SUPPLEMENTAL MATERIAL

Statin use and high-dose statin use after ischemic stroke in the UK: a retrospective cohort study

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Table S1. Codes for stroke

Medcode	Readcode	Description	Notes*
569	G64..12	Infarction - cerebral	
1298	G66..11	CVA unspecified	
1469	G66..00	Stroke and cerebrovascular accident unspecified	
3149	G64z.00	Cerebral infarction NOS	
5185	G64z111	Lateral medullary syndrome	
5363	G64..11	CVA - cerebral artery occlusion	
5602	G64z.12	Cerebellar infarction	
6116	G66..13	CVA - Cerebrovascular accident unspecified	
6155	G64..13	Stroke due to cerebral arterial occlusion	
6253	G66..12	Stroke unspecified	
7780	G667.00	Left sided CVA	
8443	G663.00	Brain stem stroke syndrome	
8837	G64..00	Cerebral arterial occlusion	
9985	G64z200	Left sided cerebral infarction	
10504	G64z300	Right sided cerebral infarction	
12833	G668.00	Right sided CVA	
15019	G641.00	Cerebral embolism	
15252	G64z.11	Brainstem infarction NOS	
16517	G640.00	Cerebral thrombosis	
16956	G669.00	Cerebral palsy, not congenital or infantile, acute	
17322	G664.00	Cerebellar stroke syndrome	
18689	G660.00	Middle cerebral artery syndrome	
19260	G662.00	Posterior cerebral artery syndrome	
19280	G661.00	Anterior cerebral artery syndrome	
23671	G63y000	Cerebral infarct due to thrombosis of precerebral arteries	
24446	G63y100	Cerebral infarction due to embolism of precerebral arteries	
25615	G64z000	Brainstem infarction	
26424	G64z400	Infarction of basal ganglia	
27975	G641000	Cerebral infarction due to embolism of cerebral arteries	
33499	G665.00	Pure motor lacunar syndrome	
33543	G6X..00	Cerebrl infarctn due/unspcf occlusn or sten/cerebrl artrs	
34758	G641.11	Cerebral embolus	
36717	G640000	Cerebral infarction due to thrombosis of cerebral arteries	
39344	G676000	Cereb infarct due cerebral venous thrombosis, nonpyogenic	
40758	G6W..00	Cereb infarct due unsp occlus/stenos precerebr arteries	
44765	G653.00	Carotid artery syndrome hemispheric	
47642	G64z100	Wallenberg syndrome	
50594	G654.00	Multiple and bilateral precerebral artery syndromes	
51767	G666.00	Pure sensory lacunar syndrome	
53745	Gyu6400	[X]Other cerebral infarction	
90572	Gyu6500	[X]Occlusion and stenosis of other precerebral arteries	
91627	Gyu6300	[X]Cerebrl infarctn due/unspcf occlusn or sten/cerebrl artrs	
92036	Gyu6600	[X]Occlusion and stenosis of other cerebral arteries	
94482	Gyu6G00	[X]Cereb infarct due unsp occlus/stenos precerebr arteries	

3535	G61z.00	Intracerebral haemorrhage NOS	ICH
5051	G61..00	Intracerebral haemorrhage	ICH
6960	G61..11	CVA - cerebrovascular accid due to intracerebral haemorrhage	ICH
7912	G614.00	Pontine haemorrhage	ICH
13564	G613.00	Cerebellar haemorrhage	ICH
18604	G61..12	Stroke due to intracerebral haemorrhage	ICH
19201	G61X100	Right sided intracerebral haemorrhage, unspecified	ICH
28314	G61X000	Left sided intracerebral haemorrhage, unspecified	ICH
30045	G616.00	External capsule haemorrhage	ICH
30202	G617.00	Intracerebral haemorrhage, intraventricular	ICH
31060	G61X.00	Intracerebral haemorrhage in hemisphere, unspecified	ICH
31595	G610.00	Cortical haemorrhage	ICH
40338	G611.00	Internal capsule haemorrhage	ICH
46316	G612.00	Basal nucleus haemorrhage	ICH
57315	G618.00	Intracerebral haemorrhage, multiple localized	ICH
62342	G615.00	Bulbar haemorrhage	ICH
96630	Gyu6F00	[X]Intracerebral haemorrhage in hemisphere, unspecified	ICH

*All the codes listed in the table were used to identify patients with stroke from the Clinical Practice Research Datalink and the codes related to intracerebral hemorrhage (ICH) were then used to exclude patients with ICH as their first stroke.

Table S2. Codes for statin use

Prodcode	Product Name
47090	Atorvastatin 10mg chewable tablets sugar free
56097	Atorvastatin 10mg chewable tablets sugar free
28	Atorvastatin 10mg tablets
51134	Atorvastatin 10mg tablets (A A H Pharmaceuticals Ltd)
55727	Atorvastatin 10mg tablets (Actavis UK Ltd)
63140	Atorvastatin 10mg tablets (Alliance Healthcare (Distribution) Ltd)
67846	Atorvastatin 10mg tablets (Almus Pharmaceuticals Ltd)
68023	Atorvastatin 10mg tablets (Aspire Pharma Ltd)
57348	Atorvastatin 10mg tablets (Consilient Health Ltd)
58834	Atorvastatin 10mg tablets (DE Pharmaceuticals)
67573	Atorvastatin 10mg tablets (DE Pharmaceuticals)
55032	Atorvastatin 10mg tablets (Dexcel-Pharma Ltd)
70987	Atorvastatin 10mg tablets (Dr Reddy's Laboratories (UK) Ltd)
68785	Atorvastatin 10mg tablets (Mylan)
54535	Atorvastatin 10mg tablets (Pfizer Ltd)
64825	Atorvastatin 10mg tablets (Phoenix Healthcare Distribution Ltd)
59357	Atorvastatin 10mg tablets (Ranbaxy (UK) Ltd)
58868	Atorvastatin 10mg tablets (Sigma Pharmaceuticals Plc)
70693	Atorvastatin 10mg tablets (Sigma Pharmaceuticals Plc)
59859	Atorvastatin 10mg tablets (Teva UK Ltd)
61149	Atorvastatin 10mg tablets (Waymade Healthcare Plc)
50236	Atorvastatin 10mg tablets (Zentiva)
48518	Atorvastatin 10mg/5ml oral solution
54992	Atorvastatin 10mg/5ml oral suspension
47065	Atorvastatin 20mg chewable tablets sugar free
56165	Atorvastatin 20mg chewable tablets sugar free
75	Atorvastatin 20mg tablets
49558	Atorvastatin 20mg tablets (A A H Pharmaceuticals Ltd)
52211	Atorvastatin 20mg tablets (Actavis UK Ltd)
58394	Atorvastatin 20mg tablets (Alliance Healthcare (Distribution) Ltd)
56564	Atorvastatin 20mg tablets (Almus Pharmaceuticals Ltd)
51359	Atorvastatin 20mg tablets (Arrow Generics Ltd)
52168	Atorvastatin 20mg tablets (Aspire Pharma Ltd)
72164	Atorvastatin 20mg tablets (Bristol Laboratories Ltd)
51622	Atorvastatin 20mg tablets (Consilient Health Ltd)
62219	Atorvastatin 20mg tablets (DE Pharmaceuticals)
62429	Atorvastatin 20mg tablets (DE Pharmaceuticals)
50790	Atorvastatin 20mg tablets (Dexcel-Pharma Ltd)
71017	Atorvastatin 20mg tablets (Dr Reddy's Laboratories (UK) Ltd)
68467	Atorvastatin 20mg tablets (Kent Pharmaceuticals Ltd)
68827	Atorvastatin 20mg tablets (Mylan)
50788	Atorvastatin 20mg tablets (Pfizer Ltd)
68048	Atorvastatin 20mg tablets (Phoenix Healthcare Distribution Ltd)
65193	Atorvastatin 20mg tablets (Ranbaxy (UK) Ltd)

56248	Atorvastatin 20mg tablets (Sigma Pharmaceuticals Plc)
58041	Atorvastatin 20mg tablets (Teva UK Ltd)
59272	Atorvastatin 20mg tablets (Waymade Healthcare Plc)
72213	Atorvastatin 20mg tablets (Wockhardt UK Ltd)
58110	Atorvastatin 20mg tablets (Zentiva)
64067	Atorvastatin 20mg/5ml oral solution
60464	Atorvastatin 20mg/5ml oral suspension
48973	Atorvastatin 30mg tablets
64702	Atorvastatin 30mg tablets (A A H Pharmaceuticals Ltd)
63469	Atorvastatin 30mg tablets (Consilient Health Ltd)
745	Atorvastatin 40mg tablets
52398	Atorvastatin 40mg tablets (A A H Pharmaceuticals Ltd)
53887	Atorvastatin 40mg tablets (Actavis UK Ltd)
49751	Atorvastatin 40mg tablets (Alliance Healthcare (Distribution) Ltd)
59446	Atorvastatin 40mg tablets (Almus Pharmaceuticals Ltd)
51200	Atorvastatin 40mg tablets (Arrow Generics Ltd)
52460	Atorvastatin 40mg tablets (Aspire Pharma Ltd)
51876	Atorvastatin 40mg tablets (Consilient Health Ltd)
57834	Atorvastatin 40mg tablets (DE Pharmaceuticals)
56841	Atorvastatin 40mg tablets (Dexcel-Pharma Ltd)
52397	Atorvastatin 40mg tablets (Dr Reddy's Laboratories (UK) Ltd)
67402	Atorvastatin 40mg tablets (Kent Pharmaceuticals Ltd)
69427	Atorvastatin 40mg tablets (Mylan)
50272	Atorvastatin 40mg tablets (Pfizer Ltd)
64810	Atorvastatin 40mg tablets (Phoenix Healthcare Distribution Ltd)
60511	Atorvastatin 40mg tablets (Ranbaxy (UK) Ltd)
64868	Atorvastatin 40mg tablets (Sigma Pharmaceuticals Plc)
50963	Atorvastatin 40mg tablets (Teva UK Ltd)
52097	Atorvastatin 40mg tablets (Wockhardt UK Ltd)
55444	Atorvastatin 40mg tablets (Zentiva)
55034	Atorvastatin 40mg/5ml oral suspension
48346	Atorvastatin 60mg tablets
5775	Atorvastatin 80mg tablets
58418	Atorvastatin 80mg tablets (A A H Pharmaceuticals Ltd)
52459	Atorvastatin 80mg tablets (Actavis UK Ltd)
53772	Atorvastatin 80mg tablets (Alliance Healthcare (Distribution) Ltd)
62476	Atorvastatin 80mg tablets (Almus Pharmaceuticals Ltd)
58742	Atorvastatin 80mg tablets (Arrow Generics Ltd)
59776	Atorvastatin 80mg tablets (Aspire Pharma Ltd)
63249	Atorvastatin 80mg tablets (Consilient Health Ltd)
60607	Atorvastatin 80mg tablets (DE Pharmaceuticals)
52821	Atorvastatin 80mg tablets (Dr Reddy's Laboratories (UK) Ltd)
53890	Atorvastatin 80mg tablets (Pfizer Ltd)
60989	Atorvastatin 80mg tablets (Phoenix Healthcare Distribution Ltd)
67660	Atorvastatin 80mg tablets (Ranbaxy (UK) Ltd)
66963	Atorvastatin 80mg tablets (Sigma Pharmaceuticals Plc)

