



14th EMPIRE Steering Committee meeting

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Agenda

- Current status of the EMPIRE registry
- News in the registry
- Personal changes
- Manuscripts in progress, publications
- Analyses and ongoing IIS
- Continuation of EMPIRE after 06/2022 – ways to go, framework budget



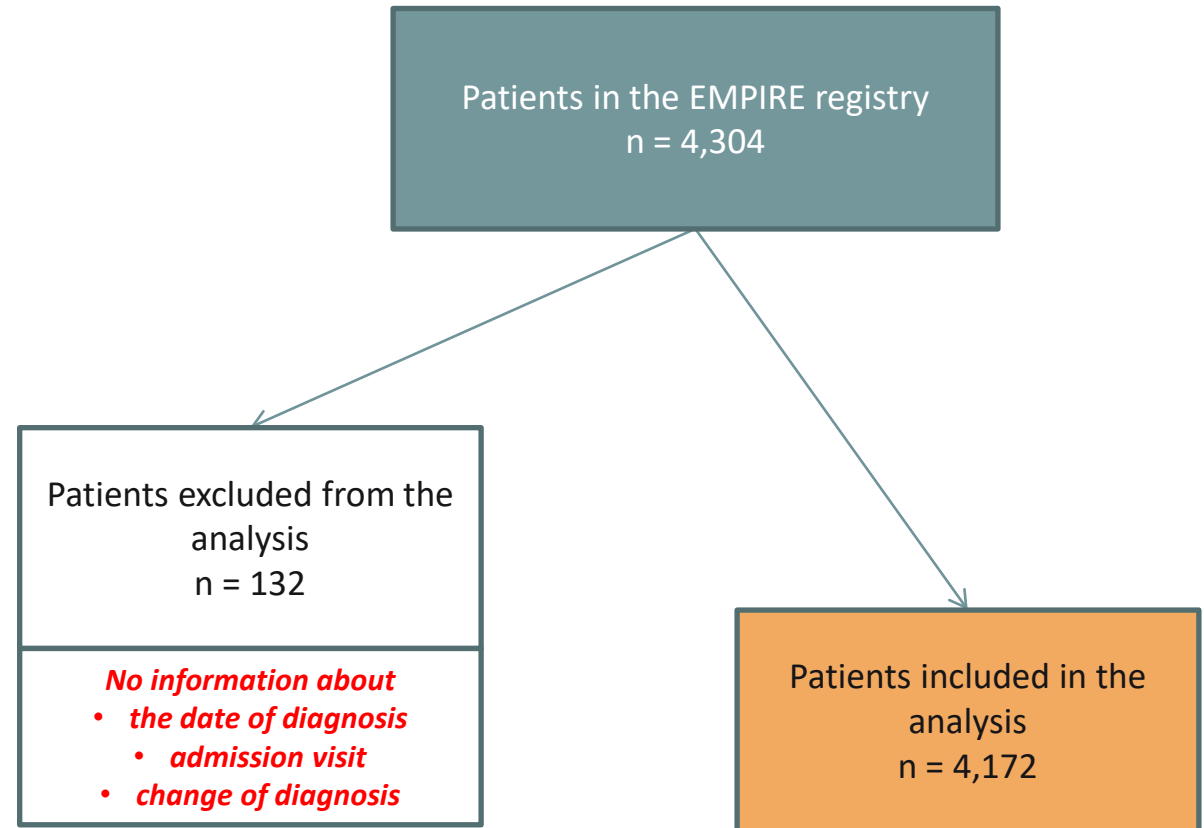


Current state of the registry

Number of patients by countries in the EMPIRE registry

