

# Evolution of disease phenotype, time to biological therapy and medium-, long-term colectomy rates in ulcerative colitis patients in Western Hungary – a population-based study between 2007–2018, data from the Veszprem county cohort

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## Background

The number of prospective population-based studies evaluating the natural disease course and surgical outcomes of ulcerative colitis (UC) are still limited from Eastern Europe.

## Aim

Our aim was to evaluate disease course by examining progression of disease phenotype, time to biological therapy and colectomy rates in a *prospective population-based study* from Veszprem Province, including incident UC patients diagnosed between January 1, 2007 and December 31, 2018.

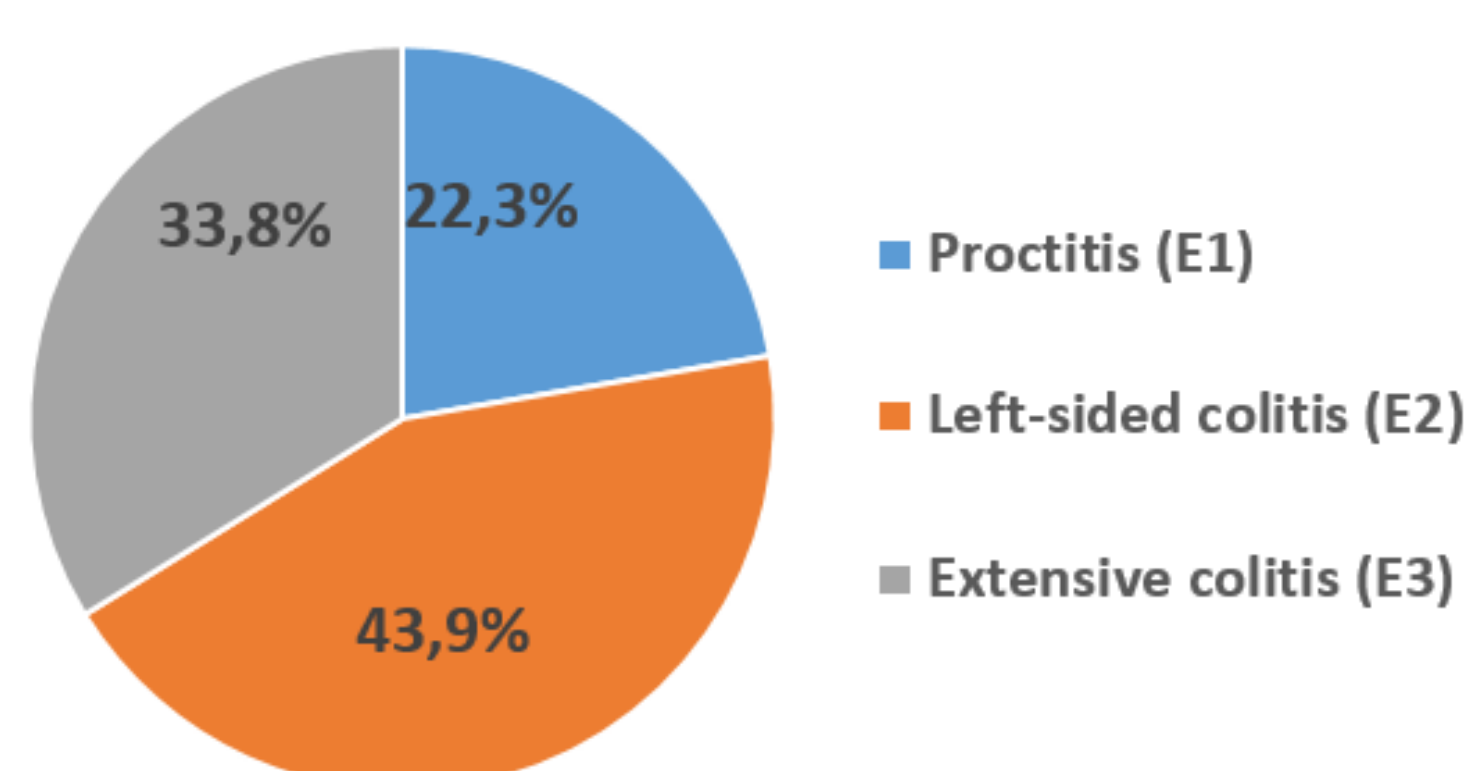
The present study is a continuation of the Veszprem IBD population-based cohort with a follow-up of the incidence and disease course of IBD since 1977.

