Physicians, Case Managers, and HCV Patients Recommend a Simplified Strategy for Baseline Testing and Minimal Monitoring for Treatment of Hepatitis C Virus Infection with DAA Therapies

Abstract No.49

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Background

- Medical societies have endorsed simplified strategies which minimize monitoring of uncomplicated HCV infection. Current evidence suggests that simplified monitoring of DAA treatment achieves comparable outcomes as standard monitoring.[1-3]
- In Taiwan, HCV patients are eligible for NHI-reimbursed DAA treatment; however, reimbursement requires extensive pre-treatment assessment and ≥4 visits for laboratory monitoring during and after treatment, including visits to pick up medications.[4]
  - Consequently, number of outpatient visits related to DAA treatment are relatively high (mean 5–7 visits).[4,5]
- Poor DAA treatment adherence has been identified to be the most important factor associated with failure to achieve SVR in Taiwan.[6]

Objectives

- This non-interventional survey study collected primary data to:
  1. Gather opinions on a simplified DAA treatment strategy from three perspectives: patients, physicians, and case managers
  2. Assess the feasibility of implementing a simplified treatment approach
  3. Understand patients' HCV treatment adherence

DAA: direct-acting antiviral; HCV: hepatitis C virus

Methods

- This non-interventional survey study conducted in 2022 collected primary data (using questionnaires designed by IQVIA and reviewed by a gastroenterologist and Gilead) from HCV patients, physicians and case managers.

Patients (n=100)

- Inclusion criteria
  - Adults (≥20 years old) diagnosed with HCV
  - Currently being treated with pangenotypic DAA or completed DAA treatment within 6 months in a hospital
  - DAA was prescribed by gastroenterologists or hepatologists
  - HCV-treatment naive prior to current DAA exposure

Physicians (n=50)

- Inclusion criteria
  - Gastroenterologists or hepatologists practiced at a hospital
  - Treated an average of ≥2 HCV patients per month in the past year for physicians who practice at area hospital (or ≥5 HCV patients for physicians who practice at regional hospital and medical center)

Case Managers (n=20)

- Inclusion criteria
  - Work with gastroenterologists or hepatologists
  - Enter relative data to the VPN system prior to and during HCV treatment

DAA: direct-acting antiviral; HCV: hepatitis C virus; VPN: Virtual Private Network.

Conclusions

- Reducing the mandatory monthly follow up visits as required by the regulations was the only modifiable factor from all groups surveyed that led to patient withdrawal or discontinuation of treatment.
- While in-treatment monitoring may still be required, there should be efforts made to simplify the VPN system to remove barriers for HCV elimination for patients, physicians and case managers.
- There is a strong need for further education for patients on the impact of HCV infection and the value of HCV treatment as patients are not aware of the value of the HCV treatment.
- This study demonstrated the common needs of all stakeholders on the simplification of HCV treatment and monitoring. This should be taken into consideration when shaping national health policies supporting successful HCV elimination in Taiwan.

Key Findings

Patients

- Majority who did not accept HCV treatment at the start or discontinued treatment prematurely did so because they did not think HCV was a serious condition.
- ≥50% felt that their work and lives are impacted by follow-up visits.
- 32% felt that it was inconvenient to go for follow-up visits and pick up medication.

Physicians

- 58% think that the VPN reporting system needs to be simplified or is unnecessary.
- 28% think that the inability of patients to make it to monthly follow-up visits is a reason for discontinuation of treatment.

Case Managers

- 40% think that the VPN reporting system needs to be simplified or is unnecessary.
- 45% think that the inability of patients to make it to monthly follow-up visits is a reason for discontinuation of treatment.

References:
1. Solomon et al. Lancet Gastroenterol Hepatol. 2022;7(4):307-317; 2. Dore et al. J Hepatol. 2020;72(3):431-440; 3. Oru et al. Lancet Glob Health. 2021;9(4):e431-e445. 4. Cheng et al. Infect Dis Ther. 2022;11(1):485-500; 5. Huang et al. Sci Rep. 2021;11(1)23473; 6. Chen et al. Liver Int. 2021;41(6):1265-1277.

