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The following report(s) provides findings from an FDA-initiated query using Sentinel. While Sentinel queries may be undertaken to assess potential medical product safety risks, they may also be initiated for various other reasons. Some examples include determining a rate or count of an identified health outcome of interest, examining medical product use, exploring the feasibility of future, more detailed analyses within Sentinel, and seeking to better understand Sentinel capabilities.

Data obtained through Sentinel are intended to complement other types of evidence such as preclinical studies, clinical trials, postmarket studies, and adverse event reports, all of which are used by FDA to inform regulatory decisions regarding medical product safety. The information contained in this report is provided as part of FDA's commitment to place knowledge acquired from Sentinel in the public domain as soon as possible. Any public health actions taken by FDA regarding products involved in Sentinel queries will continue to be communicated through existing channels.

FDA wants to emphasize that the fact that FDA has initiated a query involving a medical product and is reporting findings related to that query does not mean that FDA is suggesting health care practitioners should change their prescribing practices for the medical product or that patients taking the medical product should stop using it. Patients who have questions about the use of an identified medical product should contact their health care practitioners.

The following report contains a description of the request, request specifications, and results from the Query Builder analysis.

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Overview

Query Builder Report: This report details the results of an analysis generated by the Sentinel Query Builder application. Query Builder enables FDA to visualize, draft, and create standardized medical product utilization queries examining dispensing patterns and cohort characteristics using a set of pre-defined parameters. This is a Type 5 (Medical Product Utilization) analysis as described in the Query Request Package (QRP) documentation.

Request Description: This request assessed utilization patterns for SGLT2 inhibitors including canagliflozin, dapagliflozin, empagliflozin, ertugliflozin, and sitagliptin. Patients were assessed with an inclusion requirement of Type 1 diabetes mellitus diagnosis in addition to evidence of rapid insulin use, with an exclusion requirement of evidence of use of oral antidiabetics not including metformin. Patients were assessed separately with an inclusion requirement of Type 2 diabetes mellitus diagnosis in addition to evidence of use of oral antidiabetics including metformin, with an exclusion requirement of Type 1 diabetes mellitus diagnosis.

Sentinel Routine Querying Module: Cohort Identification and Descriptive Analysis (CIDA) module, version 10.4.0.

Data Source: We executed this request on IBM® MarketScan® Commercial Claims and Encounters Database and Medicare Supplemental Database, which included 149 million members, on September 9, 2021. The study period included data from January 1, 2010 to September 30, 2020. Please see Appendix A for data availability dates.

Limitations: Algorithms used to define exposures and inclusion and exclusion criteria are imperfect; thus it is possible that there may be misclassification. Therefore, data should be interpreted with these limitations in mind.

Notes: Please contact the Sentinel Operations Center (info@sentinelssystem.org) for questions and to provide comments/suggestions for future enhancements to this document. For more information on Sentinel Query Builder, please refer to the documentation (<https://dev.sentinelssystem.org/projects/QB/repos/querybuilder/browse>).

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Table 1a: Baseline table (Type 1 Diabetes and Canagliflozin Only)		
Characteristic¹	N/Mean	%/Std Dev²
Number of unique patients	4,999	
Demographics		
Mean Age	53.7	12.7
Age: 00-17	17	0.3%
Age: 18-24	134	2.7%
Age: 25-40	632	12.6%
Age: 41-64	3,424	68.5%
Age: 65+	792	15.8%
Sex (Female)	2,443	48.9%
Sex (Male)	2,556	51.1%
Race (American Indian or Alaska Native)	0	0.0%
Race (Asian)	0	0.0%
Race (Black or African American)	0	0.0%
Race (Native Hawaiian or Other Pacific Islander)	0	0.0%
Race (Unknown)	4,999	100.0%
Race (White)	0	0.0%
Hispanic Origin	0	0.0%
Year (2010)	0	0.0%
Year (2011)	-	-
Year (2012)	-	-
Year (2013)	785	15.7%
Year (2014)	1,891	37.8%
Year (2015)	1,450	29.0%
Year (2016)	465	9.3%
Year (2017)	195	3.9%
Year (2018)	113	2.3%
Year (2019)	65	1.3%
Year (2020)	35	0.7%
Recorded history of:		
Prior combined comorbidity score	1.1	1.8
Acquired Hypothyroidism	1,159	23.2%
Acute Myocardial Infarction	63	1.3%
Alzheimer's Disease	9	0.2%
Alzheimer's Disease, Related Disorders, or Senile Dementia	38	0.8%
Anemia	608	12.2%
Asthma	433	8.7%
Atrial Fibrillation	204	4.1%
Benign Prostatic Hyperplasia	268	5.4%
Breast Cancer	76	1.5%
Cataracts	1,049	21.0%
Chronic Kidney Disease	1,418	28.4%
Chronic Obstructive Pulmonary Disease	476	9.5%
Colorectal Cancer	32	0.6%
Depression	715	14.3%
Diabetes	4,999	100.0%
Endometrial Cancer	15	0.3%
Glaucoma	615	12.3%
Heart Failure	286	5.7%
Hip / Pelvic Fracture	14	0.3%
Hyperlipidemia	3,802	76.1%
Hypertension	3,606	72.1%
Ischemic Heart Disease	1,017	20.3%

Table 1a: Baseline table (Type 1 Diabetes and Canagliflozin Only)		
Characteristic¹	N/Mean	%/Std Dev²
Lung Cancer	11	0.2%
Osteoporosis	89	1.8%
Prostate Cancer	55	1.1%
Rheumatoid Arthritis / Osteoarthritis	1,057	21.1%
Stroke / Transient Ischemic Attack	162	3.2%
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	20.5	15.9
Mean number of emergency room encounters (ED)	0.5	1.3
Mean number of inpatient hospital encounters (IP)	0.2	0.6
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	6.1	8.2
Mean number of filled prescriptions	44.5	30.2
Mean number of generics	13.8	6.7
Mean number of unique drug classes	11.5	5.7
¹ All metrics based on total number of unique patients		
² Value represents standard deviation where no % follows the value		

Table 1b: Baseline table (Type 1 Diabetes and Dapagliflozin Only)		
Characteristic¹	N/Mean	%/Std Dev²
Number of unique patients	2,443	
Demographics		
Mean Age	51.2	11.7
Age: 00-17	7	0.3%
Age: 18-24	64	2.6%
Age: 25-40	393	16.1%
Age: 41-64	1,798	73.6%
Age: 65+	181	7.4%
Sex (Female)	1,228	50.3%
Sex (Male)	1,215	49.7%
Race (American Indian or Alaska Native)	0	0.0%
Race (Asian)	0	0.0%
Race (Black or African American)	0	0.0%
Race (Native Hawaiian or Other Pacific Islander)	0	0.0%
Race (Unknown)	2,443	100.0%
Race (White)	0	0.0%
Hispanic Origin	0	0.0%
Year (2010)	0	0.0%
Year (2011)	-	-
Year (2012)	-	-
Year (2013)	-	-
Year (2014)	740	30.3%
Year (2015)	398	16.3%
Year (2016)	424	17.4%
Year (2017)	249	10.2%
Year (2018)	255	10.4%
Year (2019)	197	8.1%
Year (2020)	180	7.4%
Recorded history of:		
Prior combined comorbidity score	1.3	1.9
Acquired Hypothyroidism	578	23.7%
Acute Myocardial Infarction	26	1.1%
Alzheimer's Disease	2	0.1%
Alzheimer's Disease, Related Disorders, or Senile Dementia	11	0.5%
Anemia	344	14.1%
Asthma	194	7.9%
Atrial Fibrillation	77	3.2%
Benign Prostatic Hyperplasia	104	4.3%
Breast Cancer	43	1.8%
Cataracts	465	19.0%
Chronic Kidney Disease	1,257	51.5%
Chronic Obstructive Pulmonary Disease	192	7.9%
Colorectal Cancer	13	0.5%
Depression	374	15.3%
Diabetes	2,443	100.0%
Endometrial Cancer	5	0.2%
Glaucoma	233	9.5%
Heart Failure	143	5.9%
Hip / Pelvic Fracture	5	0.2%
Hyperlipidemia	1,868	76.5%
Hypertension	1,781	72.9%
Ischemic Heart Disease	393	16.1%

Table 1b: Baseline table (Type 1 Diabetes and Dapagliflozin Only)

Characteristic ¹	N/Mean	%/Std Dev ²
Lung Cancer	4	0.2%
Osteoporosis	34	1.4%
Prostate Cancer	26	1.1%
Rheumatoid Arthritis / Osteoarthritis	502	20.5%
Stroke / Transient Ischemic Attack	70	2.9%
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	19.9	15.8
Mean number of emergency room encounters (ED)	0.7	1.7
Mean number of inpatient hospital encounters (IP)	0.2	0.7
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	6.1	9.5
Mean number of filled prescriptions	43.5	29.4
Mean number of generics	13.7	6.7
Mean number of unique drug classes	11.3	5.7

¹All metrics based on total number of unique patients

²Value represents standard deviation where no % follows the value

Table 1c: Baseline table (Type 1 Diabetes and Empagliflozin Only)		
Characteristic¹	N/Mean	%/Std Dev²
Number of unique patients	2,945	
Demographics		
Mean Age	53.0	12.1
Age: 00-17	6	0.2%
Age: 18-24	67	2.3%
Age: 25-40	401	13.6%
Age: 41-64	2,130	72.3%
Age: 65+	341	11.6%
Sex (Female)	1,358	46.1%
Sex (Male)	1,587	53.9%
Race (American Indian or Alaska Native)	0	0.0%
Race (Asian)	0	0.0%
Race (Black or African American)	0	0.0%
Race (Native Hawaiian or Other Pacific Islander)	0	0.0%
Race (Unknown)	2,945	100.0%
Race (White)	0	0.0%
Hispanic Origin	0	0.0%
Year (2010)	0	0.0%
Year (2011)	-	-
Year (2012)	-	-
Year (2013)	-	-
Year (2014)	171	5.8%
Year (2015)	439	14.9%
Year (2016)	473	16.1%
Year (2017)	548	18.6%
Year (2018)	384	13.0%
Year (2019)	565	19.2%
Year (2020)	365	12.4%
Recorded history of:		
Prior combined comorbidity score	1.7	2.0
Acquired Hypothyroidism	669	22.7%
Acute Myocardial Infarction	89	3.0%
Alzheimer's Disease	1	0.0%
Alzheimer's Disease, Related Disorders, or Senile Dementia	16	0.5%
Anemia	436	14.8%
Asthma	242	8.2%
Atrial Fibrillation	147	5.0%
Benign Prostatic Hyperplasia	174	5.9%
Breast Cancer	37	1.3%
Cataracts	709	24.1%
Chronic Kidney Disease	2,084	70.8%
Chronic Obstructive Pulmonary Disease	263	8.9%
Colorectal Cancer	17	0.6%
Depression	481	16.3%
Diabetes	2,945	100.0%
Endometrial Cancer	10	0.3%
Glaucoma	319	10.8%
Heart Failure	264	9.0%
Hip / Pelvic Fracture	4	0.1%
Hyperlipidemia	2,361	80.2%
Hypertension	2,249	76.4%
Ischemic Heart Disease	728	24.7%

Table 1c: Baseline table (Type 1 Diabetes and Empagliflozin Only)

Characteristic ¹	N/Mean	%/Std Dev ²
Lung Cancer	4	0.1%
Osteoporosis	54	1.8%
Prostate Cancer	26	0.9%
Rheumatoid Arthritis / Osteoarthritis	676	23.0%
Stroke / Transient Ischemic Attack	123	4.2%
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	22.5	18.0
Mean number of emergency room encounters (ED)	0.7	2.0
Mean number of inpatient hospital encounters (IP)	0.3	0.7
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	6.5	8.5
Mean number of filled prescriptions	45.7	30.5
Mean number of generics	14.3	6.9
Mean number of unique drug classes	11.7	5.8

¹All metrics based on total number of unique patients

²Value represents standard deviation where no % follows the value

Table 1d: Baseline table (Type 1 Diabetes and Ertugliflozin Only)		
Characteristic¹	N/Mean	%/Std Dev²
Number of unique patients	24	
Demographics		
Mean Age	49.7	13.0
Age: 00-17	-	-
Age: 18-24	1	4.2%
Age: 25-40	6	25.0%
Age: 41-64	15	62.5%
Age: 65+	2	8.3%
Sex (Female)	12	50.0%
Sex (Male)	12	50.0%
Race (American Indian or Alaska Native)	0	0.0%
Race (Asian)	0	0.0%
Race (Black or African American)	0	0.0%
Race (Native Hawaiian or Other Pacific Islander)	0	0.0%
Race (Unknown)	24	100.0%
Race (White)	0	0.0%
Hispanic Origin	0	0.0%
Year (2010)	0	0.0%
Year (2011)	-	-
Year (2012)	-	-
Year (2013)	-	-
Year (2014)	-	-
Year (2015)	-	-
Year (2016)	-	-
Year (2017)	-	-
Year (2018)	4	16.7%
Year (2019)	15	62.5%
Year (2020)	5	20.8%
Recorded history of:		
Prior combined comorbidity score	1.7	2.0
Acquired Hypothyroidism	4	16.7%
Acute Myocardial Infarction	0	0.0%
Alzheimer's Disease	0	0.0%
Alzheimer's Disease, Related Disorders, or Senile Dementia	0	0.0%
Anemia	4	16.7%
Asthma	2	8.3%
Atrial Fibrillation	0	0.0%
Benign Prostatic Hyperplasia	1	4.2%
Breast Cancer	1	4.2%
Cataracts	7	29.2%
Chronic Kidney Disease	20	83.3%
Chronic Obstructive Pulmonary Disease	1	4.2%
Colorectal Cancer	0	0.0%
Depression	5	20.8%
Diabetes	24	100.0%
Endometrial Cancer	0	0.0%
Glaucoma	1	4.2%
Heart Failure	0	0.0%
Hip / Pelvic Fracture	0	0.0%
Hyperlipidemia	16	66.7%
Hypertension	14	58.3%
Ischemic Heart Disease	2	8.3%

Table 1d: Baseline table (Type 1 Diabetes and Ertugliflozin Only)

Characteristic ¹	N/Mean	%/Std Dev ²
Lung Cancer	0	0.0%
Osteoporosis	1	4.2%
Prostate Cancer	0	0.0%
Rheumatoid Arthritis / Osteoarthritis	8	33.3%
Stroke / Transient Ischemic Attack	0	0.0%
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	22.5	17.2
Mean number of emergency room encounters (ED)	0.4	0.8
Mean number of inpatient hospital encounters (IP)	0.1	0.3
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	3.3	3.2
Mean number of filled prescriptions	41.1	24.4
Mean number of generics	12.6	6.2
Mean number of unique drug classes	10.0	5.1
¹ All metrics based on total number of unique patients		
² Value represents standard deviation where no % follows the value		

Table 1e: Baseline table (Type 1 Diabetes and Sitagliptin Only)		
Characteristic¹	N/Mean	%/Std Dev²
Number of unique patients	4,780	
Demographics		
Mean Age	59.8	14.6
Age: 00-17	17	0.4%
Age: 18-24	80	1.7%
Age: 25-40	399	8.3%
Age: 41-64	2,648	55.4%
Age: 65+	1,636	34.2%
Sex (Female)	2,477	51.8%
Sex (Male)	2,303	48.2%
Race (American Indian or Alaska Native)	0	0.0%
Race (Asian)	0	0.0%
Race (Black or African American)	0	0.0%
Race (Native Hawaiian or Other Pacific Islander)	0	0.0%
Race (Unknown)	4,780	100.0%
Race (White)	0	0.0%
Hispanic Origin	0	0.0%
Year (2010)	0	0.0%
Year (2011)	827	17.3%
Year (2012)	869	18.2%
Year (2013)	589	12.3%
Year (2014)	631	13.2%
Year (2015)	551	11.5%
Year (2016)	496	10.4%
Year (2017)	329	6.9%
Year (2018)	209	4.4%
Year (2019)	189	4.0%
Year (2020)	90	1.9%
Recorded history of:		
Prior combined comorbidity score	2.5	3.0
Acquired Hypothyroidism	901	18.8%
Acute Myocardial Infarction	182	3.8%
Alzheimer's Disease	83	1.7%
Alzheimer's Disease, Related Disorders, or Senile Dementia	272	5.7%
Anemia	1,170	24.5%
Asthma	482	10.1%
Atrial Fibrillation	465	9.7%
Benign Prostatic Hyperplasia	326	6.8%
Breast Cancer	100	2.1%
Cataracts	1,136	23.8%
Chronic Kidney Disease	2,207	46.2%
Chronic Obstructive Pulmonary Disease	772	16.2%
Colorectal Cancer	53	1.1%
Depression	840	17.6%
Diabetes	4,780	100.0%
Endometrial Cancer	14	0.3%
Glaucoma	614	12.8%
Heart Failure	847	17.7%
Hip / Pelvic Fracture	49	1.0%
Hyperlipidemia	3,424	71.6%
Hypertension	3,828	80.1%
Ischemic Heart Disease	1,562	32.7%

Table 1e: Baseline table (Type 1 Diabetes and Sitagliptin Only)

Characteristic ¹	N/Mean	%/Std Dev ²
Lung Cancer	22	0.5%
Osteoporosis	168	3.5%
Prostate Cancer	96	2.0%
Rheumatoid Arthritis / Osteoarthritis	1,310	27.4%
Stroke / Transient Ischemic Attack	478	10.0%
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	23.6	21.7
Mean number of emergency room encounters (ED)	1.1	2.7
Mean number of inpatient hospital encounters (IP)	0.7	1.2
Mean number of non-acute institutional encounters (IS)	0.0	0.1
Mean number of other ambulatory encounters (OA)	9.9	17.2
Mean number of filled prescriptions	48.1	33.9
Mean number of generics	15.4	7.4
Mean number of unique drug classes	12.8	6.3

¹All metrics based on total number of unique patients

²Value represents standard deviation where no % follows the value

Table 1f: Baseline table (Type 2 Diabetes and Canagliflozin Only)		
Characteristic¹	N/Mean	%/Std Dev²
Number of unique patients	112,742	
Demographics		
Mean Age	56.0	9.8
Age: 00-17	16	0.0%
Age: 18-24	254	0.2%
Age: 25-40	7,278	6.5%
Age: 41-64	89,600	79.5%
Age: 65+	15,594	13.8%
Sex (Female)	49,462	43.9%
Sex (Male)	63,280	56.1%
Race (American Indian or Alaska Native)	0	0.0%
Race (Asian)	0	0.0%
Race (Black or African American)	0	0.0%
Race (Native Hawaiian or Other Pacific Islander)	0	0.0%
Race (Unknown)	112,742	100.0%
Race (White)	0	0.0%
Hispanic Origin	0	0.0%
Year (2010)	0	0.0%
Year (2011)	-	-
Year (2012)	-	-
Year (2013)	13,311	11.8%
Year (2014)	31,595	28.0%
Year (2015)	31,672	28.1%
Year (2016)	14,690	13.0%
Year (2017)	8,627	7.7%
Year (2018)	8,150	7.2%
Year (2019)	2,727	2.4%
Year (2020)	1,970	1.7%
Recorded history of:		
Prior combined comorbidity score	0.4	1.5
Acquired Hypothyroidism	16,712	14.8%
Acute Myocardial Infarction	755	0.7%
Alzheimer's Disease	104	0.1%
Alzheimer's Disease, Related Disorders, or Senile Dementia	405	0.4%
Anemia	10,771	9.6%
Asthma	7,341	6.5%
Atrial Fibrillation	3,482	3.1%
Benign Prostatic Hyperplasia	5,825	5.2%
Breast Cancer	1,804	1.6%
Cataracts	15,798	14.0%
Chronic Kidney Disease	28,707	25.5%
Chronic Obstructive Pulmonary Disease	7,487	6.6%
Colorectal Cancer	620	0.5%
Depression	11,469	10.2%
Diabetes	112,741	100.0%
Endometrial Cancer	343	0.3%
Glaucoma	9,163	8.1%
Heart Failure	3,238	2.9%
Hip / Pelvic Fracture	89	0.1%
Hyperlipidemia	87,537	77.6%
Hypertension	86,450	76.7%
Ischemic Heart Disease	14,217	12.6%

Table 1f: Baseline table (Type 2 Diabetes and Canagliflozin Only)		
Characteristic¹	N/Mean	%/Std Dev²
Lung Cancer	171	0.2%
Osteoporosis	1,481	1.3%
Prostate Cancer	1,367	1.2%
Rheumatoid Arthritis / Osteoarthritis	20,390	18.1%
Stroke / Transient Ischemic Attack	2,167	1.9%
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	14.3	12.6
Mean number of emergency room encounters (ED)	0.3	0.9
Mean number of inpatient hospital encounters (IP)	0.1	0.4
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	3.0	4.8
Mean number of filled prescriptions	41.1	26.8
Mean number of generics	11.8	5.6
Mean number of unique drug classes	9.2	4.8
¹ All metrics based on total number of unique patients ² Value represents standard deviation where no % follows the value		

Table 1g: Baseline table (Type 2 Diabetes and Dapagliflozin Only)		
Characteristic¹	N/Mean	%/Std Dev²
Number of unique patients	101,644	
Demographics		
Mean Age	54.6	9.2
Age: 00-17	6	0.0%
Age: 18-24	314	0.3%
Age: 25-40	7,763	7.6%
Age: 41-64	86,076	84.7%
Age: 65+	7,485	7.4%
Sex (Female)	44,573	43.9%
Sex (Male)	57,071	56.1%
Race (American Indian or Alaska Native)	0	0.0%
Race (Asian)	0	0.0%
Race (Black or African American)	0	0.0%
Race (Native Hawaiian or Other Pacific Islander)	0	0.0%
Race (Unknown)	101,644	100.0%
Race (White)	0	0.0%
Hispanic Origin	0	0.0%
Year (2010)	0	0.0%
Year (2011)	-	-
Year (2012)	-	-
Year (2013)	-	-
Year (2014)	14,538	14.3%
Year (2015)	10,623	10.5%
Year (2016)	21,608	21.3%
Year (2017)	13,941	13.7%
Year (2018)	18,483	18.2%
Year (2019)	11,951	11.8%
Year (2020)	10,500	10.3%
Recorded history of:		
Prior combined comorbidity score	0.6	1.5
Acquired Hypothyroidism	14,924	14.7%
Acute Myocardial Infarction	826	0.8%
Alzheimer's Disease	58	0.1%
Alzheimer's Disease, Related Disorders, or Senile Dementia	268	0.3%
Anemia	9,753	9.6%
Asthma	6,589	6.5%
Atrial Fibrillation	2,615	2.6%
Benign Prostatic Hyperplasia	4,961	4.9%
Breast Cancer	1,454	1.4%
Cataracts	13,159	12.9%
Chronic Kidney Disease	43,479	42.8%
Chronic Obstructive Pulmonary Disease	6,241	6.1%
Colorectal Cancer	493	0.5%
Depression	10,987	10.8%
Diabetes	101,644	100.0%
Endometrial Cancer	290	0.3%
Glaucoma	7,203	7.1%
Heart Failure	2,791	2.7%
Hip / Pelvic Fracture	82	0.1%
Hyperlipidemia	80,436	79.1%
Hypertension	78,454	77.2%
Ischemic Heart Disease	11,080	10.9%

Table 1g: Baseline table (Type 2 Diabetes and Dapagliflozin Only)

Characteristic ¹	N/Mean	%/Std Dev ²
Lung Cancer	157	0.2%
Osteoporosis	1,081	1.1%
Prostate Cancer	971	1.0%
Rheumatoid Arthritis / Osteoarthritis	17,821	17.5%
Stroke / Transient Ischemic Attack	1,779	1.8%
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	13.6	12.2
Mean number of emergency room encounters (ED)	0.3	0.9
Mean number of inpatient hospital encounters (IP)	0.1	0.3
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	3.0	4.7
Mean number of filled prescriptions	39.4	26.2
Mean number of generics	11.7	5.6
Mean number of unique drug classes	9.1	4.8

¹All metrics based on total number of unique patients

²Value represents standard deviation where no % follows the value

Table 1h: Baseline table (Type 2 Diabetes and Empagliflozin Only)		
Characteristic¹	N/Mean	%/Std Dev²
Number of unique patients	127,258	
Demographics		
Mean Age	55.6	9.5
Age: 00-17	13	0.0%
Age: 18-24	343	0.3%
Age: 25-40	8,421	6.6%
Age: 41-64	105,433	82.8%
Age: 65+	13,048	10.3%
Sex (Female)	53,074	41.7%
Sex (Male)	74,184	58.3%
Race (American Indian or Alaska Native)	0	0.0%
Race (Asian)	0	0.0%
Race (Black or African American)	0	0.0%
Race (Native Hawaiian or Other Pacific Islander)	0	0.0%
Race (Unknown)	127,258	100.0%
Race (White)	0	0.0%
Hispanic Origin	0	0.0%
Year (2010)	0	0.0%
Year (2011)	-	-
Year (2012)	-	-
Year (2013)	-	-
Year (2014)	2,828	2.2%
Year (2015)	9,307	7.3%
Year (2016)	19,309	15.2%
Year (2017)	24,142	19.0%
Year (2018)	16,605	13.0%
Year (2019)	32,636	25.6%
Year (2020)	22,431	17.6%
Recorded history of:		
Prior combined comorbidity score	0.9	1.6
Acquired Hypothyroidism	19,165	15.1%
Acute Myocardial Infarction	2,176	1.7%
Alzheimer's Disease	99	0.1%
Alzheimer's Disease, Related Disorders, or Senile Dementia	414	0.3%
Anemia	13,178	10.4%
Asthma	8,674	6.8%
Atrial Fibrillation	4,494	3.5%
Benign Prostatic Hyperplasia	7,131	5.6%
Breast Cancer	1,986	1.6%
Cataracts	19,357	15.2%
Chronic Kidney Disease	69,147	54.3%
Chronic Obstructive Pulmonary Disease	8,334	6.5%
Colorectal Cancer	669	0.5%
Depression	14,778	11.6%
Diabetes	127,253	100.0%
Endometrial Cancer	416	0.3%
Glaucoma	10,030	7.9%
Heart Failure	4,986	3.9%
Hip / Pelvic Fracture	112	0.1%
Hyperlipidemia	102,774	80.8%
Hypertension	99,540	78.2%
Ischemic Heart Disease	19,333	15.2%