## Methods

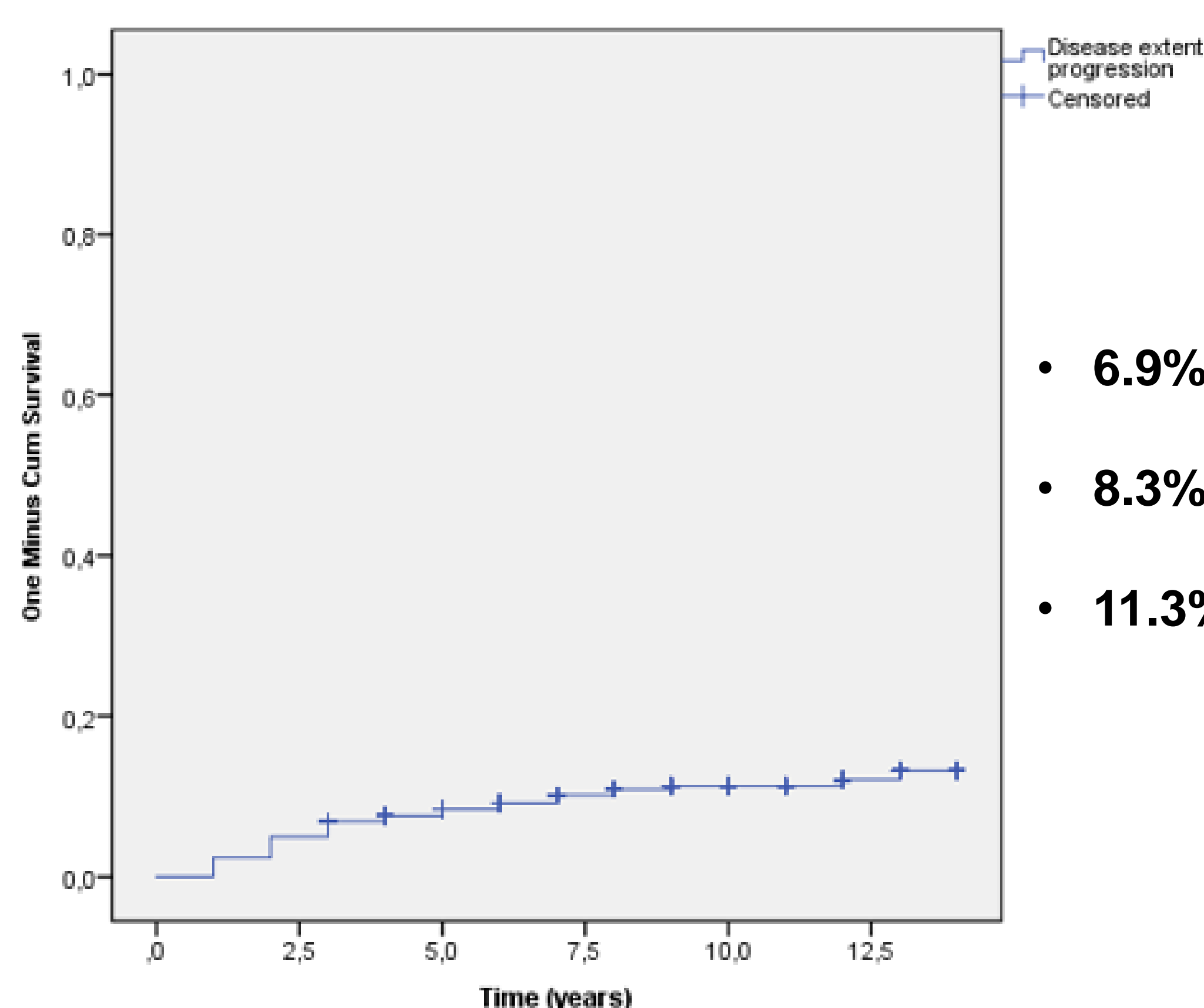
- Data of **467 incident UC patients** were analyzed (male/female: 236/231; median age at diagnosis: 36 years(y) [IQR: 25-54]).
- Both in-hospital and outpatient records were collected and comprehensively reviewed at diagnosis and during clinical follow-up.
- Disease phenotype was evaluated based on the Montreal classification.
- Probability of medium-, long-term change in disease course and surgical outcomes were analyzed using Kaplan–Meier survival analysis.
- The mean length of total follow-up was **8.34y** (SD: 3.5).

