

## Appendix A

Table – Disease groups used in the study

Group number	Group name	Broad group name
1	Malignant neoplasms of lip, oral cavity and pharynx	cancer
2	Malignant neoplasm of oesophagus	cancer
3	Malignant neoplasm of stomach	cancer
4	Malignant neoplasm of small intestine, colon, rectosigmoid junction, rectum, anus and anal canal	cancer
5	Malignant neoplasm of liver and intrahepatic bile ducts	cancer
6	Malignant neoplasm of gallbladder	cancer
7	Malignant neoplasm of pancreas	cancer
8	Malignant neoplasm of respiratory and intrathoracic organs	cancer
9	Malignant neoplasm of bone and articular cartilage	cancer
10	Melanoma and other malignant neoplasms of skin	cancer
11	Malignant neoplasms of mesothelial and soft tissue	cancer
12	Malignant neoplasm of breast	cancer
13	Malignant neoplasms of vulva, vagina, cervix uteri, corpus uteri and parts of uterus	cancer
14	Malignant neoplasms of ovary and placenta	cancer
15	Malignant neoplasms of penis, prostate, testis and other male genital organs	cancer
16	Malignant neoplasm of kidney, renal pelvis and ureter	cancer
17	Malignant neoplasm of bladder	cancer
18	Malignant neoplasms of eye and adnexa, meninges, brain, spinal cord, cranial nerves and other parts of central nervous system	cancer
19	Malignant neoplasms of thyroid gland, adrenal gland, and other endocrine glands	cancer
20	Hodgkin's disease	cancer
21	Non-Hodgkin's lymphoma	cancer
22	Malignant immunoproliferative diseases, multiple myeloma and malignant plasma cell neoplasms	cancer
23	Leukaemia	cancer
24	In situ neoplasms	cancer
25	Benign neoplasms	cancer
26	Acute rheumatic fever and chronic rheumatic heart diseases	circulatory diseases
27	Hypertensive diseases	circulatory diseases
28	Ischaemic heart diseases	circulatory diseases
29	Pulmonary heart disease and diseases of pulmonary circulation	circulatory diseases
30	Pericarditis	circulatory diseases
31	Endocarditis and myocarditis and cardiomyopathy	circulatory diseases
32	Cardiac arrhythmias and heart failure	circulatory diseases
33	Cerebrovascular diseases	circulatory diseases
34	Diseases of arteries, arterioles and capillaries	circulatory diseases
35	Diseases of veins, lymphatic vessels and lymph nodes, not elsewhere classified	circulatory diseases
36	Organic, including symptomatic, mental disorders and Alzheimer disease. Systemic atrophies.	mental diseases
37	Mental and behavioural disorders due to use of alcohol and other substances	mental diseases
38	Schizophrenia, schizotypal and delusional disorders	mental diseases
39	Mood (affective) disorders	mental diseases
40	Neurotic, stress-related and somatoform disorders	mental diseases
41	Disorders of adult personality and behaviour	mental diseases
42	Mental retardation. Disorders of psychological development, behavioral and emotional disorders	mental diseases
43	Inflammatory diseases of the central nervous system	nervous diseases
44	Demyelinating diseases of the central nervous system	nervous diseases
45	Epilepsy	nervous diseases
46	Migraine and other headache syndromes	nervous diseases
47	Sleep disorders	nervous diseases

48	Nerve, nerve root and plexus disorders, polyneuropathies and myoneuropathies	nervous diseases
49	Diseases of oesophagus, stomach and duodenum	digestive diseases
50	Diseases of appendix	digestive diseases
51	Hernia	digestive diseases
52	Inflammatory bowel disease and other diseases of intestines	digestive diseases
53	Diseases of peritoneum	digestive diseases
54	Diseases of liver	digestive diseases
55	Diseases of gallbladder, biliary tract and pancreas	digestive diseases
56	Infectious arthropathies	musculoskeletal diseases
57	Rheumatoid and juvenile arthritis. Gout	musculoskeletal diseases
58	Arthrosis and systemic connective tissue disorders	musculoskeletal diseases
59	Deforming dorsopathies, osteopathies and chondropathies. Disorders of muscles	musculoskeletal diseases
60	Glomerular diseases and renal tubulo-interstitial diseases. Renal failure	urinary diseases
61	Urolithiasis	urinary diseases
62	Other diseases of the urinary system	urinary diseases
63	Diseases of male genital organs	urinary diseases
64	Diseases of female pelvic organs	urinary diseases
65	Diseases of upper respiratory tract	respiratory diseases
66	Pneumonia, other acute lower respiratory infections and diseases of pleura	respiratory diseases
67	Chronic obstructive pulmonary disease and chronic bronchitis	respiratory diseases
68	Asthma	respiratory diseases
69	Diabetes mellitus	metabolic diseases
70	Disorders of thyroid gland	metabolic diseases
71	Disorders of other endocrine glands	metabolic diseases
72	Obesity and other hyperalimentation, metabolic disorders	metabolic diseases
73	Nutritional anaemias	diseases of bloodforming organs
74	Haemolytic anaemias	diseases of bloodforming organs
75	Coagulation defects, purpura and other haemorrhagic conditions	diseases of bloodforming organs
76	Disorders of eyelid, lacrimal system and orbit, conjunctiva, sclera, cornea, iris, ciliary body, choroid and retina.	diseases of sense organs
77	Cataract, disorders of lens	diseases of sense organs
78	Glaucoma	diseases of sense organs
79	Disorders of globe, optical nerve and visual pathways, ocular muscles, accommodation and refraction, and blindness	diseases of sense organs
80	Diseases of external and middle ear	diseases of sense organs
81	Diseases of inner ear	diseases of sense organs
82	Infections of the skin	diseases of skin
83	Bullous disorders, dermatitis and eczema, urticaria and erythema	diseases of skin
84	Intestinal infectious diseases	infectious and parasitic diseases
85	Tuberculosis	infectious and parasitic diseases
86	Bacterial diseases. Erysipelas. Meningitis	infectious and parasitic diseases
87	Sexually transmitted diseases	infectious and parasitic diseases
88	Viral infections	infectious and parasitic diseases
89	Viral hepatitis	infectious and parasitic diseases
90	HIV	infectious and parasitic diseases
91	Protozoal diseases	infectious and parasitic diseases

## Appendix B

Table – Results of the t-test on non-linear pre-trends in responses of ihs family income to a health shock by a disease group ( $\beta_2$  is unrelated to future outcomes)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
event-year -2	0.0252	-0.00457	-0.00806	0.00466	0.04412	-0.05514	-0.0017	-0.00078	0.01786	-0.00419	-0.01174	-0.00752**	-0.01042	0.00061	-0.00094
	-0.02265	-0.02328	-0.02442	-0.00794	-0.03441	-0.0747	-0.021	-0.01267	-0.0214	-0.01027	-0.0222	-0.00374	-0.00824	-0.00648	-0.00766
event-year 0	0.08399***	-0.02042	0.05932**	0.02060**	0.05260*	0.02646	-0.00703	0.02828*	-0.04282	0.04087***	0.04394***	0.03341***	0.03896***	0.03058***	0.04017***
	-0.02097	-0.06145	-0.02309	-0.00983	-0.03164	-0.02125	-0.0311	-0.01586	-0.05046	-0.01098	-0.01452	-0.00394	-0.00793	-0.00997	-0.01032
event-year 1	0.05492**	-0.01758	0.08362***	0.04821***	0.10414***	-0.00509	0.02942	0.08297***	-0.05395	0.05763***	0.05739***	0.06014***	0.05256***	0.04018***	0.08219***
	-0.02772	-0.0518	-0.02045	-0.0105	-0.03624	-0.02663	-0.02903	-0.01392	-0.05707	-0.01583	-0.01549	-0.00433	-0.00836	-0.01199	-0.01025
event-year -2 x treated	0.00149	-0.00263	0.00551	-0.00914	-0.04147	0.06291	-0.02875	0.00648	0.01833	-0.00294	0.02506	0.00164	0.01517	-0.00773	-0.00267
	-0.03327	-0.02915	-0.02818	-0.01171	-0.03809	-0.07601	-0.03315	-0.01811	-0.04112	-0.01389	-0.03197	-0.00495	-0.01068	-0.01171	-0.01158
event-year 0 x treated	-0.73653***	-3.31909***	-4.03894***	-1.26400***	-8.04393***	-6.63848***	-6.67887***	-4.14736***	-1.43776**	-6.10393***	-1.10626***	-0.17274***	-0.29028***	-0.73759***	-0.33897***
	-0.08846	-0.32452	-0.18601	-0.0519	-0.42741	-0.47606	-0.23049	-0.10469	-0.60996	-0.05394	-0.17181	-0.01148	-0.02879	-0.06042	-0.03723
event-year 1 x treated	-1.55349***	-8.00268***	-5.86686***	-2.16355***	-9.31445***	-9.91839***	-	-6.67137***	-2.87579***	-0.95737***	-1.92576***	-0.39720***	-0.73547***	-1.85194***	-0.72338***
	-0.12654	-0.46035	-0.25124	-0.0658	-0.7976	-0.72999	-0.34758	-0.14291	-0.81273	-0.06578	-0.22616	-0.01582	-0.0429	-0.09103	-0.05041
Constant	13.04808**	13.07371**	13.14901**	13.20873**	13.10995**	13.00971**	13.16590***	13.06175**	13.06472**	13.17992**	13.24386**	13.23581**	13.10761**	13.15437**	13.37691***
	-0.01731	-0.05097	-0.0284	-0.0089	-0.05781	-0.06578	-0.03157	-0.01604	-0.1086	-0.00956	-0.03009	-0.00226	-0.00578	-0.01152	-0.00679
Observations	12,998	3,097	10,346	59,328	2,064	1,721	7,885	33,405	494	28,732	4,693	217,867	52,720	26,061	38,471
R-squared	0.06535	0.42037	0.31669	0.10656	0.58853	0.55069	0.53798	0.34992	0.15892	0.04114	0.09364	0.01253	0.03041	0.0943	0.02619
Number of experimental IDs	2,656	643	2,177	12,121	448	370	1,695	7,012	102	5,871	962	43,888	10,668	5,294	7,792
<i>t-test: event-year -2 x treated</i>	0.964	0.928	0.845	0.435	0.277	0.408	0.386	0.721	0.657	0.832	0.433	0.74	0.156	0.509	0.818
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
event-year -2	0.0028	-0.0177	0.00574	0.02863	0.01068	-0.02584**	-0.05437	-0.00504	0.005	-0.00392*	0.00747	-0.00301	-0.00068	0.00827	-0.02188
	-0.01266	-0.01509	-0.01246	-0.01774	-0.0154	-0.0121	-0.04058	-0.01912	-0.00475	-0.00214	-0.01238	-0.00644	-0.00296	-0.00761	-0.01506
event-year 0	0.02918	0.07541***	0.05296***	0.04394**	-0.01103	0.02017	0.04064	0.06342***	0.05022***	0.03773***	-0.0593	0.01964**	0.04144***	0.04745***	-0.00556
	-0.0195	-0.01599	-0.01955	-0.02041	-0.02573	-0.0171	-0.0265	-0.0138	-0.00549	-0.00237	-0.05424	-0.00797	-0.00334	-0.01044	-0.01717
event-year 1	0.07004***	0.08437***	0.06667***	0.06520***	-0.0023	0.0275	0.07588**	0.05321***	0.05842***	0.05856***	0.01553	0.04613***	0.06009***	0.06725***	-0.00176
	-0.01615	-0.02057	-0.02022	-0.02223	-0.03401	-0.02384	-0.03254	-0.01922	-0.00661	-0.00252	-0.04128	-0.00844	-0.00377	-0.01266	-0.02053
event-year -2 x treated	-0.00207	0.03554*	0.01636	-0.02085	-0.01458	0.03239	0.04342	0.03373	0.01215*	0.00816***	-0.04873	-0.0052	0.00409	-0.00781	0.00465
	-0.02154	-0.01857	-0.01937	-0.01952	-0.02182	-0.02186	-0.04468	-0.02372	-0.00641	-0.00287	-0.05695	-0.00895	-0.0041	-0.0143	-0.02294
event-year 0 x treated	-1.77790***	-0.42553***	-2.21334***	-0.33604***	-0.20258	-0.92105***	-0.81948***	-1.79161***	-0.65461***	-0.202094***	-0.16125	-0.04866***	-0.42319***	-0.49801***	-0.15942***
	-0.11855	-0.05379	-0.14065	-0.08764	-0.16809	-0.09155	-0.15664	-0.14127	-0.02524	-0.00395	-0.11948	-0.01376	-0.01123	-0.0452	-0.04738
event-year 1 x treated	-2.43359***	-0.77475***	-4.45151***	-0.27593***	-0.46965*	-1.63167***	-1.62889***	-3.04825***	-0.93350***	-0.02101***	-0.14599	-0.06880***	-0.18494***	-0.25111***	-0.13468***
	-0.13889	-0.07013	-0.19892	-0.07783	-0.24366	-0.11965	-0.21556	-0.18643	-0.02933	-0.0041	-0.09656	-0.01452	-0.00752	-0.03128	-0.04706
Constant	13.17702**	13.14284**	13.23309**	13.21867**	13.19133**	13.18661**	13.22988***	13.21094**	13.16925**	13.22345**	12.93736**	13.09696**	13.13281**	13.20430**	13.25322***
	-0.01908	-0.00993	-0.02387	-0.01422	-0.03221	-0.01607	-0.02824	-0.02387	-0.00434	-0.00079	-0.01937	-0.00268	-0.00171	-0.00674	-0.00816
Observations	14,673	21,378	12,248	5,603	1,106	14,229	4,576	9,931	135,735	536,388	3,200	103,021	502,948	34,342	15,413
R-squared	0.12975	0.028	0.22847	0.01434	0.02239	0.07878	0.07242	0.15935	0.04227	0.00212	0.00592	0.00058	0.01424	0.01833	0.00419
Number of experimental IDs	3,019	4,346	2,541	1,144	228	2,910	935	2,044	27,581	108,025	658	20,854	101,801	6,986	3,129
<i>t-test: event-year -2 x treated</i>	0.924	0.0557	0.398	0.286	0.505	0.138	0.331	0.155	0.0581	0.00454	0.392	0.561	0.318	0.585	0.839
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
event-year -2	-0.00411	0.00003	0.00104	0.01056	-0.002	0.01003	-0.0089	-0.00476	-0.00136	-0.01328	0.09709***	0.0384	0.02739	0.01003	-0.03824**
	-0.01129	-0.00452	-0.00415	-0.00957	-0.00333	-0.01689	-0.00758	-0.00935	-0.00723	-0.0084	-0.03642	-0.04038	-0.01989	-0.00938	-0.01568
event-year 0	0.05357***	0.04755***	0.03659***	0.04812***	0.03706***	0.01002	-0.00712	-0.01386	0.02544***	0.01136	0.00185	0.03608	0.06756***	0.01886*	0.00764
	-0.01115	-0.0049	-0.00517	-0.01122	-0.00356	-0.01738	-0.00874	-0.01284	-0.008	-0.00911	-0.05777	-0.06319	-0.02555	-0.01054	-0.01111
event-year 1	0.07783***	0.07812***	0.06396***	0.07435***	0.05927***	0.00881	-0.02483**	0.0013	0.00396	0.02152**	-0.0411	0.04806	0.08585***	0.00605	0.02036
	-0.0122	-0.00556	-0.00556	-0.0124	-0.0038	-0.02161	-0.01025	-0.01522	-0.01084	-0.00996	-0.06458	-0.06263	-0.02641	-0.01923	-0.01402
event-year -2 x treated	-0.00524	0.00187	-0.00168	-0.00593	0.00388	-0.02269	0.01015	-0.00085	0.01208	0.01381	-0.09983	-0.11323	0.00777	0.00525	0.03183*
	-0.01495	-0.00615	-0.00589	-0.01266	-0.00435	-0.02227	-0.01102	-0.01373	-0.01028	-0.01174	-0.06317	-0.07336	-0.02785	-0.01454	-0.01824
event-year 0 x treated	-0.41423***	-0.23580***	-1.05637***	-0.58417***	-0.07083***	-0.49904***	-0.13915***	-0.09244***	-0.21783***	-0.17994***	-0.16068	-0.19997*	-0.51168***	-0.05979*	-0.24142***

