

Supplemental Table S2. Comparison of estimates from complete case analysis and that obtained using multiple imputation

	Cohort	At least one fracture		Crude Hazards Ratio		Adj. Hazards Ratio**	
	N	n	row %	Est.	95% CI	Est.	95% CI
Males							
<i>Complete case analysis*</i>							
Type 2 diabetes							
No	216,229	10,836	5.0	ref		ref	
Yes	84,766	4,509	5.3	0.867	(0.837, 0.898)	0.904	(0.871, 0.937)
<i>Analysis using multiple imputation</i>							
Type 2 diabetes							
No	398,935	17,613	4.4	ref		ref	
Yes	93,270	4,956	5.3	0.961	(0.931, 0.992)	0.972	(0.940, 1.005)
Females							
<i>Complete case analysis*</i>							
Type 2 diabetes							
No	209,832	21,503	10.2	ref		ref	
Yes	71,787	7,468	10.4	0.858	(0.835, 0.880)	0.908	(0.883, 0.933)
<i>Analysis using multiple imputation</i>							
Type 2 diabetes							
No	348,355	32,559	9.3	ref		ref	
Yes	80,974	8,358	10.3	0.910	(0.889, 0.932)	0.938	(0.915, 0.962)

*Excludes anyone with missing BMI or Townsend

**Adjusted for baseline BMI, baseline Townsend, diagnosis year and age band

Supplemental Table S3. Number of fractures per person during observation period

Number of fractures per person during observation period	Type 2 diabetes:			
	Yes (N=174,244)		No (N=747,290)	
	n	col %	n	col %
Males				
0	88,314	-	381,322	-
1	3,582	72.3	12,768	72.5
2	978	19.7	3,372	19.1
3	253	5.1	960	5.5
4	81	1.6	315	1.8
5	29	0.6	111	0.6
6 or more	33	0.7	87	0.5
Females				
0	72,616	-	315,796	-
1	5,564	66.6	21,675	66.6
2	1,870	22.4	7,383	22.7
3	578	6.9	2,189	6.7
4	193	2.3	789	2.4
5	94	1.1	342	1.1
6 or more	59	0.7	181	0.6

Supplemental Table S4. Annual prevalence of fracture for those newly diagnosed with type 2 diabetes and a comparison group

	Type 2 diabetes:					
	Yes			No		
	N (full year of follow-up)	n	≥1 fracture Rate per 1,000 person-years (95% CI)	N (full year of follow-up)	n	≥1 fracture Rate per 1,000 person-years (95% CI)
Males						
Year*						
2006	3,802	106	27.9 (22.8, 33.7)	14,029	500	35.6 (32.6, 38.9)
2007	5,663	166	29.3 (25.0, 34.1)	20,535	665	32.4 (30.0, 34.9)
2008	7,682	225	29.3 (25.6, 33.4)	27,210	852	31.3 (29.2, 33.5)
2009	9,182	300	32.7 (29.1, 36.6)	32,959	1,180	35.8 (33.8, 37.9)
2010	11,095	374	33.7 (30.4, 37.3)	37,499	1,321	35.2 (33.4, 37.2)
2011	13,154	442	33.6 (30.5, 36.9)	44,405	1,431	32.2 (30.6, 33.9)
2012	14,543	438	30.1 (27.4, 33.1)	49,635	1,625	32.7 (31.2, 34.4)
2013	15,516	545	35.1 (32.2, 38.2)	52,350	1,667	31.8 (30.3, 33.4)
2014	15,955	555	34.8 (32.0, 37.8)	53,790	1,715	31.9 (30.4, 33.4)
2015	12,547	441	35.1 (31.9, 38.6)	40,966	1,285	31.4 (29.7, 33.1)
2016	10,407	363	34.9 (31.4, 38.7)	33,496	1,098	32.8 (30.9, 34.8)
2017	8,141	331	40.7 (36.4, 45.3)	26,856	937	34.9 (32.7, 37.2)
2018	7,432	279	37.5 (33.3, 42.2)	23,748	853	35.9 (33.5, 38.4)
Females						
Year*						
2006	3,846	220	57.2 (49.9, 65.3)	15,085	956	63.4 (59.4, 67.5)
2007	5,601	288	51.4 (45.7, 57.7)	21,507	1,383	64.3 (61.0, 67.8)
2008	7,434	399	53.7 (48.5, 59.2)	27,680	1,772	64.0 (61.1, 67.1)
2009	9,049	596	65.9 (60.7, 71.4)	33,225	2,316	69.7 (66.9, 72.6)
2010	10,685	713	66.7 (61.9, 71.8)	38,152	2,789	73.1 (70.4, 75.9)
2011	12,043	805	66.8 (62.3, 71.6)	42,635	2,841	66.6 (64.2, 69.1)
2012	13,072	819	62.7 (58.4, 67.1)	46,295	3,115	67.3 (64.9, 69.7)
2013	13,712	853	62.2 (58.1, 66.5)	47,814	3,338	69.8 (67.5, 72.2)
2014	13,914	952	68.4 (64.1, 72.9)	47,757	3,330	69.7 (67.4, 72.1)
2015	10,884	683	62.8 (58.1, 67.6)	36,522	2,566	70.3 (67.6, 73.0)
2016	8,948	687	76.8 (71.1, 82.7)	29,818	2,152	72.2 (69.2, 75.3)
2017	7,141	554	77.6 (71.3, 84.3)	23,955	1,955	81.6 (78.0, 85.3)
2018	6,214	502	80.8 (73.9, 88.2)	21,107	1,770	83.9 (80.0, 87.9)

*Only a very small percentage of patients had a full year of follow-up prior to 2006 so not presented