## Results

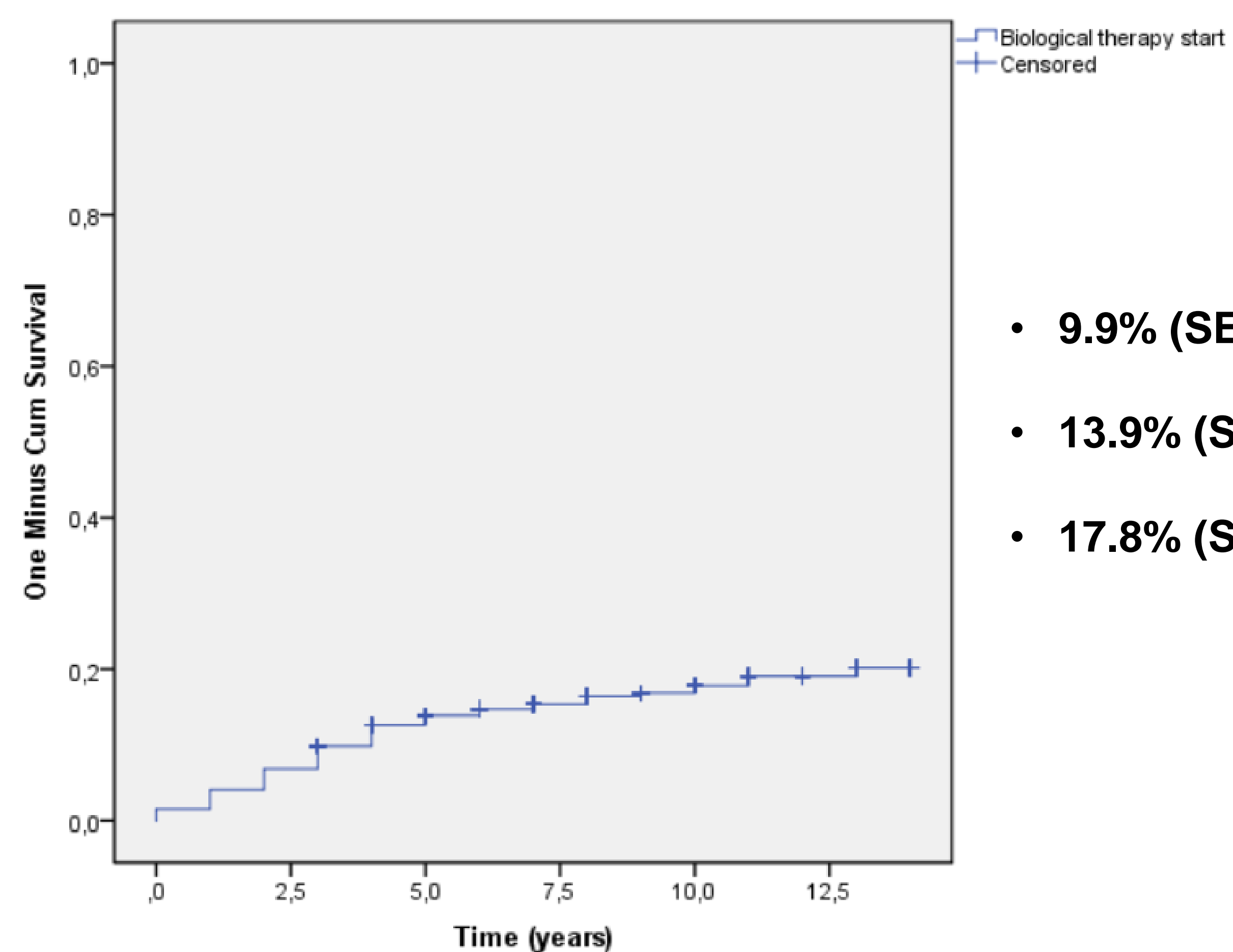
**Disease extent (at diagnosis)**



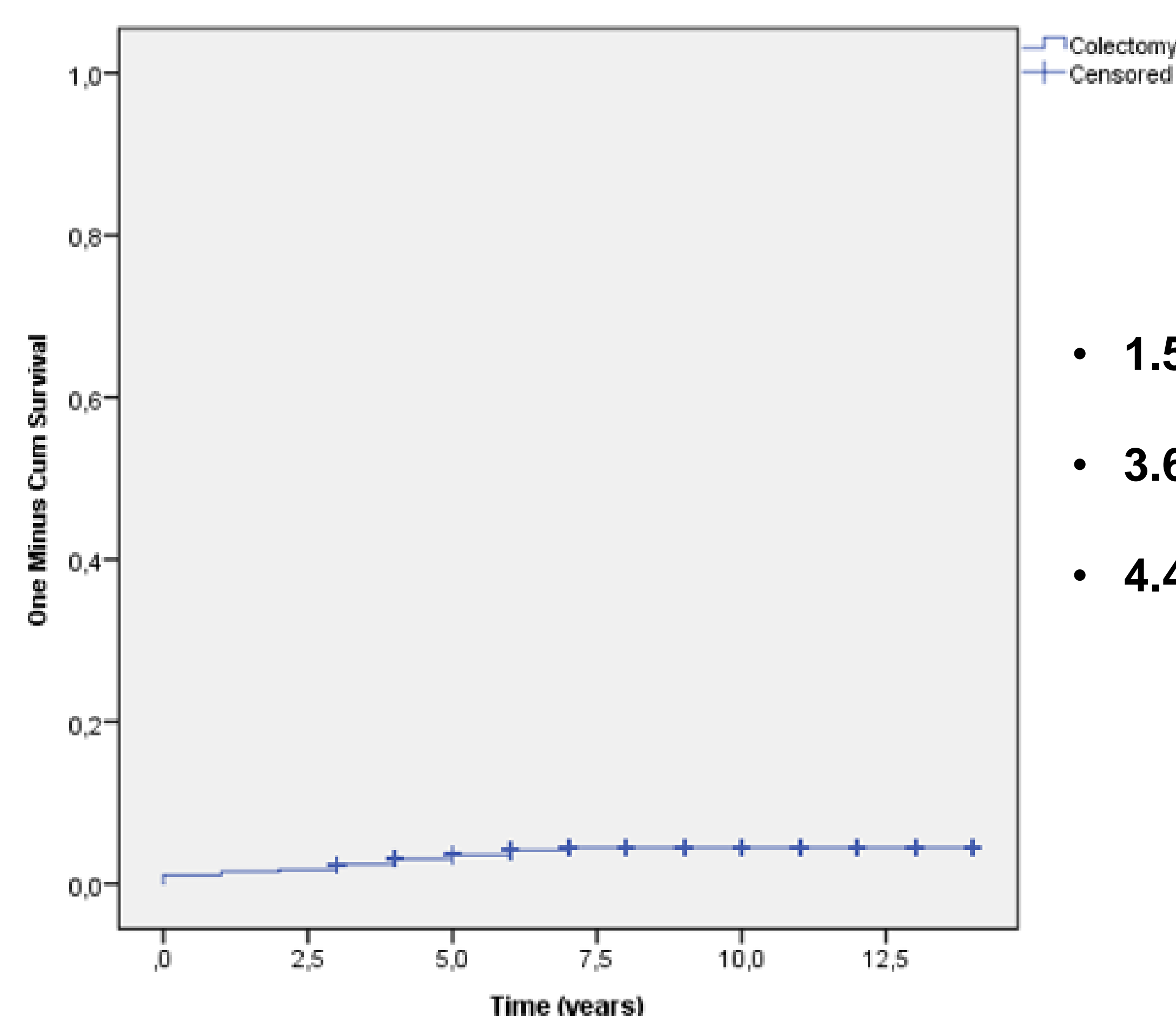
**Cumulative probability of disease extent progression (E1 > E2 > E3) in incident ulcerative colitis patients (2007-2018)**



**Cumulative probability of biological therapy initiation after diagnosis (2007-2018)**



**Cumulative probability of colectomy in incident ulcerative colitis patients (2007-2018)**



## Conclusion

**The probability of progression in disease extent was low overall, similar to results from recent pan-European population-based data. (Burisch 2019, JCC). Medium- and long-term colectomy rates were lower compared to Western European centers, but somewhat higher compared to our previous data from the Veszprem cohort (2002-2006). (Lakatos 2011, IBD).**