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Implementace fenotypů do praxe

Theory: 

Practice: 

3 zdroje informací z ČR

- CMRD (ČPFS + IBA MUNI Brno) *FEV1 ≤ 60% UNIV+KRAJSKÉ N.*
- VESALIA (ČPFS + CEEOR/Kantar Health Praha) *plicní ambulance*
- POPE Studie (copdplatform.com + IBA MUNI Brno) *plicní ambulance*

CMRD



Czech multicenter research database of severe COPD

The Czech Research Database of COPD (CMRD) (demography)

Parameter	Value	N	%
Gender	Female	187	(29.2 %)
Gender	male	450	(70.8 %)
Age		57.0	(23.0; 91.1)
Smoking status	ex-smoker	403	(64.1 %)
Smoking status	non-smoker	234	(36.9 %)
BMI		24.7	(18.9; 37.0)
FFH		19.7	(14.2; 28.3)
MAC		25.3	(11.1; 51.6)
FEV1 (% of predictive value)		45.6	(44.9; 46.3)
FVC (% of predictive value)		67.7	(66.9; 68.5)
Vmax (% of predictive value)		67.7	(66.9; 68.5)
FEV1/VCmax		0.8	(0.8; 0.7)
RV (% of predictive value)		187.0	(186.6; 188.1)
TLC (% of predictive value)		112.0	(108.0; 114.0)
RV/TLC (%)		0.60	(0.60; 0.55)
IC/TLC (%)		38.0	(37.0; 39.0)
TLC _{adj} (% of predictive value)		48.0	(32.0; 89.0)
RV (%)		46.0	(36.0; 118.0)
RV/TLC (ml)		346.0	(105.0; 505.0)
Atopy	present	41	(6.4 %)
Atopy	absent	28	(4.4 %)
Atopy		69	(10.8 %)
GOLD categories	A	10	(1.6 %)
GOLD categories	B	109	(17.0 %)
GOLD categories	C	37	(5.8 %)
GOLD categories	D	479	(75.6 %)

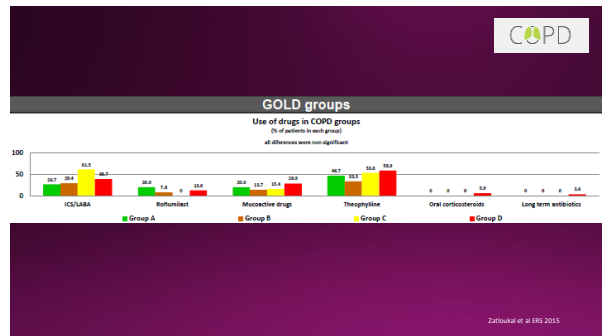
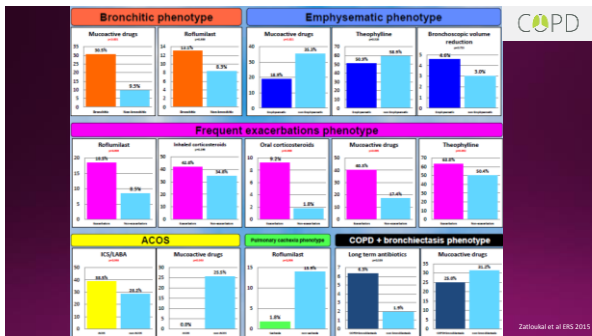
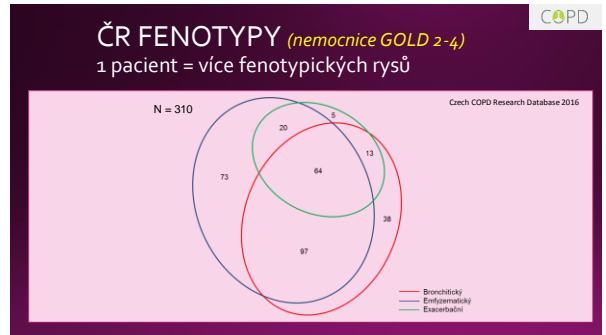
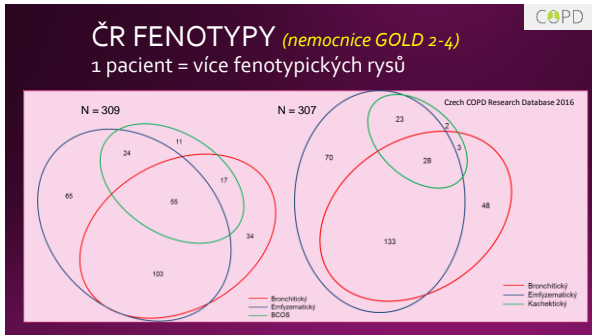
N = 637

