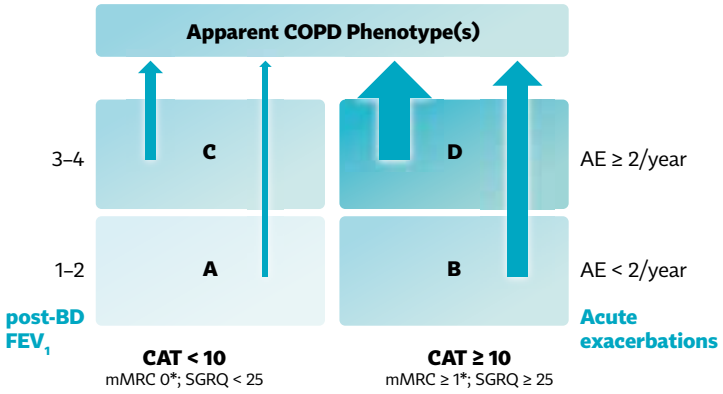
Chronic Obstructive Pulmonary Disease: Official diagnosis and treatment guidelines of the Czech Pneumological and Phthisiological Society; a novel phenotypic approach to COPD with patient-oriented care

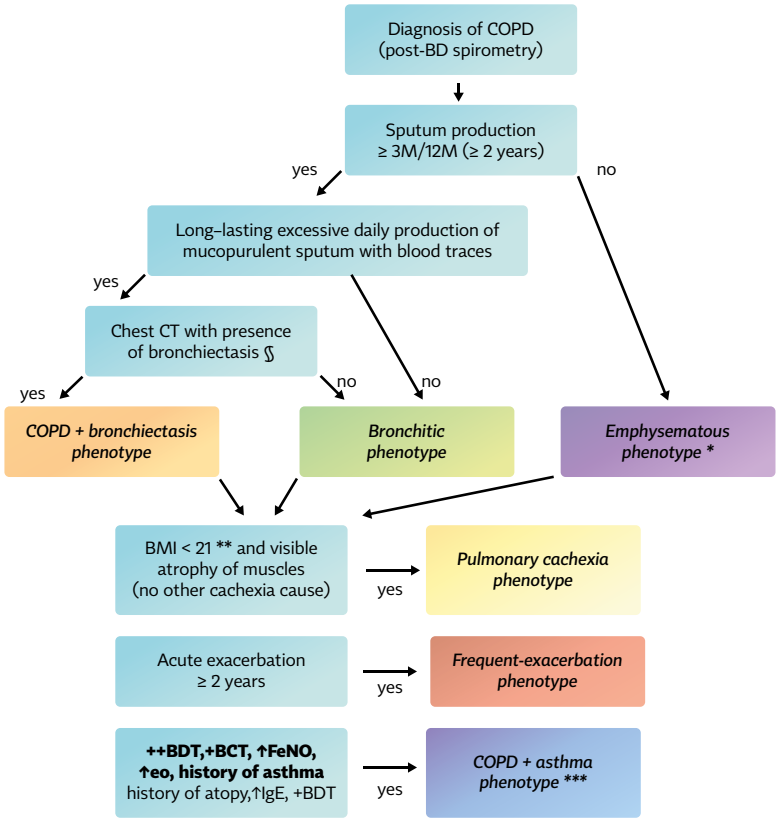
http://chopn.registry.cz/index-en.php?pg=home--publications

Figure 1: CPPS COPD classification is based on modified(*) GOLD and phenotype(s) assessment



A clinically apparent and visible phenotype can be found especially in B and D categories (less so in category C and very rarely in category A).

Figure 2: How to determine the COPD phenotypes (algorithm for specialists)



** It is useful to verify this by function assessment (TLCO, KCO < LLN, RV > ULN) for all non-A patients and by chest CT if you plan the targeted therapy of emphysematous phenotype*
§ CT scan only for patients with chronic excessive daily production of mucopurulent sputum with blood traces
*** FFMI assessment is not available in routine clinical practice, so we recommend simple use of BMI*
**** COPD + asthma phenotype can be confirmed by the presence of two major criteria (bold) or one major plus two minor criteria*

Figure 3: Four steps approach to COPD treatment (CPPS COPD Guidelines)

