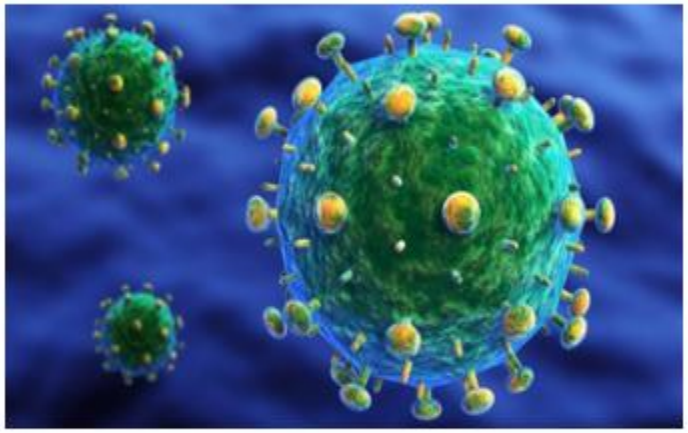
REGIONE CAMPANIA

Direzione Generale per la tutela della salute ed il coordinamento del Sistema Sanitario Regionale

Ce.Rif.A.R.C.

CORSO DI FORMAZIONE AIDS PER DIRIGENTI MEDICI - XII ANNUALITA' - 2014



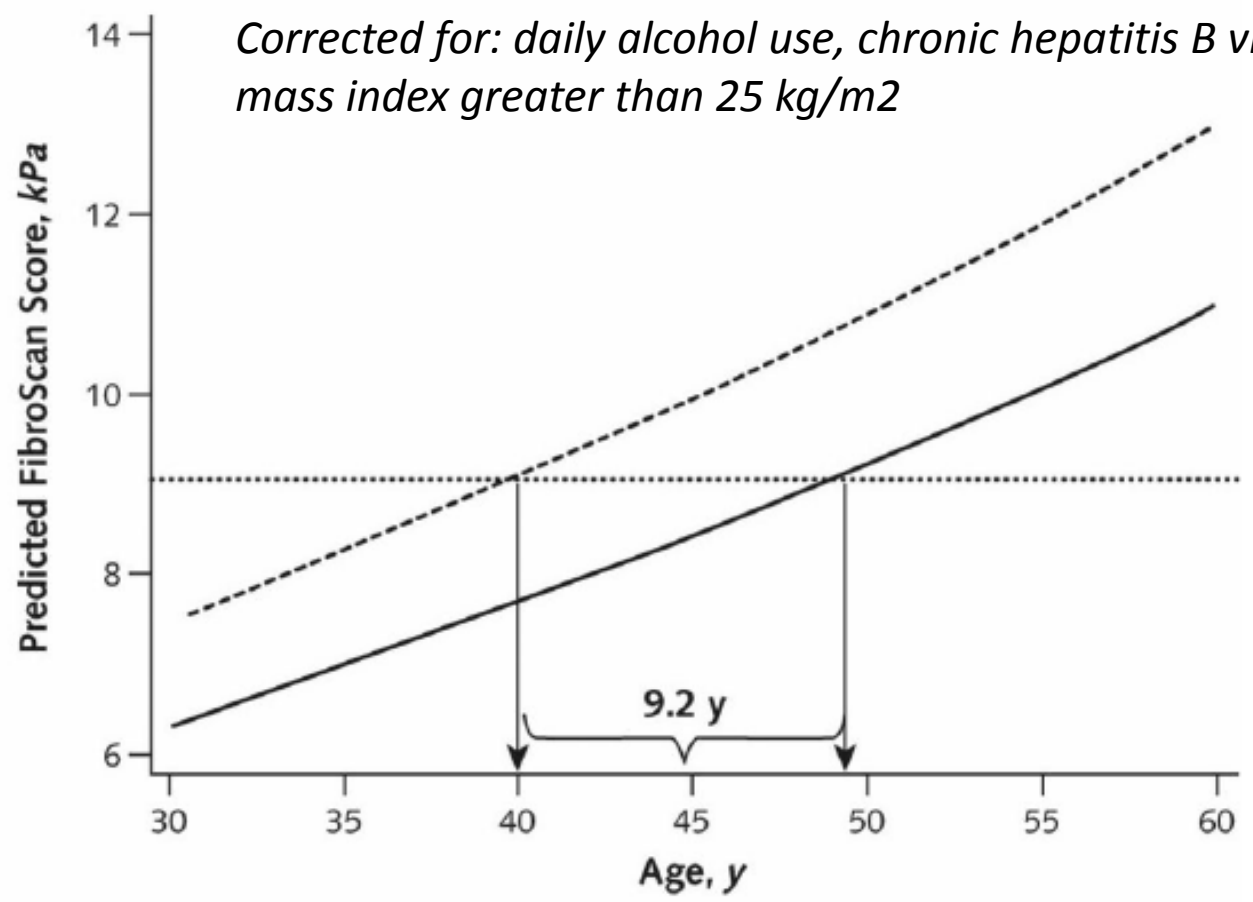
# Nuove terapie nelle coinfezioni

*Giovanni Battista Gaeta*

Cattedra di Malattie Infettive
UOC Malattie Infettive ed Epatiti Virali
Seconda Università di Napoli

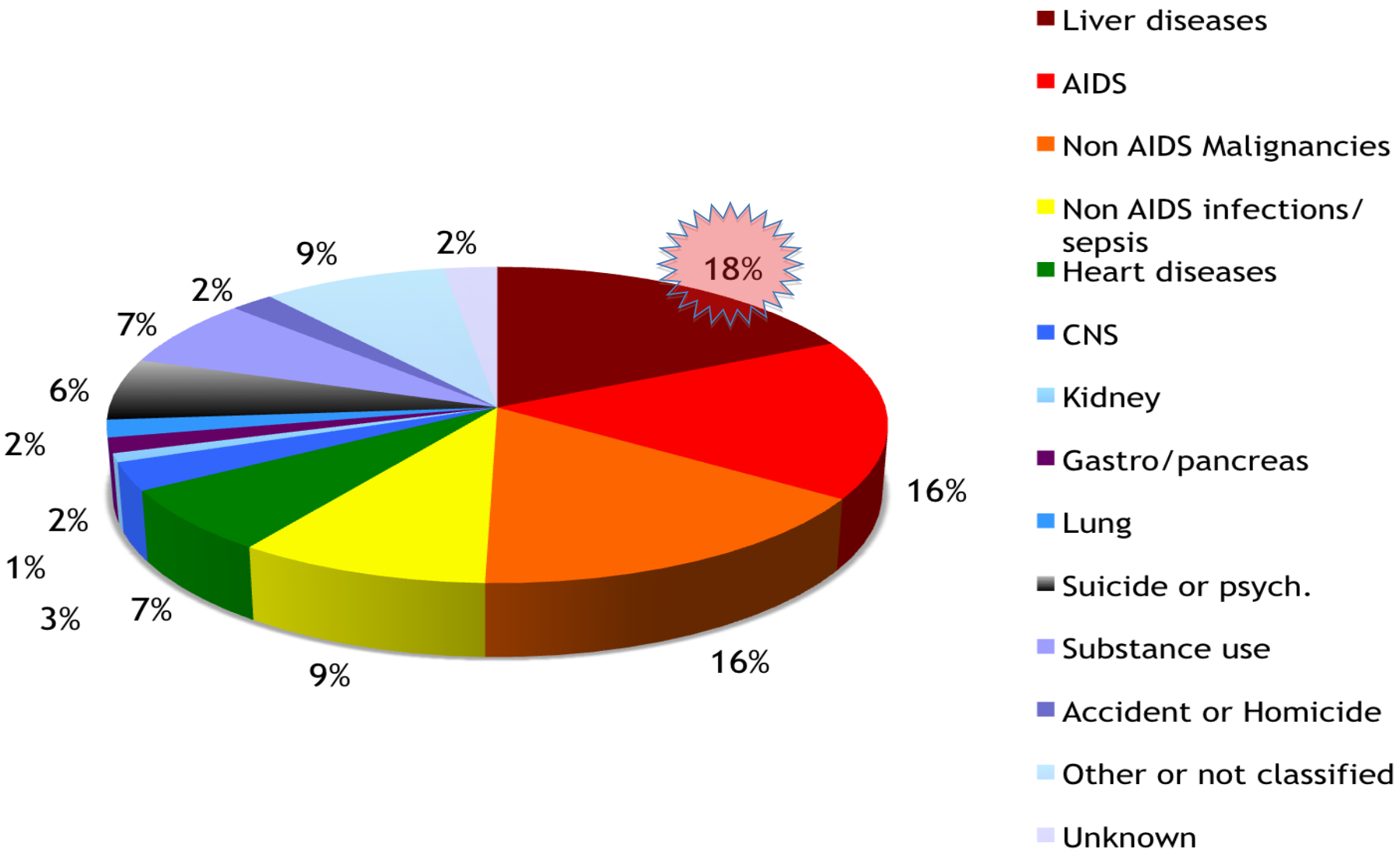
# Liver fibrosis and age among persons coinfected with HIV and HCV (dashed line) and those with only HCV (solid line)

**ALIVE cohort: 1176 current and former injection drug users with HCV**
**5634 valid liver fibrosis measurements**



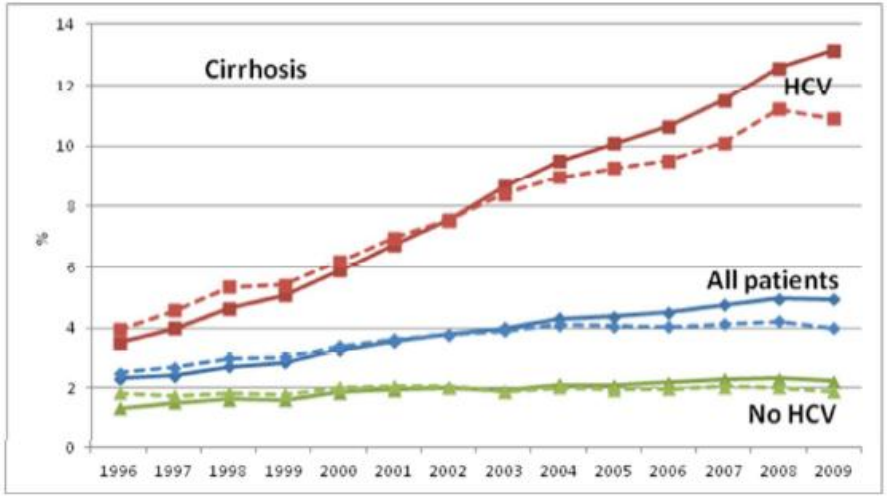

Kirk, Ann Intern Med 2013; 158: 658–666

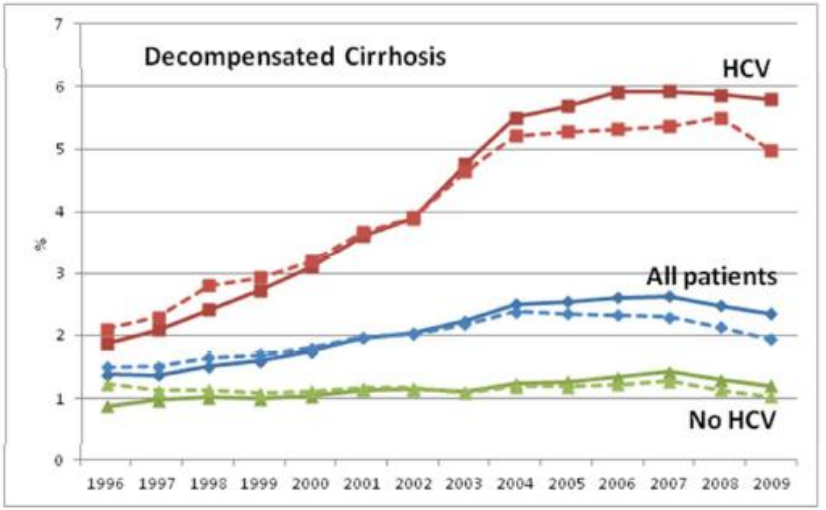
# Causes of death in the Swiss HIV Cohort study 2005-09

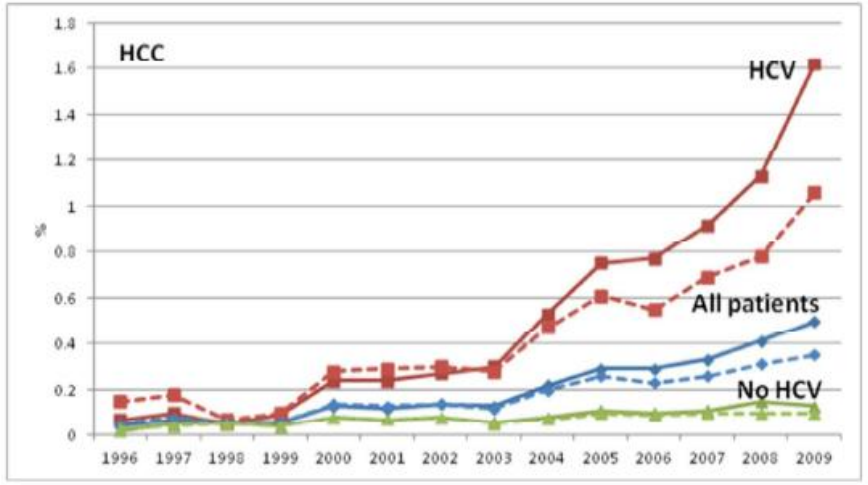


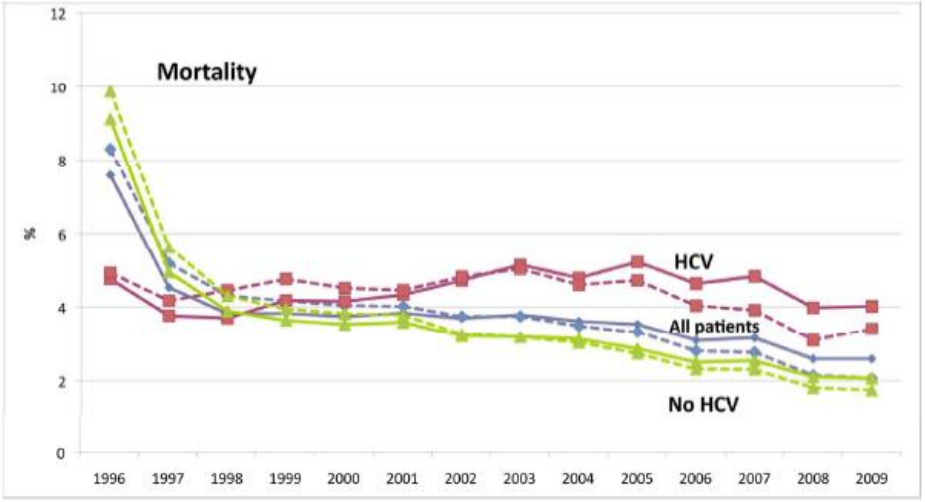

Weber R et al HIV Medicine (2013), 14, 195–207

# Trends in the prevalence of cirrhosis, decompensated cirrhosis, HCC and mortality in 24,040 HIV –infected veterans during period 1996-06 presented according to HCV status