57836	Atorvastatin 80mg tablets (Teva UK Ltd)
57117	Atorvastatin 80mg tablets (Waymade Healthcare Plc)
69093	Atorvastatin 80mg tablets (Wockhardt UK Ltd)
56182	Atorvastatin 80mg tablets (Zentiva)
420	Cerivastatin 100microgram tablets
5009	Cerivastatin 200microgram tablets
5251	Cerivastatin 300microgram tablets
5278	Cerivastatin 400microgram tablets
31658	Cerivastatin 800microgram tablets
69528	Cholib 145mg/20mg tablets (Mylan)
70486	Cholib 145mg/40mg tablets (Mylan)
7347	Crestor 10mg tablets (AstraZeneca UK Ltd)
53460	Crestor 10mg tablets (DE Pharmaceuticals)
15252	Crestor 20mg tablets (AstraZeneca UK Ltd)
70308	Crestor 20mg tablets (Sigma Pharmaceuticals Plc)
59447	Crestor 20mg tablets (Waymade Healthcare Plc)
9930	Crestor 40mg tablets (AstraZeneca UK Ltd)
57999	Crestor 40mg tablets (Lexon (UK) Ltd)
17688	Crestor 5mg tablets (AstraZeneca UK Ltd)
66780	Fenofibrate 145mg / Simvastatin 20mg tablets
66505	Fenofibrate 145mg / Simvastatin 40mg tablets
379	Fluvastatin 20mg capsules
62148	Fluvastatin 20mg capsules (Actavis UK Ltd)
72308	Fluvastatin 20mg capsules (Alliance Healthcare (Distribution) Ltd)
59278	Fluvastatin 20mg capsules (Zentiva)
2137	Fluvastatin 40mg capsules
53770	Fluvastatin 40mg capsules (A A H Pharmaceuticals Ltd)
71029	Fluvastatin 40mg capsules (Sandoz Ltd)
11627	Fluvastatin 80mg modified-release tablets
21020	Inegy 10mg/20mg tablets (Merck Sharp & Dohme Ltd)
17059	Inegy 10mg/40mg tablets (Merck Sharp & Dohme Ltd)
16186	Inegy 10mg/80mg tablets (Merck Sharp & Dohme Ltd)
8380	Lescol 20mg capsules (Novartis Pharmaceuticals UK Ltd)
9153	Lescol 40mg capsules (Novartis Pharmaceuticals UK Ltd)
67328	Lescol XL 80mg tablets (Mawdsley-Brooks & Company Ltd)
5985	Lescol XL 80mg tablets (Novartis Pharmaceuticals UK Ltd)
47721	Lipitor 10mg chewable tablets (Pfizer Ltd)
59331	Lipitor 10mg tablets (DE Pharmaceuticals)
3411	Lipitor 10mg tablets (Pfizer Ltd)
47630	Lipitor 20mg chewable tablets (Pfizer Ltd)
56016	Lipitor 20mg chewable tablets (Pfizer Ltd)
7374	Lipitor 20mg tablets (Pfizer Ltd)
2955	Lipitor 40mg tablets (Pfizer Ltd)
53594	Lipitor 80mg tablets (Mawdsley-Brooks & Company Ltd)
17683	Lipitor 80mg tablets (Pfizer Ltd)
9315	Lipobay 100microgram Tablet (Bayer Plc)

53813	Lipobay 100microgram tablets (Bayer Plc)
9316	Lipobay 200microgram Tablet (Bayer Plc)
55207	Lipobay 200microgram tablets (Bayer Plc)
4961	Lipobay 300microgram Tablet (Bayer Plc)
58480	Lipobay 300microgram tablets (Bayer Plc)
18442	Lipobay 400microgram Tablet (Bayer Plc)
62132	Lipobay 400microgram tablets (Bayer Plc)
1221	Lipostat 10mg tablets (Bristol-Myers Squibb Pharmaceuticals Ltd)
3690	Lipostat 20mg tablets (Bristol-Myers Squibb Pharmaceuticals Ltd)
1223	Lipostat 40mg tablets (Bristol-Myers Squibb Pharmaceuticals Ltd)
32921	Pravastatin 10mg Tablet (Dr Reddy's Laboratories (UK) Ltd)
490	Pravastatin 10mg tablets
68156	Pravastatin 10mg tablets (A A H Pharmaceuticals Ltd)
57397	Pravastatin 10mg tablets (Accord Healthcare Ltd)
57137	Pravastatin 10mg tablets (Almus Pharmaceuticals Ltd)
71015	Pravastatin 10mg tablets (Medreich Plc)
60251	Pravastatin 10mg tablets (Sandoz Ltd)
50925	Pravastatin 10mg tablets (Sigma Pharmaceuticals Plc)
43218	Pravastatin 10mg tablets (Teva UK Ltd)
63787	Pravastatin 10mg tablets (Tillomed Laboratories Ltd)
56146	Pravastatin 10mg tablets (Waymade Healthcare Plc)
730	Pravastatin 20mg tablets
40382	Pravastatin 20mg tablets (A A H Pharmaceuticals Ltd)
59508	Pravastatin 20mg tablets (Accord Healthcare Ltd)
52755	Pravastatin 20mg tablets (Alliance Healthcare (Distribution) Ltd)
54607	Pravastatin 20mg tablets (Almus Pharmaceuticals Ltd)
51890	Pravastatin 20mg tablets (Medreich Plc)
56735	Pravastatin 20mg tablets (Mylan)
57296	Pravastatin 20mg tablets (Phoenix Healthcare Distribution Ltd)
63074	Pravastatin 20mg tablets (PLIVA Pharma Ltd)
67829	Pravastatin 20mg tablets (Sandoz Ltd)
61134	Pravastatin 20mg tablets (Sigma Pharmaceuticals Plc)
36377	Pravastatin 20mg tablets (Teva UK Ltd)
56607	Pravastatin 20mg tablets (Waymade Healthcare Plc)
1219	Pravastatin 40mg tablets
34820	Pravastatin 40mg tablets (A A H Pharmaceuticals Ltd)
56893	Pravastatin 40mg tablets (Accord Healthcare Ltd)
72048	Pravastatin 40mg tablets (Actavis UK Ltd)
55912	Pravastatin 40mg tablets (Alliance Healthcare (Distribution) Ltd)
54435	Pravastatin 40mg tablets (Almus Pharmaceuticals Ltd)
62979	Pravastatin 40mg tablets (Kent Pharmaceuticals Ltd)
51676	Pravastatin 40mg tablets (Medreich Plc)
47988	Pravastatin 40mg tablets (Mylan)
56916	Pravastatin 40mg tablets (PLIVA Pharma Ltd)
48097	Pravastatin 40mg tablets (Teva UK Ltd)
57108	Pravastatin 40mg tablets (Waymade Healthcare Plc)

72149	Pravastatin 5mg/5ml oral suspension
44878	Ranzolont 10mg tablets (Ranbaxy (UK) Ltd)
713	Rosuvastatin 10mg tablets
57763	Rosuvastatin 10mg tablets (Waymade Healthcare Plc)
6213	Rosuvastatin 20mg tablets
71014	Rosuvastatin 20mg tablets (Waymade Healthcare Plc)
58617	Rosuvastatin 20mg/5ml oral suspension
9897	Rosuvastatin 40mg tablets
7554	Rosuvastatin 5mg tablets
60160	Rosuvastatin 5mg tablets (Mawdsley-Brooks & Company Ltd)
59452	Rosuvastatin 5mg tablets (Waymade Healthcare Plc)
13041	Simvador 10mg tablets (Discovery Pharmaceuticals)
9920	Simvador 20mg tablets (Discovery Pharmaceuticals)
802	Simvador 40mg tablets (Discovery Pharmaceuticals)
39870	Simvador 80mg tablets (Discovery Pharmaceuticals)
24509	SIMVASTATIN
29438	SIMVASTATIN
34560	Simvastatin 10mg Tablet (Ratiopharm UK Ltd)
42	Simvastatin 10mg tablets
34955	Simvastatin 10mg tablets (A A H Pharmaceuticals Ltd)
54655	Simvastatin 10mg tablets (Accord Healthcare Ltd)
48078	Simvastatin 10mg tablets (Actavis UK Ltd)
51233	Simvastatin 10mg tablets (Alliance Healthcare (Distribution) Ltd)
61360	Simvastatin 10mg tablets (Almus Pharmaceuticals Ltd)
47774	Simvastatin 10mg tablets (Arrow Generics Ltd)
53822	Simvastatin 10mg tablets (Bristol Laboratories Ltd)
67098	Simvastatin 10mg tablets (Brown & Burk UK Ltd)
64180	Simvastatin 10mg tablets (Crescent Pharma Ltd)
64968	Simvastatin 10mg tablets (DE Pharmaceuticals)
53908	Simvastatin 10mg tablets (Dexcel-Pharma Ltd)
72050	Simvastatin 10mg tablets (Genesis Pharmaceuticals Ltd)
34481	Simvastatin 10mg tablets (IVAX Pharmaceuticals UK Ltd)
48051	Simvastatin 10mg tablets (Kent Pharmaceuticals Ltd)
51085	Simvastatin 10mg tablets (Medreich Plc)
53415	Simvastatin 10mg tablets (Milpharm Ltd)
34535	Simvastatin 10mg tablets (Mylan)
58755	Simvastatin 10mg tablets (Phoenix Healthcare Distribution Ltd)
48058	Simvastatin 10mg tablets (Ranbaxy (UK) Ltd)
54493	Simvastatin 10mg tablets (Relonchem Ltd)
61321	Simvastatin 10mg tablets (Sandoz Ltd)
51715	Simvastatin 10mg tablets (Sigma Pharmaceuticals Plc)
54976	Simvastatin 10mg tablets (Somex Pharma)
40340	Simvastatin 10mg tablets (Teva UK Ltd)
47948	Simvastatin 10mg tablets (Tillomed Laboratories Ltd)
61665	Simvastatin 10mg tablets (Waymade Healthcare Plc)
52625	Simvastatin 10mg tablets (Wockhardt UK Ltd)

