Soirée ASMCC

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Impact économique des MICI en Suisse

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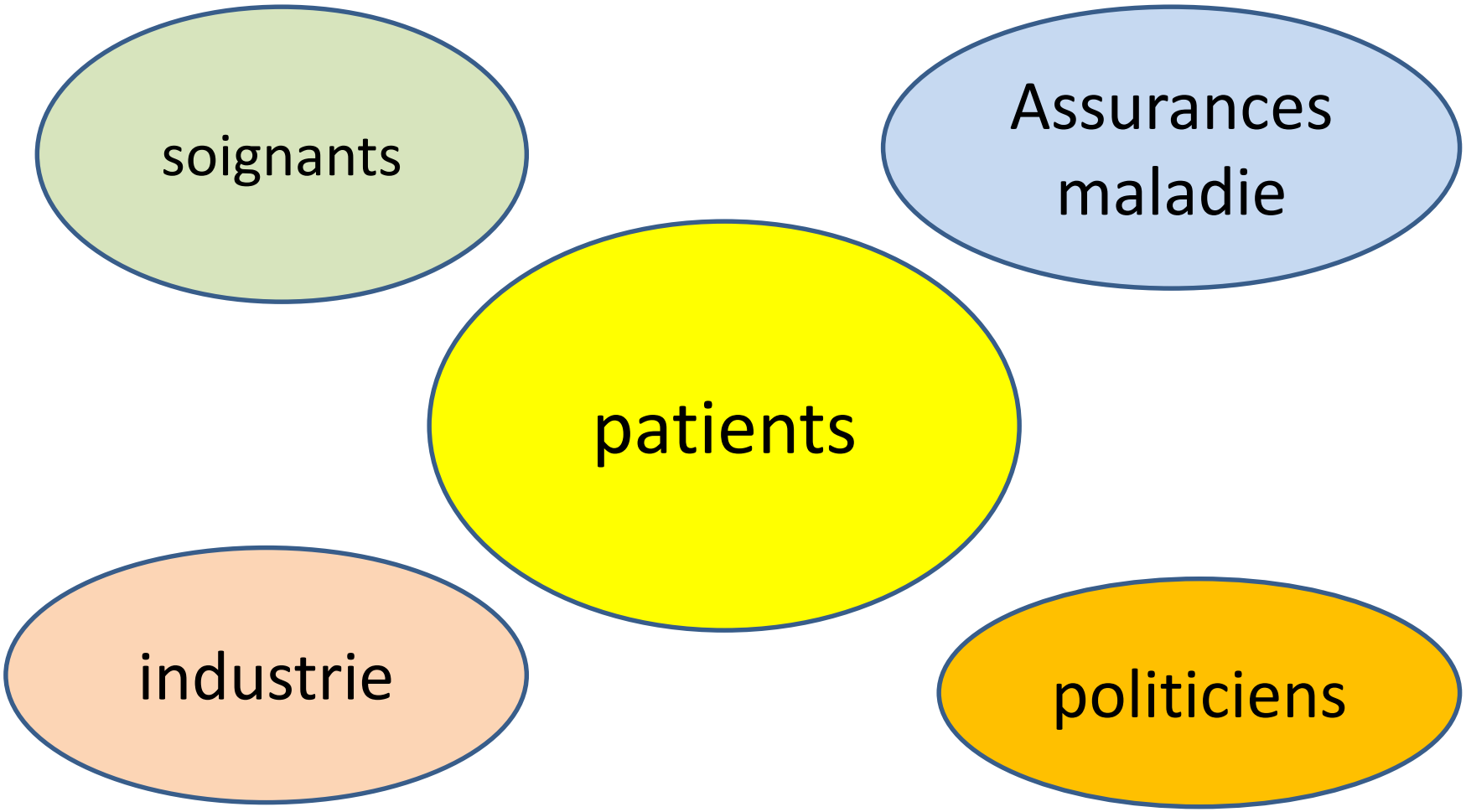
programme

- Pourquoi s’intéresser pour les finances?
- Fréquence des MICI en Suisse
- Impact économique
- Conclusions

Pourquoi parlers des chiffres?