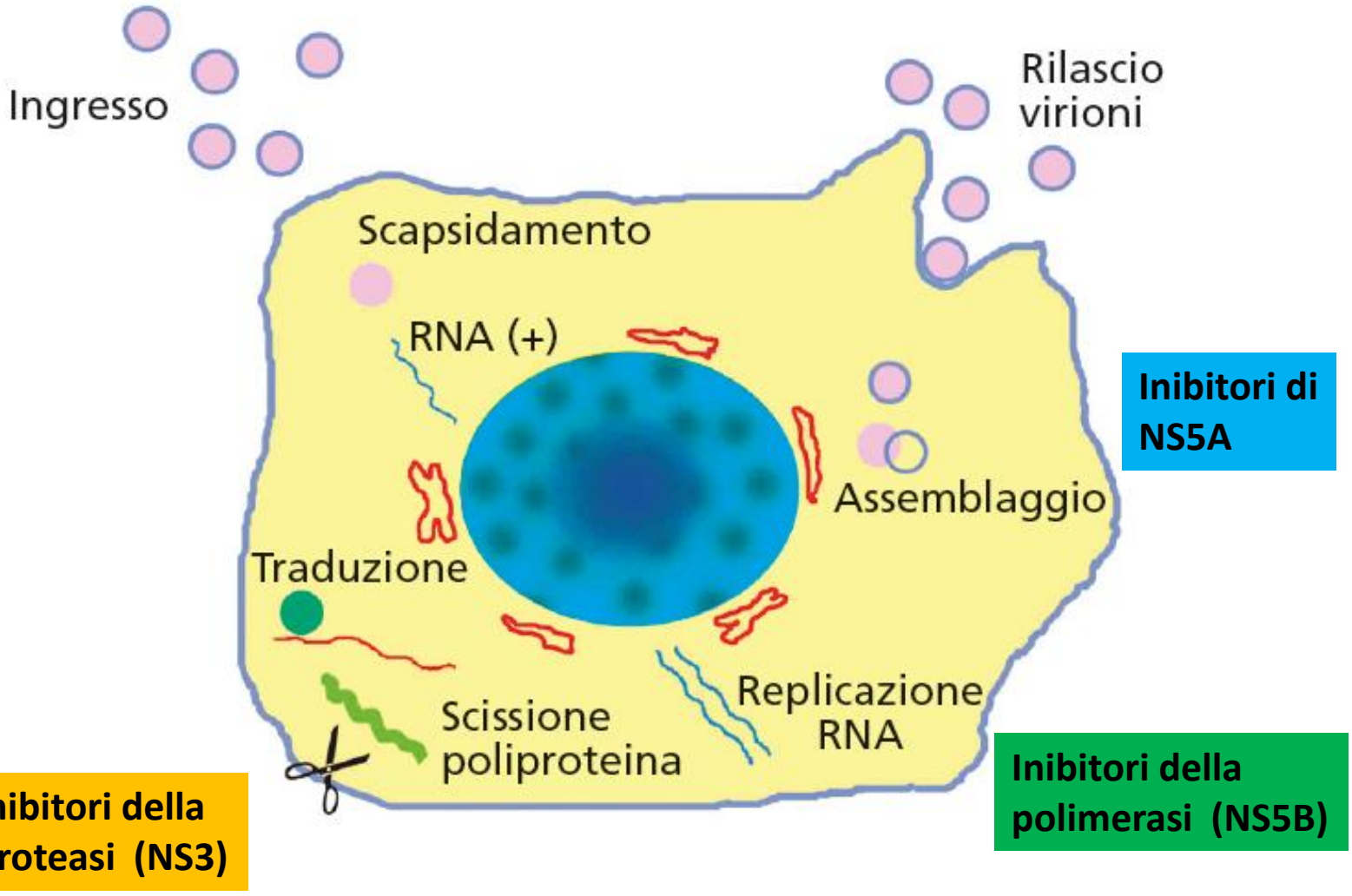




Ioannou V et al HEPATOLOGY 2013

# Ciclo di HCV e bersagli degli antivirali




*Da:Gaeta et al. In: Moroni- Malattie Infettive,Ed. 2014*

# EASL HCV Guidelines 2014: Genotype 1

| Genotype | Options for Therapy |
|---|---|
| **Genotype 1*** | **PegIFN/ribavirin** + **sofosbuvir**: 12 wks (A1) |
| | **PegIFN/ribavirin** + **simeprevir**†: 12 wks, followed by 12 wks of **pegIFN/ribavirin** in previously untreated pts and prior relapsers (A1), or 36 wks of **pegIFN/ribavirin** in previous partial responders and null responders (B1) |
| | **PegIFN/ribavirin** + **daclatasvir** (genotype 1b only; B1): 12 wks followed by 12 wks of **pegIFN/ribavirin** alone or a further 12 wks of **pegIFN/ribavirin** + **daclatasvir** (response-guided therapy) (B2) |
| | **Sofosbuvir** + **ribavirin**: 24 wks for interferon-intolerant pts only, where no other interferon-free option available (B2) |
| | **Sofosbuvir** + **simeprevir**: 12 wks (ribavirin may be added for previous nonresponders & cirrhotics) (B1) |
| | **Sofosbuvir** + **daclatasvir**: 12 wks in previously untreated pts; 24 wks in treatment-experienced patients (including TVR/BOC-experienced patients) (ribavirin may be added in previous nonresponders and cirrhotics) (B1) |

***In settings where recommended options are not available, treatment with pegIFN/ribavirin + TVR or BOC remains acceptable.**

†Not recommended in pts with genotype 1a and detectable Q80K polymorphism.

*EASL. J Hepatology. 2014;60:392-420.*

# EASL HCV Guidelines 2014: Genotype 1

| Genotype | Options for Therapy |
|---|---|
| Genotype 1* | **PegIFN/ribavirin** + **sofosbuvir**: 12 wks (A1) |
| | **PegIFN/ribavirin** + **simeprevir**†: 12 wks, followed by 12 wks of **pegIFN/ribavirin** in previously untreated pts and prior relapsers (A1), or 36 wks of **pegIFN/ribavirin** in previous partial responders and null responders (B1) |
| | **PegIFN/ribavirin** + **daclatasvir** (genotype 1b only; B1): 12 wks followed by 12 wks of **pegIFN/ribavirin** alone or a further 12 wks of **pegIFN/ribavirin** + **daclatasvir** (response-guided therapy) (B2) |
| | **Sofosbuvir** + **ribavirin**: 24 wks for interferon-intolerant pts only, where no other interferon-free option available (B2) |
| | **Sofosbuvir** + **simeprevir**: 12 wks (ribavirin may be added for previous nonresponders & cirrhotics) (B1) |
| | **Sofosbuvir** + **daclatasvir**: 12 wks in previously untreated pts; 24 wks in treatment-experienced patients (including TVR/BOC-experienced patients) (ribavirin may be added in previous nonresponders and cirrhotics) (B1) |

*In settings where recommended options are not available, treatment with pegIFN/ribavirin + TVR or BOC remains acceptable.
†Not recommended in pts with genotype 1a and detectable Q80K polymorphism.

*EASL. J Hepatology. 2014;60:392-420.*

# EASL HCV Guidelines 2014: Genotype 2-6

| Genotype | Options for Therapy |
|---|---|
| Genotype 2* | **Sofosbuvir** + **ribavirin**: 12 wks (16-20 weeks in cirrhotic patients, especially treatment experienced) (A1) |
| | **PegIFN/ribavirin** + **sofosbuvir**: 12 wks for cirrhotic and/or treatment-experienced patients (B1) |
| Genotype 3* | **Sofosbuvir** + **ribavirin**: 24 wks (unsuitable for treatment-experienced cirrhotics, no specific alternative proposed) (A2) |
| | **PegIFN/ribavirin** + **sofosbuvir**: 12 wks (A2) |
| | **Sofosbuvir** + **daclatasvir**: 12 wks (24 wks for treatment-experienced patients) (B1) |
| Genotype 4* | **PegIFN/ribavirin** + **sofosbuvir** 12 weeks (B1) |
| | **PegIFN/ribavirin** + **simeprevir**: 12 wks, followed by 12 wks of **pegIFN/ribavirin** in previously untreated patients & prior relapsers (B1), or 36 wks of **pegIFN/ribavirin** in previous partial responders & null responders (B1) |
| | **PegIFN/ribavirin** + **daclatasvir**: 12 wks followed by 12 wks of **pegIFN/ribavirin** alone or a further 12 wks of **pegIFN/ribavirin** + **daclatasvir** (response-guided therapy) (B1) |
| | **Sofosbuvir + ribavirin**: 24 wks for interferon-intolerant patients (C2) |
| | **Sofosbuvir + simeprevir**: 12 wks (ribavirin may be added in previous nonresponders and cirrhotics) (B2) |
| | **Sofosbuvir + daclatasvir**: 12 wks in previously untreated patients; 24 wks in treatment-experienced patients (ribavirin may be added in previous nonresponders and cirrhotics) (B2) |
| Genotype 5/6* | **PegIFN/ribavirin** + **sofosbuvir** 12 wks (B1) |
| | **Sofosbuvir** + **ribavirin**: 24 wks for interferon-intolerant patients (C2) |

***In settings where recommended options are not available, treatment with pegIFN/ribavirin remains acceptable.**

EASL. J Hepatology. 2014;60:392-420.

# SIMEPREVIR

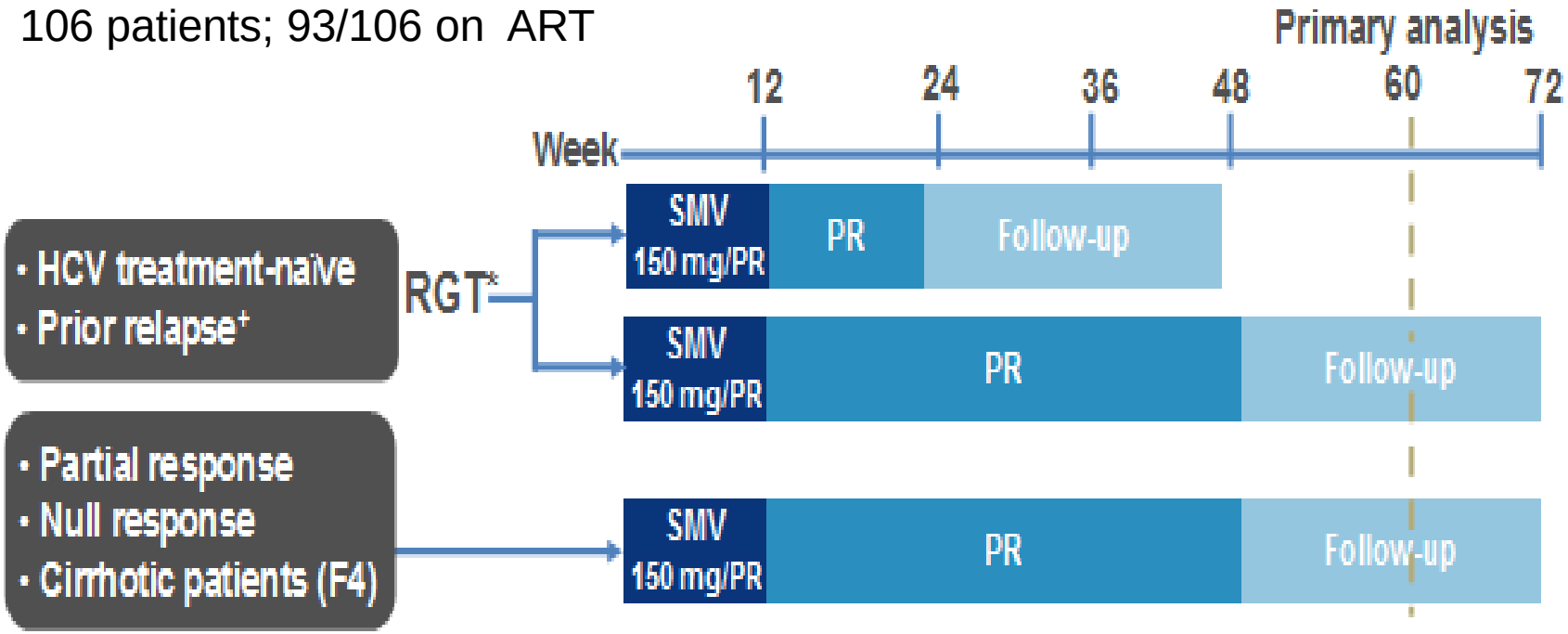
- HCV NS3/4A protease inhibitor
  - Competitive reversible macrocyclic non-convalent inhibitor of NS3/4A protease

- One 150 mg capsule, once-daily dosing with food
  - Exposure increased by ~60% with any type of food
  - Targeted to the liver, substrate of transporter OATP
  - Excretion primarily via feces, minimal in urine (<1%)
  - Metabolism primarily via CYP3A

OATP = organic anion transporter protein; CYP3A = cytochrome P450 3A

# Simeprevir with PR in HIV/HCV-coinfection

106 patients; 93/106 on ART

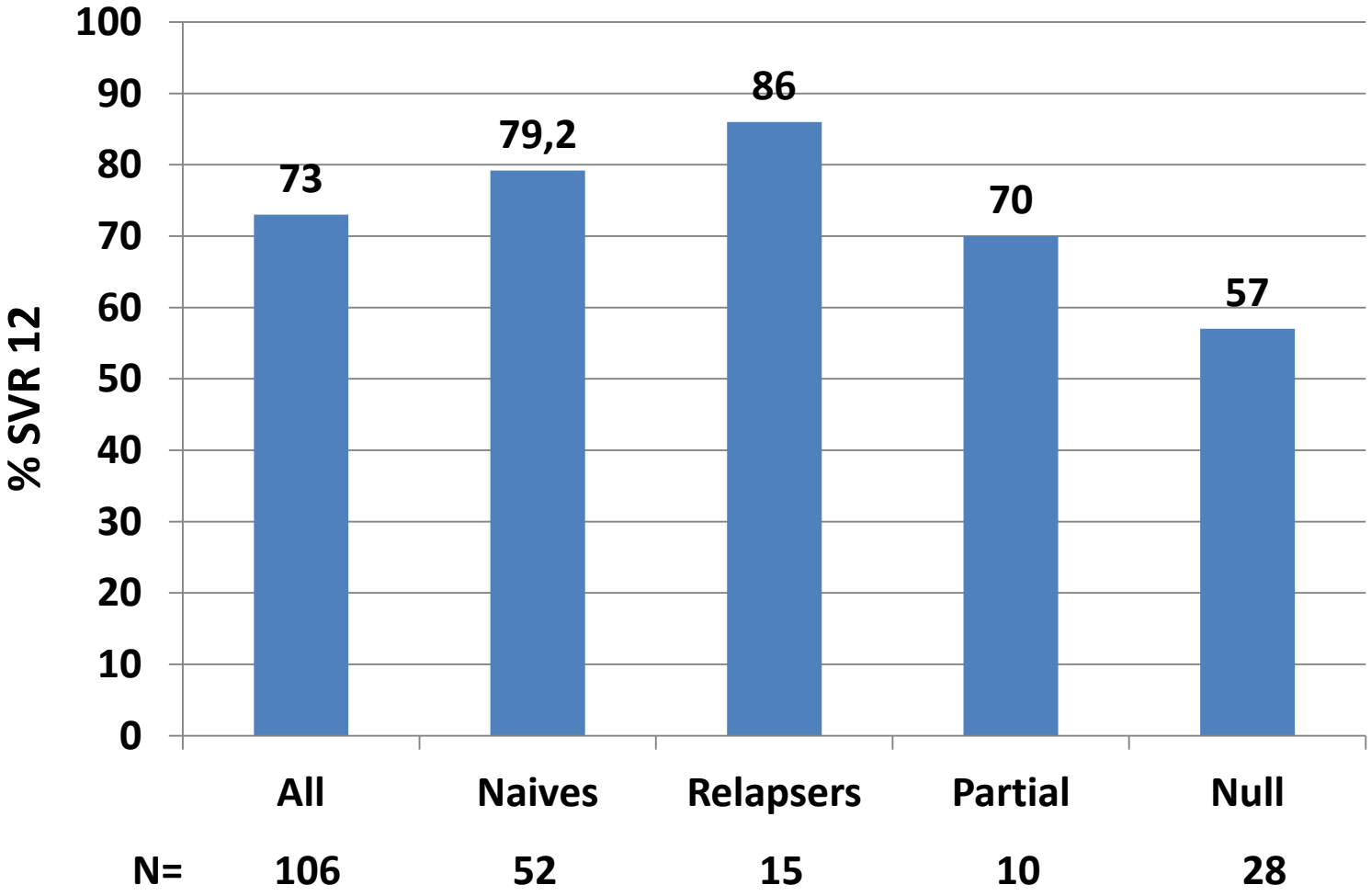



*HIV non-nucleside reverse transcriptase inhibitors (NNRTIs) other than rilpivirine and HIV protease inhibitors were not allowed.*

