

Supplementary material

Brzdęk M, Dobrowolska K, Pabjan P, Zarębska-Michaluk D. Clinical characteristics and antiviral therapy in patients infected with hepatitis C virus in the interferon-free era. *Pol Arch Intern Med.* 2022; 132: 16282. doi:10.20452/pamw.16282

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Table S1. Characteristics of patients infected with hepatitis C virus with liver cirrhosis included in the analysis.

Parameter	2015-2016	2017	2018	2019	2020
Number of patients, n	176	202	271	201	113
History of hepatic decompensation, n(%)					
Ascites	11 (12.2)	5 (11.1)	5 (15.6)	2 (8)	4 (26.7)
Hepatic encephalopathy	8 (8.9)	2 (4.4)	2 (6.3)	0	0
Documented esophageal varices, n(%)	48 (53.3)	16 (35.6)	7 (21.9)	12 (48)	6 (40)
Hepatic decompensation at baseline, n(%)					
Moderate ascites (responded to diuretics)	8 (8.9)	3 (6.7)	4 (12.5)	2 (8)	3 (20)
Tense ascites (did not respond to diuretics)	2 (2.2)	0	2 (6.3)	0	0
Hepatic encephalopathy. grade 1 – 2	3 (3.3)	2 (4.4)	1 (3.1)	0	0

Hepatic encephalopathy. grade 3 – 4	0	0	0	0	0
Child-Pugh class, n(%)					
A	70 (77.8)	41 (91)	27 (84.4)	23 (92)	10 (66.7)
B	17 (18.9)	4 (9)	4 (12.5)	2 (8)	4 (26.7)
C	3 (3.3)	0	1 (3.1)	0	1 (6.7)

Table S2. Characteristics of 15 virologic treatment failures.

Time interval of treatment	Patient	Age	GT	F, CP	Regimen	History of previous therapy	Baseline HCV RNA IU/ml	Treatment course	EOT
2015-2016	Male 1	59	1B	4, CP-A	LDV/SOF+ RBV, 12wks	Relapser (OBV/PTV/r+ DSV+RBV)	1650000	according to schedule	TND
2015-2016	Male 2	54	1B	4, CP-B	LDV/SOF+ RBV, 12wks	Treatment-naive	251000	according to schedule	TND
2015-2016	Male 3	59	1B	4, CP-A	OBV/PTV/r +DSV+RBV, 12wks	Nonresponder (TVR+pegIF N+RBV)	580000	according to schedule	TD
2015-2016	Male 4	52	3	4, CP-A	SOF+RBV, 24 wks	Discontinuation due to safety	503000	according to schedule	TND

						reason (Alfaferon+R BV)			
2017	Male 5	56	1B	2	ASV+DCV, 24wks	Treatment- naive	1590000	according to schedule	TD
2017	Male 6	48	1B	1	GZR/EBR, 12wks	Treatment- naive	6070000	according to schedule	TND
2017	Male 7	48	4	1	OBV/PTV/r +RBV, 12 wks	Nonresponder (SMV+PegIF N+RBV)	3600000	according to schedule	TND
2017	Male 8	55	3	4, CP-B	SOF+RBV, 24 wks	Nonresponder (PegIFN+RB V)	435000	according to schedule	TND
2018	Male 9	54	3	4, CP-A	GLE/PIB, 16 wks	Relapser (SOF+RBV)	4030000	according to schedule	TND
2018	Male 10	44	1B	1	OBV/PTV/r +DSV, 8wks	Treatment- naive	1530000	according to schedule	TND
2018	Male 11	42	3	1	GLE/PIB, 8 wks	Treatment- naive	4570000	according to schedule	TND
2019	Male 12	34	3	1	GLE/PIB, 8 wks	Treatment- naive	1000000 0	according to schedule	TND

2020	Male 13	31	1B	1	GLE/PIB, 8 wks	Treatment-naive	528400	modified	TD
2020	Male 14	48	1B	4, CP-B	VEL/SOF+ RBV, 12 wks	Treatment-naive	314000	according to schedule	TND
2020	Male 15	56	3	4, CP-A	VEL/SOF+ RBV, 24 wks	Relapser (GLE/PIB)	1080000	according to schedule	TND

Abbreviations: ASV, asunaprevir; CP, Child-Pugh scale; DCV, daclatasvir; DSV, dasabuvir;

EBR, elbasvir; EOT, end of treatment; F, fibrosis; GLE, glecaprevir; GT, genotype; GZR,

grazoprevir; HCV RNA, hepatitis C virus ribonucleic acid; LDV, ledipasvir; OBV,

ombitasvir; pegIFN, pegylated interferon; PIB, pibrentasvir; PTV/r, paritaprevir; RBV,

ribavirin; SMV, simeprevir; SOF, sofosbuvir; TD, target detected; TND, target not detected;

TVR, telaprevir; VEL, velpatasvir

Table S3. Safety of antiviral therapy in five time intervals.

