



APPENDIX 12.6
Results for the NON-NAIVE population

**Assessment of association between severe hypoglycemia and
use of Detemir Glargine and NPH insulins**

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2 List of abbreviations

Table 1: List of abbreviations

S.No.	Abbreviation	2. Abbrev Cox's model	Expansion
1	Gender	gender	Gender (Male or Female)
2	Age-group	agegroup	Age-group at start of follow-up (10 years intervals)
3	Diagnose	typedm	Diagnose as given in the reimbursement decision (T1, T2, or Undefined)
4	First Insulin		Insulin at start of follow-up, (detemir, glargine, NPH, or none of these (no DGN))
5	Calender year	calyear	Calender year at start of follow-up (00-05, 06, 07, 08, 09)
6	Year of diagnose		Year of diagnose (5 year intervals)
7	Time since diagnose	time2diag	Time since diagnose at start of follow-up, (under 1, 1-2, 2-5, over 5 years)
8	A10BB hist	BB.stfup	History use of oral diabetes medication, (ICD10 code A10BB) at start of follow-up
9	A10A hist	A10A.stfup	History use of insulins (ICD10 codes A10A) at start of follow-up
10	Hosp hist	hosph.stfup	History of hospitalizations due to severe hypoglycaemic coma at start of follow-up
11		useBB	Present use of oral diabetes medication (A10BB)
12		useA10A	Present use of insulins (A10A) other than glargine , detemir and NPH-insulins
13	Hospital district		Hospital district at start of follow-up
14	DGN		Detemir, Glargine or NPH

A Appendix 1: Study population description

Table A.2: Number of individuals stratified by diagnose and by study cohort.

S.No.	Diagnose	Naive		Non-naive		Other		Total	
		N	%	N	%	N	%	N	%
1	T1	12378	16.4	4878	9.1	414	4.8	17670	12.8
2	T2	47926	63.3	6526	12.2	3865	44.7	58317	42.3
3	Undefined	15378	20.3	42261	78.7	4368	50.5	62007	44.9
4	Total	75682	100.0	53665	100.0	8647	100.0	137994	100.0

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Table A.3: Number of individuals stratified by diagnose and by first insulin in the non-naive cohort .

S.No.	Diagnose	NPH		Detemir		Glargine		Total	
		N	%	N	%	N	%	N	%
1	T1	4818	9.1	5	4.6	55	9.1	4878	9.1
2	T2	6412	12.1	28	25.9	86	14.2	6526	12.2
3	Undefined	41720	78.8	75	69.4	466	76.8	42261	78.7
4	Total	52950	100.0	108	100.0	607	100.0	53665	100.0

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Table A.4: Number of individuals stratified by first insulin at start of follow-up and by study cohort.

S.No.	Insulin	Naive		Non-naive		Other		Total	
		N	%	N	%	N	%	N	%
1	A10AA01	0	0.0	0	0.0	1	0.0	1	0.0
2	A10AB01	0	0.0	0	0.0	731	8.5	731	0.5
3	A10AB04	0	0.0	0	0.0	138	1.6	138	0.1
4	A10AB05	0	0.0	0	0.0	345	4.0	345	0.3
5	A10AB06	0	0.0	0	0.0	6	0.1	6	0.0
6	A10AC01	49865	65.9	52950	98.7	0	0.0	102815	74.5
7	A10AC30	0	0.0	0	0.0	85	1.0	85	0.1
8	A10AD01	0	0.0	0	0.0	4464	51.6	4464	3.2
9	A10AD04	0	0.0	0	0.0	177	2.0	177	0.1
10	A10AD05	0	0.0	0	0.0	2694	31.2	2694	2.0
11	A10AE01	0	0.0	0	0.0	5	0.1	5	0.0
12	A10AE02	0	0.0	0	0.0	1	0.0	1	0.0
13	A10AE04	18363	24.3	607	1.1	0	0.0	18970	13.7
14	A10AE05	7454	9.8	108	0.2	0	0.0	7562	5.5
15	Total	75682	100.0	53665	100.0	8647	100.0	137994	100.0

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Table A.5: Number of individuals stratified by gender and by study cohort.

S.No.	Gender	Naive		Non-naive		Other		Total	
		N	%	N	%	N	%	N	%
1	Male	42982	56.8	28274	52.7	4230	48.9	75486	54.7
2	Female	32700	43.2	25391	47.3	4417	51.1	62508	45.3
3	Total	75682	100.0	53665	100.0	8647	100.0	137994	100.0
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Table A.6: Number of individuals stratified by gender and by first insulin in the non-naive cohort.

S.No.	Gender	NPH		Detemir		Glargine		Total	
		N	%	N	%	N	%	N	%
1	Male	27892	52.7	53	49.1	329	54.2	28274	52.7
2	Female	25058	47.3	55	50.9	278	45.8	25391	47.3
3	Total	52950	100.0	108	100.0	607	100.0	53665	100.0
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Table A.7: Number of individuals stratified by age at start of follow-up (10-year age groups) and by study cohort.

S.No.	Age group	Naive		Non-naive		Other		Total	
		N	%	N	%	N	%	N	%
1	0-9	3312	4.4	1002	1.9	8	0.1	4322	3.1
2	10-19	3045	4.0	3401	6.3	24	0.3	6470	4.7
3	20-29	1920	2.5	4086	7.6	53	0.6	6059	4.4
4	30-39	3026	4.0	5512	10.3	166	1.9	8704	6.3
5	40-49	6687	8.8	6711	12.5	447	5.2	13845	10.0
6	50-59	15858	21.0	9230	17.2	1081	12.5	26169	19.0
7	60-69	17492	23.1	10005	18.6	1936	22.4	29433	21.3
8	70-79	15427	20.4	10024	18.7	2987	34.5	28438	20.6
9	80+	8915	11.8	3694	6.9	1945	22.5	14554	10.5
10	Total	75682	100.0	53665	100.0	8647	100.0	137994	100.0
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Table A.8: Number of individuals stratified by age at start of follow-up (10-year age groups) and by first insulin in the non-naive cohort.

S.No.	Age group	NPH		Detemir		Glargine		Total	
		N	%	N	%	N	%	N	%
1	0-9	1001	1.9	0	0.0	1	0.2	1002	1.9
2	10-19	3375	6.4	0	0.0	26	4.3	3401	6.3
3	20-29	4025	7.6	7	6.5	54	8.9	4086	7.6
4	30-39	5447	10.3	8	7.4	57	9.4	5512	10.3
5	40-49	6608	12.5	15	13.9	88	14.5	6711	12.5
6	50-59	9087	17.2	24	22.2	119	19.6	9230	17.2
7	60-69	9901	18.7	21	19.4	83	13.7	10005	18.6
8	70-79	9892	18.7	15	13.9	117	19.3	10024	18.7
9	80+	3614	6.8	18	16.7	62	10.2	3694	6.9
10	Total	52950	100.0	108	100.0	607	100.0	53665	100.0
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Table A.9: Number of individuals stratified by calendar year at start of follow-up and by study cohort.

S.No.	Calendar year	Naive		Non-naive		Other		Total	
		N	%	N	%	N	%	N	%
1	2000	6977	9.2	51079	95.2	4174	48.3	62230	45.1
2	2001	6726	8.9	729	1.4	430	5.0	7885	5.7
3	2002	6867	9.1	414	0.8	371	4.3	7652	5.5
4	2003	7077	9.4	371	0.7	362	4.2	7810	5.7
5	2004	7546	10.0	321	0.6	392	4.5	8259	6.0
6	2005	7007	9.3	169	0.3	436	5.0	7612	5.5
7	2006	6609	8.7	169	0.3	579	6.7	7357	5.3
8	2007	8729	11.5	238	0.4	922	10.7	9889	7.2
9	2008	9132	12.1	92	0.2	583	6.7	9807	7.1
10	2009	9012	11.9	83	0.2	398	4.6	9493	6.9
11	Total	75682	100.0	53665	100.0	8647	100.0	137994	100.0

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Table A.10: Number of individuals stratified by calendar year at start of follow-up and by first insulin in the non-naive cohort.

S.No.	Calendar year	NPH		Detemir		Glargine		Total	
		N	%	N	%	N	%	N	%
1	2000	51079	96.5	0	0.0	0	0.0	51079	95.2
2	2001	729	1.4	0	0.0	0	0.0	729	1.4
3	2002	414	0.8	0	0.0	0	0.0	414	0.8
4	2003	265	0.5	0	0.0	106	17.5	371	0.7
5	2004	170	0.3	0	0.0	151	24.9	321	0.6
6	2005	93	0.2	4	3.7	72	11.9	169	0.3
7	2006	100	0.2	14	13.0	55	9.1	169	0.3
8	2007	67	0.1	37	34.3	134	22.1	238	0.4
9	2008	21	0.0	28	25.9	43	7.1	92	0.2
10	2009	12	0.0	25	23.1	46	7.6	83	0.2
11	Total	52950	100.0	108	100.0	607	100.0	53665	100.0

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Table A.11: Number of individuals stratified by calendar year of reimbursement decision (5-year age groups) and by study cohort.

S.No.	Year of diagnose	Naive		Non-naive		Other		Total	
		N	%	N	%	N	%	N	%
1	1960-1964	264	0.3	1625	3.0	131	1.5	2020	1.5
2	1965-1969	407	0.5	2536	4.7	187	2.2	3130	2.3
3	1970-1974	439	0.6	2962	5.5	241	2.8	3642	2.6
4	1975-1979	632	0.8	4370	8.1	453	5.2	5455	4.0
5	1980-1984	915	1.2	6033	11.2	589	6.8	7537	5.5
6	1985-1989	2753	3.6	10715	20.0	1158	13.4	14626	10.6
7	1990-1994	8447	11.2	14227	26.5	1489	17.2	24163	17.5
8	1995-1999	14924	19.7	10608	19.8	1413	16.3	26945	19.5
9	2000-2004	26424	34.9	495	0.9	1583	18.3	28502	20.7
10	2005-2009	19370	25.6	84	0.2	1302	15.1	20756	15.0
11	2010	1107	1.5	10	0.0	101	1.2	1218	0.9
12	Total	75682	100.0	53665	100.0	8647	100.0	137994	100.0

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Table A.12: Number of individuals stratified by calendar year of reimbursement decision (5-year age groups) and by first insulin in the non-naive cohort.

S.No.	Year of diagnose	NPH		Detemir		Glargine		Total	
		N	%	N	%	N	%	N	%
1	1960-1964	1598	3.0	5	4.6	22	3.6	1625	3.0
2	1965-1969	2493	4.7	2	1.9	41	6.8	2536	4.7
3	1970-1974	2924	5.5	8	7.4	30	4.9	2962	5.5
4	1975-1979	4321	8.2	6	5.6	43	7.1	4370	8.1
5	1980-1984	5946	11.2	15	13.9	72	11.9	6033	11.2
6	1985-1989	10597	20.0	16	14.8	102	16.8	10715	20.0
7	1990-1994	14034	26.5	24	22.2	169	27.8	14227	26.5
8	1995-1999	10487	19.8	20	18.5	101	16.6	10608	19.8
9	2000-2004	475	0.9	5	4.6	15	2.5	495	0.9
10	2005-2009	68	0.1	5	4.6	11	1.8	84	0.2
11	2010	7	0.0	2	1.9	1	0.2	10	0.0
12	Total	52950	100.0	108	100.0	607	100.0	53665	100.0

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Table A.13: Number of individuals stratified by hospital district at start of follow-up and by study cohort.

S.No.	Hosp. District	Naive		Non-naive		Other		Total	
		N	%	N	%	N	%	N	%
1	Unknown	13757	18.2	51817	96.6	4609	53.3	70183	50.9
2	HUS	13795	18.2	388	0.7	618	7.1	14801	10.7
3	Varsinais-Suomi	4613	6.1	92	0.2	251	2.9	4956	3.6
4	Satakunta	2990	4.0	62	0.1	195	2.3	3247	2.4
5	Kantahame	2075	2.7	55	0.1	159	1.8	2289	1.7
6	Pirkanmaa	5577	7.4	144	0.3	310	3.6	6031	4.4
7	Paijat-Hame	2526	3.3	85	0.2	134	1.5	2745	2.0
8	Kymenlaakso	2380	3.1	77	0.1	142	1.6	2599	1.9
9	Etela-Karjala	1779	2.4	83	0.2	57	0.7	1919	1.4
10	Etela-Savo	1493	2.0	41	0.1	93	1.1	1627	1.2
11	Ita-Savo	1059	1.4	32	0.1	45	0.5	1136	0.8
12	Pohjois-Karjala	2673	3.5	93	0.2	180	2.1	2946	2.1
13	Pohjois-Savo	3289	4.3	130	0.2	329	3.8	3748	2.7
14	Keski-Suomi	3439	4.5	145	0.3	239	2.8	3823	2.8
15	Etela-Pohjanmaa	3214	4.2	104	0.2	320	3.7	3638	2.6
16	Vaasa	1308	1.7	79	0.1	377	4.4	1764	1.3
17	Keski-Pohjanmaa	1082	1.4	20	0.0	132	1.5	1234	0.9
18	Pohjois-Pohjanmaa	4463	5.9	110	0.2	216	2.5	4789	3.5
19	Kainuu	1369	1.8	39	0.1	47	0.5	1455	1.1
20	Lansi-Pohja	997	1.3	26	0.0	86	1.0	1109	0.8
21	Lappi	1610	2.1	39	0.1	75	0.9	1724	1.2
22	Ahvenanmaa	194	0.3	4	0.0	33	0.4	231	0.2
23	Total	75682	100.0	53665	100.0	8647	100.0	137994	100.0

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Table A.14: Number of individuals stratified by hospital district at start of follow-up and by first insulin in the non-naive cohort.

S.No.	Hosp. District	NPH		Detemir		Glargine		Total	
		N	%	N	%	N	%	N	%
1	Unknown	51816	97.9	0	0.0	1	0.2	51817	96.6
2	HUS	242	0.5	24	22.2	122	20.1	388	0.7
3	Varsinais-Suomi	57	0.1	6	5.6	29	4.8	92	0.2
4	Satakunta	38	0.1	4	3.7	20	3.3	62	0.1
5	Kantahame	28	0.1	1	0.9	26	4.3	55	0.1
6	Pirkanmaa	92	0.2	7	6.5	45	7.4	144	0.3
7	Paijat-Hame	58	0.1	7	6.5	20	3.3	85	0.2
8	Kymenlaakso	38	0.1	6	5.6	33	5.4	77	0.1
9	Etela-Karjala	46	0.1	6	5.6	31	5.1	83	0.2
10	Etela-Savo	30	0.1	2	1.9	9	1.5	41	0.1
11	Ita-Savo	26	0.0	1	0.9	5	0.8	32	0.1
12	Pohjois-Karjala	60	0.1	5	4.6	28	4.6	93	0.2
13	Pohjois-Savo	68	0.1	3	2.8	59	9.7	130	0.2
14	Keski-Suomi	96	0.2	7	6.5	42	6.9	145	0.3
15	Etela-Pohjanmaa	68	0.1	10	9.3	26	4.3	104	0.2
16	Vaasa	38	0.1	9	8.3	32	5.3	79	0.1
17	Keski-Pohjanmaa	14	0.0	0	0.0	6	1.0	20	0.0
18	Pohjois-Pohjanmaa	73	0.1	2	1.9	35	5.8	110	0.2
19	Kainuu	21	0.0	2	1.9	16	2.6	39	0.1
20	Lansi-Pohja	12	0.0	1	0.9	13	2.1	26	0.0
21	Lappi	25	0.0	5	4.6	9	1.5	39	0.1
22	Ahvenanmaa	4	0.0	0	0.0	0	0.0	4	0.0
23	Total	52950	100.0	108	100.0	607	100.0	53665	100.0

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B Appendix 2: Crude rate estimates for *first* severe hypoglycemic coma event

Table B.15: The number/risk time/incidence rate (95% CI) of first hypoglycemic coma event for detemir insulin, glargine insulin, and NPH-insulin stratified by diagnose.

S.No.	Diagnose	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	T1	glargine	3108	165	12019	13.73	11.79	15.99
2	T1	detemir	1478	45	3419	13.16	9.83	17.63
3	T1	NPH	4818	397	22086	17.97	16.29	19.83
4	T1	no DGN	4518	64	4367	14.66	11.47	18.72
5	T2	glargine	1851	86	4783	17.98	14.55	22.21
6	T2	detemir	758	18	1111	16.20	10.20	25.71
7	T2	NPH	6415	634	33730	18.80	17.39	20.32
8	T2	no DGN	5782	139	7003	19.85	16.81	23.44
9	Undefined	glargine	17376	1051	61036	17.22	16.21	18.29
10	Undefined	detemir	7599	252	15812	15.94	14.09	18.03
11	Undefined	NPH	41738	3975	199218	19.95	19.34	20.58
12	Undefined	no DGN	36578	831	33273	24.98	23.33	26.73
13	Total	glargine	22335	1302	77838	16.73	15.84	17.66
14	Total	detemir	9835	315	20342	15.48	13.87	17.29
15	Total	NPH	52971	5006	255034	19.63	19.09	20.18
16	Total	no DGN	46878	1034	44643	23.16	21.79	24.62

Non-naive cohort. Data 28th December 2011

Table B.16: The number/risk time/incidence rate (95% CI) of first hypoglycemic coma event for detemir insulin, glargine insulin, and NPH-insulin stratified by gender.

S.No.	Gender	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	Male	glargine	11877	706	43009	16.42	15.25	17.67
2	Male	detemir	4698	147	9713	15.13	12.87	17.79
3	Male	NPH	27903	2710	137272	19.74	19.01	20.50
4	Male	no DGN	24386	504	20714	24.33	22.30	26.55
5	Female	glargine	10458	596	34829	17.11	15.79	18.54
6	Female	detemir	5137	168	10629	15.81	13.59	18.39
7	Female	NPH	25068	2296	117762	19.50	18.72	20.31
8	Female	no DGN	22492	530	23929	22.15	20.34	24.12
9	Total	glargine	22335	1302	77838	16.73	15.84	17.66
10	Total	detemir	9835	315	20342	15.48	13.87	17.29
11	Total	NPH	52971	5006	255034	19.63	19.09	20.18
12	Total	no DGN	46878	1034	44643	23.16	21.79	24.62

Non-naive cohort. Data 28th December 2011

Table B.17: The number/risk time/incidence rate (95% CI) of first hypoglycemic coma event for detemir insulin, glargine insulin, and NPH-insulin stratified by age at start of follow up.

S.No.	Age group	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	0-9	glargine	667	44	2348	18.74	13.94	25.18
2	0-9	detemir	477	19	1121	16.95	10.81	26.57
3	0-9	NPH	1001	104	4194	24.80	20.46	30.05
4	0-9	no DGN	965	16	1073	14.91	9.13	24.33
5	10-19	glargine	2511	154	10190	15.11	12.91	17.70
6	10-19	detemir	1181	44	2749	16.00	11.91	21.50
7	10-19	NPH	3375	274	14228	19.26	17.11	21.68
8	10-19	no DGN	3215	60	2819	21.28	16.53	27.41
9	20-29	glargine	2768	136	10758	12.64	10.69	14.96
10	20-29	detemir	1386	43	3183	13.51	10.02	18.22
11	20-29	NPH	4028	327	18848	17.35	15.57	19.34
12	20-29	no DGN	3691	55	3033	18.13	13.92	23.62
13	30-39	glargine	3541	205	13835	14.82	12.92	16.99
14	30-39	detemir	1649	52	3827	13.59	10.35	17.83
15	30-39	NPH	5449	451	26324	17.13	15.62	18.79
16	30-39	no DGN	4964	54	3707	14.57	11.16	19.02
17	40-49	glargine	3896	231	14523	15.91	13.98	18.10
18	40-49	detemir	1740	52	3867	13.45	10.25	17.65
19	40-49	NPH	6610	572	33067	17.30	15.94	18.78
20	40-49	no DGN	5930	73	4310	16.94	13.47	21.30
21	50-59	glargine	4091	255	13523	18.86	16.68	21.32
22	50-59	detemir	1680	47	3101	15.16	11.39	20.17
23	50-59	NPH	9095	932	49711	18.75	17.58	19.99
24	50-59	no DGN	8114	153	6824	22.42	19.14	26.27
25	60-69	glargine	2882	168	8220	20.44	17.57	23.77
26	60-69	detemir	1163	40	1815	22.03	16.16	30.04
27	60-69	NPH	9903	1041	53781	19.36	18.22	20.57
28	60-69	no DGN	8612	240	8709	27.56	24.28	31.27
29	70-79	glargine	1697	93	3936	23.63	19.28	28.95
30	70-79	detemir	486	17	595	28.59	17.77	45.98
31	70-79	NPH	9893	1034	44305	23.34	21.96	24.81
32	70-79	no DGN	8436	289	10527	27.45	24.46	30.81
33	80+	glargine	282	16	505	31.70	19.42	51.74
34	80+	detemir	73	1	85	11.79	1.66	83.69
35	80+	NPH	3617	271	10576	25.62	22.75	28.86
36	80+	no DGN	2951	94	3641	25.82	21.09	31.60
37	Total	glargine	22335	1302	77838	16.73	15.84	17.66
38	Total	detemir	9835	315	20342	15.48	13.87	17.29
39	Total	NPH	52971	5006	255034	19.63	19.09	20.18
40	Total	no DGN	46878	1034	44643	23.16	21.79	24.62

Non-naive cohort. Data 28th December 2011

Table B.18: The number/risk time/incidence rate (95% CI) of first hypoglycemic coma event for detemir insulin, glargine insulin, and NPH-insulin stratified by calendar time since diagnose (first reimbursement decision or purchase).

S.No.	Time since diag	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	-1	glargine	541	29	1966	14.75	10.25	21.22
2	-1	detemir	285	8	600	13.33	6.66	26.65
3	-1	NPH	1158	96	5597	17.15	14.04	20.95
4	-1	no DGN	1063	24	1280	18.76	12.57	27.98
5	1-2	glargine	816	46	2851	16.13	12.08	21.54
6	1-2	detemir	424	11	941	11.69	6.47	21.10
7	1-2	NPH	1733	145	8646	16.77	14.25	19.74
8	1-2	no DGN	1618	22	1918	11.47	7.55	17.42
9	2-5	glargine	2933	133	10158	13.09	11.05	15.52
10	2-5	detemir	1295	39	2522	15.46	11.30	21.16
11	2-5	NPH	6884	601	35415	16.97	15.67	18.38
12	2-5	no DGN	6265	122	6601	18.48	15.48	22.07
13	5-10	glargine	5179	279	16676	16.73	14.88	18.81
14	5-10	detemir	2241	75	4295	17.46	13.93	21.90
15	5-10	NPH	14267	1353	72636	18.63	17.66	19.65
16	5-10	no DGN	12723	287	12903	22.24	19.81	24.97
17	10-	glargine	12866	815	46187	17.65	16.48	18.90
18	10-	detemir	5590	182	11984	15.19	13.13	17.56
19	10-	NPH	28929	2811	132740	21.18	20.41	21.97
20	10-	no DGN	25209	579	21941	26.39	24.32	28.63
21	Total	glargine	22335	1302	77838	16.73	15.84	17.66
22	Total	detemir	9835	315	20342	15.48	13.87	17.29
23	Total	NPH	52971	5006	255034	19.63	19.09	20.18
24	Total	no DGN	46878	1034	44643	23.16	21.79	24.62
Non-naive cohort. Data 28th December 2011								

Table B.19: The number/risk time/incidence rate (95% CI) of first hypoglycemic coma event for detemir insulin, glargine insulin, and NPH-insulin stratified by history use of oral diabetes medication (A10BB) at start of follow-up.

