Title page

Type of manuscript: Research article

Title: Dynamics of cellular senescence markers after HCV elimination spontaneously or by DAAs in people living with HIV

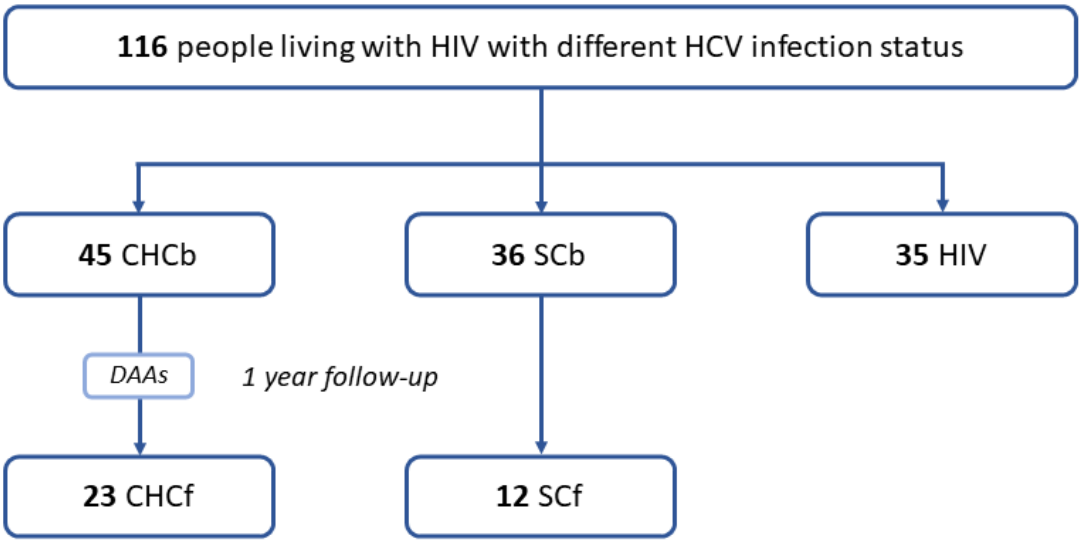
SUPPLEMENTARY DATA INDEX

Supplementary Data 1: Multidisciplinary Group of viral coinfection VIH/Hepatitis (COVIHEP)

Hospitals of the multidisciplinary group of HIV/Hepatitis viral coinfection (COVIHEP) that have collaborated in the study [In alphabetical order of institutions and authors within each institution]:

- **Infanta Leonor University Hospital** (Madrid-Spain)**:** Guillermo Cuevas; Victorino Diez-Viñas; Pablo Ryan; Jesús Troya
- **La Paz University Hospital** (Madrid-Spain)**:** Juan Miguel Castro-Álvarez; Marta Gálvez-Charro; Luz Martín-Carbonero; Mario Mayoral-Muñoz
- **La Princesa University Hospital** (Madrid-Spain)**:** Ignacio De los Santos; Lucio García-Fraile; Jesús Sanz-Sanz

Supplementary Date 2: Flow chart of patients involved in this study. Patients were grouped according to their viral status: Chronic HCV (CHC) who cleared HCV with direct-acting antivirals agents (DAAs) and HIV+ patients who spontaneously clarify HCV (SC). Samples were collected at baseline (b) and 48 weeks after achieving a sustained virological response or one year of follow-up (f). A control group PLWHIV (HIV+) without a previous HCV infection was included.



Supplementary Data 3. Evolution of clinical and metabolic characteristics of HIV group.

	HIV (n=35)		p
	Basal (HIV-b)	**Follow-up (HIV-f)**	
Clinical characteristics			
BMI (kg/m^2)	24.61 (22.34-27.67)	25.28 (22.35-26.84)	0.198
CD4+ T (cell/mm^3)	818.00 (674.70-1046.40)	876.00 (731.00-1051.00)	0.642
CD4+ T-cell (%)	38.00 (30.00-44.00)	37.50 (34.21-44.50)	0.409
CD8+ T (cell/mm^3)	942.00 (792.00-1368.00)	858.00 (638.00-929.00)	0.317
CD8+ T-cell (%)	38.00 (35.45-44.58)	38.72 (35.45-42.60)	0.317
CD4/CD8 rate (%)	1.02 (0.64-1.24)	1.11 (0.81-1.20)	0.893
Lipid profile			
Glu (mg/dL)	93.00 (86.00-97.00)	91.00 (86.00-96.00)	0.272
TC (mg/dL)	185.00 (172.00-205.00)	179.00 (169.00-210.00)	0.495
TC≥200 (mg/dL)	10 (38.5%)	7 (31.8%)	1.000
LDL (mg/dL)	116.00 (100.00-146.00)	108.00 (96.00-130.00)	0.575
HDL (mg/dL)	46.00 (37.00-55.00)	50.00 (43.00-55.00)	0.984
TG (mg/dL)	116.00 (95.50-183.50)	122.00 (93.00-183.00)	0.456
LDL/HDL (mg/dL)	2.43 (2.11-3.00)	2.31 (1.88-2.61)	0.263
AI	3.95 (3.63-5.14)	3.91 (3.31-4.28)	0.502
Low risk	17 (70.8%)	19 (96.4%)	0.500
AIP	0.39 (0.30-0.63)	0.46 (0.24-0.53)	0.737
High risk	22 (91.7%)	17 (77.3%)	0.625
Lipoprotein index	60.00 (35.61-123.36)	50.07 (23.01-95.05)	0.765
Biochemical parameters of liver function			
AST (mg/dL)	24.00 (20.00-27.00)	21.00 (20.00-24.00)	0.032
ALT (mg/dL)	28.00 (22.00-33.00)	21.00 (17.00-26.00)	0.082
GGT (mg/dL)	27.00 (21.00-43.00)	23.00 (18.00-28.00)	0.245
ALP (U/L)	77 (66-94)	73 (57-97)	0.065
BT (mg/dL)	0.42 (0.40-0.57)	0.41 (0.32-0.60)	0.862

Note. Statistics: Values are expressed as absolute number (%) and median (percentile 25; percentile 75). p-values were estimated by Mann-Whitney U test for continuous variables and Chi-square test for categorical variables. Abbreviations: HIV: individuals mono-infected with HIV; BMI, body mass index; Glu, glucose; TC, total cholesterol; LDL, low density lipoprotein; HDL, high density lipoprotein; TG, triglycerides; AI, atherogenic index (low risk <5% for men and <4.5% women, moderate risk 5-9 men and 4.5-7 women); AIP, atherogenic index for plasma (high risk >0.21); Lipoprotein index (TC * TG * LDL)/HDL); AST, aspartate aminotransferase, ALT, alanine aminotransferase; GGT, gamma glutamyl transferase; ALP, alkaline phosphatase; BT, total bilirubin. Statistically significant ($p<0.05$).

Supplementary Data 4: Senescence-Associated Secretory phenotype (SASP) biomarkers.

Target Name	Full description
EGF	Epidermal Growth Factor
Eotaxin	Eosinophil chemotactic protein
Gro-alpha (CXCL1)	Growth-regulated oncogene-alpha
GM-CSF	Granulocyte Macrophage Colony-Stimulating Factor
IFN gamma	Interferon-gamma
IL-1 beta	Interleukin-1 beta
IL-1 alpha	Interleukin-1 alpha
IL-1RA	Interleukin-1 receptor antagonist
IL-2	Interleukin-2
IL-6	Interleukin-6
IL-7	Interleukin-7
IL-8 (CXCL8)	Interleukin-8
IL-13	Interleukin-13
IL-15	Interleukin-15
IL-18	Interleukin-18
IP-10 (CXCL10)	C-X-C motif chemokine ligand 10
MCP-1 (CCL2)	C-C motif chemokine ligand 2
RANTES (CCL5)	C-C motif chemokine ligand 5
SDF-1 alpha (CXCL12)	Stromal cell-derived factor 1-alpha
FGF-2	Fibroblast growth factor 2
HGF	Hepatocyte growth factor
NGF	Nerve growth factor
PIGF-1	Placental growth factor
PD1	Programmed Death protein 1
PD-L1	Programmed Death-ligand 1
PD-L2	Programmed Death-ligand 2
SCF	Skp, cullin, F-box containing complex
TNF alpha	Tumor necrosis factor-alpha
TNF beta	Tumor necrosis factor-beta
TIM-3 (HAVCR2)	Hepatitis A virus cellular receptor 2

Supplementary Data 5: Epidemiological and clinical characteristics of all groups of patients enrolled in this study at baseline.

