

Hypersensitivity Pneumonitis: Treatment Approach and Challenges

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Disclosures

- Speaking and consulting fees from Boehringer Ingelheim, Genentech, Vicore
- Research trials with Boehringer, Genentech, Galapagos, Hoffmann-La Roche, Nitto Denko
- Authorship fees from UpToDate, Dynamed
- Medical Advisory Board: The Myositis Association



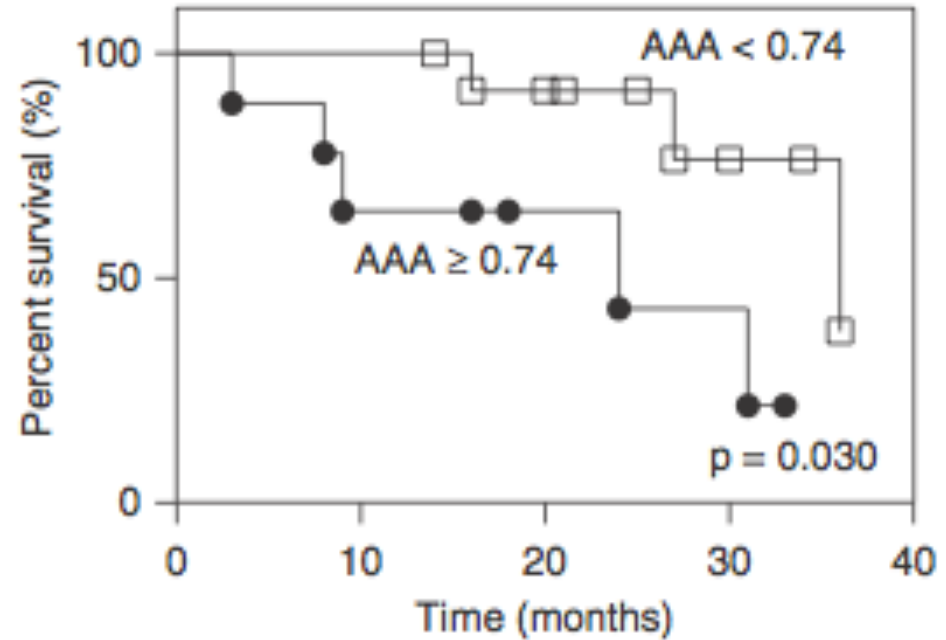
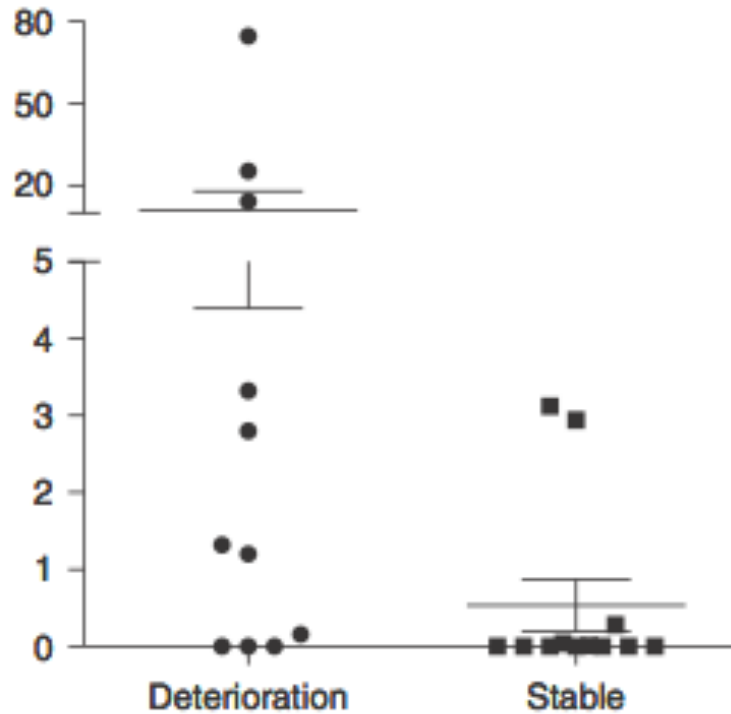
The exposure history is critical but difficult to obtain