Table 1h: Baseline table (Type 2 Diabetes and Empagliflozin Only)

Characteristic ¹	N/Mean	%/Std Dev ²
Lung Cancer	205	0.2%
Osteoporosis	1,459	1.1%
Prostate Cancer	1,527	1.2%
Rheumatoid Arthritis / Osteoarthritis	24,196	19.0%
Stroke / Transient Ischemic Attack	2,838	2.2%
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	14.8	13.1
Mean number of emergency room encounters (ED)	0.4	1.0
Mean number of inpatient hospital encounters (IP)	0.1	0.4
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	3.2	5.1
Mean number of filled prescriptions	40.4	26.7
Mean number of generics	11.9	5.7
Mean number of unique drug classes	9.3	4.9

¹All metrics based on total number of unique patients

²Value represents standard deviation where no % follows the value

Table 1i: Baseline table (Type 2 Diabetes and Ertugliflozin Only)		
Characteristic¹	N/Mean	%/Std Dev²
Number of unique patients	2,265	
Demographics		
Mean Age	54.2	9.2
Age: 00-17	-	-
Age: 18-24	12	0.5%
Age: 25-40	184	8.1%
Age: 41-64	1,935	85.4%
Age: 65+	134	5.9%
Sex (Female)	988	43.6%
Sex (Male)	1,277	56.4%
Race (American Indian or Alaska Native)	0	0.0%
Race (Asian)	0	0.0%
Race (Black or African American)	0	0.0%
Race (Native Hawaiian or Other Pacific Islander)	0	0.0%
Race (Unknown)	2,265	100.0%
Race (White)	0	0.0%
Hispanic Origin	0	0.0%
Year (2010)	0	0.0%
Year (2011)	-	-
Year (2012)	-	-
Year (2013)	-	-
Year (2014)	-	-
Year (2015)	-	-
Year (2016)	-	-
Year (2017)	-	-
Year (2018)	533	23.5%
Year (2019)	1,119	49.4%
Year (2020)	613	27.1%
Recorded history of:		
Prior combined comorbidity score	0.8	1.5
Acquired Hypothyroidism	350	15.5%
Acute Myocardial Infarction	24	1.1%
Alzheimer's Disease	1	0.0%
Alzheimer's Disease, Related Disorders, or Senile Dementia	4	0.2%
Anemia	219	9.7%
Asthma	125	5.5%
Atrial Fibrillation	56	2.5%
Benign Prostatic Hyperplasia	112	4.9%
Breast Cancer	32	1.4%
Cataracts	277	12.2%
Chronic Kidney Disease	1,330	58.7%
Chronic Obstructive Pulmonary Disease	128	5.7%
Colorectal Cancer	10	0.4%
Depression	274	12.1%
Diabetes	2,265	100.0%
Endometrial Cancer	6	0.3%
Glaucoma	165	7.3%
Heart Failure	57	2.5%
Hip / Pelvic Fracture	3	0.1%
Hyperlipidemia	1,824	80.5%
Hypertension	1,749	77.2%
Ischemic Heart Disease	214	9.4%

Table 1i: Baseline table (Type 2 Diabetes and Ertugliflozin Only)

Characteristic ¹	N/Mean	%/Std Dev ²
Lung Cancer	5	0.2%
Osteoporosis	20	0.9%
Prostate Cancer	21	0.9%
Rheumatoid Arthritis / Osteoarthritis	393	17.4%
Stroke / Transient Ischemic Attack	30	1.3%
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	13.9	12.9
Mean number of emergency room encounters (ED)	0.3	0.9
Mean number of inpatient hospital encounters (IP)	0.1	0.3
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	3.0	4.1
Mean number of filled prescriptions	38.3	24.0
Mean number of generics	11.6	5.4
Mean number of unique drug classes	9.0	4.7
¹ All metrics based on total number of unique patients		
² Value represents standard deviation where no % follows the value		

Table 1j: Baseline table (Type 2 Diabetes and Sitagliptin Only)		
Characteristic¹	N/Mean	%/Std Dev²
Number of unique patients	316,603	
Demographics		
Mean Age	58.1	11.6
Age: 00-17	69	0.0%
Age: 18-24	774	0.2%
Age: 25-40	19,786	6.2%
Age: 41-64	227,606	71.9%
Age: 65+	68,368	21.6%
Sex (Female)	144,156	45.5%
Sex (Male)	172,447	54.5%
Race (American Indian or Alaska Native)	0	0.0%
Race (Asian)	0	0.0%
Race (Black or African American)	0	0.0%
Race (Native Hawaiian or Other Pacific Islander)	0	0.0%
Race (Unknown)	316,603	100.0%
Race (White)	0	0.0%
Hispanic Origin	0	0.0%
Year (2010)	0	0.0%
Year (2011)	47,161	14.9%
Year (2012)	50,814	16.0%
Year (2013)	33,957	10.7%
Year (2014)	35,958	11.4%
Year (2015)	30,011	9.5%
Year (2016)	33,546	10.6%
Year (2017)	28,010	8.8%
Year (2018)	21,868	6.9%
Year (2019)	23,148	7.3%
Year (2020)	12,130	3.8%
Recorded history of:		
Prior combined comorbidity score	0.7	1.9
Acquired Hypothyroidism	41,552	13.1%
Acute Myocardial Infarction	3,598	1.1%
Alzheimer's Disease	1,244	0.4%
Alzheimer's Disease, Related Disorders, or Senile Dementia	3,923	1.2%
Anemia	37,137	11.7%
Asthma	20,776	6.6%
Atrial Fibrillation	14,543	4.6%
Benign Prostatic Hyperplasia	18,922	6.0%
Breast Cancer	6,158	1.9%
Cataracts	45,360	14.3%
Chronic Kidney Disease	86,690	27.4%
Chronic Obstructive Pulmonary Disease	25,324	8.0%
Colorectal Cancer	2,338	0.7%
Depression	31,433	9.9%
Diabetes	316,603	100.0%
Endometrial Cancer	1,065	0.3%
Glaucoma	27,151	8.6%
Heart Failure	15,729	5.0%
Hip / Pelvic Fracture	841	0.3%
Hyperlipidemia	224,506	70.9%
Hypertension	233,280	73.7%
Ischemic Heart Disease	47,054	14.9%

Table 1j: Baseline table (Type 2 Diabetes and Sitagliptin Only)

Characteristic ¹	N/Mean	%/Std Dev ²
Lung Cancer	1,052	0.3%
Osteoporosis	5,847	1.8%
Prostate Cancer	5,595	1.8%
Rheumatoid Arthritis / Osteoarthritis	59,838	18.9%
Stroke / Transient Ischemic Attack	9,582	3.0%
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	14.4	13.5
Mean number of emergency room encounters (ED)	0.4	1.1
Mean number of inpatient hospital encounters (IP)	0.2	0.5
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	3.3	6.6
Mean number of filled prescriptions	37.7	26.3
Mean number of generics	11.3	5.7
Mean number of unique drug classes	9.0	4.9

¹All metrics based on total number of unique patients

²Value represents standard deviation where no % follows the value

Table 2a: Distribution of cumulative exposure duration, by length categories, in days													
Exposures	Total Patients		1-30		31-90		91-365		366-730		731+		
	N	%	N	%	N	%	N	%	N	%	N	%	
Type 1 Diabetes and Canagliflozin Only	4,999	100.0	108	2.2	902	18.0	1,894	37.9	1,014	20.3	1,081	21.6	
Type 1 Diabetes and Dapagliflozin Only	2,443	100.0	81	3.3	490	20.1	971	39.7	449	18.4	452	18.5	
Type 1 Diabetes and Empagliflozin Only	2,945	100.0	104	3.5	588	20.0	1,161	39.4	612	20.8	480	16.3	
Type 1 Diabetes and Ertugliflozin Only	24	100.0	1	4.2	7	29.2	10	41.7	6	25.0	0	0.0	
Type 1 Diabetes and Sitagliptin Only	4,780	100.0	161	3.4	1,144	23.9	1,888	39.5	846	17.7	741	15.5	
Type 2 Diabetes and Canagliflozin Only	112,742	100.0	2,680	2.4	19,607	17.4	42,856	38.0	23,927	21.2	23,672	21.0	
Type 2 Diabetes and Dapagliflozin Only	101,644	100.0	3,300	3.2	17,435	17.2	37,951	37.3	21,081	20.7	21,877	21.5	
Type 2 Diabetes and Empagliflozin Only	127,258	100.0	5,017	3.9	21,638	17.0	53,097	41.7	29,501	23.2	18,005	14.1	
Type 2 Diabetes and Ertugliflozin Only	2,265	100.0	83	3.7	477	21.1	1,094	48.3	558	24.6	53	2.3	
Type 2 Diabetes and Sitagliptin Only	316,603	100.0	8,771	2.8	53,236	16.8	114,678	36.2	66,239	20.9	73,679	23.3	

Table 2b: Distribution of cumulative exposure duration, by length categories, in days, by sex												
Exposures	Total Patients		1-30		31-90		91-365		366-730		731+	
	N	%	N	%	N	%	N	%	N	%	N	%
Type 1 Diabetes and Canagliflozin Only	4,999	100.0	108	100.0	902	100.0	1,894	100.0	1,014	100.0	1,081	100.0
Female	2,443	48.9	47	43.5	479	53.1	988	52.2	488	48.1	441	40.8
Male	2,556	51.1	61	56.5	423	46.9	906	47.8	526	51.9	640	59.2
Type 1 Diabetes and Dapagliflozin Only	2,443	100.0	81	100.0	490	100.0	971	100.0	449	100.0	452	100.0
Female	1,228	50.3	45	55.6	272	55.5	487	50.2	236	52.6	188	41.6
Male	1,215	49.7	36	44.4	218	44.5	484	49.8	213	47.4	264	58.4
Type 1 Diabetes and Empagliflozin Only	2,945	100.0	104	100.0	588	100.0	1,161	100.0	612	100.0	480	100.0
Female	1,358	46.1	43	41.3	293	49.8	568	48.9	265	43.3	189	39.4
Male	1,587	53.9	61	58.7	295	50.2	593	51.1	347	56.7	291	60.6
Type 1 Diabetes and Ertugliflozin Only	24	100.0	1	100.0	7	100.0	10	100.0	6	100.0	0	0.0
Female	12	50.0	1	100.0	4	57.1	4	40.0	3	50.0	0	0.0
Male	12	50.0	0	0.0	3	42.9	6	60.0	3	50.0	0	0.0
Type 1 Diabetes and Sitagliptin Only	4,780	100.0	161	100.0	1,144	100.0	1,888	100.0	846	100.0	741	100.0
Female	2,477	51.8	80	49.7	634	55.4	970	51.4	419	49.5	374	50.5
Male	2,303	48.2	81	50.3	510	44.6	918	48.6	427	50.5	367	49.5
Type 2 Diabetes and Canagliflozin Only	112,742	100.0	2,680	100.0	19,607	100.0	42,856	100.0	23,927	100.0	23,672	100.0
Female	49,462	43.9	1,198	44.7	9,940	50.7	19,607	45.8	9,882	41.3	8,835	37.3
Male	63,280	56.1	1,482	55.3	9,667	49.3	23,249	54.2	14,045	58.7	14,837	62.7
Type 2 Diabetes and Dapagliflozin Only	101,644	100.0	3,300	100.0	17,435	100.0	37,951	100.0	21,081	100.0	21,877	100.0
Female	44,573	43.9	1,459	44.2	8,784	50.4	17,137	45.2	8,870	42.1	8,323	38.0
Male	57,071	56.1	1,841	55.8	8,651	49.6	20,814	54.8	12,211	57.9	13,554	62.0
Type 2 Diabetes and Empagliflozin Only	127,258	100.0	5,017	100.0	21,638	100.0	53,097	100.0	29,501	100.0	18,005	100.0
Female	53,074	41.7	2,142	42.7	10,315	47.7	22,620	42.6	11,455	38.8	6,542	36.3
Male	74,184	58.3	2,875	57.3	11,323	52.3	30,477	57.4	18,046	61.2	11,463	63.7
Type 2 Diabetes and Ertugliflozin Only	2,265	100.0	83	100.0	477	100.0	1,094	100.0	558	100.0	53	100.0
Female	988	43.6	39	47.0	240	50.3	477	43.6	213	38.2	19	35.8
Male	1,277	56.4	44	53.0	237	49.7	617	56.4	345	61.8	34	64.2
Type 2 Diabetes and Sitagliptin Only	316,603	100.0	8,771	100.0	53,236	100.0	114,678	100.0	66,239	100.0	73,679	100.0
Female	144,156	45.5	4,049	46.2	26,383	49.6	53,160	46.4	29,578	44.7	30,986	42.1
Male	172,447	54.5	4,722	53.8	26,853	50.4	61,518	53.6	36,661	55.3	42,693	57.9

Table 2c: Distribution of cumulative exposure duration, by length categories, in days, by age group												
Exposures	Total Patients		1-30		31-90		91-365		366-730		731+	
	N	%	N	%	N	%	N	%	N	%	N	%
Type 1 Diabetes and Canagliflozin Only	4,999	100.0	108	100.0	902	100.0	1,894	100.0	1,014	100.0	1,081	100.0
00-17	17	0.3	0	0.0	4	0.4	7	0.4	4	0.4	2	0.2
18-24	134	2.7	4	3.7	37	4.1	53	2.8	24	2.4	16	1.5
25-40	632	12.6	14	13.0	127	14.1	265	14.0	112	11.0	114	10.5
41-64	3,424	68.5	66	61.1	582	64.5	1,243	65.6	749	73.9	784	72.5
65+	792	15.8	24	22.2	152	16.9	326	17.2	125	12.3	165	15.3
Type 1 Diabetes and Dapagliflozin Only	2,443	100.0	81	100.0	490	100.0	971	100.0	449	100.0	452	100.0
00-17	7	0.3	1	1.2	2	0.4	1	0.1	0	0.0	3	0.7
18-24	64	2.6	1	1.2	26	5.3	22	2.3	12	2.7	3	0.7
25-40	393	16.1	13	16.0	81	16.5	154	15.9	82	18.3	63	13.9
41-64	1,798	73.6	59	72.8	343	70.0	707	72.8	328	73.1	361	79.9
65+	181	7.4	7	8.6	38	7.8	87	9.0	27	6.0	22	4.9
Type 1 Diabetes and Empagliflozin Only	2,945	100.0	104	100.0	588	100.0	1,161	100.0	612	100.0	480	100.0
00-17	6	0.2	0	0.0	5	0.9	1	0.1	0	0.0	0	0.0
18-24	67	2.3	1	1.0	22	3.7	33	2.8	7	1.1	4	0.8
25-40	401	13.6	15	14.4	89	15.1	177	15.2	75	12.3	45	9.4
41-64	2,130	72.3	69	66.3	398	67.7	800	68.9	475	77.6	388	80.8
65+	341	11.6	19	18.3	74	12.6	150	12.9	55	9.0	43	9.0
Type 1 Diabetes and Ertugliflozin Only	24	100.0	1	100.0	7	100.0	10	100.0	6	100.0	0	0.0
00-17	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18-24	1	4.2	1	100.0	0	0.0	0	0.0	0	0.0	0	0.0
25-40	6	25.0	0	0.0	2	28.6	2	20.0	2	33.3	0	0.0
41-64	15	62.5	0	0.0	4	57.1	7	70.0	4	66.7	0	0.0
65+	2	8.3	0	0.0	1	14.3	1	10.0	0	0.0	0	0.0
Type 1 Diabetes and Sitagliptin Only	4,780	100.0	161	100.0	1,144	100.0	1,888	100.0	846	100.0	741	100.0
00-17	17	0.4	0	0.0	5	0.4	10	0.5	2	0.2	0	0.0
18-24	80	1.7	5	3.1	27	2.4	30	1.6	10	1.2	8	1.1
25-40	399	8.3	12	7.5	129	11.3	168	8.9	60	7.1	30	4.0
41-64	2,648	55.4	71	44.1	641	56.0	1,040	55.1	467	55.2	429	57.9
65+	1,636	34.2	73	45.3	342	29.9	640	33.9	307	36.3	274	37.0
Type 2 Diabetes and Canagliflozin Only	112,742	100.0	2,680	100.0	19,607	100.0	42,856	100.0	23,927	100.0	23,672	100.0
00-17	16	0.0	1	0.0	3	0.0	8	0.0	4	0.0	0	0.0
18-24	254	0.2	8	0.3	81	0.4	99	0.2	45	0.2	21	0.1
25-40	7,278	6.5	199	7.4	1,526	7.8	3,035	7.1	1,414	5.9	1,104	4.7
41-64	89,600	79.5	1,929	72.0	15,072	76.9	33,669	78.6	19,499	81.5	19,431	82.1
65+	15,594	13.8	543	20.3	2,925	14.9	6,045	14.1	2,965	12.4	3,116	13.2
Type 2 Diabetes and Dapagliflozin Only	101,644	100.0	3,300	100.0	17,435	100.0	37,951	100.0	21,081	100.0	21,877	100.0

Table 2c: Distribution of cumulative exposure duration, by length categories, in days, by age group												
Exposures	Total Patients		1-30		31-90		91-365		366-730		731+	
	N	%	N	%	N	%	N	%	N	%	N	%
00-17	6	0.0	0	0.0	3	0.0	2	0.0	1	0.0	0	0.0
18-24	314	0.3	9	0.3	97	0.6	129	0.3	57	0.3	22	0.1
25-40	7,763	7.6	302	9.2	1,634	9.4	3,092	8.1	1,437	6.8	1,298	5.9
41-64	86,076	84.7	2,627	79.6	14,232	81.6	31,356	82.6	18,305	86.8	19,556	89.4
65+	7,485	7.4	362	11.0	1,469	8.4	3,372	8.9	1,281	6.1	1,001	4.6
Type 2 Diabetes and Empagliflozin Only	127,258	100.0	5,017	100.0	21,638	100.0	53,097	100.0	29,501	100.0	18,005	100.0
00-17	13	0.0	0	0.0	5	0.0	5	0.0	2	0.0	1	0.0
18-24	343	0.3	13	0.3	102	0.5	153	0.3	62	0.2	13	0.1
25-40	8,421	6.6	362	7.2	1,847	8.5	3,653	6.9	1,723	5.8	836	4.6
41-64	105,433	82.8	3,822	76.2	17,248	79.7	43,581	82.1	25,273	85.7	15,509	86.1
65+	13,048	10.3	820	16.3	2,436	11.3	5,705	10.7	2,441	8.3	1,646	9.1
Type 2 Diabetes and Ertugliflozin Only	2,265	100.0	83	100.0	477	100.0	1,094	100.0	558	100.0	53	100.0
00-17	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18-24	12	0.5	2	2.4	5	1.0	4	0.4	1	0.2	0	0.0
25-40	184	8.1	8	9.6	44	9.2	93	8.5	37	6.6	2	3.8
41-64	1,935	85.4	67	80.7	392	82.2	923	84.4	503	90.1	50	94.3
65+	134	5.9	6	7.2	36	7.5	74	6.8	17	3.0	1	1.9
Type 2 Diabetes and Sitagliptin Only	316,603	100.0	8,771	100.0	53,236	100.0	114,678	100.0	66,239	100.0	73,679	100.0
00-17	69	0.0	4	0.0	19	0.0	23	0.0	14	0.0	9	0.0
18-24	774	0.2	21	0.2	252	0.5	341	0.3	112	0.2	48	0.1
25-40	19,786	6.2	636	7.3	4,578	8.6	7,832	6.8	3,706	5.6	3,034	4.1
41-64	227,606	71.9	5,889	67.1	37,243	70.0	82,553	72.0	48,779	73.6	53,142	72.1
65+	68,368	21.6	2,221	25.3	11,144	20.9	23,929	20.9	13,628	20.6	17,446	23.7

Table 3a: Descriptive statistics of cumulative exposure duration, all episodes, in days

Exposures	Total Patients	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	4,999	457.18	481.84	1	100	280	640	2,578
Type 1 Diabetes and Dapagliflozin Only	2,443	412.57	459.44	1	100	228	561	2,408
Type 1 Diabetes and Empagliflozin Only	2,945	383.36	396.69	1	100	247	546	2,109
Type 1 Diabetes and Ertugliflozin Only	24	212.00	181.64	27	45	158	359	630
Type 1 Diabetes and Sitagliptin Only	4,780	372.22	453.36	1	80	199	482	3,470
Type 2 Diabetes and Canagliflozin Only	112,742	455.04	475.15	1	102	283	631	2,724
Type 2 Diabetes and Dapagliflozin Only	101,644	444.14	442.66	1	100	280	653	2,411
Type 2 Diabetes and Empagliflozin Only	127,258	368.89	357.85	1	100	251	522	2,222
Type 2 Diabetes and Ertugliflozin Only	2,265	251.90	197.68	1	93	199	382	903
Type 2 Diabetes and Sitagliptin Only	316,603	497.54	541.87	1	102	297	685	3,559

Table 3b: Descriptive statistics of cumulative exposure duration, all episodes, in days, by sex								
Exposures	Total Patients	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	4,999	457.18	481.84	1	100	280	640	2,578
Female	2,443	409.49	441.11	3	100	246	547	2,578
Male	2,556	502.76	513.75	1	106	311	732	2,572
Type 1 Diabetes and Dapagliflozin Only	2,443	412.57	459.44	1	100	228	561	2,408
Female	1,228	373.95	421.10	1	80	207	496	2,408
Male	1,215	451.59	492.28	1	100	250	642	2,376
Type 1 Diabetes and Empagliflozin Only	2,945	383.36	396.69	1	100	247	546	2,109
Female	1,358	351.40	366.17	1	95	222	491	2,109
Male	1,587	410.71	419.24	2	100	271	591	2,080
Type 1 Diabetes and Ertugliflozin Only	24	212.00	181.64	27	45	158	359	630
Female	12	195.58	204.08	27	40	100	290	630
Male	12	228.42	163.54	40	85	186	359	484
Type 1 Diabetes and Sitagliptin Only	4,780	372.22	453.36	1	80	199	482	3,470
Female	2,477	355.84	430.58	1	80	190	470	3,470
Male	2,303	389.83	476.12	1	80	206	498	3,334
Type 2 Diabetes and Canagliflozin Only	112,742	455.04	475.15	1	102	283	631	2,724
Female	49,462	407.89	441.52	1	100	247	555	2,674
Male	63,280	491.90	496.77	1	120	315	690	2,724
Type 2 Diabetes and Dapagliflozin Only	101,644	444.14	442.66	1	100	280	653	2,411
Female	44,573	405.92	420.68	1	100	245	588	2,400
Male	57,071	474.00	456.88	1	114	308	702	2,411
Type 2 Diabetes and Empagliflozin Only	127,258	368.89	357.85	1	100	251	522	2,222
Female	53,074	340.16	341.11	1	100	222	477	2,202
Male	74,184	389.44	367.99	1	107	272	551	2,222
Type 2 Diabetes and Ertugliflozin Only	2,265	251.90	197.68	1	93	199	382	903
Female	988	231.42	190.34	2	75	180	354	900
Male	1,277	267.74	201.83	1	100	216	403	903
Type 2 Diabetes and Sitagliptin Only	316,603	497.54	541.87	1	102	297	685	3,559
Female	144,156	469.45	520.96	1	100	280	643	3,545
Male	172,447	521.02	557.67	1	111	316	725	3,559

Table 3c: Descriptive statistics of cumulative exposure duration, all episodes, in days, by age group								
Exposures	Total Patients	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	4,999	457.18	481.84	1	100	280	640	2,578
00-17	17	308.71	257.81	40	100	230	484	865
18-24	134	310.67	347.38	3	80	160	482	1,968
25-40	632	412.80	453.37	1	100	251	547	2,257
41-64	3,424	483.76	499.18	1	110	300	679	2,578
65+	792	405.67	437.79	2	100	225	598	2,530
Type 1 Diabetes and Dapagliflozin Only	2,443	412.57	459.44	1	100	228	561	2,408
00-17	7	575.86	708.92	30	35	120	1,270	1,763
18-24	64	231.95	236.56	7	40	120	341	961
25-40	393	382.41	416.99	2	100	218	537	2,137
41-64	1,798	433.01	474.84	1	100	242	601	2,408
65+	181	332.48	415.34	1	91	170	384	2,164
Type 1 Diabetes and Empagliflozin Only	2,945	383.36	396.69	1	100	247	546	2,109
00-17	6	68.83	24.09	40	40	77	80	100
18-24	67	218.81	234.81	22	40	156	273	1,317
25-40	401	324.53	345.78	1	80	200	436	1,938
41-64	2,130	411.28	413.45	1	100	276	588	2,109
65+	341	315.99	346.77	2	83	192	400	2,078
Type 1 Diabetes and Ertugliflozin Only	24	212.00	181.64	27	45	158	359	630
00-17	0	-	-	-	-	-	-	-
18-24	1	27.00	-	27	27	27	27	27
25-40	6	275.50	184.35	40	75	324	371	519
41-64	15	217.27	187.26	40	40	176	370	630
65+	2	74.50	36.06	49	49	75	100	100
Type 1 Diabetes and Sitagliptin Only	4,780	372.22	453.36	1	80	199	482	3,470
00-17	17	159.88	127.50	33	53	120	200	450
18-24	80	238.03	286.05	21	40	110	339	1,288
25-40	399	264.21	319.90	3	70	149	330	2,275
41-64	2,648	389.12	484.95	1	80	200	490	3,470
65+	1,636	379.96	431.62	1	82	206	535	2,951
Type 2 Diabetes and Canagliflozin Only	112,742	455.04	475.15	1	102	283	631	2,724
00-17	16	230.06	224.23	24	88	125	386	640
18-24	254	273.02	321.31	1	49	160	380	2,642
25-40	7,278	380.18	421.97	1	100	230	493	2,668
41-64	89,600	467.16	480.61	1	110	294	649	2,724
65+	15,594	423.54	463.98	1	100	236	591	2,690
Type 2 Diabetes and Dapagliflozin Only	101,644	444.14	442.66	1	100	280	653	2,411
00-17	6	142.83	141.48	40	71	87	150	422