S.No.	A10BB hist	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	No	glargine	17237	1060	65333	16.22	15.28	17.23
2	No	detemir	7764	258	17492	14.75	13.06	16.66
3	No	NPH	30514	2732	142991	19.11	18.40	19.84
4	No	no DGN	27221	483	22018	21.94	20.06	23.98
5	Yes	glargine	5098	242	12505	19.35	17.06	21.95
6	Yes	detemir	2071	57	2851	20.00	15.42	25.92
7	Yes	NPH	22457	2274	112043	20.30	19.48	21.15
8	Yes	no DGN	19657	551	22625	24.35	22.40	26.47
9	Total	glargine	22335	1302	77838	16.73	15.84	17.66
10	Total	detemir	9835	315	20342	15.48	13.87	17.29
11	Total	NPH	52971	5006	255034	19.63	19.09	20.18
12	Total	no DGN	46878	1034	44643	23.16	21.79	24.62

Non-naive cohort. Data 28th December 2011

Table B.20: The number/risk time/incidence rate (95% CI) of first hypoglycemic coma event for detemir insulin, glargine insulin, and NPH-insulin stratified by history use of insulin medication (A10A) at start of follow-up.

S.No.	A10A hist	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	No	glargine	22335	1302	77838	16.73	15.84	17.66
2	No	detemir	9835	315	20342	15.48	13.87	17.29
3	No	NPH	52971	5006	255034	19.63	19.09	20.18
4	No	no DGN	46878	1034	44643	23.16	21.79	24.62
5	Yes	glargine	0	0	0	NA	NA	NA
6	Yes	detemir	0	0	0	NA	NA	NA
7	Yes	NPH	0	0	0	NA	NA	NA
8	Yes	no DGN	0	0	0	NA	NA	NA
9	Total	glargine	22335	1302	77838	16.73	15.84	17.66
10	Total	detemir	9835	315	20342	15.48	13.87	17.29
11	Total	NPH	52971	5006	255034	19.63	19.09	20.18
12	Total	no DGN	46878	1034	44643	23.16	21.79	24.62

Non-naive cohort. Data 28th December 2011

Table B.21: The number/risk time/incidence rate (95% CI) of first hypoglycemic coma event for detemir insulin, glargine insulin, and NPH-insulin stratified by hospitalization history at start of follow-up.

S.No.	Hosp hist	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	No	glargine	21964	1093	77174	14.16	13.35	15.03
2	No	detemir	9759	296	20220	14.64	13.06	16.41
3	No	NPH	49891	2667	248737	10.72	10.32	11.14
4	No	no DGN	45088	721	43729	16.49	15.33	17.74
5	Yes	glargine	371	209	664	314.75	274.84	360.45
6	Yes	detemir	76	19	123	154.77	98.72	242.64
7	Yes	NPH	3080	2339	6297	371.45	356.69	386.81
8	Yes	no DGN	1790	313	915	342.20	306.31	382.29
9	Total	glargine	22335	1302	77838	16.73	15.84	17.66
10	Total	detemir	9835	315	20342	15.48	13.87	17.29
11	Total	NPH	52971	5006	255034	19.63	19.09	20.18
12	Total	no DGN	46878	1034	44643	23.16	21.79	24.62
Non-naive cohort. Data 28th December 2011								

Table B.22: The number/risk time/incidence rate (95% CI) of first hypoglycemic coma event for detemir insulin, glargine insulin, and NPH-insulin stratified by hospital district at start of follow-up.

S.No.	Hosp. District	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	Unknown	glargine	21338	1238	75015	16.50	15.61	17.45
2	Unknown	detemir	9430	306	19616	15.60	13.95	17.45
3	Unknown	NPH	51816	4918	252157	19.50	18.97	20.06
4	Unknown	no DGN	45518	1011	43467	23.26	21.87	24.74
5	HUS	glargine	209	12	571	21.02	11.94	37.00
6	HUS	detemir	79	0	140	NA	NA	NA
7	HUS	NPH	249	25	582	42.93	29.01	63.54
8	HUS	no DGN	306	7	306	22.91	10.92	48.05
9	Varsinais-Suomi	glargine	48	3	132	22.76	7.34	70.57
10	Varsinais-Suomi	detemir	24	0	50	NA	NA	NA
11	Varsinais-Suomi	NPH	58	7	132	52.93	25.23	111.03
12	Varsinais-Suomi	no DGN	63	1	53	18.82	2.65	133.58
13	Satakunta	glargine	30	4	82	48.75	18.30	129.90
14	Satakunta	detemir	11	1	20	50.77	7.15	360.44
15	Satakunta	NPH	39	2	100	19.97	4.99	79.82
16	Satakunta	no DGN	45	0	41	NA	NA	NA
17	Kantahame	glargine	36	7	101	69.48	33.12	145.73
18	Kantahame	detemir	7	0	15	NA	NA	NA
19	Kantahame	NPH	30	4	68	58.78	22.06	156.63
20	Kantahame	no DGN	40	0	34	NA	NA	NA
21	Pirkanmaa	glargine	90	4	266	15.06	5.65	40.13
22	Pirkanmaa	detemir	35	0	61	NA	NA	NA
23	Pirkanmaa	NPH	94	2	248	8.05	2.01	32.20
24	Pirkanmaa	no DGN	110	0	93	NA	NA	NA
25	Paijat-Hame	glargine	35	0	95	NA	NA	NA
26	Paijat-Hame	detemir	16	0	28	NA	NA	NA
27	Paijat-Hame	NPH	59	8	165	48.51	24.26	97.00
28	Paijat-Hame	no DGN	54	1	28	35.89	5.06	254.82
29	Kymenlaakso	glargine	42	2	116	17.21	4.31	68.81
30	Kymenlaakso	detemir	18	1	29	34.66	4.88	246.06
31	Kymenlaakso	NPH	39	5	97	51.30	21.35	123.25
32	Kymenlaakso	no DGN	53	0	22	NA	NA	NA
33	Etela-Karjala	glargine	55	5	168	29.85	12.42	71.72
34	Etela-Karjala	detemir	31	1	54	18.46	2.60	131.04
35	Etela-Karjala	NPH	48	3	101	29.80	9.61	92.40
36	Etela-Karjala	no DGN	63	2	54	36.85	9.22	147.36
37	Etela-Savo	glargine	19	2	48	41.44	10.36	165.71
38	Etela-Savo	detemir	5	0	5	NA	NA	NA
39	Etela-Savo	NPH	30	1	85	11.77	1.66	83.53
40	Etela-Savo	no DGN	30	0	19	NA	NA	NA
41	Ita-Savo	glargine	15	0	32	NA	NA	NA
42	Ita-Savo	detemir	4	0	6	NA	NA	NA
43	Ita-Savo	NPH	26	0	91	NA	NA	NA
44	Ita-Savo	no DGN	24	1	27	37.13	5.23	263.63
45	Pohjois-Karjala	glargine	55	2	193	10.35	2.59	41.39
46	Pohjois-Karjala	detemir	17	0	30	NA	NA	NA
47	Pohjois-Karjala	NPH	61	2	143	13.95	3.49	55.79
48	Pohjois-Karjala	no DGN	72	1	63	15.87	2.24	112.68
49	Pohjois-Savo	glargine	92	5	257	19.48	8.11	46.80
50	Pohjois-Savo	detemir	23	0	54	NA	NA	NA
51	Pohjois-Savo	NPH	68	1	156	6.41	0.90	45.47
52	Pohjois-Savo	no DGN	95	1	71	14.14	1.99	100.41
53	Keski-Suomi	glargine	66	3	166	18.12	5.84	56.17
54	Keski-Suomi	detemir	33	3	69	43.78	14.12	135.74
55	Keski-Suomi	NPH	96	9	252	35.66	18.55	68.53
56	Keski-Suomi	no DGN	101	2	92	21.62	5.41	86.45
57	Etela-Pohjanmaa	glargine	37	5	81	61.52	25.61	147.78
58	Etela-Pohjanmaa	detemir	23	0	25	NA	NA	NA
59	Etela-Pohjanmaa	NPH	69	7	161	43.59	20.78	91.43
60	Etela-Pohjanmaa	no DGN	68	2	54	36.91	9.23	147.60
61	Vaasa	glargine	41	3	138	21.67	6.99	67.19
62	Vaasa	detemir	29	0	56	NA	NA	NA
63	Vaasa	NPH	38	2	105	19.04	4.76	76.11
64	Vaasa	no DGN	57	2	61	32.86	8.22	131.39
65	Keski-Pohjanmaa	glargine	8	0	34	NA	NA	NA
66	Keski-Pohjanmaa	detemir	4	0	4	NA	NA	NA
67	Keski-Pohjanmaa	NPH	14	0	49	NA	NA	NA
68	Keski-Pohjanmaa	no DGN	17	0	11	NA	NA	NA
69	Pohjois-Pohjanmaa	glargine	62	5	174	28.80	11.99	69.19
70	Pohjois-Pohjanmaa	detemir	17	1	28	36.22	5.10	257.11
71	Pohjois-Pohjanmaa	NPH	73	5	206	24.25	10.10	58.27
72	Pohjois-Pohjanmaa	no DGN	87	1	63	15.79	2.22	112.11
73	Kainuu	glargine	23	0	79	NA	NA	NA
74	Kainuu	detemir	14	1	27	36.95	5.20	262.29
75	Kainuu	NPH	21	0	51	NA	NA	NA
76	Kainuu	no DGN	27	0	20	NA	NA	NA
77	Lansi-Pohja	glargine	19	2	59	33.68	8.42	134.69
78	Lansi-Pohja	detemir	3	0	8	NA	NA	NA
79	Lansi-Pohja	NPH	12	3	17	178.05	57.43	552.08
80	Lansi-Pohja	no DGN	18	1	12	85.52	12.05	607.11
81	Lappi	glargine	13	0	27	NA	NA	NA
82	Lappi	detemir	10	1	17	60.17	8.48	427.11
83	Lappi	NPH	27	2	56	35.62	8.91	142.44
84	Lappi	no DGN	27	1	52	19.35	2.73	137.38
85	Ahvenanmaa	glargine	2	0	5	NA	NA	NA
86	Ahvenanmaa	detemir	2	0	3	NA	NA	NA
87	Ahvenanmaa	NPH	4	0	9	NA	NA	NA
88	Ahvenanmaa	no DGN	3	0	2	NA	NA	NA
89	Total	glargine	22335	1302	77838	16.73	15.84	17.66
90	Total	detemir	9835	315	20342	15.48	13.87	17.29
91	Total	NPH	52971	5006	255034	19.63	19.09	20.18
92	Total	no DGN	46878	1034	44643	23.16	21.79	24.62

Non-naive cohort. Data 28th December 2011

C Appendix 3: Crude rate estimates for *recurrence* of hypoglycemic coma events

Table C.23: The number/risk time/incidence rate (95% CI) for recurrence of hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by diagnose.

S.No.	Diagnose	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	T1	glargine	434	219	1342	163.23	142.98	186.35
2	T1	detemir	229	39	461	84.64	61.84	115.84
3	T1	NPH	426	399	1224	326.02	295.55	359.63
4	T1	no DGN	535	112	493	227.29	188.87	273.54
5	T2	glargine	294	113	628	179.97	149.67	216.41
6	T2	detemir	97	16	129	124.50	76.28	203.21
7	T2	NPH	674	391	1880	208.02	188.39	229.70
8	T2	no DGN	651	141	753	187.26	158.77	220.87
9	Undefined	glargine	2856	1499	7930	189.04	179.71	198.86
10	Undefined	detemir	1270	355	2352	150.94	136.03	167.49
11	Undefined	NPH	4205	3450	10535	327.49	316.74	338.60
12	Undefined	no DGN	4601	959	4212	227.67	213.70	242.54
13	Total	glargine	3584	1831	9899	184.97	176.69	193.64
14	Total	detemir	1596	410	2941	139.40	126.54	153.57
15	Total	NPH	5305	4240	13638	310.89	301.67	320.39
16	Total	no DGN	5787	1212	5458	222.06	209.90	234.92

Non-naive cohort. Data 28th December 2011

Table C.24: The number/risk time/incidence rate (95% CI) for recurrence of hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by gender.

S.No.	Gender	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	Male	glargine	1925	1057	5550	190.45	179.31	202.28
2	Male	detemir	760	167	1366	122.26	105.06	142.29
3	Male	NPH	2851	2610	7428	351.38	338.15	365.12
4	Male	no DGN	2973	648	2547	254.46	235.60	274.82
5	Female	glargine	1659	774	4349	177.97	165.86	190.96
6	Female	detemir	836	243	1575	154.26	136.04	174.93
7	Female	NPH	2454	1630	6210	262.46	250.03	275.52
8	Female	no DGN	2814	564	2911	193.72	178.37	210.39
9	Total	glargine	3584	1831	9899	184.97	176.69	193.64
10	Total	detemir	1596	410	2941	139.40	126.54	153.57
11	Total	NPH	5305	4240	13638	310.89	301.67	320.39
12	Total	no DGN	5787	1212	5458	222.06	209.90	234.92
Non-naive cohort. Data 28th December 2011								

Table C.25: The number/risk time/incidence rate (95% CI) for recurrence of hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by age at start of follow up.

S.No.	Age group	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	0-9	glargine	123	30	375	80.07	55.98	114.52
2	0-9	detemir	90	15	187	80.14	48.31	132.93
3	0-9	NPH	110	128	310	412.83	347.16	490.92
4	0-9	no DGN	157	22	192	114.30	75.26	173.60
5	10-19	glargine	401	202	1330	151.88	132.31	174.33
6	10-19	detemir	201	36	388	92.87	66.99	128.74
7	10-19	NPH	310	285	853	334.23	297.59	375.37
8	10-19	no DGN	437	81	337	240.46	193.40	298.96
9	20-29	glargine	384	330	1252	263.53	236.57	293.55
10	20-29	detemir	225	105	490	214.23	176.93	259.39
11	20-29	NPH	365	330	1021	323.18	290.13	360.00
12	20-29	no DGN	436	86	279	307.80	249.17	380.25
13	30-39	glargine	513	282	1571	179.48	159.71	201.70
14	30-39	detemir	252	84	552	152.09	122.81	188.36
15	30-39	NPH	470	461	1298	355.25	324.26	389.21
16	30-39	no DGN	558	116	363	319.77	266.57	383.60
17	40-49	glargine	564	254	1679	151.29	133.78	171.09
18	40-49	detemir	254	82	476	172.12	138.62	213.72
19	40-49	NPH	599	752	1556	483.29	449.96	519.10
20	40-49	no DGN	669	225	510	441.02	387.00	502.58
21	50-59	glargine	685	484	1799	269.08	246.14	294.15
22	50-59	detemir	287	56	490	114.28	87.95	148.50
23	50-59	NPH	993	844	2860	295.15	275.90	315.75
24	50-59	no DGN	1018	161	817	196.98	168.79	229.89
25	60-69	glargine	527	136	1171	116.15	98.18	137.41
26	60-69	detemir	202	27	271	99.52	68.25	145.11
27	60-69	NPH	1090	745	2896	257.23	239.41	276.38
28	60-69	no DGN	1099	207	1097	188.75	164.71	216.30
29	70-79	glargine	341	101	657	153.74	126.50	186.84
30	70-79	detemir	74	3	77	38.91	12.55	120.65
31	70-79	NPH	1089	589	2394	246.07	226.98	266.77
32	70-79	no DGN	1120	247	1485	166.29	146.80	188.38
33	80+	glargine	46	12	65	183.40	104.15	322.94
34	80+	detemir	11	2	9	220.43	55.13	881.39
35	80+	NPH	279	106	451	234.86	194.15	284.11
36	80+	no DGN	293	67	377	177.70	139.86	225.76
37	Total	glargine	3584	1831	9899	184.97	176.69	193.64
38	Total	detemir	1596	410	2941	139.40	126.54	153.57
39	Total	NPH	5305	4240	13638	310.89	301.67	320.39
40	Total	no DGN	5787	1212	5458	222.06	209.90	234.92

Non-naive cohort. Data 28th December 2011

Table C.26: The number/risk time/incidence rate (95% CI) for recurrence of hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by calendar time since diagnose (first reimbursement decision or purchase).

S.No.	Time since diag	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	-1	glargine	87	61	238	256.57	199.63	329.76
2	-1	detemir	46	12	95	126.11	71.63	222.06
3	-1	NPH	109	89	320	278.39	226.16	342.67
4	-1	no DGN	127	26	136	191.56	130.43	281.34
5	1-2	glargine	121	40	322	124.40	91.25	169.60
6	1-2	detemir	64	11	134	81.93	45.38	147.93
7	1-2	NPH	152	91	443	205.41	167.26	252.26
8	1-2	no DGN	172	23	152	151.60	100.74	228.13
9	2-5	glargine	402	202	1093	184.82	161.01	212.14
10	2-5	detemir	174	26	292	89.15	60.70	130.93
11	2-5	NPH	634	487	1745	279.09	255.37	305.01
12	2-5	no DGN	689	156	722	216.09	184.71	252.81
13	5-10	glargine	826	424	2087	203.14	184.70	223.43
14	5-10	detemir	377	77	607	126.83	101.44	158.57
15	5-10	NPH	1443	1025	3843	266.70	250.86	283.54
16	5-10	no DGN	1491	283	1549	182.66	162.58	205.23
17	10-	glargine	2148	1104	6160	179.23	168.96	190.12
18	10-	detemir	935	284	1813	156.65	139.45	175.97
19	10-	NPH	2967	2548	7287	349.65	336.33	363.49
20	10-	no DGN	3308	724	2899	249.71	232.17	268.58
21	Total	glargine	3584	1831	9899	184.97	176.69	193.64
22	Total	detemir	1596	410	2941	139.40	126.54	153.57
23	Total	NPH	5305	4240	13638	310.89	301.67	320.39
24	Total	no DGN	5787	1212	5458	222.06	209.90	234.92
Non-naive cohort. Data 28th December 2011								

Table C.27: The number/risk time/incidence rate (95% CI) for recurrence of hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by history use of oral diabetes medication (A10BB) at start of follow-up.

S.No.	A10BB hist	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	No	glargine	2707	1447	8228	175.86	167.03	185.16
2	No	detemir	1262	368	2510	146.61	132.37	162.38
3	No	NPH	2914	2445	7524	324.94	312.31	338.08
4	No	no DGN	3445	608	2695	225.58	208.35	244.25
5	Yes	glargine	877	384	1671	229.82	207.95	254.00
6	Yes	detemir	334	42	431	97.44	72.01	131.85
7	Yes	NPH	2391	1795	6114	293.60	280.33	307.50
8	Yes	no DGN	2342	604	2763	218.62	201.86	236.77
9	Total	glargine	3584	1831	9899	184.97	176.69	193.64
10	Total	detemir	1596	410	2941	139.40	126.54	153.57
11	Total	NPH	5305	4240	13638	310.89	301.67	320.39
12	Total	no DGN	5787	1212	5458	222.06	209.90	234.92

Non-naive cohort. Data 28th December 2011

Table C.28: The number/risk time/incidence rate (95% CI) for recurrence of hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by history use of insulin medication (A10A) at start of follow-up.

S.No.	A10A hist	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	No	glargine	3584	1831	9899	184.97	176.69	193.64
2	No	detemir	1596	410	2941	139.40	126.54	153.57
3	No	NPH	5305	4240	13638	310.89	301.67	320.39
4	No	no DGN	5787	1212	5458	222.06	209.90	234.92
5	Yes	glargine	0	0	0	NA	NA	NA
6	Yes	detemir	0	0	0	NA	NA	NA
7	Yes	NPH	0	0	0	NA	NA	NA
8	Yes	no DGN	0	0	0	NA	NA	NA
9	Total	glargine	3584	1831	9899	184.97	176.69	193.64
10	Total	detemir	1596	410	2941	139.40	126.54	153.57
11	Total	NPH	5305	4240	13638	310.89	301.67	320.39
12	Total	no DGN	5787	1212	5458	222.06	209.90	234.92

Non-naive cohort. Data 28th December 2011

Table C.29: The number/risk time/incidence rate (95% CI) for recurrence of hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by hospitalization history at start of follow-up.

S.No.	Hosp hist	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	No	glargine	2173	1137	5302	214.45	202.34	227.29
2	No	detemir	996	261	1732	150.72	133.50	170.16
3	No	NPH	2820	1549	5490	282.16	268.45	296.57
4	No	no DGN	3310	515	2697	190.93	175.13	208.15
5	Yes	glargine	1411	694	4597	150.96	140.14	162.62
6	Yes	detemir	600	149	1209	123.19	104.92	144.65
7	Yes	NPH	2485	2691	8148	330.25	318.00	342.96
8	Yes	no DGN	2477	697	2761	252.48	234.41	271.94
9	Total	glargine	3584	1831	9899	184.97	176.69	193.64
10	Total	detemir	1596	410	2941	139.40	126.54	153.57
11	Total	NPH	5305	4240	13638	310.89	301.67	320.39
12	Total	no DGN	5787	1212	5458	222.06	209.90	234.92
Non-naive cohort. Data 28th December 2011								

Table C.30: The number/risk time/incidence rate (95% CI) for recurrence of hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by hospital district at start of follow-up.

