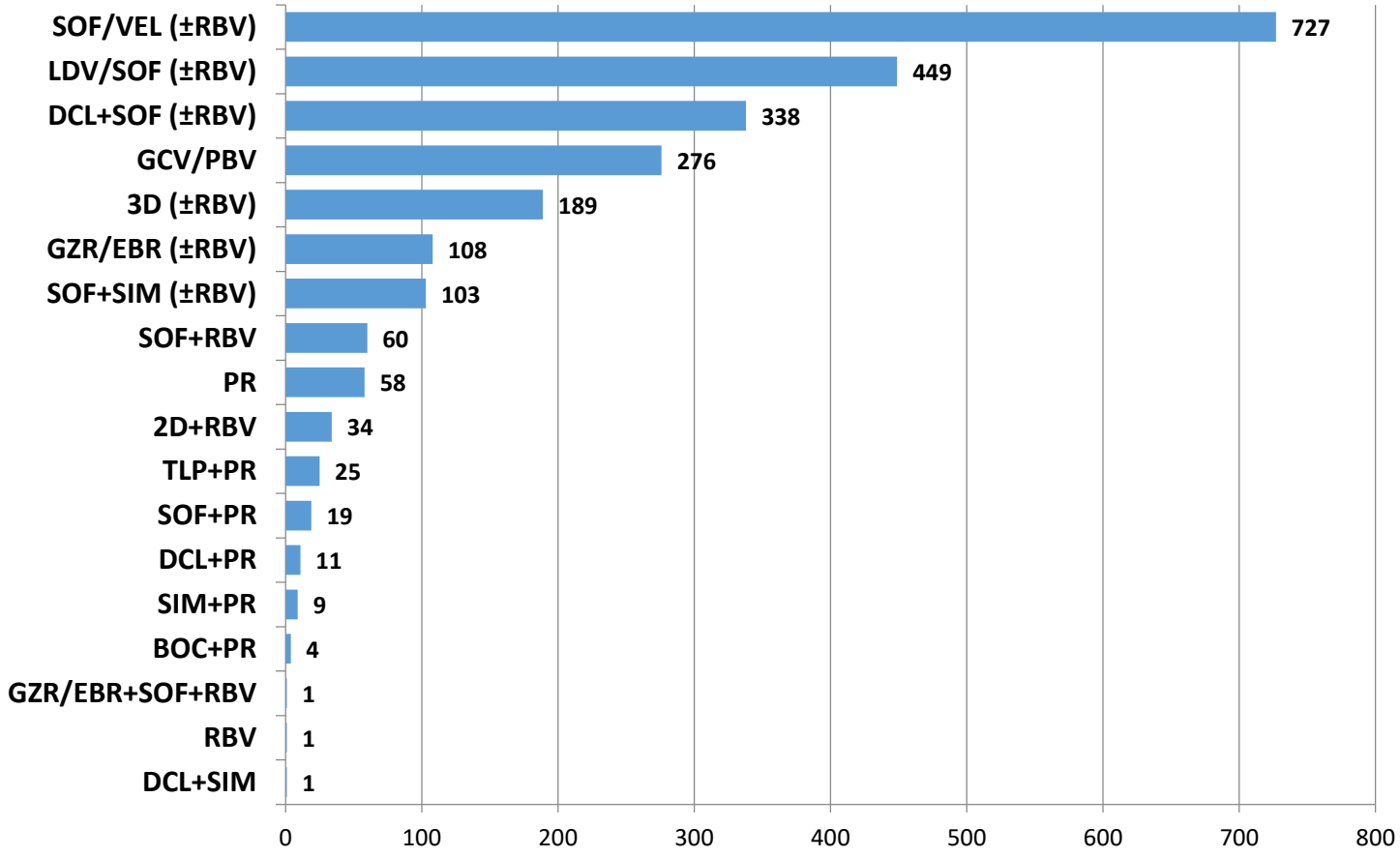
Distribution of anti-HCV regimens Icona/HepaIcona patients (n=2413 in 2346 patients)



2D	ombitasvir/paritaprevir/r
3D	ombitasvir/paritaprevir/r+ dasabuvir
BOC	boceprevir
DCL	daclatasvir
GCV/PBV	glecaprevir/pibrentasvir
GZR/EBR	grazoprevir/elbasvir
LDV/SOF	ledipasvir/sofosbuvir
PR	peg-interferon+ribavirin
RBV	ribavirin
SIM	simeprevir
SOF	sofosbuvir
SOF/VEL	sofosburvir/velpatasvir
TLP	telaprevir

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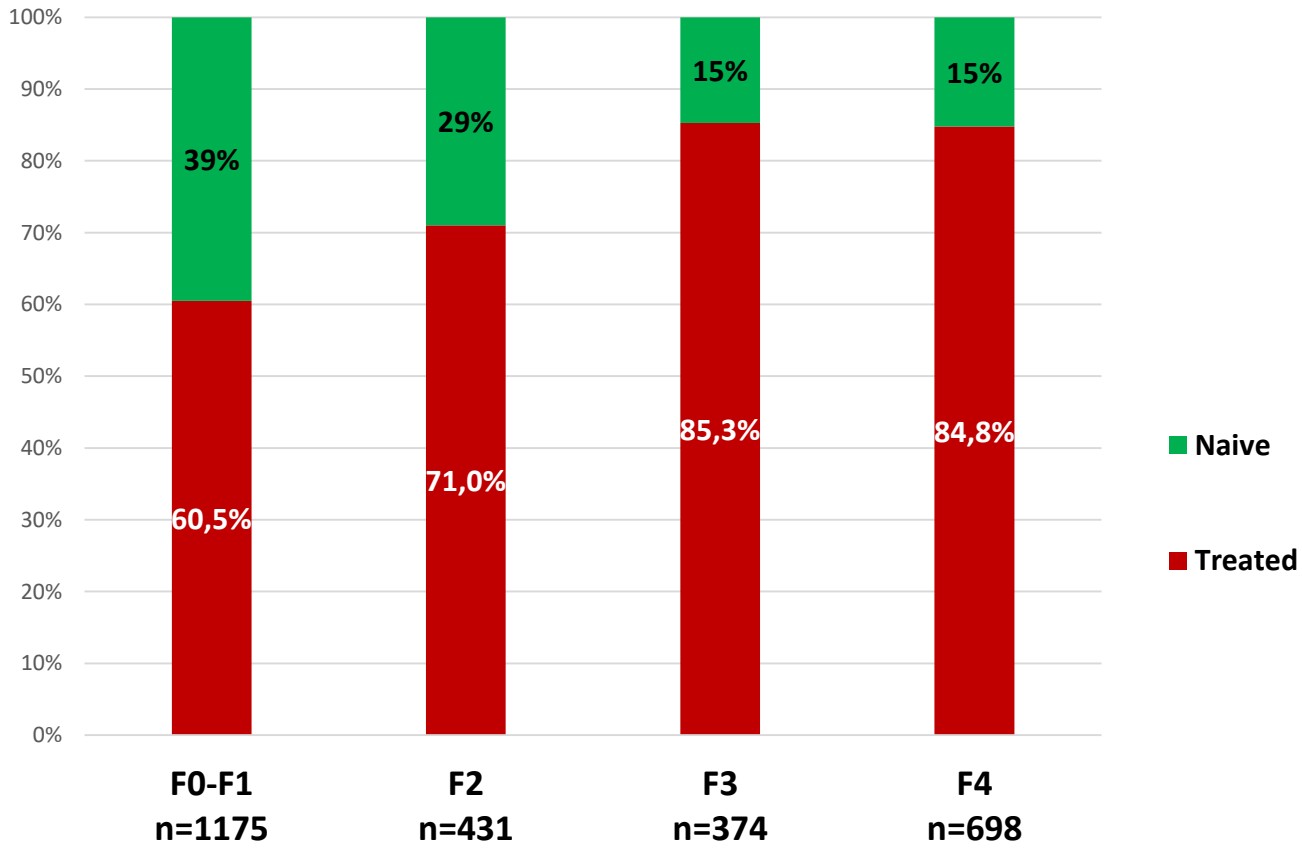
Prevalence of start of any anti-HCV treatment according to last fibrosis stage in Icona/HepaIcona patients (1928/2678 patients with fibroscan available)



