



# ARV Therapies and Therapeutic Strategies

REPORTING ON IAS 2015

## *Comprehensive Expert Review and Discussion of Key Presentations*

An Independent CME Activity Jointly Provided by Postgraduate Institute for Medicine and ViralEd, Inc.  
This coverage is not sanctioned by the conference organizers and is not an official part of the conference proceedings.

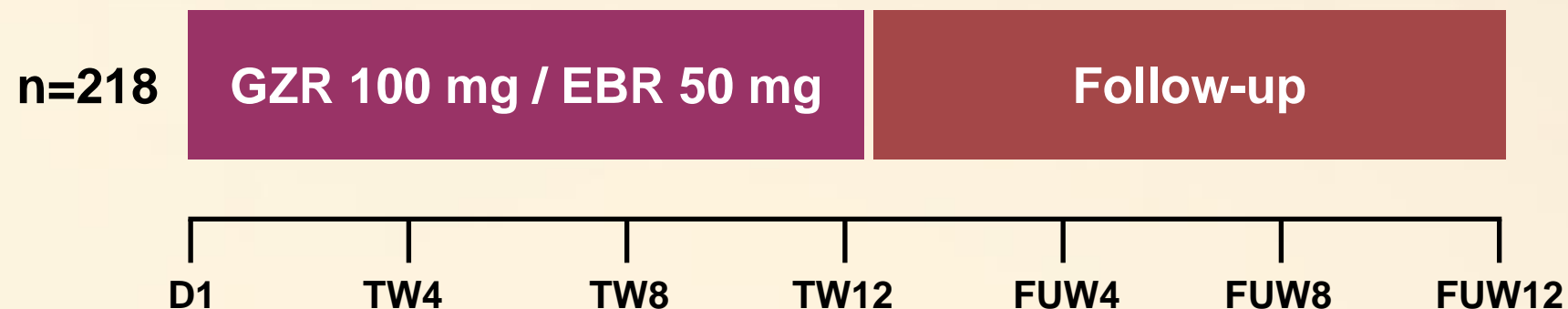
## **High efficacy of grazoprevir/elbasvir in HCV genotype 1, 4, and 6-infected patients with HIV co-infection: the phase 3 C-EDGE co-infection study**

J.K. Rockstroh, M. Nelson, C. Katlama, J. Lalezari, J. Mallolas, M. Bloch, G. Matthews, M.S. Saag, P. Zamor, C. Orkin, J. Gress, M. Shaughnessy, S. Klopfer, H.L. Platt, M. Robertson, M. Sulkowski

Abstract TUAB0206LB

# C-EDGE Study: Design

- ❖ An open-label, single-arm, multicenter study across Europe, US and Australia
- ❖ Primary endpoint: SVR12 (HCV RNA <15 IU/mL)
- ❖ Treatment-naive patients with HCV GT1, 4 or 6 infection with or without cirrhosis
- ❖ Co-infected with HIV-1:
  - ◆ Naive to ART with CD4+ >500 cells/mm<sup>3</sup> and HIV RNA <50,000 copies/mL
  - ◆ On stable on ART for ≥8 weeks and CD4+ >200 cells/mm<sup>3</sup> and undetectable HIV RNA