S.No.	Hosp. District	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	Unknown	glargine	3491	1777	9707	183.06	174.75	191.78
2	Unknown	detemir	1570	407	2910	139.88	126.93	154.15
3	Unknown	NPH	5215	4200	13459	312.05	302.76	321.63
4	Unknown	no DGN	5656	1193	5345	223.22	210.90	236.25
5	HUS	glargine	23	8	47	168.61	84.32	337.16
6	HUS	detemir	2	0	1	NA	NA	NA
7	HUS	NPH	25	16	55	289.94	177.63	473.27
8	HUS	no DGN	31	7	46	151.15	72.06	317.06
9	Varsinais-Suomi	glargine	5	4	12	325.46	122.17	867.07
10	Varsinais-Suomi	detemir	1	0	3	NA	NA	NA
11	Varsinais-Suomi	NPH	7	2	16	125.90	31.49	503.41
12	Varsinais-Suomi	no DGN	9	0	3	NA	NA	NA
13	Satakunta	glargine	5	2	9	219.83	54.98	879.00
14	Satakunta	detemir	1	0	0	NA	NA	NA
15	Satakunta	NPH	2	2	4	472.20	118.10	1888.06
16	Satakunta	no DGN	4	0	3	NA	NA	NA
17	Kantahame	glargine	9	16	22	733.53	449.38	1197.35
18	Kantahame	detemir	1	0	2	NA	NA	NA
19	Kantahame	NPH	4	2	3	723.98	181.06	2894.88
20	Kantahame	no DGN	7	5	4	1173.68	488.56	2819.59
21	Pirkanmaa	glargine	4	0	7	NA	NA	NA
22	Pirkanmaa	detemir	1	0	2	NA	NA	NA
23	Pirkanmaa	NPH	2	1	4	229.00	32.26	1625.68
24	Pirkanmaa	no DGN	4	0	3	NA	NA	NA
25	Paijat-Hame	glargine	2	0	5	NA	NA	NA
26	Paijat-Hame	detemir	1	0	0	NA	NA	NA
27	Paijat-Hame	NPH	8	1	14	70.27	9.90	498.75
28	Paijat-Hame	no DGN	8	6	5	1177.59	529.04	2621.21
29	Kymenlaakso	glargine	4	0	7	NA	NA	NA
30	Kymenlaakso	detemir	1	0	2	NA	NA	NA
31	Kymenlaakso	NPH	5	0	15	NA	NA	NA
32	Kymenlaakso	no DGN	6	0	2	NA	NA	NA
33	Etela-Karjala	glargine	7	7	12	596.81	284.53	1251.86
34	Etela-Karjala	detemir	1	0	1	NA	NA	NA
35	Etela-Karjala	NPH	3	1	5	184.01	25.92	1306.00
36	Etela-Karjala	no DGN	6	0	4	NA	NA	NA
37	Etela-Savo	glargine	2	1	3	293.85	41.39	2086.10
38	Etela-Savo	detemir	0	0	0	NA	NA	NA
39	Etela-Savo	NPH	2	3	3	1130.80	364.70	3506.20
40	Etela-Savo	no DGN	3	0	5	NA	NA	NA
41	Ita-Savo	glargine	0	0	0	NA	NA	NA
42	Ita-Savo	detemir	0	0	0	NA	NA	NA
43	Ita-Savo	NPH	0	0	0	NA	NA	NA
44	Ita-Savo	no DGN	1	1	0	6407.89	902.61	45491.73
45	Pohjois-Karjala	glargine	4	3	15	195.11	62.93	604.97
46	Pohjois-Karjala	detemir	0	0	0	NA	NA	NA
47	Pohjois-Karjala	NPH	2	0	4	NA	NA	NA
48	Pohjois-Karjala	no DGN	4	0	1	NA	NA	NA
49	Pohjois-Savo	glargine	5	5	13	387.33	161.22	930.56
50	Pohjois-Savo	detemir	1	0	2	NA	NA	NA
51	Pohjois-Savo	NPH	1	0	2	NA	NA	NA
52	Pohjois-Savo	no DGN	6	0	1	NA	NA	NA
53	Keski-Suomi	glargine	4	0	5	NA	NA	NA
54	Keski-Suomi	detemir	5	3	7	421.77	136.04	1307.65
55	Keski-Suomi	NPH	11	4	21	186.14	69.87	495.87
56	Keski-Suomi	no DGN	10	0	13	NA	NA	NA
57	Etela-Pohjanmaa	glargine	7	3	15	197.01	63.54	610.84
58	Etela-Pohjanmaa	detemir	5	0	5	NA	NA	NA
59	Etela-Pohjanmaa	NPH	7	4	13	314.46	118.02	837.87
60	Etela-Pohjanmaa	no DGN	11	0	5	NA	NA	NA
61	Vaasa	glargine	3	2	3	579.76	144.99	2318.20
62	Vaasa	detemir	1	0	5	NA	NA	NA
63	Vaasa	NPH	2	0	10	NA	NA	NA
64	Vaasa	no DGN	7	0	6	NA	NA	NA
65	Keski-Pohjanmaa	glargine	0	0	0	NA	NA	NA
66	Keski-Pohjanmaa	detemir	0	0	0	NA	NA	NA
67	Keski-Pohjanmaa	NPH	0	0	0	NA	NA	NA
68	Keski-Pohjanmaa	no DGN	0	0	0	NA	NA	NA
69	Pohjois-Pohjanmaa	glargine	6	1	9	108.51	15.29	770.35
70	Pohjois-Pohjanmaa	detemir	2	0	2	NA	NA	NA
71	Pohjois-Pohjanmaa	NPH	5	0	4	NA	NA	NA
72	Pohjois-Pohjanmaa	no DGN	6	0	12	NA	NA	NA
73	Kainuu	glargine	1	0	2	NA	NA	NA
74	Kainuu	detemir	1	0	0	NA	NA	NA
75	Kainuu	NPH	0	0	0	NA	NA	NA
76	Kainuu	no DGN	1	0	0	NA	NA	NA
77	Lansi-Pohja	glargine	2	2	5	431.48	107.91	1725.30
78	Lansi-Pohja	detemir	0	0	0	NA	NA	NA
79	Lansi-Pohja	NPH	2	3	3	858.74	276.99	2662.35
80	Lansi-Pohja	no DGN	5	0	1	NA	NA	NA
81	Lappi	glargine	0	0	0	NA	NA	NA
82	Lappi	detemir	2	0	1	NA	NA	NA
83	Lappi	NPH	2	1	1	800.99	112.83	5686.44
84	Lappi	no DGN	2	0	0	NA	NA	NA
85	Ahvenanmaa	glargine	0	0	0	NA	NA	NA
86	Ahvenanmaa	detemir	0	0	0	NA	NA	NA
87	Ahvenanmaa	NPH	0	0	0	NA	NA	NA
88	Ahvenanmaa	no DGN	0	0	0	NA	NA	NA
89	Total	glargine	3584	1831	9899	184.97	176.69	193.64
90	Total	detemir	1596	410	2941	139.40	126.54	153.57
91	Total	NPH	5305	4240	13638	310.89	301.67	320.39
92	Total	no DGN	5787	1212	5458	222.06	209.90	234.92

Non-naive cohort. Data 28th December 2011

D Appendix 4: Crude rate estimates for *all* severe hypoglycemic coma events

Table D.31: The number/risk time/incidence rate (95% CI) of all hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by diagnose.

S.No.	Diagnose	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	T1	glargine	3370	384	13367	28.73	25.99	31.75
2	T1	detemir	1658	84	3883	21.64	17.47	26.79
3	T1	NPH	4818	796	23326	34.12	31.83	36.58
4	T1	no DGN	4670	176	4864	36.18	31.21	41.94
5	T2	glargine	2052	199	5415	36.75	31.98	42.23
6	T2	detemir	837	34	1241	27.39	19.57	38.33
7	T2	NPH	6415	1025	35633	28.77	27.06	30.58
8	T2	no DGN	5940	280	7776	36.01	32.03	40.48
9	Undefined	glargine	19150	2550	69014	36.95	35.54	38.41
10	Undefined	detemir	8619	607	18175	33.40	30.84	36.16
11	Undefined	NPH	41739	7425	209903	35.37	34.58	36.19
12	Undefined	no DGN	38016	1790	37563	47.65	45.50	49.91
13	Total	glargine	24572	3133	87795	35.69	34.46	36.96
14	Total	detemir	11114	725	23299	31.12	28.93	33.47
15	Total	NPH	52972	9246	268862	34.39	33.70	35.10
16	Total	no DGN	48626	2246	50203	44.74	42.93	46.63

Non-naive cohort. Data 28th December 2011

Table D.32: The number/risk time/incidence rate (95% CI) of all hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by gender.

S.No.	Gender	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	Male	glargine	13090	1763	48589	36.28	34.63	38.02
2	Male	detemir	5310	314	11087	28.32	25.36	31.64
3	Male	NPH	27903	5320	144808	36.74	35.76	37.74
4	Male	no DGN	25313	1152	23299	49.44	46.67	52.38
5	Female	glargine	11482	1370	39206	34.94	33.14	36.84
6	Female	detemir	5804	411	12213	33.65	30.55	37.07
7	Female	NPH	25069	3926	124055	31.65	30.67	32.65
8	Female	no DGN	23313	1094	26904	40.66	38.32	43.14
9	Total	glargine	24572	3133	87795	35.69	34.46	36.96
10	Total	detemir	11114	725	23299	31.12	28.93	33.47
11	Total	NPH	52972	9246	268862	34.39	33.70	35.10
12	Total	no DGN	48626	2246	50203	44.74	42.93	46.63

Non-naive cohort. Data 28th December 2011

Table D.33: The number/risk time/incidence rate (95% CI) of all hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by age at start of follow up.

S.No.	Age group	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	0-9	glargine	747	74	2725	27.15	21.62	34.10
2	0-9	detemir	545	34	1309	25.98	18.56	36.35
3	0-9	NPH	1001	232	4508	51.47	45.25	58.54
4	0-9	no DGN	1002	38	1266	30.01	21.84	41.24
5	10-19	glargine	2750	356	11527	30.88	27.84	34.26
6	10-19	detemir	1339	80	3140	25.48	20.47	31.72
7	10-19	NPH	3375	559	15092	37.04	34.09	40.24
8	10-19	no DGN	3323	141	3163	44.58	37.80	52.58
9	20-29	glargine	3009	466	12018	38.78	35.41	42.46
10	20-29	detemir	1565	148	3675	40.27	34.28	47.31
11	20-29	NPH	4028	657	19884	33.04	30.61	35.67
12	20-29	no DGN	3852	141	3324	42.42	35.97	50.04
13	30-39	glargine	3841	487	15416	31.59	28.91	34.52
14	30-39	detemir	1847	136	4382	31.03	26.23	36.71
15	30-39	NPH	5449	912	27641	32.99	30.92	35.21
16	30-39	no DGN	5130	170	4075	41.72	35.89	48.48
17	40-49	glargine	4223	485	16213	29.91	27.37	32.70
18	40-49	detemir	1944	134	4346	30.84	26.03	36.53
19	40-49	NPH	6610	1324	34649	38.21	36.21	40.33
20	40-49	no DGN	6147	298	4831	61.69	55.07	69.11
21	50-59	glargine	4516	739	15332	48.20	44.85	51.80
22	50-59	detemir	1923	103	3593	28.67	23.63	34.78
23	50-59	NPH	9096	1776	52609	33.76	32.22	35.37
24	50-59	no DGN	8410	314	7653	41.03	36.73	45.83
25	60-69	glargine	3234	304	9397	32.35	28.91	36.20
26	60-69	detemir	1324	67	2089	32.08	25.25	40.76
27	60-69	NPH	9903	1786	56711	31.49	30.07	32.99
28	60-69	no DGN	8925	447	9820	45.52	41.49	49.94
29	70-79	glargine	1940	194	4596	42.21	36.67	48.59
30	70-79	detemir	544	20	672	29.74	19.19	46.10
31	70-79	NPH	9893	1623	46732	34.73	33.08	36.46
32	70-79	no DGN	8778	536	12047	44.49	40.88	48.42
33	80+	glargine	312	28	571	49.07	33.88	71.07
34	80+	detemir	83	3	94	31.93	10.30	99.02
35	80+	NPH	3617	377	11036	34.16	30.88	37.79
36	80+	no DGN	3059	161	4024	40.01	34.28	46.69
37	Total	glargine	24572	3133	87795	35.69	34.46	36.96
38	Total	detemir	11114	725	23299	31.12	28.93	33.47
39	Total	NPH	52972	9246	268862	34.39	33.70	35.10
40	Total	no DGN	48626	2246	50203	44.74	42.93	46.63

Non-naive cohort. Data 28th December 2011

Table D.34: The number/risk time/incidence rate (95% CI) of all hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by calendar time since diagnose (first reimbursement decision or purchase).

S.No.	Time since diag	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	-1	glargine	597	90	2206	40.81	33.19	50.17
2	-1	detemir	322	20	696	28.75	18.55	44.57
3	-1	NPH	1158	185	5920	31.25	27.06	36.09
4	-1	no DGN	1092	50	1416	35.32	26.77	46.60
5	1-2	glargine	890	86	3174	27.10	21.93	33.47
6	1-2	detemir	478	22	1076	20.45	13.46	31.05
7	1-2	NPH	1733	236	9095	25.95	22.84	29.48
8	1-2	no DGN	1649	45	2084	21.60	16.12	28.93
9	2-5	glargine	3195	335	11256	29.76	26.74	33.13
10	2-5	detemir	1430	65	2816	23.08	18.10	29.43
11	2-5	NPH	6884	1088	37182	29.26	27.57	31.05
12	2-5	no DGN	6458	278	7328	37.94	33.73	42.67
13	5-10	glargine	5716	703	18776	37.44	34.77	40.31
14	5-10	detemir	2538	152	4906	30.98	26.43	36.32
15	5-10	NPH	14267	2378	76528	31.07	29.85	32.35
16	5-10	no DGN	13126	570	14478	39.37	36.27	42.74
17	10-	glargine	14174	1919	52383	36.63	35.03	38.31
18	10-	detemir	6346	466	13806	33.75	30.82	36.96
19	10-	NPH	28930	5359	140137	38.24	37.23	39.28
20	10-	no DGN	26301	1303	24897	52.34	49.57	55.26
21	Total	glargine	24572	3133	87795	35.69	34.46	36.96
22	Total	detemir	11114	725	23299	31.12	28.93	33.47
23	Total	NPH	52972	9246	268862	34.39	33.70	35.10
24	Total	no DGN	48626	2246	50203	44.74	42.93	46.63
Non-naive cohort. Data 28th December 2011								

Table D.35: The number/risk time/incidence rate (95% CI) of all hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by history use of oral diabetes medication (A10BB) at start of follow-up.

S.No.	A10BB hist	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	No	glargine	18857	2507	73611	34.06	32.75	35.42
2	No	detemir	8766	626	20015	31.28	28.92	33.82
3	No	NPH	30514	5177	150630	34.37	33.45	35.32
4	No	no DGN	28330	1091	24771	44.04	41.51	46.74
5	Yes	glargine	5715	626	14185	44.13	40.81	47.73
6	Yes	detemir	2348	99	3284	30.15	24.76	36.71
7	Yes	NPH	22458	4069	118232	34.42	33.37	35.49
8	Yes	no DGN	20296	1155	25433	45.41	42.87	48.11
9	Total	glargine	24572	3133	87795	35.69	34.46	36.96
10	Total	detemir	11114	725	23299	31.12	28.93	33.47
11	Total	NPH	52972	9246	268862	34.39	33.70	35.10
12	Total	no DGN	48626	2246	50203	44.74	42.93	46.63

Non-naive cohort. Data 28th December 2011

Table D.36: The number/risk time/incidence rate (95% CI) of all hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by history use of insulin medication (A10A) at start of follow-up.

S.No.	A10A hist	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	No	glargine	24572	3133	87795	35.69	34.46	36.96
2	No	detemir	11114	725	23299	31.12	28.93	33.47
3	No	NPH	52972	9246	268862	34.39	33.70	35.10
4	No	no DGN	48626	2246	50203	44.74	42.93	46.63
5	Yes	glargine	0	0	0	NA	NA	NA
6	Yes	detemir	0	0	0	NA	NA	NA
7	Yes	NPH	0	0	0	NA	NA	NA
8	Yes	no DGN	0	0	0	NA	NA	NA
9	Total	glargine	24572	3133	87795	35.69	34.46	36.96
10	Total	detemir	11114	725	23299	31.12	28.93	33.47
11	Total	NPH	52972	9246	268862	34.39	33.70	35.10
12	Total	no DGN	48626	2246	50203	44.74	42.93	46.63

Non-naive cohort. Data 28th December 2011

Table D.37: The number/risk time/incidence rate (95% CI) of all hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by hospitalization history at start of follow-up.

S.No.	Hosp hist	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	No	glargine	23009	2230	82527	27.02	25.92	28.17
2	No	detemir	10457	557	21966	25.36	23.34	27.55
3	No	NPH	49891	4216	254320	16.58	16.08	17.09
4	No	no DGN	45689	1236	46499	26.58	25.14	28.11
5	Yes	glargine	1563	903	5268	171.40	160.58	182.95
6	Yes	detemir	657	168	1333	126.01	108.33	146.58
7	Yes	NPH	3081	5030	14542	345.89	336.46	355.58
8	Yes	no DGN	2937	1010	3705	272.64	256.33	289.98
9	Total	glargine	24572	3133	87795	35.69	34.46	36.96
10	Total	detemir	11114	725	23299	31.12	28.93	33.47
11	Total	NPH	52972	9246	268862	34.39	33.70	35.10
12	Total	no DGN	48626	2246	50203	44.74	42.93	46.63

Non-naive cohort. Data 28th December 2011

Table D.38: The number/risk time/incidence rate (95% CI) of all hypoglycemic coma events for detemir insulin, glargine insulin, and NPH-insulin stratified by hospital district at start of follow-up.

S.No.	Hosp. District	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	Unknown	glargine	23548	3015	84778	35.56	34.32	36.86
2	Unknown	detemir	10693	713	22541	31.63	29.39	34.04
3	Unknown	NPH	51816	9118	265803	34.30	33.61	35.02
4	Unknown	no DGN	47201	2204	48912	45.06	43.22	46.98
5	HUS	glargine	219	20	619	32.29	20.83	50.05
6	HUS	detemir	80	0	141	NA	NA	NA
7	HUS	NPH	249	41	639	64.13	47.22	87.10
8	HUS	no DGN	321	14	352	39.76	23.55	67.13
9	Varsinais-Suomi	glargine	50	7	144	48.56	23.15	101.86
10	Varsinais-Suomi	detemir	25	0	53	NA	NA	NA
11	Varsinais-Suomi	NPH	58	9	148	60.67	31.57	116.61
12	Varsinais-Suomi	no DGN	67	1	56	17.86	2.52	126.76
13	Satakunta	glargine	31	6	91	65.71	29.52	146.25
14	Satakunta	detemir	11	1	20	50.07	7.05	355.45
15	Satakunta	NPH	39	4	104	38.31	14.38	102.08
16	Satakunta	no DGN	48	0	43	NA	NA	NA
17	Kantahame	glargine	38	23	123	187.39	124.52	281.99
18	Kantahame	detemir	8	0	16	NA	NA	NA
19	Kantahame	NPH	30	6	71	84.56	37.99	188.21
20	Kantahame	no DGN	44	5	38	131.68	54.81	316.33
21	Pirkanmaa	glargine	90	4	273	14.67	5.51	39.09
22	Pirkanmaa	detemir	36	0	63	NA	NA	NA
23	Pirkanmaa	NPH	94	3	253	11.87	3.83	36.81
24	Pirkanmaa	no DGN	113	0	96	NA	NA	NA
25	Paijat-Hame	glargine	37	0	100	NA	NA	NA
26	Paijat-Hame	detemir	17	0	28	NA	NA	NA
27	Paijat-Hame	NPH	59	9	179	50.15	26.09	96.38
28	Paijat-Hame	no DGN	58	7	33	212.30	101.21	445.33
29	Kymenlaakso	glargine	44	2	123	16.29	4.07	65.12
30	Kymenlaakso	detemir	18	1	31	32.58	4.59	231.27
31	Kymenlaakso	NPH	39	5	112	44.45	18.50	106.78
32	Kymenlaakso	no DGN	55	0	24	NA	NA	NA
33	Etela-Karjala	glargine	56	12	179	66.94	38.01	117.87
34	Etela-Karjala	detemir	31	1	55	18.05	2.54	128.13
35	Etela-Karjala	NPH	48	4	106	37.68	14.14	100.39
36	Etela-Karjala	no DGN	65	2	58	34.56	8.64	138.20
37	Etela-Savo	glargine	19	3	52	58.07	18.73	180.04
38	Etela-Savo	detemir	5	0	5	NA	NA	NA
39	Etela-Savo	NPH	31	4	88	45.64	17.13	121.60
40	Etela-Savo	no DGN	32	0	23	NA	NA	NA
41	Ita-Savo	glargine	15	0	32	NA	NA	NA
42	Ita-Savo	detemir	4	0	6	NA	NA	NA
43	Ita-Savo	NPH	26	0	91	NA	NA	NA
44	Ita-Savo	no DGN	24	2	27	73.84	18.47	295.25
45	Pohjois-Karjala	glargine	56	5	209	23.97	9.98	57.59
46	Pohjois-Karjala	detemir	17	0	30	NA	NA	NA
47	Pohjois-Karjala	NPH	61	2	148	13.52	3.38	54.05
48	Pohjois-Karjala	no DGN	74	1	64	15.72	2.21	111.59
49	Pohjois-Savo	glargine	92	10	270	37.08	19.95	68.91
50	Pohjois-Savo	detemir	24	0	55	NA	NA	NA
51	Pohjois-Savo	NPH	68	1	158	6.34	0.89	45.02
52	Pohjois-Savo	no DGN	98	1	72	13.93	1.96	98.88
53	Keski-Suomi	glargine	68	3	171	17.57	5.67	54.47
54	Keski-Suomi	detemir	35	6	76	79.29	35.62	176.49
55	Keski-Suomi	NPH	96	13	274	47.37	27.50	81.58
56	Keski-Suomi	no DGN	105	2	106	18.95	4.74	75.75
57	Etela-Pohjanmaa	glargine	40	8	97	82.72	41.37	165.41
58	Etela-Pohjanmaa	detemir	28	0	29	NA	NA	NA
59	Etela-Pohjanmaa	NPH	69	11	173	63.45	35.14	114.57
60	Etela-Pohjanmaa	no DGN	75	2	59	33.90	8.48	135.55
61	Vaasa	glargine	41	5	142	35.22	14.66	84.61
62	Vaasa	detemir	30	0	61	NA	NA	NA
63	Vaasa	NPH	38	2	115	17.35	4.34	69.36
64	Vaasa	no DGN	59	2	67	30.06	7.52	120.20
65	Keski-Pohjanmaa	glargine	8	0	34	NA	NA	NA
66	Keski-Pohjanmaa	detemir	4	0	4	NA	NA	NA
67	Keski-Pohjanmaa	NPH	14	0	49	NA	NA	NA
68	Keski-Pohjanmaa	no DGN	17	0	11	NA	NA	NA
69	Pohjois-Pohjanmaa	glargine	63	6	183	32.80	14.74	73.01
70	Pohjois-Pohjanmaa	detemir	18	1	29	34.03	4.79	241.59
71	Pohjois-Pohjanmaa	NPH	73	5	210	23.76	9.89	57.07
72	Pohjois-Pohjanmaa	no DGN	90	1	76	13.23	1.86	93.92
73	Kainuu	glargine	23	0	80	NA	NA	NA
74	Kainuu	detemir	14	1	27	36.60	5.16	259.82
75	Kainuu	NPH	21	0	51	NA	NA	NA
76	Kainuu	no DGN	28	0	20	NA	NA	NA
77	Lansi-Pohja	glargine	19	4	64	62.48	23.45	166.45
78	Lansi-Pohja	detemir	3	0	8	NA	NA	NA
79	Lansi-Pohja	NPH	12	6	20	293.33	131.79	652.90
80	Lansi-Pohja	no DGN	21	1	14	73.05	10.29	518.55
81	Lappi	glargine	13	0	27	NA	NA	NA
82	Lappi	detemir	11	1	18	57.10	8.04	405.23
83	Lappi	NPH	27	3	57	52.24	16.85	161.99
84	Lappi	no DGN	28	1	52	19.29	2.72	136.92
85	Ahvenanmaa	glargine	2	0	5	NA	NA	NA
86	Ahvenanmaa	detemir	2	0	3	NA	NA	NA
87	Ahvenanmaa	NPH	4	0	9	NA	NA	NA
88	Ahvenanmaa	no DGN	3	0	2	NA	NA	NA
89	Total	glargine	24572	3133	87795	35.69	34.46	36.96
90	Total	detemir	11114	725	23299	31.12	28.93	33.47
91	Total	NPH	52972	9246	268862	34.39	33.70	35.10
92	Total	no DGN	48626	2246	50203	44.74	42.93	46.63

