



Assessment of direct healthcare costs drivers of Crohn's disease in a Dutch population-based cohort study shows a major shift

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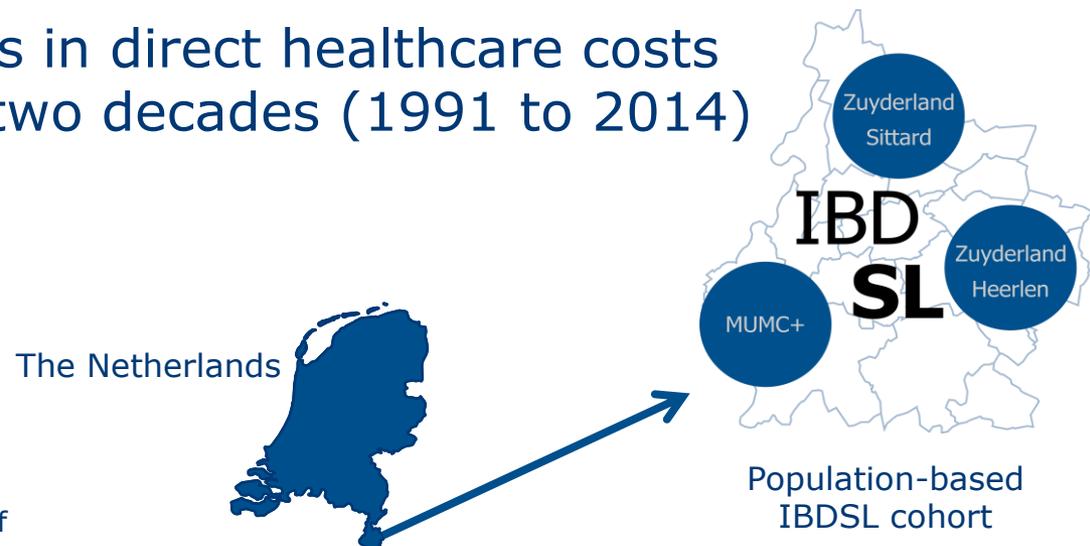


Disclosure of Conflicts of Interest:

Conflict of interest : Nothing to declare

Background

- CD is associated with substantial direct healthcare costs
- A shift in costs, from hospitalisation towards medication ¹
 - Comparisons of different patient cohorts
- **Aim:** To assess shifts in direct healthcare costs of CD over the past two decades (1991 to 2014)



1. van der Valk ME, et al. Evolution of Costs of Inflammatory Bowel Disease over Two Years of Follow-Up. PloS one. 2016;11(4):e0142481.

Methods (1)

- CD patients in the IBDSL cohort with ≥ 1 year follow-up
- Three eras distinguished based on year of CD diagnosis:
 - **Era 1:** 1991–1998
 - **Era 2:** 1999–2005 *
 - **Era 3:** 2006–2011
- Follow-up duration: 5 years
 - Till loss to follow-up or end of data collection (2014)

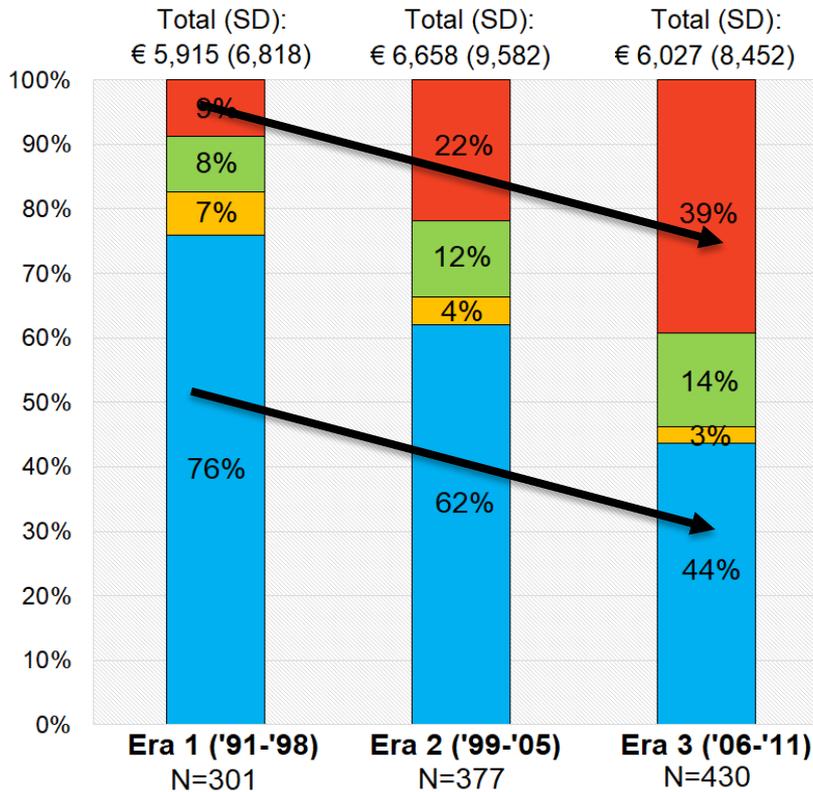
* Note: In the Netherlands, the first biological (IFX) was available in 1999

