# #550 HIV-HCV Coinfection in the DAA Era: “En Route for Eradication” ?

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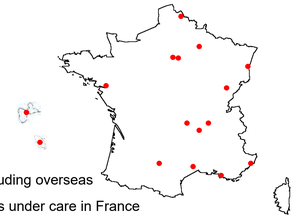
## Abstract

**Background**: The HIV-HCV population benefits from a high medical coverage, wide indications to treat HCV and is slowly decreasing over time in European countries. We report the impact of Direct Acting Antiviral agents (DAA) at the population level in French HIV-HCV coinfected patients.

**Methods**: The DatAIDS cohort covers about 25% of HIV-infected patients in care in France. All HIV-HCV coinfected patients followed between 2012 and 2015 were included. HCV status was defined yearly as naive, spontaneous cure, sustained virological response (SVR), failure or reinfection. The incidence of HCV infection and reinfection and HCV treatment initiation rate were determined yearly.

**Results:** Among 32,945 HIV-infected patients, 5001 were HIV-HCV coinfected (prevalence 15.2%). Patients were mostly male (71.9%), IVDU (51.0%), of median age 51 years, infected with HCV genotype 1a (39.5%), 3 (21.0%) or 4 (22.0%), with fibrosis F3-4 in 41.4%. From 2012 to 2015, 146 of 17,890 HCV negative patients with serological follow-up acquired HCV. Incident cases were mostly male (98%), MSM (87%) infected with HCV genotype 1a (39%) or 4 (53%). HCV incidence rate increased from 0.35 per 100 person-years (%PY) to 0.69%PY in MSM, while the median incidence in other patients was 0.08%PY. Reinfections occurred in 45 patients (male 93%, MSM 71%, genotype 1a 47% or 4 38%), including 2 patients with another reinfection. Median reinfection rate was 2.56%PY in MSM and 0.22%PY in other patients. Median death rate was 1.4%PY. HCV treatment initiation rate rose from 8.2% in 2012 to 29.4% in 2015, particularly in pre-treated patients (48.0% in 2015 vs 22.6% in naive patients). Pegylated-interferon (PEG-IFN)/ribavirin (RBV) use declined from 37.9% to 0.3%, while RBV+DAAs rose from 0% to 25.0% and DAAs combinations from 0% to 73.7%. SVR rate increased from 68.7% to 95.2%. By the end of 2015, naive patients, spontaneous cure, treatment failure, and SVR accounted for 29.5%, 12.6%, 7.7% and 50.1% of the patients respectively.

## Dat’AIDS Cohort



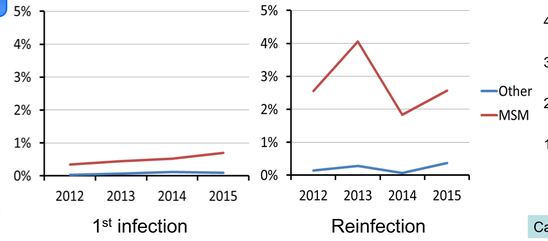
16 French HIV centers, including overseas

25% of HIV-infected patients under care in France

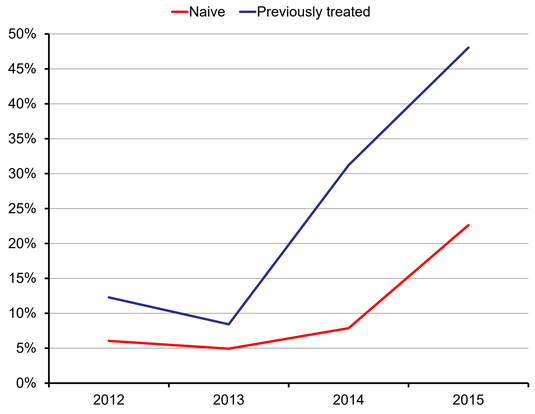
## Baseline characteristics

| | 2012-2015 cohort (n=5001) | |
|---|---|---|
| Male, n (%) | 3596 (71·9) | |
| Age (years), median (IQR) | 51 (48-55) | |
| HIV risk factor, n (%) | | |
| Intravenous drug use | 2553 (51·0) | |
| Hemophilia, transfusion, nosocomial | 284 (5·7) | |
| Heterosexual contact | 1058 (21·1) | |
| Men having sex with men | 890 (17·8) | |
| Other, unknown | 216 (4·3) | |
| Known duration of HIV infection (years), median (IQR) | 21 (14-25) | |
| CDC stage C, n (%) | 1366 (27·3) | |
| Under cART (2015), % | 93 | 98 |
| HIV viral load <50 copies/mL (2015), % | 85 | 92 |
| CD4 cell count (2015), median (IQR) | 546 (365-756) | 628 (428-852) |
| CD4 ≥500 cells/mm³ (2015), % | 56·9 | 67·3 |
| Known duration of HCV infection (years), median (IQR) | 14 (7-19) | |
| HCV genotype, n (%) | (n=3628) | |
| 1 / 1a / 1b | 115 (3·2) / 1433 (39·5) / 392 (10·8) | |
| 2 | 117 (3·2) | |
| 3 | 799 (22·0) | |
| 4 | 761 (21·0) | |
| 5 / 6 | 5 (0·1) / 6 (0·1) | |
| Maximum Fibrosis score | (n=3097) | |
| F0-F1 / F2 | 1040 (33·6) / 775 (25·0) | |
| F3 / F4 | 555 (17·9) / 727 (23·5) | |