*USED: NRTIc, Raltegravir, Rilpivirine, Maraviroc, Enfuvirtide*

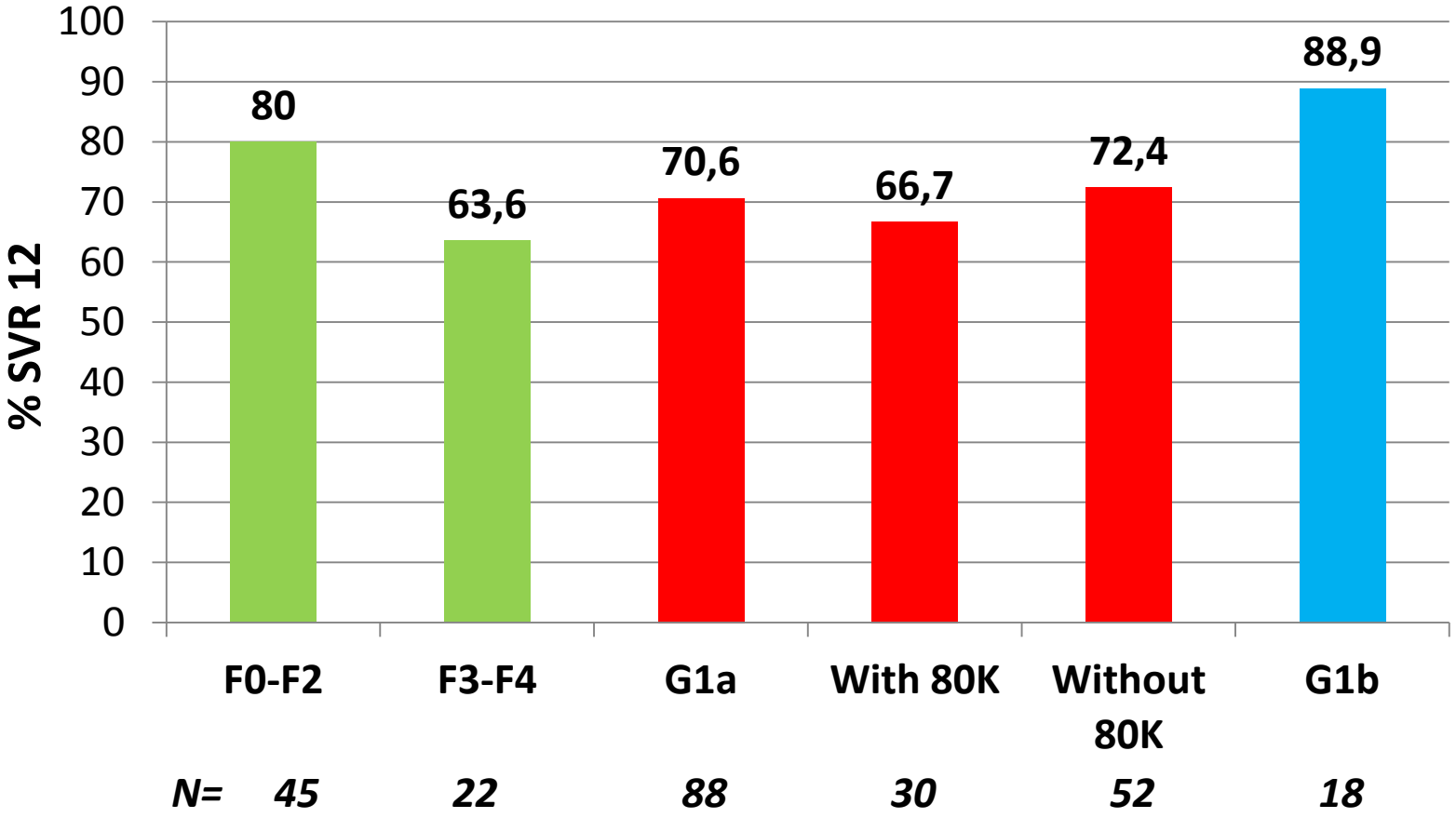
Dieterich et al. Clin Infect Dis, Sept 2014

# Simeprevir with Peg-IFN + Ribavirin: SVR12 by prior treatment response




Dieterich et al. Clin Infect Dis, Sept 2014

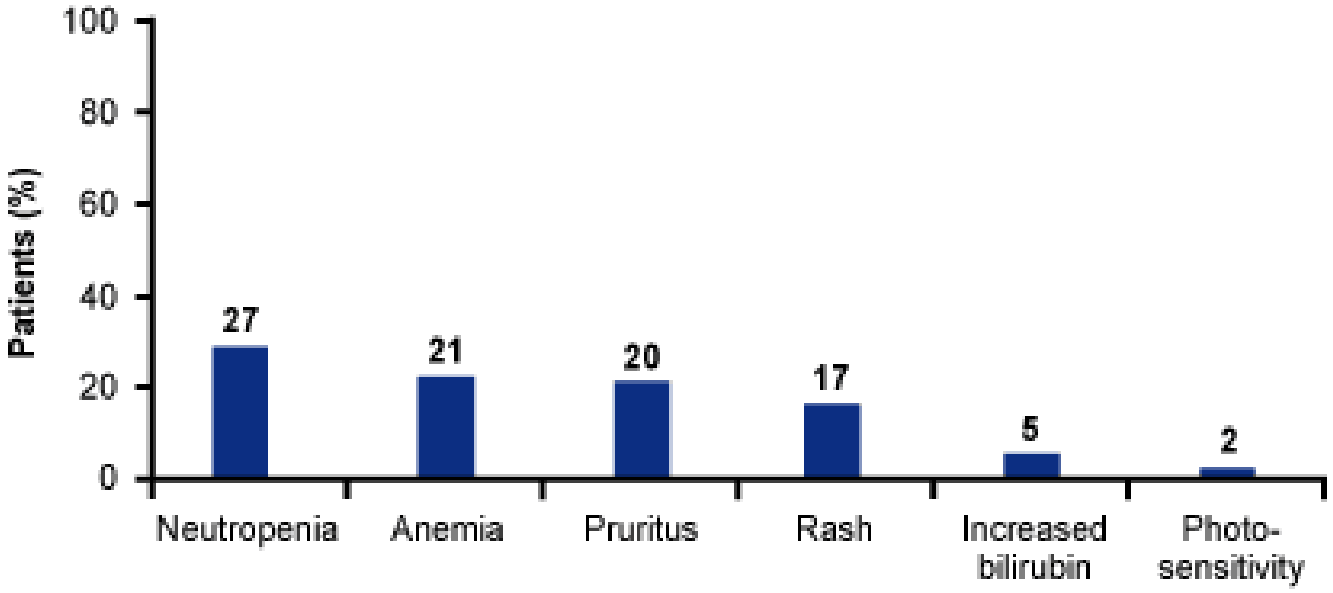
# Simeprevir with Peg-IFN + Ribavirin: SVR12 by fibrosis stage and HCV sub-genotype




Dieterich et al. Clin Infect Dis, Sept 2014

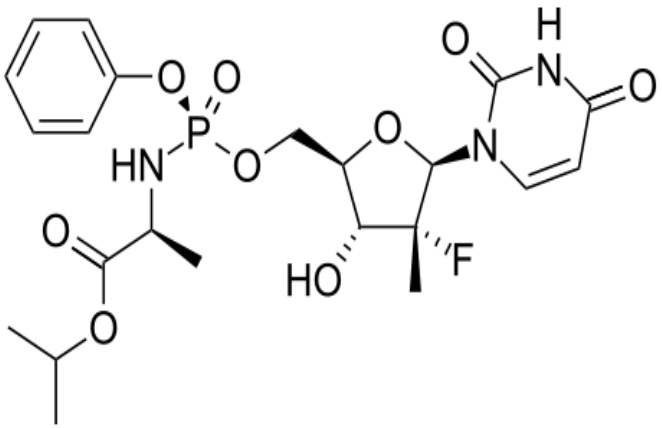
# Adverse events during Simeprevir + PR for 24/48 weeks

66% of patients experienced grade 1/2 events,
30% experienced grade 3/4 events
Most common adverse events included fatigue (41%), headache (27%), and nausea (26%)
Serious adverse events occurred in 5%
Adverse events leading to simeprevir discontinuation occurred in 4%



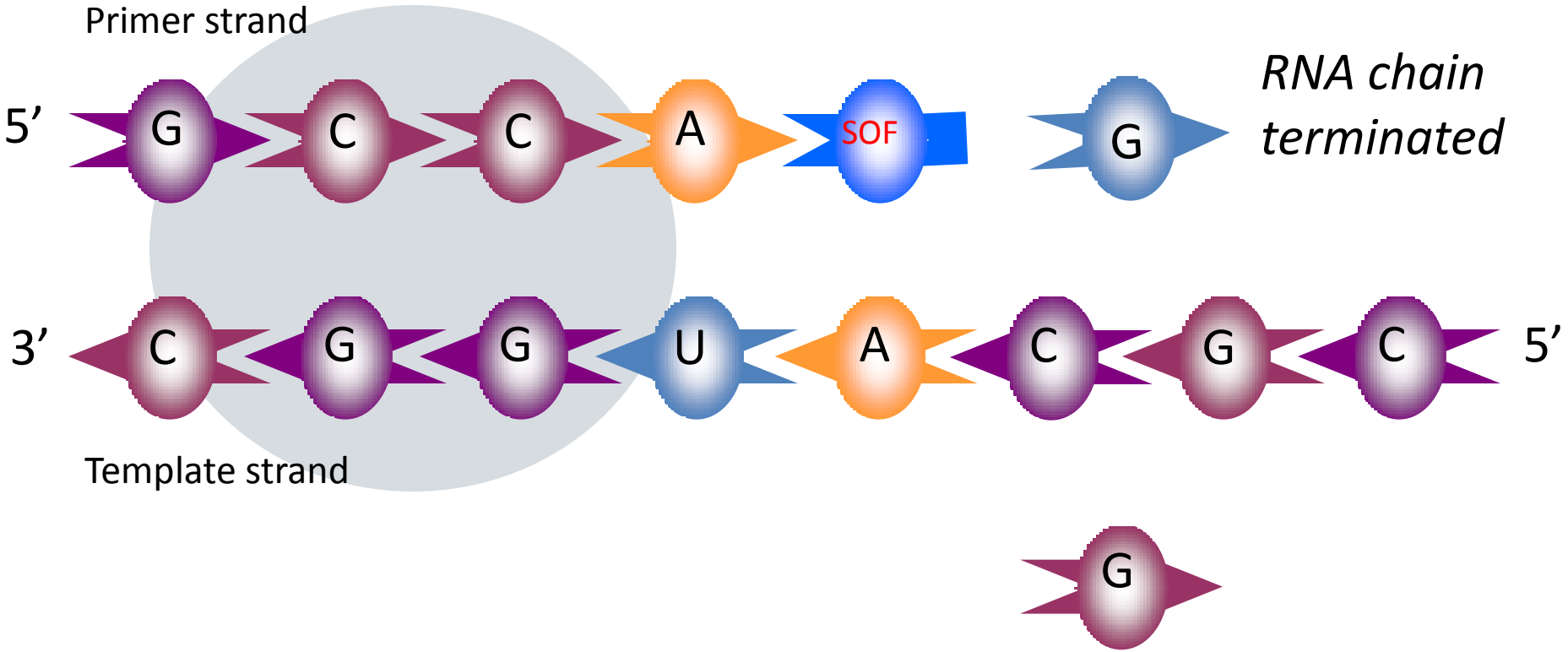

Dieterich et al. Clin Infect Dis, Sept 2014

# SOFOSBUVIR



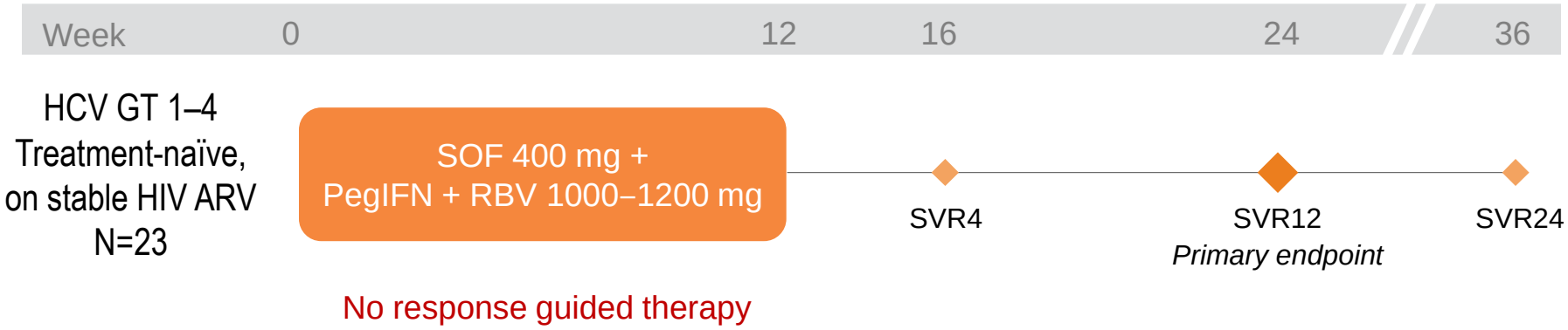

- Nucleotide analog Pol inhibitor
- High genetic barrier
- Pan-genotypic
- One daily dose (400 mg)
- No food effect
- Low potential for DDI
  - No hepatic CYP450 metabolism
- Renally cleared
- Generally safe and well-tolerated
  in clinical studies to date (>3,000 patients)

