

# Never Too Old to be DAA Treated for Hepatitis C

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## 1. Background & Aims

- Elderly patients were seldom treated for HCV in the IFN era due to side effects of treatment.
- IFN-free DAA therapy has minimal side effects making treatment feasible for many more patients, including the elderly.
- We report demographic and outcome data on all patients over 75 years of age who were treated for HCV with DAA therapy in 3 Canadian clinics.

## 2. Methods

- All HCV-infected patients greater than 75 years treated with DAAs without IFN were included.
- Information on demographics, treatment and outcomes were collected at 3 Canadian sites (Ottawa, Edmonton and Brampton).
- Fibrosis score was determined by transient elastography

## 3. Results

- 78 patients were included in the analysis. Patients were female (63%) with a mean age of 79 (SD 3.5, range 75-88 years; 36% were ≥ 80 years) and Caucasian (56%).
- Seventy (90%) were treatment naïve, 35% were genotype 1b-infected, 18% with genotype 1a, 22% with genotype 2, 6.4% with genotype 3 and 9% with genotype 4.
- The mean METAVIR fibrosis score was 2.8 (SD 1.2) with 78% having fibrosis scores ≥F2.
- 41% had cirrhosis.
- The main HCV treatments consisted of VEL/SOF(33%), LDV/SOF (32%) and EBR/GZR (17%).
- 13 of 78 (17%) received ribavirin (RBV)-containing regimens with baseline daily doses of 400 mg (n=1), 600 mg (n=1), 800 mg (n=3), 1000 mg (n=8).
- 94% (73/78) achieved SVR. No virologic failures occurred.
- SVR was 98% (n=64/65) with non-RBV regimens and 69% (9/13) for RBV-recipients.
- Two deaths (ESLD, HCC), 1 discontinuation of all HCV medications at week 2, and 1 LTFU occurred in RBV recipients.
- Mean on-treatment nadir hemoglobin in RBV recipients was 95 g/L (SD 22.1, range 57-128). RBV dose was reduced in 3/13 cases and was later discontinued in 2 of these 3 patients. Three received on-treatment PRBC transfusions.

## 4. Conclusions

- Safety and efficacy of RBV-free DAA therapy is similar to that of younger adults.
- RBV-specific complications are frequent and without evidence of improved SVR in the elderly.

Table 1. Patient Demographics

Demographics (N=78)	n	%
<b>Gender</b>		
Female	41	52.6
Male	37	47.4
<b>Race</b>		
White / Caucasian	44	56.4
Asian	10	12.8
Black	10	12.8
South Asian	6	7.7
Arab	4	5.1
Latino	2	2.6
First Nations	1	1.3
Other	1	1.3
Treatment Experienced	8	10.3
Treatment Naïve	70	89.7
<b>Genotype</b>		
1a	14	17.9
1b	27	34.6
1ab	1	1.3
1 subtype unknown	5	6.4
2	17	21.8
3	5	6.4
4	7	9.0
6	1	1.3
Mixed	1	1.3

