

Disclaimer

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

<u>Query Builder Report:</u> 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.

<u>Request Description:</u> In this report, we examined utilization patterns of several products indicated for the preventative treatment or acute treatment of migraine (eptinezumab, erenumab-aooe, fremanezumab, galcanezumab, rimegepant, and ubrogepant).

<u>Sentinel Routine Querying Module:</u> Cohort Identification and Descriptive Analysis (CIDA) module, version 11.0.0

<u>Data Source:</u> We executed this request on Merative[™] MarketScan® Commercial Claims and Encounters Database and Medicare Supplemental Database, which included 154 million members, on August 24, 2022. The study period included data from May 1, 2018 to September 30, 2021. Please see Appendix A for data availability dates.

<u>Limitations:</u> 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.

<u>Notes:</u> Please contact the Sentinel Operations Center (<u>info@sentinelsystem.org</u>) 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 (<u>https://dev.sentinelsystem.org/projects/QB/repos/querybuilder/browse</u>).

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18-24 15 12 25-40 27 21 41-64 68 54 65+ 11 8 8 54 65+ 11 8 8 54 65+ 11 8 8 55 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8	Characteristic ¹	N/Mean	%/Std Dev
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Age (Years) 00-17	Demographics		
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Year	Female	99	79.8%
2018	Male	25	20.29
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Osteoporosis 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			4.0
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Health Service Utilization Intensity:			19.4
12.0		5	4.0
Moan number of ambulatory encounters (AV)	·	12.0	12
0.5	Mean number of ambulatory encounters (AV)		2.
Mean number of emergency room encounters (ED) Mean number of inpatient hospital encounters (IP) 0.1 0.0			0. 0.

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Table 1a: Baseline table (Eptinezumab)		
Characteristic ¹	N/Mean	%/Std Dev²
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	3.8	5.1
Mean number of filled prescriptions	29.5	22.7
Mean number of generics	12.3	6.9
Mean number of unique drug classes	10.5	5.9

¹All metrics based on total number of unique patients

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²Value represents standard deviation where no % follows the value

³The Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A Combined Comorbidity Score Predicted Mortality in Elderly Patients Better Than Existing Scores. J Clin Epidemiol. 2011;64(7):749-759; Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and Validation of the Combined Comorbidity Score for ICD-10-CM. Med Care. 2017;55(12):1046-1051).



Characteristic ¹	N/Mean	%/Std Dev
Number of unique patients	750	
Demographics		
Mean Age (Years)	45.2	12.
Age (Years)	4	0.59
00-17	51	6.89
18-24	208	27.79
25-40	467	62.3
41-64	20	2.70
65+		
Sex		
Female	649	86.5
Male	101	13.5
Year		
2018	-	
2019	-	
2020	251	33.5
2021	499	66.5
ecorded history of:		
Prior combined comorbidity score ³	0.9	1
Acquired Hypothyroidism	93	12.4
Acute Myocardial Infarction	1	0.1
Alzheimer's Disease	0	0.0
Alzheimer's Disease, Related Disorders, or Senile Dementia	3	0.4
Anemia	75	10.0
Asthma	100	13.3
Atrial Fibrillation	9	1.2
Benign Prostatic Hyperplasia	10	1.3
Breast Cancer	10	1.3
Cataracts	33	4.4
Chronic Kidney Disease	56	7.5
Chronic Obstructive Pulmonary Disease	23	3.1
Colorectal Cancer	3	0.4
Depression	267	35.6
Diabetes	62	8.3
Endometrial Cancer	0	0.0
Glaucoma	29	3.9
Heart Failure	9	1.2
Hip / Pelvic Fracture	1	0.1
Hyperlipidemia	190	25.3
Hypertension	190	25.3
schemic Heart Disease	24	3.2
Lung Cancer	0	0.0
Osteoporosis	13	1.7
Prostate Cancer	0	0.0
Rheumatoid Arthritis / Osteoarthritis	212	28.3
Stroke / Transient Ischemic Attack	17	2.3
ealth Service Utilization Intensity:		
	17.0	10
Mean number of ambulatory encounters (AV) Mean number of emergency room encounters (ED)	0.5	13 1
Mean number of emergency room encounters (ED) Mean number of inpatient hospital encounters (IP)	0.5	0

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Table 1b: Baseline table (Eptinezumab PX)			
Characteristic ¹ N/Mean %/Std Dev			
Mean number of non-acute institutional encounters (IS)	0.0	0.0	
Mean number of other ambulatory encounters (OA)	5.3	11.2	
Mean number of filled prescriptions	32.0	22.1	
Mean number of generics	12.5	7.5	
Mean number of unique drug classes	11.2	6.5	

¹All metrics based on total number of unique patients ²Value represents standard deviation where no % follows the value ³The Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A Combined Comorbidity Score Predicted Mortality in Elderly Patients Better Than Existing Scores. J Clin Epidemiol. 2011;64(7):749-759; Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and Validation of the Combined Comorbidity Score for ICD-10-CM. Med Care. 2017;55(12):1046-1051).

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Characteristic ¹	N/Mean	%/Std Dev
Number of unique patients	33,986	
Demographics		
Mean Age (Years)	44.3	12.5
Age (Years)		
00-17	288	0.8%
18-24	2,761	8.1%
25-40	9,765	28.7%
41-64	20,263	59.6%
65+	909	2.7%
Sex		
Female	29,152	85.8%
Male	4,834	14.2%
Year		
2018	7,480	22.0%
2019	9,556	28.1%
2020	11,159	32.8%
2021	5,791	17.0%
Recorded history of:		
Prior combined comorbidity score ³	0.6	1.
Acquired Hypothyroidism	4,347	12.8%
Acute Myocardial Infarction	51	0.2%
Alzheimer's Disease	17	0.1%
Alzheimer's Disease, Related Disorders, or Senile Dementia	126	0.4%
Anemia	2,700	7.9%
Asthma	3,115	9.2%
Atrial Fibrillation	293	0.9%
Benign Prostatic Hyperplasia	265	0.8%
Breast Cancer	422	1.2%
Cataracts	1,051	3.1%
Chronic Kidney Disease	1,804	5.3%
Chronic Obstructive Pulmonary Disease	1,101	3.2%
Colorectal Cancer	66	0.2%
Depression	8,826	26.0%
Diabetes	2,426	7.1%
Endometrial Cancer	35	0.1%
Glaucoma	775	2.3%
Heart Failure	200	0.6%
Hip / Pelvic Fracture	25	0.1%
Hyperlipidemia	7,020	20.7%
Hypertension	7,224	21.3%
Ischemic Heart Disease	827	2.4%
Lung Cancer	32	0.1%
Osteoporosis	618	1.8%
Prostate Cancer	51	0.2%
Rheumatoid Arthritis / Osteoarthritis	6,100	17.9%
Stroke / Transient Ischemic Attack	821	2.4%
		2. 17
Health Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	11.7	10.
Mean number of emergency room encounters (ED)	0.4	1.
Mean number of inpatient hospital encounters (IP)	0.1	0.
Mean number of non-acute institutional encounters (IS)	0.0	0.

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Table 1c: Baseline table (Erenumab)			
Characteristic ¹	N/Mean	%/Std Dev ²	
Mean number of other ambulatory encounters (OA)	2.1	4.7	
Mean number of filled prescriptions	23.4	17.8	
Mean number of generics	10.2	5.9	
Mean number of unique drug classes	9.5	5.3	

¹All metrics based on total number of unique patients
²Value represents standard deviation where no % follows the value
³The Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A Combined Comorbidity Score Predicted Mortality in Elderly Patients Better Than Existing Scores. J Clin Epidemiol. 2011;64(7):749-759; Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and Validation of the Combined Comorbidity Score for ICD-10-CM. Med Care. 2017;55(12):1046-1051).

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Characteristic ¹	N/Mean	%/Std Dev
Number of unique patients	17,108	
Demographics		
Mean Age (Years)	44.4	12.
Age (Years)		
00-17	119	0.79
18-24	1,384	8.19
25-40	4,845	28.39
41-64	10,418	60.9
65+	342	2.0
Sex		
Female	14,858	86.89
Male	2,250	13.2
Year		
2018	1,450	8.5
2019	6,867	40.1
2020	5,018	29.3
2021	3,773	22.1
	-, -	
Recorded history of:		
Prior combined comorbidity score ³	0.6	1
Acquired Hypothyroidism	2,258	13.2
Acute Myocardial Infarction	24	0.1
Alzheimer's Disease	3	0.0
Alzheimer's Disease, Related Disorders, or Senile Dementia	69	0.4
Anemia	1,380	8.1
Asthma	1,621	9.5
Atrial Fibrillation	161	0.9
Benign Prostatic Hyperplasia	124	0.7
Breast Cancer	206	1.2
Cataracts	532	3.1
Chronic Kidney Disease	927	5.4
Chronic Obstructive Pulmonary Disease	540	3.2
Colorectal Cancer	23	0.1
Depression	4,458	26.1
Diabetes	1,257	7.3
Endometrial Cancer	10	0.1
Glaucoma	400	2.3
Heart Failure	114	0.7
Hip / Pelvic Fracture	7	0.0
Hyperlipidemia	3,466	20.3
Hypertension	3,698	21.6
Ischemic Heart Disease	357	2.1
Lung Cancer	16	0.1
Osteoporosis	282	1.6
Prostate Cancer	18	0.1
Rheumatoid Arthritis / Osteoarthritis	3,240	18.9
Stroke / Transient Ischemic Attack	445	2.6
		2.0
Health Service Utilization Intensity: Mean number of ambulatory encounters (AV)	2.0	10.
Mean number of emergency room encounters (ED)	0.4	10
Mean number of inpatient hospital encounters (IP)	0.4	0
Mean number of impatient riospital encounters (IP) Mean number of non-acute institutional encounters (IS)	0.4	0

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Table 1d: Baseline table (Fremanezumab)			
Characteristic ¹	N/Mean	%/Std Dev ²	
Mean number of other ambulatory encounters (OA)	2.5	5.4	
Mean number of filled prescriptions	24.2	18.3	
Mean number of generics	10.6	6.1	
Mean number of unique drug classes	9.7	5.4	

¹All metrics based on total number of unique patients

The Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A Combined Comorbidity Score Predicted Mortality in Elderly Patients Better Than Existing Scores. J Clin Epidemiol. 2011;64(7):749-759; Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and Validation of the Combined Comorbidity Score for ICD-10-CM. Med Care. 2017;55(12):1046-1051).