	Total	SC	CHC	HIV	p[a]	p[b]	p[c]	p[d]
No.	70	12	23	35	--	--	--	--
Gender (female)	33 (47.10%)	6 (50.00%)	9 (39.10%)	18 (51.40%)	0.641	0.932	0.358	0.537
Age (years)	50.50 (43.00-55.00)	53.00 (49.50-55.50)	50.00 (43.00-54.00)	49.00 (41.00-56.00)	0.437	0.272	0.937	0.192
BMI (kg/m^2)	23.92 (21.92 -26.35)	25.59 (24.01-28.40)	22.48 (21.15-24.73)	24.61 (22.34-27.27)	**0.035**	0.371	**0.045**	**0.022**
HIV infection (years)	19.95 (10.57-26.09)	22.98 (15.71-29.04)	24.18 (14.13-28.77)	17.13 (5.67-22.22)	**0.016**	**0.025**	**0.016**	0.677
Transmission route								
IVDU	19 (31.70%)	8 (72.70%)	11 (55.00%)	0 (0.00%)				
IVDU + sexual	2 (3.30%)	1 (9.10%)	1 (5.00%)	0 (0.00%)	**<0.001**	**<0.001**	**<0.001**	0.617
Sexual	38 (63.30%)	2 (18.20%)	7 (35.00%)	29 (100%)				
Vertical	1 (1.70%)	0 (0.00%)	1 (5.00%)	0 (0.00%)				
HIV clinical stage								
A	34 (48.60%)	3 (25.00%)	10 (43.50%)	21 (60.00%)				
B	12 (17.10%)	3 (25.00%)	5 (21.70%)	5 (14.30%)	0.371	0.174	0.517	0.486
C	15 (21.40%)	2 (16.70%)	6 (26.10%)	5 (14.30%)				
IFNL4 genotype								
CC	34 (48.60%)	10 (83.30%)	6 (26.10%)	18 (51.40%)				
CT	31 (44.30%)	1 (8.30%)	14 (60.90%)	16 (45.70%)	**0.014**	0.061	0.088	**0.004**
TT	5 (7.10%)	1 (8.30%)	3 (13.00%)	1 (2.90%)				
ART regimen								
2 NRTI+INIs	33 (47.1%)	5 (41.70%)	11 (47.80%)	17 (48.60%)				
2 NRTI + PI	5 (7.1%)	1 (8.3%)	2 (8.70%)	2 (5.70%)				
2 NRTI + NNRTIs	18 (25.7%)	4 (33.3%)	7 (30.40%)	7 %20.00%)	0.962	0.863	0.816	0.902
3 NRTI	3 (4.3%)	0 (0.00%)	1 (4.30%)	2 (5.70%)				
Bitherapy	10 (14.3%)	2 (16.70%)	2 (8.70%)	6 (17.10%)				
PI-Monotherapy	1 (1.40%)	0 (0.00%)	0 (0.00%)	1 (2.90%)				
CD4+ T (cell/mm^3)	785.10 (603.00-1058.00)	720.10 (538.50-1026.50)	712.80 (515.00-1098.90)	818.00 (674.70-146.40)	0.264	0.172	0.195	0.862
CD8+ T (cell/mm^3)	917.5 (712.50-1213.00)	827 (675-979)	876 (453-935)	941.5 (791.50-1367.50)	0.691	0.641	0.494	0.739
CD4/CD8 ratio	0.86 (0.64-1.20)	1.09 (0.84-1.34)	0.72 (0.48-0.86)	1.02 (0.64-1.24)	0.299	0.721	0.205	0.182
CD4 T nadir	215.00 (164.00-305.00)	154.50 (84.50-215.00)	215.00 (164.00-337.00)	256.50 (180.00-324.00)	0.063	**0.013**	0.722	0.089
HCV genotype								
1	16 (22.90%)	1 (8.30%)	15 (65.20%)	--	--	--	--	**<0.001**
4	6 (8.60%)	0 (0.00%)	6 (26.10%)	--				

Note. Statistics: Values are expressed as absolute number (percentage). *P-values* were calculated by Chi-square tests, Kruskal-Wallis tests and Mann Whitney U test. Statistically significant values are highlighted in bold. **a:** comparison between all of the three groups enrolled in this study; **b**: comparison between SC and HIV; groups; **c**: comparison between CHC and HIV groups; **d**: comparison between SC and CHC groups. Abbreviations: BMI, body mass index; IVDU, intravenous drug user; INIs, integrase inhibitors; NRTIs, nucleoside analogue reverse transcriptase inhibitors; PIs, protease inhibitors; NNRTIs, non-nucleoside reverse transcriptase inhibitors.

Supplementary Data 6: Evolution of clinical and metabolic characteristics of all group of patients enrolled in this study.