Methods (2)

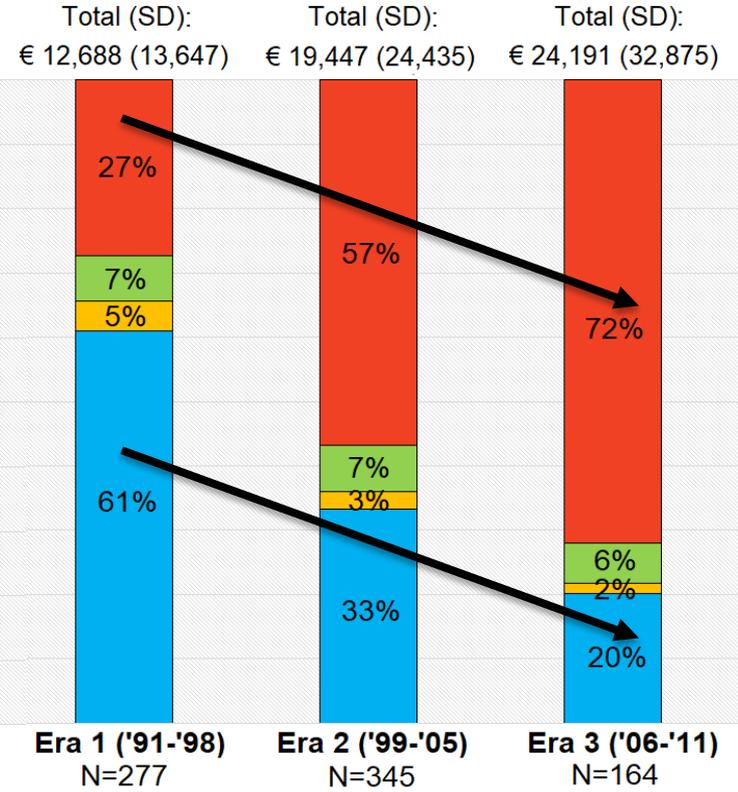
- Resource utilisation was assessed by scrutinizing patient files and medical reports
 - *Hospitalisation, surgery, diagnostics, medication*
- Costs calculations in Euros (€) by multiplying resource use by Dutch reference prices
- For each era, a separate price list was established
 - Corrected for inflation using Dutch consumer price indices

Results (1)