# HCV RNA Replication:
## Role of Sofosbuvir



# Treatment-Naïve HCV/HIV Co-infected Patients
# SOF + PegIFN + RBV x 12 weeks

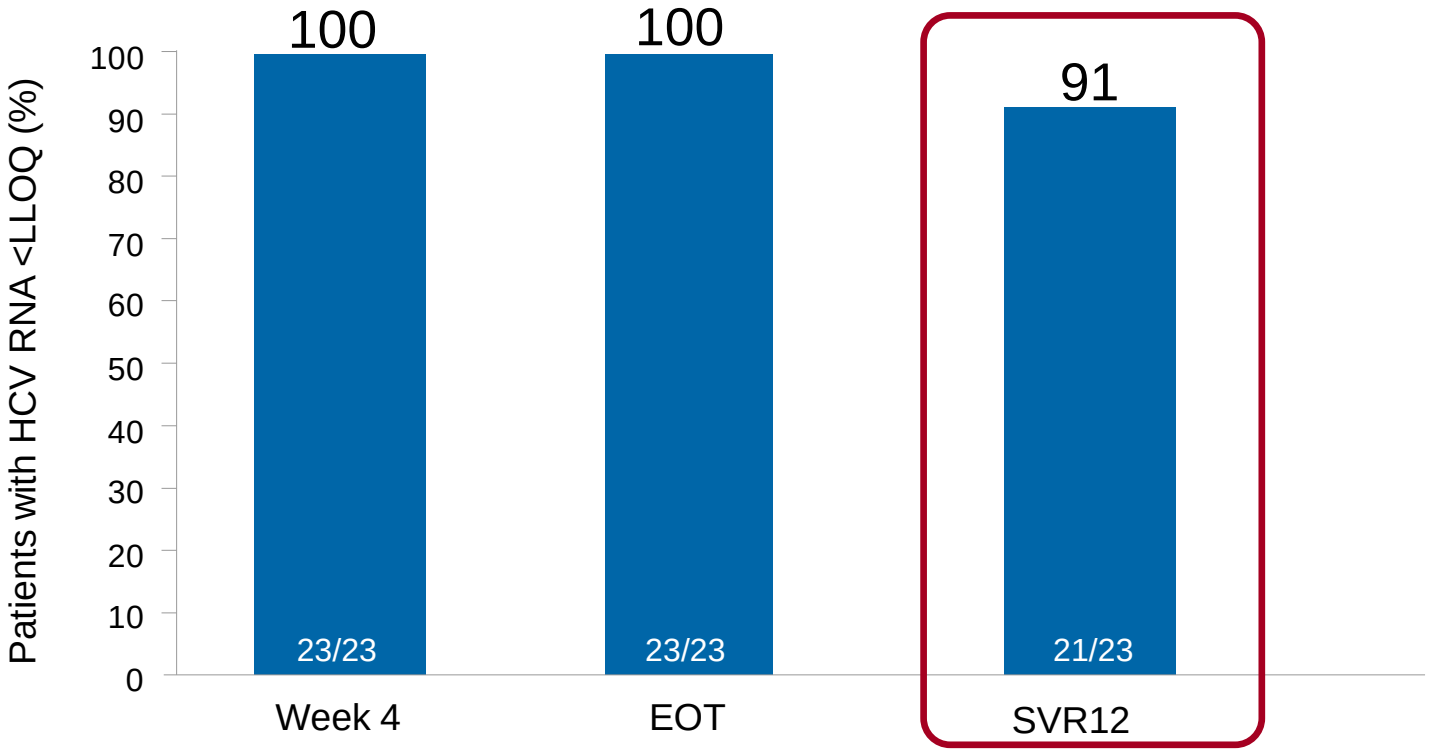
- Open-label trial in treatment-naïve, non-cirrhotic chronic HCV patients co-infected with HIV




- Primary endpoints
  - Efficacy: proportion of patients with SVR12
  - Safety and tolerability of treatment, including effects on HIV RNA and CD4 T-cell %

Rodriguez-Torres M, et al. IDWeek 2013; San Francisco, CA. Poster #714

# Treatment-Naïve HCV/HIV Co-infected Patients SOF + PegIFN + RBV x 12 weeks

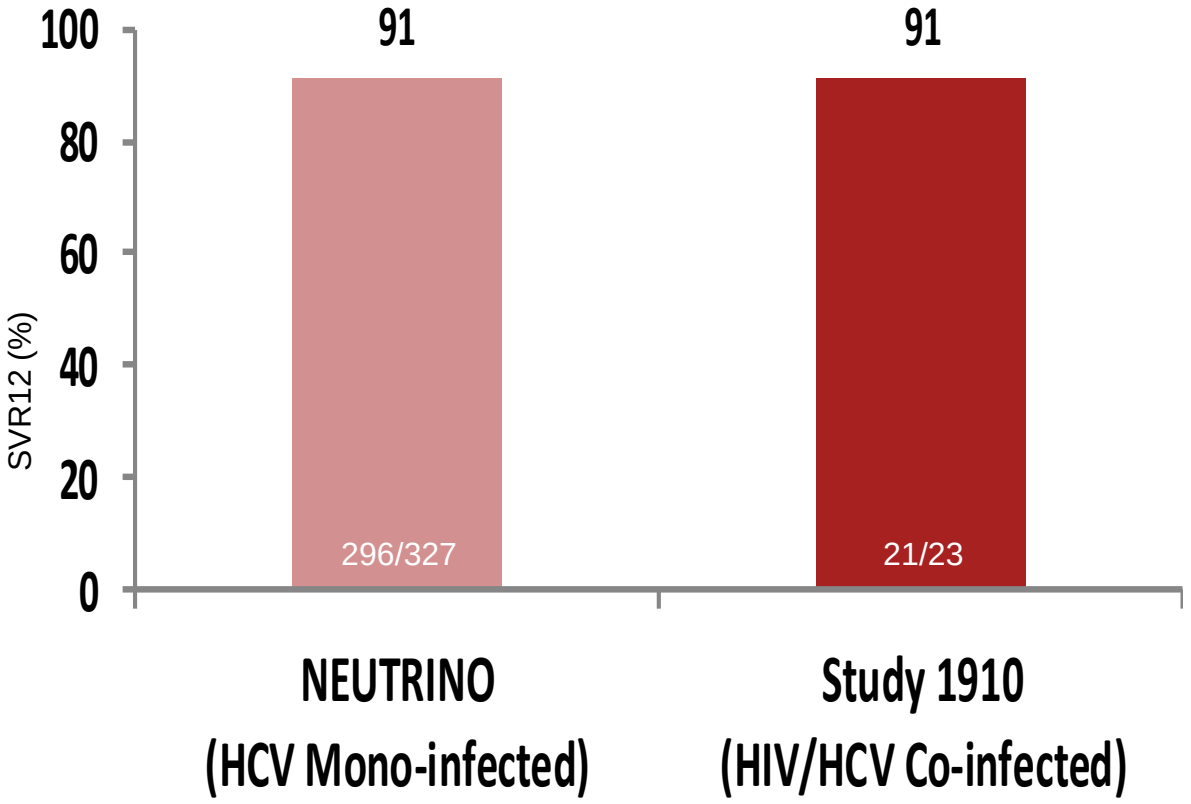



- SVR12 was similar by HCV GT and by HIV ARV regimen
- There was no on-treatment HCV or HIV virologic breakthrough
- Relapse occurred in 1 patient and accounted for all virologic failures
- Two patients discontinued treatment early due to adverse events
  - one patient discontinued at week 6 and was lost to follow-up
  - one patient achieved SVR12 after 8 weeks of SOF + RBV therapy

Rodriguez-Torres M, et al. IDWeek 2013; San Francisco, CA. Poster #714

# Comparison of HCV Mono-infected to HCV/HIV Co-infected

## Short Duration of SOF + PegIFN + RBV x 12 Weeks




Similar response rates in HCV/HIV co-infected patients compared to HCV mono-infected patients


Lawitz E, et al. APASL 2013. Singapore. Oral #LB-02

Rodriguez-Torres M, et al. IDWeek 2013; San Francisco, CA. Poster #714

# Safety Summary
# Treatment-Naïve HCV/HIV Co-infected Patients

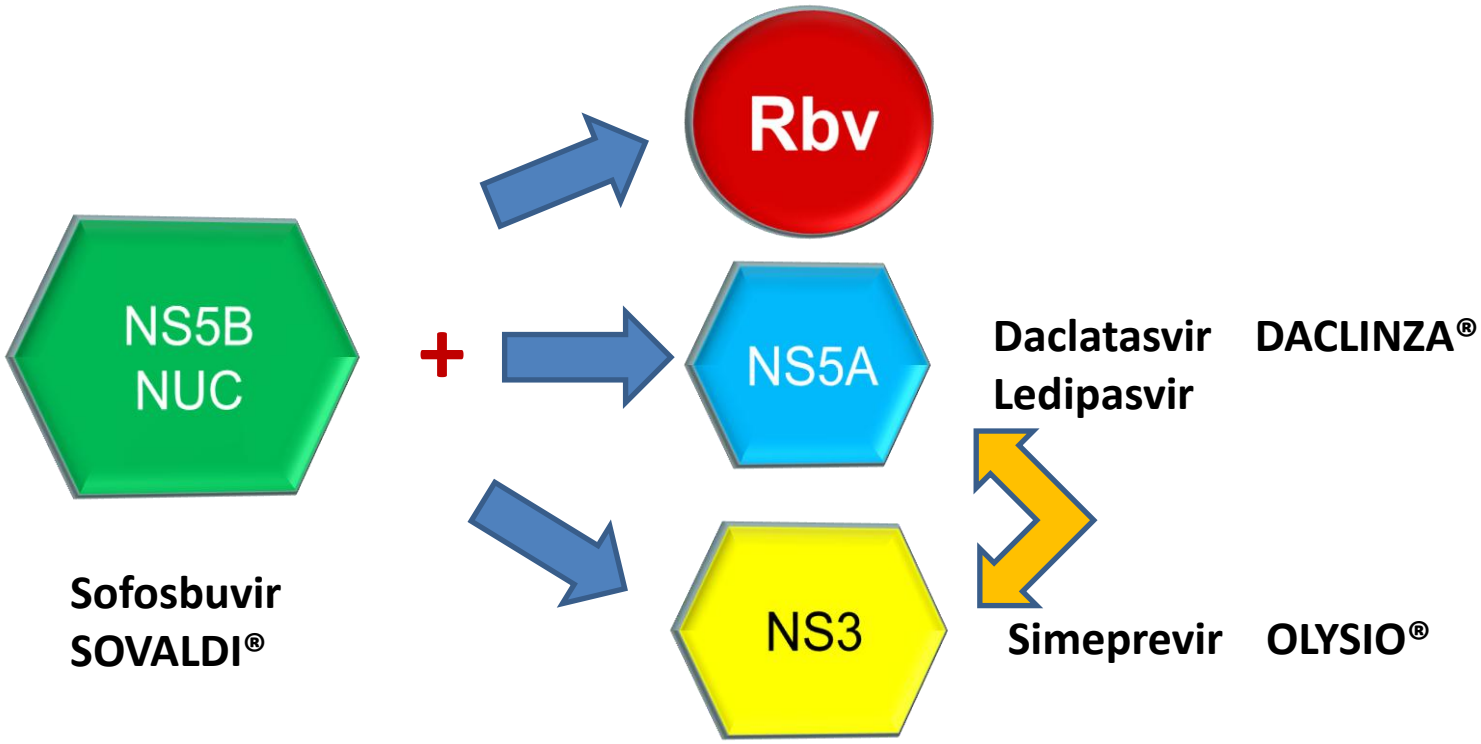
| Adverse event, n (%) | SOF + PegIFN + RBV (N=23) |
|---|---|
| Any AE | 16 (70) |
| Serious AE | 0 |
| Grade 3 AE | 7 (30) |
| Grade 4 AE | 0 |
| Discontinuation due to AE* | 2 (9) |
| Common AEs in > 10% of patients | |
| Anemia | 12 (52) |
| Fatigue | 8 (35) |
| Hyperbilirubinemia | 4 (17) |
| Neutropenia | 4 (17) |
| Myalgia | 4 (17) |
| Abdominal pain | 3 (13) |

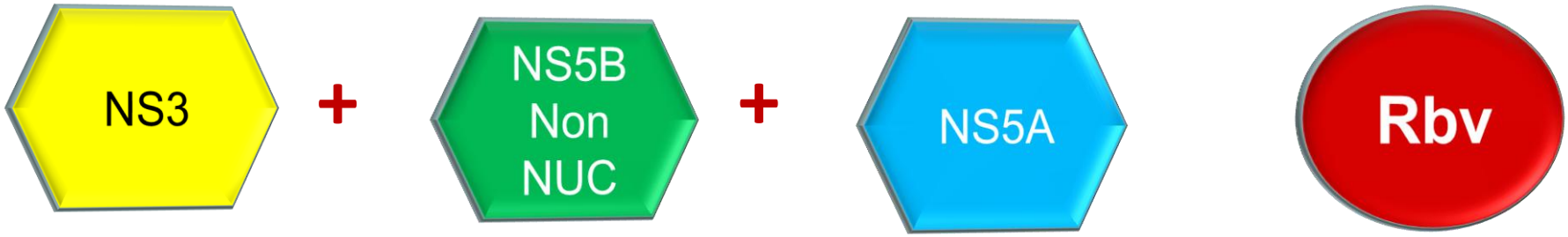
*Anemia at Week 6 (n=1) and altered mood at Week 8 (n=1).
Hyperbilirubinemia occurred only among patients receiving atazanavir + ritonavir

- No significant changes in CD4 T-cell count from baseline to follow-up Week 12

Rodriguez-Torres M, et al. IDWeek 2013; San Francisco, CA. Poster #714

# DAA combination development

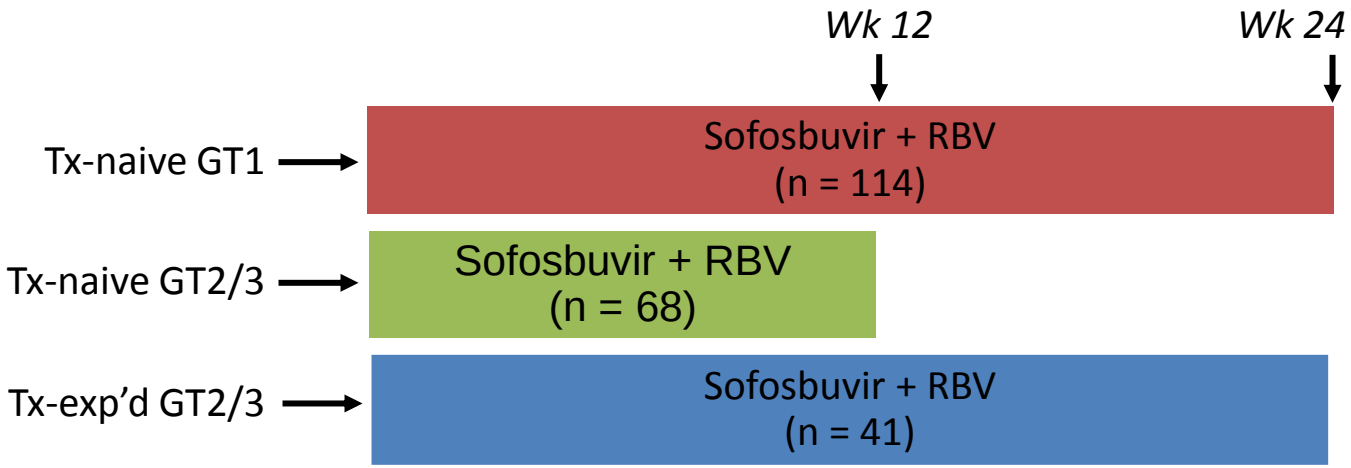


# PHOTON-1: Sofosbuvir + RBV in GT1-3 HCV Patients Coinfected With HIV

- Nonrandomized, open-label phase III study; primary endpoint: SVR12
- Stable ART (HIV-1 RNA < 50 copies/mL for > 8 wks before enrollment; >200 CD4)
- Cirrhosis at baseline: GT1, 4%; GT2/3 tx naive, 10%; GT2/3 tx-exp'd: 24%
- Wide range of ART regimen allowed

