

FIRST REAL-WORLD DATA ON SAFETY AND EFFECTIVENESS OF GLECAPREVIR/PIBRENTASVIR FOR THE TREATMENT OF PATIENTS WITH CHRONIC HEPATITIS C VIRUS INFECTION: DATA FROM THE GERMAN HEPATITIS C-REGISTRY

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Disclosures

T Berg: Consultant/advisory board member/Investigator/Speaker: AbbVie, BMS, Boehringer, Gilead, Janssen, Merck, Novartis, Roche, Vertex Pharmaceuticals Incorporated; Research grants: Gilead, Janssen, Novartis, and Roche .

U Naumann: Speaker/advisory board for AbbVie, Bristol-Myers Squibb, Gilead Sciences, Janssen, Mundipharma, MSD, Roche, ViiV.

A Stoehr: Speaker: AbbVie, Gilead, Janssen, and MSD; Advisor: AbbVie and ViiV.

C Sick: Investigator for AbbVie.

G Teuber: Speaker/Teaching: AbbVie, BMS; Advisory Board: Janssen, Gilead, MSD.

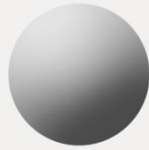
W Schiffelholz: Nothing to disclose.

S Mauss: Speaker: AbbVie, Gilead, Falk, Janssen and MSD; Advisor: AbbVie and MSD.

C Niederau: Investigator for AbbVie

J Hettinger, H Kleine and A Pangerl are employees of AbbVie and may hold stock or options.

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DHC-R

Deutsches Hepatitis C-Register

—Leberstiftungs—

GmbH

Data were derived from the **German Hepatitis C-Registry** (Deutsches Hepatitis C-Register), a project of the German Liver Foundation (Deutsche Leberstiftung), managed by Leberstiftungs-GmbH Deutschland in cooperation with the Association of German gastroenterologists in private practice (bng).

Principal Investigator: Dietrich Hüppe, Herne

Management Board: Thomas Berg, Peter Buggisch, Markus Cornberg, Dietrich Hüppe, Stefan Mauss, Christoph Sarrazin, Heiner Wedemeyer.

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Background

Approximately 200,000 patients in Germany suffer from chronic hepatitis C, primarily the result of genotype (GT) 1 infection¹

Glecaprevir^{*}/pibrentasvir (G/P) was approved in Europe for treatment of patients with HCV GT1–6 infection on July 26, 2017

- 8 week duration approved for GT1–6 treatment-naïve patients without cirrhosis²

SVR12 rate of 98% in >2200 patients in clinical trials; however, real-world data on this regimen is currently limited

1. The Polaris Observatory HCV Collaborators. Lancet Gastroenterol Hepatol. 2017 Mar;2(3):161-176.

2. MAVIRET/MAVYRET. AbbVie. 2017

^{*}Glecaprevir identified by AbbVie and Enanta

Aim

The aim of this study is to investigate the real-world effectiveness and safety of G/P within the German Hepatitis C Registry (DHC-R)

Methods

The DHC-R is an ongoing, non-interventional, multicenter, prospective registry study

Data were collected between July 28, 2017 and February 9, 2018 from 104 sites in Germany

All patients provided informed consent

Patients were treated with G/P for 8, 12, or 16 weeks according to the local label

Follow-up and laboratory testing were at investigator's discretion

Study Endpoints and Assessments

Primary Endpoint

- SVR12 (HCV RNA <LLOQ 12 weeks post-treatment)
- Assessed in the Total Effectiveness Population, and in the Per Protocol population (excludes non-virologic failures)

Secondary endpoints

- On-treatment virologic failure and post-treatment relapse
- Adverse events (AEs) and laboratory abnormalities (at investigator's discretion)
- Baseline demographics and clinical characteristics