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²Value represents standard deviation where no % follows the value



Characteristic ¹	N/Mean	%/Std Dev
Number of unique patients	74	
Demographics		
Mean Age (Years)	41.7	13
Age		
00-17	3	4.1
18-24	7	9.5
25-40	24	32.4
41-64	39	52.7
65+	1	1.4
Sex		
Female	65	87.89
Male	9	12.2
Year		
2018	-	
2019	8	10.89
2020	37	50.0
2021	29	39.2
Recorded history of:		
Prior combined comorbidity score ³	0.6	C
Acquired Hypothyroidism	7	9.5
Acute Myocardial Infarction	0	0.0
Alzheimer's Disease	0	0.0
Alzheimer's Disease, Related Disorders, or Senile Dementia	0	0.0
Anemia	7	9.5
Asthma	6	8.1
Atrial Fibrillation	0	0.0
Benign Prostatic Hyperplasia	0	0.0
Breast Cancer	1	1.4
Cataracts	1	1.4
Chronic Kidney Disease	3	4.1
Chronic Obstructive Pulmonary Disease	1	1.4
Colorectal Cancer	0	0.0
Depression	24	32.4
Diabetes	1	1.4
Endometrial Cancer	0	0.0
Glaucoma	0	0.0
Heart Failure	0	0.0
Hip / Pelvic Fracture	0	0.0
Hyperlipidemia	12	16.2
Hypertension	11	14.9
Ischemic Heart Disease	1	1.4
Lung Cancer	0	0.0
Osteoporosis	1	1.4
Prostate Cancer	0	0.0
Rheumatoid Arthritis / Osteoarthritis	8	10.8
Stroke / Transient Ischemic Attack	2	2.7
lealth Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	13.0	11
Mean number of emergency room encounters (ED)	0.4	0
Mean number of inpatient hospital encounters (IP)	0.1	C

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Table 1e: Baseline table (Fremanezumab PX)		
Characteristic ¹	N/Mean	%/Std Dev ²
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	3.3	4.0
Mean number of filled prescriptions	20.0	15.1
Mean number of generics	8.3	5.3
Mean number of unique drug classes	7.6	4.6

¹All metrics based on total number of unique patients

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^{&#}x27;All metrics based on total number of unique patients
2 Value represents standard deviation where no % follows the value
3 The Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A Combined Comorbidity Score Predicted Mortality in Elderly Patients Better Than Existing Scores. J Clin Epidemiol. 2011;64(7):749-759; Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and Validation of the Combined Comorbidity Score for ICD-10-CM. Med Care. 2017;55(12):1046-1051).



Characteristic ¹	N/Mean	%/Std Dev
Number of unique patients	30,822	
Demographics		
Mean Age (Years)	44.0	12.
Age (Years)		
00-17	200	0.69
18-24	2,457	8.00
25-40	9,273	30.19
41-64	18,304	59.4
65+	588	1.9
Sex		
Female	26,216	85.19
Male	4,606	14.9
Year		
2018	1,051	3.4
2019	12,881	41.8
2020	10,497	34.1
2021	6,393	20.7
ecorded history of:	0.6	-
Prior combined comorbidity score ³	0.6	12.5
Acquired Hypothyroidism	3,862	12.5
Acute Myocardial Infarction	57	0.2
Alzheimer's Disease	17	0.1
Alzheimer's Disease, Related Disorders, or Senile Dementia	115	0.4
Anemia	2,389	7.8
Asthma	2,821	9.2
Atrial Fibrillation	248	0.8
Benign Prostatic Hyperplasia	245	0.8
Breast Cancer	390	1.3
Cataracts	948	3.1
Chronic Kidney Disease	1,615	5.2
Chronic Obstructive Pulmonary Disease	954	3.1
Colorectal Cancer	44	0.1
Depression	8,164	26.5
Diabetes	2,201	7.1
Endometrial Cancer	29	0.1
Glaucoma	739	2.4
Heart Failure	198	0.6
Hip / Pelvic Fracture	22	0.1
Hyperlipidemia	6,215	20.2
Hypertension	6,542	21.2
Ischemic Heart Disease	690	2.2
Lung Cancer	23	0.1
Osteoporosis	496	1.6
Prostate Cancer	40	0.1
Rheumatoid Arthritis / Osteoarthritis	5,257	17.1
Stroke / Transient Ischemic Attack	748	2.4
lealth Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	11.6	10
Mean number of emergency room encounters (ED)	0.4	1
Mean number of inpatient hospital encounters (IP)	0.1	(

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Table 1f: Baseline table (Galcanezumab)		
Characteristic ¹	N/Mean	%/Std Dev ²
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	2.3	4.9
Mean number of filled prescriptions	23.0	17.6
Mean number of generics	10.3	6.0
Mean number of unique drug classes	9.5	5.3

¹All metrics based on total number of unique patients

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All metrics based on total number of unique patients

Value represents standard deviation where no % follows the value

The Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A Combined Comorbidity Score Predicted Mortality in Elderly Patients Better Than Existing Scores. J Clin Epidemiol. 2011;64(7):749-759; Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and Validation of the Combined Comorbidity Score for ICD-10-CM. Med Care. 2017;55(12):1046-1051).



Characteristic ¹	N/Mean	%/Std Dev
Number of unique patients	21,459	70,010 201
Demographics		
Mean Age (Years)	43.8	12.
Age (Years)		
00-17	130	0.69
18-24	1,686	7.99
25-40	6,673	31.19
41-64	12,571	58.6°
65+	399	1.99
Sex		
Female	18,555	86.5
Male	2,904	13.5
Year	,	
2018	_	
2019	_	
2020	9,259	43.1
2021	12,200	56.9
	,	
ecorded history of:		
Prior combined comorbidity score ³	0.6	1
Acquired Hypothyroidism	2,714	12.6
Acute Myocardial Infarction	51	0.2
Alzheimer's Disease	10	0.0
Alzheimer's Disease, Related Disorders, or Senile Dementia	78	0.4
Anemia	1,855	8.6
Asthma	2,024	9.4
Atrial Fibrillation	213	1.0
Benign Prostatic Hyperplasia	141	0.7
Breast Cancer	246	1.1
Cataracts	579	2.7
Chronic Kidney Disease	1,141	5.3
Chronic Obstructive Pulmonary Disease	499	2.3
Colorectal Cancer	32	0.1
Depression	5,206	24.3
Diabetes	1,606	7.5
Endometrial Cancer	17	0.1
Glaucoma	498	2.3
Heart Failure	157	0.7
Hip / Pelvic Fracture	10	0.0
Hyperlipidemia	4,444	20.7
Hypertension	4,460	20.8
Ischemic Heart Disease	586	2.7
Lung Cancer	20	0.1
Osteoporosis	329	1.5
Prostate Cancer	30	0.1
Rheumatoid Arthritis / Osteoarthritis	3,583	16.7
Stroke / Transient Ischemic Attack	662	3.1
lealth Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	11.0	10.
Mean number of emergency room encounters (ED)	0.4	1.
Mean number of inpatient hospital encounters (IP)	0.1	C

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Table 1g: Baseline table (Rimegepant)		
Characteristic ¹	N/Mean	%/Std Dev ²
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	3.0	5.6
Mean number of filled prescriptions	21.7	18.0
Mean number of generics	9.8	6.0
Mean number of unique drug classes	8.8	5.3

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¹All metrics based on total number of unique patients ²Value represents standard deviation where no % follows the value

The Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A Combined Comorbidity Score Predicted Mortality in Elderly Patients Better Than Existing Scores. J Clin Epidemiol. 2011;64(7):749-759; Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and Validation of the Combined Comorbidity Score for ICD-10-CM. Med Care. 2017;55(12):1046-1051).



Characteristic ¹	N/Mean	%/Std De
Number of unique patients	25,514	
Demographics		
Mean Age (Years)	44.2	12
Age (Years)		
00-17	136	0.5
18-24	1,849	7.2
25-40	7,686	30.1
41-64	15,353	60.2
65+	490	1.9
Sex		
Female	22,289	87.4
Male	3,225	12.6
Year	5,==5	
2018	_	
2019	_	
2020	14,273	55.9
2021	11,241	44.1
	,	
ecorded history of:		
Prior combined comorbidity score ³	0.6	
Acquired Hypothyroidism	3,340	13.1
Acute Myocardial Infarction	72	0.3
Alzheimer's Disease	12	0.0
Alzheimer's Disease, Related Disorders, or Senile	73	0.3
Dementia Anemia	2,156	8.5
Asthma	2,332	9.
Atrial Fibrillation	225	0.9
Benign Prostatic Hyperplasia	175	0.7
Breast Cancer	340	1.3
Cataracts	681	2.7
Chronic Kidney Disease	1,367	5.4
Chronic Obstructive Pulmonary Disease	714	2.8
Colorectal Cancer	46	0.2
Depression	6,117	24.0
Diabetes	1,970	7.7
Endometrial Cancer	21	0.1
Glaucoma	574	2.2
Heart Failure	222	0.9
Hip / Pelvic Fracture	13	0.
Hyperlipidemia	5,410	21.2
Hypertension	5,698	22.3
Ischemic Heart Disease	684	2.7
Lung Cancer	25	0.1
Osteoporosis	415	1.6
Prostate Cancer	19	0.1
Rheumatoid Arthritis / Osteoarthritis	4,251	16.7
Stroke / Transient Ischemic Attack	786	3.1
ealth Service Utilization Intensity:		
Mean number of ambulatory encounters (AV)	10.8	10
Mean number of emergency room encounters (ED)	0.4	•
Mean number of inpatient hospital encounters (IP)	0.1	(

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Table 1h: Baseline table (Ubrogepant)		
Characteristic ¹	N/Mean	%/Std Dev ²
Mean number of non-acute institutional encounters (IS)	0.0	0.0
Mean number of other ambulatory encounters (OA)	2.9	5.5
Mean number of filled prescriptions	21.9	18.3
Mean number of generics	9.9	6.2
Mean number of unique drug classes	9.0	5.5

¹All metrics based on total number of unique patients

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All metrics based on total number of unique patients

Value represents standard deviation where no % follows the value

The Combined Comorbidity Score is calculated based on comorbidities observed during a requester-defined window around the exposure episode start date. (Gagne JJ, Glynn RJ, Avorn J, Levin R, Schneeweiss S. A Combined Comorbidity Score Predicted Mortality in Elderly Patients Better Than Existing Scores. J Clin Epidemiol. 2011;64(7):749-759; Sun JW, Rogers JR, Her Q, Welch EC, Panozzo CA, Toh S, Gagne JJ. Adaptation and Validation of the Combined Comorbidity Score for ICD-10-CM. Med Care. 2017;55(12):1046-1051).



