

HCV DAA Treatment Interruptions

Karla Thornton, MD, MPH

6/7/23

Conflict of Interest Disclosure Statement

- Speaker has nothing to disclose

Learning Objectives

1. Apply the guidance provided by the AASLD/IDSA on HCV DAA treatment interruptions
2. Identify when patients should have DAA therapy continued vs when DAA therapy should be stopped
3. Describe the data in patients with incomplete adherence


AASLD-IDSA HCV Guidelines



HCV Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C



Home Test, Evaluate, Monitor Treatment-Naive Treatment-Experienced Unique & Key Populations About



New and updated:
[Updated Testing Recommendations](#)
Review new HCV screening guidance from the AASLD and IDSA.

Search the Guidance

Enter your keyword

Recent Announcements

- 24 Oct What's New, Updates and Changes to the Guidance
- 29 Sep What's New, Updates and Changes to the Guidance

Start Here: Choose a patient profile from the menu above.

Welcome to HCVGuidelines.org

The AASLD and IDSA in partnership with the panel have created an updated web experience to facilitate easier and faster access to this important resource. Please select a patient profile from the menu above, click on a guidance section below, or use the search box to begin.

- Contents and Introduction** - *Select a Page*
- Testing, Evaluation, and Monitoring of Hepatitis C** - *Browse Topics*
 - Testing, Evaluation, and Monitoring of Hepatitis C
 - HCV Testing and Linkage to Care
 - When and in Whom to Initiate HCV Therapy
 - Overview of Cost, Reimbursement, and Cost-Effectiveness Considerations for Hepatitis C Treatment Regimens
 - Monitoring Patients Who Are Starting HCV Treatment, Are on Treatment, or Have Completed Therapy
 - Incomplete Adherence
 - HCV Resistance Primer
- Initial Treatment of HCV Infection** - *Choose Patient Genotype*

Introduction

- Missing medication doses is common
- Minimal data regarding the outcome of patients who have incomplete adherence to DAA therapy
- AASLD-IDSA HCV Guidelines updated 10/5/21
- Recommendations are based on the opinion of the AASLD-IDSA HCV Treatment Guidance Panel

Simplify Study

- International multicenter study to evaluate adherence to sofosbuvir/velpatasvir (12 weeks) in 103 people with recent injecting drug use.
 - One-third (32%) of study participants had <90% adherence
 - Most episodes of nonadherence lasted fewer than 7 days; 11% of episodes lasted ≥ 7 days
 - Despite nonadherence, SVR12 94% among DAA adherent ($\geq 90\%$ of doses) and nonadherent (<90% of doses) patients.

Italian Retrospective Analysis: NAVIGATORE-Lombardia Network

- Aim to investigate SVR 12 rates in patients who prematurely discontinued DAA therapy , N= 365
- DAA discontinued a median of 1 week before planned EOT
- 45% stopped treatment at least 2 weeks prior to planned EOT
- No cirrhosis:
 - <4 weeks of therapy SVR 50% (2/4)
 - ≥4 weeks of therapy SVR 99% (109/110)
- Cirrhosis:
 - <8 weeks of therapy SVR 83% (25/30)
 - ≥8 weeks of therapy SVR 95% (209/221)