# Demographics: HCV Disease

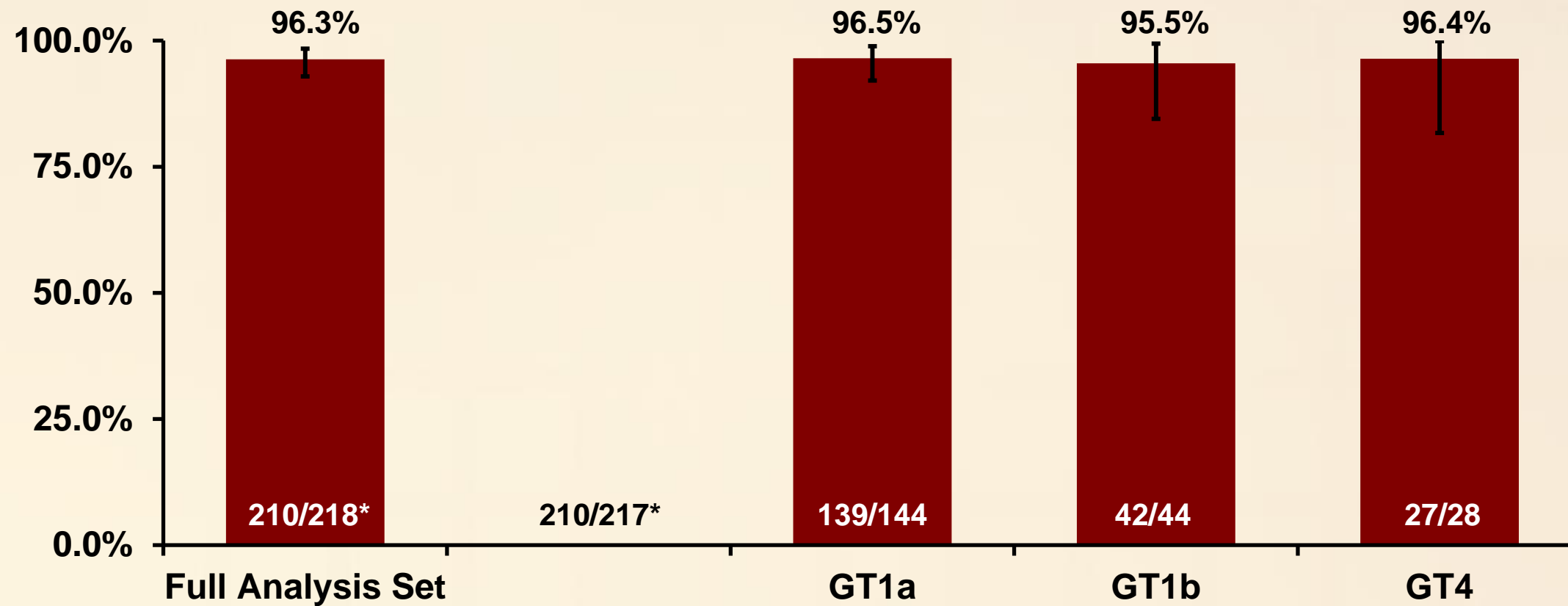
	All Patients N = 218
<b>Age, years mean (SD)</b>	48.7 (8.9)
<b>Sex, n (%)</b>	
<b>Male,</b>	183 (83.9)
<b>Female</b>	35 (16.1)
<b>Race, n (%)</b>	
<b>White</b>	167 (76.6)
<b>Black or African-American</b>	38 (17.4)
<b>Asian</b>	6 (2.8)
<b>Other</b>	7 (3.2)
<b>Ethnicity, n (%)</b>	
<b>Hispanic / Latino</b>	14 (6.4)
<b>Not Hispanic / Latino</b>	194 (89.0)
<b>Not reported</b>	10 (4.6)
<b>HCV genotype, n (%)</b>	
<b>1a</b>	144 (66.1)
<b>1b</b>	44 (20.2)
<b>4</b>	28 (12.8)
<b>6</b>	2 (1.0)
<b>Baseline HCV RNA &gt;800,000 IU/mL, n (%)</b>	130 (59.6)
<b>Cirrhotic*, n (%)</b>	35 (16.1)
<b>IL28B CC (%) , n (%)</b>	77 (35.3)

\*Of the 35 patients (16.1%) with cirrhosis, 27 were diagnosed by Fibroscan, 6 by biopsy, and 2 by Fibrotest and APRI.

# Demographics: HIV Disease

	All Patients N = 218
<b>Antiretroviral therapy, n (%)</b>	
Receiving ART with undetectable HIV RNA	211 (96.8)
Naïve to ART	7 (3.2)
<b>Baseline CD4 count (cells/<math>\mu</math>L)</b>	
Mean (SD)	613 (0.57)
Median (1 <sup>st</sup> quartile – 3 <sup>rd</sup> quartile)	568 (424-766)
<b>Antiretroviral therapy, n (%)</b>	
Abacavir containing regimen	47 (21.6)
Tenofovir containing regimen	164 (75.2)
Raltegravir	113 (51.8)
Dolutegravir	59 (27.1)
Rilpivirine	38 (17.4)