Table 2a: Distribution of cumulative	exposure duration	, by length	categories,	in days								
	Total Pat	ients	1-30		31-90	31-90 91-365			366-730		731+	
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
Eptinezumab	124	100.0	37	29.8	46	37.1	40	32.3	1	0.8	0	0.0
Eptinezumab PX	750	100.0	750	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Erenumab	33,986	100.0	4,813	14.2	6,706	19.7	13,757	40.5	6,585	19.4	2,125	6.3
Fremanezumab	17,108	100.0	2,649	15.5	3,867	22.6	7,129	41.7	2,615	15.3	848	5.0
Fremanezumab PX	74	100.0	74	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Galcanezumab	30,822	100.0	4,725	15.3	6,107	19.8	12,717	41.3	5,924	19.2	1,349	4.4
Rimegepant	21,459	100.0	10,516	49.0	6,303	29.4	4,471	20.8	169	0.8	0	0.0
Ubrogepant	25,514	100.0	12,134	47.6	7,199	28.2	5,871	23.0	310	1.2	0	0.0

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	Total Pat	ients	1-30		31-9	0	91-36	5	366-73	30	731+	F
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
Eptinezumab	124	100.0	37	100.0	46	100.0	40	100.0	1	100.0	0	0.0
Female	99	79.8	30	81.1	37	80.4	31	77.5	1	100.0	0	0.0
Male	25	20.2	7	18.9	9	19.6	9	22.5	0	0.0	0	0.0
Eptinezumab PX	750	100.0	750	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Female	649	86.5	649	86.5	0	0.0	0	0.0	0	0.0	0	0.0
Male	101	13.5	101	13.5	0	0.0	0	0.0	0	0.0	0	0.0
Erenumab	33,986	100.0	4,813	100.0	6,706	100.0	13,757	100.0	6,585	100.0	2,125	100.0
Female	29,152	85.8	4,081	84.8	5,709	85.1	11,889	86.4	5,666	86.0	1,807	85.0
Male	4,834	14.2	732	15.2	997	14.9	1,868	13.6	919	14.0	318	15.0
Fremanezumab	17,108	100.0	2,649	100.0	3,867	100.0	7,129	100.0	2,615	100.0	848	100.0
Female	14,858	86.8	2,322	87.7	3,341	86.4	6,218	87.2	2,259	86.4	718	84.7
Male	2,250	13.2	327	12.3	526	13.6	911	12.8	356	13.6	130	15.3
Fremanezumab PX	74	100.0	74	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Female	65	87.8	65	87.8	0	0.0	0	0.0	0	0.0	0	0.0
Male	9	12.2	9	12.2	0	0.0	0	0.0	0	0.0	0	0.0
Galcanezumab	30,822	100.0	4,725	100.0	6,107	100.0	12,717	100.0	5,924	100.0	1,349	100.0
Female	26,216	85.1	3,867	81.8	5,153	84.4	10,917	85.8	5,088	85.9	1,191	88.3
Male	4,606	14.9	858	18.2	954	15.6	1,800	14.2	836	14.1	158	11.7
Rimegepant	21,459	100.0	10,516	100.0	6,303	100.0	4,471	100.0	169	100.0	0	0.0
Female	18,555	86.5	8,956	85.2	5,535	87.8	3,907	87.4	157	92.9	0	0.0
Male	2,904	13.5	1,560	14.8	768	12.2	564	12.6	12	7.1	0	0.0
Ubrogepant	25,514	100.0	12,134	100.0	7,199	100.0	5,871	100.0	310	100.0	0	0.0
Female	22,289	87.4	10,412	85.8	6,370	88.5	5,235	89.2	272	87.7	0	0.0
Male	3,225	12.6	1,722	14.2	829	11.5	636	10.8	38	12.3	0	0.0



	Total Pat	ients	1-30)	31-9	0	91-36	5	366-7	30	731-	٠
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
Eptinezumab	124	100.0	37	100.0	46	100.0	40	100.0	1	100.0	0	0.0
00-17	3	2.4	2	5.4	1	2.2	0	0.0	0	0.0	0	0.0
18-24	15	12.1	4	10.8	5	10.9	6	15.0	0	0.0	0	0.0
25-40	27	21.8	12	32.4	8	17.4	7	17.5	0	0.0	0	0.0
41-64	68	54.8	17	45.9	26	56.5	24	60.0	1	100.0	0	0.0
65+	11	8.9	2	5.4	6	13.0	3	7.5	0	0.0	0	0.0
Eptinezumab PX	750	100.0	750	100.0	0	0.0	0	0.0	0	0.0	0	0.0
00-17	4	0.5	4	0.5	0	0.0	0	0.0	0	0.0	0	0.0
18-24	51	6.8	51	6.8	0	0.0	0	0.0	0	0.0	0	0.0
25-40	208	27.7	208	27.7	0	0.0	0	0.0	0	0.0	0	0.0
41-64	467	62.3	467	62.3	0	0.0	0	0.0	0	0.0	0	0.0
65+	20	2.7	20	2.7	0	0.0	0	0.0	0	0.0	0	0.0
Erenumab	33,986	100.0	4,813	100.0	6,706	100.0	13,757	100.0	6,585	100.0	2,125	100.0
00-17	288	0.8	38	0.8	51	8.0	133	1.0	55	0.8	11	0.5
18-24	2,761	8.1	406	8.4	561	8.4	1,204	8.8	478	7.3	112	5.3
25-40	9,765	28.7	1,389	28.9	2,070	30.9	4,158	30.2	1,705	25.9	443	20.8
41-64	20,263	59.6	2,792	58.0	3,808	56.8	7,962	57.9	4,198	63.8	1,503	70.7
65+	909	2.7	188	3.9	216	3.2	300	2.2	149	2.3	56	2.6
Fremanezumab	17,108	100.0	2,649	100.0	3,867	100.0	7,129	100.0	2,615	100.0	848	100.0
00-17	119	0.7	20	8.0	36	0.9	44	0.6	15	0.6	4	0.5
18-24	1,384	8.1	230	8.7	342	8.8	584	8.2	191	7.3	37	4.4
25-40	4,845	28.3	781	29.5	1,172	30.3	2,047	28.7	658	25.2	187	22.1
41-64	10,418	60.9	1,554	58.7	2,223	57.5	4,315	60.5	1,715	65.6	611	72.1
65+	342	2.0	64	2.4	94	2.4	139	1.9	36	1.4	9	1.1
Fremanezumab PX	74	100.0	74	100.0	0	0.0	0	0.0	0	0.0	0	0.0
00-17	3	4.1	3	4.1	0	0.0	0	0.0	0	0.0	0	0.0
18-24	7	9.5	7	9.5	0	0.0	0	0.0	0	0.0	0	0.0
25-40	24	32.4	24	32.4	0	0.0	0	0.0	0	0.0	0	0.0
41-64	39	52.7	39	52.7	0	0.0	0	0.0	0	0.0	0	0.0
65+	1	1.4	1	1.4	0	0.0	0	0.0	0	0.0	0	0.0
Galcanezumab	30,822	100.0	4,725	100.0	6,107	100.0	12,717	100.0	5,924	100.0	1,349	100.0
00-17	200	0.6	42	0.9	41	0.7	73	0.6	40	0.7	4	0.3
18-24	2,457	8.0	436	9.2	534	8.7	1,017	8.0	396	6.7	74	5.5
25-40	9,273	30.1	1,439	30.5	1,976	32.4	3,966	31.2	1,602	27.0	290	21.5
41-64	18,304	59.4	2,683	56.8	3,428	56.1	7,413	58.3	3,810	64.3	970	71.9
65+	588	1.9	125	2.6	128	2.1	248	2.0	76	1.3	11	0.8
Rimegepant	21,459	100.0	10,516	100.0	6,303	100.0	4,471	100.0	169	100.0	0	0.0



	Total Pat	ients	1-30		31-9	0	91-36	5	366-7	30	731+	
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
00-17	130	0.6	81	0.8	38	0.6	11	0.2	0	0.0	0	0.0
18-24	1,686	7.9	957	9.1	457	7.3	264	5.9	8	4.7	0	0.0
25-40	6,673	31.1	3,201	30.4	2,044	32.4	1,385	31.0	43	25.4	0	0.0
41-64	12,571	58.6	6,037	57.4	3,654	58.0	2,764	61.8	116	68.6	0	0.0
65+	399	1.9	240	2.3	110	1.7	47	1.1	2	1.2	0	0.0
Ubrogepant	25,514	100.0	12,134	100.0	7,199	100.0	5,871	100.0	310	100.0	0	0.0
00-17	136	0.5	74	0.6	43	0.6	18	0.3	1	0.3	0	0.0
18-24	1,849	7.2	965	8.0	542	7.5	324	5.5	18	5.8	0	0.0
25-40	7,686	30.1	3,751	30.9	2,197	30.5	1,664	28.3	74	23.9	0	0.0
41-64	15,353	60.2	7,023	57.9	4,299	59.7	3,817	65.0	214	69.0	0	0.0
65+	490	1.9	321	2.6	118	1.6	48	0.8	3	1.0	0	0.0



Table 3a: Descriptive statistics of cun	nulative exposure duration, all e	pisodes, in days						
Exposures	Total Patients	Mean	STD	Min	Q1	Median	Q3	Max
Eptinezumab	124	90.40	77.75	1	30	72	120	402
Eptinezumab PX	750	2.03	1.13	1	1	2	3	7
Erenumab	33,986	257.04	240.17	1	66	175	376	1,193
Fremanezumab	17,108	229.47	222.09	1	60	150	327	1,084
Fremanezumab PX	74	1.88	2.36	1	1	1	2	18
Galcanezumab	30,822	240.02	221.29	1	60	165	356	1,053
Rimegepant	21,459	65.67	72.62	1	21	32	90	541
Ubrogepant	25,514	71.88	80.59	1	20	36	90	577

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Exposures	Total Patients	Mean	STD	Min	Q1	Median	Q3	Max
Eptinezumab	124	90.40	77.75	1	30	72	120	402
Female	99	89.75	78.99	1	30	68	120	402
Male	25	93.00	74.13	2	30	90	137	336
Eptinezumab PX	750	2.03	1.13	1	1	2	3	7
Female	649	2.04	1.13	1	1	2	3	7
Male	101	1.99	1.12	1	1	2	3	5
Erenumab	33,986	257.04	240.17	1	66	175	376	1,193
Female	29,152	257.39	239.59	1	70	176	376	1,192
Male	4,834	254.92	243.68	1	60	168	379	1,193
- remanezumab	17,108	229.47	222.09	1	60	150	327	1,084
Female	14,858	228.29	220.84	1	60	150	325	1,084
Male	2,250	237.31	230.03	1	60	150	330	1,048
Fremanezumab PX	74	1.88	2.36	1	1	1	2	18
Female	65	1.63	1.45	1	1	1	2	9
Male	9	3.67	5.45	1	1	2	3	18
Galcanezumab	30,822	240.02	221.29	1	60	165	356	1,053
Female	26,216	243.22	222.31	1	61	168	360	1,053
Male	4,606	221.83	214.52	1	60	142	330	1,035
Rimegepant	21,459	65.67	72.62	1	21	32	90	541
Female	18,555	66.55	73.43	1	22	32	90	541
Male	2,904	60.04	66.91	1	16	30	74	497
Jbrogepant	25,514	71.88	80.59	1	20	36	90	577
Female	22,289	72.99	81.29	1	21	39	90	577
Male	3,225	64.23	75.12	1	20	30	90	540



