



9th Paris Hepatitis Conference

Paris, 11 January 2016

Take home message, Monday 11

Massimo Colombo

Chairman Department of Liver, Kidney, Lung and Bone Marrow Units and Organ Transplant

Head Division of Gastroenterology and Hepatology

Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico

University of Milan

Milan, Italy

Financial Disclosures

Grant and research support: BMS, Gilead Science

Advisory committees: Merck, Roche, Novartis, Bayer, BMS, Gilead Science,
Tibotec, Vertex, Janssen Cilag, Achillion, Lundbeck, GSK,
GenSpera

Speaking and teaching: Tibotec, Roche, Novartis, Bayer, BMS, Gilead
Science, Vertex, Merck, Janssen

The Burden of Hepatitis C

Summary

- The burden of hepatitis C is immense and often underestimated
- Curing hepatitis C will have a positive impact by:
 - Decreasing the incidence of cirrhosis
 - Decreasing hepatocellular carcinoma
 - Improving overall quality of life for
- Multiple common barriers exist for implementation of focused programs to control HCV across low, middle, and high income countries
- We must continue to be the champions to effect change and to shape policies in our respective countries that will lead to greater access to care

Why Should I Treat My Patients With Mild Hepatitis C?

Available therapies are highly effective and safe

Disease staging is not faultless

HCV causes significant extra-hepatic morbidity

Best cost-effectiveness is obtained treating at an early stage of disease

Why Don't I Treat My Patients with Mild Hepatitis?

- The first step is to prioritise access to antiviral treatment according to severity of fibrosis, the risk of progression to more advanced disease and the presence of severe extra-hepatic manifestations related to HCV
- Antiviral treatment can be deferred in patients with mild disease, except in genotype 3 patients
 - Very good short-term prognosis
 - Optimisation of the antiviral regimen (short duration, simplification, etc...)
 - Sequential decrease of the cost of the therapy
- However, universal access to treatment is a short-term objective with the aim of eradicating the hepatitis C epidemic in the next future

Is the Benefit to Treat Patients With Cirrhosis Proven?

Benefits of an SVR:

Compensated: prevention of end stage complications and liver related mortality. Similar life expectancy as general population. Doubtful reduction of all cause mortality.

Decompensated: reversal of decompensation possible, durability and no-return point, unclear. Regression of cirrhosis and prevention of HCC doubtful. Reduction of liver related mortality likely, reduction of all-cause mortality unknown. Delisting possible, driven by local policies.

It Is Useful To Detect RAVs?

- Usefulness of RAV testing will be patient population and treatment regimen dependent
- RAV testing most likely not required in patient populations with SVR rates >99%
- RAV testing most likely be clinically useful and cost effective in population with sub-optimal SVR rates (definition <95%/90% & if population large enough
 - regimens w/o very high barrier to resistance drug
 - treatment experienced patients (in particular when exposed to DAAs)
 - patients with cirrhosis
 - When the shortest possible treatment duration is economically important

Individual Optimisation of Therapy Theory

- Short course therapy with extended therapy for failures may be cost-effective
- Careful selection of patients will be critical
- Robust re-treatment regimens will be necessary
- Studies in the UK are on-going

HCV In Dialysis Patients And Kidney Recipients

- GFR > 30 ml/mn: all the therapeutic options

- GFR < 30 ml/mn:

GT1 or 4: GZP/EBV 12 weeks

GT1b: 3D 12 weeks

GT2/3/5/6: SOF (200 mg/d or 400 mg/d or each 2 days ???) +
NS5A –DCV-/d

SOF/LDV?

- Kidney recipients:

- GFR > 30 ml/mn

GT1, 2, 4-5: SOF+LDV 12 weeks

GT1 or 4: GZP/EBV 12 weeks?

3D with adjustments of calcineurin inhibitors

GT3: SOF + DCV

- GFR < 30 ml/mn

GT1 or 4: GZP/EBV 12 weeks?

GT1b 3D with adjustments of calcineurin inhibitors

GT2/3/5/6: SOF (200 mg/d or 400 mg/d or each 2 days?)
+ NS5A/j

Daas And Transplanted Patients

- Treat hepatitis C using DAA before or after LT? Both strategies are feasible with excellent efficacy results and good safety profiles
- Regarding efficacy, better results are achieved after LT than before in decompensated cirrhotic patients
- Regarding safety, drug-drug interactions and degree of hepatic impairment are still issues, and favor the use of NS5A inhibitors
- Withdraw patients of waiting list is feasible and should concern about 30% of patients.

HIV-HCV Co-infected Patients

- Data from phase 3 clinical trials indicate similar SVR rate in persons with and without HIV coinfection *with some caveats*
 - High rate of HCV relapse after 8 weeks of daclatasvir + sofosbuvir
 - High rate of HCV relapse among Black patients treated for 12 weeks with ledipasvir/sofosbuvir
- HCV disease progression is more rapid despite effective HIV treatment
- Incidence of reinfection may be higher after SVR
- Drug interactions must be carefully considered by clinicians with expertise in HIV and/or HCV

How to Improve the Therapeutic Strategies ?

- 1 **E**ducation (medical education, sciences)
- 2 **R**esistance (salvage therapy, RAVs)
- 3 **A**ccess to Treatment
- 7 **D**uration (shorten, 6 or 8 weeks)
- 8 **I**ncreasing Screening (worldwide)
- 9 **C**ompliance
- 10 **A** la carte or Universal Treatment
- 11 **T**reatment Interraction (DDI)
- 12 **I**mproving Survival (HCC, ELD)
- 13 **O**ther populations (PWID, Decompensated cirrhosis,...

HCV ERADICATION WORLDWIDE

How to Provide the Best Treatment With What Is Available?

- Six all-oral regimens are approved for chronic HCV treatment; two more coming in 2016
- Limited access and availability of some oral agents create the need to build the best treatment regimen from available drugs
- Treatment choice is often based on access, efficacy, safety and cost balance
- Easy to treat populations allow more options for tailored therapy, while hard to treat populations (eg; gen 3, decompensated, renal failure) require more select treatment regimens

Universal Screening

- Birth cohort screening does not recognize a significant fraction of persons with chronic HCV and falls short of Universal screening.
- Improved strategies which link patients identified with HCV to providers who can properly evaluate and treat this disease is required.
- Restricted access to HCV medication by insurance carriers and governmental bodies is the single greatest impediment to treating HCV infection today.
- Universal screening for HCV can identify patients with chronic HCV and co-morbidities which enhance fibrosis progression.

EASL Guidelines. Post-treatment Follow-up of Patients Who Achieve an SVR

- Non-cirrhotic patients with SVR should be retested for ALT and HCV RNA at **48 weeks post-treatment**, then discharged if ALT is normal and HCV RNA is negative (B1)....
- Patients with **pre-existing cofactors** for liver disease (notably, history of alcohol drinking and/or type 2 diabetes) should be carefully and periodically subjected to a thorough clinical assessment,.....
- The exact duration of **HCC surveillance** in patients with advanced fibrosis or cirrhosis who achieve an SVR is unknown in the current state of knowledge, but is probably indefinite (B1).