Disclosures:
CJL: None; HJL: Employee of Gilead Sciences; DL: Employee of Gilead Sciences; KMK: Employee of Gilead Sciences; LC: Employee of Gilead Sciences

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Results

Findings from the Patient Surveys

Demographics and Disease Characteristics

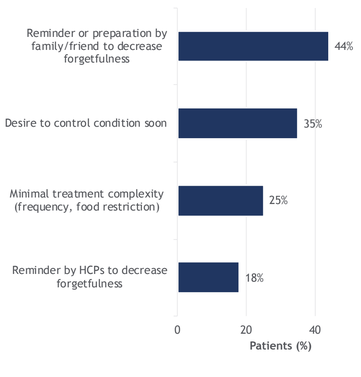
Description	Total (N=100)
Age, years, mean (SD)	53 (16)
Female, n (%)	50 (50)
Education level, n (%)	
High school and below	21 (21)
College/university and above	79 (79)
Annual household income, NT$, n (%)	
>1,000,000	49 (49)
<1,000,000	51 (51)
Employment status, n (%)	
Student	5 (5)
Employed	54 (54)
Retired or unemployed	41 (41)

Description	Total (N=100)
Comorbidities, n (%)	
Type 2 diabetes	29 (29)
Chronic renal disease	31 (31)
PWID	20 (20)
Cardiovascular disease	8 (8)
Mobility-impaired	5 (5)
None of the above	7 (7)
Current treatment status, n (%)	
Completed DAA treatment over the last 6 months	50 (50)
Currently being treated with DAA	50 (50)
Average number of hospital visits monthly, mean (SD)	1 (1)
Average number of the types of medications daily, mean (SD)	7 (2)
Did not accept HCV treatment at the start, n (%)	15 (15)
Had HCV treatment interruption, n (%)	15 (15)

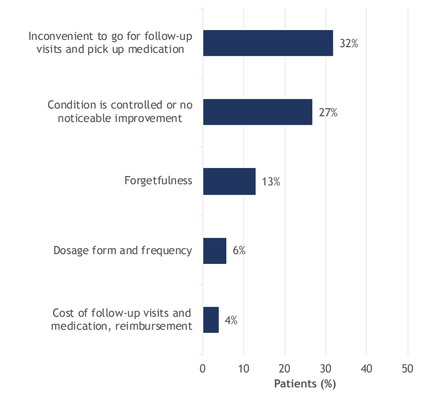
DAA: direct-acting antiviral; HCV: hepatitis C virus, NT$: New Taiwan Dollar; PWID: people who inject drugs; SD: standard deviation.

HCV Treatment Experience

Key reasons why patients follow doctor's instructions when taking medication (N=88)[a]



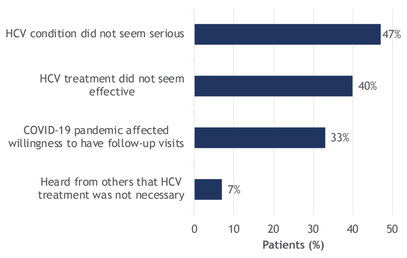
Key barriers to commit to a routine HCV treatment in the long run (N=100)[b]



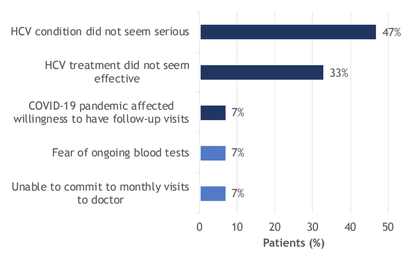
[a] 'What made you fully follow the doctor's instructions when taking medication?'; [b] 'What are the barriers to committing to a routine HCV treatment in the long run?'; HCP: healthcare professional; HCV: hepatitis C virus.

Treatment Journey

Key reasons for not accepting DAA treatment at the start (N=15)[a]



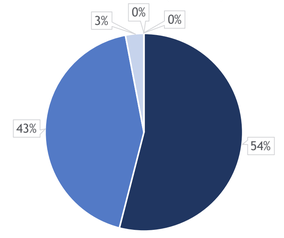
Key reasons for DAA treatment interruption (N=15)[b]



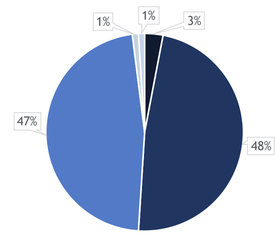
[a] 'What is the reason you didn't accept to be treated right at the start?'; [b] What is the reason for discontinuing HCV treatment?'; DAA: direct-acting antiviral; HCV: hepatitis C virus..