	-0.03652	-0.01379	-0.02386	-0.04047	-0.00719	-0.0665	-0.01618	-0.02414	-0.01965	-0.01872	-0.10218	-0.11676	-0.08653	-0.03303	-0.03514	
event-year 1 x treated	-0.24799***	-0.15133***	-0.36842***	-0.28503***	-0.07005***	-0.64386***	-0.12450***	-0.02021	-0.11068***	-0.13544***	-0.0444	-0.11147	-0.34079***	-0.02618	-0.25963***	
	-0.0287	-0.01112	-0.01264	-0.02598	-0.00689	-0.07431	-0.01709	-0.0239	-0.01729	-0.01652	-0.09975	-0.10926	-0.06861	-0.03362	-0.03658	
Constant	13.16978**	13.21002**	13.14763**	13.03875**	13.10451**	13.08650**	12.66890***	12.53469**	13.05938**	12.98482**	12.49749**	12.37911**	13.16485**	13.15320**	12.94399***	
	-0.0058	-0.00227	-0.00332	-0.0061	-0.00134	-0.01133	-0.00321	-0.00457	-0.00342	-0.00342	-0.02061	-0.02252	-0.01382	-0.00619	-0.00632	
Observations	44,487	203,803	239,628	51,165	287,771	17,836	180,418	63,253	94,061	89,486	5,287	3,098	10,188	13,561	27,324	
R-squared	0.01246	0.0056	0.05439	0.02267	0.00137	0.02613	0.00253	0.00119	0.00529	0.00451	0.00273	0.00274	0.01748	0.00078	0.01089	
Number of experimental IDs	9,024	41,242	48,744	10,409	58,425	3,639	36,730	12,940	19,083	18,265	1,104	636	2,078	2,771	5,594	
<i>t-test: event-year -2 x treated</i>	0.726	0.761	0.775	0.639	0.373	0.309	0.357	0.951	0.24	0.24	0.114	0.123	0.78	0.718	0.081	
	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	
event-year -2	0.01698**	-0.00158	0.00442	-0.00936*	-0.0049	0.0034	0.00835**	-0.02189	-0.0022	0.00289	-0.0073	-0.0048	-0.00548	-0.00202	0.00343	
	-0.00663	-0.01281	-0.00666	-0.00502	-0.00527	-0.00349	-0.00382	-0.02852	-0.01252	-0.00282	-0.01626	-0.00476	-0.00423	-0.00277	-0.00704	
event-year 0	0.03869***	0.09472***	0.02447**	0.03037***	0.03781***	0.04228***	0.05103***	0.06013***	-0.02093	0.04212***	0.05294***	0.02794***	0.04452***	0.04226***	0.04335***	
	-0.00746	-0.01383	-0.00965	-0.0052	-0.00602	-0.00382	-0.00447	-0.0177	-0.01705	-0.00329	-0.01189	-0.00481	-0.00477	-0.00306	-0.00835	
event-year 1	0.05797***	0.13231***	0.06074***	0.04897***	0.07762***	0.06394***	0.07255***	0.03912	-0.00713	0.06933***	0.07070***	0.03891***	0.08130***	0.06207***	0.04780***	
	-0.00873	-0.0147	-0.00902	-0.00585	-0.00641	-0.00444	-0.00523	-0.02683	-0.01875	-0.00357	-0.01655	-0.00522	-0.00496	-0.00352	-0.01097	
event-year -2 x treated	-0.01343	0.00253	-0.01032	0.01452**	0.00289	0.00256	-0.00268	0.04619	-0.00755	-0.00209	0.01285	0.00847	0.00515	0.00704*	0.01371	
	-0.0088	-0.01672	-0.01037	-0.00656	-0.00725	-0.0047	-0.00545	-0.03252	-0.01992	-0.00386	-0.02049	-0.00592	-0.00564	-0.00373	-0.00932	
event-year 0 x treated	-0.05307***	-0.05173**	-0.07745***	-0.07458***	-0.01715*	-0.02351***	-0.05795***	-0.31463***	-1.44466***	-0.07016***	-0.02525	-0.04019***	-0.03493***	-0.03316***	-0.12844***	
	-0.01469	-0.0218	-0.01872	-0.00997	-0.00914	-0.00638	-0.00822	-0.0973	-0.07516	-0.00652	-0.02652	-0.00842	-0.00855	-0.00511	-0.01895	
event-year 1 x treated	-0.05759***	-0.06335***	-0.10801***	-0.09378***	-0.02714***	-0.02846***	-0.05804***	-0.23102***	-0.78331***	-0.09279***	-0.02787	-0.03793***	-0.04800***	-0.04135***	-0.11591***	
	-0.01487	-0.02457	-0.01892	-0.0108	-0.00981	-0.0067	-0.00869	-0.08073	-0.05525	-0.00684	-0.03071	-0.00869	-0.00877	-0.00554	-0.02002	
Constant	13.15244**	13.28069**	13.10919**	13.05630**	13.21610**	13.09626**	13.17805***	13.20908**	12.99230**	13.18410**	13.22180**	13.11613**	13.23406**	13.18220**	13.14490***	
	-0.0029	-0.0048	-0.00345	-0.00195	-0.00189	-0.00132	-0.00165	-0.01532	-0.011	-0.00126	-0.00569	-0.0166	-0.00165	-0.00107	-0.00356	
Observations	75,929	31,834	59,322	206,881	157,152	265,276	250,891	4,700	31,888	411,905	17,837	121,618	157,521	466,556	71,363	
R-squared	0.0008	0.00531	0.00135	0.00109	0.00216	0.00171	0.00123	0.01128	0.07587	0.00131	0.00211	0.00087	0.0026	0.00133	0.00216	
Number of experimental IDs	15,418	6,419	12,075	41,929	31,796	53,767	50,666	962	6,559	83,057	3,620	24,581	31,807	94,240	14,503	
<i>t-test: event-year -2 x treated</i>	0.127	0.88	0.32	0.0269	0.691	0.586	0.623	0.156	0.705	0.588	0.531	0.153	0.361	0.059	0.141	
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	
event-year -2	0.00104	-0.0013	0.00491	0.00394	-0.00291	0.00111	-0.00067	0.00525	0.0009	0.0045	0.00313	-0.00788	0.00286	0.02061	0.01268	
	-0.00547	-0.00697	-0.00554	-0.00306	-0.00472	-0.00501	-0.0116	-0.00733	-0.00714	-0.00501	-0.02182	-0.01018	-0.01213	-0.02479	-0.01177	
event-year 0	0.04710***	0.04808***	0.03585***	0.05301***	0.04712***	0.03893***	0.03651***	0.02401***	0.05567***	0.03348***	0.03582**	0.04034***	0.02438	0.02708	0.01562	
	-0.00612	-0.00625	-0.00693	-0.00419	-0.00489	-0.00584	-0.01297	-0.00926	-0.00729	-0.00617	-0.01584	-0.00862	-0.01573	-0.02392	-0.02407	
event-year 1	0.07127***	0.06869***	0.05604***	0.09243***	0.06872***	0.05766***	0.03290**	0.04733***	0.05814***	0.05440***	0.06579***	0.04846***	0.04764**	0.04822	0.05688***	
	-0.00656	-0.00798	-0.0076	-0.00402	-0.0053	-0.00655	-0.01546	-0.01102	-0.00848	-0.00614	-0.01937	-0.01263	-0.01872	-0.02932	-0.01986	
event-year -2 x treated	0.00594	0.00347	0.00056	-0.00469	0.00687	0.00336	0.01738	-0.00478	0.01706*	-0.00051	-0.00349	0.00434	-0.01833	-0.03062	-0.0307	
	-0.00735	-0.0085	-0.00776	-0.00426	-0.0063	-0.00694	-0.01659	-0.00985	-0.00921	-0.00683	-0.02626	-0.01401	-0.01871	-0.03158	-0.02234	
event-year 0 x treated	-0.02587***	-0.04277***	-0.02289**	-0.01636***	-0.03175***	-0.25635***	-0.19146***	-0.10907***	-0.10300***	-0.03452***	-0.09942**	-0.10855***	-0.07855**	-0.32117***	-0.28926***	
	-0.0097	-0.01176	-0.01129	-0.00623	-0.00786	-0.01583	-0.03538	-0.02335	-0.01419	-0.0103	-0.04268	-0.02252	-0.03085	-0.0756	-0.06898	
event-year 1 x treated	-0.03628***	-0.03925***	-0.02806**	-0.02027***	-0.03457***	-0.25815***	-0.19311***	-0.10831***	-0.10479***	-0.02791***	-0.08987**	-0.09192***	-0.15171***	-0.40743***	-0.27761***	
	-0.01016	-0.01293	-0.01211	-0.00624	-0.0083	-0.01559	-0.03821	-0.0224	-0.01526	-0.01008	-0.03798	-0.02238	-0.04041	-0.08533	-0.05902	
Constant	13.15881**	13.27093**	13.14053**	13.31108**	13.19818**	13.11506**	12.93727***	13.03011**	12.97382**	13.17009**	13.13482**	13.12606**	13.01476**	13.05987**	13.14755***	
	-0.00203	-0.00239	-0.00232	-0.00127	-0.00163	-0.00277	-0.00652	-0.00411	-0.00283	-0.00206	-0.00782	-0.00422	-0.00621	-0.01346	-0.01092	
Observations	147,713	82,259	101,713	222,832	178,285	178,166	27,068	43,132	119,552	92,183	13,127	40,420	23,436	9,730	9,032	
R-squared	0.0016	0.0018	0.00105	0.00579	0.00189	0.00719	0.00502	0.00207	0.0014	0.00147	0.00151	0.00157	0.00164	0.01176	0.01183	
Number of experimental IDs	29,952	16,620	20,595	44,790	36,078	36,124	5,518	8,800	24,307	18,727	2,676	8,221	4,766	1,991	1,845	
<i>t-test: event-year -2 x treated</i>	0.419	0.683	0.942	0.271	0.275	0.629	0.295	0.628	0.0641	0.94	0.894	0.757	0.327	0.322	0.17	
	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91
event-year -2	0.0044	0.01301	0.01915	0.02886**	0.00177	-0.01249*	0.00262	-0.00313	-0.0045	-0.0222	0.0122	0.0016	-0.02322*	0.02144	-0.04999	0.04265
	-0.00684	-0.01183	-0.01265	-0.01145	-0.00722	-0.00687	-0.01274	-0.00836	-0.00735	-0.04005	-0.00784	-0.01168	-0.01346	-0.02877	-0.07845	-0.06944
event-year 0	0.03172***	0.02856*	0.03277**	0.04644***	0.04353***	0.04966***	0.05881***	0.03358***	0.04175***	-0.09846*	0.03734***	0.02843	0.04752***	0.09667***	0.06379	-0.12957
	-0.00862	-0.0152	-0.01312	-0.01434	-0.0076	-0.00668	-0.01433	-0.00866	-0.00832	-0.0539	-0.0098	-0.01801	-0.0154	-0.03171	-0.04908	-0.11004
event-year 1	0.06877***	0.06790***	0.03835**	0.07793***	0.06540***	0.08006***	0.06542***	0.03654***	0.06823***	0.02271	0.05715***	0.03789**	0.08245***	0.14511***	0.45125	0.07057
	-0.00877	-0.01979	-0.01583	-0.01615	-0.00816	-0.00753	-0.01626	-0.01031	-0.00859	-0.0398	-0.01007	-0.0188	-0.01634	-0.03926	-0.41615	-0.09945

event-year -2 x treated	-0.01228	-0.01592	-0.01493	-0.02870*	0.00758	0.01261	0.01134	0.01271	-0.00073	0.0163	-0.00686	0.00907	0.01908	-0.01191	0.13496	0.08148
	-0.00937	-0.02098	-0.01484	-0.01545	-0.00916	-0.0085	-0.01681	-0.01084	-0.01083	-0.057	-0.01092	-0.01869	-0.01841	-0.03737	-0.1287	-0.11173
event-year 0 x treated	-0.0143	0.00826	-0.01705	-0.04581*	-0.02368*	-0.02446**	-0.07743***	-0.01691	-0.05975***	0.14229	-0.24942***	-0.04782*	-0.08837***	-0.15228***	-3.83711***	0.03577
	-0.01188	-0.02436	-0.01849	-0.02471	-0.01211	-0.01011	-0.02458	-0.01524	-0.01532	-0.10413	-0.02444	-0.02854	-0.02912	-0.05805	-1.18031	-0.17024
event-year 1 x treated	-0.03454***	-0.0379	-0.04832*	-0.05991**	-0.04290***	-0.03503***	-0.05885**	-0.01416	-0.03907***	-0.15167	-0.11249***	-0.09384***	-0.04614*	-0.14861**	-1.93687**	-0.0815
	-0.01274	-0.03357	-0.02743	-0.02706	-0.0134	-0.01096	-0.02676	-0.01672	-0.01457	-0.1301	-0.01859	-0.03308	-0.02614	-0.06001	-0.91285	-0.15736
Constant	13.18173**	12.95165**	13.05045**	13.15974**	13.12386**	13.25635**	13.03690***	13.05110**	13.21741**	12.82511**	13.10734**	13.07019**	13.20781**	12.86963**	12.38742**	12.99260**
	-0.00247	-0.00599	-0.00495	-0.00542	-0.00264	-0.00219	-0.00516	-0.00322	-0.00291	-0.02097	-0.00407	-0.00589	-0.00527	-0.01151	-0.16396	-0.0303
Observations	91,118	12,240	13,188	21,063	70,495	80,305	38,006	51,630	65,583	3,683	80,996	21,695	27,198	11,621	255	1,921
R-squared	0.00147	0.00206	0.00117	0.00157	0.00163	0.00369	0.00096	0.00072	0.00162	0.00264	0.00531	0.00097	0.00236	0.00217	0.23675	0.00433
Number of experimental IDs	18,458	2,484	2,690	4,294	14,354	16,250	7,747	10,525	13,336	760	16,432	4,451	5,541	2,388	54	402
<i>t-test: event-year -2 x treated</i>	0.19	0.448	0.314	0.0634	0.408	0.138	0.5	0.241	0.947	0.775	0.53	0.627	0.3	0.75	0.299	0.466

*Note:* Additionally to the terms reported in the table, models include (experimental) individual fixed effects. Event-years -3 and -1 are reference categories. Disease groups that were excluded from the estimation sample – as those that have not passed the test – are in bold. Standard errors clustered at a (experimental) individual level are in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