Antigen avoidance is first-line therapy

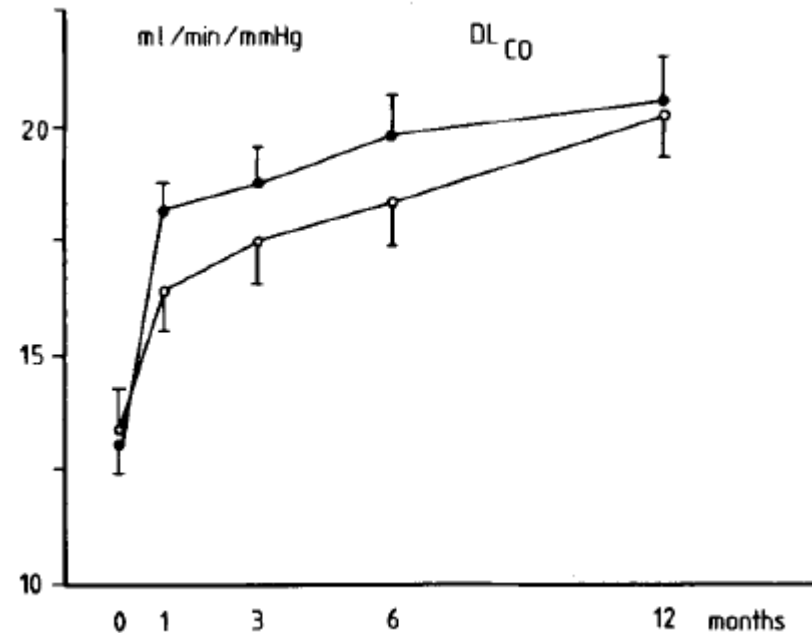
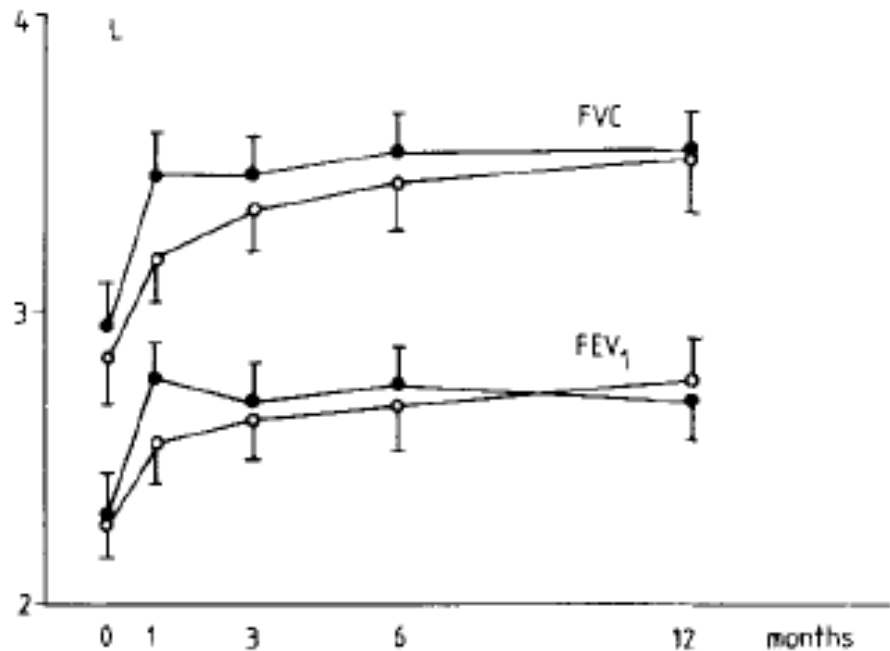
23 patients with Bird Fancier's Lung (mostly down comforters)