	SC (n=12)		CHC (n=23)		HIV (n=35)	p[a]	p[b]	p[c]	p[d]	p[e]
	Basal (SC-b)	Follow-up (SC-f)	Basal (CHC-b)	Follow-up (CHC-f)						
Epidemiological and clinical characteristics										
BMI (kg/m^2)	25.59 (24.00-28.39)	26.26 (23.24-28.73)	22.48 (21.14-24.72)	21.54 (19.92-24.47)	24.61 (22.34-27.26)	0.508	0.730	**0.035**	0.538	**0.049**
CD4+ T (cell/mm^3)	720.10 (538.50-1026.50)	819.50 (628.00-1047.00)	712.80 (515.00-1098.90)	881.50 (621.50-1183.00)	818 (674.70-1046.40)	0.410	0.421	0.586	0.575	0.944
CD4+ T-cell (%)	35.50 (29.24-43.04)	30.75 (25.50-39.50)	33.00 (26.00-44.00)	36.00 (30.98-43.00)	38 (30-44)	0.135	0.824	0.340	0.153	0.655
CD8+ T (cell/mm^3)	827.00 (675.00-979.00)	918 (894-941)	876 (453-935)	1135 (701-1667)	942 (792-1368)	0.655	0.109	0.355	0.888	0.705
CD8+ T-cell (%)	32.47 (32.15-32.80)	30.15 (28.70-31.60)	44.47 (41.16-54.00)	42.51 (38.21-48.94)	38 (35.45-44.58)	0.180	0.465	0.064	0.068	0.257
CD4/CD8 rate (%)	1.09 (0.84-1.34)	1.24 (1.10-1.37)	0.72 (0.48-0.86)	0.87 (0.68-0.91)	1.02 (0.64-1.24)	0.180	1.000	0.064	0.456	0.484
Lipid profile										
Glu (mg/dL)	94 (89-104)	91 (84-98)	88 (86-100)	90 (82-100)	93 (86-97)	0.182	0.180	0.986	0.730	0.732
Glu≥110 (mg/dL)	2 (16.70%)	1 (8.30%)	3 (13.00%)	3 (13.60%)	2 (7.70%)	1.000	1.000	0.646	0.941	0.635
TC (mg/dL)	191 (178-217)	199 (166-210)	185 (166-210)	179 (145-201)	185 (172-205)	0.937	0.584	0.159	0.826	0.136
TC≥200 (mg/dL)	4 (33.30%)	6 (50%)	9 (39.10%)	7 (30.40%)	10 (38.50%)	0.625	0.727	0.256	0.503	0.556
LDL (mg/dL)	107 (95-124)	113 (98-134)	112 (82-130)	117 (77-137)	116 (100-146)	0.260	0.271	0.951	0.606	0.814
LDL≥130 (mg/dL)	2 (22.20%)	3 (27.30%)	7 (30.40%)	7 (35%)	9 (37.50%)	1.000	0.625	0.660	0.554	0.864
HDL (mg/dL)	51 (45-56)	50 43-54)	53 (40-56)	49 (37-62)	46 (37-55)	0.361	0.173	0.905	0.455	0.674
TG (mg/dL)	119.5 (101-151)	147 (101-186)	126 (81-154)	113 (74-150)	116 (93-184)	0.878	0.092	0.142	0.943	0.183
TG≥200 (mg/dL)	1 (10.00%)	0 (0.00%)	3 (13.00%)	1 (4.80%)	5 (20.80%)	1.000	0.500	0.462	0.086	0.089
LDL/HDL (mg/dL)	2.19 (1.91-2.42)	2.17 (1.91-2.78)	2.22 (1.67-2.84)	2.22 (1.48-3.02)	2.43 (2.10-2.99)	0.314	0.296	0.901	0.424	0.564
AI	3.73 (3.36-4.22)	3.88 (3.59-4.34)	3.85 (3.12-4.43)	4.21 (3.08-4.57)	3.95 (3.63-5.14)	0.374	0.520	0.796	0.558	0.562
Low risk	9 (100%)	11 (91.70%)	20 (87%)	19 (82.60%)	17 (70.80%)	1.000	1.000	0.467	0.156	0.341
AIP	0.34 (0.20-0.43)	0.46 (0.34-0.56)	0.42 (0.12-0.55)	0.30 (0.05-0.61)	0.39 (0.30-0.63)	0.767	0.205	0.427	0.859	0.232
High risk	6 (66.70%)	9 (81.80%)	16 (69.60%)	15 (71.40%)	22 (91.70%)	1.000	1.000	0.519	0.395	0.076
Biochemical parameters of liver function										
AST (mg/dL)	23 (19-28)	23 (20-27)	37 (30-47)	23 (18-26)	24 (20-27)	0.405	**<0.001**	0.515	0.487	0.129
AST≥40 (mg/dL)	0 (0%)	0 (0%)	8 (34.80%)	0 (0%)	2 (7.70%)	--	**0.016**	--	0.324	0.184
ALT (mg/dL)	23 (19-27)	21 (19-25)	47 (32-62)	19 (14-22)	28 (22-33)	0.655	**<0.001**	0.266	**0.038**	**0.001**
ALT≥40 (mg/dL)	0 (0%)	0 (0%)	14 (60.90%)	0 (0.00%)	5 (19.20%)	--	**<0.001**	--	0.103	**0.030**
GGT (mg/dL)	38 (26-44)	33 (25-41)	45 (33-107)	18 (13-25)	27 (21-43)	0.507	**<0.001**	**0.002**	0.233	**0.036**
GGT≥50 (mg/dL)	2 (18.20%)	2 (16.70%)	11 (47.80%)	1 (4.50%)	5 (20.80%)	1.000	**0.004**	0.234	0.766	0.101
Albumin (g/L)	4.60 (4.50-4.80)	4.50 (4.40-4.60)	4.40 (4.30-4.50)	4.20 (4.10-4.40)	4.15 (4.00-4.70)	0.317	0.705	**0.042**	0.177	0.936
ALP (U/L)	71 (65-104)	82 (63-106)	86 (76-98)	71 (83-98)	77 (66-94)	0533	0.237	0.866	0.660	0.500
BT (mg/dL)	0.47 (0.35-0.59)	0.49 (0.41-0.74)	0.51 (0.48-0.67)	0.46 (0.34-0.62)	0.42 (0.40-0.57)	0.136	0.484	0.689	0.299	0.581

Note. Statistics: Values are expressed as absolute number (%) and median (percentile 25; percentile 75). p-values were estimated by Mann-Whitney *U* test for continuous variables and Chi-square test for categorical variables: **a**, comparison between SC group at baseline and after 48 weeks (SC-b vs SC-f); **b**, comparison between CHC group at baseline and after 48 weeks of HCV elimination by direct-acting antivirals agents (CHC-b vs CHC-f); **c,** comparison between SC-f and CHC-f groups; **d**, comparison between SC-f groups and HIV; **e**, comparison between CHC-f and HIV groups. Abbreviations: HIV: individuals mono-infected with HIV; SC, spontaneous clearers; CHC, individuals with chronic HCV infection; BMI, body mass index; Glu, glucose; TC, total cholesterol; LDL, low density lipoprotein; HDL, high density lipoprotein; TG, triglycerides; AI, atherogenic index (low risk <5% for men and <4.5% women, moderate risk 5-9 men and 4.5-7 women); AIP, atherogenic index for plasma (high risk >0.21); AST, aspartate aminotransferase, ALT, alanine aminotransferase; GGT, gamma glutamyl transferase; ALP, alkaline phosphatase; BT, total bilirubin. Statistically significant in bold (P<0.05).

Supplementary Data 7. Evolution of biomarkers of cellular senescence in spontaneous clarifiers (SC) and HCV chronic infected patients (CHC) after 48 weeks.

	SC		p [a]	AMR (IC95%)	p[b]	q	CHC		p[a]	AMR (IC95%)	p[b]	q
	SC-f (follow-up)	SC-b (basal)					CHC-f (follow-up)	CHC-b (basal)				
TAC	5.00 (4.59-5.24)	5.39 (4.28-5.57)	0.875	1.00 (0.86-1.16)	0.971	0.971	4.85 (4.44-5.46)	4.82 (4.58-5.74)	0.543	0.95 (0.86-1.07)	0.401	0.602
GSH	28.69 (22.84-31.05)	28.47 (26.32-36.61)	0.345	0.90 (0.74-1.10)	0.310	0.510	29.92 (26.93-38.72)	28.84 (26.95-32.07)	0.088	1.07 (0.96-1.20)	0.234	0.461
GSSG	6.74 (4.80-8.80)	18.82 (4.39-31.54)	**0.043**	0.50 (0.23-1.12)	0.092	0.399	12.43 (10.18-17.11)	32.86 (15.17-44.44)	**0.002**	0.43 (0.31-0.61)	**<0.001**	**0.008**
GSH/GSSG	4.37 (3.60-5.90)	1.74 (0.91-5.57)	**0.043**	1.44 (0.68-3.06)	0.340	0.510	2.24 (2.06-2.96)	0.87 (0.68-2.11)	**0.001**	1.62 (1.05-2.49)	**0.028**	**0.084**
Nitrate	9.76 (6.65-15.16)	9.79 (6.54-14.33)	0.333	1.10 (0.67-1.80)	0.702	0.903	13.62 (8.92-20.11)	20.76 (12.21-24.50)	0.100	0.62 (0.44-0.88)	**0.007**	**0.032**
LP	0.44 (0.36-0.62)	0.86 (0.65-0.97)	**0.008**	0.56 (0.42-0.75)	**<0.001**	**0.008**	0.68 (0.35-1.16)	0.87 (0.47-0.96)	0.709	0.97 (0.69-1.36)	0.854	0.934
PCC	0.17 (0.07-0.48)	0.20 (0.10-0.30)	0.767	1.10 (0.51-2.34)	0.815	0.917	0.14 (0.04-0.23)	0.13 (0.03-0.37)	0.177	0.91 (0.48-1.74)	0.776	0.934
DNA damage	2.73 (1.78-4.77)	4.83 (0.26-6.53)	0.209	0.70 (0.44-1.12)	0.133	0.399	3.92 (2.52-6.20)	4.60 (2.29-6.09)	0.654	1.01 (0.72-1.42)	0.934	0.934
RTL	0.25 (0.15-0.28)	0.26 (0.21-0.32)	0.237	0.88 (0.69-1.13)	0.309	0.510	0.24 (0.16-0.37)	0.24 (0.21-0.28)	0.351	1.15 (0.90-1.46)	0.256	0.461