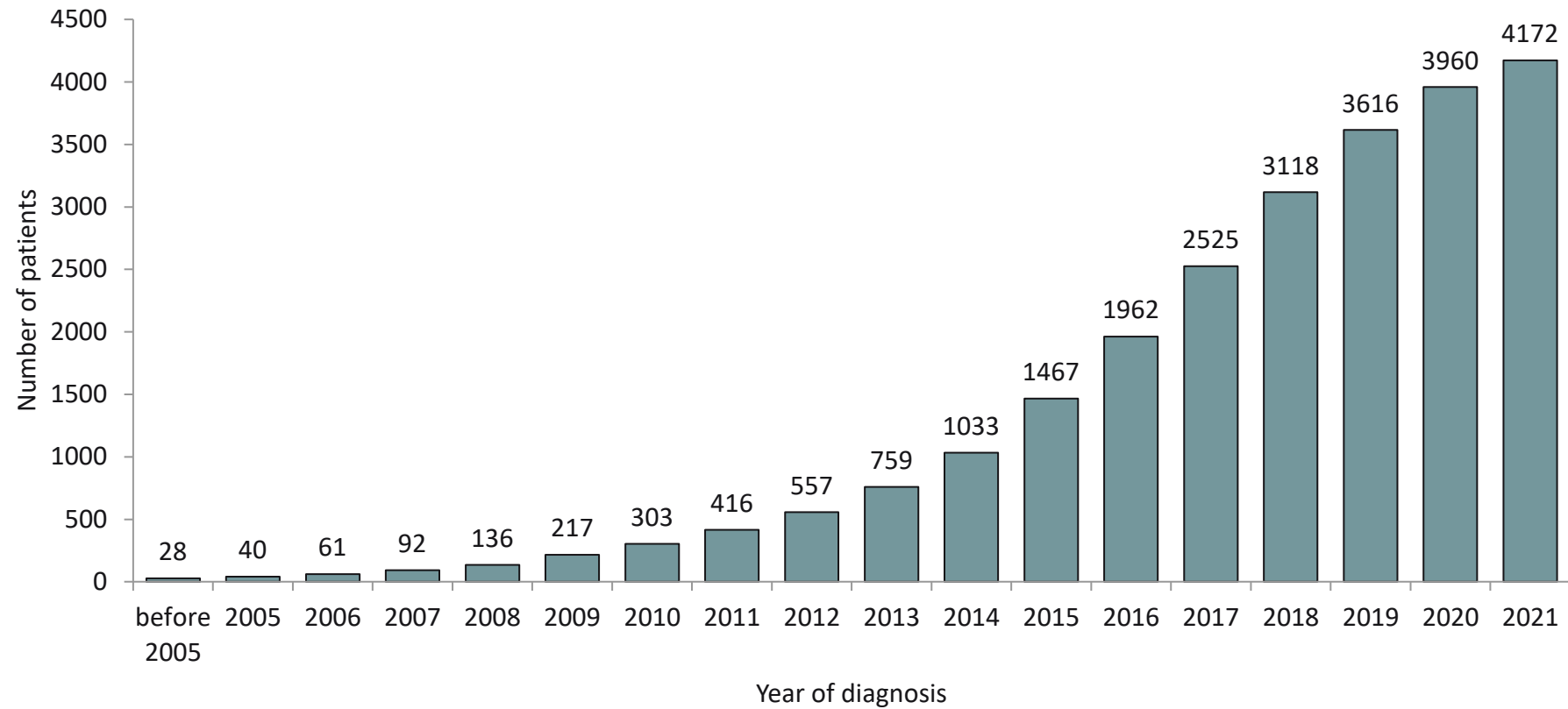
n = 4,172

	Number of patients
Czech Republic	1451 (34.8%)
Turkey	824 (19.8%)
Poland	657 (15.7%)
Hungary	294 (7%)
Israel	275 (6.6%)
Slovakia	240 (5.8%)
Serbia	155 (3.7%)
Austria	131 (3.1%)
Croatia	113 (2.7%)
Bulgaria	24 (0.6%)
Macedonia	8 (0.2%)



Number of newly diagnosed patients

n = 4,172



Patients with COVID-19

	Number of patients	Deceased
Czech Republic	60	7
Turkey	51	13
Poland	4	
Hungary	2	
Israel	1	1
Slovakia	1	
Austria	3	
Croatia	2	