Non-naive cohort. Data 28th December 2011

E Appendix 5: Cox's proportional hazards models

E.1 First hypoglycemic coma event

Table E.39: The risk for the first hypoglycemic coma event estimated by the Cox's proportional hazards model. Hospital district as strata. Glargine insulin as reference

S.No.	Variables	parameter est	std	Hazard ratio	lower	upper	P-value
1	typedm T2	0.093	0.06	1.098	0.977	1.234	0.117
2	typedm Undefined	-0.034	0.057	0.967	0.864	1.081	0.552
3	insulin detemir	0.059	0.064	1.06	0.935	1.203	0.364
4	insulin NPH	0.012	0.079	1.012	0.868	1.181	0.878
5	insulin no DGN	0.197	0.077	1.218	1.047	1.417	0.011
6	gender Female	-0.064	0.023	0.938	0.896	0.982	0.006
7	agegroup2 0-9	0.491	0.092	1.633	1.364	1.955	<0.001
8	agegroup2 10-19	0.232	0.062	1.261	1.115	1.425	<0.001
9	agegroup2 30-39	0.008	0.056	1.008	0.904	1.124	0.887
10	agegroup2 40-49	0.052	0.054	1.054	0.948	1.171	0.333
11	agegroup2 50-59	0.199	0.052	1.221	1.102	1.352	<0.001
12	agegroup2 60-69	0.271	0.054	1.311	1.18	1.457	<0.001
13	agegroup2 70-79	0.418	0.056	1.519	1.362	1.695	<0.001
14	agegroup2 80+	0.455	0.073	1.577	1.367	1.819	<0.001
15	BB.stfup Yes	0.018	0.034	1.018	0.953	1.087	0.601
16	useBB Yes	-0.039	0.039	0.962	0.891	1.038	0.32
17	useA10A Yes	0.055	0.029	1.057	0.999	1.119	0.055
18	Switch YES	-0.02	0.077	0.98	0.843	1.139	0.792
19	time2diag 1-2	-0.066	0.104	0.936	0.764	1.148	0.528
20	time2diag 2-5	-0.023	0.088	0.977	0.823	1.161	0.794
21	time2diag 5-10	0.146	0.09	1.158	0.971	1.381	0.103
22	time2diag 10-	0.304	0.092	1.355	1.131	1.623	<0.001

Non-naive cohort. Data 28th December 2011

Table E.40: The risk for the first hypoglycemic coma event estimated by the Cox's proportional hazards model. Hospital district as strata. NPH insulin as reference

S.No.	Variables	parameter est	std	Hazard ratio	lower	upper	P-value
1	typedm T2	0.093	0.06	1.098	0.977	1.234	0.117
2	typedm Undefined	-0.034	0.057	0.967	0.864	1.081	0.552
3	insulinNPH detemir	0.046	0.094	1.048	0.871	1.26	0.622
4	insulinNPH glargine	-0.012	0.079	0.988	0.847	1.152	0.878
5	insulinNPH no DGN	0.185	0.036	1.203	1.122	1.291	<0.001
6	gender Female	-0.064	0.023	0.938	0.896	0.982	0.006
7	agegroup2 0-9	0.491	0.092	1.633	1.364	1.955	<0.001
8	agegroup2 10-19	0.232	0.062	1.261	1.115	1.425	<0.001
9	agegroup2 30-39	0.008	0.056	1.008	0.904	1.124	0.887
10	agegroup2 40-49	0.052	0.054	1.054	0.948	1.171	0.333
11	agegroup2 50-59	0.199	0.052	1.221	1.102	1.352	<0.001
12	agegroup2 60-69	0.271	0.054	1.311	1.18	1.457	<0.001
13	agegroup2 70-79	0.418	0.056	1.519	1.362	1.695	<0.001
14	agegroup2 80+	0.455	0.073	1.577	1.367	1.819	<0.001
15	BB.stfup Yes	0.018	0.034	1.018	0.953	1.087	0.601
16	useBB Yes	-0.039	0.039	0.962	0.891	1.038	0.32
17	useA10A Yes	0.055	0.029	1.057	0.999	1.119	0.055
18	Switch YES	-0.02	0.077	0.98	0.843	1.139	0.792
19	time2diag 1-2	-0.066	0.104	0.936	0.764	1.148	0.528
20	time2diag 2-5	-0.023	0.088	0.977	0.823	1.161	0.794
21	time2diag 5-10	0.146	0.09	1.158	0.971	1.381	0.103
22	time2diag 10-	0.304	0.092	1.355	1.131	1.623	<0.001

Non-naive cohort. Data 28th December 2011

Table E.41: Sensitivity analysis for the risk of first hypoglycemic coma event estimated by the Cox's proportional hazards model. Hospital district as strata. NPH insulin as reference. I) Original estimates, II) Estimates assuming no gaps in use of detemir, glargine, and NPH-insulins, III) Estimates considering hypoglycemic events with main diagnose E10.00 or E11.00 only,IV) Periods with overlapping use of detemir, glargine, or NPH-insulins are removed, V) follow-up ends at first switch.

S.No.	Variables	I			II			III			IV			V		
		HR	lower	upper	HR	lower	upper	HR	lower	upper	HR	lower	upper	HR	lower	upper
1	typedm T2	1.098	0.977	1.234	1.099	0.977	1.235	1.02	0.897	1.16	1.104	0.97	1.256	1.084	0.953	1.233
2	typedm Undefined	0.967	0.864	1.081	0.964	0.862	1.078	0.931	0.826	1.05	0.964	0.855	1.086	0.947	0.841	1.068
3	insulinNPH detemir	1.048	0.871	1.26	0.896	0.718	1.118	1.048	0.858	1.281	1.004	0.821	1.227	0.465	0.381	0.569
4	insulinNPH glargine	0.988	0.847	1.152	0.865	0.711	1.051	0.971	0.82	1.149	0.963	0.813	1.14	0.88	0.744	1.042
5	insulinNPH no DGN	1.203	1.122	1.291	NA	NA	NA	1.199	1.107	1.3	1.202	1.109	1.302	1.217	1.124	1.319
6	gender Female	0.938	0.896	0.982	0.94	0.898	0.985	0.938	0.891	0.987	0.937	0.89	0.986	0.923	0.877	0.971
7	agegroup2 0-9	1.633	1.364	1.955	1.644	1.374	1.968	1.671	1.388	2.011	1.656	1.376	1.994	1.641	1.363	1.975
8	agegroup2 10-19	1.261	1.115	1.425	1.265	1.119	1.429	1.281	1.129	1.453	1.272	1.121	1.443	1.241	1.093	1.408
9	agegroup2 30-39	1.008	0.904	1.124	1.006	0.902	1.122	0.991	0.885	1.111	1	0.892	1.121	0.944	0.842	1.058
10	agegroup2 40-49	1.054	0.948	1.171	1.05	0.945	1.167	1.019	0.912	1.139	1.05	0.94	1.173	0.993	0.888	1.109
11	agegroup2 50-59	1.221	1.102	1.352	1.216	1.097	1.347	1.114	0.999	1.242	1.221	1.095	1.361	1.138	1.021	1.269
12	agegroup2 60-69	1.311	1.18	1.457	1.31	1.179	1.455	1.137	1.015	1.273	1.299	1.159	1.455	1.209	1.079	1.354
13	agegroup2 70-79	1.519	1.362	1.695	1.534	1.375	1.711	1.239	1.1	1.396	1.515	1.344	1.707	1.425	1.264	1.605
14	agegroup2 80+	1.577	1.367	1.819	1.616	1.401	1.863	1.25	1.061	1.473	1.568	1.33	1.847	1.479	1.255	1.743
15	BB.stfup Yes	1.018	0.953	1.087	1.023	0.957	1.092	0.918	0.85	0.99	1.016	0.942	1.097	1.007	0.934	1.087
16	useBB Yes	0.962	0.891	1.038	0.952	0.882	1.028	0.997	0.911	1.092	0.963	0.879	1.055	0.983	0.898	1.076
17	useA10A Yes	1.057	0.999	1.119	1.056	0.998	1.118	1.086	1.018	1.159	1.055	0.989	1.126	1.076	1.009	1.148
18	Switch YES	0.98	0.843	1.139	1.086	0.892	1.321	1.035	0.877	1.221	0.977	0.828	1.153	NA	NA	NA
19	time2diag 1-2	0.936	0.764	1.148	0.936	0.763	1.148	0.968	0.775	1.209	0.93	0.745	1.162	0.93	0.744	1.162
20	time2diag 2-5	0.977	0.823	1.161	0.973	0.819	1.155	1.01	0.836	1.22	0.971	0.804	1.173	1.019	0.844	1.231
21	time2diag 5-10	1.158	0.971	1.381	1.152	0.966	1.374	1.226	1.01	1.488	1.163	0.958	1.411	1.186	0.977	1.439
22	time2diag 10-	1.355	1.131	1.623	1.35	1.127	1.617	1.437	1.178	1.754	1.372	1.124	1.674	1.421	1.165	1.734

Non-naive cohort. Data 28th December 2011

Table E.42: Sensitivity analysis for the risk of first hypoglycemic coma event estimated by the Cox's proportional hazards model. Hospital district as strata. NPH insulin as reference. I) Original estimates, II-IV) Inverse propensity score weighting (IPW). Individuals weighted by the inverse of the probability to start on their insulin conditional on covariates (gender, typedm, agegroup2, calyear2, BB.stfup, A10A.stfup, hosp.stfup, time2diag), truncation points givenin paranthesis, III) IPW-weights with no truncation.

S.No.	Variables	I			II [0.1/0.9]			III [0.01/0.99]			IV [0.001/0.999]			V [0/1]		
		HR	lower	upper	HR	lower	upper	HR	lower	upper	HR	lower	upper	HR	lower	upper
1	typedm T2	1.098	0.977	1.234	1.074	0.955	1.208	1.04	0.918	1.179	1.026	0.905	1.162	1.027	0.906	1.163
2	typedm Undefined	0.967	0.864	1.081	0.94	0.842	1.051	0.907	0.806	1.019	0.871	0.775	0.979	0.846	0.753	0.952
3	insulinNPH detemir	1.048	0.871	1.26	1.053	0.874	1.27	0.987	0.795	1.225	1.041	0.839	1.292	1.041	0.839	1.292
4	insulinNPH glargine	0.988	0.847	1.152	1.028	0.88	1.202	1.097	0.918	1.31	1.2	1.004	1.433	1.232	1.031	1.472
5	insulinNPH no DGN	1.203	1.122	1.291	1.212	1.127	1.303	1.207	1.115	1.307	1.208	1.115	1.308	1.209	1.116	1.309
6	gender Female	0.938	0.896	0.982	0.951	0.908	0.997	0.957	0.91	1.006	0.959	0.912	1.008	0.961	0.914	1.01
7	agegroup2 0-9	1.633	1.364	1.955	1.595	1.33	1.914	1.611	1.328	1.954	1.625	1.339	1.971	1.644	1.356	1.995
8	agegroup2 10-19	1.261	1.115	1.425	1.25	1.104	1.415	1.238	1.087	1.41	1.239	1.088	1.411	1.249	1.097	1.423
9	agegroup2 30-39	1.008	0.904	1.124	0.999	0.894	1.118	1.007	0.896	1.132	1.012	0.9	1.138	1.011	0.899	1.137
10	agegroup2 40-49	1.054	0.948	1.171	1.052	0.944	1.172	1.05	0.937	1.176	1.042	0.931	1.168	1.044	0.932	1.17
11	agegroup2 50-59	1.221	1.102	1.352	1.182	1.065	1.313	1.189	1.065	1.327	1.169	1.047	1.305	1.176	1.054	1.313
12	agegroup2 60-69	1.311	1.18	1.457	1.261	1.132	1.404	1.278	1.141	1.431	1.233	1.101	1.381	1.235	1.103	1.384
13	agegroup2 70-79	1.519	1.362	1.695	1.47	1.313	1.645	1.496	1.327	1.686	1.459	1.295	1.644	1.4	1.242	1.577
14	agegroup2 80+	1.577	1.367	1.819	1.518	1.309	1.759	1.612	1.373	1.892	1.578	1.345	1.853	1.575	1.342	1.848
15	BB.stfup Yes	1.018	0.953	1.087	1.008	0.943	1.078	0.986	0.917	1.06	0.97	0.903	1.043	0.95	0.884	1.022
16	useBB Yes	0.962	0.891	1.038	0.966	0.894	1.044	1.003	0.924	1.09	1.023	0.941	1.111	1.046	0.963	1.136
17	useA10A Yes	1.057	0.999	1.119	1.06	0.999	1.125	1.062	0.997	1.131	1.052	0.988	1.121	1.05	0.985	1.118
18	Switch YES	0.98	0.843	1.139	0.952	0.817	1.109	0.891	0.749	1.06	0.815	0.685	0.97	0.793	0.667	0.944
19	time2diag 1-2	0.936	0.764	1.148	0.934	0.758	1.15	0.917	0.733	1.147	0.946	0.756	1.183	0.946	0.756	1.183
20	time2diag 2-5	0.977	0.823	1.161	0.991	0.832	1.181	1.006	0.835	1.212	1.033	0.857	1.244	1.019	0.845	1.227
21	time2diag 5-10	1.158	0.971	1.381	1.189	0.995	1.42	1.236	1.023	1.494	1.312	1.086	1.585	1.327	1.098	1.604
22	time2diag 10-	1.355	1.131	1.623	1.416	1.18	1.699	1.482	1.221	1.8	1.607	1.324	1.951	1.665	1.372	2.022

Non-naive cohort. Data 28th December 2011

Table E.43: sensitivity analysis for the risk for the first hypoglycemic coma event estimated by the Cox's proportional hazards model. The probability conditional on covariates (gender, typedm, agegroup2, ca-year2, BB.stfup, A10A.stfup, hosph.stfup, time2diag) to initiate treatment with detemir and glargine as two additional covariates. Hospital district as strata. NPH insulin as reference

S.No.	Variables	parameter est	std	Hazard ratio	lower	upper	P-value
1	typedm T2	0.057	0.068	1.059	0.928	1.209	0.397
2	typedm Undefined	-0.115	0.069	0.891	0.779	1.02	0.094
3	insulinNPH detemir	0.05	0.094	1.051	0.874	1.264	0.597
4	insulinNPH glargine	-0.011	0.079	0.989	0.848	1.154	0.889
5	insulinNPH no DGN	0.186	0.036	1.205	1.123	1.292	<0.001
6	gender Female	-0.032	0.034	0.969	0.906	1.035	0.344
7	agegroup2 0-9	0.386	0.121	1.472	1.162	1.864	0.001
8	agegroup2 10-19	0.209	0.064	1.233	1.088	1.397	0.001
9	agegroup2 30-39	-0.022	0.065	0.978	0.861	1.111	0.733
10	agegroup2 40-49	0.029	0.055	1.03	0.924	1.147	0.596
11	agegroup2 50-59	0.083	0.077	1.087	0.934	1.265	0.281
12	agegroup2 60-69	0.072	0.113	1.075	0.861	1.341	0.524
13	agegroup2 70-79	0.177	0.128	1.194	0.929	1.535	0.166
14	agegroup2 80+	0.188	0.151	1.207	0.898	1.622	0.211
15	BB.stfup Yes	-0.068	0.058	0.934	0.833	1.047	0.241
16	useBB Yes	-0.035	0.039	0.966	0.894	1.043	0.374
17	useA10A Yes	0.056	0.029	1.057	0.999	1.119	0.054
18	Switch YES	-0.018	0.077	0.982	0.845	1.142	0.815
19	time2diag 1-2	-0.045	0.121	0.956	0.754	1.213	0.713
20	time2diag 2-5	0.029	0.091	1.029	0.861	1.231	0.75
21	time2diag 5-10	0.239	0.106	1.27	1.032	1.564	0.024
22	time2diag 10-	0.465	0.122	1.592	1.252	2.023	<0.001
23	Pdet	-1.137	4.926	0.321	0	4999.675	0.817
24	Pgla	-2.111	1.674	0.121	0.005	3.224	0.207

Non-naive cohort. Data 28th December 2011

E.2 Recurrence of hypoglycemic coma events

Table E.44: The risk for recurrence of hypoglycemic coma events estimated by the Cox's proportional hazards model. Hospital district as strata. Glargine insulin as reference

S.No.	Variables	parameter est	std	Hazard ratio	lower	upper	P-value
1	typedm T2	-0.248	0.205	0.78	0.522	1.166	0.226
2	typedm Undefined	0.071	0.161	1.073	0.783	1.471	0.661
3	insulin detemir	-0.027	0.173	0.973	0.693	1.366	0.874
4	insulin NPH	0.022	0.143	1.022	0.773	1.353	0.877
5	insulin no DGN	0.028	0.142	1.028	0.778	1.358	0.846
6	gender Female	-0.157	0.101	0.855	0.702	1.041	0.119
7	agegroup2 0-9	-0.377	0.322	0.686	0.365	1.289	0.242
8	agegroup2 10-19	-0.219	0.216	0.804	0.526	1.227	0.312
9	agegroup2 30-39	-0.124	0.159	0.883	0.646	1.207	0.435
10	agegroup2 40-49	0.036	0.264	1.036	0.618	1.737	0.892
11	agegroup2 50-59	-0.241	0.234	0.786	0.497	1.243	0.303
12	agegroup2 60-69	-0.585	0.308	0.557	0.304	1.02	0.058
13	agegroup2 70-79	-0.703	0.331	0.495	0.259	0.948	0.034
14	agegroup2 80+	-0.951	0.403	0.386	0.175	0.85	0.018
15	BB.stfup Yes	0.514	0.429	1.672	0.721	3.878	0.231
16	useBB Yes	-0.236	0.277	0.79	0.458	1.36	0.395
17	useA10A Yes	-0.106	0.108	0.899	0.728	1.11	0.323
18	Switch YES	0.132	0.122	1.141	0.899	1.447	0.279
19	time2diag 1-2	-0.478	0.376	0.62	0.297	1.295	0.204
20	time2diag 2-5	-0.131	0.346	0.877	0.446	1.727	0.705
21	time2diag 5-10	-0.232	0.33	0.793	0.415	1.514	0.482
22	time2diag 10-	-0.089	0.352	0.915	0.459	1.825	0.801

Non-naive cohort. Data 28th December 2011

Table E.45: The risk for recurrence of hypoglycemic coma events estimated by the Cox's proportional hazards model. Hospital district as strata. NPH insulin as reference

S.No.	Variables	parameter est	std	Hazard ratio	lower	upper	P-value
1	typedm T2	-0.248	0.205	0.78	0.522	1.166	0.226
2	typedm Undefined	0.071	0.161	1.073	0.783	1.471	0.661
3	insulinNPH detemir	-0.05	0.174	0.952	0.677	1.339	0.776
4	insulinNPH glargine	-0.022	0.143	0.978	0.739	1.294	0.877
5	insulinNPH no DGN	0.006	0.091	1.006	0.842	1.202	0.951
6	gender Female	-0.157	0.101	0.855	0.702	1.041	0.119
7	agegroup2 0-9	-0.377	0.322	0.686	0.365	1.289	0.242
8	agegroup2 10-19	-0.219	0.216	0.804	0.526	1.227	0.312
9	agegroup2 30-39	-0.124	0.159	0.883	0.646	1.207	0.435
10	agegroup2 40-49	0.036	0.264	1.036	0.618	1.737	0.892
11	agegroup2 50-59	-0.241	0.234	0.786	0.497	1.243	0.303
12	agegroup2 60-69	-0.585	0.308	0.557	0.304	1.02	0.058
13	agegroup2 70-79	-0.703	0.331	0.495	0.259	0.948	0.034
14	agegroup2 80+	-0.951	0.403	0.386	0.175	0.85	0.018
15	BB.stfup Yes	0.514	0.429	1.672	0.721	3.878	0.231
16	useBB Yes	-0.236	0.277	0.79	0.458	1.36	0.395
17	useA10A Yes	-0.106	0.108	0.899	0.728	1.11	0.323
18	Switch YES	0.132	0.122	1.141	0.899	1.447	0.279
19	time2diag 1-2	-0.478	0.376	0.62	0.297	1.295	0.204
20	time2diag 2-5	-0.131	0.346	0.877	0.446	1.727	0.705
21	time2diag 5-10	-0.232	0.33	0.793	0.415	1.514	0.482
22	time2diag 10-	-0.089	0.352	0.915	0.459	1.825	0.801

Non-naive cohort. Data 28th December 2011

Table E.46: Sensitivity analysis of the risk for recurrence of hypoglycemic coma events estimated by the Cox's proportional hazards model. Hospital district as strata. NPH insulin as reference. I) Original estimates, II) Estimates assuming no gaps in use of detemir, glargine, and NPH-insulins, III) Estimates considering hypoglycemic events with main diagnose E10.00 or E11.00 only, IV) Periods with overlapping use of detemir, glargine, or NPH-insulins are removed, V) follow-up ends at first switch.