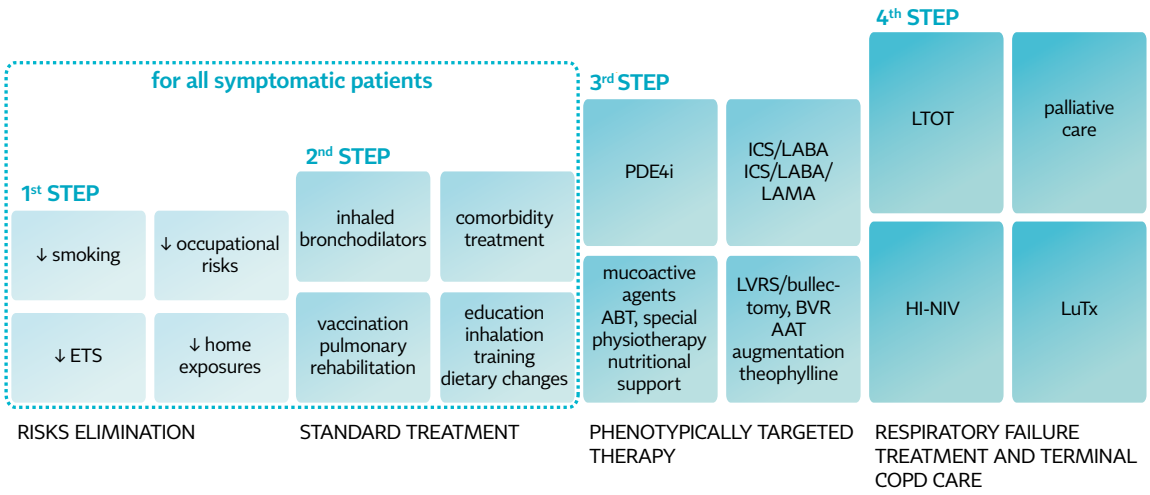
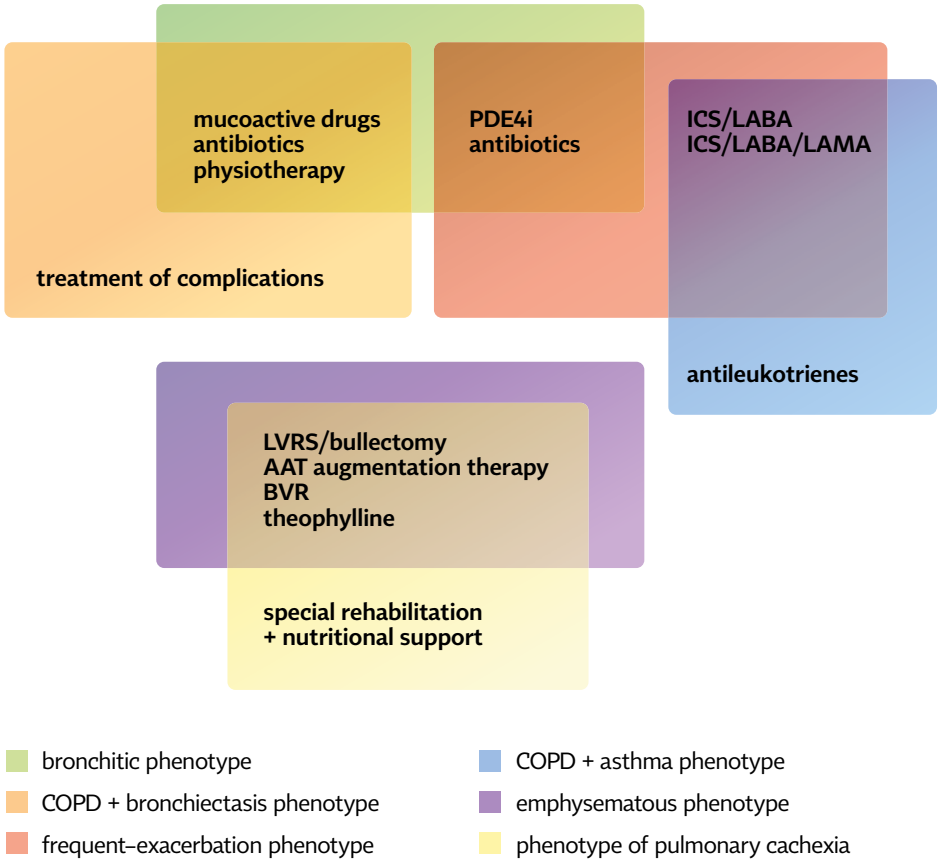


Figure 4: Simplified diagram of phenotype-specific COPD treatment (3rd step)



Abbreviations:

AAT, Alpha-1 antitrypsin; AE, Acute exacerbation; ABT/ATB, Antibiotic therapy; BCT, Bronchial challenge test; BDT, Bronchodilator test; BMI, Body mass index; BVR, Bronchoscopic lung volume reduction; CAT, COPD Assessment Test; COPD, Chronic obstructive pulmonary disease; CPPS, Czech Pneumological and Phthisiological Society; CT, Computer tomography; Eo, Eosinophil; ERS, European Respiratory Society; ETS, Environmental tobacco smoke; FEV_1, forced expiratory volume in 1 second; FeNO, Fractional exhaled nitric oxide; FFMI, Fat-free mass index; GERD – gastroesophageal reflux disease; GPs, General practitioners; HI-NIV, High-intensity non- invasive ventilation; ICS, Inhaled corticosteroid; IgE, Immunoglobulin E; K_{CO}, Carbon monoxide uptake rate; LABA, Long-acting beta2-agonist; LAMA, Long-acting muscarinic antagonist; LLN, Lower limit of normality; LTOT, Long-term oxygen therapy; LuTx, Lung transplantation; LVRS, Lung volume reduction surgery; mMRC, Modified Medical Research Council dyspnoea scale; NCC, National Consensus Conference; PDE4i, Phosphodiesterase 4 inhibitor; SGRQ – St. George's Respiratory Questionnaire; TL_{CO}, Transfer factor of the lung for carbon monoxide; ULN, Upper limit of normality; VC, Vital capacity; ↑, Rise; +, Light positivity; ++, Strong positivity