

Supplementary Information

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SUPPLEMENTARY TABLES

Supplementary Table 1: Studies reporting incidence

Summary of studies reporting incidence of Crohn's disease (CD) or ulcerative colitis (UC) grouped by geographic region.

The displayed incidence rates represent the mean incidence rate of the study period weighted by the population of the catchment area where possible, otherwise the unweighted mean incidence is presented. A more granular breakdown is provided for studies with a study period of more than ten years and at least two data points. Rates are in units of 100,000 person-years. Average annual percent changes (AAPC)s were calculated when the study period was at least five years long and there was a ratio of at least three datapoints to every five years.

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
AFRICA (n=6)							
Hammada 2011 ¹	Algeria	Constantine	2003–2007	7.38	4.58	25.01 (-4.4, 63.4)	13.92 (-18, 58.3)
Novis 1975 ²	South Africa	Cape Town	1970–1974	0.50			
Wright 1983 ³	South Africa	Cape Town	1970–1979	1.17	1.96	24.67 (-0.3, 55.9)	4.29 (-10.7, 21.8)
Wright 1986 ⁴	South Africa	Cape Town	1975–1980	1.47	2.27	10.11 (-0.9, 22.3)	4.04 (-4, 12.7)
Segal 1988 ⁵	South Africa	Soweto	1975-1987		0.18		
Qu 2022 ⁶	Tanzania	Zanzibar	2014–2021	0.13	0.34		
ASIA (n=96)							
Zayyani 2017 ⁷	Bahrain	Nationwide	1990–2015	5.99			
			1990–1999	5.50			
			2000–2009	6.00			
			2010–2015	8.00			
Ong 2018 ⁸	Brunei	Nationwide	2004-2016	0.28	0.59	0.65 (-23.7, 32.7)	7.21 (-11.7, 30.1)
			2004–2009	0.31	0.45		
			2010–2016	0.25	0.71		
Ng 2018 ⁹	Brunei	Nationwide	2011–2013	0.24	0.24		
Zheng 2010 ¹⁰	China	Nationwide	1950–2007	0.85			
Miao 2015 ¹¹	China	Yunnan	1998–2013	0.03	0.45	N/A [†]	N/A [†]
			1998–1999	0.002	0.09		
			2000–2009	0.02	0.37		
			2010–2013	0.06	0.83		
Zhao 2013 ¹²	China	Wuhan	2010	0.56	1.59		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Ng 2018 ⁹	China	Wuhan	2010–2011	0.56	1.59		
Ng 2013 ¹³	China	Chengdu	2011–2012	0.14	0.43		
	China	Macau	2011–2012	0.60	1.60		
	China	Xi'An	2011–2012	0.07	0.82		
	China	Zhongshan	2011–2012	1.22	2.22		
Zeng 2013 ¹⁴	China	Zhongshan	2011–2012	1.13	2.07		
Ng 2018 ⁹	China	Chengdu	2011–2012	0.14	0.43		
	China	Guangzhou	2011–2013	1.30	2.19		
	China	Macau	2011–2013	0.80	1.60		
	China	Xi'An	2011–2013	0.07	0.47		
He 2022 ¹⁵	China	Yinzhou District	2011–2020	0.97	14.45	28.43 (-1.1, 66.8)	25.75 (12.7, 40.3)
Yang 2014 ¹⁶	China	Daqing	2012–2013	0.15	1.86		
Ng 2018 ⁹	China	Daqing	2012–2013	0.15	1.86		
	China	Kunming	2012–2013	0.08	1.19		
	China	Xiangshan	2012–2013	0.40	1.07		
Yang 2022 ¹⁷	China	Nationwide	2013–2016	0.93	4.47		
Burisch 2014 ¹⁸	Cyprus	Nicosia	2010	6.25	5.00		
Vegh 2014 ¹⁹	Cyprus	Nicosia	2010–2011	5.65	5.30		
Shi 2016 ²⁰	Hong Kong	Nationwide	1981–2013		0.60		
Ng 2016 ²¹	Hong Kong	Nationwide	1981–2014	0.60	0.92		
			1981–1990	0.07	0.21		
			1990–2000	0.39	0.63		
			2001–2010	0.86	1.44		
			2011–2014	1.46	1.66		
Chow 2009 ²²	Hong Kong	Shatin district	1985–2006		3.69		
			1986–1988		1.4		
			1989–2000		4.63		
			2001–2006		3.97		
Leong 2004 ²³	Hong Kong	Shatin and Sai Kung districts	1986–2001	0.62	0.90		
			1986–1989	0.30	0.68		
			1990–1998	0.56	0.86		
			1999–2001	0.99	1.16		
Sung 1994 ²⁴	Hong Kong	Shatin district	1987–1992	0.21			
Lok 2008 ²⁵	Hong Kong	Tuen Mun and Yuen Long districts	1990–2006		0.56		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Lok 2007 ²⁶	Hong Kong	Tuen Mun and Yuen Long districts	1997–1999		0.36		
			2000–2006		0.64		
			1991–2006	0.17			
			1991–1998	0.14			
			1999–2006	0.21			
Mak 2018 ²⁷	Hong Kong	Nationwide	2010–2012	0.94	1.20		
Ng 2013 ¹³	Hong Kong	North East and Kowloon East territories	2011–2012	1.31	1.75		
Ng 2018 ⁹	Hong Kong	North East and Kowloon East territories	2011–2013	1.09	1.49		
Mak 2018 ²⁸	Hong Kong	Nationwide	2013–2016	3.36			
Ng 2018 ⁹	India	Hyderabad	2012–2013	3.91	5.40		
Ng 2013 ¹³	Indonesia	Central Jakarta	2011–2012	0.33	0.55		
Ng 2018 ⁹	Indonesia	Central Jakarta	2011–2013	0.27	0.49		
Mansour-Ghanaei 2015 ²⁹	Iran	Guilan Province	2009–2012	0.56	3.99		
Zahedi 2014 ³⁰	Iran	Kerman	2011–2012	0.83	4.98		
Shapira 1994 ³¹	Israel	Kinneret	1960–1990	1.74			
			1960–1971	0.90			
			1972–1977	0.80			
			1978–1990	2.95			
Krawiec 1984 ³²	Israel	Beer Sheva	1961–1980	1.03			
			1961–1970	0.62			
			1971–1980	1.13			
Odes 1987 ³³	Israel	Beer Sheva	1961–1985		4.03		
			1961–1970		1.60		
			1971–1980		4.35		
			1981–1985		5.80		
Odes 1987 ³⁴	Israel	Beer Sheva	1961–1985		4.05		
			1961–1975		2.00		
			1976–1985		5.80		
Shapira 1998 ³⁵	Israel	Kinneret	1965–1994		3.28		
			1960–1969		0.80		
			1970–1979		1.95		
			1980–1989		5.35		
			1990–1994		3.60		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Niv 1990 ³⁶	Israel	Upper Galilee	1967–1986		2.50		
			1967–1976		1.86		
			1977–1986		3.79		
Odes 1994 ³⁷	Israel	Beer Sheva	1968–1992	1.67			
Rozen 1979 ³⁸	Israel	Tel Aviv	1970–1976	1.23		17.66 (-16.6, 66)	
Fireman 1989 ³⁹	Israel	Tel Aviv	1970–1980	1.72			
Grossman 1989 ⁴⁰	Israel	Tel Aviv	1970–1980		3.88		
Odes 1989 ⁴¹	Israel	Beer Sheva	1970–1987	1.55	4.30		
			1970–1978	1.00	3.20		
			1979–1987	2.10	5.40		
Jacobsohn 1986 ⁴²	Israel	Jerusalem	1973–1978		6.14		6.67 (-9.5, 25.7)
Shivananda 1996 ⁴³	Israel	Beer Sheva	1991-1993	4.40	9.10		
Zvidi 2019 ⁴⁴	Israel	Nationwide	2003–2008	12.40	11.35	-0.18 (-12.6, 14)	-9.12 (-21, 4.5)
Stulman 2021 ⁴⁵	Israel	Nationwide	2005–2018	15.96	12.42	-0.03 (-3.6, 3.7)	-2.8 (-6.7, 1.3)
			2005–2009	15.84	13.89		
			2010–2017	16.02	11.61		
Ledder 2023 ⁴⁶	Israel	Nationwide	2005–2018	15.06	11.81		
Atia 2021 ⁴⁷	Israel	Nationwide	2005–2019	14.57			
Burisch 2014 ¹⁸	Israel	Beer Sheva	2010	8.57	4.67		
Vegh 2014 ¹⁹	Israel	Beer Sheva	2010–2011	6.65	5.80		
Utsunomiya 1983 ⁴⁸	Japan	Nationwide	1955–1980		0.18		11.91 (-3.7, 30.1)
			1955–1959		0.02		
			1960–1969		0.08		
			1970–1979		0.33		
Yoshida 1990 ⁴⁹	Japan	Nationwide	1955–1982	0.04	0.22	12.37 (-17.3, 52.7)	9.75 (-2.4, 23.3)
			1955–1959	0.003	0.03		
			1960–1969	0.02	0.09		
			1970–1979	0.07	0.38		
			1980–1982	0.08	0.35		
Kitahora 1995 ⁵⁰	Japan	Nationwide	1960–1985		0.27		
			1961–1965		0.02		
			1970–1975		0.38		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Chiba 2021 ⁵¹	Japan	Nationwide	1965–2000	0.50	1.82		
			1970–1975	0.04	0.56		
			1980–1985	0.32	1.22		
			1990–1995	0.88	2.65		
Yao 2000 ⁵²	Japan	Nationwide	1986–1998	0.86		6.94 (-8.8, 25.4)	
			1986–1989	0.58			
			1990–1998	0.99			
Morita 1995 ⁵³	Japan	Nationwide	1991	0.51	1.95		
Al-Nakib 1984 ⁵⁴	Kuwait	Nationwide	1977–1982	0.45	2.27		
Al-Shamali 2003 ⁵⁵	Kuwait	Nationwide	1985–1999		2.74		0.29 (-6.5, 7.6)
			1985–1989		2.59		
			1990–1999		2.82		
Abou Rached 2021 ⁵⁶	Lebanon	Nationwide	2001–2020	4.58	4.69		
Mokhtar 2019 ⁵⁷	Malaysia	Kuala Lumpur	1980–2018	0.25	0.54		
			1980–1989	0.06	0.30		
			1990–1999	0.08	0.40		
			2000–2009	0.22	0.41		
			2010–2018	0.54	0.92		
Hilmi 2015 ⁵⁸	Malaysia	Kinta Valley	1990–2013	0.06	0.29	34.46 (-23.9, 137.7)	10.73 (-5.6, 30)
			1990–1999	0.02	0.15		
			2000–2009	0.10	0.40		
Ng 2013 ¹³	Malaysia	Kinta Valley	2011–2012	0.23	0.70		
Ng 2018 ⁹	Malaysia	Kinta Valley	2011–2013	0.18	0.59		
Pang 2018 ⁵⁹	Malaysia	Johor	2016	0.36	0.32		
Xin-Hui 2023 [‡]	Malaysia	Kinta Valley	2022–2023	0.90	0.79		
Pandit 2018 ⁶⁰	Nepal	BP Koirala Institute of Health Sciences	2009–2017	0.09	0.15		
Radhakrishnan 1997 ⁶¹	Oman	Nationwide	1987–1994		1.44		6.63 (-17.4, 37.6)
Ng 2018 ⁹	Philippines	Manila	2011–2013	0.14	0.29		
Chashkova 2023 ⁶²	Russia	Irkutsk Region	2006–2019	1.38	2.73	4.75 (-6.3, 17.1)	7.79 (-0.6, 16.8)
			2006–2009	1.00	1.85		
			2010–2019	1.54	3.11		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Zhilin 2022 ⁶³	Russia	Zabaykalsky Krai	2017–2021		1.87		-12.5 (-44.7, 38.5)
Khan 1996 ⁶⁴	Saudi Arabia	Al-Madinah Province	1989-1994		3.70		
Ng 2013 ¹³	Singapore	Nationwide	2011–2012	0.40	0.66		
Ng 2018 ⁹	Singapore	Nationwide	2011–2013	0.43	0.70		
Yang 2000 ⁶⁵	South Korea	Songpa-Kangdong, Seoul	1986–1997		0.69		19.38 (-4.5, 49.3)
			1986–1989		0.26		
			1990–1997		0.88		
Yang 2008 ⁶⁶	South Korea	Songpa-Kangdong, Seoul	1986–2005	0.55	1.55	20.59 (4.9, 38.6)	14.22 (6.2, 22.8)
			1986–1989	0.02	0.29		
			1990–1999	0.32	1.17		
			200–2005	1.24	2.91		
Park 2019 ⁶⁷	South Korea	Songpa-Kangdong, Seoul	1986–2015	0.97	2.93	13.07 (6.9, 19.6)	9.55 (6.4, 12.7)
			1986–1989	0.03	0.23		
			1990–1999	0.20	1.27		
			2000–2009	1.27	3.89		
			2010–2015	2.32	5.77		
Cha 2020 ⁶⁸	South Korea	Songpa-Kangdong, Seoul	1986–2015		3.34		
			1986–1999		1.02		
			2000–2009		6.74		
			2010–2015		6.26		
Kim 2023 ⁶⁹	South Korea	Jeju Island	1990–2019	0.97	1.70	12.09 (6, 18.5)	11.9 (7.3, 16.7)
			1990–1999	0.02	0.15		
			2000–2009	0.81	1.33		
			2010–2019	1.92	3.33		
Moon 2021 ⁷⁰	South Korea	Nationwide	2005–2008	2.83	7.47		
Kim 2022 ⁷¹	South Korea	Nationwide	2005–2016	2.08	4.16		
			2005–2010	1.70	4.15		
			2011–2016	2.45	4.20		
Choi 2021 ⁷²	South Korea	Nationwide	2006–2010	2.69	6.93		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Kim 2015 ⁷³	South Korea	Nationwide	2006–2012	3.26	4.67	-2.16 (-20.3, 20.1)	-1.7 (-17.2, 16.7)
Kim 2020 ⁷⁴	South Korea	Nationwide	2006–2015	2.78	6.27		
Choe 2022 ⁷⁵	South Korea	Nationwide	2006–2015	3.70	7.67	-1.14 (-11.6, 10.6)	-6.61 (-13.7, 1)
Kim 2022 ⁷⁶	South Korea	Nationwide	2006–2015		6.14		
Kim 2023 ⁷⁷	South Korea	Nationwide	2006–2015		6.32		
Oh 2022 ⁷⁸	South Korea	Nationwide	2007–2020		5.15		
Moon 2023 ⁷⁹	South Korea	Nationwide	2007–2020	2.60	6.26		
Park 2023 ⁸⁰	South Korea	Nationwide	2008–2017	1.38	3.21	-0.66 (-23.2, 28.5)	-2.62 (-17.7, 15.3)
Han 2023 ⁸¹	South Korea	Nationwide	2008–2018		2.55		
Park 2019 ⁸²	South Korea	Nationwide	2009–2016		7.95		
Kwak 2019 ⁸³	South Korea	Nationwide	2009–2016	2.59	4.45	3.62 (-14.2, 25.1)	5.18 (-8.9, 21.5)
Song 2020 ⁸⁴	South Korea	Nationwide	2010–2014	2.50			
Han 2020 ⁸⁵	South Korea	Nationwide	2010–2016		4.87		
Han 2019 ⁸⁶	South Korea	Nationwide	2010–2016	2.55			
Hong 2022 ⁸⁷	South Korea	Nationwide	2010–2017	3.13	6.66		
Kim 2023 ⁸⁸	South Korea	Nationwide	2010–2017	2.21	5.94		
Lee 2021 ⁸⁹	South Korea	Nationwide	2010–2019	3.44	7.24	2.29 (-9, 14.9)	5.23 (-2.9, 14.1)
Jung 2017 ^{90,91}	South Korea	Nationwide	2011–2014	2.79	5.00		
Jung 2017 ^{90,91}	South Korea	Nationwide	2011–2014	2.79	5.00		
Niriella 2010 ⁹²	Sri Lanka	Columbo and Gampaha	2008	0.09	0.67		
Ng 2013 ¹³	Sri Lanka	Gampaha District	2011–2012	0.59	1.00		
Kasturiratne 2014 ⁹³	Sri Lanka	Gampaha District	2011–2012	0.59	1.00		
Ng 2018 ⁹	Sri Lanka	Gampaha District	2011–2013	0.52	1.16		
Chen 2013 ⁹⁴	Taiwan	Nationwide	1998–2008		0.62		7.15 (-15.9, 36.4)
			1998–1999		0.45		
			2000–2008		0.65		
Wei 2013 ⁹⁵	Taiwan	Nationwide	1998–2008	0.19	0.76	4.64 (-32.1, 61.3)	5.81 (-14.8, 31.4)
			1998–1999	0.15	0.58		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
			2000–2008	0.20	0.80		
Chuang 2013 ⁹⁶	Taiwan	Nationwide	1998–2010	0.20	0.79	5.65 (-24.3, 47.5)	5.05 (-10.9, 23.9)
			1998–1999	0.15	0.61		
			2000–2009	0.20	0.80		
Hsu 2017 ⁹⁷	Taiwan	Nationwide	1998–2011	0.18	0.79	8.71 (-21, 49.5)	5.17 (-9.3, 21.9)
			1998–1999	0.11	0.54		
			2000–2009	0.17	0.80		
			2010–2011	0.29	0.97		
Kuo 2015 ⁹⁸	Taiwan	Nationwide	2000–2010	0.21	0.84		
Yen 2019 ⁹⁹	Taiwan	Nationwide	2001–2015	0.27	0.84	8.7 (-14.2, 37.7)	0.83 (-11.3, 14.6)
			2001–2009	0.20	0.84		
			2010–2015	0.37	0.83		
Wei 2020 ¹⁰⁰	Taiwan	Nationwide	2001–2015	0.32	0.75		
			2001	0.17	0.54		
			2015	0.47	0.95		
Wu 2023 ¹⁰¹	Taiwan	Nationwide	2001–2017	0.31	0.85		
			2001–2009	0.29	0.81		
			2017	0.68	1.48		
			2018–2020	0.74	1.51		
Ng 2018 ⁹	Taiwan	Nationwide	2011–2013	0.31	0.72		
Ng 2013 ¹³	Thailand	Bangkok	2011–2012	0.35	0.28		
	Thailand	Chiang Mai and Chiang Rai	2011–2012	0.30	0.36		
Ng 2018 ⁹	Thailand	Bangkok	2011–2013	0.34	0.29		
	Thailand	Chiang Mai	2011–2013	0.27	0.30		
EUROPE (n=248)							
Petritsch 2013 ¹⁰²	Austria	Styria	1997–2007	6.61	4.77	2.67 (-4.5, 10.4)	2.59 (-5.8, 11.8)
			1997–1999	5.70	4.40		
			2000–2007	6.95	4.90		
Van Gossum 1996 ¹⁰³	Belgium	Brussels	1992–1993	3.70	3.00		
Latour 1996 ¹⁰⁴	Belgium	Liège	1993–1994	5.52	3.55		
Latour 1998 ¹⁰⁵	Belgium	Liège	1993–1996	4.50	4.37		
Piront 2002 ¹⁰⁶	Belgium	Liège	1993–1996	4.50	4.37		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Pavlovic-Calic 2008 ¹⁰⁷	Bosnia and Herzegovina	Tuzla	1995–2006	2.33		25 (10.2, 41.8)	
			1995–1999	0.76			
			2000–2006	3.46			
Salkic 2010 ¹⁰⁸	Bosnia and Herzegovina	Tuzla	1995–2006	2.35	3.88	25 (10.2, 41.8)	17.82 (7.5, 29.1)
			1995–1999	0.76	1.89		
			2000–2006	3.48	5.30		
Sola Lamoglia 1992 ¹⁰⁹	Catalonia	Catalonia	1978–1987	0.43	0.60		
Brunet 2018 ¹¹⁰	Catalonia	Catalonia	2011–2016	14.66	21.64	14.96 (1.5, 30.2)	10.49 (-0.2, 22.3)
Jovanovic 1999 ¹¹¹	Croatia	Rijeka and Istria	1973–1994	1.56		11.95 (5.3, 19)	
			1973–1979	0.52			
			1980–1989	1.57			
			1990–1994	2.99			
Vucelic 1991 ¹¹²	Croatia	Zagreb	1980–1989		1.47		0.95 (-15.5, 20.6)
Vucelic 1991 ¹¹³	Croatia	Zagreb	1980–1989	0.66		-1.17 (-24.3, 29)	
Pezerovic 2014 ¹¹⁴	Croatia	Primorsko-Goranska County	1995–2001	3.92	3.88		
	Croatia	Vukovarsko-Srijemska County	1967–2011	0.74	1.19	9.57 (0.2, 19.9)	15.1 (10.7, 19.7)
			1967–1969		0.13		
			1970–1979		0.04		
			1980–1989		0.08		
			1990–1999	0.44	0.94		
			2000–2009	0.80	3.00		
			2010–2011	1.75	6.35		
Sincic 2006 ¹¹⁵	Croatia	Primorsko-Goranska County	2000–2004	6.55	4.60	-1.98 (-23.1, 24.9)	-18.98 (-39.8, 9.1)
Klarin 2013 ¹¹⁶	Croatia	Primorsko-Goranska County	2000–2010	6.56	4.60		
	Croatia	Vukovarsko-Srijemska County	2000–2010	0.50	1.60		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
	Croatia	Zadar County	2000–2010	8.36	8.18	12.43 (5.1, 20.3)	6.95 (0.1, 14.3)
Burisch 2014 ¹⁸	Croatia	Zagreb	2010	3.15	3.15		
Jarkovsky 2017 ¹¹⁷	Czech Republic	Nationwide	2007–2015	17.52	22.07	7.73 (1.3, 14.5)	6.53 (0.9, 12.5)
Burisch 2014 ¹⁸	Czech Republic	Prague	2010	5.53	6.64		
	Czech Republic	South Bohemia	2010	3.85	3.85		
Vegh 2014 ¹⁹	Czech Republic	Prague	2010–2011	5.55	6.60		
Høj 1973 ¹¹⁸	Denmark	Copenhagen County	1960–1970	1.22		19.38 (-6.6, 52.5)	
Vind 2006 ¹¹⁹	Denmark	Copenhagen County	1960–2005	6.37	11.36		
			1960–1965	0.70	6.81		
			1970–1975	2.19	4.94		
			1980–1985	3.60	10.15		
			1991–1993	6.60	9.90		
			2003–2005	8.97	14.38		
Bonnevie 1968 ¹²⁰	Denmark	Copenhagen County	1961–1966		7.31		3.72 (-12.8, 23.4)
Binder 1982 ¹²¹	Denmark	Copenhagen	1962–1978	1.81	8.15	13.72 (4.9, 23.3)	1.23 (-2.2, 4.7)
			1962–1969	0.84	7.83		
			1970–1978	2.68	8.42		
Munkholm 1992 ¹²²	Denmark	Copenhagen	1962–1987	2.62		8.07 (4.3, 12)	
			1962–1969	0.73			
			1970–1979	2.67			
			1980–1987	4.21			
Lo 2023 ¹²³	Denmark	Nationwide	1973–2018	10.05	19.84	3.31 (2.5, 4.1)	4.03 (3.4, 4.6)
			1973–1979	4.01	5.91		
			1980–1989	5.81	8.67		
			1990–1999	9.74	18.80		
			2000–2009	12.27	28.33		
			2010–2018	15.25	30.02		
Nyboe 2017 ¹²⁴	Denmark	Nationwide	1977–2011		25.98		
Olén 2020 ¹²⁵	Denmark	Nationwide	1977–2017	6.49			
			1977–1990	7.58			