S.No.	Variables	I			II			III			IV			V		
		HR	lower	upper	HR	lower	upper	HR	lower	upper	HR	lower	upper	HR	lower	upper
1	typedm T2	0.78	0.522	1.166	0.78	0.522	1.166	0.748	0.495	1.129	0.775	0.513	1.171	0.814	0.539	1.229
2	typedm Undefined	1.073	0.783	1.471	1.073	0.782	1.471	1.069	0.77	1.485	1.051	0.756	1.459	1.012	0.729	1.406
3	insulinNPH detemir	0.952	0.677	1.339	1.062	0.758	1.487	0.901	0.634	1.279	0.952	0.67	1.351	0	0	0
4	insulinNPH glargine	0.978	0.739	1.294	1.055	0.761	1.462	0.926	0.693	1.237	1.011	0.757	1.352	1.037	0.776	1.386
5	insulinNPH no DGN	1.006	0.842	1.202	NA	NA	NA	0.939	0.818	1.077	1.012	0.882	1.162	0.989	0.862	1.134
6	gender Female	0.855	0.702	1.041	0.855	0.702	1.041	0.929	0.796	1.085	0.85	0.728	0.992	0.786	0.673	0.918
7	agegroup2 0-9	0.686	0.365	1.289	0.686	0.364	1.291	0.589	0.313	1.109	0.702	0.373	1.322	1.337	0.71	2.517
8	agegroup2 10-19	0.804	0.526	1.227	0.805	0.526	1.231	0.733	0.489	1.099	0.804	0.536	1.204	1.165	0.777	1.746
9	agegroup2 30-39	0.883	0.646	1.207	0.883	0.646	1.208	0.893	0.651	1.225	0.885	0.646	1.214	1.185	0.864	1.625
10	agegroup2 40-49	1.036	0.618	1.737	1.037	0.616	1.744	0.741	0.555	0.991	1.036	0.775	1.385	1.545	1.156	2.065
11	agegroup2 50-59	0.786	0.497	1.243	0.787	0.498	1.242	0.891	0.648	1.226	0.78	0.567	1.073	0.886	0.644	1.218
12	agegroup2 60-69	0.557	0.304	1.02	0.558	0.307	1.016	0.624	0.441	0.883	0.555	0.392	0.786	0.732	0.517	1.036
13	agegroup2 70-79	0.495	0.259	0.948	0.496	0.263	0.934	0.552	0.405	0.754	0.486	0.356	0.663	0.624	0.457	0.852
14	agegroup2 80+	0.386	0.175	0.85	0.387	0.18	0.831	0.418	0.273	0.641	0.381	0.249	0.584	0.47	0.307	0.72
15	BB.stfup Yes	1.672	0.721	3.878	1.673	0.719	3.892	1.071	0.807	1.419	1.693	1.277	2.245	1.747	1.317	2.316
16	useBB Yes	0.79	0.458	1.36	0.789	0.454	1.371	1.023	0.673	1.555	0.787	0.518	1.196	0.823	0.542	1.251
17	useA10A Yes	0.899	0.728	1.11	0.898	0.726	1.111	1.03	0.894	1.186	0.892	0.775	1.028	0.927	0.805	1.068
18	Switch YES	1.141	0.899	1.447	1.058	0.782	1.432	1.189	0.915	1.544	1.097	0.845	1.425	NA	NA	NA
19	time2diag 1-2	0.62	0.297	1.295	0.62	0.296	1.297	0.668	0.308	1.452	0.639	0.294	1.389	0.719	0.331	1.561
20	time2diag 2-5	0.877	0.446	1.727	0.878	0.445	1.732	0.89	0.438	1.808	0.898	0.442	1.824	1.045	0.515	2.124
21	time2diag 5-10	0.793	0.415	1.514	0.793	0.415	1.517	0.812	0.412	1.599	0.834	0.424	1.642	1.033	0.524	2.034
22	time2diag 10-	0.915	0.459	1.825	0.915	0.46	1.821	0.786	0.399	1.546	0.975	0.495	1.918	1.369	0.696	2.694

Non-naive cohort. Data 28th December 2011

Table E.47: Sensitivity analysis of the risk for recurrence of hypoglycemic coma events estimated by the Cox's proportional hazards model. Hospital district as strata. NPH insulin as reference. I) Original estimates, II-IV) Inverse propensity score weighting (IPW). Individuals weighted by the inverse of the probability to start on their insulin conditional on covariates (gender, typedm, agegroup2, BB.stfup, hosph.stfup, time2diag), truncation points givenin paranthesis, III) IPW-weights with no truncation.

S.No.	Variables	I			II [0.1/0.9]			III [0.01/0.99]			IV [0.001/0.999]			V [0/1]		
		HR	lower	upper	HR	lower	upper	HR	lower	upper	HR	lower	upper	HR	lower	upper
1	typedm T2	0.78	0.522	1.166	0.675	0.415	1.099	0.696	0.434	1.115	0.708	0.442	1.134	0.692	0.432	1.11
2	typedm Undefined	1.073	0.783	1.471	0.924	0.647	1.32	0.924	0.649	1.315	0.932	0.655	1.326	0.914	0.642	1.3
3	insulinNPH detemir	0.952	0.677	1.339	1.08	0.723	1.614	1.115	0.751	1.655	1.061	0.715	1.574	0.894	0.603	1.327
4	insulinNPH glargine	0.978	0.739	1.294	0.915	0.665	1.259	0.929	0.669	1.291	0.889	0.64	1.234	0.714	0.514	0.992
5	insulinNPH no DGN	1.006	0.842	1.202	1.064	0.829	1.365	1.061	0.828	1.359	1.07	0.836	1.371	1.088	0.849	1.393
6	gender Female	0.855	0.702	1.041	0.847	0.683	1.05	0.847	0.685	1.048	0.854	0.691	1.057	0.872	0.705	1.079
7	agegroup2 0-9	0.686	0.365	1.289	0.762	0.366	1.586	0.76	0.368	1.572	0.756	0.366	1.564	0.762	0.368	1.576
8	agegroup2 10-19	0.804	0.526	1.227	0.855	0.512	1.426	0.848	0.512	1.405	0.845	0.51	1.4	0.854	0.516	1.414
9	agegroup2 30-39	0.883	0.646	1.207	1.002	0.686	1.463	1.003	0.686	1.466	1.004	0.687	1.467	1.004	0.687	1.468
10	agegroup2 40-49	1.036	0.618	1.737	1.171	0.676	2.03	1.169	0.676	2.024	1.174	0.678	2.033	1.183	0.683	2.047
11	agegroup2 50-59	0.786	0.497	1.243	0.822	0.501	1.35	0.842	0.52	1.363	0.849	0.524	1.375	0.851	0.525	1.378
12	agegroup2 60-69	0.557	0.304	1.02	0.628	0.315	1.251	0.633	0.326	1.228	0.637	0.328	1.236	0.634	0.327	1.231
13	agegroup2 70-79	0.495	0.259	0.948	0.55	0.257	1.178	0.566	0.272	1.179	0.575	0.276	1.197	0.567	0.272	1.182
14	agegroup2 80+	0.386	0.175	0.85	0.422	0.168	1.06	0.453	0.184	1.113	0.537	0.219	1.318	0.9	0.367	2.211
15	BB.stfup Yes	1.672	0.721	3.878	1.756	0.638	4.833	1.725	0.652	4.561	1.691	0.639	4.471	1.78	0.673	4.706
16	useBB Yes	0.79	0.458	1.36	0.794	0.421	1.499	0.8	0.433	1.479	0.813	0.44	1.503	0.793	0.429	1.466
17	useA10A Yes	0.899	0.728	1.11	0.907	0.716	1.148	0.91	0.721	1.148	0.915	0.725	1.155	0.969	0.768	1.223
18	Switch YES	1.141	0.899	1.447	1.094	0.797	1.501	1.104	0.802	1.519	1.169	0.849	1.609	1.459	1.06	2.008
19	time2diag 1-2	0.62	0.297	1.295	0.562	0.228	1.386	0.599	0.246	1.461	0.617	0.253	1.505	0.606	0.248	1.477
20	time2diag 2-5	0.877	0.446	1.727	0.962	0.405	2.284	0.964	0.408	2.28	0.967	0.409	2.287	0.943	0.399	2.231
21	time2diag 5-10	0.793	0.415	1.514	0.743	0.326	1.691	0.744	0.328	1.689	0.74	0.326	1.681	0.728	0.321	1.653
22	time2diag 10-	0.915	0.459	1.825	0.982	0.414	2.328	0.986	0.418	2.329	0.979	0.415	2.313	0.998	0.423	2.357

Non-naive cohort. Data 28th December 2011

Table E.48: sensitivity analysis of the risk for recurrence of hypoglycemic coma events estimated by the Cox's proportional hazards model. The probability, conditional on covariates (gender, typedm, agegroup2, BB.stfup, hospstfup, time2diag) to initiate treatment with detemir and glargine as two additional covariates. Hospital district as strata. NPH insulin as reference

S.No.	Variables	parameter est	std	Hazard ratio	lower	upper	P-value
1	typedm T2	-0.449	0.246	0.638	0.394	1.033	0.067
2	typedm Undefined	-0.248	0.19	0.78	0.537	1.133	0.193
3	insulinNPH detemir	-0.045	0.175	0.956	0.678	1.348	0.798
4	insulinNPH glargine	-0.006	0.145	0.994	0.748	1.321	0.969
5	insulinNPH no DGN	0.006	0.089	1.006	0.844	1.199	0.949
6	gender Female	-0.095	0.144	0.91	0.686	1.205	0.509
7	agegroup2 0-9	-1.22	0.388	0.295	0.138	0.632	0.002
8	agegroup2 10-19	0.442	0.477	1.556	0.611	3.962	0.354
9	agegroup2 30-39	-0.176	0.175	0.838	0.595	1.181	0.314
10	agegroup2 40-49	0.143	0.225	1.154	0.743	1.794	0.524
11	agegroup2 50-59	-0.717	0.722	0.488	0.119	2.012	0.321
12	agegroup2 60-69	-1.717	1.225	0.18	0.016	1.982	0.161
13	agegroup2 70-79	-2.663	1.864	0.07	0.002	2.692	0.153
14	agegroup2 80+	-3.438	2.309	0.032	0	2.963	0.136
15	BB.stfup Yes	-0.941	0.569	0.39	0.128	1.191	0.098
16	useBB Yes	-0.221	0.269	0.802	0.474	1.358	0.412
17	useA10A Yes	-0.102	0.105	0.903	0.735	1.108	0.329
18	Switch YES	0.13	0.121	1.139	0.899	1.444	0.281
19	time2diag 1-2	-0.261	0.4	0.77	0.352	1.685	0.513
20	time2diag 2-5	0.199	0.365	1.22	0.596	2.494	0.587
21	time2diag 5-10	0.347	0.463	1.415	0.571	3.506	0.453
22	time2diag 10-	0.933	0.822	2.542	0.508	12.721	0.256
23	Pdet	4.466	3.302	87.013	0.135	56255.384	0.176
24	Pgla	-13.277	7.55	0	0	4.581	0.079

Non-naive cohort. Data 28th December 2011

E.3 All hypoglycemic coma events

Table E.49: The risk for all hypoglycemic coma events estimated by the Cox's proportional hazards model. Hospital district as strata. Gargine insulin as reference

S.No.	Variables	parameter est	std	Hazard ratio	lower	upper	P-value
1	typedm T2	-0.033	0.12	0.967	0.765	1.223	0.78
2	typedm Undefined	-0.051	0.096	0.95	0.787	1.148	0.598
3	insulin detemir	0.009	0.106	1.009	0.82	1.241	0.933
4	insulin NPH	0.002	0.097	1.002	0.828	1.212	0.986
5	insulin no DGN	0.293	0.095	1.34	1.113	1.614	0.002
6	gender Female	-0.132	0.06	0.876	0.778	0.987	0.029
7	agegroup2 0-9	0.295	0.189	1.343	0.928	1.944	0.118
8	agegroup2 10-19	0.08	0.128	1.083	0.844	1.391	0.53
9	agegroup2 30-39	-0.11	0.105	0.896	0.729	1.1	0.292
10	agegroup2 40-49	0.002	0.178	1.002	0.707	1.42	0.991
11	agegroup2 50-59	-0.024	0.129	0.977	0.758	1.258	0.855
12	agegroup2 60-69	-0.165	0.156	0.848	0.625	1.151	0.29
13	agegroup2 70-79	-0.087	0.173	0.917	0.653	1.286	0.615
14	agegroup2 80+	-0.146	0.204	0.864	0.579	1.29	0.476
15	BB.stfup Yes	0.264	0.216	1.303	0.854	1.988	0.22
16	useBB Yes	-0.2	0.13	0.819	0.635	1.056	0.123
17	useA10A Yes	0.018	0.063	1.018	0.9	1.152	0.777
18	Switch YES	0.14	0.088	1.15	0.968	1.367	0.111
19	time2diag 1-2	-0.297	0.21	0.743	0.493	1.121	0.157
20	time2diag 2-5	-0.105	0.194	0.9	0.616	1.316	0.588
21	time2diag 5-10	0.038	0.186	1.039	0.722	1.494	0.838
22	time2diag 10-	0.275	0.203	1.317	0.885	1.959	0.174

Non-naive cohort. Data 28th December 2011

Table E.50: The risk for all hypoglycemic coma events estimated by the Cox's proportional hazards model. Hospital district as strata. NPH insulin as reference

S.No.	Variables	parameter est	std	Hazard ratio	lower	upper	P-value
1	typedm T2	-0.033	0.12	0.967	0.765	1.223	0.78
2	typedm Undefined	-0.051	0.096	0.95	0.787	1.148	0.598
3	insulinNPH detemir	0.007	0.117	1.007	0.801	1.267	0.951
4	insulinNPH glargine	-0.002	0.097	0.998	0.825	1.208	0.986
5	insulinNPH no DGN	0.291	0.058	1.338	1.193	1.5	<0.001
6	gender Female	-0.132	0.06	0.876	0.778	0.987	0.029
7	agegroup2 0-9	0.295	0.189	1.343	0.928	1.944	0.118
8	agegroup2 10-19	0.08	0.128	1.083	0.844	1.391	0.53
9	agegroup2 30-39	-0.11	0.105	0.896	0.729	1.1	0.292
10	agegroup2 40-49	0.002	0.178	1.002	0.707	1.42	0.991
11	agegroup2 50-59	-0.024	0.129	0.977	0.758	1.258	0.855
12	agegroup2 60-69	-0.165	0.156	0.848	0.625	1.151	0.29
13	agegroup2 70-79	-0.087	0.173	0.917	0.653	1.286	0.615
14	agegroup2 80+	-0.146	0.204	0.864	0.579	1.29	0.476
15	BB.stfup Yes	0.264	0.216	1.303	0.854	1.988	0.22
16	useBB Yes	-0.2	0.13	0.819	0.635	1.056	0.123
17	useA10A Yes	0.018	0.063	1.018	0.9	1.152	0.777
18	Switch YES	0.14	0.088	1.15	0.968	1.367	0.111
19	time2diag 1-2	-0.297	0.21	0.743	0.493	1.121	0.157
20	time2diag 2-5	-0.105	0.194	0.9	0.616	1.316	0.588
21	time2diag 5-10	0.038	0.186	1.039	0.722	1.494	0.838
22	time2diag 10-	0.275	0.203	1.317	0.885	1.959	0.174

Non-naive cohort. Data 28th December 2011

F Appendix 6: Duration of hospitalizations and secondary care visits

Table F.51: Hospitalizations and secondary care visits due to severe hypoglycemic coma events stratified by insulin at start of follow-up and by present insulin. The number of visits and the distribution of the length of the visits.

S.No.	Variables		All (N)	Days (%)				
	First Insulin	Insulin		N	0-1	2-3	4-5	6-7
1	glargine	glargine	87	71.26	11.49	11.49	2.30	3.45
2	glargine	detemir	3	33.33	0.00	33.33	0.00	33.33
3	glargine	NPH	2	0.00	50.00	0.00	0.00	50.00
4	glargine	no DGN	8	75.00	12.50	12.50	0.00	0.00
5	detemir	glargine	0	NaN	NaN	NaN	NaN	NaN
6	detemir	detemir	4	75.00	0.00	0.00	25.00	0.00
7	detemir	NPH	0	NaN	NaN	NaN	NaN	NaN
8	detemir	no DGN	0	NaN	NaN	NaN	NaN	NaN
9	NPH	glargine	3046	76.82	8.63	5.55	3.18	5.81
10	NPH	detemir	718	79.81	7.24	3.90	3.34	5.71
11	NPH	NPH	9241	64.86	10.75	7.56	5.57	11.25
12	NPH	no DGN	2237	58.38	11.80	8.31	6.97	14.53
13	Total	glargine	3133	76.67	8.71	5.71	3.16	5.75
14	Total	detemir	725	79.59	7.17	4.00	3.45	5.79
15	Total	NPH	9243	64.85	10.75	7.56	5.57	11.26
16	Total	no DGN	2245	58.44	11.80	8.33	6.95	14.48

Non-naive cohort. Data 28th December 2011

Table F.52: Hospitalizations and secondary care visits due to severe hypoglycemic coma events stratified by insulin at start of follow-up and by present insulin. The number of visits and the distribution of visit length (Days) described by the minimum, the 25% quantile, the median, the mean, the 75% quantile and the maximum.

S.No.	Variables		All (N)	Duration (Days)					
	First Insulin	Insulin		Min	25%	Median	Mean	75%	Max
1	glargine	glargine	87	1	1.00	1.0	2.161	2.00	24
2	glargine	detemir	3	1	2.50	4.0	6.333	9.00	14
3	glargine	NPH	2	2	3.75	5.5	5.500	7.25	9
4	glargine	no DGN	8	1	1.00	1.0	1.500	1.25	4
5	detemir	glargine	0	NA	NA	NA	NaN	NA	NA
6	detemir	detemir	4	1	1.00	1.0	2.250	2.25	6
7	detemir	NPH	0	NA	NA	NA	NaN	NA	NA
8	detemir	no DGN	0	NA	NA	NA	NaN	NA	NA
9	NPH	glargine	3046	1	1.00	1.0	2.435	1.00	156
10	NPH	detemir	718	1	1.00	1.0	2.350	1.00	62
11	NPH	NPH	9241	1	1.00	1.0	3.466	3.00	404
12	NPH	no DGN	2237	1	1.00	1.0	4.165	5.00	170
13	Total	glargine	3133	1	1.00	1.0	2.427	1.00	156
14	Total	detemir	725	1	1.00	1.0	2.366	1.00	62
15	Total	NPH	9243	1	1.00	1.0	3.466	3.00	404
16	Total	no DGN	2245	1	1.00	1.0	4.155	5.00	170

Non-naive cohort. Data 28th December 2011

Table F.53: Hospitalizations and secondary care visits due to severe hypoglycemic coma events stratified by reimbursement diagnose and by insulin. The number of visits and the distribution of the length of the visits.

S.No.	Variables		All (N)	Days (%)				
	Diagnose	Insulin		N	0-1	2-3	4-5	6-7
1	T1	glargine	384	84.11	5.21	4.69	2.08	3.91
2	T1	detemir	84	75.00	9.52	5.95	3.57	5.95
3	T1	NPH	796	81.03	9.30	3.64	1.88	4.15
4	T1	no DGN	176	79.55	8.52	2.27	3.98	5.68
5	T2	glargine	199	66.83	13.57	7.54	5.53	6.53
6	T2	detemir	34	73.53	5.88	2.94	8.82	8.82
7	T2	NPH	1025	50.34	13.46	10.93	8.78	16.49
8	T2	no DGN	280	54.64	10.36	11.07	8.93	15.00
9	Undefined	glargine	2550	76.31	8.86	5.73	3.14	5.96
10	Undefined	detemir	607	80.56	6.92	3.79	3.13	5.60
11	Undefined	NPH	7422	65.12	10.54	7.52	5.52	11.30
12	Undefined	no DGN	1789	56.96	12.35	8.50	6.93	15.26
13	Total	glargine	3133	76.67	8.71	5.71	3.16	5.75
14	Total	detemir	725	79.59	7.17	4.00	3.45	5.79
15	Total	NPH	9243	64.85	10.75	7.56	5.57	11.26
16	Total	no DGN	2245	58.44	11.80	8.33	6.95	14.48

Non-naive cohort. Data 28th December 2011

Table F.54: Hospitalizations and secondary care visits due to severe hypoglycemic coma events stratified by reimbursement diagnose and by insulin. The number of visits and the distribution of visit length (Days) described by the minimum, the 25% quantile, the median, the mean, the 75% quantile and the maximum.

S.No.	Variables		All (N)	Duration (Days)					
	Diagnose	Insulin		N	Min	25%	Median	Mean	75%
1	T1	glargine	384	1	1	1	2.250	1.00	121
2	T1	detemir	84	1	1	1	2.571	1.25	34
3	T1	NPH	796	1	1	1	2.196	1.00	159
4	T1	no DGN	176	1	1	1	2.415	1.00	57
5	T2	glargine	199	1	1	1	2.462	3.00	20
6	T2	detemir	34	1	1	1	4.176	1.75	62
7	T2	NPH	1025	1	1	1	4.388	6.00	137
8	T2	no DGN	280	1	1	1	3.854	5.00	43
9	Undefined	glargine	2550	1	1	1	2.451	1.00	156
10	Undefined	detemir	607	1	1	1	2.236	1.00	61
11	Undefined	NPH	7422	1	1	1	3.475	3.00	404
12	Undefined	no DGN	1789	1	1	1	4.374	5.00	170
13	Total	glargine	3133	1	1	1	2.427	1.00	156
14	Total	detemir	725	1	1	1	2.366	1.00	62
15	Total	NPH	9243	1	1	1	3.466	3.00	404
16	Total	no DGN	2245	1	1	1	4.155	5.00	170

Non-naive cohort. Data 28th December 2011

Table F.55: Hospitalizations and secondary care visits due to severe hypoglycemic coma events stratified by gender and by insulin. The number of visits and the distribution of the length of the visits.

S.No.	Variables		All (N)	Days (%)				
	Gender	Insulin		N	0-1	2-3	4-5	6-7
1	Male	glargine	1763	77.03	9.08	5.10	2.84	5.96
2	Male	detemir	314	79.62	7.01	3.18	4.46	5.73
3	Male	NPH	5320	68.93	9.83	6.82	5.13	9.29
4	Male	no DGN	1152	63.45	10.07	7.29	6.16	13.02
5	Female	glargine	1370	76.20	8.25	6.50	3.58	5.47
6	Female	detemir	411	79.56	7.30	4.62	2.68	5.84
7	Female	NPH	3923	59.32	12.01	8.56	6.17	13.94
8	Female	no DGN	1093	53.16	13.63	9.42	7.78	16.01
9	Total	glargine	3133	76.67	8.71	5.71	3.16	5.75
10	Total	detemir	725	79.59	7.17	4.00	3.45	5.79
11	Total	NPH	9243	64.85	10.75	7.56	5.57	11.26
12	Total	no DGN	2245	58.44	11.80	8.33	6.95	14.48

Non-naive cohort. Data 28th December 2011

Table F.56: Hospitalizations and secondary care visits due to severe hypoglycemic coma events stratified by gender and by insulin. The number of visits and the distribution of visit length (Days) described by the minimum, the 25% quantile, the median, the mean, the 75% quantile and the maximum.