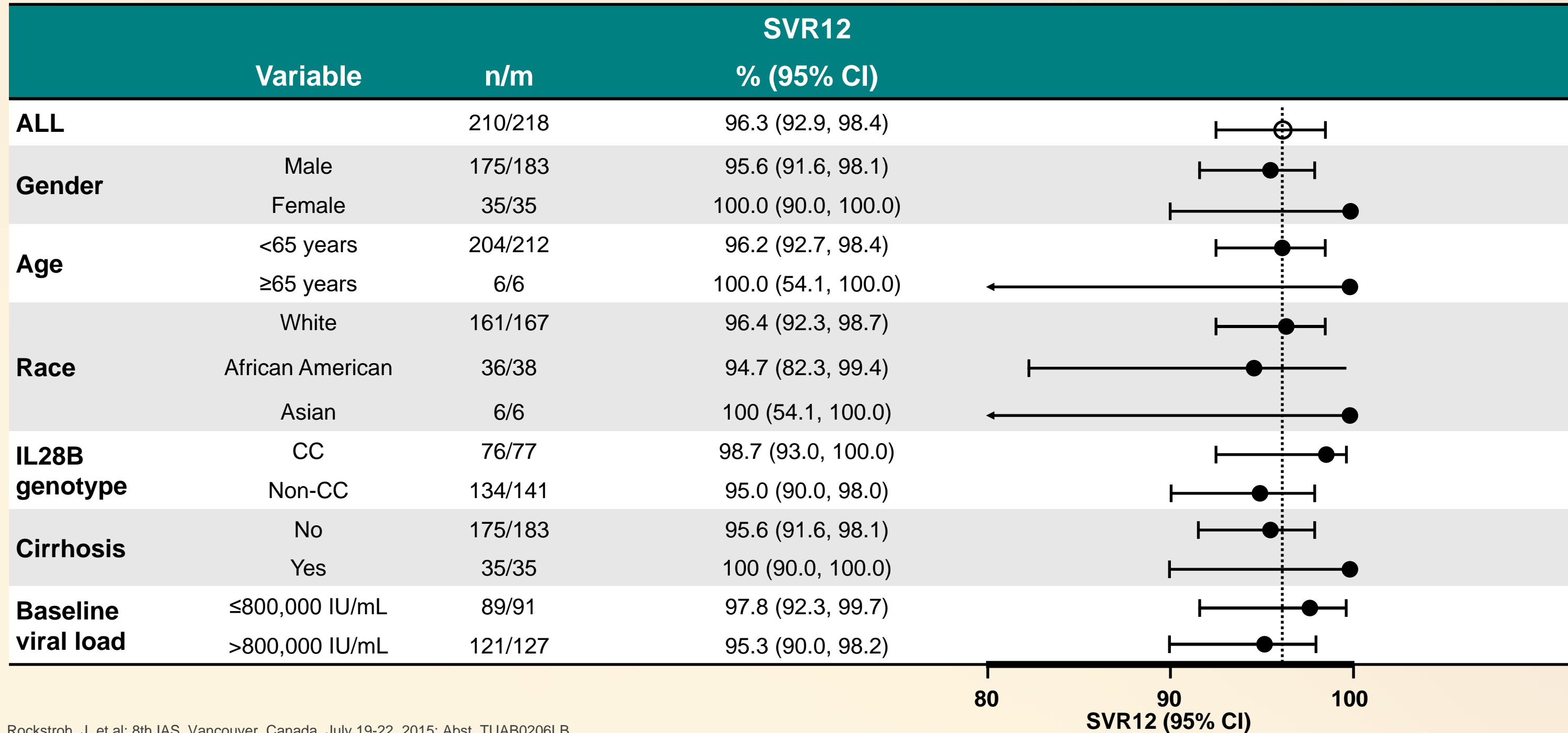
# C-EDGE Study: Results – SVR12



<b>Discontinued unrelated to VF</b>	1	0	1	0
<b>Relapse</b>	5	4	0	1
<b>Reinfection</b>	2	1	1	0

