

## Supplement S-1 Questionnaires

### UC/AMC and FSR questionnaire

#### COVID-19 questionnaire

1. By completing this questionnaire, you are agreeing to have this data shared with others and understand that a summary of data may be published. **Do you agree?**
  - Yes**
  - No**
  
2. Have you been infected with COVID-19 (corona virus)?
  - Yes
  - No
  - a. If yes, what was outcome (check all that apply)
    - Treated only at home
    - I was hospitalized but I did not go to an intensive care area
    - Treated at any time in an intensive care area
    - At any time on a ventilator (breathing machine)
  
3. Have any people who live in the same house/apartment as me been diagnosed with COVID-19 (corona virus)?
  - Yes
  - No
  
4. Are you a health care provider?     Yes                       No
  
5. I have the following medical conditions (check all that apply)
  - Sarcoidosis
    - i. If sarcoidosis, how many years have you had sarcoidosis: \_\_\_\_\_
  - COPD/Asthma
  - Cancer
  - Diabetes
  - Heart disease
  - Hypertension
  - Other
  
6. Your age: \_\_\_\_\_
  
7. Your race (check all that apply)
  - Black
  - White

- Asian
- Other

8. Sex:

- Female
- Male

9. I live in the following state (if United States) or country (if not USA): \_\_\_\_\_

**IF I HAVE SARCOIDOSIS, PLEASE ANSWER THE FOLLOWING FIVE QUESTIONS**

10. I have sarcoidosis in the following areas of my body (check all that apply)

- Lung
- Heart
- Brain
- Other

11. I have been treated in past 3 months for sarcoidosis with (check all that apply)

- Prednisone/prednisolone
  - i. If yes, current daily dose of prednisone/prednisolone \_\_\_\_\_
- Methotrexate/Azathioprine (Imuran)/Mycophenolate (Cellcept)/Leflunomide(Arava)
- Infliximab (Remicade/Renflexis/Inflectra)/Adalimumab(Humira)
- Hydroxychloroquine(Plaquenil)/Chloroquine
- Rituximab (Rituxan)
- Other chemotherapy
- Other

12. In the past, have you been treated for sarcoidosis with (check all that apply)?

- Prednisone/prednisolone/decadron
- Methotrexate/Azathioprine (Imuran)/Mycophenolate (Cellcept)/Leflunomide(Arava)
- Infliximab (Remicade/Renflexis/Inflectra)/Adalimumab(Humira)
- Hydroxychloroquine(Plaquenil)/Chloroquine
- Rituximab (Rituxan)
- Other chemotherapy
- Other

13. This is the initial questionnaire?

- Yes
- No

14. If this is the initial questionnaire, do you agree to being contacted in 3-6 months to complete this questionnaire a second time?

- Yes
- No

**Supplement S-2**  
**Dutch Questionnaire**

**COVID-19 / Corona vragenlijst voor sarcoïdosepatiënten**

Patient information:

In korte tijd heeft COVID-19 wereldwijd toegeslagen en het leven veranderd. Het heeft tot veel onzekerheden geleid.

Bent u sarcoïdosepatiënt dan wordt u gevraagd deze survey in te vullen. Met nadruk willen we erop wijzen dat ook wanneer u geen COVID-19 infectie heeft gehad, u toch wordt verzocht de vragenlijst in te vullen.

Met uw hulp kunnen we dan trachten betrouwbare cijfers ook uit Nederland te verzamelen.

Betreffende sarcoïdose en COVID-19 kwamen allerlei vragen naar voren:

- Heeft een sarcoïdosepatiënt een hoger risico op het krijgen van een COVID-19 infectie?
- Als een sarcoïdosepatiënt geïnfecteerd raakt, heeft hij of zij dan een ernstiger beloop?
- Hebben sarcoïdosepatiënten die prednison of andere immunosuppressiva (medicijnen die het afweersysteem onderdrukken) gebruiken een hoger risico op het geïnfecteerd raken met COVID-19?
- Bescherm het gebruik van hydroxychloroquine een sarcoïdosepatiënt tegen COVID-19?
- Heeft geslacht, ras, gewicht, of leeftijd invloed op het risico of de uitkomst van COVID-19?

Om deze vragen te kunnen beantwoorden zijn de Foundation for Sarcoidosis Research (FSR) en de Universiteit van Cincinnati, met als hoofdonderzoeker prof. Robert Baughman, een survey onder sarcoïdosepatiënten gestart in de USA. Om hierover ook een indruk te krijgen in de rest van de wereld zijn diverse landen benaderd om ook deze vragenlijst onder sarcoïdosepatiënten uit te zetten, waaronder Nederland. Deze vragenlijst wordt in Nederland op verzoek van de initiatiefnemers verspreid door de ild care foundation in samenwerking met Sarcoidose.nl.

Door deze vragenlijst in te vullen, stemt u ermee in dat de gegevens anoniem verwerkt worden. Een samenvatting van het onderzoek zal, op basis van anonieme gegevens, gepubliceerd worden.

Bij voorbaat hartelijk dank voor uw medewerking!