  -95% on ART: TDF/FTC, 100%; EFV, 35%; ATV/RTV, 17%; DRV/RTV, 15%; RAL, 16%; RPV, 6%



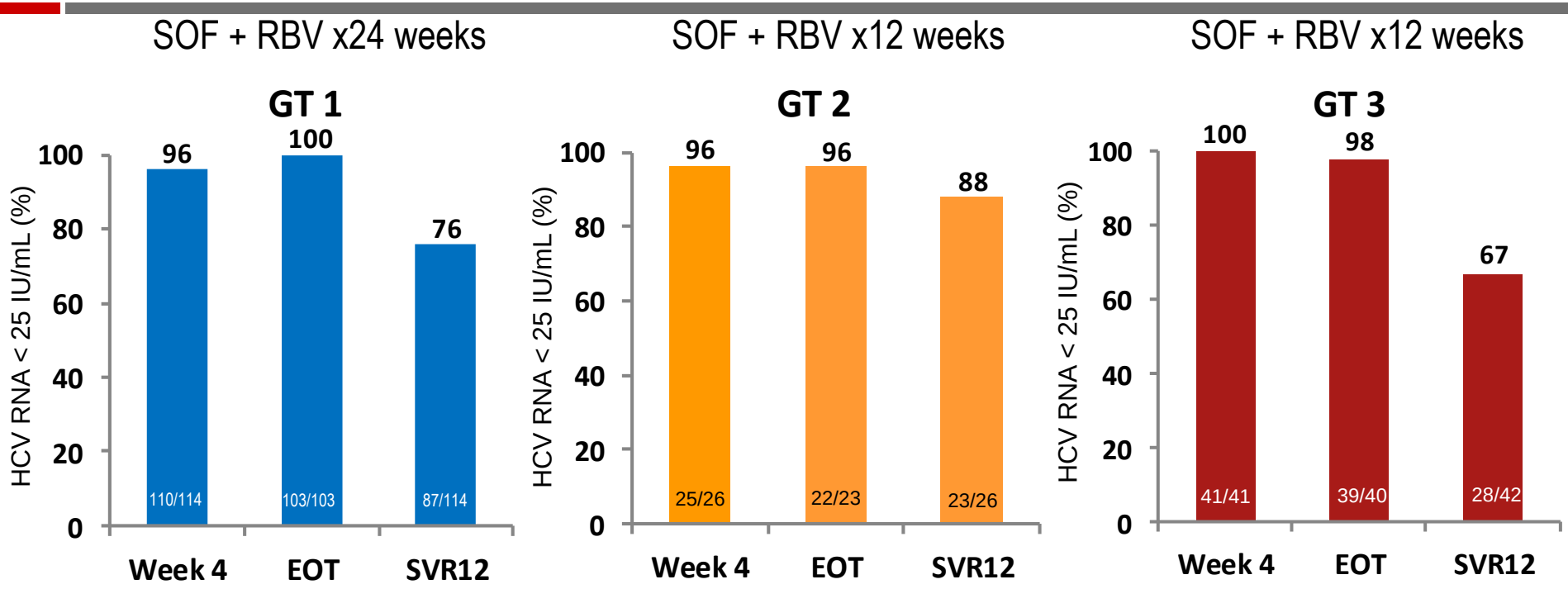

Sofosbuvir 400 mg QD; weight-based RBV 1000 or 1200 mg/day

22. Sulkowski MS, et al. JAMA. 2014;312:353-361.

Sulkowski MS, et al. *JAMA.* 2014;312(4):353-361

# PHOTON-1 Virologic Response

## All-Oral Therapy of SOF + RBV in Treatment-Naive HCV/HIV Co-infection




- An all-oral regimen of SOF + RBV for 12–24 weeks resulted in high SVR12 rates in TN GT 1, 2, and 3 CHC with HIV co-infection – with SVR12 rates similar to mono-infection
- No HCV resistance (S282T) was observed in virologic failures via deep sequencing
- Two patients had HCV breakthrough; both had documented non-adherence to SOF
- Two other patients had transient HIV breakthrough; both had documented non-adherence to ART

Sulkowski MS, et al. *JAMA.* 2014;312(4):353-361

# PHOTON-1 Safety Summary

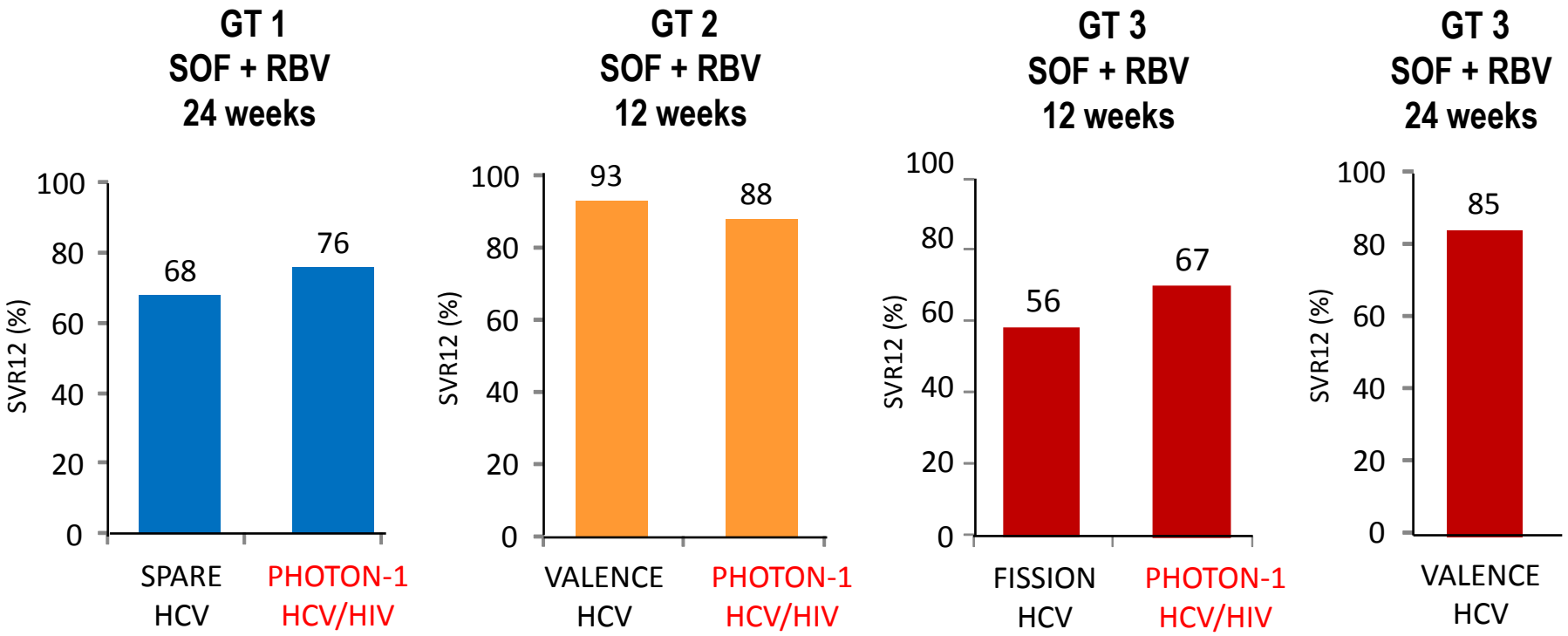
## GT 1, 2, 3 HCV Treatment-Naïve, HCV/HIV Co-infection

| Patients, % | SOF + RBV | |
|---|---|---|
| | GT1 TN 24 Weeks (n=114) | GT2/3 TN 12 Weeks (n=68) |
| AEs | 93 | 84 |
| Grade 3–4 AEs | 13 | 10 |
| Serious AEs | 7 | 7 |
| Treatment D/C due to AEs* | 3 | 4 |
| Death | 0 | 1† |
| AEs in ≥ 15% of patients | | |
| Fatigue | 36 | 35 |
| Insomnia | 13 | 21 |
| Nausea | 16 | 18 |
| Hemoglobin†† | | |
| <10 g/dL | 22 (19) | 7 (10) |
| <8.5 g/dL | 2 (2) | 1 (1) |

*Weight loss, insomnia/agitation, pneumonia, suicide attempt, foreign body sensation in throat, increased anxiety, and dyspnea.
†Suicide 9 days after completing study treatment; patient had history of depression.
††46 (25%) required ribavirin dose reduction during study; epoetin alfa was not permitted.

Sulkowski MS, et al. AASLD 2013. Washington, DC. Oral #212

# SOF+RBV for HCV Mono-infected and HCV/HIV Co-infected Patients

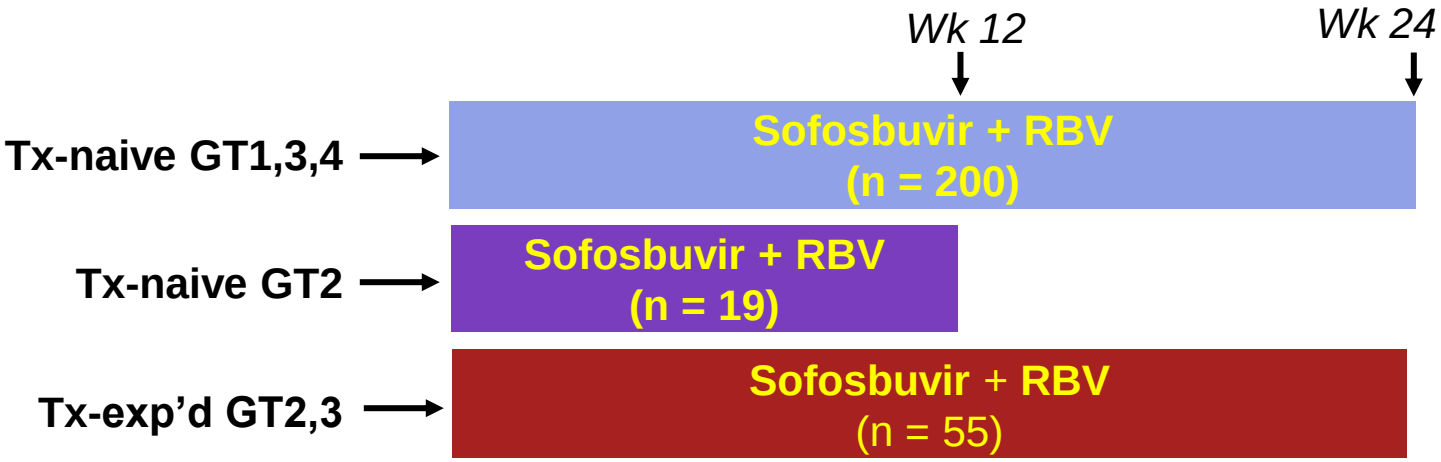



Similar response rates in HCV/HIV co-infected patients compared to HCV mono-infected patients

Osinusi A, et al. *JAMA*. 2013;310(8):804-811.Sulkowski MS, et al. AASLD 2013. Washington, DC. Oral #212. Zeuzem S, et al. AASLD 2013. Washington, DC. #1085. Lawitz E, et al. *N Engl J Med*. 2013 May 16;368(20):1878-87. Sulkowski et al, JAMA. 2014 ;312:353-61

# PHOTON-2: Sofosbuvir + RBV in GT1-4 HCV Patients Coinfected With HIV

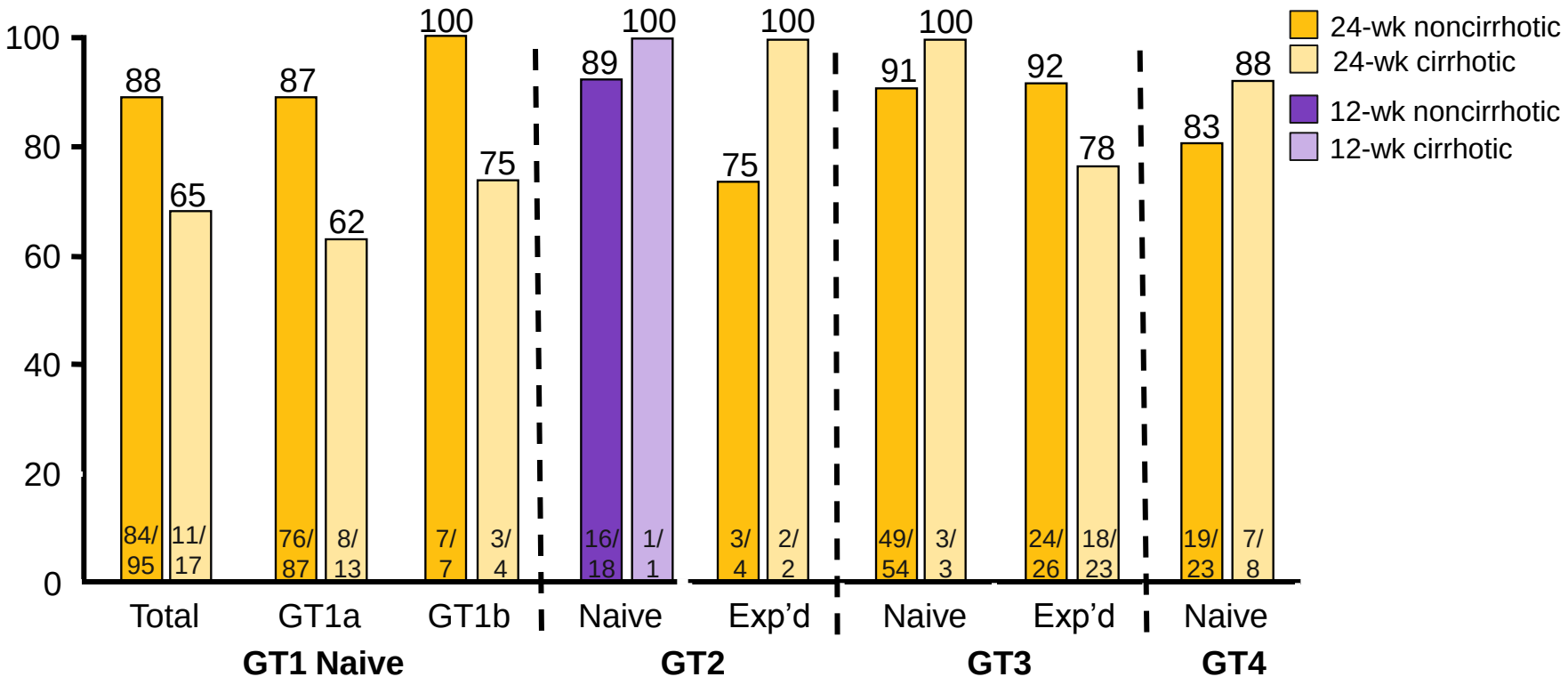
- Nonrandomized, open-label phase III study; primary endpoint: SVR12
- Stable ART (HIV-1 RNA < 50 copies/mL for ≥ 8 wks before enrollment)
  - 97% on ART: TDF/FTC, 100%; EFV, 25%; ATV/RTV, 17%; DRV/RTV, 21%; RAL; 23%; RPV, 5%
- **Cirrhosis at baseline: All pts, 20%;** tx-naive patients, 13%; tx-exp'd patients, 45%




Sofosbuvir 400 mg QD; weight-based RBV 1000 or 1200 mg/day

Molina JM, et al. AIDS 2014. Abstract MOAB0105LB.

