

The German Asthma Net: Anti-IL5(R) therapy reduces disease burden in a real-life severe asthma cohort

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German Asthma Net e.V. 

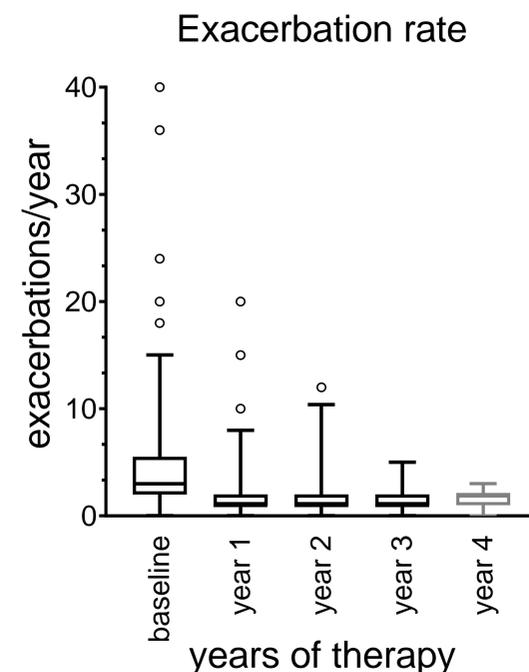
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Introduction

Anti-IL5(R) antibody therapy (mepolizumab, benralizumab, reslizumab) was used by 718 of 2283 patients with severe asthma from the real-life, long-term German Asthma Net (GAN) registry, 343 had started therapy after registry inclusion.

Overall study cohort details:	
age:	56±13 years
sex:	55% female
smoking:	1.7% current smokers
BMI:	27±5 kg/m ²
exacerbations:	4.6±4.6/year
ACQ-5 score:	2.9±1.4

We performed this study of the real-life severe asthma GAN registry cohort with paired t-test analyses to elucidate the effects of anti-IL5 therapy on key disease burden parameters.



Exacerbations in the past year were reduced under anti-IL5 therapy.

Paired T-Test of patients with anti-IL5 therapy, baseline vs. follow-up timepoint

timepoint	mean difference ± SD	p=	95% CI
Exacerbations/year, n=289			
year 1	-3.0 ± 5.3	<0.001	2.07; 3.95
year 2	-3.1 ± 4.3	<0.001	1.89; 4.36
year 3	-2.8 ± 4.6	0.015	0.62; 5.06
year 4	-3.2 ± 3.6	0.020	0.64; 5.76
ACQ-5 score, n=290			
year 1	-1.2 ± 1.5	<0.001	1.02; 1.38
year 2	-1.3 ± 1.4	<0.001	0.99; 1.51
year 3	-1.1 ± 1.2	<0.001	0.69; 1.44
year 4	-0.8 ± 1.5	0.047	0.01; 1.52
mAQLQ score, n=271			
year 1	1.0 ± 1.4	<0.001	-1.22; -0.87
year 2	1.0 ± 1.4	<0.001	-1.26; -0.73
year 3	1.0 ± 1.3	<0.001	-1.40; -0.54
year 4	1.2 ± 1.5	0.010	-2.09; -0.34
FEV1 in % predicted, n=325			
year 1	8 ± 17.4	<0.001	-10.25; -6.22
year 2	10 ± 17.6	<0.001	-13.34; -7.49
year 3	12 ± 15.8	<0.001	-16.52; -8.09
year 4	10 ± 15.9	0.018	-18.37; -1.98
OCS dose in mg, n= 341			
year 1	-3.6 ± 11.7	<0.001	2.39; 4.89
year 2	-4.5 ± 11.6	<0.001	2.73; 6.33
year 3	-5.1 ± 8.4	<0.001	3.06; 7.22
year 4	-5.6 ± 9.4	0.005	1.87; 9.29

Results:

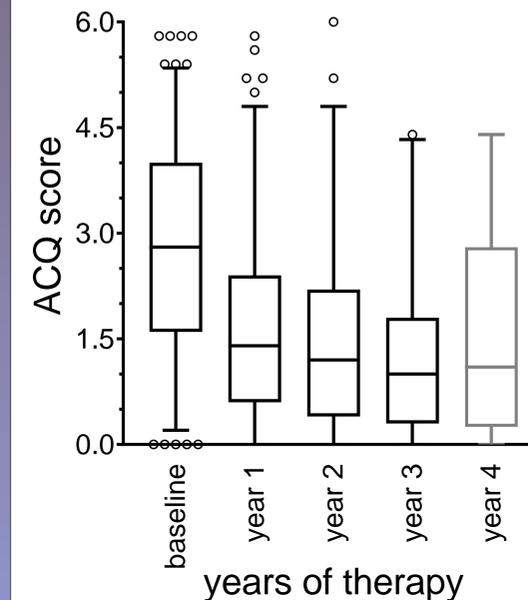
In comparison to baseline, patients on anti-IL5(R) therapy showed significantly less exacerbations, significantly better asthma control as measured by ACQ-5 score, better quality of life as measured by mAQLQ score, an increase in FEV1, and significantly reduced corticosteroid dependency.

