squared test, as appropriate, to test for non-inferiority (threshold -0.25) in the fungal allergic group compared to the non-fungal allergic group.

Results The fungal allergic group ($n = 76$) was found to have a mean AQLQ difference between baseline and 16 weeks of $+1.34$ (± 1.25). When compared to the non-fungal allergic cohort, the fungal allergic group was found to have a statistically significant mean AQLQ difference between baseline and 16 weeks of -0.41 (95% CI: $-0.14 - -0.81$). See Figure 1.

Conclusion Fungal allergic patients have a less profound AQLQ response to Omalizumab than non-fungal allergic although the benefit is still clinically significant in the majority of cases. The reduced benefit is statistically different in terms of change, though it does not fulfil the a-priori threshold for non-inferiority.

Abstract P160 Figure 1 Comparing mean AQLQ response to Omalizumab between fungal and non-fungal allergic patients

Treating Idiopathic Pulmonary Fibrosis

P161 UNMET NEEDS IN THE TREATMENT OF IDIOPATHIC PULMONARY FIBROSIS (IPF) – INSIGHTS FROM PATIENT CHART REVIEW IN FIVE EUROPEAN COUNTRIES

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Abstract P161 Table 1 Summary of findings from the treated and untreated populations across European countries

Factor	Treated N = 828	Untreated N = 909
Average age, years	67	70**
Male, %	69	63**
MDT evaluation, %	83	57**
Lung comorbidities, %	39	51**
Emphysema	23	33**
Lung cancer	2	5**
Pulmonary hypertension	22	25
CV comorbidities, %	39	45*
High risk of coronary artery disease	16	17
Coronary artery disease without history of MI or stroke	14	16
Coronary artery disease with history of MI	11	15**
Candidate for lung transplantation, %	19	7**
Confirmed IPF, %	84	51**
Average time from diagnosis to last consultation, months	15.8	15.9
Stable IPF, %	31	51**
Mild IPF (current level), %	18	41**
Symptomatic at treatment initiation, %	90	70**
%FVC at last check-up	60.7	64.2**
%DLco at last check-up	47.4	50.6**

p values represent treated population versus untreated population. * $p \leq 0.05$; ** $p \leq 0.01$. CV, cardiovascular; %DLco, percent predicted carbon monoxide diffusing capacity; %FVC, percent predicted forced vital capacity; IPF, idiopathic pulmonary fibrosis; MDT, multidisciplinary team; MI, myocardial infarction.

Introduction and objectives Two antifibrotic drugs, pirfenidone and nintedanib, are approved by the FDA and EMA for the treatment of IPF. We investigated treatment patterns of European patients with IPF to understand antifibrotic treatment uptake and identify unmet needs in IPF treatment practice.

Methods Between February and March 2016, respiratory physicians from France, Germany, Italy, Spain and the UK participated in an online questionnaire designed to collect information on IPF treatment patterns. Responses were collected from physicians who had consulted with ≥ 6 (France, Italy, Spain) or ≥ 10 (Germany, UK) patients with IPF (within 3 months). Patients were categorised as being in the treated population (those who had received approved antifibrotics) or the untreated population (those who had not received approved antifibrotics, but may have received other therapies). Classification of IPF diagnosis (confirmed/suspected) and severity (mild/moderate/severe) for each patient was based on the individual physician's report.

Results Overall, there were 290 respondent physicians reporting on 1838 patients. Of 1783 patients with data, 54% were not treated with an approved antifibrotic. Of patients with a confirmed IPF diagnosis, 41% were not treated. In the 1737 patients analysed, the untreated population was older than the treated population (70 versus 67 years, respectively; $p \leq 0.01$) and had less frequent multidisciplinary team (MDT) evaluation (57% versus 83%, respectively; $p \leq 0.01$). At diagnosis, mild, moderate and severe IPF was reported in 43%, 40% and 16% of untreated patients, and 26%, 64% and 10% of treated patients, respectively. Average forced vital capacity (FVC) at diagnosis and last check-up was significantly higher in untreated patients versus treated patients (both $p \leq 0.01$; Table); however, fewer untreated patients had an FVC measurement at their most recent check-up

compared with treated patients (12% versus 26%, respectively; $p \leq 0.01$).