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Olén 2020 ¹²⁶	Denmark	Nationwide	1991–2002	8.56			
			2003–2017	4.50			
			1977–2017		15.09		
			1977–1990		6.72		
			1991–2002		21.98		
Agrawal 2021 ¹²⁷	Denmark	Nationwide	2003–2017		17.06		
			1977–2018	13.48	26.74		
			1978–2002	6.67	12.46		
			1978–2020	9.38	18.27	3.34 (2.5, 4.2)	3.09 (2.5, 3.7)
			1978–1979	4.03	8.26		
Jacobsen 2006 ¹²⁸	Denmark	North Jutland	1980–1989	4.65	9.40		
			1990–1999	8.45	14.45		
			2000–2009	9.35	22.38		
			2010–2019	14.74	27.05		
			1979–1987	4.10			
Munkholm 1993 ¹³⁰	Denmark	Copenhagen	1979–1987	4.10			
Axelrad 2021 ¹³¹	Denmark	Nationwide	1979–2011	7.56	20.64		
Langholz 1991 ¹³²	Denmark	Copenhagen	1980–1987		7.98		1.15 (-0.7, 3)
Lophaven 2017 ¹³³	Denmark	Nationwide	1980–2013	12.35	25.56		
			1980–1989	8.97	15.71		
			1990–1999	10.59	23.58		
			2000–2009	13.00	34.16		
			2010–2013	15.60	32.51		
Dorn-Rasmussen 2022 ¹³⁴	Denmark	Nationwide	1980–2017	10.34	21.02	3.35 (2.4, 4.3)	4.11 (3.4, 4.8)
			1980–1989	5.48	8.15		
			1990–1999	9.31	18.29		
			2000–2009	11.89	27.91		
			2010–2018	15.19	30.48		
Fonager 1997 ¹³⁵	Denmark	Nationwide	1981–1992	4.56	13.20		
Shivananda 1996 ⁴³	Denmark	Copenhagen	1991–1993	7.20	9.50		
Nørgård 2014	Denmark	Nationwide	1995–2012	8.08	19.07		
Agrawal 2022 ¹³⁶	Denmark	Nationwide	1995–2018	12.88	27.20	2.8 (0.9, 4.7)	1.52 (0.2, 2.8)
			1995–1999	10.24	21.85		
			2000–2009	12.15	28.42		
			2010–2016	15.66	29.09		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Nørgård 2023 ¹³⁷	Denmark	Nationwide	1995–2020	18.07	36.47		
Wewer 2022 ¹³⁸	Denmark	Nationwide	1997–2015	9.37			
Jacobsen 2022 ¹³⁹	Denmark	North Jutland	2002–2020	20.08	37.76		
Burisch 2017 ¹⁴⁰	Denmark	Copenhagen	2003–2004		12.38		
Christiansen 2019 ¹⁴¹	Denmark	Copenhagen	2003–2004	8.79	12.38		
Lo 2020 ¹⁴²	Denmark	Copenhagen	2003–2004	8.79	12.38		
Lo 2020 ¹⁴³	Denmark	Copenhagen	2003–2004	8.79	12.38		
Vadstrup 2020 ¹⁴⁴	Denmark	Nationwide	2003–2015	14.23	30.69	-1.01 (-4.8, 2.9)	-1.72 (-4.3, 0.9)
			2003–2009	14.37	31.92		
			2010–2015	14.07	29.29		
Burisch 2014 ¹⁸	Denmark	Amager	2010	5.23	11.95		
	Denmark	Aarhus	2010	8.47	12.70		
	Denmark	Fünen	2010	10.73	19.97		
	Denmark	Herlev	2010	6.53	15.86		
	Denmark	Herning	2010	6.49	14.71		
	Denmark	Viborg	2010	8.65	15.96		
Vegh 2014 ¹⁹	Denmark	Amager	2010–2011	5.00	13.85		
	Denmark	Herlev	2010–2011	5.40	17.60		
Lordal 2020 ¹⁴⁵	Denmark	Nationwide	2010–2017	16.00	32.00		
Zhao 2022 ¹⁴⁶	Denmark	Nationwide	2010–2017	14.82	27.44	-1.55 (-9, 6.5)	-5.73 (-11, -0.1)
Salupere 2001 ¹⁴⁷	Estonia	Tartu	1973–1998	0.85	1.63		
			1973–1992	0.27	1.50		
			1993–1998	1.40	1.70		
Burisch 2014 ¹⁸	Estonia	Southern Region	2010	5.15	5.15		
Hammer 2016 ¹⁴⁸	Faroe Islands	Nationwide	1960–2014	4.70	22.91		
			1960–1969	0.82	3.82		
			1970–1979	0.73	8.53		
			1980–1989	3.54	19.69		
			1990–1999	5.62	30.25		
			2000–2009	9.26	28.63		
			2010–2014	8.77	57.24		
Nielsen 2023 ¹⁴⁹	Faroe Islands	Nationwide	1960–2020	5.60	26.78		
			1960–1979	0.77	6.18		
			1980–1989	3.98	19.69		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
			1990–1999	5.83	30.68		
			2000–2009	9.68	28.84		
			2010–2020	10.19	57.74		
Berner 1986 ¹⁵⁰	Faroe Islands	Nationwide	1964–1983	1.94	7.78		
			1964–1968		2.15		
			1969–1978		7.67		
			1979–1983		12.81		
Roin 1989 ¹⁵¹	Faroe Islands	Nationwide	1981–1988	3.61	18.33		
Burisch 2014 ¹⁸	Faroe Islands	Nationwide	2010	10.51	70.90		
Vegh 2014 ¹⁹	Faroe Islands	Nationwide	2010–2011	10.80	72.85		
Linden 1971 ¹⁵²	Finland	Nationwide	1967		4.86		
Halme 1989 ¹⁵³	Finland	Helsinki	1975–1985	2.29		12.68 (-0.9, 28.2)	
			1975–1979	12.28			
			1980–1985	3.14			
Manninen 2010 ¹⁵⁴	Finland	Tampere	1986–1999	7.06	16.85	4.9 (0.5, 9.4)	2.72 (0, 5.5)
			1986–1989	6.00	14.20		
			1990–1999	7.54	18.05		
Jussila 2012 ¹⁵⁵	Finland	Nationwide	2000–2007	9.16	24.73		
Kontola 2022 ¹⁵⁶	Finland	Nationwide	2000–2020	9.87	27.82	2.22 (-0.1, 4.6)	2.52 (1.1, 3.9)
			2000–2009	8.86	24.01		
			2010–2019	10.48	30.79		
Burisch 2014 ¹⁸	Finland	Pirkanmaa	2010	4.41	21.80		
Colombel 1990 ¹⁵⁷	France	Nord, Pas-de-Calais, and Somme	1988	6.09	4.47		
Gower-Rousseau 1994 ¹⁵⁸	France	Nord, Pas-de-Calais, and Somme	1988–1990	4.98	3.44		
Molinie 2004 ¹⁵⁹	France	Nord, Pas-de-Calais, Somme, and Seine-Maritime	1988–1999	5.78	4.11		
			1988–1990	4.56	3.56		
			1991–1999	5.95	4.19		
Chouraki 2011 ¹⁶⁰	France	Nord, Pas-de-Calais, Somme, and Seine-Maritime	1988–2007	6.36	4.11		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
			1988–1990	5.20	4.30		
			1991–1999	6.30	4.23		
			2000–2007	6.85	3.89		
Gower-Rousseau 2013 ¹⁶¹	France	Nord, Pas-de-Calais, Somme, and Seine-Maritime	1988–2008	6.62	4.40		
			1988–1990	5.3			
			1991–1999	6.43			
			2000–2008	7.43			
Fumery 2018 ¹⁶²	France	Nord, Pas-de-Calais, Somme, and Seine-Maritime	1988–2014	7.09	4.54		
Genin 2013 ¹⁶³	France	Nord, Pas-de-Calais, Somme, and Seine-Maritime	1990–2006	6.57			
Shivananda 1996 ⁴³	France	Amiens	1991–1993	9.50	6.70		
Flamenbaum 1997 ¹⁶⁴	France	Puy-de-Dôme	1993–1994	6.60	2.41		
Pagenault 1997 ¹⁶⁵	France	Brittany	1994–1995	3.61	3.65		
Brochard 2022 ¹⁶⁶	France	Brittany	1994–1997	2.90			
Heresbach 2004 ¹⁶⁷	France	Brittany	1994–1997	2.41	2.29		
Nerich 2006 ¹⁶⁸	France	Nationwide	2000–2002	7.92	6.93		
Nerich 2010 ¹⁶⁹	France	Nationwide	2000–2002	8.10	7.10		
Abakar-Mahamat 2007 ¹⁷⁰	France	Corsica	2002–2003	3.84	9.80		
Kirchgesner 2017 ¹⁷¹	France	Nationwide	2009–2013	12.21	12.30	-2.33 (-18.2, 16.6)	-3.15 (-18.9, 15.6)
Achit 2022 ¹⁷²	France	Nationwide	2010–2016	11.78	9.34		
Brandes 1983 ¹⁷³	Germany	Marburg	1962–1965	2.88	5.06		
Daiss 1989 ¹⁷⁴	Germany	Tübingen	1970–1984	3.13	1.29	11.2 (3.6, 19.3)	7.64 (-3.2, 19.7)
			1970–1979	2.33	1.04		
			1980–1984	4.74	1.78		
Dirks 1994	Germany	Ruhr	1980–1984		2.81		
Goebell 1994 ¹⁷⁵	Germany	Essen, Mülheim, Duisburg, and Oberhausen	1980–1984	3.98		3.84 (-23.9, 41.7)	

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Timmer 1999 ¹⁷⁶	Germany	Essen and Mülheim	1980–1995	4.37			
			1980–1984	4.62			
			1991–1995	4.10			
Timmer 1999 ¹⁷⁷	Germany	Essen and Mülheim	1980–1995		2.04		
			1980–1984		1.79		
			1991–1995		2.35		
Loffler 1993 ¹⁷⁸	Germany	Cologne	1985–1986	5.09			
Shivananda 1996 ⁴³	Germany	Essen	1991–1993	4.20	4.20		
Ott 2008 ¹⁷⁹	Germany	Oberpfalz	2004–2006	5.14	3.61		
Tsianos 2003 ¹⁸⁰	Greece	Ioannina, Arta, Preveza, Thesprotia, Lefkas, and Corfu	1981–1997	0.56	4.60		
			1982–1991	0.38	3.54		
			1992–1997	0.89	6.69		
Tsianos 2005 ¹⁸¹	Greece	Ioannina, Arta, Preveza, Thesprotia, Lefkas, and Corfu	1981–1997	0.60	4.87		
			1982–1991	0.40	3.60		
			1992–1997	0.90	6.60		
Tsianos 1994 ¹⁸²	Greece	Ioannina	1982–1991		4.00		10.83 (-0.8, 23.9)
Economou 2007 ¹⁸³	Greece	Ioannina, Arta, Preveza, Thesprotia, Lefkas, and Corfu	1983–2005	1.06	3.34		
			1983–1988	0.50	3.10		
			1989–2000	1.05	3.70		
			2001–2005	2.20	3.90		
Manousos 1996 ¹⁸⁴	Greece	Heraklion Prefecture	1990–1994	2.79		14.59 (-21.3, 66.8)	
Manousos 1996 ¹⁸⁵	Greece	Heraklion Prefecture	1990–1994		8.83		20.5 (-2.6, 49.1)
Ladas 2005 ¹⁸⁶	Greece	Trikala	1990–1994		11.24		29.32 (6.6, 56.8)

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Shivananda 1996 ⁴³	Greece	Heraklion Prefecture	1991–1993	4.70	19.00		
	Greece	Ioannina	1991–1993	0.90	8.90		
Burisch 2014 ¹⁸	Greece	Ioannina	2010	3.07	6.14		
Vegh 2014 ¹⁹	Greece	Ioannina	2010–2011	3.55	5.15		
Burisch 2014 ¹⁸	Greenland	Nationwide	2010	0.00	24.00		
Lakatos 2003 ¹⁸⁷	Hungary	Veszprém County	1977–2001	2.22	6.30		
			1977–1981	0.41	1.66		
			1982–1991	1.52	4.82		
			1992–2001	3.87	10.18		
Lakatos 2011 ¹⁸⁸	Hungary	Veszprém County	1977–2006	5.54	9.09		
			1977–1981	0.40	1.60		
			1982–1991	1.55	4.75		
			1992–2001	3.85	10.15		
			2002–2006	8.83	11.91		
Wetwittayakhlan 2023 ¹⁸⁹	Hungary	Veszprém County	1977–2020	5.83	9.18		
			1977–1995	1.99	5.13		
			1996–2008	8.59	13.72		
			2009–2020	8.92	10.66		
Gonczi 2022 ¹⁹⁰	Hungary	Veszprém County	2007–2018	10.02		-1.82 (-6.8, 3.4)	
			2007–2009	8.24			
			2010–2018	10.63			
Kurti 2022 ¹⁹¹	Hungary	Veszprém County	2007–2018		11.09		-0.62 (-5.4, 4.4)
			2007–2009		11.61		
			2010–2018		10.91		
Burisch 2014 ¹⁸	Hungary	Veszprém County	2010	11.49	11.49		
Vegh 2014 ¹⁹	Hungary	Veszprém County	2010–2011	13.30	11.95		
Kunovszki 2020 ¹⁹²	Hungary	Nationwide	2010–2016		21.70		
Bjornsson 1983 ¹⁹³	Iceland	Nationwide	1950–1979		5.53		
			1950–1959		3.28		
			1960–1969		4.64		
			1970–1979		7.91		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Bjornsson 1989 ¹⁹⁴	Iceland	Nationwide	1950–1979	0.58	4.97		
			1950–1959	0.40	2.80		
			1960–1969	0.45	4.70		
			1970–1979	0.90	7.40		
Bjornsson 1998 ¹⁹⁵	Iceland	Nationwide	1950–1989	1.78	8.27		
			1950–1959	0.49	2.90		
			1960–1969	0.51	4.60		
			1970–1979	0.85	7.56		
			1980–1989	3.12	11.74		
Bjornsson 2000 ¹⁹⁶	Iceland	Nationwide	1970–1994	2.84	11.28	10.16 (5.6, 14.9)	4.82 (3.7, 6)
			1970–1979	0.90	7.56		
			1980–1989	3.11	11.78		
			1990–1994	5.54	16.53		
Shivananda 1996 ⁴³	Iceland	Reykjavík	1991–1993	8.40	25.10		
Bjornsson 2015 ¹⁹⁷	Iceland	Nationwide	1995–2009	6.46	20.47		
			1995–1999	6.67	18.04		
			2000–2009	6.36	21.59		
Burisch 2014 ¹⁸	Iceland	Nationwide	2010	5.57	23.10		
Shivananda 1996 ⁴³	Ireland	Dublin	1991–1993	5.70	14.80		
Burisch 2014 ¹⁸	Ireland	County Meath	2010	4.76	8.40		
Lanfranchi 1976 ¹⁹⁸	Italy	Bologna	1972–1973	0.75	1.87		
Trallori 1991 ¹⁹⁹	Italy	Florence	1978–1987	1.81	5.98	9.59 (-7, 29.1)	14.04 (4, 25)
			1978–1979	1.24	2.55		
			1980–1987	1.95	6.84		
Trallori 1996 ²⁰⁰	Italy	Florence	1978–1992	2.64	7.56		
			1979–1980	1.90	3.80		
			1981–1989	2.63	8.13		
			1990–1992	3.40	9.60		
Belvedere 2021 ²⁰¹	Italy	Messina	1978–2017	14.97	26.38		
			1978–1987	3.40	7.30		
			1988–1997	8.20	15.10		
			1998–2007	20.50	36.30		
			2008–2017	28.30	47.64		
Tragnone 1993 ²⁰²	Italy	Bologna	1986–1989	2.63	5.05		
Cottone 1989 ²⁰³	Italy	Palermo	1987–1988	2.72			

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Cottone 1991 ²⁰⁴	Italy	Palermo	1987–1989	2.76			
Tragnone 1996 ²⁰⁵	Italy	Nationwide	1989–1992	2.33	5.34		
Ranzi 1996 ²⁰⁶	Italy	Lombardia	1990–1993	3.41	7.24		
Shivananda 1996 ⁴³	Italy	Cremona	1991–1993	2.60	8.40		
	Italy	Florence	1991–1993	3.20	8.60		
	Italy	Milan/Varese	1991–1993	2.50	8.80		
	Italy	Palermo	1991–1993	6.60	10.50		
	Italy	Reggio Emilia	1991–1993	4.30	8.70		
Valpiani 2018 ²⁰⁷	Italy	Folrì	1993–2013	6.13	14.09		
			1993–1998	5.55	13.65		
			1999–2010	7.00	14.40		
			2011–2013	3.80	13.70		
Taborelli 2020 ²⁰⁸	Italy	Friuli Venezia Giulia Region	1995–2013	5.73	10.34		
			1995–1998	7.29	11.15		
			1999–2008	5.57	10.19		
			2009–2013	5.42	10.58		
Caviglia 2023 ²⁰⁹	Italy	Healthcare District of Bra	2001–2021	5.89	10.47		
			2001–2006	2.90	3.70		
			2016–2019	5.68	10.00		
			2020–2021	7.80	14.80		
Di Domenicantonio 2014 ²¹⁰	Italy	Lazio	2008–2009	6.75	14.85		
Macaluso 2019 ²¹¹	Italy	Sardinia	2008–2010	5.00	10.00		
Crocetti 2021 ²¹²	Italy	Milan	2010–2018	9.26	15.80	1.39 (-6.7, 10.2)	-0.64 (-6.8, 5.9)
Tursi 2013 ²¹³	Italy	Barletta-Andria-Trani Province	2009–2012	5.05	7.18		
Burisch 2014 ¹⁸	Italy	Northern Italy (Padua, Florence, Cremona and Crema, Forlì, and Reggio Emilia)	2010	3.94	6.93		
Vegh 2014 ¹⁹	Italy	Northern Italy (Padua, Florence, Cremona and	2010–2011	3.80	7.25		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
		Crema, Forlì, and Reggio Emilia)					
Kiudelis 2012 ²¹⁴	Lithuania	Kaunas Region	2007–2009	1.21	6.91		
Burisch 2014 ¹⁸	Lithuania	Kaunas	2010	2.40	6.14		
Vegh 2014 ¹⁹	Lithuania	Kaunas	2010–2011	2.00	8.65		
Burisch 2014 ¹⁸	Moldova	Chişinău	2010	0.43	3.87		
Vegh 2014 ¹⁹	Moldova	Chişinău	2010–2011	0.60	3.70		
Shivananda 1987 ²¹⁵	Netherlands	Regio Leiden	1979–1983	3.87		-5.86 (-31.4, 29.1)	
Shivananda 1996 ⁴³	Netherlands	Maastricht	1991–1993	9.10	14.20		
Russel 1998 ²¹⁶	Netherlands	South Limburg	1991–1994	6.88	9.97		
Romberg-Camps 2009 ²¹⁷	Netherlands	South Limburg	1991–2003	6.15	9.19		
Van den Heuvel 2017 ²¹⁸	Netherlands	South Limburg	1991–2010	10.99	15.81	6 (3.5, 8.5)	3.81 (1.8, 5.8)
			1991–1999	7.72	12.82		
			2000–2009	13.29	17.94		
de Groof 2016 ²¹⁹	Netherlands	Central Netherlands	2004–2010	18.37	19.27	12.02 (0.3, 25.1)	-4.84 (-14.5, 5.9)
Myren 1971 ²²⁰	Norway	Nationwide	1964–1969	1.04	3.30	8.16 (-31.9, 71.8)	1.98 (-21.2, 32)
Kildebo 1989 ²²¹	Norway	North Health Region	1983–1986	5.85			
Kildebo 1990 ²²²	Norway	North Health Region	1983–1986		12.77		
Haug 1988 ²²³	Norway	Hordaland	1984–1985		12.47		
	Norway	Rogaland	1984–1985		16.56		
	Norway	Sogn and Fjordane	1984–1985		18.40		
	Norway	West Health Region	1984–1985		14.81		
Haug 1989 ²²⁴	Norway	West Health Region	1984–1985	5.33			
Yu 2022 ²²⁵	Norway	Nationwide	1987–2015	10.45	24.82		
Moum 1995 ²²⁶	Norway	Oslo, Østfold, Telemark, and Aust-Agder	1990	5.02	10.56		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Moum 1996 ²²⁷	Norway	Oslo, Østfold, Telemark, and Aust-Agder	1990–1993	5.97			
Moum 1996 ²²⁸	Norway	Oslo, Østfold, Telemark, and Aust-Agder	1990–1993		16.00		
Bengtson 2009 ²²⁹	Norway	Oslo, Østfold, Telemark, and Aust-Agder	1990–1993	5.03	10.75		
Shivananda 1996 ⁴³	Norway	Oslo	1991–1993	7.90	16.00		
Lirhus 2018 ²³⁰	Norway	Nationwide	2010–2012	19.05	36.56		
Anisdahl 2021 ²³¹	Norway	Nationwide	2010–2016	14.88	26.36	-1.85 (-10.8, 8)	-0.93 (-7.8, 6.5)
Lordal 2020 ¹⁴⁵	Norway	Nationwide	2010–2017	22.00	28.00		
Lirhus 2021 ²³²	Norway	Nationwide	2010–2017	14.91	26.36	-1.39 (-8.8, 6.6)	-0.9 (-6.6, 5.1)
Zhao 2022 ¹⁴⁶	Norway	Nationwide	2010–2017	17.78	33.08	-5.83 (-12.4, 1.2)	-9.52 (-14.2, -4.6)
Anisdahl 2023 ²³³	Norway	Nationwide	2011–2019	15.66	29.34		
Holten 2023 ²³⁴	Norway	South-East Health Region	2017–2019	5.72	11.92		
Zagrowicz 2022 ²³⁵	Poland	Nationwide	2011–2018	5.04	15.63	-1.72 (-14.1, 12.5)	-5.42 (-12.4, 2.1)
Shivananda 1996 ⁴³	Portugal	Almada	1991–1993	2.60	1.70		
	Portugal	Braga	1991–1993	4.40	6.40		
Burisch 2014 ¹⁸	Portugal	Vale do Sousa	2010	7.18	3.95		
Vegh 2014 ¹⁹	Portugal	Vale do Sousa	2010–2011	6.35	4.95		
Gheorghe 2004 ²³⁶	Romania	Nationwide	2002–2003	0.39	0.75		
Burisch 2014 ¹⁸	Romania	Timiș	2010	1.72	2.41		
Vegh 2014 ¹⁹	Romania	Timiș	2010–2011	2.25	3.10		
Burisch 2014 ¹⁸	Russia	Moscow	2010	0.78	4.31		
Piscaglia 2019 ²³⁷	San Marino	Nationwide	1980–2014	9.93	11.28	6.52 (4.4, 8.7)	2.03 (-0.3, 4.4)
			1980–1989	3.14	5.42		
			1990–1999	7.22	12.42		
			2000–2009	9.08	13.83		
			2010–2014	17.65	12.20		
Jojic 2000 ²³⁸	Serbia	Zvezdara	1988–1998	1.30	1.81		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Saro Gismera 2000 ²³⁹	Spain	Gijón	1954–1997	2.98	3.71		
Saro Gismera 2003 ²⁴⁰	Spain	Asturias	1954–1997	2.41	2.97		
Martinez 1983 ²⁴¹	Spain	Asturias	1965–1980	0.53		13.86 (-11.6, 46.6)	
Yanguela 1991 ²⁴²	Spain	La Rioja	1975–1990	0.67	2.48		
			1975–1979	0.72	2.07		
			1980–1990	0.64	2.64		
Cella Lanau 1995 ²⁴³	Spain	Aragón	1975–1992	1.72	2.39		
			1975–1980	0.44	0.28		
			1981–1989	2.04	3.04		
			1990–1992	3.33	4.67		
Ruiz 1989 ²⁴⁴	Spain	Galicia	1976–1982	0.47			
Ruiz 1984 ²⁴⁵	Spain	Galicia	1976–1983	0.80		11.59 (-26.8, 70)	
Martinez-Salmeron 1993 ²⁴⁶	Spain	Granada Province	1979–1988	0.96	2.00	6.54 (-14.7, 33.1)	13.78 (-2.9, 33.4)
Mate-Jimenez 1994 ²⁴⁷	Spain	Madrid and Soria	1981–1988	1.64	3.20	19.47 (-6.8, 53.1)	5.21 (-11.2, 24.7)
Alonso 1992 ²⁴⁸	Spain	Soria	1981–1990	1.20	3.00		
Sebastian Domingo 1989 ²⁴⁹	Spain	Madrid	1983–1987	1.30	2.38	47.31 (-18.8, 167.2)	3.86 (-30.6, 55.3)
Hinojosa 1990 ²⁵⁰	Spain	Sagunto	1983–1989	3.06	4.13	13.5 (-8.5, 40.8)	-5.57 (-21.4, 13.4)
Arin Letamendia 1999 ²⁵¹	Spain	Pamplona	1983–1993	2.36	3.92	4.58 (-7.5, 18.2)	6.17 (-3.5, 16.8)
			1983–1989	2.33	3.58		
			1990–1993	2.39	4.51		
Brullet 1991 ²⁵²	Spain	Sabadell, Barberà, Castellar, Sant Quirze, Cerdanyola, Ripollet, and Santa Perpètua	1985–1989		3.90		28.06 (-7.6, 77.5)
Lizcano 1994 ²⁵³	Spain	Cuenca	1986–1993	2.75	6.88	-5.9 (-21.7, 13)	-5.57 (-15.9, 6)
Shivananda 1996 ⁴³	Spain	Sabadell	1991–1993	5.40	9.60		
	Spain	Vigo	1991–1993	5.40	7.30		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Brullet 1998 ²⁵⁴	Spain	Mallorca, Motril, Sabadell, and Vigo	1991–1993	4.28	6.06		
De Castro Parga 2020 ²⁵⁵	Spain	Vigo	1991–2011	6.54	9.70		
			1991–1993	4.29	8.08		
			2010–2011	8.41	11.04		
Lopez Miguel 1999 ²⁵⁶	Spain	Aragón	1992–1995	3.90	7.20		
Monferrer Guardiola 1999 ²⁵⁷	Spain	Castellón	1992–1996	1.90	6.80		
Chaaro 2017 ²⁵⁸	Spain	Córdoba and Sevilla	1995–2014	6.03	6.40	4.01 (0.8, 7.3)	4.51 (1.4, 7.8)
			1995–1999	3.14	3.24		
			2000–2009	7.51	7.32		
			2010–2014	6.27	7.72		
Pozzati 2002 ²⁵⁹	Spain	Mérida	1996–2000	1.89	4.92		
Garrido 2004 ²⁶⁰	Spain	Northern Huelva	1996–2003	4.82	6.42		
Lopez-Serrano 2009 ²⁶¹	Spain	Madrid	1998–2005	7.51	7.05		
Rivera Irigoín 2007	Spain	Costa Del Sol	2000–2001		7.84		
Anton Martinez 2010 ²⁶²	Spain	Campo Arañuelo, Cáceres	2000–2009	5.70	11.47	-0.47 (-9.1, 8.9)	4.94 (-8.7, 20.7)
Lucendo 2014 ²⁶³	Spain	Ciudad Real	2000–2012	9.06	5.81	7.59 (2.4, 13.1)	4.15 (-2, 10.7)
			2000–2009	8.15	5.31		
			2010–2012	11.86	7.35		
Arin Letamendia 2008 ²⁶⁴	Spain	Navarre	2001–2003	6.30	11.28		
Cueto-Torreblanca 2017 ²⁶⁵	Spain	Málaga	2007–2008	5.90	4.60		
Burisch 2014 ¹⁸	Spain	Vigo	2010	10.22	10.22		
Fernández 2015 ²⁶⁶	Spain	Vigo	2010	9.14	9.14		
Vegh 2014 ¹⁹	Spain	Vigo	2010–2011	8.85	11.65		
Hernandez 2021 ²⁶⁷	Spain	Vigo	2011	6.43	12.07		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Chaparro 2021 ²⁶⁸	Spain	Nationwide	2017	7.40	8.81		
Mauriz-Barreiro 2022 ²⁶⁹	Spain	Health Area of Santiago de Compostela	2017	6.55	15.13		
Saiz-Chumillas 2022 ²⁷⁰	Spain	Castilla y León	2017	7.50	9.05		
Ronnblom 2010 ²⁷¹	Sweden	Uppsala	1945–2007		13.88		
			1945–1949		2.99		
			1950–1959		7.13		
			1960–1969		14.41		
			1970–1979		14.99		
			1980–1984		13.52		
			2005–2007		17.90		
Nordenvall 1985 ²⁷²	Sweden	Stockholm County	1955–1979		3.66		3.69 (0.7, 6.8)
			1955–1959		1.74		
			1960–1969		3.74		
			1970–1979		4.47		
Lapidus 1997 ²⁷³	Sweden	Stockholm County	1955–1989	3.84			
			1955–1959	1.36			
			1960–1969	3.05			
			1970–1979	4.64			
			1980–1989	4.72			
Norlen 1970 ²⁷⁴	Sweden	Uppsala and Västmanland counties	1956–1967	2.49		13.39 (1.6, 26.6)	
			1956–1959	1.40			
			1960–1967	3.03			
Bergman 1975 ²⁷⁵	Sweden	Uppsala and Västmanland counties	1956–1973	3.38		9.27 (3.7, 15.1)	
			1956–1959	1.40			
			1960–1969	3.38			
			1970–1973	5.07			
Brahme 1975 ²⁷⁶	Sweden	Malmö	1958–1973	5.15		7.1 (2, 12.4)	
			1958–1959	2.75			
			1960–1969	4.91			
			1970–1973	6.75			
Stewenius 1995 ²⁷⁷	Sweden	Malmö	1958–1982		6.12		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
			1958–1967		4.275		
			1968–1977		6.10		
			1978–1982		9.85		
Tysk 1992 ²⁷⁸	Sweden	Örebro	1963–1987		9.27		
			1963–1967		3.30		
			1968–1977		8.21		
			1978–1987		13.08		
Eriksson 2017 ²⁷⁹	Sweden	Örebro	1963–2010		12.54		
			1963–1970		3.77		
			1971–1980		9.94		
			1981–1990		13.27		
			1991–2000		15.91		
			2001–2010		16.72		
Myrelid 2017 ²⁸⁰	Sweden	Nationwide	1964–2010		15.92		
Landerholm 2017 ²⁸¹	Sweden	Nationwide	1964–2010		15.94		
Ludvigsson 2019 ²⁸²	Sweden	Nationwide	1964–2014	6.10	12.92		
Ekbom 1991 ²⁸³	Sweden	Uppsala	1965–1983	6.06	10.33	-0.56 (-3.8, 2.8)	2.62 (0, 5.3)
			1965–1969	6.08	8.06		
			1970–1979	6.18	10.93		
			1980–1983	5.73	11.65		
Olén 2020 ¹²⁵	Sweden	Nationwide	1969–2017	7.92			
			1969–1976	3.87			
			1977–1990	5.79			
			1991–2002	8.07			
			2003–2017	10.97			
Olén 2020 ¹²⁶	Sweden	Nationwide	1969–2017		14.81		
			1969–1976		4.32		
			1977–1990		9.86		
			1991–2002		15.73		
			2003–2017		20.25		
Axelrad 2021 ¹³¹	Sweden	Nationwide	1969–2017	7.97	18.32		
Sun 2023 ²⁸⁴	Sweden	Nationwide	1969–2019	5.62	13.30		
			1969–1989	1.23	1.97		
			1990–1999	6.52	14.14		
			2000–2009	10.92	27.51		
			2010–2019	7.73	19.57		
Yin 2017 ²⁸⁵	Sweden	Uppsala County	1973–2012	12.00	25.30		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Nyhlin 1986 ²⁸⁶	Sweden	Norrbottn and Västerbotten	1974–1981	4.93	4.88		
	Sweden	Norrbottn County	1974–1981	4.92		0.8 (-12.1, 15.5)	
	Sweden	Västerbotten	1974–1981	4.93		1.41 (-11.5, 16.2)	
Lindberg 1991 ²⁸⁷	Sweden	Örebro	1983–1987	6.08		1.63 (-0.6, 3.9)	
Yu 2022 ²²⁵	Sweden	Nationwide	1987–2016	11.51	23.62		
Lapidus 2006 ²⁸⁸	Sweden	Stockholm County	1990–2001	8.31			
Forss 2022 ²⁸⁹	Sweden	Nationwide	1990–2014	8.21	20.32		
			1990–2001	7.30	15.80		
			2002–2014	9.00	23.10		
Segerman 2019 ²⁹⁰	Sweden	Skåne County	2000–2013	16.29	25.18	-1.38 (-6.5, 4)	0.07 (-4.1, 4.5)
			2000–2009	16.80	24.84		
			2010–2013	15.57	25.63		
Everhov 2019 ²⁹¹	Sweden	Nationwide	2002–2014	11.14	25.65		
			2002–2005	11.70	27.51		
			2006–2014	10.90	24.86		
Axelrad 2019 ²⁹²	Sweden	Nationwide	2002–2014	11.12	25.60		
Axelrad 2020 ²⁹³	Sweden	Nationwide	2002–2017	9.02	23.29		
Ludvigsson 2021 ²⁹⁴	Sweden	Nationwide	2002–2017	11.11	28.96		
Halfvarson 2022 ²⁹⁵	Sweden	Nationwide	2003–2017	10.59	25.35		
			2003–2008	10.60	25.77		
			2009–2017	10.58	25.08		
Sjoberg 2013 ²⁹⁶	Sweden	Uppsala County	2005–2009		20.57		5.07 (-8.5, 20.7)
Sjoberg 2014 ²⁹⁷	Sweden	Uppsala County	2005–2009	10.25		13.18 (-7.3, 38.2)	
Ronnblohm 2020 ²⁹⁸	Sweden	Uppsala	2005–2009		20.75		
Ronnblohm 2021 ²⁹⁹	Sweden	Uppsala County	2005–2009	9.62	20.75		
Lochhead 2020 ³⁰⁰	Sweden	Nationwide	2006–2014	9.04	18.52		
Shrestha 2022 ³⁰¹	Sweden	Nationwide	2006–2016	11.02	19.55		
Boks 2022 ³⁰²	Sweden	Region Jämtland Härjedalen	2006–2019	6.95	21.55		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
			2006–2010	5.11	19.05		
			2011–2019	7.97	22.94		
Nguyen 2020 ³⁰³	Sweden	Nationwide	2007–2016	8.31	16.79		
Burisch 2014 ¹⁸	Sweden	Linköping	2010	9.76	28.58		
	Sweden	Örebro	2010	7.46	19.00		
Lordal 2020 ¹⁴⁵	Sweden	Nationwide	2010–2017	16.00	25.00		
Zhao 2022 ¹⁴⁶	Sweden	Nationwide	2010–2017	14.13	22.01	-3.25 (-10.7, 4.9)	-5.05 (-11, 1.3)
Qian 2021 ³⁰⁴	Sweden	Nationwide	2017	10.00	3.00		
Fahrlander 1971 ³⁰⁵	Switzerland	Basel	1960–1969	1.57			
Tezel 2003 ³⁰⁶	Turkey	Trakya	1998–2002		0.72		
Tozun 2009 ³⁰⁷	Turkey	Nationwide	2001–2003	2.20	4.40		
Can 2019 ³⁰⁸	Turkey	Western Black Sea Region	2004–2013	1.23	2.90	20.67 (-2.5, 49.4)	21.47 (5.6, 39.8)
Mayberry 1979 ³⁰⁹	United Kingdom	Cardiff	1931–1977	1.84		7.64 (5.5, 9.8)	
			1931–1939	0.19			
			1940–1949	0.30			
			1950–1959	1.48			
			1960–1969	3.08			
			1970–1977	4.51			
Rose 1988 ³¹⁰	United Kingdom	Cardiff	1931–1985	2.89		6.71 (5.3, 8.1)	
			1931–1939	0.13			
			1940–1949	0.56			
			1950–1959	1.64			
			1960–1969	3.08			
			1970–1979	4.52			
Thomas 1995 ³¹¹	United Kingdom	Cardiff	1980–1985	7.95			
			1931–1990	2.87		5.8 (4.6, 7)	
			1931–1939	0.12			
			1940–1949	0.30			
			1950–1959	1.48			
			1960–1969	3.04			
Yapp 2000 ³¹²	United Kingdom	Cardiff	1970–1979	4.60			
			1980–1989	7.23			
			1931–1995	3.09		4.65 (3.7, 5.6)	