Stiffness Value	Fibrosis Stage
<7 KPa	F0-F1
7-10 KPa	F2
10-13 KPa	F3
>13 KPa	F4

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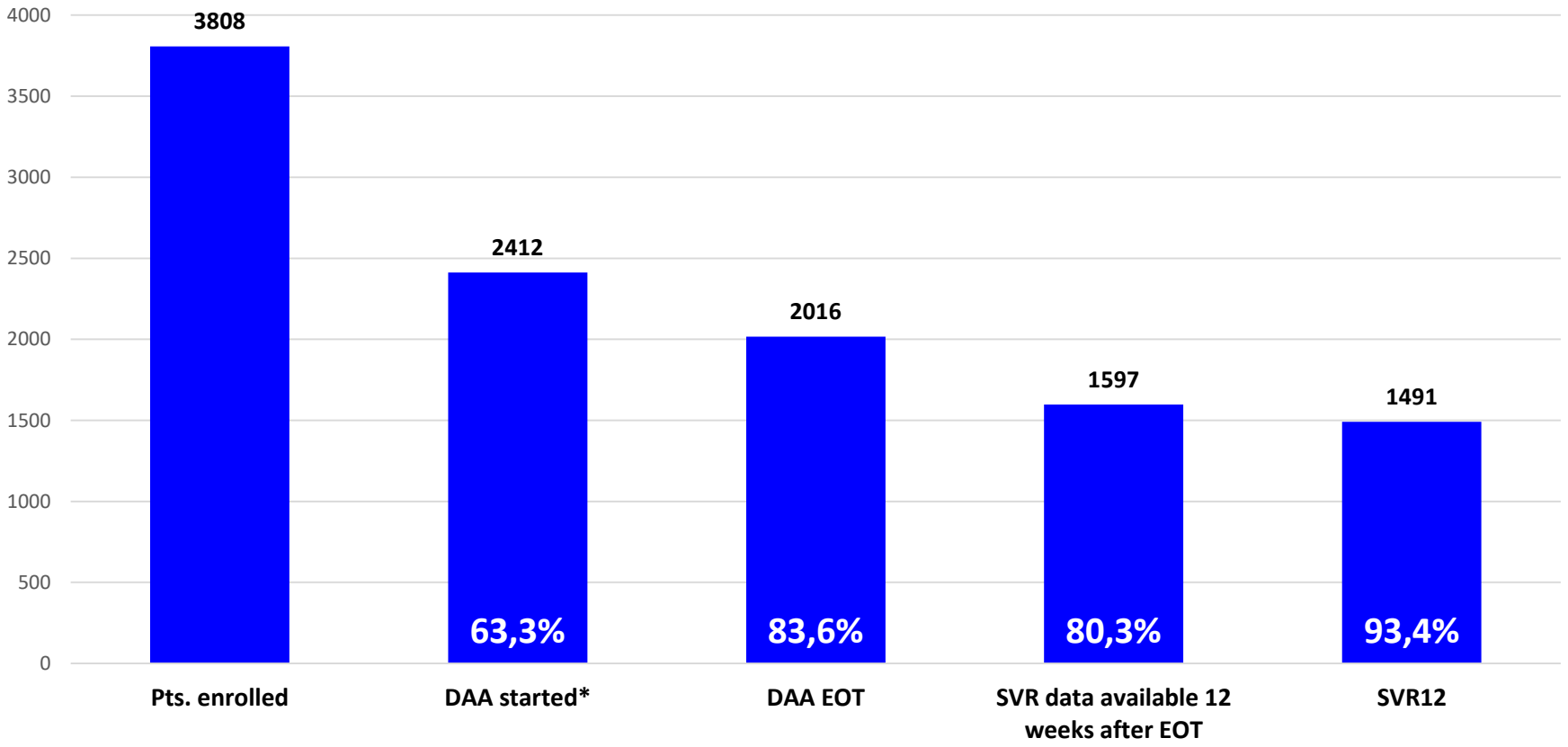
Outcome of anti-HCV therapies started in Icona/Hepaicona

39% known to be Cured



** 58 patients starting Peg-Interferon+Ribavirin*

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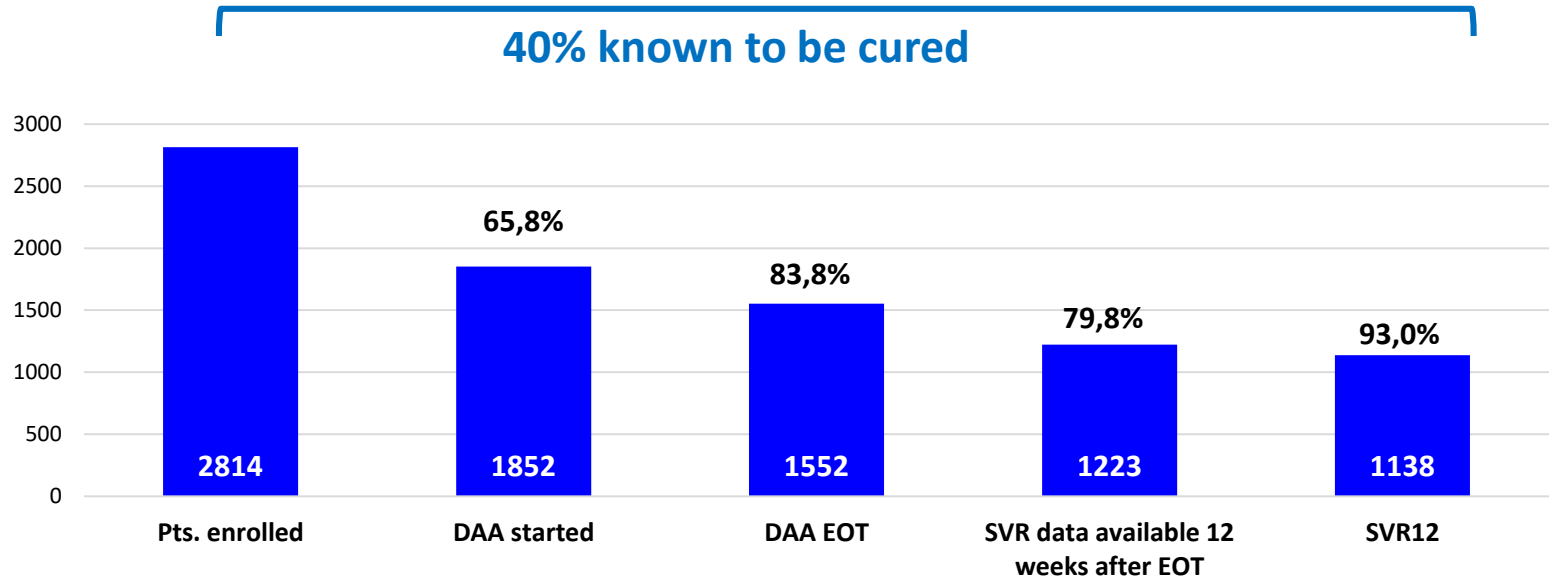
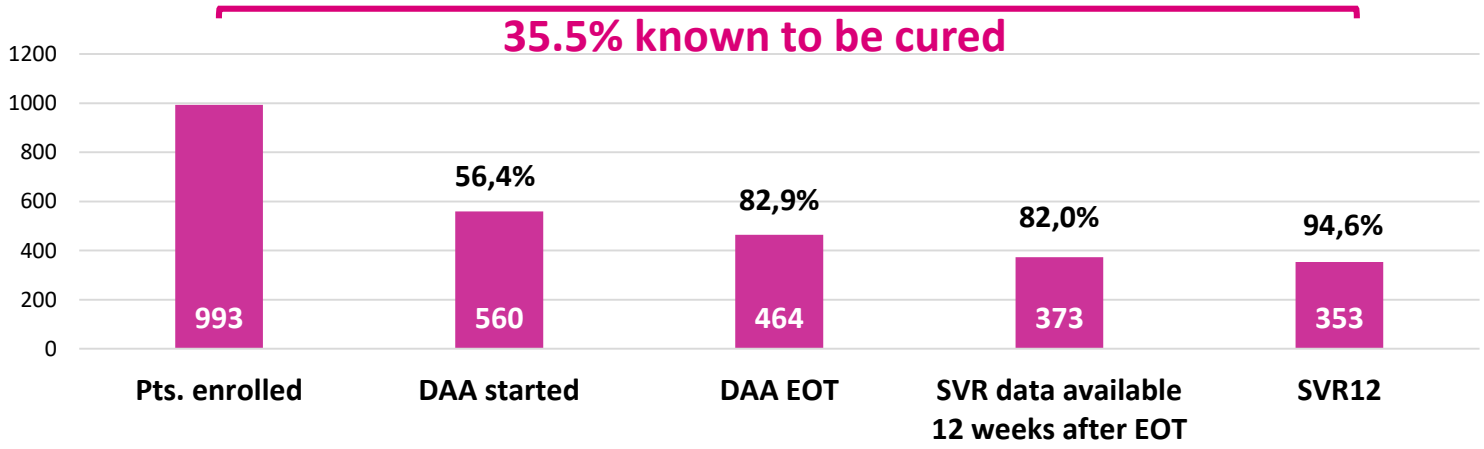
Outcome of anti-HCV therapies started in Icona/HepaIcona according to gender

