SUPPLEMENTARY APPENDIX

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: Fernández J, Clària J, Amorós A, et al. Albumin Treatment in Decompensated Cirrhosis: Effects On Systemic And Portal Hemodynamics And On Systemic Inflammation

Supplementary Appendix

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Supplementary Methods

Inclusion and Exclusion Criteria In The Pilot PRECIOSA Study

Inclusion criteria: age between 18 and 80 years, presence of ascites, renal dysfunction [serum creatinine≥ 1.2 mg/dl, blood urea nitrogen (BUN)≥ 25 mg/dl or dilutional hyponatremia (serum sodium ≤ 130 mEq/l)] and need for diuretic treatment to prevent ascites recurrence (at least 200 mg of spironolactone or 100 mg of spironolactone and 40 mg of furosemide).

Exclusion criteria: hepatorenal syndrome, refractory ascites (> 1 paracentesis/month), neoplastic disease including hepatocellular carcinoma over the Milan criteria, prior insertion of a transjugular intrahepatic portosystemic shunt, bacterial infections or GI bleeding within the previous 15 days, moderate to severe chronic heart (NYHA class II or IV) or pulmonary disease (GOLD III or IV), previous transplantation, active drug consumption, organic nephropathy, HIV infection, pregnancy and mental state that prevents the patient understand the nature, extent and consequences of the study, except for hepatic encephalopathy.

Inclusion and Exclusion Criteria In The INFECIR-2 Study

Inclusion criteria: age ≥18 years; diagnosis of liver cirrhosis established by histology or by the combination of clinical, analytical and ultrasonographic data; diagnosis of urinary infection, pneumonia, spontaneous or secondary bacteremia, skin and soft tissue infection, acute cholangitis or suspected bacterial infection; analytical data of renal and/or liver dysfunction [serum creatinine ≥ 1.2 mg/dl, serum sodium ≤ 130 mEq/l, serum bilirubin ≥4 mg/dl; patients with pneumonia or bacteremia required the presence of 1 or more of these criteria for inclusion, 2 or more were required in the rest]. Additionally, patients with urinary or suspected infections required the presence of at least 1 diagnostic criterion of systemic inflammatory response syndrome (SIRS) and serum CRP levels ≥1 mg/dl to be included.

Exclusion criteria: > 72h after infection diagnosis; acute or sub-acute liver failure; septic shock; endocarditis; fungal infection; severe acute respiratory distress syndrome ($PaO_2/Fi0_2$ ≤100), active or recent variceal bleeding (unless controlled for > 48h); type-1 HRS (IAC criteria); ACLF grade-3 (3 or more organ failures defined according to the Canonic Study criteria); renal replacement therapy; malignancy (except for hepatocellular carcinoma within Milan criteria or non-melanocytic skin cancer); moderate or severe chronic heart failure (NYHA class II, III or IV); severe chronic pulmonary disease (GOLD IV); previous liver transplantation; severe psychiatric disorders that prevent the patient from giving informed consent and from making autonomous decisions; HIV infection (except for patients under antiretroviral therapy with undetectable viral load, CD4 levels > 200/mm^3 and no previous history of opportunistic infections diagnostic of AIDS); contraindications to albumin (allergy, signs of pulmonary edema); albumin administration (≥ 80 g) in the last 2 days; spontaneous bacterial peritonitis co-infection; administration of any investigational drug within 90 days prior to randomization; pre-menopausal women not practicing an acceptable method of birth control; refusal to participate; patients who could not provide prior informed consent and when there was documented evidence that the patient had no legal surrogate decision maker and it appeared unlikely that the patient would regain consciousness or sufficient ability to provide delayed informed consent; physician and team not committed to intensive care if needed.