New countries/centres interested in participation

Country	Comment
Bulgaria	Military Medical Academy Sofia (contract pending), possible interest of other centres (information from BI)
Ukraine	Recent contact from Ivano-Frankivsk
Czechia	General University Hospital in Prague

How we are doing – example Q3/2021

Hospital	Entry	F-up
České Budějovice - Plicní oddělení	3	12
Clinical Research Center Salzburg GmbH	6	32
EGE University - Department of Pulmonary Medicine	28	225
FN Brno - Plicní klinika	4	67
FN Motol - Pneumologická klinika	3	24
FN Olomouc - Plicní klinika	7	47
FN Ostrava - Klinika TRN	8	92
FN Plzeň - Klinika TRN	0	21
FNHK - Plicní klinika	2	63
Inst. of Tuberc. and Lung Dis. Warsaw - I Dep	9	30
Inst. of Tuberc. and Lung Dis. Warsaw - III Dep	1	7
Jihlava - Plicní odd.	3	5
Levice - Ambulancia pneumológie a ftizeológie	0	5
Národný ústav tuberkulózy a pľúcnych chorôb	0	14
Nemocnice Na Bulovce – Plicní klinika	1	62
Nový Jičín - Plicní odd.	4	21
Pécs University - Department of Pulmonology	1	1
Rabin Medical Center - Institute of Pulm. Medicine	1	1
Semmelweis University - Department of Pulmonology	2	36
Szpital Gdańsk. Uniw. Med. - Klin. Alerg. i Pneum.	1	71
Thomayerova nemocnice - Pneumologická klinika	10	116
University Hospital Dubrava - Dep. of pulmonology	3	5

Country	Entry forms	F-up forms
AT	6	32
CZ	45	530
HR	3	5
HU	3	37
PL	11	108
IL	1	1
SK	0	19
TR	28	225
Total	97	957



SC voting since the last meeting

- **COVID-19 vaccination data in the registry**

Result: approved

Phases and forms

Enrollment (1)	Treatment (3)	Follow-up (13)	Adverse Events (3)	End of Observation (1)	COVID-19 vaccination (0)
COVID-19 vaccination					
Available forms					
COVID-19 vaccination			Create new form		

- **Continuation of the EMPIRE registry and inclusion of other diseases**

Result: sent in a standalone document on 11 Aug 2021

To be discussed later at this meeting



Personal changes

- Steering Committee – Serbia:
Dragana Jovanovic → Sanja Dimic Janjic
- IBA analyst:
Simona Littnerová → Petra Ovesná



EMPIRE
(IPF)

Analyses & publications

Published articles (IF journals)

2021

- Doubková M, Kriegová E, Littnerová S, Schneiderová P, Šterclová M, Bartoš V, et al. DSP rs2076295 variants influence nintedanib and pirfenidone outcomes in idiopathic pulmonary fibrosis: a pilot study. Therapeutic Advances in Respiratory Disease 2021.

2020

- Kolonics-Farkas A, Šterclová M, Mogulkoc N, Kus J, Hájková M, Müller V, Jovanovic D, Tekavec-Trkanjec J, Littnerová S, Hejduk K, Vašáková M. Anticoagulant use and bleeding risk in Central European patients with idiopathic pulmonary fibrosis (IPF) treated with antifibrotic therapy: real-world data from EMPIRE. Drug Safety 2020; 43(10): 971–980. Times cited: 3 (Web of Science), 3 (Scopus)
- Tran T, Šterclová M, Mogulkoc N, Lewandowska K, Müller V, Hájková M, Kramer MR, Jovanović D, Tekavec-Trkanjec J, Studnicka M, Stoeva N, Hejduk K, Dušek L, Suissa S, Vašáková M. The European MultiPartner IPF registry (EMPIRE): validating long-term prognostic factors in idiopathic pulmonary fibrosis. Respiratory Research 2020; 21: 11. Times cited: 9 (Web of Science), 9 (Scopus)