1. Bent u besmet (geweest) met COVID-19 (coronavirus)?

- Ja
- Nee
- Weet het niet zeker, ben niet getest, maar heb wel symptomen (gehad)

2. Zo ja, wat was er nodig voor de behandeling? (vink aan wat van toepassing is) :

- Kon thuis worden behandeld
- Ben opgenomen geweest in een ziekenhuis, maar ben niet op de intensive care verpleegd
- Ben opgenomen geweest op een intensive care afdeling
- Ben beademd met een ventilator (beademingsmachine)
- Niet van toepassing, geen COVID-19 gehad

3. Zijn er mensen die in hetzelfde huis/ appartement wonen als u, die besmet zijn geweest met COVID-19 (corona virus)?

- Ja
- Nee

4. Bent u een zorgverlener?

- Ja
- Nee

5. Hoe lang heeft u al sarcoïdose? (jaren, maanden)

6. Ik heb sarcoïdose in de volgende organen/delen van mijn lichaam: (vink aan wat van toepassing is, meerdere keuzes mogelijk)

- Longen
- Hart
- Hersenen / zenuwstelsel
- Anders, nl.:

7. Ik heb naast sarcoïdose ook de volgende medische aandoeningen (vul in wat van toepassing is)

- geen andere aandoeningen
- Kanker
- Diabetes
- Hart-vaataandoening
- Hartfalen
- Hypertensie / hoge bloeddruk
- COPD
- Astma
- Andere aandoening:

8. Nadat ik COVID-19 heb gehad, zijn mijn klachten:

- verergerd
- minder geworden dan voorheen
- hetzelfde gebleven
- niet van toepassing, heb geen COVID-19 gehad.

9. Wat is u leeftijd? (jaren)

10. Wat is uw gewicht? (in kg)

11. Wat is uw lengte (in cm)

12. Wat is uw geslacht?

- Vrouw
- Man
- gender neutraal

13. Wat is uw etniciteit?

- Kaukasisch / wit
- Negroïde / Afro Amerikaans / zwart
- Aziatisch
- Anders, nl. /:

14. Ik woon in (land) :

- Nederland
- België
- Anders, nl.:

15. Bent u in de afgelopen 3 maanden behandeld voor sarcoidose met: (vink aan wat van toepassing is, meerdere antwoorden mogelijk)

- Prednison/prednisolon (graag de huidige dagelijkse dosis onderaan deze vraag invullen)
- Methotrexaat
- Azathioprine (Imuran)
- Cellcept (Mycophenolaat)
- Leflunomide (Arava)
- Infliximab (Remicade/Renflexis/Inflectra)
- Adalimumab (Humira)
- Hydroxychloroquine (Plaquenil)/Chloroquine
- Rituximab (Rituxan)
- Andere immunotherapie
- Andere behandelwijze

- Geen medicatie of behandeling

Dosering Prednison per dag (in mg):

Bewerken Opties

Bewerken Opties Logica Verplaatsen Kopiëren Verwijderen

16. Bent U In het verleden behandeld voor sarcoïdose met (vink aan wat van toepassing is)?

- Prednison/prednisolon (graag de huidige dagelijkse dosis onderaan deze vraag invullen)
- Methotrexaat
- Azathioprine (Imuran)
- Cellcept (Mycophenolaat)
- Leflunomide (Arava)
- Infliximab (Remicade/Renflexis/Inflectra)
- Adalimumab (Humira)
- Hydroxychloroquine (Plaquenil)/Chloroquine
- Rituximab (Rituxan)
- Andere immunotherapie
- Andere behandelwijze
- Geen medicatie of behandeling

Dosering Prednison per dag (in mg):

Bewerken Opties

Nieuwe vraag

Hartelijk dank voor uw medewerking!

**Supplement S-3**  
**Italian Questionnaire**

The following questionnaire was created using GOOGLE FORMS.

For further infos, please visit <https://www.google.com/intl/en-US/forms/about/>

Every single answer or group of answers generate both visual data and an excel file with the sum of all data.

### Dati epidemiologici

1. Completando questo questionario, si autorizza alla condivisione dei dati qui raccolti e si dà il benestare alla eventuale pubblicazione anonima dei dati stessi. Dai il tuo consenso?

- Sì
- No

2. Età

Scegli (choose – dropdown menu)

3. Sesso

- Maschile
- Femminile
- Preferisco non rispondere

4. Etnia

- Caucasica (prevalentemente europea)
- Afro-americana
- Asiatica
- Preferisco non rispondere

5. Sei un operatore sanitario?

- Sì
- No

6. In quale regione vivi?

Scegli (choose – dropdown menu)

### Covid-19 e Sarcoidosi

7. Sei stata/o contagiata/o dal COVID-19 (coronavirus)?

- Sì

| No

7a. Se sì, quale esito ha avuto (segnare tutte opzioni pertinenti)

- | Trattamento esclusivamente a casa
- | Ricovero in ospedale ma non in area intensiva
- | Curato in terapia intensiva
- | Curato con ventilazione assistita

8. Ci sono state persone conviventi nella tua abitazione che sono state contagiate dal COVID-19 (coronavirus)?

- | Sì
- | No

9. Attualmente soffri di una o più delle seguenti patologie? (segnare tutte le patologie in essere)

- | Sarcoidosi
- | BPCO/Asma
- | Cancro
- | Diabete
- | Ipertensione
- | Altro

9a. Se hai segnato la sarcoidosi, da quanti anni ne soffri? (non si intende da che età, ma gli anni di malattia)

Scegli (choose – dropdown menu)

10. Quale area del tuo corpo è interessata dalla Sarcoidosi? (specificare quale o quali)

- | Polmoni
- | Cuore
- | Sistema nervoso
- | Altro

11. Negli ultimi 3 mesi ti sei stato sottoposto ad una o più d'una delle seguenti terapie? (indica le voci pertinenti)

- | Prednisone/Prednisolone (farmaci cortisonici)
- | Metotrexato/Azatriopina/Micofenolato/Leflunomide
- | Infliximab/Adalimumab
- | Idrossiclorochina/Clorochina (Plaquenil)
- | Rituximab
- | Altre chemioterapie
- | Nessuna terapia

11a. Se hai assunto prednisone/prednisolone (farmaci cortisonici), qual è stata la dose giornaliera (quantificata in mg)?