Note. Statistics: Values are expressed as median (interquartile range). Simple comparison between continuous variables were calculated by Wilcoxon test (**p[a]**). The AMR values were obtained using a generalized linear mixed model (GLMMs) adjusted by de most significant variables, p-values were also shown (**p[b]**). Abbreviations: SC-b, PLWHIV who spontaneously clarify HCV at baseline; SC-f, PLWHIV patients who spontaneously clarify HCV after 48 weeks of follow-up; CHCb, PLWHIV chronically infected by HCV at baseline; CHCf, PLWHIV chronically infected by HCV 48 weeks after achievement sustained virological response (SVR) with the new direct-acting antivirals agents (DAAs); aAMR, arithmetic median ratio adjusted by the most significant variables; TAC, total antioxidant capacity (nmole/µL); GSH, reduced glutathione (µM); GSSG, oxidized glutathione (µM); nitrate (µM); LP, lipid peroxidation (nmole/mL); PCC, protein carbonyl content (nmole/mg); DNA damage (pg/mL) ($x10^3$); TL, telomere length.

Supplementary Data 8. Evolution of the senescence-associated secretory phenotype (SASP) in spontaneous clarifiers patients (SC) and patients with chronic HCV infection (CHC).

	SC (n=12)						CHC (n=23)					
	SC-f (follow-up)	**SC-b (basal)**	**p[a]**	**AMR (IC95%)**	**p[b]**	**q**	**CHC-f (follow-up)**	**CHC-b (basal)**	**p[a]**	**AMR (IC95%)**	**p[b]**	**q**
Th1/Th2												
GM-CSF	17.39 (15.30-18.79)	15.30 (13.43-16.75)	0.423	1.09 (0.94-1.27)	0.238	0.387	20.46 (14.00-24.48)	19.00 (14.73-26.10)	0.670	0.93 (0.75-1.16)	0.521	0.677
IFN-γ	55.78 (30.59-70.04)	25.00 (23.13-30.41)	0.075	1.68 (1.17-2.43)	**0.005**	**0.033**	27.46 (24.75-41.00)	35.75 (26.25-55.05)	0.107	0.79 (0.58-1.06)	0.116	0.266
IL-1β	15.07 (11.10-17.15)	13.17 (11.50-16.05)	0.722	1.02 (0.80-1.29)	0.904	0.904	15.67 (13.31-17.85)	15.50 (13.18-21.50)	0.201	0.84 (0.67-1.05)	0.132	0.266
IL-2	17.38 (15.48-20.46)	14.66 (13.00-18.34)	0.477	1.10 (0.93-1.29)	0.278	0.402	16.80 (12.54-18.50)	18.95 (14.33-26.50)	0.089	0.81 (0.66-0.99)	**0.035**	0.150
IL-6	18.70 (17.18-20.00)	18.15 (15.16-23.26)	0.859	0.99 (0.83-1.18)	0.894	0.904	19.44 (17.00-20.08)	19.90 (16.70-23.40)	0.412	0.86 (0.69-1.07)	0.176	0.305
IL-8	73.59 (68.63-77.60)	60.81 (51.81-64.05)	**0.033**	1.31 (1.11-1.55)	**0.001**	**0.013**	73.00 (60.17-19.38)	61.90 (58.17-71.70)	0.089	1.06 (0.97-1.17)	0.214	0.348
IL-13	13.79 (12.04-17.50)	15.91 (12.21-20.97)	0.286	0.89 (0.73-1.08)	0.232	0.387	15.00 (12.58-16.00)	16.83 (14.06-25.10)	**0.043**	0.76 (0.63-0.93)	**0.009**	**0.078**
IL-18	403.98 (144.46-533.83)	71.56 (60.40-359.58)	**0.041**	2.39 (1.23-4.64)	**0.010**	**0.043**	77.38 (56.95-258.83)	121.75 (74.75-280.35)	0.503	0.96 (0.58-1.61)	0.888	1.000
TNF-α	19.55 (17.51-22.55)	12.96 (8.74-16.65)	**0.016**	1.45 (1.15-1.82)	**0.002**	**0.017**	18.50 (14.88-20.25)	17.80 (13.95-22.75)	0.301	0.82 (0.65-1.04)	0.823	0.973
Inflammatory cytokines												
IL-1α	56.63 (51.10-65.76)	50.63 (43.75-62.66)	0.182	0.95 (0.55-1.67)	0.868	0.904	56.71 (47.35-73.83)	54.30 (44.53-69.45)	0.287	1.10 (0.93-1.30)	0.262	0.401
IL-1RA	62.03 (27.70-81.65)	21.99 (21.04-44.00)	**0.033**	2.26 (1.44-3.54)	**<0.001**	**0.013**	30.67 (21.60-39.58)	31.71 (24.30-61.07)	0.171	0.76 (0.52-1.12)	0.166	0.305
IL-7	20.25 (18.54-20.74)	18.00 (16.40-22.50)	0.929	1.03 (0.90-1.18)	0.640	0.723	19.50 (16.29-23.65)	22.25 (16.80-27.15)	**0.045**	0.86 (0.73-1.02)	0.082	0.237
IL-15	20.58 (17.85-24.44)	17.85 (16.15-25.00)	0.722	1.06 (0.89-1.26)	0.519	0.613	21.13 (19.25-24.00)	23.95 (19.45-26.00)	0.236	0.80 (0.67-0.96)	**0.018**	0.117
TNF-β	83.20 (66.45-89.63)	69.61 (56.65-81.77)	0.286	1.18 (0.90-1.54)	0.209	0.387	75.25 (71.50-92.92)	73.15 (58.50-87.08)	0.064	1.09 (0.92-1.29)	0.323	0.467
Chemokines												
Eotaxin	199.05 (145.80-222.92)	134.61 (57.36-194.57)	0.050	1.59 (1.01-2.50)	**0.047**	0.153	140.92 (90.92-217.38)	97.85 (68.92-153.75)	0.114	1.42 (1.01-2.01)	**0.046**	0.150
Gro-α	59.82 (48.31-67.64)	50.14 (44.50-55.20)	0.091	1.21 (0.99-1.50)	0.069	0.198	60.50 (53.75-69.50)	49.50 (44.93-60.50)	**0.012**	1.19 (1.05-1.34)	**0.005**	**0.065**
IP-10	137.06 (116.67-176.64)	110.97 (70.87-177.73)	0.050	1.46 (0.96-2.21)	0.076	0.198	125.38 (104.25-185.00)	164.50 (143.30-232.00)	**0.048**	0.73 (0.54-0.98)	**0.034**	0.150
MCP-1	193.27 (147.65-236.02)	142.26 (94.15-202.15)	0.110	1.36 (0.90-2.05)	0.144	0.312	162.00 (102.00-233.95)	121.93 (87.28-213.42)	0.153	1.15 (0.83-1.61)	0.400	0.547
RANTES*	93.97 (76.19-98.42)	69.68 (33.06-86.93)	0.075	1.34 (0.89-2.02)	0.168	0.336	85.04 (73.12-98.91)	63.29 (56.20-80.38)	**<0.001**	1.28 (1.09-1.52)	**0.003**	**0.065**
SDF-1α	334.77 (303.88-522.21)	300.97 (238.48-370.98)	0.075	1.37 (0.94-1.99)	0.104	0.246	315.08 (267.25-379.50)	285.08 (255.30-313.35)	0.068	1.15 (1.00-1.31)	**0.045**	0.150
Growth factors												
EGF	40.00 (2.58-50.37)	28.01 (20.55-31.89)	**0.041**	2.13 (1.20-3.79)	**0.010**	**0.043**	36.25 (23.92-47.73)	32.71 (25.30-46.25)	0.114	1.05 (0.82-1.35)	0.702	0.869
FGF-2	41.51 (37.32-47.29)	37.78 (34.18-40.79)	**0.033**	1.67 (1.10-2.52)	**0.016**	**0.059**	42.94 (36.92-50.03)	38.15 (35.35-44.52)	**0.018**	1.09 (0.97-1.22)	0.133	0.266
HGF	21.50 (19.12-24.37)	16.95 (12.75-22.85)	0.248	1.13 (0.91-1.39)	0.262	0.401	21.67 (18.08-27.50)	21.79 (17.00-23.55)	0.563	1.00 (0.83-1.19)	0.959	1.000
NGF	36.85 (32.58-40.05)	34.36 (24.92-38.33)	0.657	1.08 (0.91-1.29)	0.377	0.490	35.10 (32.50-41.50)	33.50 (30.00-38.20)	0.136	1.00 (0.87-1.14)	0.982	1.000
PIGF-1	293.01 (210.08-352.22)	227.46 (177.09-289.52)	0.213	1.13 (0.83-1.53)	0.446	0.552	260.33 (209.50-329.83)	236.60 (198.85-262.20)	0.128	1.15 (0.98-1.34)	0.091	0.237
SCF	42.95 (34.89-53.72)	37.93 (26.67-50.70)	0.248	1.13 (0.87-1.47)	0.352	0.482	38.75 (32.63-49.25)	40.73 (32.20-49.30)	0.784	1.00 (0.83-1.20)	1.000	1.000