67745	Simvastatin 10mg tablets (Zentiva)
52676	Simvastatin 10mg/5ml oral suspension
7552	Simvastatin 20mg / Ezetimibe 10mg tablets
34746	Simvastatin 20mg Tablet (Niche Generics Ltd)
34476	Simvastatin 20mg Tablet (Ratiopharm UK Ltd)
25	Simvastatin 20mg tablets
33082	Simvastatin 20mg tablets (A A H Pharmaceuticals Ltd)
52257	Simvastatin 20mg tablets (Accord Healthcare Ltd)
45245	Simvastatin 20mg tablets (Actavis UK Ltd)
49062	Simvastatin 20mg tablets (Alliance Healthcare (Distribution) Ltd)
54947	Simvastatin 20mg tablets (Almus Pharmaceuticals Ltd)
48018	Simvastatin 20mg tablets (Arrow Generics Ltd)
52953	Simvastatin 20mg tablets (Bristol Laboratories Ltd)
69413	Simvastatin 20mg tablets (Brown & Burk UK Ltd)
64104	Simvastatin 20mg tablets (Crescent Pharma Ltd)
65679	Simvastatin 20mg tablets (DE Pharmaceuticals)
39060	Simvastatin 20mg tablets (Dexcel-Pharma Ltd)
68686	Simvastatin 20mg tablets (Genesis Pharmaceuticals Ltd)
34366	Simvastatin 20mg tablets (IVAX Pharmaceuticals UK Ltd)
34891	Simvastatin 20mg tablets (Kent Pharmaceuticals Ltd)
50754	Simvastatin 20mg tablets (Medreich Plc)
51483	Simvastatin 20mg tablets (Milpharm Ltd)
34312	Simvastatin 20mg tablets (Mylan)
55452	Simvastatin 20mg tablets (Phoenix Healthcare Distribution Ltd)
40601	Simvastatin 20mg tablets (Ranbaxy (UK) Ltd)
50564	Simvastatin 20mg tablets (Relonchem Ltd)
45235	Simvastatin 20mg tablets (Sandoz Ltd)
52812	Simvastatin 20mg tablets (Sigma Pharmaceuticals Plc)
53087	Simvastatin 20mg tablets (Somex Pharma)
34316	Simvastatin 20mg tablets (Teva UK Ltd)
53676	Simvastatin 20mg tablets (Tillomed Laboratories Ltd)
58315	Simvastatin 20mg tablets (Waymade Healthcare Plc)
34814	Simvastatin 20mg tablets (Wockhardt UK Ltd)
67773	Simvastatin 20mg tablets (Zentiva)
11815	Simvastatin 20mg with ezetimibe 10mg tablet
818	Simvastatin 20mg/5ml oral solution sugar free
54266	Simvastatin 20mg/5ml oral suspension
39675	Simvastatin 20mg/5ml Oral suspension (Martindale Pharmaceuticals Ltd)
48221	Simvastatin 20mg/5ml oral suspension sugar free
54606	Simvastatin 20mg/5ml oral suspension sugar free (A A H Pharmaceuticals Ltd)
65925	Simvastatin 20mg/5ml oral suspension sugar free (Alliance Healthcare (Distribution) Ltd)
44528	Simvastatin 20mg/5ml oral suspension sugar free (Rosemont Pharmaceuticals Ltd)
56065	Simvastatin 20mg/5ml oral suspension sugar free (Waymade Healthcare Plc)
57329	Simvastatin 25mg/5ml oral suspension
10172	Simvastatin 40mg / Ezetimibe 10mg tablets
34879	Simvastatin 40mg Tablet (Niche Generics Ltd)

34545	Simvastatin 40mg Tablet (Ratiopharm UK Ltd)
51	Simvastatin 40mg tablets
34502	Simvastatin 40mg tablets (A A H Pharmaceuticals Ltd)
50703	Simvastatin 40mg tablets (Accord Healthcare Ltd)
34969	Simvastatin 40mg tablets (Actavis UK Ltd)
48867	Simvastatin 40mg tablets (Alliance Healthcare (Distribution) Ltd)
46878	Simvastatin 40mg tablets (Almus Pharmaceuticals Ltd)
45346	Simvastatin 40mg tablets (Arrow Generics Ltd)
49061	Simvastatin 40mg tablets (Bristol Laboratories Ltd)
68563	Simvastatin 40mg tablets (Brown & Burk UK Ltd)
64307	Simvastatin 40mg tablets (Crescent Pharma Ltd)
65181	Simvastatin 40mg tablets (DE Pharmaceuticals)
44650	Simvastatin 40mg tablets (Dexcel-Pharma Ltd)
34381	Simvastatin 40mg tablets (IVAX Pharmaceuticals UK Ltd)
45219	Simvastatin 40mg tablets (Kent Pharmaceuticals Ltd)
51166	Simvastatin 40mg tablets (Medreich Plc)
50670	Simvastatin 40mg tablets (Milpharm Ltd)
34353	Simvastatin 40mg tablets (Mylan)
53966	Simvastatin 40mg tablets (Phoenix Healthcare Distribution Ltd)
52098	Simvastatin 40mg tablets (Ranbaxy (UK) Ltd)
50483	Simvastatin 40mg tablets (Relonchem Ltd)
37434	Simvastatin 40mg tablets (Sandoz Ltd)
54240	Simvastatin 40mg tablets (Sigma Pharmaceuticals Plc)
50882	Simvastatin 40mg tablets (Somex Pharma)
34376	Simvastatin 40mg tablets (Teva UK Ltd)
62137	Simvastatin 40mg tablets (Waymade Healthcare Plc)
34907	Simvastatin 40mg tablets (Wockhardt UK Ltd)
65901	Simvastatin 40mg tablets (Zentiva)
10183	Simvastatin 40mg with ezetimibe 10mg tablet
39652	Simvastatin 40mg/5ml oral solution sugar free
54985	Simvastatin 40mg/5ml oral suspension
48431	Simvastatin 40mg/5ml oral suspension sugar free
61155	Simvastatin 40mg/5ml oral suspension sugar free (A A H Pharmaceuticals Ltd)
54819	Simvastatin 40mg/5ml oral suspension sugar free (Rosemont Pharmaceuticals Ltd)
14219	Simvastatin 80mg / Ezetimibe 10mg tablets
5148	Simvastatin 80mg tablets
32909	Simvastatin 80mg tablets (A A H Pharmaceuticals Ltd)
49587	Simvastatin 80mg tablets (Almus Pharmaceuticals Ltd)
46956	Simvastatin 80mg tablets (Arrow Generics Ltd)
71773	Simvastatin 80mg tablets (Brown & Burk UK Ltd)
52962	Simvastatin 80mg tablets (Medreich Plc)
41657	Simvastatin 80mg tablets (Teva UK Ltd)
10206	Simvastatin 80mg with ezetimibe 10mg tablet
57568	Zocor 10mg tablets (Lexon (UK) Ltd)
2718	Zocor 10mg tablets (Merck Sharp & Dohme Ltd)
56481	Zocor 10mg tablets (Sigma Pharmaceuticals Plc)

7196	Zocor 20mg tablets (Merck Sharp & Dohme Ltd)
56494	Zocor 20mg tablets (Sigma Pharmaceuticals Plc)
53340	Zocor 40mg tablets (Lexon (UK) Ltd)
6168	Zocor 40mg tablets (Merck Sharp & Dohme Ltd)
22579	Zocor 80mg tablets (Merck Sharp & Dohme Ltd)
31930	Zocor heart-pro 10mg Tablet (McNeil Products Ltd)

Table S3. Criteria for quality control

Data item	Unacceptable value
ALL the records of a patient were excluded for any reason below:	
First registration date	Empty; invalid date; prior to year of birth; within one year before the first stroke diagnosis date
Current registration date	Invalid date; prior to first registration date; prior to year of birth
Transferred out date	Invalid date; present with no reason; prior to first registration date; prior to current registration date
A transferred out reason	Present with no date
Registration status	Temporary patients
Age	Over 125 years at the end of follow-up
Year of birth	Absent
Gender	Other than male, female or indeterminate
Death date	Prior to the first registration date; prior to the current registration date
RELEVANT episode records of a patient were excluded for any reason below:	
Event date	Invalid; absent; prior to birth year
Weight	<30kg; >300kg
Height	<1.1 metres; >2.3 metres
The date were **CHANGED** for any reason below:	
Change the death date and transferred out date to the first stroke diagnosis date	Death date prior to the first stroke diagnosis date; transferred out date prior to the first stroke diagnosis date
Change the death date and transferred out date to the last post-stroke statin prescription date	Death date prior to the last post-stroke statin prescription date; transferred out date prior to the last post-stroke statin prescription date