Antigen
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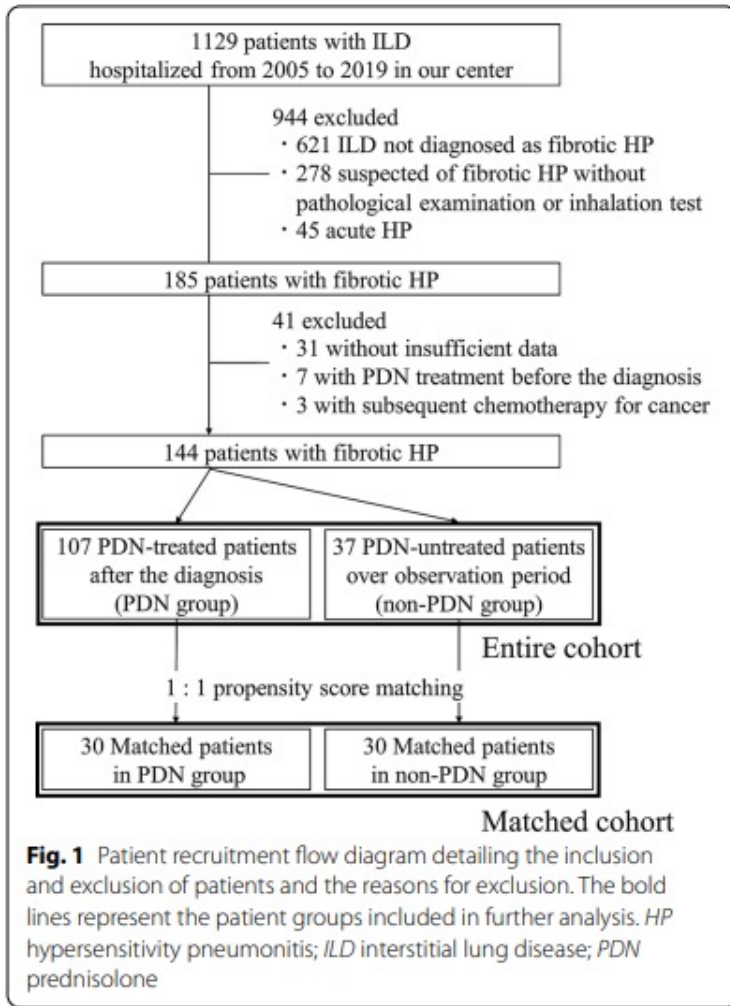


The impact of steroids on acute HP

- 36 patients with acute Farmer's Lung in a randomized, double-blind, placebo trial
--20 received prednisolone (40 mg tapered over 8 weeks); 16 received placebo



Steroids may be beneficial in cHP



Baseline characteristics:

Antifibrotics

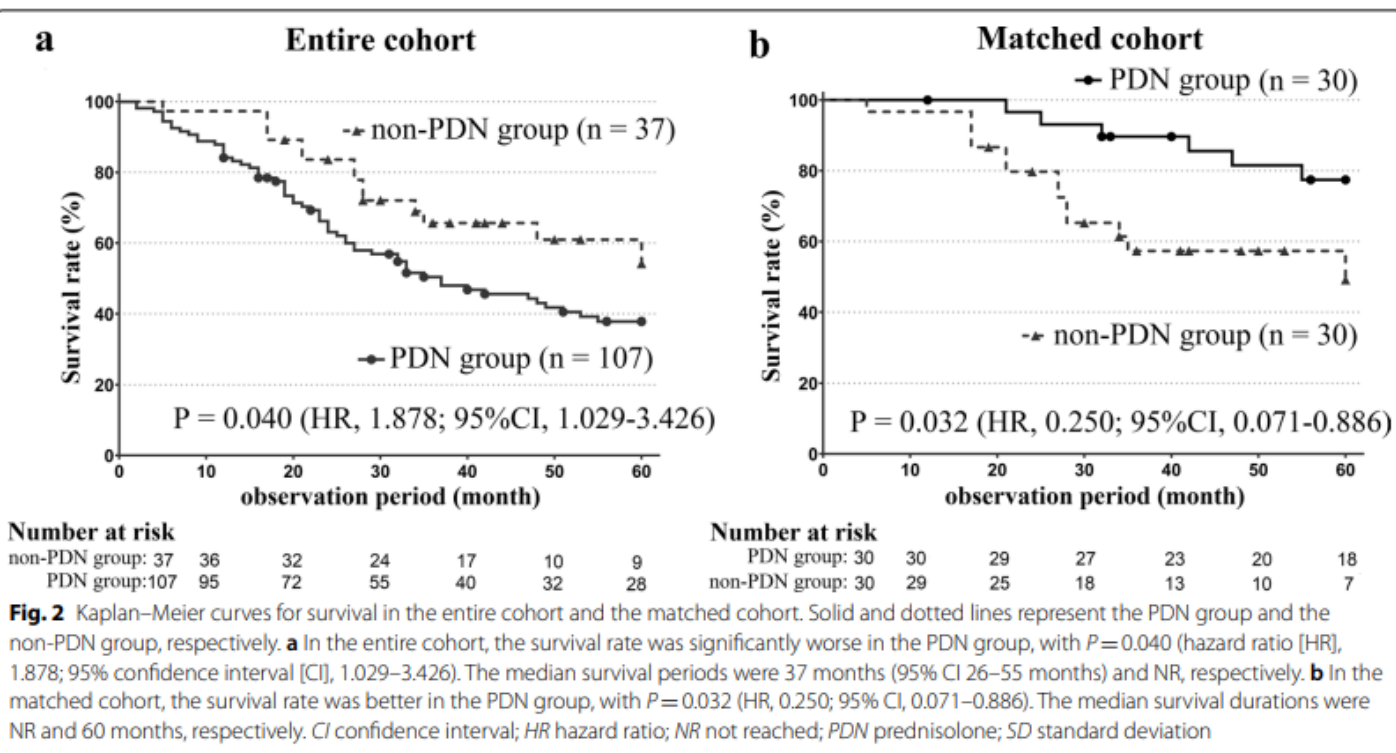
13% pred group; 22% non-pred group (NS)