Scegli (choose – dropdown menu)

11a.2 Se alla domanda precedente hai indicato 'altro' scrivi qui la dose giornaliera di cortisonici (quantificata in mg)

----- risposta aperta (open response)

11b. Se hai assunto Idrossiclorochina/Clorochina (Plaquenil), qual è stata la dose giornaliera (quantificata in mg)? (this question is only in the Italian Survey)

Scegli (choose – dropdown menu)

11b.2 Se alla domanda precedente hai indicato 'altro' scrivi qui la dose giornaliera di Idrossiclorochina/Clorochina(quantificata in mg)

----- risposta aperta (open response)

12. In passato sei stato sottoposto ad una o più d'una delle seguenti terapie? (indica le voci pertinenti)

- Prednisone/Prednisolone (farmaci cortisonici)
- Metotrexato/Azatriopina/Micofenolato/Leflunomide
- Infliximab/Adalimumab
- Idrossiclorochina/Clorochina (Plaquenil)
- Rituximab
- Altre chemioterapie
- Nessuna terapia

13. Una versione precedente di questo questionario è già stata condotta durante il mese di aprile. Hai già compilato il 1° questionario di aprile?

- Sì
- No

**Supplement S-4**  
**Spanish Questionnaire**

## Cuestionario COVID-19

1- Al completar este cuestionario, acepta compartir estos datos con otros y comprende que se puede publicar un resumen de los datos. ¿Está de acuerdo?

SÍ  NO

2- ¿Ha sido infectado con COVID-19 (coronavirus)?

SÍ  NO

a) En caso afirmativo, cuál fue el resultado (marque todos los que correspondan)

Tratado solo en casa

Fui hospitalizado pero no fui a un área de cuidados intensivos

Tratado en cualquier momento en un área de cuidados intensivos

En cualquier momento en un ventilador (máquina de respiración)

3- ¿Alguna de las personas que viven en la misma casa / departamento que yo ha sido diagnosticada con COVID-19 (coronavirus)?

SÍ  NO

4- ¿Es usted un proveedor de atención médica?

SÍ  NO

Sarcoidosis Si tiene sarcoidosis, ¿cuántos años ha tenido sarcoidosis? \_\_\_\_\_

EPOC / Asma

Cáncer

Diabetes

Enfermedad del corazón

Hipertensión

Otro

6- Edad: \_\_\_\_\_

7- Origen étnico

Negro

Blanco

Asiático

Otros

Prefiero no responder

8-

Masculino

Femenino

Prefiero no responder

9- Vivo en el siguiente estado/país \_\_\_\_\_

10- Este es el cuestionario inicial?

Si  No

SI TIENE SARCOIDOSIS, RESPONDA LAS SIGUIENTES CINCO PREGUNTAS

11- Tengo sarcoidosis en las siguientes áreas de mi cuerpo (marque todas las que correspondan)

Pulmón

Corazón

Cerebro

Otro

corresponda)

Prednisona / prednisolona

a. En caso afirmativo, la dosis diaria actual de prednisona / prednisolona

\_\_\_\_\_

Metotrexato / Azatioprina (Imuran) / Micofenolato (Cellcept) / Leflunomida (Arava)

Infliximab (Remicade / Renflexis / Inflectra) / Adalimumab (Humira)

Hidroxicloroquina (Plaquenil) / Cloroquina

Rituximab (Rituxan)

Otra quimioterapia

Otro

Ninguna

13- En el pasado, ¿ha recibido tratamiento para la sarcoidosis con (marque todo lo que corresponda)?

○Prednisona / prednisolona / decadron

○Metotrexato / Azatioprina (Imuran) / Micofenolato (Cellcept) / Leflunomida (Arava)

○Infliximab (Remicade / Renflexis / Inflectra) / Adalimumab (Humira)

○Hidroxicloroquina (Plaquenil) / Cloroquina

○Rituximab (Rituxan)

○Otra quimioterapia

○Otro

○Ninguna

Supplement S-5

Results of UC/AMC questionnaire

	Covid Positive	Covid negative		Percent with feature	Percent COVID positive	Hazards ratio	95% CI	P	Comments
<b>ALL PATIENTS</b>									
Sarcoidosis	66	1906	1972		3.35%	9.15	2.249-37.253	0.002	
Cancer	2	545	547		0.37%				
<b>LOCAL</b>									
OH/KY/IN	3	538	541		0.55%	1.5166	0.2544-9.041		Cincinnati Clinic patients
Cancer	2	545	547		0.37%				Sarc versus cancer
<b>Sarc patients</b>									
Male	19	495	514	26.18%	3.70%	1.14	0.675-1.923	>0.10	
Female	47	1402	1449	73.82%	3.24%				9 no sex indicated
Black	11	371	382	20.07%	2.88%	0.796	0.4209-1.5066	>0.10	
White	55	1466	1521	79.93%	3.62%				9 patients biracial
Roommate with COVID									
yes	21	17	38	1.94%	55.26%	23.6772	15.769-35.5514	<0.0001	
no	45	1883	1928	98.22%	2.33%				
Health care provider									