Note. Statistics: Values are expressed as median of fluorescence (interquartile range). Simple comparison between continuous variables were calculated by Wilcoxon test (**p[a]**). The AMR values were obtained a generalized linear mixed model (GLMMs) adjusted by de most significant variables, p-values were also shown (**p[b]**). *The RANTES data are expressed as $x10^2$ such given the high values obtained. Abbreviations: SC-b, PLWHIV who spontaneously clarify HCV at baseline; SC-f, PLWHIV patients who spontaneously clarify HCV after 48 weeks of follow-up; CHCb, PLWHIV chronically infected by HCV at baseline; CHCf, PLWHIV chronically infected by HCV 48 weeks after achievement sustained virological response (SVR) with the new direct-acting antivirals agents (DAAs); aAMR, arithmetic median ratio adjusted by the most significant variables; q, corrected level of significance by false discovery rate.

Supplementary Data 9. Comparison of biomarkers of cellular senescence between spontaneous clarifiers to HIV individuals after 48 weeks of follow-up.

	SC-f (n=12)	HIV (n=35)	p^a	AMR (IC95%)	p^b	q	aAMR (IC95%)	p^b	q
TAC	5.00 (4.59-5.24)	4.94 (4.37-6.01)	0.826	0.96 (0.83-1.11)	0.561	0.561	0.98 (0.85-1.23)	0.777	0.777
GSH	28.69 (22.84-31.05)	29.95 (27.24-35.40)	0.385	0.90 (0.76-1.05)	0.185	0.333	0.88 (0.75-1.04)	0.144	0.202
GSSG	6.74 (4.80-8.80)	17.08 (13.74-26.35)	0.131	0.56 (0.30-1.05)	0.072	0.288	0.44 (0.22-0.87)	**0.019**	0.140
GSH/GSSG	4.37 (3.60-5.90)	2.06 (1.11-2.61)	0.145	1.42 (0.71-2.85)	0.328	0.390	1.75 (0.89-3.45)	0.105	0.202
Nitrate	9.76 (6.65-15.16)	13.30 (9.03-20.42)	0.261	0.82 (0.54-1.24)	0.346	0.390	0.71 (0.47-1.07)	0.102	0.202
LP	0.44 (0.36-0.62)	0.85 (0.32-0.99)	**0.036**	0.61 (0.41-0.89)	**0.012**	0.108	0.63 (0.42-0.96)	**0.031**	0.140
PCC	0.17 (0.07-0.48)	0.14 (0.05-0.28)	0.453	1.45 (0.77-2.69)	0.244	0.366	1.38 (0.69-2.75)	0.358	0.403
DNA damage	2.73 (1.78-4.77)	4.14 (3.01-5.23)	0.109	0.76 (0.54-1.07)	0.114	0.288	0.76 (0.54-1.09)	0.133	0.202
RTL	0.25 (0.15-0.28)	0.29 (0.23-0.32)	0.142	0.85 (0.69-1.05)	0.128	0.288	0.86 (0.70-1.06)	0.157	0.202

Note. Statistics: values are expressed as median (interquartile range). Comparison between continuous variables: Wilcoxon test (**p^a**). The AMR values were obtained using a generalised linear model (GLM) adjusted by de most significant variables, p-values were also shown (**p^b**). Abbreviations: SC-f, PLWHIV patients who spontaneously clarify HCV after 48 weeks of follow-up; HIV, PLWHIV control group; AMR, arithmetic median rate; aAMR, arithmetic median ratio adjusted by the most significant variables; q, corrected level of significance by false discovery rate; TAC, total antioxidant capacity (nmole/µL); GSH, reduced glutathione (µM); GSSG, oxidized glutathione (µM); nitrate, (µM); LP, lipid peroxidation (nmole/mL) ($x10^3$); PCC, protein carbonyl content (nmole/mg); DNA damage (pg/mL) ($x10^3$); TL, telomere length.

Supplementary Data 10. Comparison of the senescence-associated secretory phenotype (SASP) in spontaneous clarifiers to HIV individuals after 48 weeks