Male



Female



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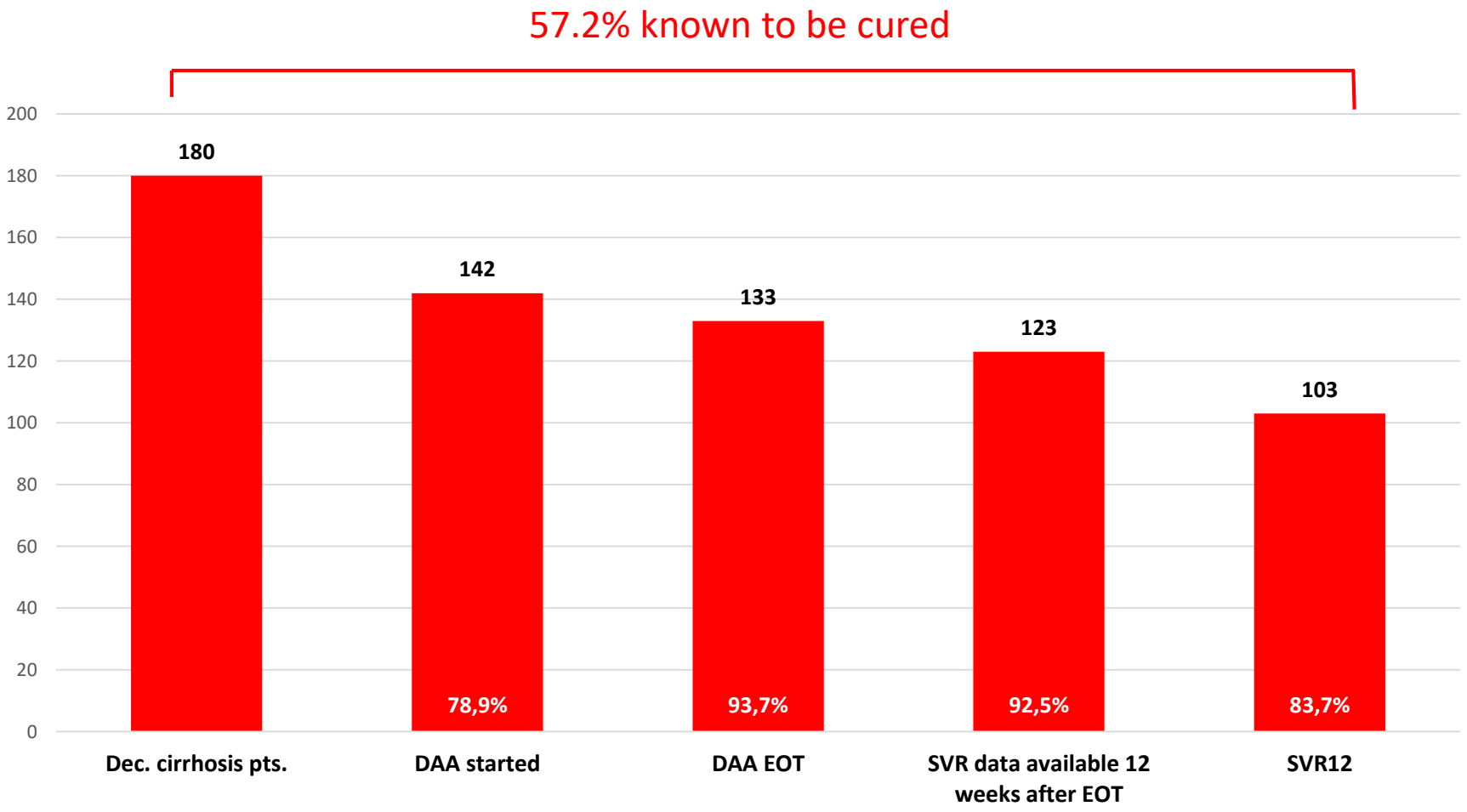
Outcome of DAA-cohort patients with decompensated cirrhosis starting DAA



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Italian Cohort I.C.O.N.A. Naive Antiretrovirals

Published data from the ICONA/HEPAicona cohorts

Jan 2018 Report

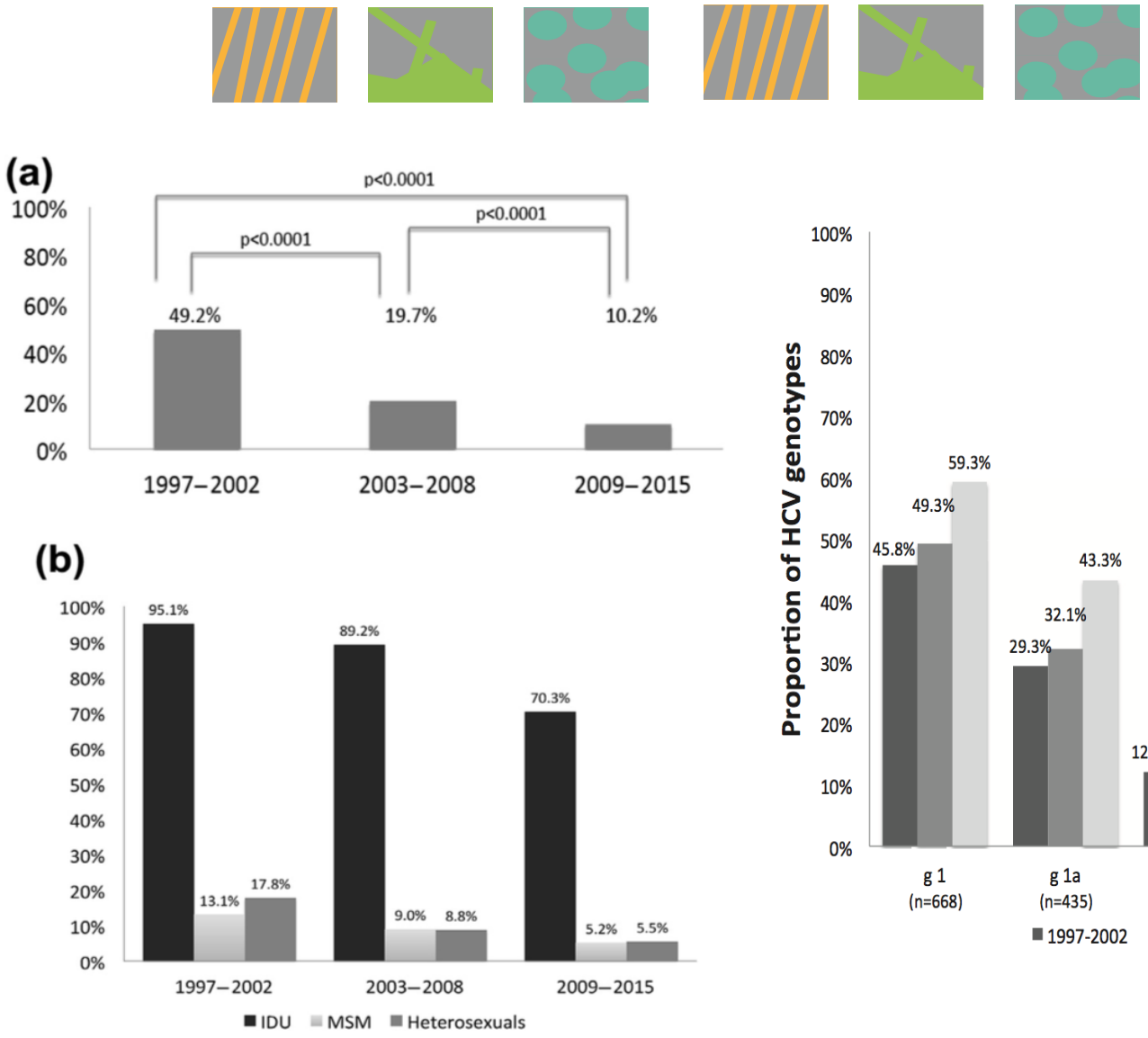
Contents lists available at ScienceDirect

Clinical Microbiology and Infection

journal homepage: www.clinicalmicrobiologyandinfection.com

Evolution of the prevalence of hepatitis C virus infection and hepatitis C virus genotype distribution in human immunodeficiency virus-infected patients in Italy between 1997 and 2015

B. Rossetti [1,2,*], F. Bai [3], A. Tavelli [4], M. Galli [5], A. Antinori [6], F. Castelli [7], G. Pellizzer [8], A. Cozzi-Lepri [9], S. Bonora [10], A.d'Arminio Monforte [3], M. Puoti [11], A. De Luca [1,12], on behalf of the ICONA Foundation study group



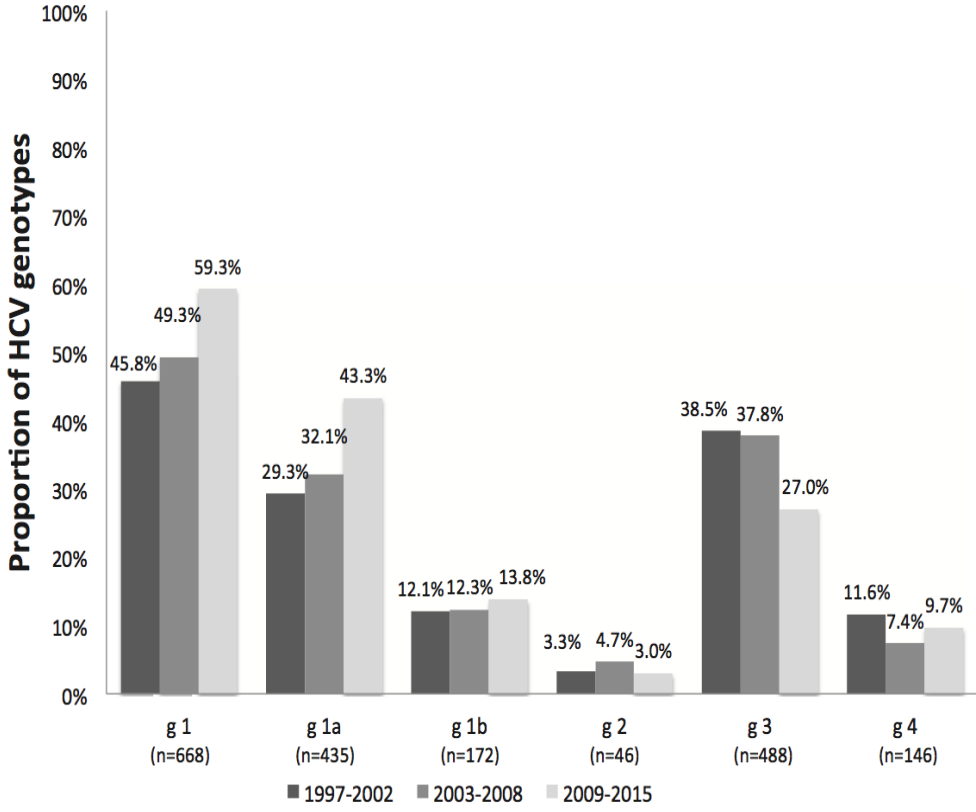


Fig. 1. Prevalence of hepatitis C virus antibody-positive (HCV-Ab+) status at entry into cohort according to (a) calendar period and (b) risk factor for human immunodeficiency virus (HIV) acquisition. IDU, injecting drug users; MSM, men who have sex with men. Linear-by-linear association chi-squared test: for IDU p <0.0001, for MSM p <0.0001, for heterosexual contacts p <0.0001.