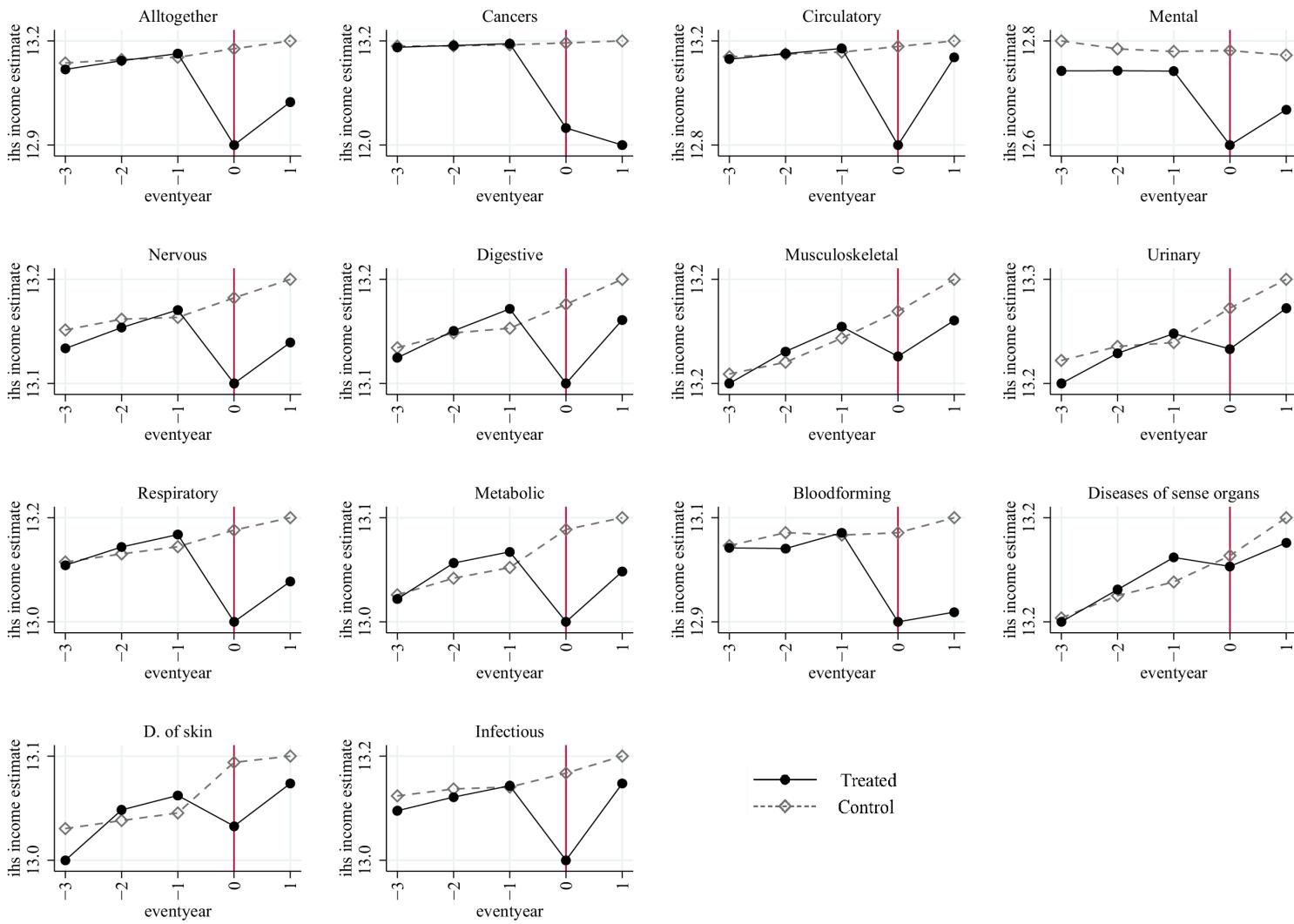


Figure B1 – Development of ihs family income by event years for treated and control groups (with  $\alpha_i$ ), both sexes

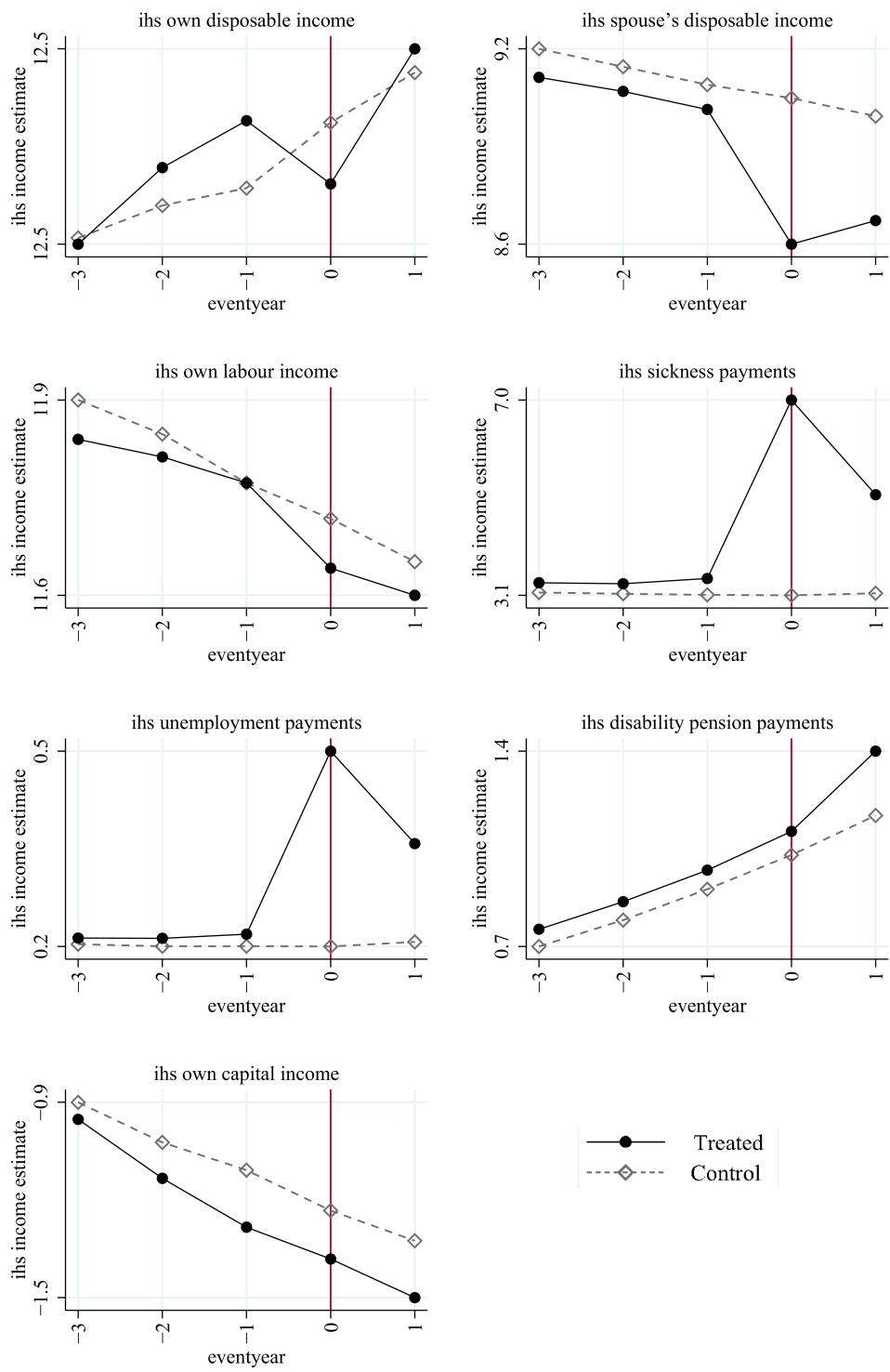


Figure B2 – Development of the sources of ihs family income by event years for treated and control groups (with  $\alpha_i$ ), both sexes

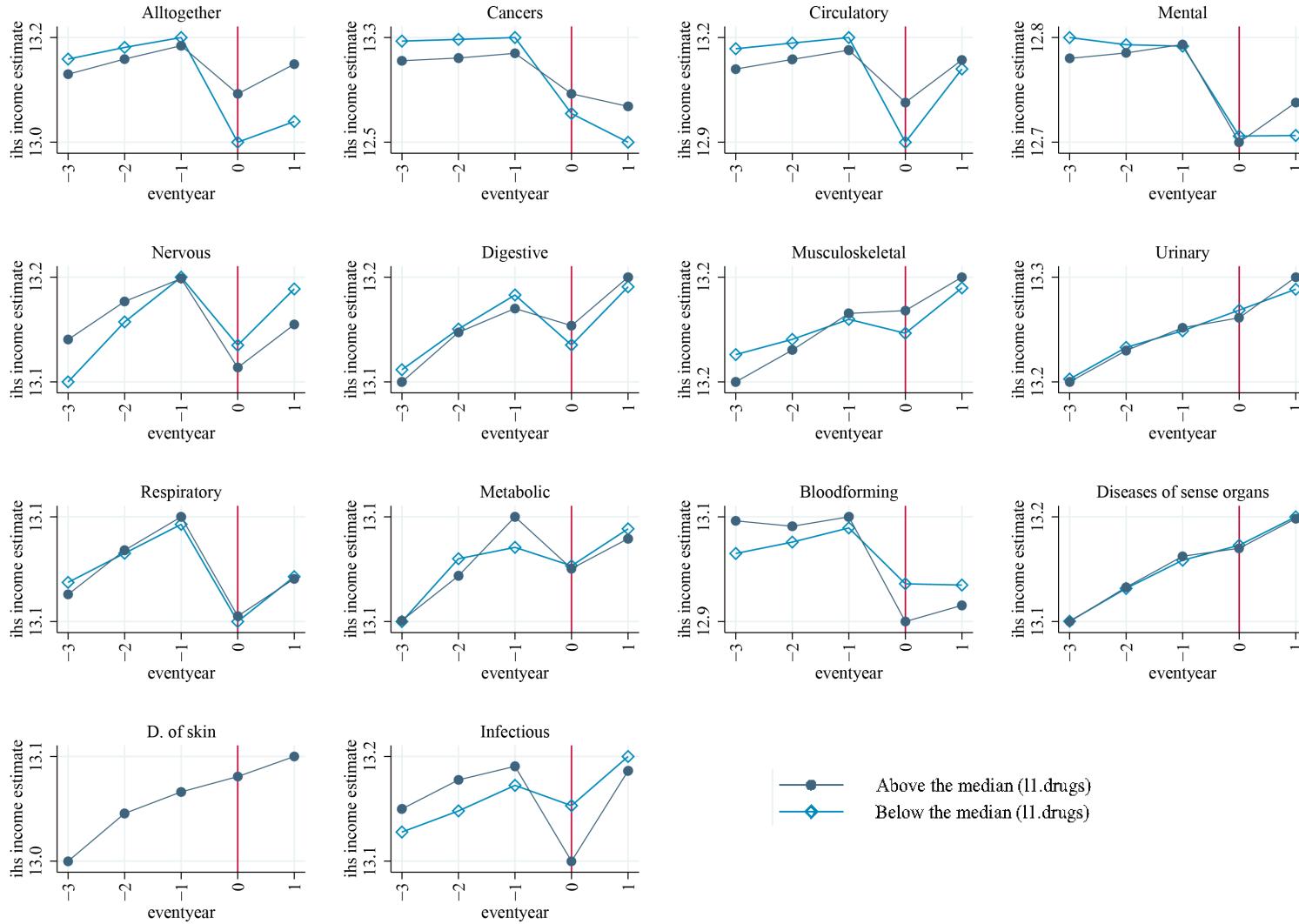


Figure B2 – Development of ihs family income by event years for groups by the level of l1.drugs (with  $\alpha_i$ ), both sexes

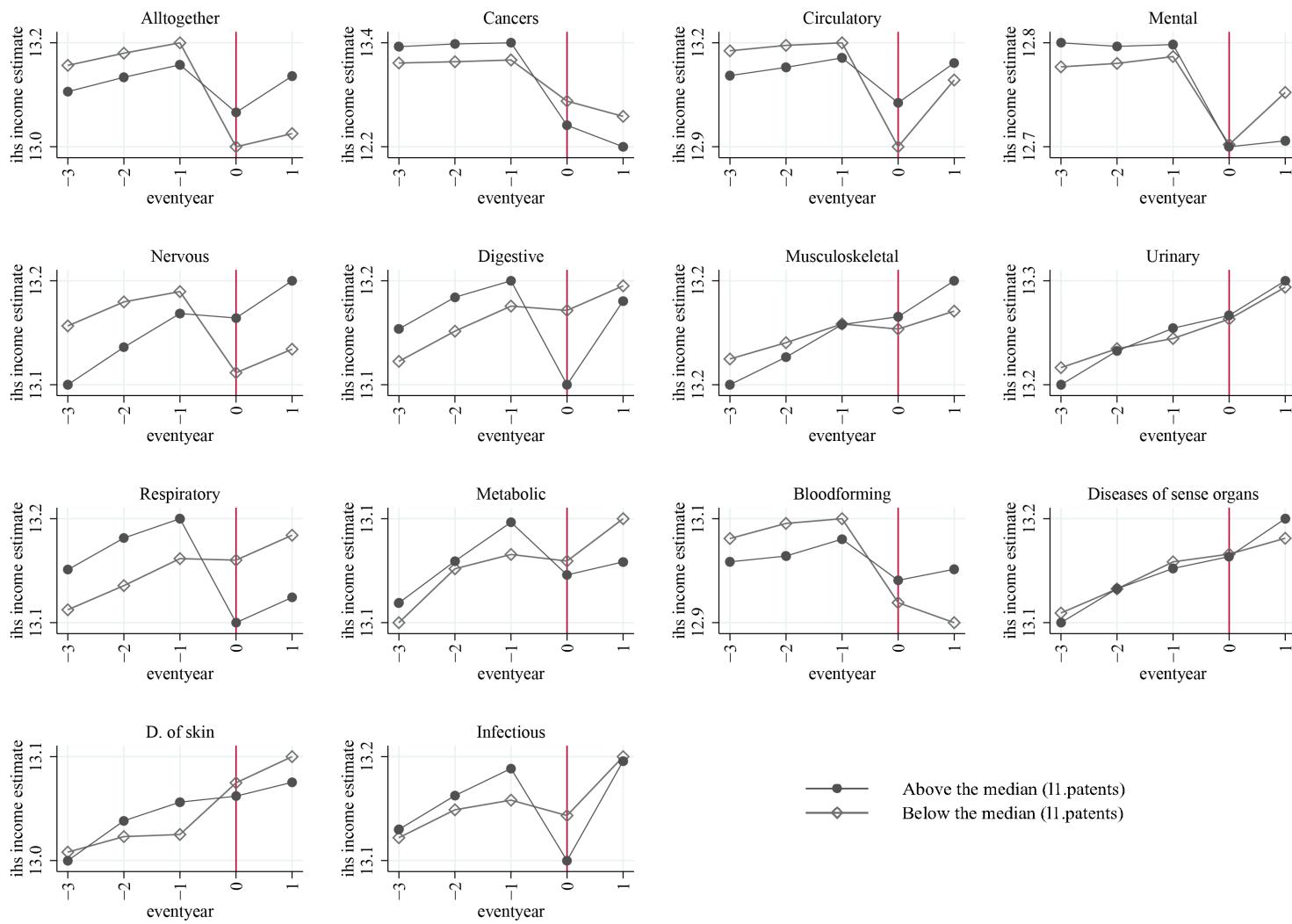


Figure B3 – Development of ihs family income by event years for groups by the level of 11.patents (with  $\alpha_i$ ), both sexes

## Appendix C

Table C1 – DDD estimates: Impact of medical innovations in 1981–2006 on the sources of ihs family income *for men* in ages 40–60 Sweden