Laboratory methods

PRA was measured using radioimmunoassay (GammaCoat Plasma Renin Activity, DiaSorin, Saluggia, Italy, normal values: 0.3-2.5 ng/mL.h); PRC was measured using a chemiluminescent immunoassay Liaison Direct Renin on the LIAISON Analyzer (DiaSorin) (normal values 2.8-39.9 microUI/ml); ANP was measured by radioimmunoassay (Euro-Diagnostica, Arnhem, The Netherlands); BNP was determined by chemiluminiscence immunoassay run in an Advia Centaur XP (Siemens Health Care, Tarrytown, NY) (normal values: 9-24 f mol/l and 4-37 pmol/ml). The plasma concentration of IL-6 was measured by ELISA (Diasource, Louvain-la-Neuve, Belgium)

(normal values <5 pg/mL). Serum albumin measurement was performed using standard routine methods. Plasma levels of a panel of 24 inflammatory cytokines, 10 chemokines, 4 growth factors, 2 markers of endothelial dysfunction and 2 markers of coagulation/platelet function were performed using two multiplex immunoassays based on Luminex multi-analyte profiling technology (Human Cytokine/Chemokine Magnetic bead panel Premixed 38 Plex Kit and Human Sepsis Magnetic bead panel 1, Merk Millipore, Billerica, MA). Among the 24 cytokines measured, 11 were not detectable in any patient/healthy subject and were not included in this analysis. Signals were read in a Luminex 100 Bioanalyzer (Luminex Corp., Austin, TX). A five-parameter logistic regression model was used to create standard curves and to calculate the concentration of each sample with the standard version of the Milliplex Analyst software (Merck Millipore). The lower limit of detection of each analyte is indicated in supplementary table 2. Normal values given in table 2 were obtained from 24 healthy volunteers aged 18-65 years. The plasma levels of 2 soluble markers of macrophage activation (sCD163 and sMR/sCD206) were determined by enzyme-linked immunosorbent assays (Antibodies on line, Aachen, Germany).

Supplementary Table 1. Baseline Characteristics And Outcomes Of Patients Included In The Pilot PRECIOSA Study.*

	Patients (N=18)
Baseline data	
Age (years)	56 (50-64)
Male sex, n (%)	13 (72)
Alcoholic cirrhosis, n (%)	12 (67)
Previous variceal bleeding, n (%)	5 (28)
ß-blockers, n (%)	7 (39)
Previous SBP, n (%)	5 (28)
Long-term norfloxacin prophylaxis, n (%)	8 (44)
Previous hepatic encephalopathy, n (%)	7 (39)
Diabetes mellitus, n (%)	3 (17)
HCC, n (%)	1 (6)
Mild hepatic encephalopathy, n (%)	2 (11)
Ascites, n (%)	18 (100)
Blood leukocyte count, $x10^9$/L	4.2 (3.3-7.3)
Hematocrit, %	30 (27-34)
Platelet count, $x10^9$/L	88 (60-169)
Serum bilirubin, mg/dL	2.0 (1.4-4.0)
Serum albumin, g/L	27 (25-36)
INR	1.4 (1.2-1.8)
Serum creatinine, mg/dL	1.2 (0.8-1.4)
BUN, mg/dL	23 (15-35)
Serum sodium, mEq/L	132 (128-135)
Serum C-reactive protein, mg/dL	0.7 (0.3-1.1)
Child-Pugh score, points	9 (7-10)
MELD score, points	16 (13-17)
Main complications during 3-month follow-up	
Variceal bleeding, n (%)	2 (11)
Other gastrointestinal bleeding, n (%)	2 (11)
Non-SBP infections, n (%)	4 (22)

*The pilot PRECIOSA study was an open-label, multicenter, nonrandomized (single-group), prospective, phase 4 investigation of albumin treatment in patients with decompensated cirrhosis without bacterial infection. Continuous variables are expressed as median (interquartile range). SBP denotes spontaneous bacterial peritonitis, HCC hepatocellular carcinoma, INR international normalized ratio, BUN blood urea nitrogen, and MELD Model for End-Stage Liver Disease.

