

Abstract Presentations

2. Janwillem Kocks, Netherlands!

The sensitivity and specificity of specific IgE in diagnosing asthma in primary care

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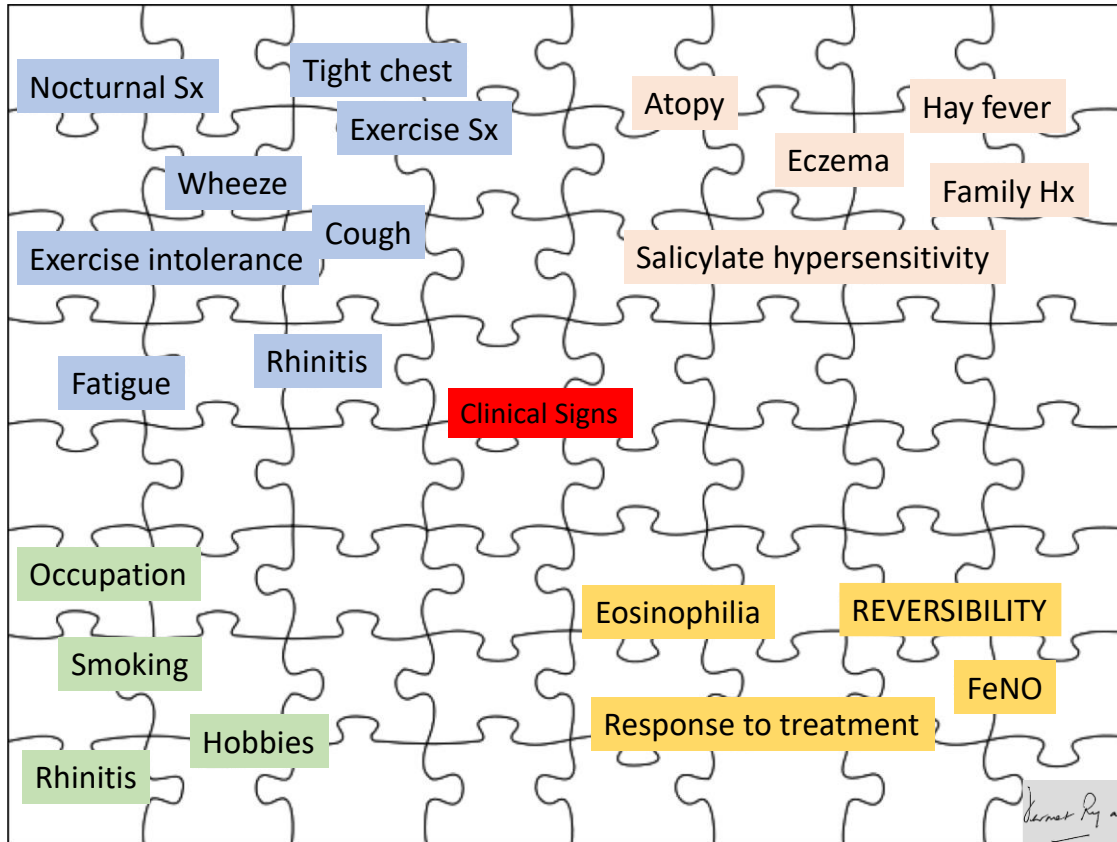
On behalf of:

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Introduction

- Over- and under diagnosis both occur for asthma, a disease where around 300 million people suffer from worldwide¹
- Certain parameters could assist in completing the jigsaw of diagnosis, but since atopy is one of the predisposing factors for asthma, measurement of sIgE could be of assistance²

The asthma jigsaw



Factors in the multi dimensional diagnosis of asthma

Symptoms

Social Hx

Past and Family Hx

Biomarkers

Aim

- Investigate the sensitivity and specificity of sIgE to inhalant allergens in primary care patients who were diagnosed with asthma by remote assessment of a pulmonologist and showing clear bronchodilator reversibility (BdR)