	Ihs Own Disposable Income	Ihs Spouse's Disposable	Ihs Own Labour Income	Ihs Sickness Absence	Ihs Unemployment Benefits	Ihs Disability Pension	Ihs Own Capital Income							
post	0.04862*** (0.00289)	0.05603*** (0.00219)	-0.10280*** (0.00723)	-0.04087*** (0.00538)	-0.16652*** (0.00538)	-0.13085*** (0.00411)	-0.23665*** (0.00969)	-0.21289*** (0.00731)	0.00130 (0.00305)	0.00081 (0.00233)	0.20324*** (0.00376)	0.20076*** (0.00295)	-0.57490*** (0.01410)	-0.44402*** (0.01083)
post x l1.drugs	0.00011 (0.00016)	0.00294*** (0.00037)		0.00075*** (0.00029)		0.00204*** (0.00044)		0.00005 (0.00014)		0.00100*** (0.00018)		0.01288*** (0.00075)		
post x treated	-0.10646*** (0.00464)	-0.07705*** (0.00344)	-0.50652*** (0.01185)	-0.40986*** (0.00884)	-0.21009*** (0.00821)	-0.13554*** (0.01554)	2.92149*** (0.01200)	3.11660*** (0.00564)	0.38731*** (0.00439)	0.37413*** (0.00573)	0.09620*** (0.00452)	0.10682*** (0.01991)	0.05314*** (0.01528)	
post x treated x l1.drugs	0.00334*** (0.00023)	0.00693*** (0.00057)		0.00614*** (0.00042)		-0.00362*** (0.00074)		-0.00349*** (0.00025)		0.00030 (0.00028)		-0.00098 (0.00106)		
post x l1.patents		-0.00002*** (0.00000)		-0.00005*** (0.00001)		-0.00007*** (0.00001)		0.00003** (0.00001)		0.00000 (0.00000)		0.00006*** (0.00001)		0.00023*** (0.00002)
post x treated x l1.patents		0.00007*** (0.00001)		0.00004** (0.00002)		0.00007*** (0.00001)		-0.00076*** (0.00002)		-0.00013*** (0.00001)		-0.00002** (0.00001)		0.00002 (0.00003)
Constant	12.63420*** (0.00059)	12.63420*** (0.00059)	8.70217*** (0.00151)	8.70215*** (0.00151)	12.18627*** (0.00108)	12.18626*** (0.00108)	3.14804*** (0.00213)	3.14582*** (0.00212)	0.24087*** (0.00074)	0.24086*** (0.00074)	0.66272*** (0.00080)	0.66278*** (0.00080)	-1.55617*** (0.00265)	-1.55625*** (0.00265)
Observations	3,319,071	3,319,071	3,319,071	3,319,071	3,319,071	3,319,071	3,184,765	3,184,765	3,319,071	3,319,071	3,184,765	3,184,765	3,319,071	3,319,071
R-squared	0.00059	0.00044	0.00574	0.00529	0.00459	0.00428	0.07537	0.07693	0.01100	0.01122	0.01703	0.01712	0.00202	0.00187
Number of individuals	673,469	673,469	673,469	673,469	673,469	673,469	673,437	673,437	673,469	673,469	673,437	673,437	673,469	673,469
Individual (experimental) FEes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
1 SD of l1.drugs /l1.patents	13.1586	516.0485	13.1586	516.0485	13.1586	516.0485	13.2729	523.62	13.1586	516.0485	13.2729	523.62	13.1586	516.0485
1 SD x effect x 100%	4.39%	3.61%	9.12%	2.06%	8.08%	3.61%	-4.80%	-39.80%	-4.59%	-6.71%	0.40%	-1.05%	-1.29%	1.03%
1 SD combined effect x 100%				8.01%	11.18%	11.69%		-44.60%		-11.30%		-0.65%		-0.26%
1 SD combined SE x 100%					1.28%	0.76%		1.44%		0.61%		0.64%		2.08%
CI lower 95%					8.68%	10.21%		-47.41%		-12.50%		-1.91%		-4.34%
CI higher 95					13.68%	13.17%		-41.79%		-10.10%		0.61%		3.83%

Note: Models are estimated according to Eq.4. Robust standard errors clustered at individual (experimental) level are in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table C2 – DDD estimates: Impact of medical innovations in 1981–2006 on the sources of ihs family income *for women* in ages 40–60 Sweden

	Ihs Own Disposable	Ihs Spouse's Disposable	Ihs Own Labour Income	Ihs Sickness Absence	Ihs Unemployment Benefits	Ihs Disability Pension	Ihs Own Capital Income							
post	0.07818*** (0.00335)	0.07394*** (0.00249)	-0.24756*** (0.00795)	-0.19495*** (0.00593)	-0.11812*** (0.00639)	-0.11651*** (0.00476)	-0.26695*** (0.01125)	-0.18892*** (0.00835)	0.00193 (0.00237)	0.00030 (0.00177)	0.30758*** (0.00519)	0.33113*** (0.00387)	-0.23626*** (0.01442)	-0.21380*** (0.01100)
post x l1.drugs	-0.00061*** (0.00014)		0.00395*** (0.00037)		-0.00038 (0.00030)		0.00644*** (0.00051)		-0.00013 (0.00010)		0.00227*** (0.00024)		0.00211*** (0.00069)	
post x treated	-0.05224*** (0.00508)	-0.03542*** (0.00369)	-0.48703*** (0.01285)	-0.36722*** (0.00950)	-0.15672*** (0.00939)	-0.09422*** (0.00692)	2.61465*** (0.01751)	2.72813*** (0.01327)	0.19711*** (0.00438)	0.18031*** (0.00331)	0.09126*** (0.00765)	0.09345*** (0.00575)	-0.00261 (0.02024)	0.00318 (0.01547)
post x treated x l1.drugs	0.00139*** (0.00020)		0.00930*** (0.00056)		0.00481*** (0.00043)		-0.00227*** (0.00078)		-0.00201*** (0.00018)		-0.00002 (0.00036)		-0.00008 (0.00097)	
post x l1.patents		-0.00002*** (0.00000)		0.00005*** (0.00001)		-0.00002*** (0.00001)		0.00010*** (0.00001)		-0.00000 (0.00000)		0.00005*** (0.00001)		0.00004** (0.00002)
post x treated x l1.patents		0.00002*** (0.00001)		0.00012*** (0.00001)		0.00006*** (0.00001)		-0.00044*** (0.00002)		-0.00005*** (0.00000)		-0.00001 (0.00001)		-0.00002 (0.00003)
Constant	12.30220*** (0.00063)	12.30220*** (0.00063)	9.62234*** (0.00164)	9.62232*** (0.00164)	11.46079*** (0.00120)	11.46080*** (0.00120)	3.53886*** (0.00239)	3.53692*** (0.00239)	0.12445*** (0.00057)	0.12445*** (0.00057)	1.00352*** (0.00104)	1.00328*** (0.00104)	-0.53772*** (0.00272)	-0.53774*** (0.00272)
Observations	2,791,726	2,791,726	2,791,726	2,791,726	2,791,726	2,791,726	2,684,346	2,684,346	2,791,726	2,791,726	2,684,346	2,684,346	2,791,726	2,791,726
R-squared	0.00095	0.00093	0.00794	0.00720	0.00254	0.00239	0.06233	0.06264	0.00536	0.00536	0.02504	0.02497	0.00063	0.00062
Number of individuals	565,915	565,915	565,915	565,915	565,915	565,915	565,899	565,899	565,915	565,915	565,899	565,899	565,915	565,915
Individual (experimental) FEs	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
1 SD of l1.drugs /l1.patents	14.3734	562.4148	14.3734	562.4148	14.3734	562.4148	14.4856	570.7715	14.3734	562.4148	14.4856	570.7715	14.3734	562.4148
1 SD x effect x 100%	2.00%	1.12%	13.45%	6.75%	6.91%	3.37%	-3.29%	-25.11%	-2.89%	-2.81%	-0.03%	-0.57%	-0.11%	-1.12%
1 SD combined effect x 100%		3.12%		20.20%		10.29%		-28.40%		-5.70%		-0.60%		-1.24%
1 SD combined SE x 100%		0.63%		0.98%		0.84%		1.61%		0.26%		0.77%		2.19%
CI lower 95%		1.88%		18.28%		8.65%		-31.55%		-6.21%		-2.12%		-5.53%
CI higher 95		4.36%		22.13%		11.93%		-25.25%		-5.19%		0.92%		3.05%

Note: Models are estimated according to Eq.4. Robust standard errors clustered at individual (experimental) level are in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## Appendix D

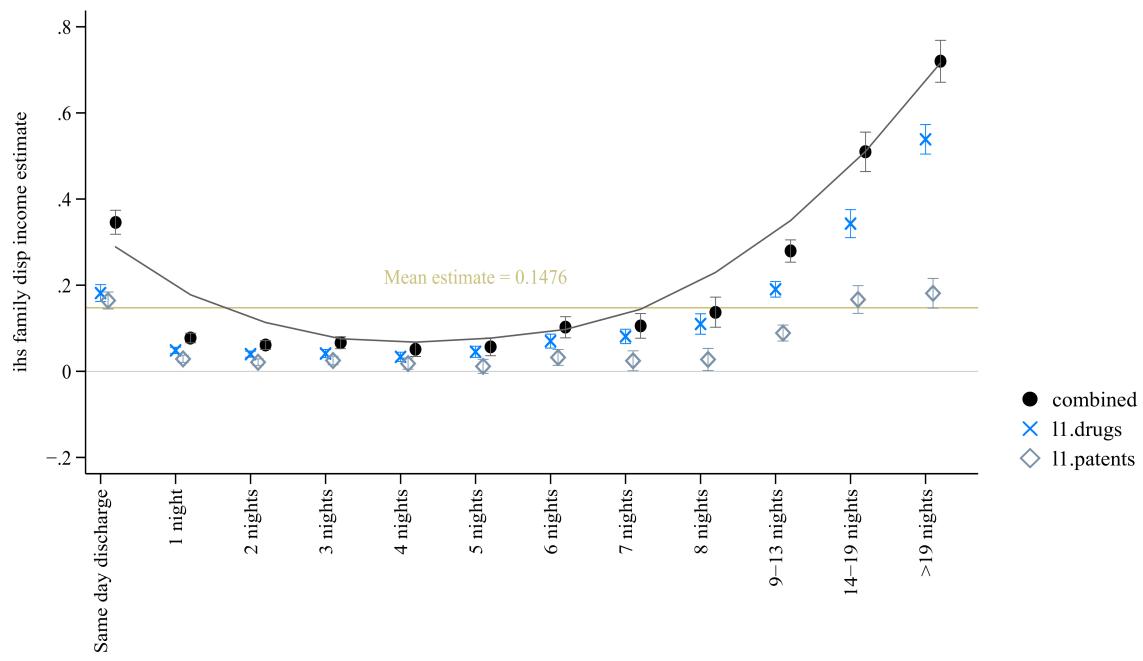


Figure – Heterogeneous DDD estimates: Impact of medical innovations on ihs family disposable income by the length to stay in a hospital

## Appendix E

Table E1 – Results of the t-test on non-linear pre-trends in responses of ihs family income to a health shock by broad disease groups from a final estimation sample ( $\beta_2$  is unrelated to future outcomes)

	Altogether	Cancers	Circulatory	Mental	Nervous	Digestive	Musculo-skeletal	Urinary	Respiratory	Metabolic	D. of bloodforming organs	D. of sense organs	D. of skin	Infectious
event-year -2	-0.00004 (0.00081)	-0.00456* (0.00239)	-0.00043 (0.00165)	-0.00536 (0.00406)	0.00400 (0.00415)	0.00290 (0.00178)	-0.00531* (0.00313)	0.00266 (0.00226)	-0.00030 (0.00306)	0.00092 (0.00412)	0.00906 (0.00920)	0.00180 (0.00357)	-0.00066 (0.00724)	0.00162 (0.00466)
event-year 0	0.03785*** (0.00093)	0.03589*** (0.00270)	0.03918*** (0.00189)	0.00341 (0.00473)	0.03936*** (0.00464)	0.04182*** (0.00206)	0.03827*** (0.00328)	0.04712*** (0.00268)	0.04069*** (0.00342)	0.04464*** (0.00421)	0.02312** (0.01154)	0.04059*** (0.00403)	0.04430*** (0.00787)	0.03854*** (0.00570)
event-year 1	0.05913*** (0.00103)	0.05972*** (0.00293)	0.06253*** (0.00209)	-0.00440 (0.00561)	0.06304*** (0.00509)	0.06762*** (0.00230)	0.06333*** (0.00354)	0.07332*** (0.00294)	0.05966*** (0.00382)	0.05575*** (0.00488)	0.04976*** (0.01310)	0.07031*** (0.00432)	0.04880*** (0.00910)	0.06667*** (0.00598)
event-year -2 x treated	0.00213* (0.00112)	0.00372 (0.00330)	0.00115 (0.00228)	0.00634 (0.00587)	-0.00242 (0.00557)	-0.00039 (0.00247)	0.00698* (0.00404)	0.00187 (0.00304)	0.00493 (0.00418)	0.00799 (0.00540)	-0.02388* (0.01357)	-0.00188 (0.00468)	0.01210 (0.00948)	0.00101 (0.00661)
event-year 0 x treated	-0.25361*** (0.00262)	-0.98413*** (0.01468)	-0.40943*** (0.00640)	-0.17179*** (0.00959)	-0.10540*** (0.01015)	-0.08970*** (0.00429)	-0.03655*** (0.00592)	-0.03605*** (0.00454)	-0.14357*** (0.00809)	-0.07988*** (0.00836)	-0.17991*** (0.02863)	-0.02090*** (0.00598)	-0.04258*** (0.01363)	-0.13955*** (0.01223)
event-year 1 x treated	-0.23238*** (0.00245)	-1.47194*** (0.01744)	-0.18551*** (0.00424)	-0.12736*** (0.00952)	-0.10854*** (0.01008)	-0.07950*** (0.00410)	-0.04285*** (0.00614)	-0.03866*** (0.00476)	-0.14441*** (0.00805)	-0.07523*** (0.00863)	-0.23639*** (0.03229)	-0.03934*** (0.06662)	-0.03310** (0.01487)	-0.08387*** (0.01054)
Constant	13.13080*** (0.00045)	13.20313*** (0.00247)	13.13839*** (0.00097)	12.80599*** (0.00181)	13.13390*** (0.00190)	13.16037*** (0.00079)	13.18502*** (0.00116)	13.22320*** (0.00092)	13.12995*** (0.00147)	13.07319*** (0.00164)	13.05364*** (0.00520)	13.17099*** (0.00129)	13.04507*** (0.00287)	13.13059*** (0.00216)
Observations	6,110,797	583,626	1,485,778	453,439	218,158	1,121,812	296,976	625,880	426,651	265,282	42,198	288,409	89,636	212,952
R-squared	0.00713	0.07139	0.01416	0.00334	0.00169	0.00142	0.00170	0.00186	0.00273	0.00109	0.00500	0.00187	0.00074	0.00211
Number of experimental IDs	1,239,384	118,866	301,272	92,397	44,355	226,807	60,008	126,460	86,520	53,931	8,602	58,530	18,272	43,364
<i>t-test: event-year -2 x treated = 0</i>	0.0559	0.260	0.614	0.280	0.663	0.875	0.0843	0.540	0.238	0.139	0.0783	0.688	0.202	0.878

Note: Additionally to the terms reported in the table, models include (experimental) individual fixed effects. Event-years -3 and -1 are reference categories. Standard errors clustered at a (experimental) individual level are in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table E2 – Results of the t-test on non-linear pre-trends in responses of ihs family income to changes in medical innovations (drugs and patents) by broad disease groups from a final estimation sample ( $\beta_4$  is unrelated to future outcomes)

