



# **Epidemiological and therapeutic aspects of inflammatory bowel disease**

av

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## **Akademisk avhandling**

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## Abstract

Carl Eriksson (2018): Epidemiological and therapeutic aspects of inflammatory bowel disease. Örebro Studies in Medicine 178.

**Introduction:** The two main forms of inflammatory bowel disease (IBD) are Crohn's disease and ulcerative colitis. These are chronic inflammatory disorders, mainly affecting the gastrointestinal tract.

**Aims:** The overall aims of this thesis were to study the epidemiology of ulcerative colitis in Örebro, Sweden; to examine certain aspects of anaemia in IBD; and to determine the clinical effectiveness of medical treatments.

**Material and methods:** Cohort studies with the sampling frame defined by the geographic boundaries of the primary catchment area of Örebro University Hospital (Papers I–III), or by the entire IBD population in Sweden registered in the Swedish national quality registry for IBD (SWIBREG; paper IV), were performed to determine the epidemiology of ulcerative colitis, the incidence and prevalence of anaemia in IBD, and the clinical effectiveness of thiopurine drugs and vedolizumab in routine care.

**Results:** A fivefold increase in the incidence and a tenfold increase in the prevalence of ulcerative colitis was observed in Örebro during the past 50 years. In parallel, the prognosis, in terms of risk for colectomy within 10 years from diagnosis, improved during the same time period. Earlier and more widespread use of thiopurine drugs may have contributed to the decrease in colectomies. Anaemia is common in IBD, particularly in Crohn's disease. Vedolizumab, a new drug targeting leucocyte migration to the gut, appears to be well tolerated and effective in Swedish real-world IBD care.

**Conclusion:** Ulcerative colitis is on the rise, and data from Örebro indicate that the number of IBD patients in Sweden already exceeds 70,000. Improved knowledge of long-term outcomes of medical therapy may have far-reaching implications for future IBD management.

**Keywords:** Inflammatory bowel disease; ulcerative colitis; Crohn's disease; cohort study; population-based; colectomy; disease course; anaemia; azathioprine; 6-mercaptopurine; vedolizumab

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