Exposures	Total Patients	Mean	STD	Min	Q1	Median	Q3	Max
ptinezumab	124	90.40	77.75	1	30	72	120	402
00-17	3	40.00	17.32	30	30	30	60	60
18-24	15	100.67	71.25	14	30	90	150	264
25-40	27	81.70	86.73	9	30	31	114	336
41-64	68	93.09	79.13	1	31	84	120	402
65+	11	94.91	66.98	17	34	90	123	252
ptinezumab PX	750	2.03	1.13	1	1	2	3	7
00-17	4	2.75	2.06	1	1	3	5	5
18-24	51	2.04	1.17	1	1	2	3	7
25-40	208	2.00	1.13	1	1	2	3	5
41-64	467	2.05	1.12	1	1	2	3	6
65+	20	1.75	0.97	1	1	1	3	4
renumab	33,986	257.04	240.17	1	66	175	376	1,193
00-17	288	234.34	205.01	2	75	180	338	1,025
18-24	2,761	230.80	214.92	1	60	153	330	1,135
25-40	9,765	234.42	222.03	1	60	152	333	1,176
41-64	20,263	273.12	250.73	1	75	180	411	1,193
65+	909	228.31	240.66	1	56	120	341	1,142
remanezumab	17,108	229.47	222.09	1	60	150	327	1,084
00-17	119	188.16	206.57	2	56	102	211	929
18-24	1,384	202.34	197.58	1	60	122	287	1,065
25-40	4,845	212.37	209.34	1	60	139	288	1,067
41-64	10,418	242.97	230.92	1	62	164	346	1,084
65+	342	184.84	185.62	1	60	112	270	930
remanezumab PX	74	1.88	2.36	1	1	1	2	18
00-17	3	3.67	4.62	1	1	1	9	9
18-24	7	2.00	1.83	1	1	1	2	6
25-40	24	1.25	0.61	1	1	1	1	3
41-64	39	2.13	2.87	1	1	1	2	18
65+	1	1.00	-	1	1	1	1	1
Galcanezumab	30,822	240.02	221.29	1	60	165	356	1,053
00-17	200	210.32	203.39	4	49	124	326	899
18-24	2,457	211.53	201.91	1	60	141	302	986
25-40	9,273	221.42	206.48	1	60	150	316	1,035
41-64	18,304	255.30	230.69	1	64	180	383	1,053
65+	588	187.15	186.13	1	54	120	264	981
Rimegepant	21,459	65.67	72.62	1	21	32	90	541
00-17	130	43.62	45.15	3	16	30	58	285

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Table 3c: Descriptive statistics of cumulative exposure duration, all episodes, in days, by age group (years)											
Exposures	Total Patients	Mean	STD	Min	Q1	Median	Q3	Max			
18-24	1,686	54.61	63.89	1	16	30	60	458			
25-40	6,673	65.22	70.37	1	22	32	90	502			
41-64	12,571	68.17	75.26	1	23	32	90	541			
65+	399	48.59	57.20	1	16	30	60	421			
Ubrogepant	25,514	71.88	80.59	1	20	36	90	577			
00-17	136	53.92	61.25	2	15	30	62	369			
18-24	1,849	61.21	70.40	1	20	30	75	548			
25-40	7,686	68.27	76.40	1	20	34	90	556			
41-64	15,353	76.03	84.18	1	23	40	99	577			
65+	490	44 01	53.05	1	15	30	59	404			



Table 4a: Distribution of first expos	able 4a: Distribution of first exposure episode duration, by length categories, in days											
	Total Epis	sodes	1-30		31-90)	91-365		366-730		731-	+
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
Eptinezumab	124	100.0	72	58.1	43	34.7	9	7.3	0	0.0	0	0.0
Eptinezumab PX	750	100.0	750	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Erenumab	33,986	100.0	18,827	55.4	8,444	24.8	5,771	17.0	777	2.3	167	0.5
Fremanezumab	17,108	100.0	8,888	52.0	4,804	28.1	2,941	17.2	382	2.2	93	0.5
Fremanezumab PX	74	100.0	74	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Galcanezumab	30,822	100.0	18,322	59.4	7,214	23.4	4,543	14.7	646	2.1	97	0.3
Rimegepant	21,459	100.0	18,130	84.5	2,347	10.9	932	4.3	50	0.2	0	0.0
Ubrogepant	25,514	100.0	21,821	85.5	2,629	10.3	1,000	3.9	64	0.3	0	0.0

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	Total Epis	sodes	1-30		31-9	0	91-36	5	366-7	30	731	+
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
Eptinezumab	124	100.0	72	100.0	43	100.0	9	100.0	0	0.0	0	0.0
Female	99	79.8	58	80.6	34	79.1	7	77.8	0	0.0	0	0.0
Male	25	20.2	14	19.4	9	20.9	2	22.2	0	0.0	0	0.0
Eptinezumab PX	750	100.0	750	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Female	649	86.5	649	86.5	0	0.0	0	0.0	0	0.0	0	0.0
Male	101	13.5	101	13.5	0	0.0	0	0.0	0	0.0	0	0.0
Erenumab	33,986	100.0	18,827	100.0	8,444	100.0	5,771	100.0	777	100.0	167	100.0
Female	29,152	85.8	16,085	85.4	7,282	86.2	4,977	86.2	657	84.6	151	90.4
Male	4,834	14.2	2,742	14.6	1,162	13.8	794	13.8	120	15.4	16	9.6
Fremanezumab	17,108	100.0	8,888	100.0	4,804	100.0	2,941	100.0	382	100.0	93	100.0
Female	14,858	86.8	7,744	87.1	4,153	86.4	2,553	86.8	328	85.9	80	86.0
Male	2,250	13.2	1,144	12.9	651	13.6	388	13.2	54	14.1	13	14.0
Fremanezumab PX	74	100.0	74	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Female	65	87.8	65	87.8	0	0.0	0	0.0	0	0.0	0	0.0
Male	9	12.2	9	12.2	0	0.0	0	0.0	0	0.0	0	0.0
Galcanezumab	30,822	100.0	18,322	100.0	7,214	100.0	4,543	100.0	646	100.0	97	100.0
Female	26,216	85.1	15,507	84.6	6,179	85.7	3,889	85.6	552	85.4	89	91.8
Male	4,606	14.9	2,815	15.4	1,035	14.3	654	14.4	94	14.6	8	8.2
Rimegepant	21,459	100.0	18,130	100.0	2,347	100.0	932	100.0	50	100.0	0	0.0
Female	18,555	86.5	15,644	86.3	2,057	87.6	810	86.9	44	88.0	0	0.0
Male	2,904	13.5	2,486	13.7	290	12.4	122	13.1	6	12.0	0	0.0
Ubrogepant	25,514	100.0	21,821	100.0	2,629	100.0	1,000	100.0	64	100.0	0	0.0
Female	22,289	87.4	19,067	87.4	2,285	86.9	883	88.3	54	84.4	0	0.0
Male	3,225	12.6	2,754	12.6	344	13.1	117	11.7	10	15.6	0	0.0



	Total Epis	odes	1-30		31-90)	91-36	5	366-7	'30	731	+
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
Eptinezumab	124	100.0	72	100.0	43	100.0	9	100.0	0	0.0	0	0.0
00-17	3	2.4	2	2.8	1	2.3	0	0.0	0	0.0	0	0.0
18-24	15	12.1	10	13.9	5	11.6	0	0.0	0	0.0	0	0.0
25-40	27	21.8	16	22.2	9	20.9	2	22.2	0	0.0	0	0.0
41-64	68	54.8	42	58.3	20	46.5	6	66.7	0	0.0	0	0.0
65+	11	8.9	2	2.8	8	18.6	1	11.1	0	0.0	0	0.0
Eptinezumab PX	750	100.0	750	100.0	0	0.0	0	0.0	0	0.0	0	0.0
00-17	4	0.5	4	0.5	0	0.0	0	0.0	0	0.0	0	0.0
18-24	51	6.8	51	6.8	0	0.0	0	0.0	0	0.0	0	0.0
25-40	208	27.7	208	27.7	0	0.0	0	0.0	0	0.0	0	0.0
41-64	467	62.3	467	62.3	0	0.0	0	0.0	0	0.0	0	0.0
65+	20	2.7	20	2.7	0	0.0	0	0.0	0	0.0	0	0.0
Erenumab	33,986	100.0	18,827	100.0	8,444	100.0	5,771	100.0	777	100.0	167	100.
00-17	288	8.0	155	8.0	79	0.9	45	0.8	8	1.0	1	0.6
18-24	2,761	8.1	1,556	8.3	681	8.1	479	8.3	39	5.0	6	3.6
25-40	9,765	28.7	5,371	28.5	2,513	29.8	1,651	28.6	198	25.5	32	19.2
41-64	20,263	59.6	11,267	59.8	4,923	58.3	3,450	59.8	502	64.6	121	72.5
65+	909	2.7	478	2.5	248	2.9	146	2.5	30	3.9	7	4.2
Fremanezumab	17,108	100.0	8,888	100.0	4,804	100.0	2,941	100.0	382	100.0	93	100.
00-17	119	0.7	62	0.7	38	8.0	17	0.6	2	0.5	0	0.0
18-24	1,384	8.1	734	8.3	386	8.0	231	7.9	29	7.6	4	4.3
25-40	4,845	28.3	2,513	28.3	1,418	29.5	802	27.3	87	22.8	25	26.9
41-64	10,418	60.9	5,398	60.7	2,861	59.6	1,839	62.5	258	67.5	62	66.7
65+	342	2.0	181	2.0	101	2.1	52	1.8	6	1.6	2	2.2
Fremanezumab PX	74	100.0	74	100.0	0	0.0	0	0.0	0	0.0	0	0.0
00-17	3	4.1	3	4.1	0	0.0	0	0.0	0	0.0	0	0.0
18-24	7	9.5	7	9.5	0	0.0	0	0.0	0	0.0	0	0.0
25-40	24	32.4	24	32.4	0	0.0	0	0.0	0	0.0	0	0.0
41-64	39	52.7	39	52.7	0	0.0	0	0.0	0	0.0	0	0.0
65+	1	1.4	1	1.4	0	0.0	0	0.0	0	0.0	0	0.0
Galcanezumab	30,822	100.0	18,322	100.0	7,214	100.0	4,543	100.0	646	100.0	97	100.
00-17	200	0.6	109	0.6	58	8.0	25	0.6	8	1.2	0	0.0
18-24	2,457	8.0	1,549	8.5	578	8.0	288	6.3	42	6.5	0	0.0
25-40	9,273	30.1	5,503	30.0	2,244	31.1	1,328	29.2	183	28.3	15	15.5
41-64	18,304	59.4	10,811	59.0	4,210	58.4	2,799	61.6	404	62.5	80	82.
65+	588	1.9	350	1.9	124	1.7	103	2.3	9	1.4	2	2.1
Rimegepant	21,459	100.0	18,130	100.0	2,347	100.0	932	100.0	50	100.0	0	0.0