LLOQ, lower limit of quantification

Inclusion / Exclusion Criteria for the Analysis

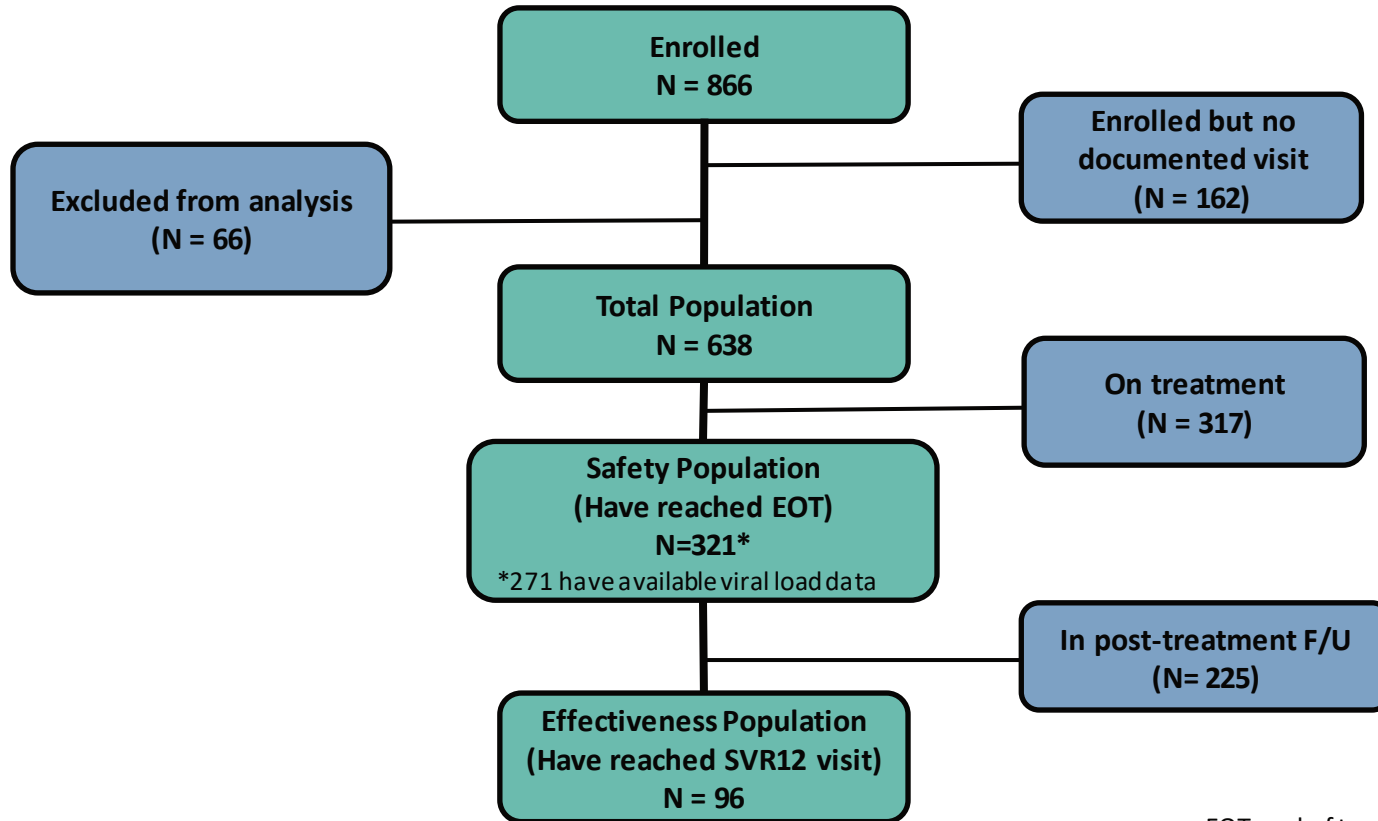
Inclusion criteria

- ≥ 18 years of age
- Chronic hepatitis C infection
- Without cirrhosis *or* with compensated cirrhosis
- Treatment with G/P
- HCV treatment-naïve *or* treatment-experienced with interferon (IFN)- or sofosbuvir (SOF)/ribavirin (RBV)-based regimens

Exclusion criteria

- Label-inconsistent treatment regimen or duration
- DAA treatment experience (excluding sofosbuvir)
- Decompensated cirrhosis (Child-Pugh B/C)
- Liver transplantation
- Pregnancy
- Mixed HCV genotype infection
- Informed consent withdrawn

Disposition of Enrolled Patients



EOT, end of treatment; F/U, follow-up

Baseline Demographics & Disease Characteristics

Characteristic	Total N = 638
Male, n (%)	431 (68)
White race, n (%)	602 (94)
Age, median (range), years	47 (18–86)
BMI, median (range), kg/m ²	24.8 (15.7–61.6)*
Genotype, n (%)	
1a [†]	218 (34)
1b [†]	111 (17)
2	44 (7)
3	226 (35)
4	30 (5)
5/ 6	2 (<1) / 1 (<1)
HCV RNA, median (Q1–Q3), IU/mL	1,455,000 (249,871–4,334,000)
Treatment-naive, n (%)	577 (90)
Treatment-experienced, n (%)	61 (10)

G/P, glecaprevir/pibrentasvir; BMI, body mass index; HCV, hepatitis C virus.

