



Immunomodulators reduce the risk of surgery and hospitalization in Crohn's Disease in a prospective European population-based inception cohort

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Disclosure of Conflicts of Interest:

Conflict of interest :

- Personal fees: AbbVie, Janssen-Cilag, Celgene, MSD, Pfizer, Takeda
- Non-financial support: Calpro A/S

Introduction

- Immunomodulators and biological therapy have been shown to improve the disease course in IBD patients – however, the literature remains inconsistent.
- The aim of the study was to investigate the impact of treatment with immunomodulators and biological therapy on disease course and prognosis of patients diagnosed with Crohn's disease (CD)

Methods – Epi-IBD cohort

- European prospective population-based inception cohort
- 5 years of follow-up
- 29 centres from 21 countries
 - Western Europe 20
 - Eastern Europe 9
- Web-based registration
 - Disease course
 - Treatment (medical & surgical)
 - Blood samples



Results

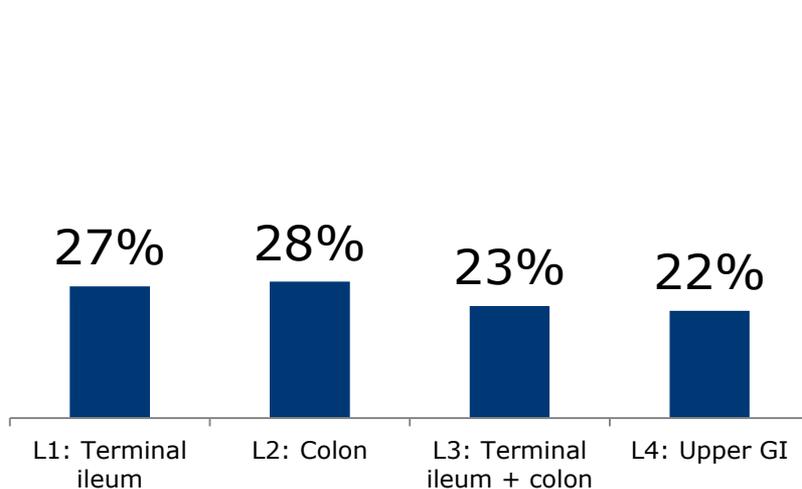
Patient characteristics, n=488

Male, n (%)	244 (50%)
Age at diagnosis, yrs. (IQR)	33 (23-49)
Median time to diagnosis, months, (IQR, yrs.)	4 (0-1)

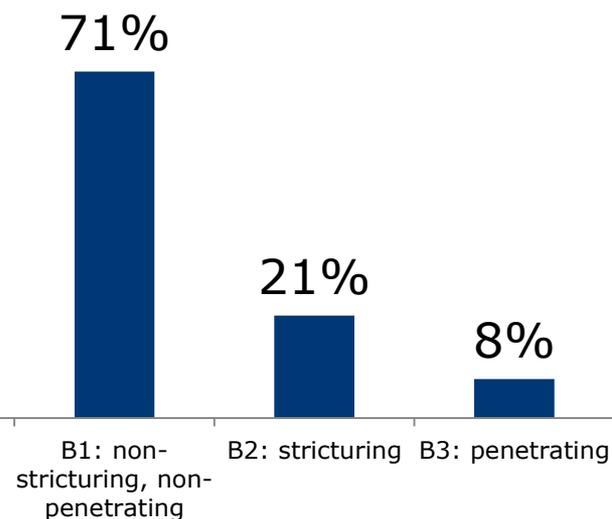
Smoking status at diagnosis, n (%)

Never smoker	183 (40%)
Current smoker	171 (37%)
Former smoker	103 (23%)