Supplementary Table 2. Lower Limit Of Detection, Expressed As The Minimun Detectable Concentration, For Each Analyte Measured In The Study*

Analyte	Minimum Detectable Concentration
EGF (pg/ml)	2.8
FGF-2 (pg/ml)	7.6
Eotaxin (pg/ml)	4.0
TGF-α (pg/ml)	0.8
G-CSF (pg/ml)	1.8
Flt-3L (pg/ml)	5.4
GM-CSF (pg/ml)	7.5
Fractalkine (pg/ml)	22.7
IFNα2 (pg/ml)	2.9
IFNγ (pg/ml)	0.8
GROα (pg/ml)	9.9
IL-10 (pg/ml)	1.1
MCP-3 (pg/ml)	3.8
IL-12P40 (pg/ml)	7.4
MDC (pg/ml)	3.6
IL-12P70 (pg/ml)	0.6
IL-13 (pg/ml)	1.3
IL-15 (pg/ml)	1.2
sCD40L (pg/ml)	5.1
IL-17 (pg/ml)	0.7
IL-1RA (pg/ml)	8.3
IL-1α (pg/ml)	9.4
IL-9 (pg/ml)	1.2
IL-1β (pg/ml)	0.8
IL-2 (pg/ml)	1.0
IL-3 (pg/ml)	0.7
IL-4 (pg/ml)	4.5
IL-5 (pg/ml)	0.5
IL-6 (pg/ml)	0.9
IL-7 (pg/ml)	1.4
IL-8 (pg/ml)	0.4
IP-10 (pg/ml)	8.6
MCP-1 (pg/ml)	1.9
MIP-1α (pg/ml)	2.9
MIP-1β (pg/ml)	3.0
TNFα (pg/ml)	0.7
TNFβ (pg/ml)	1.5
VEGF (pg/ml)	26.3
sICAM-1 (pg/ml)	17.7
sVCAM-1 (pg/ml)	10.7
tPAI-1 (pg/ml)	3.2
MIF (pg/ml)	2.7

*Minimum Detectable Concentration was calculated using MILLIPLEX Analyst 5.1. It measures the true limits of detection for an assay by mathematically determining what the empirical Minimum Detectable Concentration would be if an infinite number of standard concentrations were run for the assay under the same conditions.

Supplementary Table 3. Plasma Levels of Chemokines, Growth Factors, Markers Of Macrophage Activation, And Markers of Endothelial Dysfunction And Of Coagulation/Platelet Function, At Baseline And The 6th Week Of Treatment in Patients Receiving Either Low Albumin Dosage (LAlbD) or High Albumin Dosage (HAlbD) in the Pilot PRECIOSA Study.*