Table S4. Baseline characteristics of patients with specified ischemic and unspecified stroke

Factor	Specified ischemic (n=26,339)		Unspecified (n=54,103)		Total (N=80,442)	
Demographics						
Age (Year)						
Mean (SD)	72.7	(13.1)	75.1	(12.8)	74.3	(12.9)
Female (%)	12,803	(48.6)	28,533	(52.7)	41,336	(51.4)
IMD (%)[a]						
Group 1	5,898	(22.4)	10,933	(20.2)	16,831	(20.9)
Group 2	5,507	(20.9)	10,480	(19.4)	15,987	(19.9)
Group 3	5,354	(20.3)	11,255	(20.8)	16,609	(20.7)
Group 4	5,092	(19.3)	10,445	(19.3)	15,537	(19.3)
Group 5	4,482	(17.0)	10,869	(20.3)	15,442	(19.2)
Prior medical conditions (%)						
AF	4,404	(16.7)	8,764	(16.2)	13,168	(16.4)
Cancer	2,629	(10.0)	5,312	(9.8)	7,941	(9.9)
CHD	5,248	(19.9)	11,252	(20.8)	16,500	(20.5)
CKD	495	(1.9)	753	(1.4)	1,248	(1.6)
CLD	195	(0.7)	423	(0.8)	618	(0.8)
COPD	1,994	(7.6)	4,313	(8.0)	6,307	(7.8)
Dementia	909	(3.5)	3,329	(6.2)	4,238	(5.3)
Diabetes	4,194	(15.9)	8,676	(16.0)	12,870	(16.0)
Heart failure	1,789	(6.8)	5,028	(9.3)	6,817	(8.5)
Hypertension	13,769	(52.3)	27,388	(50.6)	41,157	(51.2)
Myopathy	1,399	(5.3)	2,935	(5.4)	4,334	(5.4)
PAD	1,627	(6.2)	3,579	(6.6)	5,206	(6.5)
TIA	3,031	(11.5)	8,141	(15.1)	11,172	(13.9)
Smoking status (%)[b]						
Current-smoker	5,235	(17.2)	10,141	(18.7)	15,376	(19.1)
Ex-smoker	7,939	(30.1)	14,588	(27.0)	22,527	(28.0)
Non-smoker	13,165	(50.0)	29,374	(54.3)	42,539	(52.9)
BMI[c]						
Mean (SD)	27.0	(5.2)	26.8	(5.3)	26.8	(5.3)
Medications before stroke (%)						
Statins[d]	9,198	(34.9)	15,906	(29.4)	25,104	(31.2)
High	2,038	(7.7)	3,301	(6.1)	5,339	(6.6)
Low/Medium	7,155	(27.2)	12,561	(23.2)	19,716	(24.5)
Other LLT	686	(2.6)	1094	(2.0)	1,780	(2.2)

Notes: a. A total of 36 (0.04%) patients had missing value of IMD: 9 (0.03%) and 27 (0.05%) for specified ischemic stroke and unspecified stroke, respectively. Group 1 is the least deprived group.
b. A total of 4,802 (6.0%) patients had missing value of smoking status: 1,058 (4.0%) and 3,744 (6.9%) for specified ischemic stroke and unspecified stroke, respectively.
c. A total of 13,570 (16.9%) patients had missing value of BMI: 3,645 (13.8%) and 9,925 (18.3%) for specified ischemic stroke and unspecified stroke, respectively.
d. A total of 49 (0.06%) patients had missing value of pre-stroke statin dose: 5 (0.05%) and 44 (0.08%) for specified ischemic stroke and unspecified stroke, respectively.
Abbreviations: AF, atrial fibrillation; BMI, body mass index; CHD, coronary heart disease; CKD, chronic kidney disease; CLD, chronic liver disease; COPD, chronic obstructive pulmonary disease; IMD, Index of Multiple Deprivation; LLT, lipid-lowering treatment; PAD, peripheral artery disease; SD, standard deviation; TIA, transient ischemic attack.

Table S5. Statin use patterns within two years after first stroke

	Specified ischemic (%) (n=19,575)		Unspecified (%) (n=31,763)		Total (N=51,338)	
Initial prescription						
Starting time after stroke						
Median (IQR), day	26	(12-55)	26	(11-58)	26	(12-57)
0-90	16,669	(85.2)	26,589	(83.7)	43,258	(84.3)
91-365	2,351	(12.0)	3,971	(12.5)	6,322	(12.3)
366-730	555	(2.8)	1203	(3.8)	1758	(3.4)
Intensity[a]						
Low	1,760	(9.0)	3,654	(11.5)	5,414	(10.6)
Medium	14,613	(74.7)	23,278	(73.3)	37,891	(73.8)
High	3,177	(16.2)	4,745	(14.9)	7,922	(15.4)
Product						
Atorvastatin	4,271	(21.8)	7,100	(22.3)	11,371	(22.2)
Cerivastatin	25	(0.1)	86	(0.3)	111	(0.2)
Fluvastatin	81	(0.4)	171	(0.5)	252	(0.5)
Pravastatin	810	(4.1)	1,695	(5.3)	2,505	(4.9)
Rosuvastatin	343	(1.8)	490	(1.5)	833	(1.6)
Simvastatin	14,045	(71.8)	22,221	(70.0)	36,266	(70.6)
Subsequent prescriptions						
Prescription number[b]						
Median (IQR)	14	(9-24)	14	(8-24)	14	(9-24)
1	742	(3.8)	1,431	(4.5)	2,173	(4.2)
2	600	(3.1)	1,085	(3.4)	1,685	(3.3)
3 or more	18,233	(93.1)	29,247	(92.1)	47,480	(92.5)
Number of different intensities used[c]						
1	16,859	(86.1)	27,481	(86.5)	44,340	(86.4)
2	2,595	(13.3)	4,090	(12.9)	6,685	(13.0)
3	120	(0.6)	181	(0.6)	301	(0.6)
Number of different statins used						
1	17,031	(87.0)	27,841	(87.7)	44,872	(87.4)
2	2,347	(12.0)	3,643	(11.5)	5,990	(11.7)
3	188	(1.0)	264	(0.8)	452	(0.9)
4	9	(0.05)	15	(0.05)	24	(0.05)

Notes: a. A total of 111 (0.2%) patients had missing value of initial statin intensity: 25 (0.1%) and 86 (0.3%) for specified ischemic stroke and unspecified stroke, respectively. All the missing values were for cerivastatin.

b. This includes the first prescription.

c. A total of 12 (0.02%) patients had missing value of number of different intensities used: 1 (0.01%) and 11 (0.03%) for specified ischemic stroke and unspecified stroke, respectively. All the missing values were for cerivastatin.

Abbreviation: IQR, interquartile range.

Table S6. Factors associated with statin use in a time partitioned analysis

Factor	First 90 days of follow-up			After first 90 days of follow-up		
	Crude HR (95% CI)	Adjusted HR (95% CI)		Crude HR (95% CI)	Adjusted HR (95% CI)	
		Model 1	Model 2		Model 1	Model 2
Demographics						
Age (Year)						
18-44	0.53 (0.49-0.56)***	0.53 (0.50-0.57)***	0.54 (0.50-0.59)***	0.44 (0.38-0.50)***	0.44 (0.39-0.51)***	0.43 (0.37-0.49)***
45-54	0.91 (0.87-0.95)***	0.91 (0.88-0.95)***	0.89 (0.85-0.94)***	0.83 (0.75-0.92)***	0.83 (0.75-0.92)***	0.81 (0.72-0.90)***
55-64	Reference	Reference	Reference	Reference	Reference	Reference
65-74	0.89 (0.86-0.91)***	0.89 (0.87-0.92)***	0.91 (0.88-0.93)***	0.86 (0.81-0.93)***	0.87 (0.81-0.93)***	0.88 (0.81-0.95)**
75-84	0.69 (0.67-0.71)***	0.70 (0.67-0.72)***	0.74 (0.72-0.77)***	0.58 (0.54-0.62)***	0.58 (0.54-0.62)***	0.65 (0.60-0.71)***
85-	0.42 (0.41-0.44)***	0.43 (0.41-0.45)***	0.50 (0.48-0.53)***	0.28 (0.25-0.31)***	0.29 (0.26-0.31)***	0.35 (0.32-0.39)***
Female	0.82 (0.81-0.84)***	0.93 (0.91-0.94)***	0.99 (0.96-1.01)	0.76 (0.73-0.80)***	0.92 (0.88-0.96)***	0.99 (0.94-1.04)
IMD (Quintile)						
Group 1(least deprived)	Reference	Reference	Reference	Reference	Reference	Reference
Group 2	0.98 (0.94-1.04)	0.98 (0.94-1.03)	1.00 (0.96-1.04)	0.92 (0.84-1.01)	0.91 (0.83-0.99)*	0.87 (0.79-0.95)**
Group 3	1.00 (0.95-1.05)	0.99 (0.94-1.03)	0.98 (0.94-1.02)	0.96 (0.88-1.05)	0.96 (0.88-1.04)	0.93 (0.85-1.02)
Group 4	1.04 (0.98-1.09)	1.00 (0.95-1.05)	0.99 (0.95-1.04)	1.01 (0.92-1.10)	0.96 (0.87-1.04)	0.95 (0.86-1.04)
Group 5	1.00 (0.95-1.05)	0.94 (0.90-0.99)*	0.98 (0.94-1.03)	0.99 (0.91-1.08)	0.91 (0.84-1.00)*	0.94 (0.86-1.02)
Prior conditions						
AF	0.90 (0.87-0.92)***	1.00 (0.98-1.03)	0.90 (0.87-0.93)***	0.88 (0.83-0.94)***	1.02 (0.96-1.08)	0.93 (0.86-1.00)*
Cancer	0.93 (0.90-0.96)***	0.98 (0.95-1.01)	0.89 (0.86-0.92)***	0.91 (0.84-0.99)*	0.97 (0.89-1.05)	0.86 (0.78-0.94)**
CHD	1.21 (1.18-1.24)***	1.25 (1.22-1.28)***	1.20 (1.17-1.23)***	1.24 (1.17-1.31)***	1.36 (1.28-1.44)***	1.35 (1.26-1.44)***
CKD	1.34 (1.24-1.44)***	1.42 (1.32-1.53)***	1.04 (0.97-1.12)	1.04 (0.84-1.29)	1.15 (0.93-1.41)	0.78 (0.62-0.97)*
CLD	0.81 (0.72-0.90)***	0.71 (0.64-0.80)***	0.68 (0.60-0.77)***	0.73 (0.56-0.96)***	0.61 (0.49-0.80)***	0.55 (0.41-0.73)***
COPD	1.03 (1.00-1.07)	1.02 (0.98-1.05)	0.98 (0.95-1.02)	0.92 (0.84-1.00)	0.88 (0.80-0.96)**	0.82 (0.74-0.91)***
Dementia	0.46 (0.43-0.50)***	0.58 (0.54-0.62)***	0.65 (0.61-0.70)***	0.30 (0.25-0.35)***	0.39 (0.33-0.46)***	0.46 (0.38-0.55)***
Diabetes	1.26 (1.23-1.29)***	1.21 (1.18-1.24)***	1.07 (1.05-1.10)***	1.31 (1.24-1.39)***	1.25 (1.18-1.32)***	1.12 (1.05-1.20)***
Heart failure	0.77 (0.74-0.80)***	0.89 (0.84-0.91)***	0.88 (0.84-0.92)***	0.65 (0.59-0.72)***	0.80 (0.72-0.89)***	0.79 (0.71-0.89)***
Hypertension	1.19 (1.16-1.21)***	1.24 (1.21-1.26)***	1.09 (1.07-1.12)***	1.19 (1.13-1.24)***	1.24 (1.19-1.30)***	1.12 (1.07-1.18)***
Myopathy	1.02 (0.98-1.06)	1.10 (1.05-1.14)***	0.97 (0.92-1.01)	0.95 (0.85-1.05)	1.04 (0.94-1.16)	0.82 (0.73-0.93)*
PAD	1.06 (1.02-1.10)**	1.06 (1.02-1.11)**	1.00 (0.96-1.04)	1.13 (1.03-1.14)**	1.14 (1.04-1.25)**	1.12 (1.02-1.23)*
TIA	1.05 (1.02-1.08)**	1.10 (1.06-1.13)***	1.14 (1.11-1.17)***	0.84 (0.78-0.90)***	0.90 (0.84-0.96)**	0.91 (0.86-1.00)
Smoking status						
Current-smoker	1.18 (1.15-1.21)***	0.99 (0.96-1.01)	1.04 (1.01-1.07)**	1.41 (1.33-1.49)***	1.10 (1.04-1.17)***	1.21 (1.13-1.29)***