2019

- Barczy E, Starobinski L, Kolonics-Farkas A, Eszes N, Bohacs A, Vašáková M, et al. Long-term effects and adverse events of nintedanib therapy in idiopathic pulmonary fibrosis patients with functionally advanced disease. Advances in Therapy 2019; 36(5): 1221–1232. Times cited: 5 (Web of Science), 6 (Scopus)
- Žurková M, Eva Kriegová E, Kolek V, Lošťáková V, Šterclová M, Bartoš M, et al. Effect of pirfenidone on lung function decline and survival: 5-yr experience from a real-life IPF cohort from the Czech EMPIRE registry. Respiratory Research 2019; 20: 16. Times cited: 35 (Web of Science), 33 (Scopus)

2018

- Doubková M, Švancara J, Svoboda M, Šterclová M, Bartoš V, Plačková M, et al. EMPIRE Registry, Czech Part: Impact of demographics, pulmonary function and HRCT on survival and clinical course in idiopathic pulmonary fibrosis. The Clinical Respiratory Journal 2018; 12(4): 1526–1535. Times cited: 18 (Web of Science), 23 (Scopus)



Articles in preparation/submitted

- **Comorbidity burden in patients with idiopathic pulmonary fibrosis: the EMPIRE registry study**

Lead author: Dragana M. Jovanović

Current status: final approval, to be submitted

- **Outcomes in patients with IPF in the EMPIRE registry treated with pirfenidone or nintedanib: impact of switching to a second antifibrotic therapy after discontinuation of the first antifibrotic**

Lead author: Yochai Adir

Current status: ?

- **Intercountry differences in IPF patients**

Lead author: Abigél M. Kolonics-Farkas

Current status: re-submitted, waiting for editor's decision



Articles in preparation /submitted

- **Correlation of response to antifibrotic treatment with adverse events to antifibrotic drugs in IPF patients from the EMPIRE registry**

Dragana M. Jovanović

Current status: paper in preparation

- **Short- and long-term outcome of pirfenidone treatment in definite, probable and possible idiopathic pulmonary fibrosis**

Lead author: Martina Vašáková

Current status: got stuck in PLOS One

If rejected – Respirology (6.424), Respiratory Research (5.631)...?



Analyses – to be initiated

- Analyses previously agreed by the SC, but without specification to date
- **Crepitus**
Investigator: Michael Studnicka
- **Quality of life**
Investigator: Katarzyna Lewandowska
- **Genetics in Czech and Turkish cohorts**
Investigator: Nesrin Mogulkoc
- **Risk assessment**
Investigator: Nesrin Mogulkoc

Analyses – to be proposed and approved

- Analyses to be approved by SC
- **Extension of the pirfenidone radiological study (SDU)**

Investigator: Michael Studnicka



EMPIRE
(IPF)

Subprojects, IIS

HRCT Repository

- Repository ready from October 2021
- Cooperation with Czech centres – under negotiation (in the form of amendment to existing contracts)
- Cooperation with centres from abroad – to be contacted soon
- Operated by TatraMed SK software
 - TomoCon Workstation <https://tatramed.sk/en/tomocon-workstation/>
 - T3C <https://tatramed.sk/en/t3c/>



PD-L1 biomarkers

- Contract MU–Roche in review
- Protocol, budget proposal and informed consent have been prepared
- Administrative issues – permission to import samples to Serbia from their MoH

Country/site	Number of samples	Collection – prospective	Collection – retrospective	Collection – routine	Collection – for the study
Czechia					
Hradec Kralove	50	yes	no	yes	no
Bulovka	20	yes	no	yes	no
Thomayer Hospital	40	yes	no	no	yes
Olomouc	20	yes	yes	yes	yes
Turkey					
Ege	400	yes	yes	yes	yes
Hungary					
Budapest	100	yes	no	yes	no
Croatia					
Dubrava	40	yes	no	no	yes

Nintedanib study

- Objective: analysis of short- and long-term clinical outcome of patients treated with nintedanib with different characteristics (FVC, HRCT, age, rapid/slow progression)
- IIS led by Martina Vašáková and supported by BI
- Current state: first phase completed (selection and basic description of patients cohorts to be analysed)



EMPIRE
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EMPIRE in 2021, 2022...?