Variable	LAlbD group (N=10)				HAlbD Group (N=5)				P Value for Between-Group Comparison	
	Undetectable Levels	Baseline Cytokine Level	Absolute Change From Baseline	Percentage Change from Baseline	Undetectable Levels	Baseline Cytokine Level	Absolute Change from Baseline	Percentage Change From Baseline	Absolute Change from Baseline	Percentage Change from Baseline
	no. (%)	*Median (IQR) — pg/mL*	*Median (IQR) — pg/mL*	*Median (IQR) — %*	*no. (%)*	*Median (IQR) — pg/mL*	*Median (IQR) — pg/mL*	*Median (IQR) — %*		
Chemokines										
GROα/CXCL1	0 (0)	675.0 (256.0 to 916.2)	76.2 (-100.0 to 120.5)	19.1 (-19.0 to 58.4)	1 (20)	509.9 (287.9 to 1,717.1)	-157.6 (-1,230.1 to -65.5)	-31.3 (-57.1 to -10.5)	0.10	0.08
MCP-1/CCL2	0 (0)	307.1 (244.1 to 375.0)	-2.9 (-33.4 to 141.3)	-1.6 (-9.0 to 57.6)	0 (0)	292.8 (263.1 to 341.6)	107.4 (53.0 to 107.9)	20.8 (18.1 to 31.4)	0.66	0.76
MIP-1α/CCL3	4 (40)	7.0 (6.8 to 10.8)	-4.3 (-7.0 to 3.6)	-57.4 (-100.0 to 12.7)	1 (20)	6.6 (4.0 to 23.5)	-2.1 (-7.4 to -1.1)	-29.4 (-37.7 to -13.1)	0.75	0.59
MIP-1β/CCL4	0 (0)	41.7 (15.2 to 65.2)	2.8 (-9.8 to 5.4)	13.6 (-9.7 to 34.6)	0 (0)	35.3 (30.5 to 41.4)	-11.8 (-20.4 to -9.6)	-45.6 (-48.8 to -33.3)	0.07	0.02
MCP-3/CCL7	2 (20)	7.2 (3.8 to 14.7)	0.6 (-1.9 to 4.2)	15.7 (-17.7 to 42.3)	1 (20)	14.1 (4.5 to 23.3)	-3.7 (-12.9 to 0.0)	-26.2 (-55.2 to 5.1)	0.13	0.23
IL-8/CXCL8	0 (0)	48.8 (34.0 to 78.6)	-7.4 (-11.1 to 4.3)	-15.0 (-26.1 to 15.9)	0 (0)	75.1 (50.8 to 106.2)	-32.1 (-47.9 to -13.8)	-37.3 (-42.8 to -27.2)	0.08	0.10
IP-10/CXCL10	0 (0)	352.1 (187.2 to 509.9)	29.3 (-24.9 to 283.6)	15.6 (-9.7 to 85.9)	0 (0)	623.9 (187.8 to 830.5)	52.7 (-218.2 to 66.8)	35.6 (-35.0 to 40.3)	0.76	0.43
Eotaxin/CXCL11	0 (0)	126.8 (75.3 to 151.6)	11.1 (-12.4 to 31.4)	7.4 (-9.2 to 24.9)	0 (0)	128.7 (111.5 to 134.0)	-5.9 (-29.4 to -0.7)	-2.9 (-26.3 to -0.5)	0.29	0.36
Fractalkine/CX3CL1	2 (20)	45.3 (21.1 to 430.2)	-11.7 (-228.1 to 1.7)	-27.0 (-64.0 to 5.8)	1 (20)	22.7 (14.4 to 31.5)	-6.1 (-6.8 to -2.8)	-23.3 (-59.3 to -8.6)	0.49	0.73
MDC/CCL22	0 (0)	733.9 (547.0 to 1,289.0)	72.8 (-119.7 to 105.9)	6.6 (-26.2 to 17.8)	0 (0)	573.2 (529.9 to 809.5)	164.8 (36.9 to 193.8)	22.5 (8.4 to 28.8)	0.24	0.16
Growth Factors										
EGF	2 (20)	37.3 (12.9 to 63.3)	-3.7 (-15.3 to 11.0)	-10.9 (-38.4 to 134.1)	2 (40)	5.2 (5.2 to 45.4)	4.8 (-2.4 to 6.9)	15.3 (-46.4 to 92.5)	0.76	1.00
MIF	1 (10)	59.8 (53.9 to 63.7)	-1.0 (-48.7 to 14.3)	-3.2 (-32.8 to 31.2)	1 (20)	91.2 (55.8 to 207.2)	74.4 (25.1 to 5,394.3)	103.21 (5.51 to 8,366.60)	0.11	0.19
FGF2	1 (10)	58.9 (36.5 to 85.9)	3.5 (-3.2 to 14.8)	2.8 (-5.5 to 33.5)	0 (0)	70.7 (22.0 to 82.4)	-31.8 (-44.4 to 0.0)	-27.57 (-62.86 to 0.00)	0.27	0.20
Markers of coagulation/platelet function										
PAI-1	1 (10)	18862 (16401 to 19473)	513.0 (-2,709.0 to 2,706.0)	2.72 (-10.7 to 16.5)	1 (20)	9357 (8422.5 to 12299.5)	-2887.0 (-3,247.0 to 210.5)	-25.18 (-32.65 to 6.10)	0.39	0.14
sCD40L	0 (0)	612.8 (285.3 to 1497.0)	-184.8 (-471.7 to 0.0)	-18.15 (-52.8 to 0.0)	0 (0)	211.69 (43.8 to 635.2)	64.2 (-477.7 to 196.9)	146.58 (-34.18 to 447.03)	0.67	0.24

Supplementary Table 3. (Continued.)