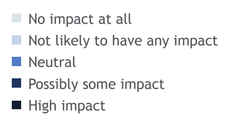
More than 50% of the Patients Feel that their Lives are Negatively Impacted by Routine Follow-up Visits

Impact of follow-up visits on work (N=100)



Impact of follow-up visits on life (N=100)





Findings from the Physician Surveys

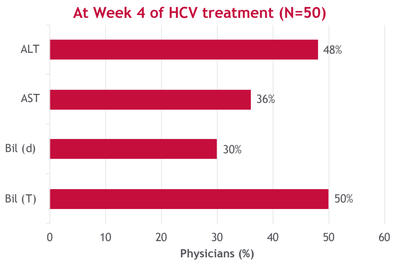
Demographics

Description	Total (N=50)
Hospital type, n (%)	
Medical Center	17 (34)
Regional Hospital	17 (34)
Area Hospital	16 (32)
Membership types by TASL, n (%)	
Gastroenterology and a listed member with 2021/2022 TASL	17 (34)
Gastroenterology, but not a member of TASL	33 (66)
Length of time in practice, excluding time as a resident doctor, years, mean (SD)	17 (7)
Newly diagnosed HCV patients over the past 3 months, mean (SD)	9 (6)

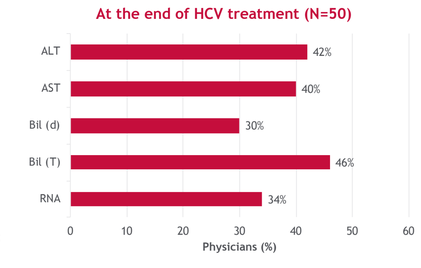
HCV: hepatitis C virus; SD: standard deviation; TASL: Taiwan Association for the Study of the Liver.

Lab Tests Considered Necessary/Required at Week 4 and at the End of HCV Treatment

At Week 4 of HCV treatment (N=50)



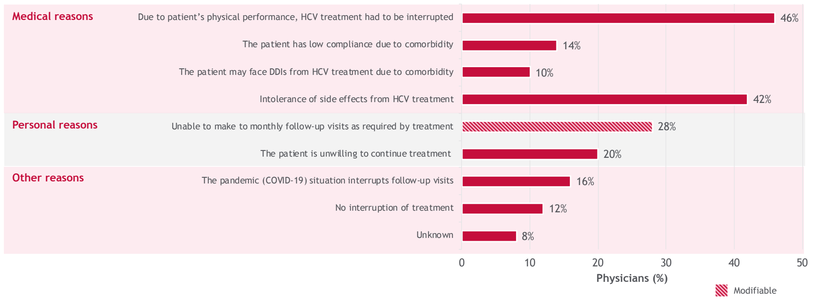
At the end of HCV treatment (N=50)



ALT: alanine transaminase; AST: aspartate transaminase; Bil (d): bilirubin (direct); Bil (T): bilirubin total; HCV: hepatitis C virus; RNA: ribonucleic acid.

Reasons for Patient Withdrawal or Discontinuation of Treatment

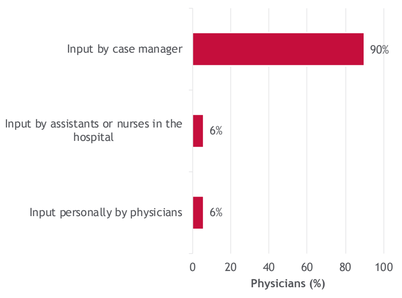
Key reasons for patient withdrawal or discontinuation of treatment by category[a]



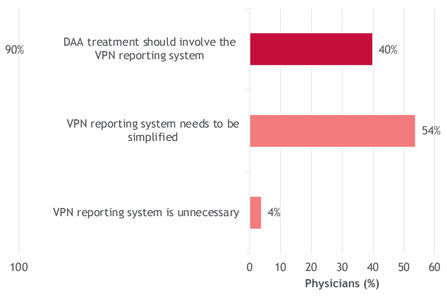
[a] 'What are the reasons that cause patients to withdraw or discontinue treatments?'; DDI: drug-drug interaction; HCV: hepatitis C virus.