Table 3c: Descriptive statistics of cumulative exposure duration, all episodes, in days, by age group								
Exposures	Total Patients	Mean	STD	Min	Q1	Median	Q3	Max
18-24	314	262.89	287.47	10	70	155	370	1,812
25-40	7,763	378.81	403.87	1	91	220	539	2,406
41-64	86,076	459.53	449.41	1	106	295	678	2,411
65+	7,485	342.80	383.15	1	95	200	460	2,372
Type 2 Diabetes and Empagliflozin Only	127,258	368.89	357.85	1	100	251	522	2,222
00-17	13	282.00	378.50	40	44	110	340	1,397
18-24	343	233.10	237.62	12	70	158	315	1,363
25-40	8,421	311.31	320.27	1	80	200	426	2,128
41-64	105,433	378.64	361.24	1	101	262	537	2,222
65+	13,048	330.94	349.10	1	91	202	467	2,179
Type 2 Diabetes and Ertugliflozin Only	2,265	251.90	197.68	1	93	199	382	903
00-17	0	-	-	-	-	-	-	-
18-24	12	122.00	113.58	8	40	76	187	368
25-40	184	222.21	171.30	1	72	189	351	899
41-64	1,935	260.35	201.33	1	100	205	394	903
65+	134	182.20	160.17	17	70	116	248	863
Type 2 Diabetes and Sitagliptin Only	316,603	497.54	541.87	1	102	297	685	3,559
00-17	69	302.90	339.09	8	47	154	423	1,440
18-24	774	249.34	303.50	1	69	140	310	2,363
25-40	19,786	384.47	460.96	1	80	210	499	3,379
41-64	227,606	500.50	539.16	1	110	304	687	3,559
65+	68,368	523.42	569.42	1	100	300	743	3,520

Table 4a: Distribution of first exposure episode duration, by length categories, in days												
Exposures	Total Episodes		1-30		31-90		91-365		366-730		731+	
	N	%	N	%	N	%	N	%	N	%	N	%
Type 1 Diabetes and Canagliflozin Only	4,999	100.0	124	2.5	1,911	38.2	1,997	39.9	609	12.2	358	7.2
Type 1 Diabetes and Dapagliflozin Only	2,443	100.0	85	3.5	1,020	41.8	990	40.5	229	9.4	119	4.9
Type 1 Diabetes and Empagliflozin Only	2,945	100.0	130	4.4	1,073	36.4	1,237	42.0	343	11.6	162	5.5
Type 1 Diabetes and Ertugliflozin Only	24	100.0	2	8.3	12	50.0	7	29.2	3	12.5	0	0.0
Type 1 Diabetes and Sitagliptin Only	4,780	100.0	200	4.2	1,983	41.5	1,983	41.5	415	8.7	199	4.2
Type 2 Diabetes and Canagliflozin Only	112,742	100.0	3,097	2.7	40,426	35.9	45,950	40.8	14,587	12.9	8,682	7.7
Type 2 Diabetes and Dapagliflozin Only	101,644	100.0	3,478	3.4	36,877	36.3	42,715	42.0	11,608	11.4	6,966	6.9
Type 2 Diabetes and Empagliflozin Only	127,258	100.0	5,605	4.4	42,004	33.0	56,938	44.7	16,700	13.1	6,011	4.7
Type 2 Diabetes and Ertugliflozin Only	2,265	100.0	86	3.8	866	38.2	1,024	45.2	264	11.7	25	1.1
Type 2 Diabetes and Sitagliptin Only	316,603	100.0	10,723	3.4	112,281	35.5	132,606	41.9	37,955	12.0	23,038	7.3

Table 4b: Distribution of first exposure episode duration, by length categories, in days, by sex												
Exposures	Total Episodes		1-30		31-90		91-365		366-730		731+	
	N	%	N	%	N	%	N	%	N	%	N	%
Type 1 Diabetes and Canagliflozin Only	4,999	100.0	124	100.0	1,911	100.0	1,997	100.0	609	100.0	358	100.0
Female	2,443	48.9	51	41.1	1,000	52.3	1,001	50.1	253	41.5	138	38.5
Male	2,556	51.1	73	58.9	911	47.7	996	49.9	356	58.5	220	61.5
Type 1 Diabetes and Dapagliflozin Only	2,443	100.0	85	100.0	1,020	100.0	990	100.0	229	100.0	119	100.0
Female	1,228	50.3	46	54.1	543	53.2	494	49.9	103	45.0	42	35.3
Male	1,215	49.7	39	45.9	477	46.8	496	50.1	126	55.0	77	64.7
Type 1 Diabetes and Empagliflozin Only	2,945	100.0	130	100.0	1,073	100.0	1,237	100.0	343	100.0	162	100.0
Female	1,358	46.1	56	43.1	539	50.2	568	45.9	145	42.3	50	30.9
Male	1,587	53.9	74	56.9	534	49.8	669	54.1	198	57.7	112	69.1
Type 1 Diabetes and Ertugliflozin Only	24	100.0	2	100.0	12	100.0	7	100.0	3	100.0	0	0.0
Female	12	50.0	1	50.0	7	58.3	3	42.9	1	33.3	0	0.0
Male	12	50.0	1	50.0	5	41.7	4	57.1	2	66.7	0	0.0
Type 1 Diabetes and Sitagliptin Only	4,780	100.0	200	100.0	1,983	100.0	1,983	100.0	415	100.0	199	100.0
Female	2,477	51.8	106	53.0	1,083	54.6	995	50.2	200	48.2	93	46.7
Male	2,303	48.2	94	47.0	900	45.4	988	49.8	215	51.8	106	53.3
Type 2 Diabetes and Canagliflozin Only	112,742	100.0	3,097	100.0	40,426	100.0	45,950	100.0	14,587	100.0	8,682	100.0
Female	49,462	43.9	1,369	44.2	19,361	47.9	19,907	43.3	5,743	39.4	3,082	35.5
Male	63,280	56.1	1,728	55.8	21,065	52.1	26,043	56.7	8,844	60.6	5,600	64.5
Type 2 Diabetes and Dapagliflozin Only	101,644	100.0	3,478	100.0	36,877	100.0	42,715	100.0	11,608	100.0	6,966	100.0
Female	44,573	43.9	1,537	44.2	17,551	47.6	18,230	42.7	4,715	40.6	2,540	36.5
Male	57,071	56.1	1,941	55.8	19,326	52.4	24,485	57.3	6,893	59.4	4,426	63.5
Type 2 Diabetes and Empagliflozin Only	127,258	100.0	5,605	100.0	42,004	100.0	56,938	100.0	16,700	100.0	6,011	100.0
Female	53,074	41.7	2,388	42.6	19,202	45.7	23,252	40.8	6,149	36.8	2,083	34.7
Male	74,184	58.3	3,217	57.4	22,802	54.3	33,686	59.2	10,551	63.2	3,928	65.3
Type 2 Diabetes and Ertugliflozin Only	2,265	100.0	86	100.0	866	100.0	1,024	100.0	264	100.0	25	100.0
Female	988	43.6	40	46.5	409	47.2	436	42.6	93	35.2	10	40.0
Male	1,277	56.4	46	53.5	457	52.8	588	57.4	171	64.8	15	60.0
Type 2 Diabetes and Sitagliptin Only	316,603	100.0	10,723	100.0	112,281	100.0	132,606	100.0	37,955	100.0	23,038	100.0
Female	144,156	45.5	4,997	46.6	54,236	48.3	59,361	44.8	16,167	42.6	9,395	40.8
Male	172,447	54.5	5,726	53.4	58,045	51.7	73,245	55.2	21,788	57.4	13,643	59.2

Table 4c: Distribution of first exposure episode duration, by length categories, in days, by age group												
Exposures	Total Episodes		1-30		31-90		91-365		366-730		731+	
	N	%	N	%	N	%	N	%	N	%	N	%
Type 1 Diabetes and Canagliflozin Only	4,999	100.0	124	100.0	1,911	100.0	1,997	100.0	609	100.0	358	100.0
00-17	17	0.3	0	0.0	9	0.5	5	0.3	3	0.5	0	0.0
18-24	134	2.7	4	3.2	64	3.3	48	2.4	9	1.5	9	2.5
25-40	632	12.6	15	12.1	280	14.7	250	12.5	57	9.4	30	8.4
41-64	3,424	68.5	75	60.5	1,302	68.1	1,343	67.3	448	73.6	256	71.5
65+	792	15.8	30	24.2	256	13.4	351	17.6	92	15.1	63	17.6
Type 1 Diabetes and Dapagliflozin Only	2,443	100.0	85	100.0	1,020	100.0	990	100.0	229	100.0	119	100.0
00-17	7	0.3	1	1.2	3	0.3	2	0.2	1	0.4	0	0.0
18-24	64	2.6	1	1.2	43	4.2	17	1.7	3	1.3	0	0.0
25-40	393	16.1	14	16.5	169	16.6	161	16.3	34	14.8	15	12.6
41-64	1,798	73.6	59	69.4	738	72.4	727	73.4	179	78.2	95	79.8
65+	181	7.4	10	11.8	67	6.6	83	8.4	12	5.2	9	7.6
Type 1 Diabetes and Empagliflozin Only	2,945	100.0	130	100.0	1,073	100.0	1,237	100.0	343	100.0	162	100.0
00-17	6	0.2	0	0.0	5	0.5	1	0.1	0	0.0	0	0.0
18-24	67	2.3	1	0.8	34	3.2	27	2.2	4	1.2	1	0.6
25-40	401	13.6	15	11.5	167	15.6	169	13.7	37	10.8	13	8.0
41-64	2,130	72.3	76	58.5	774	72.1	885	71.5	263	76.7	132	81.5
65+	341	11.6	38	29.2	93	8.7	155	12.5	39	11.4	16	9.9
Type 1 Diabetes and Ertugliflozin Only	24	100.0	2	100.0	12	100.0	7	100.0	3	100.0	0	0.0
00-17	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18-24	1	4.2	1	50.0	0	0.0	0	0.0	0	0.0	0	0.0
25-40	6	25.0	0	0.0	4	33.3	1	14.3	1	33.3	0	0.0
41-64	15	62.5	0	0.0	8	66.7	5	71.4	2	66.7	0	0.0
65+	2	8.3	1	50.0	0	0.0	1	14.3	0	0.0	0	0.0
Type 1 Diabetes and Sitagliptin Only	4,780	100.0	200	100.0	1,983	100.0	1,983	100.0	415	100.0	199	100.0
00-17	17	0.4	0	0.0	9	0.5	7	0.4	1	0.2	0	0.0
18-24	80	1.7	5	2.5	41	2.1	27	1.4	5	1.2	2	1.0
25-40	399	8.3	15	7.5	219	11.0	142	7.2	19	4.6	4	2.0
41-64	2,648	55.4	80	40.0	1,179	59.5	1,060	53.5	222	53.5	107	53.8
65+	1,636	34.2	100	50.0	535	27.0	747	37.7	168	40.5	86	43.2
Type 2 Diabetes and Canagliflozin Only	112,742	100.0	3,097	100.0	40,426	100.0	45,950	100.0	14,587	100.0	8,682	100.0
00-17	16	0.0	1	0.0	7	0.0	7	0.0	1	0.0	0	0.0
18-24	254	0.2	10	0.3	143	0.4	75	0.2	20	0.1	6	0.1
25-40	7,278	6.5	212	6.8	3,277	8.1	2,832	6.2	650	4.5	307	3.5
41-64	89,600	79.5	2,137	69.0	32,376	80.1	36,316	79.0	11,851	81.2	6,920	79.7
65+	15,594	13.8	737	23.8	4,623	11.4	6,720	14.6	2,065	14.2	1,449	16.7
Type 2 Diabetes and Dapagliflozin Only	101,644	100.0	3,478	100.0	36,877	100.0	42,715	100.0	11,608	100.0	6,966	100.0



Table 4c: Distribution of first exposure episode duration, by length categories, in days, by age group												
Exposures	Total Episodes		1-30		31-90		91-365		366-730		731+	
	N	%	N	%	N	%	N	%	N	%	N	%
00-17	6	0.0	0	0.0	6	0.0	0	0.0	0	0.0	0	0.0
18-24	314	0.3	9	0.3	177	0.5	98	0.2	22	0.2	8	0.1
25-40	7,763	7.6	322	9.3	3,443	9.3	3,072	7.2	618	5.3	308	4.4
41-64	86,076	84.7	2,753	79.2	30,995	84.0	35,930	84.1	10,161	87.5	6,237	89.5
65+	7,485	7.4	394	11.3	2,256	6.1	3,615	8.5	807	7.0	413	5.9
Type 2 Diabetes and Empagliflozin Only	127,258	100.0	5,605	100.0	42,004	100.0	56,938	100.0	16,700	100.0	6,011	100.0
00-17	13	0.0	0	0.0	9	0.0	4	0.0	0	0.0	0	0.0
18-24	343	0.3	13	0.2	190	0.5	116	0.2	21	0.1	3	0.0
25-40	8,421	6.6	374	6.7	3,580	8.5	3,497	6.1	746	4.5	224	3.7
41-64	105,433	82.8	4,038	72.0	34,909	83.1	47,136	82.8	14,322	85.8	5,028	83.6
65+	13,048	10.3	1,180	21.1	3,316	7.9	6,185	10.9	1,611	9.6	756	12.6
Type 2 Diabetes and Ertugliflozin Only	2,265	100.0	86	100.0	866	100.0	1,024	100.0	264	100.0	25	100.0
00-17	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18-24	12	0.5	2	2.3	7	0.8	3	0.3	0	0.0	0	0.0
25-40	184	8.1	8	9.3	85	9.8	74	7.2	16	6.1	1	4.0
41-64	1,935	85.4	70	81.4	729	84.2	873	85.3	240	90.9	23	92.0
65+	134	5.9	6	7.0	45	5.2	74	7.2	8	3.0	1	4.0
Type 2 Diabetes and Sitagliptin Only	316,603	100.0	10,723	100.0	112,281	100.0	132,606	100.0	37,955	100.0	23,038	100.0
00-17	69	0.0	4	0.0	43	0.0	18	0.0	4	0.0	0	0.0
18-24	774	0.2	23	0.2	434	0.4	261	0.2	42	0.1	14	0.1
25-40	19,786	6.2	733	6.8	9,743	8.7	7,370	5.6	1,344	3.5	596	2.6
41-64	227,606	71.9	6,730	62.8	83,176	74.1	95,252	71.8	27,074	71.3	15,374	66.7
65+	68,368	21.6	3,233	30.2	18,885	16.8	29,705	22.4	9,491	25.0	7,054	30.6

Table 5a: Descriptive statistics of first exposure episode duration, in days								
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	4,999	231.84	317.61	1	40	100	280	2,530
Type 1 Diabetes and Dapagliflozin Only	2,443	191.12	269.04	1	40	100	200	2,255
Type 1 Diabetes and Empagliflozin Only	2,945	208.33	264.16	1	40	100	256	2,080
Type 1 Diabetes and Ertugliflozin Only	24	131.42	149.34	11	40	40	187	519
Type 1 Diabetes and Sitagliptin Only	4,780	176.92	251.97	1	40	100	190	2,770
Type 2 Diabetes and Canagliflozin Only	112,742	246.00	328.71	1	40	105	290	2,724
Type 2 Diabetes and Dapagliflozin Only	101,644	226.56	296.29	1	40	100	271	2,411
Type 2 Diabetes and Empagliflozin Only	127,258	212.13	248.78	1	40	103	276	2,200
Type 2 Diabetes and Ertugliflozin Only	2,265	166.82	164.63	1	40	100	225	903
Type 2 Diabetes and Sitagliptin Only	316,603	237.78	335.30	1	40	100	280	3,559

Table 5b: Descriptive statistics of first exposure episode duration, in days, by sex								
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	4,999	231.84	317.61	1	40	100	280	2,530
Female	2,443	206.64	279.32	3	40	100	235	2,433
Male	2,556	255.92	348.67	1	40	100	313	2,530
Type 1 Diabetes and Dapagliflozin Only	2,443	191.12	269.04	1	40	100	200	2,255
Female	1,228	172.84	249.73	1	40	100	190	2,255
Male	1,215	209.60	286.16	1	40	100	226	2,136
Type 1 Diabetes and Empagliflozin Only	2,945	208.33	264.16	1	40	100	256	2,080
Female	1,358	182.13	227.25	1	40	100	220	1,921
Male	1,587	230.76	290.27	2	40	100	280	2,080
Type 1 Diabetes and Ertugliflozin Only	24	131.42	149.34	11	40	40	187	519
Female	12	105.83	139.67	27	40	40	100	519
Male	12	157.00	160.31	11	40	70	272	484
Type 1 Diabetes and Sitagliptin Only	4,780	176.92	251.97	1	40	100	190	2,770
Female	2,477	166.75	239.17	1	40	100	190	2,770
Male	2,303	187.85	264.68	1	40	100	198	2,510
Type 2 Diabetes and Canagliflozin Only	112,742	246.00	328.71	1	40	105	290	2,724
Female	49,462	220.00	297.32	1	40	100	261	2,674
Male	63,280	266.32	349.96	1	40	130	326	2,724
Type 2 Diabetes and Dapagliflozin Only	101,644	226.56	296.29	1	40	100	271	2,411
Female	44,573	207.47	276.07	1	40	100	241	2,400
Male	57,071	241.48	310.36	1	40	104	285	2,411
Type 2 Diabetes and Empagliflozin Only	127,258	212.13	248.78	1	40	103	276	2,200
Female	53,074	194.26	232.55	1	40	100	244	2,200
Male	74,184	224.92	259.01	1	50	115	286	2,198
Type 2 Diabetes and Ertugliflozin Only	2,265	166.82	164.63	1	40	100	225	903
Female	988	154.17	155.29	2	40	100	209	899
Male	1,277	176.61	170.92	1	40	100	245	903
Type 2 Diabetes and Sitagliptin Only	316,603	237.78	335.30	1	40	100	280	3,559
Female	144,156	223.01	317.97	1	40	100	253	3,520
Male	172,447	250.14	348.65	1	40	101	286	3,559

Table 5c: Descriptive statistics of first exposure episode duration, in days, by age group								
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	4,999	231.84	317.61	1	40	100	280	2,530
00-17	17	185.41	188.13	40	40	78	280	580
18-24	134	191.34	300.86	3	40	83	167	1,968
25-40	632	191.42	275.39	1	40	100	203	2,234
41-64	3,424	241.11	327.11	1	40	100	288	2,433
65+	792	231.87	309.71	2	40	100	278	2,530
Type 1 Diabetes and Dapagliflozin Only	2,443	191.12	269.04	1	40	100	200	2,255
00-17	7	166.57	229.20	30	35	40	194	663
18-24	64	101.31	112.70	7	40	40	105	561
25-40	393	168.98	241.68	2	40	100	169	2,018
41-64	1,798	199.46	278.77	1	40	100	220	2,255
65+	181	189.08	261.00	1	40	100	196	1,485
Type 1 Diabetes and Empagliflozin Only	2,945	208.33	264.16	1	40	100	256	2,080
00-17	6	55.50	25.49	40	40	40	73	100
18-24	67	129.36	140.02	22	40	77	173	836
25-40	401	173.69	213.52	1	40	100	203	1,380
41-64	2,130	219.56	278.40	1	40	100	280	2,080
65+	341	197.17	239.75	2	40	100	250	1,461
Type 1 Diabetes and Ertugliflozin Only	24	131.42	149.34	11	40	40	187	519
00-17	0	-	-	-	-	-	-	-
18-24	1	27.00	-	27	27	27	27	27
25-40	6	176.50	205.86	40	40	58	345	519
41-64	15	130.47	136.93	40	40	40	198	484
65+	2	55.50	62.93	11	11	56	100	100
Type 1 Diabetes and Sitagliptin Only	4,780	176.92	251.97	1	40	100	190	2,770
00-17	17	98.65	101.01	33	40	53	120	450
18-24	80	134.49	193.29	21	40	70	143	1,288
25-40	399	117.29	148.85	3	40	70	120	1,364
41-64	2,648	172.99	254.33	1	40	100	190	2,770
65+	1,636	200.71	268.23	1	40	100	220	2,510
Type 2 Diabetes and Canagliflozin Only	112,742	246.00	328.71	1	40	105	290	2,724
00-17	16	113.69	147.24	24	40	88	105	640
18-24	254	146.87	249.00	1	40	65	150	2,642
25-40	7,278	183.83	261.86	1	40	100	199	2,668
41-64	89,600	248.52	329.93	1	40	108	297	2,724
65+	15,594	262.27	347.04	1	40	104	310	2,690
Type 2 Diabetes and Dapagliflozin Only	101,644	226.56	296.29	1	40	100	271	2,411
00-17	6	62.83	18.02	40	40	71	77	79

Table 5c: Descriptive statistics of first exposure episode duration, in days, by age group								
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
18-24	314	139.94	198.91	10	40	70	131	1,569
25-40	7,763	173.41	241.52	1	40	100	191	2,406
41-64	86,076	232.64	302.38	1	40	100	280	2,411
65+	7,485	215.51	273.35	1	48	100	251	2,372
Type 2 Diabetes and Empagliflozin Only	127,258	212.13	248.78	1	40	103	276	2,200
00-17	13	70.15	47.99	40	40	40	100	190
18-24	343	123.41	146.14	12	40	70	145	1,318
25-40	8,421	164.50	203.47	1	40	100	194	2,128
41-64	105,433	215.28	249.80	1	40	106	280	2,200
65+	13,048	219.97	265.08	1	46	104	279	2,179
Type 2 Diabetes and Ertugliflozin Only	2,265	166.82	164.63	1	40	100	225	903
00-17	0	-	-	-	-	-	-	-
18-24	12	79.67	77.80	8	40	40	124	233
25-40	184	135.49	139.94	1	40	79	173	899
41-64	1,935	172.07	168.34	1	40	100	233	903
65+	134	141.88	136.94	11	42	100	191	863
Type 2 Diabetes and Sitagliptin Only	316,603	237.78	335.30	1	40	100	280	3,559
00-17	69	101.52	111.63	8	40	47	100	511
18-24	774	129.74	187.96	1	40	70	130	1,897
25-40	19,786	154.43	231.16	1	40	75	165	3,333
41-64	227,606	230.99	323.26	1	40	100	275	3,559
65+	68,368	285.88	390.19	1	58	115	344	3,520

Table 6a: Distribution of second and subsequent exposure episode duration, by length categories, in days												
Exposures	Total Episodes		1-30		31-90		91-365		366-730		731+	
	N	%	N	%	N	%	N	%	N	%	N	%
Type 1 Diabetes and Canagliflozin Only	7,316	100.0	267	3.6	3,210	43.9	3,102	42.4	531	7.3	206	2.8
Type 1 Diabetes and Dapagliflozin Only	3,520	100.0	138	3.9	1,529	43.4	1,524	43.3	232	6.6	97	2.8
Type 1 Diabetes and Empagliflozin Only	3,492	100.0	271	7.8	1,364	39.1	1,526	43.7	265	7.6	66	1.9
Type 1 Diabetes and Ertugliflozin Only	22	100.0	7	31.8	8	36.4	6	27.3	1	4.5	0	0.0
Type 1 Diabetes and Sitagliptin Only	6,515	100.0	530	8.1	2,699	41.4	2,699	41.4	441	6.8	146	2.2
Type 2 Diabetes and Canagliflozin Only	146,840	100.0	5,756	3.9	63,538	43.3	61,810	42.1	11,238	7.7	4,498	3.1
Type 2 Diabetes and Dapagliflozin Only	131,103	100.0	5,007	3.8	53,539	40.8	57,234	43.7	10,929	8.3	4,394	3.4
Type 2 Diabetes and Empagliflozin Only	130,103	100.0	8,023	6.2	51,660	39.7	57,501	44.2	10,196	7.8	2,723	2.1
Type 2 Diabetes and Ertugliflozin Only	1,736	100.0	120	6.9	901	51.9	636	36.6	75	4.3	4	0.2
Type 2 Diabetes and Sitagliptin Only	511,368	100.0	32,605	6.4	207,928	40.7	216,275	42.3	38,006	7.4	16,554	3.2