Markers of macrophage and lymphocyte activation		*ng/mL*				*ng/mL*				
sCD163 (ng/ml) (9/4)	1 (10)	464.7 (86.1 to 631.0)	13.1 (-26.6 to 49.1)	6.8 (-46.6 to 24.6)	1 (20)	616.9 (488.0 to 692.6)	-31.0 (-131.6 to 156.6)	-5.25 (-20.98 to 24.00)	0.70	0.94
sMR/sCD206 (ng/ml) (9/4)	1 (10)	152.5 (120.7 to 287.5)	19.0 (-7.8 to 57.9)	9.7 (-2.7 to 48.0)	1 (20)	237.4 (183.9 to 309.6)	37.2 (-33.3 to 69.4)	14.04 (-8.63 to 31.72)	0.94	0.82
Markers of endothelial dysfunction		*µg/mL*				*µg/mL*				
sICAM-1	1 (10)	0.06 (0.04 to 0.08)	-0.0003 (-0.005 to 0.01)	-0.48 (-9.12 to 4.72)	1 (20)	0.13 (0.09 to 0.25)	-0.004 (-0.06 to -0.0003)	-3.29 (-17.44 to 0.14)	0.39	0.32
sVCAM-1	1 (10)	0.28 (0.20 to 0.31)	-0.005 (-0.06 to 0.05)	-1.54 (-14.01 to 27.08)	1 (20)	0.36 (0.25 to 0.43)	-0.05 (-0.11 to -0.03)	-20.66 (-30.10 to -12.44)	0.14	0.19

*The pilot PRECIOSA study enrolled patients with decompensated cirrhosis unrelated to bacterial infection. The LAlbD group received 1 g/kg b.w. of albumin every two weeks and the HAlbD group received 1.5 g/kg b.w. of albumin every week. Levels of molecules were measured using Luminex and enzyme immunoassays. The usual symbol of molecules was given together with its alias for most of them (usual symbol/alias). P values were calculated with the use of nonparametric tests. The cell colored in green shows P values of less than 0.05. IQR denotes interquartile range, GROα growth-regulated alpha protein, CXCL C-X-C motif chemokine ligand, MCP monocyte chemotactic protein, CCL C-C motif chemokine ligand, MIP macrophage inflammatory protein, IL interleukin, IP-10 10 kDa interferon gamma-induced protein, MDC macrophage-derived chemokine, EGF epidermal growth factor, MIF macrophage migration inhibitory factor, FGF fibroblast growth factor, sCD163 soluble CD163, sMR, soluble mannose receptor, sICAM-1 soluble intercellular adhesion molecule, sVCAM-1 soluble vascular cell adhesion molecule, PAI-1 plasminogen activator inhibitor 1, and sCD40L soluble CD40 ligand.

Supplementary Table 4. Baseline Plasma Levels of Chemokines, Growth Factors, Markers Of Macrophage Activation, And Markers of Endothelial Dysfunction And Of Coagulation/Platelet Function, and Their Changes During the First Week of Treatment, In Patients From The INFECIR-2 Study Who Were Randomized To Receive Either Antibiotics Alone Or Albumin-Plus-Antibiotics.*