S.No.	Variables		All (N)	Duration (Days)					
	Gender	Insulin		N	Min	25%	Median	Mean	75%
1	Male	glargine	1763	1	1	1	2.322	1	156
2	Male	detemir	314	1	1	1	2.150	1	34
3	Male	NPH	5320	1	1	1	3.136	3	404
4	Male	no DGN	1152	1	1	1	3.728	4	123
5	Female	glargine	1370	1	1	1	2.563	1	138
6	Female	detemir	411	1	1	1	2.530	1	62
7	Female	NPH	3923	1	1	1	3.914	4	137
8	Female	no DGN	1093	1	1	1	4.606	5	170
9	Total	glargine	3133	1	1	1	2.427	1	156
10	Total	detemir	725	1	1	1	2.366	1	62
11	Total	NPH	9243	1	1	1	3.466	3	404
12	Total	no DGN	2245	1	1	1	4.155	5	170

Non-naive cohort. Data 28th December 2011

Table F.57: Hospitalizations and secondary care visits due to severe hypoglycemic coma events stratified by age at start of follow-up and by insulin. The number of visits and the distribution of the length of the visits.

S.No.	Variables		All (N)	Days (%)				
	Age group	Insulin		N	0-1	2-3	4-5	6-7
1	0-9	glargine	74	85.14	6.76	4.05	1.35	2.70
2	0-9	detemir	34	70.59	17.65	2.94	2.94	5.88
3	0-9	NPH	232	91.38	6.03	0.86	0.43	1.29
4	0-9	no DGN	38	86.84	13.16	0.00	0.00	0.00
5	10-19	glargine	356	84.55	6.46	4.49	1.97	2.53
6	10-19	detemir	80	82.50	7.50	5.00	0.00	5.00
7	10-19	NPH	559	81.22	10.91	3.22	0.89	3.76
8	10-19	no DGN	141	75.89	12.06	4.26	1.42	6.38
9	20-29	glargine	466	87.34	5.58	3.22	1.07	2.79
10	20-29	detemir	148	89.19	6.08	4.05	0.00	0.68
11	20-29	NPH	657	81.58	7.61	3.35	2.89	4.57
12	20-29	no DGN	141	85.82	4.96	2.84	1.42	4.96
13	30-39	glargine	487	81.72	7.60	3.49	2.26	4.93
14	30-39	detemir	136	83.09	5.15	2.94	5.15	3.68
15	30-39	NPH	912	79.17	8.77	5.04	2.30	4.71
16	30-39	no DGN	170	79.41	5.88	5.29	1.76	7.65
17	40-49	glargine	485	77.32	8.66	5.57	1.65	6.80
18	40-49	detemir	134	84.33	7.46	0.75	3.73	3.73
19	40-49	NPH	1324	78.70	6.72	5.74	2.87	5.97
20	40-49	no DGN	298	78.52	5.70	3.69	3.36	8.72
21	50-59	glargine	739	77.94	7.98	5.68	3.65	4.74
22	50-59	detemir	103	74.76	6.80	4.85	3.88	9.71
23	50-59	NPH	1776	68.24	10.53	6.76	5.35	9.12
24	50-59	no DGN	314	59.55	9.55	7.96	6.69	16.24
25	60-69	glargine	304	54.61	15.79	11.51	6.91	11.18
26	60-69	detemir	67	56.72	10.45	8.96	8.96	14.93
27	60-69	NPH	1786	56.33	12.15	9.97	7.33	14.22
28	60-69	no DGN	447	46.09	12.98	8.50	10.51	21.92
29	70-79	glargine	194	53.61	15.46	9.28	8.25	13.40
30	70-79	detemir	20	60.00	0.00	10.00	10.00	20.00
31	70-79	NPH	1623	41.10	15.03	12.14	9.86	21.87
32	70-79	no DGN	536	40.86	17.35	13.43	10.07	18.28
33	80+	glargine	28	42.86	10.71	21.43	10.71	14.29
34	80+	detemir	3	66.67	0.00	0.00	0.00	33.33
35	80+	NPH	374	38.24	13.90	10.70	12.03	25.13
36	80+	no DGN	160	43.75	17.50	13.75	10.62	14.38
37	Total	glargine	3133	76.67	8.71	5.71	3.16	5.75
38	Total	detemir	725	79.59	7.17	4.00	3.45	5.79
39	Total	NPH	9243	64.85	10.75	7.56	5.57	11.26
40	Total	no DGN	2245	58.44	11.80	8.33	6.95	14.48

Non-naive cohort. Data 28th December 2011

Table F.58: Hospitalizations and secondary care visits due to severe hypoglycemic coma events stratified by age at start of follow-up and by insulin. The number of visits and the distribution of visit length (Days) described by the minimum, the 25% quantile, the median, the mean, the 75% quantile and the maximum.

S.No.	Variables		All (N)	Duration (Days)					
	Age group	Insulin		N	Min	25%	Median	Mean	75%
1	0-9	glargine	74	1	1	1.0	1.622	1.00	19
2	0-9	detemir	34	1	1	1.0	3.029	2.00	34
3	0-9	NPH	232	1	1	1.0	1.254	1.00	13
4	0-9	no DGN	38	1	1	1.0	1.184	1.00	3
5	10-19	glargine	356	1	1	1.0	1.952	1.00	43
6	10-19	detemir	80	1	1	1.0	1.838	1.00	22
7	10-19	NPH	559	1	1	1.0	3.399	1.00	319
8	10-19	no DGN	141	1	1	1.0	2.390	1.00	57
9	20-29	glargine	466	1	1	1.0	1.526	1.00	17
10	20-29	detemir	148	1	1	1.0	1.284	1.00	10
11	20-29	NPH	657	1	1	1.0	2.189	1.00	104
12	20-29	no DGN	141	1	1	1.0	1.986	1.00	45
13	30-39	glargine	487	1	1	1.0	2.199	1.00	121
14	30-39	detemir	136	1	1	1.0	1.956	1.00	30
15	30-39	NPH	912	1	1	1.0	2.096	1.00	58
16	30-39	no DGN	170	1	1	1.0	3.294	1.00	77
17	40-49	glargine	485	1	1	1.0	2.765	1.00	156
18	40-49	detemir	134	1	1	1.0	1.933	1.00	37
19	40-49	NPH	1324	1	1	1.0	2.789	1.00	404
20	40-49	no DGN	298	1	1	1.0	3.037	1.00	108
21	50-59	glargine	739	1	1	1.0	2.007	1.00	30
22	50-59	detemir	103	1	1	1.0	2.990	1.50	62
23	50-59	NPH	1776	1	1	1.0	3.051	3.00	96
24	50-59	no DGN	314	1	1	1.0	4.701	5.00	170
25	60-69	glargine	304	1	1	1.0	3.576	4.00	84
26	60-69	detemir	67	1	1	1.0	4.896	5.00	61
27	60-69	NPH	1786	1	1	1.0	4.001	5.00	120
28	60-69	no DGN	447	1	1	2.0	5.438	7.00	92
29	70-79	glargine	194	1	1	1.0	5.088	4.75	138
30	70-79	detemir	20	1	1	1.0	4.800	6.00	32
31	70-79	NPH	1623	1	1	3.0	4.953	7.00	68
32	70-79	no DGN	536	1	1	3.0	4.563	6.00	42
33	80+	glargine	28	1	1	2.5	3.929	5.50	14
34	80+	detemir	3	1	1	1.0	6.000	8.50	16
35	80+	NPH	374	1	1	3.0	5.893	7.75	135
36	80+	no DGN	160	1	1	2.0	5.306	5.25	82
37	Total	glargine	3133	1	1	1.0	2.427	1.00	156
38	Total	detemir	725	1	1	1.0	2.366	1.00	62
39	Total	NPH	9243	1	1	1.0	3.466	3.00	404
40	Total	no DGN	2245	1	1	1.0	4.155	5.00	170

Non-naive cohort. Data 28th December 2011

Table F.59: Hospitalizations and secondary care visits due to severe hypoglycemic coma events stratified by calendar year at start of follow-up and by insulin. The number of visits and the distribution of the length of the visits.

S.No.	Variables		All (N)	Days (%)				
	Calender year	Insulin		N	0-1	2-3	4-5	6-7
1	00-05	glargine	3108	76.77	8.69	5.66	3.12	5.76
2	00-05	detemir	721	79.61	7.21	4.02	3.47	5.69
3	00-05	NPH	9232	64.83	10.76	7.57	5.57	11.28
4	00-05	no DGN	2243	58.40	11.81	8.34	6.95	14.49
5	06	glargine	7	57.14	14.29	28.57	0.00	0.00
6	06	detemir	0	NaN	NaN	NaN	NaN	NaN
7	06	NPH	7	85.71	0.00	0.00	14.29	0.00
8	06	no DGN	0	NaN	NaN	NaN	NaN	NaN
9	07	glargine	15	73.33	13.33	0.00	6.67	6.67
10	07	detemir	1	100.00	0.00	0.00	0.00	0.00
11	07	NPH	2	100.00	0.00	0.00	0.00	0.00
12	07	no DGN	0	NaN	NaN	NaN	NaN	NaN
13	08	glargine	2	50.00	0.00	0.00	50.00	0.00
14	08	detemir	3	66.67	0.00	0.00	0.00	33.33
15	08	NPH	2	50.00	50.00	0.00	0.00	0.00
16	08	no DGN	1	100.00	0.00	0.00	0.00	0.00
17	09	glargine	1	0.00	0.00	100.00	0.00	0.00
18	09	detemir	0	NaN	NaN	NaN	NaN	NaN
19	09	NPH	0	NaN	NaN	NaN	NaN	NaN
20	09	no DGN	1	100.00	0.00	0.00	0.00	0.00
21	Total	glargine	3133	76.67	8.71	5.71	3.16	5.75
22	Total	detemir	725	79.59	7.17	4.00	3.45	5.79
23	Total	NPH	9243	64.85	10.75	7.56	5.57	11.26
24	Total	no DGN	2245	58.44	11.80	8.33	6.95	14.48

Non-naive cohort. Data 28th December 2011

Table F.60: Hospitalizations and secondary care visits due to severe hypoglycemic coma events stratified by calendar year at start of follow-up and by insulin. The number of visits and the distribution of visit length (Days) described by the minimum, the 25% quantile, the median, the mean, the 75% quantile and the maximum.

S.No.	Variables		All (N)	Duration (Days)					
	Calender year	Insulin		N	Min	25%	Median	Mean	75%
1	00-05	glargine	3108	1	1.00	1.0	2.424	1.00	156
2	00-05	detemir	721	1	1.00	1.0	2.355	1.00	62
3	00-05	NPH	9232	1	1.00	1.0	3.468	3.00	404
4	00-05	no DGN	2243	1	1.00	1.0	4.158	5.00	170
5	06	glargine	7	1	1.00	1.0	2.143	3.50	4
6	06	detemir	0	NA	NA	NA	NaN	NA	NA
7	06	NPH	7	1	1.00	1.0	1.857	1.00	7
8	06	no DGN	0	NA	NA	NA	NaN	NA	NA
9	07	glargine	15	1	1.00	1.0	3.067	1.50	24
10	07	detemir	1	1	1.00	1.0	1.000	1.00	1
11	07	NPH	2	1	1.00	1.0	1.000	1.00	1
12	07	no DGN	0	NA	NA	NA	NaN	NA	NA
13	08	glargine	2	1	2.25	3.5	3.500	4.75	6
14	08	detemir	3	1	1.00	1.0	5.333	7.50	14
15	08	NPH	2	1	1.50	2.0	2.000	2.50	3
16	08	no DGN	1	1	1.00	1.0	1.000	1.00	1
17	09	glargine	1	4	4.00	4.0	4.000	4.00	4
18	09	detemir	0	NA	NA	NA	NaN	NA	NA
19	09	NPH	0	NA	NA	NA	NaN	NA	NA
20	09	no DGN	1	1	1.00	1.0	1.000	1.00	1
21	Total	glargine	3133	1	1.00	1.0	2.427	1.00	156
22	Total	detemir	725	1	1.00	1.0	2.366	1.00	62
23	Total	NPH	9243	1	1.00	1.0	3.466	3.00	404
24	Total	no DGN	2245	1	1.00	1.0	4.155	5.00	170

Non-naive cohort. Data 28th December 2011

Table F.61: Hospitalizations and secondary care visits due to severe hypoglycemic coma events stratified by time (Years) from year of diagnose (first reimbursement decision or purchase) at start of follow-up. The number of visits and the distribution of the length of the visits.

S.No.	Variables	All (N)	Days (%)					7-
			Insulin	N	0-1	2-3	4-5	
1	-1	glargine	90	92.22	5.56	0.00	1.11	1.11
2	-1	detemir	20	65.00	15.00	5.00	10.00	5.00
3	-1	NPH	185	74.05	12.43	2.70	3.78	7.03
4	-1	no DGN	50	76.00	12.00	2.00	6.00	4.00
5	1-2	glargine	86	68.60	11.63	10.47	3.49	5.81
6	1-2	detemir	22	90.91	0.00	9.09	0.00	0.00
7	1-2	NPH	236	65.25	12.71	6.36	7.20	8.47
8	1-2	no DGN	45	64.44	6.67	8.89	6.67	13.33
9	2-5	glargine	335	77.61	7.76	5.07	2.99	6.57
10	2-5	detemir	65	72.31	12.31	3.08	4.62	7.69
11	2-5	NPH	1088	65.53	10.20	7.63	6.25	10.39
12	2-5	no DGN	278	64.03	11.15	6.47	7.91	10.43
13	5-10	glargine	703	77.52	8.39	5.55	3.41	5.12
14	5-10	detemir	152	73.68	8.55	6.58	3.95	7.24
15	5-10	NPH	2378	59.42	12.66	8.96	5.63	13.33
16	5-10	no DGN	570	50.88	13.68	10.88	7.37	17.19
17	10-	glargine	1919	75.82	9.02	5.94	3.18	6.04
18	10-	detemir	466	82.62	6.01	3.00	3.00	5.36
19	10-	NPH	5356	66.78	9.88	7.15	5.40	10.79
20	10-	no DGN	1302	59.68	11.29	7.83	6.61	14.59
21	Total	glargine	3133	76.67	8.71	5.71	3.16	5.75
22	Total	detemir	725	79.59	7.17	4.00	3.45	5.79
23	Total	NPH	9243	64.85	10.75	7.56	5.57	11.26
24	Total	no DGN	2245	58.44	11.80	8.33	6.95	14.48

Naive cohort. Data 28th December 2011

Table F.62: Hospitalizations and secondary care visits due to severe hypoglycemic coma events stratified by time (Years) from year of diagnose (first reimbursement decision or purchase) at start of follow-up. The number of visits and the distribution of visit length (Days) described by the minimum, the 25% quantile, the median, the mean, the 75% quantile and the maximum.

S.No.	Variables	All (N)	Duration (Days)						
			N	Min	25%	Median	Mean	75%	Max
1	-1	glargine	90	1	1	1	1.222	1.00	8
2	-1	detemir	20	1	1	1	3.500	2.00	34
3	-1	NPH	185	1	1	1	2.497	2.00	56
4	-1	no DGN	50	1	1	1	2.260	1.00	25
5	1-2	glargine	86	1	1	1	2.488	2.75	20
6	1-2	detemir	22	1	1	1	1.318	1.00	5
7	1-2	NPH	236	1	1	1	3.822	3.00	137
8	1-2	no DGN	45	1	1	1	3.356	5.00	22
9	2-5	glargine	335	1	1	1	2.881	1.00	121
10	2-5	detemir	65	1	1	1	3.369	2.00	62
11	2-5	NPH	1088	1	1	1	3.208	3.00	159
12	2-5	no DGN	278	1	1	1	3.464	3.00	77
13	5-10	glargine	703	1	1	1	2.216	1.00	125
14	5-10	detemir	152	1	1	1	2.809	2.00	61
15	5-10	NPH	2378	1	1	1	4.091	4.00	404
16	5-10	no DGN	570	1	1	1	4.232	5.00	78
17	10-	glargine	1919	1	1	1	2.479	1.00	156
18	10-	detemir	466	1	1	1	2.082	1.00	37
19	10-	NPH	5356	1	1	1	3.259	3.00	135
20	10-	no DGN	1302	1	1	1	4.370	4.00	170
21	Total	glargine	3133	1	1	1	2.427	1.00	156
22	Total	detemir	725	1	1	1	2.366	1.00	62
23	Total	NPH	9243	1	1	1	3.466	3.00	404
24	Total	no DGN	2245	1	1	1	4.155	5.00	170

Naive cohort. Data 28th December 2011

Table F.63: Hospitalizations and secondary care visits due to severe hypoglycemic coma events stratified by hospital district at start of follow-up and by insulin.

S.No.	Variables		All (N)	Days (%)				
	Hosp. District	Insulin		0-1	2-3	4-5	6-7	7-
1	Unknown	glargine	3015	77.01	8.66	5.47	3.12	5.74
2	Unknown	detemir	713	79.66	7.29	3.93	3.37	5.75
3	Unknown	NPH	9115	65.06	10.62	7.53	5.53	11.27
4	Unknown	no DGN	2203	58.28	11.94	8.35	6.85	14.57
5	HUS	glargine	20	70.00	10.00	0.00	0.00	20.00
6	HUS	detemir	0	NaN	NaN	NaN	NaN	NaN
7	HUS	NPH	41	65.85	12.20	4.88	7.32	9.76
8	HUS	no DGN	14	64.29	0.00	14.29	0.00	21.43
9	Varsinais-Suomi	glargine	7	85.71	0.00	0.00	0.00	14.29
10	Varsinais-Suomi	detemir	0	NaN	NaN	NaN	NaN	NaN
11	Varsinais-Suomi	NPH	9	66.67	22.22	0.00	11.11	0.00
12	Varsinais-Suomi	no DGN	1	0.00	0.00	0.00	100.00	0.00
13	Satakunta	glargine	6	66.67	0.00	16.67	16.67	0.00
14	Satakunta	detemir	1	100.00	0.00	0.00	0.00	0.00
15	Satakunta	NPH	4	25.00	25.00	50.00	0.00	0.00
16	Satakunta	no DGN	0	NaN	NaN	NaN	NaN	NaN
17	Kantahame	glargine	23	100.00	0.00	0.00	0.00	0.00
18	Kantahame	detemir	0	NaN	NaN	NaN	NaN	NaN
19	Kantahame	NPH	6	16.67	16.67	33.33	16.67	16.67
20	Kantahame	no DGN	5	80.00	0.00	0.00	20.00	0.00
21	Pirkanmaa	glargine	4	50.00	0.00	25.00	25.00	0.00
22	Pirkanmaa	detemir	0	NaN	NaN	NaN	NaN	NaN
23	Pirkanmaa	NPH	3	66.67	33.33	0.00	0.00	0.00
24	Pirkanmaa	no DGN	0	NaN	NaN	NaN	NaN	NaN
25	Paijat-Hame	glargine	0	NaN	NaN	NaN	NaN	NaN
26	Paijat-Hame	detemir	0	NaN	NaN	NaN	NaN	NaN
27	Paijat-Hame	NPH	9	33.33	33.33	22.22	0.00	11.11
28	Paijat-Hame	no DGN	7	71.43	0.00	0.00	28.57	0.00
29	Kymenlaakso	glargine	2	50.00	0.00	0.00	50.00	0.00
30	Kymenlaakso	detemir	1	0.00	0.00	100.00	0.00	0.00
31	Kymenlaakso	NPH	5	0.00	20.00	20.00	20.00	40.00
32	Kymenlaakso	no DGN	0	NaN	NaN	NaN	NaN	NaN
33	Etela-Karjala	glargine	12	33.33	41.67	16.67	8.33	0.00
34	Etela-Karjala	detemir	1	100.00	0.00	0.00	0.00	0.00
35	Etela-Karjala	NPH	4	75.00	25.00	0.00	0.00	0.00
36	Etela-Karjala	no DGN	2	0.00	50.00	0.00	0.00	50.00
37	Etela-Savo	glargine	3	33.33	0.00	66.67	0.00	0.00
38	Etela-Savo	detemir	0	NaN	NaN	NaN	NaN	NaN
39	Etela-Savo	NPH	4	0.00	50.00	25.00	0.00	25.00
40	Etela-Savo	no DGN	0	NaN	NaN	NaN	NaN	NaN
41	Ita-Savo	glargine	0	NaN	NaN	NaN	NaN	NaN
42	Ita-Savo	detemir	0	NaN	NaN	NaN	NaN	NaN
43	Ita-Savo	NPH	0	NaN	NaN	NaN	NaN	NaN
44	Ita-Savo	no DGN	2	100.00	0.00	0.00	0.00	0.00
45	Pohjois-Karjala	glargine	5	100.00	0.00	0.00	0.00	0.00
46	Pohjois-Karjala	detemir	0	NaN	NaN	NaN	NaN	NaN
47	Pohjois-Karjala	NPH	2	100.00	0.00	0.00	0.00	0.00
48	Pohjois-Karjala	no DGN	1	100.00	0.00	0.00	0.00	0.00
49	Pohjois-Savo	glargine	10	80.00	10.00	0.00	10.00	0.00
50	Pohjois-Savo	detemir	0	NaN	NaN	NaN	NaN	NaN
51	Pohjois-Savo	NPH	1	100.00	0.00	0.00	0.00	0.00
52	Pohjois-Savo	no DGN	1	100.00	0.00	0.00	0.00	0.00
53	Keski-Suomi	glargine	3	100.00	0.00	0.00	0.00	0.00
54	Keski-Suomi	detemir	6	83.33	0.00	0.00	16.67	0.00
55	Keski-Suomi	NPH	13	61.54	15.38	0.00	23.08	0.00
56	Keski-Suomi	no DGN	2	0.00	0.00	50.00	50.00	0.00
57	Etela-Pohjanmaa	glargine	8	50.00	25.00	12.50	0.00	12.50
58	Etela-Pohjanmaa	detemir	0	NaN	NaN	NaN	NaN	NaN
59	Etela-Pohjanmaa	NPH	11	36.36	36.36	0.00	9.09	18.18
60	Etela-Pohjanmaa	no DGN	2	50.00	50.00	0.00	0.00	0.00
61	Vaasa	glargine	5	60.00	0.00	40.00	0.00	0.00
62	Vaasa	detemir	0	NaN	NaN	NaN	NaN	NaN
63	Vaasa	NPH	2	100.00	0.00	0.00	0.00	0.00
64	Vaasa	no DGN	2	100.00	0.00	0.00	0.00	0.00
65	Keski-Pohjanmaa	glargine	0	NaN	NaN	NaN	NaN	NaN
66	Keski-Pohjanmaa	detemir	0	NaN	NaN	NaN	NaN	NaN
67	Keski-Pohjanmaa	NPH	0	NaN	NaN	NaN	NaN	NaN
68	Keski-Pohjanmaa	no DGN	0	NaN	NaN	NaN	NaN	NaN
69	Pohjois-Pohjanmaa	glargine	6	16.67	0.00	66.67	0.00	16.67
70	Pohjois-Pohjanmaa	detemir	1	100.00	0.00	0.00	0.00	0.00
71	Pohjois-Pohjanmaa	NPH	5	20.00	40.00	40.00	0.00	0.00
72	Pohjois-Pohjanmaa	no DGN	1	100.00	0.00	0.00	0.00	0.00
73	Kainuu	glargine	0	NaN	NaN	NaN	NaN	NaN
74	Kainuu	detemir	1	100.00	0.00	0.00	0.00	0.00
75	Kainuu	NPH	0	NaN	NaN	NaN	NaN	NaN
76	Kainuu	no DGN	0	NaN	NaN	NaN	NaN	NaN
77	Lansi-Pohja	glargine	4	25.00	50.00	25.00	0.00	0.00
78	Lansi-Pohja	detemir	0	NaN	NaN	NaN	NaN	NaN
79	Lansi-Pohja	NPH	6	33.33	0.00	16.67	16.67	33.33
80	Lansi-Pohja	no DGN	1	100.00	0.00	0.00	0.00	0.00
81	Lappi	glargine	0	NaN	NaN	NaN	NaN	NaN
82	Lappi	detemir	1	0.00	0.00	0.00	0.00	100.00
83	Lappi	NPH	3	33.33	33.33	0.00	0.00	33.33
84	Lappi	no DGN	1	100.00	0.00	0.00	0.00	0.00
85	Ahvenanmaa	glargine	0	NaN	NaN	NaN	NaN	NaN
86	Ahvenanmaa	detemir	0	NaN	NaN	NaN	NaN	NaN
87	Ahvenanmaa	NPH	0	NaN	NaN	NaN	NaN	NaN
88	Ahvenanmaa	no DGN	0	NaN	NaN	NaN	NaN	NaN
89	Total	glargine	3133	76.67	8.71	5.71	3.16	5.75
90	Total	detemir	725	79.59	7.17	4.00	3.45	5.79
91	Total	NPH	9243	64.85	10.75	7.56	5.57	11.26
92	Total	no DGN	2245	58.44	11.80	8.33	6.95	14.48

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Table F.64: Hospitalizations and secondary care visits due to severe hypoglycemic coma events stratified by hospital district at start of follow-up and by insulin.