Factor	First 90 days of follow-up			After first 90 days of follow-up		
	Crude HR (95% CI)	Adjusted HR (95% CI)		Crude HR (95% CI)	Adjusted HR (95% CI)	
		Model 1	Model 2		Model 1	Model 2
Ex-smoker	1.27 (1.24-1.30)***	1.18 (1.15-1.21)***	1.10 (1.08-1.13)***	1.32 (1.25-1.39)***	1.20 (1.14-1.27)***	1.13 (1.06-1.20)***
Non-smoker	Reference	Reference	Reference	Reference	Reference	Reference
BMI						
<18.5	0.75 (0.70-0.80)***	0.79 (0.74-0.85)***	0.79 (0.73-0.85)***	0.70 (0.60-0.82)***	0.74 (0.63-0.87)***	0.73 (0.62-0.86)***
18.5-24	Reference	Reference	Reference	Reference	Reference	Reference
25-29	1.19 (1.16-1.22)***	1.13 (1.10-1.16)***	1.09 (1.06-1.12)***	1.23 (1.17-1.31)***	1.15 (1.09-1.22)***	1.12 (1.06-1.19)***
30-34	1.31 (1.27-1.35)***	1.20 (1.17-1.24)***	1.09 (1.06-1.13)***	1.40 (1.30-1.50)***	1.24 (1.15-1.33)***	1.15 (1.07-1.24)***
35-	1.39 (1.33-1.44)***	1.24 (1.19-1.29)***	1.07 (1.03-1.12)**	1.53 (1.39-1.68)***	1.27 (1.15-1.40)***	1.11 (1.00-1.23)*
Pre-stroke medications						
Statins	2.75 (2.67-2.84)***	2.61 (2.54-2.69)***	2.32 (2.26-2.39)***	3.78 (3.56-4.01)***	3.52 (3.31-3.74)***	2.85 (2.67-3.05)***
High intensity	2.80 (2.69-2.91)***	2.55 (2.45-2.66)***	2.27 (2.18-2.37)***	4.30 (3.82-4.84)***	3.67 (3.25-4.15)***	2.92 (2.56-3.33)***
Low/Medium intensity	2.74 (2.65-2.82)***	2.63 (2.55-2.72)***	2.33 (2.27-2.37)***	3.68 (3.45-3.93)***	3.50 (3.28-3.74)***	2.84 (2.64-3.05)***
No statin use	Reference	Reference	Reference	Reference	Reference	Reference
Other LLT	1.04 (0.97-1.10)	0.95 (0.89-1.01)	0.68 (0.64-0.73)***	0.87 (0.75-1.01)	0.75 (0.65-0.87)***	0.48 (0.42-0.56)***

Notes: ***P-value <0.001, **<0.01, *<0.05.

Model 1: This model included demographics (age, gender, IMD) for adjustment.

Model 2: This model included demographics (age, gender, IMD), prior conditions (AF, cancer, CHD, CKD, CLD, COPD, dementia, diabetes, heart failure, hypertension, myopathy, PAD, TIA), smoking, and BMI for adjustment.

Abbreviations: AF, atrial fibrillation; BMI, body mass index; CHD, coronary heart disease; CI, confidence interval; CKD, chronic kidney disease; CLD, chronic liver disease; COPD, chronic obstructive pulmonary disease; HR: hazard ratio; IMD, Index of Multiple Deprivation; LLT, lipid-lowering treatment; PAD, peripheral artery disease; RR: risk ratio; TIA, transient ischemic attack.

Table S7. Sensitivity analysis for factors associated with statin use and high-intensity statin use in patients with specified ischemic stroke codes

Factor	Statin use			High-intensity statin use		
	Crude HR (95% CI)	Adjusted HR (95% CI)		Crude RR (95% CI)	Adjusted RR (95% CI)	
		Model 1	Model 2		Model 1	Model 2
Demographics						
Age (Year)						
18-44	0.48 (0.44-0.52)***	0.49 (0.45-0.53)***	0.49 (0.44-0.54)***	0.79 (0.66-0.93)**	0.78 (0.66-0.93)**	0.80 (0.66-0.97)*
45-54	0.89 (0.84-0.95)***	0.90 (0.85-0.95)***	0.89 (0.83-0.95)***	1.03 (0.93-1.14)	1.03 (0.93-1.14)	1.06 (0.97-1.17)
55-64	Reference	Reference	Reference	Reference	Reference	Reference
65-74	0.94 (0.90-0.98)**	0.94 (0.91-0.98)**	0.93 (0.88-0.97)**	0.89 (0.83-0.96)**	0.89 (0.83-0.95)**	0.83 (0.77-0.90)***
75-84	0.77 (0.74-0.80)***	0.78 (0.74-0.81)***	0.78 (0.75-0.82)***	0.74 (0.69-0.80)***	0.73 (0.68-0.79)***	0.67 (0.62-0.73)***
85-	0.52 (0.49-0.55)***	0.53 (0.50-0.56)***	0.56 (0.52-0.60)***	0.49 (0.44-0.56)***	0.49 (0.43-0.55)***	0.44 (0.38-0.50)***
Female	0.85 (0.83-0.88)***	0.92 (0.90-0.95)***	0.96 (0.93-0.99)*	1.00 (0.95-1.06)	1.07 (1.02-1.13)*	1.14 (1.08-1.20)***
IMD (Quintile)						
Group 1(least deprived)	Reference	Reference	Reference	Reference	Reference	Reference
Group 2	0.99 (0.93-1.06)	0.99 (0.94-1.05)	0.99 (0.94-1.04)	1.05 (0.94-1.18)	1.05 (0.94-1.17)	1.05 (0.94-1.17)
Group 3	1.00 (0.94-1.06)	1.00 (0.94-1.05)	0.99 (0.94-1.04)	1.00 (0.90-1.11)	0.99 (0.89-1.10)	0.94 (0.85-1.05)
Group 4	1.00 (0.95-1.06)	0.98 (0.93-1.04)	0.97 (0.92-1.02)	1.08 (0.96-1.21)	1.05 (0.94-1.17)	1.00 (0.89-1.11)
Group 5	0.98 (0.92-1.04)	0.95 (0.89-1.01)	0.96 (0.91-1.02)	1.08 (0.96-1.22)	1.03 (0.92-1.16)	0.98 (0.88-1.10)
Prior condition						
AF	0.88 (0.84-0.91)***	0.94 (0.90-0.98)**	0.87 (0.83-0.91)***	0.86 (0.80-0.93)***	0.95 (0.88-1.03)	0.87 (0.80-0.95)**
Cancer	0.91 (0.87-0.96)***	0.95 (0.90-0.99)*	0.90 (0.85-0.95)***	0.91 (0.82-1.01)	0.99 (0.89-1.09)	0.98 (0.88-1.08)
CHD	1.21 (1.17-1.26)***	1.24 (1.19-1.28)***	1.19 (1.15-1.24)***	1.57 (1.47-1.68)***	1.69 (1.58-1.80)***	1.59 (1.48-1.71)***
CKD	1.15 (1.04-1.28)**	1.22 (1.10-1.36)***	0.96 (0.86-1.07)	1.24 (1.04-1.49)*	1.34 (1.12-1.61)**	0.97 (0.82-1.15)
CLD	0.78 (0.66-0.92)**	0.72 (0.61-0.85)***	0.69 (0.57-0.83)***	0.92 (0.63-1.35)	0.86 (0.59-1.25)	0.86 (0.58-1.26)
COPD	1.04 (0.99-1.10)	1.01 (0.96-1.06)	0.97 (0.92-1.03)	1.09 (0.99-1.20)	1.11 (1.00-1.22)*	0.97 (0.88-1.08)
Dementia	0.58 (0.52-0.64)***	0.68 (0.61-0.75)***	0.68 (0.61-0.76)***	0.76 (0.59-0.98)*	0.90 (0.70-1.16)	0.89 (0.70-1.14)
Diabetes	1.22 (1.18-1.27)***	1.19 (1.14-1.23)***	1.09 (1.05-1.13)***	1.45 (1.36-1.56)***	1.45 (1.36-1.56)***	1.23 (1.15-1.32)***
Heart failure	0.84 (0.78-0.90)***	0.92 (0.86-0.98)*	0.92 (0.86-0.98)*	1.20 (1.07-1.34)***	1.33 (1.19-1.50)***	1.11 (0.99-1.24)
Hypertension	1.15 (1.11-1.18)***	1.18 (1.15-1.22)***	1.09 (1.06-1.13)***	1.21 (1.14-1.27)***	1.29 (1.22-1.36)***	1.19 (1.13-1.26)***
Myopathy	0.99 (0.93-1.06)	1.04 (0.98-1.11)	0.94 (0.88-1.01)	1.07 (0.96-1.20)	1.16 (1.04-1.29)**	1.07 (0.96-1.19)
PAD	1.12 (1.06-1.18)***	1.11 (1.05-1.17)***	1.04 (0.98-1.10)	1.36 (1.24-1.49)***	1.41 (1.29-1.54)***	1.16 (1.06-1.27)**
TIA	1.07 (1.03-1.12)**	1.09 (1.04-1.14)***	1.10 (1.04-1.15)***	1.04 (0.96-1.13)	1.07 (0.99-1.16)	1.07 (0.98-1.16)
Smoking status						
Current-smoker	1.13 (1.09-1.17)***	1.00 (0.97-1.04)	1.04 (1.00-1.08)	1.22 (1.14-1.31)***	1.09 (1.02-1.17)*	1.15 (1.06-1.24)***
Ex-smoker	1.19 (1.15-1.23)***	1.12 (1.08-1.16)***	1.06 (1.02-1.10)**	1.15 (1.08-1.22)***	1.14 (1.07-1.21)***	1.09 (1.02-1.16)**