							1.0099		
Yes	12	197	209	10.65%	5.74%	1.8565	- 3.4127	0.0464	
no	54	1692	174 6	88.95%	3.09%				
Current meds									
Prednisone	24	755	779	39.50%	3.08%	0.8751	0.5343 - 1.4332	>0.10	
No prednisone	42	1151	119 3	60.50%	3.52%				
Prednisone >10 mg or more	13	361	374	18.97%	3.48%	1.048	0.5774 - 1.9022	>0.10	
Prednisone < 10 mg	53	1545	159 8	81.03%	3.32%				
Plaquenil	7	239	246	12.47%	2.85%	0.8324	0.3846 - 1.8016	>0.10	
No plaquenil	59	1667	172 6	87.53%	3.42%				
anti-TNF	6	183	189	9.58%	3.17%	0.9434	0.4131 - 2.1542	>0.10	
no anti-TNF	60	1723	178 3	90.42%	3.37%				
Cytotoxic	21	537	558	28.30%	3.76%	1.1826	0.7111 - 1.9666	>0.10	
No cytotoxic	45	1369	141 4	71.70%	3.18%				
Rituximab	6	42	48	2.43%	12.50 %	4.0083	1.8213 - 8.8217	0.0006	
No rituximab	60	1864	192 4	97.57%	3.12%				
Underlying									

							0.5917 -		
COPD	12	321	333	16.89%	3.60%	1.0938	2.0217	>0.10	
	54	1585	163 9	83.11%	3.29%				
							0.1873 -		
Diabetes	5	292	297	15.06%	1.68%	0.4623	1.1408	0.0941	
	61	1614	167 5	84.94%	3.64%				
							0.4348 -		
Heart disease	8	254	262	13.29%	3.05%	0.9002	1.8637	>0.10	
	58	1652	171 0	86.71%	3.39%				
Hypertension	15	480	495	25.10%	3.03%	0.8776	0.498- 1.5466	>0.10	
	51	1426	147 7	74.90%	3.45%				
Organ involved									
							0.6721 -		
Lung	58	1596	165 4	83.87%	3.51%	1.3939	2.8907	>0.10	
	8	310	318	16.13%	2.52%				
							0.7206 -		
Cardiac sarc	12	278	290	14.71%	4.14%	1.3303	2.4557	>0.10	
	54	1628	168 2	85.29%	3.21%				
							0.9704 -		
Neuro sarc	11	184	195	9.89%	5.64%	1.8228	3.4229	0.0619	
	55	1722	177 7	90.11%	3.10%				

Origin									
US	50	1551	160 1	81.19%	3.12%	0.7516	0.4269 - 1.3232	>0.10	
non US	15	346	361	18.31%	4.16%				No country entered: 10
OH/KY/IN	3	538	541	27.43%	0.55%				
	63	1368	143 1	72.57%	4.40%				
<b>Sarcoid age</b>									
Covid Positive							54.5 ± 11.39 years	0.088	
Covid negative							53.0 ± 9.60 years		
COVID outcome	Home	Hospital	ICU	Ventilator					
Sarc	44	9	3	0					
Cancer	1	1	0	0					
Sarc ≥ 5 yr	48	1274	132 2	67.35%	3.63%	1.3321	0.7629 -2.359	>0.01	
Sarc < 5 yr	16	571	587	29.90%	2.73%				
									Hospital considered bad outcome
<b>COVID positive</b>	<b>Home</b>	<b>Hospital</b>							Hazard ration for
Prednisone									Hospitalization
Yes	20	4	24	1.22%	83.33 %	0.875	0.2941 - 2.6036	>0.10	
No	34	8	42	2.14%	80.95 %				
If prednisone									

Prednisone ≥ 10 mg	11	2	13	19.70%	15.38 %	0.8154	0.2027 - 3.2794	>0.10	
Prednisone < 10mg	43	10	53	80.30%	18.87 %				
Infliximab									
Yes	4	2	6	0.31%	66.67 %	0.8154	0.2027 - 3.2794	>0.10	
No	50	10	60	3.06%	83.33 %				
Plaquenil									
Yes	6	1	7	0.36%	85.71 %	0.7662	0.1156 - 5.9785	>0.10	
No	48	11	59	3.01%	81.36 %				
Cytotoxic									
Yes	14	7	21	1.07%	66.67 %	3	1.0773 -83539	0.0355	
No	40	5	45	2.29%	88.89 %				
Rituximab									
Yes	6	0	6	0.31%	100.00 %	0.3486	0.0230 3- 5.2723	>0.10	
No	48	12	60	3.06%	80.00 %				

\*9 patients did not indicate sex.

†9 patients biracial

¶ Included infliximab, adlimumab, and biosimilars

§ Included methotrexate, azathioprine, mycophenolate, and leflunomide

\*\*63 patients did not provide information regarding duration of disease.