Table 6b: Distribution of second and subsequent exposure episode duration, by length categories, in days, by sex												
Exposures	Total Episodes		1-30		31-90		91-365		366-730		731+	
	N	%	N	%	N	%	N	%	N	%	N	%
Type 1 Diabetes and Canagliflozin Only	7,316	100.0	267	100.0	3,210	100.0	3,102	100.0	531	100.0	206	100.0
Female	3,537	48.3	90	33.7	1,695	52.8	1,471	47.4	197	37.1	84	40.8
Male	3,779	51.7	177	66.3	1,515	47.2	1,631	52.6	334	62.9	122	59.2
Type 1 Diabetes and Dapagliflozin Only	3,520	100.0	138	100.0	1,529	100.0	1,524	100.0	232	100.0	97	100.0
Female	1,776	50.5	68	49.3	844	55.2	726	47.6	96	41.4	42	43.3
Male	1,744	49.5	70	50.7	685	44.8	798	52.4	136	58.6	55	56.7
Type 1 Diabetes and Empagliflozin Only	3,492	100.0	271	100.0	1,364	100.0	1,526	100.0	265	100.0	66	100.0
Female	1,647	47.2	144	53.1	663	48.6	694	45.5	117	44.2	29	43.9
Male	1,845	52.8	127	46.9	701	51.4	832	54.5	148	55.8	37	56.1
Type 1 Diabetes and Ertugliflozin Only	22	100.0	7	100.0	8	100.0	6	100.0	1	100.0	0	0.0
Female	8	36.4	0	0.0	4	50.0	3	50.0	1	100.0	0	0.0
Male	14	63.6	7	100.0	4	50.0	3	50.0	0	0.0	0	0.0
Type 1 Diabetes and Sitagliptin Only	6,515	100.0	530	100.0	2,699	100.0	2,699	100.0	441	100.0	146	100.0
Female	3,344	51.3	284	53.6	1,387	51.4	1,392	51.6	208	47.2	73	50.0
Male	3,171	48.7	246	46.4	1,312	48.6	1,307	48.4	233	52.8	73	50.0
Type 2 Diabetes and Canagliflozin Only	146,840	100.0	5,756	100.0	63,538	100.0	61,810	100.0	11,238	100.0	4,498	100.0
Female	61,385	41.8	2,344	40.7	28,124	44.3	24,982	40.4	4,310	38.4	1,625	36.1
Male	85,455	58.2	3,412	59.3	35,414	55.7	36,828	59.6	6,928	61.6	2,873	63.9
Type 2 Diabetes and Dapagliflozin Only	131,103	100.0	5,007	100.0	53,539	100.0	57,234	100.0	10,929	100.0	4,394	100.0
Female	56,422	43.0	2,101	42.0	24,527	45.8	24,045	42.0	4,159	38.1	1,590	36.2
Male	74,681	57.0	2,906	58.0	29,012	54.2	33,189	58.0	6,770	61.9	2,804	63.8
Type 2 Diabetes and Empagliflozin Only	130,103	100.0	8,023	100.0	51,660	100.0	57,501	100.0	10,196	100.0	2,723	100.0
Female	53,904	41.4	3,201	39.9	22,974	44.5	23,020	40.0	3,779	37.1	930	34.2
Male	76,199	58.6	4,822	60.1	28,686	55.5	34,481	60.0	6,417	62.9	1,793	65.8
Type 2 Diabetes and Ertugliflozin Only	1,736	100.0	120	100.0	901	100.0	636	100.0	75	100.0	4	100.0
Female	714	41.1	46	38.3	395	43.8	243	38.2	30	40.0	0	0.0
Male	1,022	58.9	74	61.7	506	56.2	393	61.8	45	60.0	4	100.0
Type 2 Diabetes and Sitagliptin Only	511,368	100.0	32,605	100.0	207,928	100.0	216,275	100.0	38,006	100.0	16,554	100.0
Female	230,837	45.1	15,056	46.2	97,970	47.1	94,990	43.9	15,997	42.1	6,824	41.2
Male	280,531	54.9	17,549	53.8	109,958	52.9	121,285	56.1	22,009	57.9	9,730	58.8



Table 6c: Distribution of second and subsequent exposure episode duration, by length categories, in days, by age group												
Exposures	Total Episodes		1-30		31-90		91-365		366-730		731+	
	N	%	N	%	N	%	N	%	N	%	N	%
Type 1 Diabetes and Canagliflozin Only	7,316	100.0	267	100.0	3,210	100.0	3,102	100.0	531	100.0	206	100.0
00-17	26	0.4	1	0.4	15	0.5	10	0.3	0	0.0	0	0.0
18-24	169	2.3	6	2.2	106	3.3	53	1.7	3	0.6	1	0.5
25-40	1,114	15.2	23	8.6	582	18.1	437	14.1	58	10.9	14	6.8
41-64	5,152	70.4	151	56.6	2,256	70.3	2,176	70.1	407	76.6	162	78.6
65+	855	11.7	86	32.2	251	7.8	426	13.7	63	11.9	29	14.1
Type 1 Diabetes and Dapagliflozin Only	3,520	100.0	138	100.0	1,529	100.0	1,524	100.0	232	100.0	97	100.0
00-17	12	0.3	0	0.0	6	0.4	3	0.2	2	0.9	1	1.0
18-24	68	1.9	4	2.9	34	2.2	26	1.7	4	1.7	0	0.0
25-40	631	17.9	14	10.1	275	18.0	303	19.9	28	12.1	11	11.3
41-64	2,636	74.9	92	66.7	1,157	75.7	1,122	73.6	186	80.2	79	81.4
65+	173	4.9	28	20.3	57	3.7	70	4.6	12	5.2	6	6.2
Type 1 Diabetes and Empagliflozin Only	3,492	100.0	271	100.0	1,364	100.0	1,526	100.0	265	100.0	66	100.0
00-17	2	0.1	0	0.0	2	0.1	0	0.0	0	0.0	0	0.0
18-24	72	2.1	6	2.2	44	3.2	19	1.2	3	1.1	0	0.0
25-40	461	13.2	22	8.1	216	15.8	192	12.6	24	9.1	7	10.6
41-64	2,609	74.7	95	35.1	1,037	76.0	1,207	79.1	220	83.0	50	75.8
65+	348	10.0	148	54.6	65	4.8	108	7.1	18	6.8	9	13.6
Type 1 Diabetes and Ertugliflozin Only	22	100.0	7	100.0	8	100.0	6	100.0	1	100.0	0	0.0
00-17	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18-24	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
25-40	7	31.8	2	28.6	2	25.0	3	50.0	0	0.0	0	0.0
41-64	11	50.0	1	14.3	6	75.0	3	50.0	1	100.0	0	0.0
65+	4	18.2	4	57.1	0	0.0	0	0.0	0	0.0	0	0.0
Type 1 Diabetes and Sitagliptin Only	6,515	100.0	530	100.0	2,699	100.0	2,699	100.0	441	100.0	146	100.0
00-17	20	0.3	1	0.2	16	0.6	3	0.1	0	0.0	0	0.0
18-24	100	1.5	0	0.0	65	2.4	34	1.3	1	0.2	0	0.0
25-40	580	8.9	14	2.6	345	12.8	193	7.2	26	5.9	2	1.4
41-64	3,893	59.8	170	32.1	1,761	65.2	1,610	59.7	259	58.7	93	63.7
65+	1,922	29.5	345	65.1	512	19.0	859	31.8	155	35.1	51	34.9
Type 2 Diabetes and Canagliflozin Only	146,840	100.0	5,756	100.0	63,538	100.0	61,810	100.0	11,238	100.0	4,498	100.0
00-17	27	0.0	1	0.0	20	0.0	6	0.0	0	0.0	0	0.0
18-24	355	0.2	11	0.2	232	0.4	100	0.2	11	0.1	1	0.0
25-40	11,618	7.9	298	5.2	6,405	10.1	4,192	6.8	531	4.7	192	4.3
41-64	120,568	82.1	3,432	59.6	52,938	83.3	51,133	82.7	9,321	82.9	3,744	83.2
65+	14,272	9.7	2,014	35.0	3,943	6.2	6,379	10.3	1,375	12.2	561	12.5
Type 2 Diabetes and Dapagliflozin Only	131,103	100.0	5,007	100.0	53,539	100.0	57,234	100.0	10,929	100.0	4,394	100.0



Table 6c: Distribution of second and subsequent exposure episode duration, by length categories, in days, by age group												
Exposures	Total Episodes		1-30		31-90		91-365		366-730		731+	
	N	%	N	%	N	%	N	%	N	%	N	%
00-17	9	0.0	1	0.0	7	0.0	1	0.0	0	0.0	0	0.0
18-24	374	0.3	17	0.3	204	0.4	138	0.2	13	0.1	2	0.0
25-40	11,907	9.1	480	9.6	5,717	10.7	4,849	8.5	637	5.8	224	5.1
41-64	113,539	86.6	4,142	82.7	45,901	85.7	49,748	86.9	9,776	89.5	3,972	90.4
65+	5,274	4.0	367	7.3	1,710	3.2	2,498	4.4	503	4.6	196	4.5
Type 2 Diabetes and Empagliflozin Only	130,103	100.0	8,023	100.0	51,660	100.0	57,501	100.0	10,196	100.0	2,723	100.0
00-17	22	0.0	3	0.0	11	0.0	6	0.0	2	0.0	0	0.0
18-24	381	0.3	20	0.2	216	0.4	132	0.2	12	0.1	1	0.0
25-40	10,202	7.8	522	6.5	5,079	9.8	4,005	7.0	478	4.7	118	4.3
41-64	110,137	84.7	5,291	65.9	44,088	85.3	49,499	86.1	8,916	87.4	2,343	86.0
65+	9,361	7.2	2,187	27.3	2,266	4.4	3,859	6.7	788	7.7	261	9.6
Type 2 Diabetes and Ertugliflozin Only	1,736	100.0	120	100.0	901	100.0	636	100.0	75	100.0	4	100.0
00-17	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18-24	6	0.3	0	0.0	3	0.3	3	0.5	0	0.0	0	0.0
25-40	186	10.7	9	7.5	109	12.1	66	10.4	2	2.7	0	0.0
41-64	1,490	85.8	102	85.0	764	84.8	549	86.3	71	94.7	4	100.0
65+	54	3.1	9	7.5	25	2.8	18	2.8	2	2.7	0	0.0
Type 2 Diabetes and Sitagliptin Only	511,368	100.0	32,605	100.0	207,928	100.0	216,275	100.0	38,006	100.0	16,554	100.0
00-17	117	0.0	4	0.0	59	0.0	48	0.0	5	0.0	1	0.0
18-24	999	0.2	53	0.2	639	0.3	279	0.1	17	0.0	11	0.1
25-40	37,966	7.4	1,488	4.6	20,397	9.8	13,876	6.4	1,656	4.4	549	3.3
41-64	382,220	74.7	15,510	47.6	163,517	78.6	163,215	75.5	28,099	73.9	11,879	71.8
65+	90,066	17.6	15,550	47.7	23,316	11.2	38,857	18.0	8,229	21.7	4,114	24.9

Table 7a: Descriptive statistics of second and subsequent exposure episode duration, in days								
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	7,316	153.98	202.60	1	40	100	187	2,122
Type 1 Diabetes and Dapagliflozin Only	3,520	153.69	207.27	1	40	100	190	2,115
Type 1 Diabetes and Empagliflozin Only	3,492	147.61	180.77	1	40	100	190	1,841
Type 1 Diabetes and Ertugliflozin Only	22	87.91	111.26	3	11	40	100	471
Type 1 Diabetes and Sitagliptin Only	6,515	143.29	200.15	1	40	95	163	2,985
Type 2 Diabetes and Canagliflozin Only	146,840	160.50	214.07	1	40	100	190	2,540
Type 2 Diabetes and Dapagliflozin Only	131,103	168.69	217.69	1	40	100	190	2,343
Type 2 Diabetes and Empagliflozin Only	130,103	153.33	184.15	1	40	100	190	2,129
Type 2 Diabetes and Ertugliflozin Only	1,736	111.00	112.90	1	40	71	130	844
Type 2 Diabetes and Sitagliptin Only	511,368	160.82	228.41	1	40	100	190	3,466

Table 7b: Descriptive statistics of second and subsequent exposure episode duration, in days, by sex								
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	7,316	153.98	202.60	1	40	100	187	2,122
Female	3,537	140.11	182.50	2	40	80	148	1,922
Male	3,779	166.95	218.99	1	40	100	190	2,122
Type 1 Diabetes and Dapagliflozin Only	3,520	153.69	207.27	1	40	100	190	2,115
Female	1,776	139.06	187.70	1	40	79	161	2,115
Male	1,744	168.59	224.54	1	40	100	192	2,022
Type 1 Diabetes and Empagliflozin Only	3,492	147.61	180.77	1	40	100	190	1,841
Female	1,647	139.57	170.31	2	40	100	168	1,571
Male	1,845	154.79	189.38	1	40	100	190	1,841
Type 1 Diabetes and Ertugliflozin Only	22	87.91	111.26	3	11	40	100	471
Female	8	134.63	145.89	40	40	87	157	471
Male	14	61.21	80.15	3	11	30	75	281
Type 1 Diabetes and Sitagliptin Only	6,515	143.29	200.15	1	40	95	163	2,985
Female	3,344	140.06	188.75	2	40	91	160	2,674
Male	3,171	146.69	211.49	1	40	100	166	2,985
Type 2 Diabetes and Canagliflozin Only	146,840	160.50	214.07	1	40	100	190	2,540
Female	61,385	151.39	201.61	1	40	98	177	2,486
Male	85,455	167.04	222.37	1	40	100	190	2,540
Type 2 Diabetes and Dapagliflozin Only	131,103	168.69	217.69	1	40	100	190	2,343
Female	56,422	156.78	203.35	1	40	100	190	2,280
Male	74,681	177.69	227.51	1	40	100	196	2,343
Type 2 Diabetes and Empagliflozin Only	130,103	153.33	184.15	1	40	100	190	2,129
Female	53,904	143.65	173.01	1	40	100	179	1,987
Male	76,199	160.17	191.34	1	40	100	191	2,129
Type 2 Diabetes and Ertugliflozin Only	1,736	111.00	112.90	1	40	71	130	844
Female	714	106.90	108.79	1	40	70	117	717
Male	1,022	113.86	115.66	1	40	73	133	844
Type 2 Diabetes and Sitagliptin Only	511,368	160.82	228.41	1	40	100	190	3,466
Female	230,837	153.90	219.37	1	40	100	175	3,466
Male	280,531	166.52	235.43	1	40	100	190	3,184

Table 7c: Descriptive statistics of second and subsequent exposure episode duration, in days, by age group								
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	7,316	153.98	202.60	1	40	100	187	2,122
00-17	26	80.62	60.52	6	40	40	106	225
18-24	169	94.62	106.64	9	40	40	100	760
25-40	1,114	125.60	159.35	2	40	74	135	1,922
41-64	5,152	161.27	212.87	1	40	100	190	2,122
65+	855	161.00	201.40	2	40	100	190	1,420
Type 1 Diabetes and Dapagliflozin Only	3,520	153.69	207.27	1	40	100	190	2,115
00-17	12	238.75	274.73	38	53	116	314	916
18-24	68	122.96	106.88	6	40	78	196	420
25-40	631	132.93	151.02	2	40	100	160	1,252
41-64	2,636	159.31	220.52	1	40	100	190	2,115
65+	173	150.03	195.40	9	40	93	192	1,367
Type 1 Diabetes and Empagliflozin Only	3,492	147.61	180.77	1	40	100	190	1,841
00-17	2	40.00	0.00	40	40	40	40	40
18-24	72	83.24	90.29	6	40	40	100	439
25-40	461	131.21	162.88	4	40	80	149	1,750
41-64	2,609	156.53	182.99	1	40	100	190	1,841
65+	348	116.43	193.35	5	11	40	125	1,433
Type 1 Diabetes and Ertugliflozin Only	22	87.91	111.26	3	11	40	100	471
00-17	0	-	-	-	-	-	-	-
18-24	0	-	-	-	-	-	-	-
25-40	7	84.86	77.73	3	10	70	180	197
41-64	11	118.36	137.41	20	40	75	116	471
65+	4	9.50	3.00	5	8	11	11	11
Type 1 Diabetes and Sitagliptin Only	6,515	143.29	200.15	1	40	95	163	2,985
00-17	20	52.05	28.72	6	40	40	55	130
18-24	100	82.83	70.74	31	40	40	100	420
25-40	580	101.07	117.80	4	40	42	100	1,020
41-64	3,893	147.01	211.24	1	40	94	167	2,985
65+	1,922	152.58	200.16	1	40	100	190	1,927
Type 2 Diabetes and Canagliflozin Only	146,840	160.50	214.07	1	40	100	190	2,540
00-17	27	68.96	60.32	14	40	40	75	319
18-24	355	90.26	109.42	2	40	40	100	1,188
25-40	11,618	123.00	167.25	1	40	70	130	2,230
41-64	120,568	162.48	214.94	1	40	100	190	2,486
65+	14,272	176.21	237.88	1	40	100	194	2,540
Type 2 Diabetes and Dapagliflozin Only	131,103	168.69	217.69	1	40	100	190	2,343
00-17	9	53.33	31.32	25	40	40	55	130

Table 7c: Descriptive statistics of second and subsequent exposure episode duration, in days, by age group								
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
18-24	374	103.22	113.30	5	40	70	102	988
25-40	11,907	133.91	176.03	1	40	78	141	2,150
41-64	113,539	172.01	221.06	1	40	100	192	2,343
65+	5,274	180.65	227.32	1	40	100	204	2,206
Type 2 Diabetes and Empagliflozin Only	130,103	153.33	184.15	1	40	100	190	2,129
00-17	22	125.18	162.95	4	40	55	105	690
18-24	381	98.75	100.54	2	40	70	103	752
25-40	10,202	121.17	144.85	1	40	74	134	1,893
41-64	110,137	156.39	185.17	1	40	100	190	2,129
65+	9,361	154.67	207.81	1	40	100	190	1,968
Type 2 Diabetes and Ertugliflozin Only	1,736	111.00	112.90	1	40	71	130	844
00-17	0	-	-	-	-	-	-	-
18-24	6	84.67	48.65	31	40	85	104	163
25-40	186	85.78	68.95	1	40	70	102	461
41-64	1,490	114.65	117.47	1	40	72	133	844
65+	54	100.06	100.06	1	40	64	110	387
Type 2 Diabetes and Sitagliptin Only	511,368	160.82	228.41	1	40	100	190	3,466
00-17	117	118.76	151.61	10	40	74	108	1,201
18-24	999	92.66	136.82	1	40	40	100	1,957
25-40	37,966	119.89	169.76	1	40	70	112	2,975
41-64	382,220	160.49	224.04	1	40	100	190	3,466
65+	90,066	180.31	263.94	1	40	100	193	3,386



Table 8a: Distribution of all episode durations, by length categories, in days													
Exposures	Total Episodes		1-30		31-90		91-365		366-730		731+		
	N	%	N	%	N	%	N	%	N	%	N	%	
Type 1 Diabetes and Canagliflozin Only	12,315	100.0	391	3.2	5,121	41.6	5,099	41.4	1,140	9.3	564	4.6	
Type 1 Diabetes and Dapagliflozin Only	5,963	100.0	223	3.7	2,549	42.7	2,514	42.2	461	7.7	216	3.6	
Type 1 Diabetes and Empagliflozin Only	6,437	100.0	401	6.2	2,437	37.9	2,763	42.9	608	9.4	228	3.5	
Type 1 Diabetes and Ertugliflozin Only	46	100.0	9	19.6	20	43.5	13	28.3	4	8.7	0	0.0	
Type 1 Diabetes and Sitagliptin Only	11,295	100.0	730	6.5	4,682	41.5	4,682	41.5	856	7.6	345	3.1	
Type 2 Diabetes and Canagliflozin Only	259,582	100.0	8,853	3.4	103,964	40.1	107,760	41.5	25,825	9.9	13,180	5.1	
Type 2 Diabetes and Dapagliflozin Only	232,747	100.0	8,485	3.6	90,416	38.8	99,949	42.9	22,537	9.7	11,360	4.9	
Type 2 Diabetes and Empagliflozin Only	257,361	100.0	13,628	5.3	93,664	36.4	114,439	44.5	26,896	10.5	8,734	3.4	
Type 2 Diabetes and Ertugliflozin Only	4,001	100.0	206	5.1	1,767	44.2	1,660	41.5	339	8.5	29	0.7	
Type 2 Diabetes and Sitagliptin Only	827,971	100.0	43,328	5.2	320,209	38.7	348,881	42.1	75,961	9.2	39,592	4.8	

Table 8b: Distribution of all episode durations, by length categories, in days, by sex												
Exposures	Total Episodes		1-30		31-90		91-365		366-730		731+	
	N	%	N	%	N	%	N	%	N	%	N	%
Type 1 Diabetes and Canagliflozin Only	12,315	100.0	391	100.0	5,121	100.0	5,099	100.0	1,140	100.0	564	100.0
Female	5,980	48.6	141	36.1	2,695	52.6	2,472	48.5	450	39.5	222	39.4
Male	6,335	51.4	250	63.9	2,426	47.4	2,627	51.5	690	60.5	342	60.6
Type 1 Diabetes and Dapagliflozin Only	5,963	100.0	223	100.0	2,549	100.0	2,514	100.0	461	100.0	216	100.0
Female	3,004	50.4	114	51.1	1,387	54.4	1,220	48.5	199	43.2	84	38.9
Male	2,959	49.6	109	48.9	1,162	45.6	1,294	51.5	262	56.8	132	61.1
Type 1 Diabetes and Empagliflozin Only	6,437	100.0	401	100.0	2,437	100.0	2,763	100.0	608	100.0	228	100.0
Female	3,005	46.7	200	49.9	1,202	49.3	1,262	45.7	262	43.1	79	34.6
Male	3,432	53.3	201	50.1	1,235	50.7	1,501	54.3	346	56.9	149	65.4
Type 1 Diabetes and Ertugliflozin Only	46	100.0	9	100.0	20	100.0	13	100.0	4	100.0	0	0.0
Female	20	43.5	1	11.1	11	55.0	6	46.2	2	50.0	0	0.0
Male	26	56.5	8	88.9	9	45.0	7	53.8	2	50.0	0	0.0
Type 1 Diabetes and Sitagliptin Only	11,295	100.0	730	100.0	4,682	100.0	4,682	100.0	856	100.0	345	100.0
Female	5,821	51.5	390	53.4	2,470	52.8	2,387	51.0	408	47.7	166	48.1
Male	5,474	48.5	340	46.6	2,212	47.2	2,295	49.0	448	52.3	179	51.9
Type 2 Diabetes and Canagliflozin Only	259,582	100.0	8,853	100.0	103,964	100.0	107,760	100.0	25,825	100.0	13,180	100.0
Female	110,847	42.7	3,713	41.9	47,485	45.7	44,889	41.7	10,053	38.9	4,707	35.7
Male	148,735	57.3	5,140	58.1	56,479	54.3	62,871	58.3	15,772	61.1	8,473	64.3
Type 2 Diabetes and Dapagliflozin Only	232,747	100.0	8,485	100.0	90,416	100.0	99,949	100.0	22,537	100.0	11,360	100.0
Female	100,995	43.4	3,638	42.9	42,078	46.5	42,275	42.3	8,874	39.4	4,130	36.4
Male	131,752	56.6	4,847	57.1	48,338	53.5	57,674	57.7	13,663	60.6	7,230	63.6
Type 2 Diabetes and Empagliflozin Only	257,361	100.0	13,628	100.0	93,664	100.0	114,439	100.0	26,896	100.0	8,734	100.0
Female	106,978	41.6	5,589	41.0	42,176	45.0	46,272	40.4	9,928	36.9	3,013	34.5
Male	150,383	58.4	8,039	59.0	51,488	55.0	68,167	59.6	16,968	63.1	5,721	65.5
Type 2 Diabetes and Ertugliflozin Only	4,001	100.0	206	100.0	1,767	100.0	1,660	100.0	339	100.0	29	100.0
Female	1,702	42.5	86	41.7	804	45.5	679	40.9	123	36.3	10	34.5
Male	2,299	57.5	120	58.3	963	54.5	981	59.1	216	63.7	19	65.5
Type 2 Diabetes and Sitagliptin Only	827,971	100.0	43,328	100.0	320,209	100.0	348,881	100.0	75,961	100.0	39,592	100.0
Female	374,993	45.3	20,053	46.3	152,206	47.5	154,351	44.2	32,164	42.3	16,219	41.0
Male	452,978	54.7	23,275	53.7	168,003	52.5	194,530	55.8	43,797	57.7	23,373	59.0

Table 8c: Distribution of all episode durations, by length categories, in days, by age group												
Exposures	Total Episodes		1-30		31-90		91-365		366-730		731+	
	N	%	N	%	N	%	N	%	N	%	N	%
Type 1 Diabetes and Canagliflozin Only	12,315	100.0	391	100.0	5,121	100.0	5,099	100.0	1,140	100.0	564	100.0
00-17	43	0.3	1	0.3	24	0.5	15	0.3	3	0.3	0	0.0
18-24	303	2.5	10	2.6	170	3.3	101	2.0	12	1.1	10	1.8
25-40	1,746	14.2	38	9.7	862	16.8	687	13.5	115	10.1	44	7.8
41-64	8,576	69.6	226	57.8	3,558	69.5	3,519	69.0	855	75.0	418	74.1
65+	1,647	13.4	116	29.7	507	9.9	777	15.2	155	13.6	92	16.3
Type 1 Diabetes and Dapagliflozin Only	5,963	100.0	223	100.0	2,549	100.0	2,514	100.0	461	100.0	216	100.0
00-17	19	0.3	1	0.4	9	0.4	5	0.2	3	0.7	1	0.5
18-24	132	2.2	5	2.2	77	3.0	43	1.7	7	1.5	0	0.0
25-40	1,024	17.2	28	12.6	444	17.4	464	18.5	62	13.4	26	12.0
41-64	4,434	74.4	151	67.7	1,895	74.3	1,849	73.5	365	79.2	174	80.6
65+	354	5.9	38	17.0	124	4.9	153	6.1	24	5.2	15	6.9
Type 1 Diabetes and Empagliflozin Only	6,437	100.0	401	100.0	2,437	100.0	2,763	100.0	608	100.0	228	100.0
00-17	8	0.1	0	0.0	7	0.3	1	0.0	0	0.0	0	0.0
18-24	139	2.2	7	1.7	78	3.2	46	1.7	7	1.2	1	0.4
25-40	862	13.4	37	9.2	383	15.7	361	13.1	61	10.0	20	8.8
41-64	4,739	73.6	171	42.6	1,811	74.3	2,092	75.7	483	79.4	182	79.8
65+	689	10.7	186	46.4	158	6.5	263	9.5	57	9.4	25	11.0
Type 1 Diabetes and Ertugliflozin Only	46	100.0	9	100.0	20	100.0	13	100.0	4	100.0	0	0.0
00-17	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18-24	1	2.2	1	11.1	0	0.0	0	0.0	0	0.0	0	0.0
25-40	13	28.3	2	22.2	6	30.0	4	30.8	1	25.0	0	0.0
41-64	26	56.5	1	11.1	14	70.0	8	61.5	3	75.0	0	0.0
65+	6	13.0	5	55.6	0	0.0	1	7.7	0	0.0	0	0.0
Type 1 Diabetes and Sitagliptin Only	11,295	100.0	730	100.0	4,682	100.0	4,682	100.0	856	100.0	345	100.0
00-17	37	0.3	1	0.1	25	0.5	10	0.2	1	0.1	0	0.0
18-24	180	1.6	5	0.7	106	2.3	61	1.3	6	0.7	2	0.6
25-40	979	8.7	29	4.0	564	12.0	335	7.2	45	5.3	6	1.7
41-64	6,541	57.9	250	34.2	2,940	62.8	2,670	57.0	481	56.2	200	58.0
65+	3,558	31.5	445	61.0	1,047	22.4	1,606	34.3	323	37.7	137	39.7
Type 2 Diabetes and Canagliflozin Only	259,582	100.0	8,853	100.0	103,964	100.0	107,760	100.0	25,825	100.0	13,180	100.0
00-17	43	0.0	2	0.0	27	0.0	13	0.0	1	0.0	0	0.0
18-24	609	0.2	21	0.2	375	0.4	175	0.2	31	0.1	7	0.1
25-40	18,896	7.3	510	5.8	9,682	9.3	7,024	6.5	1,181	4.6	499	3.8
41-64	210,168	81.0	5,569	62.9	85,314	82.1	87,449	81.2	21,172	82.0	10,664	80.9
65+	29,866	11.5	2,751	31.1	8,566	8.2	13,099	12.2	3,440	13.3	2,010	15.3
Type 2 Diabetes and Dapagliflozin Only	232,747	100.0	8,485	100.0	90,416	100.0	99,949	100.0	22,537	100.0	11,360	100.0