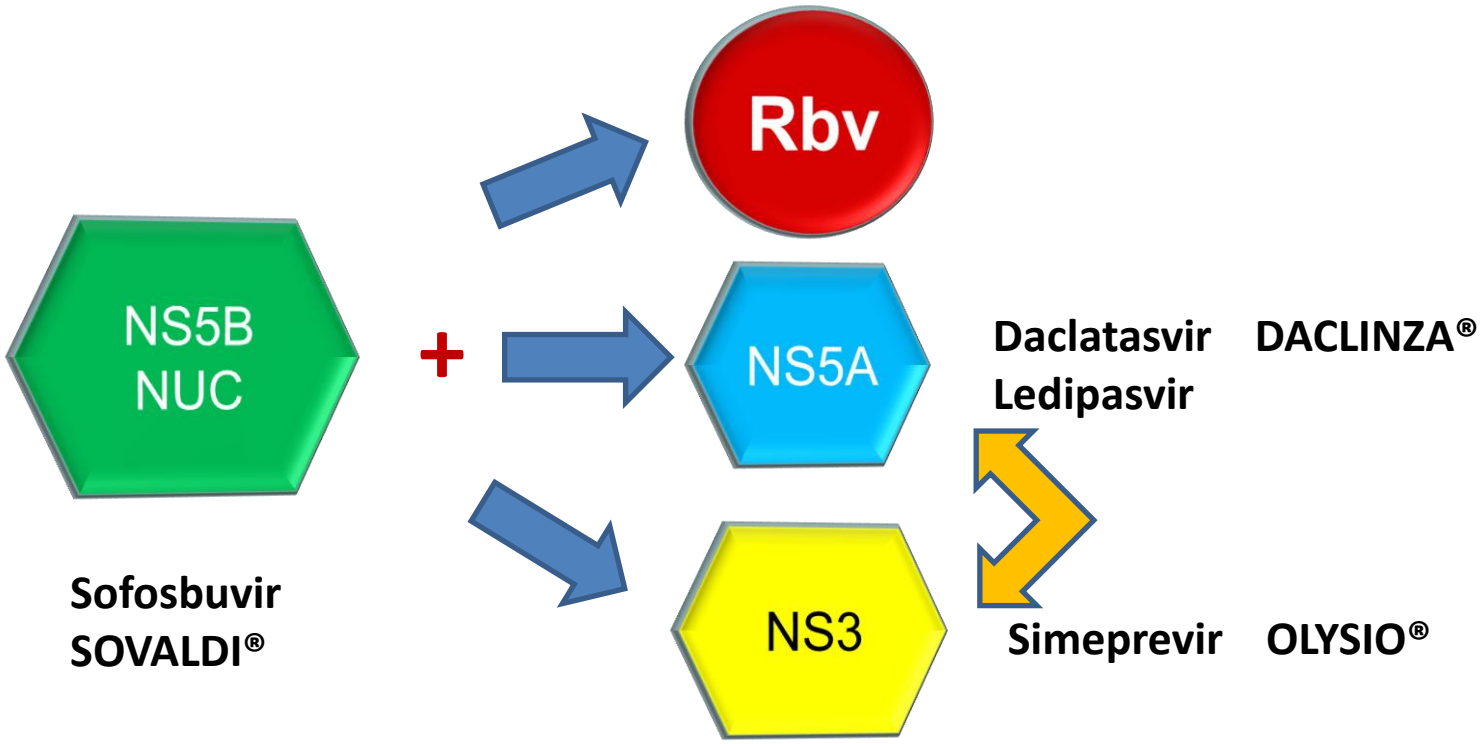
# PHOTON-2: SVR12 by Genotype and Cirrhosis

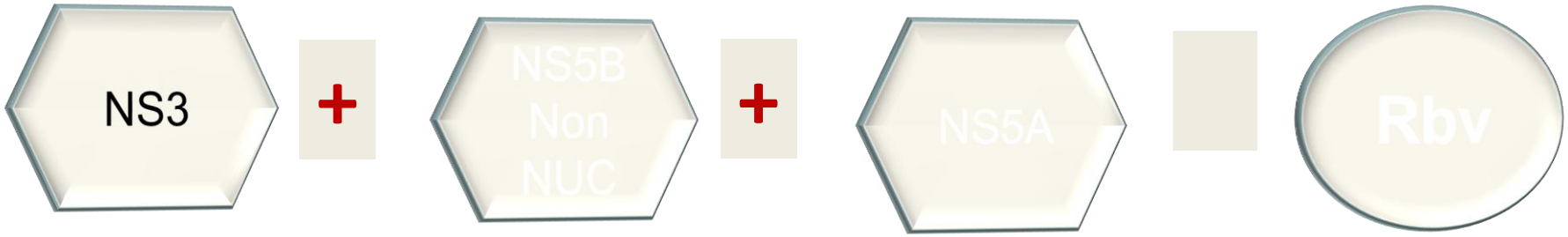



- Absolute CD4+ count—but not CD4%—decreased, consistent with effect of RBV on lymphocytes

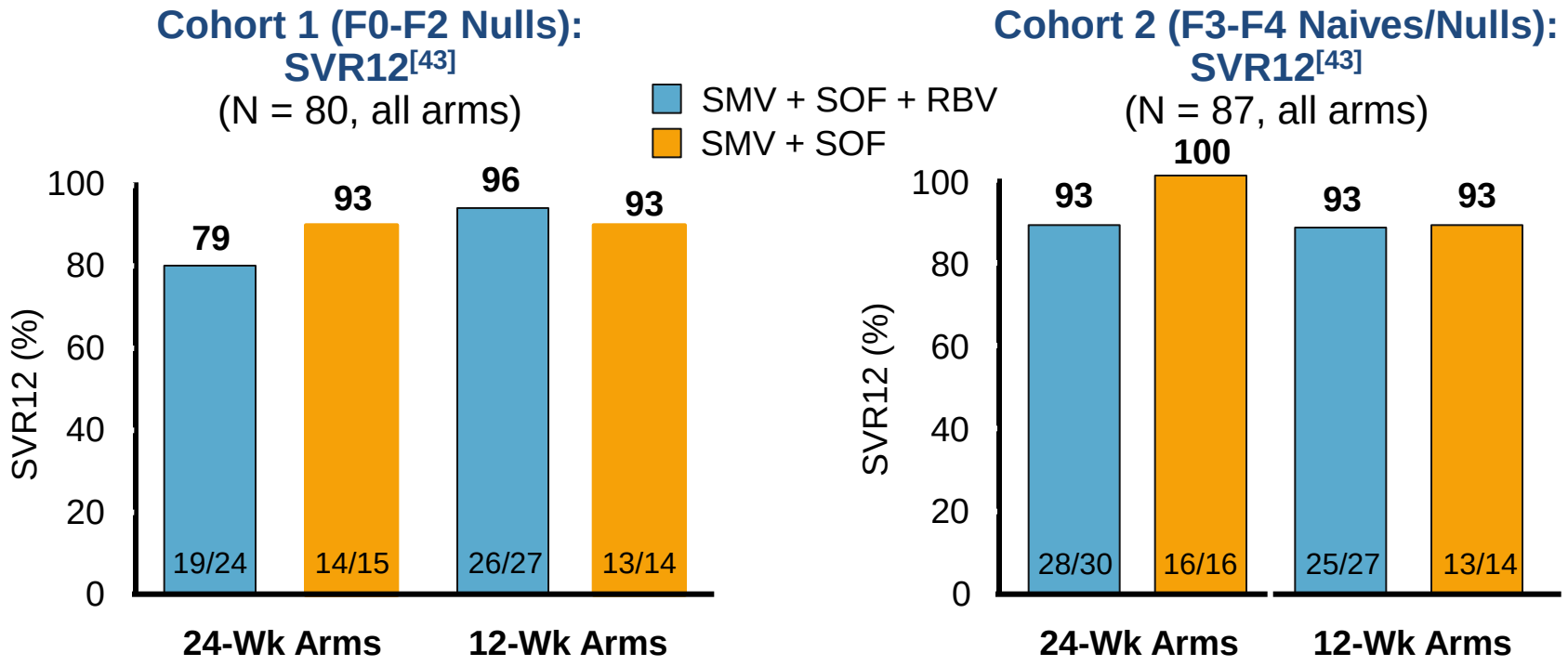
Molina JM, et al. AIDS 2014. Abstract MOAB0105LB.

# DAA combination development



# COSMOS: Sofosbuvir + Simeprevir ± RBV in GT1 HCV Monoinfection




- SVR in pts with Q80K mutation = 83% to 100%
- Study investigating SOF + SMV in HCV/HIV-coinfected patients planned[2]

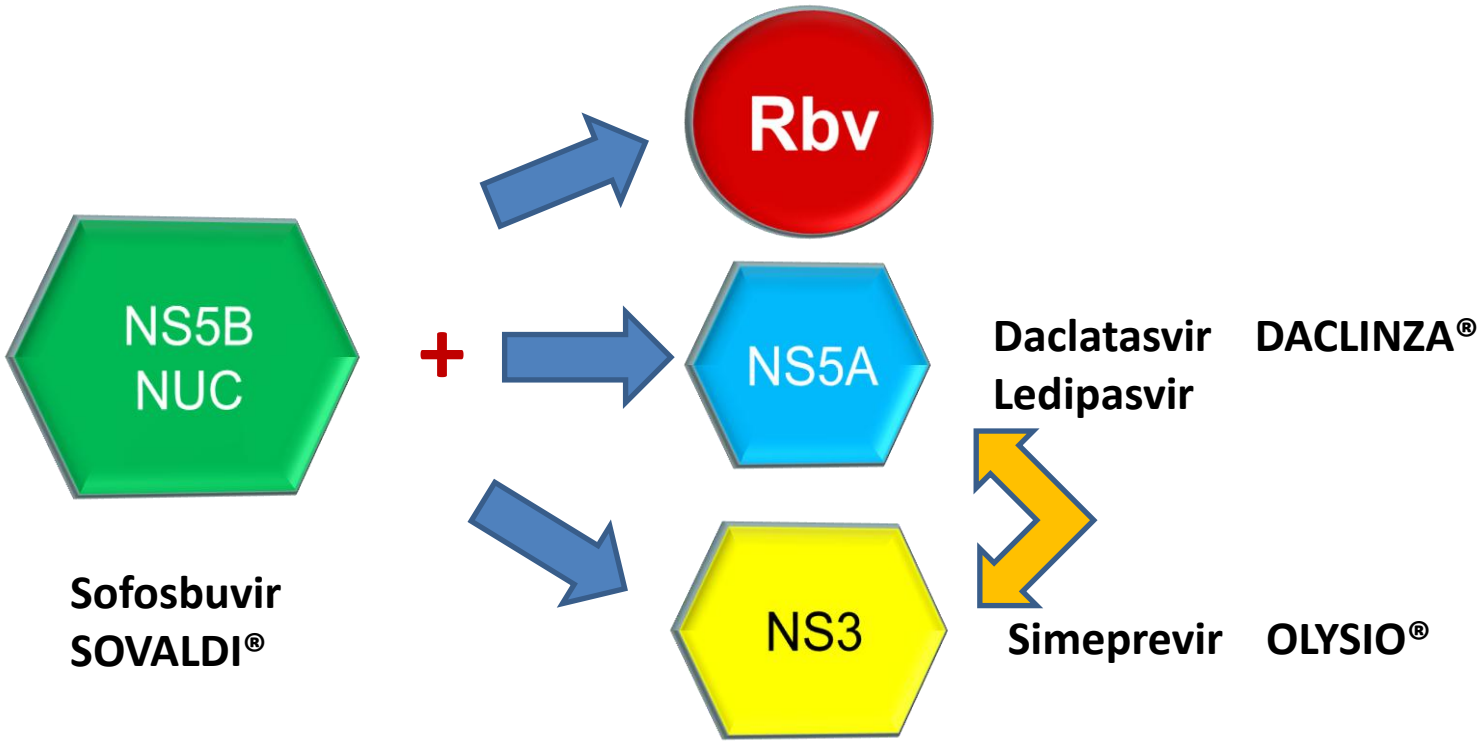
Lawitz E, et al. Lancet. 2014;[Epub ahead of print]..

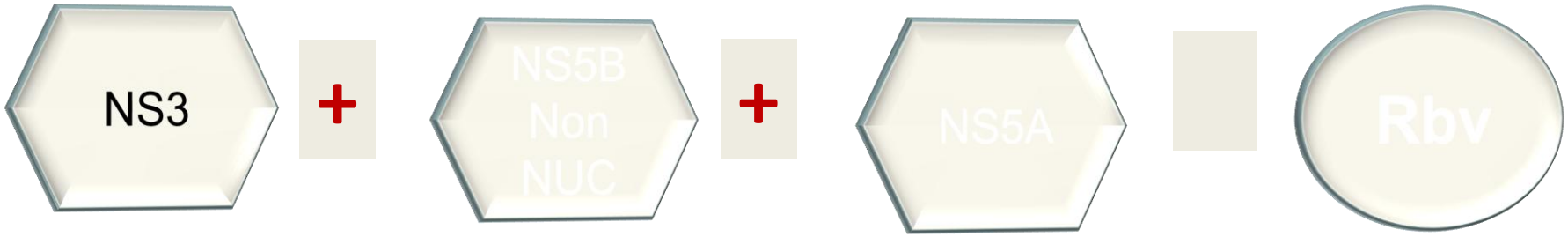
# Drug–Drug Interactions With ARVs

| ARV | Simeprevir | Sofosbuvir |
|---|---|---|
| DTG | No interaction expected | No interaction expected |
| RAL | Use standard doses | Use standard doses |
| EFV | Do not coadminister | Use standard doses |
| DLV, ETR, NVP | Do not coadminister | Use standard doses |
| RPV | Use standard doses | Use standard doses |
| Any PI | Do not coadminister | |
| DRV/RTV | Do not coadminister | Use standard doses |
| RTV | Do not coadminister | Use standard doses |
| TPV/RTV | Do not coadminister | Do not coadminister |
| TDF | Use standard doses | Use standard doses |
| COBI | Do not coadminister | Use standard doses |

Sofosbuvir [package insert]. Simeprevir [package insert]. Kirby B, et al. AASLD 2012. Abstract 1877. Ouwerkerk-Mahadevan S, et al. IDSA 2012. Abstract 49.