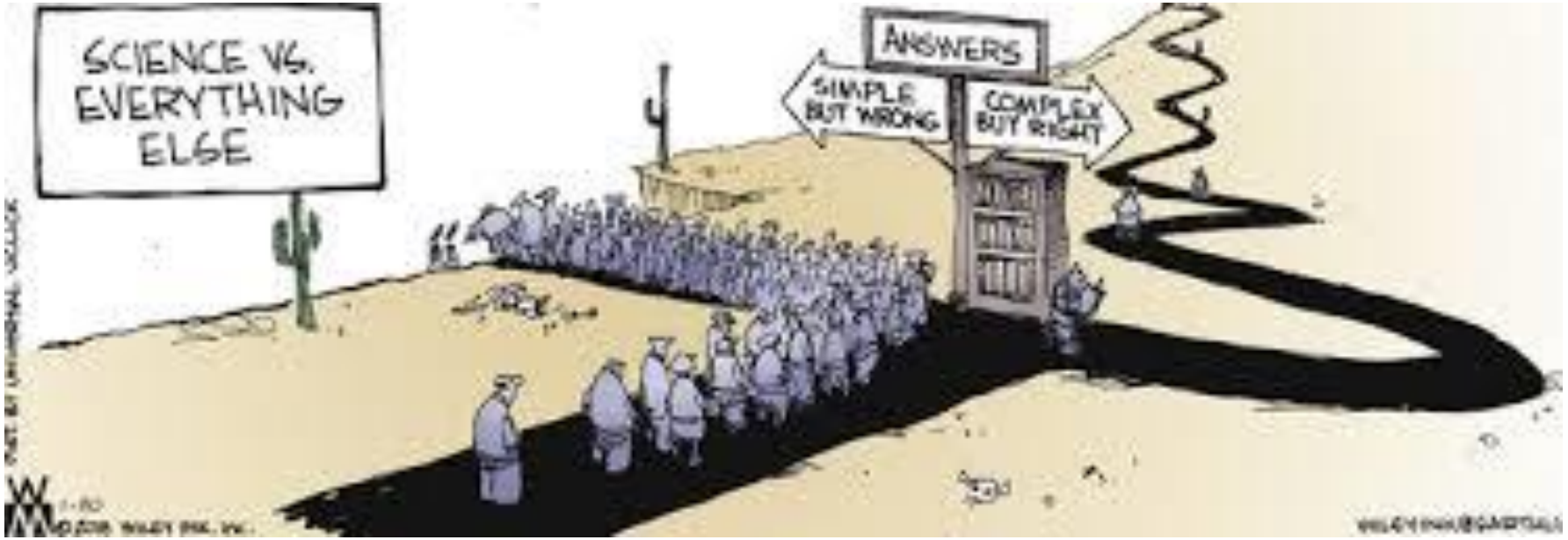
Différentes parties prenantes



Organisation du système de santé: le rêve

Organisation du système de santé: la réalité

Besoin des données suisses…



programme

- Pourquoi s’intéresser pour les finances?
- Fréquence des MICI en Suisse
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Intérêts des différents parties prenantes

soignants

Assurances maladie

Helsana

Bähler *et al. BMC Gastroenterology* (2017) 17:138
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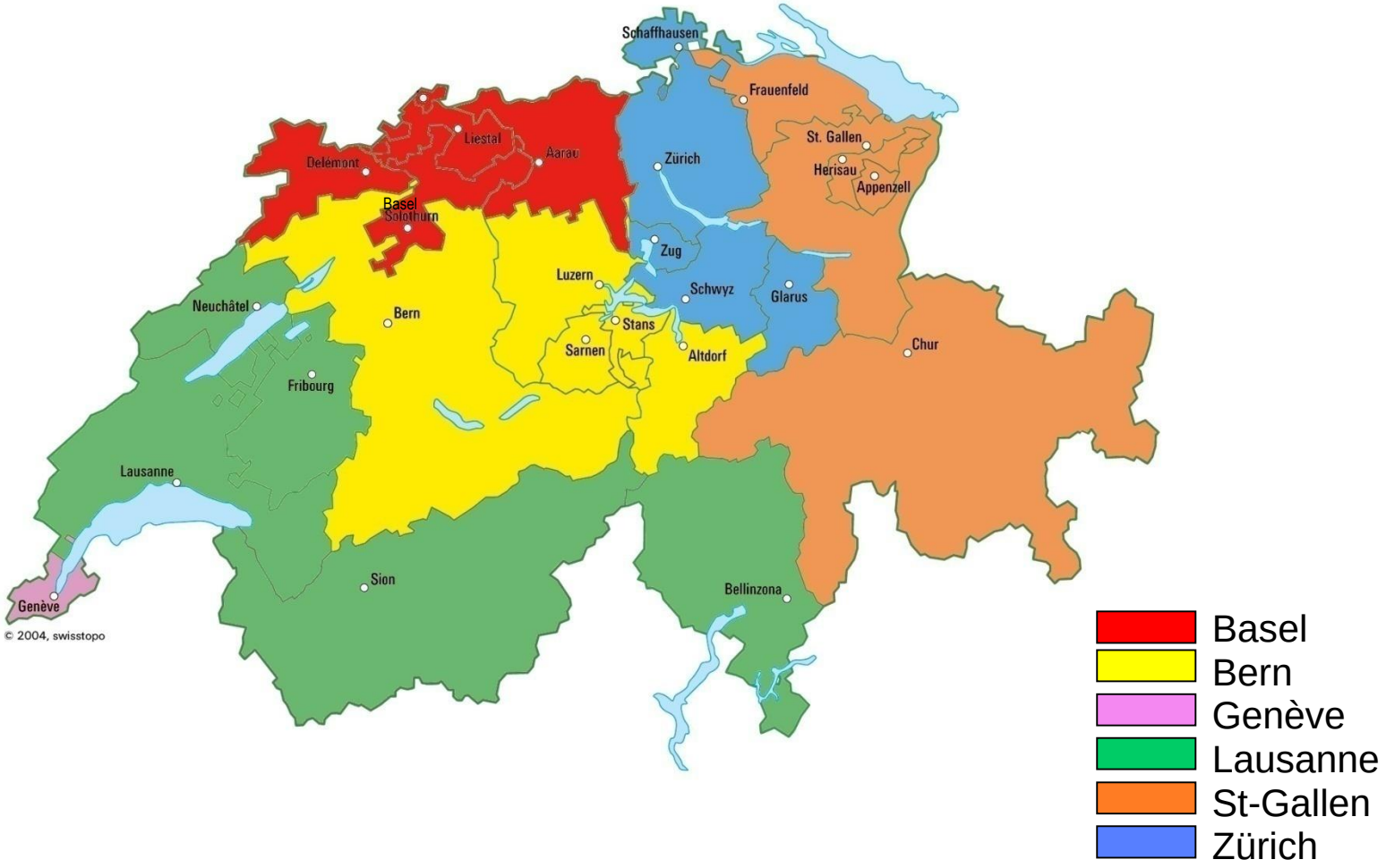
BMC Gastroenterology