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Gunesh 2008 ³¹³	United Kingdom	Cardiff	1931–1939	0.12			
			1940–1949	0.54			
			1950–1959	1.39			
			1960–1969	2.98			
			1970–1979	4.61			
			1980–1989	7.20			
			1990–1995	5.44			
			1931–2005	4.09		3.46 (2.8, 4.1)	
Evans 1965 ³¹⁴	United Kingdom	Oxford County and surrounding	1931–1939	0.11			
			1940–1949	0.64			
			1950–1959	2.09			
			1960–1969	3.18			
			1970–1979	5.00			
			1980–1989	7.02			
			1990–1999	5.97			
			2000–2005	7.57			
Fellows 1990 ³¹⁵	United Kingdom	Derby	1951–1985	5.50			
Kyle 1965 ³¹⁶	United Kingdom	Northeast Scotland	1951–1960	2.20			
			1961–1970	3.60			
			1971–1980	7.95			
			1981–1985	11.00			
			1955–1963	1.33		14.65 (-8.7, 43.9)	
Kyle 1971 ³¹⁷	United Kingdom	Northeast Scotland	1955–1969	2.17		8.03 (-1.4, 18.3)	
			1955–1959	1.27			
			1960–1969	2.66			
Kyle 1980 ³¹⁸	United Kingdom	Northeast Scotland	1955–1975	2.94			
			1955–1960	1.55			
			1961–1969	3.53			
			1970–1975	3.45			
Kyle 1992 ³¹⁹	United Kingdom	Grampian and Northern Islands	1955–1988	5.47			
			1955–1960	1.62			
			1961–1969	4.05			

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Miller 1974 ³²⁰	United Kingdom	Nottingham	1970–1978	6.44			
			1979–1988	7.94			
			1958–1972	2.05		12.73 (3.2, 23.2)	
			1958–1959	0.70			
			1960–1969	1.83			
			1970–1972	3.67			
		England and Wales	1958–1975	3.32		7.59 (0, 15.8)	
			1958–1959	2.00			
			1960–1969	3.24			
			1970–1972	5.05			
Smith 1975 ³²¹	United Kingdom	Clydesdale	1966–1970	1.55		8.83 (-8.7, 29.8)	
Brown 1988 ³²²	United Kingdom	Northern Ireland	1966–1981	1.82			
			1966–1973	1.30			
			1974–1981	2.34			
Humphreys 1990 ³²³	United Kingdom	Northern Ireland	1966–1981	1.77		5.96 (-2.3, 15)	
			1966–1969	1.22			
			1970–1979	1.86			
			1980–1981	2.48			
Morris 1984 ³²⁴	United Kingdom	South Glamorgan	1968–1977		7.16		-0.94 (-8.6, 7.4)
Lee 1985 ³²⁵	United Kingdom	Blackpool	1968–1980	4.02		15.56 (7.7, 24)	
			1968–1969	0.77			
			1970–1979	4.76			
Srivastava 1992 ³²⁶	United Kingdom	Cardiff	1968–1987		6.36		0.26 (-2.7, 3.3)
			1968–1969		5.85		
			1970–1979		6.21		
			1980–1987		6.69		
Lee 1994 ³²⁷	United Kingdom	Blackpool, Wyre, and Fylde health authority	1968–1990	5.23		5.2 (2.3, 8.2)	
			1968–1969	1.17			
			1970–1979	4.50			
			1980–1989	6.35			

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Devlin 1980 ³²⁸	United Kingdom	Stockton-on-Tees	1971–1977	5.21		-6 (-20.1, 10.6)	
Jayanthi 1992 ³²⁹	United Kingdom	Leicestershire	1972–1989	4.01		4.11 (-0.5, 8.9)	
			1972–1979	3.30			
			1980–1989	4.57			
Jayanthi 1992 ³³⁰	United Kingdom	Tower Hamlets	1972–1989		4.00		3.68 (-0.9, 8.5)
			1972–1979		3.28		
			1980–1989		4.57		
Probert 1992 ³³¹	United Kingdom	Tower Hamlets	1972–1989	3.32		1.41 (-3.4, 6.5)	
			1972–1979	3.05			
			1980–1989	3.54			
Probert 1992 ³³²	United Kingdom	Leicestershire	1972–1989		5.58		3.22 (-0.6, 7.2)
			1972–1979		4.27		
			1980–1989		6.62		
Fellows 1988 ³³³	United Kingdom	Derby	1976–1985	6.25		0.4 (-7.9, 9.5)	
Rubin 2000 ³³⁴	United Kingdom	Stockton-on-Tees	1990–1994	8.30	13.90		
Thompson 1998 ³³⁵	United Kingdom	England and Wales	1991–1992	10.60			
Carr 1999 ³³⁶	United Kingdom	Leicestershire	1991–1994		9.14		
Steed 2010 ³³⁷	United Kingdom	Tayside Health Area	1998–2007	8.36		4.66 (-2.9, 12.8)	
King 2020 ³³⁸	United Kingdom	Nationwide	2000–2017	14.28	23.42	-0.14 (-2.5, 2.2)	-1.23 (-3, 0.6)
			2000–2009	14.39	24.71		
			2010–2017	14.14	21.80		
Pasvol 2020 ³³⁹	United Kingdom	Nationwide	2000–2018	10.12	15.61	-1.42 (-3.9, 1.2)	-2.06 (-4.1, 0)
			2000–2009	10.75	17.08		
			2010–2018	9.42	13.98		
	United Kingdom	Northern Ireland	2000–2018	13.10	16.20		
	United Kingdom	Scotland	2000–2018	12.30	15.30		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
	United Kingdom	Wales	2000–2018	8.90	14.10		
Arms-Williams 2022 ³⁴⁰	United Kingdom	Cardiff	2005–2016	7.93	15.41	0.13 (-5.5, 6.1)	1.47 (-2.7, 5.8)
			2005–2009	7.96	14.68		
			2010–2016	7.92	15.93		
Trivedi 2020 ³⁴¹	United Kingdom	England	2006–2016	18.53	35.24	-0.87 (-5.7, 4.2)	2.21 (-1.4, 6)
			2006–2009	19.03	33.38		
			2010–2015	18.20	36.48		
Hamilton 2021 ³⁴²	United Kingdom	Devon	2008–2017	10.10	17.88	2.6 (-3.9, 9.5)	1.1 (-1, 3.3)
Jones 2019 ³⁴³	United Kingdom	Lothian	2008–2018	13.41	25.68	-0.45 (-3.5, 2.7)	-0.28 (-1.7, 1.2)
			2008–2009	11.81	26.21		
			2010–2017	13.79	25.56		
Burisch 2014 ¹⁸	United Kingdom	Brent & Harrow	2010	2.61	17.25		
	United Kingdom	Hull & East Yorkshire	2010	8.35	9.74		
Misra 2019 ³⁴⁴	United Kingdom	England	2016–2017	5.06	9.86		
NORTH AMERICA (n=44)							
Edwards 2008 ³⁴⁵	Barbados	Nationwide	1980–2004	0.71	1.84		
			1980–1989	0.43	1.45		
			1990–1999	1.02	2.22		
			2000–2004	0.66	1.83		
Pinchbeck 1988 ³⁴⁶	Canada	Northern Alberta	1966–1981	6.53	3.61	10.02 (5.2, 15.1)	11.28 (4.6, 18.3)
			1966–1969	2.85	1.36		
			1970–1979	7.15	4.00		
			1980–1981	9.17	5.19		
Bernstein 2006 ³⁴⁷	Canada	Manitoba	1984–2002	15.40	15.40		
	Canada	Alberta	1985–2002	16.50	11.00		
	Canada	Saskatchewan	1985–2002	13.50	10.40		
Blanchard 2001 ³⁴⁸	Canada	Manitoba	1987–1996	15.60	15.60		
Coward 2024 ³⁴⁹	Canada	Manitoba	1987–2014	13.46	15.23	-1.51 (-2.7, -0.3)	-0.06 (-1.2, 1.1)
			1987–1989	17.44	14.04		
			1990–1999	14.31	15.65		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
			2000–2009	12.59	15.47		
			2010–2014	11.48	14.68		
Bernstein 2021 ³⁵⁰	Canada	Manitoba	1987–2018	11.24	13.20		
Bernstein 1999 ³⁵¹	Canada	Manitoba	1989–1994	14.94	14.64		
Bernstein 2019 ³⁵²	Canada	Manitoba	1989–2012	8.59	10.63		
Green 2006 ³⁵³	Canada	Manitoba	1990–2001	14.88	14.59	-0.48 (-4.6, 3.8)	-1.96 (-6.1, 2.3)
			1990–1999	14.98	15.08		
			2000–2001	14.38	12.22		
Torabi 2020 ³⁵⁴	Canada	Manitoba	1990–2012	11.51	13.14	-1.84 (-3.6, 0)	-0.92 (-2.6, 0.8)
			1990–1999	12.94	13.60		
			2000–2009	11.02	13.46		
			2010–2012	8.70	10.75		
Lowe 2009 ³⁵⁵	Canada	Quebec	1993–2002	20.23			
Leddin 2014 ³⁵⁶	Canada	Nova Scotia	1996–2009	22.64	30.74	-2.98 (-5.6, -0.3)	-1.24 (-3.5, 1.1)
			1996–1999	25.87	32.83		
			2000–2009	21.35	29.91		
Targownik 2018 ³⁵⁷	Canada	Manitoba	1996–2014	17.31	17.96		
Cote-Daigneault 2019 ³⁵⁸	Canada	Quebec	1996–2015	15.26	10.42		
Verdon 2021 ³⁵⁹	Canada	Quebec	1996–2015	13.47	9.13		
Bernstein 2006 ³⁴⁷	Canada	Alberta, Saskatchewan, Manitoba, Nova Scotia	1998–2000	16.30	12.90		
	Canada	Alberta, British Columbia, Saskatchewan, Manitoba, and Nova Scotia	1998–2000	13.40	11.80		
	Canada	British Columbia	1998–2000	8.80	9.90		
	Canada	Nova Scotia	1998–2000	20.20	19.20		
Coward 2024 ³⁴⁹	Canada	Saskatchewan	1998–2018	15.71	13.24	-2.72 (-4.4, -1)	-2.92 (-4.8, -1)
			1998–1999	21.65	18.57		
			2000–2009	16.55	13.91		
			2010–2018	13.67	11.49		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Benchimol 2014 ³⁶⁰	Canada	Ontario	1999–2008	10.45	11.27	1.82 (-4.8, 8.9)	2.33 (-4.1, 9.1)
Benchimol 2017 ³⁶¹	Canada	Alberta	1999–2008	13.54	15.69		
	Canada	Nova Scotia	1999–2008	21.34	20.60		
Benchimol 2018 ³⁶²	Canada	Alberta	1999–2008	11.68	14.01		
Benchimol 2017 ³⁶¹	Canada	Alberta, Manitoba, Ontario, and Nova Scotia	1999–2010	10.23	12.03		
	Canada	Manitoba	1999–2010	10.76	13.28		
	Canada	Ontario	1999–2010	8.76	10.58		
Benchimol 2018 ³⁶²	Canada	Manitoba	1999–2010	7.61	9.30		
	Canada	Ontario	1999–2010	6.37	7.77		
Osei 2021 ³⁶³	Canada	Saskatchewan	1999–2016	16.90	15.30	-6.24 (-8.3, -4.1)	-8.01 (-10.2, -5.8)
			2000–2009	18.23	17.15		
			2010–2016	12.44	10.04		
Coward 2024 ³⁴⁹	Canada	Ontario	1999–2016	11.96	14.98	0.32 (-2.2, 2.9)	1.87 (-0.5, 4.3)
			2000–2009	12.02	13.99		
			2010–2016	11.99	16.47		
Peña-Sánchez 2022 ³⁶⁴	Canada	Saskatchewan	1999–2017	2.94	6.00	-3.16 (-8.1, 2)	-3.32 (-8.3, 1.9)
			2000–2009	3.30	6.80		
			2010–2017	2.50	5.00		
Peña-Sánchez 2023 ³⁶⁵	Canada	Saskatchewan	1999–2018	13.29	11.30		
Coward 2024 ³⁴⁹	Canada	British Columbia	1999–2019	12.99	18.63	0.26 (-1.7, 2.2)	1.28 (-0.4, 3)
			2000–2009	12.81	17.08		
			2010–2019	13.23	20.06		
	Canada	Newfoundland and Labrador	2000–2014	24.74	16.91	1.28 (-1.1, 3.7)	2.51 (-0.4, 5.5)
			2000–2009	23.91	16.03		
			2010–2014	26.36	18.64		
Dhaliwal 2021 ³⁶⁶	Canada	Ontario	2000–2015	10.72	11.68		
Bitton 2014 ³⁶⁷	Canada	Quebec	2001–2008	17.39	10.11	-1.25 (-8.2, 6.2)	-3.52 (-12.3, 6.1)

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Coward 2024 ³⁴⁹	Canada	Nationwide	2007–2014	13.55	15.03	-0.37 (-8.2, 8.2)	1.25 (-6.3, 9.5)
	Canada	Nova Scotia	2001–2018	25.53	24.06	-1.9 (-3.6, -0.1)	-2.69 (-4.5, -0.9)
			2001–2009	27.43	27.07		
			2010–2018	23.66	21.07		
	Canada	Quebec	2002–2014	12.01	8.13	0.7 (-3.4, 5)	0.39 (-4.6, 5.6)
			2002–2009	11.71	8.01		
			2010–2014	12.45	8.32		
	Canada	Alberta	2007–2018	15.11	19.45	-2.3 (-6.3, 1.9)	0.34 (-3.3, 4.1)
			2007–2009	17.08	19.37		
			2010–2018	14.53	19.47		
Edouard 2005 ³⁶⁸	Guadeloupe and Martinique	Nationwide	1997–1999	1.95	2.45		
	Guadeloupe and Martinique	Guadeloupe	1997–1999	1.26	2.13		
	Guadeloupe and Martinique	Martinique	1997–1999	2.71	2.80		
Yamamoto-Furusko 2019 ³⁶⁹	Mexico	Nationwide	2000–2017	0.04	0.15		
Linares de la Cal 1999 ³⁷⁰	Panama	Colón	1987–1993		1.26		13.96 (-18.7, 59.7)
Appleyard 2004 ³⁷¹	Puerto Rico	Guayama, Ponce, San German, Yauco, and Mayagüez	1996–2000	1.15	3.72	30.11 (-28.9, 138)	20.83 (-13, 67.8)
Stowe 1990 ³⁷²	United States	Rochester, New York	1920–1989	2.24	1.49		
			1920–1929	0.00	0.05		
			1930–1939	0.12	0.07		
			1940–1949	0.37	0.33		
			1950–1959	0.85	0.73		
			1960–1969	2.57	1.59		
			1970–1979	5.06	3.53		
			1980–1989	3.87	2.30		
Sedlack 1972 ³⁷³	United States	Olmsted County	1935–1964	2.04			

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Sedlack 1980 ³⁷⁴	United States	Olmsted County	1935–1944	2.40			
			1945–1954	2.50			
			1955–1964	1.50			
			1935–1975	4.30			
Loftus 1998 ³⁷⁵	United States	Olmsted County	1935–1954	1.90			
			1955–1964	3.70			
			1965–1975	6.80			
			1940–1993	5.78			
			1944–1953	2.30			
			1954–1963	2.54			
			1964–1973	7.42			
Loftus 2000 ³⁷⁶	United States	Olmsted County	1974–1983	7.11			
			1984–1993	6.92			
			1940–1993		7.26		
			1954–1963		4.76		
			1964–1973		7.92		
			1974–1983		8.75		
			1984–1993		8.07		
Loftus 2007 ³⁷⁷	United States	Olmsted County	1940–2000	5.67	7.42		
			1940–1949	2.30	3.10		
			1950–1959	2.60	4.20		
			1960–1969	6.50	9.40		
			1970–1979	7.90	10.10		
			1980–1989	6.80	8.90		
			1990–2000	7.90	8.80		
			1940–1949	2.30	3.10		
Gollop 1988 ³⁷⁸	United States	Olmsted County	1943–1982	3.50			
			1943–1947	0.90			
			1948–1957	2.00			
			1958–1967	3.12			
			1968–1977	6.17			
			1978–1982	4.30			
			1943–1947	0.90			
Stonnington 1987 ³⁷⁹	United States	Olmsted County	1960–1979		13.65		
Shivashankar 2017 ³⁸⁰	United States	Olmsted County	1970–2010	9.17	10.80		
			1970–1979	7.60	8.96		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
			1980–1989	7.37	9.72		
			1990–1999	8.51	10.10		
			2000–2010	11.78	13.2		
Aniwan 2018 ³⁸¹	United States	Olmsted County	1970–2010	9.19	10.82		
Aniwan 2019 ³⁸²	United States	Olmsted County	1970–2010	8.29	9.90		
Cotter 2017 ³⁸³	United States	Olmsted County	1970–2011	9.24	11.04		
Bakhshi 2022 ³⁸⁴	United States	Olmsted County	1970–2019	8.47	11.18		
			1970–1979	6.46	9.04		
			1980–1989	6.52	10.58		
			1990–1999	9.00	10.09		
			2000–2009	11.47	13.52		
			2010–2019	7.86	11.56		
Loftus 2023 [‡]	United States	Olmsted County	1970–2019	8.86	11.30	0.74 (0.1, 1.4)	0.91 (0.3, 1.5)
Garland 1981 ³⁸⁵	United States	Albuquerque, NM; Banning, CA; Boulder, CO; Bridgeport, CT; Clarksville, TN; Eunice, LA; Eureka, CA; Ithaca, NY; Lansing, MI; Maryville, TN; Medford, OR; Portland, ME; Topeka, KS; Winona, MN; York, PA	1973	2.15	3.08		
Aniwan 2018 ³⁸⁶	United States	Olmsted County	1980–2010	9.44	11.05		
Shapiro 2016 ³⁸⁷	United States	Rhode Island	2008–2010	14.05	16.67		
OCEANIA (n=16)							
Andrews 1995 ³⁸⁸	Australia	Sydney	1977–1992	5.05	7.03		
Wilson 2010 ³⁸⁹	Australia	Geelong	2007–2008	17.37	11.97		
Studd 2016 ³⁹⁰	Australia	Barwon Heads	2007–2011	16.03	10.77		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
Vegh 2014 ¹⁹	Australia	Melbourne	2010–2011	16.00	14.30		
Ng 2018 ⁹	Australia	Geelong	2010–2013	12.50	9.33		
Ng 2013 ¹³	Australia	Geelong	2011–2012	14.00	9.66		
Bhatia 2019 ³⁹¹	Australia	Tasmania	2013–2014	14.42	14.62		
Flanagan 2022 ³⁹²	Australia	Mackay-Isaac-Whitsunday Region	2017–2018	13.55	19.45		
Eason 1982 ³⁹³	New Zealand	Auckland	1969–1978	1.75	5.50		
Schlup 1986 ³⁹⁴	New Zealand	Dunedin	1972–1981	2.29			
Coppell 2018 ³⁹⁵	New Zealand	Otago	1996–2013	7.51	6.25	2.49 (-0.8, 5.9)	2.59 (-1, 6.3)
			1996–1999	7.10	5.50		
			2000–2009	6.30	6.05		
			2010–2013	10.86	7.45		
Gearry 2006 ³⁹⁶	New Zealand	Canterbury	2004–2005	16.40	8.25		
Seleq 2023 ³⁹⁷	New Zealand	Waikato	2009–2019	7.86	10.20		
Morton 2023 ³⁹⁸	New Zealand	Manawātū	2011–2015	17.70	10.70		
Su 2016 ³⁹⁹	New Zealand	Canterbury	2014	26.02	13.79		
Qiu 2022 ⁴⁰⁰	New Zealand	Lakes District Health Board	2016–2020	6.00	6.40		
SOUTH AMERICA (n=13)							
Linares de la Cal 1999 ³⁷⁰	Argentina	Partido de General Pueyrredón	1987–1993		2.19		-5.14 (-26.2, 21.9)
Balderramo 2021 ⁴⁰¹	Argentina	Córdoba	2015–2019	0.65	3.00		
Victoria 2009 ⁴⁰²	Brazil	Botucatu	1986–2005	1.57	4.69		
			1986–1990	0.24	0.74		
			1991–2000	1.09	5.58		
			2001–2005	3.50	6.23		
Parente 2015 ⁴⁰³	Brazil	Piauí State	1988–2012	0.23	0.34	11.62 (-2.4, 27.7)	16.01 (2.4, 31.5)
			1988–1989	0.12	0.00		
			1990–1999	0.07	0.06		
			2000–2009	0.35	0.57		
			2010–2012	0.47	0.71		
Martins 2021 ⁴⁰⁴	Brazil	Uberlândia	1981–2014	0.65	0.65	2.19 (-2.7, 7.4)	4.42 (-1, 10.2)
			1981–1989	0.36	0.18		
			1990–1999	0.55	0.53		

Author and Publication Year	Region	Subregion	Study Period	Mean Incidence		AAPC (95% CI)	
				CD	UC + IBD-u	CD	UC + IBD-u
			2000–2009	0.84	0.91		
			2010–2014	0.61	0.58		
da Luz Moreira 2022 ⁴⁰⁵	Brazil	Nationwide	2008–2017	2.68	4.31	-0.31 (-14.6, 16.4)	5.35 (-6.8, 19.1)
Renuzza 2022 ⁴⁰⁶	Brazil	Paraná State	2010–2019	1.64	4.44	17.22 (-2.1, 40.4)	23.03 (9.8, 37.9)
Lima Martins 2018 ⁴⁰⁷	Brazil	Espírito Santo	2012–2014	2.72	5.39		
Gasparini 2018 ⁴⁰⁸	Brazil	São Paulo State	2012–2015	6.14	7.16		
Quaresma 2022 ⁴⁰⁹	Brazil	Nationwide	2012–2020	3.30	5.91	-3.2 (-15.8, 11.3)	3.15 (-7.1, 14.5)
Juliao-Banos 2021 ⁴¹⁰	Colombia	Nationwide	2010–2017	0.86	6.10	-7.09 (-33.1, 29)	1.06 (-10.6, 14.2)
Buenavida 2011 ⁴¹¹	Uruguay	Artigas, Salto, Lavalleja, San José, Montevideo	2007–2008	0.39	2.25		
Iade 2018 ⁴¹²	Uruguay	Montevideo	2007–2011	0.45	4.53	-18.42 (-68.3, 110)	-6.77 (-30.4, 24.9)
	Uruguay	Salto	2007–2011	1.17	3.50	-15.52 (-52.9, 51.5)	33.32 (-5.9, 89)

[†]AAPC could not be calculated from the available data.