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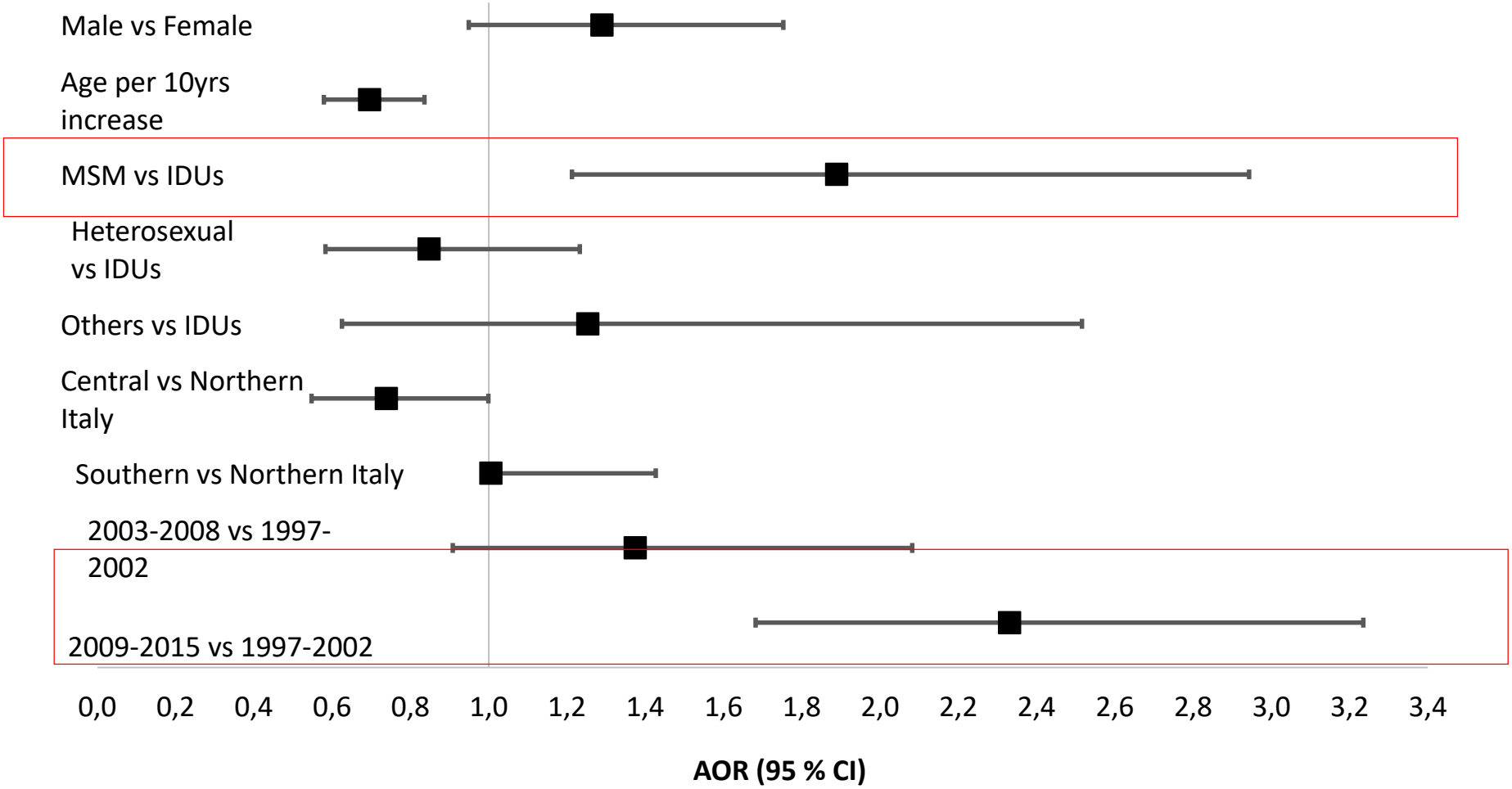
Factors associated with hepatitis C virus antibody-positive status between 1997 and 2015

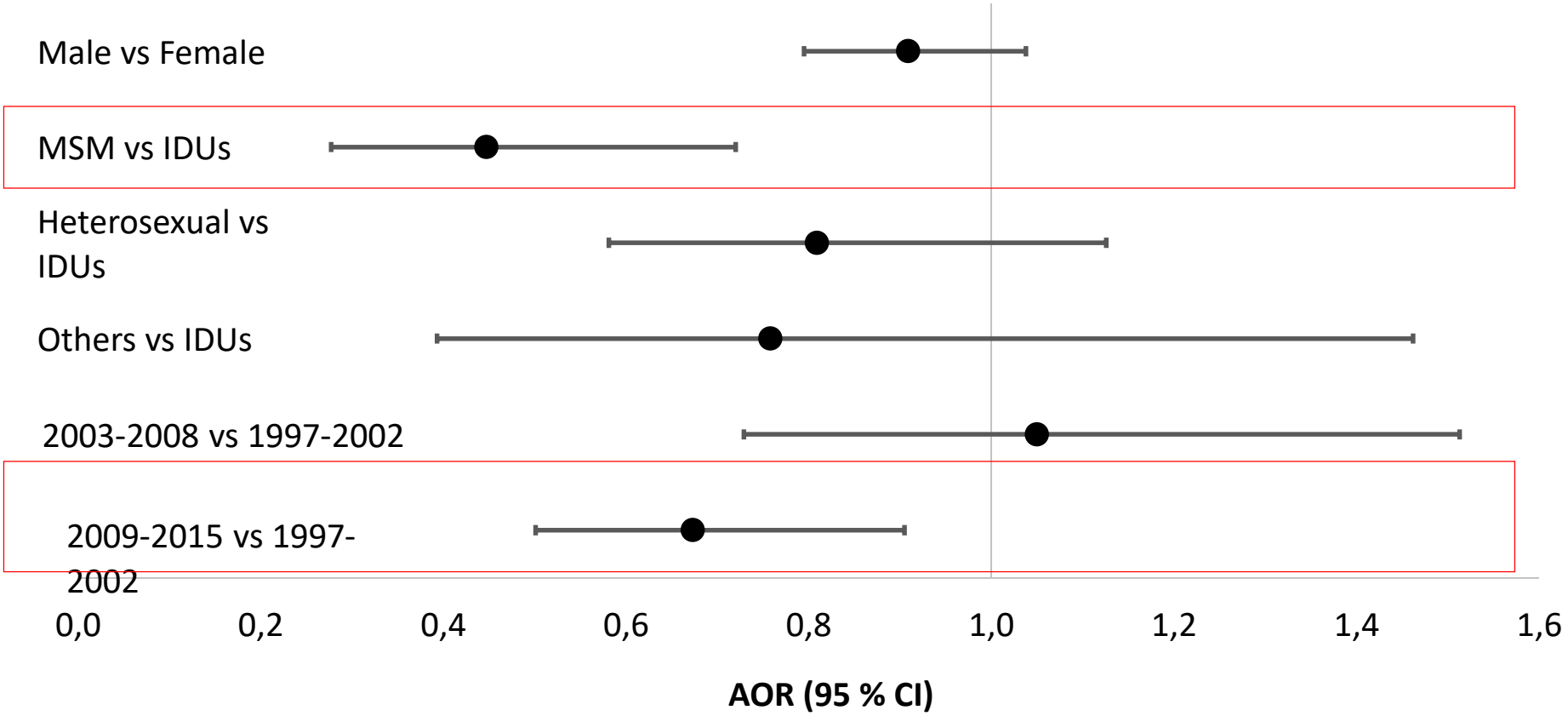
Variable	Univariate analysis			Multivariate analysis		
	OR	95% CI	p	AOR	95% CI	p
Male gender	1			1		
Female gender	1.06	0.97–1.16	0.18	1.23	1.04–1.50	0.01
Age, for 10 years older	1.52	1.46–1.58	<0.0001	1.04	0.97–1.11	0.27
Risk category:						
IDU	1		<0.0001	1		<0.0001
MSM	0.01	0.01–0.01	<0.0001	0.01	0.01–0.01	<0.0001
Heterosexual contacts	0.01	0.01–0.01	<0.0001	0.01	0.01–0.01	<0.0001
Other/Unknown	0.01	0.01–0.02	<0.0001	0.02	0.01–0.02	<0.0001
Geographic area:						
North	1		<0.0001	1		0.09
Centre	0.76	0.69–0.83	<0.0001	0.85	0.73–0.98	0.03
South/Islands	1.47	1.32–1.65	<0.0001	0.95	0.79–1.15	0.60
Foreign-born	1			1		
Italian	4.27	3.62–5.03	<0.0001	1.45	1.16–1.81	0.001
Calendar period:						
1997–2002	1		<0.0001	1		<0.0001
2003–2008	0.25	0.22–0.29	<0.0001	0.49	0.41–0.61	<0.0001
2009–2015	0.11	0.10–0.13	<0.0001	0.23	0.19–0.27	<0.0001
HBsAg–	1			1		
HBsAg+	1.46	1.25–1.71	<0.0001	1.18	0.91–1.52	0.201

Factors associated with genotype 1a (N=435)



*Variables are mutually adjusted

Factors associated with genotype 3 (N=488)



*Variables are mutually adjusted

PLOS ONE | 2017; 12(5): e0177402. https://doi.