RESEARCH ARTICLE Open Access

Trends in prevalence, mortality, health care utilization and health care costs of Swiss IBD patients: a claims data based study of the years 2010, 2012 and 2014

Caroline Bähler[1*], Stephan R. Vavricka[2], Alain M. Schoepfer[3], Beat Brüngger[1] and Oliver Reich[1]

SWISSIBDcohort study



La Cohorte Vaudoise

Adultes dans le Canton de Vaud (494’202 personnes)

PREVALENCE : 205,6 IBD patients / 10^5 habitants (0.2%)

51% m. de Crohn
49% recto-colite ulcéreuse

1 personne sur 500

Pour toute la population suisse: 16’000 patients

Juillerat et al, *Journal of Crohn's and Colitis* 2008;2:131–141

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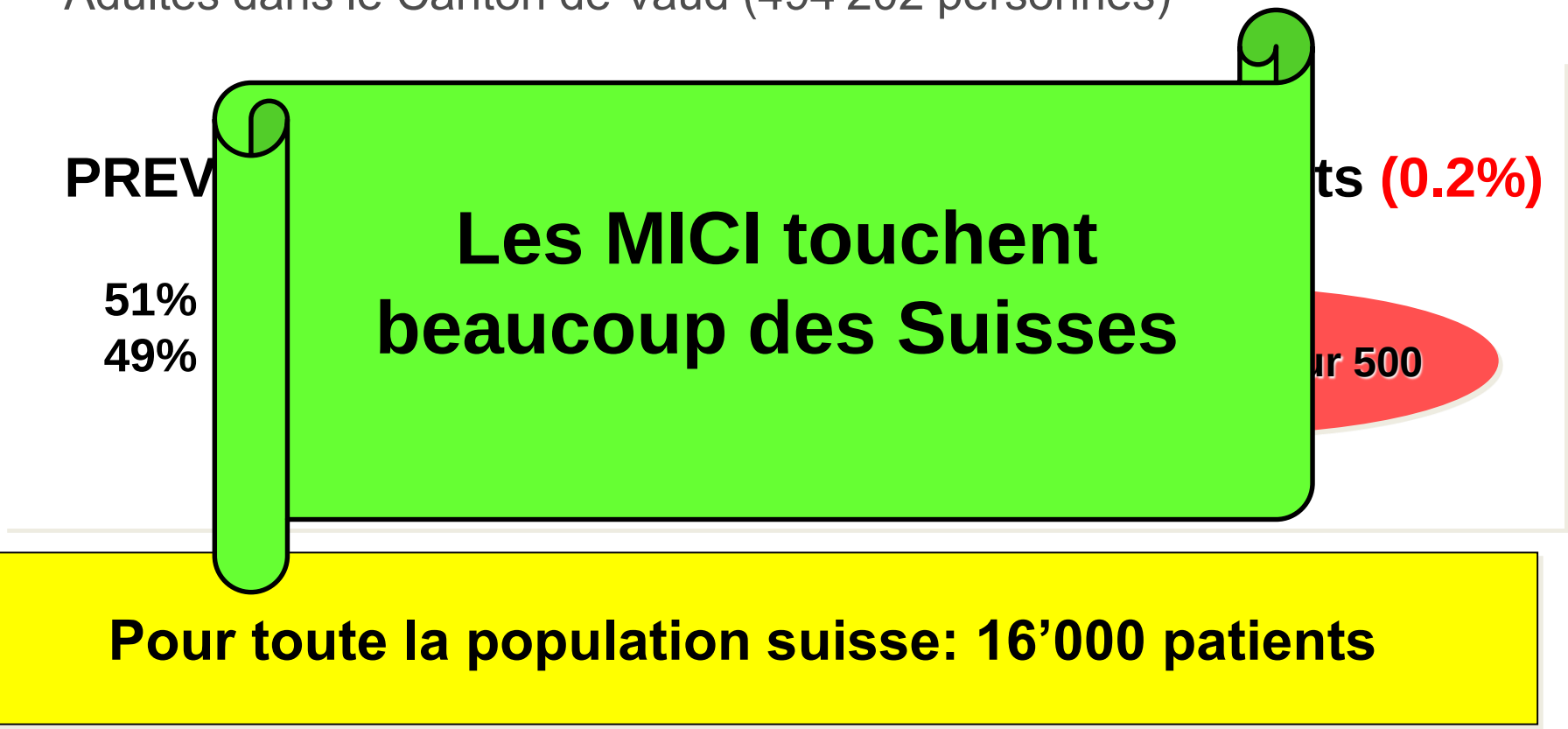
La Cohorte Vaudoise