# DAA combination development



# SOF/Ledipasvir for HIV/HCV-coinfection

## ERADICATE

- Fifty HIV/HCV genotype 1, treatment-naive subjects
- HAI fibrosis stage 0 – 3


**ARV Untreated (n=13)**

CD4 count stable + HIV RNA <500 copies
OR
- CD4 count > 500 cells/mm$^3$

→ SVR 12

**SOF/LDV (400/90mg)**

**ARV Treated (n=37)**

- CD4 count > 100 cells/mm$^3$
- HIV RNA < 40 copies
- Current ARVs ≥ 8 weeks

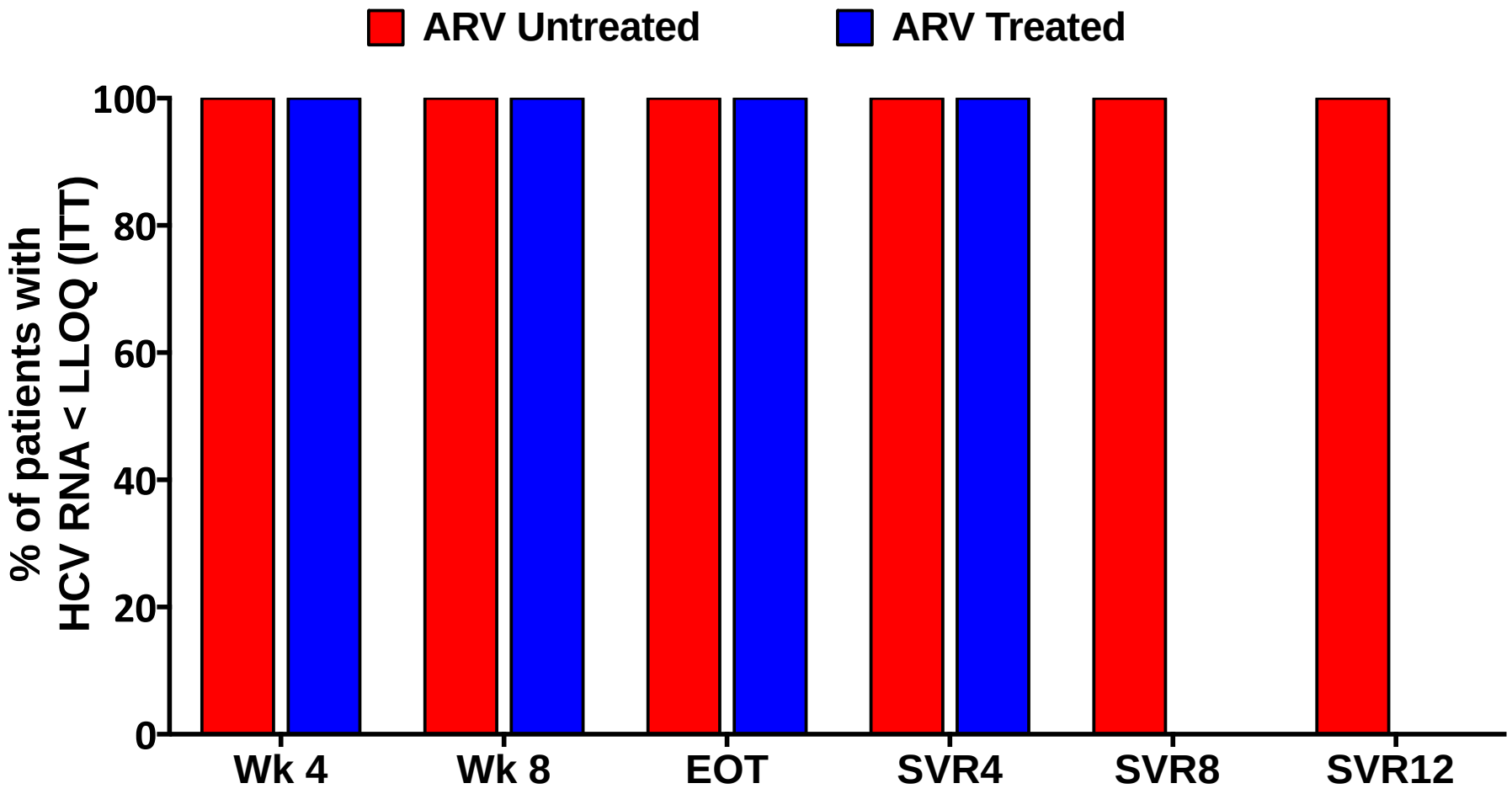
→ SVR 4

ARVs: tenofovir, emtricitabine, efavirenz, rilpivirine and raltegravir

Osinusi A, EASL, 2014, O14

# SOF/Ledipasvir for HIV/HCV-coinfection

## ERADICATE

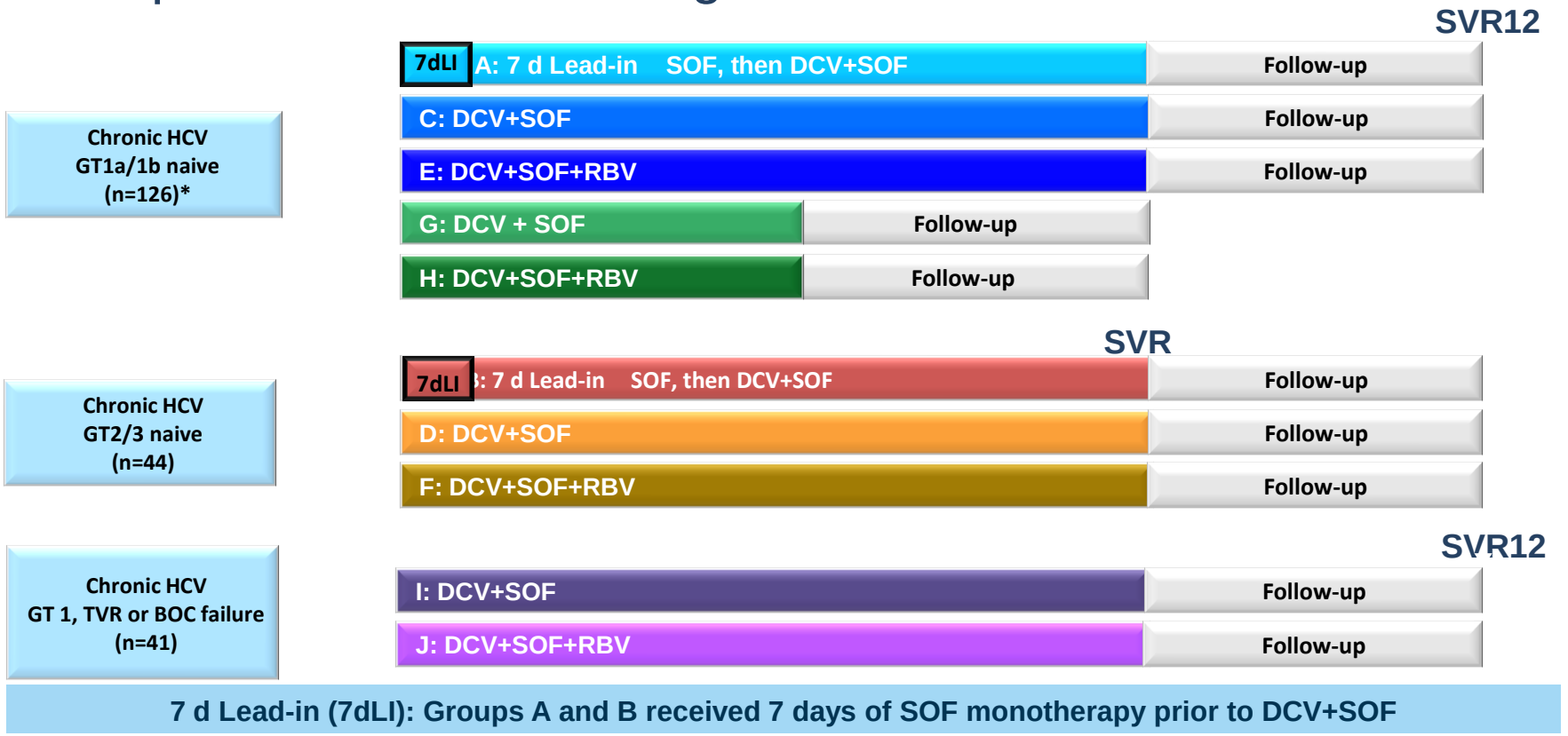



| | | | | | | |
|---|---|---|---|---|---|---|
| ARV - | 13/ 13 | 13/13 | 13/ 13 | 12/12 | 10/10 | 10/10 |
| ARV + | 37/37 | 37/37 | 30/30 | 22/22 | | |

Osinusi A, EASL, 2014, O14

# Daclatasvir Plus Sofosbuvir for Previously Treated or Untreated Chronic HCV

- Endpoint: SVR12 following 12 or 24 weeks of treatment

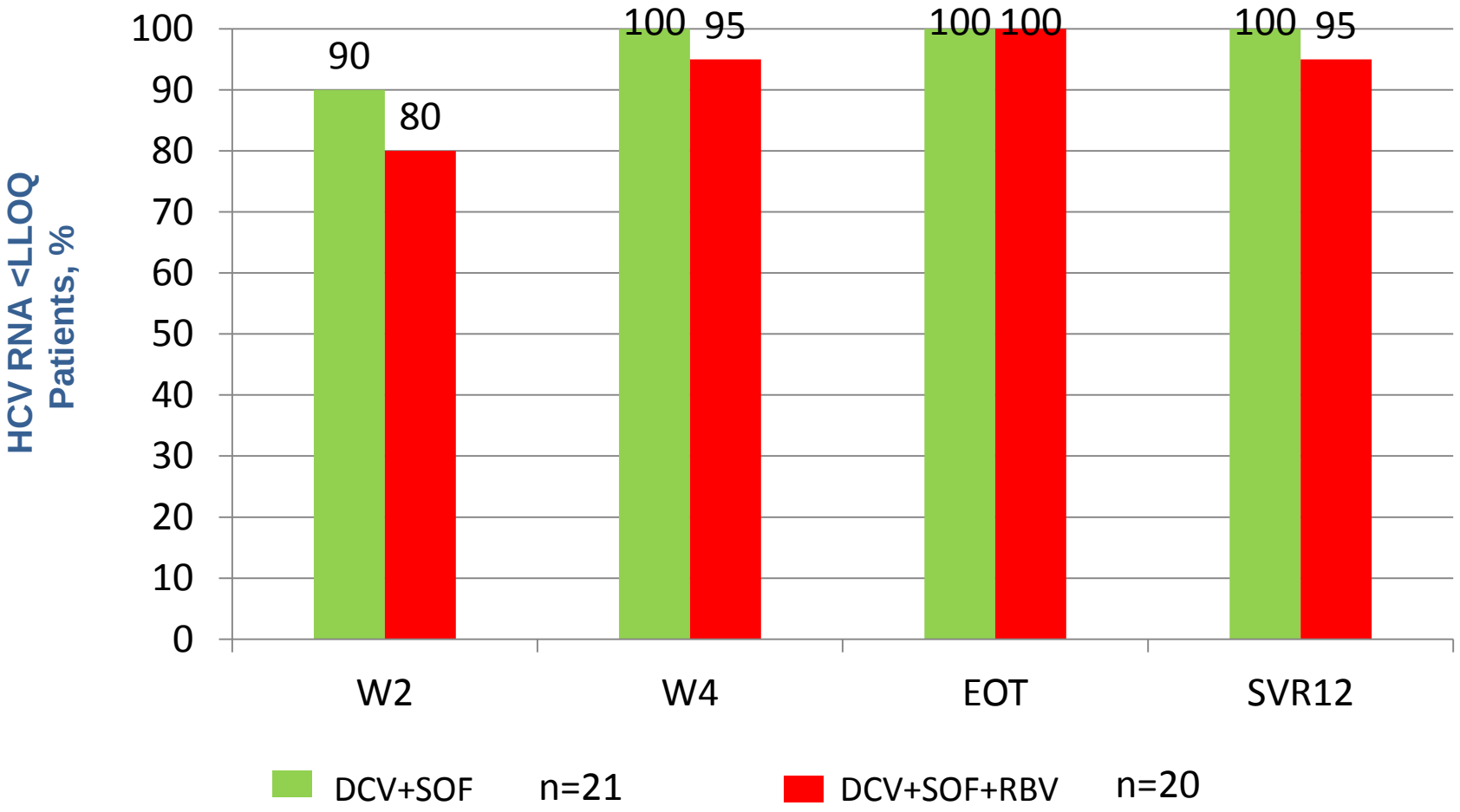



RBV: 1000-1200 mg/d, weight-based (GT 1); 800 mg/d (GT 2/3).
GT = genotype, DCV = daclatasvir, SOF = sofosbuvir (GS-7977), RBV = ribavirin, TVR = telaprevir, BOC = boceprevir, SVR = sustained virologic response

.

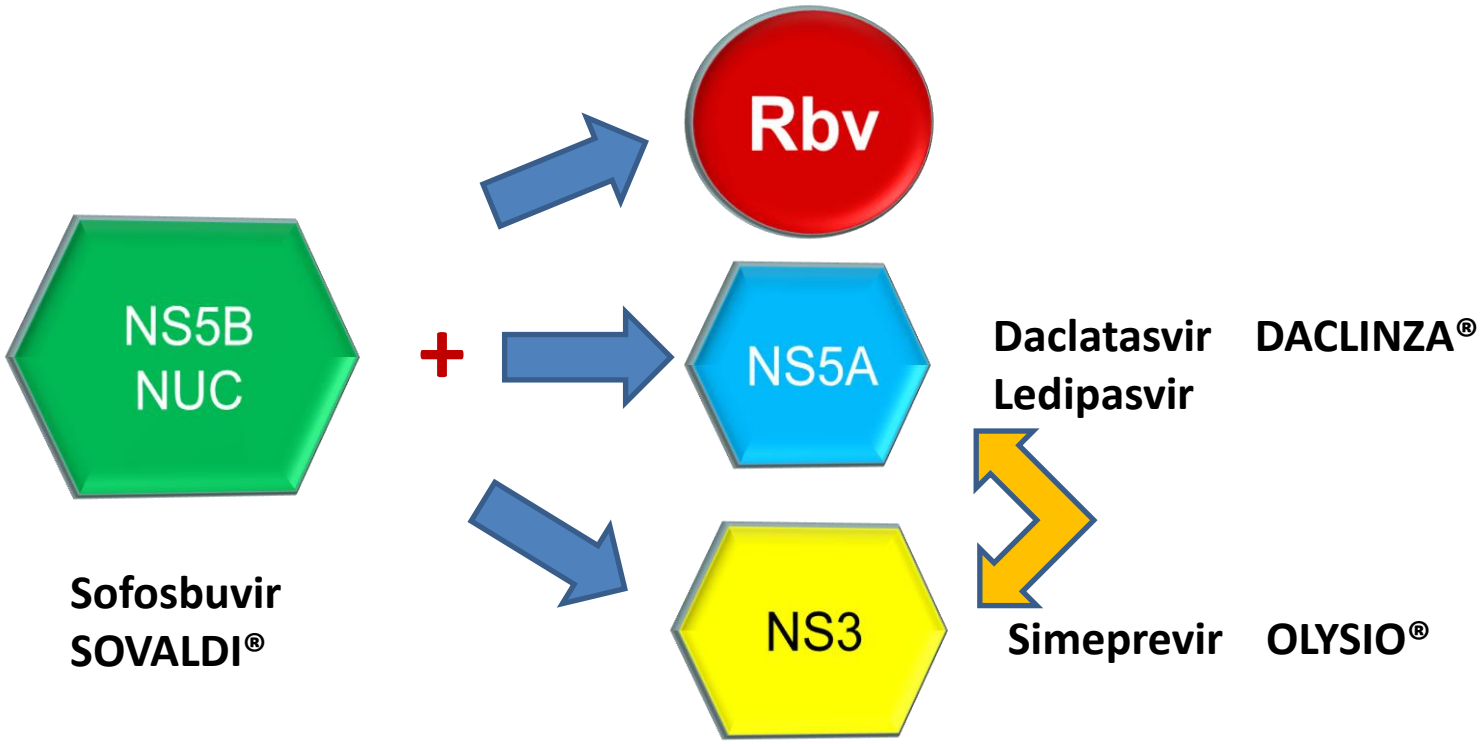
**Sulkowski MS *et al* (2014) N Engl J Med;370:211-21**