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RESEARCH ARTICLE

Access and response to direct antiviral agents (DAA) in HIV-HCV co-infected patients in Italy: Data from the Icona cohort

Antonella d'Arminio Monforte[1]*, Alessandro Cozzi-Lepri[2], Francesca Ceccherini-Silberstein[3], Andrea De Luca[4], Sergio Lo Caputo[5], Antonella Castagna[6], Cristina Mussini[7], Antonella Cingolani[8], Alessandro Tavelli[9], Milensu Shanyinde[2], Andrea Gori[10], Enrico Girardi[11], Massimo Andreoni[12], Andrea Antinori[13], Massimo Puoti[14]*, on behalf of Icona Foundation and Hepalcona Study Group[¶]

2,607 HIV-HCV co-infected patients

↓

1,090 (41%) eligible to DAA reimbursement

↓

920(761 -69.8%- patients eligible, and 159 -10.5%- not eligible), started DAA in a median FU of 38 (30-41) months

↓

61/606 patients (10.1%) experienced TF: 50 had detectable HCV-RNA 12 weeks after a full course of treatment and 11 had suspended treatment prematurely

↓

RATE OF SVR12: 92% (545/595)

RATE OF TREATMENT SUCCESS: 90%

A d'Arminio Monforte et al, PlosOne 2017

Table 2 Relative hazards of starting DAA from fitting a Cox regression model

	Relative hazards of starting DAA			
	Unadjusted RH (95% CI)	**p-value**	**Adjusted* RH (95% CI)**	**p-value**
Age, years				
>50 years vs. below	1.15 (0.98, 1.36)	0.092	1.07 (0.88, 1.30)	0.496
Gender				
Female vs. Male	0.90 (0.76, 1.07)	0.253	0.99 (0.80, 1.23)	0.926
Employment				
Unemployed	1.00		1.00	
Employed	1.56 (1.26, 1.93)	<.001	1.45 (1.12, 1.89)	0.005
Other/unknown	1.66 (1.19, 2.30)	0.003	1.55 (1.07, 2.26)	0.021
CD4 count, cells/mm3				
per 100 higher	1.00 (0.98, 1.02)	0.862	0.98 (0.95, 1.01)	0.170
HIV-RNA, copies/mL				
0-50 vs. >50	1.20 (0.98, 1.46)	0.073	1.19 (0.91, 1.58)	0.208
Time from HIV diagnosis, years				
per 10 longer	0.83 (0.76, 0.91)	<.001	0.83 (0.74, 0.93)	0.002
HCV genotype				
1a	1.00		1.00	
1b	1.03 (0.81, 1.30)	0.837	0.93 (0.71, 1.23)	0.631
2	0.59 (0.34, 1.02)	0.059	0.48 (0.25, 0.93)	0.029
3	0.86 (0.72, 1.03)	0.099	0.72 (0.59, 0.90)	0.003
4	1.08 (0.87, 1.34)	0.479	1.00 (0.78, 1.29)	0.971
Other/unknown	0.75 (0.45, 1.26)	0.275	1.10 (0.58, 2.10)	0.770
HCV-RNA, log10 IU/l				
per log higher	0.88 (0.81, 0.95)	0.002	0.89 (0.81, 0.97)	0.011
Fib4,				
0-1.45	1.00		1.00	
1.46-3.25	1.23 (0.97, 1.56)	0.091	1.01 (0.75, 1.37)	0.931
3.25+	1.06 (0.84, 1.34)	0.638	0.82 (0.58, 1.16)	0.255
Decompensated cirrhosis				
Yes vs. No	1.28 (1.01, 1.64)	0.044	1.26 (0.93, 1.70)	0.137
Previous failure of HCV treatment				
Yes vs. No	1.64 (1.42, 1.90)	<.001	1.52 (1.27, 1.82)	<.001

*adjusted for all factors examined in table and stratified by cohort

A d'Arminio Monforte et al, PlosOne 2017

Table 4

Variation of HIV-related markers (CD4 counts and HIV-RNA copy levels) from DAA initiation to 12 weeks after end of treatment, according to use of ribavirin

HIV lab markers	RBV in DAA	RBV-free DAA		RBV in DAA	RBV-free DAA	
	Unadjusted Mean (95% CI)		p-value	Adjusted*& Mean (95% CI)		p-value
CD4 count at EOT						
cells/mm3	481 (454, 507)	616 (588, 644)	<.001	480 (453, 507)	616 (588, 644)	<.001
CD4 count 12 weeks after EOT						
cells/mm3	623 (589, 656)	663 (628, 699)	0.108	624 (590, 657)	665 (629, 700)	0.100
HIV-RNA at EOT						
log10 copies/mL	0.50 (0.38, 0.62)	0.66 (0.54, 0.78)	0.067	0.48 (0.37, 0.60)	0.67 (0.55, 0.79)	0.033
HIV-RNA 12 weeks after EOT						
log10 copies/mL	0.56 (0.43, 0.69)	0.63 (0.50, 0.76)	0.458	0.56 (0.43, 0.69)	0.63 (0.50, 0.77)	0.443

*adjusted for gender, age, HCV genotype, decompensate cirrhosis and diabetes

&HIV-RNA also adjusted for CD4 count at DAA initiation and viceversa

A d'Arminio Monforte et al, PlosOne 2017

ART and DAA

In the 3 months before starting DAA, ART was switched in:

- 118/328 (36.0%) PI/r-based regimen (113 to INI, 5 to RPV)
- 36/175 (21%) NNRTI-based regimen (30 to INI)
- 5/272 (2%) INI-including regimen (4 to RPV)

A d'Arminio Monforte et al, PlosOne 2017

Table 5. Odds ratios of_ a) virological failure (non-SVR12). B) treatment failure (TF) from fitting a logistic regression model

a) non-SVR12

Characteristics	Virological failure N= 50	SVR N= 545	OR of DAA failure from fitting a logistic regression model: Unadjusted OR (95% CI)	p-value	Adjusted* OR (95% CI)	p-value
Sub-optimal DAA						
No	35 (70.0%)	467 (85.7%)	1.00		1.00	
Yes	15 (30.0%)	78 (14.3%)	2.57 (1.34, 4.92)	0.005	2.52 (1.24, 5.12)	0.011
Decompensated cirhrosis						
No	42 (84.0%)	494 (90.6%)	1.00		1.00	
Yes	8 (16.0%)	51 (9.4%)	1.85 (0.82, 4.14)	0.138	1.79 (0.77, 4.16)	0.177

b) TF

Characteristics	Treatment failure N= 61	No TF N= 545	OR of DAA failure from fitting a logistic regression model: Unadjusted OR (95% CI)	p-value	Adjusted* OR (95% CI)	p-value
Sub-optimal DAA						
No	44 (72.1%)	467 (85.7%)	1.00		1.00	
Yes	17 (27.9%)	78 (14.3%)	2.31 (1.26, 4.25)	0.007	2.19 (1.13, 4.22)	0.020
Decompensated cirrhosis						
No	51 (83.6%)	494 (90.6%)	1.00		1.00	
Yes	10 (16.4%)	51 (9.4%)	1.90 (0.91, 3.97)	0.088	1.84 (0.85, 3.95)	0.120

A d'Arminio Monforte et al, PlosOne 2017

J Acquir Immune Defic Syndr • Volume 75, Number 4, August 1, 2017

Active HCV Replication but Not HCV or CMV Seropositive Status Is Associated With Incident and Prevalent Type 2 Diabetes in Persons Living With HIV

Andrea De Luca, MD,† Patrizia Lorenzini, BSc,‡ Antonella Castagna, MD,§ Massimo Puoti, MD,‖ Nicola Gianotti, MD,§ Francesco Castelli, MD, PhD,¶ Claudio Mastroianni, MD,# Franco Maggiolo, MD,** Andrea Antinori, MD,†† Giovanni Guaraldi, MD,‡‡ Miriam Lichtner, MD, PhD,§§ and Antonella d'Arminio Monforte, MD,‖‖ for the ICONA Foundation Study*

Objective: To analyze the association between chronic HCV and CMV infections with type 2 diabetes in HIV-infected patients.

Study Population:
All patients with available CMV IgG results and without type 2 diabetes were followed until onset of type 2 diabetes, last available clinical follow-up, death or September 2014)
Type 2 diabetes def: (1) diagnosis by the treating clinician, (2) use of antidiabetic drugs, or (3) first of 2 consecutive fasting blood glucose levels >125 mg/dL at a verified fasting status.

Methods:
Kaplan–Meier method using first CMV serology as baseline for time to diagnosis of DM2
Predictors of incident DM2 were analyzed by Poisson regression.
Factors associated with prevalent DM2 were analyzed by logistic regression;

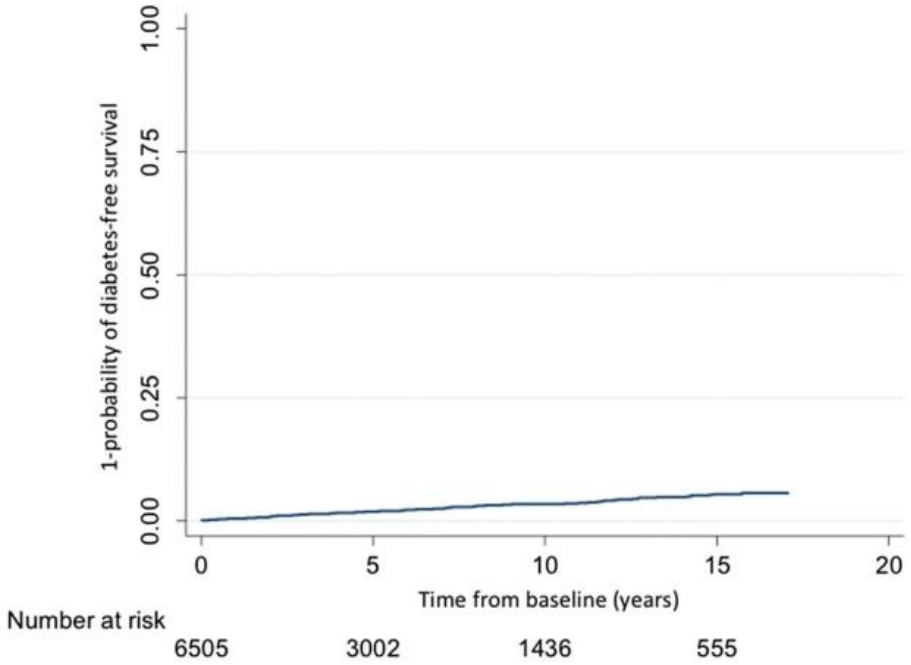

FIGURE 1. Estimated probability of type 2 diabetes. Kaplan–Meier method. Baseline was the time of the first available CMV serology. Patients with pre-baseline diabetes were excluded.

