Supplementary data

The DIAMORFOSIS (DIAgnosis and Management Of lung canceR and FibrOSIS) survey. International survey and call for consensus.

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Idiopathic Pulmonary Fibrosis (IPF) is a debilitating fibrotic lung disease with a steady increase in both incidence and mortality. In addition, the clinical course of patients with IPF is often complicated by major comorbidities including lung cancer. Despite abundant epidemiologic and mechanistic links between IPF and lung cancer there is considerable lack of knowledge on the diagnostic and therapeutic management of these patients.

To this end, the ERS Assembly 12 (Interstitial Lung Diseases), took the initiative to collaborate with Assembly 11 (Thoracic Oncology) and Assembly 8 (Thoracic Surgery and Lung Transplantation) to create and launch a joint-survey, namely DIAMORFOSIS (DIAgnosis and Management Of lung canceR and FibrOSIS), in which we invite you to participate by clicking in the following link and answering the questions included.

The main objectives of this survey are:

- To identify variations in diagnostic and management strategies across different hospitals and institutions
- To raise awareness on the association between the two conditions
- To provide rationale for a consensus statement for an improved, homogeneous and standardized approach

The estimated time of completion is less than 10 minutes. We greatly appreciate your time and we anticipate your valuable feedback. Results of the survey will be exploited as a publication in an ERS-journal and/or abstract in upcoming ERS and ATS international conferences. Names of the respondents will be included as collaborators in the acknowledgement section of the manuscript.

1. **In which country do you practice?**

…….

2. **What is your medical specialty?**

Pulmonologist ☐

Oncologist ☐

Thoracic surgeon ☐

Anesthesiologist ☐

Pulmo-oncologist ☐

Radio-oncologist ☐

Other (please specify) ☐

3. **How many years of experience do you have as a specialist?**

Less than 5 ☐

5-10 ☐

11-15 ☐

16-20 ☐

More than 20 ☐

4. **What is your hospital setting?**

University Hospital ☐

Non-university hospital ☐

Private institution/practice ☐

5. **How many patients with IPF do you treat per year?**

<10 ☐

10-20 ☐

20-50 ☐

More than 50 ☐

Unknown ☐

6. **What is the incidence of lung cancer in patients with IPF?**

1-5% ☐

5-10% ☐

10-20% ☐

>20% ☐

7. How often do you involve a multi-disciplinary team on the management of patients with IPF and lung cancer?

Always ☐

Sometimes ☐

Never ☐

8. **What diagnostic modality do you use to screen patients with IPF for lung cancer (more than one answers possible)?**

Regular low dose HRCT scan ☐

Regular CXR ☐

HRCT scan in case of symptoms ☐

Tumor markers (Ca19/9, CA125, CEA) ☐

No screening ☐

Other (please specify) ☐

9. **What is the most common histologic subtype of lung cancer in patients with IPF?**

NSCLC-Adenocarcinoma ☐

NSCLC-Squamous cell ☐

NSCLC- other ☐

Small cell ☐

I don't know ☐

None of the above ☐

10. **What is the most common anatomical location for lung cancer in patients with IPF?**

Upper lobes ☐

Middle lobe or lingula ☐

Lower lobes ☐

I don't know ☐

11. What is the median latency time (months) between IPF and lung cancer diagnosis in your experience?

0 (synchronous diagnosis) ☐

<12 ☐

12-24 ☐

24-36 ☐

>36 ☐

Unknown ☐

12. What percentage of patients with IPF present with other types of cancer (non-lung cancer)?

<1% ☐

1-5% ☐

5-10% ☐

10-20% ☐

Unknown ☐

Other (please specify) ☐

13. Which is the most common type of malignancy other than lung cancer occurring in patients with IPF?

Breast cancer ☐

Colon cancer ☐

Prostate cancer ☐

Hematologic malignancies (excluding MDS) ☐

Liver cancer ☐

Renal cancer ☐

Urinary bladder cancer ☐

Unknown ☐

Other (please specify) ☐

14. Do you agree with the following statement: moderate to severe IPF is an absolute contraindication to radiotherapy or chemoradiotherapy in locally advanced NSCLC.