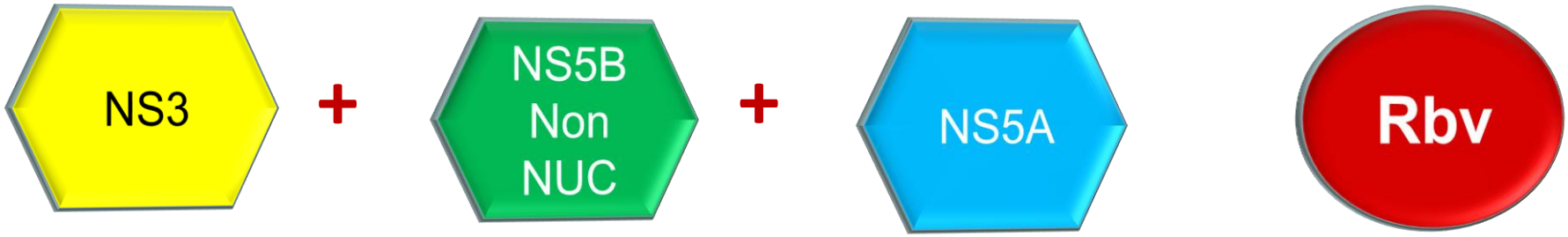
# Virologic response during and after treatment in PI failure monoinfected patients




Sulkowski MS *et al* (2014) N Engl J Med;370:211-21

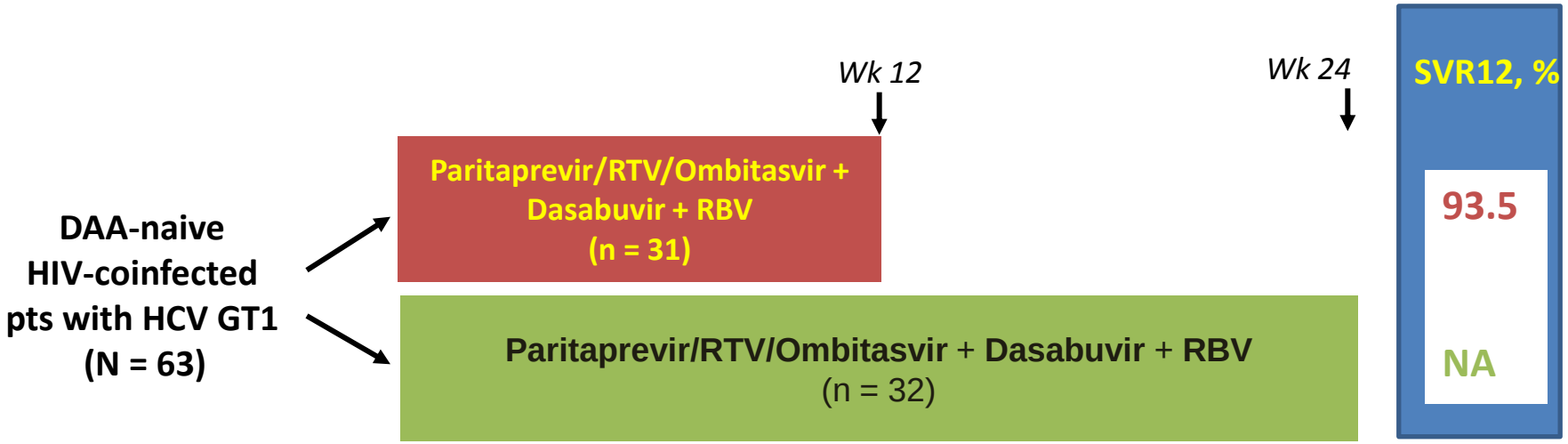
# DAA combination development



# TURQUOISE I: Paritaprevir/RTV/Ombitasvir + Dasabuvir + RBV in GT1 HCV/HCV Pts

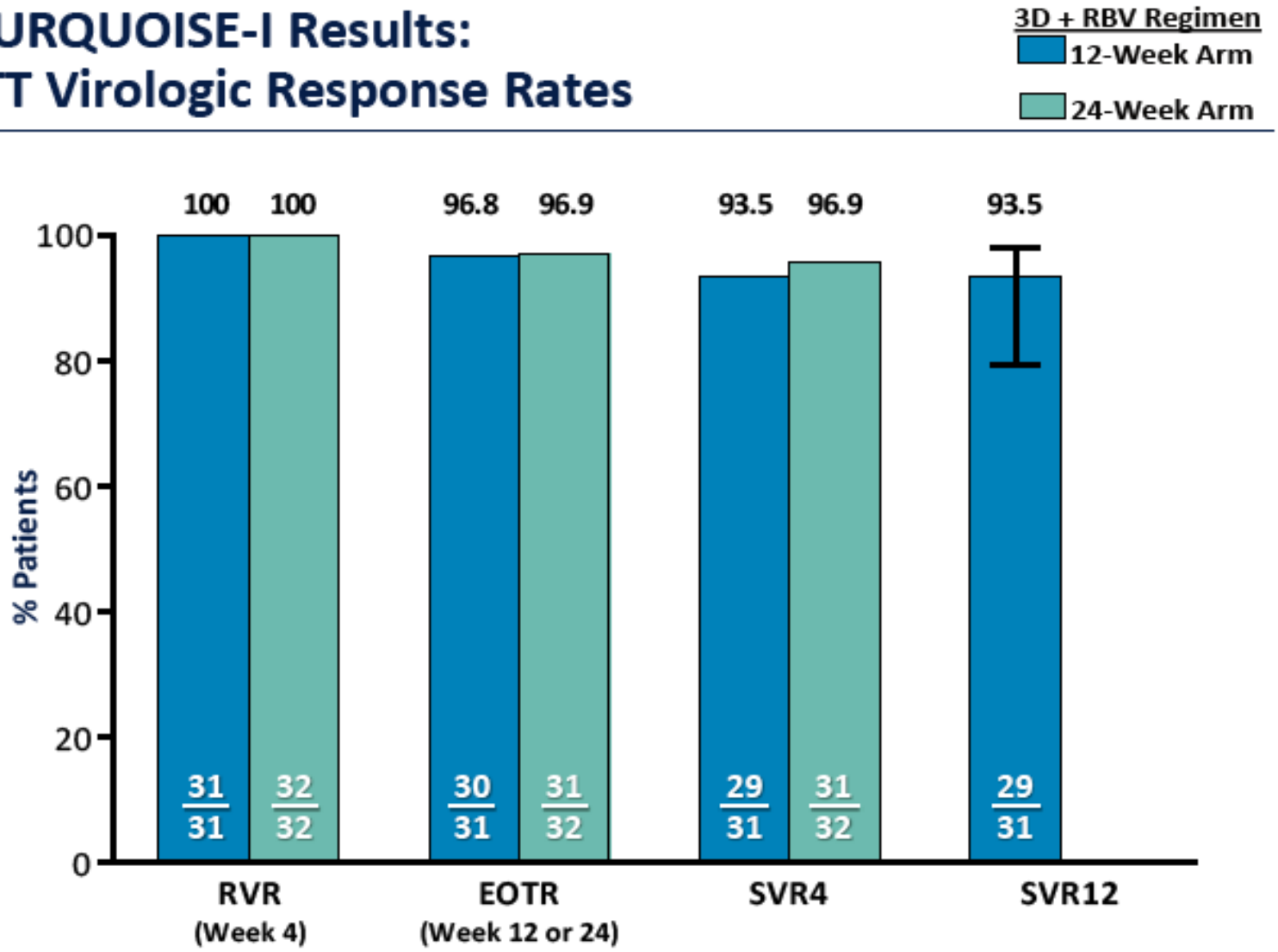
- **Open-label phase II/III trial in GT1, DAA-naive, coinfected pts**
  - **HIV-1 RNA < 40 c/mL *on ATV or RAL regimen;* CD4+ count ≥ 200 or CD4+% ≥ 14%**
- **Primary endpoint: SVR12**
- **19% of patients per arm had cirrhosis**




Paritaprevir/RTV/ombitasvir 150/100/25 mg QD FDC; dasabuvir 250 mg BID; RBV 1000-1200 mg/day.

Eron et al, ICAAC 2014 54th Interscience Conference September 5-9, 2014, Washington, DC

# TURQUOISE-I Results: ITT Virologic Response Rates




Eron et al, ICAAC 2014 54th Interscience Conference
September 5-9, 2014, Washington, DC

# AASLD/IDSA Guidance: Recommended Regimens for HCV/HIV-Coinfected Pts

| Genotype | Recommended Regimens |
|---|---|
| **Genotype 1** | |
| HCV treatment naive and prior PR relapsers<br>▪ IFN eligible | Sofosbuvir + pegIFN/RBV for 12 wks |
| ▪ IFN ineligible | Sofosbuvir + RBV for 24 wks<br>Sofosbuvir + simeprevir ± RBV for 12 wks |
| HCV treatment experienced (partial or null responders) | Sofosbuvir + simeprevir ± RBV for 12 wks |
| **Genotype 2** | |
| Regardless of HCV treatment history | Sofosbuvir + RBV for 12 wks |
| **Genotype 3** | |
| Regardless of HCV treatment history | Sofosbuvir + RBV for 24 wks |
| **Genotype 4** | |
| Regardless of HCV treatment history<br>▪ IFN eligible | Sofosbuvir + pegIFN/RBV for 12 wks |
| ▪ IFN ineligible | Sofosbuvir + RBV for 24 wks |
| **Genotype 5 or 6** | |
| Regardless of HCV treatment history | Sofosbuvir + pegIFN/RBV for 12 wks |

# Indicazioni all'impiego di farmaci antiretrovirali in soggetti nei quali si programma terapia con farmaci anti HCV *(Da: Linee Guida Italiane 2014)*

| TIPOLOGIA DI FARMACO ANTIRETRO VIRALE | FARMACO | IMPIEGO CON TELAPREVIR | IMPIEGO CON BOCEPREVIR | IMPIEGO CON SOFOSBUVIR | IMPIEGO CON SIMEPREVIR | IMPIEGO CON DACLATASVIR | IMPIEGO CON LEDIPASVIR | IMPIEGO CON DASABUVIR, OMBITASVIR ABT450/R |
|---|---|---|---|---|---|---|---|---|
| NRTI | Zidovudina, Stavudina, Didanosina | Sconsigliato§ | Sconsigliato§ | Sconsigliato§ | Sconsigliato§ | Sconsigliato§ | Sconsigliato§ | Sconsigliato§ |
| | Abacavir, Lamivudina, Emtricitabina | Possono essere impiegati | Possono essere impiegati | Possono essere impiegati | Possono essere impiegati | Possono essere impiegati | Possono essere impiegati | Possono essere impiegati |
| | Tenofovir | Può essere impiegato Incremento esposizione del 30% | Può essere impiegato | Può essere impiegato | Può essere impiegato Incremento esposizione del 18-24% | Può essere impiegato | Può essere impiegato incremento dell'esposizione 1.9 - 2.6 volte (come per ritonavir boosted anti HIV PI ) | Può essere impiegato |
| IP | Lopinavir/r | Sconsigliato | Sconsigliato* | Può essere impiegato | Sconsigliato* | Non vi sono dati sconsigliato | Non vi sono dati | Sconsigliato |
| | Darunavir/r | Può esserne valutato l'impiego caso per caso# | Sconsigliato* | Può essere impiegato | Sconsigliato* | Non vi sono dati sconsigliato | Può essere impiegato | Può essere impiegato |
| | Atazanavir/r | Può essere impiegato con incremento Cmin 85% | Da valutare caso per caso§§ | Può essere impiegato | Sconsigliato* | Può essere impiegato riducendo la dose di Dacltasvir a 30 mg/die | Può essere impiegato | Può essere impiegato |
| | Fosamprenavir/r | Sconsigliato | Sconsigliato | Può essere impiegato | Sconsigliato* | Non vi sono dati | Non vi sono dati | Non vi sono dati |
| | Tipranavir/r | Sconsigliato | Sconsigliato | Sconsigliato | Sconsigliato* | Sconsigliato | Sconsigliato | Sconsigliato |
| NNRTI | Efavirenz | Con Telaprevir 1125 mg x 3 (TID) | Sconsigliato° | Può essere impiegato | Sconsigliato | Può essere impiegato aumentando la dose di Daclatasvir a 90 mg/die | Può essere impiegato | Sconsigliato |
| | Nevirapina | Sconsigliato ) | Sconsigliato | Può essere impiegato | Sconsigliato | Non vi sono dati sconsigliato | Non vi sono dati | Non vi sono dati |
| | Rilpivirina | Può essere impiegato^ | Può essere impiegato | Può essere impiegato | Può essere impiegato | Non vi sono dati interazioni improbabili | Può essere impiegato | Sconsigliato |
| | Etravirina | Può essere impiegato | Può essere impiegato ma decremento esposizione 23% | Può essere impiegato | Non vi sono dati, ma interazioni sono possibili | Non vi sono dati sconsigliato | Non vi sono dati | Non vi sono dati |
| INI | Raltegravir | Può essere impiegato | Può essere impiegato | Può essere impiegato | Può essere impiegato | Non vi sono dati interazioni improbabili° | Può essere impiegato | Può essere impiegato |
| | Dolutegravir | Può essere impiegato | Può essere impiegato | Può essere impiegato | Non vi sono dati interazioni improbabili° | Non vi sono dati interazioni improbabili° | Non vi sono dati interazioni improbabili° | Non vi sono dati interazioni improbabili° |
| | Elvitegravir/ Cobicistat/ Tenofovir/Emtricitabina | Può essere impiegato | Non vi sono dati | Può essere impiegato | Sconsigliato | Non vi sono dati interazioni probabili può essere impiegato ridicendo la dose a 30 mg | Non vi sono dati | Non vi sono dati |
| Antagonisti CCR5 | Maraviroc | Può essere impiegato: 150 mg BID | Può essere impiegato: 150 mg BID | Può essere impiegato | Non vi sono dati | Non vi sono dati interazioni improbabili | Non vi sono dati | Non vi sono dati |

# Considerations Regarding Treatment Initiation in HCV/HIV-Coinfected Pts

- Is the patient ready and able to start therapy?
- Patients not receiving ART
  - Treat HCV now and defer ART?

    *Choice HCV drugs not active against HIV !*
- Patients receiving ART
  - Is there an HCV regimen available that can be coadministered with current ART or is ART switch needed?
  - Should ART interruption ever be considered?