Conclusions Despite recent regulatory approval of antifibrotic therapies, many European patients with confirmed IPF do not receive approved antifibrotic treatment. Possible explanations may include: lack of MDT diagnosis; lack of referral to specialist centres; patients not meeting treatment thresholds; subjective perceptions of disease severity; reluctance to treat patients with 'stable' disease; variations in patient/physician awareness or knowledge of IPF; or lack of confidence in prescribing new treatments.

P162 CURRENT INTERSTITIAL LUNG DISEASE SPECIALIST MDT PROVISION ACROSS THE UK

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The advent of novel anti-fibrotic therapies and the introduction of specialist, commissioned Interstitial Lung Disease (ILD) centres, has led to an increased workload for Multidisciplinary Team (MDT) meetings. We set out to survey specialist UK centres to gain a better understanding of their organisational processes and associated challenges.

Methods Between August and December 2015 we conducted an online survey of all 23 NHS England commissioned ILD centres, plus 5 specialist ILD centres in Scotland, Wales and Northern Ireland. The survey was sent to the clinical lead of each centre. A total of 20 questions assessed the workforce composition and frequency of meetings. Their workload was also evaluated and we asked them to identify areas that required improvement.

Results 26 out of 28 centres responded.

MDTs are coordinated by the ILD lead consultant (57%) or a medical secretary (26%), with only 17% directed by a MDT coordinator.

Peripheral hospitals participate in MDTs in 78% of centres; in person, via video-link or paper referrals; however, the majority of discussed patients are reviewed at the specialist centre.

MDTs are typically held weekly, lasting 1 to 2 hours, with 10 to 20 patients discussed. 26% of MDTs discuss all new referrals, 87% discuss all patients considered for anti-fibrotic therapy, whilst only 22% discuss all patients considered for immunosuppressive therapy (aside from oral steroids).

All respondents agreed that the available MDT time was insufficient. The most common reasons were cited as; lack of dedicated MDT funding (83%), lack of sufficient respiratory radiologist consultant time (78%) and lack of dedicated administrative support (61%).

In 96% of cases there is no local tariff in place to fund MDT discussion and all respondents agreed that a dedicated tariff would improve MDT provision.

92% of centres enrol MDT patients into clinical trials.

Conclusion Specialist ILD MDTs are able to concentrate a high level of expertise and allow patients access to vital clinical trials. They are, however, under considerable strain due to lack of funding and administrative support. A dedicated funding stream for this specialist service would be beneficial.

P163 SURGICAL LUNG BIOPSY IN THE DIAGNOSIS OF INTERSTITIAL LUNG DISEASE- A SYSTEMATIC LITERATURE REVIEW

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Methods We performed a systematic literature review based on the PRISMA guidelines following a pre-specified protocol. Pubmed and Embase databases were searched for studies reporting the use of Surgical Lung Biopsies (SLB) in the diagnosis of adults with Interstitial Lung Disease (ILD). Randomised controlled trials, case control studies and case series with more than 20 subjects were included, restricted to papers published from 2000 till September 2015 taking into consideration changes in surgical techniques and diagnostic criteria. All relevant abstracts were assessed by two independent reviewers utilising EPPI reviewer 4, an online software tool for research synthesis. Full papers were obtained for those deemed potentially eligible, and two reviewers agreed the final set of review papers. Primary outcomes were 90 day mortality and complications while secondary were diagnostic yield, mean length of stay and change of treatment following biopsy.

Results (see Figure 1). 24 studies were included reporting on the use of SLB in 2600 patients. The overall quality of the reports was moderate to poor with mainly retrospective case series available. Mean mortality was 4.9% (CI 90% -0.04 -0.14) with a wide range of 0 - 22.4%. Complication rates were reported in 19 of the studies. Mean overall complication rate was 19.4% (CI -0.05 - 0.48) with a range from 7.1% to 65.7%. Mean length of stay adjusted for patient numbers was 5.4 days and diagnostic yield for definite pathological diagnosis was 89%. Eight studies recorded treatment change following SLB in a total of 588 patients out of 869. Mean percentage of patients in whom treatments was changed on the basis of the SLB result was 60% (CI 90% 0.35-0.87).

Conclusions High-quality data on the outcomes of SLB in ILD diagnosis are sparse. Comparison between different studies is difficult due to heterogeneous patient populations (e.g. acute vs elective cases) and differences in outcome reporting. Nonetheless, the overall mortality and morbidity rates are similar to a recent analysis of a US national database. SLB in ILD remains a useful diagnostic tool but carries significant mortality and morbidity. More prospective data and evaluation of surgical risk stratification is required.