6505 patients were suitable for the DM2 incidence analysis. CMV IgG were detected in 84.4% HCV-Ab in 31.5% of 6112 tested, of whom 83.5% of 1033 tested had a detectable HCV RNA.

During 38.062 PYFU, we observed 140 cases of incident DM2 with an incidence rate of 3.7 (95% CI: 3.1 to 4.3) per 1.000 PYFU

HCV RNA-positive status, but not HCV-antibody positive, HCV RNA negative status was independently associated with a higher incidence of type 2 diabetes as compared to an HCV-antibody negative status [adjusted relative rate, ARR, 1.73 (1.08–2.78)];

10° CONGRESSO NAZIONALE
ICAR Italian Conference on AIDS and Antiviral Research
Presidenza del Congresso Massimo Andreoni, Roma Andrea Antinori, Roma Carlo Federico Perno, Milano

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Conceived by Professor Mauro Moroni

Impact of HCV treatment with Direct-Acting Antivirals on glucose levels in diabetic HIV/HCV co-infected patients in the ICONA and HepaICONA cohorts

I. Mastrorosa[1], P. Lorenzini[1], A. Cozzi-Lepri[2], M. Puoti[3], R. Rossotti[3], G. Marchetti[4], G. Orofino[5], L. Sighinolfi[6], A. Raimondi[7], A. d'Arminio Monforte[4], A. Antinori[1], A. De Luca[8]
on behalf of the Icona/Hepaicona Foundation Study Group

Study Population:

HIV/HCV co-infected patients enrolled in the ICONA and HepaICONA study cohorts who have:
-started DAA treatment
-had a diagnosis of diabetes mellitus, at or before DAA initiation
-had fasting glucose levels measurement, before and after DAA completion.

Objective:

Explore if the HCV treatment with DAA had an impact on glucose levels in diabetic pts

Methods:

Paired Wilcoxon test was used for comparisons of glucose levels from baseline to 6M and 12M.

Stepwise mixed linear models with random intercept/slope were fitted to analyse the slope of glucose levels comparing periods before and after DAA therapy start.

Multivariable model was adjusted for main potential confounding factors.

Univariable	***Beta***	***95% CI***		***p-value***
Slope before DAA starting	0.008	0.006	0.009	<0.001
Slope change after DAA starting	-0.015	-0.023	-0.007	<0.001
Multivariable*	***Beta***	***95% CI***		***p-value***
Slope before DAA starting	0.007	0.004	0.010	<0.001
Slope change after DAA starting	-0.013	-0.023	-0.003	0.010

*adjusted for age, gender, mode of HIV transmission, race, nadir and current $CD4^+$ count, Log_{10} HIV RNA, AIDS diagnosis, ART regimen change before starting DAA (yes or no), Log_{10} HCV RNA, HCV genotype 3, SVR12 (yes or no), DAA regimen (paritaprevir/ritonavir yes or no), F4 fibrosis stage.

Conclusion

Effective DAA treatment seemed to have a beneficial effect on glucose levels, in HIV/HCV co-infected patients with diabetes. This finding underscores the need to accelerate DAA treatment in individuals affected by this comorbid condition.

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THE IMPACT OF DAA-MEDIATED HCV ERADICATION ON CD4+ AND CD8+ T LYMPHOCYTES TRAJECTORIES IN HIV/HCV COINFECTED PATIENTS: DATA FROM THE ICONA FOUNDATION COHORT

A Bandera1, P Lorenzini2, G Lapadula1, C Mussini3, A Saracino4, F Ceccherini Silberstein5, M Puoti6, E Quiros-Roldan7, F Montagnani8, A Antinori 2, A Gori1, A d'Arminio Monforte9, for the Icona Foundation Cohort

Background: If HCV co-infection promotes systemic inflammation and impairs CD4+ T cell recovery in HIV-infected patients, this should be resolved by the clearance of HCV

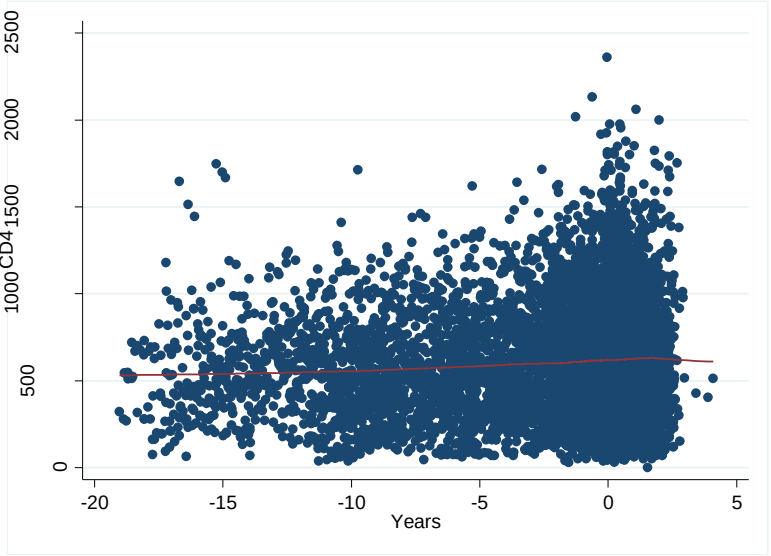
Objective: evaluate, the role of DAA-mediated HCV-eradication on CD4+ T cells, CD8+ T cells and CD4/CD8 ratio dynamic

Methods: Patients with HCV/HIV coinfection included within ICONA and HepaIcona cohorts:
-Achieved SVR12 after DAA treatment
-Had undetectable HIV-RNA at DAA start
-Had available at least 1 CD4+ T cells count, CD8+ T cells count and CD4/CD8 ratio before and after DAA treatment
Piecewise mixed effect linear regression with random slope and intercept was used to model CD4+ and CD8 trajectories before and after DAA.

Study population

Median follow-up:
2 years (IQR 0.6-10) before DAA and 1.6 years (IQR 1-2) after DAA

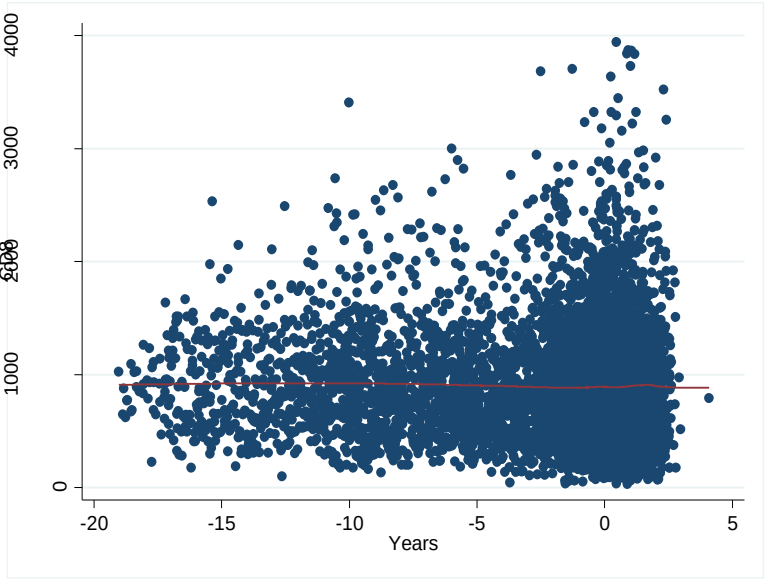
CD4+ T cell trajectories



	Pre-DAA slope (cells/year)	95%CI	Post-DAA slope (cells/year)	95%CI	Test between pre- and post-DAA*
CD4 T cells	27.2	22.6; 31.9	22.5	10.2; 34.6	0.001

*Adjusted for age, sex, epidemiology, nationality, CD4 nadir, CD4 count at DAA start, previous AIDS diagnosis, HCV genotype, HCV-RNA at DAA start, type of DAA, change of ART pre-DAA, use of ribavirin, F4 at DAA start

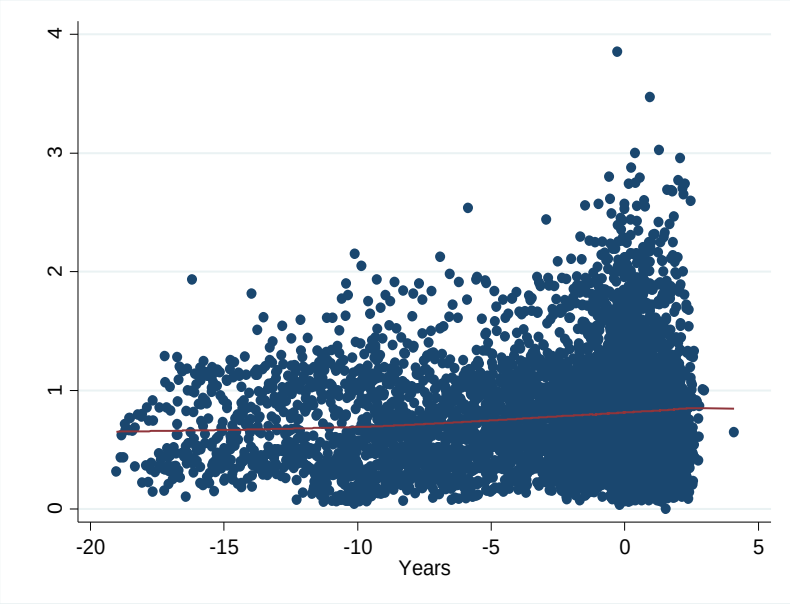
CD8+ T cell trajectories



	Pre-DAA slope (cells/year)	95%CI	Post-DAA slope (cells/year)	95%CI	Test between pre- and post-DAA*
CD8 T cells	-11.2	-20.0; -2.5	-25.3	-41.5; -9.1	0.030