Factor	Statin use			High-intensity statin use		
	Crude HR (95% CI)	Adjusted HR (95% CI)		Crude RR (95% CI)	Adjusted RR (95% CI)	
		Model 1	Model 2		Model 1	Model 2
Non-smoker	Reference	Reference	Reference	Reference	Reference	Reference
BMI						
<18.5	0.75 (0.67-0.83)***	0.79 (0.71-0.88)***	0.79 (0.71-0.86)***	0.89 (0.68-1.17)	0.90 (0.69-1.18)	0.91 (0.70-1.17)
18.5-24	Reference	Reference	Reference	Reference	Reference	Reference
25-29	1.16 (1.12-1.20)***	1.11 (1.07-1.15)***	1.08 (1.04-1.12)***	1.19 (1.11-1.28)***	1.16 (1.08-1.24)***	1.11 (1.04-1.19)**
30-34	1.26 (1.20-1.31)***	1.18 (1.13-1.23)***	1.10 (1.05-1.15)***	1.36 (1.26-1.48)***	1.29 (1.19-1.40)***	1.14 (1.05-1.23)**
35-	1.28 (1.21-1.36)***	1.19 (1.12-1.26)***	1.05 (0.99-1.12)	1.42 (1.29-1.57)***	1.29 (1.17-1.43)***	1.07 (0.97-1.18)
Pre-stroke medications						
Statins	2.34 (2.25-2.42)***	2.27 (2.18-2.35)***	2.14 (2.06-2.23)***	1.86 (1.75-1.98)***	1.94 (1.82-2.06)***	1.62 (1.51-1.74)***
High intensity	2.38 (2.26-2.51)***	2.23 (2.12-2.35)***	2.12 (2.00-2.25)***	4.89 (4.58-5.21)***	4.89 (4.59-5.22)***	4.34 (4.03-4.68)***
Low/Medium intensity	2.32 (2.24-2.41)***	2.28 (2.19-2.36)***	2.15 (2.07-2.24)***	0.97 (0.90-1.05)	1.02 (0.94-1.09)	0.96 (0.88-1.05)
No statin use	Reference	Reference	Reference	Reference	Reference	Reference
Other LLT	0.89 (0.81-0.97)**	0.84 (0.77-0.92)***	0.65 (0.59-0.71)***	2.23 (2.03-2.45)***	2.16 (1.97-2.37)***	1.59 (1.46-1.74)***

Notes: ***P-value <0.001, **<0.01, *<0.05

Model 1: This model included demographics (age, gender, IMD) for adjustment.

Model 2: This model included demographics (age, gender, IMD), prior conditions (AF, cancer, CHD, CKD, CLD, COPD, dementia, diabetes, heart failure, hypertension, myopathy, PAD, TIA), smoking, BMI, and period of stroke for adjustment.

Abbreviations: AF, atrial fibrillation; BMI, body mass index; CHD, coronary heart disease; CI, confidence interval; CKD, chronic kidney disease; CLD, chronic liver disease; COPD, chronic obstructive pulmonary disease; HR: hazard ratio; IMD, Index of Multiple Deprivation; LLT, lipid-lowering treatment; PAD, peripheral artery disease; RR: risk ratio; TIA, transient ischemic attack.

Table S8. Sensitivity analysis for factors associated with statin use and high-intensity statin use in patients with no prior statin treatment

Factor	Statin use			High-intensity statin use		
	Crude HR (95% CI)	Adjusted HR (95% CI)		Crude RR (95% CI)	Adjusted RR (95% CI)	
		Model 1	Model 2		Model 1	Model 2
Demographics						
Age (Year)						
18-44	0.55 (0.51-0.59)***	0.55 (0.52-0.59)***	0.49 (0.46-0.53)***	0.98 (0.86-1.13)	0.98 (0.86-1.13)	0.91 (0.77-1.06)
45-54	0.93 (0.89-0.98)**	0.93 (0.89-0.98)**	0.85 (0.81-0.89)***	1.03 (1.03-1.24)**	1.13 (1.04-1.24)**	1.09 (0.98-1.20)
55-64	Reference	Reference	Reference	Reference	Reference	Reference
65-74	0.80 (0.77-0.83)***	0.80 (0.77-0.83)***	0.86 (0.83-0.90)***	0.86 (0.80-0.93)***	0.85 (0.79-0.92)***	0.86 (0.79-0.94)**
75-84	0.56 (0.54-0.58)***	0.56 (0.54-0.58)***	0.68 (0.66-0.71)***	0.71 (0.66-0.77)***	0.70 (0.65-0.76)***	0.70 (0.64-0.76)***
85-	0.32 (0.31-0.34)***	0.33 (0.31-0.34)***	0.44 (0.41-0.46)***	0.53 (0.47-0.60)***	0.52 (0.45-0.59)***	0.52 (0.45-0.60)***
Female	0.81 (0.79-0.83)***	0.95 (0.93-0.98)***	0.98 (0.95-1.01)	1.00 (0.95-1.06)	1.08 (1.02-1.15)**	1.10 (1.04-1.16)***
IMD (Quintile)						
Group 1(least deprived)	Reference	Reference	Reference	Reference	Reference	Reference
Group 2	0.95 (0.89-1.00)	0.94 (0.89-0.99)*	0.95 (0.91-1.00)*	1.02 (0.91-1.15)	1.02 (0.91-1.14)	1.04 (0.93-1.17)
Group 3	0.98 (0.92-1.03)	0.96 (0.92-1.02)	0.96 (0.92-1.01)	0.97 (0.87-1.09)	0.95 (0.85-1.07)	0.94 (0.83-1.05)
Group 4	0.99 (0.93-1.05)	0.94 (0.89-1.00)	0.95 (0.90-1.00)*	1.03 (0.91-1.15)	0.99 (0.89-1.11)	0.97 (0.86-1.09)
Group 5	0.94 (0.88-0.99)*	0.87 (0.82-0.91)***	0.93 (0.88-0.98)**	0.97 (0.86-1.11)	0.93 (0.81-1.05)	0.91 (0.80-1.03)
Prior condition						
AF	0.76 (0.74-0.79)***	0.90 (0.87-0.94)***	0.84 (0.81-0.88)***	0.81 (0.74-0.90)***	0.92 (0.83-1.01)	0.86 (0.78-0.96)**
Cancer	0.89 (0.85-0.93)***	0.96 (0.92-1.01)	0.86 (0.83-0.91)***	0.94 (0.84-1.04)	1.04 (0.94-1.15)	1.00 (0.89-1.11)
CHD	0.65 (0.63-0.68)***	0.74 (0.71-0.78)***	0.82 (0.79-0.86)***	1.13 (1.03-1.24)**	1.27 (1.15-1.39)***	1.29 (1.16-1.43)***
CKD	1.05 (0.94-1.17)	1.18 (1.05-1.32)**	0.92 (0.81-1.03)	1.44 (1.15-1.80)**	1.58 (1.25-2.00)***	1.27 (1.00-1.61)*
CLD	0.82 (0.72-0.94)**	0.69 (0.60-0.79)***	0.64 (0.55-0.74)***	1.02 (0.72-1.42)	0.95 (0.68-1.33)	0.92 (0.64-1.32)
COPD	0.91 (0.87-0.96)***	0.92 (0.87-0.97)**	0.91 (0.87-0.96)***	0.97 (0.86-1.09)	1.03 (0.92-1.15)	0.98 (0.87-1.11)
Dementia	0.31 (0.28-0.34)***	0.41 (0.37-0.45)***	0.47 (0.42-0.52)***	0.54 (0.39-0.75)***	0.66 (0.48-0.92)*	0.67 (0.48-0.95)*
Diabetes	0.80 (0.77-0.84)***	0.80 (0.77-0.83)***	0.81 (0.79-0.85)***	1.03 (0.93-1.14)	1.06 (0.95-1.17)	1.01 (0.91-1.13)
Heart failure	0.45 (0.42-0.48)***	0.57 (0.53-0.69)***	0.70 (0.65-0.75)***	1.02 (0.87-1.20)	1.17 (1.00-1.38)	1.09 (0.91-1.30)
Hypertension	1.01 (0.99-1.04)	1.09 (1.06-1.12)***	1.04 (1.01-1.07)**	1.01 (0.96-1.07)	1.10 (1.04-1.16)**	1.10 (1.03-1.17)**
Myopathy	0.92 (0.88-0.97)**	1.03 (0.97-1.09)	0.94 (0.89-1.01)	1.01 (0.88-1.15)	1.09 (0.95-1.25)	1.06 (0.92-1.23)
PAD	0.71 (0.67-0.75)***	0.76 (0.72-0.81)***	0.89 (0.83-0.95)**	0.99 (0.86-1.15)	1.09 (0.94-1.27)	1.03 (0.88-1.22)
TIA	0.75 (0.72-0.78)***	0.82 (0.79-0.86)***	0.93 (0.89-0.97)**	0.94 (0.86-1.03)	0.97 (0.89-1.07)	0.97 (0.88-1.08)
Smoking status						
Current-smoker	1.32 (1.28-1.36)***	1.04 (1.01-1.08)**	1.10 (1.06-1.14)***	1.23 (1.15-1.32)***	1.10 (1.02-1.18)*	1.16 (1.07-1.26)***
Ex-smoker	1.23 (1.20-1.27)***	1.15 (1.12-1.18)***	1.11 (1.08-1.15)***	1.06 (0.99-1.14)***	1.07 (1.00-1.15)	1.07 (0.99-1.15)