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	Total Epis	Total Episodes		1-30 31-90		91-365		5	366-730		731·	+
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
00-17	130	0.6	120	0.7	9	0.4	1	0.1	0	0.0	0	0.0
18-24	1,686	7.9	1,471	8.1	161	6.9	53	5.7	1	2.0	0	0.0
25-40	6,673	31.1	5,612	31.0	747	31.8	300	32.2	14	28.0	0	0.0
41-64	12,571	58.6	10,587	58.4	1,383	58.9	567	60.8	34	68.0	0	0.0
65+	399	1.9	340	1.9	47	2.0	11	1.2	1	2.0	0	0.0
Ubrogepant	25,514	100.0	21,821	100.0	2,629	100.0	1,000	100.0	64	100.0	0	0.0
00-17	136	0.5	120	0.5	12	0.5	4	0.4	0	0.0	0	0.0
18-24	1,849	7.2	1,624	7.4	176	6.7	45	4.5	4	6.3	0	0.0
25-40	7,686	30.1	6,553	30.0	819	31.2	303	30.3	11	17.2	0	0.0
41-64	15,353	60.2	13,078	59.9	1,585	60.3	642	64.2	48	75.0	0	0.0
65+	490	1.9	446	2.0	37	1.4	6	0.6	1	1.6	0	0.0



Table 5a: Descriptive statistics of first exposure episode duration, in days										
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max		
Eptinezumab	124	52.11	41.99	1	30	30	84	270		
Eptinezumab PX	750	1.00	0.00	1	1	1	1	1		
Erenumab	33,986	79.34	108.43	1	30	30	90	1,192		
Fremanezumab	17,108	83.45	109.47	1	30	30	90	1,067		
Fremanezumab PX	74	1.00	0.00	1	1	1	1	1		
Galcanezumab	30,822	71.73	97.60	1	30	30	79	1,017		
Rimegepant	21,459	32.03	40.00	1	8	30	30	497		
Ubrogepant	25,514	31.24	41.67	1	10	30	30	556		



Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Eptinezumab	124	52.11	41.99	1	30	30	84	270
Female	99	51.73	41.12	1	30	30	84	270
Male	25	53.64	46.11	1	30	30	84	204
Eptinezumab PX	750	1.00	0.00	1	1	1	1	1
Female	649	1.00	0.00	1	1	1	1	1
Male	101	1.00	0.00	1	1	1	1	1
Erenumab	33,986	79.34	108.43	1	30	30	90	1,192
Female	29,152	79.57	108.92	1	30	30	90	1,192
Male	4,834	77.95	105.40	1	30	30	90	1,099
Fremanezumab	17,108	83.45	109.47	1	30	30	90	1,067
Female	14,858	83.28	109.32	1	30	30	90	1,067
Male	2,250	84.58	110.47	1	30	30	90	947
Fremanezumab PX	74	1.00	0.00	1	1	1	1	1
Female	65	1.00	0.00	1	1	1	1	1
Male	9	1.00	0.00	1	1	1	1	1
Galcanezumab	30,822	71.73	97.60	1	30	30	79	1,017
Female	26,216	72.23	98.39	1	30	30	84	1,017
Male	4,606	68.89	92.91	1	30	30	60	891
Rimegepant	21,459	32.03	40.00	1	8	30	30	497
Female	18,555	32.18	40.21	1	8	30	30	486
Male	2,904	31.11	38.60	1	8	30	30	497
Jbrogepant	25,514	31.24	41.67	1	10	30	30	556
Female	22,289	31.29	41.65	1	10	30	30	556
Male	3,225	30.92	41.78	1	10	30	30	540



Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
ptinezumab	124	52.11	41.99	1	30	30	84	270
00-17	3	40.00	17.32	30	30	30	60	60
18-24	15	47.53	28.79	14	30	30	84	90
25-40	27	55.22	51.61	9	30	30	84	270
41-64	68	49.04	42.06	1	30	30	84	204
65+	11	73.00	32.26	17	34	84	90	123
Eptinezumab PX	750	1.00	0.00	1	1	1	1	1
00-17	4	1.00	0.00	1	1	1	1	1
18-24	51	1.00	0.00	1	1	1	1	1
25-40	208	1.00	0.00	1	1	1	1	1
41-64	467	1.00	0.00	1	1	1	1	1
65+	20	1.00	0.00	1	1	1	1	1
Erenumab	33,986	79.34	108.43	1	30	30	90	1,192
00-17	288	77.18	97.27	1	30	30	90	804
18-24	2,761	72.05	85.78	1	30	30	90	930
25-40	9,765	76.74	100.85	1	30	30	90	1,164
41-64	20,263	81.30	113.79	1	30	30	90	1,192
65+	909	86.35	126.54	1	30	30	90	1,142
remanezumab	17,108	83.45	109.47	1	30	30	90	1,067
00-17	119	69.59	75.92	2	30	30	90	562
18-24	1,384	76.12	93.71	1	30	30	90	974
25-40	4,845	80.59	106.62	1	30	30	90	1,067
41-64	10,418	86.07	113.11	1	30	30	90	1,047
65+	342	78.31	103.46	1	30	30	90	840
remanezumab PX	74	1.00	0.00	1	1	1	1	1
00-17	3	1.00	0.00	1	1	1	1	1
18-24	7	1.00	0.00	1	1	1	1	1
25-40	24	1.00	0.00	1	1	1	1	1
41-64	39	1.00	0.00	1	1	1	1	1
65+	1	1.00	-	1	1	1	1	1
Galcanezumab	30,822	71.73	97.60	1	30	30	79	1,017
00-17	200	74.65	93.28	1	30	30	85	560
18-24	2,457	62.48	79.33	1	30	30	60	688
25-40	9,273	69.03	90.16	1	30	30	65	1,017
41-64	18,304	74.28	103.33	1	30	30	84	1,016
65+	588	72.87	94.18	1	30	30	87	788
Rimegepant	21,459	32.03	40.00	1	8	30	30	497
00-17	130	24.61	23.66	3	8	30	30	240

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Table 5c: Descriptive statistics of first exposure episode duration, in days, by age group (years)											
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max			
18-24	1,686	28.20	31.59	1	8	30	30	403			
25-40	6,673	32.08	38.77	1	8	30	30	473			
41-64	12,571	32.70	41.89	1	8	30	30	497			
65+	399	28.93	33.68	1	8	30	30	421			
Ubrogepant	25,514	31.24	41.67	1	10	30	30	556			
00-17	136	25.51	23.28	2	10	30	30	150			
18-24	1,849	28.42	33.91	1	10	30	30	438			
25-40	7,686	30.65	38.64	1	10	30	30	556			
41-64	15,353	32.15	44.38	1	10	30	30	546			
65+	490	24 17	25.83	1	10	24	30	366			



Table 6a: Distribution of second and	Table 6a: Distribution of second and subsequent exposure episode duration, by length categories, in days											
	Total Epis	Total Episodes 1-30		31-90		91-36	91-365		366-730		+	
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
Eptinezumab	107	100.0	67	62.6	35	32.7	5	4.7	0	0.0	0	0.0
Eptinezumab PX	772	100.0	772	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Erenumab	88,904	100.0	50,502	56.8	23,967	27.0	13,018	14.6	1,251	1.4	166	0.2
Fremanezumab	35,545	100.0	19,526	54.9	10,101	28.4	5,368	15.1	488	1.4	62	0.2
Fremanezumab PX	65	100.0	65	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Galcanezumab	79,029	100.0	45,598	57.7	21,239	26.9	11,109	14.1	999	1.3	84	0.1
Rimegepant	26,781	100.0	23,106	86.3	2,853	10.7	806	3.0	16	0.1	0	0.0
Ubrogepant	39,281	100.0	34,081	86.8	4,023	10.2	1,148	2.9	29	0.1	0	0.0



	Total Epis	odes	1-30		31-90)	91-36	5	366-7	30	731	+
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
Eptinezumab	107	100.0	67	100.0	35	100.0	5	100.0	0	0.0	0	0.0
Female	84	78.5	55	82.1	25	71.4	4	80.0	0	0.0	0	0.0
Male	23	21.5	12	17.9	10	28.6	1	20.0	0	0.0	0	0.0
Eptinezumab PX	772	100.0	772	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Female	672	87.0	672	87.0	0	0.0	0	0.0	0	0.0	0	0.0
Male	100	13.0	100	13.0	0	0.0	0	0.0	0	0.0	0	0.0
Erenumab	88,904	100.0	50,502	100.0	23,967	100.0	13,018	100.0	1,251	100.0	166	100.0
Female	76,831	86.4	43,665	86.5	20,776	86.7	11,225	86.2	1,032	82.5	133	80.1
Male	12,073	13.6	6,837	13.5	3,191	13.3	1,793	13.8	219	17.5	33	19.9
Fremanezumab	35,545	100.0	19,526	100.0	10,101	100.0	5,368	100.0	488	100.0	62	100.0
Female	30,847	86.8	17,024	87.2	8,717	86.3	4,646	86.5	410	84.0	50	80.6
Male	4,698	13.2	2,502	12.8	1,384	13.7	722	13.5	78	16.0	12	19.4
Fremanezumab PX	65	100.0	65	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Female	41	63.1	41	63.1	0	0.0	0	0.0	0	0.0	0	0.0
Male	24	36.9	24	36.9	0	0.0	0	0.0	0	0.0	0	0.0
Galcanezumab	79,029	100.0	45,598	100.0	21,239	100.0	11,109	100.0	999	100.0	84	100.0
Female	68,128	86.2	39,238	86.1	18,335	86.3	9,617	86.6	862	86.3	76	90.5
Male	10,901	13.8	6,360	13.9	2,904	13.7	1,492	13.4	137	13.7	8	9.5
Rimegepant	26,781	100.0	23,106	100.0	2,853	100.0	806	100.0	16	100.0	0	0.0
Female	23,611	88.2	20,384	88.2	2,501	87.7	710	88.1	16	100.0	0	0.0
Male	3,170	11.8	2,722	11.8	352	12.3	96	11.9	0	0.0	0	0.0
Ubrogepant	39,281	100.0	34,081	100.0	4,023	100.0	1,148	100.0	29	100.0	0	0.0
Female	35,080	89.3	30,415	89.2	3,608	89.7	1,030	89.7	27	93.1	0	0.0
Male	4,201	10.7	3,666	10.8	415	10.3	118	10.3	2	6.9	0	0.0