ČR FENOTYPY (nemocnice GOLD 2-4)

1 pacient = 1 fenotyp

N = 637

- AE CB (N = 399) 62.6%
- AE NON-CB (N = 120) 18.8%
- AE CB (N = 45) 7.1%
- AE NON-CB (N = 45) 11.5%



VESALIA

Parametr	2014 N=1323	2016 N=562
Věk	68.15±9.32	67.17±9.36
Pohlaví: M/F	910/413 (68.78/31.22)	382/180 (67.97/32.03)
BMI	28.02±5.73	27.56±5.95
Post BD FEV1 (%)	52.55±19.21	52.09±22.72
mMRC		
0. Stupeň	91 (6.88)	38 (6.76)
1. Stupeň	310 (24.94)	129 (22.95)
2. Stupeň	474 (35.83)	183 (32.56)
3. Stupeň	231 (17.46)	93 (16.55)
4. Stupeň	101 (7.63)	61 (10.85)
Nezjištěno	96 (7.26)	58 (10.32)
CAT	15.58±7.91	13.55±8.15
ADO	4.19±1.71	4.12±1.71

Soubor běžných pacientů s CHOPN v ČR *plicní ambulance*

Fenotypické spektrum (n 409)
(analýza osob s CT hrudníku)

COPD phenotypes based on clinical parameters and CT	Proportion of COPD patients
Bronchitic phenotype	64.4 %
Emphysematous phenotype	65.4 %
ACOS	6.1 %
BCOS	15.7 %
Frequent exacerbator	34.4 %

Note: One patient may be identified by several phenotypic labels

(pohled Českýma očima tedy ± PACIENT více fenotypických rysů)

Kobak V et al. ERS 2015

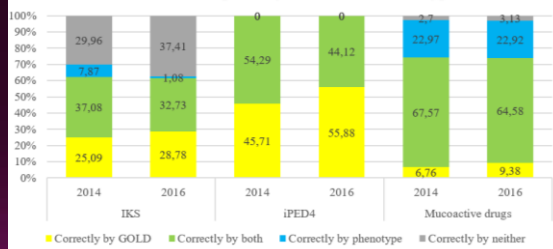
Vývoj fenotypů v plicních ambulancích

(n 562)