Immunosuppression

46% in the pred group (mostly CsA, TAC)

0% in the non-pred group

Steroids may be beneficial in cHP



For the *Entire* cohort:

PDN group was sicker at baseline

FVC 58% vs 71% ($p<0.001$)

DLCO 45% vs 56% ($p=0.005$)

PDN group had more fibrosis

Traction bronchiectasis 93% vs 78% ($P=0.03$)

Honeycombing 58% vs 38% ($p=0.055$)

For the *Matched* cohort:

Most patients did not have extensive fibrosis

Propensity score based on the following: Age, sex, smoking history, %FVC, %FEV1, presence of honeycombing, traction bronchiectasis and mosaic attenuation on CT

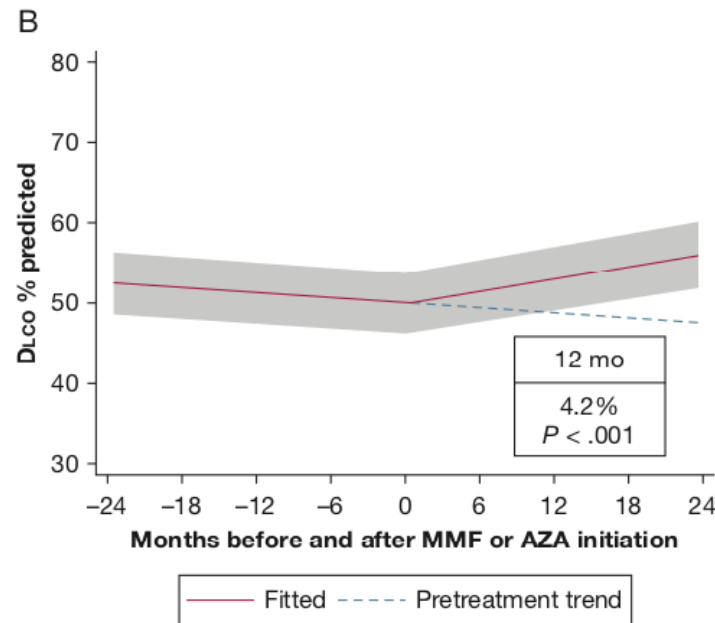
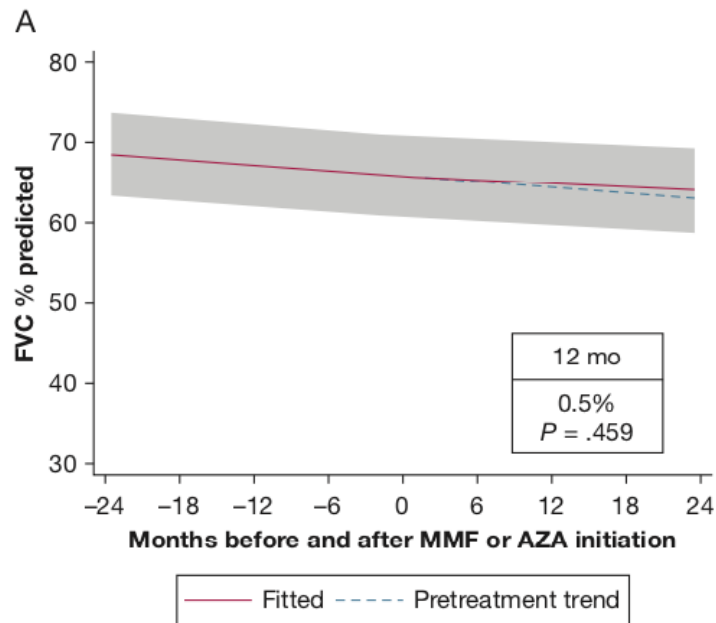
Steroid-sparing agents may be beneficial