Methods

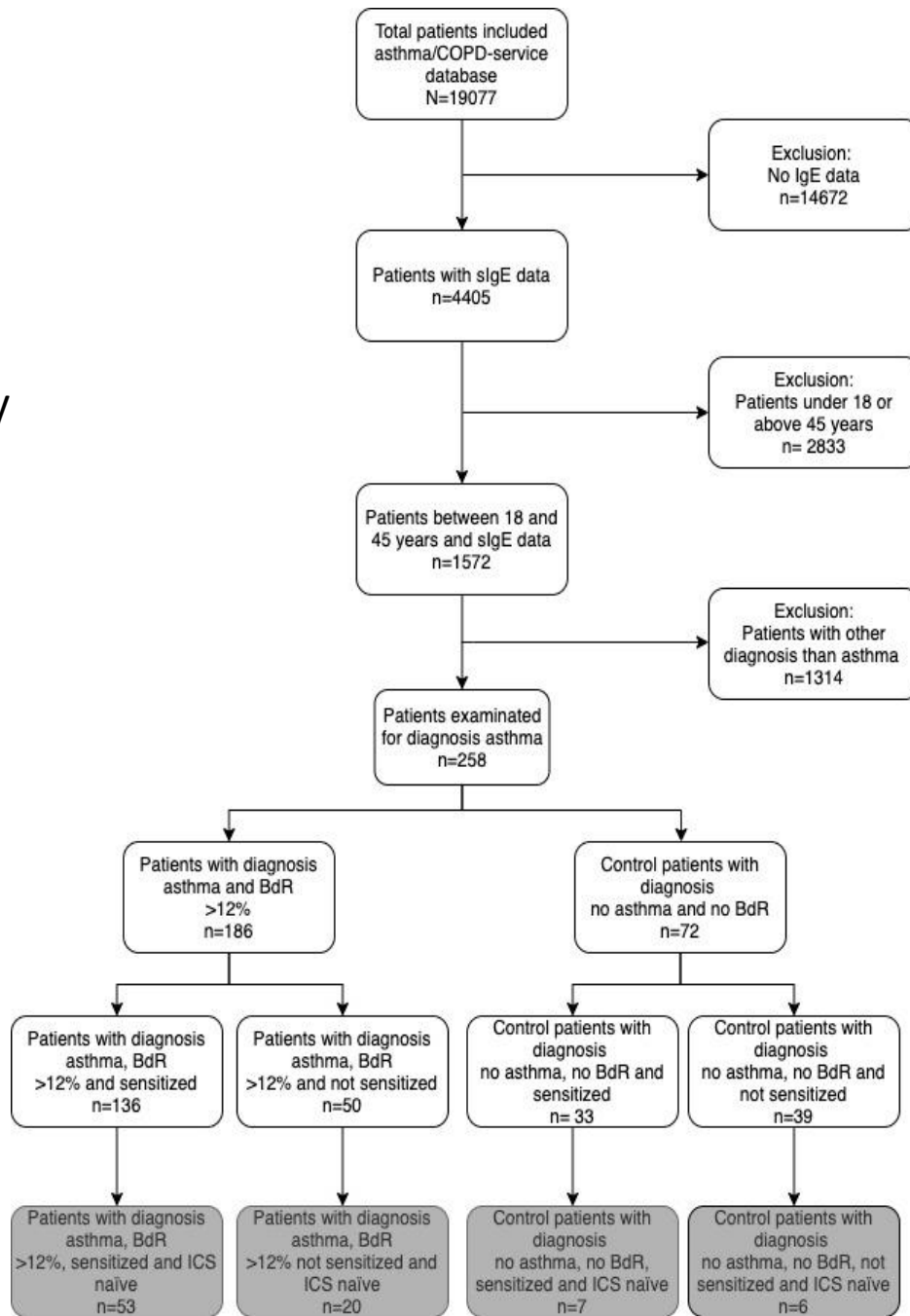
- Over 19.000 patients with suspicion of obstructive lung disease were included from the asthma/COPD-service Groningen¹
- The Phadiatop test was performed for sIgE measurements, which screens for inhalant allergens (grass pollen, tree pollen, house dust mite, cat dander, dog dander, moulds, weed pollen)²

1: Metting et al. Feasibility and effectiveness of an Asthma/COPD service for primary care: A cross-sectional baseline description and longitudinal results. *npj Prim Care Respir Med*. 2015;25(June 2014):1-7. doi:10.1038/npjpcrm.2014.101

2: Vidal C, Gude F, Boquete O, et al. Evaluation of the Phadiatop™ test in the diagnosis of allergic sensitization in a general adult population. *J Investig Allergol Clin Immunol*. 2005;15(2):124-130.

Results (1)

- Total of 258 patients included in study
- Total of 86 patients ICS naïve



Results (2)

Specific IgE and asthma diagnosis				
		Certainly no asthma	Diagnosis asthma and reversible	Total:
Specific IgE	Neg	39	50	89
	Pos	33	136	169
Total		72	186	258

Sensitivity:
How many asthma patients
have a positive allergy test?

Ruling in Asthma

Sensitivity	
Positive IgE and asthma	136
All positive IgE	186
Sensitivity	0,73

Specificity	
Negative IgE and no asthma	39
All negative IgE	72
Specificity	0,54

Specificity:
How many **non-asthma**
patients have a **negative**
allergy test?

Ruling out Asthma

ICS naïve, specific IgE and asthma diagnosis				
		Certainly no asthma	Diagnosis asthma and reversible	Total:
Specific IgE	Neg	6	20	27
	Pos	7	53	59
Total		13	73	86

ICS naïve Sensitivity	
Positive IgE and asthma	53
All positive IgE	73
Sensitivity	0,73

ICS naïve Specificity	
Negative IgE and no asthma	6
All negative IgE	13
Specificity	0,46

Conclusion

- Measurement of sIgE might have additional utility in the diagnosis of asthma, as sensitized patients are more likely to have asthma.
- This data supports the guidelines that advise to measure sIgE for assisting in making the asthma jigsaw more complete towards the diagnosis of asthma.