	Altogether	Cancers	Circulatory	Mental	Nervous	Digestive	Musculo-skeletal	Urinary	Respiratory	Metabolic	D. of bloodforming organs	D. of sense organs	D. of skin	Infectious
<b>(A) Drugs</b>														
event-year -2	0.00090 (0.00085)	0.00142 (0.00270)	0.00116 (0.00209)	-0.00338 (0.00557)	0.00691 (0.00877)	0.00129 (0.00154)	-0.00253 (0.00677)	0.00413 (0.00320)	0.00067 (0.00494)	0.01025*** (0.00356)	0.00483 (0.01088)	-0.00029 (0.00312)	0.00863 (0.01680)	-0.00456 (0.00679)
event-year 0	-0.14973*** (0.00218)	-0.67605*** (0.01314)	-0.30653*** (0.00662)	-0.08816*** (0.00882)	-0.00238 (0.01593)	-0.00131 (0.00250)	-0.00941 (0.00999)	0.01854*** (0.00446)	-0.07852*** (0.01032)	0.00427 (0.00557)	-0.03325 (0.03123)	0.02940*** (0.00399)	0.01083 (0.02482)	0.02246** (0.01139)
event-year 1	-0.12459*** (0.00207)	-0.93418*** (0.01469)	-0.09646*** (0.00405)	-0.09502*** (0.00866)	0.02970* (0.01521)	0.02548*** (0.00250)	-0.00729 (0.01046)	0.03096*** (0.00466)	-0.06765*** (0.01011)	0.01840*** (0.00570)	-0.05396* (0.03234)	0.04490*** (0.00446)	0.01068 (0.02581)	0.04186*** (0.01077)
event-year -2 x ll.drugs	0.00001 (0.00004)	-0.00044* (0.00024)	-0.00005 (0.00012)	0.00008 (0.00029)	-0.00038 (0.00079)	0.00021 (0.00016)	0.00004 (0.00033)	-0.00002 (0.00011)	0.00004 (0.00013)	-0.00031* (0.00016)	-0.00080 (0.00080)	0.00007 (0.00017)	-0.00011 (0.00058)	0.00033 (0.00031)
event-year 0 x ll.drugs	0.00364*** (0.00009)	0.02544*** (0.00102)	0.00867*** (0.00030)	0.00029 (0.00047)	-0.00109 (0.00141)	-0.00031 (0.00023)	0.00146*** (0.00049)	0.00043*** (0.00015)	0.00120*** (0.00024)	-0.00001 (0.00024)	-0.00356 (0.00302)	0.00004 (0.00022)	0.00041 (0.00084)	-0.00271*** (0.00058)
event-year 1 x ll.drugs	0.00413*** (0.00008)	0.03333*** (0.00113)	0.00408*** (0.00021)	0.00168*** (0.00044)	-0.00198 (0.00134)	0.00032 (0.00024)	0.00247*** (0.00050)	0.00095*** (0.00016)	0.00141*** (0.00024)	-0.00004 (0.00026)	-0.00148 (0.00288)	0.00037 (0.00023)	0.00074 (0.00084)	-0.00088* (0.00050)
Constant	13.13137*** (0.00045)	13.20603*** (0.00255)	13.13911*** (0.00098)	12.80648*** (0.00182)	13.13421*** (0.00191)	13.16052*** (0.00080)	13.18510*** (0.00116)	13.22327*** (0.00092)	13.13031*** (0.00148)	13.07340*** (0.00165)	13.05428*** (0.00526)	13.17107*** (0.00129)	13.04519*** (0.00288)	13.13089*** (0.00217)
Observations	6,110,797	583,626	1,485,778	453,439	218,158	1,121,812	296,976	625,880	426,651	265,282	42,198	288,409	89,636	212,952
R-squared	0.00301	0.03609	0.00703	0.00170	0.00015	0.00033	0.00141	0.00167	0.00050	0.00012	0.00160	0.00165	0.00046	0.00090
Number of experimental IDs	1,239,384	118,866	301,272	92,397	44,355	226,807	60,008	126,460	86,520	53,931	8,602	58,530	18,272	43,364
<i>t-test: event-year -2 x ll.drugs = 0</i>	0.740	0.0709	0.660	0.780	0.629	0.188	0.908	0.845	0.754	0.0628	0.317	0.660	0.855	0.278
<b>(B) Patents</b>														
event-year -2	0.00129** (0.00064)	-0.00160 (0.00272)	0.00119 (0.00163)	0.00055 (0.00354)	0.00512 (0.00359)	0.00302** (0.00145)	-0.00135 (0.00312)	0.00445** (0.00199)	0.00036 (0.00290)	0.00769*** (0.00298)	-0.00143 (0.00804)	-0.00229 (0.00272)	0.00648 (0.00593)	-0.00140 (0.00489)
event-year 0	-0.10416*** (0.00158)	-0.52523*** (0.01438)	-0.24522*** (0.00496)	-0.08000*** (0.00632)	-0.02413*** (0.00688)	0.04998*** (0.00311)	0.00840* (0.00447)	0.02506*** (0.00288)	0.00353 (0.00474)	0.00722 (0.00465)	-0.05415*** (0.01680)	0.02790*** (0.00345)	0.02552*** (0.00828)	-0.00664 (0.00829)
event-year 1	-0.07315*** (0.00148)	-0.77166*** (0.01615)	-0.06375*** (0.00316)	-0.04812*** (0.00600)	-0.00277 (0.00679)	0.05596*** (0.00266)	0.01979*** (0.00472)	0.04917*** (0.00302)	0.02369*** (0.00481)	0.02079*** (0.00478)	-0.06503*** (0.01965)	0.04561*** (0.00387)	0.02760*** (0.00926)	0.02777*** (0.00769)
event-year -2 x ll.patents	-0.00000 (0.00000)	-0.00002 (0.00005)	-0.00000 (0.00001)	-0.00000 (0.00001)	-0.00001 (0.00001)	-0.00000 (0.00001)	-0.00000 (0.00001)	-0.00000 (0.00000)	-0.00000 (0.00001)	-0.00001* (0.00000)	-0.00000 (0.00001)	0.00002** (0.00001)	-0.00000 (0.00001)	0.00000 (0.00001)
event-year 0 x ll.patents	0.00004*** (0.00000)	0.00137*** (0.00025)	0.00037*** (0.00001)	-0.00000 (0.00001)	0.00004** (0.00002)	-0.00046*** (0.00003)	0.00006*** (0.00002)	0.00001** (0.00000)	-0.00008*** (0.00001)	-0.00001 (0.00001)	-0.00002 (0.00001)	0.00001 (0.00001)	-0.00000 (0.00001)	-0.00003*** (0.00001)
event-year 1 x ll.patents	0.00005*** (0.00000)	0.00259*** (0.00028)	0.00016*** (0.00001)	-0.00003*** (0.00001)	0.00004** (0.00002)	-0.00025*** (0.00002)	0.00011*** (0.00002)	0.00001*** (0.00000)	-0.00008*** (0.00001)	-0.00001 (0.00001)	-0.00000 (0.00001)	0.00003** (0.00001)	0.00000 (0.00001)	-0.00000 (0.00001)
Constant	13.13135*** (0.00045)	13.20599*** (0.00255)	13.13905*** (0.00098)	12.80646*** (0.00182)	13.13422*** (0.00191)	13.16045*** (0.00079)	13.18510*** (0.00116)	13.22326*** (0.00092)	13.13025*** (0.00148)	13.07340*** (0.00165)	13.05429*** (0.00526)	13.17107*** (0.00129)	13.04518*** (0.00287)	13.13090*** (0.00217)
Observations	6,110,797	583,626	1,485,778	453,439	218,158	1,121,812	296,976	625,880	426,651	265,282	42,198	288,409	89,636	212,952
R-squared	0.00225	0.03232	0.00668	0.00173	0.00024	0.00483	0.00148	0.00159	0.00090	0.00012	0.00163	0.00167	0.00046	0.00077

Number of experimental IDs	1,239,384	118,866	301,272	92,397	44,355	226,807	60,008	126,460	86,520	53,931	8,602	58,530	18,272	43,364
<i>t-test: event-year -2 x ln.patents =0</i>	<i>0.654</i>	<i>0.743</i>	<i>0.467</i>	<i>0.375</i>	<i>0.386</i>	<i>0.730</i>	<i>0.864</i>	<i>0.548</i>	<i>0.443</i>	<i>0.0901</i>	<i>0.528</i>	<i>0.0374</i>	<i>0.867</i>	<i>0.378</i>

*Note.* Additionally to the terms reported in the table, models include (experimental) individual fixed effects. Event-years -3 and -1 are reference categories. Standard errors clustered at a (experimental) individual level are in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table E3 – Results of the t-test on non-linear pre-trends in responses of ihs family income to a health shock across levels of medical innovations (drugs and patents) by broad disease groups ( $\beta_3$  is unrelated to future outcomes) from a final estimation sample (an event-study specification of the DDD specification in the main body)

	Altogether	Cancers	Circulatory	Mental	Nervous	Digestive	Musculo-skeletal	Urinary	Respiratory	Metabolic	D. of bloodforming organs	D. of sense organs	D. of skin	Infectious
<b>(A) Drugs</b>														
event-year -2	0.00021 (0.00124)	0.00073 (0.00390)	-0.00054 (0.00305)	-0.00779 (0.00751)	0.00307 (0.01349)	0.00036 (0.00224)	-0.01412 (0.01056)	0.00121 (0.00474)	0.00772 (0.00700)	0.00902* (0.00527)	0.02169* (0.01318)	-0.00081 (0.00483)	0.02134 (0.02503)	-0.00873 (0.00963)
event-year 0	0.03115*** (0.00138)	0.02864*** (0.00427)	0.02547*** (0.00346)	-0.01265 (0.00871)	0.06637*** (0.01332)	0.03805*** (0.00256)	-0.01196 (0.01051)	0.03588*** (0.00535)	0.01499* (0.00803)	0.04111*** (0.00548)	0.01880 (0.02099)	0.04122*** (0.00517)	0.01686 (0.02731)	0.03669*** (0.01139)
event-year 1	0.05147*** (0.00154)	0.04384*** (0.00467)	0.04332*** (0.00377)	-0.01760* (0.01038)	0.07695*** (0.01567)	0.06421*** (0.00284)	0.01114 (0.01111)	0.05164*** (0.00583)	0.03112*** (0.00926)	0.05355*** (0.00649)	0.04780** (0.02312)	0.06460*** (0.00576)	0.05817* (0.03080)	0.07124*** (0.01212)
event-year -2 x treated	0.00103 (0.00170)	-0.00068 (0.00538)	0.00256 (0.00418)	0.00846 (0.01112)	0.00727 (0.01760)	0.00176 (0.00308)	0.02258* (0.01360)	0.00564 (0.00641)	-0.01450 (0.00987)	0.00223 (0.00713)	-0.03280 (0.02158)	0.00101 (0.00626)	-0.02522 (0.03367)	0.00808 (0.01357)
event-year 0 x treated	-0.35758*** (0.00431)	-1.39229*** (0.02547)	-0.65778*** (0.01303)	-0.14813*** (0.01752)	-0.13600*** (0.03163)	-0.07794*** (0.00498)	0.00563 (0.01992)	-0.03413*** (0.00889)	-0.18344*** (0.02044)	-0.07246*** (0.01108)	-0.10101 (0.06175)	-0.02320*** (0.00796)	-0.01052 (0.04942)	-0.02702 (0.02263)
event-year 1 x treated	-0.35255*** (0.00415)	-2.05754*** (0.03010)	-0.27676*** (0.00811)	-0.15347*** (0.01730)	-0.09357*** (0.03036)	-0.07696*** (0.00500)	-0.03609* (0.02091)	-0.04096*** (0.00931)	-0.19555*** (0.02017)	-0.06933*** (0.01139)	-0.20145*** (0.06500)	-0.03909*** (0.00891)	-0.09369* (0.05149)	-0.05753*** (0.02149)
event-year -2 x ll.drugs	-0.00001 (0.00006)	-0.00062* (0.00036)	0.00001 (0.00018)	0.00015 (0.00038)	0.00009 (0.00120)	0.00037* (0.00022)	0.00044 (0.00050)	0.00006 (0.00017)	-0.00020 (0.00018)	-0.00047* (0.00025)	-0.00128 (0.00087)	0.00017 (0.00025)	-0.00076 (0.00087)	0.00051 (0.00043)
event-year 0 x ll.drugs	0.00041*** (0.00007)	0.00085** (0.00038)	0.00085*** (0.00020)	0.00102** (0.00045)	-0.00250** (0.00121)	0.00055** (0.00026)	0.00251*** (0.00052)	0.00046** (0.00019)	0.00066*** (0.00020)	0.00021 (0.00020)	0.00044 (0.00181)	-0.00004 (0.00032)	0.00095 (0.00090)	0.00009 (0.00055)
event-year 1 x ll.drugs	0.00047*** (0.00008)	0.00187*** (0.00042)	0.00119*** (0.00023)	0.00084 (0.00058)	-0.00129 (0.00139)	0.00050* (0.00029)	0.00260*** (0.00057)	0.00090*** (0.00020)	0.00073*** (0.00023)	0.00013 (0.00031)	0.00020 (0.00197)	0.00037 (0.00032)	-0.00032 (0.00103)	-0.00023 (0.00055)
event-year -2 x treated x ll.drugs	0.00007 (0.00008)	0.00051 (0.00048)	-0.00009 (0.00024)	-0.00014 (0.00057)	-0.00090 (0.00158)	-0.00031 (0.00031)	-0.00078 (0.00066)	-0.00016 (0.00022)	0.00050* (0.00026)	0.00033 (0.00033)	0.00090 (0.00159)	-0.00019 (0.00034)	0.00129 (0.00116)	-0.00035 (0.00061)
event-year 0 x treated x ll.drugs	0.00637*** (0.00017)	0.04832*** (0.00198)	0.01545*** (0.00060)	-0.00151 (0.00094)	0.00283 (0.00280)	-0.00171*** (0.00047)	-0.00210** (0.00097)	-0.00008 (0.00031)	0.00103** (0.00047)	-0.00044 (0.00048)	-0.00800 (0.00598)	0.00015 (0.00044)	-0.00111 (0.00167)	-0.00560*** (0.00116)
event-year 1 x treated x ll.drugs	0.00733*** (0.00017)	0.06768*** (0.00230)	0.00566*** (0.00042)	0.00167* (0.00088)	-0.00139 (0.00267)	-0.00037 (0.00049)	-0.00032 (0.00100)	0.00010 (0.00032)	0.00132*** (0.00047)	-0.00035 (0.00051)	-0.00355 (0.00582)	-0.00001 (0.00046)	0.00210 (0.00168)	-0.00131 (0.00100)
Constant	13.13078*** (0.00045)	13.20289*** (0.00246)	13.13836*** (0.00097)	12.80600*** (0.00181)	13.13390*** (0.00190)	13.16037*** (0.00079)	13.18504*** (0.00116)	13.22321*** (0.00092)	13.12996*** (0.00147)	13.07319*** (0.00164)	13.05364*** (0.00520)	13.17100*** (0.00129)	13.04507*** (0.00287)	13.13058*** (0.00216)
Observations	6,110,797	583,626	1,485,778	453,439	218,158	1,121,812	296,976	625,880	426,651	265,282	42,198	288,409	89,636	212,952
R-squared	0.00886	0.08012	0.01679	0.00342	0.00173	0.00144	0.00190	0.00197	0.00295	0.00112	0.00520	0.00189	0.00081	0.00271
Number of experimental IDs	1,239,384	118,866	301,272	92,397	44,355	226,807	60,008	126,460	86,520	53,931	8,602	58,530	18,272	43,364
t-test: event-year -2 x treated =0	0.547	0.899	0.539	0.447	0.679	0.568	0.0969	0.378	0.142	0.754	0.129	0.872	0.454	0.551
t-test: event-year -2 x ll.drugs =0	0.810	0.0885	0.964	0.681	0.943	0.0897	0.381	0.714	0.268	0.0537	0.141	0.501	0.385	0.240
t-test: event-year -2 x treated x ll.drugs =0	0.420	0.292	0.713	0.812	0.571	0.319	0.239	0.474	0.0510	0.311	0.572	0.580	0.265	0.571
<b>(B) Patents</b>														
event-year -2	0.00013 (0.00094)	-0.00231 (0.00387)	0.00008 (0.00236)	-0.00297 (0.00485)	-0.00066 (0.00541)	0.00181 (0.00201)	-0.00646 (0.00494)	0.00496* (0.00301)	-0.00048 (0.00425)	0.00455 (0.00451)	0.01203 (0.01121)	-0.00474 (0.00427)	0.00261 (0.00929)	-0.00513 (0.00682)
event-year 0	0.03769*** (0.00104)	0.02600*** (0.00429)	0.03132*** (0.00269)	0.00932 (0.00582)	0.03830*** (0.00562)	0.04556*** (0.00249)	0.02239*** (0.00479)	0.04240*** (0.00339)	0.03929*** (0.00452)	0.04415*** (0.00482)	0.02258* (0.01337)	0.03596*** (0.00460)	0.02884*** (0.00956)	0.03322*** (0.00819)

