

SUPPLEMENTARY MATERIAL

Hydroxychloroquine is associated with lower seroconversion upon 17DD-Yellow

Fever primovaccination in patients with primary Sjögren's Syndrome

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Supplementary Table S1. Adverse events post 17DD-YF primovaccination in patients with primary Sjögren's Syndrome categorized according to the use of HCQ immunotherapy

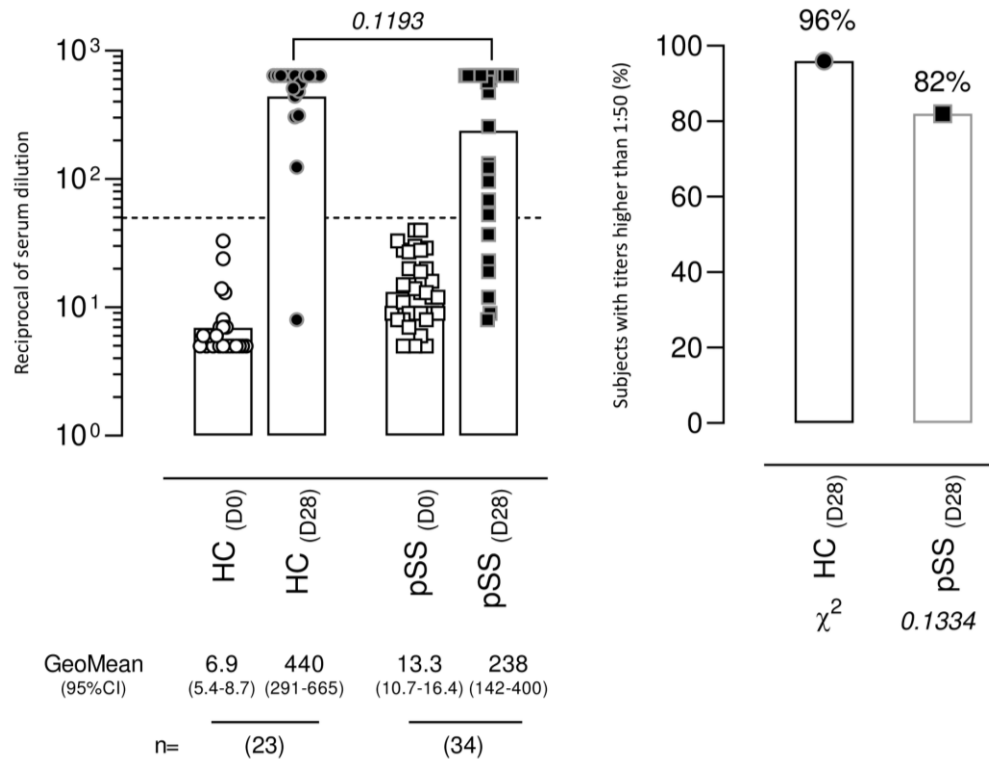
Adverse Events	pSS subgroups		
	Non-HCQ (n=18)	HCQ (n=16)	<i>p value</i>
Local % (n)	33 (6)	31 (5)	>0.9999
Pain	28 (5)	25 (4)	>0.9999
Node	0 (0)	6 (1)	0.4706
Edema	11 (2)	0 (0)	0.4866
Warmth	0 (0)	6 (1)	0.4706
Systemic % (n)	44 (8)	50 (8)	>0.9999
Fever	6 (1)	6 (1)	>0.9999
Malaise	17 (3)	31 (5)	0.4290
Headache	22 (4)	13 (2)	0.6602
Myalgia	28 (5)	6 (1)	0.1801
<u>Arthralgia</u>	<u>33 (6)</u>	<u>0 (0)</u>	<u>0.0198</u>
Back pain	17 (3)	0 (0)	0.2299
Diarrhea	6 (1)	0 (0)	>0.9999
Abdominal pain	6 (1)	6 (1)	>0.9999
Nausea	11 (2)	6 (1)	>0.9999
Emesis	6 (1)	0 (0)	>0.9999
Pruritus	6 (1)	13 (2)	0.5909
Dyspnea	0 (0)	6 (1)	0.4706
Cough	6 (1)	6 (1)	>0.9999
Weakness	22 (4)	0 (0)	0.1052

pSS = patients with primary Sjögren's Syndrome; Non-HCQ = pSS not using hydroxychloroquine; HCQ = pSS using hydroxychloroquine. Comparative analysis was carried out by Chi-square test. In all cases, significant difference was considered at $p \leq 0.05$ and underscored by bold underlined format.