Factor	Statin use			High-intensity statin use		
	Crude HR (95% CI)	Adjusted HR (95% CI)		Crude RR (95% CI)	Adjusted RR (95% CI)	
		Model 1	Model 2		Model 1	Model 2
Non-smoker	Reference	Reference	Reference	Reference	Reference	Reference
BMI						
<18.5	0.74 (0.69-0.80)***	0.79 (0.73-0.85)***	0.78 (0.72-0.84)***	0.81 (0.64-1.02)	0.81 (0.65-1.03)	0.80 (0.64-1.01)
18.5-24	Reference	Reference	Reference	Reference	Reference	Reference
25-29	1.16 (1.13-1.20)***	1.10 (1.06-1.13)***	1.10 (1.06-1.13)***	1.09 (1.01-1.17)*	1.07 (1.00-1.15)	1.08 (1.00-1.15)*
30-34	1.25 (1.20-1.30)***	1.12 (1.08-1.17)***	1.11 (1.07-1.16)***	1.10 (1.01-1.20)*	1.05 (0.96-1.15)	1.04 (0.95-1.13)
35-	1.32 (1.25-1.39)***	1.12 (1.06-1.18)***	1.09 (1.03-1.15)**	1.15 (1.02-1.30)*	1.04 (0.92-1.18)	1.00 (0.88-1.14)
Pre-stroke medications						
Other LLT	0.61 (0.56-0.68)***	0.57 (0.51-0.64)***	0.48 (0.43-0.54)***	1.67 (1.37-2.03)***	1.68 (1.38-2.05)***	1.47 (1.19-1.80)***

Notes: ***P-value < 0.001, **<0.01, *<0.05

Model 1: This model included demographics (age, gender, IMD) for adjustment.

Model 2: This model included demographics (age, gender, IMD), prior conditions (AF, cancer, CHD, CKD, CLD, COPD, dementia, diabetes, heart failure, hypertension, myopathy, PAD, TIA), smoking, BMI, and period of stroke for adjustment

Abbreviations: AF, atrial fibrillation; BMI, body mass index; CHD, coronary heart disease; CI, confidence interval; CKD, chronic kidney disease; CLD, chronic liver disease; COPD, chronic obstructive pulmonary disease; HR: hazard ratio; IMD, Index of Multiple Deprivation; LLT, lipid-lowering treatment; PAD, peripheral artery disease; RR: risk ratio; TIA, transient ischemic attack.

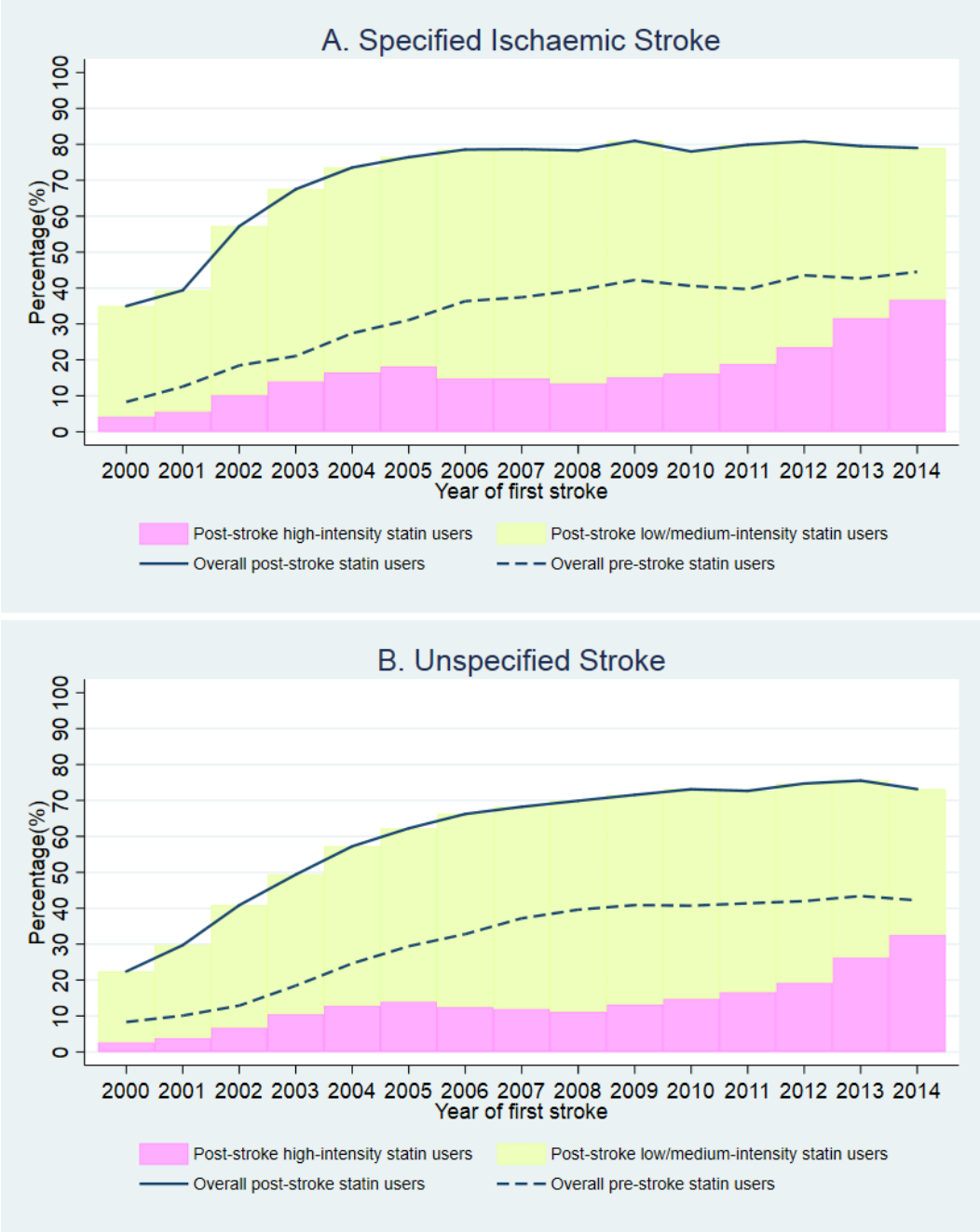

Figure S1. Trend in statin and intensity use after stroke by stroke coding (A. Specified ischemic stroke; B. Unspecified stroke)

