

Table S1. Preoperative characteristics of diabetes patients with and without use of metformin (before matching by propensity score)

	No metformin (N=322995)		Metformin (N=153943)		p-value
	n	(%)	n	(%)	
Sex					0.0088
Female	163216	(50.5)	77166	(50.1)	
Male	159779	(49.5)	76777	(49.9)	
Age, years					<0.0001
20-29	4397	(1.4)	2625	(1.7)	
30-39	14356	(4.4)	7032	(4.6)	
40-49	28949	(9.0)	15227	(9.9)	
50-59	67947	(21.0)	33653	(21.9)	
60-69	84246	(26.1)	42072	(27.3)	
70-79	82288	(25.5)	37209	(24.2)	
≥80	40812	(12.6)	16125	(10.5)	
Low income					<0.0001
No	313376	(97.0)	148856	(96.7)	
Yes	9619	(3.0)	5087	(3.3)	
Volume of hospital					<0.0001
Low	78121	(24.2)	59569	(38.7)	
Moderate	113302	(35.1)	49457	(32.1)	
High	131572	(40.7)	44917	(29.2)	
Medical conditions					
Hypertension	115407	(35.7)	53901	(35.0)	<0.0001
Mental disorders	63701	(19.7)	31693	(20.6)	<0.0001
Ischemic heart disease	51635	(16.0)	22382	(14.5)	<0.0001
COPD	25766	(8.0)	12383	(8.0)	0.4274
Hyperlipidemia	25122	(7.8)	10453	(6.8)	<0.0001
Liver cirrhosis	15342	(4.8)	7745	(5.0)	<0.0001
Heart failure	17102	(5.3)	7058	(4.6)	<0.0001
Alcohol-related illness	8597	(2.7)	5055	(3.3)	<0.0001
Parkinson's disease	7269	(2.3)	3469	(2.3)	0.9491
Renal dialysis	21595	(6.7)	3008	(2.0)	<0.0001
Types of surgery					<0.0001
Skin	7142	(2.2)	3310	(2.2)	
Breast	3810	(1.2)	2160	(1.4)	
Musculoskeletal	102820	(31.8)	49419	(32.1)	

Respiratory	11476	(3.6)	6161	(4.0)	
Cardiovascular	21098	(6.5)	6921	(4.5)	
Digestive	65490	(20.3)	32287	(21.0)	
Kidney, ureter, bladder	29854	(9.2)	15121	(9.8)	
Delivery, CS, abortion	8600	(2.7)	2037	(1.3)	
Neurosurgery	36972	(11.5)	19957	(13.0)	
Eye	6870	(2.1)	2925	(1.9)	
Others	28863	(8.9)	13645	(8.9)	
Types of anaesthesia					<0.0001
General	233799	(72.4)	116561	(75.7)	
Epidural or Spinal	89196	(27.6)	37382	(24.3)	
CCI score					<0.0001
1	141046	(43.7)	68671	(44.6)	
2	62434	(19.3)	30354	(19.7)	1.00
3	61294	(19.0)	26103	(17.0)	
≥4	58221	(18.0)	28815	(18.7)	
Chronic kidney disease	38698	(12.0)	9448	(6.1)	<0.0001
Prior diabetes hospitalization	22637	(7.0)	8544	(5.6)	<0.0001
Inadequate control for diabetes	68390	(21.2)	32451	(21.1)	0.4581
Diabetes-related ketoacidosis	4784	(1.5)	2115	(1.4)	0.0037
Diabetes-related coma	7114	(2.2)	2675	(1.7)	<0.0001
Diabetes-related renal manifestations	58799	(18.2)	22197	(14.4)	<0.0001
Diabetes-related eye involvement	54806	(17.0)	23504	(15.3)	<0.0001
Diabetes-related PCD	20019	(6.2)	8521	(5.5)	<0.0001
Type I diabetes	9622	(3.0)	2504	(1.6)	<0.0001
Preoperative use of insulin	34292	(10.6)	21232	(13.8)	<0.0001
Use of AGIs	67245	(20.8)	34407	(22.4)	<0.0001
Use of DPP-4	42948	(13.3)	37969	(24.7)	<0.0001
Use of meglitinides	59605	(18.5)	27549	(17.9)	<0.0001
Use of sulfonylureas	201982	(62.5)	116566	(75.7)	<0.0001

AGIs, alpha-glucosidase inhibitors; DPP-4, Dipeptidyl peptidase 4 inhibitors