

Essences From ERS Congress 2021

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Sarcoidosis Treatment

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ERS Congress 2021

Long-term response to prednisone in newly treated patients with pulmonary sarcoidosis

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Corticosteroids

Corticosteroid medications are considered the first line of treatment for sarcoidosis that requires therapy. Oral corticosteroids effectively reduce systemic inflammation in most people, thereby slowing, stopping or even preventing organ damage. Corticosteroids may be prescribed alone or with other medications. Although there is no standard dosage or duration of corticosteroid therapy, the charts in this monograph will provide guidelines for individual organ involvement. It is recommended that patients on corticosteroids long term be monitored for osteoporosis and treated appropriately.

Topical corticosteroids or intralesional injections may be prescribed for cutaneous involvement, and eye drops may be prescribed for uveitis. Corticosteroid inhalers may be useful in those with evidence of bronchial hyperactivity.

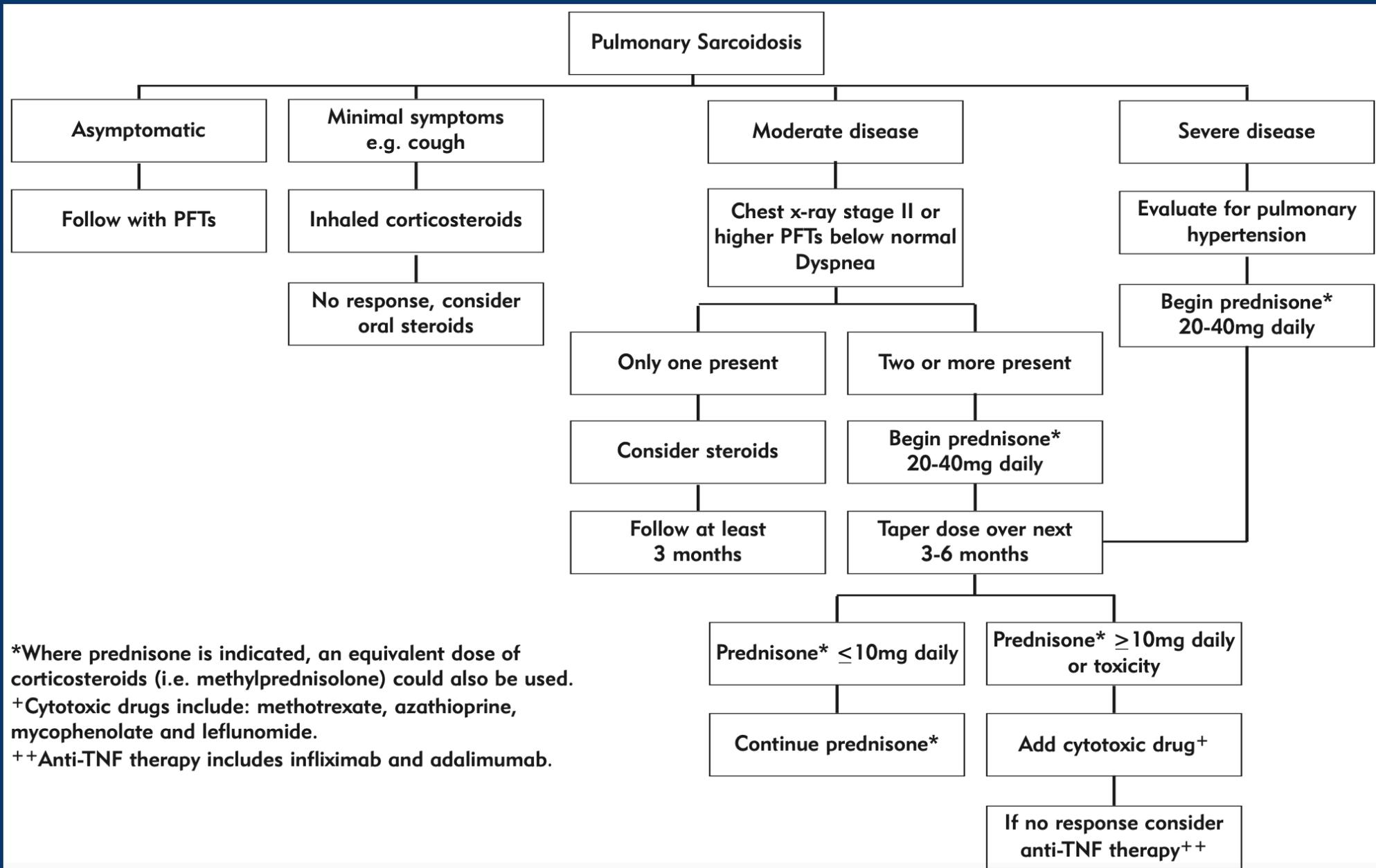
Background and aims

Background

- Prednisone is the cornerstone of treatment for sarcoidosis
- Current guidelines are largely based on expert opinion
- There is a major need to optimize treatment and tapering regimes

Aim

- In this study we aimed to assess the long-term response to prednisone treatment in a cohort of newly treated patients with pulmonary sarcoidosis

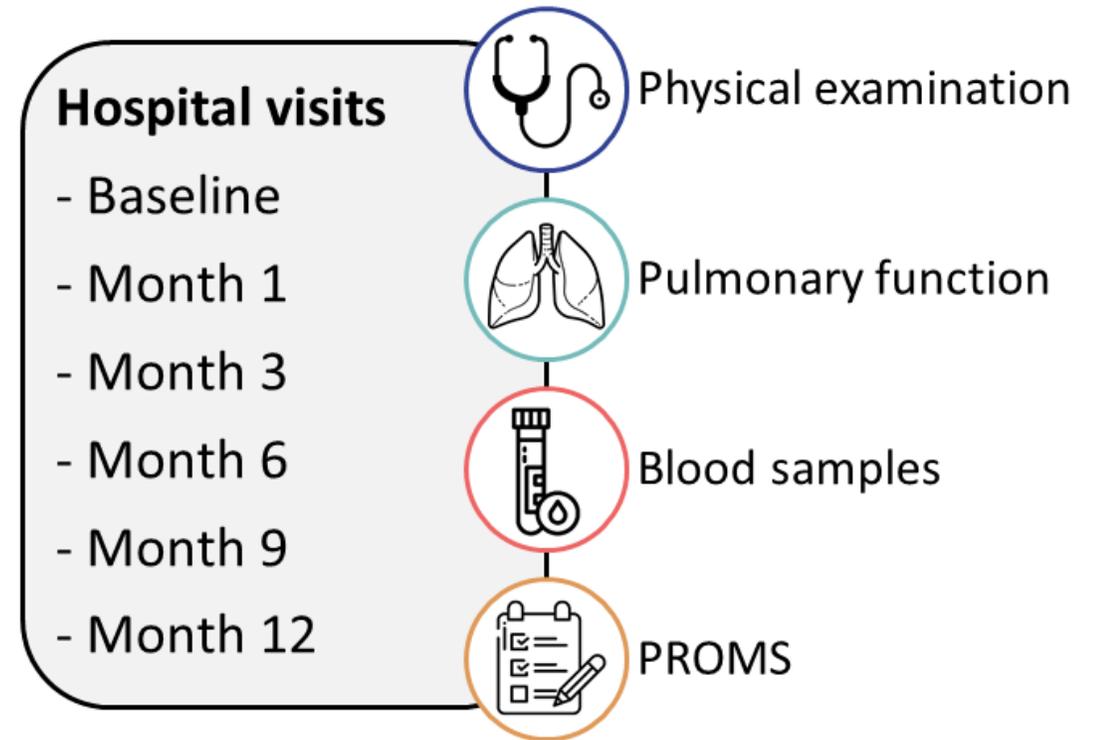


[1]Kahlmann V, Moor CC, Broos CE, In 'T Veen JCCM, Overbeek MJ, Grootenboers MJJH, et al. Long-term response to prednisone in newly treated patients with pulmonary sarcoidosis. Sarcoidosis and Other Granulomatous ILD / DPLD 2021- Data on file