Table 8c: Distribution of all episode durations, by length categories, in days, by age group												
Exposures	Total Episodes		1-30		31-90		91-365		366-730		731+	
	N	%	N	%	N	%	N	%	N	%	N	%
00-17	15	0.0	1	0.0	13	0.0	1	0.0	0	0.0	0	0.0
18-24	688	0.3	26	0.3	381	0.4	236	0.2	35	0.2	10	0.1
25-40	19,670	8.5	802	9.5	9,160	10.1	7,921	7.9	1,255	5.6	532	4.7
41-64	199,615	85.8	6,895	81.3	76,896	85.0	85,678	85.7	19,937	88.5	10,209	89.9
65+	12,759	5.5	761	9.0	3,966	4.4	6,113	6.1	1,310	5.8	609	5.4
Type 2 Diabetes and Empagliflozin Only	257,361	100.0	13,628	100.0	93,664	100.0	114,439	100.0	26,896	100.0	8,734	100.0
00-17	35	0.0	3	0.0	20	0.0	10	0.0	2	0.0	0	0.0
18-24	724	0.3	33	0.2	406	0.4	248	0.2	33	0.1	4	0.0
25-40	18,623	7.2	896	6.6	8,659	9.2	7,502	6.6	1,224	4.6	342	3.9
41-64	215,570	83.8	9,329	68.5	78,997	84.3	96,635	84.4	23,238	86.4	7,371	84.4
65+	22,409	8.7	3,367	24.7	5,582	6.0	10,044	8.8	2,399	8.9	1,017	11.6
Type 2 Diabetes and Ertugliflozin Only	4,001	100.0	206	100.0	1,767	100.0	1,660	100.0	339	100.0	29	100.0
00-17	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18-24	18	0.4	2	1.0	10	0.6	6	0.4	0	0.0	0	0.0
25-40	370	9.2	17	8.3	194	11.0	140	8.4	18	5.3	1	3.4
41-64	3,425	85.6	172	83.5	1,493	84.5	1,422	85.7	311	91.7	27	93.1
65+	188	4.7	15	7.3	70	4.0	92	5.5	10	2.9	1	3.4
Type 2 Diabetes and Sitagliptin Only	827,971	100.0	43,328	100.0	320,209	100.0	348,881	100.0	75,961	100.0	39,592	100.0
00-17	186	0.0	8	0.0	102	0.0	66	0.0	9	0.0	1	0.0
18-24	1,773	0.2	76	0.2	1,073	0.3	540	0.2	59	0.1	25	0.1
25-40	57,752	7.0	2,221	5.1	30,140	9.4	21,246	6.1	3,000	3.9	1,145	2.9
41-64	609,826	73.7	22,240	51.3	246,693	77.0	258,467	74.1	55,173	72.6	27,253	68.8
65+	158,434	19.1	18,783	43.4	42,201	13.2	68,562	19.7	17,720	23.3	11,168	28.2

Table 9a: Descriptive statistics of all exposure episode durations, in days								
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	12,315	185.58	258.44	1	40	100	196	2,530
Type 1 Diabetes and Dapagliflozin Only	5,963	169.03	235.25	1	40	100	190	2,255
Type 1 Diabetes and Empagliflozin Only	6,437	175.39	224.86	1	40	100	198	2,080
Type 1 Diabetes and Ertugliflozin Only	46	110.61	132.89	3	40	40	116	519
Type 1 Diabetes and Sitagliptin Only	11,295	157.52	224.16	1	40	100	188	2,985
Type 2 Diabetes and Canagliflozin Only	259,582	197.64	273.22	1	40	100	220	2,724
Type 2 Diabetes and Dapagliflozin Only	232,747	193.96	256.62	1	40	100	220	2,411
Type 2 Diabetes and Empagliflozin Only	257,361	182.41	220.47	1	40	100	220	2,200
Type 2 Diabetes and Ertugliflozin Only	4,001	142.60	147.09	1	40	96	190	903
Type 2 Diabetes and Sitagliptin Only	827,971	190.25	276.78	1	40	100	197	3,559

Table 9b: Descriptive statistics of all exposure episode durations, in days, by sex								
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	12,315	185.58	258.44	1	40	100	196	2,530
Female	5,980	167.29	229.42	2	40	100	190	2,433
Male	6,335	202.85	282.05	1	40	100	222	2,530
Type 1 Diabetes and Dapagliflozin Only	5,963	169.03	235.25	1	40	100	190	2,255
Female	3,004	152.87	215.83	1	40	91	172	2,255
Male	2,959	185.43	252.44	1	40	100	197	2,136
Type 1 Diabetes and Empagliflozin Only	6,437	175.39	224.86	1	40	100	198	2,080
Female	3,005	158.80	199.18	1	40	100	190	1,921
Male	3,432	189.92	244.25	1	40	100	224	2,080
Type 1 Diabetes and Ertugliflozin Only	46	110.61	132.89	3	40	40	116	519
Female	20	117.35	139.09	27	40	58	108	519
Male	26	105.42	130.46	3	11	40	176	484
Type 1 Diabetes and Sitagliptin Only	11,295	157.52	224.16	1	40	100	188	2,985
Female	5,821	151.42	212.07	1	40	100	172	2,770
Male	5,474	164.01	236.19	1	40	100	190	2,985
Type 2 Diabetes and Canagliflozin Only	259,582	197.64	273.22	1	40	100	220	2,724
Female	110,847	182.01	251.23	1	40	100	197	2,674
Male	148,735	209.28	287.96	1	40	100	237	2,724
Type 2 Diabetes and Dapagliflozin Only	232,747	193.96	256.62	1	40	100	220	2,411
Female	100,995	179.15	239.52	1	40	100	195	2,400
Male	131,752	205.32	268.44	1	40	100	235	2,411
Type 2 Diabetes and Empagliflozin Only	257,361	182.41	220.47	1	40	100	220	2,200
Female	106,978	168.76	206.28	1	40	100	197	2,200
Male	150,383	192.11	229.55	1	40	100	237	2,198
Type 2 Diabetes and Ertugliflozin Only	4,001	142.60	147.09	1	40	96	190	903
Female	1,702	134.34	139.63	1	40	78	190	899
Male	2,299	148.72	152.11	1	40	100	197	903
Type 2 Diabetes and Sitagliptin Only	827,971	190.25	276.78	1	40	100	197	3,559
Female	374,993	180.47	263.86	1	40	100	191	3,520
Male	452,978	198.35	286.79	1	40	100	206	3,559



Table 9c: Descriptive statistics of all exposure episode durations, in days, by age group								
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	12,315	185.58	258.44	1	40	100	196	2,530
00-17	43	122.05	135.46	6	40	70	141	580
18-24	303	137.39	220.24	3	40	70	130	1,968
25-40	1,746	149.42	211.23	1	40	78	166	2,234
41-64	8,576	193.14	267.32	1	40	100	205	2,433
65+	1,647	195.08	261.52	2	40	100	200	2,530
Type 1 Diabetes and Dapagliflozin Only	5,963	169.03	235.25	1	40	100	190	2,255
00-17	19	212.16	254.78	30	40	72	251	916
18-24	132	112.46	109.85	6	40	70	130	561
25-40	1,024	146.76	191.66	2	40	100	165	2,018
41-64	4,434	175.59	246.57	1	40	100	191	2,255
65+	354	170.00	231.78	1	40	100	194	1,485
Type 1 Diabetes and Empagliflozin Only	6,437	175.39	224.86	1	40	100	198	2,080
00-17	8	51.63	22.70	40	40	40	57	100
18-24	139	105.47	118.77	6	40	40	127	836
25-40	862	150.97	189.22	1	40	100	190	1,750
41-64	4,739	184.86	232.90	1	40	100	219	2,080
65+	689	156.39	221.11	2	19	91	190	1,461
Type 1 Diabetes and Ertugliflozin Only	46	110.61	132.89	3	40	40	116	519
00-17	0	-	-	-	-	-	-	-
18-24	1	27.00	-	27	27	27	27	27
25-40	13	127.15	151.46	3	40	70	180	519
41-64	26	125.35	134.50	20	40	58	176	484
65+	6	24.83	36.90	5	11	11	11	100
Type 1 Diabetes and Sitagliptin Only	11,295	157.52	224.16	1	40	100	188	2,985
00-17	37	73.46	74.32	6	40	40	100	450
18-24	180	105.79	141.14	21	40	42	104	1,288
25-40	979	107.68	131.51	3	40	70	100	1,364
41-64	6,541	157.53	230.00	1	40	100	181	2,985
65+	3,558	174.71	235.12	1	40	100	193	2,510
Type 2 Diabetes and Canagliflozin Only	259,582	197.64	273.22	1	40	100	220	2,724
00-17	43	85.60	102.34	14	40	40	100	640
18-24	609	113.87	183.17	1	40	40	103	2,642
25-40	18,896	146.43	210.91	1	40	75	160	2,668
41-64	210,168	199.16	273.35	1	40	100	222	2,724
65+	29,866	221.15	302.94	1	40	100	263	2,690
Type 2 Diabetes and Dapagliflozin Only	232,747	193.96	256.62	1	40	100	220	2,411
00-17	15	57.13	26.45	25	40	40	71	130

Table 9c: Descriptive statistics of all exposure episode durations, in days, by age group								
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
18-24	688	119.98	159.16	5	40	70	116	1,569
25-40	19,670	149.50	205.30	1	40	83	167	2,406
41-64	199,615	198.16	261.00	1	40	100	223	2,411
65+	12,759	201.10	255.90	1	40	100	233	2,372
Type 2 Diabetes and Empagliflozin Only	257,361	182.41	220.47	1	40	100	220	2,200
00-17	35	104.74	133.94	4	40	40	100	690
18-24	724	110.43	124.77	2	40	70	112	1,318
25-40	18,623	140.77	175.15	1	40	80	166	2,128
41-64	215,570	185.19	221.14	1	40	100	225	2,200
65+	22,409	192.69	244.93	1	40	100	238	2,179
Type 2 Diabetes and Ertugliflozin Only	4,001	142.60	147.09	1	40	96	190	903
00-17	0	-	-	-	-	-	-	-
18-24	18	81.33	67.96	8	40	40	104	233
25-40	370	110.50	112.76	1	40	70	132	899
41-64	3,425	147.09	151.05	1	40	100	195	903
65+	188	129.87	128.59	1	40	100	166	863
Type 2 Diabetes and Sitagliptin Only	827,971	190.25	276.78	1	40	100	197	3,559
00-17	186	112.37	138.07	8	40	71	106	1,201
18-24	1,773	108.85	162.15	1	40	40	102	1,957
25-40	57,752	131.72	193.70	1	40	71	132	3,333
41-64	609,826	186.80	267.63	1	40	100	196	3,559
65+	158,434	225.87	328.69	1	40	100	260	3,520



Table 10a: Distribution of days supplied per dispensing, by length categories										
Exposures	Total Dispensings		1-30		31-60		61-90		91+	
	N	%	N	%	N	%	N	%	N	%
Type 1 Diabetes and Canagliflozin Only	47,708	100.0	35,172	73.7	559	1.2	11,923	25.0	54	0.1
Type 1 Diabetes and Dapagliflozin Only	21,533	100.0	16,220	75.3	259	1.2	5,038	23.4	16	0.1
Type 1 Diabetes and Empagliflozin Only	22,754	100.0	15,699	69.0	455	2.0	6,579	28.9	21	0.1
Type 1 Diabetes and Ertugliflozin Only	127	100.0	110	86.6	0	0.0	17	13.4	0	0.0
Type 1 Diabetes and Sitagliptin Only	35,060	100.0	23,482	67.0	707	2.0	10,805	30.8	66	0.2
Type 2 Diabetes and Canagliflozin Only	1,093,670	100.0	817,767	74.8	13,664	1.2	261,144	23.9	1,095	0.1
Type 2 Diabetes and Dapagliflozin Only	934,453	100.0	668,515	71.5	14,597	1.6	250,797	26.8	544	0.1
Type 2 Diabetes and Empagliflozin Only	976,709	100.0	692,977	71.0	21,206	2.2	261,517	26.8	1,009	0.1
Type 2 Diabetes and Ertugliflozin Only	13,980	100.0	11,653	83.4	241	1.7	2,077	14.9	9	0.1
Type 2 Diabetes and Sitagliptin Only	3,064,044	100.0	2,032,875	66.3	59,021	1.9	967,183	31.6	4,965	0.2



Table 10b: Distribution of days supplied per dispensing, by length categories, by sex										
Exposures	Total Dispensings		1-30		31-60		61-90		91+	
	N	%	N	%	N	%	N	%	N	%
Type 1 Diabetes and Canagliflozin Only	47,708	100.0	35,172	100.0	559	100.0	11,923	100.0	54	100.0
Female	21,539	45.1	16,500	46.9	213	38.1	4,812	40.4	14	25.9
Male	26,169	54.9	18,672	53.1	346	61.9	7,111	59.6	40	74.1
Type 1 Diabetes and Dapagliflozin Only	21,533	100.0	16,220	100.0	259	100.0	5,038	100.0	16	100.0
Female	10,028	46.6	7,777	47.9	101	39.0	2,137	42.4	13	81.3
Male	11,505	53.4	8,443	52.1	158	61.0	2,901	57.6	3	18.8
Type 1 Diabetes and Empagliflozin Only	22,754	100.0	15,699	100.0	455	100.0	6,579	100.0	21	100.0
Female	9,973	43.8	7,212	45.9	189	41.5	2,563	39.0	9	42.9
Male	12,781	56.2	8,487	54.1	266	58.5	4,016	61.0	12	57.1
Type 1 Diabetes and Ertugliflozin Only	127	100.0	110	100.0	0	0.0	17	100.0	0	0.0
Female	58	45.7	51	46.4	0	0.0	7	41.2	0	0.0
Male	69	54.3	59	53.6	0	0.0	10	58.8	0	0.0
Type 1 Diabetes and Sitagliptin Only	35,060	100.0	23,482	100.0	707	100.0	10,805	100.0	66	100.0
Female	17,942	51.2	12,413	52.9	359	50.8	5,141	47.6	29	43.9
Male	17,118	48.8	11,069	47.1	348	49.2	5,664	52.4	37	56.1
Type 2 Diabetes and Canagliflozin Only	1,093,670	100.0	817,767	100.0	13,664	100.0	261,144	100.0	1,095	100.0
Female	442,330	40.4	341,626	41.8	5,022	36.8	95,267	36.5	415	37.9
Male	651,340	59.6	476,141	58.2	8,642	63.2	165,877	63.5	680	62.1
Type 2 Diabetes and Dapagliflozin Only	934,453	100.0	668,515	100.0	14,597	100.0	250,797	100.0	544	100.0
Female	383,237	41.0	282,634	42.3	5,643	38.7	94,746	37.8	214	39.3
Male	551,216	59.0	385,881	57.7	8,954	61.3	156,051	62.2	330	60.7
Type 2 Diabetes and Empagliflozin Only	976,709	100.0	692,977	100.0	21,206	100.0	261,517	100.0	1,009	100.0
Female	386,435	39.6	284,307	41.0	7,981	37.6	93,786	35.9	361	35.8
Male	590,274	60.4	408,670	59.0	13,225	62.4	167,731	64.1	648	64.2
Type 2 Diabetes and Ertugliflozin Only	13,980	100.0	11,653	100.0	241	100.0	2,077	100.0	9	100.0
Female	5,612	40.1	4,693	40.3	98	40.7	820	39.5	1	11.1
Male	8,368	59.9	6,960	59.7	143	59.3	1,257	60.5	8	88.9
Type 2 Diabetes and Sitagliptin Only	3,064,044	100.0	2,032,875	100.0	59,021	100.0	967,183	100.0	4,965	100.0
Female	1,346,586	43.9	919,741	45.2	25,682	43.5	399,054	41.3	2,109	42.5
Male	1,717,458	56.1	1,113,134	54.8	33,339	56.5	568,129	58.7	2,856	57.5

Table 10c: Distribution of days supplied per dispensing, by length categories, by age group										
Exposures	Total Dispensings		1-30		31-60		61-90		91+	
	N	%	N	%	N	%	N	%	N	%
Type 1 Diabetes and Canagliflozin Only	47,708	100.0	35,172	100.0	559	100.0	11,923	100.0	54	100.0
00-17	136	0.3	122	0.3	1	0.2	13	0.1	0	0.0
18-24	935	2.0	753	2.1	4	0.7	177	1.5	1	1.9
25-40	5,865	12.3	4,719	13.4	73	13.1	1,069	9.0	4	7.4
41-64	35,406	74.2	26,776	76.1	379	67.8	8,207	68.8	44	81.5
65+	5,366	11.2	2,802	8.0	102	18.2	2,457	20.6	5	9.3
Type 1 Diabetes and Dapagliflozin Only	21,533	100.0	16,220	100.0	259	100.0	5,038	100.0	16	100.0
00-17	87	0.4	49	0.3	18	6.9	19	0.4	1	6.3
18-24	334	1.6	268	1.7	5	1.9	61	1.2	0	0.0
25-40	3,361	15.6	2,682	16.5	26	10.0	652	12.9	1	6.3
41-64	16,616	77.2	12,507	77.1	187	72.2	3,910	77.6	12	75.0
65+	1,135	5.3	714	4.4	23	8.9	396	7.9	2	12.5
Type 1 Diabetes and Empagliflozin Only	22,754	100.0	15,699	100.0	455	100.0	6,579	100.0	21	100.0
00-17	9	0.0	8	0.1	0	0.0	1	0.0	0	0.0
18-24	313	1.4	238	1.5	7	1.5	68	1.0	0	0.0
25-40	2,635	11.6	1,865	11.9	35	7.7	732	11.1	3	14.3
41-64	17,680	77.7	12,284	78.2	345	75.8	5,034	76.5	17	81.0
65+	2,117	9.3	1,304	8.3	68	14.9	744	11.3	1	4.8
Type 1 Diabetes and Ertugliflozin Only	127	100.0	110	100.0	0	0.0	17	100.0	0	0.0
00-17	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18-24	1	0.8	1	0.9	0	0.0	0	0.0	0	0.0
25-40	53	41.7	53	48.2	0	0.0	0	0.0	0	0.0
41-64	67	52.8	51	46.4	0	0.0	16	94.1	0	0.0
65+	6	4.7	5	4.5	0	0.0	1	5.9	0	0.0
Type 1 Diabetes and Sitagliptin Only	35,060	100.0	23,482	100.0	707	100.0	10,805	100.0	66	100.0
00-17	64	0.2	55	0.2	0	0.0	9	0.1	0	0.0
18-24	414	1.2	326	1.4	11	1.6	77	0.7	0	0.0
25-40	2,254	6.4	1,747	7.4	45	6.4	456	4.2	6	9.1
41-64	20,327	58.0	13,975	59.5	380	53.7	5,934	54.9	38	57.6
65+	12,001	34.2	7,379	31.4	271	38.3	4,329	40.1	22	33.3
Type 2 Diabetes and Canagliflozin Only	1,093,670	100.0	817,767	100.0	13,664	100.0	261,144	100.0	1,095	100.0
00-17	97	0.0	90	0.0	1	0.0	6	0.0	0	0.0
18-24	1,583	0.1	1,309	0.2	9	0.1	263	0.1	2	0.2
25-40	64,149	5.9	52,922	6.5	635	4.6	10,559	4.0	33	3.0
41-64	912,922	83.5	699,781	85.6	10,798	79.0	201,465	77.1	878	80.2
65+	114,919	10.5	63,665	7.8	2,221	16.3	48,851	18.7	182	16.6
Type 2 Diabetes and Dapagliflozin Only	934,453	100.0	668,515	100.0	14,597	100.0	250,797	100.0	544	100.0



Table 10c: Distribution of days supplied per dispensing, by length categories, by age group										
Exposures	Total Dispensings		1-30		31-60		61-90		91+	
	N	%	N	%	N	%	N	%	N	%
00-17	24	0.0	24	0.0	0	0.0	0	0.0	0	0.0
18-24	1,889	0.2	1,538	0.2	24	0.2	326	0.1	1	0.2
25-40	63,082	6.8	47,702	7.1	919	6.3	14,435	5.8	26	4.8
41-64	822,463	88.0	591,420	88.5	12,395	84.9	218,176	87.0	472	86.8
65+	46,995	5.0	27,831	4.2	1,259	8.6	17,860	7.1	45	8.3
Type 2 Diabetes and Empagliflozin Only	976,709	100.0	692,977	100.0	21,206	100.0	261,517	100.0	1,009	100.0
00-17	92	0.0	82	0.0	0	0.0	10	0.0	0	0.0
18-24	1,768	0.2	1,380	0.2	59	0.3	328	0.1	1	0.1
25-40	57,856	5.9	44,546	6.4	1,134	5.3	12,130	4.6	46	4.6
41-64	838,819	85.9	602,996	87.0	17,539	82.7	217,414	83.1	870	86.2
65+	78,174	8.0	43,973	6.3	2,474	11.7	31,635	12.1	92	9.1
Type 2 Diabetes and Ertugliflozin Only	13,980	100.0	11,653	100.0	241	100.0	2,077	100.0	9	100.0
00-17	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
18-24	38	0.3	34	0.3	1	0.4	3	0.1	0	0.0
25-40	1,086	7.8	976	8.4	14	5.8	96	4.6	0	0.0
41-64	12,374	88.5	10,328	88.6	210	87.1	1,827	88.0	9	100.0
65+	482	3.4	315	2.7	16	6.6	151	7.3	0	0.0
Type 2 Diabetes and Sitagliptin Only	3,064,044	100.0	2,032,875	100.0	59,021	100.0	967,183	100.0	4,965	100.0
00-17	469	0.0	384	0.0	3	0.0	81	0.0	1	0.0
18-24	4,369	0.1	3,543	0.2	75	0.1	749	0.1	2	0.0
25-40	165,762	5.4	129,105	6.4	2,417	4.1	34,115	3.5	125	2.5
41-64	2,271,037	74.1	1,566,462	77.1	40,773	69.1	660,393	68.3	3,409	68.7
65+	622,407	20.3	333,381	16.4	15,753	26.7	271,845	28.1	1,428	28.8

Table 11a: Descriptive statistics of days supplied per dispensing								
Exposures	Total Dispensings	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	47,708	44.84	26.63	1	30	30	65	330
Type 1 Diabetes and Dapagliflozin Only	21,533	43.68	26.04	1	30	30	30	460
Type 1 Diabetes and Empagliflozin Only	22,754	46.76	27.91	1	30	30	90	240
Type 1 Diabetes and Ertugliflozin Only	127	36.08	21.84	1	30	30	30	90
Type 1 Diabetes and Sitagliptin Only	35,060	47.34	29.29	1	30	30	90	360
Type 2 Diabetes and Canagliflozin Only	1,093,670	44.13	26.12	1	30	30	39	450
Type 2 Diabetes and Dapagliflozin Only	934,453	45.67	27.00	1	30	30	90	270
Type 2 Diabetes and Empagliflozin Only	976,709	45.51	27.21	1	30	30	90	720
Type 2 Diabetes and Ertugliflozin Only	13,980	38.10	22.29	1	30	30	30	390
Type 2 Diabetes and Sitagliptin Only	3,064,044	48.51	28.72	1	30	30	90	990

Table 11b: Descriptive statistics of days supplied per dispensing, by sex								
Exposures	Total Dispensings	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	47,708	44.84	26.63	1	30	30	65	330
Female	21,539	43.16	25.39	1	30	30	30	180
Male	26,169	46.23	27.52	1	30	30	90	330
Type 1 Diabetes and Dapagliflozin Only	21,533	43.68	26.04	1	30	30	30	460
Female	10,028	42.46	25.58	1	30	30	30	460
Male	11,505	44.75	26.39	1	30	30	69	180
Type 1 Diabetes and Empagliflozin Only	22,754	46.76	27.91	1	30	30	90	240
Female	9,973	44.75	26.97	1	30	30	77	180
Male	12,781	48.33	28.53	1	30	30	90	240
Type 1 Diabetes and Ertugliflozin Only	127	36.08	21.84	1	30	30	30	90
Female	58	36.52	19.36	15	30	30	30	90
Male	69	35.71	23.86	1	30	30	30	90
Type 1 Diabetes and Sitagliptin Only	35,060	47.34	29.29	1	30	30	90	360
Female	17,942	45.68	28.79	1	30	30	90	180
Male	17,118	49.08	29.70	1	30	30	90	360
Type 2 Diabetes and Canagliflozin Only	1,093,670	44.13	26.12	1	30	30	39	450
Female	442,330	42.69	25.20	1	30	30	30	390
Male	651,340	45.11	26.67	1	30	30	87	450
Type 2 Diabetes and Dapagliflozin Only	934,453	45.67	27.00	1	30	30	90	270
Female	383,237	44.40	26.29	1	30	30	60	210
Male	551,216	46.55	27.45	1	30	30	90	270
Type 2 Diabetes and Empagliflozin Only	976,709	45.51	27.21	1	30	30	90	720
Female	386,435	44.00	26.36	1	30	30	57	630
Male	590,274	46.50	27.71	1	30	30	90	720
Type 2 Diabetes and Ertugliflozin Only	13,980	38.10	22.29	1	30	30	30	390
Female	5,612	37.86	21.88	1	30	30	30	180
Male	8,368	38.25	22.56	1	30	30	30	390
Type 2 Diabetes and Sitagliptin Only	3,064,044	48.51	28.72	1	30	30	90	990
Female	1,346,586	47.27	28.30	1	30	30	90	990
Male	1,717,458	49.48	29.01	1	30	30	90	730