Variable	Antibiotics Alone (N=40)						Albumin-Plus-Antibiotics (N=38)					
	Undetectable Levels	Baseline Level	Absolute Change From Baseline	Percentage Change from Baseline	P Value For Change From Baseline		Undetectable Levels	Baseline Level	Absolute change From Baseline	Percentage Change From Baseline	P Value For Change From Baseline	
	no. (%)	*Median (IQR) — pg/mL*	*Median (IQR) — pg/mL*	*Median (IQR) — %*	*Absolute change*	*% change*	*no. (%)*	*Median (IQR) — pg/mL*	*Median (IQR) — pg/mL*	*Median (IQR) — %*	*Absolute change*	*% change*
Chemokines												
GROα/CXCL1	0 (0)	241 (107 to 519)	21 (-47 to 354)	6.5 (-20.7 to 95.6)	0.13	0.75	0 (0)	247 (123 to 520)	-1.7 (-145 to 93)	-1.3 (-61.0 to 61.4)	0.60	0.87
MCP-1/CCL2	0 (0)	268 (175 to 504)	4.7 (-62.9 to 72.2)	1.0 (-27.1 to 35.9)	0.80	1.00	0 (0)	318 (208 to 549)	-35 (-96 to 33)	-9.8 (-23.2 to 22.7)	0.11	0.14
MIP-1α/CCL3	13 (33)	10.3 (2.7 to 21.7)	-0.5 (-2.2 to 0.9)	-4.4 (-15.4 ; 8.2)	0.32	0.33	10 (26)	9.4 (5.3 to 16.0)	-2.4 (-9.5 to 1.1)	-29.6 (-61.4 to 22.6)	0.01	0.09
MIP-1β/CCL4	3 (8)	24.2 (16.6 to 39.5)	-6.5 (-14.0 to 0.4)	-23.8 (-43.4 to 6.9)	0.01	0.03	6 (16)	30.4 (11.6 to 52.6)	-0.4 (-15.2 to 4.2)	-3.0 (-41.7 to 27.8)	0.24	0.58
IL-8/CXCL8	0 (0)	51.3 (20.6 to 96.2)	0.2 (-14.2 to 18.9)	1.0 (-36.3 to 47.8)	0.44	0.63	0 (0)	62.7 (27.3 to 100)	-6.6 (-28.1 to 5.2)	-13.5 (-35.1 to 25.2)	0.54	0.14
IP-10/CXCL10	0 (0)	1175 (870 to 2468)	-183 (-472 to 32)	-9.8 (-40.3 to 3.0)	0.004	0.04	0 (0)	1313 (803 to 2136)	-161 (-558 to 233)	-1.7 (-41.7 to 17.4)	0.30	1.00
Eotaxin/CXCL11	0 (0)	76.3 (56.5 to 141.4)	-0.6 (-26.3 to 9.5)	0.1 (-28.0 to 17.9)	0.52	1.00	0 (0)	101.7 (51.4 to 149.4)	16 (-16.9 to 21.2)	0.8 (-14.7 to 33.4)	0.66	1.00
Fractalkine/CX3CL1	13 (33)	89.9 (25.4 to 363.1)	-5.9 (-47.1 to 22.0)	-15.1 (-29.4 to 65.8)	0.25	0.70	0 (0)	67.2 (19.2 to 128.3)	0.0 (-18.7 to 36.6)	0.0 (-43.8 to 153.2)	0.56	1.00
MDC/CCL22	0 (0)	348 (257 to 523)	2.7 (-75.4 to 79.1)	0.8 (-19.4 to 27.8)	0.97	0.87	0 (0)	371 (246 to 573)	21.1 (-79 to 112)	5.7 (-27.7 to 28.5)	0.43	0.42
Growth factors												
EGF	0 (0)	6.3 (2.8 to 37.5)	0 (-7.0 to 11.2)	0.0 (-7.1 to 17.6)	0.73	0.85	0 (0)	2.8 (2.8 to 37.9)	0 (-2.0 to 0)	0.0 (-16.7 to 0.0)	0.60	0.81
MIF	0 (0)	198 (121 to 391)	4 (-182 to 108)	3.9 (-40.1 to 90.5)	0.91	0.87	2 (5)	226 (118 to 708)	8 (-198 to 168)	5.1 (-32.2 to 81.5)	0.90	0.62
FGF2	0 (0)	45.0 (13.3 to 79.0)	-2.0 (-21.8 to 5.7)	-9.6 (-34.6 to 17.9)	0.29	0.19	0 (0)	30.1 (15.1 to 74.6)	0 (-7.2 to 12.6)	0.0 (-19.4 to 53.1)	0.49	0.86
Markers of coagulation/platelet function												
PAI-1	0 (0)	49535 (35875 to 84200)	-67 (-15592 to 15755)	0.1 (-21.0 to 34.2)	0.87	1.00	2 (5)	62250 (36870 to 79825)	-610 (-28682 to 24980)	-2.7 (-33.4 to 64.0)	0.92	1.00
sCD40L	0 (0)	150.9 (72.3 to 386)	-4.8 (-58.9 to 110.1)	-3.9 (-38.6 to 103.1)	0.72	0.87	0 (0)	115.9 (46.7 to 412.5)	4.4 (-84.5 to 43.9)	5.4 (-34.7 to 107.8)	0.73	0.87

