

Propositions accompanying this PhD thesis

# Management of Patients with Asthma or Chronic Obstructive Pulmonary Disease

## The role of genetics

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1. The *ADRB2* Arg16 haplotype increases the risk of asthma exacerbations in patients treated with inhaled corticosteroids plus long-acting  $\beta_2$ -agonists. (this thesis)
2. Genome-wide association studies have identified potential associations between genetic variants and asthma exacerbations despite the use of inhaled corticosteroids. (this thesis)
3. The use of cardioselective  $\beta$ -blockers reduces the risk of COPD exacerbations in patients with both COPD and cardiovascular disease. (this thesis)
4. Current users of  $\beta_2$ -agonists carrying the *ADRB2* Arg16 haplotype have a significantly lower risk of COPD exacerbations. (this thesis)
5. Adherence to inhaled maintenance therapy is not optimal among COPD patients. (this thesis)
6. Real-world evidence studies are known for their greater patient inclusivity, making their findings more applicable to a broader population and offering higher external validity compared to traditional randomized controlled trials. (Nawar Diar Bakerly et al., 2022)
7. "Breathing is life - act earlier." (*World COPD Day, 2023*)
8. "Life is a game of inches - and the inches we need are everywhere around us." (Al Pacino as Coach Tony D'Amato in *Any Given Sunday*)
9. "These big data sets will give us the statistical power to find what is really a needle in a haystack." (Andrew DeWan, interview on the need for more extensive genetic data, 2018)
10. "I'll think about it tomorrow - after all, tomorrow is another day." (Scarlett O'Hara in *Gone with the Wind*, 1939)
11. Linking diverse real-world data sources can unlock comprehensive insights, leading to more personalized and effective healthcare solutions.