Methods

- Prospective cohort study
- Treatment naïve patients with pulmonary sarcoidosis (FVC<85%) were included
- Major endpoint: FVC change
- Patients were treated with a predefined prednisone schedule
 - Initiated at 40mg
 - Tapered to 10mg maintenance (wk 10)



Assessments during study visits

* PROMS: dyspnoea Medical Research Council (MRC) scale, Fatigue Assessment Scale (FAS), St. George Respiratory Questionnaire (SGRQ) and short form health survey (SF-36), Kings Sarcoidosis Questionnaire (KSQ)

Baseline Characteristics

Demographic and Clinical Characteristics at baseline (n=25)	
* Plus-minus values are means \pm SD	
Age - years	42.9 \pm 10.6
Sex (Male/Female)	17/8
Race - no. (%)	
Caucasian	14 (56%)
Afro-American	7 (28%)
Asian	4 (16%)
Weight (kg)	80.4 \pm 15.9
BMI	26.3 \pm 5.3
Smoking – no. (%)	
Never	17 (68%)
Former	7 (24%)
Current	2 (8%)
Pulmonary function test – % of predicted	
FVC	69.9 \pm 13.6
DLCOc	60.7 \pm 18.2
Extra thoracic involvement – no. (%)	
Skin	3 (12%)
Eyes	3 (12%)
Articular	8 (32%)
Liver	2 (8%)
Spleen	2 (4%)
Bones	1 (4%)

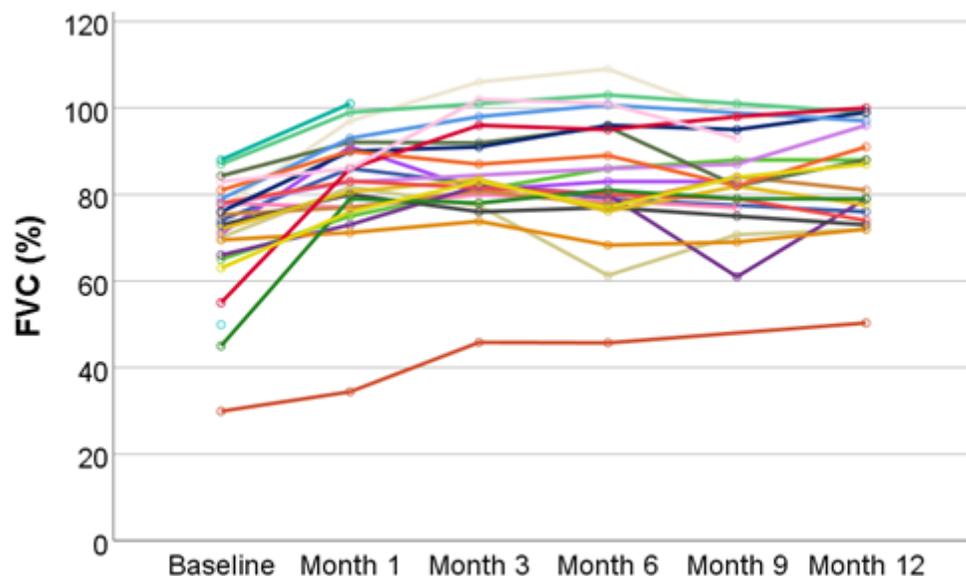
Two patients were excluded from analysis:

- Use of immunosuppressive therapy in the past (n=1)
- Inability to perform a technical correct pulmonary function test (n=1)