Adultes dans le Canton de Vaud (494’202 personnes)



Pour toute la population suisse: 16’000 patients

Juillerat et al, *Journal of Crohn's and Colitis* 2008;2:131–141

Fréquence des MICI en Suisse

Table 1 Prevalence estimates of IBD extrapolated to the general Swiss population for the years 2010, 2012, and 2014

	2010	2012	2014
Prevalence /100.000 (CI)			
Total	318 (308-329)	376 (365-388)	408 (396-420)
Men (all ages)	284 (270-298)	338 (322-353)	372 (356-388)
1-17			
18-40			
41-60	373 (343-403)	447 (412-481)	469 (435-504)
60+	495 (458-532)	567 (527-606)	627 (585-669)
Women (all ages)	352 (337-36		
1-17	20 (11-30)		
18-40	299 (273-32		
41-60	445 (413-47		
60+	535 (502-568)	616 (580-653)	648 (611-685)

0.32%

0.38%

0.5%

1/200 avec MICI => 40’000 patients en Suisse

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Médicaments utilisés

Table 3 Percentage of IBD patients with at least one of the listed medical claims ($n = 13,451$)

%	Total	2010	2012	2014
5-ASA[a]	87.4	96.8	84.8	82.2
Immunosuppressants[b]	23.2	18.7	24.4	25.9
Biologics[c]	9.7	5.3	10.2	12.8
Steroids[d]	35.0	32.8	36.5	35.3

[a]mesalazine, sulfasalazine
[b]methotrexate, azathioprine, mercaptopurine
[c]infliximab, adalimumab, golimumab, certolizumab pegol
[d]prednisone, prednisolone, methylprednisolone, budesonide

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Mortalité des patients MICI

Item	IBD	Non-IBD	P
Mortality	1.3%	0.8%	0.234
Age at death (years)	81.0 (IQR 13.8)	83.0 (IQR 16.0)	0.001

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Fréquence d'hospitalisation des patients MICI

Item	IBD	Non-IBD	P
≥1 hosp./year	24%	10.8%	<0.001
Days of hospitalization	7 (IQR 14)	5 (IQR 9)	ND