Figure 1. Fibrosis Stage

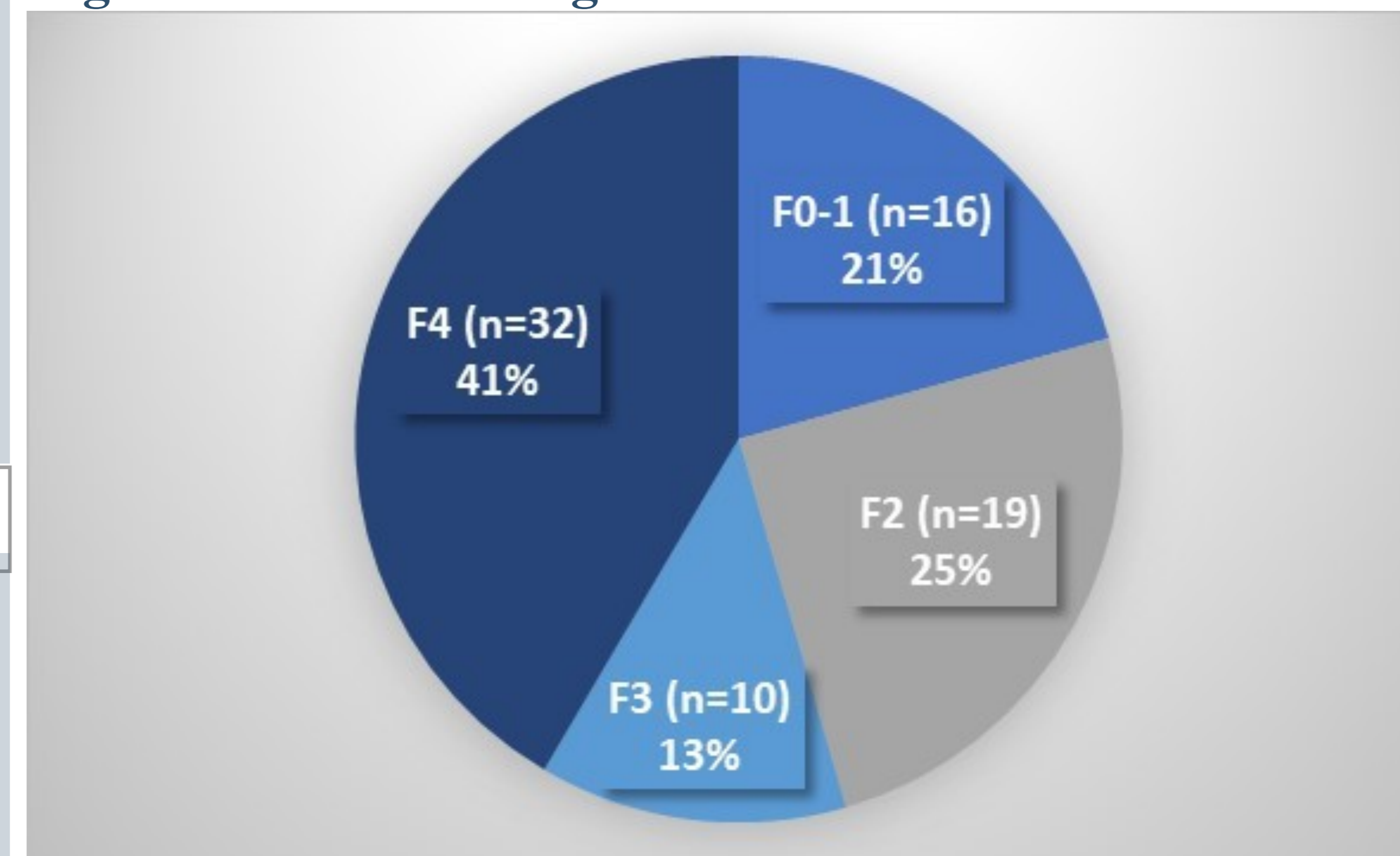


Table 2. Treatment Regimens

Regimens (N=78)	n	%
Velpatasvir-Sofosbuvir	26	33.3
Paritaprevir/ritonavir-Ombitasvir- Dasabuvir- Ribavirin	3	3.8
Ledipasvir-Sofosbuvir	25	32.1
Sofosbuvir-Ribavirin	10	12.8
Sofosbuvir-Velpatasvir-Voxilaprevir	1	1.3
Elbasvir-Grazoprevir	13	16.7

Table 3. Outcomes

Treatment Outcomes (N=78)	n	%
SVR	73	93.6%
Relapse	0	0%
Missing SVR Data	5	6.4%

Table 4. Outcomes in Ribavirin Exposed Patients

	Age	Gender	Race	GT	Fibrosis Score	RBV Dose	Hb Nadir	RBV Dose Change	PRBC	Viral Outcome
1	76	M	White	3	4	1000	95	None	N	UNK*
2	75	F	White	1b	4	1000	103	↓, then D/C	N	SVR
3	76	F	Asian	1b	4	1000	94	↓, then D/C	N	SVR
4	75	M	Other	1a	4	1000	120	None	N	SVR
5	75	M	White	2ac	4	1000	117	None	N	SVR
6	75	F	Asian	2	4	1000	97	None	N	SVR
7	75	M	S. Asian	3	4	1000	UNK	UNK	N	UNK
8	84	F	Asian	2	2	800	78	D/C All Tx	Y	UNK
9	76	M	White	2	1	1000	128	↓	N	SVR
10	76	F	White	2	2	800	106	None	N	SVR
11	80	F	Asian	2	3	800	71	None	Y	SVR
12	79	F	Black	4e	4	600	57	All Tx D/C**	Y	UNK
13	77	F	White	2	4	400	69	None	N	SVR

↓ - Reduced RBV Dose; D/C - Discontinued RBV Treatment; \* Died HCC 6 months post tx; \*\* Died of ESRD while on tx; UNK - Unknown

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