	SC-f (n=12)	HIV (n=35)	p^a	AMR (IC95%)	p^b	q	aAMR (IC95%)	p^b	q
Th1/Th2									
GM-CSF	17.39 (15.30-18.79)	20.26 (15.08-26.75)	0.241	0.85 (0.71-1.01)	0.066	0.132	0.78 (0.66-0.93)	**0.006**	**0.047**
IFN-γ	55.78 (30.59-70.04)	28.52 (23.77-55.29)	0.079	1.10 (0.74-1.64)	0.626	0.730	1.18 (0.78-1.80)	0.431	0.560
IL-1β	15.07 (11.10-17.15)	17.75 (14.07-23.80)	0.057	0.77 (0.62-0.96)	**0.022**	**0.082**	0.76 (0.60-0.95)	**0.018**	**0.059**
IL-2	17.38 (15.48-20.46)	19.88 (14.59-25.40)	0.213	0.81 (0.66-0.99)	**0.047**	0.111	0.79 (0.64-0.99)	**0.040**	0.116
IL-6	18.70 (17.18-20.00)	23.00 (19.00-27.53)	0.732	0.73 (0.60-0.91)	**0.005**	**0.043**	0.72 (0.57-0.90)	**0.005**	**0.047**
IL-8	73.59 (68.63-77.60)	60.00 (54.81-75.02)	**0.045**	1.15 (0.98-1.35)	0.095	0.166	1.14 (0.96-1.35)	0.146	0.253
IL-13	13.79 (12.04-17.50)	17.00 (12.33-21.99)	0.081	0.77 (0.62-0.96)	**0.021**	**0.082**	0.74 (0.59-0.94)	**0.014**	**0.059**
IL-18	403.98 (144.46-533.83)	94.23 (47.31-241.45)	**0.015**	1.56 (0.81-3.02)	0.183	0.280	1.70 (0.84-3.43)	0.142	0.253
TNF-α	19.55 (17.51-22.55)	18.59 (15.94-24.62)	0.942	0.98 (0.82-1.18)	0.838	0.872	0.98 (0.80-1.20)	0.847	0.957
Inflammatory cytokines									
IL-1α	56.63 (51.10-65.76)	48.70 (43.49-55.64)	**0.019**	1.42 (1.11-1.80)	**0.005**	**0.043**	1.43 (1.10-1.86)	**0.008**	**0.047**
IL-1RA	62.03 (27.70-81.65)	29.78 (22.09-50.06)	0.064	1.54 (0.99-2.38)	0.053	0.115	1.83 (1.16-2.89)	**0.009**	**0.047**
IL-7	20.25 (18.54-20.74)	21.98 (19.00-27.61)	0.062	0.84 (0.72-0.99)	**0.032**	**0.088**	0.82 (0.69-0.96)	**0.017**	**0.059**
IL-15	20.58 (17.85-24.44)	22.00 (19.25-27.16)	0.379	0.85 (0.78-1.05)	0.135	0.219	0.84 (0.66-1.05)	0.123	0.253
TNF-β	83.20 (66.45-89.63)	73.88 (59.00-96.85)	0.798	0.99 (0.79-1.24)	0.913	0.913	1.02 (0.80-1.30)	0.894	0.964
Chemokines									
Eotaxin	199.05 (145.80-222.92)	101.70 (59.69-161.30)	**0.010**	1.61 (1.08-2.40)	**0.020**	**0.082**	1.36 (0.90-2.07)	0.145	0.253
Gro-α	59.82 (48.31-67.64)	48.93 (40.50-58.34)	**0.045**	1.19 (1.02-1.38)	**0.027**	**0.088**	1.16 (0.99-1.35)	0.060	0.142
IP-10	137.06 (116.67-176.64)	119.27 (82.72-209.16)	0.479	0.92 (0.65-1.30)	0.646	0.730	0.79 (0.56-1.11)	0.176	0.286
MCP-1	193.27 (147.65-236.02)	143.00 (100.06-245.20)	0.354	1.12 (0.85-1.49)	0.430	0.621	1.07 (0.80-1.43)	0.656	0.794
RANTES*	93.97 (76.19-98.42)	77.94 (58.63-91.79)	0.054	1.18 (0.97-1.44)	0.096	0.166	1.14 (0.93-1.41)	0.206	0.298
SDF-1α	334.77 (303.88-522.21)	266.50 (233.32-339.31)	**0.008**	1.35 (1.35-1.66)	**0.005**	**0.043**	1.39 (1.12-1.72)	**0.003**	**0.047**
Growth factors									
EGF	40.00 (2.58-50.37)	34.58 (22.67-47.88)	0.479	1.04 (0.76-1.42)	0.826	0.872	1.08 (0.77-1.51)	0.672	0.794
FGF-2	41.51 (37.32-47.29)	38.25 (32.01-42.50)	0.140	1.16 (1.01-1.32)	**0.034**	**0.088**	1.09 (0.96-1.23)	0.198	0.298
HGF	21.50 (19.12-24.37)	23.50 (16.00-26.33)	0.751	0.93 (0.76-1.15)	0.519	0.675	0.88 (0.71-1.09)	0.227	0.311
NGF	36.85 (32.58-40.05)	33.83 (29.84-39.70)	0.464	1.03 (0.92-1.16)	0.589	0.729	1.01 (0.89-1.14)	0.927	0.964
PIGF-1	293.01 (210.08-352.22)	231.17 (189.54-267.21)	0.054	1.29 (1.06-1.57)	**0.010**	**0.065**	1.23 (0.99-1.51)	0.052	0.135
SCF	42.95 (34.89-53.72)	40.65 (36.02-50.22)	0.608	1.05 (0.91-1.21)	0.493	0.675	1.00 (0.86-1.16)	0.994	0.994

Note. Statistics: Values are expressed as median of fluorescence (interquartile range). Comparison between continuous variables: Wilcoxon test (p^a). The AMR values were obtained using a generalised linear model (GLM) adjusted by de most significant variables, p-values were also shown (p^b). *The RANTES data are expressed as $x10^2$ such given the high values obtained. Abbreviations: SC-f, PLWHIV patients who spontaneously clarify HCV after 48 weeks of follow-up; HIV, PLWHIV control group; aAMR, arithmetic median ratio adjusted by the most significant variables; q, corrected level of significance by false discovery rate.

Supplementary Data 11. Comparison of biomarkers of cellular senescence between HCV chronic infected patients and HIV individuals after 48 weeks.

	CHC-f (n=23)	HIV (n=35)	p^a	AMR (IC95%)	p^b	q	aAMR (IC95%)	p^b	q
TAC	4.85 (4.44-5.46)	4.94 (4.37-6.01)	0.583	0.94 (0.84-1.05)	0.235	0.981	0.94 (0.84-1.05)	0.263	0.855
GSH	29.92 (26.93-38.72)	29.95 (27.24-35.40)	0.745	1.03 (0.91-1.16)	0.695	0.981	1.01 (0.89-1.14)	0.883	0.949
GSSG	12.43 (10.18-17.11)	17.08 (13.74-26.35)	0.069	0.71 (0.49-1.04)	0.078	0.702	0.77 (0.52-1.13)	0.177	0.855
GSH/GSSG	2.24 (2.06-2.96)	2.06 (1.11-2.61)	0.243	0.85 (0.54-1.33)	0.467	0.981	0.80 (0.51-1.24)	0.314	0.855
Nitrate	13.62 (8.92-20.11)	13.30 (9.03-20.42)	0.933	0.95 (0.72-1.26)	0.724	0.981	0.99 (0.75-1.31)	0.949	0.949
LP	0.68 (0.35-1.16)	0.85 (0.32-0.99)	0.943	1.00 (0.71-1.39)	0.981	0.981	0.95 (0.68-1.35)	0.791	0.949
PCC	0.14 (0.04-0.23)	0.14 (0.05-0.28)	0.591	1.03 (0.63-1.70)	0.894	0.981	1.03 (0.60-1.76)	0.924	0.949
DNA damage	3.92 (2.52-6.20)	4.14 (3.01-5.23)	0.729	0.97 (0.74-1.28)	0.848	0.981	1.12 (0.87-1.45)	0.380	0.855
RTL	0.24 (0.16-0.37)	0.29 (0.23-0.32)	0.178	0.98 (0.79-1.20)	0.814	0.981	0.95 (0.76-1.18)	0.637	0.949

Note. Statistics: values are expressed as median (interquartile range). Comparison between continuous variables: Wilcoxon test (p^a). The AMR values were obtained using a generalised linear model (GLM) adjusted by de most significant variables, p-values were also shown (p^b). Abbreviations: ; CHCf, PLWHIV chronically infected by HCV 48 weeks after achievement sustained virological response (SVR) with the new direct-acting antivirals agents (DAAs); HIV, PLWHIV control group; AMR, arithmetic median rate; aAMR, arithmetic median ratio adjusted by the most significant variables; q, corrected level of significance by false discovery rate; TAC, total antioxidant capacity (nmole/µL); GSH, reduced glutathione (µM); GSSG, oxidized glutathione (µM); nitrate, (µM); LP, lipid peroxidation (nmole/mL) ($x10^3$); PCC, protein carbonyl content (nmole/mg); DNA damage (pg/mL) ($x10^3$); TL, telomere length.