58% of the Physicians Think that the VPN Reporting System Needs to be Simplified or is Unnecessary

Experience with the VPN reporting system (N=50)[a]



Perception on the necessity of VPN Reporting System (N=50)[b]



[a] 'What is your experience with the VPN reporting system?'; [b] 'Based on previous experience with the VPN reporting system, does this affect your willingness to take part in NHI Coverage of DAA Treatment for HCV?'; DAA: direct-acting antiviral; HCV: hepatitis C virus; VPN: virtual private network.

Findings from the Case Manager Surveys

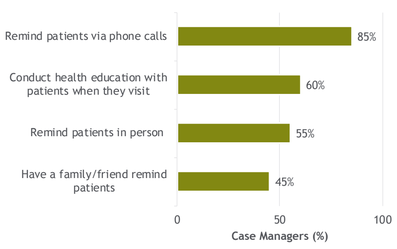
Demographics

Description	Total (N=20)
Number of patients managed in a month, mean (SD)	290 (522)
HCV patients managed in a month, mean (SD)	39 (40)
Newly diagnosed HCV patients monthly, over the past 3 months, mean (SD)	34 (45)
Portion (%) of newly diagnosed HCV patients treated with DAA over the past 3 months, mean (SD)	84 (25)

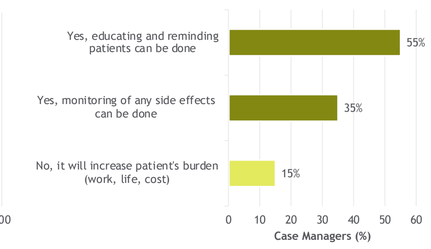
DAA: direct-acting antiviral; HCV: hepatitis C virus; SD: standard deviation.

Approaches to Increase Patient Compliance

Key approaches adopted by case managers to increase patient compliance (N=20)[a]



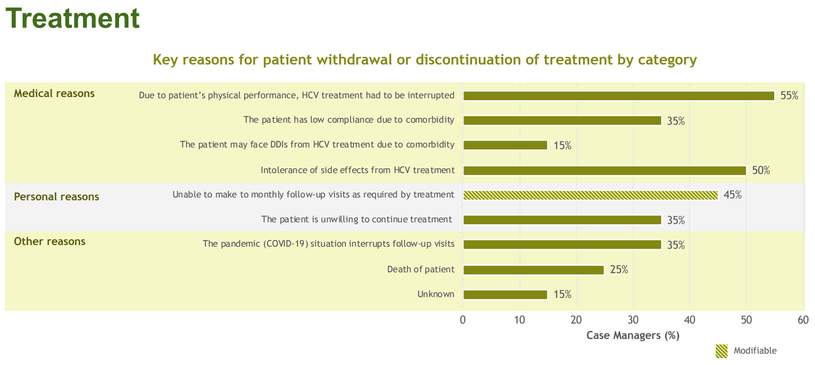
Do you find monthly follow-up appointments helpful for patient compliance? (N=20)



[a] 'While managing HCV cases, what approaches did you adopt to help increase the compliance?'; HCV: hepatitis C virus.

Reasons for Patient Withdrawal or Discontinuation of Treatment

Key reasons for patient withdrawal or discontinuation of treatment by category



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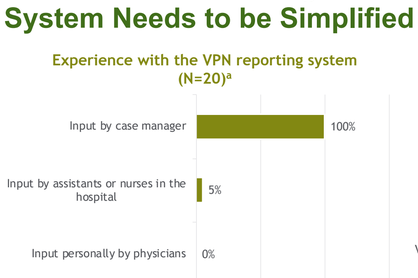
40% of the Case Managers Think that the VPN Reporting System Needs to be Simplified or is Unnecessary

Experience with the VPN reporting system (N=20)[a]



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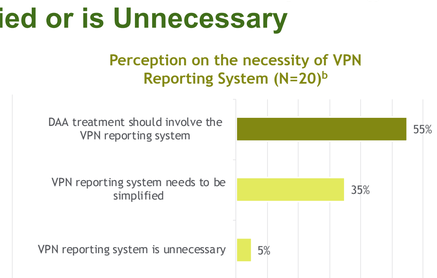

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