Parameter	2015-2016	2017	2018	2019	2020
Number of patients, n	176	202	271	201	113
Treatment course, n (%)					
according to schedule	163 (92.6)	196 (97)	266 (98.2)	200 (99.5)	112 (99.1)
therapy modification	8 ^a (4.6)	3 ^c (1.5)	3 ^e (1.1)	0	1 ^h (0.9)
therapy discontinuation	5 ^b (2.8)	3 ^d (1.50)	2 ^f (0.7)	1 ^g (0.5)	0

Patients with at least one AE, n (%)	50 (28.4)	21 (10.4)	47 (17.3)	17 (8.5)	15 (13.3)
Serious adverse events, n (%)	11 ⁱ (6.3)	3 ^j (1.5)	7 ^k (2.6)	3 ^l (1.5)	2 ^m (1.8)
AEs leading to treatment discontinuation, n (%)	2 ⁿ (1.1)	0	0	1 ^o (0.5)	0
Most common AEs ($\geq 2\%$), n (%)					
weakness/fatigue	9 (5.1)	8 (4)	24 (8.9)	8 (4)	6 (5.3)
anemia	19 (10.8)	8 (4)	7 (2.6)	1 (0.5)	0
AEs of special interest (cirrhotics), n (%)	n=90	n=45	n=32	n=25	n=15
ascites	2 (2.2)	1 (2.2)	3 (9.4)	2 (8)	0
hepatic encephalopathy	2 (2.2)	1 (2.2)	1 (3.1)	1 (4)	1 (6.7)
gastrointestinal bleeding	0	0	1 (3.1)	0	0
Death, n (%)	4 ^p (2.3)	1 ^r (0.5)	2 ^s (0.7)	0	1 ^t (0.9)

Abbreviations: AE, adverse event;

^a8xRBV dose reduction

^b2x AEs, 1x death, 1x patient's decision, 1x unknown reason

^c3xRBV dosing

^d3x patient's decision,

^e2xRBV dose reduction, 1x non-adherence

^f2x death

^g1x acute hepatitis

^h1x non-adherence

ⁱ encephalopathy, fracture of lower extremity, dysplastic nodules in the liver, hepatocellular carcinoma, 2x liver impairment, severe thrombocytopenia, progression of hepatocellular carcinoma, ptosis of the left eyelid, lung cancer, cerebral stroke

^j ALT elevation, cerebral stroke, 1x (head injury, urinary tract infection)

^k balance disorders, diarrhea, 2x cerebral stroke, 1x (stomach tumor, clostridium difficile infection), 1x (balance disorders, interstitial lung disease), arterial hypertension

^l 1x (myocardial infarction, pulmonary embolism), acute hepatitis, liver impairment

^m liver transplantation, COVID-19

ⁿ cerebral stroke, vomits

^o acute hepatitis

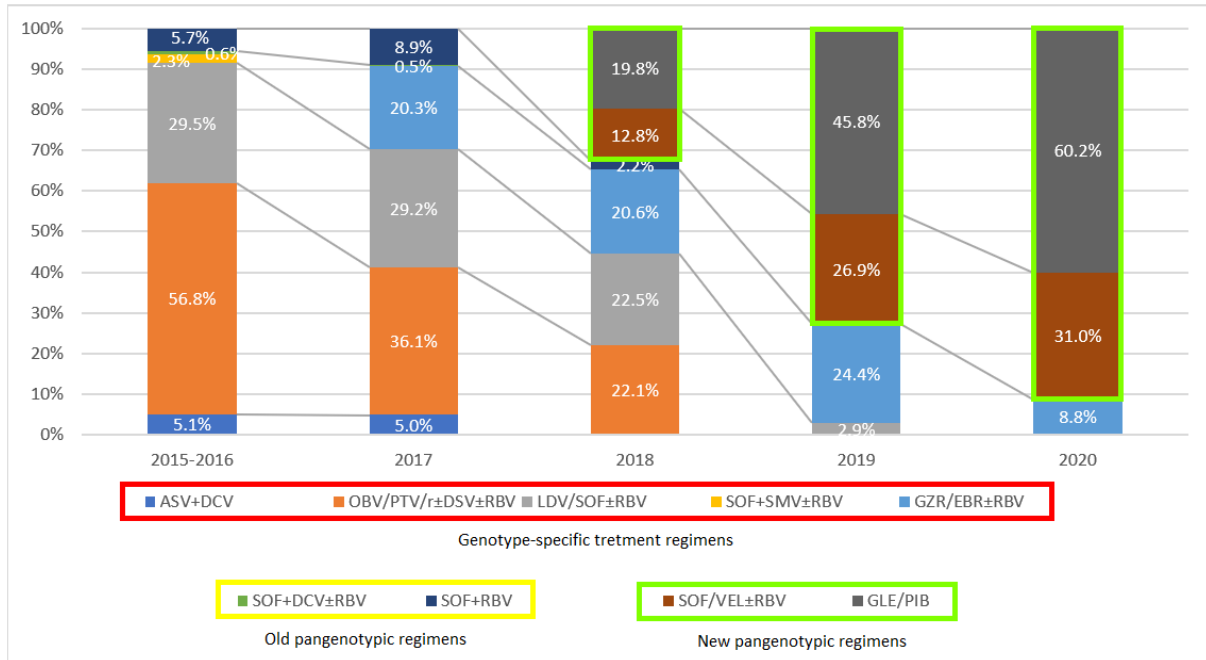
^p liver impairment, hepatocellular carcinoma, cardiac reason, kidney failure

^r cerebral stroke

^s cerebral stroke, liver impairment

^t COVID-19

Figure S1. Distribution of treatment regimens in five time intervals.



Abbreviations: ASV, asunaprevir; DCV, daclatasvir; DSV, dasabuvir; EBR, elbasvir; GLE, glecaprevir; GZR, grazoprevir; LDV, ledipasvir; OBV, ombitasvir; PIB, pibrentasvir; PTV/r, paritaprevir; RBV, ribavirin; SOF, sofosbuvir; VEL, velpatasvir;