Supplementary Table 4. (Continued.)												
Markers of macrophage and lymphocyte activation		*ng/mL*						*ng/mL*				
sCD163	1 (3)	760 (539 to 1208)	84 (-342 to 578)	13.2 (-34.9 to 75.0)	0.45	0.52	1 (3)	704 (514 to 1152)	250 (-266 to 733)	27.2 (-28.1 to 137.3)	0.20	0.62
sMR/sCD206	1 (3)	190 (135 to 302)	21 (-85 to 144)	13.2 (-34.9 to 75.0)	0.52	0.52	2 (5)	181 (131 to 289)	34 (-77 to 175)	27.2 (-28.1 to 137.3)	0.27	0.62
		µg/mL						*µg/mL*				
Markers of endothelial dysfunction												
sICAM-1	0 (0)	0.5 (0.3 to 0.8)	-0.05 (-0.2 to 0.1)	-12.9 (-36.5 to 25.8)	0.22	0.27	1 (3)	0.5 (0.3 to 0.9)	-0.04 (-0.19 to 0.09)	-6.3 (-27.6 to 40.6)	0.34	0.32
sVCAM-1	0 (0)	1.9 (1.2 to 2.5)	-0.08 (-0.6 to 0.3)	-5.7 (-30.3 to 13.9)	0.14	0.27	3 (8)	1.8 (1.2 to 2.6)	0.16 (-0.6 to 0,7)	8.9 (-26.4 to 49.4)	0.64	0.74

* The INFECIR-2 study enrolled patients with decompensated cirrhosis and infection unrelated to spontaneous bacterial peritonitis. Levels of molecules were measured using Luminex and enzyme immunoassays. The usual symbol of molecules was given together with its alias for most of them (usual symbol/alias). Changes during the first week of albumin treatment were assessed between day 3 and day 7 after inclusion. There were no significant between‐group differences in cytokine levels at baseline. P values for within-group comparisons were calculated with the use of nonparametric tests. Cells colored in green show P values of less than 0.05. IQR denotes interquartile range, GRO-α growth-regulated alpha protein, CXCL C-X-C motif chemokine ligand, MCP monocyte chemotactic protein, CCL C-C motif chemokine ligand, MIP macrophage inflammatory protein, IL interleukin, IP-10 10 kDa interferon gamma-induced protein, MDC macrophage-derived chemokine, EGF epidermal growth factor, MIF macrophage migration inhibitory factor, FGF fibroblast growth factor, sCD163 soluble CD163, sMR, soluble mannose receptor, sICAM-1 soluble intercellular adhesion molecule, sVCAM-1 soluble vascular cell adhesion molecule, PAI-1 plasminogen activator inhibitor 1**,** and sCD40L soluble CD40 ligand.