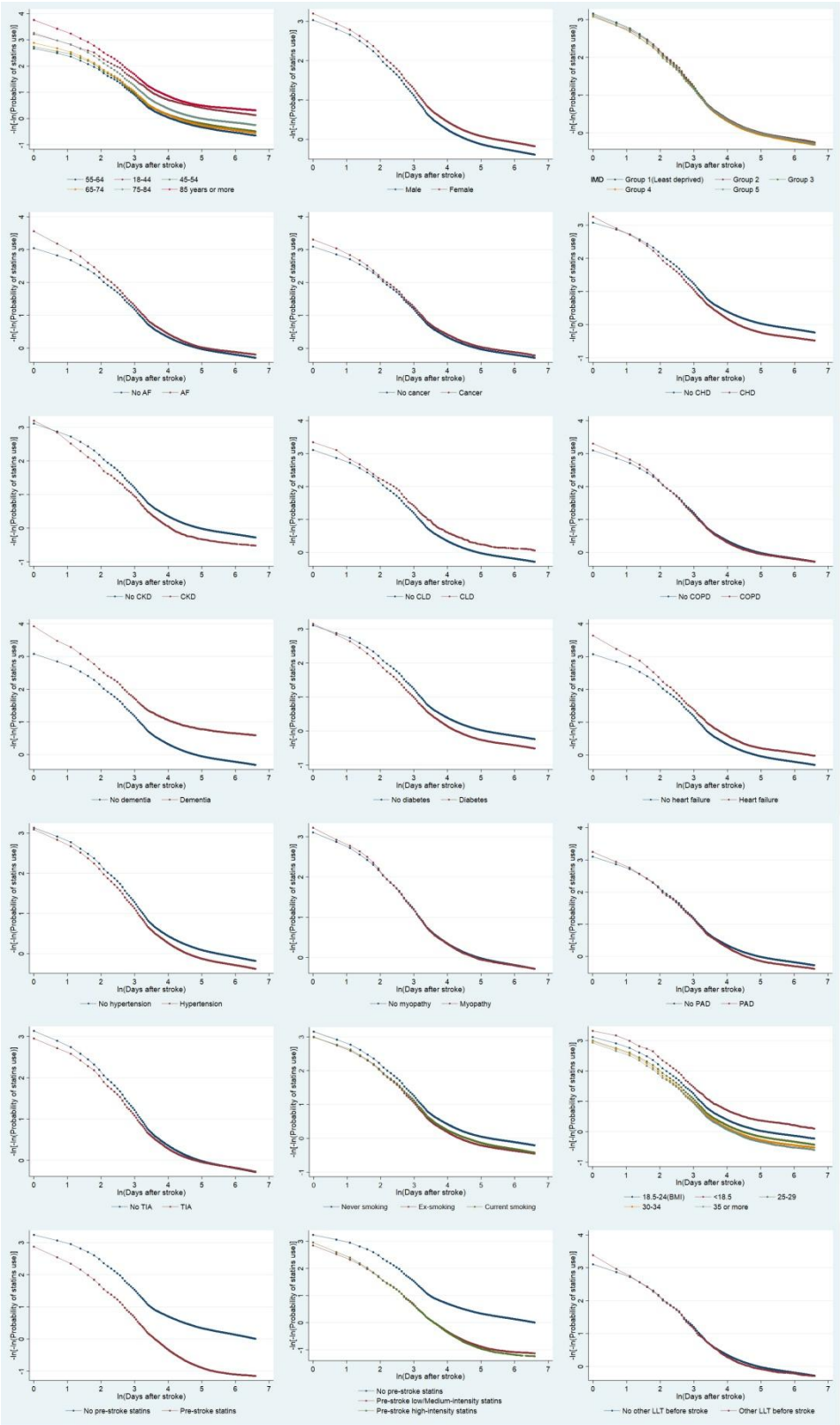

Figure S2. Log-log plots for statin use after stroke

Abbreviations: AF, atrial fibrillation; BMI, body mass index; CHD, coronary heart disease; CKD, chronic kidney disease; CLD, chronic liver disease; COPD, chronic obstructive pulmonary disease; IMD, Index of Multiple Deprivation; LLT, lipid-lowering treatment; PAD, peripheral artery disease; TIA, transient ischemic attack.

The RECORD statement – checklist of items, extended from the STROBE statement

	Item No.	STROBE items	Location in manuscript where items are reported	RECORD items	Location in manuscript where items are reported
Title and abstract					
	1	(a) Indicate the study's design with a commonly used term in the title or the abstract (b) Provide in the abstract an informative and balanced summary of what was done and what was found	(a) Title and abstract (b) Abstract	RECORD 1.1: The type of data used should be specified in the title or abstract. When possible, the name of the databases used should be included. RECORD 1.2: If applicable, the geographic region and timeframe within which the study took place should be reported in the title or abstract. RECORD 1.3: If linkage between databases was conducted for the study, this should be clearly stated in the title or abstract.	RECORD 1.1: Title and abstract RECORD 1.2: Title and abstract RECORD 13: IMD data were linked, but this was only mentioned in the Methods.
Introduction					
Background rationale	2	Explain the scientific background and rationale for the investigation being reported	The first two paragraphs		
Objectives	3	State specific objectives, including any prespecified hypotheses	The 3nd paragraph		
Methods					
Study Design	4	Present key elements of study design early in the paper	Key elements including "Study		

			population", "Statin use after stroke", and "Covariates"		
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	All have been described in the Methods: setting (general practices), location (UK), dates (1 Jan 2000 to 31 Dec 2014), exposure (see "Covariates"), follow-up (two years) and data collection (from CPRD).		
Participants	6	*(a) Cohort study* - Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up *Case-control study* - Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls *Cross-sectional study* - Give the eligibility criteria, and the sources and methods of selection of participants *(b) Cohort study* - For matched studies, give matching criteria	*(a) Cohort study* – the first two paragraphs in the Methods	RECORD 6.1: The methods of study population selection (such as codes or algorithms used to identify subjects) should be listed in detail. If this is not possible, an explanation should be provided. RECORD 6.2: Any validation studies of the codes or algorithms used to select the population should be referenced. If validation was conducted for this study and not published elsewhere, detailed methods and results should be provided. RECORD 6.3: If the study involved linkage of databases, consider use of a flow diagram or other graphical	RECORD 6.1: Stroke codes were listed in Table S1. RECORD 6.2: The methods were specified on the website provided in the 4th paragraph in the Methods. RECORD 6.3: Figure 1.

		and number of exposed and unexposed *Case-control study* - For matched studies, give matching criteria and the number of controls per case		display to demonstrate the data linkage process, including the number of individuals with linked data at each stage.	
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable.	In the sections of "Statin use after stroke" and "Covariates" in the Methods.	RECORD 7.1: A complete list of codes and algorithms used to classify exposures, outcomes, confounders, and effect modifiers should be provided. If these cannot be reported, an explanation should be provided.	RECORD 7.1: The codes for the outcome (statins) were listed in Table S2. Codes for all the factors of interest were listed on the website provided in "Covariates" section in the Methods.
Data sources/ measurement	8	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	The 1st paragraph in the Methods.		
Bias	9	Describe any efforts to address potential sources of bias	Specified in each paragraph in the Methods, for example, rigorous procedure in codes development, quality control in data cleansing, and		

			examining proportional hazards assumption.		
Study size	10	Explain how the study size was arrived at	In the section of "Study population" in the Methods. We included all eligible patients from the CPRD.		
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen, and why	In the section of "Covariates" in the Methods.		
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed (d) *Cohort study* - If applicable, explain how loss to follow-up was addressed *Case-control study* - If applicable, explain how matching of cases and controls was addressed *Cross-sectional study* - If applicable, describe analytical methods taking account of sampling strategy	(a)-(c) The section of "Statistical analysis" in the Methods. (d) *Cohort study* – the section of "Statistical analysis" in the Methods.		

		(e) Describe any sensitivity analyses	(e) The section of "Sensitivity analysis" in the Methods.		
Data access and cleaning methods		..		RECORD 12.1: Authors should describe the extent to which the investigators had access to the database population used to create the study population. RECORD 12.2: Authors should provide information on the data cleaning methods used in the study.	RECORD 12.1: the section of "Data source" in the Methods. RECORD 12.2: The section of "Statistical analysis" in the Methods and Table 3.
Linkage		..		RECORD 12.3: State whether the study included person-level, institutional-level, or other data linkage across two or more databases. The methods of linkage and methods of linkage quality evaluation should be provided.	RECORD 12.3: Figure 1.
Results					
Participants	13	(a) Report the numbers of individuals at each stage of the study (*e.g.*, numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed) (b) Give reasons for non-participation at each stage.	(a) The 1st paragraph in the Results and Figure 1. (b) Figure 1.	RECORD 13.1: Describe in detail the selection of the persons included in the study (*i.e.*, study population selection) including filtering based on data quality, data availability and linkage. The selection of included persons can be described in the text and/or by means of the study flow diagram.	RECORD 13.1: Figure 1.

		(c) Consider use of a flow diagram	(c) Figure 1.		
Descriptive data	14	(a) Give characteristics of study participants (*e.g.*, demographic, clinical, social) and information on exposures and potential confounders (b) Indicate the number of participants with missing data for each variable of interest (c) *Cohort study* - summarise follow-up time (*e.g.*, average and total amount)	(a) Table 1 and Table S4. (b) Table 1. (c) *Cohort study* – the 1st paragraph in the Results.		
Outcome data	15	*Cohort study* - Report numbers of outcome events or summary measures over time *Case-control study* - Report numbers in each exposure category, or summary measures of exposure *Cross-sectional study* - Report numbers of outcome events or summary measures	*Cohort study* –Table 1, Figures 2 and 3.		
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (e.g., 95% confidence interval). Make clear which confounders were adjusted for and why they were included (b) Report category boundaries when continuous variables were categorized	(a) Table 2. (b) Table 1.		

		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	(c) Not applicable but we did translate them into percentage risk reduction as shown in Table 3.		
Other analyses	17	Report other analyses done—e.g., analyses of subgroups and interactions, and sensitivity analyses	Figure 3, Tables S4-8 and Figures S1-2.		
Discussion					
Key results	18	Summarise key results with reference to study objectives	The 1st paragraph in the Discussion		
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	The "Strengths and limitations" section.	RECORD 19.1: Discuss the implications of using data that were not created or collected to answer the specific research question(s). Include discussion of misclassification bias, unmeasured confounding, missing data, and changing eligibility over time, as they pertain to the study being reported.	RECORD 19.1: The "Strengths and limitations" section.
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	The 1st to 6th paragraphs of the Discussion.		
Generalisability	21	Discuss the generalisability (external validity) of the study results	The last limitation mentioned in the "Strengths and limitations" section.		

Other Information					
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	No funding for this study.		
Accessibility of protocol, raw data, and programming code		..		RECORD 22.1: Authors should provide information on how to access any supplemental information such as the study protocol, raw data, or programming code.	Where applicable, the links to any relevant information or any supplementary materials were provided in the Methods or Results.

*Reference: Benchimol EI, Smeeth L, Guttmann A, Harron K, Moher D, Petersen I, Sørensen HT, von Elm E, Langan SM, the RECORD Working Committee. The REporting of studies Conducted using Observational Routinely-collected health Data (RECORD) Statement. *PLoS Medicine* 2015; in press.