*Adjusted for age, sex, epidemiology, nationality, CD4 nadir, CD4 count at DAA start, previous AIDS diagnosis, HCV genotype, HCV-RNA at DAA start, type of DAA, change of ART pre-DAA, use of ribavirin, F4 at DAA start

CD4/CD8 ratio trajectories



	Pre-DAA slope	95%CI	Post-DAA slope	95%CI	Test between pre- and post-DAA*
CD4/CD8 ratio	0.047	0.040; 0.055	0.009	-0.010; 0.019	0.001

*Adjusted for age, sex, epidemiology, nationality, CD4 nadir, CD4 count at DAA start, previous AIDS diagnosis, HCV genotype, HCV-RNA at DAA start, type of DAA, change of ART pre-DAA, use of ribavirin, F4 at DAA start

T cells trajectories in F4 patients (n=305)

	Pre-DAA slope	95%CI	Post-DAA slope	95%CI	test between pre- and post-DAA*
CD4 T cells	26,8	18.0; 35.7	26,5	11.0; 42.1	0,047
CD8 T cells	-19,6	-32.5; -6.7	-21,3	-38.2; -4.4	0,039
CD4/CD8 ratio	0,058	0.041; 0.075	0,051	0.029; 0.074	0,234

*Adjusted for age, sex, epidemiology, nationality, CD4 nadir, CD4 count at DAA start, previous AIDS diagnosis, HCV genotype, HCV-RNA at DAA start, type of DAA, change of ART pre-DAA, use of ribavirin

Genotype 3 infection in HIV/HCV co-infected subjects in the DAA era: real life data from the ICONA/HepaICONA Foundation Cohort

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Background

HCV genotype (GT) 3 has emerged as a difficult-to-treat viral strain

Data about GT3-infected HIV patients are scarce either from clinical trials or real life.

Aims

Describe the outcome of GT3 co-infected individuals treated with DAA;

Explore factors associated with virological failure.

Method

-All HIV-infected patients with a GT3 HCV co-infection who started any DAA regimen and with a 12-week follow up enrolled in the ICONA/HepaICONA cohorts up to October 2017.

-SVR rates were assessed and univariable/multivariable logistic regression evaluating predictors of viral response were developed.

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		OR	95%CI	p	AOR	95%CI	p
Gender	Females	0.40	0.09-1.84	.240			
Age	>50	0.90	0.27-2.97	.866			
Baseline FIB-4	<1.45	0.64	0.07-5.76	.692	0.34	0.03-4.50	.414
	1.45-3.25	2.43	0.77-7.65	.128	1.77	0.47-6.64	.395
	>3.25	1			1		
HCV Tx history	Experienced	0.70	0.15-3.28	.654			
HCV Tx	SOF+DCV±RBV	1			1		
	SOF+RBV±IFN	1.53	0.45-5.18	.499	1.78	0.45-7.01	0.41
	Other*	4.07	0.72-22.83	.111	11.88	1.36-104.21	**.025**
Length of Tx	8 weeks	6.85	1.03-45.48	**.046**	5.34	0.53-53.76	.155
	12 weeks	0.70	0.19-2.63	.598	0.51	0.11-2.28	.377
	24 weeks	1			1		
Ribavirin use	Yes	1.57	0.48-5.10	.452			
Diabetes	Yes	0.60	0.07-4.85	.632			
BMI	<18.5	3.15	0.29-33.80	.343	7.98	0.40-157.65	.173
	18.5-24.9	1			1		
	25-29.9	2.92	0.73-11.71	.131	5.99	1.12-32.16	**.037**
	≥30	1.75	0.18-17.45	.633	3.22	0.26-40.05	.363
	Missing	1.41	0.36-5.50	.624	2.03	0.41-10.00	.382
AIDS diagnosis	Yes	3.97	1.31-12.07	**.015**	5.55	1.53-20.17	**.009**
Baseline CD4 (cell/mmc)	0-350	1					
	350-500	0.28	0.03-2.49	.251			
	<500	0.93	0.30-2.90	.901			

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Conceived by Professor Mauro Moroni

The overall SVR rate was 90.9%.

Conclusion

-The rate of SVR was high and similar to main trials for GT3 in mono-infected subjects.
-Traditional predictors of viral response (except BMI) failed to foretell SVR.
-An inadequate DAA regimen has a 11.8-fold increased risk of not achieving SVR
-A previous AIDS diagnosis has a 5.55-fold increased risk of treatment failure despite an optimal current immunological and virological status.

NoCo Project: objectives

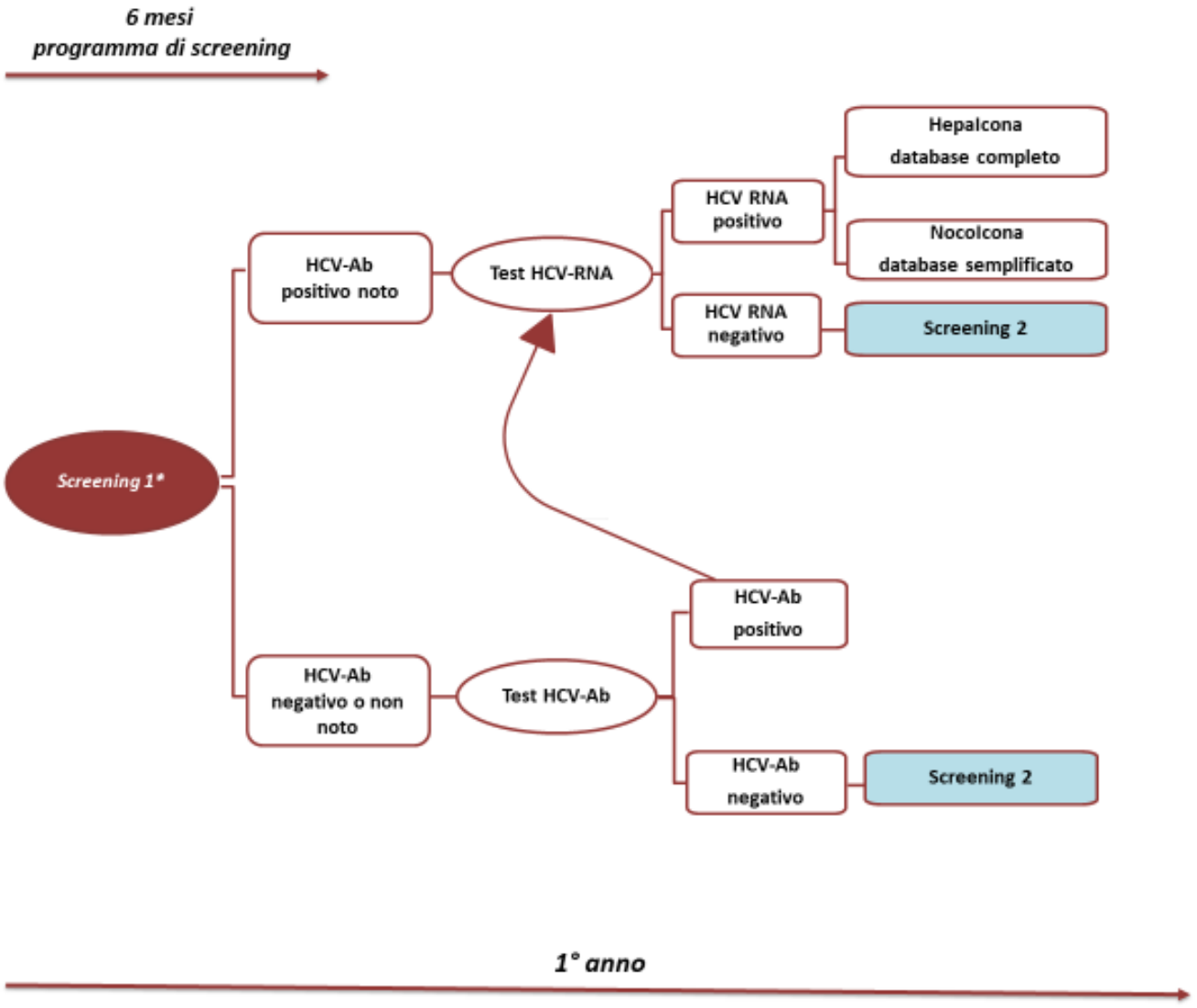
Main objectives over the 3-year period :

1. To estimate the **prevalence of HCV** infection at study entry and the **incidence of new infections** before DAA initiation and following HCV cure (**re-infections**).
2. To estimate the **rate of HCV cure**, also in patients with low liver fibrosis. The hypothesis is that this rate will be even higher than what estimated in those treated thus far because of the lower stage of fibrosis of patients who are about to initiate.
3. To study the correlation between the incidence of new infections and year-3 estimate of HCV prevalence and DAA treatment uptake and success, as well as of the incidence of other STI as a proxy of high-risk sexual behaviour.