UC: University of Cincinnati clinic

## Results from FSR questionnaire

	Covid Positive	Covid negative		Percent with feature	Percent COVID positive	Hazards ratio	95% CI	P	Comments
<b>ALL PATIENTS</b>									
Sarcoidosis	13	1603	1616		0.80%				
<b>Sarc patients</b>									
Male	2	275	277	14.11%	0.72%	0.4545	0.1003-2.0624	>0.10	
Female	10	620	630	32.09%	1.59%				709 no sex indicated
Black	3	90	93	4.89%	3.23%	2.817	0.7764-10.2227	>0.10	
White	9	777	786	41.30%	1.15%				826 patients biracial
Roommate with COVID									
yes	2	3	5	0.25%	40.00%	58.5818	17.2179-1999.317	<0.0001	
no	11	1600	1611	82.07%	0.68%				
Health care provider									
Yes	1	82	83	4.23%	1.20%	1.5392	0.2025-11.6963	>0.10	
no	12	1521	1533	78.09%	0.78%				
<b>Current meds *</b>									<b>If no response, assume</b>

Prednisone	5	318	323	16.38 %	1.55%	2.5019	0.824- 7.5971	>0.10	<b>drug not used</b>
No prednisone	8	1285	129 3	65.57 %	0.62%				
Plaquenil	0	115	115	5.83%	0.00%	0.4572	0.02735- 7.6429	>0.10	
No plaquenil	13	1418	143 1	72.57 %	0.91%				
anti-TNF	1	115	116	5.88%	0.86%	1.0273	0.1348- 7.8316	>0.10	
no anti- TNF	12	1418	143 0	72.52 %	0.84%				
Cytotoxic	2	272	274	13.89 %	0.73%	0.8905	0.1985- 3.9952	>0.10	
No cytotoxic	11	1331	134 2	68.05 %	0.82%				
Rituximab	1	10	11	0.56%	9.09%	12.151 5	1.7255- 85.5785	0.0122	
No rituximab	12	1592	160 4	81.34 %	0.75%				
Underlying									
COPD	3	177	180	9.13%	1.67%	2.3933	0.6648- 8.6150	>0.10	
	10	1426	143 6	72.82 %	0.70%				
			161 6						
Diabetes	1	134	135	6.85%	0.74%	0.9142	0.1198- 6.9776	>0.10	
	12	1469	148 1	75.10 %	0.81%				
			161 6						
Heart disease	1	116	117	5.93%	0.85%	1.067	0.14- 8.1402	>0.10	
	12	1487	149 9	76.01 %	0.80%				
			161						

			6						
Hypertension	4	275	279	14.15 %	1.43%	2.1298	0.6605-6.8673	>0.10	
	9	1328	1337	67.80 %	0.67%				
			1616						
<b>Organ involved*</b>									<b>If no response, assume</b>
Lung	10	728	738	37.42 %	1.36%	3.9657	1.0954-14.3563	0.0358	<b>not involved</b>
	3	875	878	44.52 %	0.34%				
			1616						
Cardiac sarc	1	12	13	0.66%	7.69%	9.4551	1.3244-67.5027	0.0251	
	12	1463	1475	74.80 %	0.81%				
			1488						
Neuro sarc	4	84	88	4.46%	4.55%	7.7172	2.424-24.5693	0.0005	
	9	1519	1528	77.48 %	0.59%				
			1616						
Origin									
US	NA	NA	0	0.00%	#VALUE!				NOT AVAILABLE
non US	NA	NA	0	0.00%	#VALUE!				
			0						
<b>Sarcoid age</b>									
Covid Positive							54.4 ± 11.29 years	>0.10	
Covid negative							56.6 ± 10.39 years		
Sarc ≥ 5 yr	8	720	728	38.14	1.10%	0.5357	0.163-	>0.01	Information

				%			1.7602		missing on 986 patients
Sarc < 5 yr	4	191	195	10.21%	2.05%				

COVID outcome	Home	Hospital	ICU	Vent					
Sarc	8	3	0	0					2 no information

			#REF!						
COVID positive	Home	Hospital							If in hospital, considered
Prednisone									bad outcome
Yes	3	1	4	6.06%	75.00%	1.05	0.5037-2.1889	>0.10	Hazard ration for
No	5	2	7	10.61%	71.43%				Hospitalization
Infliximab									
Yes	0	0	0	0.00%	0.00%	0.7059	0.09617-5.1812	>0.10	
No	8	3	11	16.67%	72.73%				
Plaquenil									
Yes	0	0	0	0.00%	0.00%	0.7059	0.09617-5.1812	>0.10	
No	8	3	11	16.67%	72.73%				

Cytotoxic									
Yes	1	0	1	1.52%	100.00%	1.4286	0.9512-2.1435	0.0849	
No	7	3	10	15.15%	70.00%				
Rituximab									
Yes	0	1	1	1.52%	0.00%	0.3235	0.02872-3.6449	>0.10	
No	8	2	10	15.15%	80.00%				

## Results from Netherlands questionnaire

Site: Netherlands									
	<b>Covid Positive</b>	<b>Covid negative</b>		<b>Percent with feature</b>	<b>Percent COVID positive</b>	<b>Hazard ratio</b>	<b>95% CI</b>	<b>P</b>	<b>Comments</b>
<b>Sarcoidosis (996 who live in the Netherlands , out of 1034 respondents )</b>	<b>23</b>	<b>973</b>	996		<b>2.31%</b>				
Male	6	418	424	21.60%	1.42%	0.4745	0.1187-1.1932	>0.10	
Female	17	553	570	29.04%	2.98%				2 no sex indicated
White	22	932	954	48.60%	2.31%	0.9682	0.1337-7.0165	>0.10	
Other	1	41	42	2.14%	2.38%				
BMI categories									
BMI < 25	8	348	356	18.14%	2.25%	0.958	0.4029-2.2323	>0.10	
BMI ≥ 25	15	623	638	32.50%	2.35%				
Current meds									
Prednisone	4	194	198	10.09%	2.02%	0.84585	0.2919-2.4661	>0.01	of 28 patients the dose is missing

