

The German Severe Asthma Registry

S. Korn¹, M. Hübner¹, K.Ch. Bergmann², A. Jahn³, P. Kardos⁴, A. Koch⁵, M. Lommatzsch⁶, E. Hamelmann⁷, R. Buhl¹

¹ Pulmonary Department, Mainz University Hospital, ² Allergy-Centre-Charité, Charité – Universitätsmedizin Berlin, ³ Institute of Medical Biostatistics, Epidemiology, and Informatics, Mainz University Hospital, ⁴ Lungenpraxis Maingau, Frankfurt, ⁵ Medical Clinic III for Pneumology, Allergology and Sleep Medicine, University Hospital Bergmannsheil, Bochum, ⁶ Department for Respiratory and Critical Care Medicine, Rostock University Hospital, ⁷ Children's Hospital of Ruhr University, Bochum, GERMANY

German Asthma Net

- Severe persistent asthma represents the highest unmet medical need among the asthmatic population
- Improvement of the understanding of severe disease progresses in pediatric and adult asthma

German Asthma Net

- Registry to optimise diagnostic evaluation and treatment of adults and children with severe asthma
- Detailed characterization of patients with severe asthma



www.german-asthma-net.de

Severe Asthma Registry

Definition of severe asthma (adults)

Either high-intensity treatment (with or without asthma control) (A) or moderate-intensity treatment and poor asthma control (B):

A. High-intensity treatment

- Maintenance therapy with high dose ICS ($\geq 1000\mu\text{g}$ BDP equivalent) + LABA and/or LTRA and/or theophylline
- Maintenance therapy with OCS \geq past 3 months
- Omalizumab therapy

B. Moderate-intensity treatment and poor asthma control

- Maintenance therapy with moderate to high dose ICS ($\geq 500\mu\text{g}$ BDP equivalent) + LABA and/or LTRA and/or theophylline
- and poor asthma control
 - Daytime asthma symptoms ≥ 3 x/week
 - Limitations of activities due to asthma
 - Nocturnal asthma symptoms
 - Exacerbation(s) ≥ 1 in the past year requiring ≥ 3 days OCS treatment
 - Impaired lung function: FEV1 < 80% pred.

German Severe Asthma Registry



261 patients as of August 2012

Analysis of patients (n=226) included by abstract authors

Parameter	Adults (n=202)	Children (n=24)
Age (yrs.)	49.4 \pm 0.9	11.8 \pm 0.9
Male	76 (38%)	11 (46%)
Never smokers	120 (59%)	24 (100%)
FEV1 (L)	1.9 \pm 0.1	2.5 \pm 0.3
FEV1 (% pred.)	61.6 \pm 1.4	86.2 \pm 4.8
eNO (ppb)	50 \pm 5	41 \pm 14
Asthma control (uncontrolled)	158 (78%)	7 (29%)
ACQ-5	2.9 \pm 0.1	1.9 \pm 0.4
AQLQ	3.9 \pm 0.1	4.8 \pm 0.3
Allergic asthma	111 (55%)	23 (96%)
Oral corticosteroids Dose (mg prednisolone)	16 \pm 2	NA
Omalizumab Median dose (mg)	300	600
Exacerbations (no/year)	3.4 \pm 0.3	3.7 \pm 0.9

Categorical variables: n (%), continuous endpoints: mean \pm SEM

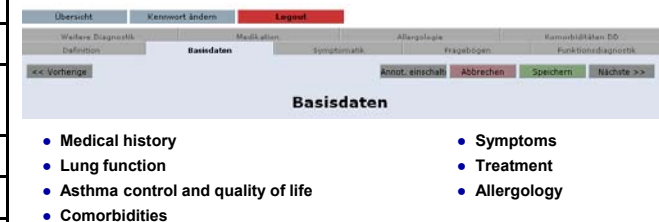
Summary

- Ongoing recruitment of a large number of patients with severe asthma \rightarrow characterization of clinical, physiologic, cellular and biochemical parameters related to severe disease in a longitudinal assessment
- Identification of parameters that may improve diagnosis, phenotyping, management and treatment
- Ideal patient cohort to perform clinical trials
- Confirmation and extension of results of similar databases such as U-BIOPRED and SARP

1. Registration of patients



2. Data entry



- Medical history
- Lung function
- Asthma control and quality of life
- Comorbidities
- Symptoms
- Treatment
- Allergology

3. Data export and analysis