Retrospective evaluation of 70 patients with chronic HP

51 received MMF

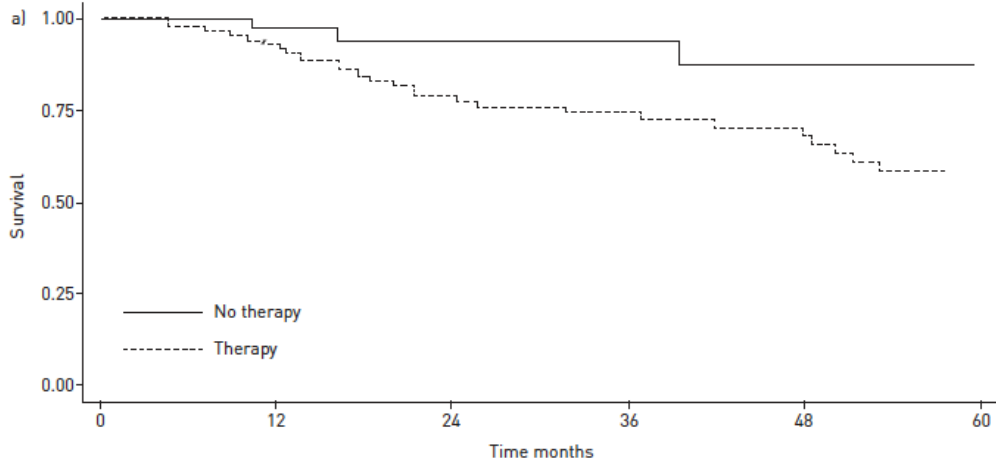
19 received AZA

(84% were receiving concurrent prednisone)



FVC 10% improvement in 13% of patients
DLCO 10% improvement in 20% of patients
Ave prednisone (mg/d) 12.3 → 3.75

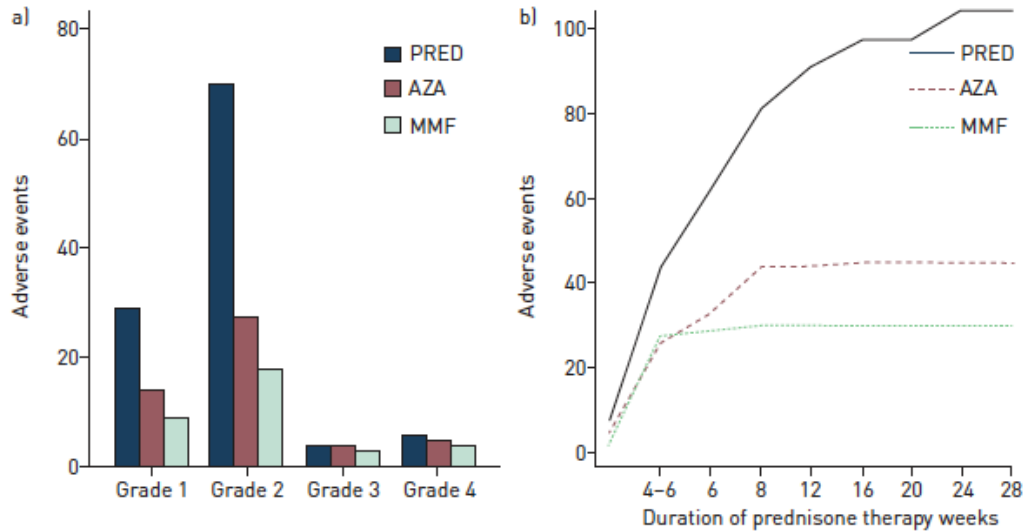
Use steroid-sparing agents early if immunosuppression is needed