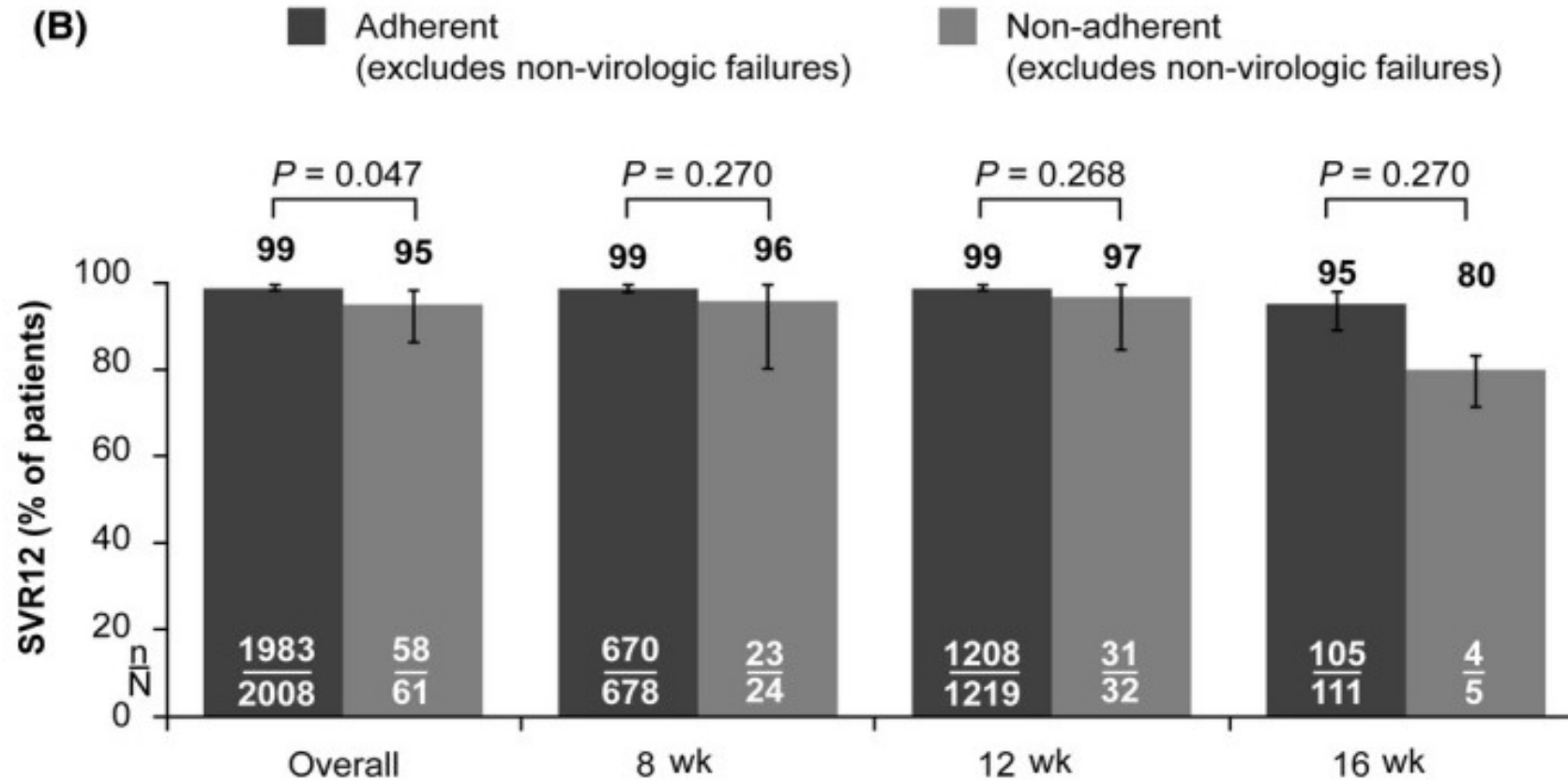
Fabbiani M, Lombardi A, Colaneri M, et al. High rates of sustained virological response despite premature discontinuation of directly acting antivirals in HCV-infected patients treated in a real-life setting. J Viral Hepat. 2021;28(3):558-568.

Clinical Trials Data with GLE/PIB

- Pooled analysis of 2091 patients with HCV genotypes 1-6
- Adherence
 - 97% adherent (2024/2091) at all study visits
 - 67% considered non-adherent had <80% adherence during at least 1 study visit

Baseline characteristic, yes vs no	Odds ratio	95% CI	P value
Alcohol use (drinker or ex-drinker)	2.38	1.13-5.01	.022
Tobacco use (smoker or ex-smoker)	1.60	0.82-3.13	.167
History of depression	0.98	0.53-1.80	.944
On stable OST	0.81	0.31-2.11	.660
Injecting drug use	1.06	0.61-1.84	.830
On polypharmacy (use of ≥5 concomitant medications)	1.10	0.64-1.87	.737

SVR Based on Treatment Duration and Adherence – GLE/PIB



Updated Guidance

- Recommendations for :
 - treatment-naive patients
 - no cirrhosis or compensated cirrhosis
 - receiving either glecaprevir/pibrentasvir or sofosbuvir/velpatasvir.
- Recommendations are based on the opinion of the AASLD-IDSA HCV Treatment Guidance Panel

AASLD/IDSA Guidance on Incomplete Adherence: First 28 days of therapy

Interruptions During First 28 Days of DAA Therapy

Missed ≤ 7 Days

- **Restart** DAA therapy immediately. Complete therapy for originally planned duration (8 or 12 weeks).