No prednisone	19	779	798	40.65%	2.38%				
Prednisone ≥ 10 mg	2	76	78	3.97%	2.56%	1.1795	0.1701-8.1803	>0.10	
Prednisone < 10mg	2	90	92	4.69%	2.17%				
Plaquenil	1	57	58	2.95%	1.72%	0.7351	0.1008-5.3585	>0.10	
No plaquenil	22	916	938	47.78%	2.35%				
anti-TNF (infliximab (6), adalimumab (7))	0	76	76	3.87%	0.00%	0.2545	0.01561-4.14497	>0.10	
no anti-TNF (de lege cellen uit dezelfde kolommen)	23	897	920	46.87%	2.50%				1 patient was treated with both infliximab and adalimumab
Cytotoxic (methotrexate (2), azathioprine (3), leflunomide (5))	2	227	229	11.67%	0.87%	0.319	0.07536-1.3502	>0.10	
No cytotoxic (lege cellen in dezelfde kolommen)	21	746	767	39.07%	2.74%				3 patients were treated with both methotrexate and azathioprine
Rituximab									
yes	0	1	1	0.05%	0.00%	10.5957	0.9295-120.7801	0.0573	
no	23	972	99	50.69%	2.31%				

			5	%					
Current medication									
yes	7	515	57 2	26.74 %	1.34%	0.40	0.165- 0.958	<0.05	
no	16	458	47 4	24.04 %	3.38%				
Underlying									
COPD	0	20	20	1.02%	0.00%	0.9899	0.6217- 15.7596	>0.10	
	23	953	97 6	49.72 %	2.36%				
Asthma	2	80	82	4.18%	2.44%	1.0616	0.2534- 4.448	>0.10	
	21	893	91 4	46.56 %	2.30%				
Diabetes	2	47	49	2.50%	4.08%	1.8406	0.441- 7.628	>0.10	(past) use of prednison can be studied additionally
	21	926	94 7	48.24 %	2.22%				
Heart failure	0	27	27	1.38%	0.00%	0.7371	0.04592- 11.8322	>0.10	
	23	946	96 9	49.36 %	2.37%				
Circulation	2	35	37	1.88%	5.41%	2.4685	0.601- 10.1387	>0.10	
	21	938	95 9	48.85 %	2.19%				
Hypertension	1	107	10 8	5.50%	0.93%	0.3737	0.05088- 2.7452	>0.10	
	22	866	88 8	45.24 %	2.48%				

Cancer	0	20	20	1.02%	0.00%	0.9899	0.06217- 15.7596	>0.10	
	23	953	97 6	49.72 %	2.36%				
Organ involved									
Lung	20	820	84 0	42.79 %	2.38%	1.2381	0.3724- 4.1165	>0.10	
no Lung	3	153	15 6	7.95%	1.92%				
heart	0	115	11 5	5.86%	0.00%	0.1618	0.00989 2-2.645	>0.10	
no heart	23	858	88 1	44.88 %	2.61%				
CNS	1	118	11 9	6.06%	0.84%	0.335	0.04557- 2.426	>0.10	
no CNS	22	855	87 7	44.68 %	2.51%				
<b>Sarcoid age</b>									
<b>COVID positive</b>							55.3 ± 6.0 years		
<b>COVID negative</b>							55.0±10. 8 years		
<b>COVID uncertain</b>							50.5 ± 11.0 years		
COVID outcome	Home	Hospita l	IC U	Vent					
Sarc	20	3	0	0.00%					
Sarc ≥ 5 yr	15	678	69 3	70.14 %	2.16%	0.912	0.3758- 2.2141	>0.10	
Sarc < 5 yr	7	288	29 5	29.86 %	2.37%				8 unknown
			98						

			8						
Roommates with COVID-19									
yes	11	30	41	4.12%	26.83%	21.3516	10.0247-45-4768	<0.0001	
no	12	943	955	95.88%	1.26%				
			996						
Work in healthcare									
Yes	4	99	103	10.34%	3.88%	1.8252	0.6331-5.2618	>0.10	
No	19	874	893	89.66%	2.13%				
			996						
<b>COVID positive</b>	<b>Home</b>	<b>Hospital</b>		<b>Percent on drug</b>	<b>Percent treated in hospital</b>				If in hospital, considered
									bad outcome
									Hazard ration for
									Hospitalization
Prednisone									
Yes	4	0	4	17.39%	0.00%	0.5714	0.03487-9.3644	>0.10	
No	16	3	19	82.61%	15.79%				
Prednisone > 10 mg	2	0	2	50.00%	0.00%				TOO SMALL
Prednisone < 10mg	2	0	2	50.00%	0.00%				
Infliximab									

									there were no COVID - 19 positive patients who were treated with infliximab
Plaquenil									
Yes	1	0	1	4.35%	0.00%	1.6428	0.1236-21.835	>0.10	
No	19	3	22	95.65%	13.64%				
Cytotoxic									
yes	2	0	2	8.70%	0.00%	1.0476	0.06994-15.6914	>0.10	
no	18	3	21	91.30%	14.29%				
Rituximab									
									none of the COVID-19 positive patients was treated with rituximab

## Results from Italian Questionnaire

	Covid Positive	Covid negative		Percent with feature *	Percent COVID positive	Hazard ratio	95% CI	P	Comments
<b>ALL PATIENTS</b>									
Sarcoidosis	9	502	511		1.76%				
<b>Sarc patients</b>									
Male	3	205	208	40.70 %	1.44%	0.87	0.203-3.628	>0.10	
Female	5	293	298	58.32 %	1.68%				5 no sex identified
Black	0	6	6	1.17%	0.00%				less than 10 blacks
White	9	483	492	96.28 %	1.83%				13 no race indicated
Roommate with COVID									
yes	5	3	8	1.57%	62.50 %	205.8	36.24-1169.14	<0.0001	
no	4	494	498	97.46 %	0.80%				5 no answer
Health care provider									
Yes	2	45	47	9.20%	4.26%	2.89	0.583-14.324	>0.10	
no	7	455	462	90.41 %	1.52%				2 no answer
<b>Current meds *</b>									
Prednisone	1	260	261	51.08 %	0.38%	0.12	0.015-1.017	0.052	
No prednisone	7	226	233	45.60 %	3.00%				17 no answer