131 chronic HP patients
71% received immunosuppression

Same outcome prednisone/AZA/MMF

TEAEs (vs prednisone):
54% less w/ AZA
66% less w/ MMF



Rituximab for chronic HP

Retrospective study of 20 cHP patients progressing despite antigen avoidance

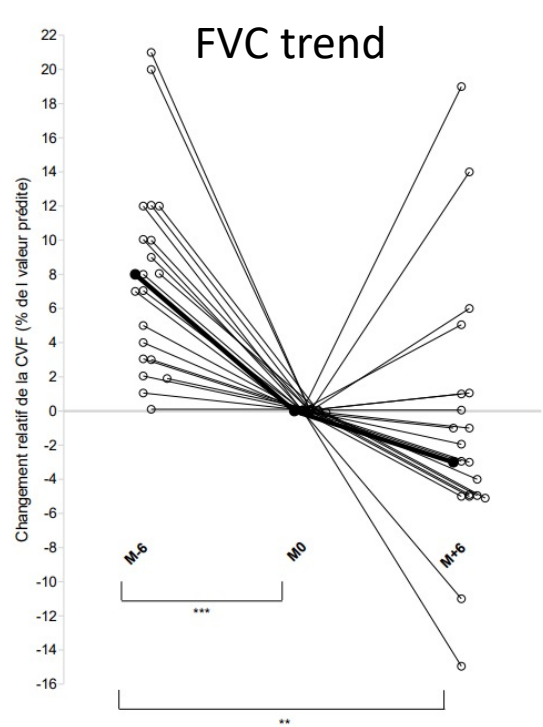


Figure 1: relative change in FVC (% of predicted value), 6 months before and after the introduction of rituximab (n = 20). The median value is represented by the bold line. ** and ***: $p < 0.01$ and < 0.001 , respectively.

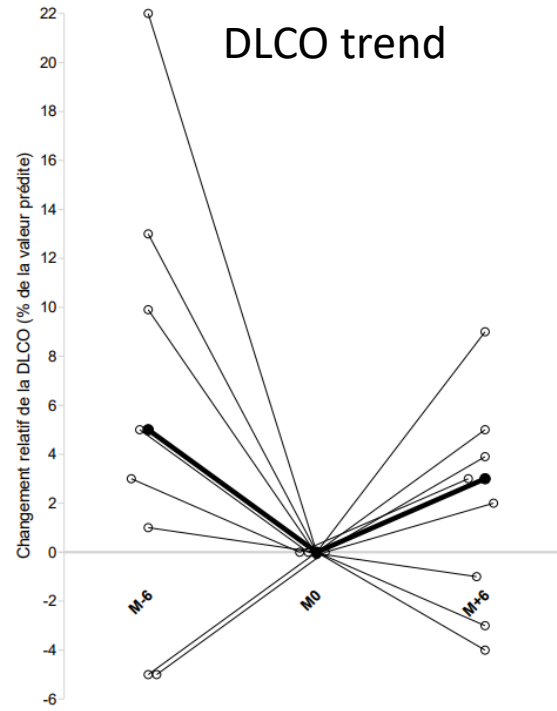


Figure 2: relative change in DLCO (% of predicted value) in 8 patients (for whom a DLCO value was available at the initiation of rituximab), 6 months before and after the introduction of rituximab. The median value is represented by the bold line.