Supplementary Table S2. Serum soluble mediators in patients with primary Sjögren's Syndrome categorized according to the use of HCQ immunotherapy

Parameters	pSS subgroups		<i>p value</i>
	Non-HCQ (n=18) Median (IR)	HCQ (n=16) Median (IR)	
CXCL8	3.5 (2.3-11.3)	8.6 (3.3-56.5)	0.1989
CCL11	20.8 (16.3-53.3)	28.3 (10.3-68.8)	0.6588
CCL3	1.8 (1.1-2.9)	2.0 (1.4-2.7)	0.6083
CCL4	61.6 (15.9-118.0)	95.9 (12.4-307.4)	0.4221
<u>CCL2</u>	<u>14.7 (9.5-21.9)</u>	<u>31.1 (14.1-53.3)</u>	<u>0.0510</u>
CCL5	188.4 (180.8-402.9)	251.4 (87.2-368.2)	0.9809
<u>CXCL10</u>	<u>55.6 (33.4-88.4)</u>	<u>104.3 (51.1-232.4)</u>	<u>0.0314</u>
IL-1 β	0.3 (0.2-0.6)	0.3 (0.2-0.3)	0.4146
<u>IL-6</u>	<u>0.1 (0.1-0.3)</u>	<u>0.4 (0.2-0.4)</u>	<u>0.0378</u>
TNF- α	3.3 (1.7-4.9)	7.3 (1.0-8.9)	0.3661
IL-12	0.3 (0.2-0.4)	0.3 (0.2-0.5)	0.8953
<u>IFN-γ</u>	<u>0.6 (0.3-1.1)</u>	<u>1.1 (0.8-2.0)</u>	<u>0.0208</u>
IL-15	44.9 (29.1-68.8)	29.1 (27.8-79.2)	0.7500
IL-17	3.7 (2.4-6.2)	3.3 (2.2-16.9)	0.7398
<u>IL-1Ra</u>	<u>44.8 (24.0-66.8)</u>	<u>107.1 (58.2-295.6)</u>	<u>0.0058</u>
IL-4	0.8 (0.5-1.2)	1.2 (0.5-1.6)	0.4172
IL-5	6.7 (2.3-10.0)	6.9 (4.0-7.5)	0.9932
<u>IL-9</u>	<u>2.8 (2.1-5.3)</u>	<u>6.5 (4.0-12.5)</u>	<u>0.0302</u>
<u>IL-10</u>	<u>1.7 (1.1-2.2)</u>	<u>2.2 (1.5-5.7)</u>	<u>0.0509</u>
IL-13	0.3 (0.2-0.5)	0.4 (0.2-0.6)	0.5105
FGF-basic	4.3 (2.9-5.5)	5.1 (2.3-8.6)	0.3293
PDGF	92.6 (42.1-187.1)	74.4 (24.5-265.2)	0.8592
VEGF	20.4 (16.3-27.4)	18.7 (8.1-33.1)	0.7941
G-CSF	11.7 (7.0-31.9)	21.3 (12.8-28.7)	0.8063
GM-CSF	0.4 (0.2-0.7)	0.5 (0.2-0.9)	0.9144
<u>IL-2</u>	<u>0.7 (0.5-1.1)</u>	<u>1.3 (0.9-7.3)</u>	<u>0.0225</u>
IL-7	3.5 (1.3-4.7)	2.6 (1.9-3.6)	0.5728

Serum soluble mediators are expressed in median with interquartile range (IR); pSS = patients with primary Sjögren's Syndrome; Non-HCQ = pSS not using hydroxychloroquine; HCQ = pSS using hydroxychloroquine. Comparative analysis was carried out by Mann-Whitney test. In all cases, significant difference was considered at $p \leq 0.05$ and underscored by bold underlined format.



Supplementary Figure S1. *Neutralizing antibody titers and viremia according to age in patients with primary Sjögren's Syndrome Upon 17DD-YF Primovaccination categorized according to the use of HCQ immunotherapy.* The YF-specific neutralizing antibodies titers and viremia levels were determined in serum samples from patients with primary Sjögren's Syndrome (pSS), categorized according to the use HCQ immunotherapy, referred as: Non-HCQ (◆, n = 18) or HCQ (▲, n = 16). Correlations analysis between PRNT titers and viremia levels with age was carried out by Spearman rank test and data shown as scattering of individual values. Analysis of cumulative RNAnemia for individual samples along the kinetic timeline according to age was performed by Kolmogorov-Smirnov (KS) test and data shown in line charts. In all cases, significant differences were considered at $p < 0.05$. Correlation indices (r score) as well as AUC, X and Y Peaks values are provided in the figure.