Conclusion:

In this study of the GAN cohort, real-life, severe asthma patients treated with anti-IL5(R) biologics showed long-term benefits regarding pivotal outcome and disease control parameters.

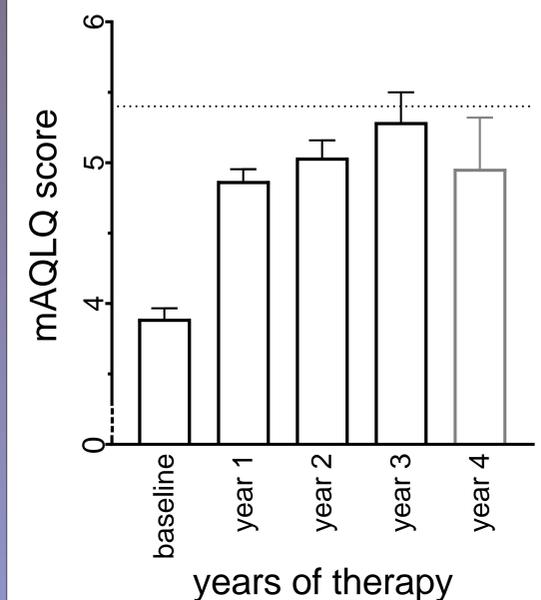
These results highlight beneficial effects which were previously documented in controlled studies in a real-life severe asthma cohort.

ACQ asthma control



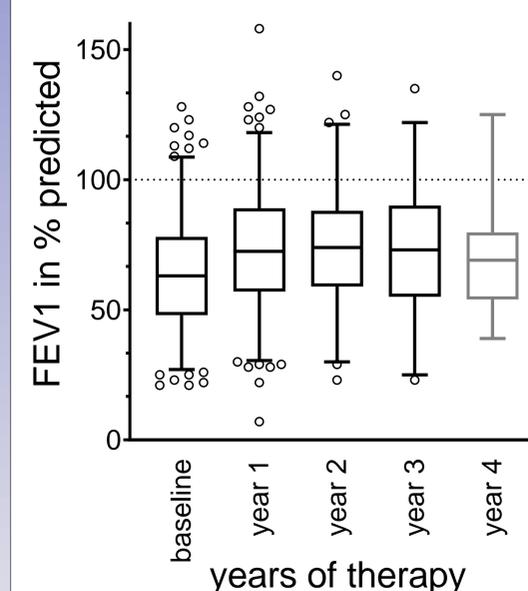
Asthma control measured by ACQ-5 score was improved under anti-IL5 therapy.

mAQLQ quality of life



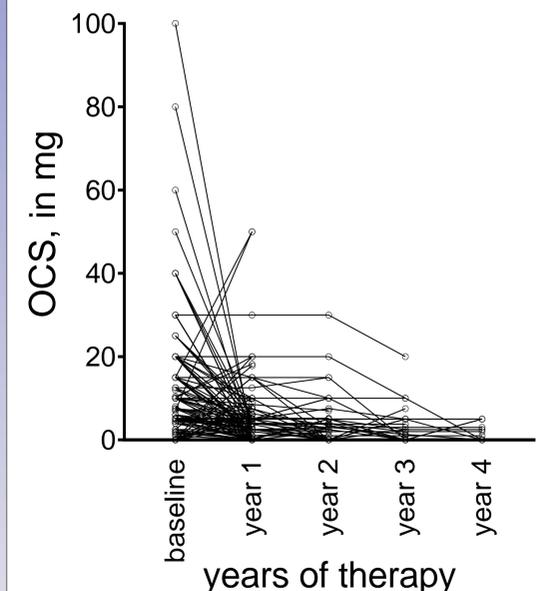
Quality of life (mAQLQ score) was improved under anti-IL5 therapy.

FEV1% - lung function



Obstructive lung function as measured by FEV1 in % of predicted increased.

OCS dependency



OCS dose measured in mg was reduced from baseline in year 1-4.