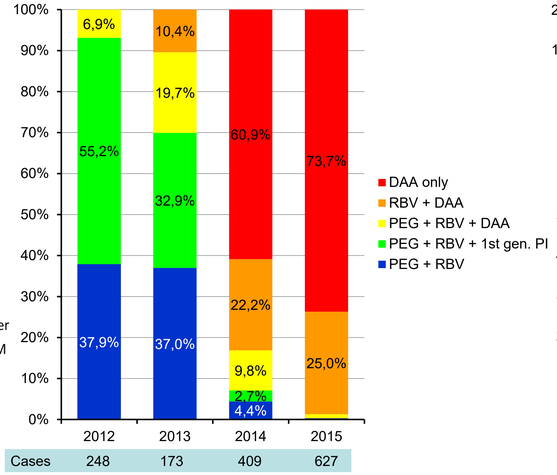
## HCV incidence



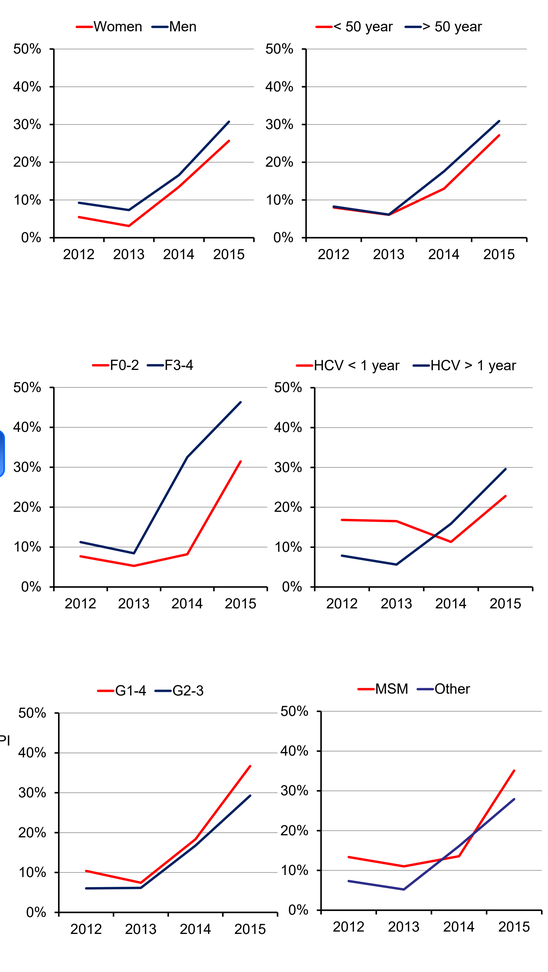

## Treatment initiation rate



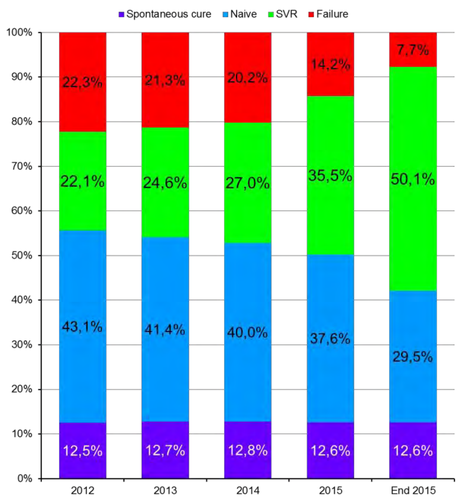

## HCV treatment regimen




## Treatment initiation / characteristic




## Patients’ status




## Conclusion

HCV treatment dramatically increased in HIV-HCV coinfected patients in France from 2012 to 2015 resulting in HCV cure in more than half of the patients. Combined with a declining HCV prevalence, the prevalence of active HCV infection among HIV patients is expected to drastically decrease in forthcoming years. Since new HCV infections and reinfections mostly occur in MSM, strengthened information and preventive measures are necessary to achieve viral eradication in the HIV-HCV population.

## Acknowledgments

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