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Les frais

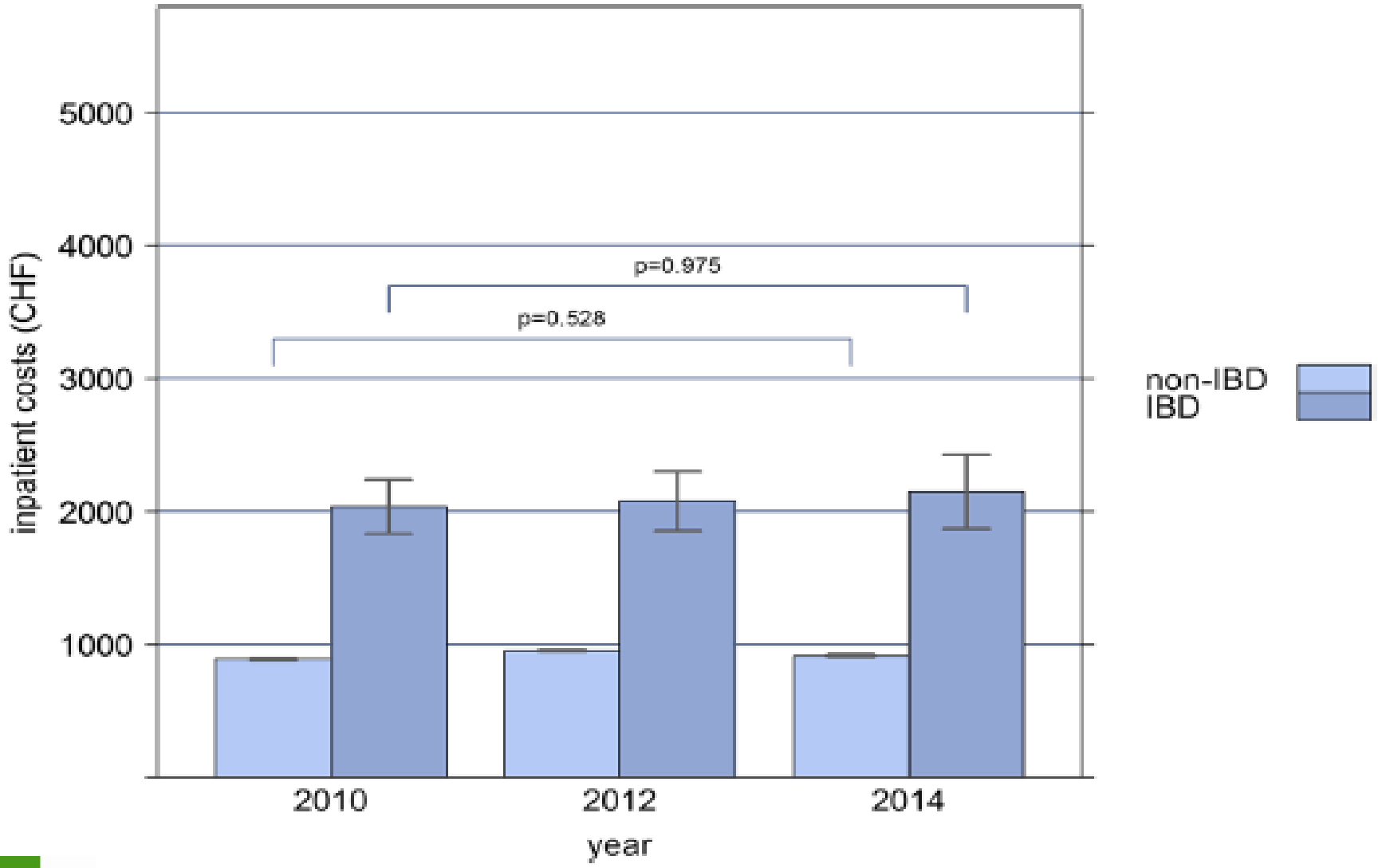
Table 4 The extrapolated health care costs (in Swiss Francs) in IBD versus non-IBD patients between 2010 and 2014

Mean (CI, median)	IBD	non-IBD	p^a
2010			
Total	9590 (9210-9970, 5390)	3160 (3140-3170, 750)	<0.001
Inpatient	2040 (1830-2240, 0)	890 (880-890, 0)	<0.001
Outpatient	3920 (3790-4040, 2810)	1510 (1500-1510, 490)	<0.001
Medication	3630 (343		<0.001
2012			
Total	11,680 (1		<0.001
Inpatient	2080 (18		<0.001
Outpatient	4470 (43		<0.001
Medication	5130 (4840		<0.001
2014			
Total	12,790 (12,270-13,300, 6810)	3540 (3520-3560, 870)	<0.001
Inpatient	2150 (1870-2430, 0)	910 (900-920, 0)	<0.001
Outpatient	5280 (5070-5490, 3510)	1830 (1830-1840, 610)	<0.001
Medication	5360 (5100-5620, 1900)	800 (790-800, 110)	<0.001

[a] *p-values* were calculated using multivariate linear regression (adjusted for age group, sex, and canton of residence)

Augmentation annuelle des frais de 6% dans les patients MICI comparé à 2.4% dans les patients non-MICI

Patients hospitalisés (CHF)