Prednisone>10 mg	1	83	84	16.44 %	1.19%				
Prednisone<10 mg	0	177	177	34.64 %	0.00%	6.38	0.257-158.215	>0.10	only 1 COVID on prednisone
anti-TNF	0	9	9	1.76%	0.00%	3.23	0.1697-61.655	>0.10	
no anti-TNF	6	399	405	79.26 %	1.48%				97 no answer
Cytotoxic	2	86	88	17.22 %	2.27%	1.55	0.307-7.793	>0.10	
No cytotoxic	6	399	405	79.26 %	1.48%				18 no answer
Rituximab									
No rituximab									No answers on ritux
Underlying									
COPD	2	48	50	9.78%	4.00%	2.68	0.542-13.289	>0.10	
	7	451	458	89.63 %	1.53%				3 no answer
Diabetes	0	32	32	6.26%	0.00%	0.76	0.043-13.328	>0.10	
	9	468	477	93.35 %	1.89%				2 no answer
Heart disease									not answered
Hypertension	4	126	130	25.44 %	3.08%	2.37	0.628-8.980	>0.10	
	5	374	379	74.17 %	1.32%				2 did not answer

Organ involved*									If no response, assume not involved
Lung	9	459	468	91.59 %	1.92%	1.67	0.096-29.299	>0.10	
	0	40	40	7.83%	0.00%				3 did not answer
Cardiac sarc	2	33	35	6.85%	5.71%	4.03	0.806-20.198	0.0896	
	7	466	473	92.56 %	1.48%				3 did not answer
Neuro sarc	0	23	23	4.50%	0.00%	1.07	0.060-18.895	>0.10	
	9	476	485	94.91 %	1.86%				3 did not answer
<b>Sarcoid age</b>									
Covid Positive							55.0 ± 8.63 years	>0.10	
Covid negative							51.8 ± 9.74 years		

COVID outcome	Home	Hospital	ICU	Vent					
Sarc	7	2	1	0					

\*Percent positive of 511 patients who participated in study.

## Results from Spanish questionnaire

	Covid Positive	Covid negative		Percent with feature	Percent COVID positive	Hazard ratio	95% CI	P	Comments
<b>ALL PATIENTS</b>									
Sarcoidosis	5	100	105		4.76%				
<b>Sarc patients</b>									
Male	1	27	28	26.67%	3.57%	0.6875	0.08022 -5.8917	>0.05	
Female	4	73	77	73.33%	5.19%				
Other	0	2	2	1.90%	0.00%	DNC			
White	5	97	102	97.14%	4.90%				1 No Answer
<b>Current meds</b>									
Prednisone	2	40	42	40.00%	4.76%	1	0.1745- 5.7322	>0.05	
No prednisone	3	60	63	60.00%	4.76%				
Prednisone ≥ 10 mg	0	19	19	18.10%	0.00%	0.24	0.01222 -4.715	>0.05	
Prednisone < 10mg	2	21	23	21.90%	8.70%				
Plaquenil	0	6	6	5.71%	0.00%	1.2987	0.07692 -21.834	>0.05	
No plaquenil	5	94	99	94.29%	5.05%				
anti-TNF	1	6	7	6.67%	14.29%	3.5	0.4493- 27.264	>0.05	

no anti-TNF	4	94	98	93.33%	4.08%				
Cytotoxic	0	19	19	18.10%	0.00%	0.3955	0.02278 -6.8641	>0.05	
No cytotoxic	5	81	86	81.90%	5.81%				
Rituximab	0	0	0	0.00%	0.00%	DNC			
No rituximab	5	100	105	100.00%	4.76%				
Underlying									
							0.03854 -		
COPD	0	12	12	11.43%	0.00%	0.6573	11.2108	>0.05	
	5	88	93	88.57%	5.38%				
Diabetes	1	19	20	19.05%	5.00%	1.0625	0.1254- 8.9993	>0.05	
	4	81	85	80.95%	4.71%				
			105						
Heart disease	0	5	5	4.76%	0.00%	1.5303	0.09537 -	>0.05	
	5	95	100	95.24%	5.00%				
			105						
Hypertensi on	0	15	15	14.29%	0.00%	0.517	0.3003- 8.9023	>0.05	
	5	85	90	85.71%	5.56%				
			105						
Organ involved									2 no answer
Lung	4	93	97	92.38%	4.12%	0.2474	0.3249- 1.8845	>0.05	
	1	5	6	5.71%	16.67%				
			103						
Cardiac sarc	0	4	4	3.81%	0.00%	1.8182	0.116- 28.5055	>0.05	

	5	94	99	94.29%	5.05%				
			103						
Neuro sarc	2	6	8	7.62%	25.00%	7.9167	1.5399-40.701	0.0133	
	3	92	95	90.48%	3.16%				
			103						
Origin									
SPAIN	4	100	104	5.30%	3.85%				
NOT SPANISH	1	0	1	0.05%	100.00%				
			105						
<b>Sarcoid age</b>									
Covid Positive							49.80 ± 9.20years	0.3	
Covid negative							44.88 ± 8.82 years		

