

HEPATITIS C TREATMENT: COST AND EFFECTIVENESS

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BACKGROUND

Hepatitis C virus (HCV) infection is one of chronic liver disease major causes. Due to HCV infection prevalence in European Regions (1.5%)¹, there has been increasing health expenditure in order to HCV eradication.

PURPOSE

Assess cost, effectiveness and safety of treated HCV patients with pegylated interferon-ribavirin (IFN-RIB) compared to new direct acting antivirals (DAA).

MATERIAL and METHODS

Retrospective observational comparative study of two cohort of patients including HCV patients who started and finished treatments with IFN-RIB in 2011 (except above 12 months) and with DAAs in 2017. Exclusion criteria: deaths, no therapeutic adherence and transfer to another hospital. Data were extracted from electronic records.

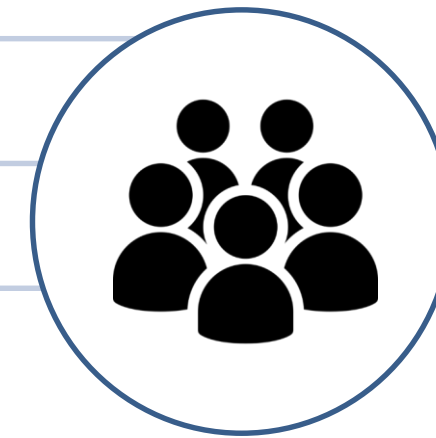
RESULTS

49 patients

2011 87.8% male
44.4±7.1 years
40.8% co-infected
51.0% genotype 1
12.2% were previously treated

185 patients

2017 75.0% male
52.2±9.9 years
28.1% co-infected
64.9% genotype 1
11.4% were previously treated (4 with DAA)



73.5% were treated with IFNα2a-RIB and remaining with IFNα2b-RIB

79.3% patients had severe or moderate fibrosis (FD≥2).

Treatments

Ledipasvir/Sofosbuvir	71.9%
Sofosbuvir/Velpatasvir	7.6%
Elbasvir/Grazoprevir	7.0%
Sofosbuvir	7.0%
PrOD	3.2%
Daclatasvir+Sofosbuvir	2.3%
Sofosbuvir+PrOD	0.5%
Ombistavir/Paritaprevir/Ritonavir	0.5%

PrOD=Paritaprevir/ritonavir/ombitasvir+dasabuvir

Comparing treatments of two cohort patients (IFN-RIB/DAA)

IFN-RIB

- Average treatment: - 8.1months/patient
- 70.4% 12 weeks length
- 36.7% treatments were discontinued:
 - Serious adverse reactions
 - Patients non-responders

4287,7€/patient

53.1% success rate

23/49 patients were posteriorly treated with DAA

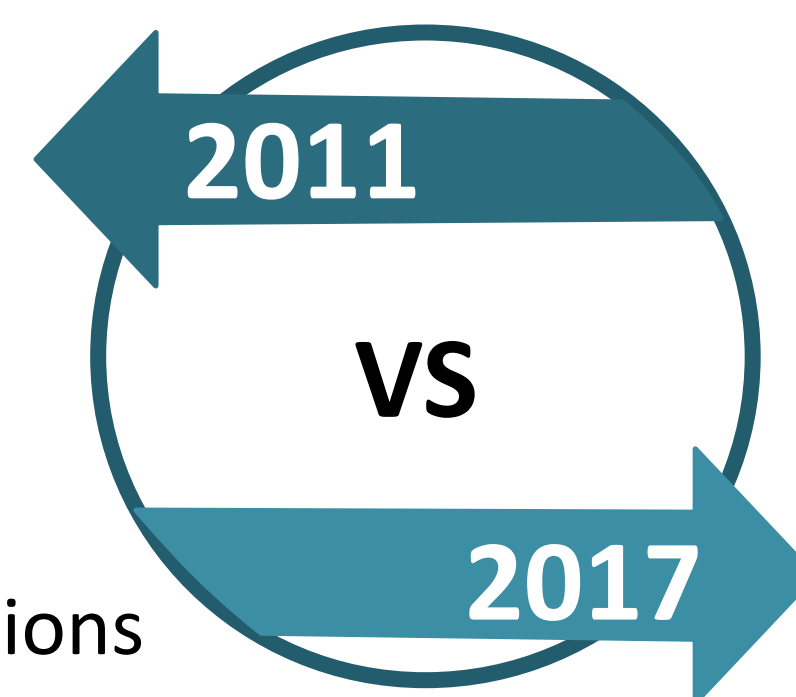
DAA

- Average treatment: - 3.5months/patient
- Fewer and lower severity adverse reactions
- 0% treatments were discontinued

14867,1€/patient

96.8% success rate

2018 prices of treatment/patient are half of 2017



increasing of 1309.2% annually



Incremental Cost-Effectiveness Ratio (DAA/IFN-RBV)

238,1€/patient successfully treated

CONCLUSION

DAAs treatments have higher effectiveness against HCV infection (>95%), treatments are shorter, more effective and safer than older therapies, despite higher costs.

REFERENCES

1. Centre for Disease Prevention and Control. Systematic review on hepatitis B and C prevalence in the EU/EEA. Stockholm: ECDC; 2016.