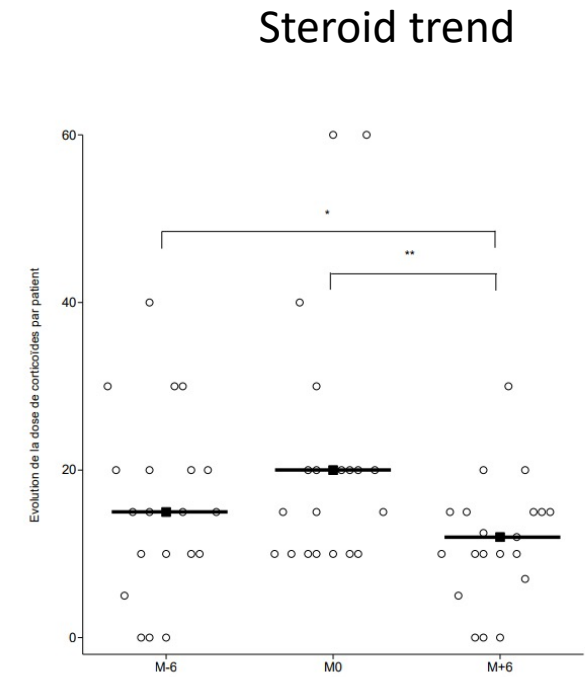
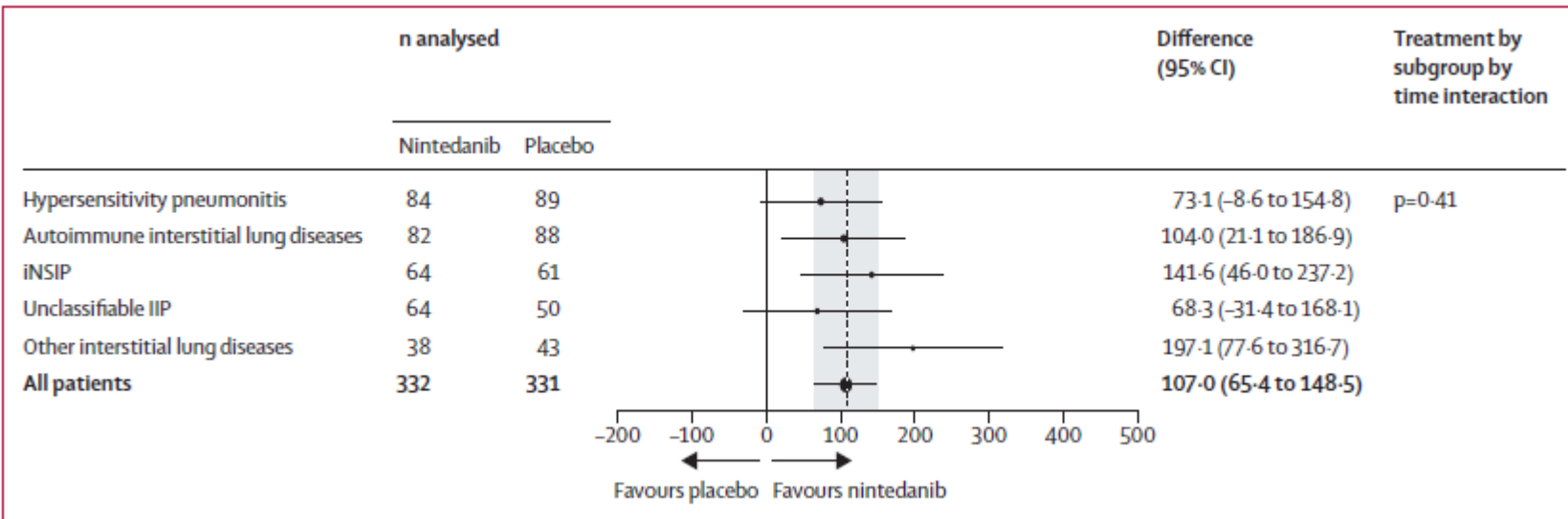
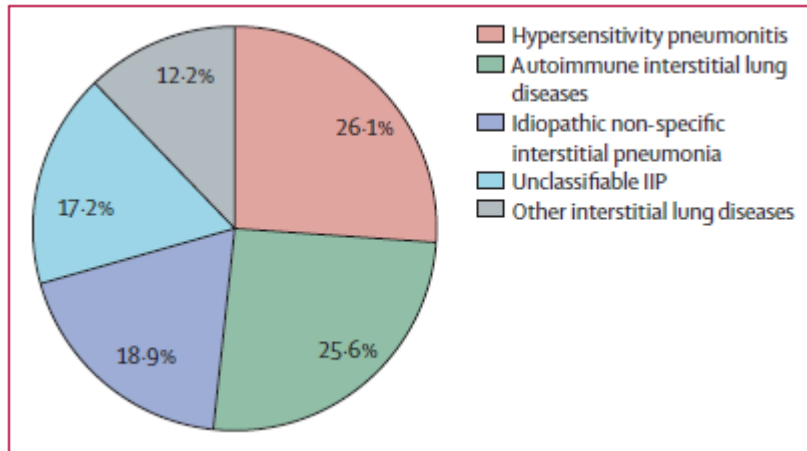