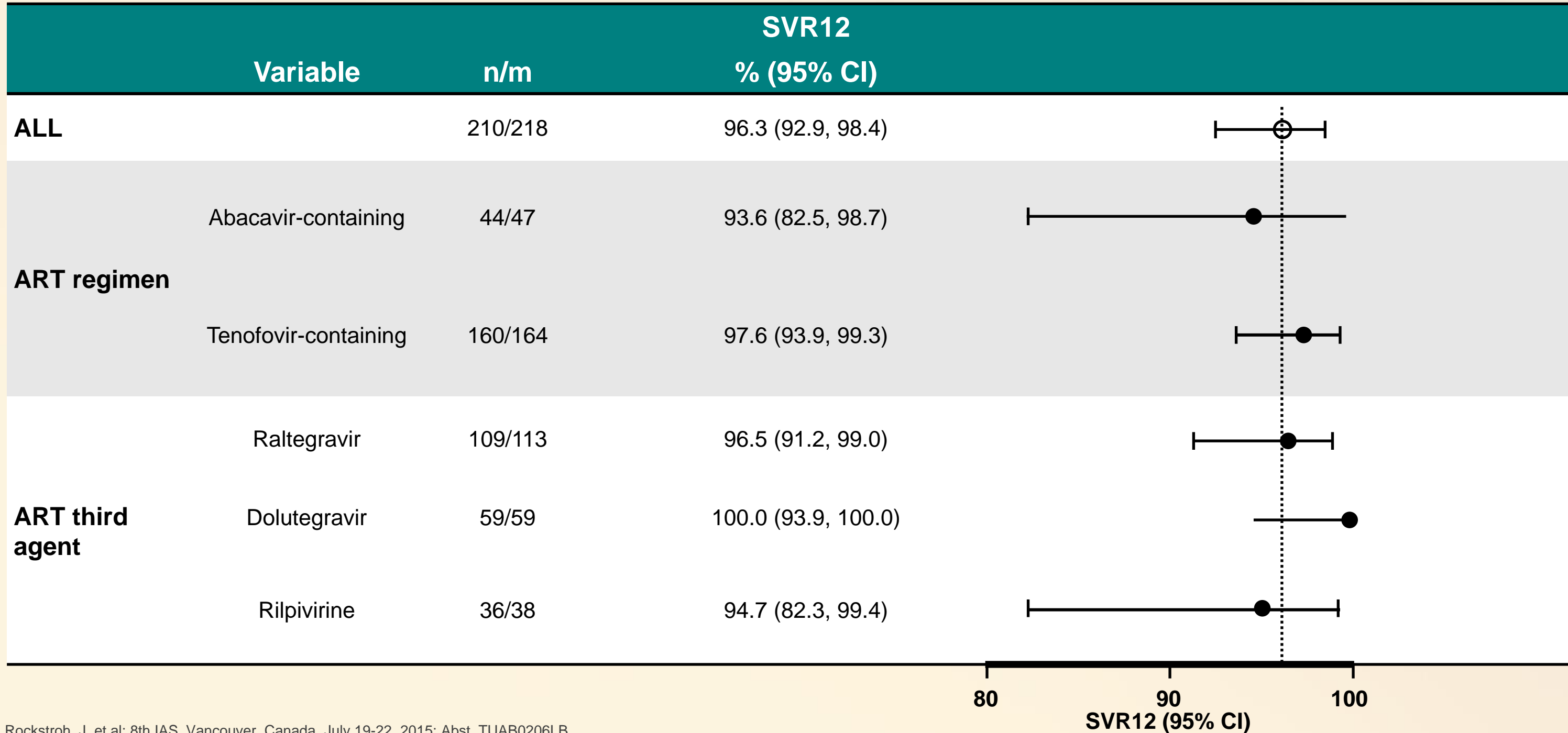
\* 2 patients with GT6 infection were also included; both patients achieved SVR12. GT = genotype

# SVR12 – Subgroup Analyses Full Analysis Set





# SVR12 According to Art Regimen Full Analysis Set



# C-EDGE Study: Resistance Associated Variants in Patients with Relapse or Reinfection

	Baseline HCV GT	ARV Regimen	Resistance Associated Variants			
			At Baseline		At Failure	
			NS3	NS5A	NS3	NS5A
<b>RELAPSES</b>						
56 yr black/AA male	1a	tenofovir, emtricitabine, rilpivirine	V36M/L	L31M/L	<b>Q80K, D168A</b>	<b>Q30K, L31M</b>
63 yr black/AA male	1a	None	Q80K	Y93S	<b>Q80K, D168A</b>	<b>Q30R, Y93S</b>
37 yr white male	1a	tenofovir, emtricitabine, raltegravir	WT	WT	WT	<b>Q30R/Q</b>
43 yr white male	1a	abacavir, lamivudine, raltegravir	WT	WT	WT	WT
53 yr white male	4	tenofovir, emtricitabine, raltegravir	WT	WT	WT	<b>L28S</b>
<b>REINFECTIONS</b>						
35 yr white male	1b	abacavir, lamivudine, raltegravir	WT	WT	(GT3)	(GT3)
43 yr white male	1a	tenofovir, emtricitabine, rilpivirine	V55A/V	WT	(GT3)	(GT3)

**Bold** indicates RAV detected at virologic failure not previously detected at baseline.

Rockstroh, J, et al; 8th IAS, Vancouver, Canada, July 19-22, 2015; Abst. TUAB0206LB.



# C-EDGE Study: Adverse Events

<b>Patients with:</b>	<b>All Patients N = 218</b>
<b>Serious AE, n (%)</b>	8 (2.8)
<b>Serious drug-related AE, n (%)</b>	0 (0)
<b>Discontinuation due to AE, n (%)</b>	0 (0)
<b>Deaths, n (%)</b>	0 (0)
<b>Any adverse event, n (%)</b>	167 (76.6)
<b>Fatigue</b>	29 (13.3)
<b>Headache</b>	27 (12.4)
<b>Nausea</b>	20 (9.2)
<b>Late ALT or AST &gt;5.0 x ULN, n (%)</b>	2 (0.9)
<b>Lowest hemoglobin on treatment, n (%)</b>	
<b>≥8.5 to &lt;10 g/dL</b>	1 (0.5)
<b>Elevation of total bilirubin, n (%)</b>	
<b>&gt;2.5 – 5.0 x baseline</b>	8 (3.7)
<b>&gt;5.0 x baseline</b>	1 (0.5)
<b>Creatinine &gt;2.5 x baseline, n (%)</b>	0 (0)