Strongly agree ☐

Agree ☐

I am not sure ☐

Disagree ☐

Strongly disagree ☐

I don't know ☐

15. Do you consider any of the following treatments for advanced stage NSCLC an absolute contraindication in moderate to severe IPF (more than one answer possible)

Platinum based chemotherapy ☐

Docetaxel ☐

Immunotherapy ☐

Tyrosine kinase inhibitors ☐

Bevacizumab ☐

None of the above ☐

I don't know ☐

Other (please specify) ☐

16. Do you continue anti-fibrotic treatment (pirfenidone or nintedanib) when a patient is diagnosed with lung cancer (any stage)?

Yes ☐

No ☐

Other (please specify) ☐

17. Which safety precautions do you apply to patients with IPF and non-small cell lung cancer undergoing surgical lung interventions?

Low tidal volume ☐

Avoidance of high fraction of inspired oxygen ☐

Minimal perioperative administration of fluids ☐

Stop antifibrotic drugs ☐

Continuation of antifibrotic drugs ☐

Other (please specify) ☐

18. How would you treat a patient with advanced IPF (DLCO<35%, FVC<50%, and otherwise operable non-small cell lung cancer nodule (TNM stage I-II)?

surgery ☐

stereotactic radiotherapy ☐

palliative care ☐

doublet platinum ± bevacizumab ☐

Immunotherapy ☐

Targeted therapy ☐

Antifibrotics ☐

Other (please specify) ☐

19. How would you treat a patient with advanced IPF (DLCO<35%, FVC<50%) and metastatic NSCLC (TNM IV) ?

Palliative care ☐

doublet platinum ± bevacizumab ☐

Immunotherapy i.e. PDL1 inhibitors ☐

Targeted therapy ☐

Anti-fibrotics ☐

Other (please specify) ☐

20. How would you treat a patient with mild-to-moderate IPF (DLCO>35%, FVC>50%), and otherwise operable non-small cell lung cancer nodule (TNM stage I-II)?

surgery ☐

stereotactic radiotherapy ☐

palliative care ☐

doublet platinum ± bevacizumab ☐

Immunotherapy i.e. PDL1 inhibitors ☐

Targeted therapy ☐

Antifibrotics ☐

Other (please specify) ☐

21. **What would it be your next diagnostic step in a patient with mild-to-moderate IPF (DLCO>35%, FVC>50%) with a central nodular lesion of 20 mm and mediastinal lymphadenopathy?**

Monitor the patient with HRCT scan every 3-6 months ☐

Perform PET CT scan and do not change your routine follow-up work if negative ☐

Perform PET CT scan and if positive then apply endobronchial ultrasound-guided transbronchial needle biopsy (EBUS-TBNB) ☐

None of the above ☐

Other (please specify) ☐

22. **What would it be your next diagnostic step in a patient with severe IPF (DLCO<35%, FVC<50%) with a central nodular lesion of 20mm and mediastinal lymphadenopathy?**

Monitor the patient with HRCT scan every 3-6 months ☐

Perform PET CT scan and do not change your routine follow-up work if negative ☐

Perform PET CT scan and if positive then apply endobronchial ultrasound-guided transbronchial needle biopsy (EBUS-TBNB) ☐

Perform surgical lung biopsy (VATS) and resection without histological proof prior to surgery ☐

None of the above ☐

Other (please specify) ☐

23. **Do you think a consensus statement for the diagnosis and management of patients with IPF and lung cancer is necessary?**

Yes ☐

No ☐

24. **Other points that are missing and considered to be necessary……..**

25. **Please provide your personal contact details (non-mandatory)……..**