COVID outcome	Home	Hospital	ICU	Vent					
Sarc	4	1	0	0					

Sarc ≥ 5 yr	4	63	67	3.51%	5.97%	5.0294	0.27827 - 90.9223	>0.05	1 no answer
Sarc < 5 yr	0	37	37	1.94%	0.00%				
			104						
<b>COVID positive</b>	<b>Home</b>	<b>Hospital</b>		<b>Percent on drug</b>	<b>Percent treated in hospital</b>				If in hospital, considered
Prednisone									bad outcome
Yes	2	0	2	3.03%	0.00%				Hazard ration for
No	2	1	3	4.55%	33.33%				Hospitalizati

									on
Prednisone ≥ 10 mg	0	0	0	0.00%	#DIV/0 !				
Prednisone < 10mg	2	0	2	3.03%	0.00%				
Infliximab									
Yes	1	0	1	1.52%	0.00%				
No	3	1	4	6.06%	25.00%				
Plaquenil									
Yes	0	0	0	0.00%	#DIV/0 !				
No	4	1	5	7.58%	20.00%				
Cytotoxic									
Yes	0	0	0	0.00%	#DIV/0 !				
No	4	1	5	7.58%	20.00%				
Rituximab									
Yes	0	0	0	0.00%	#DIV/0 !				
No	4	1	5	7.58%	20.00%				

	Covid Positive	Covid negative							
Roommate	0	2	2	1.90%	0.00%	3.0909	0.2167- 44.087	>0.05	2 no answer
No roommate	5	96	101	96.19%	4.95%				
Health provider	3	13	16	15.24%	18.75%	8.0625	1.4614- 44.4791	0.016 6	3 no answer
No healtg provider	2	84	86	81.90%	2.33%				

**Supplement Table S-10**

**Number of patients and percent positive for individual countries and states within United States**

<b>Country</b>	<b>State</b>	<b>Total Number</b>	<b>Number positive</b>	<b>Percent Positive</b>
US	Total	1601	50	3.1%
	Alabama	20	4	20.0%
	Alaska	4	0	0.0%
	Arizona	16	0	0.0%
	Arkansas	10	0	0.0%
	California	50	0	0.0%
	Colorado	21	0	0.0%
	Conneticut	13	1	7.7%
	District of Columbia	3	0	0.0%
	Deleware	5	1	20.0%
	Florida	60	1	1.7%
	Georgia	24	0	0.0%
	Hawaii	1	0	0.0%
	Idaho	4	0	0.0%
	Illinois	61	0	0.0%
	Indiana	46	4	8.7%
	Iowa	17	0	0.0%
	Kansas	5	0	0.0%
	Kentucky	77	8	10.4%
	Lousiana	12	0	0.0%
	Maine	7	0	0.0%
	Maryland	13	0	0.0%
	Massachusetts	38	0	0.0%
	Michigan	51	1	2.0%
	Minnesota	14	0	0.0%
	Mississippi	8	0	0.0%
	Missouri	19	1	5.3%
	Montana	5	0	0.0%
	Nebraska	2	0	0.0%
	Nevada	7	0	0.0%
	New Hampshire	11	0	0.0%
	New Jersey	30	0	0.0%
	New Mexico	3	0	0.0%
	New York	85	3	3.5%
	North Carolina	38	0	0.0%
	North Dakota	2	0	0.0%

	Ohio	468	22	4.7%
	Oklahoma	14	0	0.0%
	Oregon	12	0	0.0%
	Pennsylvania	52	1	1.9%
	Rhode Island	2	0	0.0%
	South Carolina	21	0	0.0%
	South Dakota	3	0	0.0%
	Tennessee	22	2	9.1%
	Texas	42	0	0.0%
	Utah	12	0	0.0%
	Virginia	38	0	0.0%
	Washington	27	0	0.0%
	West Virginia	16	2	12.5%
	Wisconsin	11	2	18.2%
	Wyoming	2	0	0.0%
Non US	Total	361	15	
Argentina		1	0	0.0%
Australia		64	0	0.0%
Austria		1	0	0.0%
Belarus		1	0	0.0%
Belgium		2	0	0.0%
Brazil		2	1	50.0%
Canada		62	3	4.8%
Columbia		2	0	0.0%
Czech		1	0	0.0%
Denmark		12	0	0.0%
Ecuador		1	0	0.0%
Egypt		2	0	0.0%
England		96	2	2.1%
Finland		1	0	0.0%
France		5	0	0.0%
Germany		9	0	0.0%
Hungary		1	0	0.0%
India		2	0	0.0%
Ireland		20	0	0.0%
Italy		1	0	0.0%
Mexico		2	1	50.0%
Morocco		1	0	0.0%
New Zealand		4	0	0.0%
Nigeria		3	0	0.0%

Norway		3	0	0.0%
Palestine		2	0	0.0%
Poland		2	0	0.0%
Portugal		3	0	0.0%
Puerto Rico		1	0	0.0%
Romania		3	0	0.0%
Russia		1	0	0.0%
Scotland		9	1	11.1%
Slovenia		1	0	0.0%
South Africa		10	0	0.0%
Spain		5	0	0.0%
Sweden		4	3	75.0%
Switzerland		1	0	0.0%
The Netherlands		2	0	0.0%
Turkey		1	0	0.0%
UAE		1	0	0.0%
Wales		1	0	0.0%
Zimbabwe		1	0	0.0%