NoCo Project: objectives ctd

3. To evaluate the impact of DAA treatment on issues related to the management of HIV disease (maintenance of HIV-RNA suppression, CD4 cell count, CD4/CD8 ratio, incidence of ART changes and incidence of liver-related, other serious AIDS and non-AIDS events and mortality.
4. To implement patients' engagement and counselling programs on sexual risk behaviour

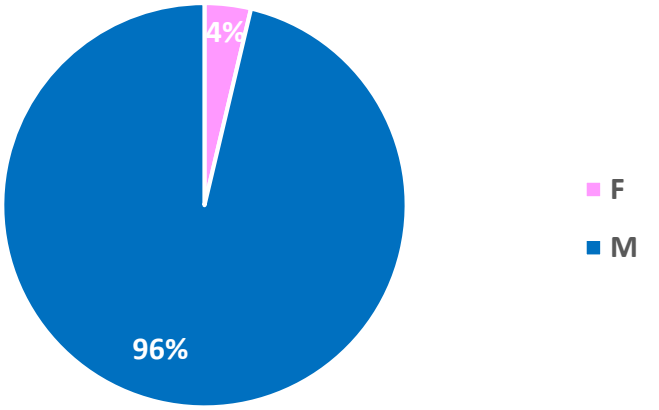
Flowchart



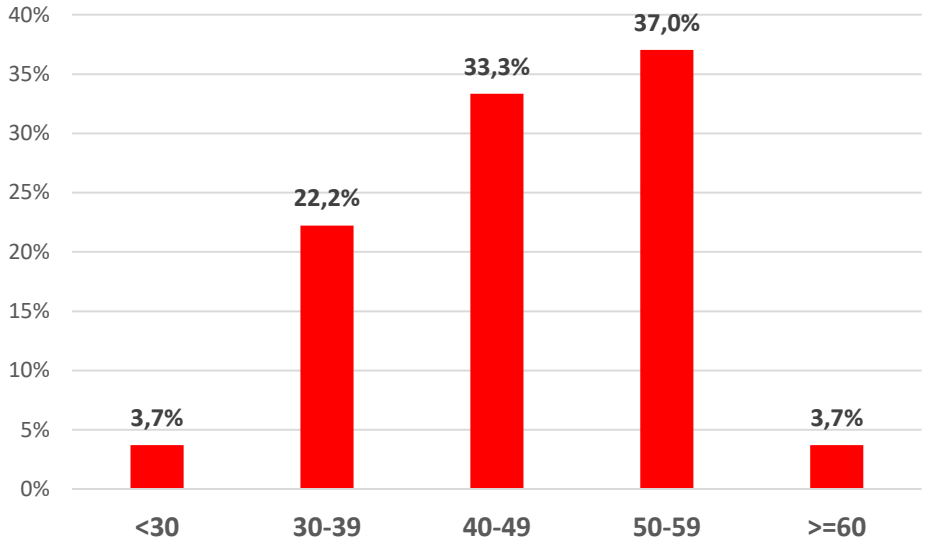
*Se screening HCV è già stato effettuato nei 6 mesi precedenti, da considerare valido, non ripetere.

Demographic data of 27 newly diagnosed HCV infections

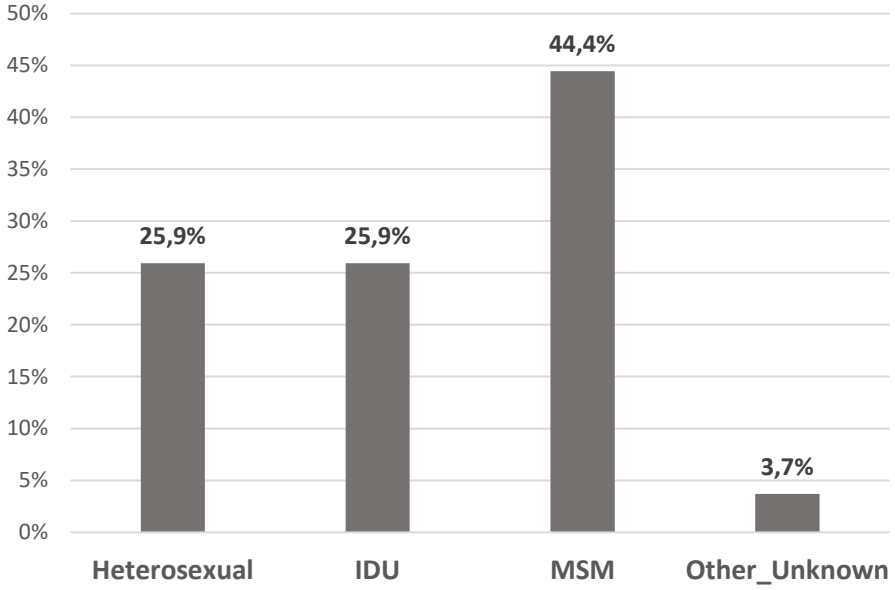
GENDER



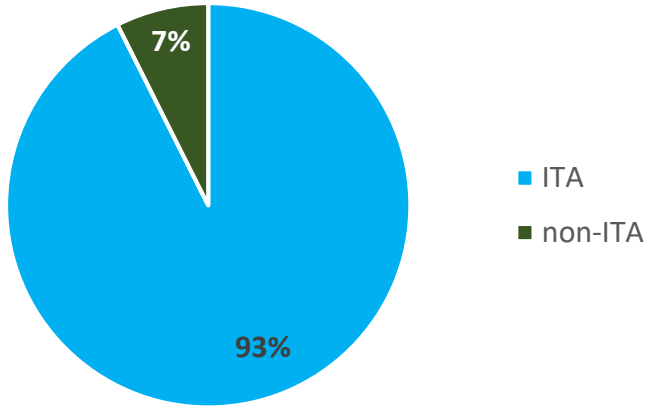
AGE STRATA



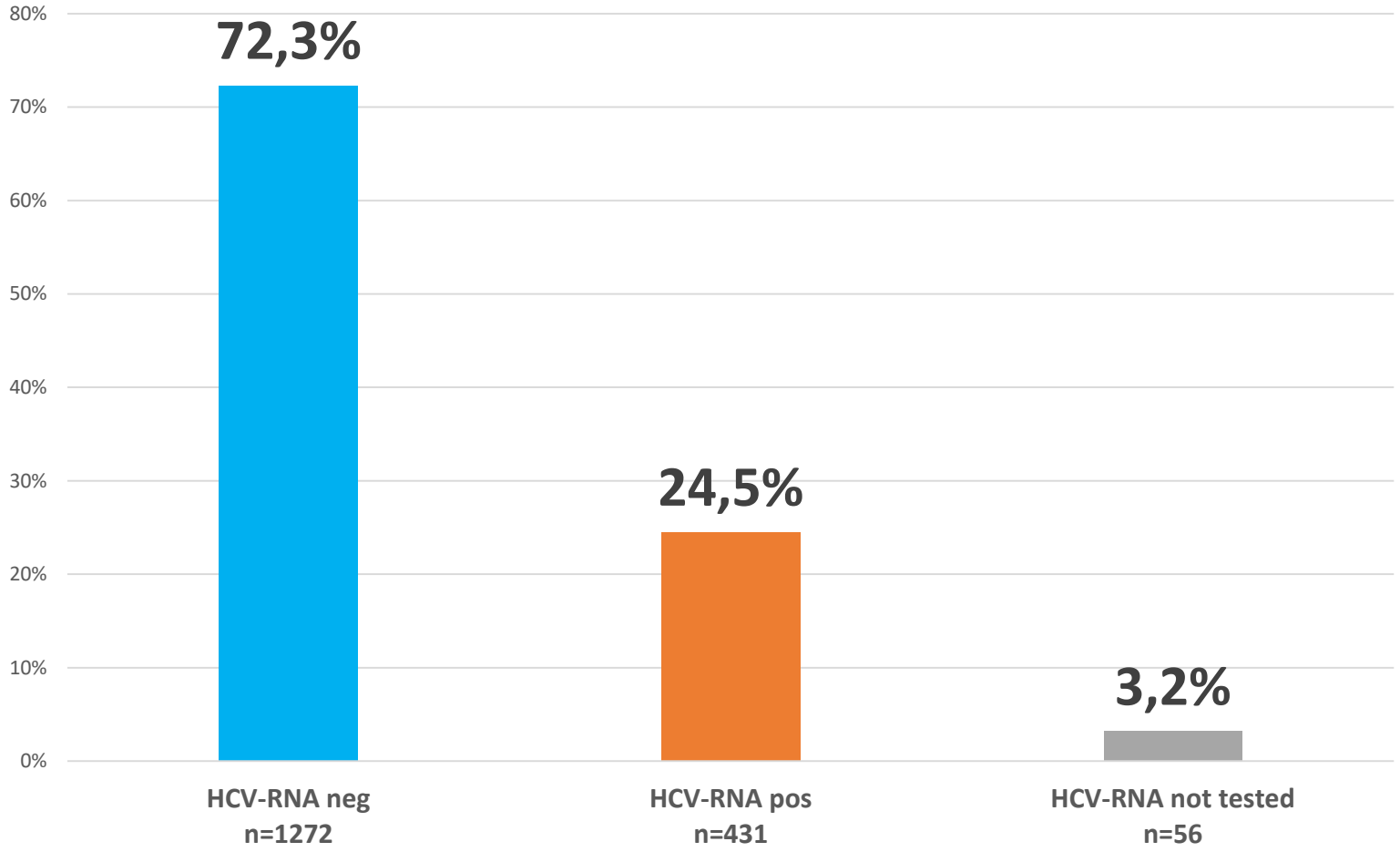
MODE of HIV TRANSMISSION



NATIONALITY



1st NoCo Screening: HCV-RNA status for 1759 HCV-Ab pos patients



Icona Foundation Study Group

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