S.No.	Variables		All (N)	Duration (Days)					
	Hosp. District	Insulin		Min	25%	Median	Mean	75%	Max
1	Unknown	glargine	3015	1	1.00	1.0	2.427	1.00	156
2	Unknown	detemir	713	1	1.00	1.0	2.359	1.00	62
3	Unknown	NPH	9115	1	1.00	1.0	3.463	3.00	404
4	Unknown	no DGN	2203	1	1.00	1.0	4.183	5.00	170
5	HUS	glargine	20	1	1.00	1.0	3.650	2.25	24
6	HUS	detemir	0	NA	NA	NA	NaN	NA	NA
7	HUS	NPH	41	1	1.00	1.0	3.878	3.00	36
8	HUS	no DGN	14	1	1.00	1.0	3.286	4.75	10
9	Varsinais-Suomi	glargine	7	1	1.00	1.0	2.571	1.00	12
10	Varsinais-Suomi	detemir	0	NA	NA	NA	NaN	NA	NA
11	Varsinais-Suomi	NPH	9	1	1.00	1.0	1.889	2.00	7
12	Varsinais-Suomi	no DGN	1	7	7.00	7.0	7.000	7.00	7
13	Satakunta	glargine	6	1	1.00	1.0	2.500	3.25	7
14	Satakunta	detemir	1	1	1.00	1.0	1.000	1.00	1
15	Satakunta	NPH	4	1	2.50	3.5	3.250	4.25	5
16	Satakunta	no DGN	0	NA	NA	NA	NaN	NA	NA
17	Kantahame	glargine	23	1	1.00	1.0	1.000	1.00	1
18	Kantahame	detemir	0	NA	NA	NA	NaN	NA	NA
19	Kantahame	NPH	6	1	2.50	4.5	5.833	5.75	17
20	Kantahame	no DGN	5	1	1.00	1.0	2.200	1.00	7
21	Pirkanmaa	glargine	4	1	1.00	3.0	3.250	5.25	6
22	Pirkanmaa	detemir	0	NA	NA	NA	NaN	NA	NA
23	Pirkanmaa	NPH	3	1	1.00	1.0	1.667	2.00	3
24	Pirkanmaa	no DGN	0	NA	NA	NA	NaN	NA	NA
25	Paijat-Hame	glargine	0	NA	NA	NA	NaN	NA	NA
26	Paijat-Hame	detemir	0	NA	NA	NA	NaN	NA	NA
27	Paijat-Hame	NPH	9	1	1.00	3.0	3.111	4.00	8
28	Paijat-Hame	no DGN	7	1	1.00	1.0	2.429	3.50	6
29	Kymenlaakso	glargine	2	1	2.25	3.5	3.500	4.75	6
30	Kymenlaakso	detemir	1	4	4.00	4.0	4.000	4.00	4
31	Kymenlaakso	NPH	5	3	5.00	6.0	6.400	9.00	9
32	Kymenlaakso	no DGN	0	NA	NA	NA	NaN	NA	NA
33	Etela-Karjala	glargine	12	1	1.00	3.0	2.667	3.25	6
34	Etela-Karjala	detemir	1	1	1.00	1.0	1.000	1.00	1
35	Etela-Karjala	NPH	4	1	1.00	1.0	1.500	1.50	3
36	Etela-Karjala	no DGN	2	2	3.75	5.5	5.500	7.25	9
37	Etela-Savo	glargine	3	1	2.50	4.0	3.333	4.50	5
38	Etela-Savo	detemir	0	NA	NA	NA	NaN	NA	NA
39	Etela-Savo	NPH	4	2	2.75	3.5	4.500	5.25	9
40	Etela-Savo	no DGN	0	NA	NA	NA	NaN	NA	NA
41	Ita-Savo	glargine	0	NA	NA	NA	NaN	NA	NA
42	Ita-Savo	detemir	0	NA	NA	NA	NaN	NA	NA
43	Ita-Savo	NPH	0	NA	NA	NA	NaN	NA	NA
44	Ita-Savo	no DGN	2	1	1.00	1.0	1.000	1.00	1
45	Pohjois-Karjala	glargine	5	1	1.00	1.0	1.000	1.00	1
46	Pohjois-Karjala	detemir	0	NA	NA	NA	NaN	NA	NA
47	Pohjois-Karjala	NPH	2	1	1.00	1.0	1.000	1.00	1
48	Pohjois-Karjala	no DGN	1	1	1.00	1.0	1.000	1.00	1
49	Pohjois-Savo	glargine	10	1	1.00	1.0	1.800	1.00	7
50	Pohjois-Savo	detemir	0	NA	NA	NA	NaN	NA	NA
51	Pohjois-Savo	NPH	1	1	1.00	1.0	1.000	1.00	1
52	Pohjois-Savo	no DGN	1	1	1.00	1.0	1.000	1.00	1
53	Keski-Suomi	glargine	3	1	1.00	1.0	1.000	1.00	1
54	Keski-Suomi	detemir	6	1	1.00	1.0	1.833	1.00	6
55	Keski-Suomi	NPH	13	1	1.00	1.0	2.615	3.00	7
56	Keski-Suomi	no DGN	2	4	4.50	5.0	5.000	5.50	6
57	Etela-Pohjanmaa	glargine	8	1	1.00	1.5	3.125	3.50	11
58	Etela-Pohjanmaa	detemir	0	NA	NA	NA	NaN	NA	NA
59	Etela-Pohjanmaa	NPH	11	1	1.00	3.0	4.636	4.50	18
60	Etela-Pohjanmaa	no DGN	2	1	1.25	1.5	1.500	1.75	2
61	Vaasa	glargine	5	1	1.00	1.0	2.400	4.00	5
62	Vaasa	detemir	0	NA	NA	NA	NaN	NA	NA
63	Vaasa	NPH	2	1	1.00	1.0	1.000	1.00	1
64	Vaasa	no DGN	2	1	1.00	1.0	1.000	1.00	1
65	Keski-Pohjanmaa	glargine	0	NA	NA	NA	NaN	NA	NA
66	Keski-Pohjanmaa	detemir	0	NA	NA	NA	NaN	NA	NA
67	Keski-Pohjanmaa	NPH	0	NA	NA	NA	NaN	NA	NA
68	Keski-Pohjanmaa	no DGN	0	NA	NA	NA	NaN	NA	NA
69	Pohjois-Pohjanmaa	glargine	6	1	4.00	4.0	4.333	4.75	8
70	Pohjois-Pohjanmaa	detemir	1	1	1.00	1.0	1.000	1.00	1
71	Pohjois-Pohjanmaa	NPH	5	1	2.00	3.0	3.200	5.00	5
72	Pohjois-Pohjanmaa	no DGN	1	1	1.00	1.0	1.000	1.00	1
73	Kainuu	glargine	0	NA	NA	NA	NaN	NA	NA
74	Kainuu	detemir	1	1	1.00	1.0	1.000	1.00	1
75	Kainuu	NPH	0	NA	NA	NA	NaN	NA	NA
76	Kainuu	no DGN	0	NA	NA	NA	NaN	NA	NA
77	Lansi-Pohja	glargine	4	1	1.75	2.0	2.250	2.50	4
78	Lansi-Pohja	detemir	0	NA	NA	NA	NaN	NA	NA
79	Lansi-Pohja	NPH	6	1	1.75	5.5	7.000	12.25	15
80	Lansi-Pohja	no DGN	1	1	1.00	1.0	1.000	1.00	1
81	Lappi	glargine	0	NA	NA	NA	NaN	NA	NA
82	Lappi	detemir	1	14	14.00	14.0	14.000	14.00	14
83	Lappi	NPH	3	1	2.00	3.0	4.333	6.00	9
84	Lappi	no DGN	1	1	1.00	1.0	1.000	1.00	1
85	Ahvenanmaa	glargine	0	NA	NA	NA	NaN	NA	NA
86	Ahvenanmaa	detemir	0	NA	NA	NA	NaN	NA	NA
87	Ahvenanmaa	NPH	0	NA	NA	NA	NaN	NA	NA
88	Ahvenanmaa	no DGN	0	NA	NA	NA	NaN	NA	NA
89	Total	glargine	3133	1	1.00	1.0	2.427	1.00	156
90	Total	detemir	725	1	1.00	1.0	2.366	1.00	62
91	Total	NPH	9243	1	1.00	1.0	3.466	3.00	404
92	Total	no DGN	2245	1	1.00	1.0	4.155	5.00	170

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G Appendix 7: All-cause mortality analysis

G.1 Distribution of causes of mortality

Table G.65: Causes of death. International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM)

S.No.	Classification of diseases and ICD10 code
1	infectious and parasitic diseases (A00-B99)
2	Neoplasms (C00-D48)
3	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50-D89)
4	Endocrine, nutritional and metabolic diseases (E00-E90)
5	Mental and behavioral disorders (F01-F99)
6	Diseases of the nervous system (G00-G99)
7	Diseases of the eye and adnexa (H00-H59)
8	Diseases of the ear and mastoid process (H60-H95)
9	Diseases of the circulatory system (I00-I99)
10	Diseases of the respiratory system (J00-J99)
11	Diseases of the digestive system (K00-K93)
12	Diseases of the skin and subcutaneous tissue (L00-L99)
13	Diseases of the musculoskeletal system and connective tissue (M00-M99)
14	Diseases of the genitourinary system (N00-N99)
15	Pregnancy, childbirth and the puerperium (O00-O99)
16	Certain conditions originating in the perinatal period (P00-P96)
17	Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)
18	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)
19	Injury, poisoning and certain other consequences of external causes (S00-T98)
20	External causes of morbidity (V01-Y99)
21	Factors influencing health status and contact with health services (Z00-Z99)

Table G.66: Number of individuals stratified by statistical cause of death and by study cohort.

S.No.	ICD10	Naive		Non-naive		Other		Total	
		N	%	N	%	N	%	N	%
1	A	93	0.66	114	0.67	32	0.69	239	0.67
2	B	20	0.14	17	0.1	6	0.13	43	0.12
3	C	2932	20.95	2242	13.11	733	15.85	5907	16.54
4	D	105	0.75	77	0.45	30	0.65	212	0.59
5	E	852	6.09	2102	12.3	488	10.55	3442	9.64
6	F	334	2.39	428	2.5	158	3.42	920	2.58
7	G	391	2.79	397	2.32	115	2.49	903	2.53
8	H	2	0.01	2	0.01	0	0	4	0.01
9	I	7086	50.64	9415	55.07	2434	52.64	18935	53.02
10	J	583	4.17	645	3.77	213	4.61	1441	4.04
11	K	712	5.09	635	3.71	191	4.13	1538	4.31
12	L	17	0.12	13	0.08	8	0.17	38	0.11
13	M	55	0.39	42	0.25	18	0.39	115	0.32
14	N	144	1.03	162	0.95	49	1.06	355	0.99
15	Q	10	0.07	10	0.06	4	0.09	24	0.07
16	R	33	0.24	53	0.31	9	0.19	95	0.27
17	VWXY	615	4.39	730	4.26	135	2.92	1480	4.14
18	Total	13984	100	17084	100	4623	100	35691	100

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Table G.67: Number of individuals in the non-naive cohort stratified by statistical cause of death and by diagnose.

S.No.	ICD10	T1		T2		Undefined		Total	
		N	%	N	%	N	%	N	%
1	A	3	0.84	23	0.95	88	0.61	114	0.67
2	B	0	0	4	0.17	13	0.09	17	0.1
3	C	49	13.73	416	17.22	1777	12.41	2242	13.11
4	D	2	0.56	8	0.33	67	0.47	77	0.45
5	E	59	16.53	150	6.21	1893	13.22	2102	12.3
6	F	7	1.96	63	2.61	358	2.5	428	2.5
7	G	7	1.96	61	2.52	329	2.3	397	2.32
8	H	1	0.28	0	0	1	0.01	2	0.01
9	I	107	29.97	1290	53.39	8018	55.98	9415	55.07
10	J	16	4.48	104	4.3	525	3.67	645	3.77
11	K	48	13.45	124	5.13	463	3.23	635	3.71
12	L	0	0	3	0.12	10	0.07	13	0.08
13	M	1	0.28	11	0.46	30	0.21	42	0.25
14	N	1	0.28	23	0.95	138	0.96	162	0.95
15	Q	0	0	3	0.12	7	0.05	10	0.06
16	R	5	1.4	10	0.41	38	0.27	53	0.31
17	VWXY	48	13.44	119	4.91	563	3.92	730	4.26
18	Total	354	99	2412	100	14318	100	17084	100

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G.2 Crude estimates for risk of all-cause mortality

Table G.68: The number/risk time/incidence rate (95% CI) for all-cause mortality for detemir insulin, glargine insulin, and NPH-insulin stratified by diagnose.

S.No.	Diagnose	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	T1	glargine	3370	48	13367	3.59	2.71	4.77
2	T1	detemir	1658	8	3883	2.06	1.03	4.12
3	T1	NPH	4818	199	23326	8.53	7.42	9.80
4	T1	no DGN	4670	102	4864	20.97	17.27	25.46
5	T2	glargine	2052	137	5415	25.30	21.40	29.91
6	T2	detemir	837	21	1241	16.92	11.03	25.95
7	T2	NPH	6415	1301	35633	36.51	34.58	38.55
8	T2	no DGN	5940	958	7776	123.20	115.64	131.25
9	Undefined	glargine	19150	1111	69014	16.10	15.18	17.07
10	Undefined	detemir	8619	235	18175	12.93	11.38	14.69
11	Undefined	NPH	41739	7081	209903	33.73	32.96	34.53
12	Undefined	no DGN	38016	5904	37563	157.18	153.22	161.24
13	Total	glargine	24572	1296	87795	14.76	13.98	15.59
14	Total	detemir	11114	264	23299	11.33	10.04	12.78
15	Total	NPH	52972	8581	268862	31.92	31.25	32.60
16	Total	no DGN	48626	6964	50203	138.72	135.50	142.01

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Table G.69: The number/risk time/incidence rate (95% CI) for all-cause mortality for detemir insulin, glargine insulin, and NPH-insulin stratified by gender.

S.No.	Gender	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	Male	glargine	13090	778	48589	16.01	14.93	17.18
2	Male	detemir	5310	153	11087	13.80	11.78	16.17
3	Male	NPH	27903	4738	144808	32.72	31.80	33.66
4	Male	no DGN	25313	3093	23299	132.75	128.16	137.52
5	Female	glargine	11482	518	39206	13.21	12.12	14.40
6	Female	detemir	5804	111	12213	9.09	7.55	10.95
7	Female	NPH	25069	3843	124055	30.98	30.01	31.97
8	Female	no DGN	23313	3871	26904	143.88	139.42	148.48
9	Total	glargine	24572	1296	87795	14.76	13.98	15.59
10	Total	detemir	11114	264	23299	11.33	10.04	12.78
11	Total	NPH	52972	8581	268862	31.92	31.25	32.60
12	Total	no DGN	48626	6964	50203	138.72	135.50	142.01
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Table G.70: The number/risk time/incidence rate (95% CI) for all-cause mortality for detemir insulin, glargine insulin, and NPH-insulin stratified by age at start of follow up.

S.No.	Age group	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	0-9	glargine	747	1	2725	0.37	0.05	2.60
2	0-9	detemir	545	1	1309	0.76	0.11	5.42
3	0-9	NPH	1001	0	4508	NA	NA	NA
4	0-9	no DGN	1002	0	1266	NA	NA	NA
5	10-19	glargine	2750	10	11527	0.87	0.47	1.61
6	10-19	detemir	1339	4	3140	1.27	0.48	3.39
7	10-19	NPH	3375	19	15092	1.26	0.80	1.97
8	10-19	no DGN	3323	9	3163	2.85	1.48	5.47
9	20-29	glargine	3009	40	12018	3.33	2.44	4.54
10	20-29	detemir	1565	8	3675	2.18	1.09	4.35
11	20-29	NPH	4028	55	19884	2.77	2.12	3.60
12	20-29	no DGN	3852	16	3324	4.81	2.95	7.86
13	30-39	glargine	3841	102	15416	6.62	5.45	8.03
14	30-39	detemir	1847	32	4382	7.30	5.16	10.33
15	30-39	NPH	5449	191	27641	6.91	6.00	7.96
16	30-39	no DGN	5130	73	4075	17.91	14.24	22.53
17	40-49	glargine	4223	197	16213	12.15	10.57	13.97
18	40-49	detemir	1944	56	4346	12.89	9.92	16.75
19	40-49	NPH	6610	496	34649	14.31	13.11	15.63
20	40-49	no DGN	6147	227	4831	46.99	41.26	53.52
21	50-59	glargine	4516	275	15332	17.94	15.94	20.19
22	50-59	detemir	1923	53	3593	14.75	11.27	19.31
23	50-59	NPH	9096	1169	52609	22.22	20.98	23.53
24	50-59	no DGN	8410	591	7653	77.22	71.24	83.71
25	60-69	glargine	3234	273	9397	29.05	25.80	32.71
26	60-69	detemir	1324	61	2089	29.21	22.72	37.54
27	60-69	NPH	9903	2113	56711	37.26	35.70	38.88
28	60-69	no DGN	8925	1398	9820	142.36	135.09	150.02
29	70-79	glargine	1940	313	4596	68.11	60.96	76.08
30	70-79	detemir	544	43	672	63.94	47.42	86.22
31	70-79	NPH	9893	3099	46732	66.31	64.02	68.69
32	70-79	no DGN	8778	2948	12047	244.70	236.03	253.69
33	80+	glargine	312	85	571	148.96	120.43	184.24
34	80+	detemir	83	6	94	63.87	28.70	142.16
35	80+	NPH	3617	1439	11036	130.39	123.83	137.31
36	80+	no DGN	3059	1702	4024	422.95	403.33	443.53
37	Total	glargine	24572	1296	87795	14.76	13.98	15.59
38	Total	detemir	11114	264	23299	11.33	10.04	12.78
39	Total	NPH	52972	8581	268862	31.92	31.25	32.60
40	Total	no DGN	48626	6964	50203	138.72	135.50	142.01

Non-naive cohort. Data 28th December 2011

Table G.71: The number/risk time/incidence rate (95% CI) for all-cause mortality for detemir insulin, glargine insulin, and NPH-insulin stratified by calendar time since diagnose (first reimbursement decision or purchase).

S.No.	Time since diag	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	-1	glargine	597	15	2206	6.80	4.10	11.28
2	-1	detemir	322	4	696	5.75	2.16	15.32
3	-1	NPH	1158	122	5920	20.61	17.26	24.61
4	-1	no DGN	1092	76	1416	53.68	42.87	67.21
5	1-2	glargine	890	20	3174	6.30	4.07	9.77
6	1-2	detemir	478	5	1076	4.65	1.93	11.16
7	1-2	NPH	1733	179	9095	19.68	17.00	22.79
8	1-2	no DGN	1649	127	2084	60.95	51.22	72.53
9	2-5	glargine	3195	104	11256	9.24	7.62	11.20
10	2-5	detemir	1430	13	2816	4.62	2.68	7.95
11	2-5	NPH	6884	1003	37182	26.98	25.36	28.70
12	2-5	no DGN	6458	666	7328	90.88	84.23	98.05
13	5-10	glargine	5716	282	18776	15.02	13.36	16.88
14	5-10	detemir	2538	61	4906	12.43	9.67	15.98
15	5-10	NPH	14267	2512	76528	32.82	31.57	34.13
16	5-10	no DGN	13126	1967	14478	135.86	129.99	142.00
17	10-	glargine	14174	875	52383	16.70	15.63	17.85
18	10-	detemir	6346	181	13806	13.11	11.33	15.17
19	10-	NPH	28930	4765	140137	34.00	33.05	34.98
20	10-	no DGN	26301	4128	24897	165.80	160.82	170.94
21	Total	glargine	24572	1296	87795	14.76	13.98	15.59
22	Total	detemir	11114	264	23299	11.33	10.04	12.78
23	Total	NPH	52972	8581	268862	31.92	31.25	32.60
24	Total	no DGN	48626	6964	50203	138.72	135.50	142.01
Non-naive cohort. Data 28th December 2011								

Table G.72: The number/risk time/incidence rate (95% CI) for all-cause mortality for detemir insulin, glargine insulin, and NPH-insulin stratified by history use of oral diabetes medication (A10BB) at start of follow-up.

S.No.	A10BB hist	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	No	glargine	18857	779	73611	10.58	9.87	11.35
2	No	detemir	8766	180	20015	8.99	7.77	10.41
3	No	NPH	30514	2961	150630	19.66	18.96	20.38
4	No	no DGN	28330	2032	24771	82.03	78.54	85.68
5	Yes	glargine	5715	517	14185	36.45	33.44	39.73
6	Yes	detemir	2348	84	3284	25.58	20.65	31.68
7	Yes	NPH	22458	5620	118232	47.53	46.31	48.79
8	Yes	no DGN	20296	4932	25433	193.93	188.59	199.41
9	Total	glargine	24572	1296	87795	14.76	13.98	15.59
10	Total	detemir	11114	264	23299	11.33	10.04	12.78
11	Total	NPH	52972	8581	268862	31.92	31.25	32.60
12	Total	no DGN	48626	6964	50203	138.72	135.50	142.01

Non-naive cohort. Data 28th December 2011

Table G.73: The number/risk time/incidence rate (95% CI) for all-cause mortality for detemir insulin, glargine insulin, and NPH-insulin stratified by history use of insulin medication (A10A) at start of follow-up.