event-year 1	0.06106*** (0.00117)	0.03964*** (0.00472)	0.05128*** (0.00294)	0.01300* (0.00682)	0.05390*** (0.00654)	0.07180*** (0.00274)	0.04110*** (0.00518)	0.07003*** (0.00369)	0.06161*** (0.00506)	0.05651*** (0.00543)	0.04901*** (0.01570)	0.06202*** (0.00496)	0.03628*** (0.01090)	0.06409*** (0.00869)
event-year -2 x treated	0.00212* (0.00128)	-0.00015 (0.00542)	0.00165 (0.00325)	0.00672 (0.00707)	0.01119 (0.00720)	0.00235 (0.00290)	0.00997 (0.00626)	-0.00103 (0.00400)	0.00159 (0.00581)	0.00603 (0.00598)	-0.02637 (0.01606)	0.00478 (0.00547)	0.00738 (0.01193)	0.00721 (0.00976)
event-year 0 x treated	-0.28078*** (0.00314)	-1.08752*** (0.02789)	-0.54913*** (0.00979)	-0.17592*** (0.01254)	-0.12297*** (0.01365)	0.00871 (0.00609)	-0.02757*** (0.00891)	-0.03431*** (0.00575)	-0.07027*** (0.00942)	-0.07276*** (0.00924)	-0.15062*** (0.03332)	-0.01581** (0.00689)	-0.00629 (0.01649)	-0.07806*** (0.01645)
event-year 1 x treated	-0.26871*** (0.00297)	-1.69400*** (0.03331)	-0.22891*** (0.00634)	-0.12049*** (0.01198)	-0.11209*** (0.01355)	-0.03043*** (0.00539)	-0.04230*** (0.00944)	-0.04149*** (0.00603)	-0.07421*** (0.00960)	-0.07068*** (0.00954)	-0.22768*** (0.03940)	-0.03267*** (0.00774)	-0.01700 (0.01848)	-0.07135*** (0.01534)
event-year -2 x ll.patents	-0.00000 (0.00000)	-0.00005 (0.00007)	-0.00000 (0.00001)	-0.00000 (0.00001)	0.00002 (0.00001)	0.00001 (0.00001)	0.00001 (0.00002)	-0.00000 (0.00000)	0.00000 (0.00001)	-0.00000 (0.00001)	-0.00000 (0.00000)	0.00003*** (0.00001)	-0.00000 (0.00001)	0.00001 (0.00001)
event-year 0 x ll.patents	0.00000 (0.00000)	0.00021*** (0.00008)	0.00004*** (0.00001)	-0.00001 (0.00001)	0.00000 (0.00002)	-0.00003** (0.00002)	0.00008*** (0.00002)	0.00001** (0.00000)	0.00000 (0.00001)	0.00000 (0.00001)	0.00000 (0.00001)	0.00002* (0.00001)	0.00002** (0.00001)	0.00001 (0.00001)
event-year 1 x ll.patents	-0.00001** (0.00000)	0.00042*** (0.00009)	0.00005*** (0.00001)	-0.00002*** (0.00001)	0.00003** (0.00002)	-0.00004** (0.00002)	0.00011*** (0.00002)	0.00000 (0.00000)	-0.00000 (0.00001)	-0.00000 (0.00001)	0.00000 (0.00001)	0.00004*** (0.00002)	0.00001 (0.00001)	0.00000 (0.00001)
event-year -2 x treated x ll.patents	0.00000 (0.00000)	0.00008 (0.00010)	-0.00000 (0.00001)	-0.00000 (0.00001)	-0.00005** (0.00002)	-0.00002 (0.00002)	-0.00002 (0.00002)	0.00000 (0.00000)	0.00001 (0.00001)	0.00001 (0.00001)	0.00000 (0.00001)	-0.00004** (0.00002)	0.00000 (0.00001)	-0.00001 (0.00001)
event-year 0 x treated x ll.patents	0.00008*** (0.00000)	0.00219*** (0.00049)	0.00066*** (0.00003)	0.00001 (0.00001)	0.00007* (0.00003)	-0.00085*** (0.00006)	-0.00005 (0.00004)	-0.00000 (0.00000)	-0.00016*** (0.00002)	-0.00002 (0.00002)	-0.00004 (0.00003)	-0.00003 (0.00002)	-0.00004*** (0.00001)	-0.00008*** (0.00002)
event-year 1 x treated x ll.patents	0.00011*** (0.00000)	0.00468*** (0.00058)	0.00020*** (0.00002)	-0.00001 (0.00001)	0.00001 (0.00004)	-0.00043*** (0.00004)	-0.00000 (0.00004)	0.00000 (0.00001)	-0.00016*** (0.00002)	-0.00002 (0.00002)	-0.00001 (0.00002)	-0.00004 (0.00003)	-0.00002 (0.00002)	-0.00002 (0.00002)
Constant	13.13079*** (0.00045)	13.20313*** (0.00247)	13.13836*** (0.00097)	12.80598*** (0.00181)	13.13390*** (0.00190)	13.16028*** (0.00079)	13.18504*** (0.00116)	13.22320*** (0.00092)	13.12993*** (0.00147)	13.07319*** (0.00164)	13.05364*** (0.00520)	13.17100*** (0.00129)	13.04509*** (0.00287)	13.13059*** (0.00216)
Observations	6,110,797	583,626	1,485,778	453,439	218,158	1,121,812	296,976	625,880	426,651	265,282	42,198	288,409	89,636	212,952
R-squared	0.00758	0.07240	0.01619	0.00343	0.00189	0.00965	0.00195	0.00189	0.00392	0.00113	0.00524	0.00193	0.00093	0.00251
Number of experimental IDs	1,239,384	118,866	301,272	92,397	44,355	226,807	60,008	126,460	86,520	53,931	8,602	58,530	18,272	43,364
<i>t-test: event-year -2 x treated =0</i>	0.0971	0.978	0.613	0.342	0.120	0.419	0.112	0.797	0.784	0.313	0.101	0.382	0.536	0.460
<i>t-test: event-year -2 x ll.patents =0</i>	0.786	0.518	0.787	0.567	0.122	0.333	0.754	0.338	0.960	0.118	0.348	0.00598	0.716	0.230
<i>t-test: event-year -2 x treated x ll.patents =0</i>	0.982	0.424	0.832	0.948	0.0103	0.157	0.531	0.308	0.480	0.539	0.637	0.0281	0.667	0.446

Note: Additionally to the terms reported in the table, models include (experimental) individual fixed effects. Event-years -3 and -1 are reference categories. Standard errors clustered at a (experimental) individual level are in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table E4 – Results of the t-test on non-linear pre-trends in responses of the sources of ihs family income to a health shock across levels of medical innovations (drugs and patents) by broad disease groups ( $\beta_3$  is unrelated to future outcomes) from a final estimation sample (an event-study specification of the DDD specification in the main body)

Variables	Ihs Own Disposable Income	Ihs Spouse's Disposable Income	Ihs Own Labour Income	Ihs Sickness Absence Payments	Ihs Unemployment Payments	Ihs Disability Pension Payments	Ihs Own Capital Income							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
event-year -2	0.00321 (0.00210)	0.00131 (0.00155)	0.00360 (0.00388)	0.00168 (0.00290)	0.00563* (0.00327)	0.01062*** (0.00247)	0.01557** (0.00752)	0.00641 (0.00553)	-0.00002 (0.00203)	-0.00175 (0.00150)	-0.01385*** (0.00160)	-0.01507*** (0.00122)	0.02468*** (0.00877)	0.00715 (0.00678)
event-year 0	0.05134*** (0.00236)	0.05210*** (0.00177)	-0.13231*** (0.00523)	-0.08783*** (0.00390)	-0.10410*** (0.00424)	-0.08902*** (0.00320)	-0.25142*** (0.00824)	-0.21744*** (0.00612)	-0.00356 (0.00224)	-0.00440*** (0.00168)	0.18009*** (0.00278)	0.19142*** (0.00212)	-0.31324*** (0.01078)	-0.27164*** (0.00828)
event-year 1	0.07452*** (0.00264)	0.07708*** (0.00200)	-0.19632*** (0.00636)	-0.13476*** (0.00473)	-0.18189*** (0.00503)	-0.15382*** (0.00379)	-0.24538*** (0.00911)	-0.18425*** (0.00684)	0.00700*** (0.00248)	0.00454** (0.00188)	0.30401*** (0.00371)	0.31867*** (0.00283)	-0.51213*** (0.01246)	-0.39845*** (0.00955)
event-year -2 x treated	0.00399 (0.00286)	0.00616*** (0.00213)	0.00017 (0.00545)	0.00280 (0.00407)	-0.00414 (0.00460)	-0.00520 (0.00346)	-0.06327*** (0.01060)	-0.06933*** (0.00782)	-0.00532* (0.00287)	-0.00243 (0.00213)	0.00241 (0.00226)	0.00472*** (0.00172)	-0.02817** (0.01217)	-0.01311 (0.00940)
event-year 0 x treated	-0.08811*** (0.00392)	-0.06186*** (0.00285)	-0.49074*** (0.00920)	-0.38706*** (0.00685)	-0.17165*** (0.00658)	-0.10181*** (0.00489)	3.74694*** (0.01323)	3.88978*** (0.01004)	0.41135*** (0.00442)	0.37895*** (0.00333)	0.01301*** (0.00411)	0.01965*** (0.00314)	0.01803 (0.01519)	0.00108 (0.01167)
event-year 1 x treated	-0.07141*** (0.00408)	-0.04825*** (0.00302)	-0.51174*** (0.01044)	-0.39551*** (0.00773)	-0.20580*** (0.00758)	-0.13692*** (0.00564)	1.74219*** (0.01428)	1.89676*** (0.01091)	0.18950*** (0.00418)	0.18599*** (0.00321)	0.18454*** (0.00584)	0.19095*** (0.00455)	0.01654 (0.01767)	0.02578* (0.01355)
event-year -2 x l1.drugs	-0.00014 (0.00010)	0.00004 (0.00019)		0.00039** (0.00016)		-0.00075** (0.00032)			-0.00008 (0.00008)		0.00004 (0.00008)		-0.00160*** (0.00047)	
event-year 0 x l1.drugs	-0.00024** (0.00012)	0.00293*** (0.00025)		0.00021 (0.00021)		0.00297*** (0.00037)			-0.00001 (0.00010)		0.00158*** (0.00014)		0.00376*** (0.00056)	
event-year 1 x l1.drugs	-0.00029** (0.00013)	0.00353*** (0.00031)		0.00053** (0.00025)		0.00517*** (0.00041)			-0.00014 (0.00011)		0.00216*** (0.00018)		0.01073*** (0.00063)	
event-year -2 x treated x l1.drugs	0.00007 (0.00014)	0.00011 (0.00027)		-0.00006 (0.00023)		-0.00014 (0.00046)			0.00015 (0.00012)		0.00003 (0.00011)		0.00095 (0.00065)	
event-year 0 x treated x l1.drugs	0.00260*** (0.00017)	0.00734*** (0.00041)		0.00564*** (0.00031)		-0.00533*** (0.00062)			-0.00433*** (0.00019)		0.00068*** (0.00020)		-0.00039 (0.00079)	
event-year 1 x treated x l1.drugs	0.00224*** (0.00019)	0.00930*** (0.00048)		0.00542*** (0.00037)		-0.00104 (0.00065)			-0.00158*** (0.00018)		-0.00050* (0.00027)		-0.00006 (0.00089)	
event-year -2 x l1.patents	-0.00000 (0.00000)	0.00001 (0.00000)		0.00000 (0.00000)		-0.00001 (0.00001)			0.00000 (0.00000)		0.00001*** (0.00000)		-0.00003** (0.00001)	
event-year 0 x l1.patents	-0.00001*** (0.00000)	0.00001 (0.00001)		-0.00004*** (0.00001)		0.00005*** (0.00001)			0.00000 (0.00001)		0.00005*** (0.00000)		0.00006*** (0.00001)	
event-year 1 x l1.patents	-0.00002*** (0.00000)	-0.00001 (0.00001)		-0.00006*** (0.00001)		0.00008*** (0.00001)			0.00000 (0.00000)		0.00006*** (0.00001)		0.00019*** (0.00002)	
event-year -2 x treated x l1.patents	-0.00000 (0.00000)	-0.00000 (0.00001)		0.00000 (0.00001)		0.00001 (0.00001)			-0.00000 (0.00000)		-0.00001* (0.00000)		0.00000 (0.00002)	
event-year 0 x treated x l1.patents	0.00005*** (0.00000)	0.00005*** (0.00001)		0.00007*** (0.00001)		-0.00069*** (0.00002)			-0.00012*** (0.00000)		0.00001*** (0.00001)		0.00003 (0.00002)	
event-year 1 x treated x l1.patents	0.00004*** (0.00001)	0.00011*** (0.00001)		0.00006*** (0.00001)		-0.00051*** (0.00002)			-0.00007*** (0.00000)		-0.00004*** (0.00001)		-0.00003 (0.00002)	
Constant	12.48133***	12.48133***	9.12079***	9.12079***	11.85171***	11.85172***	3.33752***	3.33561***	0.18867***	0.18866***	0.82241***	0.82230***	-1.08819***	-1.08823***

	(0.00051)	(0.00051)	(0.00118)	(0.00118)	(0.00090)	(0.00090)	(0.00186)	(0.00186)	(0.00055)	(0.00055)	(0.00064)	(0.00064)	(0.00223)	(0.00223)
Observations	6,110,797	6,110,797	6,110,797	6,110,797	6,110,797	5,869,111	5,869,111	6,110,797	6,110,797	5,869,111	5,869,111	6,110,797	6,110,797	6,110,797
R-squared	0.00072	0.00065	0.00669	0.00606	0.00389	0.00366	0.08586	0.08676	0.01001	0.01006	0.02485	0.02486	0.00139	0.00127
Number of experimental IDs	1,239,384	1,239,384	1,239,384	1,239,384	1,239,384	1,239,384	1,239,336	1,239,336	1,239,384	1,239,336	1,239,336	1,239,384	1,239,384	1,239,384
<i>t-test: event-year -2x treated =0</i>	0.163	0.00382	0.975	0.492	0.368	0.133	0	0	0.0640	0.253	0.284	0.00606	0.0207	0.163
<i>t-test: event-year -2x ll.drugs =0</i>		0.183		0.818		0.0139		0.0214		0.332		0.613		0.000587
<i>t-test: event-year -2x treated x ll.drugs =0</i>	0.601		0.676		0.790		0.755		0.199		0.771		0.144	
<i>t-test: event-year -2x ll.patents =0</i>		0.661		0.115		0.339		0.191		0.566		0.0120		0.0273
<i>t-test: event-year -2x treated x ll.patents =0</i>		0.441		0.749		0.970		0.400		0.698		0.0902		0.900