Table 11c: Descriptive statistics of days supplied per dispensing, by age group								
Exposures	Total Dispensings	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	47,708	44.84	26.63	1	30	30	65	330
00-17	136	35.21	18.05	1	30	30	30	90
18-24	935	40.95	24.03	1	30	30	30	120
25-40	5,865	40.89	23.60	1	30	30	30	180
41-64	35,406	43.84	26.00	1	30	30	30	330
65+	5,366	56.69	30.91	1	30	30	90	120
Type 1 Diabetes and Dapagliflozin Only	21,533	43.68	26.04	1	30	30	30	460
00-17	87	43.84	25.59	7	30	30	31	93
18-24	334	40.45	23.73	1	30	30	30	90
25-40	3,361	41.22	23.96	1	30	30	30	150
41-64	16,616	43.82	26.12	1	30	30	30	460
65+	1,135	49.90	30.07	1	30	30	90	120
Type 1 Diabetes and Empagliflozin Only	22,754	46.76	27.91	1	30	30	90	240
00-17	9	36.67	20.00	30	30	30	30	90
18-24	313	42.44	25.07	3	30	30	30	90
25-40	2,635	46.11	27.39	1	30	30	90	180
41-64	17,680	46.79	27.53	1	30	30	90	240
65+	2,117	48.02	31.82	1	30	30	90	120
Type 1 Diabetes and Ertugliflozin Only	127	36.08	21.84	1	30	30	30	90
00-17	0	-	-	-	-	-	-	-
18-24	1	27.00	-	27	27	27	27	27
25-40	53	28.68	5.05	3	30	30	30	30
41-64	67	43.88	25.42	20	30	30	30	90
65+	6	15.83	36.33	1	1	1	1	90
Type 1 Diabetes and Sitagliptin Only	35,060	47.34	29.29	1	30	30	90	360
00-17	64	37.03	22.18	6	30	30	30	90
18-24	414	41.32	23.74	1	30	30	30	90
25-40	2,254	42.18	24.86	1	30	30	30	175
41-64	20,327	47.21	28.06	1	30	30	90	360
65+	12,001	48.80	32.03	1	30	30	90	360
Type 2 Diabetes and Canagliflozin Only	1,093,670	44.13	26.12	1	30	30	39	450
00-17	97	33.41	15.07	4	30	30	30	90
18-24	1,583	39.58	24.51	1	30	30	30	390
25-40	64,149	39.63	22.74	1	30	30	30	360
41-64	912,922	43.11	25.37	1	30	30	30	450
65+	114,919	54.81	30.78	1	30	30	90	180
Type 2 Diabetes and Dapagliflozin Only	934,453	45.67	27.00	1	30	30	90	270
00-17	24	29.58	1.41	25	30	30	30	30

Table 11c: Descriptive statistics of days supplied per dispensing, by age group									
Exposures	Total Dispensings	Mean	STD	Min	Q1	Median	Q3	Max	
18-24	1,889	39.86	23.17	1	30	30	30	120	
25-40	63,082	43.26	25.59	1	30	30	30	210	
41-64	822,463	45.49	26.89	1	30	30	90	270	
65+	46,995	52.17	29.84	1	30	30	90	210	
Type 2 Diabetes and Empagliflozin Only	976,709	45.51	27.21	1	30	30	90	720	
00-17	92	35.27	18.67	4	30	30	30	90	
18-24	1,768	41.13	23.78	1	30	30	30	180	
25-40	57,856	42.03	24.94	1	30	30	30	201	
41-64	838,819	45.08	26.86	1	30	30	80	720	
65+	78,174	52.85	31.21	1	30	30	90	180	
Type 2 Diabetes and Ertugliflozin Only	13,980	38.10	22.29	1	30	30	30	390	
00-17	0	-	-	-	-	-	-	-	
18-24	38	34.11	17.66	8	30	30	30	90	
25-40	1,086	34.31	17.93	1	30	30	30	90	
41-64	12,374	38.08	22.28	1	30	30	30	390	
65+	482	47.40	28.30	1	30	30	90	90	
Type 2 Diabetes and Sitagliptin Only	3,064,044	48.51	28.72	1	30	30	90	990	
00-17	469	39.92	23.59	2	30	30	30	120	
18-24	4,369	39.83	23.14	1	30	30	30	143	
25-40	165,762	41.99	24.81	1	30	30	30	390	
41-64	2,271,037	47.22	27.84	1	30	30	90	730	
65+	622,407	55.00	31.67	1	30	30	90	990	

Table 12a: Descriptive statistics of the length of the first gap between treatment episodes, in days								
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	2,544	60.18	147.57	1	5	16	49	2,019
Type 1 Diabetes and Dapagliflozin Only	1,259	69.07	172.19	1	6	17	51	2,165
Type 1 Diabetes and Empagliflozin Only	1,372	61.64	147.96	1	6	16	46	1,718
Type 1 Diabetes and Ertugliflozin Only	10	57.40	73.17	3	15	25	62	212
Type 1 Diabetes and Sitagliptin Only	2,294	86.92	219.62	1	7	21	61	2,200
Type 2 Diabetes and Canagliflozin Only	53,529	58.82	147.15	1	5	15	42	2,403
Type 2 Diabetes and Dapagliflozin Only	49,607	68.00	160.63	1	6	16	49	2,184
Type 2 Diabetes and Empagliflozin Only	55,589	63.42	146.68	1	6	16	48	2,020
Type 2 Diabetes and Ertugliflozin Only	915	36.00	60.91	1	6	15	36	517
Type 2 Diabetes and Sitagliptin Only	164,547	88.22	221.74	1	7	20	62	3,311

Table 12b: Descriptive statistics of the length of the first gap between treatment episodes, in days, by sex								
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	2,544	60.18	147.57	1	5	16	49	2,019
Female	1,241	55.50	143.30	1	5	15	45	1,912
Male	1,303	64.64	151.44	1	6	17	53	2,019
Type 1 Diabetes and Dapagliflozin Only	1,259	69.07	172.19	1	6	17	51	2,165
Female	627	74.25	165.08	1	6	19	60	1,384
Male	632	63.94	178.95	1	6	16	45	2,165
Type 1 Diabetes and Empagliflozin Only	1,372	61.64	147.96	1	6	16	46	1,718
Female	643	61.67	145.64	1	5	16	46	1,200
Male	729	61.61	150.08	1	6	15	46	1,718
Type 1 Diabetes and Ertugliflozin Only	10	57.40	73.17	3	15	25	62	212
Female	3	91.33	104.58	27	27	35	212	212
Male	7	42.86	59.68	3	8	19	62	171
Type 1 Diabetes and Sitagliptin Only	2,294	86.92	219.62	1	7	21	61	2,200
Female	1,180	85.94	206.78	1	8	23	67	2,199
Male	1,114	87.96	232.54	1	7	20	57	2,200
Type 2 Diabetes and Canagliflozin Only	53,529	58.82	147.15	1	5	15	42	2,403
Female	22,911	59.82	148.92	1	6	15	43	2,267
Male	30,618	58.07	145.81	1	5	15	42	2,403
Type 2 Diabetes and Dapagliflozin Only	49,607	68.00	160.63	1	6	16	49	2,184
Female	21,180	70.83	167.42	1	6	16	50	2,184
Male	28,427	65.90	155.34	1	6	16	48	2,171
Type 2 Diabetes and Empagliflozin Only	55,589	63.42	146.68	1	6	16	48	2,020
Female	22,760	66.35	155.19	1	6	16	49	2,020
Male	32,829	61.38	140.44	1	6	16	48	2,014
Type 2 Diabetes and Ertugliflozin Only	915	36.00	60.91	1	6	15	36	517
Female	371	35.80	60.96	1	6	15	36	420
Male	544	36.13	60.92	1	6	14	36	517
Type 2 Diabetes and Sitagliptin Only	164,547	88.22	221.74	1	7	20	62	3,311
Female	74,432	91.67	228.63	1	7	20	64	3,299
Male	90,115	85.37	215.84	1	7	19	60	3,311

Table 12c: Descriptive statistics of the length of the first gap between treatment episodes, in days, by age group								
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	2,544	60.18	147.57	1	5	16	49	2,019
00-17	9	194.78	483.76	3	17	36	67	1,483
18-24	69	82.96	219.15	1	6	17	55	1,267
25-40	342	50.63	129.33	1	5	15	50	1,912
41-64	1,776	58.03	140.49	1	5	15	45	2,019
65+	348	72.55	162.93	1	8	23	62	1,293
Type 1 Diabetes and Dapagliflozin Only	1,259	69.07	172.19	1	6	17	51	2,165
00-17	4	17.00	12.25	2	7	20	27	27
18-24	31	87.10	326.48	1	6	15	46	1,837
25-40	210	63.32	132.82	1	6	15	52	927
41-64	938	67.86	165.91	1	6	17	50	2,165
65+	76	95.36	246.02	1	7	19	73	1,531
Type 1 Diabetes and Empagliflozin Only	1,372	61.64	147.96	1	6	16	46	1,718
00-17	2	30.00	29.70	9	9	30	51	51
18-24	31	75.52	144.62	6	12	24	80	756
25-40	185	53.24	132.56	1	7	15	39	1,043
41-64	1,018	60.62	149.92	1	5	15	42	1,718
65+	136	78.01	154.85	1	8	26	68	952
Type 1 Diabetes and Ertugliflozin Only	10	57.40	73.17	3	15	25	62	212
00-17	0	-	-	-	-	-	-	-
18-24	0	-	-	-	-	-	-	-
25-40	3	15.33	17.21	3	3	8	35	35
41-64	6	77.67	89.21	15	19	25	171	212
65+	1	62.00	-	62	62	62	62	62
Type 1 Diabetes and Sitagliptin Only	2,294	86.92	219.62	1	7	21	61	2,200
00-17	6	82.67	152.69	1	8	21	54	392
18-24	35	105.71	314.53	1	5	25	68	1,830
25-40	190	84.81	180.23	1	7	22	71	1,128
41-64	1,354	85.42	217.98	1	7	21	57	2,200
65+	709	89.44	227.60	1	9	23	68	2,199
Type 2 Diabetes and Canagliflozin Only	53,529	58.82	147.15	1	5	15	42	2,403
00-17	8	56.63	93.09	3	7	11	79	257
18-24	127	69.18	184.43	1	9	21	58	1,791
25-40	3,879	57.84	147.54	1	6	15	41	1,687
41-64	43,506	57.87	145.57	1	5	15	40	2,403
65+	6,009	66.08	156.94	1	6	18	58	2,267
Type 2 Diabetes and Dapagliflozin Only	49,607	68.00	160.63	1	6	16	49	2,184
00-17	3	12.33	5.03	7	7	13	17	17

Table 12c: Descriptive statistics of the length of the first gap between treatment episodes, in days, by age group								
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
18-24	162	60.83	116.17	1	8	18	62	737
25-40	4,130	69.78	159.95	1	7	17	49	2,184
41-64	42,707	67.77	159.71	1	6	16	48	2,183
65+	2,605	69.60	178.29	1	6	18	53	2,171
Type 2 Diabetes and Empagliflozin Only	55,589	63.42	146.68	1	6	16	48	2,020
00-17	8	69.13	62.34	2	29	51	98	197
18-24	164	70.21	132.58	1	7	19	78	818
25-40	4,018	63.27	149.93	1	6	17	49	1,891
41-64	47,020	63.37	147.20	1	6	16	46	2,020
65+	4,379	63.79	138.46	1	7	19	65	1,885
Type 2 Diabetes and Ertugliflozin Only	915	36.00	60.91	1	6	15	36	517
00-17	0	-	-	-	-	-	-	-
18-24	6	62.83	69.76	3	20	38	84	194
25-40	82	36.44	54.41	1	5	15	52	314
41-64	788	35.77	61.93	1	6	15	35	517
65+	39	35.54	52.21	1	6	14	49	272
Type 2 Diabetes and Sitagliptin Only	164,547	88.22	221.74	1	7	20	62	3,311
00-17	40	54.33	90.55	1	5	15	61	407
18-24	369	81.64	161.60	1	10	26	79	1,304
25-40	11,222	86.51	225.22	1	7	20	60	2,994
41-64	121,523	85.84	216.72	1	7	19	58	3,299
65+	31,393	98.15	239.45	1	8	24	75	3,311

Table 13a: Descriptive statistics of the length of second and subsequent gaps between treatment episodes, in days								
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	4,772	46.75	109.24	1	6	17	44	2,353
Type 1 Diabetes and Dapagliflozin Only	2,261	52.96	113.56	1	7	19	50	1,650
Type 1 Diabetes and Empagliflozin Only	2,120	56.99	111.70	1	8	20	59	1,758
Type 1 Diabetes and Ertugliflozin Only	12	25.50	27.53	1	6	13	45	74
Type 1 Diabetes and Sitagliptin Only	4,221	60.89	128.03	1	9	23	66	3,001
Type 2 Diabetes and Canagliflozin Only	93,311	45.41	104.36	1	6	16	41	2,299
Type 2 Diabetes and Dapagliflozin Only	81,496	48.15	111.06	1	6	16	42	2,005
Type 2 Diabetes and Empagliflozin Only	74,514	49.86	110.73	1	6	17	44	1,822
Type 2 Diabetes and Ertugliflozin Only	821	31.67	50.01	1	6	16	37	426
Type 2 Diabetes and Sitagliptin Only	346,821	58.80	141.62	1	7	20	54	3,374



Table 13b: Descriptive statistics of the length of second and subsequent gaps between treatment episodes, in days, by sex								
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	4,772	46.75	109.24	1	6	17	44	2,353
Female	2,296	44.69	98.50	1	6	16	40	1,181
Male	2,476	48.66	118.31	1	7	18	46	2,353
Type 1 Diabetes and Dapagliflozin Only	2,261	52.96	113.56	1	7	19	50	1,650
Female	1,149	52.20	110.53	1	7	19	50	1,650
Male	1,112	53.75	116.66	1	7	19	49	1,279
Type 1 Diabetes and Empagliflozin Only	2,120	56.99	111.70	1	8	20	59	1,758
Female	1,004	60.97	124.14	1	8	21	64	1,758
Male	1,116	53.40	99.10	1	7	20	57	978
Type 1 Diabetes and Ertugliflozin Only	12	25.50	27.53	1	6	13	45	74
Female	5	10.00	12.65	1	3	5	9	32
Male	7	36.57	30.65	6	8	21	74	74
Type 1 Diabetes and Sitagliptin Only	4,221	60.89	128.03	1	9	23	66	3,001
Female	2,164	64.89	147.19	1	8	23	65	3,001
Male	2,057	56.68	104.00	1	9	23	66	1,395
Type 2 Diabetes and Canagliflozin Only	93,311	45.41	104.36	1	6	16	41	2,299
Female	38,474	46.37	107.26	1	6	17	42	2,230
Male	54,837	44.74	102.28	1	6	16	41	2,299
Type 2 Diabetes and Dapagliflozin Only	81,496	48.15	111.06	1	6	16	42	2,005
Female	35,242	48.81	112.48	1	6	16	43	1,916
Male	46,254	47.65	109.96	1	6	16	41	2,005
Type 2 Diabetes and Empagliflozin Only	74,514	49.86	110.73	1	6	17	44	1,822
Female	31,144	50.19	112.51	1	6	17	44	1,822
Male	43,370	49.63	109.43	1	6	16	44	1,783
Type 2 Diabetes and Ertugliflozin Only	821	31.67	50.01	1	6	16	37	426
Female	343	32.38	51.51	1	6	16	37	415
Male	478	31.16	48.96	1	6	16	38	426
Type 2 Diabetes and Sitagliptin Only	346,821	58.80	141.62	1	7	20	54	3,374
Female	156,405	61.43	149.11	1	8	20	56	3,374
Male	190,416	56.64	135.12	1	7	19	52	2,869

Table 13c: Descriptive statistics of the length of second and subsequent gaps between treatment episodes, in days, by age group								
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	4,772	46.75	109.24	1	6	17	44	2,353
00-17	17	26.35	32.43	3	9	17	35	138
18-24	100	46.90	80.98	1	9	21	46	513
25-40	772	47.29	120.86	1	7	18	44	2,353
41-64	3,376	45.11	106.47	1	6	16	41	1,933
65+	507	57.50	114.78	1	8	24	66	1,133
Type 1 Diabetes and Dapagliflozin Only	2,261	52.96	113.56	1	7	19	50	1,650
00-17	8	158.75	237.83	2	16	37	282	599
18-24	37	75.92	144.67	2	9	21	52	726
25-40	421	54.39	132.38	1	7	18	47	1,650
41-64	1,698	52.04	108.54	1	7	19	49	1,279
65+	97	45.33	74.05	1	9	23	55	544
Type 1 Diabetes and Empagliflozin Only	2,120	56.99	111.70	1	8	20	59	1,758
00-17	0	-	-	-	-	-	-	-
18-24	41	72.02	160.69	2	10	31	62	978
25-40	276	48.61	119.53	1	7	16	34	1,110
41-64	1,591	56.27	112.34	1	7	19	54	1,758
65+	212	70.37	79.83	1	19	62	86	479
Type 1 Diabetes and Ertugliflozin Only	12	25.50	27.53	1	6	13	45	74
00-17	0	-	-	-	-	-	-	-
18-24	0	-	-	-	-	-	-	-
25-40	4	17.50	12.87	1	9	19	27	32
41-64	5	6.20	2.39	3	5	6	8	9
65+	3	68.33	9.81	57	57	74	74	74
Type 1 Diabetes and Sitagliptin Only	4,221	60.89	128.03	1	9	23	66	3,001
00-17	14	77.29	103.83	2	9	29	107	352
18-24	65	60.48	85.54	1	5	19	77	368
25-40	390	62.61	131.84	1	9	21	55	1,395
41-64	2,539	58.95	137.18	1	8	21	55	3,001
65+	1,213	64.22	107.51	1	10	32	78	1,320
Type 2 Diabetes and Canagliflozin Only	93,311	45.41	104.36	1	6	16	41	2,299
00-17	19	18.53	25.16	2	6	11	20	115
18-24	228	55.98	101.07	1	7	20	52	836
25-40	7,739	44.92	102.27	1	6	16	41	2,135
41-64	77,062	43.98	103.72	1	6	16	38	2,299
65+	8,263	58.97	111.30	1	9	26	74	2,230
Type 2 Diabetes and Dapagliflozin Only	81,496	48.15	111.06	1	6	16	42	2,005
00-17	6	36.00	17.75	11	16	44	50	51

Table 13c: Descriptive statistics of the length of second and subsequent gaps between treatment episodes, in days, by age group								
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
18-24	212	55.70	104.84	1	7	21	60	922
25-40	7,777	51.63	117.18	1	7	18	46	2,005
41-64	70,832	47.60	110.15	1	6	16	41	1,987
65+	2,669	51.98	116.80	1	7	19	50	1,945
Type 2 Diabetes and Empagliflozin Only	74,514	49.86	110.73	1	6	17	44	1,822
00-17	14	26.14	24.17	1	10	18	29	78
18-24	217	50.71	88.48	1	6	15	45	603
25-40	6,184	52.89	114.18	1	7	17	46	1,497
41-64	63,117	48.88	111.72	1	6	16	41	1,822
65+	4,982	58.61	93.00	1	9	32	76	1,425
Type 2 Diabetes and Ertugliflozin Only	821	31.67	50.01	1	6	16	37	426
00-17	0	-	-	-	-	-	-	-
18-24	0	-	-	-	-	-	-	-
25-40	104	32.25	44.86	1	7	19	42	268
41-64	702	31.88	51.15	1	6	16	36	426
65+	15	17.40	21.78	2	3	8	27	72
Type 2 Diabetes and Sitagliptin Only	346,821	58.80	141.62	1	7	20	54	3,374
00-17	77	134.29	255.46	1	17	48	127	1,583
18-24	630	68.80	130.02	1	9	24	72	1,203
25-40	26,744	61.09	156.55	1	7	20	50	3,374
41-64	260,697	55.81	139.16	1	7	19	47	3,230
65+	58,673	70.86	144.47	1	10	30	78	2,699

Table 14a: Descriptive statistics of the length of all gaps between treatment episodes, in days								
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	7,316	51.42	124.07	1	6	17	45	2,353
Type 1 Diabetes and Dapagliflozin Only	3,520	58.72	137.63	1	7	18	50	2,165
Type 1 Diabetes and Empagliflozin Only	3,492	58.81	127.19	1	7	18	55	1,758
Type 1 Diabetes and Ertugliflozin Only	22	40.00	54.36	1	8	20	57	212
Type 1 Diabetes and Sitagliptin Only	6,515	70.05	166.59	1	8	23	64	3,001
Type 2 Diabetes and Canagliflozin Only	146,840	50.30	121.89	1	6	16	42	2,403
Type 2 Diabetes and Dapagliflozin Only	131,103	55.66	132.37	1	6	16	44	2,184
Type 2 Diabetes and Empagliflozin Only	130,103	55.65	127.51	1	6	16	46	2,020
Type 2 Diabetes and Ertugliflozin Only	1,736	33.95	56.05	1	6	15	36	517
Type 2 Diabetes and Sitagliptin Only	511,368	68.27	172.08	1	7	20	57	3,374

Table 14b: Descriptive statistics of the length of all gaps between treatment episodes, in days, by sex								
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	7,316	51.42	124.07	1	6	17	45	2,353
Female	3,537	48.48	116.30	1	6	16	42	1,912
Male	3,779	54.17	130.89	1	6	18	48	2,353
Type 1 Diabetes and Dapagliflozin Only	3,520	58.72	137.63	1	7	18	50	2,165
Female	1,776	59.98	132.75	1	7	19	52	1,650
Male	1,744	57.44	142.45	1	6	18	47	2,165
Type 1 Diabetes and Empagliflozin Only	3,492	58.81	127.19	1	7	18	55	1,758
Female	1,647	61.24	132.91	1	7	19	58	1,758
Male	1,845	56.64	121.85	1	6	18	51	1,718
Type 1 Diabetes and Ertugliflozin Only	22	40.00	54.36	1	8	20	57	212
Female	8	40.50	70.63	1	4	18	34	212
Male	14	39.71	45.70	3	8	20	62	171
Type 1 Diabetes and Sitagliptin Only	6,515	70.05	166.59	1	8	23	64	3,001
Female	3,344	72.32	170.87	1	8	23	66	3,001
Male	3,171	67.67	161.94	1	8	22	63	2,200
Type 2 Diabetes and Canagliflozin Only	146,840	50.30	121.89	1	6	16	42	2,403
Female	61,385	51.39	124.62	1	6	16	42	2,267
Male	85,455	49.52	119.88	1	6	16	41	2,403
Type 2 Diabetes and Dapagliflozin Only	131,103	55.66	132.37	1	6	16	44	2,184
Female	56,422	57.07	136.15	1	6	16	45	2,184
Male	74,681	54.60	129.43	1	6	16	44	2,171
Type 2 Diabetes and Empagliflozin Only	130,103	55.65	127.51	1	6	16	46	2,020
Female	53,904	57.01	132.46	1	6	16	46	2,020
Male	76,199	54.69	123.89	1	6	16	45	2,014
Type 2 Diabetes and Ertugliflozin Only	1,736	33.95	56.05	1	6	15	36	517
Female	714	34.16	56.60	1	6	16	36	420
Male	1,022	33.81	55.68	1	6	15	36	517
Type 2 Diabetes and Sitagliptin Only	511,368	68.27	172.08	1	7	20	57	3,374
Female	230,837	71.18	179.22	1	7	20	58	3,374
Male	280,531	65.87	165.94	1	7	19	55	3,311

Table 14c: Descriptive statistics of the length of all gaps between treatment episodes, in days, by age group								
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Type 1 Diabetes and Canagliflozin Only	7,316	51.42	124.07	1	6	17	45	2,353
00-17	26	84.65	286.77	3	9	18	41	1,483
18-24	169	61.62	153.69	1	7	20	47	1,267
25-40	1,114	48.31	123.48	1	6	17	45	2,353
41-64	5,152	49.56	119.44	1	6	16	42	2,019
65+	855	63.63	136.55	1	8	23	64	1,293
Type 1 Diabetes and Dapagliflozin Only	3,520	58.72	137.63	1	7	18	50	2,165
00-17	12	111.50	202.26	2	14	24	70	599
18-24	68	81.01	242.91	1	8	20	48	1,837
25-40	631	57.36	132.49	1	7	16	51	1,650
41-64	2,636	57.67	132.03	1	6	19	49	2,165
65+	173	67.31	173.42	1	8	22	59	1,531
Type 1 Diabetes and Empagliflozin Only	3,492	58.81	127.19	1	7	18	55	1,758
00-17	2	30.00	29.70	9	9	30	51	51
18-24	72	73.53	152.93	2	11	27	66	978
25-40	461	50.47	124.80	1	7	16	36	1,110
41-64	2,609	57.96	128.31	1	6	17	50	1,758
65+	348	73.36	114.97	1	13	52	80	952
Type 1 Diabetes and Ertugliflozin Only	22	40.00	54.36	1	8	20	57	212
00-17	0	-	-	-	-	-	-	-
18-24	0	-	-	-	-	-	-	-
25-40	7	16.57	13.53	1	3	16	32	35
41-64	11	45.18	73.31	3	6	15	27	212
65+	4	66.75	8.62	57	60	68	74	74
Type 1 Diabetes and Sitagliptin Only	6,515	70.05	166.59	1	8	23	64	3,001
00-17	20	78.90	116.26	1	9	27	104	392
18-24	100	76.31	197.93	1	5	22	74	1,830
25-40	580	69.88	149.63	1	9	21	60	1,395
41-64	3,893	68.16	170.14	1	8	21	56	3,001
65+	1,922	73.53	162.89	1	10	28	77	2,199
Type 2 Diabetes and Canagliflozin Only	146,840	50.30	121.89	1	6	16	42	2,403
00-17	27	29.81	55.55	2	6	11	20	257
18-24	355	60.70	136.74	1	8	20	55	1,791
25-40	11,618	49.24	119.46	1	6	16	41	2,135
41-64	120,568	48.99	120.69	1	6	15	39	2,403
65+	14,272	61.96	132.49	1	7	22	69	2,267
Type 2 Diabetes and Dapagliflozin Only	131,103	55.66	132.37	1	6	16	44	2,184
00-17	9	28.11	18.53	7	13	17	45	