S.No.	A10A hist	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	No	glargine	24572	1296	87795	14.76	13.98	15.59
2	No	detemir	11114	264	23299	11.33	10.04	12.78
3	No	NPH	52972	8581	268862	31.92	31.25	32.60
4	No	no DGN	48626	6964	50203	138.72	135.50	142.01
5	Yes	glargine	0	0	0	NA	NA	NA
6	Yes	detemir	0	0	0	NA	NA	NA
7	Yes	NPH	0	0	0	NA	NA	NA
8	Yes	no DGN	0	0	0	NA	NA	NA
9	Total	glargine	24572	1296	87795	14.76	13.98	15.59
10	Total	detemir	11114	264	23299	11.33	10.04	12.78
11	Total	NPH	52972	8581	268862	31.92	31.25	32.60
12	Total	no DGN	48626	6964	50203	138.72	135.50	142.01

Non-naive cohort. Data 28th December 2011

Table G.74: The number/risk time/incidence rate (95% CI) all-cause mortality for detemir insulin, glargine insulin, and NPH-insulin stratified by hospitalization history at start of follow-up.

S.No.	Hosp hist	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	No	glargine	23009	2230	82527	27.02	25.92	28.17
2	No	detemir	10457	557	21966	25.36	23.34	27.55
3	No	NPH	49891	4216	254320	16.58	16.08	17.09
4	No	no DGN	45689	1236	46499	26.58	25.14	28.11
5	Yes	glargine	1563	903	5268	171.40	160.58	182.95
6	Yes	detemir	657	168	1333	126.01	108.33	146.58
7	Yes	NPH	3081	5030	14542	345.89	336.46	355.58
8	Yes	no DGN	2937	1010	3705	272.64	256.33	289.98
9	Total	glargine	24572	3133	87795	35.69	34.46	36.96
10	Total	detemir	11114	725	23299	31.12	28.93	33.47
11	Total	NPH	52972	9246	268862	34.39	33.70	35.10
12	Total	no DGN	48626	2246	50203	44.74	42.93	46.63

Non-naive cohort. Data 28th December 2011

Table G.75: The number/risk time/incidence rate (95% CI) for all-cause mortality for detemir insulin, glargine insulin, and NPH-insulin stratified by hospital district at start of follow-up.

S.No.	Hosp. District	Insulin	Npat	Events	Years	Rate	lower limit	upper limit
1	Unknown	glargine	23548	1226	84778	14.46	13.67	15.29
2	Unknown	detemir	10693	251	22541	11.14	9.84	12.60
3	Unknown	NPH	51816	8428	265803	31.71	31.04	32.39
4	Unknown	no DGN	47201	6801	48912	139.05	135.78	142.39
5	HUS	glargine	219	12	619	19.37	11.00	34.11
6	HUS	detemir	80	1	141	7.09	1.00	50.32
7	HUS	NPH	249	32	639	50.05	35.40	70.78
8	HUS	no DGN	321	36	352	102.24	73.75	141.74
9	Varsinais-Suomi	glargine	50	3	144	20.81	6.71	64.52
10	Varsinais-Suomi	detemir	25	1	53	18.99	2.67	134.79
11	Varsinais-Suomi	NPH	58	8	148	53.93	26.97	107.84
12	Varsinais-Suomi	no DGN	67	7	56	124.99	59.59	262.16
13	Satakunta	glargine	31	2	91	21.90	5.48	87.57
14	Satakunta	detemir	11	0	20	NA	NA	NA
15	Satakunta	NPH	39	6	104	57.47	25.82	127.91
16	Satakunta	no DGN	48	7	43	161.85	77.16	339.50
17	Kantahame	glargine	38	2	123	16.29	4.08	65.15
18	Kantahame	detemir	8	0	16	NA	NA	NA
19	Kantahame	NPH	30	2	71	28.19	7.05	112.70
20	Kantahame	no DGN	44	5	38	131.68	54.81	316.37
21	Pirkanmaa	glargine	90	7	273	25.67	12.24	53.85
22	Pirkanmaa	detemir	36	1	63	15.83	2.23	112.41
23	Pirkanmaa	NPH	94	7	253	27.70	13.21	58.11
24	Pirkanmaa	no DGN	113	14	96	146.07	86.51	246.65
25	Paijat-Hame	glargine	37	6	100	59.96	26.94	133.45
26	Paijat-Hame	detemir	17	2	28	71.43	17.86	285.60
27	Paijat-Hame	NPH	59	12	179	66.86	37.97	117.74
28	Paijat-Hame	no DGN	58	8	33	242.63	121.34	485.17
29	Kymenlaakso	glargine	44	2	123	16.29	4.07	65.12
30	Kymenlaakso	detemir	18	0	31	NA	NA	NA
31	Kymenlaakso	NPH	39	6	112	53.33	23.96	118.72
32	Kymenlaakso	no DGN	55	5	24	205.45	85.51	493.61
33	Etela-Karjala	glargine	56	7	179	39.05	18.62	81.91
34	Etela-Karjala	detemir	31	2	55	36.10	9.03	144.33
35	Etela-Karjala	NPH	48	4	106	37.68	14.14	100.39
36	Etela-Karjala	no DGN	65	2	58	34.56	8.64	138.20
37	Etela-Savo	glargine	19	1	52	19.36	2.73	137.41
38	Etela-Savo	detemir	5	0	5	NA	NA	NA
39	Etela-Savo	NPH	31	5	88	57.05	23.75	137.05
40	Etela-Savo	no DGN	32	2	23	85.27	21.33	340.94
41	Ita-Savo	glargine	15	0	32	NA	NA	NA
42	Ita-Savo	detemir	4	0	6	NA	NA	NA
43	Ita-Savo	NPH	26	4	91	43.84	16.45	116.80
44	Ita-Savo	no DGN	24	3	27	110.76	35.72	343.42
45	Pohjois-Karjala	glargine	56	4	209	19.18	7.20	51.09
46	Pohjois-Karjala	detemir	17	0	30	NA	NA	NA
47	Pohjois-Karjala	NPH	61	4	148	27.03	10.15	72.03
48	Pohjois-Karjala	no DGN	74	7	64	110.02	52.45	230.79
49	Pohjois-Savo	glargine	92	6	270	22.25	10.00	49.52
50	Pohjois-Savo	detemir	24	1	55	18.09	2.55	128.44
51	Pohjois-Savo	NPH	68	9	158	57.08	29.70	109.69
52	Pohjois-Savo	no DGN	98	10	72	139.28	74.94	258.86
53	Keski-Suomi	glargine	68	5	171	29.28	12.19	70.34
54	Keski-Suomi	detemir	35	2	76	26.43	6.61	105.68
55	Keski-Suomi	NPH	96	13	274	47.37	27.50	81.58
56	Keski-Suomi	no DGN	105	12	106	113.69	64.57	200.20
57	Etela-Pohjanmaa	glargine	40	0	97	NA	NA	NA
58	Etela-Pohjanmaa	detemir	28	2	29	67.80	16.96	271.05
59	Etela-Pohjanmaa	NPH	69	14	173	80.75	47.82	136.34
60	Etela-Pohjanmaa	no DGN	75	20	59	339.01	218.72	525.46
61	Vaasa	glargine	41	1	142	7.04	0.99	49.99
62	Vaasa	detemir	30	0	61	NA	NA	NA
63	Vaasa	NPH	38	4	115	34.69	13.02	92.44
64	Vaasa	no DGN	59	3	67	45.09	14.54	139.82
65	Keski-Pohjanmaa	glargine	8	1	34	29.43	4.15	208.91
66	Keski-Pohjanmaa	detemir	4	0	4	NA	NA	NA
67	Keski-Pohjanmaa	NPH	14	2	49	40.43	10.11	161.65
68	Keski-Pohjanmaa	no DGN	17	3	11	266.41	85.92	826.04
69	Pohjois-Pohjanmaa	glargine	63	7	183	38.27	18.24	80.27
70	Pohjois-Pohjanmaa	detemir	18	1	29	34.03	4.79	241.59
71	Pohjois-Pohjanmaa	NPH	73	9	210	42.76	22.25	82.19
72	Pohjois-Pohjanmaa	no DGN	90	11	76	145.53	80.59	262.78
73	Kainuu	glargine	23	1	80	12.42	1.75	88.19
74	Kainuu	detemir	14	0	27	NA	NA	NA
75	Kainuu	NPH	21	6	51	117.59	52.83	261.76
76	Kainuu	no DGN	28	1	20	50.83	7.16	360.73
77	Lansi-Pohja	glargine	19	1	64	15.62	2.20	110.88
78	Lansi-Pohja	detemir	3	0	8	NA	NA	NA
79	Lansi-Pohja	NPH	12	0	20	NA	NA	NA
80	Lansi-Pohja	no DGN	21	5	14	365.25	152.04	877.46
81	Lappi	glargine	13	1	27	37.03	5.22	262.88
82	Lappi	detemir	11	0	18	NA	NA	NA
83	Lappi	NPH	27	6	57	104.49	46.94	232.57
84	Lappi	no DGN	28	1	52	19.29	2.72	136.92
85	Ahvenanmaa	glargine	2	1	5	186.92	26.33	1326.87
86	Ahvenanmaa	detemir	2	0	3	NA	NA	NA
87	Ahvenanmaa	NPH	4	0	9	NA	NA	NA
88	Ahvenanmaa	no DGN	3	1	2	578.84	81.53	4109.40
89	Total	glargine	24572	1296	87795	14.76	13.98	15.59
90	Total	detemir	11114	264	23299	11.33	10.04	12.78
91	Total	NPH	52972	8581	268862	31.92	31.25	32.60
92	Total	no DGN	48626	6964	50203	138.72	135.50	142.01

Non-naive cohort. Data 28th December 2011

G.3 Cox's proportional hazards model for risk of all-cause mortality analysis

Table G.76: The risk for all-cause mortality estimated by the Cox's proportional hazards model. Hospital district as strata. Glargine insulin as reference

S.No.	Variables	parameter est	std	Hazard ratio	lower	upper	P-value
1	typedm T2	0.146	0.06	1.157	1.029	1.301	0.015
2	typedm Undefined	0.197	0.061	1.218	1.08	1.373	0.001
3	insulin detemir	-0.069	0.068	0.933	0.817	1.066	0.31
4	insulin NPH	0.312	0.047	1.366	1.245	1.498	<0.001
5	insulin no DGN	1.482	0.045	4.4	4.025	4.809	<0.001
6	gender Female	-0.406	0.016	0.666	0.646	0.688	<0.001
7	agegroupD 40-49	1.243	0.054	3.465	3.118	3.85	<0.001
8	agegroupD 50-59	1.629	0.05	5.1	4.627	5.621	<0.001
9	agegroupD 60-69	2.193	0.048	8.962	8.152	9.854	<0.001
10	agegroupD 70-79	2.779	0.048	16.109	14.66	17.702	<0.001
11	agegroupD 80+	3.404	0.051	30.089	27.242	33.233	<0.001
12	BB.stfup Yes	0.01	0.019	1.011	0.973	1.05	0.589
13	useBB Yes	-0.554	0.023	0.575	0.549	0.602	<0.001
14	useA10A Yes	-0.692	0.018	0.501	0.484	0.518	<0.001
15	nhosph2 1-2	0.558	0.023	1.747	1.669	1.828	<0.001
16	nhosph2 3+	0.86	0.049	2.364	2.149	2.6	<0.001
17	Switch YES	0.177	0.039	1.194	1.105	1.29	<0.001
18	time2diag 1-2	-0.138	0.088	0.871	0.734	1.034	0.114
19	time2diag 2-5	-0.031	0.073	0.97	0.841	1.119	0.675
20	time2diag 5-10	-0.037	0.074	0.964	0.834	1.114	0.617
21	time2diag 10-	0.137	0.074	1.147	0.991	1.327	0.065

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Table G.77: The risk for all-cause mortality estimated by the Cox's proportional hazards model. Hospital district as strata. NPH insulin as reference

S.No.	Variables	parameter est	std	Hazard ratio	lower	upper	P-value
1	typedm T2	0.146	0.06	1.157	1.029	1.301	0.015
2	typedm Undefined	0.197	0.061	1.218	1.08	1.373	0.001
3	insulinNPH detemir	-0.381	0.073	0.683	0.592	0.789	<0.001
4	insulinNPH glargine	-0.312	0.047	0.732	0.667	0.803	<0.001
5	insulinNPH no DGN	1.17	0.017	3.222	3.113	3.334	<0.001
6	gender Female	-0.406	0.016	0.666	0.646	0.688	<0.001
7	agegroupD 40-49	1.243	0.054	3.465	3.118	3.85	<0.001
8	agegroupD 50-59	1.629	0.05	5.1	4.627	5.621	<0.001
9	agegroupD 60-69	2.193	0.048	8.962	8.152	9.854	<0.001
10	agegroupD 70-79	2.779	0.048	16.109	14.66	17.702	<0.001
11	agegroupD 80+	3.404	0.051	30.089	27.242	33.233	<0.001
12	BB.stfup Yes	0.01	0.019	1.011	0.973	1.05	0.589
13	useBB Yes	-0.554	0.023	0.575	0.549	0.602	<0.001
14	useA10A Yes	-0.692	0.018	0.501	0.484	0.518	<0.001
15	nhosph2 1-2	0.558	0.023	1.747	1.669	1.828	<0.001
16	nhosph2 3+	0.86	0.049	2.364	2.149	2.6	<0.001
17	Switch YES	0.177	0.039	1.194	1.105	1.29	<0.001
18	time2diag 1-2	-0.138	0.088	0.871	0.734	1.034	0.114
19	time2diag 2-5	-0.031	0.073	0.97	0.841	1.119	0.675
20	time2diag 5-10	-0.037	0.074	0.964	0.834	1.114	0.617
21	time2diag 10-	0.137	0.074	1.147	0.991	1.327	0.065

Non-naive cohort. Data 28th December 2011

Table G.79: The risk for all-cause mortality estimated by the Cox's proportional hazards model. Hospital district as strata. NPH insulin as reference. 'no DGN'-periods censored

S.No.	Variables	parameter est	std	Hazard ratio	lower	upper	P-value
1	typedm T2	0.195	0.072	1.216	1.056	1.4	0.007
2	typedm Undefined	0.217	0.074	1.242	1.074	1.437	0.004
3	insulinNPH detemir	-0.49	0.106	0.612	0.498	0.753	<0.001
4	insulinNPH glargine	-0.375	0.088	0.687	0.578	0.817	<0.001
5	insulinNPH no DGN	NA	0	NA	NA	NA	NA
6	gender Female	-0.448	0.021	0.639	0.614	0.666	<0.001
7	agegroupD 40-49	1.157	0.06	3.18	2.826	3.578	<0.001
8	agegroupD 50-59	1.502	0.056	4.49	4.025	5.01	<0.001
9	agegroupD 60-69	2.039	0.055	7.68	6.897	8.552	<0.001
10	agegroupD 70-79	2.699	0.055	14.864	13.345	16.556	<0.001
11	agegroupD 80+	3.473	0.06	32.235	28.672	36.241	<0.001
12	BB.stfup Yes	0.044	0.026	1.045	0.994	1.099	0.087
13	useBB Yes	-0.407	0.029	0.666	0.63	0.704	<0.001
14	useA10A Yes	-0.388	0.024	0.678	0.647	0.711	<0.001
15	nhosph2 1-2	0.788	0.031	2.2	2.071	2.337	<0.001
16	nhosph2 3+	1.072	0.066	2.92	2.564	3.326	<0.001
17	Switch YES	0.059	0.088	1.061	0.894	1.26	0.498
18	time2diag 1-2	-0.153	0.11	0.859	0.692	1.065	0.164
19	time2diag 2-5	-0.127	0.091	0.881	0.738	1.053	0.163
20	time2diag 5-10	-0.183	0.092	0.833	0.695	0.997	0.047
21	time2diag 10-	-0.032	0.093	0.969	0.807	1.162	0.732

Non-naive cohort. Data 28th December 2011

Table G.80: The risk for all-cause mortality estimated by the Cox's proportional hazards model. Hospital district as strata. NPH insulin as reference. Assume use of last insulin

S.No.	Variables	parameter est	std	Hazard ratio	lower	upper	P-value
1	typedm T2	0.129	0.06	1.138	1.013	1.279	0.03
2	typedm Undefined	0.165	0.061	1.179	1.045	1.33	0.007
3	insulinf detemir	-0.461	0.088	0.63	0.53	0.749	<0.001
4	insulinf glargine	-0.297	0.071	0.743	0.646	0.855	<0.001
5	insulinf no DGN	NA	0	NA	NA	NA	NA
6	gender Female	-0.374	0.016	0.688	0.667	0.71	<0.001
7	agegroupD 40-49	1.206	0.054	3.342	3.007	3.713	<0.001
8	agegroupD 50-59	1.583	0.05	4.869	4.418	5.367	<0.001
9	agegroupD 60-69	2.176	0.048	8.809	8.013	9.685	<0.001
10	agegroupD 70-79	2.876	0.048	17.746	16.148	19.501	<0.001
11	agegroupD 80+	3.646	0.051	38.33	34.707	42.332	<0.001
12	BB.stfup Yes	0.055	0.019	1.056	1.017	1.097	0.005
13	useBB Yes	-0.674	0.023	0.51	0.487	0.533	<0.001
14	useA10A Yes	-0.663	0.018	0.515	0.497	0.534	<0.001
15	nhosph2 1-2	0.692	0.023	1.997	1.909	2.09	<0.001
16	nhosph2 3+	1.045	0.048	2.845	2.587	3.128	<0.001
17	Switch YES	-0.034	0.071	0.967	0.842	1.11	0.631
18	time2diag 1-2	-0.13	0.088	0.878	0.74	1.043	0.138
19	time2diag 2-5	-0.089	0.073	0.915	0.793	1.056	0.223
20	time2diag 5-10	-0.105	0.074	0.901	0.779	1.041	0.157
21	time2diag 10-	0.088	0.075	1.092	0.943	1.264	0.239

Non-naive cohort. Data 28th December 2011

Table G.81: The risk for mortality due to Neoplasms (ICD10 letters C and D) estimated by the Cox's proportional hazards model. Hospital district as strata. NPH insulin as reference.

S.No.	Variables	parameter est	std	Hazard ratio	lower	upper	P-value
1	typedm T2	0.052	0.154	1.053	0.778	1.425	0.737
2	typedm Undefined	0.145	0.16	1.156	0.845	1.581	0.365
3	insulinNPH detemir	-0.621	0.215	0.537	0.352	0.819	0.004
4	insulinNPH glargine	-0.761	0.134	0.467	0.359	0.607	<0.001
5	insulinNPH no DGN	1.242	0.047	3.463	3.161	3.795	<0.001
6	gender Female	-0.409	0.044	0.664	0.61	0.723	<0.001
7	agegroupD 40-49	1.944	0.23	6.99	4.452	10.975	<0.001
8	agegroupD 50-59	2.9	0.213	18.174	11.982	27.566	<0.001
9	agegroupD 60-69	3.476	0.211	32.319	21.373	48.869	<0.001
10	agegroupD 70-79	3.941	0.211	51.463	34.018	77.855	<0.001
11	agegroupD 80+	4.158	0.218	63.968	41.741	98.032	<0.001
12	BB.stfup Yes	0.125	0.053	1.134	1.022	1.257	0.018
13	useBB Yes	-0.522	0.06	0.593	0.527	0.668	<0.001
14	useA10A Yes	-0.647	0.048	0.523	0.477	0.575	<0.001
15	nhosph2 1-2	0.512	0.065	1.669	1.47	1.895	<0.001
16	nhosph2 3+	0.791	0.137	2.206	1.685	2.887	<0.001
17	Switch YES	0.453	0.102	1.573	1.287	1.921	<0.001
18	time2diag 1-2	-0.436	0.189	0.646	0.446	0.936	0.021
19	time2diag 2-5	-0.429	0.152	0.651	0.484	0.876	0.005
20	time2diag 5-10	-0.613	0.156	0.542	0.399	0.735	<0.001
21	time2diag 10-	-0.667	0.158	0.513	0.376	0.7	<0.001

Non-naive cohort. Data 28th December 2011

Table G.82: The risk for mortality due to external causes (ICD10 letters V,W,X, and Y) estimated by the Cox's proportional hazards model. Hospital district as strata. NPH insulin as reference.

S.No.	Variables	parameter est	std	Hazard ratio	lower	upper	P-value
1	typedm T2	-0.07	0.186	0.932	0.648	1.342	0.705
2	typedm Undefined	-0.085	0.192	0.919	0.63	1.339	0.659
3	insulinNPH detemir	-0.187	0.314	0.83	0.448	1.535	0.552
4	insulinNPH glargine	-0.034	0.227	0.967	0.619	1.51	0.882
5	insulinNPH no DGN	0.841	0.091	2.318	1.939	2.771	<0.001
6	gender Female	-0.75	0.082	0.472	0.402	0.554	<0.001
7	agegroup2 0-9	-14.877	501.905	0	0	Inf	0.976
8	agegroup2 10-19	-0.687	0.296	0.503	0.282	0.899	0.02
9	agegroup2 30-39	0.124	0.21	1.132	0.75	1.708	0.555
10	agegroup2 40-49	0.434	0.194	1.544	1.056	2.257	0.025
11	agegroup2 50-59	0.386	0.192	1.471	1.01	2.143	0.044
12	agegroup2 60-69	0.564	0.194	1.757	1.201	2.572	0.004
13	agegroup2 70-79	0.767	0.198	2.152	1.459	3.175	<0.001
14	agegroup2 80+	1.523	0.218	4.584	2.988	7.033	<0.001
15	BB.stfup Yes	-0.164	0.098	0.849	0.7	1.028	0.094
16	useBB Yes	-0.497	0.124	0.608	0.477	0.776	<0.001
17	useA10A Yes	-0.729	0.086	0.482	0.407	0.571	<0.001
18	nhosph2 1-2	0.795	0.109	2.214	1.789	2.741	<0.001
19	nhosph2 3+	0.847	0.242	2.332	1.452	3.744	<0.001
20	Switch YES	-0.045	0.21	0.956	0.634	1.442	0.829
21	time2diag 1-2	0.032	0.318	1.033	0.554	1.927	0.919
22	time2diag 2-5	0.011	0.272	1.011	0.593	1.725	0.967
23	time2diag 5-10	-0.06	0.28	0.942	0.544	1.629	0.83
24	time2diag 10-	-0.143	0.285	0.866	0.495	1.515	0.615

Non-naive cohort. Data 28th December 2011