Missed ≥ 8 Days

- **Restart** DAA therapy immediately. Restarting DAA takes precedence over obtaining HCV RNA level.
- Obtain HCV RNA test as soon as possible, preferably the same day as restarting the DAA therapy.
- If HCV RNA is negative (undetectable) complete originally planned DAA treatment course (8 or 12 weeks). Recommend extending DAA treatment for an additional 4 weeks for patients with genotype 3 and/or cirrhosis.
- If HCV RNA is positive (>25 IU/L), or not obtained, extend DAA treatment for an additional 4 weeks.

AASLD/IDSA Guidance on Incomplete Adherence: After initial 28 days of treatment

Interruptions After Receiving ≥28 Days of DAA Therapy

Missed ≤7 Days

- **Restart** DAA therapy immediately. Complete DAA therapy for originally planned duration (8 or 12 weeks).

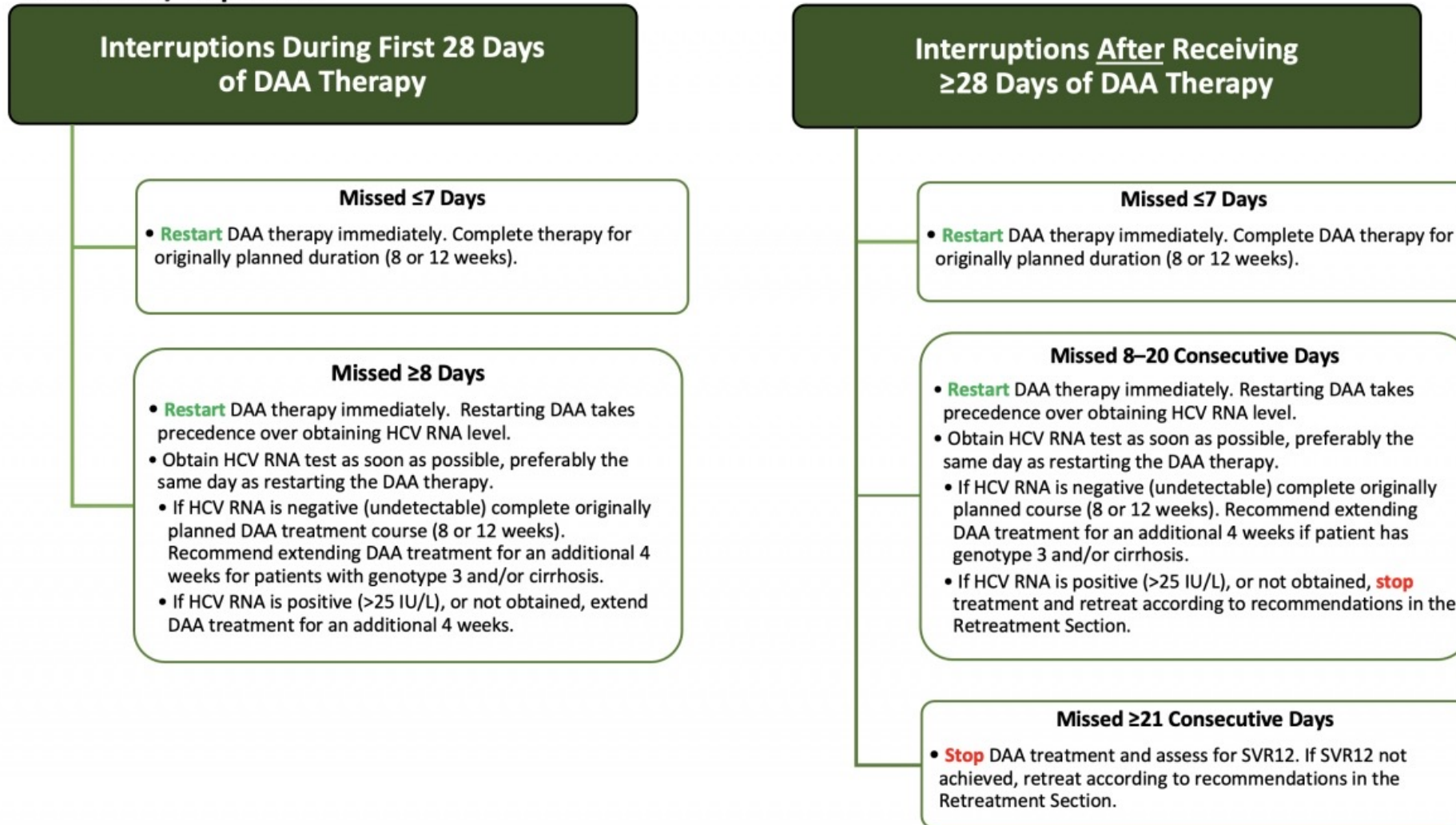
Missed 8–20 Consecutive Days

- **Restart** DAA therapy immediately. Restarting DAA takes precedence over obtaining HCV RNA level.
- Obtain HCV RNA test as soon as possible, preferably the same day as restarting the DAA therapy.
- If HCV RNA is negative (undetectable) complete originally planned course (8 or 12 weeks). Recommend extending DAA treatment for an additional 4 weeks if patient has genotype 3 and/or cirrhosis.
- If HCV RNA is positive (>25 IU/L), or not obtained, **stop** treatment and retreat according to recommendations in the Retreatment Section.

Missed ≥21 Consecutive Days

- **Stop** DAA treatment and assess for SVR12. If SVR12 not achieved, retreat according to recommendations in the Retreatment Section.

Figure 1. Recommended Management of DAA Treatment Interruptions for Treatment-Naive Patients, Without Cirrhosis or With Compensated Cirrhosis, Receiving Glecaprevir/Pibrentasvir or Sofosbuvir/Velpatasvir



DAA, direct-acting antiviral; HCV RNA, hepatitis C virus ribonucleic acid; SVR12, sustained virologic response 12 weeks after end of treatment.