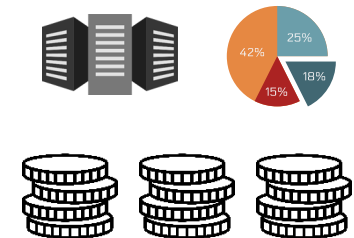
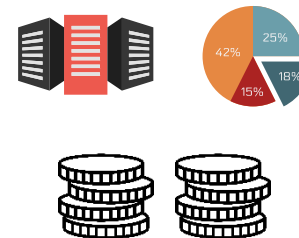
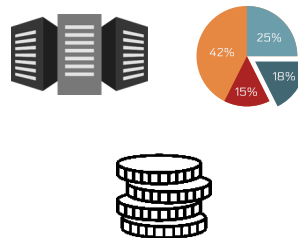
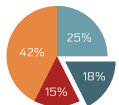
What we know

- Current contracts by 30 June 2022
- Support of BI and Roche from July 2022 onwards in negotiation
- Results of SC voting (July 2021)
 - Continue with IPF and add other ILDs
 - Add CTD-ILDs and hypersensitivity pneumonitis
- New electronic data capture system –to be implemented during 2022
- TrialDB to be subdued, IPF data capture either transferred into the new EDC, or (almost) terminated



Scenarios

IPF minimalistic	IPF continuous	IPF minimalistic + 1 or 2 dg	IPF continuous + 1 or 2 dg
1	2	3	4
<ul style="list-style-type: none"> Terminated IPF data in Trial DB (or continuing f-up until the system is incapable of maintenance, operation, and appropriate security) Analyses of data captured to date, IIS 	<ul style="list-style-type: none"> Conversion of IPF data from Trial DB to a new EDC Ongoing data capture on IPF 	<ul style="list-style-type: none"> Terminated IPF data capture in Trial DB, analyses of data captured to date, IIS Data on CTD/HP captured in the new EDC (launch of a new database) 	<ul style="list-style-type: none"> Conversion of IPF data from Trial DB to the new EDC Ongoing data capture on IPF Data on IPF/CTD/HP captured in the new EDC (launch of a new database)
Switch to IIS mode, focus on analyses and publications	Going on as we have done to date	Switch to IIS mode for IPF, prospective monitoring of new diagnoses	Going on as we have done to date with 2 or 3 diagnoses
Depends on each IIS proposal	293,900 EUR	293,900–494,600 EUR	687,300 EUR



EMPIRE – annual costs

Item	2019–2022 (EUR) IPF	2022–20?? (EUR) IPF	2022–20?? (EUR) CTD-ILD	2022–20?? (EUR) HP	2022–20?? (EUR) 2 dg	2022–20?? (EUR) 3 dg
ICT – hosting, database, connectivity	12,000	20,000	20,000	20,000	24,000	28,000
Project management, administration, help desk	23,000	25,000	25,000	25,000	29,000	33,000
Data management, reporting	5,800	6,200	6,200	6,200	13,400	18,600
Analytical service – basic	7,200	7,500	7,500	7,500	15,000	22,500
<i>Analytical service – extended (upon request)</i>	<i>24,000</i>	<i>24,000</i>	<i>24,000</i>	<i>24,000</i>	<i>24,000</i>	<i>24,000</i>
Steering Committee	18,500	20,000	20,000	20,000	20,000	20,000
Pharmacovigilance reporting	1,200	1,200	1,200	1,200	1,200	1,200
<i>Publication fees</i>	<i>12,000</i>	<i>12,000</i>	<i>12,000</i>	<i>12,000</i>	<i>12,000</i>	<i>12,000</i>
Physician fee for data entry – baseline data*	18,000	18,000	18,000	18,000	36,000	48,000
Physician fee for data entry – follow-up*	160,000	160,000	160,000	160,000	320,000	480,000
TOTAL	281,700	293,900	293,900	293,900	494,600	687,300

*Estimation based on real EMPIRE data 2019–2021. The same number of patients and frequency of visits is considered for each diagnosis.