[‡]Study submitted for publication but pending acceptance; data received from author directly pre-publication.

Supplementary Table 2: Studies reporting prevalence

Summary of studies reporting prevalence of Crohn's disease or ulcerative colitis grouped by geographic region.

The displayed prevalence rates represent the mean prevalence rate of the study period weighted by the population of the catchment area where possible, otherwise the unweighted mean prevalence is presented. Rates are in units of 100,000 persons. AAPCs were not calculated due to the limited number of studies with enough available data.

Author and Publication Year	Region	Subregion	Study Period	Mean Prevalence	
				CD	UC + IBD-u
AFRICA (n=2)					
Hammada 2011 ¹	Algeria	Constantine	2007	19.02	12.57
Elbadry 2022 ⁴¹³	Egypt	Nationwide	2020	0.05	0.22
ASIA (n=61)					
Miao 2015 ¹¹	China	Yunnan	1998-2013	0.14	2.77
Zheng 2010 ¹⁰	China	Nationwide	2007	2.29	
Yang 2022 ¹⁷	China	Nationwide	2013–2016	2.74	12.93
Ng 2016 ²¹	Hong Kong	Nationwide	1985–2015	7.23	12.47
Lok 2007 ²⁶	Hong Kong	Tuen Mun and Yuen Long districts	1991–2006	1.48	
Lok 2008 ²⁵	Hong Kong	Tuen Mun and Yuen Long districts	1997–2006		4.52
Chow 2009 ²²	Hong Kong	Shatin district	2006		26.50
Khosla 1986 ⁴¹⁴	India	Haryana	1985		45.51
Mansour-Ghanaei 2015 ²⁹	Iran	Guilan Province	2007	4.66	31.44
Saberzadeh-Ardestani 2022 ⁴¹⁵	Iran	Nationwide	2020	1.71	6.23
Shapira 1994 ³¹	Israel	Kinneret	1965–1990	20.98	
Fireman 1989 ³⁹	Israel	Tel Aviv	1970–1980	13.28	
Rozen 1979 ³⁸	Israel	Tel Aviv	1976	12.31	
Jacobsohn 1986 ⁴²	Israel	Jerusalem	1978		56.91
Krawiec 1984 ³²	Israel	Beer Sheva	1980	14.03	
Grossman 1989 ⁴⁰	Israel	Tel Aviv	1980		55.20
Odes 1987 ³⁴	Israel	Beer Sheva	1985		73.12
Niv 1990 ³⁶	Israel	Upper Galilee	1986		44.58
Odes 1989 ⁴¹	Israel	Beer Sheva	1987	30.00	89.00
Odes 1994 ³⁷	Israel	Beer Sheva	1992	50.60	
Shapira 1998 ³⁵	Israel	Kinneret	1994		70.50

Author and Publication Year	Region	Subregion	Study Period	Mean Prevalence	
				CD	UC + IBD-u
Zvidi 2019 ⁴⁴	Israel	Nationwide	2003–2008	118.89	133.02
Stulman 2021 ⁴⁵	Israel	Nationwide	2005–2018	226.18	205.94
Friedman 2018 ⁴¹⁶	Israel	Nationwide	2015	253.13	223.23
Chiba 2021 ⁵¹	Japan	Nationwide	1975–2016	12.50	45.70
Higashi 1988 ⁴¹⁷	Japan	Nationwide	1985	1.79	7.54
Yao 2000 ⁵²	Japan	Nationwide	1986–1998	7.48	
Morita 1995 ⁵³	Japan	Nationwide	1991	5.85	18.12
Asakura 2009 ⁴¹⁸	Japan	Nationwide	2003–2005	18.53	57.13
Murakami 2019 ⁴¹⁹	Japan	Nationwide	2014	55.16	171.40
Kaibullayeva 2020 ⁴²⁰	Kazakhstan	Nationwide	2017	31.15	79.62
Al-Shamali 2003 ⁵⁵	Kuwait	Nationwide	1999		41.73
Abou Rached 2021 ⁵⁶	Lebanon	Nationwide	2020	68.35	69.90
Hilmi 2015 ⁵⁸	Malaysia	Kinta Valley	2013	2.17	7.08
Pang 2018 ⁵⁹	Malaysia	Johor	2016	1.86	2.41
Mokhtar 2019 ⁵⁷	Malaysia	Kuala Lumpur	2018	7.36	15.67
Chashkova 2023 ⁶²	Russia	Irkutsk Region	2019	17.80	47.23
Al-Fawzan 2023 ⁴²¹	Saudi Arabia	Al-Qassim Province	2016	31.50	32.75
Lee 2000 ⁴²²	Singapore	Nationwide	1996	3.70	6.52
Yang 2000 ⁶⁵	South Korea	Songpa-Kangdong, Seoul	1997		7.80
Kim 2023 ⁶⁹	South Korea	Jeju Island	2004-2019	14.46	25.51
Yang 2008 ⁶⁶	South Korea	Songpa-Kangdong, Seoul	2005	11.24	30.87
Kim 2019 ⁴²³	South Korea	Nationwide	2006–2015	16.48	33.99
Choe 2022 ⁷⁵	South Korea	Nationwide	2006–2015	17.92	37.38
Jung 2020 ⁴²⁴	South Korea	Nationwide	2008–2017		93.36
Park 2023 ⁸⁰	South Korea	Nationwide	2008-2017	35.73	82.06
Kwak 2019 ⁸³	South Korea	Nationwide	2009–2016	23.15	55.18
Kim 2018 ⁴²⁵	South Korea	Nationwide	2010–2014	31.03	63.28
Lee 2021 ⁸⁹	South Korea	Nationwide	2010–2019	25.89	51.44
Park 2019 ⁴²⁶	South Korea	Nationwide	2013	23.78	47.99
Park 2019 ⁴²⁷	South Korea	Nationwide	2013	25.09	52.10
Park 2019 ⁶⁷	South Korea	Songpa-Kangdong, Seoul	2015	31.59	76.66
Jo 2021 ⁴²⁸	South Korea	Nationwide	2017	38.69	88.20
Niriella 2010 ⁹²	Sri Lanka	Columbo and Gampaha	2008	1.22	5.33
Kalubowila 2018 ⁴²⁹	Sri Lanka	Central Province	2017	2.33	5.45
Chen 2013 ⁹⁴	Taiwan	Nationwide	1998–2008		2.38
Wei 2013 ⁹⁵	Taiwan	Nationwide	1998–2008	0.92	4.01
Chuang 2013 ⁹⁶	Taiwan	Nationwide	1998–2010	1.05	4.54

Author and Publication Year	Region	Subregion	Study Period	Mean Prevalence	
				CD	UC + IBD-u
Yen 2019 ⁹⁹	Taiwan	Nationwide	2001–2015	1.81	7.59
Wei 2020 ¹⁰⁰	Taiwan	Nationwide	2001–2015	2.30	7.62
Wu 2023 ¹⁰¹	Taiwan	Nationwide	2001–2023	4.92	12.38
EUROPE (n=110)					
Pavlovic-Calic 2008 ¹⁰⁷	Bosnia and Herzegovina	Tuzla	2006	28.20	
Salkic 2010 ¹⁰⁸	Bosnia and Herzegovina	Tuzla	2006		43.12
Brunet 2018 ¹¹⁰	Catalonia	Nationwide	2011–2016	155.28	308.12
Brunet 2020 ⁴³⁰	Catalonia	Nationwide	2011–2017	169.34	
Jovanovic 1999 ¹¹¹	Croatia	Rijeka and Istria	1973–1994	11.47	
Vucelic 1991 ¹¹²	Croatia	Zagreb	1989		22.55
	Croatia	Zagreb	1989	8.30	
Pezerovic 2014 ¹¹⁴	Croatia	Primorsko-Goranska County	1995–2001	26.03	32.27
	Croatia	Vukovarsko-Srijemska Country	1967–2011	5.17	8.63
Klarin 2013 ¹¹⁶	Croatia	Zadar County	2000–2010	78.00	104.30
	Croatia	Primorsko-Goranska County	2004	83.70	84.90
	Croatia	Vukovarsko-Srijemska County	2004	6.30	19.00
Bitter 1980 ⁴³¹	Czech Republic	Česká Lípa	1968–1978		13.10
	Czech Republic	Chomutov	1968–1978		12.30
	Czech Republic	Děčín	1968–1978		10.50
	Czech Republic	Jablonec u Libčevsi	1968–1978		17.30
	Czech Republic	Liberec	1968–1978		18.50
	Czech Republic	Litoměřice	1968–1978		25.30
	Czech Republic	Louny	1968–1978		11.50
	Czech Republic	Most	1968–1978		25.35
	Czech Republic	North Bohemia	1968–1978		17.60
	Czech Republic	Teplice	1968–1978		10.80
	Czech Republic	Ústí	1968–1978		30.55
Jarkovsky 2017 ¹¹⁷	Czech Republic	Nationwide	2007–2015	171.18	213.92
Langholz 1991 ¹³²	Denmark	Copenhagen	1962–1987		94.47
Bonnevie 1968 ¹²⁰	Denmark	Copenhagen County	1967		44.08
Binder 1982 ¹²¹	Denmark	Copenhagen	1978	34.00	117.00
Jacobsen 2006 ¹²⁸	Denmark	North Jutland	1978–2002	151.35	293.61

Author and Publication Year	Region	Subregion	Study Period	Mean Prevalence	
				CD	UC + IBD-u
Dorn-Rasmussen 2022 ¹³⁴	Denmark	Nationwide	1978–2018	137.87	271.34
Munkholm 1992 ¹²²	Denmark	Copenhagen	1987	54.00	
Munkholm 1993 ¹³⁰	Denmark	Copenhagen	1987	54.00	
Agrawal 2022 ⁴³²	Denmark	Nationwide	1995–2016	202.53	420.15
Larsen 2022 ⁴³³	Denmark	North Jutland	2003–2020	188.58	386.78
Lophaven 2017 ¹³³	Denmark	Nationwide	2013	247.99	575.35
Nielsen 2023 ¹⁴⁹	Faroe Islands	Nationwide	1960–2020	131.52	624.81
Berner 1986 ¹⁵⁰	Faroe Islands	Nationwide	1983	31.80	157.30
Manninen 2010 ¹⁵⁴	Finland	Tampere	1986–1999	86.33	235.90
Jussila 2013 ⁴³⁴	Finland	Nationwide	1993	38.35	177.71
Fakih 2021 ⁴³⁵	France	Nationwide	2008–2018	128.55	105.46
Kirchgesner 2017 ¹⁷¹	France	Nationwide	2009–2013	151.71	168.74
Genin 2020 ⁴³⁶	France	Nationwide	2014	201.70	
Brandes 1983 ¹⁷³	Germany	Marburg	1973–1975	30.50	48.80
Dirks 1994 ⁴³⁷	Germany	Ruhr	1984		27.30
Goebell 1994 ¹⁷⁵	Germany	Essen, Mülheim, Duisburg, and Oberhausen	1984	35.99	
Daiss 1989 ¹⁷⁴	Germany	Tübingen	1984	54.60	24.80
Loffler 1993 ¹⁷⁸	Germany	Cologne	1986	30.68	
Tsianos 2005 ¹⁸¹	Greece	Ioannina, Arta, Preveza, Thesprotia, Lefkas, and Corfu	1987–1995	0.60	4.90
Gantzel 2023 ⁴³⁸	Greenland	Nationwide	2022	70.64	377.91
Lakatos 2003 ¹⁸⁷	Hungary	Veszprém County	1991–2001	34.93	107.32
Lakatos 2011 ¹⁸⁸	Hungary	Veszprém County	2006	115.30	222.90
Gonczi 2022 ¹⁹⁰	Hungary	Veszprém County	2011–2015	213.76	
Kurti 2022 ¹⁹¹	Hungary	Veszprém County	2011–2015		300.49
Kurti 2016 ⁴³⁹	Hungary	Nationwide	2013	202.47	343.30
Kunovszki 2020 ¹⁹²	Hungary	Nationwide	2013		368.71
Bjornsson 1983 ¹⁹³	Iceland	Nationwide	1950–1979		58.06
Bjornsson 1989 ¹⁹⁴	Iceland	Nationwide	1959–1979	6.31	76.06
Trallori 1991 ¹⁹⁹	Italy	Florence	1987	16.62	47.69
Trallori 1996 ²⁰⁰	Italy	Florence	1992	39.27	118.73
Sardu 2012 ⁴⁴⁰	Italy	Florence	2009	15.00	124.00
Di Domenicantonio 2014 ²¹⁰	Italy	Lazio	2009	93.59	213.57

Author and Publication Year	Region	Subregion	Study Period	Mean Prevalence	
				CD	UC + IBD-u
Tursi 2013 ²¹³	Italy	Barletta-Andria-Trani Province	2009–2012	28.74	59.97
Macaluso 2019 ²¹¹	Italy	Sardinia	2010	63.00	124.00
Crocetti 2021 ⁴⁴¹	Italy	Milan	2010–2018	143.95	236.99
Valpiani 2018 ²⁰⁷	Italy	Folrì	2013	109.20	266.40
Belvedere 2021 ²⁰¹	Italy	Messina	2017	146.78	272.73
Caviglia 2023 ²⁰⁹	Italy	Healthcare District of Bra	2021	121.50	182.24
Karpaviciute 2023 ⁴⁴²	Lithuania	Nationwide	2020	33.00	117.00
Shivananda 1987 ²¹⁵	Netherlands	Regio Leiden	1983	47.75	58.43
de Groof 2016 ²¹⁹	Netherlands	Central Netherlands	2004–2010	145.98	209.00
Van den Heuvel 2017 ²¹⁸	Netherlands	South Limburg	2010	331.00	499.00
Haug 1988 ²²³	Norway	West Health Region	1985		92.00
Bengtson 2009 ²²⁹	Norway	Oslo, Østfold, Telemark, and Aust-Agder	1993	262.00	505.00
Lordal 2020 ¹⁴⁵	Norway	Nationwide	2010–2017	164.00	345.47
Lirhus 2021 ²³²	Norway	Nationwide	2017	270.98	501.25
Zagrowicz 2022 ²³⁵	Poland	Nationwide	2011–2018	40.72	133.18
Holko 2018 ⁴⁴³	Poland	Nationwide	2014	34.56	122.50
Azevedo 2010 ⁴⁴⁴	Portugal	Nationwide	2003–2007	57.80	56.40
Gheorghe 2004 ²³⁶	Romania	Nationwide	2003	1.17	1.88
Piscaglia 2019 ²³⁷	San Marino	Nationwide	2014	253.08	320.16
Prikazska 1996 ⁴⁴⁵	Slovakia	Nationwide	1994	6.64	
Yanguela 1991 ²⁴²	Spain	La Rioja	1975	1.25	6.65
Ruiz 1984 ²⁴⁵	Spain	Galicia	1983	5.20	
Martinez-Salmeron 1993 ²⁴⁶	Spain	Granada Province	1988	9.00	21.00
Mate-Jimenez 1994 ²⁴⁷	Spain	Madrid and Soria	1988	19.80	43.40
Hinojosa 1990 ²⁵⁰	Spain	Sagunto	1989	21.40	28.87
Alonso 1992 ²⁴⁸	Spain	Soria	1990	13.00	32.00
Saro Gismera 2000 ²³⁹	Spain	Gijón	1997	116.48	129.76
Saro Gismera 2003 ²⁴⁰	Spain	Asturias	1997	87.45	117.75
Lucendo 2014 ²⁶³	Spain	Ciudad Real	2000–2012	79.57	69.22
Eriksson 2017 ²⁷⁹	Sweden	Örebro	1963–2010		283.95
Brahme 1975 ²⁷⁶	Sweden	Malmö	1965–1973	49.07	89.00
Norlen 1970 ²⁷⁴	Sweden	Uppsala and Västmanland counties	1967	27.00	

Author and Publication Year	Region	Subregion	Study Period	Mean Prevalence	
				CD	UC + IBD-u
Bergman 1975 ²⁷⁵	Sweden	Uppsala and Västmanland counties	1967–1973	39.30	
Tysk 1992 ²⁷⁸	Sweden	Örebro	1987		234.00
Lindberg 1991 ²⁸⁷	Sweden	Örebro	1987	146.00	
Lindgren 1996 ⁴⁴⁶	Sweden	Göteborg	1990	94.12	
Lapidus 2006 ²⁸⁸	Sweden	Stockholm County	2001	213.40	
Busch 2014 ⁴⁴⁷	Sweden	Nationwide	2010	194.67	349.31
Lordal 2020 ¹⁴⁵	Sweden	Nationwide	2010–2017	288.11	450.18
Segerman 2019 ²⁹⁰	Sweden	Skåne County	2013	292.92	407.59
Boks 2022 ³⁰²	Sweden	Region Jämtland Härjedalen	2013	76.92	238.46
Tezel 2003 ³⁰⁶	Turkey	Trakya	2002		4.90
Can 2019 ³⁰⁸	Turkey	Western Black Sea Region	2013	12.54	31.84
Evans 1965 ³¹⁴	United Kingdom	Oxford County and surrounding	1960	9.00	79.90
Miller 1974 ³²⁰	United Kingdom	Nottingham	1965	26.50	
Smith 1975 ³²¹	United Kingdom	Clydesdale	1966	18.14	
Kyle 1971 ³¹⁷	United Kingdom	Northeast Scotland	1969	32.50	
Keighley 1976 ⁴⁴⁸	United Kingdom	Nottingham	1971	34.99	
Mayberry 1980 ⁴⁴⁹	United Kingdom	Barry	1976	76.10	
	United Kingdom	Caerphilly	1976	39.10	
	United Kingdom	Cardiff	1976	47.30	
	United Kingdom	Clwyd	1976	39.32	
	United Kingdom	Colwyn Bay	1976	31.30	
	United Kingdom	Cwmbran	1976	28.30	
	United Kingdom	Dyfed	1976	30.02	
	United Kingdom	Gwent	1976	40.12	
	United Kingdom	Gwynedd	1976	36.28	

Author and Publication Year	Region	Subregion	Study Period	Mean Prevalence	
				CD	UC + IBD-u
	United Kingdom	Llanelli	1976	52.90	
	United Kingdom	Methyr	1976	9.10	
	United Kingdom	Mid-Glamorgan County	1976	34.78	
	United Kingdom	Neath	1976	106.20	
	United Kingdom	Newport	1976	54.50	
	United Kingdom	Pontypool	1976	24.40	
	United Kingdom	Pontypridd	1976	35.80	
	United Kingdom	Port Talbot	1976	39.60	
	United Kingdom	Powys	1976	37.31	
	United Kingdom	South Glamorgan	1976	54.07	
	United Kingdom	Swansea	1976	57.60	
	United Kingdom	Wales	1976	40.20	
	United Kingdom	West Glamorgan	1976	46.08	
	United Kingdom	Wrexham	1976	54.20	
Devlin 1980 ³²⁸	United Kingdom	Stockton-on-Tees	1977	35.00	
Lee 1985 ³²⁵	United Kingdom	Blackpool	1980	47.00	
Fellows 1990 ³¹⁵	United Kingdom	Derby	1985	85.00	
Kyle 1992 ³¹⁹	United Kingdom	Grampian and Northern Islands	1988	147.00	
Probert 1993 ⁴⁵⁰	United Kingdom	Leicestershire	1989	72.69	
Thompson 1998 ³³⁵	United Kingdom	England and Wales	1992	57.20	
Rubin 2000 ³³⁴	United Kingdom	Stockton-on-Tees	1994	147.36	271.14

Author and Publication Year	Region	Subregion	Study Period	Mean Prevalence	
				CD	UC + IBD-u
Lewis 2002 ⁴⁵¹	United Kingdom	Nationwide	1996	114.00	214.00
King 2020 ³³⁸	United Kingdom	Nationwide	2000-2017	304.01	474.55
Stone 2003 ⁴⁵²	United Kingdom	Trent	2002	130.18	266.13
Steed 2010 ³³⁷	United Kingdom	Tayside Health Area	2007	157.29	
Hamilton 2021 ³⁴²	United Kingdom	Devon	2008–2017	230.15	419.83
Jones 2019 ³⁴³	United Kingdom	Lothian	2008–2018	254.57	435.26
Lyons 2022 ⁴⁵³	United Kingdom	Lothian	2015	345.70	600.48
Pasvol 2020 ³³⁹	United Kingdom	Nationwide	2018	276.00	397.00
NORTH AMERICA (n=32)					
Edwards 2008 ³⁴⁵	Barbados	Nationwide	2004	16.70	44.30
Pinchbeck 1988 ³⁴⁶	Canada	Northern Alberta	1981	44.00	37.20
Coward 2024 ³⁴⁹	Canada	Manitoba	1987-2014	225.01	216.11
Green 2006 ³⁵³	Canada	Manitoba	1990–2001	222.07	198.80
Coward 2019 ⁴⁵⁴	Canada	Manitoba	1990–2013	241.59	231.57
Lowe 2009 ³⁵⁵	Canada	Quebec	1993–2006	191.79	
Bernstein 1999 ³⁵¹	Canada	Manitoba	1994	198.95	170.09
Coward 2024 ³⁴⁹	Canada	Newfoundland and Labrador	1995-2018	379.11	212.65
Coward 2019 ⁴⁵⁴	Canada	Nova Scotia	1996–2009	342.35	348.10
Targownik 2018 ³⁵⁷	Canada	Manitoba	1996–2014	179.48	184.50
Coward 2019 ⁴⁵⁴	Canada	British Columbia	1997–2014	209.25	261.48
Coward 2024 ³⁴⁹	Canada	Quebec	1997-2014	237.57	162.30
Coward 2019 ⁴⁵⁴	Canada	Saskatchewan	1998–2016	287.36	212.81
Coward 2024 ³⁴⁹	Canada	Saskatchewan	1998-2018	309.86	238.67
Benchimol 2014 ³⁶⁰	Canada	Ontario	1999–2008	219.26	216.78
Osei 2020 ⁴⁵⁵	Canada	Saskatchewan	1999-2016	321.42	244.12
Coward 2024 ³⁴⁹	Canada	Ontario	1999-2016	251.15	269.44
Coward 2019 ⁴⁵⁴	Canada	Ontario	1999-2014	232.24	250.03
Coward 2024 ³⁴⁹	Canada	British Columbia	1999-2019	269.24	324.44
Bernstein 2006 ³⁴⁷	Canada	Alberta, Saskatchewan, Manitoba, and Nova Scotia	2000	279.20	211.20

Author and Publication Year	Region	Subregion	Study Period	Mean Prevalence	
				CD	UC + IBD-u
	Canada	Alberta	2000	283.00	185.00
	Canada	Alberta, British Columbia, Saskatchewan, Manitoba, and Nova Scotia	2000	233.70	193.70
	Canada	British Columbia	2000	160.70	162.10
	Canada	Manitoba	2000	271.40	248.60
	Canada	Nova Scotia	2000	318.50	247.90
	Canada	Saskatchewan	2000	263.80	234.30
Osei 2021 ⁴⁵⁶	Canada	Saskatchewan	2000–2017	327.70	249.86
Peña-Sánchez 2022 ³⁶⁴	Canada	Saskatchewan	2000–2017	43.12	74.29
Bitton 2014 ³⁶⁷	Canada	Quebec	2001–2008	226.19	140.06
Coward 2019 ⁴⁵⁴	Canada	Quebec	2001–2008	228.95	142.62
Coward 2024 ³⁴⁹	Canada	Nova Scotia	2001–2018	509.88	417.35
	Canada	Nationwide	2002–2014	275.75	256.31
Coward 2019 ⁴⁵⁴	Canada	Alberta	2002–2015	277.92	250.17
Coward 2024 ³⁴⁹	Canada	Alberta	2002–2018	304.62	276.77
Buie 2023 ⁴⁵⁷	Canada	Alberta	2002–2018	304.62	214.70
Targownik 2020 ⁴⁵⁸	Canada	Manitoba	2005–2015	277.71	292.18
Coward 2019 ⁴⁵⁴	Canada	Alberta, British Columbia, Saskatchewan, Manitoba, Ontario, and Nova Scotia	2008	263.00	226.00
Seow 2022 ⁴⁵⁹	Canada	Alberta	2013	345.88	341.98
Yamamoto-Furusho 2019 ³⁶⁹	Mexico	Nationwide	2000–2017	0.23	0.99
Yamamoto-Furusho 2020 ⁴⁶⁰	Mexico	Nationwide	2015	8.17	27.13
Vendrell 2013 ⁴⁶¹	Puerto Rico	Nationwide	2002–2005	12.92	22.68
Torres 2021 ⁴⁶²	Puerto Rico	Nationwide	2013	72.71	90.77
Sedlack 1972 ³⁷³	United States	Olmsted County	1965	28.00	87.00
Sedlack 1980 ³⁷⁴	United States	Olmsted County	1975	106.58	
Stonnington 1987 ³⁷⁹	United States	Olmsted County	1979		212.60
Gollop 1988 ³⁷⁸	United States	Olmsted County	1980	89.12	
Loftus 1998 ³⁷⁵	United States	Olmsted County	1991	136.79	
Loftus 2000 ³⁷⁶	United States	Olmsted County	1991		215.92
Shivashankar 2017 ³⁸⁰	United States	Olmsted County	1991–2011	201.35	256.01
Loftus 2023 [†]	United States	Olmsted County	2000–2020	228.43	302.19
Loftus 2007 ³⁷⁷	United States	Olmsted County	2001	177.42	216.94
Barnes 2022 ⁴⁶³	United States	Nationwide	2016	320.18	280.00

Author and Publication Year	Region	Subregion	Study Period	Mean Prevalence	
				CD	UC + IBD-u
Bakhshi 2022 ³⁸⁴	United States	Olmsted County	2019	284.90	350.00
OCEANIA (n=10)					
Andrews 1995 ³⁸⁸	Australia	Sydney	1992	83.40	116.00
Studd 2016 ³⁹⁰	Australia	Barwon Heads	2011	197.32	144.50
Bhatia 2019 ³⁹¹	Australia	Tasmania	2014	170.34	164.69
Pudipeddi 2021 ⁴⁶⁴	Australia	Canada Bay, Sydney	2016	186.14	227.00
Busingye 2021 ⁴⁶⁵	Australia	Nationwide	2019	306.45	346.60
Gearry 2006 ³⁹⁶	New Zealand	Canterbury	2005	155.21	153.03
Seleg 2023 ⁴⁶⁶	New Zealand	Waikato	2010–2019	148.33	185.13
Morton 2023 ³⁹⁸	New Zealand	Manawatū	2013	250.41	206.50
Tranter-Entwistle 2020 ⁴⁶⁷	New Zealand	Canterbury	2015		112.44
Qiu 2022 ⁴⁰⁰	New Zealand	Lakes District Health Board	2020	85.93	83.35
SOUTH AMERICA (n=11)					
Balderramo 2021 ⁴⁰¹	Argentina	Córdoba	2019	9.24	59.53
Victoria 2009 ⁴⁰²	Brazil	Botucatu	1990–2005	2.38	9.08
Martins 2021 ⁴⁰⁴	Brazil	Uberlândia	2007	15.23	15.07
da Luz Moreira 2022 ⁴⁰⁵	Brazil	Nationwide	2008–2017	21.09	28.14
Renuzza 2022 ⁴⁰⁶	Brazil	Paraná State	2012–2019	7.47	18.83
Quaresma 2022 ⁴⁰⁹	Brazil	Nationwide	2012–2020	23.71	41.59
Lima Martins 2018 ⁴⁰⁷	Brazil	Espírito Santo	2013–2014	9.55	16.67
Gasparini 2018 ⁴⁰⁸	Brazil	São Paulo State	2015	24.28	28.31
Yepes-Baretto 2010 ⁴⁶⁸	Colombia	Cartagena	2006	6.60	21.99
Juliao-Banos 2021 ⁴¹⁰	Colombia	Nationwide	2010–2017	6.36	49.38
Fernandez-Avila 2020 ⁴⁶⁹	Colombia	Nationwide	2016	17.00	70.00

†Study submitted for publication but pending acceptance; data received from author directly pre-publication

Supplementary Table 3: Literature search strategy

Detailed systematic search strategies for literature review (1950–August 1, 2023).

