### 1 Supplementary Table S1

## 2 Demographic characteristics of patients with HCV

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#### A. Patients receiving IFN therapy during the chronic phase

Gender	Age	HCV genotype			
M/F	Median (Range)	1a	1b	3a	ND
9/4	47 (34-61)	8	5		

#### **B.** Patients receiving IFN therapy during the acute phase

Gender	Age	HCV genotype			
M/F	Median (Range)	1a	1b	3a	ND
9/1	33	4	1	5	
	(23-47)				

#### C. Spontaneously resolved patients

Gender	Age	HCV genotype			
M/F	Median (Range)	1a	1b	3a	ND
8/2	36.5	1		2	7
	(20-47)				
NI	D: Not done				

#### **Supplementary Table S2**

Restricting HLA Allelle	HCV Protein	AA	Peptide sequence
A1	NS3	1436-1444	ATDALMTGY
A2	Core	131-140	ADLMGYIPLV
	E2	614-622	RLWHYPCTV
	NS5B	2594-2603	ALYDVVTKL
	NS3	1073-1081	CINGVCWTV
	NS3	1406-1415	KLVALGINAV
	NS4b	1807-1816	LLFNILGGWV
A3	E2	630-639	RMYVGGVEHR
B7	Core	41-49	GPRLGVRAT
<b>B8</b>	NS3	1395-1403	HSKKKCDEL
<u>B8</u>	NS3	1395-1403	HSKKKCDEL

MHC class I tetramers used in screening HCV-specific CD8+ T-cell responses in chronic
 patients prior to start of therapy
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#### 1 Supplementary Figure Legend

Figure S1. Representative flow cytometry for T-cell proliferation. Prolifaration was
measured by CFSE dilution assay. PBMCs were stimulated with HCV peptide pools (C) or nonstimulated (B). Proliferating cells were cells were gated on CD3+ CFSE+ viable cells then either
CD4+ or CD8+ (A).

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**Figure S2. Representative flow cytometry for cytokine staining.** Degranulation was measured for CD8+ T cells by CD107a surface staining and cytokine production was measured for both CD4+ and CD8+ T cells by intracellular staining for IFN- $\gamma$  and IL-2. PBMCs were stimulated with HCV peptide pools (B, C bottom row) or non-stimulated (B, C top row). IFN- $\gamma$ +, IL2+ and CD107a+ cells were gated on CD3+ viable cells then either CD4+ or CD8+.

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# Figure S3. No restoration of immune responses against HCV in patients who resolved after receiving IFN-α therapy in the chronic phase (C-SVRs).

Results are represented as the mean of C-SVR patients' responses (n=8) in an IFN-γ ELISpot
assay against the indicated HCV overlapping peptide pools. Each pool consisted of 39-50
overlapping peptides representing the entire HCV polyprotein. Peptides are 18 AA long,
overlapping by 11 AA (Biodefense and Emerging Infections Research Resources Repository
(BEI resources)). No significant difference was observed in the responses between the different
time points tested. The dashed line represents the positivity threshold (50 SFC/ 10<sup>6</sup> PBMCs).

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A.

Supplementary Figure S1



B.

Gated on CD4+



C.

Gated on CD8+



Abdel-Hakeem MS et al., 2010 Supplementary Figure S2



Abdel-Hakeem MS et al., 2010 Supplementary Figure S3