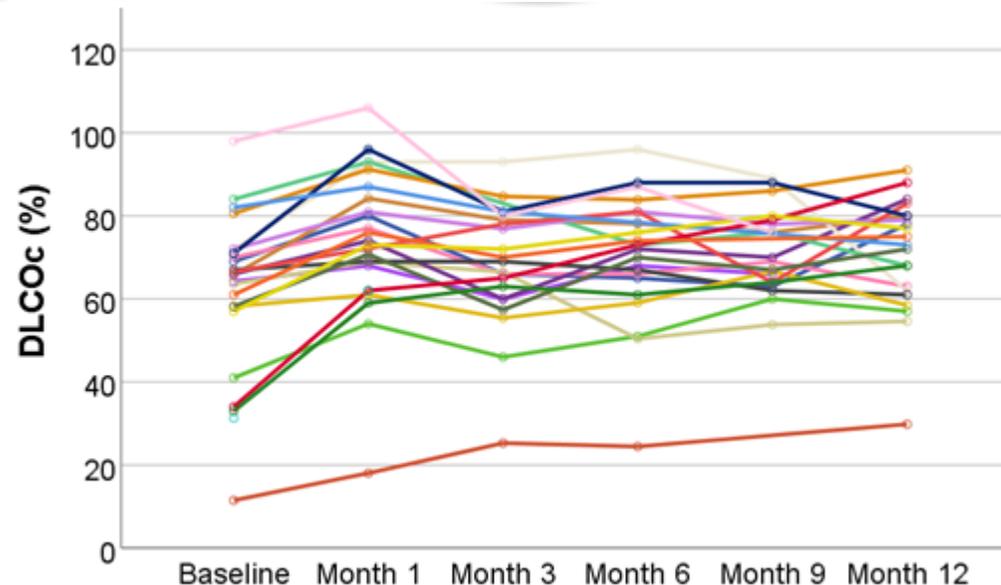


Results - Pulmonary function tests

Forced vital capacity (FVC (%))



Diffusion capacity (DLCOc (%))



- FVC improved significantly between baseline and month 1 (mean Δ +11.5% \pm 8.5SD, $p < 0.001$)
- After month 1 FVC remained stable up to month 12 (mean Δ +2.5% \pm 8.2%SD, $p = 0.19$)
- DLCOc improved significantly between baseline and month 1 (mean Δ +12.5% \pm 7.8%, $p < 0.001$)
- After month 1 DLCOc remained stable up to month 12 (mean Δ 2.2% \pm 12.3%, $p = 0.47$)