MEDLINE	
1.	Inflammatory Bowel Diseases/
2.	Colitis, Ulcerative/
3.	Crohn Disease/
4.	Epidemiology/
5.	epidemiolog*.tw.
6.	(crohn* or (ulcerative adj5 colitis) or inflammatory bowel*).tw.
7.	1 or 2 or 3 or 6
8.	incidence.mp. or *Incidence/
9.	prevalence.mp. or *Prevalence/
10.	4 or 5 or 8 or 9
11.	7 and 10
12.	Limit 11 to (comment or editorial or letter)
13.	11 not 12
14.	Limit 13 to dt=YYYYMMDD-YYYYMMDD

EMBASE	
1.	*enteritis/
2.	*Crohn disease/
3.	*ulcerative colitis/
4.	Epidemiology/
5.	epidemiolog*.tw.
6.	(inflammatory bowel disease* or IBD or crohn or (ulcerative adj5 colitis)).tw.
7.	1 or 2 or 3 or 6
8.	incidence.mp. or *Incidence/
9.	prevalence.mp. or *Prevalence/
10.	4 or 5 or 8 or 9
11.	7 and 10
12.	Limit 11 to (embase and (editorial or letter))
13.	11 not 12
14.	Limit 13 to dd= YYYYMMDD-YYYYMMDD

PUBMED [†]	
1.	enteritis[MeSH Major Topic]
2.	crohn disease[MeSH Terms]
3.	colitis, ulcerative[MeSH Terms]
4.	inflammatory bowel disease[MeSH Terms]
5.	inflammatory bowel diseases[MeSH Terms]
6.	inflammatory bowel disease*[Title/Abstract]
7.	inflammatory bowel*[Title/Abstract]
8.	IBD[Title/Abstract]

9.	crohn*[Title/Abstract]
10.	ulcerative colitis[Title/Abstract]
11.	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10
12.	epidemiology[MeSH Terms]
13.	epidemiolog*[Title/Abstract]
14.	incidence[MeSH Terms]
15.	incidence studies[MeSH Terms]
16.	incidence study[MeSH Terms]
17.	incidences[MeSH Terms]
18.	studies, incidence[MeSH Terms]
19.	incidence[Title/Abstract]
20.	prevalence[MeSH Terms]
21.	prevalence studies[MeSH Terms]
22.	prevalence study[MeSH Terms]
23.	prevalence[Title/Abstract]
24.	12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23
25.	11 and 24
26.	25 and YYYY/MM/DD:YYYY/MM/DD[dp]

WEB OF SCIENCE [†]	
1.	TS=(crohn disease)
2.	TS=(colitis, ulcerative)
3.	TS=(inflammatory bowel disease)
4.	TS=(inflammatory bowel diseases)
5.	TS=(inflammatory bowel)
6.	TS=(IBD)
7.	TS=(ulcerative colitis)
8.	1 or 2 or 3 or 4 or 5 or 6 or 7
9.	TS=(epidemiology)
10.	TS=(epidemiolog)
11.	TS=(incidence)
12.	TS=(prevalence)
13.	9 or 10 or 11 or 12
14.	8 and 13
15.	Limit 14 to Index Date timespan: YYYY-MM-DD to YYYY-MM-DD
16.	Limit 15 to NOT Document Type letter or editorial material

[†]Only used for the 2017–2023 update

Supplementary Table 4: Quality assessment results

Quality assessment results for all studies included in the systematic review. A score between zero and eight, eight being indicative of the highest quality studies, was assigned using the modified Joanna Briggs Institute criteria below. Select reviews and recent abstracts included in the systematic review that did not undergo quality assessment are noted.

Studies were evaluated based on yes, no, unclear, or not/applicable responses to the following questions:

1. Did the sampling frame include all IBD patients or exclude certain populations?
2. Population-based criteria:
 - a. Was the sampling method population-based and able to include all cases of IBD/UC/CD within the population?
 - b. Was the study “strictly” population-based?
3. Did the study have adequate sample size to calculate a prevalence and/or incidence rate?
4. Did the study adequately describe the age and sex distribution of the population?
5. Was data analysis conducted with sufficient coverage of the identified sample?
6. Did the study use valid methods to identify diagnoses of IBD?
7. Did the study use consistent methods to ascertain diagnoses across all patients? i.e., Is the same methodology for case identification applied consistently across all patients?
8. Did the study report appropriate numerators and/or denominators, and confidence intervals?

Author	Publication Year	Ref.	Strictly Population-Based	Total Score
Evans	1965	314	No	6
Kyle	1965	316	No	5
Bonnevie	1968	120	No	6
Norlen	1970	274	No	4
Fahrlander	1971	305	No	6
Kyle	1971	317	No	5
Linden	1971	152	No	4
Myren	1971	220	No	5
Sedlack	1972	373	No	6
Hoj	1973	118	No	4
Miller	1974	320	No	5
Bergman	1975	275	No	6
Brahme	1975	276	No	5
Novis	1975	2	No	3
Smith	1975	321	No	6
Keighley	1976	448	No	6

Author	Publication Year	Ref.	Strictly Population-Based	Total Score
Lanfranchi	1976	198	No	6
Mayberry	1979	309	No	5
Rozen	1979	38	No	6
Bitter	1980	431	No	5
Devlin	1980	328	No	5
Kyle	1980	318	No	5
Mayberry	1980	449	No	5
Sedlack	1980	374	Yes	7
Garland	1981	385	No	6
Binder	1982	121	No	6
Eason	1982	393	No	6
Bjornsson	1983	193	No	5
Brandes	1983	173	No	4
Martinez	1983	241	No	6
Utsunomiya	1983	48	No	NA - Review
Wright	1983	3	No	7
Al-Nakib	1984	54	No	5
Calkins	1984	470	No	6
Krawiec	1984	32	No	6
Morris	1984	324	No	6
Ruiz	1984	245	No	5
Lee	1985	325	No	6
Nordenvall	1985	272	No	6
Berner	1986	150	No	6
Jacobsohn	1986	42	No	5
Khosla	1986	414	Yes	7
Nyhlin	1986	286	No	6
Schlup	1986	394	No	5
Wright	1986	4	No	6
Odes	1987	34	No	5
Odes	1987	33	No	5
Shivananda	1987	215	Yes	7
Stonnington	1987	379	Yes	7
Brown	1988	322	No	5
Fellows	1988	333	No	5
Gollop	1988	378	Yes	7
Haug	1988	223	No	6
Higashi	1988	417	No	4

Author	Publication Year	Ref.	Strictly Population-Based	Total Score
Pinchbeck	1988	346	No	6
Rose	1988	310	No	7
Segal	1988	5	No	7
Bjornsson	1989	194	Yes	7
Cottone	1989	203	No	6
Daiss	1989	174	No	4
Fireman	1989	39	No	5
Grossman	1989	40	No	5
Halme	1989	153	No	5
Haug	1989	224	No	6
Kildebo	1989	221	No	6
Odes	1989	41	No	5
Roin	1989	151	No	6
Ruiz	1989	244	No	5
Sebastian Domingo	1989	249	No	5
Colombel	1990	157	No	5
Fellows	1990	315	No	7
Hinojosa	1990	250	No	5
Humphreys	1990	323	No	6
Kildebo	1990	222	No	6
Niv	1990	36	Yes	7
Stowe	1990	372	No	6
Yoshida	1990	49	No	3
Brullet	1991	252	No	7
Cottone	1991	204	No	6
Ekbom	1991	283	No	6
Langholz	1991	132	No	6
Lindberg	1991	287	No	7
Trallori	1991	199	No	6
Vucelic	1991	112	No	7
Vucelic	1991	112	No	7
Yanguela	1991	242	No	5
Alonso	1992	248	No	6
Jayanthi	1992	329	No	6
Jayanthi	1992	330	No	6
Kyle	1992	319	No	7
Munkholm	1992	122	No	6
Probert	1992	331	No	6

Author	Publication Year	Ref.	Strictly Population-Based	Total Score
Probert	1992	331	No	6
Sola Lamoglia	1992	109	No	5
Srivastava	1992	326	No	6
Tysk	1992	278	No	7
Loffler	1993	178	No	3
Martinez-Salmeron	1993	246	No	6
Munkholm	1993	130	Yes	8
Probert	1993	450	No	5
Tragnone	1993	202	No	6
Dirks	1994	437	No	6
Goebell	1994	175	No	6
Gower-Rousseau	1994	158	No	6
Lee	1994	327	No	7
Lizcano	1994	253	No	6
Mate-Jimenez	1994	247	No	6
Odes	1994	37	No	6
Shapira	1994	31	No	5
Sung	1994	24	No	6
Tsianos	1994	182	No	7
Andrews	1995	388	No	5
Cella Lanau	1995	243	No	6
Kitahora	1995	50	No	4
Morita	1995	53	No	3
Moum	1995	226	No	6
Stewenius	1995	277	No	6
Thomas	1995	311	Yes	8
Khan	1996	64	No	6
Latour	1996	104	No	4
Lindgren	1996	446	No	7
Manousos	1996	184	No	7
Manousos	1996	185	No	7
Moum	1996	227	No	6
Moum	1996	228	No	6
Prikazska	1996	445	No	4
Ranzi	1996	206	No	7
Shivananda	1996	43	No	6
Tragnone	1996	205	No	7
Trallori	1996	200	No	8

Author	Publication Year	Ref.	Strictly Population-Based	Total Score
Van Gossum	1996	103	No	5
Flamenbaum	1997	164	No	6
Fonager	1997	135	Yes	8
Lapidus	1997	273	No	7
Pagenault	1997	165	No	6
Radhakrishnan	1997	61	No	5
Bjornsson	1998	195	No	7
Brullet	1998	254	No	7
Latour	1998	105	No	5
Loftus	1998	375	Yes	8
Russel	1998	216	No	6
Shapira	1998	35	No	6
Thompson	1998	335	No	5
Arin Letamendia	1999	251	No	6
Bernstein	1999	351	Yes	8
Carr	1999	336	No	6
Jovanovic	1999	111	No	6
Linares de la Cal	1999	370	No [†]	7
Lopez Miguel	1999	256	No	6
Monferrer Guardiola	1999	257	No	6
Timmer	1999	176	No	7
Timmer	1999	177	No	7
Bjornsson	2000	196	No	7
Jojic	2000	238	No	6
Lee	2000	422	No	6
Loftus	2000	376	Yes	8
Rubin	2000	334	No	7
Saro Gismera	2000	239	No	7
Yang	2000	65	No	7
Yao	2000	52	NA - Review	NA - Review
Yapp	2000	312	No	7
Blanchard	2001	348	Yes	7
Salupere	2001	147	No	6
Lewis	2002	451	No	3
Piront	2002	106	No	4
Pozzati	2002	259	No	7
Al-Shamali	2003	55	No	5
Lakatos	2003	471	No	6

Author	Publication Year	Ref.	Strictly Population-Based	Total Score
Saro Gismera	2003	240	No	7
Stone	2003	452	No	4
Tezel	2003	306	No	6
Tsianos	2003	180	No	7
Appleyard	2004	371	No	4
Garrido	2004	260	No	6
Gheorghe	2004	236	No	6
Heresbach	2004	167	Yes	6
Leong	2004	23	No	7
Molinie	2004	159	No	7
Rodrigo	2004	472	No	7
Edouard	2005	368	No	6
Garcia Rodriguez	2005	473	No	6
Ladas	2005	186	No	7
Tsianos	2005	181	No	7
Bernstein	2006	347	Yes	7
Gearry	2006	396	No	7
Green	2006	353	Yes	6
Jacobsen	2006	128	No	7
Lapidus	2006	288	Yes	8
Nerich	2006	168	No	7
Sincic	2006	115	No	7
Vind	2006	119	No	7
Abakar-Mahamat	2007	170	No	6
Economou	2007	183	No	6
Loftus	2007	377	Yes	8
Lok	2007	26	No	6
Rivera Irigoien	2007	474	No	7
Arin Letamendia	2008	264	No	6
Cachia	2008	475	No	6
Edwards	2008	345	Yes	7
Gunesh	2008	313	No	7
Juillerat	2008	476	No	7
Lok	2008	25	No	6
Ott	2008	179	No	7
Pavlovic-Calic	2008	107	No	7
Yang	2008	66	No	7
Asakura	2009	418	No	6

Author	Publication Year	Ref.	Strictly Population-Based	Total Score
Bengtson	2009	229	No	5
Chow	2009	22	Yes	8
Lopez-Serrano	2009	261	No	7
Lowe	2009	355	Yes	7
Romberg-Camps	2009	217	No	6
Tozun	2009	307	No	6
Victoria	2009	402	No	6
Anton Martinez	2010	262	No	6
Azevedo	2010	444	No	5
Manninen	2010	154	No	6
Nerich	2010	169	Yes	7
Niriella	2010	92	No	7
Ronnblom	2010	271	Yes	6
Salkic	2010	108	No	7
Steed	2010	337	No	7
Wilson	2010	389	No	7
Yepes-Baretto	2010	468	No	7
Zheng	2010	10	NA - Review	NA - Review
Buenavida	2011	411	No	6
Chouraki	2011	160	Yes	8
Hammada	2011	1	No	6
Lakatos	2011	477	Yes	8
Lakatos	2011	477	Yes	8
Jussila	2012	155	No	7
Kiudelis	2012	214	No	6
Sardu	2012	440	No	6
Chen	2013	94	No	6
Chuang	2013	96	Yes	8
Genin	2013	163	Yes	6
Gower-Rousseau	2013	161	Yes	8
Jussila	2013	434	No	7
Klarin	2013	116	No	5
Ng	2013	13	No	5
Petritsch	2013	102	Yes	7
Sjoberg	2013	296	No	7
Tursi	2013	213	No	7
Vendrell	2013	461	No	7
Wei	2013	95	Yes	7

Author	Publication Year	Ref.	Strictly Population-Based	Total Score
Zeng	2013	14	Yes	8
Zhao	2013	12	No	7
Benchimol	2014	360	Yes	8
Bitton	2014	367	Yes	8
Burisch	2014	18	No	7
Busch	2014	447	Yes	8
Di Domenicantonio	2014	210	Yes	8
Kasturiratne	2014	93	No	7
Leddin	2014	356	Yes	8
Lucendo	2014	263	Yes	8
Norgard	2014	478	Yes	8
Pezerovic	2014	114	No	6
Sjoberg	2014	297	No	7
Vegh	2014	19	No	7
Yang	2014	16	No	7
Zahedi	2014	30	No	7
Bjornsson	2015	197	Yes	8
Fernández	2015	266	Yes	8
Hilmi	2015	58	No	7
Kim	2015	73	Yes	7
Kuo	2015	98	No	7
Mansour-Ghanaei	2015	29	No	6
Miao	2015	11	Yes	8
Parente	2015	403	No	6
de Groof	2016	219	No	7
Hammer	2016	148	Yes	7
Kurti	2016	439	Yes	8
Ng	2016	21	Yes	8
Shapiro	2016	387	No	7
Shi	2016	20	No	6
Studd	2016	390	No	7
Su	2016	399	No	7
Benchimol	2017	361	Yes	8
Burisch	2017	140	No	6
Chaaro Benallal	2017	258	No	6
Cotter	2017	383	Yes	7
Cueto-Torreblanca	2017	265	No	7
Eriksson	2017	279	Yes	8

Author	Publication Year	Ref.	Strictly Population-Based	Total Score
Gottgens	2017	479	No	6
Hsu	2017	97	No	7
Jarkovsky	2017	117	No	6
Jung	2017	90	Yes	8
Jung	2017	91	Yes	7
Kirchgesner	2017	171	No	5
Landerholm	2017	281	Yes	6
Lophaven	2017	133	Yes	8
Myrelid	2017	280	Yes	7
Nguyen	2017	480	No	7
Nyboe Anderson	2017	124	Yes	7
Shivashankar	2017	380	Yes	8
Van den Heuvel	2017	218	No	6
Yin	2017	285	No	6
Zayyani	2017	7	No	7
Aniwan	2018	381	Yes	7
Aniwan	2018	386	Yes	7
Benchimol	2018	362	No	7
Brunet	2018	110	Yes	7
Coppell	2018	395	No	5
Everhov	2018	481	Yes	7
Friedman	2018	416	Yes	7
Fumery	2018	162	No	6
Gasparini	2018	408	No	5
Holko	2018	443	Yes	8
Iade	2018	412	No	5
Kalubowila	2018	429	No	7
Kim	2018	425	Yes	7
Lima-Martins	2018	407	No	7
Lirhus	2018	230	No	7
Mak	2018	27	Yes	6
Mak	2018	28	Yes	7
Marin-Jimenez	2018	482	No	6
Ng	2018	9	No	6
Ong	2018	8	No	6
Pandit	2018	60	No	6
Pang	2018	59	No	6
Targownik	2018	357	No	7

Author	Publication Year	Ref.	Strictly Population-Based	Total Score
Valpiani	2018	207	Yes	8
Wintjens	2018	483	No	7
Aniwan	2019	382	Yes	8
Axelrad	2019	292	Yes	7
Bernstein	2019	352	Yes	7
Bhatia	2019	391	No	7
Burisch	2019	484	Yes	7
Can	2019	308	No	7
Christiansen	2019	141	No	6
Cote-Daigneault	2019	358	Yes	7
Coward	2019	454	Yes	8
Everhov	2019	291	Yes	6
Han	2019	86	Yes	7
Jones	2019	343	Yes	8
Kim	2019	423	Yes	8
Kwak	2019	83	Yes	8
Ludvigsson	2019	282	Yes	7
Macaluso	2019	211	Yes	8
Misra	2019	344	No	7
Mokhtar	2019	57	No	7
Murakami	2019	419	No	6
Nugent	2019	485	Yes	7
Park	2019	67	No	7
Park	2019	82	No	7
Park	2019	427	Yes	7
Park	2019	426	Yes	7
Piscaglia	2019	237	Yes	8
Segerman	2019	290	Yes	7
Yamamoto-Furusho	2019	369	No	6
Yen	2019	99	No	7
Zvidi	2019	44	No	5
Axelrad	2020	293	Yes	7
Brunet	2020	430	Yes	7
Cha	2020	68	Yes	7
Fernandez-Avila	2020	469	No	6
Genin	2020	436	Yes	8
Han	2020	85	Yes	6
Jung	2020	424	NA - Abstract	NA - Abstract

Author	Publication Year	Ref.	Strictly Population-Based	Total Score
Kaibullayeva	2020	420	Yes	4
Kim	2020	74	NA - Abstract	NA - Abstract
King	2020	338	No	7
Kunovszki	2020	192	Yes	7
Lo	2020	142	Yes	6
Lo	2020	143	Yes	7
Lochhead	2020	300	NA - Abstract	NA - Abstract
Lordal	2020	145	NA - Abstract	NA - Abstract
Moon	2020	486	Yes	6
Nguyen	2020	303	Yes	7
Olén	2020	126	Yes	7
Olén	2020	125	Yes	8
Osei	2020	455	Yes	8
Parga	2020	255	NA - Abstract	NA - Abstract
Pasvol	2020	339	No	7
Ronnblom	2020	298	No	7
Song	2020	84	Yes	7
Taborelli	2020	208	Yes	7
Targownik	2020	458	Yes	7
Torabi	2020	354	Yes	8
Tranter-Entwistle	2020	467	No	4
Trivedi	2020	341	Yes	7
Vadstrup	2020	144	Yes	6
Wei	2020	100	NA - Abstract	NA - Abstract
Yamamoto-Furusho	2020	460	No	6
Abou Rached	2021	56	NA - Abstract	NA - Abstract
Agrawal	2021	127	Yes	7
Anisdahl	2021	231	Yes	6
Atia	2021	47	No	6
Axelrad	2021	131	Yes	7
Balderramo	2021	401	No	6
Belvedere	2021	201	No	7
Bernstein	2021	350	Yes	7
Busingye	2021	465	No	5
Chaparro	2021	268	No	6
Chiba	2021	51	No	5
Choi	2021	72	No	6
Crocetti	2021	212	Yes	8

Author	Publication Year	Ref.	Strictly Population-Based	Total Score
Dhaliwal	2021	366	Yes	8
Fakih	2021	435	NA - Abstract	NA - Abstract
Hamilton	2021	342	No	7
Hernandez	2021	267	No	6
Jo	2021	428	Yes	7
Juliao-Banos	2021	487	Yes	8
Lee	2021	89	NA - Abstract	NA - Review
Lirhus	2021	232	Yes	8
Ludvigsson	2021	294	Yes	7
Mak	2021	488	Yes	7
Martins	2021	404	No	6
Moon	2021	70	Yes	7
Osei	2021	456	Yes	8
Osei	2021	363	Yes	8
Pudipeddi	2021	464	Yes	8
Qian	2021	304	NA - Abstract	NA - Abstract
Rönblom	2021	299	No	5
Shimodaira	2021	489	No	5
Stulman	2021	45	Yes	8
Torres	2021	462	No	7
Verdon	2021	359	Yes	6
Weimers	2021	490	Yes	7
Wewer	2021	491	Yes	7
Achit	2022	172	No	6
Agrawal	2022	136	Yes	8
Arms-Williams	2022	340	Yes	8
Bakhshi	2022	384	NA - Abstract	NA - Abstract
Barnes	2022	463	No	4
Boks	2022	302	No	7
Brochard	2022	492	No	6
Choe	2022	75	Yes	8
da Luz Moreira	2022	405	Yes	7
Dorn-Rasmussen	2022	134	Yes	8
Elbadry	2022	413	No	6
Elmahdi	2022	493	Yes	5
Flanagan	2022	392	No	7
Forss	2022	289	Yes	8
Fujiya	2022	494	No	5

Author	Publication Year	Ref.	Strictly Population-Based	Total Score
Gonczi	2022	190	Yes	8
Halfvarson	2022	295	Yes	7
He	2022	15	No	7
Hong	2022	87	NA - Abstract	NA - Abstract
Jacobsen	2022	139	Yes	6
Kim	2022	71	Yes	8
Kim	2022	76	No	4
Kontola	2022	156	No	7
Kurti	2022	191	Yes	8
Larsen	2022	129	Yes	8
Lyons	2022	453	Yes	7
Mauriz-Barreiro	2022	269	No	4
Oh	2022	78	No	6
Pena-Sanchez	2022	364	No	6
Qiu	2022	400	No	6
Qu	2022	6	No	5
Quaresma	2022	409	Yes	8
Renuzza	2022	406	No	6
Saberzadeh-Ardestani	2022	415	No	5
Saiz-Chumillas	2022	459	No	6
Seow	2022	459	Yes	7
Shrestha	2022	301	Yes	7
Wewer	2022	138	Yes	7
Yang	2022	17	No	6
Yu	2022	225	No	6
Zagórowicz	2022	235	Yes	8
Zhao	2022	146	Yes	7
Zhilin	2022	63	No	6
Al-Fawzan	2023	421	No	6
Anisdahl	2023	233	NA - Abstract	NA - Abstract
Attaubi	2023	495	NA - Abstract	NA - Abstract
Buie	2023	496	Yes	8
Caviglia	2023	209	No	5
Chashkova	2023	62	No	5
Gantzel	2023	497	No	7
Han	2023	81	Yes	7
Holten	2023	234	Yes	7

Author	Publication Year	Ref.	Strictly Population-Based	Total Score
Karpaviciute	2023	442	NA - Abstract	NA - Abstract
Kim	2023	88	Yes	7
Kim	2023	77	Yes	8
Kim	2023	69	Yes	8
Ledder	2023	46	Yes	7
Lo	2023	123	Yes	8
Moon	2023	79	NA - Abstract	NA - Abstract
Morton	2023	398	Yes	8
Nielsen	2023	149	Yes	8
Nørgård	2023	137	Yes	7
Park	2023	80	Yes	7
Peña-Sánchez	2023	365	Yes	7
Seleq	2023	397	No	7
Sun	2023	284	Yes	8
Wetwittayakhlan	2023	189	Yes	8
Wu	2023	101	NA - Abstract	NA - Abstract
Xin-Hui	2023	‡	NA - Abstract	NA - Abstract
Coward	2024	349	Yes	8

†Population-based for Panama, but not for Argentina.