1 year after diagnosis

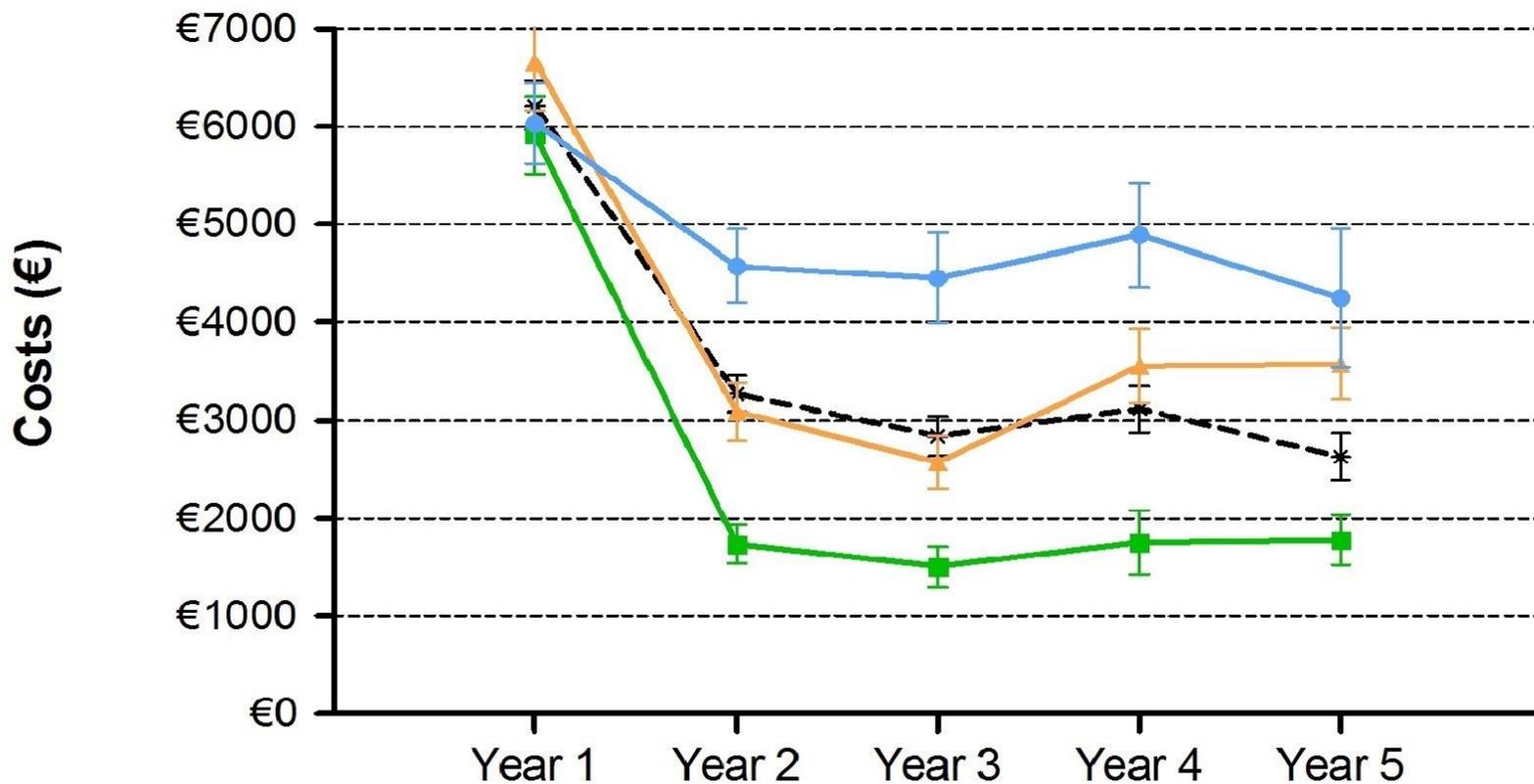


5 years after diagnosis



■ Hospitalisation (mean)
 ■ Surgery (mean)
 ■ Diagnostics (mean)
 ■ Medication (mean)

Mean total costs per year



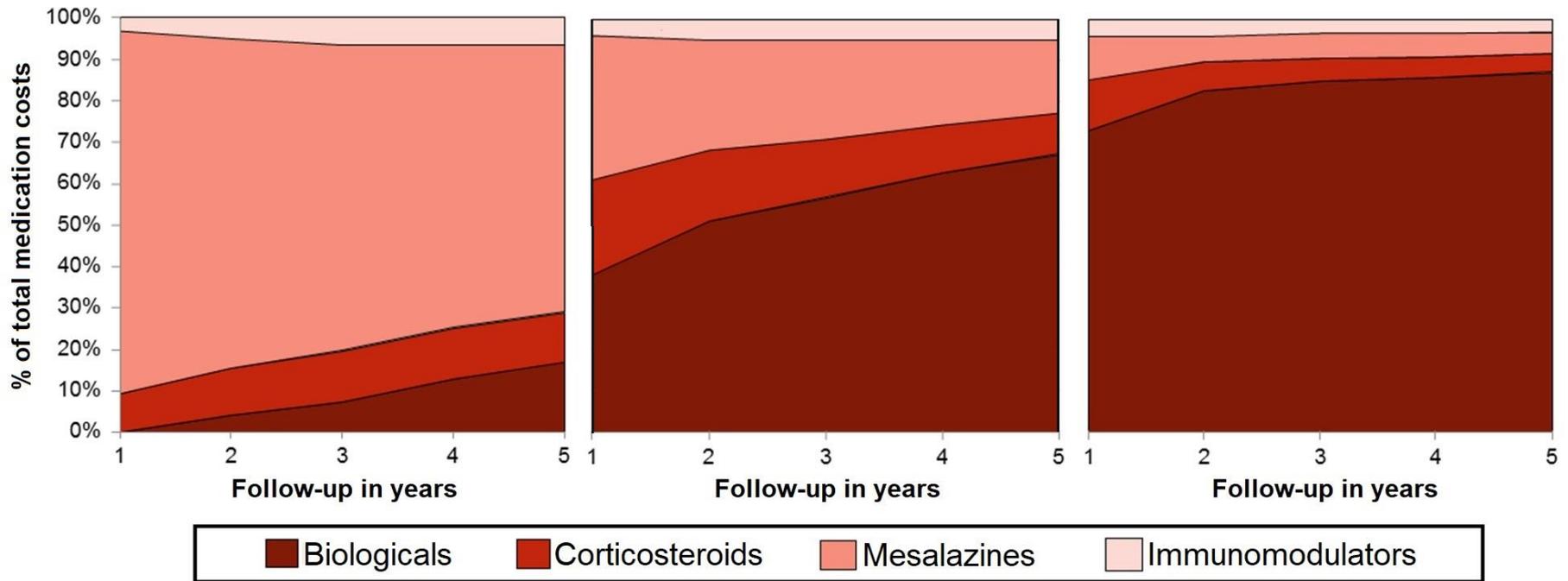
■ Era 1 ('91-'98) ▲ Era 2 ('99-'05) ● Era 3 ('06-'11) -*- Total cohort

Results (2)

Era 1 ('91-'98)

Era 2 ('99-'05)

Era 3 ('06-'11)



- Biologicals: 4% of total costs in era 1, 63% of total costs in era 3

Summary & conclusion

- Direct costs of CD increased markedly over time
 - *Increasing costs after the first year*
- A major shift in direct cost profiles of CD was observed
 - *Hospitalisation major cost driver in the first era, replaced by medication in the following eras*
- Nowadays, direct healthcare costs of CD are mainly driven by biologicals