Table 14c: Descriptive statistics of the length of all gaps between treatment episodes, in days, by age group								
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
18-24	374	57.92	109.77	1	7	19	61	922
25-40	11,907	57.93	133.85	1	7	17	47	2,184
41-64	113,539	55.19	131.37	1	6	16	43	2,183
65+	5,274	60.68	150.59	1	6	18	52	2,171
Type 2 Diabetes and Empagliflozin Only	130,103	55.65	127.51	1	6	16	46	2,020
00-17	22	41.77	45.88	1	12	26	65	197
18-24	381	59.10	109.92	1	7	16	58	818
25-40	10,202	56.98	129.54	1	7	17	47	1,891
41-64	110,137	55.07	128.27	1	6	16	43	2,020
65+	9,361	61.03	116.52	1	8	25	74	1,885
Type 2 Diabetes and Ertugliflozin Only	1,736	33.95	56.05	1	6	15	36	517
00-17	0	-	-	-	-	-	-	-
18-24	6	62.83	69.76	3	20	38	84	194
25-40	186	34.10	49.20	1	7	18	42	314
41-64	1,490	33.94	57.12	1	6	15	35	517
65+	54	30.50	46.33	1	4	12	41	272
Type 2 Diabetes and Sitagliptin Only	511,368	68.27	172.08	1	7	20	57	3,374
00-17	117	106.95	216.71	1	10	40	102	1,583
18-24	999	73.54	142.56	1	9	25	73	1,304
25-40	37,966	68.61	179.97	1	7	20	53	3,374
41-64	382,220	65.36	168.33	1	7	19	50	3,299
65+	90,066	80.37	183.71	1	9	28	77	3,311



Table 15: Counts of reason for censoring, all episodes and first episode										
	Total		Disenrollment		Evidence of death		DP/Query end date		Episode end	
	N	%	N	%	N	%	N	%	N	%
Exposures										
Type 1 Diabetes and Canagliflozin Only	12,315	100.0	1,673	13.6	3	0.0	201	1.6	10,651	86.5
Type 1 Diabetes and Dapagliflozin Only	5,963	100.0	1,115	18.7	1	0.0	446	7.5	4,852	81.4
Type 1 Diabetes and Empagliflozin Only	6,437	100.0	1,617	25.1	0	0.0	874	13.6	4,827	75.0
Type 1 Diabetes and Ertugliflozin Only	46	100.0	11	23.9	0	0.0	11	23.9	35	76.1
Type 1 Diabetes and Sitagliptin Only	11,295	100.0	1,693	15.0	21	0.2	238	2.1	9,591	84.9
Type 2 Diabetes and Canagliflozin Only	259,582	100.0	42,254	16.3	39	0.0	7,162	2.8	217,497	83.8
Type 2 Diabetes and Dapagliflozin Only	232,747	100.0	58,990	25.3	3	0.0	27,381	11.8	174,012	74.8
Type 2 Diabetes and Empagliflozin Only	257,361	100.0	80,852	31.4	1	0.0	48,230	18.7	176,788	68.7
Type 2 Diabetes and Ertugliflozin Only	4,001	100.0	1,320	33.0	0	0.0	1,026	25.6	2,689	67.2
Type 2 Diabetes and Sitagliptin Only	827,971	100.0	160,673	19.4	490	0.1	39,604	4.8	667,579	80.6
Patients' First Episode										
Type 1 Diabetes and Canagliflozin Only	4,999	100.0	828	16.6	2	0.0	48	1.0	4,175	83.5
Type 1 Diabetes and Dapagliflozin Only	2,443	100.0	481	19.7	1	0.0	188	7.7	1,963	80.4
Type 1 Diabetes and Empagliflozin Only	2,945	100.0	844	28.7	0	0.0	417	14.2	2,105	71.5
Type 1 Diabetes and Ertugliflozin Only	24	100.0	5	20.8	0	0.0	5	20.8	19	79.2
Type 1 Diabetes and Sitagliptin Only	4,780	100.0	747	15.6	12	0.3	86	1.8	4,023	84.2
Type 2 Diabetes and Canagliflozin Only	112,742	100.0	21,952	19.5	25	0.0	2,519	2.2	90,857	80.6
Type 2 Diabetes and Dapagliflozin Only	101,644	100.0	28,682	28.2	3	0.0	12,452	12.3	73,063	71.9
Type 2 Diabetes and Empagliflozin Only	127,258	100.0	44,565	35.0	1	0.0	25,460	20.0	82,813	65.1
Type 2 Diabetes and Ertugliflozin Only	2,265	100.0	725	32.0	0	0.0	532	23.5	1,544	68.2
Type 2 Diabetes and Sitagliptin Only	316,603	100.0	72,513	22.9	276	0.1	15,322	4.8	244,096	77.1

Table 16: Cohort Attrition Table	
Attrition Criteria	Members
Type 1 Diabetes and Canagliflozin Only	
Initial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	149,170,986 (100.0%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N and DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must satisfy the age range condition within the query period	120,361,738 (80.7%)
Exclusion - Members must meet chart availability criterion within the query period	120,361,738 (80.7%)
Exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	120,361,738 (80.7%)
Exclusion - Members must have at least one claim with cohort-identifying codes within the query period	218,192 (0.1%)
Exclusion - Members must have at least one cohort episode index date within the age range condition	218,192 (0.1%)
Exclusion - Members must have at least one episode defining index claim during the query period	218,192 (0.1%)
Exclusion - Members must have at least one cohort episode incident with respect to other criteria	218,192 (0.1%)
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	144,341 (0.1%)
Exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	4,999 (0.0%)
Exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	4,999 (0.0%)
Type 1 Diabetes and Dapagliflozin Only	
Initial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	149,170,986 (100.0%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N and DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must satisfy the age range condition within the query period	120,361,738 (80.7%)
Exclusion - Members must meet chart availability criterion within the query period	120,361,738 (80.7%)
Exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	120,361,738 (80.7%)
Exclusion - Members must have at least one claim with cohort-identifying codes within the query period	194,668 (0.1%)
Exclusion - Members must have at least one cohort episode index date within the age range condition	194,668 (0.1%)
Exclusion - Members must have at least one episode defining index claim during the query period	194,668 (0.1%)
Exclusion - Members must have at least one cohort episode incident with respect to other criteria	194,668 (0.1%)
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	127,785 (0.1%)
Exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	2,443 (0.0%)
Exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	2,443 (0.0%)
Type 1 Diabetes and Empagliflozin Only	
Initial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	149,170,986 (100.0%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N and DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must satisfy the age range condition within the query period	120,361,738 (80.7%)
Exclusion - Members must meet chart availability criterion within the query period	120,361,738 (80.7%)
Exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	120,361,738 (80.7%)

Table 16: Cohort Attrition Table	
Attrition Criteria	Members
Exclusion - Members must have at least one claim with cohort-identifying codes within the query period	228,161 (0.2%)
Exclusion - Members must have at least one cohort episode index date within the age range condition	228,161 (0.2%)
Exclusion - Members must have at least one episode defining index claim during the query period	228,161 (0.2%)
Exclusion - Members must have at least one cohort episode incident with respect to other criteria	228,161 (0.2%)
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	155,808 (0.1%)
Exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	2,945 (0.0%)
Exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	2,945 (0.0%)
Type 1 Diabetes and Ertugliflozin Only	
Initial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	149,170,986 (100.0%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N and DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must satisfy the age range condition within the query period	120,361,738 (80.7%)
Exclusion - Members must meet chart availability criterion within the query period	120,361,738 (80.7%)
Exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	120,361,738 (80.7%)
Exclusion - Members must have at least one claim with cohort-identifying codes within the query period	3,788 (0.0%)
Exclusion - Members must have at least one cohort episode index date within the age range condition	3,788 (0.0%)
Exclusion - Members must have at least one episode defining index claim during the query period	3,788 (0.0%)
Exclusion - Members must have at least one cohort episode incident with respect to other criteria	3,788 (0.0%)
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	2,747 (0.0%)
Exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	24 (0.0%)
Exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	24 (0.0%)
Type 1 Diabetes and Sitagliptin Only	
Initial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	149,170,986 (100.0%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N and DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must satisfy the age range condition within the query period	120,361,738 (80.7%)
Exclusion - Members must meet chart availability criterion within the query period	120,361,738 (80.7%)
Exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	120,361,738 (80.7%)
Exclusion - Members must have at least one claim with cohort-identifying codes within the query period	1,035,083 (0.7%)
Exclusion - Members must have at least one cohort episode index date within the age range condition	1,035,083 (0.7%)
Exclusion - Members must have at least one episode defining index claim during the query period	1,035,083 (0.7%)
Exclusion - Members must have at least one cohort episode incident with respect to other criteria	1,035,083 (0.7%)
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	434,635 (0.3%)
Exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	4,780 (0.0%)
Exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	4,780 (0.0%)
Type 2 Diabetes and Canagliflozin Only	

Table 16: Cohort Attrition Table	
Attrition Criteria	Members
Initial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	149,170,986 (100.0%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N and DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must satisfy the age range condition within the query period	120,361,738 (80.7%)
Exclusion - Members must meet chart availability criterion within the query period	120,361,738 (80.7%)
Exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	120,361,738 (80.7%)
Exclusion - Members must have at least one claim with cohort-identifying codes within the query period	218,192 (0.1%)
Exclusion - Members must have at least one cohort episode index date within the age range condition	218,192 (0.1%)
Exclusion - Members must have at least one episode defining index claim during the query period	218,192 (0.1%)
Exclusion - Members must have at least one cohort episode incident with respect to other criteria	218,192 (0.1%)
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	144,341 (0.1%)
Exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	112,742 (0.1%)
Exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	112,742 (0.1%)
Type 2 Diabetes and Dapagliflozin Only	
Initial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	149,170,986 (100.0%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N and DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must satisfy the age range condition within the query period	120,361,738 (80.7%)
Exclusion - Members must meet chart availability criterion within the query period	120,361,738 (80.7%)
Exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	120,361,738 (80.7%)
Exclusion - Members must have at least one claim with cohort-identifying codes within the query period	194,668 (0.1%)
Exclusion - Members must have at least one cohort episode index date within the age range condition	194,668 (0.1%)
Exclusion - Members must have at least one episode defining index claim during the query period	194,668 (0.1%)
Exclusion - Members must have at least one cohort episode incident with respect to other criteria	194,668 (0.1%)
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	127,785 (0.1%)
Exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	101,644 (0.1%)
Exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	101,644 (0.1%)
Type 2 Diabetes and Empagliflozin Only	
Initial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	149,170,986 (100.0%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N and DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must satisfy the age range condition within the query period	120,361,738 (80.7%)
Exclusion - Members must meet chart availability criterion within the query period	120,361,738 (80.7%)
Exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	120,361,738 (80.7%)
Exclusion - Members must have at least one claim with cohort-identifying codes within the query period	228,161 (0.2%)

Table 16: Cohort Attrition Table	
Attrition Criteria	Members
Exclusion - Members must have at least one cohort episode index date within the age range condition	228,161 (0.2%)
Exclusion - Members must have at least one episode defining index claim during the query period	228,161 (0.2%)
Exclusion - Members must have at least one cohort episode incident with respect to other criteria	228,161 (0.2%)
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	155,808 (0.1%)
Exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	127,258 (0.1%)
Exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	127,258 (0.1%)
Type 2 Diabetes and Ertugliflozin Only	
Initial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	149,170,986 (100.0%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N and DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must satisfy the age range condition within the query period	120,361,738 (80.7%)
Exclusion - Members must meet chart availability criterion within the query period	120,361,738 (80.7%)
Exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	120,361,738 (80.7%)
Exclusion - Members must have at least one claim with cohort-identifying codes within the query period	3,788 (0.0%)
Exclusion - Members must have at least one cohort episode index date within the age range condition	3,788 (0.0%)
Exclusion - Members must have at least one episode defining index claim during the query period	3,788 (0.0%)
Exclusion - Members must have at least one cohort episode incident with respect to other criteria	3,788 (0.0%)
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	2,747 (0.0%)
Exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	2,265 (0.0%)
Exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	2,265 (0.0%)
Type 2 Diabetes and Sitagliptin Only	
Initial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	149,170,986 (100.0%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period	120,361,790 (80.7%)
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N and DrugCov=N and MedCov=Y or A during the query period	120,361,790 (80.7%)
Exclusion - Members must satisfy the age range condition within the query period	120,361,738 (80.7%)
Exclusion - Members must meet chart availability criterion within the query period	120,361,738 (80.7%)
Exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	120,361,738 (80.7%)
Exclusion - Members must have at least one claim with cohort-identifying codes within the query period	1,035,083 (0.7%)
Exclusion - Members must have at least one cohort episode index date within the age range condition	1,035,083 (0.7%)
Exclusion - Members must have at least one episode defining index claim during the query period	1,035,083 (0.7%)
Exclusion - Members must have at least one cohort episode incident with respect to other criteria	1,035,083 (0.7%)
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	434,635 (0.3%)
Exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	316,603 (0.2%)
Exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	316,603 (0.2%)



Appendix A. Dates of Available Data for Each Data Partner (DP) up to Request End Date (09/30/2020) as of Query Distribution Date

Data Partner (Masked)	Start Date	End Date
DP01	01/01/2010	09/30/2020

Appendix B. Specifications Used to Define Parameters in this Query

Global Values	
Enrollment Criteria	Medical and Drug Coverage
Enrollment Gap (Days)	45
Age Groups (Years)	00-17, 18-24, 25-40, 41-64, 65+
Reporting Output	All tables
Query Period	01/01/2010-09/30/2020
Baseline Characteristics Table	Yes
Baseline Evaluation Window (Day)	-365,0

#	Cohort Name	Index Exposure	Pre-Index Enrollment Period (Days)	Washout Period (Days)	Treatment Episode Gap (Days)	Treatment Episode Extension (Days)	Inclusion/Exclusion ⁽⁵⁾	Criteria	Criteria Definition	Evaluation Period Start (Day)	Evaluation Period End (Day)
1	Type 1 Diabetes and Canagliflozin Only	Canagliflozin ^[1]	365	365	10	10	Inclusion	T1DM and rapid insulin	T1DM ^[2] and rapid insulin ^[3]	-365 ^[4]	-5 ^[4]
							Exclusion	Oral antidiabetic not metformin	Oral antidiabetic not metformin ^[4]	-365	-1
2	Type 1 Diabetes and Empagliflozin Only	Empagliflozin ^[5]	365	365	10	10	Inclusion	T1DM and rapid insulin	T1DM ^[6] and rapid insulin ^[7]	-365 ^[8]	-5 ^[8]
							Exclusion	Oral antidiabetic not metformin	Oral antidiabetic not metformin ^[8]	-365	-1
3	Type 1 Diabetes and Dapagliflozin Only	Dapagliflozin ^[9]	365	365	10	10	Inclusion	T1DM and rapid insulin	T1DM ^[1] and rapid insulin ^[1]	-365 ^[10]	-5 ^[10]
							Exclusion	Oral antidiabetic not metformin	Oral antidiabetic not metformin ^[12]	-365	-1
4	Type 1 Diabetes and Ertugliflozin Only	Ertugliflozin ^[13]	365	365	10	10	Inclusion	T1DM and rapid insulin	T1DM ^[1] and rapid insulin ^[1]	-365 ^[14]	-5 ^[14]
							Exclusion	Oral antidiabetic not metformin	Oral antidiabetic not metformin ^[16]	-365	-1
5	Type 1 Diabetes and Sitagliptin Only	Sitagliptin ^[17]	365	365	10	10	Inclusion	T1DM and rapid insulin	T1DM ^[1] and rapid insulin ^[1]	-365 ^[18]	-5 ^[18]
							Exclusion	Oral antidiabetic not metformin	Oral antidiabetic not metformin ^[20]	-365	-1
6	Type 2 Diabetes and Canagliflozin Only	Canagliflozin ^[21]	365	365	10	10	Inclusion	T2DM and antidiabetic list 1	T2DM ^[2] and antidiabetic not metformin in list 1 ^[23]	-365 ^[22]	-5 ^[22]
							Inclusion	T2DM and antidiabetic list 2	T2DM ^[2] and antidiabetic not metformin in list 2 ^[25]	-365 ^[24]	-1 ^[24]
							Exclusion	T1DM	T1DM ^[2]	-365	-5
7	Type 2 Diabetes and Empagliflozin Only	Empagliflozin ^[27]	365	365	10	10	Inclusion	T2DM and antidiabetic list 1	T2DM ^[2] and antidiabetic not metformin in list 1 ^[29]	-365 ^[28]	-5 ^[28]
							Inclusion	T2DM and antidiabetic list 2	T2DM ^[3] and antidiabetic not metformin in list 2 ^[31]	-365 ^[30]	-1 ^[30]
							Exclusion	T1DM	T1DM ^[3]	-365	-5
8	Type 2 Diabetes and Dapagliflozin Only	Dapagliflozin ^[31]	365	365	10	10	Inclusion	T2DM and antidiabetic list 1	T2DM ^[3] and antidiabetic not metformin in list 1 ^[33]	-365 ^[32]	-5 ^[32]
							Inclusion	T2DM and antidiabetic list 2	T2DM ^[3] and antidiabetic not metformin in list 2 ^[35]	-365 ^[34]	-1 ^[34]
							Exclusion	T1DM	T1DM ^[3]	-365	-5
9	Type 2 Diabetes and Ertugliflozin Only	Ertugliflozin ^[36]	365	365	10	10	Inclusion	T2DM and antidiabetic list 1	T2DM ^[4] and antidiabetic not metformin in list 1 ^[42]	-365 ^[40]	-5 ^[40]
							Inclusion	T2DM and antidiabetic list 2	T2DM ^[4] and antidiabetic not metformin in list 2 ^[44]	-365 ^[42]	-1 ^[42]
							Exclusion	T1DM	T1DM ^[4]	-365	-5
10	Type 2 Diabetes and Sitagliptin Only	Sitagliptin ^[45]	365	365	10	10	Inclusion	T2DM and antidiabetic list 1	T2DM ^[4] and antidiabetic not metformin in list 1 ^[47]	-365 ^[46]	-5 ^[46]
							Inclusion	T2DM and antidiabetic list 2	T2DM ^[4] and antidiabetic not metformin in list 2 ^[49]	-365 ^[48]	-1 ^[48]
							Exclusion	T1DM	T1DM ^[5]	-365	-5

ICD-9/ICD-10/HCPCS AND CPT are provided by Optum360
NDCs are checked against First Data Bank's MedKnowledge.

Appendix of Generic Names and Chronic Conditions

- [1] See Appendix C
- [2] See Appendices D and E
- [3] See Appendices D and E
- [4] See Appendix G
- [5] See Appendix C
- [6] See Appendices D and E
- [7] See Appendices D and E
- [8] See Appendix G
- [9] See Appendix C
- [10] See Appendices D and E
- [11] See Appendices D and E
- [12] See Appendix G
- [13] See Appendix C
- [14] See Appendices D and E
- [15] See Appendices D and E
- [16] See Appendix G
- [17] See Appendix C
- [18] See Appendices D and E
- [19] See Appendices D and E
- [20] See Appendix G
- [21] See Appendix C
- [22] See Appendices D and E
- [23] See Appendices D and E
- [24] See Appendices D and E
- [25] See Appendices D and E
- [26] See Appendix F
- [27] See Appendix C
- [28] See Appendices D and E
- [29] See Appendices D and E
- [30] See Appendices D and E
- [31] See Appendices D and E
- [32] See Appendix F
- [33] See Appendix C
- [34] See Appendices D and E
- [35] See Appendices D and E
- [36] See Appendices D and E
- [37] See Appendices D and E
- [38] See Appendix F
- [39] See Appendix C
- [40] See Appendices D and E
- [41] See Appendices D and E
- [42] See Appendices D and E
- [43] See Appendices D and E
- [44] See Appendix F
- [45] See Appendix C
- [46] See Appendices D and E
- [47] See Appendices D and E
- [48] See Appendices D and E
- [49] See Appendices D and E
- [50] See Appendix F
- [51] The code list used to define inclusion criterion "Oral Anti-Diabetic, with Metformin" exceeded the permissible file upload size on the Query Builder application. Therefore, the list was divided into 2 inclusion criteria for the purposes of upload. Appendix E represents the list in full.

Baseline Characteristics Table

Acquired Hypothyroidism	Chronic Kidney Disease	Hypertension
Acute Myocardial Infarction	Chronic Obstructive Pulmonary Disease	Ischemic Heart Disease
Alzheimer's Disease	Colorectal Cancer	Lung Cancer
Alzheimer's Disease, Related Disorders, or Senile Dementia	Depression	Osteoporosis
Anemia	Diabetes	Prostate Cancer
Asthma	Endometrial Cancer	Rheumatoid Arthritis / Osteoarthritis
Atrial Fibrillation	Glaucoma	Stroke / Transient Ischemic Attack
Benign Prostatic Hyperplasia	Heart Failure	
Breast Cancer	Hip / Pelvic Fracture	
Cataracts	Hyperlipidemia	

Glossary of Terms for Analyses Using Cohort Identification and Descriptive Analysis (CIDA) Module

- Age Groups** - Age groups of members included in the cohort. Strata also used for reporting purposes.
- Ambulatory Visit (AV)** - A care setting value including visits at outpatient clinics, same-day surgeries, urgent care visits, and other same-day ambulatory hospital encounters, but excludes emergency department encounters.
- Baseline Characteristics Table** - An optional table containing general characteristics of study population, including background rates of 27 chronic conditions from the CMS Non-Acute Warehouse (see above if table requested). Users define an evaluation period for the presence of baseline characteristics.
- Care Setting** - Type of medical encounter or facility where the exposure, event, or condition code was recorded. Possible care settings include: Inpatient (I), Outpatient (O), or Missing (U). The Care Setting (IS), with the Principal Diagnosis Indicator (AV), and Other Ambulatory Visit (OA). For laboratory results, possible care settings include: Emergency Department (E), Home (H), Inpatient (I), Outpatient (O), or Missing (U). The Care Setting (IS), with the Principal Diagnosis Indicator (PDX), forms the Care Setting/PDX parameter.
- Charlson/Elixhauser Combined Comorbidity Score** - Calculated based on comorbidities observed during a requester-defined window around the exposure episode start date (e.g., in the 183 days prior to index).
- Cohort Definition** - Cohort includes all valid exposure episodes during the query period. Only the first valid episode's incidence is assessed using the washout period.
- Emergency Department (ED)** - A care setting value including ED encounters that become inpatient stays (in which case inpatient stays would be a separate encounter). Excludes urgent care visits.
- Enrollment Criteria** - Type of coverage required during enrollment period. By default, all patients must have medical and drug coverage.
- Enrollment Gap** - Allowed gap between coverage periods.
- Episodes** - Treatment episodes; length of episode is determined by days supplied in one dispensing or consecutive dispensings bridged by the episode gap.
- Inclusion/Exclusion** - Contains the comprehensive set of codes used to define additional cohort inclusion and/or exclusion criteria (e.g., restrict cohort to individuals with evidence of a pre-existing condition 183 days before the index date). Criteria could be defined with complex algorithms (e.g., diagnosis codes and drug codes) defined under Criteria Definition.
- Inpatient Hospital Stay (IP)** - A care setting value including all inpatient stays, same-day hospital discharges, hospital transfers, and acute hospital care where the discharge is after the admission date.
- Non-Acute Ambulatory Visit (IA)** - A care setting value including skilled nursing facility (SNF), rehab center, nursing home, residential, overnight non-hospital dialysis and other non-hospital stays, as well as telemedicine.
- Other Ambulatory Visit (OV)** - A care setting value including other non-overnight AV encounters such as hospice care, nursing home health visits, skilled nursing facility visits, other non-hospital visits, and mental health, telephone and email consultations.
- Principal Diagnosis (PDX)** - Diagnosis or condition established to be chiefly responsible for admission of the patient to the hospital. 'P' = principal diagnosis, 'S' = secondary diagnosis, 'X' = unspecified diagnosis, '.' = blank. Along with the Care Setting values, forms the CareSetting/PDX parameter.
- Query Period** - The period of time which patients can contribute indexed exposure/events. Data prior to the start date may be used to determine enrollment, washout, and other cohort inclusion criteria.
- Treatment Episode Extension** - The episode extension adds the select-defined exposure/days. Data after the end of an episode to count as exposed time.
- Treatment Episode Gap** - The maximum number of days allowed between two dispensings to consider them part of the same episode.
- Washout Period** - The period before an exposure episode during which an individual cannot have evidence of incidence-defining criteria.