‡Study submitted for publication but pending acceptance; data received from author directly pre-publication.

Supplementary Table 5: *k*-NN model accuracy

Final *k*-NN model results for labelled data set creation.

Data Type	<i>k</i>-NN Accuracy
Crohn's disease incidence	81.33%
ulcerative colitis incidence	84.71%
Crohn's disease prevalence	92.50%
ulcerative colitis prevalence	92.22%

Supplementary Table 6: Random forest sensitivity, specificity, and balanced accuracy

Random forest model sensitivity, specificity, and balanced accuracy (i.e., average of sensitivity and specificity) by class.

	Stage 1	Stage 2	Stage 3
Sensitivity (%)	78.34	96.53	92.56
Specificity (%)	99.66	89.24	97.62
Balanced accuracy (%)	89.02	92.89	95.09

Supplementary Table 7: Data sources for prevalence model

Data used in the prevalence models.

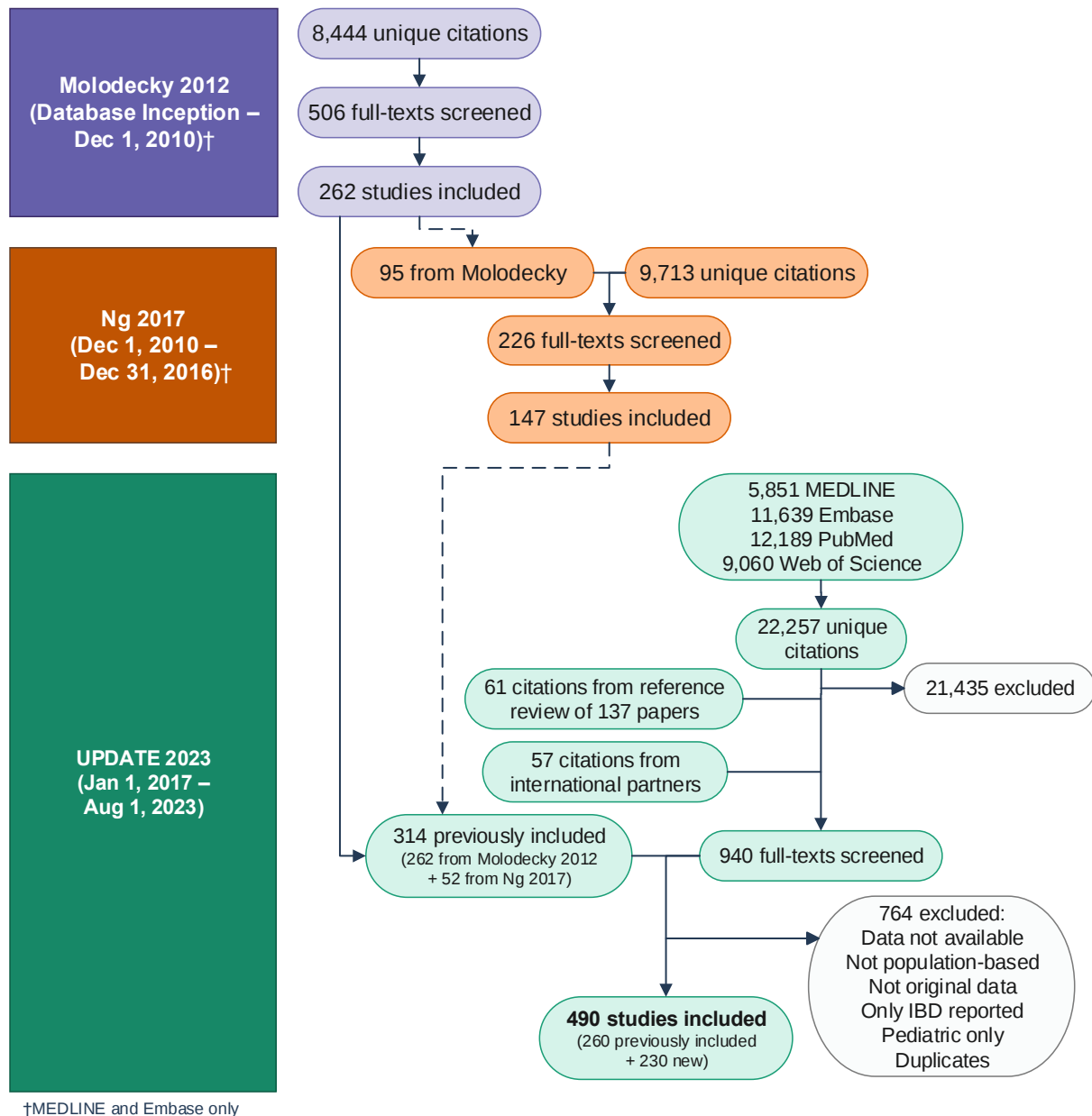
	Canada	Denmark	Scotland
Region/sub-region	Nationwide [†]	Nationwide	Lothian NHS Region
Model input incidence period	2007–2014	2010–2017	2010–2017
Model input initial prevalence year	2014	2017	2017
Population size (year)	34,417,184 (2014)	5,777,920 (2017)	889,450 (2017)
Average IBD incidence (per 100,000) for input period	27.63	45.43	46.75
IBD prevalence (per 100,000) for input year	650.21	946.29	794.09
Data source	Health admin databases	Health admin databases	Health admin databases
IBD Case definition	ICD-9 555/556 ICD-10 K50/K51 Algorithm	ICD-8 563.00-563.09/563.19/569.04 ICD-10 K50/51 Algorithm	ICD-10 K50/51/52 Prescriptions Pathology Manual case verification using medical records

[†]Missing New Brunswick, the Northwest Territories, Nunavut, and the Yukon (<3% of the national population).

SUPPLEMENTARY FIGURES

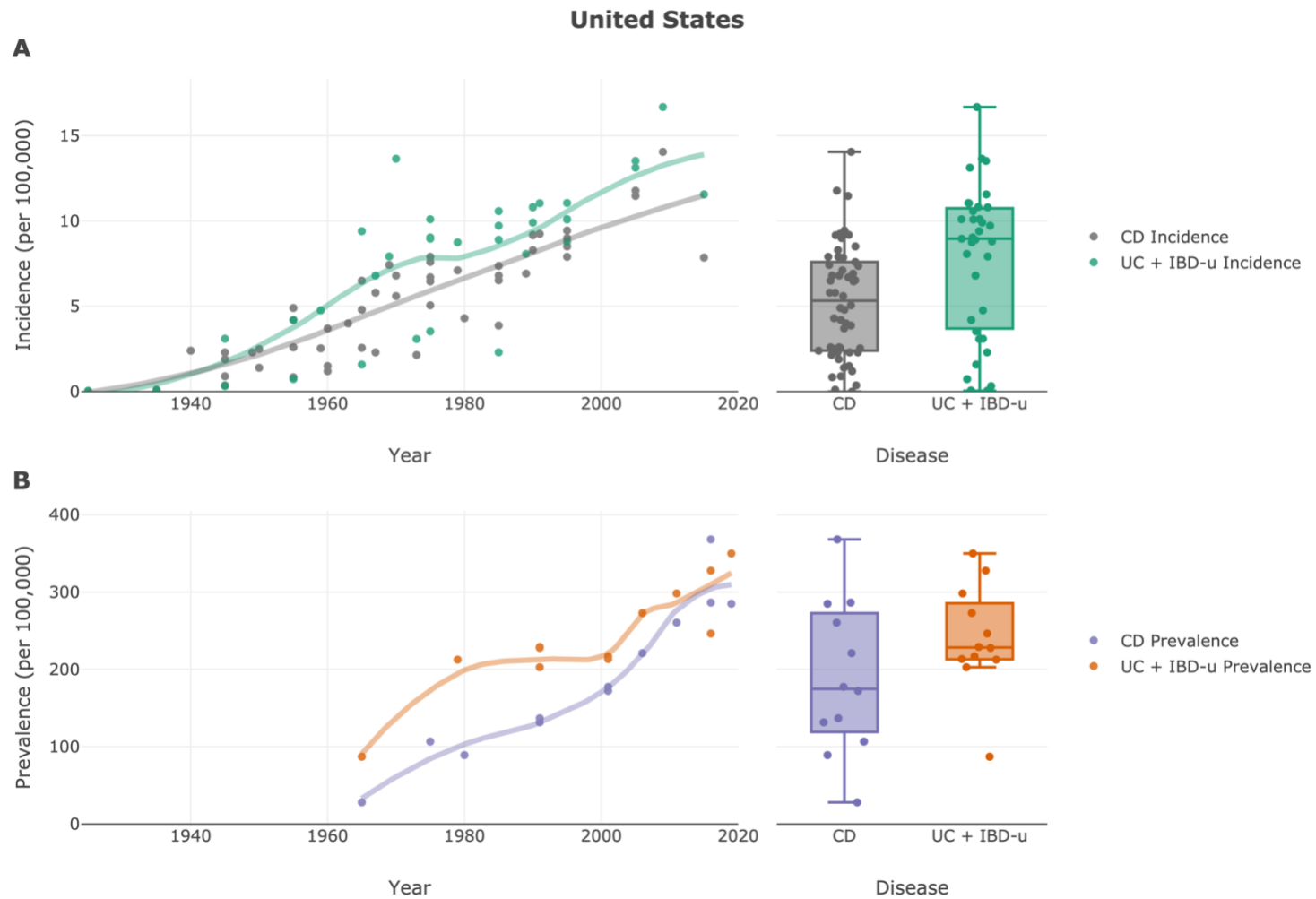
Supplementary Figure 1: Systematic review flowchart

Flowchart detailing the study selection process including a brief description of the two previous systematic reviews.^{498,499}



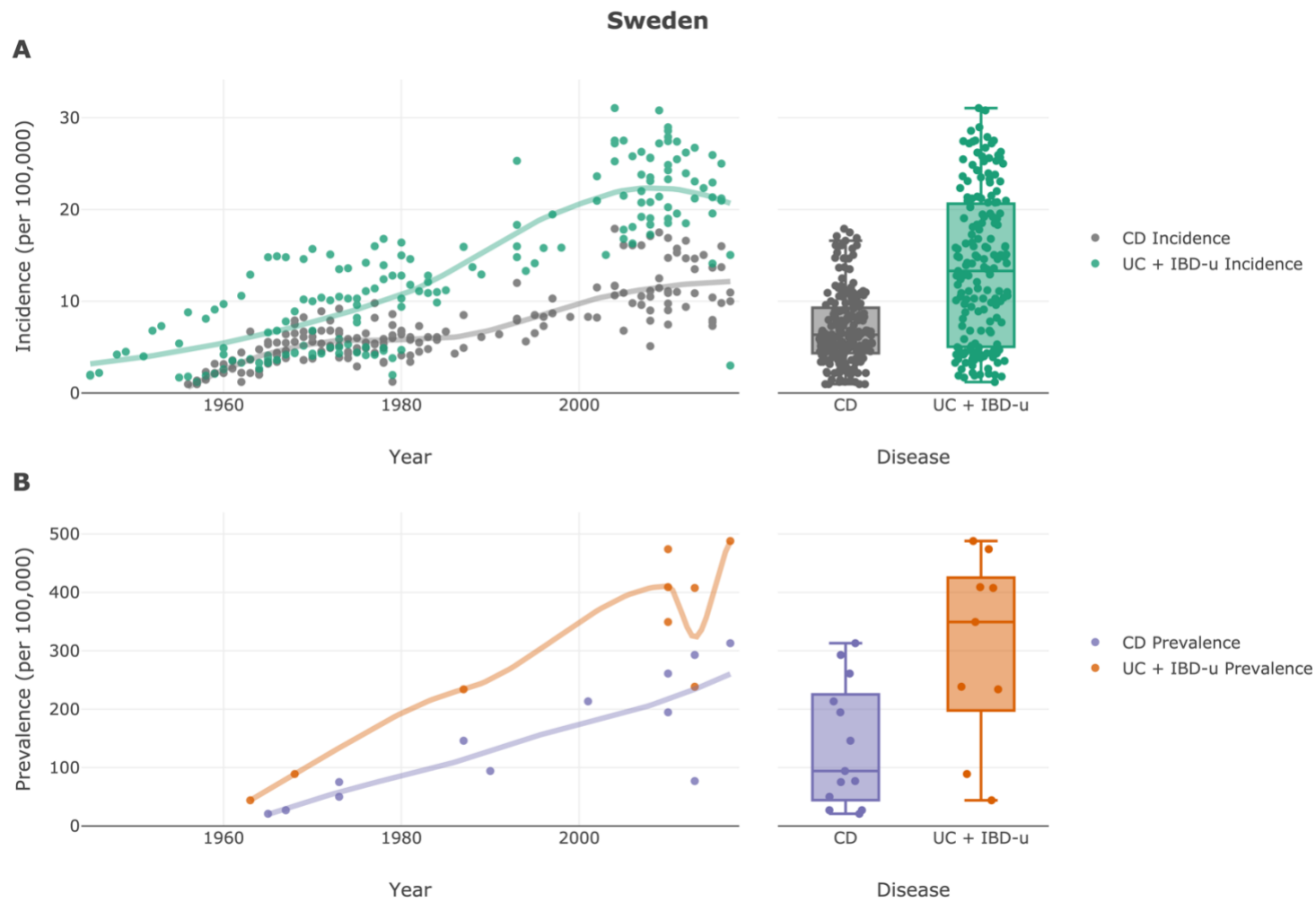
Supplementary Figure 2: United States

Incidence and prevalence trends of Crohn's disease and ulcerative colitis across time in the United States.



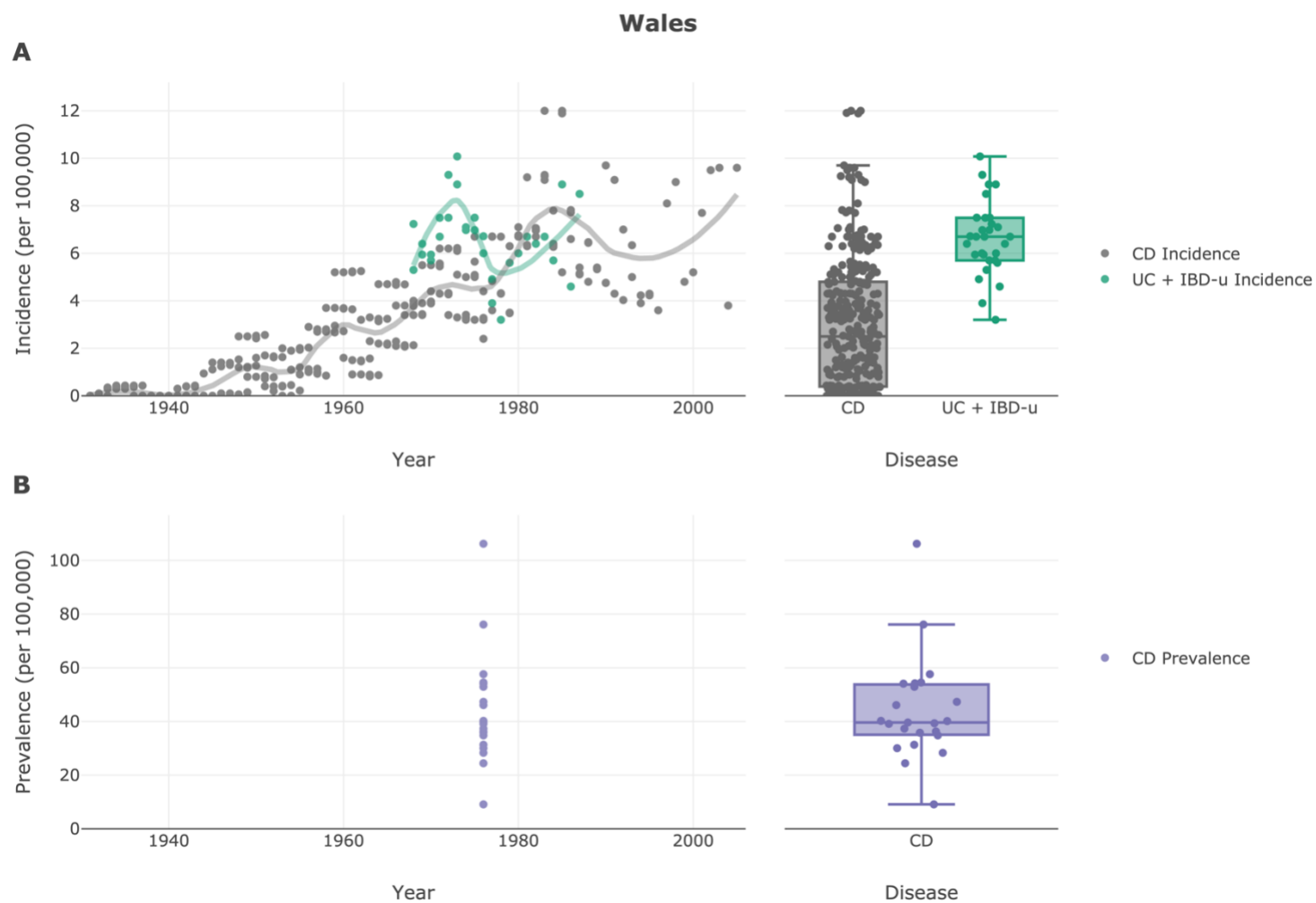
Supplementary Figure 3: Sweden

Incidence and prevalence trends of Crohn's disease and ulcerative colitis across time in Sweden.



Supplementary Figure 4: Wales

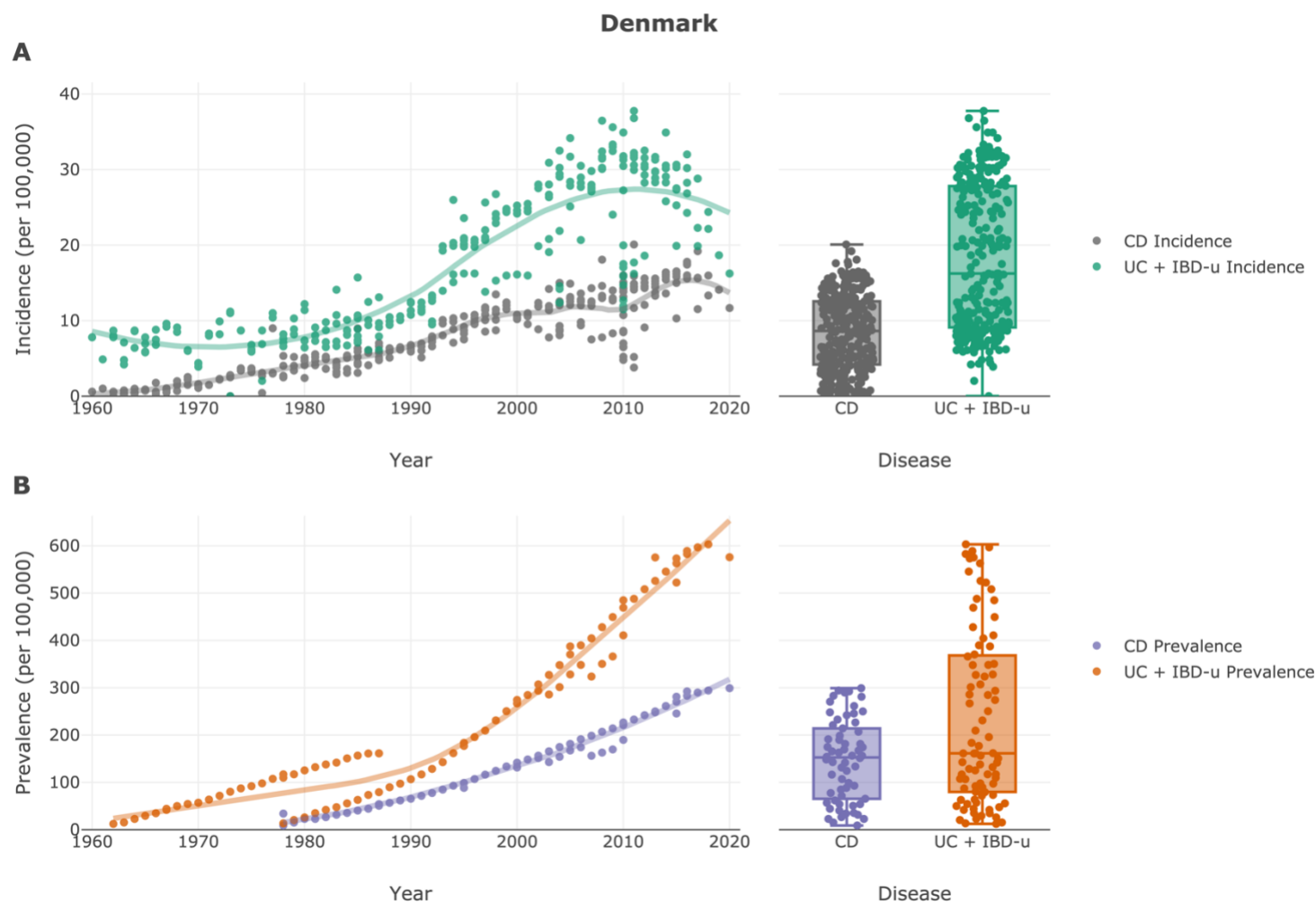
Incidence and prevalence trends of Crohn's disease and ulcerative colitis across time in Wales.



†Prevalence points are for each county within Wales. The spread shows variation between subregions.

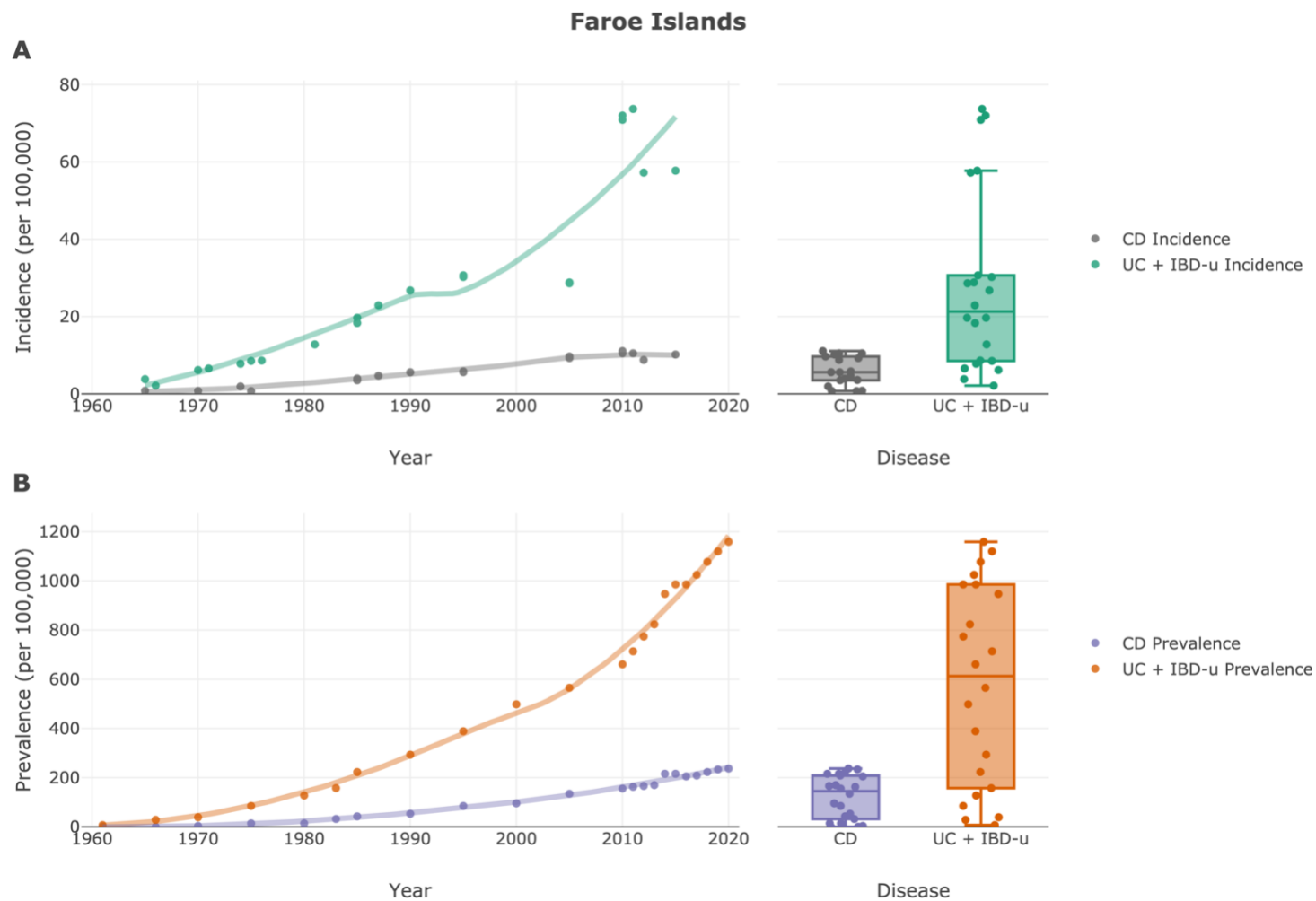
Supplementary Figure 5: Denmark

Incidence and prevalence trends of Crohn's disease and ulcerative colitis across time in Denmark.