<https://www.hcvguidelines.org/evaluate/monitoring/incomplete-adherence>

Updated 10/5/21

Other recommendations

- Patients with prior DAA treatment, or receiving other DAAs should be managed in consultation with an expert
- All patients with incomplete adherence should be asked about factors contributing to adherence or nonadherence, and counseled regarding the importance of adherence
- In general, the panel considers a treatment interruption of <7 days unlikely to impact SVR12

Key Points

- Patients who miss consecutive doses of DAAs should be restarted on therapy as soon as possible
- Therapy should be stopped if patients have missed more than 21 days of consecutive doses
- Optimal treatment outcomes observed with >90% treatment adherence and full course of HCV therapy **but**
 - *SVR can be achieved with imperfect adherence and shorter courses of therapy*
- Patients with incomplete treatment adherence should be asked about factors which impair adherence and every attempt made to address and minimize these barriers

References

- AASLD-IDSA. Recommendations for testing, managing, and treating hepatitis C. <http://www.hcvguidelines.org>. [accessed 6/5/23].
- Brown A, Welzel TM, Conway B, Negro F, Braun N. Adherence to pan-genotypic glecaprevir/pibrenasvir and efficacy in HCV infected patients: A pooled analysis. *Liver Int.* 2020;40:778-786.
- Cunningham, E. B., Amin, J., Feld, J. J., Bruneau, J., Dalgard, O., Powis, J., et al. (2018). Adherence to sofosbuvir and velpatasvir among people with chronic HCV infection and recent injection drug use: The SIMPLIFY study. *Int J Drug Policy.* 62; 2018:14-23.
- Fabbiani M, Lombardi A, Colaneri M, Del Poggio P, Perini P, et al. High rates of sustained virological response despite premature discontinuation of directly acting antivirals in HCV-infected patients treated in a real-life setting. *J Viral Hepat.* 2021;28:558-563.

Questions