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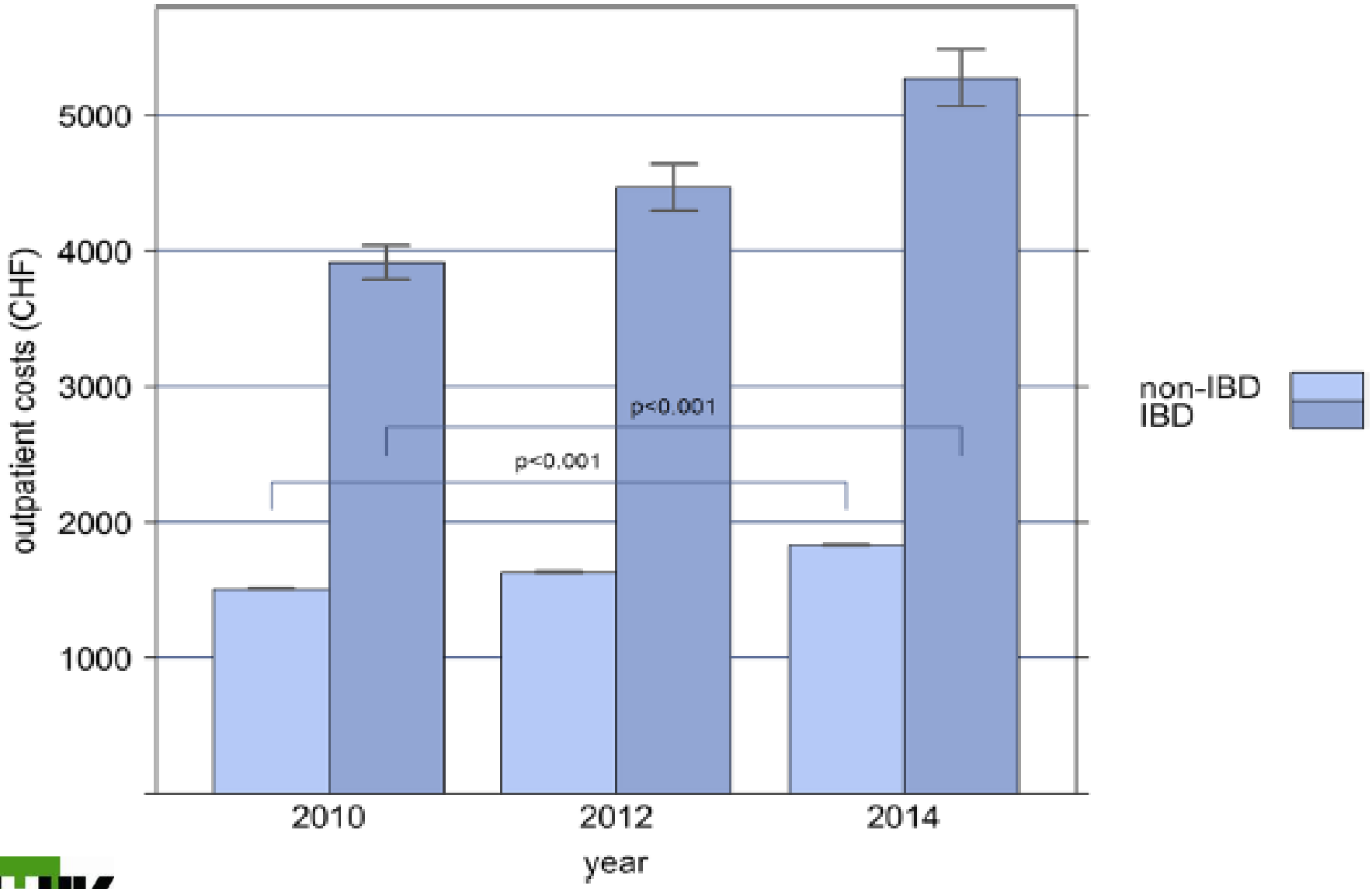
Patients ambulatoires (CHF)



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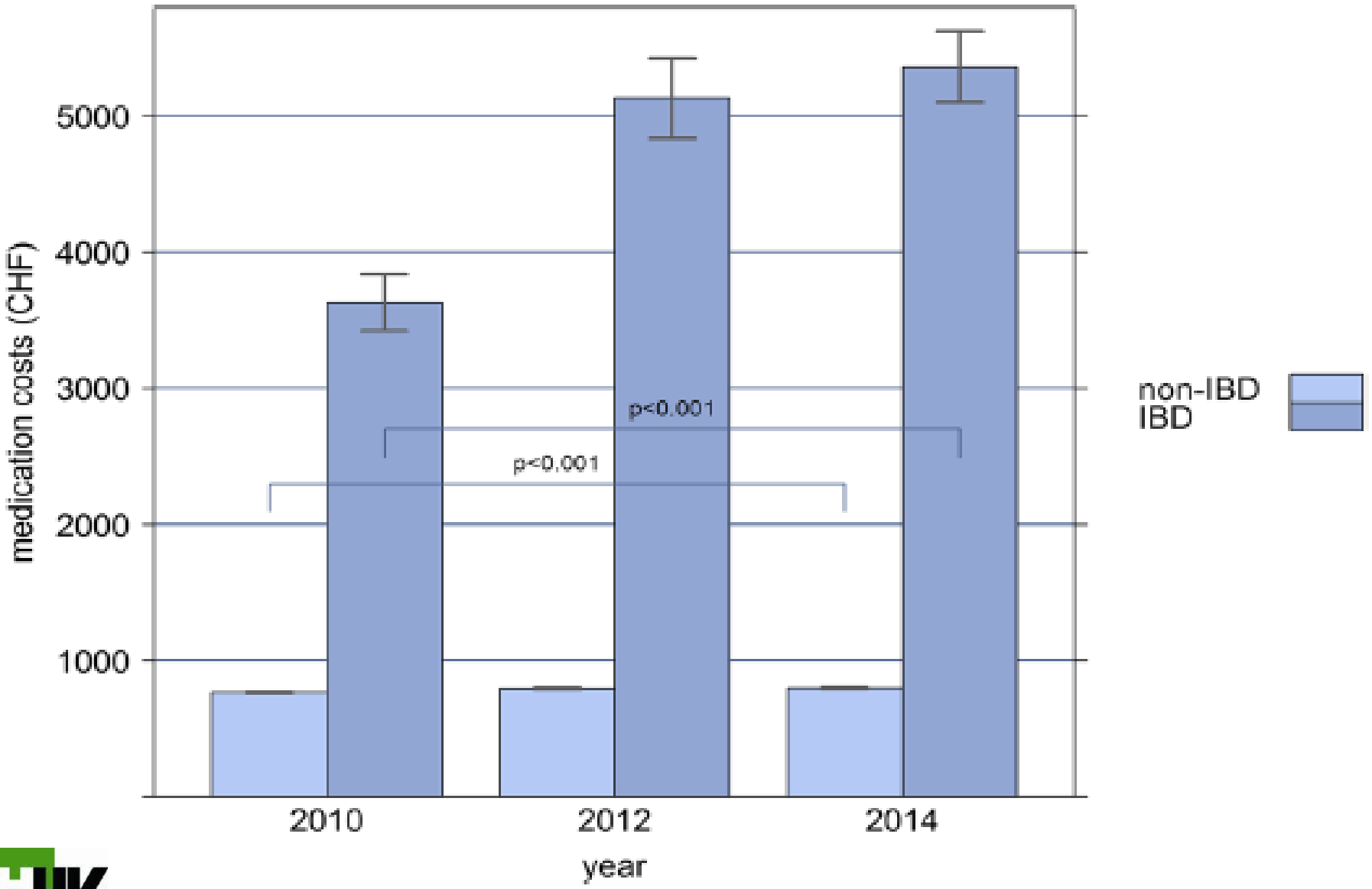
Médicaments (CHF)