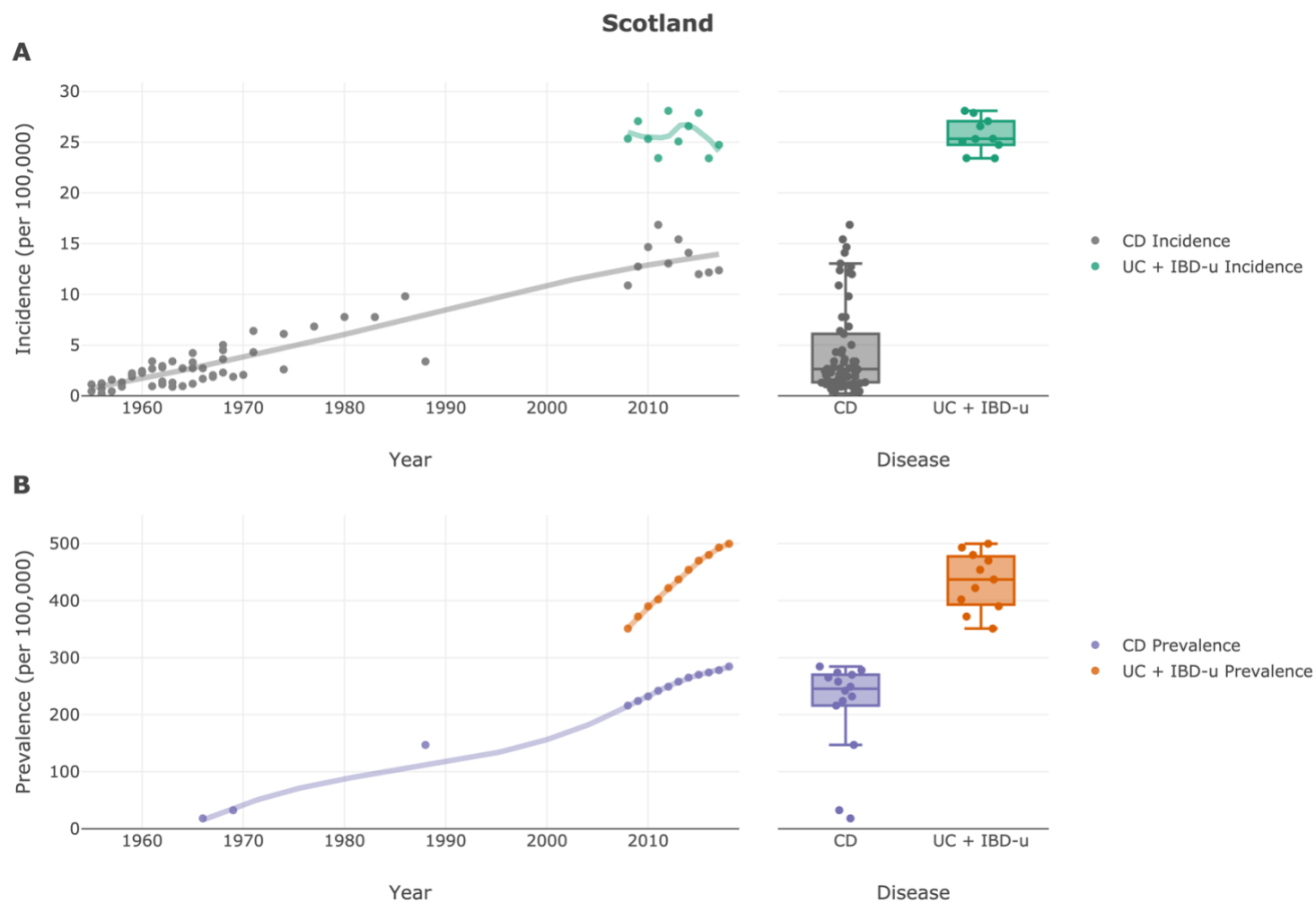
Supplementary Figure 6: Faroe Islands

Incidence and prevalence trends of Crohn's disease and ulcerative colitis across time in the Faroe Islands.



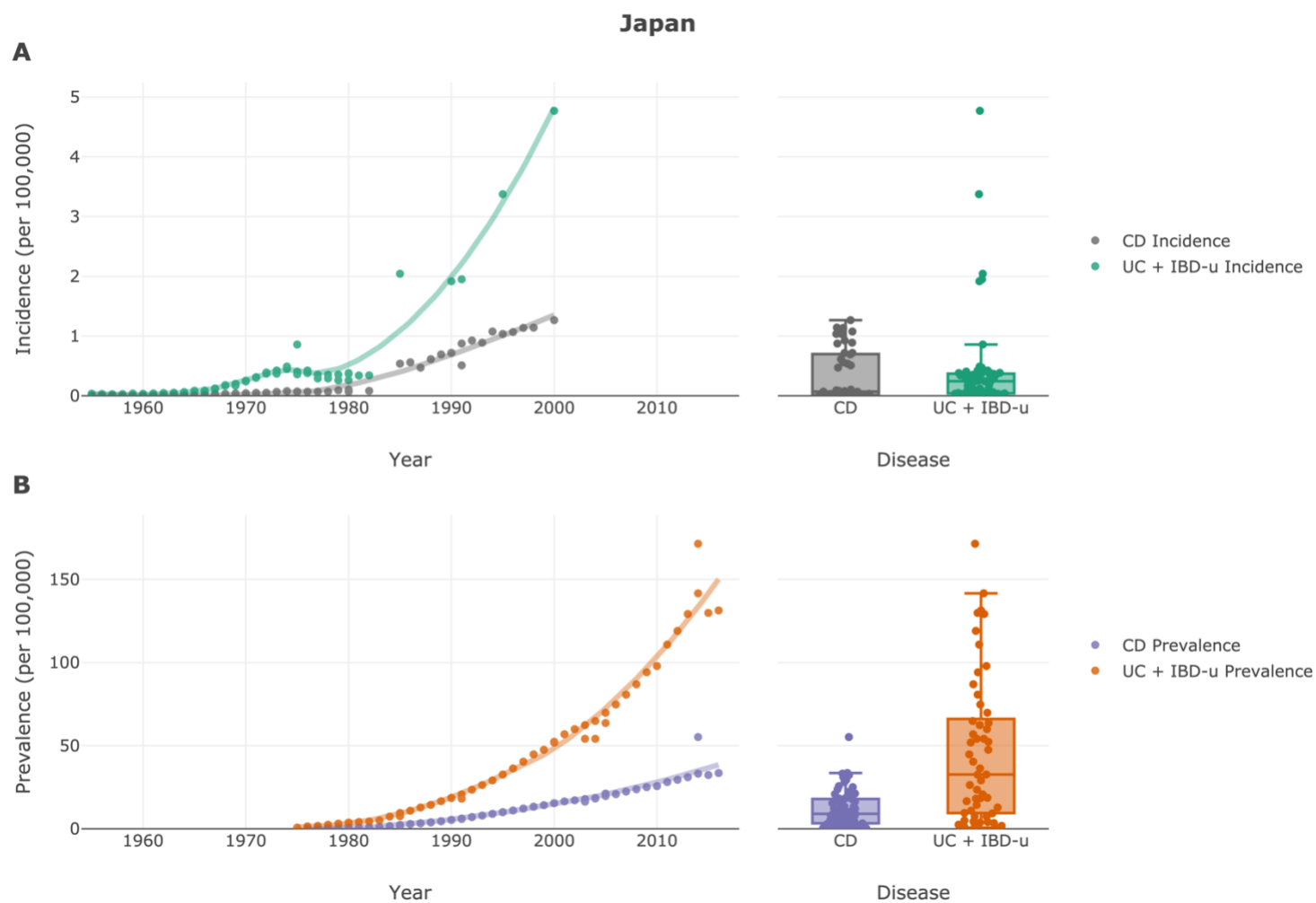
Supplementary Figure 7: Scotland

Incidence and prevalence trends of Crohn's disease and ulcerative colitis across time in Scotland.



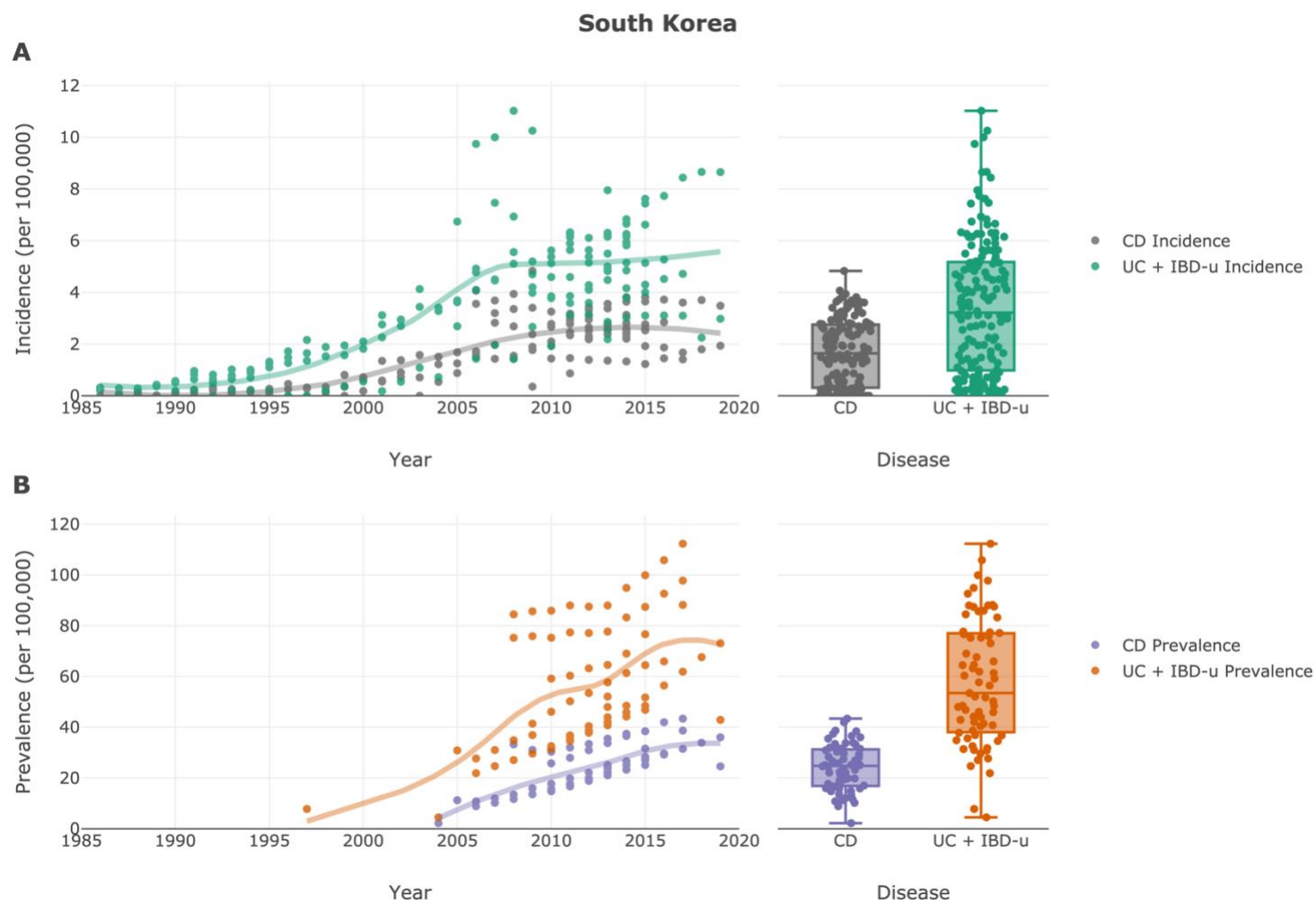
Supplementary Figure 8: Japan

Incidence and prevalence trends of Crohn's disease and ulcerative colitis across time in Japan.



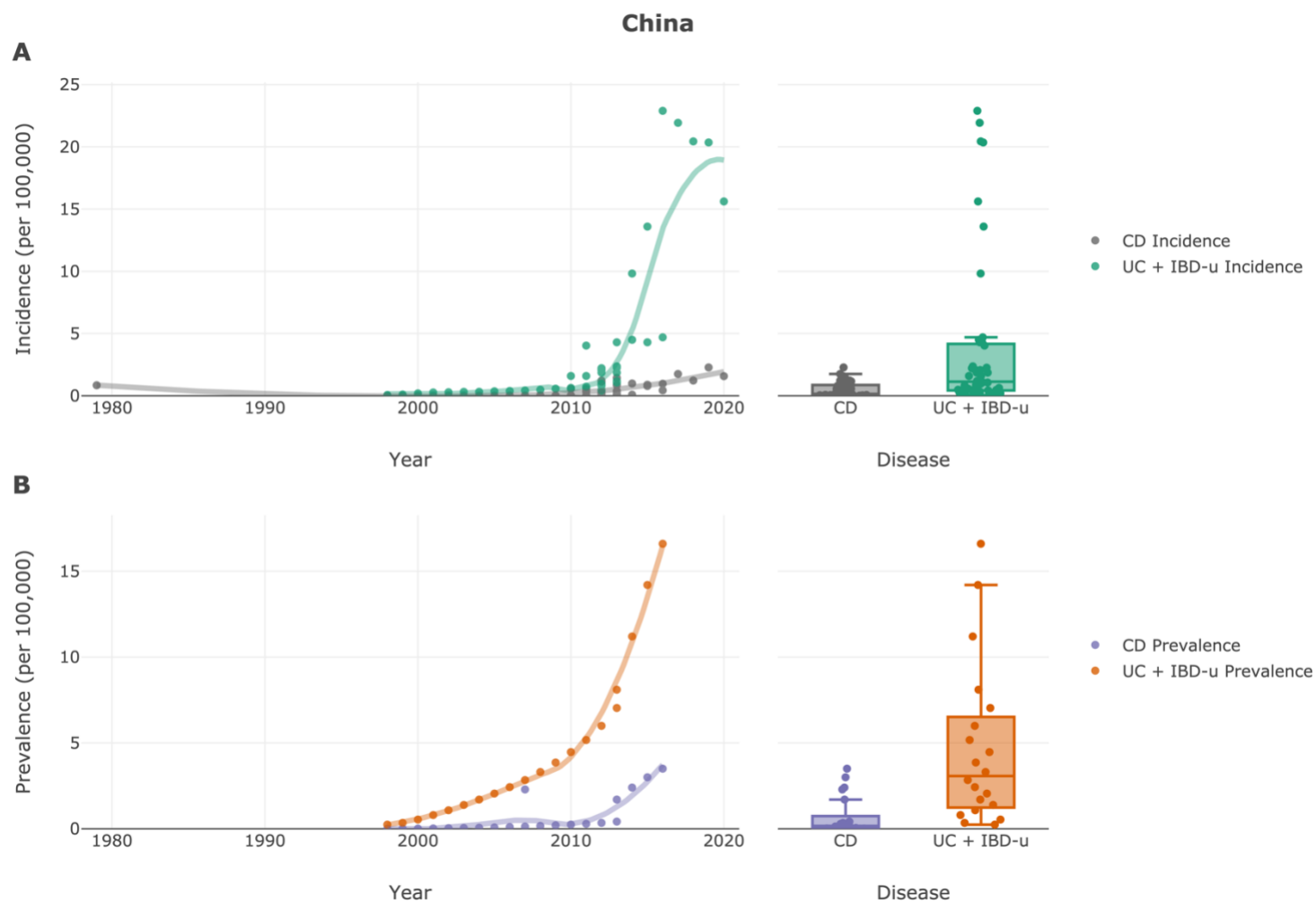
Supplementary Figure 9: South Korea

Incidence and prevalence trends of Crohn's disease and ulcerative colitis across time in South Korea.



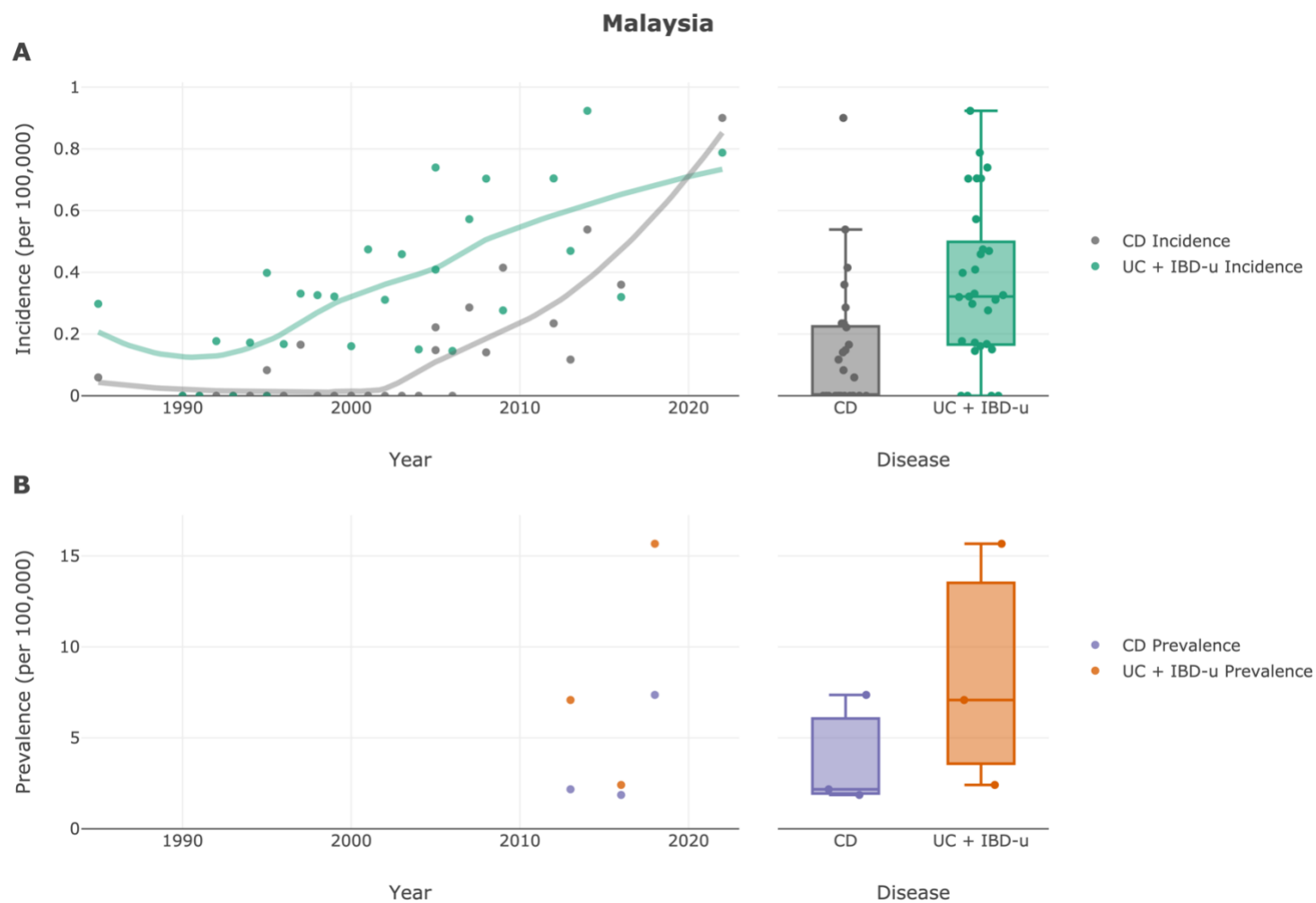
Supplementary Figure 10: China

Incidence and prevalence trends of Crohn's disease and ulcerative colitis across time in China.



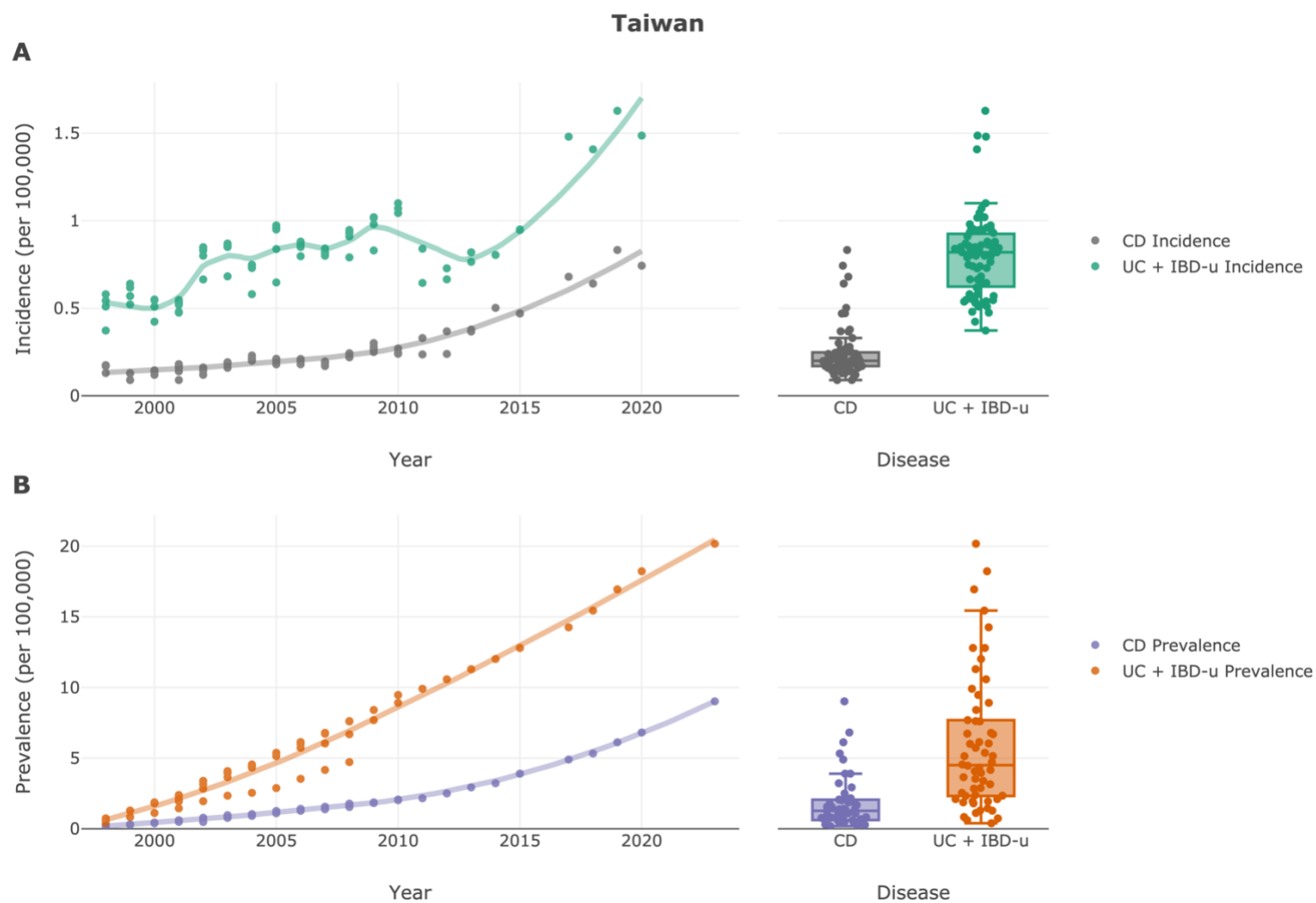
Supplementary Figure 11: Malaysia

Incidence and prevalence trends of Crohn's disease and ulcerative colitis across time in Malaysia.



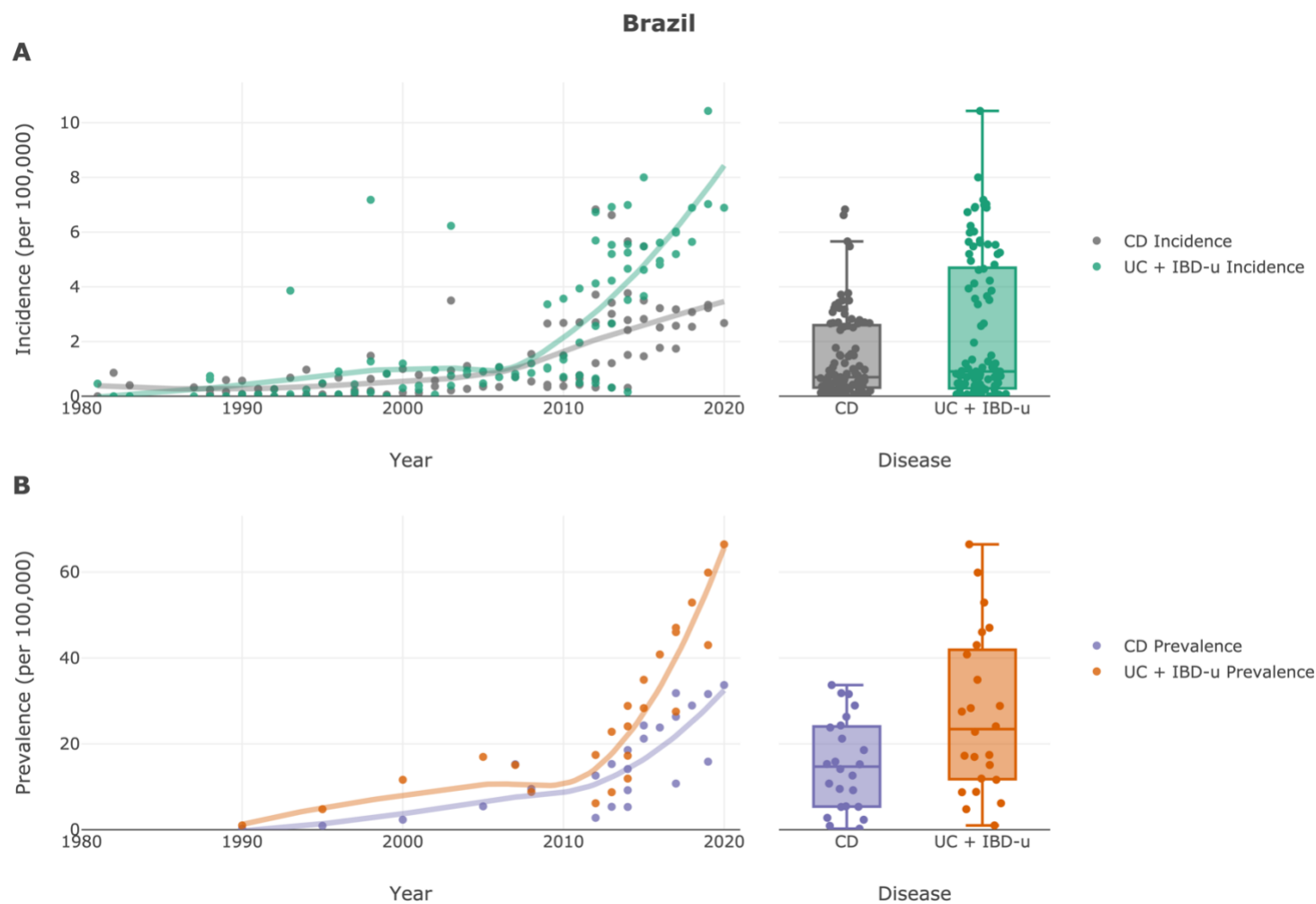
Supplementary Figure 12: Taiwan

Incidence and prevalence trends of Crohn's disease and ulcerative colitis across time in Taiwan.