Note. Additionally to the terms reported in the table, models include (experimental) individual fixed effects. Event-years -3 and -1 are reference categories. Standard errors clustered at a (experimental) individual level are in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## Appendix F

Table – Results of the t-test on non-linear pre-trends in the models for robustness analyses

Variables	Detrended Innovations		International Innovations Only		10-Year Lags of Innovations		Symptoms and External Causes as Controls		Adding the Died to the Treated		Adding Outpatient Register	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
event-year -2	0.00017 (0.00117)	0.00006 (0.00092)	0.00066 (0.00120)	0.00003 (0.00088)	-0.00042 (0.00121)	0.00009 (0.00091)	-0.00004 (0.00118)	-0.00015 (0.00089)	0.00056 (0.00124)	0.00037 (0.00094)	0.00066 (0.00252)	0.00120 (0.00176)
event-year 0	0.03240*** (0.00131)	0.03771*** (0.00103)	0.03148*** (0.00136)	0.03612*** (0.00098)	0.03086*** (0.00136)	0.03691*** (0.00102)	0.03348*** (0.00134)	0.03679*** (0.00102)	0.03102*** (0.00139)	0.03795*** (0.00105)	0.05325*** (0.00306)	0.05978*** (0.00207)
event-year 1	0.05301*** (0.00146)	0.06103*** (0.00115)	0.05290*** (0.00149)	0.05758*** (0.00110)	0.05069*** (0.00150)	0.05933*** (0.00114)	0.05524*** (0.00147)	0.06092*** (0.00111)	0.05143*** (0.00155)	0.06134*** (0.00118)	0.08574*** (0.00344)	0.08966*** (0.00227)
event-year -2 x treated	0.00110 (0.00161)	0.00215* (0.00126)	0.00043 (0.00165)	0.00231* (0.00120)	0.00165 (0.00166)	0.00211* (0.00124)	0.00188 (0.00161)	0.00259** (0.00120)	0.00074 (0.00170)	0.00200 (0.00128)	0.00063 (0.00352)	0.00437* (0.00242)
event-year 0 x treated	-0.34701*** (0.00408)	-0.28610*** (0.00316)	-0.37046*** (0.00444)	-0.27055*** (0.00295)	-0.37291*** (0.00438)	-0.27532*** (0.00301)	-0.36759*** (0.00404)	-0.28457*** (0.00294)	-0.35707*** (0.00431)	-0.28041*** (0.00314)	-0.06319*** (0.00525)	-0.04677*** (0.00349)
event-year 1 x treated	-0.34109*** (0.00394)	-0.27787*** (0.00303)	-0.36431*** (0.00423)	-0.25543*** (0.00278)	-0.36723*** (0.00420)	-0.26100*** (0.00284)	-0.36924*** (0.00391)	-0.27744*** (0.00281)	-0.35201*** (0.00415)	-0.26862*** (0.00298)	-0.07218*** (0.00551)	-0.04988*** (0.00359)
event-year -2 x ll.drugs	-0.00001 (0.00006)	-0.00011 (0.00016)		0.00004 (0.00009)		-0.00002 (0.00006)		-0.00003 (0.00006)		-0.00004 (0.00008)		
event-year 0 x ll.drugs	0.00038*** (0.00007)	0.00103*** (0.00018)		0.00064*** (0.00010)		0.00041*** (0.00007)		0.00041*** (0.00007)		0.00010 (0.00009)		
event-year 1 x ll.drugs	0.00043*** (0.00008)	0.00101*** (0.00020)		0.00078*** (0.00011)		0.00061*** (0.00007)		0.00049*** (0.00008)		0.00010 (0.00010)		
event-year -2 x treated x ll.drugs	0.00007 (0.00009)	0.00027 (0.00022)		0.00004 (0.00012)		0.00005 (0.00008)		0.00008 (0.00008)		0.00011 (0.00011)		
event-year 0 x treated x ll.drugs	0.00654*** (0.00017)	0.01902*** (0.00047)		0.01100*** (0.00026)		0.00651*** (0.00016)		0.00637*** (0.00017)		0.00101*** (0.00015)		
event-year 1 x treated x ll.drugs	0.00757*** (0.00017)	0.02136*** (0.00045)		0.01236*** (0.00025)		0.00742*** (0.00016)		0.00729*** (0.00017)		0.00110*** (0.00016)		
event-year -2 x ll.patents	-0.00000 (0.00000)	-0.00000 (0.00000)		-0.00000 (0.00000)		-0.00000 (0.00000)		-0.00000 (0.00000)		-0.00000 (0.00000)		-0.00000 (0.00000)
event-year 0 x ll.patents	0.00000 (0.00000)	0.00001*** (0.00000)		0.00001 (0.00000)		0.00001 (0.00000)		0.00001*** (0.00000)		-0.00000 (0.00000)		-0.00001** (0.00000)
event-year 1 x ll.patents	-0.00001** (0.00000)	0.00001*** (0.00000)		-0.00000 (0.00000)		0.00001*** (0.00000)		0.00001*** (0.00000)		-0.00001** (0.00000)		-0.00000 (0.00000)
event-year -2 x treated x ll.patents	-0.00000 (0.00000)	-0.00000 (0.00000)		0.00000 (0.00000)		0.00000 (0.00000)		0.00000 (0.00000)		0.00000 (0.00000)		-0.00000 (0.00000)

event-year 0 x treated x ll.patents	0.00010*** (0.00000)	0.00012*** (0.00001)	0.00014*** (0.00001)	0.00007*** (0.00000)	0.00008*** (0.00000)	0.00002*** (0.00000)
event-year 1 x treated x ll.patents	0.00014*** (0.00000)	0.00017*** (0.00001)	0.00018*** (0.00001)	0.00009*** (0.00000)	0.00011*** (0.00000)	0.00001*** (0.00000)
Constant	13.13076*** (0.00045)	13.13076*** (0.00045)	13.13076*** (0.00045)	13.13077*** (0.00045)	13.13078*** (0.00045)	13.12754*** (0.00042)
Observations	6,110,797	6,110,797	6,110,797	6,110,797	6,110,797	7,112,891
R-squared	0.00885	0.00789	0.00911	0.00750	0.00947	0.00756
Number of experimental IDs	1,239,384	1,239,384	1,239,384	1,239,384	1,239,384	1,442,305
<i>t-test: event-year -2 x treated =0</i>	0.495	0.0881	0.795	0.0552	0.320	0.0898
<i>t-test: event-year -2 x ll.drugs =0</i>					0.683	0.788
<i>t-test: event-year -2 x treated x ll.drugs =0</i>	0.408		0.208		0.718	0.515
<i>t-test: event-year -2 x ll.patents =0</i>		0.877		0.912		0.817
<i>t-test: event-year -2 x treated x ll.patents =0</i>		0.979		0.760		0.974
					0.850	0.688
						0.196
					0.978	0.708

Note. Additionally to the terms reported in the table, models include (experimental) individual fixed effects. Event-years -3 and -1 are reference categories. Standard errors clustered at a (experimental) individual level are in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

## Appendix G

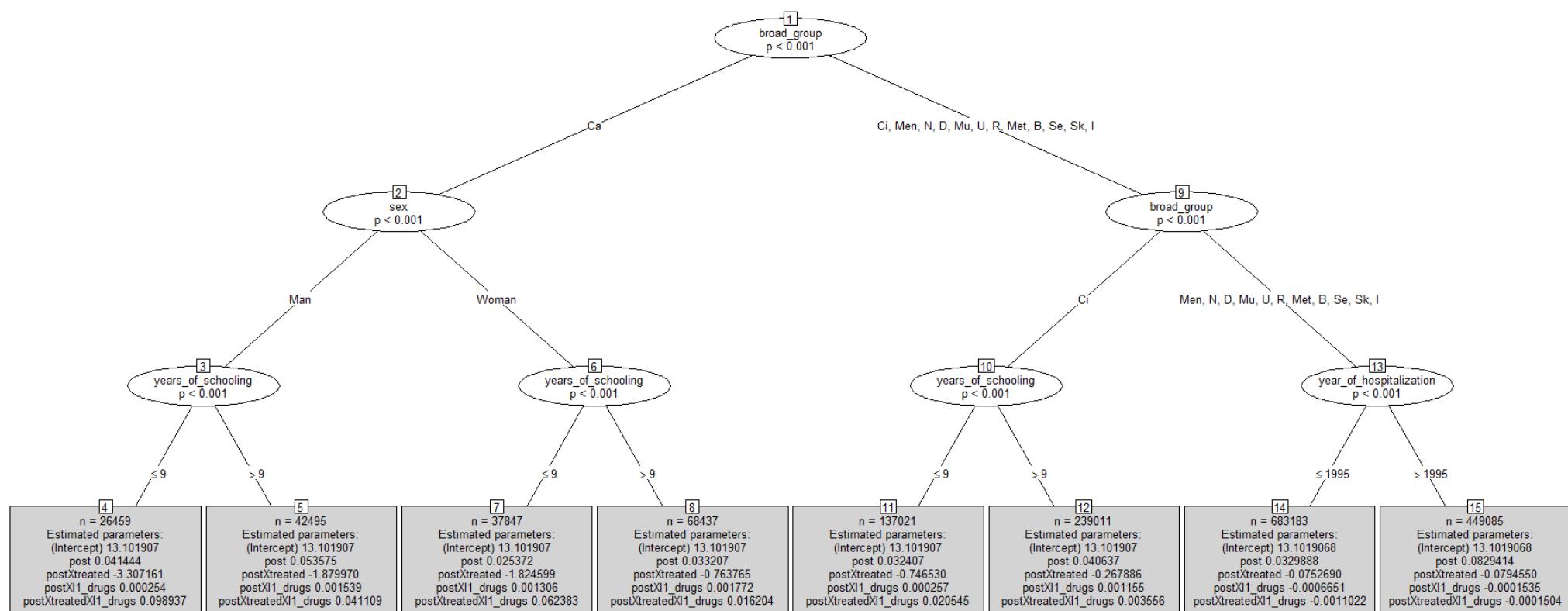


Figure G1 – Linear regression-based tree for the impact of medical innovations (l1.drugs) on ihs family disposable income.

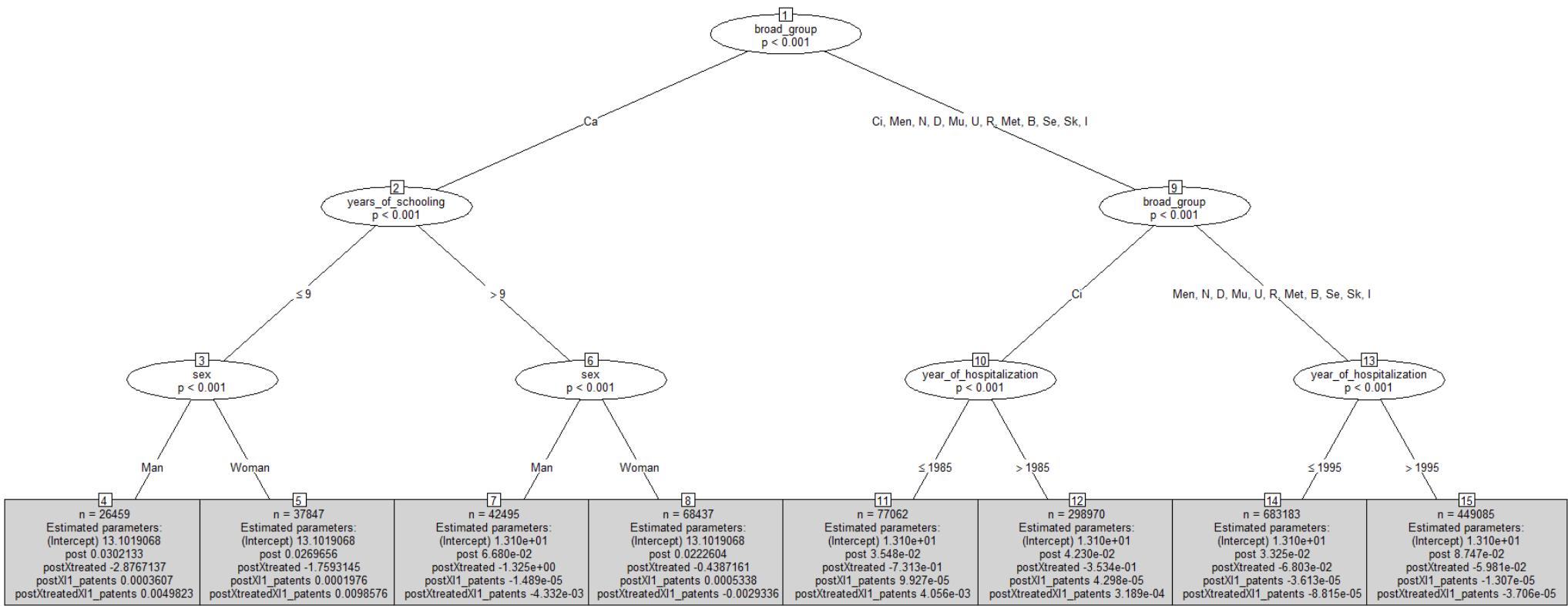


Figure G2 – Linear regression-based tree for the impact of medical innovations (11.patents) on ihs family disposable income.