Appendix C. List of Generic and Brand Names of Medical Products Used to Define Index Exposure in this Request

Generic Name	Brand Name
Canagliflozin	
Canagliflozin/metformin HCl	
Canagliflozin/metformin HCl	
Empagliflozin	
Empagliflozin/linagliptin	
Empagliflozin/linagliptin/metformin HCl	
Empagliflozin/metformin HCl	
Empagliflozin/metformin HCl	
Dapagliflozin propanediol	
Dapagliflozin propanediol/metformin HCl	
Dapagliflozin propanediol/saxagliptin HCl	
Ertugliflozin pidolate	
Ertugliflozin pidolate/metformin HCl	
Sitagliptin phosphate	
Sitagliptin phosphate/metformin HCl	
Sitagliptin phosphate/metformin HCl	
Sitagliptin phosphate/simvastatin	

Appendix D. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion Criteria in this Request

Code	Code Category	Code Type	Description
Type 1 Diabetes Mellitus			
250.01	Diagnosis	ICD-9-CM	Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled
250.03	Diagnosis	ICD-9-CM	Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled
250.21	Diagnosis	ICD-9-CM	Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled
250.23	Diagnosis	ICD-9-CM	Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled
250.11	Diagnosis	ICD-9-CM	Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled
250.13	Diagnosis	ICD-9-CM	Diabetes with ketoacidosis, type I [juvenile type], uncontrolled
250.61	Diagnosis	ICD-9-CM	Diabetes with neurological manifestations, type I [juvenile type], not stated as uncontrolled
250.63	Diagnosis	ICD-9-CM	Diabetes with neurological manifestations, type I [juvenile type], uncontrolled
250.51	Diagnosis	ICD-9-CM	Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled
250.53	Diagnosis	ICD-9-CM	Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled
250.31	Diagnosis	ICD-9-CM	Diabetes with other coma, type I [juvenile type], not stated as uncontrolled
250.33	Diagnosis	ICD-9-CM	Diabetes with other coma, type I [juvenile type], uncontrolled
250.81	Diagnosis	ICD-9-CM	Diabetes with other specified manifestations, type I [juvenile type], not stated as uncontrolled
250.83	Diagnosis	ICD-9-CM	Diabetes with other specified manifestations, type I [juvenile type], uncontrolled
250.71	Diagnosis	ICD-9-CM	Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as uncontrolled
250.73	Diagnosis	ICD-9-CM	Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled
250.41	Diagnosis	ICD-9-CM	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled
250.43	Diagnosis	ICD-9-CM	Diabetes with renal manifestations, type I [juvenile type], uncontrolled
250.91	Diagnosis	ICD-9-CM	Diabetes with unspecified complication, type I [juvenile type], not stated as uncontrolled
250.93	Diagnosis	ICD-9-CM	Diabetes with unspecified complication, type I [juvenile type], uncontrolled
E10.3299	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye
E10.3319	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye
E10.3499	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye

Appendix D. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion Criteria in this Request

Code	Code Category	Code Type	Description
E10.37	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment
E10.37X9	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye
E10.3219	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye
E10.3213	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral
E10.3211	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye
E10.3212	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye
E10.3293	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral
E10.3291	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye
E10.3292	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye
E10.3313	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral
E10.3311	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye
E10.3312	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye
E10.3399	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye
E10.3393	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral
E10.3391	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye
E10.3392	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye
E10.354	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment
E10.3549	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye
E10.3519	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye
E10.353	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula
E10.352	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula

Appendix D. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion Criteria in this Request

Code	Code Category	Code Type	Description
E10.3529	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye
E10.3533	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral
E10.3531	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye
E10.3532	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye
E10.3539	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye
E10.3599	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye
E10.355	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy
E10.3419	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye
E10.3413	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral
E10.3411	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye
E10.3412	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye
E10.3493	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral
E10.3491	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye
E10.3492	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye
E10.39	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other diabetic ophthalmic complication
E10.35	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy
E10	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus
E10.37X3	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral
E10.37X1	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye
E10.37X2	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye
E10.3543	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral

Appendix D. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion Criteria in this Request

Code	Code Category	Code Type	Description
E10.3541	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye
E10.3542	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye
E10.3513	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral
E10.3511	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye
E10.3512	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye
E10.3523	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral
E10.3521	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye
E10.3522	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye
E10.3593	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral
E10.3591	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye
E10.3592	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye
E10.3553	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral
E10.3552	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, left eye
E10.3551	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, right eye
E10.3559	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye
E10.5	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with circulatory complications
E10.22	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic chronic kidney disease
E10.41	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic mononeuropathy
E10.40	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic neuropathy, unspecified
E10.42	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic polyneuropathy
E10.44	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic amyotrophy
E10.61	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic arthropathy
E10.36	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic cataract
E10.620	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic dermatitis
E10.21	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic nephropathy
E10.641	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with hypoglycemia with coma

Appendix D. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion Criteria in this Request

Code	Code Category	Code Type	Description
E10.649	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with hypoglycemia without coma
E10.11	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with ketoacidosis with coma
E10.10	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with ketoacidosis without coma
E10.2	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with kidney complications
E10.4	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with neurological complications
E10.3	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with ophthalmic complications
E10.59	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other circulatory complications
E10.618	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other diabetic arthropathy
E10.29	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other diabetic kidney complication
E10.638	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other oral complications
E10.628	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other skin complications
E10.69	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other specified complication
E10.6	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other specified complications
E10.630	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with periodontal disease
E10.31	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with unspecified diabetic retinopathy
E10.8	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with unspecified complications
E10.621	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with foot ulcer
E10.65	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with hyperglycemia
E10.64	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with hypoglycemia
E10.1	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with ketoacidosis
E10.63	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with oral complications
E10.622	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other skin ulcer
E10.62	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with skin complications
E10.9	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus without complications
E10.329	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema
E10.52	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene
E10.51	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene
E10.43	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy
E10.610	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic neuropathic arthropathy
E10.321	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema
E10.32	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy
E10.339	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema
E10.331	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema
E10.33	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy

Appendix D. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion Criteria in this Request

Code	Code Category	Code Type	Description
E10.49	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other diabetic neurological complication
E10.351	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema
E10.349	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema
E10.341	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema
E10.34	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy
E10.319	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema
E10.311	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema
E10.359	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema
Type 2 Diabetes Mellitus			
250.00	Diagnosis	ICD-9-CM	Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled
250.02	Diagnosis	ICD-9-CM	Diabetes mellitus without mention of complication, type II or unspecified type, uncontrolled
250.20	Diagnosis	ICD-9-CM	Diabetes with hyperosmolarity, type II or unspecified type, not stated as uncontrolled
250.22	Diagnosis	ICD-9-CM	Diabetes with hyperosmolarity, type II or unspecified type, uncontrolled
250.10	Diagnosis	ICD-9-CM	Diabetes with ketoacidosis, type II or unspecified type, not stated as uncontrolled
250.12	Diagnosis	ICD-9-CM	Diabetes with ketoacidosis, type II or unspecified type, uncontrolled
250.60	Diagnosis	ICD-9-CM	Diabetes with neurological manifestations, type II or unspecified type, not stated as uncontrolled
250.62	Diagnosis	ICD-9-CM	Diabetes with neurological manifestations, type II or unspecified type, uncontrolled
250.50	Diagnosis	ICD-9-CM	Diabetes with ophthalmic manifestations, type II or unspecified type, not stated as uncontrolled
250.52	Diagnosis	ICD-9-CM	Diabetes with ophthalmic manifestations, type II or unspecified type, uncontrolled
250.30	Diagnosis	ICD-9-CM	Diabetes with other coma, type II or unspecified type, not stated as uncontrolled
250.32	Diagnosis	ICD-9-CM	Diabetes with other coma, type II or unspecified type, uncontrolled
250.80	Diagnosis	ICD-9-CM	Diabetes with other specified manifestations, type II or unspecified type, not stated as uncontrolled
250.82	Diagnosis	ICD-9-CM	Diabetes with other specified manifestations, type II or unspecified type, uncontrolled

Appendix D. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion Criteria in this Request

Code	Code Category	Code Type	Description
250.70	Diagnosis	ICD-9-CM	Diabetes with peripheral circulatory disorders, type II or unspecified type, not stated as uncontrolled
250.72	Diagnosis	ICD-9-CM	Diabetes with peripheral circulatory disorders, type II or unspecified type, uncontrolled
250.40	Diagnosis	ICD-9-CM	Diabetes with renal manifestations, type II or unspecified type, not stated as uncontrolled
250.42	Diagnosis	ICD-9-CM	Diabetes with renal manifestations, type II or unspecified type, uncontrolled
250.90	Diagnosis	ICD-9-CM	Diabetes with unspecified complication, type II or unspecified type, not stated as uncontrolled
250.92	Diagnosis	ICD-9-CM	Diabetes with unspecified complication, type II or unspecified type, uncontrolled
E11.3539	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye
E11.37X9	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye
E11.37	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment
E11.3219	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye
E11.354	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment
E11.3549	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye
E11.353	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula
E11.352	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula
E11.3529	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye
E11.3533	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral
E11.3531	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye
E11.3532	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye
E11.355	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy
E11.01	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with hyperosmolarity with coma
E11	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus

Appendix D. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion Criteria in this Request

Code	Code Category	Code Type	Description
E11.37X3	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral
E11.37X1	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye
E11.37X2	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye
E11.3213	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral
E11.3211	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye
E11.3212	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye
E11.3293	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral
E11.3291	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye
E11.3292	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye
E11.3299	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye
E11.3319	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye
E11.3313	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral
E11.3311	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye
E11.3312	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye
E11.3393	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral
E11.3391	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye
E11.3392	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye
E11.3399	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye
E11.39	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with other diabetic ophthalmic complication
E11.3543	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral
E11.3541	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye

Appendix D. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion Criteria in this Request

Code	Code Category	Code Type	Description
E11.3542	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye
E11.3519	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye
E11.3513	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral
E11.3511	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye
E11.3512	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye
E11.3523	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral
E11.3521	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye
E11.3522	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye
E11.3599	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye
E11.3593	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral
E11.3591	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye
E11.3592	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye
E11.3553	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral
E11.3552	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, left eye
E11.3551	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, right eye
E11.3559	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye
E11.3419	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye
E11.3413	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral
E11.3411	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye
E11.3412	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye
E11.3493	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral

Appendix D. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion Criteria in this Request

Code	Code Category	Code Type	Description
E11.3491	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye
E11.3492	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye
E11.3499	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye
E11.5	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with circulatory complications
E11.22	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic chronic kidney disease
E11.41	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic mononeuropathy
E11.42	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic polyneuropathy
E11.44	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic amyotrophy
E11.61	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic arthropathy
E11.620	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic dermatitis
E11.21	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic nephropathy
E11.641	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with hypoglycemia with coma
E11.649	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with hypoglycemia without coma
E11.10	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with ketoacidosis without coma
E11.2	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with kidney complications
E11.4	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with neurological complications
E11.3	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with ophthalmic complications
E11.59	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with other circulatory complications
E11.618	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with other diabetic arthropathy
E11.29	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with other diabetic kidney complication
E11.49	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with other diabetic neurological complication
E11.638	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with other oral complications
E11.628	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with other skin complications
E11.69	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with other specified complication
E11.6	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with other specified complications
E11.630	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with periodontal disease
E11.8	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with unspecified complications
E11.31	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with unspecified diabetic retinopathy
E11.36	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic cataract
E11.621	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with foot ulcer
E11.65	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with hyperglycemia
E11.0	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with hyperosmolarity
E11.64	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with hypoglycemia
E11.1	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with ketoacidosis
E11.11	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with ketoacidosis with coma
E11.63	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with oral complications
E11.622	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with other skin ulcer
E11.62	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with skin complications

Appendix D. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Inclusion Criteria in this Request

Code	Code Category	Code Type	Description
E11.9	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus without complications
E11.359	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema
E11.52	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene
E11.51	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene
E11.43	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy
E11.610	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic neuropathic arthropathy
E11.00	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)
E11.321	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema
E11.329	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema
E11.32	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy
E11.331	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema
E11.33	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy
E11.339	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema
E11.351	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema
E11.35	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with proliferative diabetic retinopathy
E11.349	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema
E11.341	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema
E11.34	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy
E11.319	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema
E11.311	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema
E11.40	Diagnosis	ICD-10-CM	Type 2 diabetes mellitus with diabetic neuropathy, unspecified

Appendix E. List of Generic and Brand Names of Medical Products Used to Define Inclusion Criteria in this Request

Generic Name	Brand Name
Rapid Insulin	
insulin lispro	Humalog U-100 Insulin
insulin lispro protamine and insulin lispro	Humalog Mix 75-25(U-100)Insuln
insulin lispro protamine and insulin lispro	Humalog Mix 50-50 Insuln U-100
insulin lispro	Humalog KwikPen Insulin
insulin lispro	Humalog Junior KwikPen U-100
insulin lispro-aabc	Lyumjev U-100 Insulin
insulin lispro	insulin lispro
insulin lispro-aabc	Lyumjev KwikPen U-100 Insulin
insulin regular, human	Humulin R Regular U-100 Insulin
insulin lispro-aabc	Lyumjev KwikPen U-200 Insulin
insulin lispro protamine and insulin lispro	insulin lispro protamin-lispro
insulin regular, human	Humulin R U-500 (Conc) Insulin
insulin NPH human isophane/insulin regular, human	Humulin 70/30 U-100 Insulin
insulin lispro	Humalog Pen
insulin NPH human isophane/insulin regular, human	Humulin 70/30 Insulin Pen
insulin lispro protamine and insulin lispro	Humalog Mix 75-25 KwikPen
insulin lispro protamine and insulin lispro	Humalog Mix 50-50 KwikPen
insulin NPH human isophane/insulin regular, human	Humulin 70/30 U-100 KwikPen
insulin regular, human	Humulin R U-500 (Conc) Kwikpen
insulin NPH human isophane/insulin regular, human	Humulin 50/50
insulin regular, human	Afrezza
insulin lispro	Admelog U-100 Insulin lispro
insulin lispro	Admelog SoloStar U-100 Insulin
insulin glulisine	Apidra U-100 Insulin
insulin glulisine	Apidra SoloStar U-100 Insulin
insulin regular, human	Novolin R Regular U-100 Insuln
insulin NPH human isophane/insulin regular, human	Novolin 70/30 U-100 Insulin
diluent,insulin aspart combination no.1	Diluting Medium for Novolog
insulin aspart	Novolog U-100 Insulin aspart
insulin aspart	Novolog Flexpen U-100 Insulin
insulin aspart protamine human/insulin aspart	Novolog Mix 70-30 U-100 Insuln
insulin aspart protamine human/insulin aspart	Novolog Mix 70-30FlexPen U-100
insulin regular, human	Novolin R InnoLet
insulin NPH human isophane/insulin regular, human	Novolin 70/30 InnoLet Insulin
insulin regular, human	Novolin R Flexpen
insulin NPH human isophane/insulin regular, human	Novolin 70-30 FlexPen U-100
insulin aspart (niacinamide)	Fiasp U-100 Insulin
insulin aspart (niacinamide)	Fiasp FlexTouch U-100 Insulin
insulin aspart (niacinamide)	Fiasp Penfill U-100 Insulin
insulin aspart	Novolog PenFill U-100 Insulin
insulin regular, human	Novolin R PenFill

Appendix E. List of Generic and Brand Names of Medical Products Used to Define Inclusion Criteria in this Request

Generic Name	Brand Name
insulin NPH human isophane/insulin regular, human	Novolin 70/30 PenFill
insulin regular, human in 0.9 % sodium chloride	Myxredlin
insulin aspart	insulin aspart U-100
insulin aspart protamine human/insulin aspart	insulin asp prt-insulin aspart
Oral Anti-Diabetic, with Metformin	
dapagliflozin propanediol	Farxiga
saxagliptin HCl	Onglyza
saxagliptin HCl/metformin HCl	Kombiglyze XR
sitagliptin phosphate/metformin HCl	Janumet XR
sitagliptin phosphate	Januvia
sitagliptin phosphate/simvastatin	Juvisync
sitagliptin phosphate/metformin HCl	Janumet
ertugliflozin pidolate	Steglatro
ertugliflozin pidolate/sitagliptin phosphate	Steglujan
ertugliflozin pidolate/metformin HCl	Segluromet
rosiglitazone maleate/glimepiride	Avandaryl
rosiglitazone maleate/metformin HCl	Avandamet
glyburide, micronized	Glynase
miglitol	Glyset
acarbose	Precose
rosiglitazone maleate	Avandia
glyburide	Diabeta
glimepiride	Amaryl
glipizide	Glucotrol XL
glipizide	Glucotrol
acarbose	acarbose
nateglinide	Starlix
metformin HCl	Glucophage
metformin HCl	Glucophage XR
glyburide/metformin HCl	Glucovance
glipizide/metformin HCl	Metaglip
metformin HCl	metformin
pioglitazone HCl	pioglitazone
pioglitazone HCl/metformin HCl	pioglitazone-metformin
glyburide/metformin HCl	glyburide-metformin
glimepiride	glimepiride
glipizide/metformin HCl	glipizide-metformin
glyburide, micronized	glyburide micronized
glyburide	glyburide
repaglinide	Prandin
repaglinide/metformin HCl	Prandimet
glipizide	glipizide

Appendix E. List of Generic and Brand Names of Medical Products Used to Define Inclusion Criteria in this Request

Generic Name	Brand Name
chlorpropamide	chlorpropamide
dapagliflozin propanediol/metformin HCl	Xigduo XR
dapagliflozin propanediol/saxagliptin HCl	Qtern
tolbutamide	tolbutamide
tolazamide	tolazamide
repaglinide	repaglinide
nateglinide	nateglinide
linagliptin	Tradjenta
linagliptin/metformin HCl	Jentadueto
empagliflozin	Jardiance
empagliflozin/metformin HCl	Synjardy
empagliflozin/linagliptin	Glyxambi
linagliptin/metformin HCl	Jentadueto XR
empagliflozin/metformin HCl	Synjardy XR
empagliflozin/linagliptin/metformin HCl	Trijardy XR
pioglitazone HCl/glimepiride	pioglitazone-glimepiride
metformin HCl	Riomet ER
metformin HCl	Riomet
pioglitazone HCl	Actos
metformin HCl	Glumetza
pioglitazone HCl/metformin HCl	Actoplus MET
alogliptin benzoate	alogliptin
alogliptin benzoate/metformin HCl	alogliptin-metformin
alogliptin benzoate/pioglitazone HCl	alogliptin-pioglitazone
canagliflozin	Invokana
canagliflozin/metformin HCl	Invokamet
canagliflozin/metformin HCl	Invokamet XR
metformin HCl	Fortamet
miglitol	miglitol
alogliptin benzoate/pioglitazone HCl	Oseni
alogliptin benzoate	Nesina
pioglitazone HCl/glimepiride	DUETACT
pioglitazone HCl/metformin HCl	Actoplus Met XR
alogliptin benzoate/metformin HCl	Kazano
repaglinide/metformin HCl	repaglinide-metformin

Appendix F. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Exclusion Criteria in this Request

Code	Code Category	Code Type	Description
Type 1 Diabetes Mellitus			
250.01	Diagnosis	ICD-9-CM	Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled
250.03	Diagnosis	ICD-9-CM	Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled
250.21	Diagnosis	ICD-9-CM	Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled
250.23	Diagnosis	ICD-9-CM	Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled
250.11	Diagnosis	ICD-9-CM	Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled
250.13	Diagnosis	ICD-9-CM	Diabetes with ketoacidosis, type I [juvenile type], uncontrolled
250.61	Diagnosis	ICD-9-CM	Diabetes with neurological manifestations, type I [juvenile type], not stated as uncontrolled
250.63	Diagnosis	ICD-9-CM	Diabetes with neurological manifestations, type I [juvenile type], uncontrolled
250.51	Diagnosis	ICD-9-CM	Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled
250.53	Diagnosis	ICD-9-CM	Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled
250.31	Diagnosis	ICD-9-CM	Diabetes with other coma, type I [juvenile type], not stated as uncontrolled
250.33	Diagnosis	ICD-9-CM	Diabetes with other coma, type I [juvenile type], uncontrolled
250.81	Diagnosis	ICD-9-CM	Diabetes with other specified manifestations, type I [juvenile type], not stated as uncontrolled
250.83	Diagnosis	ICD-9-CM	Diabetes with other specified manifestations, type I [juvenile type], uncontrolled
250.71	Diagnosis	ICD-9-CM	Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as uncontrolled
250.73	Diagnosis	ICD-9-CM	Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled
250.41	Diagnosis	ICD-9-CM	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled
250.43	Diagnosis	ICD-9-CM	Diabetes with renal manifestations, type I [juvenile type], uncontrolled
250.91	Diagnosis	ICD-9-CM	Diabetes with unspecified complication, type I [juvenile type], not stated as uncontrolled
250.93	Diagnosis	ICD-9-CM	Diabetes with unspecified complication, type I [juvenile type], uncontrolled
E10.3299	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye
E10.3319	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye
E10.3499	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye

Appendix F. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Exclusion Criteria in this Request

Code	Code Category	Code Type	Description
E10.37	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment
E10.37X9	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye
E10.3219	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye
E10.3213	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral
E10.3211	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye
E10.3212	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye
E10.3293	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral
E10.3291	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye
E10.3292	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye
E10.3313	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral
E10.3311	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye
E10.3312	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye
E10.3399	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye
E10.3393	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral
E10.3391	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye
E10.3392	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye
E10.354	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment
E10.3549	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye
E10.3519	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye
E10.353	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula
E10.352	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula

Appendix F. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Exclusion Criteria in this Request

Code	Code Category	Code Type	Description
E10.3529	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye
E10.3533	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral
E10.3531	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye
E10.3532	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye
E10.3539	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye
E10.3599	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye
E10.355	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy
E10.3419	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye
E10.3413	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral
E10.3411	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye
E10.3412	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye
E10.3493	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral
E10.3491	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, right eye
E10.3492	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, left eye
E10.39	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other diabetic ophthalmic complication
E10.35	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy
E10	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus
E10.37X3	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral
E10.37X1	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye
E10.37X2	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye
E10.3543	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral

Appendix F. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Exclusion Criteria in this Request

Code	Code Category	Code Type	Description
E10.3541	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye
E10.3542	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye
E10.3513	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral
E10.3511	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye
E10.3512	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye
E10.3523	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral
E10.3521	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye
E10.3522	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye
E10.3593	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral
E10.3591	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye
E10.3592	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye
E10.3553	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral
E10.3552	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, left eye
E10.3551	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, right eye
E10.3559	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye
E10.5	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with circulatory complications
E10.22	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic chronic kidney disease
E10.41	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic mononeuropathy
E10.40	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic neuropathy, unspecified
E10.42	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic polyneuropathy
E10.44	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic amyotrophy
E10.61	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic arthropathy
E10.36	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic cataract
E10.620	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic dermatitis
E10.21	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic nephropathy
E10.641	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with hypoglycemia with coma

Appendix F. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Exclusion Criteria in this Request

Code	Code Category	Code Type	Description
E10.649	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with hypoglycemia without coma
E10.11	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with ketoacidosis with coma
E10.10	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with ketoacidosis without coma
E10.2	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with kidney complications
E10.4	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with neurological complications
E10.3	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with ophthalmic complications
E10.59	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other circulatory complications
E10.618	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other diabetic arthropathy
E10.29	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other diabetic kidney complication
E10.638	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other oral complications
E10.628	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other skin complications
E10.69	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other specified complication
E10.6	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other specified complications
E10.630	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with periodontal disease
E10.31	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with unspecified diabetic retinopathy
E10.8	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with unspecified complications
E10.621	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with foot ulcer
E10.65	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with hyperglycemia
E10.64	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with hypoglycemia
E10.1	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with ketoacidosis
E10.63	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with oral complications
E10.622	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other skin ulcer
E10.62	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with skin complications
E10.9	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus without complications
E10.329	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema
E10.52	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene
E10.51	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene
E10.43	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy
E10.610	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with diabetic neuropathic arthropathy
E10.321	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema
E10.32	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy
E10.339	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema
E10.331	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema
E10.33	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy

Appendix F. List of International Classifications of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) and International Classifications of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) Diagnosis Codes Used to Define Exclusion Criteria in this Request

Code	Code Category	Code Type	Description
E10.49	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with other diabetic neurological complication
E10.351	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema
E10.349	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema
E10.341	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema
E10.34	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy
E10.319	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema
E10.311	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema
E10.359	Diagnosis	ICD-10-CM	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema

Appendix G. List of Generic and Brand Names of Medical Products Used to Define Exclusion Criteria in this Request

Generic Name	Brand Name
Oral Anti-Diabetic, no Metformin	
dapagliflozin propanediol	Farxiga
saxagliptin HCl	Onglyza
sitagliptin phosphate	Januvia
sitagliptin phosphate/simvastatin	Juvisync
ertugliflozin pidolate	Steglatro
ertugliflozin pidolate/sitagliptin phosphate	Steglujan
rosiglitazone maleate/glimepiride	Avandaryl
glyburide,micronized	Glynase
miglitol	Glyset
acarbose	Precose
rosiglitazone maleate	Avandia
glyburide	Diabeta
glimepiride	Amaryl
glipizide	Glucotrol XL
glipizide	Glucotrol
acarbose	acarbose
nateglinide	Starlix
pioglitazone HCl	pioglitazone
glimepiride	glimepiride
glyburide,micronized	glyburide micronized
glyburide	glyburide
repaglinide	Prandin
glipizide	glipizide
chlorpropamide	chlorpropamide
dapagliflozin propanediol/saxagliptin HCl	Qtern
tolbutamide	tolbutamide
tolazamide	tolazamide
repaglinide	repaglinide
nateglinide	nateglinide
linagliptin	Tradjenta
empagliflozin	Jardiance
empagliflozin/linagliptin	Glyxambi
pioglitazone HCl/glimepiride	pioglitazone-glimepiride
pioglitazone HCl	Actos
alogliptin benzoate	alogliptin
alogliptin benzoate/pioglitazone HCl	alogliptin-pioglitazone
canagliflozin	Invokana
miglitol	miglitol
alogliptin benzoate/pioglitazone HCl	Oseni
alogliptin benzoate	Nesina
pioglitazone HCl/glimepiride	DUETACT