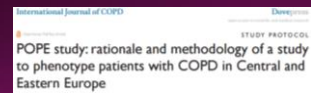
Kobak V et al. 2017

Correct Prescription by GOLD and Phenotype



Kobak V et al. 2017

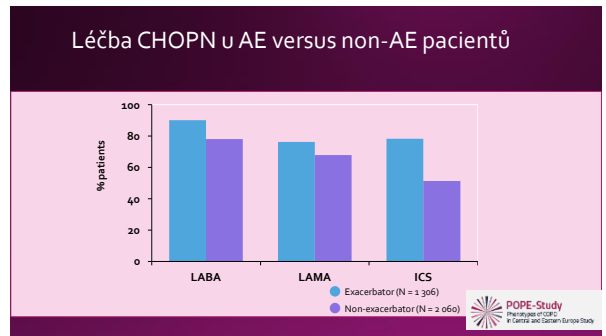
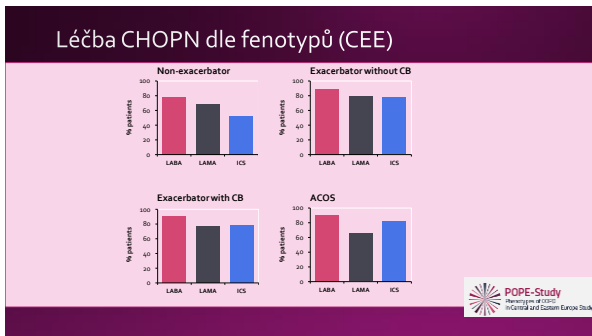
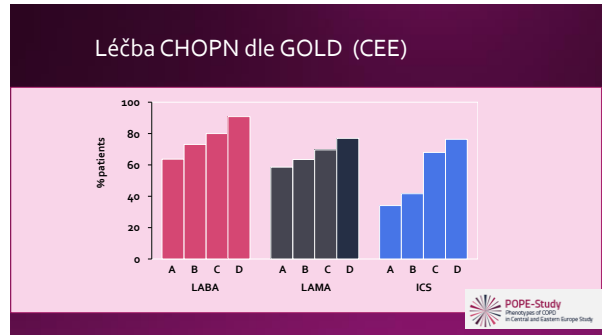
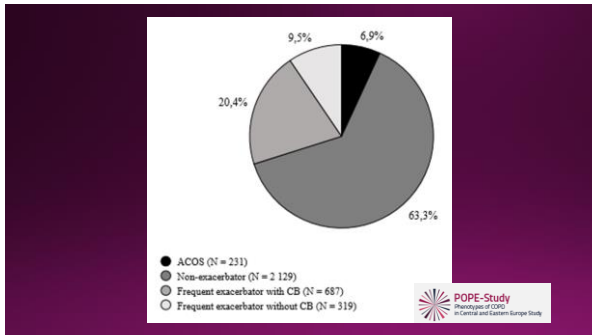
POPE



POPE-Study
Phenotypes of COPD
in Central and Eastern Europe Study

Age at inclusion, years	66.0 (8.8)
Age at diagnosis, years	58.5 (9.0)
Male gender, N (%)	2 356 (70.0)
Smoking exposure	Ex-smoker, N (%) Current smoker, N (%)
School education, years	11.3 (2.8)
Urban area, N (%)	2 424 (74.1)
Rural area, N (%)	849 (25.9)
BMI, kg m ⁻²	27.2 (5.7)
CAT	17.4 (7.8)
mMRC	2.0 (1.0)
FEV ₁ , L	1.4 (0.6)
FEV ₁ , % predicted	52.8 (18.5)
FVC, L	2.8 (0.9)
FVC, % predicted	80.0 (20.4)
FEV ₁ /FVC	0.5 (0.1)
Acute exacerbations / 12 months	Moderate Severe Total
	0.9 (1.3) 0.3 (0.7) 1.2 (1.6)

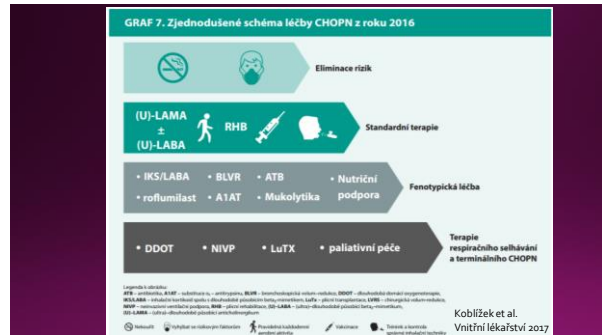
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	POPE	SLOVENSKO	ČESKO
LABA	82.8%	90.9%	83.5%
LAMA	71.1%	81.9%	55.4%
IKS	61.8%	51.8%	47.4%
TEOFYLINY	24.9%	28.6%	19.0%
MUKOAKTIVNÍ	8.8%	13.3%	9.8%
ROFLUMILAST	4.2%	11.9%	8.3%
KS	8.8%	2.5%	1.5%

MALÁ REVIZE DP CHOPN 2016-17



ZÁVĚR

Závěr

- CHOPN POPULACE JE HETEROGENNÍ ve všech kohortách
- FENOTYPICKÝ POHLED ovlivňuje terapeutický vzor
- IMPLEMENTACE není dostatečná
- Malá revize DP 2016 zdůrazňuje personalizovaný přístup