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facteurs clés pour les frais

	β (95% CI)	p
Age group by males		
1-17 (male)	1.00	
18-40 (male)	0.59 (0.39-0.91)	0.016
41-60 (male)	0.47 (0.30-0.71)	<0.001
60+ (male)	0.44 (0.29-0.67)	<0.001
Age group by females		
1-17 (female)	1.00	
18-40 (female)	1.04 (0.72-1.49)	0.840
41-60 (female)	0.79 (0.55-1.13)	0.195
60+ (female)	0.59 (0.41-0.85)	0.004
Number of chronic conditions	1.31 (1.29-1.33)	<0.001
Nursing dependency	1.89 (1.69-2.12)	<0.001
Language area		
German	1.00	
French	1.03 (0.96-1.11)	0.375
Italian	0.86 (0.78-0.95)	0.003
Health insurance plan		
Higher deductible class	0.65 (0.60-0.71)	<0.001
Accident coverage	1.10 (1.03-1.18)	0.004
Managed care	0.87 (0.83-0.92)	<0.001
Supplementary insurance	1.06 (0.99-1.14)	0.061

Co-morbidités dans les MICI

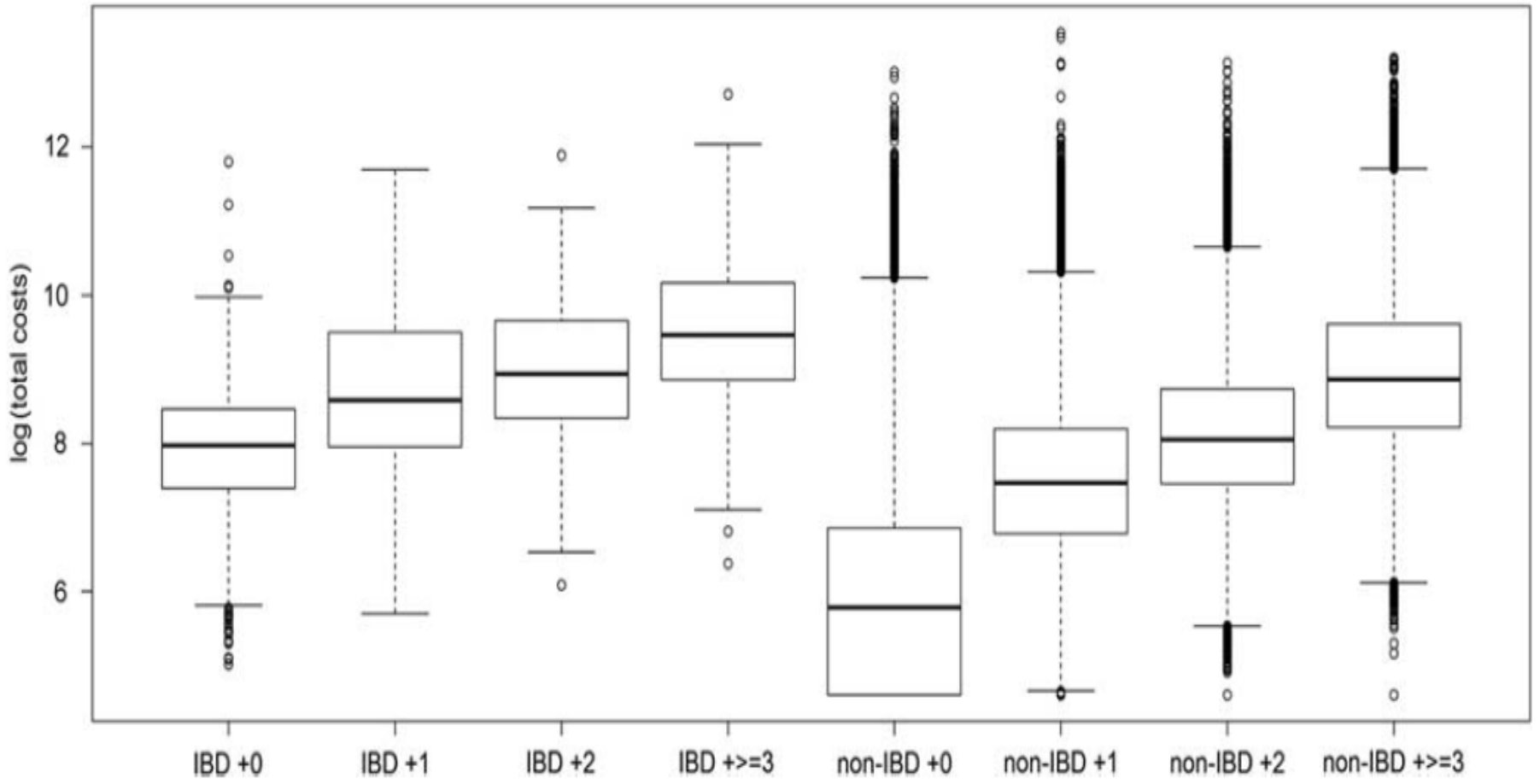
Table 2. (Co)morbidities in indiv
bowel disease, 2014 ($n = 1\ 11$