	Total Epis	odes	1-30		31-90)	91-36	5	366-7	30	731·	+
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
Eptinezumab	107	100.0	67	100.0	35	100.0	5	100.0	0	0.0	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	18	16.8	13	19.4	5	14.3	0	0.0	0	0.0	0	0.0
25-40	11	10.3	4	6.0	6	17.1	1	20.0	0	0.0	0	0.0
41-64	75	70.1	50	74.6	21	60.0	4	80.0	0	0.0	0	0.0
65+	3	2.8	0	0.0	3	8.6	0	0.0	0	0.0	0	0.0
Eptinezumab PX	772	100.0	772	100.0	0	0.0	0	0.0	0	0.0	0	0.0
00-17	7	0.9	7	0.9	0	0.0	0	0.0	0	0.0	0	0.0
18-24	53	6.9	53	6.9	0	0.0	0	0.0	0	0.0	0	0.0
25-40	208	26.9	208	26.9	0	0.0	0	0.0	0	0.0	0	0.0
41-64	489	63.3	489	63.3	0	0.0	0	0.0	0	0.0	0	0.0
65+	15	1.9	15	1.9	0	0.0	0	0.0	0	0.0	0	0.0
Erenumab	88,904	100.0	50,502	100.0	23,967	100.0	13,018	100.0	1,251	100.0	166	100.
00-17	695	0.8	385	8.0	197	0.8	101	0.8	12	1.0	0	0.0
18-24	7,035	7.9	4,025	8.0	1,958	8.2	1,002	7.7	49	3.9	1	0.6
25-40	24,002	27.0	14,063	27.8	6,410	26.7	3,223	24.8	268	21.4	38	22.9
41-64	55,438	62.4	31,106	61.6	14,914	62.2	8,402	64.5	892	71.3	124	74.7
65+	1,734	2.0	923	1.8	488	2.0	290	2.2	30	2.4	3	1.8
Fremanezumab	35,545	100.0	19,526	100.0	10,101	100.0	5,368	100.0	488	100.0	62	100.
00-17	219	0.6	129	0.7	65	0.6	21	0.4	3	0.6	1	1.6
18-24	2,708	7.6	1,543	7.9	766	7.6	373	6.9	23	4.7	3	4.8
25-40	9,691	27.3	5,462	28.0	2,757	27.3	1,376	25.6	90	18.4	6	9.7
41-64	22,408	63.0	12,114	62.0	6,354	62.9	3,525	65.7	363	74.4	52	83.9
65+	519	1.5	278	1.4	159	1.6	73	1.4	9	1.8	0	0.0
Fremanezumab PX	65	100.0	65	100.0	0	0.0	0	0.0	0	0.0	0	0.0
00-17	8	12.3	8	12.3	0	0.0	0	0.0	0	0.0	0	0.0
18-24	7	10.8	7	10.8	0	0.0	0	0.0	0	0.0	0	0.0
25-40	6	9.2	6	9.2	0	0.0	0	0.0	0	0.0	0	0.0
41-64	44	67.7	44	67.7	0	0.0	0	0.0	0	0.0	0	0.0
65+	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Galcanezumab	79,029	100.0	45,598	100.0	21,239	100.0	11,109	100.0	999	100.0	84	100.
00-17	404	0.5	238	0.5	93	0.4	69	0.6	4	0.4	0	0.0
18-24	6,073	7.7	3,587	7.9	1,653	7.8	783	7.0	47	4.7	3	3.6
25-40	22,665	28.7	13,408	29.4	6,017	28.3	3,001	27.0	216	21.6	23	27.4
41-64	48,923	61.9	27,835	61.0	13,206	62.2	7,111	64.0	714	71.5	57	67.9
65+	964	1.2	530	1.2	270	1.3	145	1.3	18	1.8	1	1.2
Rimegepant	26,781	100.0	23,106	100.0	2,853	100.0	806	100.0	16	100.0	0	0.0

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	Total Epi	sodes	1-30		31-9	0	91-36	5	366-7	730	731-	F .
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
00-17	110	0.4	102	0.4	7	0.2	1	0.1	0	0.0	0	0.0
18-24	1,672	6.2	1,463	6.3	164	5.7	45	5.6	0	0.0	0	0.0
25-40	8,388	31.3	7,337	31.8	805	28.2	241	29.9	5	31.3	0	0.0
41-64	16,341	61.0	13,982	60.5	1,842	64.6	507	62.9	10	62.5	0	0.0
65+	270	1.0	222	1.0	35	1.2	12	1.5	1	6.3	0	0.0
brogepant	39,281	100.0	34,081	100.0	4,023	100.0	1,148	100.0	29	100.0	0	0.0
00-17	161	0.4	146	0.4	13	0.3	2	0.2	0	0.0	0	0.0
18-24	2,216	5.6	1,927	5.7	225	5.6	63	5.5	1	3.4	0	0.0
25-40	11,142	28.4	9,723	28.5	1,103	27.4	305	26.6	11	37.9	0	0.0
41-64	25,364	64.6	21,933	64.4	2,645	65.7	769	67.0	17	58.6	0	0.0
65+	398	1.0	352	1.0	37	0.9	9	8.0	0	0.0	0	0.0



Table 7a: Descriptive statistics of sec	ond and subsequent exposure e	pisode duration, in	n days					
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Eptinezumab	107	44.37	35.32	1	30	30	46	241
Eptinezumab PX	772	1.00	0.00	1	1	1	1	1
Erenumab	88,904	67.93	84.82	1	28	30	79	1,114
Fremanezumab	35,545	70.28	84.86	1	30	30	90	1,018
Fremanezumab PX	65	1.00	0.00	1	1	1	1	1
Galcanezumab	79,029	65.63	79.42	1	28	30	60	1,005
Rimegepant	26,781	26.95	31.22	1	8	24	30	473
Ubrogepant	39,281	26.40	32.77	1	10	20	30	538



Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Eptinezumab	107	44.37	35.32	1	30	30	46	241
Female	84	44.81	35.85	1	30	30	50	241
Male	23	42.78	34.05	1	30	30	34	168
Eptinezumab PX	772	1.00	0.00	1	1	1	1	1
Female	672	1.00	0.00	1	1	1	1	1
Male	100	1.00	0.00	1	1	1	1	1
Erenumab	88,904	67.93	84.82	1	28	30	79	1,114
Female	76,831	67.47	83.63	1	28	30	74	1,114
Male	12,073	70.86	91.98	1	29	30	84	1,053
Fremanezumab	35,545	70.28	84.86	1	30	30	90	1,018
Female	30,847	69.85	83.80	1	30	30	90	991
Male	4,698	73.15	91.47	1	30	30	90	1,018
Fremanezumab PX	65	1.00	0.00	1	1	1	1	1
Female	41	1.00	0.00	1	1	1	1	1
Male	24	1.00	0.00	1	1	1	1	1
Galcanezumab	79,029	65.63	79.42	1	28	30	60	1,005
Female	68,128	65.80	79.59	1	28	30	60	997
Male	10,901	64.62	78.39	1	30	30	60	1,005
Rimegepant	26,781	26.95	31.22	1	8	24	30	473
Female	23,611	27.01	31.67	1	8	24	30	473
Male	3,170	26.51	27.63	1	8	24	30	305
Jbrogepant	39,281	26.40	32.77	1	10	20	30	538
Female	35,080	26.50	32.99	1	10	20	30	538
Male	4,201	25.57	30.79	1	10	19	30	438



Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
ptinezumab	107	44.37	35.32	1	30	30	46	241
00-17	0	-	-	-	-	-	-	-
18-24	18	44.28	24.50	30	30	30	59	90
25-40	11	65.00	46.97	1	23	84	84	168
41-64	75	39.93	34.85	1	30	30	31	241
65+	3	80.33	6.35	73	73	84	84	84
ptinezumab PX	772	1.00	0.00	1	1	1	1	1
00-17	7	1.00	0.00	1	1	1	1	1
18-24	53	1.00	0.00	1	1	1	1	1
25-40	208	1.00	0.00	1	1	1	1	1
41-64	489	1.00	0.00	1	1	1	1	1
65+	15	1.00	0.00	1	1	1	1	1
renumab	88,904	67.93	84.82	1	28	30	79	1,114
00-17	695	65.13	74.99	1	28	30	84	655
18-24	7,035	62.30	67.49	1	28	30	60	770
25-40	24,002	64.15	78.56	1	28	30	60	1,108
41-64	55,438	70.11	89.04	1	28	30	84	1,114
65+	1,734	74.42	93.42	1	30	30	90	819
remanezumab	35,545	70.28	84.86	1	30	30	90	1,018
00-17	219	64.43	92.78	3	30	30	60	854
18-24	2,708	64.51	71.72	1	30	30	84	891
25-40	9,691	65.88	74.16	1	30	30	84	870
41-64	22,408	72.94	90.22	1	30	30	90	1,018
65+	519	70.20	88.36	1	28	30	84	720
remanezumab PX	65	1.00	0.00	1	1	1	1	1
00-17	8	1.00	0.00	1	1	1	1	1
18-24	7	1.00	0.00	1	1	1	1	1
25-40	6	1.00	0.00	1	1	1	1	1
41-64	44	1.00	0.00	1	1	1	1	1
65+	0	-	-	-	-	-	-	_
Galcanezumab	79,029	65.63	79.42	1	28	30	60	1,005
00-17	404	67.17	77.91	1	28	30	84	728
18-24	6,073	60.30	67.67	1	28	30	60	793
25-40	22,665	62.35	73.55	1	28	30	60	1,005
41-64	48,923	67.73	83.08	1	29	30	72	997
65+	964	69.71	87.42	1	30	30	84	732
Rimegepant	26,781	26.95	31.22	1	8	24	30	473
00-17	110	22.47	20.78	2	8	20	30	184

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Table 7c: Descriptive statistics of se	econd and subsequent exposu	re episode duratio	on, in days, by age	group (years)				
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
18-24	1,672	26.63	29.47	1	8	24	30	330
25-40	8,388	26.36	30.58	1	8	23	30	421
41-64	16,341	27.28	31.64	1	8	24	30	473
65+	270	29.06	37.83	1	8	16	30	380
Ubrogepant	39,281	26.40	32.77	1	10	20	30	538
00-17	161	23.99	20.56	3	10	25	30	150
18-24	2,216	27.36	30.41	1	10	25	30	382
25-40	11,142	25.95	32.31	1	10	20	30	510
41-64	25,364	26.56	33.18	1	10	20	30	538
65+	398	24 43	35.46	1	6	15	30	345