Results - Symptoms and quality of life

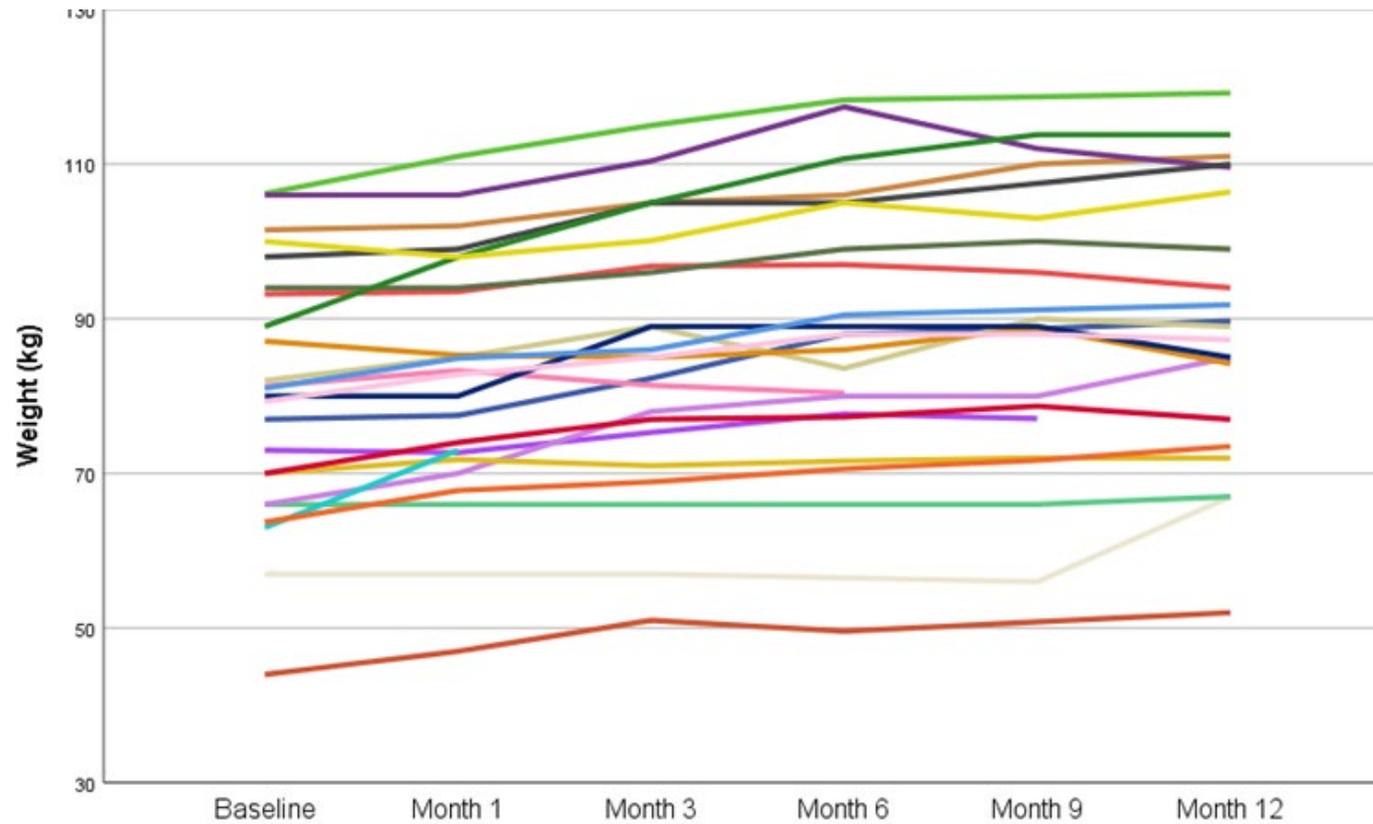
Symptoms and quality of life assessed during prednisone treatment *			
Questionnaire	Baseline	Month 1	Month 12
Dyspnoea Medical Research Council scale; max score 5 (n=20);	2.42±1.0	1.42±0.8	1.37±1.2
Fatigue Assessment Scale; max score 50 (n=20)	26.5±10.7	20.3±7.0	22.1±7.9
King's Sarcoidosis Questionnaire; max score 100 (n=11)			
General health score	70.8±22.0	80.4 ±16.8	75.7±22.4
Lung score	72.5±17.3	85.1±17.5	80.3±24.6

*Data is shown in mean ± SD; Only patients with data available at all three time points were included

All questionnaires improved significantly ($p < 0.05$) from baseline to month 1 and remained stable from month 1 to month 12.