Supplementary Data 12. Comparison of the senescence-associated secretory phenotype (SASP) in patients with chronic HCV infection to HIV individuals after 48 weeks

	CHC-f (n=23)	HIV (n=35)	p^a	AMR (IC95%)	p^b	q	aAMR (IC95%)	p^b	q
Th1/Th2									
GM-CSF	20.46 (14.00-24.48)	20.26 (15.08-26.75)	0.732	0.98 (0.83-1.15)	0.772	0.857	1.01 (0.86-1.19)	0.917	0.954
IFN-γ	27.46 (24.75-41.00)	28.52 (23.77-55.29)	0.930	0.83 (0.61-1.13)	0.240	0.367	0.86 (0.62-1.20)	0.378	0.546
IL-1β	15.67 (13.31-17.85)	17.75 (14.07-23.80)	0.087	0.82 (0.70-0.97)	**0.023**	**0.100**	0.88 (0.74-1.04)	0.142	0.264
IL-2	16.80 (12.54-18.50)	19.88 (14.59-25.40)	**0.039**	0.80 (0.68-0.95)	**0.010**	**0.065**	0.82 (0.69-0.97)	**0.023**	0.120
IL-6	19.44 (17.00-20.08)	23.00 (19.00-27.53)	**0.039**	0.82 (0.69-0.99)	**0.036**	0.117	0.82 (0.68-0.99)	**0.041**	0.178
IL-8	73.00 (60.17-19.38)	60.00 (54.81-75.02)	0.055	1.09 (0.97-1.23)	0.168	0.291	1.10 (0.97-1.25)	0.156	0.270
IL-13	15.00 (12.58-16.00)	17.00 (12.33-21.99)	0.100	0.82 (0.70-0.97)	**0.022**	**0.100**	0.85 (0.71-1.01)	0.061	0.179
IL-18	77.38 (56.95-258.83)	94.23 (47.31-241.45)	0.867	0.81 (0.47-1.39)	0.443	0.640	--	--	--
TNF-α	18.50 (14.88-20.25)	18.59 (15.94-24.62)	0.249	0.88 (0.76-1.01)	0.073	0.158	0.88 (0.76-1.03)	0.112	0.224
Inflammatory cytokines									
IL-1α	56.71 (47.35-73.83)	48.70 (43.49-55.64)	**0.021**	1.26 (1.06-1.50)	**0.008**	**0.065**	1.24 (1.04-1.49)	**0.017**	0.111
IL-1RA	30.67 (21.60-39.58)	29.78 (22.09-50.06)	0.880	0.89 (0.64-1.23)	0.475	0.650	0.93 (0.65-1.34)	0.706	0.806
IL-7	19.50 (16.29-23.65)	21.98 (19.00-27.61)	**0.043**	0.86 (0.75-0.99)	**0.032**	0.117	0.87 (0.76-0.99)	**0.049**	0.179
IL-15	21.13 (19.25-24.00)	22.00 (19.25-27.16)	0.572	0.88 (0.75-1.03)	0.107	0.199	0.90 (0.77-1.06)	0.211	0.343
TNF-β	75.25 (71.50-92.92)	73.88 (59.00-96.85)	0.441	1.06 (0.88-1.28)	0.523	0.680	1.06 (0.87-1.28)	0.558	0.725
Chemokines									
Eotaxin	140.92 (90.92-217.38)	101.70 (59.69-161.30)	0.087	1.36 (0.98-1.89)	0.071	0.158	1.34 (0.95-1.87)	0.092	0.217
Gro-α	60.50 (53.75-69.50)	48.93 (40.50-58.34)	**0.002**	1.22 (1.08-1.38)	**0.001**	**0.013**	1.25 (1.10-1.41)	**<0.001**	**0.008**
IP-10	125.38 (104.25-185.00)	119.27 (82.72-209.16)	0.639	1.04 (0.77-1.40)	0.791	0.857	1.12 (0.81-1.55)	0.508	0.695
MCP-1	162.00 (102.00-233.95)	143.00 (100.06-245.20)	0.824	1.04 (0.82-1.32)	0.742	0.857	0.95 (0.75-1.19)	0.638	0.790
RANTES*	85.04 (73.12-98.91)	77.94 (58.63-91.79)	**0.048**	1.14 (0.98-1.32)	0.086	0.172	1.15 (0.99-1.34)	0.062	0.179
SDF-1α	315.08 (267.25-379.50)	266.50 (233.32-339.31)	**0.035**	1.10 (0.95-1.28)	0.185	0.301	1.10 (0.94-1.28)	0.227	0.347
Growth factors									
EGF	36.25 (23.92-47.73)	34.58 (22.67-47.88)	0.489	0.98 (0.77-1.24)	0.846	0.880	1.00 (0.77-1.29)	0.982	0.982
FGF-2	42.94 (36.92-50.03)	38.25 (32.01-42.50)	**0.008**	1.20 (1.08-1.33)	**0.001**	**0.013**	1.25 (1.12-1.39)	**<0.001**	**0.008**
HGF	21.67 (18.08-27.50)	23.50 (16.00-26.33)	0.757	0.99 (0.84-1.17)	0.897	0.897	1.03 (0.87-1.23)	0.713	0.806
NGF	35.10 (32.50-41.50)	33.83 (29.84-39.70)	**0.048**	1.09 (1.00-1.20)	0.061	0.158	1.08 (0.98-1.19)	0.109	0.224
PIGF-1	260.33 (209.50-329.83)	231.17 (189.54-267.21)	0.114	1.17 (1.06-1.36)	**0.043**	0.124	1.14 (0.98-1.34)	0.090	0.217
SCF	38.75 (32.63-49.25)	40.65 (36.02-50.22)	0.756	1.03 (0.90-1.18)	0.655	0.811	1.01 (0.88-1.15)	0.910	0.954

Note. Statistics: Values are expressed as median of fluorescence (interquartile range). Comparison between continuous variables: Wilcoxon test (p^a). The AMR values were obtained using a generalised linear model (GLM) adjusted by de most significant variables, p-values were also shown (p^b). *The RANTES data are expressed as $x10^2$ such given the high values obtained. Due to the extreme values of some covariates, the aAMR of IL-18 is extremely low. Abbreviations: CHCf, PLWHIV chronically infected by HCV 48 weeks after achievement sustained virological response (SVR) with the new direct-acting antivirals agents (DAAs); HIV, PLWHIV control group; aAMR, arithmetic median ratio adjusted by the most significant variables; q, corrected level of significance by false discovery rate.

Supplementary Data 13. Comparison of biomarkers of cellular senescence between CHC and SC individuals after 48 weeks.

	CHC-f (n=23)	SC-f (n=12)	p[a]	AMR (IC95%)	p[b]	q	aAMR (IC95%)	p[b]	q
TAC	4.85 (4.44-5.46)	5.00 (4.59-5.24)	0.835	0.98 (0.87-1.09)	0.661	0.661	0.92 (0.81-1.05)	0.233	0.375
GSH	29.92 (26.93-38.72)	28.69 (22.84-31.05)	0.276	1.14 (0.94-1.39)	0.175	0.477	1.25 (1.00-1.55)	**0.049**	0.110
GSSG	12.43 (10.18-17.11)	6.74 (4.80-8.80)	**0.048**	1.27 (0.78-2.06)	0.331	0.534	2.26 (1.27-4.04)	**0.006**	**0.027**
GSH/GSSG	2.24 (2.06-2.96)	4.37 (3.60-5.90)	0.058	0.60 (0.40-0.89)	**0.010**	**0.050**	0.45 (0.30-0.70)	**<0.001**	**0.008**
Nitrate	13.62 (8.92-20.11)	9.76 (6.65-15.16)	0.276	1.16 (0.76-1.77)	0.490	0.561	1.30 (0.75-2.23)	0.350	0.450
LP	0.68 (0.35-1.16)	0.44 (0.36-0.62)	0.398	1.64 (1.12-2.42)	**0.011**	**0.050**	1.68 (1.05-2.68)	**0.029**	**0.087**
PCC	0.14 (0.04-0.23)	0.17 (0.07-0.48)	0.371	0.72 (0.35-1.46)	0.356	0.534	0.68 (0.27-1.71)	0.415	0.467
DNA damage	3.92 (2.52-6.20)	2.73 (1.78-4.77)	0.246	1.28 (0.87-1.89)	0.212	0.477	1.28 (0.84-1.95)	0.250	0.375
RTL	0.24 (0.16-0.37)	0.25 (0.15-0.28)	0.722	1.15 (0.77-1.70)	0.499	0.561	1.10 (0.76-1.60)	0.604	0.604