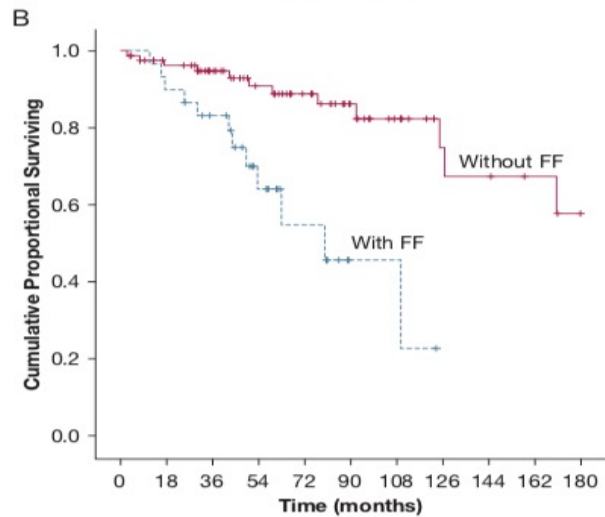
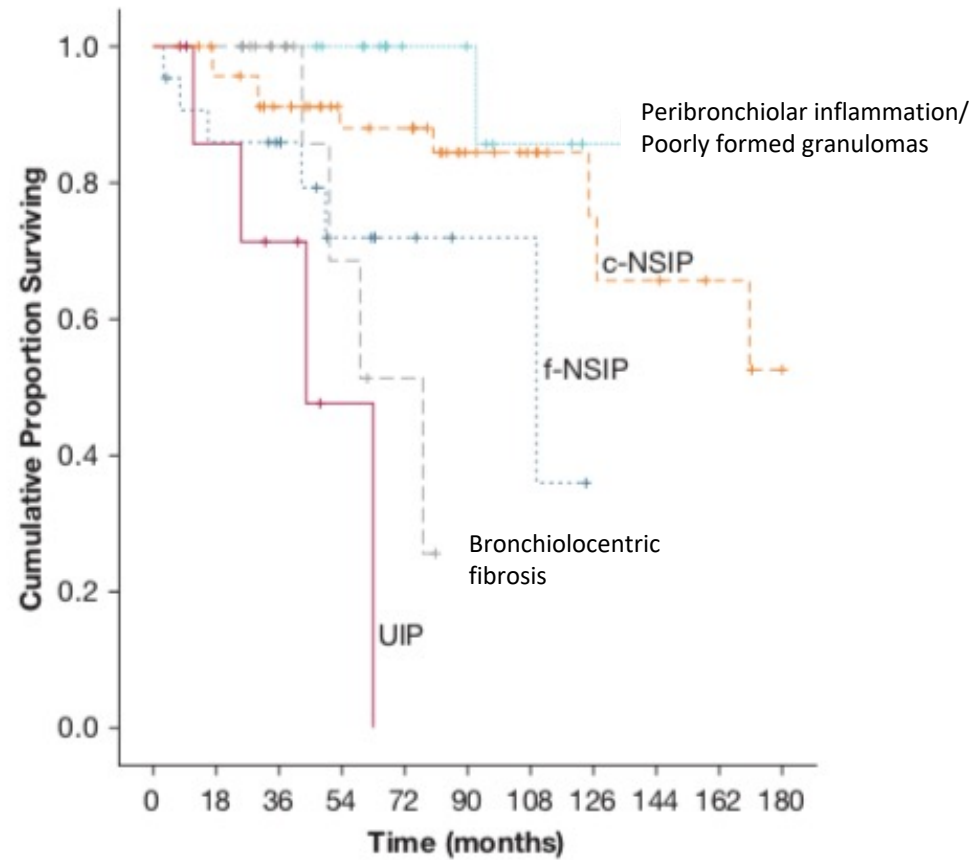
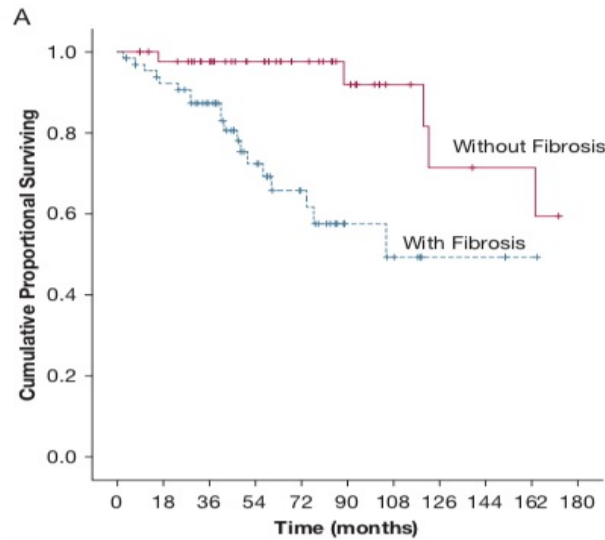
Figure 3: Difference in the dose of corticosteroids 6 months before and after the introduction of rituximab (n = 20). The median values are represented by the bold lines. * and **: $p < 0.05$ and < 0.01 respectively.

Nintedanib has been used to treat fibrotic HP (INBUILD trial)



Pathology determines outcomes in chronic HP

119 patients with cHP and pathology





International Pillow Fight Day 2023 (April 1)

(Masks optional)



Summary

- HP can be challenging to treat, and frequently presents with a progressive fibrotic phenotype
- When identifiable, avoidance of the implicated organic antigen is critical
- The use of immunosuppression may improve outcomes for select patients with an inflammatory component of disease
- Antifibrotic therapy may play a role in patients with progressively fibrotic disease