## Appendix H

Table – DDD estimates for selected single diseases: Impact of medical innovations in 1981–2006 on the ihs family income in ages 40–60 Sweden

	Prostate Cancer				Breast Cancer				Hypertensive diseases				Ischaemic heart diseases				
	ihs family income		ihs own income		ihs family income		ihs own income		ihs family income		ihs own income		ihs family income		ihs own income		
post	0.00937 (0.00724)	0.00985 (0.00749)	0.09506*** (0.01838)	0.09792*** (0.01871)	0.02963 (0.03753)	0.05281*** (0.01534)	-0.01970 (0.05678)	-0.00040 (0.02567)	-0.01216 (0.01761)	0.00435 (0.01788)	-0.00386 (0.03048)	0.05359 (0.03315)	0.02300*** (0.00776)	0.02421*** (0.00595)	0.05911*** (0.01258)	0.05378*** (0.00971)	
post x l1.drugs	0.00320*** (0.00058)		-0.00254* (0.00134)		0.00194 (0.00232)		0.00403 (0.00338)		0.00181*** (0.00068)		0.00153 (0.00115)		0.00144*** (0.00043)		0.00004 (0.00068)		
post x treated	-0.47224*** (0.02647)	-0.47515*** (0.02747)	-0.14243*** (0.03048)	-0.13907*** (0.03075)	-1.73045*** (0.19074)	-0.94086*** (0.07022)	-0.91345*** (0.17044)	-0.23122*** (0.05465)	-0.11106*** (0.03144)	-0.11696*** (0.03470)	0.04901 (0.04526)	0.04544 (0.05072)	-0.75891*** (0.02700)	-0.64987*** (0.02166)	-0.51214*** (0.02662)	-0.41933*** (0.02136)	
post x treated x l1.drugs	0.01512*** (0.00175)		0.00790*** (0.00207)		0.07345*** (0.01091)		0.05167*** (0.00974)		0.00214* (0.00115)		-0.00207 (0.00167)		0.02314*** (0.00122)		0.02080*** (0.00125)		
post x l1.patents		0.00071*** (0.00013)		-0.00062** (0.00030)		0.00024 (0.00043)		0.00131** (0.00054)		0.00027 (0.00017)		-0.00017 (0.00030)		0.00025*** (0.00006)		0.00006 (0.00009)	
post x treated x l1.patents		0.00343*** (0.00041)		0.00170*** (0.00047)		0.01157*** (0.00145)		0.00463*** (0.00112)		0.00055* (0.00030)		-0.00045 (0.00044)		0.00325*** (0.00017)		0.00297*** (0.00018)	
Constant	13.23354*** (0.00215)	13.23354*** (0.00215)	12.36356*** (0.00238)	12.36356*** (0.00238)	13.37578*** (0.00662)	13.37566*** (0.00661)	12.86785*** (0.00516)	12.86783*** (0.00518)	13.09513*** (0.00237)	13.09512*** (0.00236)	12.41587*** (0.00356)	12.41582*** (0.00356)	13.13333*** (0.00162)	13.13334*** (0.00162)	12.55318*** (0.00161)	12.55318*** (0.00161)	
Observations	217,867	217,867	217,867	217,867	38,471	38,471	38,471	38,471	103,021	103,021	103,021	103,021	502,948	502,948	502,948	502,948	
R-squared	0.01215	0.01191	0.00079	0.00075	0.02850	0.02952	0.00584	0.00338	0.00105	0.00083	0.00029	0.00034	0.01479	0.01497	0.00338	0.00358	
Number of individuals	43,888	43,888	43,888	43,888	7,792	7,792	7,792	7,792	20,854	20,854	20,854	20,854	101,801	101,801	101,801	101,801	
Individual (experimental) FEs	yes																
1 SD of l1.drugs /l1.patents	6.436942	27.05131	6.436942	27.05131	3.545197	24.24355	3.545197	24.24355	10.30004	40.7342	10.30004	40.7342	7.161477	51.14879	7.161477	51.14879	
1 SD x effect x 100%	9.73%	9.28%	5.09%	4.60%	26.04%	28.05%	18.32%	11.22%	2.20%	2.24%	-2.13%	-1.83%	16.57%	16.62%	14.90%	15.19%	
1 SD combined effect x 100%		19.01%		9.68%		54.09%		29.54%		4.44%		-3.97%		33.20%		30.09%	
1 SD combined SE x 100%		1.58%		1.84%		5.23%		4.39%		1.70%		2.48%		1.23%		1.28%	
CI lower 95%		15.91%		6.07%		43.85%		20.93%		1.11%		-8.83%		30.78%		27.57%	
CI higher 95		22.11%		13.29%		64.33%		38.15%		7.78%		0.90%		35.61%		32.60%	

Table G1 Cont'd

	Cardiac arrhythmias and heart failure				Cerebrovascular diseases				Diseases of arteries, arterioles and capillaries				Mental and behavioural disorders due to use of alcohol and other substances			
	ihs family income		ihs own income		ihs family income		ihs own income		ihs family income		ihs own income		ihs family income		ihs own income	
post	-0.02750 (0.01764)	0.01809* (0.01021)	0.00336 (0.03059)	0.02076 (0.01731)	0.01261 (0.00995)	0.02074** (0.01038)	0.05153*** (0.01803)	0.05583*** (0.01859)	0.06846*** (0.02595)	0.07724*** (0.01994)	0.05043 (0.03597)	0.05292* (0.02848)	-0.02371 (0.05898)	0.01210 (0.02217)	0.01283 (0.07324)	0.06143** (0.02635)
post x l1.drugs	0.00315*** (0.00064)		0.00205* (0.00108)		0.00388*** (0.00102)		-0.00044 (0.00186)		-0.00137 (0.00339)		0.00050 (0.00438)		0.00111 (0.00621)		-0.00180 (0.00771)	
post x treated	-0.36692*** (0.04525)	-0.28976*** (0.02563)	-0.14254*** (0.04911)	-0.08145*** (0.02801)	-1.18349*** (0.04653)	-1.21691*** (0.04677)	-0.61881*** (0.04038)	-0.68695*** (0.04318)	-0.53963*** (0.07276)	-0.50059*** (0.05672)	-0.25572*** (0.06167)	-0.23008*** (0.05444)	-0.25071*** (0.09612)	-0.17362*** (0.03845)	-0.28695*** (0.10677)	-0.12734*** (0.04198)
post x treated x l1.drugs	0.00599*** (0.00152)		0.00384** (0.00168)		0.04672*** (0.00419)		0.05104*** (0.00362)		0.01294 (0.00871)		0.02374*** (0.00711)		0.01186 (0.00996)		0.03146*** (0.01108)	

post x l1.patents	0.00014*** (0.00003)	0.00013** (0.00005)	0.00021*** (0.00007)	-0.00006 (0.00013)	-0.00004 (0.00005)	0.00000 (0.00006)	-0.00002 (0.00006)	-0.00002 (0.00001)	-0.00004** (0.00002)
post x treated x l1.patents	0.00029*** (0.00007)	0.00015* (0.00008)	0.00340*** (0.00028)	0.00393*** (0.00026)	0.00014 (0.00011)	0.00036*** (0.00010)	0.00002 (0.00002)	0.00002 (0.00002)	0.00010*** (0.00003)
Constant	13.21043*** (0.00208)	13.21043*** (0.00208)	12.59019*** (0.00223)	12.59020*** (0.00223)	13.14844*** (0.00327)	12.47717*** (0.00259)	12.47714*** (0.00259)	13.04147*** (0.00576)	12.45956*** (0.00467)
Observations	203,803	203,803	203,803	203,803	239,628	239,628	239,628	51,174	51,174
R-squared	0.00534	0.00535	0.00092	0.00095	0.04143	0.04187	0.00524	0.00655	0.01770
Number of individuals	41,242	41,242	41,242	41,242	48,744	48,744	48,744	10,411	10,411
Individual (experimental) FEs	yes								
1 SD of l1.drugs /l1.patents	6.979301	151.1118	6.979301	151.1118	4.219155	62.80019	4.219155	33.68879	256.7495
1 SD x effect x 100%	4.18%	4.38%	2.68%	2.27%	19.71%	21.35%	21.53%	24.68%	4.36%
1 SD combined effect x 100%	8.56%	4.95%			41.06%		46.22%	7.95%	17.24%
1 SD combined SE x 100%	1.50%	1.68%			2.49%		2.24%	4.07%	3.51%
CI lower 95%	5.63%	1.65%			36.18%		41.83%	-0.03%	1.89%
CI higher 95	11.50%	8.25%			45.95%		50.60%	15.94%	24.12%
									6.63%
									15.27%

Table G1 Cont'd

Schizophrenia, schizotypal and delusional disorders										Mood (affective) disorders				Infectious arthropathies				Arthritis and systemic connective tissue disorders				
	ihs family income				ihs own income				ihs family income	ihs own income				ihs family income				ihs family income				
post	0.02376 (0.10539)	0.01130 (0.02691)	0.30430** (0.14292)	0.09945*** (0.03771)	-0.01460 (0.01670)	-0.00769 (0.02129)	0.01977 (0.02788)	0.12035** (0.04771)	0.03724 (0.05918)	0.04659 (0.03020)	-0.13650 (0.11820)	-0.10006 (0.08717)	0.02222 (0.01403)	0.03795*** (0.00861)	0.14464*** (0.02884)	0.12032*** (0.01822)						
post x l1.drugs	-0.00130 (0.00492)		-0.01357** (0.00661)		0.00102 (0.00064)		0.00077 (0.00092)		0.00188 (0.00413)		0.01324* (0.00795)		0.00188*** (0.00061)		-0.00296** (0.00123)							
post x treated	0.04311 (0.17341)	-0.03087 (0.04611)	-0.09061 (0.21644)	0.06521 (0.05779)	-0.19044*** (0.03639)	-0.16666*** (0.05302)	-0.04630 (0.04136)	-0.04939 (0.07567)	-0.30809** (0.13028)	-0.12525 (0.08058)	0.06718 (0.17175)	0.09560 (0.11875)	-0.03729 (0.02545)	-0.03862** (0.01576)	0.05119 (0.04378)	0.03274 (0.02780)						
post x treated x l1.drugs	-0.00457 (0.00801)		0.00946 (0.00999)		0.00076 (0.00122)		0.00201 (0.00132)		0.01929** (0.00873)		-0.00441 (0.01180)		-0.00027 (0.00107)		-0.00191 (0.00183)							
post x l1.patents		-0.00022 (0.00037)		-0.00128** (0.00051)		0.00011 (0.00012)		-0.00039* (0.00023)		0.00124 (0.00201)		0.01087* (0.00591)		0.00009*** (0.00003)		-0.00014*** (0.00005)						
post x treated x l1.patents		-0.00036 (0.00062)		0.00071 (0.00077)		-0.00001 (0.00026)		0.00031 (0.00036)		0.00669 (0.00525)		-0.00648 (0.00789)		-0.00002 (0.00005)		-0.00008 (0.00008)						
Constant	12.53303*** (0.00419)	12.53302*** (0.00419)	12.09120*** (0.00484)	12.09117*** (0.00484)	13.06065*** (0.00313)	13.06065*** (0.00313)	12.44551*** (0.00344)	12.44545*** (0.00498)	13.22154*** (0.00499)	12.61755*** (0.00663)	12.61759*** (0.00663)	13.23313*** (0.00145)	13.23313*** (0.00145)	12.54123*** (0.00241)	12.54122*** (0.00241)							
Observations	63,263	63,263	63,263	63,263	94,131	94,131	94,131	94,131	17,837	17,837	17,837	17,837	157,521	157,521	157,521	157,521						
R-squared	0.00068	0.00072	0.00189	0.00198	0.00478	0.00465	0.00084	0.00071	0.00344	0.00245	0.00144	0.00150	0.00235	0.00237	0.00256	0.00259						
Number of individuals	12,942	12,942	12,942	12,942	19,097	19,097	19,097	19,097	3,620	3,620	3,620	3,620	31,807	31,807	31,807	31,807						
Individual (experimental) FEs	yes	yes	yes	yes	yes	yes	yes	yes														
1 SD of l1.drugs /l1.patents	2.769833	34.78858	2.769833	34.78858	13.16524	57.06547	13.16524	57.06547	2.857023	4.200988	2.857023	4.200988	6.870148	159.2471	6.870148	159.2471						
1 SD x effect x 100%	-1.27%	-1.25%	2.62%	2.47%	1.00%	-0.06%	2.65%	1.77%	5.51%	2.81%	-1.26%	-2.72%	-0.19%	-0.32%	-1.31%	-1.27%						
1 SD combined effect x 100%	-2.52%		5.09%		0.94%		4.42%		8.32%		-3.98%		-0.50%		-2.59%							
1 SD combined SE x 100%	3.09%		3.85%		2.19%		2.69%		3.33%		4.73%		1.08%		1.79%							
CI lower 95%	-8.58%		-2.46%		-3.34%		-0.86%		1.80%		-13.25%		-2.63%		-6.09%							
CI higher 95	3.55%		12.64%		5.23%		9.69%		14.85%		5.28%		1.62%		0.92%							

Table G1 Cont'd

	HIV															
	Deforming dorsopathies, osteopathies and chondropathies				Diseases of male genital organs				Diseases of female pelvic organs							
	ihs family income		ihs own income		ihs family income		ihs own income		ihs family income		ihs own income		ihs family income		ihs own income	
post	0.01489** (0.00624)	0.02733*** (0.00538)	0.05227*** (0.01030)	0.06954*** (0.00920)	0.02290 (0.01461)	0.03493*** (0.00982)	0.05909*** (0.01963)	0.05876*** (0.01301)	0.03497 (0.02276)	0.04533*** (0.01562)	0.04986 (0.04365)	0.05712* (0.03001)	-0.43324 (0.54844)	-0.70974 (0.84106)	-0.37795 (0.53885)	-0.64686 (0.83108)
post x l1.drugs	0.00145*** (0.00024)	0.00032 (0.00039)		0.00180 (0.00134)		-0.00032 (0.00175)		0.00098 (0.00061)		0.00036 (0.00115)		0.04497 (0.04697)		0.04139 (0.04657)		
post x treated	-0.02875*** (0.01010)	-0.02901*** (0.00883)	0.01480 (0.01443)	0.00975 (0.01293)	-0.00593 (0.02255)	-0.01540 (0.01580)	0.00805 (0.02945)	-0.00183 (0.01971)	-0.04409 (0.03400)	-0.03012 (0.02337)	-0.00024 (0.05542)	0.00471 (0.03810)	-3.63504 (2.95396)	-3.29495 (3.66706)	0.44015 (0.64624)	0.84992 (0.95363)
post x treated x l1.drugs	-0.00041 (0.00038)	-0.00080 (0.00055)		-0.00167 (0.00199)		-0.00105 (0.00268)		0.00073 (0.00090)		-0.00025 (0.00146)		0.02767 (0.16659)		-0.05009 (0.05068)		
post x l1.patents		0.00002*** (0.00000)		-0.00001 (0.00001)		0.00008 (0.00009)		-0.00003 (0.00011)		0.00005* (0.00003)		0.00001 (0.00006)		0.00447 (0.00469)		0.00418 (0.00466)
post x treated x l1.patents	-0.00001 (0.00001)	-0.00001 (0.00001)		-0.00009 (0.00014)		-0.00002 (0.00018)		0.00003 (0.00004)		-0.00003 (0.00007)		0.00043 (0.01536)		-0.00545 (0.00503)		
Constant	13.18272*** (0.00090)	13.18272*** (0.00090)	12.56455*** (0.00130)	12.56454*** (0.00130)	13.14229*** (0.00195)	13.14228*** (0.00195)	12.67301*** (0.00250)	12.67301*** (0.00250)	13.31162*** (0.00107)	13.31162*** (0.00107)	12.56104*** (0.00187)	12.40196*** (0.00187)	12.40196*** (0.17507)	12.40196*** (0.17512)	12.22417*** (0.04956)	12.22419*** (0.04932)
Observations	466,576	466,576	466,576	466,576	101,713	101,713	101,713	101,713	222,832	222,832	222,832	222,832	255	255	255	255
R-squared	0.00143	0.00134	0.00122	0.00125	0.00097	0.00095	0.00018	0.00017	0.00513	0.00513	0.00141	0.00141	0.19866	0.19697	0.03443	0.03812
Number of individuals	94,244	94,244	94,244	94,244	20,595	20,595	20,595	20,595	44,790	44,790	44,790	44,790	54	54	54	54
Individual (experimental) FEs	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
1 SD of l1.drugs /l1.patents	12.24771	803.7869	12.24771	803.7869	5.271199	79.13483	5.271199	79.13483	5.978831	125.1056	5.978831	125.1056	2.730056	7.438911	2.730056	7.438911
1 SD x effect x 100%	-0.50%	-0.80%	-0.98%	-0.80%	-0.88%	-0.71%	-0.55%	-0.16%	0.44%	0.38%	-0.15%	-0.38%	7.55%	0.32%	-13.67%	-4.05%
1 SD combined effect x 100%		-1.31%		-1.78%		-1.59%		-0.71%		0.81%		-0.52%		7.87%		-17.73%
1 SD combined SE x 100%		0.93%		1.05%		1.53%		2.01%		0.73%		1.24%		46.89%		14.33%
CI lower 95%		-3.13%		-3.84%		-4.58%		-4.64%		-0.63%		-2.95%		-84.04%		-45.82%
CI higher 95		0.51%		0.27%		1.40%		3.22%		2.25%		1.90%		99.78%		10.36%

Note: Models are estimated according to Eq.4. Robust standard errors clustered at individual (experimental) level are in parentheses.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1