Note. Statistics: values are expressed as median (interquartile range). Comparison between continuous variables: Wilcoxon test (**p[a]**). The AMR values were obtained using a generalised linear model (GLM) adjusted by de most significant variables, p-values were also shown (**p[b]**). Abbreviations: SC-f, PLWHIV patients who spontaneously clarify HCV after 48 weeks of follow-up; CHCf, PLWHIV chronically infected by HCV 48 weeks after achievement sustained virological response (SVR) with the new direct-acting antivirals agents (DAAs); aAMR, arithmetic median ratio adjusted by the most significant variables; q, corrected level of significance by false discovery rate; TAC, total antioxidant capacity (nmole/µL); GSH, reduced glutathione (µM); GSSG, oxidized glutathione (µM); nitrate, (µM); LP, lipid peroxidation (nmole/mL) ($x10^3$); PCC, protein carbonyl content (nmole/mg); DNA damage (pg/mL) ($x10^3$); TL, telomere length.

Supplementary Data 14. Comparison of the senescence-associated secretory phenotype (SASP) between CHC and SC individuals after 48 weeks.

	CHC-f (n=23)	SC-f (n=12)	p[a]	AMR (IC95%)	p[b]	q	aAMR (IC95%)	p[b]	q
Th1/Th2									
GM-CSF	20.46 (14.00-24.48)	17.39 (15.30-18.79)	0.381	1.15 (0.96-1.38)	0.134	0.581	1.12 (0.90-1.40)	0.298	0.999
IFN-γ	27.46 (24.75-41.00)	55.78 (30.59-70.04)	**0.034**	0.75 (0.54-1.04)	0.082	0.510	0.78 (0.56-1.11)	0.164	0.999
IL-1β	15.67 (13.31-17.85)	15.07 (11.10-17.15)	0.548	1.07 (0.89-1.28)	0.485	0.777	1.13 (0.90-1.41)	0.291	0.999
IL-2	16.80 (12.54-18.50)	17.38 (15.48-20.46)	0.526	0.99 (0.84-1.17)	0.883	0.883	0.99 (0.81-1.20)	0.899	0.999
IL-6	19.44 (17.00-20.08)	18.70 (17.18-20.00)	0.278	1.12 (0.95-1.33)	0.171	0.635	1.08 (0.89-1.31)	0.436	0.999
IL-8	73.00 (60.17-19.38)	73.59 (68.63-77.60)	0.797	0.95 (0.84-1.08)	0.415	0.777	0.98 (0.85-1.13)	0.767	0.999
IL-13	15.00 (12.58-16.00)	13.79 (12.04-17.50)	0.420	1.06 (0.92-1.23)	0.396	0.777	1.09 (0.92-1.28)	0.329	0.999
IL-18	77.38 (56.95-258.83)	403.98 (144.46-533.83)	**0.014**	0.52 (0.28-0.96)	**0.036**	0.321	0.54 (0.28-1.04)	0.066	0.858
TNF-α	18.50 (14.88-20.25)	19.55 (17.51-22.55)	0.057	0.89 (0.78-1.02)	0.098	0.510	0.96 (0.82-1.12)	0.593	0.999
Inflammatory cytokines									
IL-1α	56.71 (47.35-73.83)	56.63 (51.10-65.76)	0.986	0.89 (0.65-1.22)	0.469	0.777	0.98 (0.70-1.38)	0.907	0.999
IL-1RA	30.67 (21.60-39.58)	62.03 (27.70-81.65)	**0.045**	0.58 (0.39-0.87)	**0.009**	0.234	0.59 (0.38-0.91)	**0.016**	0.416
IL-7	19.50 (16.29-23.65)	20.25 (18.54-20.74)	0.851	1.02 (0.87-1.20)	0.772	0.836	1.00 (0.83-1.20)	0.999	0.999
IL-15	21.13 (19.25-24.00)	20.58 (17.85-24.44)	0.526	1.04 (0.91-1.18)	0.596	0.792	0.97 (0.84-1.12)	0.636	0.999
TNF-β	75.25 (71.50-92.92)	83.20 (66.45-89.63)	0.719	1.08 (0.87-1.33)	0.508	0.777	1.03 (0.81-1.31)	0.808	0.999
Chemokines									
Eotaxin	140.92 (90.92-217.38)	199.05 (145.80-222.92)	0.263	0.85 (0.56-1.28)	0.422	0.777	0.89 (0.55-1.44)	0.635	0.999
Gro-α	60.50 (53.75-69.50)	59.82 (48.31-67.64)	0.644	1.03 (0.88-1.20)	0.713	0.806	1.00 (0.83-1.20)	0.992	0.999
IP-10	125.38 (104.25-185.00)	137.06 (116.67-176.64)	1.000	1.13 (0.81-1.58)	0.473	0.777	0.98 (0.64-1.51)	0.923	0.999
MCP-1	162.00 (102.00-233.95)	193.27 (147.65-236.02)	0.461	0.93 (0.68-1.27)	0.643	0.792	0.97 (0.68-1.40)	0.875	0.999
RANTES*	85.04 (73.12-98.91)	93.97 (76.19-98.42)	0.719	0.96 (0.82-1.13)	0.646	0.792	0.94 (0.77-1.15)	0.567	0.999
SDF-1α	315.08 (267.25-379.50)	334.77 (303.88-522.21)	0.440	0.820 (0.68-0.99)	**0.037**	0.321	0.86 (0.68-1.09)	0.220	0.999
Growth factors									
EGF	36.25 (23.92-47.73)	40.00 (2.58-50.37)	0.905	0.94 (0.72-1.24)	0.670	0.792	0.92 (0.67-1.26)	0.610	0.999
FGF-2	42.94 (36.92-50.03)	41.51 (37.32-47.29)	0.644	1.04 (0.90-1.19)	0.616	0.792	1.04 (0.87-1.23)	0.696	0.999
HGF	21.67 (18.08-27.50)	21.50 (19.12-24.37)	0.526	1.06 (0.90-1.25)	0.504	0.777	1.08 (0.89-1.31)	0.462	0.999
NGF	35.10 (32.50-41.50)	36.85 (32.58-40.05)	0.278	1.06 (0.96-1.17)	0.261	0.777	0.99 (0.89-1.10)	0.805	0.999
PIGF-1	260.33 (209.50-329.83)	293.01 (210.08-352.22)	0.548	0.91 (0.74-1.11)	0.346	0.777	0.92 (0.71-1.20)	0.549	0.999
SCF	38.75 (32.63-49.25)	42.95 (34.89-53.72)	0.400	0.98 (0.80-1.20)	0.853	0.883	0.93 (0.74-1.18)	0.556	0.999

Note. Statistics: Values are expressed as median of fluorescence (interquartile range). Comparison between continuous variables: Wilcoxon test (**p[a]**). The AMR values were obtained using a generalised linear model (GLM) adjusted by de most significant variables, p-values were also shown (**p[b]**). *The RANTES data are expressed as $x10^2$ such given the high values obtained. Abbreviations: SC-f, PLWHIV patients who spontaneously clarify HCV after 48 weeks of follow-up; CHCf, PLWHIV chronically infected by HCV 48 weeks after achievement sustained virological response (SVR) with the new direct-acting antivirals agents (DAAs); aAMR, arithmetic median ratio adjusted by the most significant variables; q, corrected level of significance by false discovery rate.