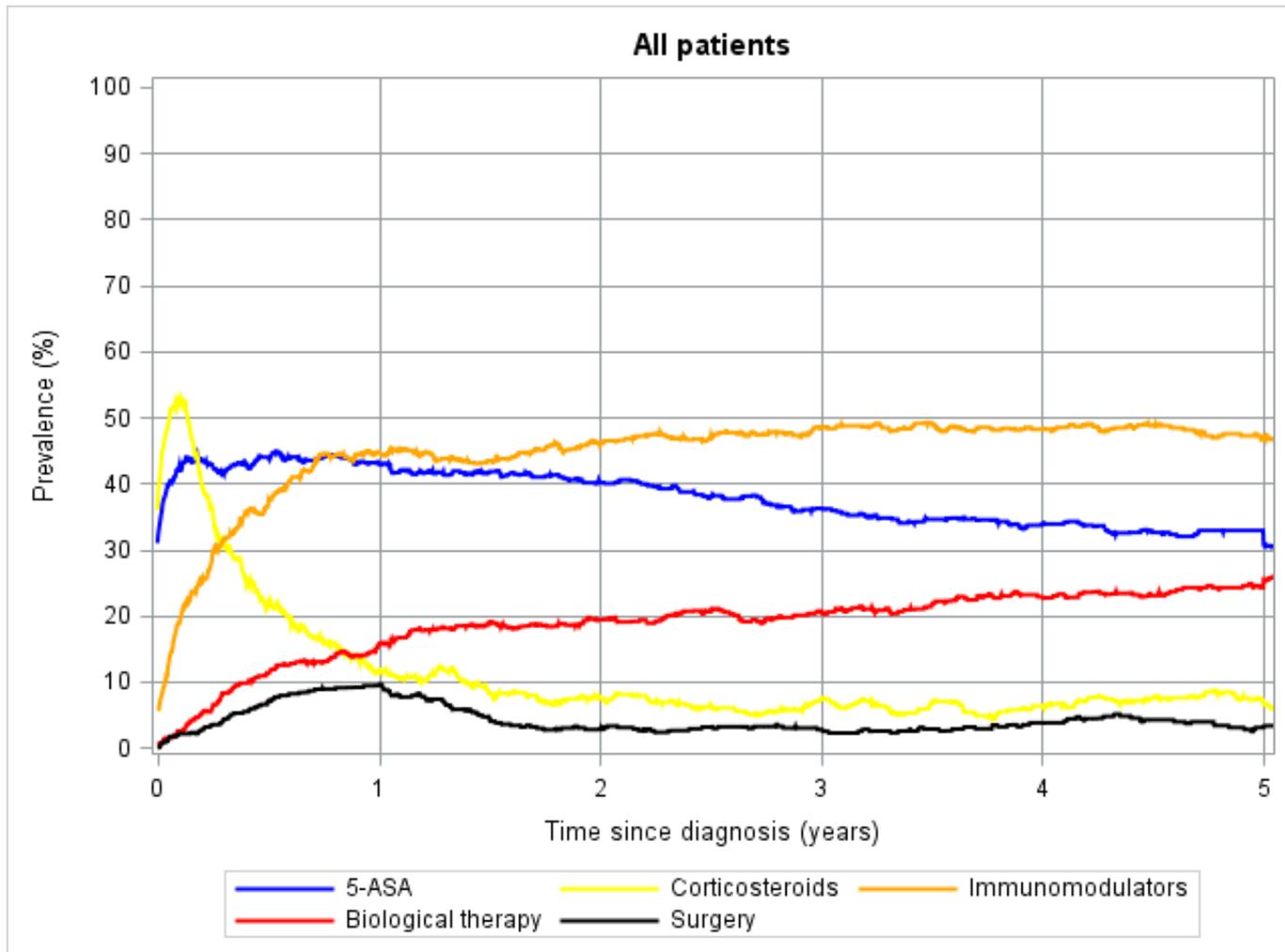
Disease location



Disease behaviour

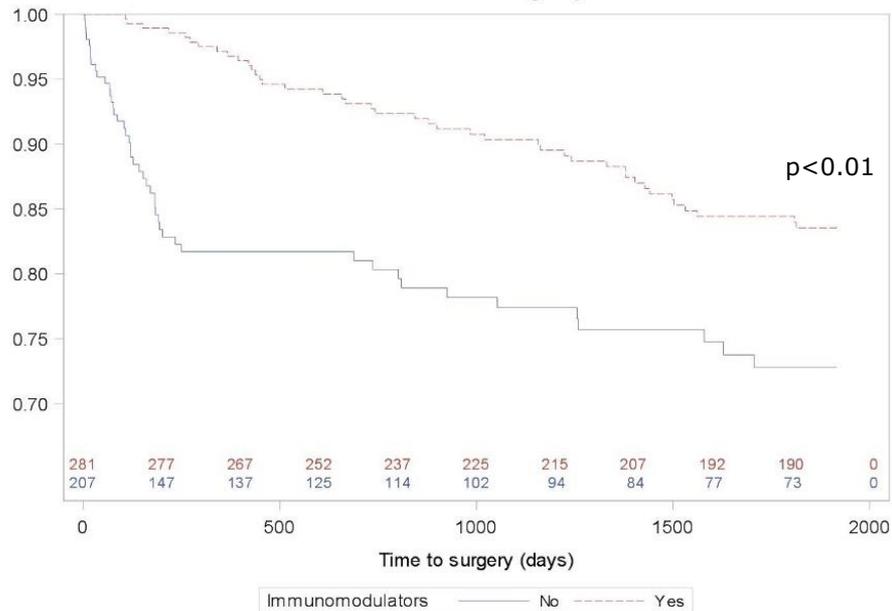


Time-varying prevalence of treatments on any given day during follow-up

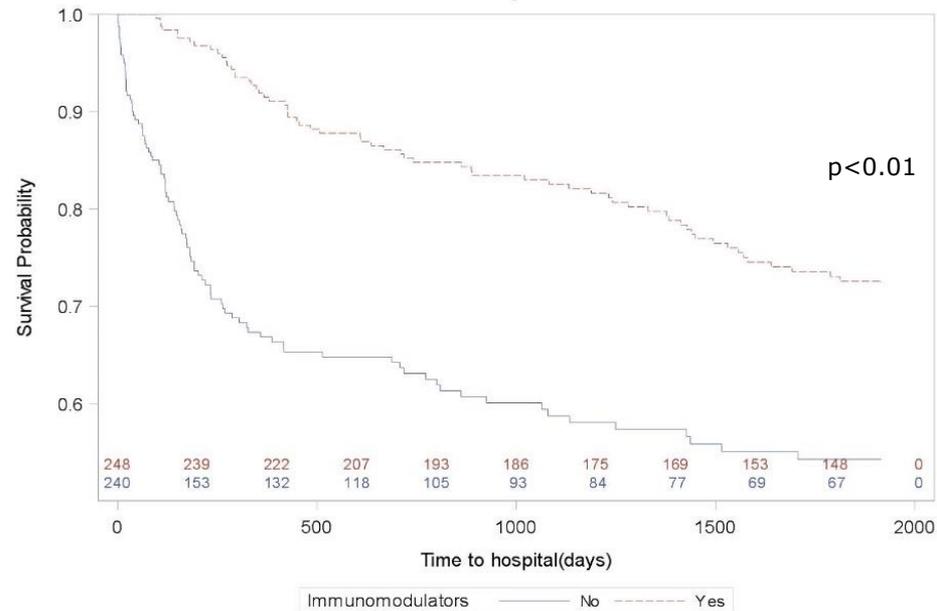


Risk of surgery and hospitalization

Time to surgery



Time to hospitalization



Predictors of surgery and hospitalization

	Hospitalization	Surgery
Age at diagnosis (per year)	0.99 (0.98-0.99)*	0.99 (0.98-1.00)
Sex		
Female	1.0 (0.7-1.3)	0.8 (0.5-1.3)
Male	<i>reference</i>	<i>reference</i>
Diagnostic delay (per day)	1.0 (1.0-1.1)	1.005 (1.001-1.009)*
Geographic region		
Eastern Europe	0.7 (0.4-1.1)	0.8 (0.4-1.4)
Western Europe	<i>reference</i>	<i>reference</i>
Smoking status at diagnosis		
Currently	1.2 (0.8-1.7)	1.2 (0.7-2.0)
Former	1.3 (0.8-2.1)	1.4 (0.8-2.5)
Never	<i>reference</i>	<i>reference</i>
Disease behaviour		
B2: stricturing	3.0 (2.1-4.4)*	4.7 (2.8-7.9)*
B3: penetrating	2.7 (1.6-4.5)*	4.8 (2.5-9.1)*
B1: non-stricturing, non-penetrating	<i>reference</i>	<i>reference</i>
Disease location		
L2: Colon	1.2 (0.7-1.9)	1.1 (0.6-2.1)
L3: Terminal Ileum + colon	0.9 (0.6-1.6)	1.1 (0.5-2.0)
L4: Upper GI (± L1-L3)	1.3 (0.8-2.0)	1.2 (0.7-2.2)
L1: Terminal ileum	<i>reference</i>	<i>reference</i>
Extra-intestinal manifestations at diagnosis	0.8 (0.5-1.3)	0.8 (0.4-1.6)
Use of immunomodulators	0.3 (0.2-0.5)*	0.4 (0.2-0.6)*
Use of biologicals	0.7 (0.5-1.2)	0.8 (0.4-1.3)
Need for early corticosteroids	1.2 (0.8-1.7)	1.0 (0.6-1.7)

Conclusion

- Half of the patients were treated with immunomodulators and a fifth of them with biological therapy on any given day during follow-up
- Immunomodulators reduced the risk of surgery and hospitalization, while biological therapy did not.
- Future studies on risk stratification are needed to further improve the long-term disease course in CD

Thank you!



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