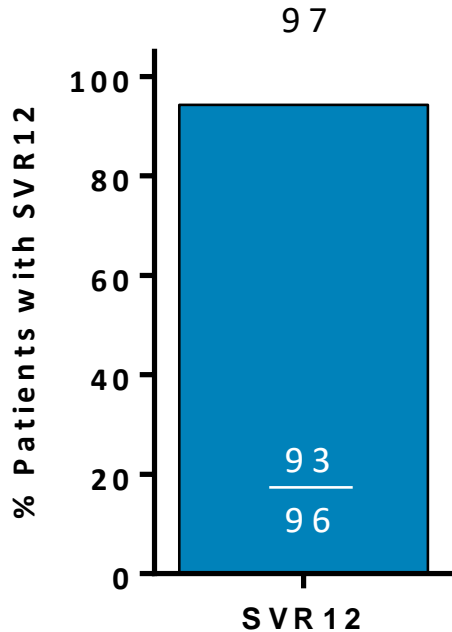
*N=615

†6 patients had GT1 with unknown/ non-GT1a/b or mixed GT1a-subtype

Baseline Demographics & Disease Characteristics

Characteristic	Total N = 638
Platelets per μL , median (range)	221,000 (45,000–564,000)
Baseline APRI score <1, n/N (%)	449/568 (79)
Baseline APRI score >2, n/N (%)	27/568 (5)
With compensated cirrhosis, n (%)	45 (7)
Comorbidities, n (%)	
≥ 1 comorbidity	450 (71)
Cardiovascular disease	103 (16)
HIV coinfection	33 (5)
Psychiatric disease	80 (13)
Chronic kidney disease	18 (3)
On opiate substitution therapy	168 (26)
Active drug use	10 (2)

Effectiveness of G/P, SVR12



Effectiveness
Population
N = 96

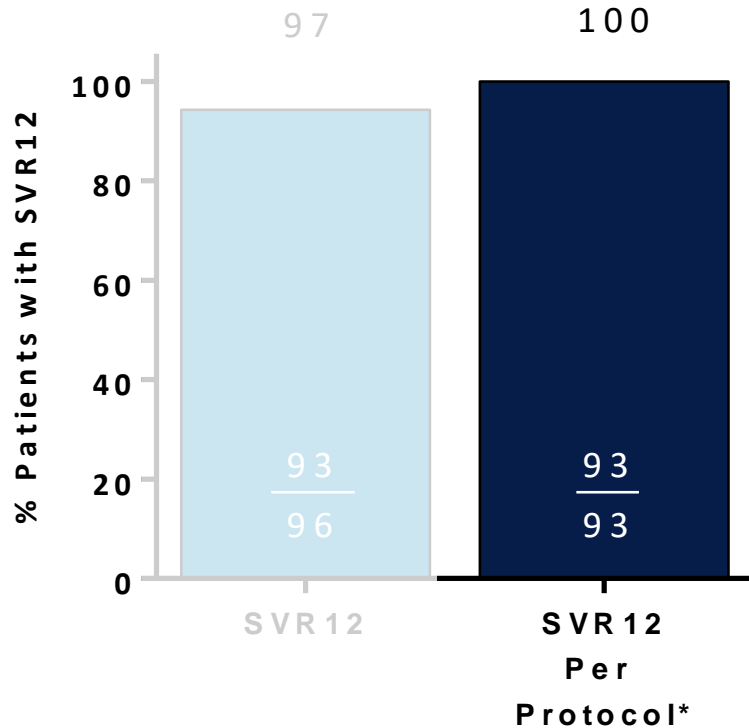
Total SVR12
Responders
N = 93

Reasons for Non-SVR:

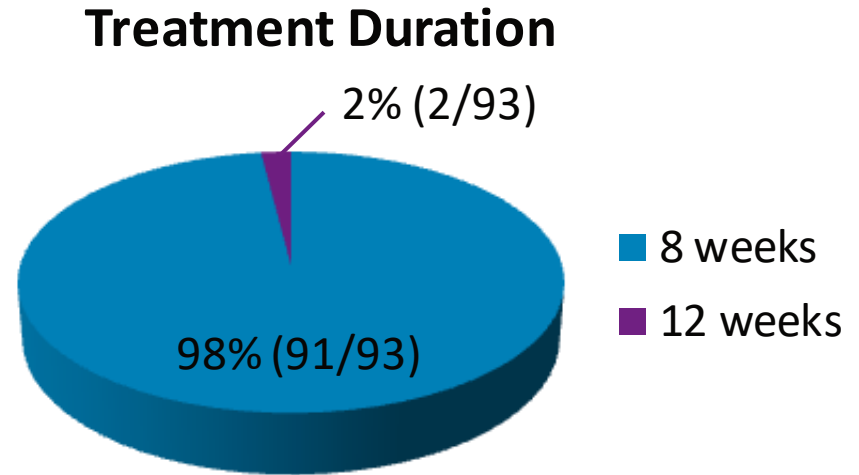
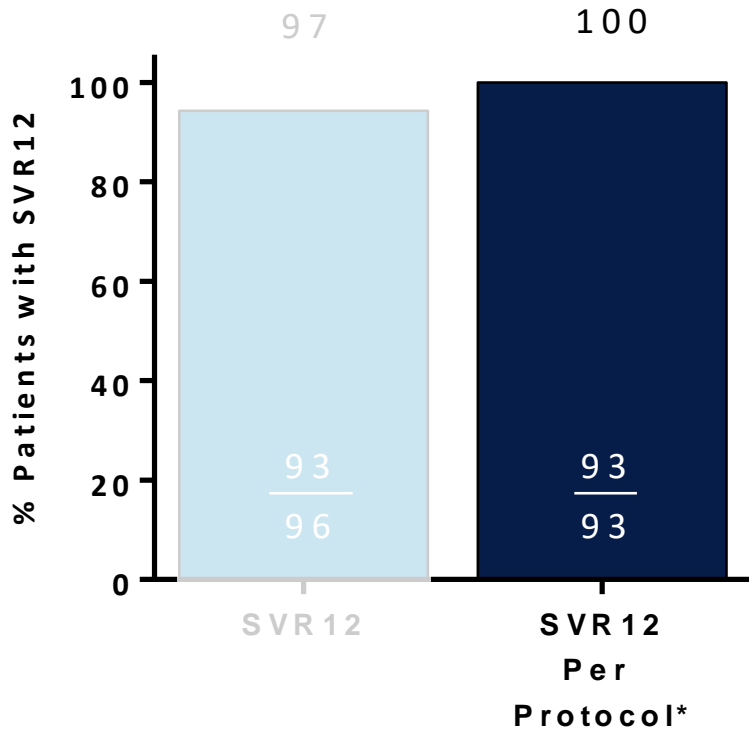
- 1 patient with IBD, cardiovascular insufficiency, & thyroid dysfunction DC'd at TW4 due to AE of diarrhea
- 1 patient with psychiatric disease, drug abuse, HIV/HCV coinfection, & chronic respiratory disease DC'd at TW1 due to AE of nausea
- 1 patient LTFU at TW1

NC, non-cirrhotic; TN, treatment-naïve; TE, treatment-experienced; IBD, irritable bowel disease; DC, discontinued; TW, treatment week; AE, adverse event; LTFU, lost to follow-up

Effectiveness of G/P, SVR12 (per protocol population)



Effectiveness of G/P, SVR12 (per protocol population)



*Per protocol i includes 91 non-cirrhotic patients treated for 8 weeks (80 treatment-naïve; 11 treatment-experienced) and 2 cirrhotic patients treated for 12 weeks.

Comparison of the Per Protocol and Baseline Populations

Characteristic, n (%)	Per Protocol Population N=93	Baseline Population N=638
Treatment-naïve	80 (86)	577 (90)
Cirrhosis	2 (2)	45 (7)
Genotype		
1	46 (49)	329 (52)
2	7 (8)	44 (7)
3	32 (34)	226 (35)
4	8 (9)	30 (5)

Safety and Tolerability

Event, n (%)	Safety Population N=321
Any AE	87 (27)
AEs leading to study drug discontinuation	2 (1)
Serious AEs	6 (2)*
Serious AEs related or possibly related to DAA	1 (<1) [†]
Death	0
AEs occurring in ≥5% total patients	
Fatigue	30 (9)
Headache	25 (8)
Laboratory Abnormalities, n/N (%)	
AST, Grade ≥3 (>5 × ULN)	1/284 (<1)
ALT, Grade ≥3 (>5 × ULN)	0 [‡]
Total bilirubin, Grade ≥3 (>3 × ULN)	2/285 (1)

AE, adverse event; DAA, direct-acting antiviral; ALT, alanine aminotransferase; AST, aspartate aminotransferase; ULN, upper limit of normal

*1) Atrial flutter on day 26; 2) Circulatory collapse on day 30; 3) Colitis on day 21; 4) Humerus fracture on day 31; 5) Injection site abscess on day 6; 6) Meniere's disease on day 21

[†]Meniere's disease, assessed as possibly related to DAA

[‡]N=306

Summary

97% SVR12 with no virologic failures to date in patients with HCV GT1–6 infection treated with G/P in real-world cohort

- 100% SVR12 in per protocol population

G/P was safe and well-tolerated:

- Discontinuations due to AEs were rare (1%)
- Lab abnormalities were rare ($\leq 1\%$)

First results from this ongoing cohort study show favorable real-world safety and effectiveness of G/P

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