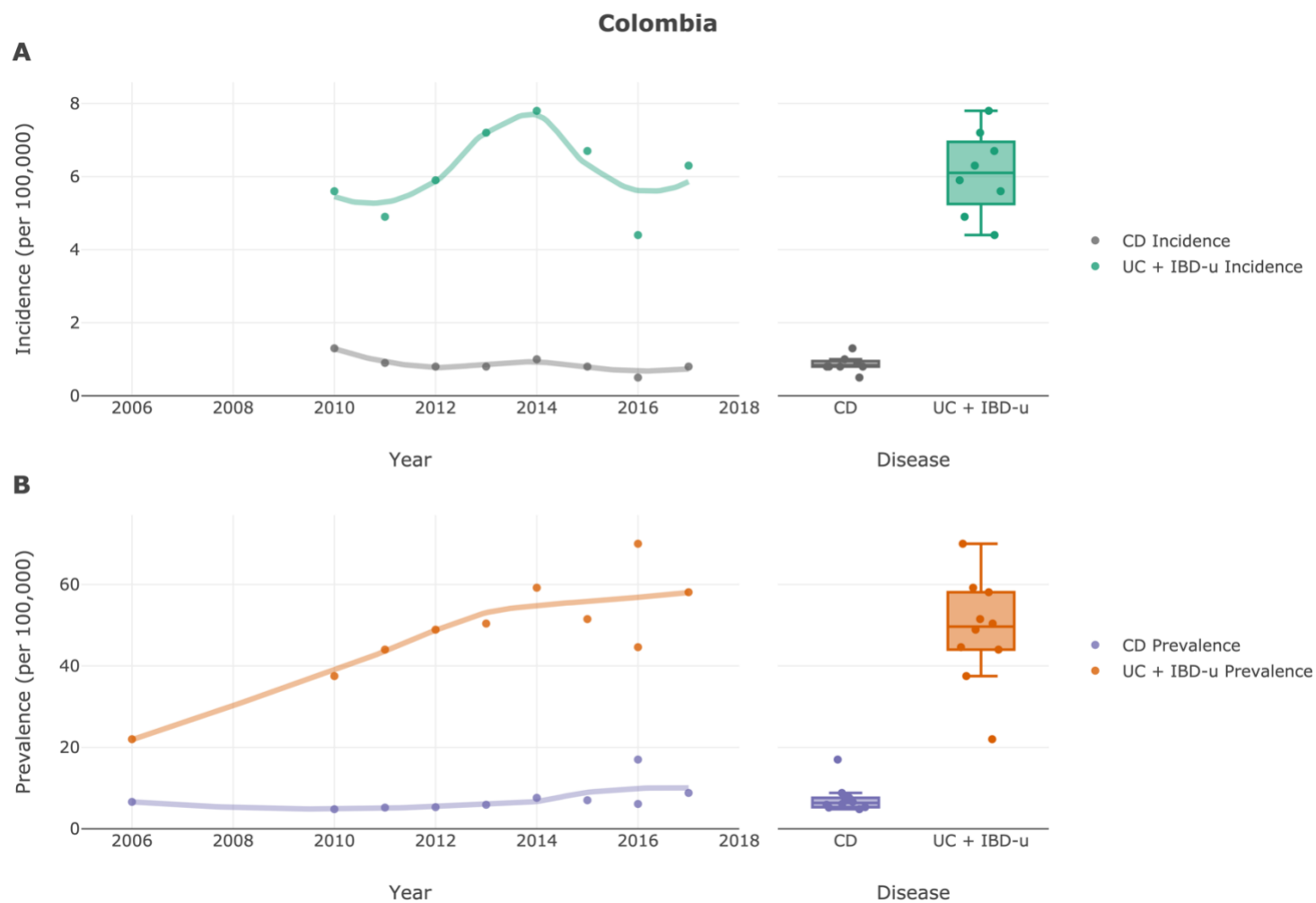
Supplementary Figure 13: Brazil

Incidence and prevalence trends of Crohn's disease and ulcerative colitis across time in Brazil.



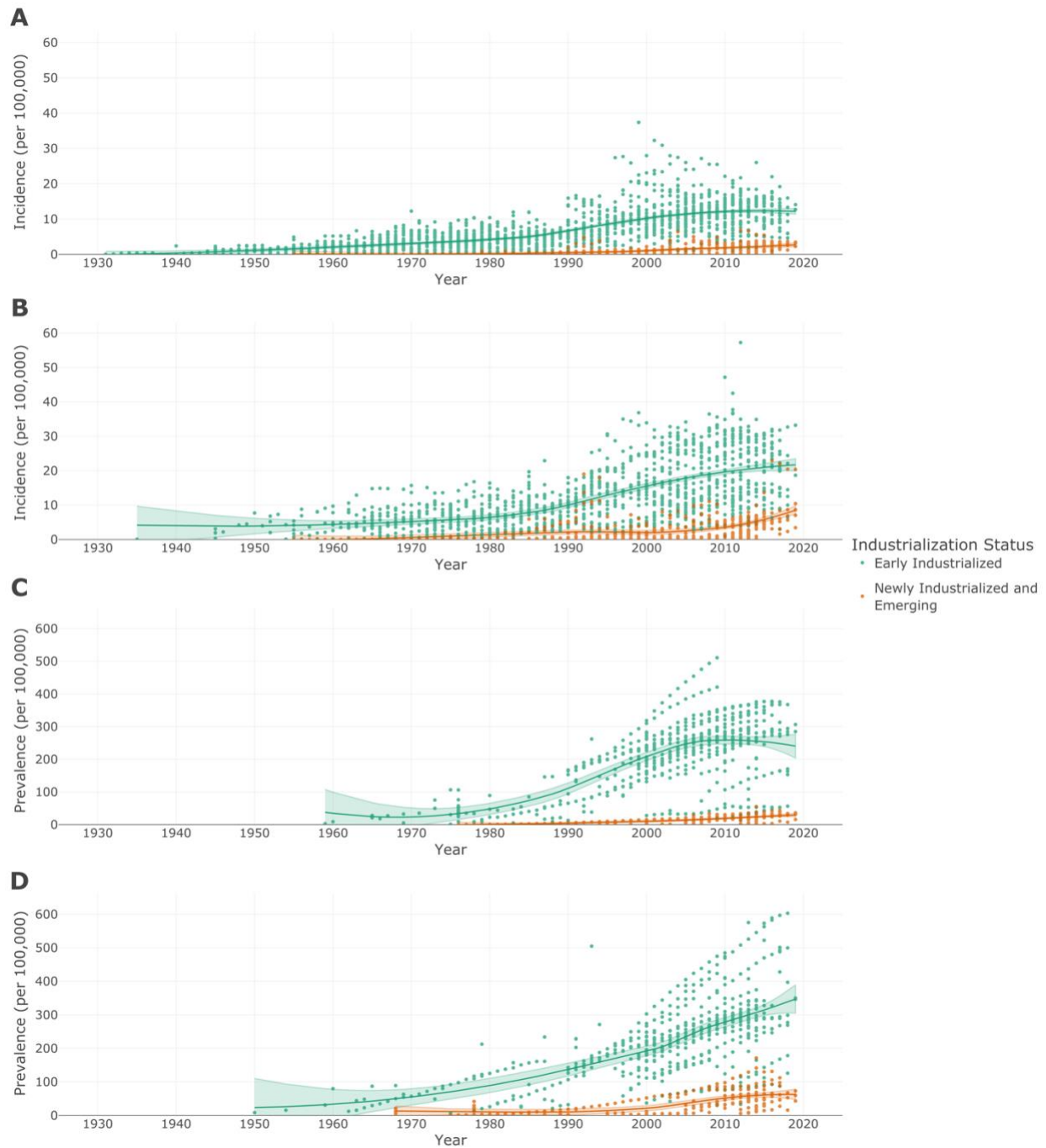
Supplementary Figure 14: Colombia

Incidence and prevalence trends of Crohn's disease and ulcerative colitis across time in Colombia.



Supplementary Figure 15: Industrialization scatterplots for training classifier

Labelled data based on industrialization status used to train the random forest classifier model:
A. Crohn's disease incidence, **B.** ulcerative colitis incidence, **C.** Crohn's disease prevalence, and **D.** ulcerative colitis prevalence. Only data from the countries listed below were used to train the model.



Early industrialized regions:

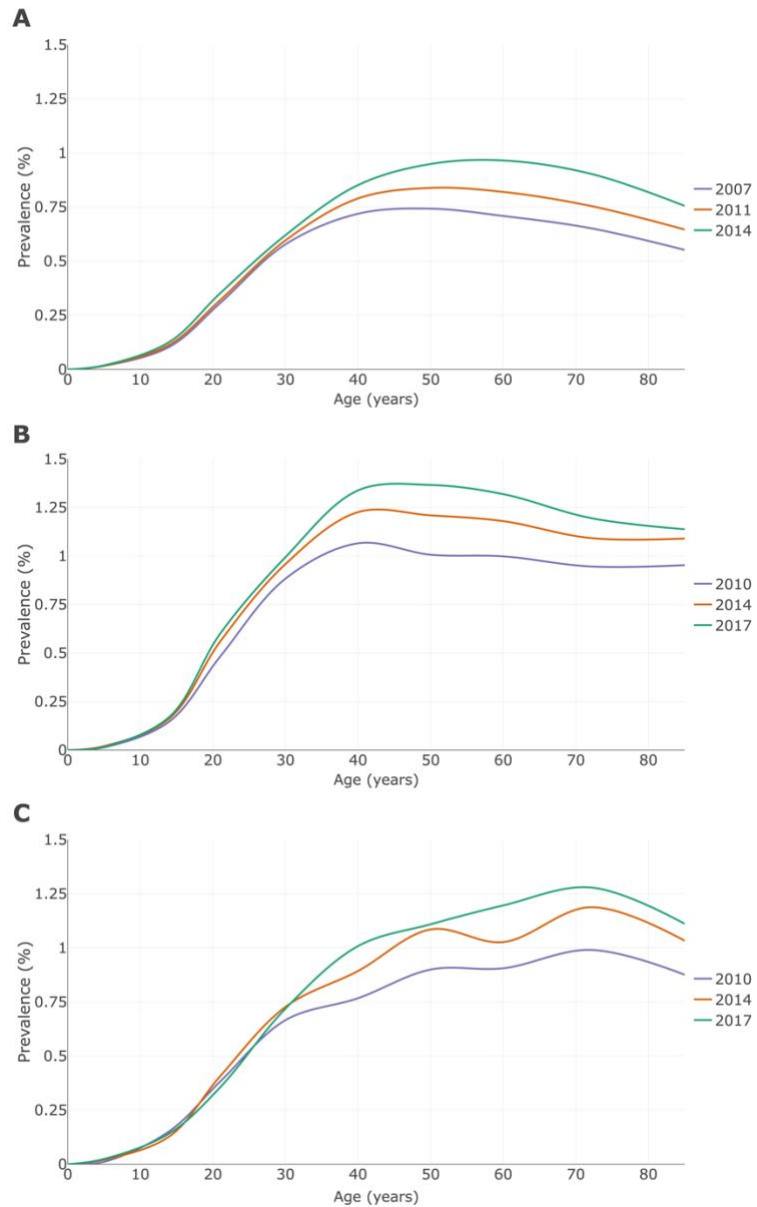
Australia, Austria, Belgium, Canada, Catalonia, Denmark, England, Faroe Islands, Finland, France, Germany, Iceland, Italy, Netherlands, New Zealand, Northern Ireland, Norway, Poland, Portugal, San Marino, Scotland, Spain, Sweden, Switzerland, United Kingdom, United States, Wales

Newly industrialized and emerging regions:

Bosnia and Herzegovina, Brazil, China, Czech Republic, Estonia, Greece, Hong Kong, Japan, Lithuania, Malaysia, Romania, Russia, Serbia, Singapore, Slovakia, South Korea

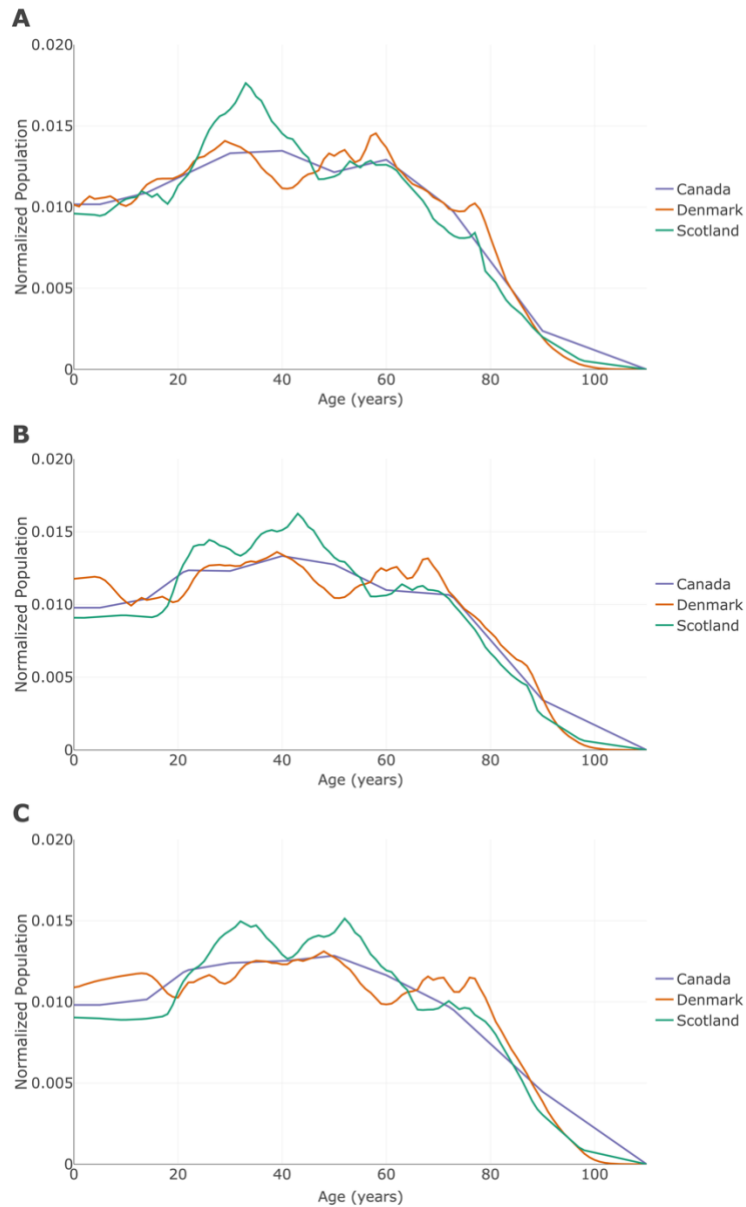
Supplementary Figure 16: Age-structured prevalence over time

Age-structured prevalence for IBD in Canada for the years 2007, 2011, and 2014³⁴⁹ (panel A), in Denmark for the years 2010, 2014, and 2017 (panel B), and in Scotland (Lothian health region) for the years 2010, 2014, and 2017 (panel C). Since the data were divided into a small number of age bins, cubic-spline interpolation was used to calculate values for other ages.



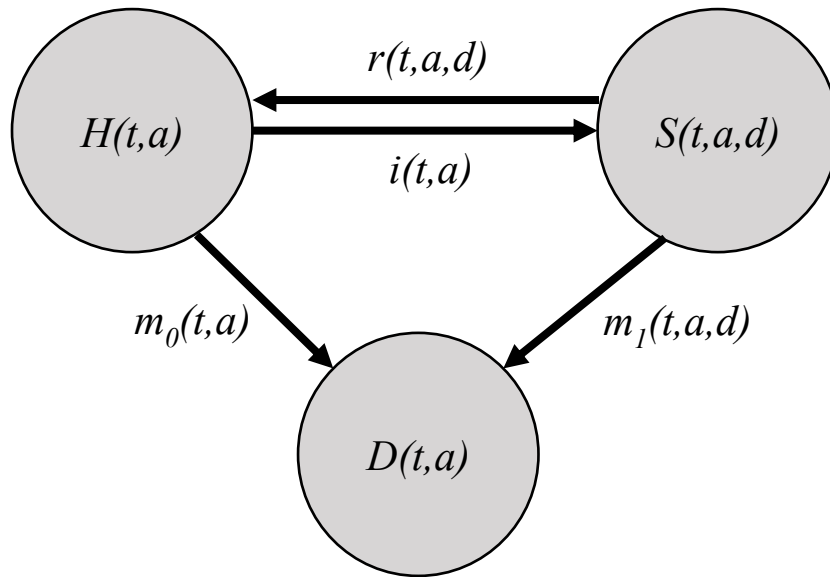
Supplementary Figure 17: Population age-structure

Projected population age-structure of Canada, Denmark, and Scotland for the years 2024 (panel A) and 2034 (panel B), and 2043 (panel C). Due to varying age bins used by the statistics offices of the three countries, populations have been normalized such that the area under the curve is equal to one.



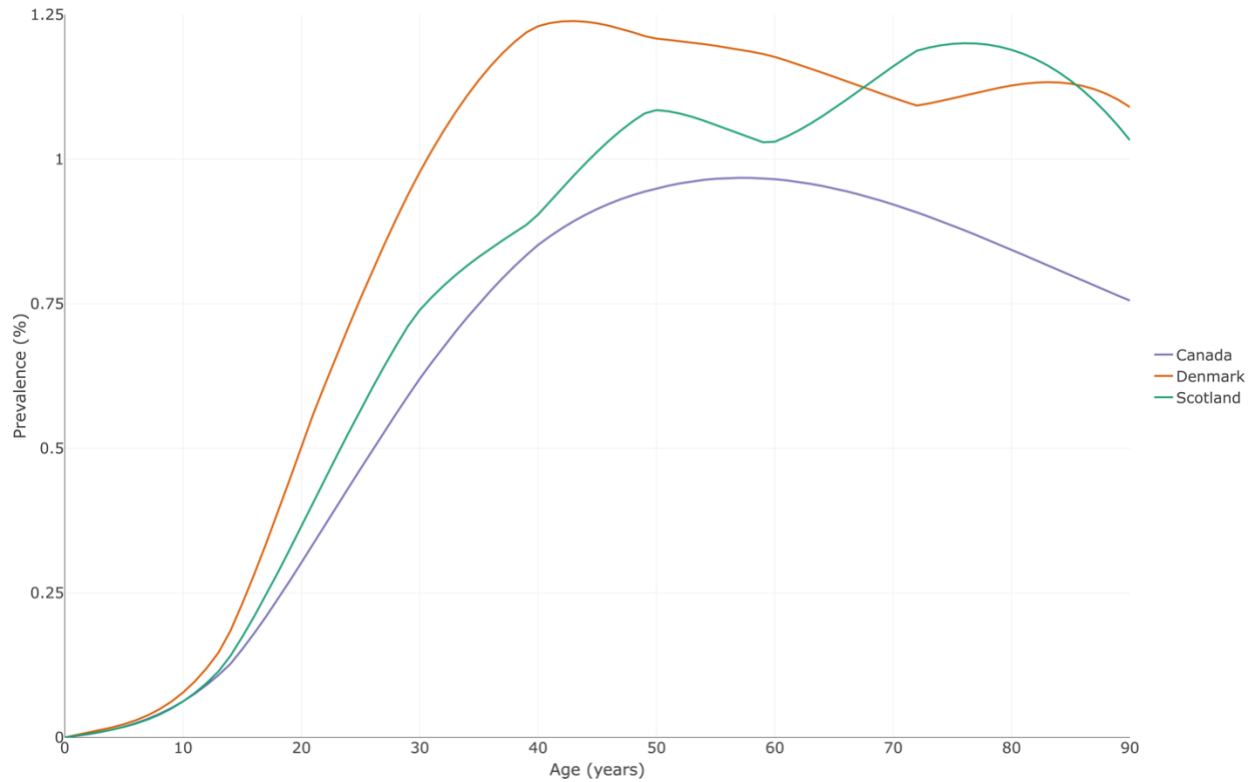
Supplementary Figure 18: Compartment model

Compartment model with three states: healthy H , diseased S , and dead D ; i = incidence; r = remission, and m_0 = mortality rates depend on age a and time t , whereas m_1 = mortality rate is dependent on age, time, and possibly duration of disease d .



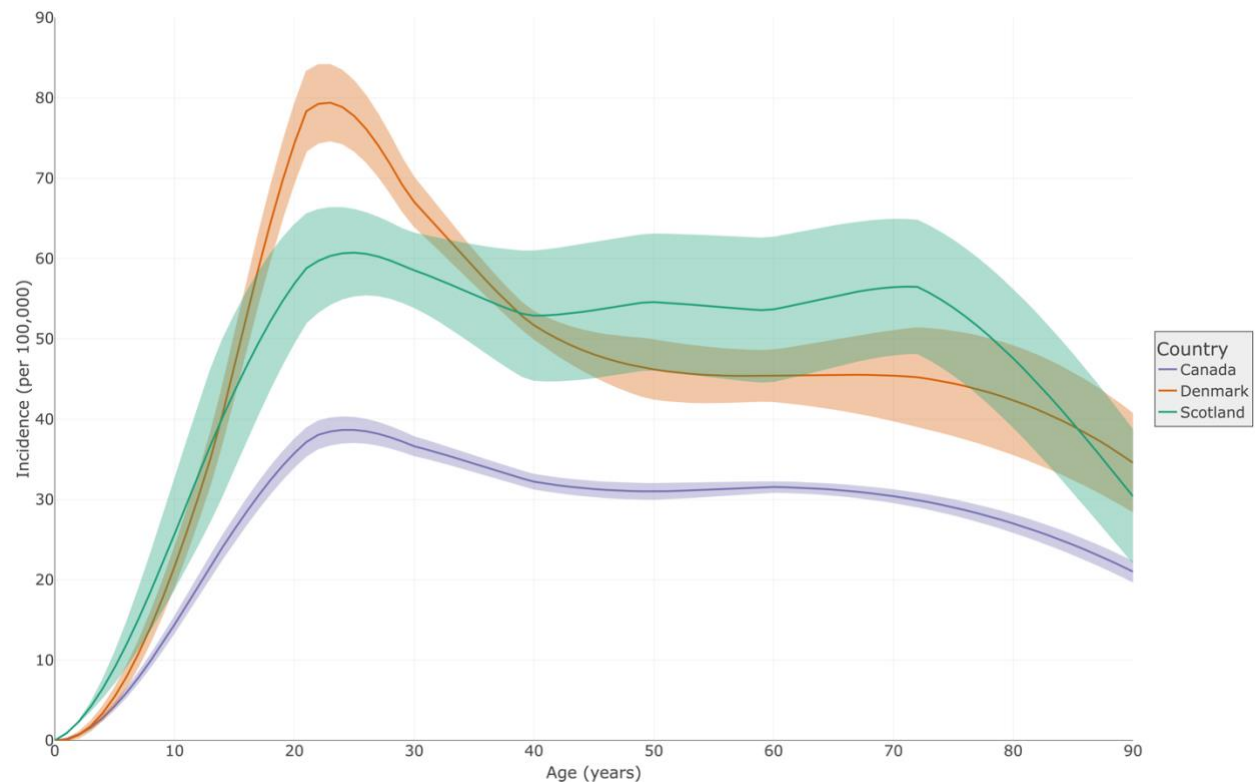
Supplementary Figure 19: Age-structured prevalence

Age-structured prevalence for IBD in Canada, Denmark, and Scotland for the year 2014. The prevalence in Canada as a function of age is uniformly below that of Scotland, while Denmark has a higher prevalence than Scotland for all ages below 65.



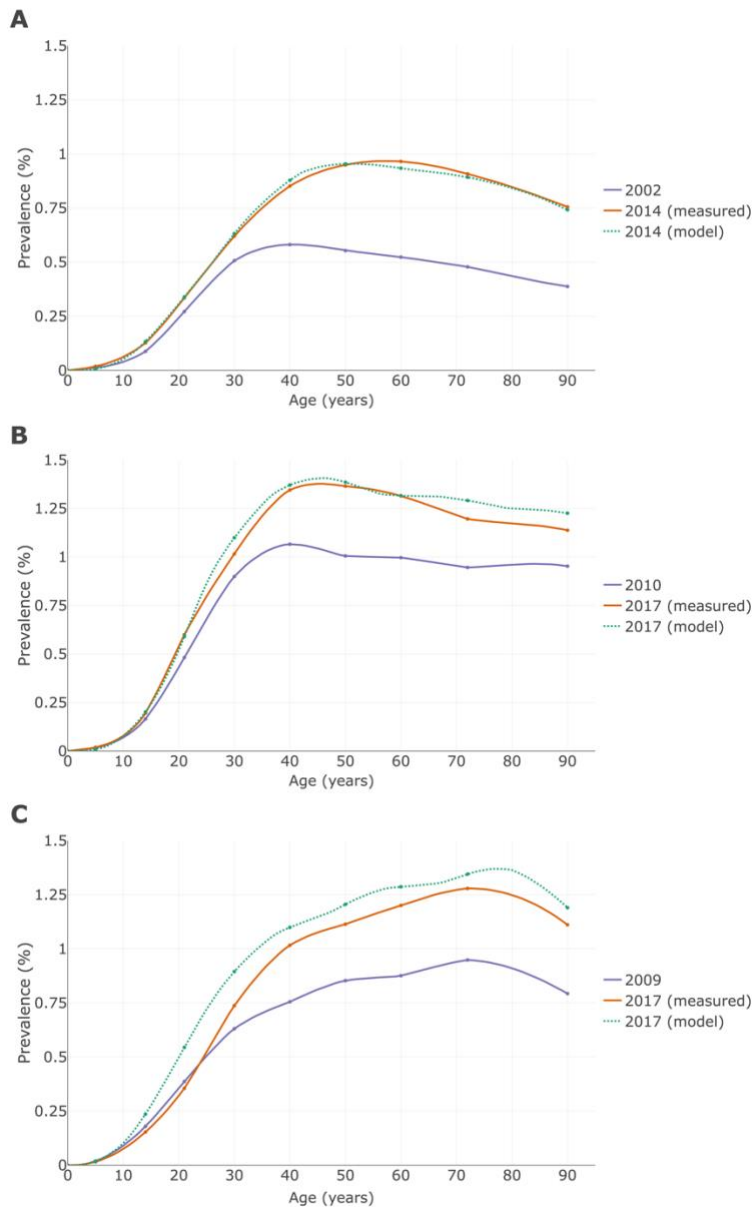
Supplementary Figure 20: Age-structured incidence

Average incidence by age per 100,000 and 95% confidence intervals for IBD in Canada, Denmark, and Scotland. For the Canadian data, the years 2007–2014 have been used, while both Danish and Scottish data are for the years 2010–2017. The area under the curve is similar for Denmark and Scotland, although the age structure of the incidence rate varies considerably between the two. On average, the Danish and Scottish rates are approximately 50% greater than the Canadian rate.



Supplementary Figure 21: PDE model verification

Comparison of measured and modelled IBD prevalence in Canada (panel A), Denmark (panel B), and Scotland (panel C). For Canada, the measured prevalence of IBD in 2014 is compared to the modelled prevalence in 2014. For Denmark and Scotland, the measured prevalence of IBD in 2017 is compared to the modelled prevalence in 2017. The dots on all three plots correspond to the mid-point of the data bins. The integrated prevalences (i.e., multiplied by age-structured population distribution in 2014 and integrated over age) are very similar: 0.64% from the data and 0.64% from the model for Canada, 0.95% from the data and 0.99% from the model for Denmark, and 0.80% from the data and 0.90% from the model for Scotland.



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