Au moyenne 3 co-morbidités dans les patients MICI

Chronic conditions (%)				
Acid-related disorders				
Bone diseases (osteoporosis)				
Cancer				
Cardiovascular diseases				
Dementia				
Diabetes mellitus				
Epilepsy	2.7	5.6	**1.45**	1.20–1.76
Glaucoma	3.3	6.2	1.05	0.89–1.24
Gout/hyperuricemia	1.5	2.8	1.05	0.82–1.35
HIV	0.2	0.4	1.70	0.81–3.75
Hyperlipidemia	10.6	18.7	1.07	0.96–1.19
Iron-deficiency anemia	2.6	4.7	**1.77**	1.42–2.21
Migraines	1.1	2.2	**1.81**	1.32–2.52
Pain	9.6	25.8	**2.12**	1.91–2.35
Parkinson's disease	0.9	1.5	0.92	0.67–1.27
Psychological disorders (depression)	9.8	20.9	**1.45**	1.30–1.61
Psychoses	2.6	3.4	0.83	0.67–1.02
Respiratory illness (asthma, COPD)	7.9	13.2	**1.43**	1.26–1.63
Rheumatologic conditions	12.7	36.3	**2.59**	2.36–2.85
Thyroid disorders	3.5	6.7	**1.24**	1.05–1.47
Tuberculosis	0.06	0.4	**4.12**	1.54–14.01

Bähler C, Schoepfer A, et al. Eur J Gastroenterol Hepatol 2017;29:916-925

Co-morbidités augmentent les frais



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Frais associés aux traitements biologiques

Table 7 Health care costs (in Swiss Francs) of IBD patients treated with or without biologics in 2014 ($n = 4812$)

Mean (SD, median)	No Biologics	Biologics	p^a
Total	10,437 (15,146, 5833)	28,265 (12,970, 25,779)	<0.001
Inpatient	2308 (8340, 0)	1887 (4790, 0)	0.3
Outpatient	5163 (6912, 3368)	6303 (4830, 4956)	<0.001
Primary care physicians	635 (777, 417)	551 (769, 285)	<0.001
Specialists	1516 (1854, 941)	2026 (2191, 1509)	<0.001
Others (e.g. paramedical)	3012 (6044, 1401)	3726 (3630, 2692)	<0.001
Medications	2966 (5464, 1644)	20,075 (9486, 19,316)	<0.001

[a] *p-values* were calculated using Wilcoxon rank sum test

Conclusions

- ✓ La fréquence des MICI augmente
- ✓ Mortalité pas différente des patients non-MICI
- ✓ Un quart des patients est hospitalisé dans une année
- ✓ Augmentation des frais de 6% dans les patients MICI comparé à 2.4% dans les patients non-MICI
- ✓ Augmentation des frais surtout lié aux frais ambulatoires
- ✓ Frais plus importants dans les patients sous traitements biologiques

Le futur

- Ressources limitées
- Évaluation de l’impact économique est nécessaire afin de posséder des données suisses qui sont à la base d’une discussion parmi les différentes parties prenantes

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- The sponsor reviewed, discussed and approved the protocol CH-LCE-6247/2016-ms-3882.
- Conduction, analysis and interpretation of the data, preparation and submission of the manuscript were solely in the responsibility of the authors, without any obligations to the sponsor.