

Publication**Heterogeneity of obesity-asthma association disentangled by latent class analysis, the SAPALDIA cohort****Journal Article (Originalarbeit in einer wissenschaftlichen Zeitschrift)****ID** 3846285**Author(s)** Jeong, Ayoung; Imboden, Medea; Hansen, Sofie; Zemp, Elisabeth; Bridevaux, Pierre-Olivier; Lovison, Gianfranco; Schindler, Christian; Probst-Hensch, Nicole**Author(s) at UniBasel** [Imboden, Medea](#) ; [Zemp Stutz, Elisabeth](#) ; [Schindler, Christian](#) ; [Probst Hensch, Nicole](#) ;**Year** 2017**Title** Heterogeneity of obesity-asthma association disentangled by latent class analysis, the SAPALDIA cohort**Journal** Respiratory medicine**Volume** 125**Pages / Article-Number** 25-32

Although evidence for the heterogeneity of asthma accumulated, consensus for definitions of asthma phenotypes is still lacking. Obesity may have heterogeneous effects on various asthma phenotypes. We aimed to distinguish asthma phenotypes by latent class analysis and to investigate their associations with different obesity parameters in adults using a population-based Swiss cohort (SAPALDIA). We applied latent class analysis to 959 self-reported asthmatics using information on disease activity, atopy, and age of onset. Associations with obesity were examined by multinomial logistic regression, after adjustments for age, sex, smoking status, educational level, and study centre. Body mass index, percent body fat, waist hip ratio, waist height ratio, and waist circumference were used as obesity measure. Four asthma classes were identified, including persistent multiple symptom-presenting asthma (n=122), symptom-presenting asthma (n=290), symptom-free atopic asthma (n=294), and symptom-free non-atopic asthma (n=253). Obesity was positively associated with symptom-presenting asthma classes but not with symptom-free ones. Percent body fat showed the strongest association with the persistent multiple symptom-presenting asthma. We observed heterogeneity of associations with obesity across asthma classes, indicating different asthma aetiologies.

Publisher Saunders**ISSN/ISBN** 0954-6111**edoc-URL** <http://edoc.unibas.ch/55418/>**Full Text on edoc** No;**Digital Object Identifier DOI** 10.1016/j.rmed.2017.02.014**PubMed ID** <http://www.ncbi.nlm.nih.gov/pubmed/28340859>**ISI-Number** WOS:000399865700006**Document type (ISI)** Journal Article