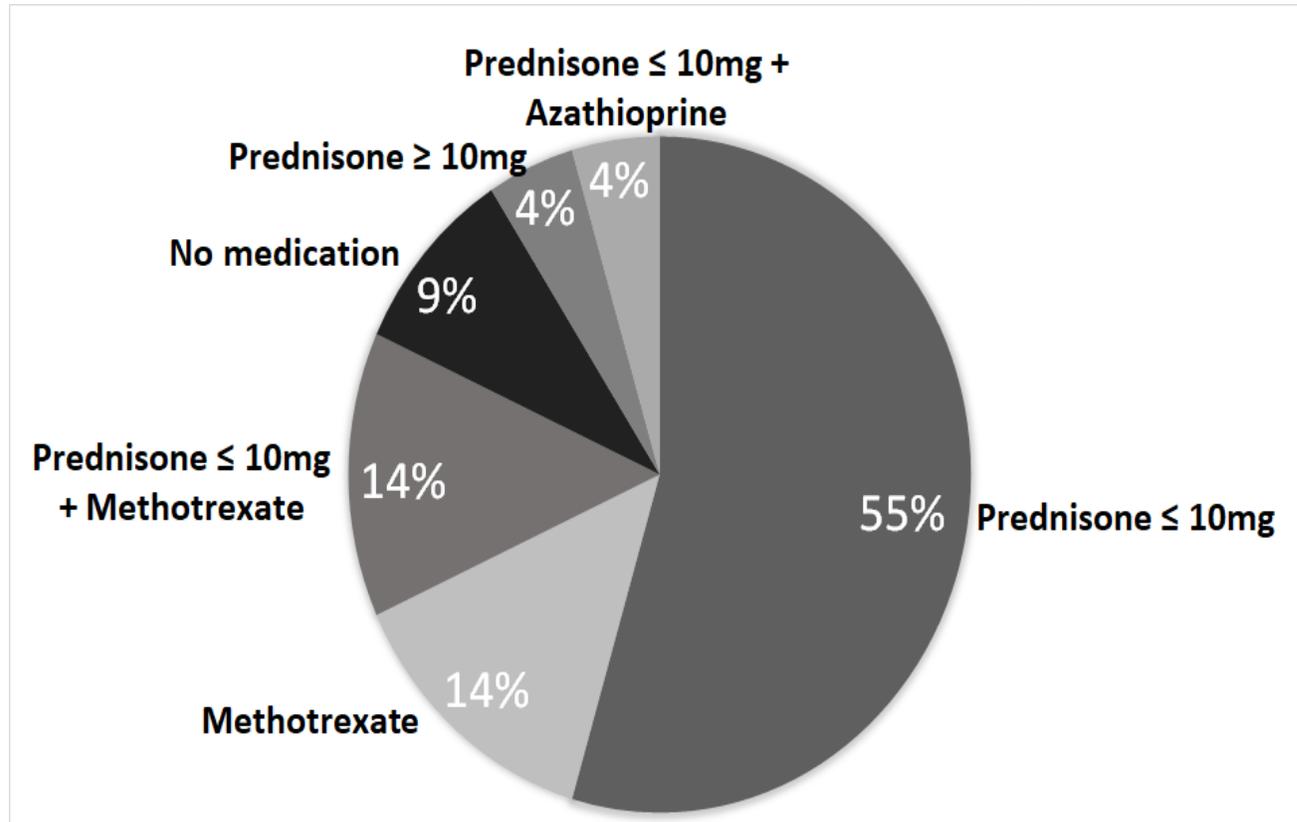
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Results – Weight change



Weight increased with mean $8.2\text{kg} \pm 6.2\text{ SD}$ ($p < 0.001$) between baseline and 1 year

Results - Medication use at one year



Medication use at month 12 (n=22)

Conclusion

- Major clinical improvement occurred within 1 month after start of prednisone
- After 1 month, lung function, QoL and symptoms remained stable up until 1 year irrespective of prednisone tapering schedule
- These results can help optimize treatment schedules and inform future trial design

List of references

1. Baughman RP, Valeyre D, Korsten P, Mathioudakis AG, Wuyts WA, Wells A, et al. ERS clinical practice guidelines on treatment of sarcoidosis. *Eur Respir J*. 2021.
2. Statement on sarcoidosis. Joint Statement of the American Thoracic Society (ATS), the European Respiratory Society (ERS) and the World Association of Sarcoidosis and Other Granulomatous Disorders (WASOG) adopted by the ATS Board of Directors and by the ERS Executive Committee, February 1999. *Am J Respir Crit Care Med*. 1999;160(2):736-55.
3. Thillai M, Atkins CP, Crawshaw A, Hart SP, Ho LP, Kouranos V, et al. BTS Clinical Statement on pulmonary sarcoidosis. *Thorax*. 2021;76(1):4-20.
4. Paramothayan NS, Lasserson TJ, Jones PW. Corticosteroids for pulmonary sarcoidosis. *Cochrane Database Syst Rev*. 2005(2):CD001114.
5. Broos CE, Wapenaar M, Looman CWN, In 't Veen J, van den Toorn LM, Overbeek MJ, et al. Daily home spirometry to detect early steroid treatment effects in newly treated pulmonary sarcoidosis. *Eur Respir J*. 2018;51(1)
6. Kahlmann V, Janssen Bonas M, Moor CC, van Moorsel CHM, Kool M, Kraaijvanger R, et al. Design of a randomized controlled trial to evaluate effectiveness of methotrexate versus prednisone as first-line treatment for pulmonary sarcoidosis: the PREDMETH study. *BMC Pulm Med*. 2020;20(1):271

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