Table 8a: Distribution of all episode	durations, by lengt	h categori	es, in days									
	Total Epis	odes	1-30		31-90)	91-36	5	366-73	30	731-	+
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
Eptinezumab	231	100.0	139	60.2	78	33.8	14	6.1	0	0.0	0	0.0
Eptinezumab PX	1,522	100.0	1,522	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Erenumab	122,890	100.0	69,329	56.4	32,411	26.4	18,789	15.3	2,028	1.7	333	0.3
Fremanezumab	52,653	100.0	28,414	54.0	14,905	28.3	8,309	15.8	870	1.7	155	0.3
Fremanezumab PX	139	100.0	139	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Galcanezumab	109,851	100.0	63,920	58.2	28,453	25.9	15,652	14.2	1,645	1.5	181	0.2
Rimegepant	48,240	100.0	41,236	85.5	5,200	10.8	1,738	3.6	66	0.1	0	0.0
Ubrogepant	64,795	100.0	55,902	86.3	6,652	10.3	2,148	3.3	93	0.1	0	0.0



	Total Epis	odes	1-30		31-90)	91-36	5	366-73	30	731	+
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
Eptinezumab	231	100.0	139	100.0	78	100.0	14	100.0	0	0.0	0	0.0
Female	183	79.2	113	81.3	59	75.6	11	78.6	0	0.0	0	0.0
Male	48	20.8	26	18.7	19	24.4	3	21.4	0	0.0	0	0.0
Eptinezumab PX	1,522	100.0	1,522	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Female	1,321	86.8	1,321	86.8	0	0.0	0	0.0	0	0.0	0	0.0
Male	201	13.2	201	13.2	0	0.0	0	0.0	0	0.0	0	0.0
Erenumab	122,890	100.0	69,329	100.0	32,411	100.0	18,789	100.0	2,028	100.0	333	100.0
Female	105,983	86.2	59,750	86.2	28,058	86.6	16,202	86.2	1,689	83.3	284	85.3
Male	16,907	13.8	9,579	13.8	4,353	13.4	2,587	13.8	339	16.7	49	14.7
Fremanezumab	52,653	100.0	28,414	100.0	14,905	100.0	8,309	100.0	870	100.0	155	100.0
Female	45,705	86.8	24,768	87.2	12,870	86.3	7,199	86.6	738	84.8	130	83.9
Male	6,948	13.2	3,646	12.8	2,035	13.7	1,110	13.4	132	15.2	25	16.1
Fremanezumab PX	139	100.0	139	100.0	0	0.0	0	0.0	0	0.0	0	0.0
Female	106	76.3	106	76.3	0	0.0	0	0.0	0	0.0	0	0.0
Male	33	23.7	33	23.7	0	0.0	0	0.0	0	0.0	0	0.0
Galcanezumab	109,851	100.0	63,920	100.0	28,453	100.0	15,652	100.0	1,645	100.0	181	100.0
Female	94,344	85.9	54,745	85.6	24,514	86.2	13,506	86.3	1,414	86.0	165	91.2
Male	15,507	14.1	9,175	14.4	3,939	13.8	2,146	13.7	231	14.0	16	8.8
Rimegepant	48,240	100.0	41,236	100.0	5,200	100.0	1,738	100.0	66	100.0	0	0.0
Female	42,166	87.4	36,028	87.4	4,558	87.7	1,520	87.5	60	90.9	0	0.0
Male	6,074	12.6	5,208	12.6	642	12.3	218	12.5	6	9.1	0	0.0
Ubrogepant	64,795	100.0	55,902	100.0	6,652	100.0	2,148	100.0	93	100.0	0	0.0
Female	57,369	88.5	49,482	88.5	5,893	88.6	1,913	89.1	81	87.1	0	0.0
Male	7,426	11.5	6,420	11.5	759	11.4	235	10.9	12	12.9	0	0.0



	Total Epis	odes	1-30		31-90)	91-36	5	366-7	30	731·	+
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
Eptinezumab	231	100.0	139	100.0	78	100.0	14	100.0	0	0.0	0	0.0
00-17	3	1.3	2	1.4	1	1.3	0	0.0	0	0.0	0	0.0
18-24	33	14.3	23	16.5	10	12.8	0	0.0	0	0.0	0	0.0
25-40	38	16.5	20	14.4	15	19.2	3	21.4	0	0.0	0	0.0
41-64	143	61.9	92	66.2	41	52.6	10	71.4	0	0.0	0	0.0
65+	14	6.1	2	1.4	11	14.1	1	7.1	0	0.0	0	0.0
Eptinezumab PX	1,522	100.0	1,522	100.0	0	0.0	0	0.0	0	0.0	0	0.0
00-17	11	0.7	11	0.7	0	0.0	0	0.0	0	0.0	0	0.0
18-24	104	6.8	104	6.8	0	0.0	0	0.0	0	0.0	0	0.0
25-40	416	27.3	416	27.3	0	0.0	0	0.0	0	0.0	0	0.0
41-64	956	62.8	956	62.8	0	0.0	0	0.0	0	0.0	0	0.0
65+	35	2.3	35	2.3	0	0.0	0	0.0	0	0.0	0	0.0
Erenumab	122,890	100.0	69,329	100.0	32,411	100.0	18,789	100.0	2,028	100.0	333	100.
00-17	983	0.8	540	8.0	276	0.9	146	0.8	20	1.0	1	0.3
18-24	9,796	8.0	5,581	8.1	2,639	8.1	1,481	7.9	88	4.3	7	2.1
25-40	33,767	27.5	19,434	28.0	8,923	27.5	4,874	25.9	466	23.0	70	21.
41-64	75,701	61.6	42,373	61.1	19,837	61.2	11,852	63.1	1,394	68.7	245	73.0
65+	2,643	2.2	1,401	2.0	736	2.3	436	2.3	60	3.0	10	3.0
Fremanezumab	52,653	100.0	28,414	100.0	14,905	100.0	8,309	100.0	870	100.0	155	100.
00-17	338	0.6	191	0.7	103	0.7	38	0.5	5	0.6	1	0.6
18-24	4,092	7.8	2,277	8.0	1,152	7.7	604	7.3	52	6.0	7	4.5
25-40	14,536	27.6	7,975	28.1	4,175	28.0	2,178	26.2	177	20.3	31	20.
41-64	32,826	62.3	17,512	61.6	9,215	61.8	5,364	64.6	621	71.4	114	73.
65+	861	1.6	459	1.6	260	1.7	125	1.5	15	1.7	2	1.3
Fremanezumab PX	139	100.0	139	100.0	0	0.0	0	0.0	0	0.0	0	0.0
00-17	11	7.9	11	7.9	0	0.0	0	0.0	0	0.0	0	0.0
18-24	14	10.1	14	10.1	0	0.0	0	0.0	0	0.0	0	0.0
25-40	30	21.6	30	21.6	0	0.0	0	0.0	0	0.0	0	0.0
41-64	83	59.7	83	59.7	0	0.0	0	0.0	0	0.0	0	0.0
65+	1	0.7	1	0.7	0	0.0	0	0.0	0	0.0	0	0.0
Galcanezumab	109,851	100.0	63,920	100.0	28,453	100.0	15,652	100.0	1,645	100.0	181	100.
00-17	604	0.5	347	0.5	151	0.5	94	0.6	12	0.7	0	0.0
18-24	8,530	7.8	5,136	8.0	2,231	7.8	1,071	6.8	89	5.4	3	1.7
25-40	31,938	29.1	18,911	29.6	8,261	29.0	4,329	27.7	399	24.3	38	21.
41-64	67,227	61.2	38,646	60.5	17,416	61.2	9,910	63.3	1,118	68.0	137	75.
65+	1,552	1.4	880	1.4	394	1.4	248	1.6	27	1.6	3	1.7
Rimegepant	48,240	100.0	41,236	100.0	5,200	100.0	1,738	100.0	66	100.0	0	0.0

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	Total Epis	odes	1-30		31-90)	91-36	5	366-7	30	731-	+
Exposures	N	%	N	%	N	%	N	%	N	%	N	%
00-17	240	0.5	222	0.5	16	0.3	2	0.1	0	0.0	0	0.0
18-24	3,358	7.0	2,934	7.1	325	6.3	98	5.6	1	1.5	0	0.0
25-40	15,061	31.2	12,949	31.4	1,552	29.8	541	31.1	19	28.8	0	0.0
41-64	28,912	59.9	24,569	59.6	3,225	62.0	1,074	61.8	44	66.7	0	0.0
65+	669	1.4	562	1.4	82	1.6	23	1.3	2	3.0	0	0.0
brogepant	64,795	100.0	55,902	100.0	6,652	100.0	2,148	100.0	93	100.0	0	0.0
00-17	297	0.5	266	0.5	25	0.4	6	0.3	0	0.0	0	0.0
18-24	4,065	6.3	3,551	6.4	401	6.0	108	5.0	5	5.4	0	0.0
25-40	18,828	29.1	16,276	29.1	1,922	28.9	608	28.3	22	23.7	0	0.0
41-64	40,717	62.8	35,011	62.6	4,230	63.6	1,411	65.7	65	69.9	0	0.
65+	888	1.4	798	1.4	74	1.1	15	0.7	1	1.1	0	0.



Table 9a: Descriptive statistics of all	exposure episode durations, in d	lays						
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Eptinezumab	231	48.53	39.15	1	30	30	84	270
Eptinezumab PX	1,522	1.00	0.00	1	1	1	1	1
Erenumab	122,890	71.09	92.10	1	30	30	84	1,192
Fremanezumab	52,653	74.56	93.77	1	30	30	90	1,067
Fremanezumab PX	139	1.00	0.00	1	1	1	1	1
Galcanezumab	109,851	67.35	84.96	1	30	30	63	1,017
Rimegepant	48,240	29.21	35.48	1	8	29	30	497
Ubrogepant	64,795	28.31	36.61	1	10	23	30	556



Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Eptinezumab	231	48.53	39.15	1	30	30	84	270
Female	183	48.55	38.84	1	30	30	84	270
Male	48	48.44	40.73	1	30	30	78	204
Eptinezumab PX	1,522	1.00	0.00	1	1	1	1	1
Female	1,321	1.00	0.00	1	1	1	1	1
Male	201	1.00	0.00	1	1	1	1	1
Erenumab	122,890	71.09	92.10	1	30	30	84	1,192
Female	105,983	70.80	91.45	1	30	30	84	1,192
Male	16,907	72.88	96.06	1	30	30	84	1,099
Fremanezumab	52,653	74.56	93.77	1	30	30	90	1,067
Female	45,705	74.21	93.08	1	30	30	90	1,067
Male	6,948	76.85	98.17	1	30	30	90	1,018
Fremanezumab PX	139	1.00	0.00	1	1	1	1	1
Female	106	1.00	0.00	1	1	1	1	1
Male	33	1.00	0.00	1	1	1	1	1
Galcanezumab	109,851	67.35	84.96	1	30	30	63	1,017
Female	94,344	67.58	85.28	1	30	30	66	1,017
Male	15,507	65.89	82.99	1	30	30	60	1,005
Rimegepant	48,240	29.21	35.48	1	8	29	30	497
Female	42,166	29.29	35.77	1	8	29	30	486
Male	6,074	28.71	33.41	1	8	28	30	497
Jbrogepant	64,795	28.31	36.61	1	10	23	30	556
Female	57,369	28.36	36.68	1	10	24	30	556
Male	7,426	27.90	36.07	1	10	21	30	540



Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
Eptinezumab	231	48.53	39.15	1	30	30	84	270
00-17	3	40.00	17.32	30	30	30	60	60
18-24	33	45.76	26.16	14	30	30	84	90
25-40	38	58.05	49.88	1	30	30	84	270
41-64	143	44.27	38.58	1	30	30	34	241
65+	14	74.57	28.58	17	71	84	90	123
Eptinezumab PX	1,522	1.00	0.00	1	1	1	1	1
00-17	11	1.00	0.00	1	1	1	1	1
18-24	104	1.00	0.00	1	1	1	1	1
25-40	416	1.00	0.00	1	1	1	1	1
41-64	956	1.00	0.00	1	1	1	1	1
65+	35	1.00	0.00	1	1	1	1	1
Erenumab	122,890	71.09	92.10	1	30	30	84	1,192
00-17	983	68.66	82.28	1	28	30	84	804
18-24	9,796	65.05	73.24	1	30	30	83	930
25-40	33,767	67.79	85.79	1	30	30	72	1,164
41-64	75,701	73.11	96.41	1	30	30	84	1,192
65+	2,643	78.52	106.11	1	30	30	90	1,142
remanezumab	52,653	74.56	93.77	1	30	30	90	1,067
00-17	338	66.25	87.14	2	30	30	73	854
18-24	4,092	68.44	80.01	1	30	30	90	974
25-40	14,536	70.79	86.62	1	30	30	90	1,067
41-64	32,826	77.11	98.25	1	30	30	90	1,047
65+	861	73.42	94.67	1	30	30	90	840
remanezumab PX	139	1.00	0.00	1	1	1	1	1
00-17	11	1.00	0.00	1	1	1	1	1
18-24	14	1.00	0.00	1	1	1	1	1
25-40	30	1.00	0.00	1	1	1	1	1
41-64	83	1.00	0.00	1	1	1	1	1
65+	1	1.00	-	1	1	1	1	1
Galcanezumab	109,851	67.35	84.96	1	30	30	63	1,017
00-17	604	69.64	83.31	1	28	30	84	728
18-24	8,530	60.93	71.23	1	30	30	60	793
25-40	31,938	64.29	78.79	1	30	30	60	1,017
41-64	67,227	69.51	89.10	1	30	30	78	1,016
65+	1,552	70.90	90.03	1	30	30	84	788
Rimegepant	48,240	29.21	35.48	1	8	29	30	497
00-17	240	23.63	22.37	2	8	23	30	240

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Table 9c: Descriptive statistics of a	Il exposure episode durations,	in days, by age gr	oup (years)					
Exposures	Total Episodes	Mean	STD	Min	Q1	Median	Q3	Max
18-24	3,358	27.42	30.56	1	8	28	30	403
25-40	15,061	28.90	34.57	1	8	28	30	473
41-64	28,912	29.64	36.55	1	8	30	30	497
65+	669	28.98	35.38	1	8	25	30	421
Ubrogepant	64,795	28.31	36.61	1	10	23	30	556
00-17	297	24.69	21.83	2	10	28	30	150
18-24	4,065	27.84	32.05	1	10	30	30	438
25-40	18,828	27.87	35.11	1	10	23	30	556
41-64	40,717	28.67	37.89	1	10	23	30	546
65±	888	24 29	30.51	1	10	20	30	366



Table 10a: Distribution of days sup	oplied per dispensing	g, by lengt	h categories							
	Total Dispe	nsings	1-30		31-60)	61-90)	91+	
Exposures	N	%	N	%	N	%	N	%	N	%
Eptinezumab	248	100.0	143	57.7	32	12.9	73	29.4	0	0.0
Eptinezumab PX	1,522	100.0	1,522	100.0	0	0.0	0	0.0	0	0.0
Erenumab	282,409	100.0	269,561	95.5	2,335	0.8	10,157	3.6	356	0.1
Fremanezumab	117,166	100.0	107,203	91.5	1,202	1.0	8,605	7.3	156	0.1
Fremanezumab PX	139	100.0	139	100.0	0	0.0	0	0.0	0	0.0
Galcanezumab	241,792	100.0	231,554	95.8	2,343	1.0	7,629	3.2	266	0.1
Rimegepant	63,730	100.0	62,920	98.7	523	0.8	250	0.4	37	0.1
Ubrogepant	84,016	100.0	82,290	97.9	758	0.9	915	1.1	53	0.1



	Total Dispe	nsings	1-30		31-60	0	61-90		91+	
Exposures	N	%	N	%	N	%	N	%	N	%
Eptinezumab	248	100.0	143	100.0	32	100.0	73	100.0	0	0.0
Female	196	79.0	117	81.8	21	65.6	58	79.5	0	0.0
Male	52	21.0	26	18.2	11	34.4	15	20.5	0	0.0
Eptinezumab PX	1,522	100.0	1,522	100.0	0	0.0	0	0.0	0	0.0
Female	1,321	86.8	1,321	86.8	0	0.0	0	0.0	0	0.0
Male	201	13.2	201	13.2	0	0.0	0	0.0	0	0.0
Erenumab	282,409	100.0	269,561	100.0	2,335	100.0	10,157	100.0	356	100
Female	242,806	86.0	231,877	86.0	2,016	86.3	8,605	84.7	308	86.
Male	39,603	14.0	37,684	14.0	319	13.7	1,552	15.3	48	13.
Fremanezumab	117,166	100.0	107,203	100.0	1,202	100.0	8,605	100.0	156	100
Female	101,467	86.6	92,973	86.7	1,035	86.1	7,320	85.1	139	89.
Male	15,699	13.4	14,230	13.3	167	13.9	1,285	14.9	17	10.
Fremanezumab PX	139	100.0	139	100.0	0	0.0	0	0.0	0	0.0
Female	106	76.3	106	76.3	0	0.0	0	0.0	0	0.0
Male	33	23.7	33	23.7	0	0.0	0	0.0	0	0.0
Galcanezumab	241,792	100.0	231,554	100.0	2,343	100.0	7,629	100.0	266	100.
Female	208,471	86.2	199,662	86.2	2,007	85.7	6,593	86.4	209	78.0
Male	33,321	13.8	31,892	13.8	336	14.3	1,036	13.6	57	21.
Rimegepant	63,730	100.0	62,920	100.0	523	100.0	250	100.0	37	100
Female	55,799	87.6	55,080	87.5	463	88.5	220	88.0	36	97.
Male	7,931	12.4	7,840	12.5	60	11.5	30	12.0	1	2.7
Ubrogepant	84,016	100.0	82,290	100.0	758	100.0	915	100.0	53	100
Female	74,502	88.7	72,979	88.7	668	88.1	814	89.0	41	77.
Male	9,514	11.3	9,311	11.3	90	11.9	101	11.0	12	22.

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	Total Dispe	ensings	1-30		31-6	0	61-90)	91+	-
Exposures	N	%	N	%	N	%	N	%	N	%
Eptinezumab	248	100.0	143	100.0	32	100.0	73	100.0	0	0.0
00-17	3	1.2	2	1.4	1	3.1	0	0.0	0	0.0
18-24	33	13.3	23	16.1	1	3.1	9	12.3	0	0.0
25-40	42	16.9	21	14.7	3	9.4	18	24.7	0	0.0
41-64	155	62.5	95	66.4	25	78.1	35	47.9	0	0.0
65+	15	6.0	2	1.4	2	6.3	11	15.1	0	0.0
Eptinezumab PX	1,522	100.0	1,522	100.0	0	0.0	0	0.0	0	0.
00-17	11	0.7	11	0.7	0	0.0	0	0.0	0	0.0
18-24	104	6.8	104	6.8	0	0.0	0	0.0	0	0.0
25-40	416	27.3	416	27.3	0	0.0	0	0.0	0	0.0
41-64	956	62.8	956	62.8	0	0.0	0	0.0	0	0.0
65+	35	2.3	35	2.3	0	0.0	0	0.0	0	0.0
Erenumab	282,409	100.0	269,561	100.0	2,335	100.0	10,157	100.0	356	100
00-17	2,174	0.8	2,053	8.0	24	1.0	96	0.9	1	0.3
18-24	20,907	7.4	20,127	7.5	144	6.2	592	5.8	44	12
25-40	75,456	26.7	72,768	27.0	621	26.6	1,980	19.5	87	24
41-64	177,693	62.9	169,074	62.7	1,431	61.3	6,965	68.6	223	62.
65+	6,179	2.2	5,539	2.1	115	4.9	524	5.2	1	0.3
Fremanezumab	117,166	100.0	107,203	100.0	1,202	100.0	8,605	100.0	156	100
00-17	689	0.6	642	0.6	5	0.4	42	0.5	0	0.0
18-24	8,382	7.2	7,652	7.1	102	8.5	616	7.2	12	7.
25-40	30,972	26.4	28,449	26.5	325	27.0	2,161	25.1	37	23.
41-64	75,395	64.3	69,009	64.4	728	60.6	5,552	64.5	106	67.
65+	1,728	1.5	1,451	1.4	42	3.5	234	2.7	1	0.0
Fremanezumab PX	139	100.0	139	100.0	0	0.0	0	0.0	0	0.
00-17	11	7.9	11	7.9	0	0.0	0	0.0	0	0.0
18-24	14	10.1	14	10.1	0	0.0	0	0.0	0	0.0
25-40	30	21.6	30	21.6	0	0.0	0	0.0	0	0.0
41-64	83	59.7	83	59.7	0	0.0	0	0.0	0	0.0
65+	1	0.7	1	0.7	0	0.0	0	0.0	0	0.0
Galcanezumab	241,792	100.0	231,554	100.0	2,343	100.0	7,629	100.0	266	100
00-17	1,363	0.6	1,296	0.6	10	0.4	56	0.7	1	0.4
18-24	17,193	7.1	16,581	7.2	162	6.9	428	5.6	22	8.3
25-40	67,367	27.9	64,594	27.9	655	28.0	2,042	26.8	76	28
41-64	152,371	63.0	145,819	63.0	1,463	62.4	4,929	64.6	160	60
65+	3,498	1.4	3,264	1.4	53	2.3	174	2.3	7	2.
Rimegepant	63,730	100.0	62,920	100.0	523	100.0	250	100.0	37	100

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	Total Dispe	ensings	1-30		31-6	0	61-9	0	91-	e e
Exposures	N	%	N	%	N	%	N	%	N	%
00-17	275	0.4	272	0.4	0	0.0	3	1.2	0	0.0
18-24	4,216	6.6	4,176	6.6	32	6.1	7	2.8	1	2.7
25-40	19,720	30.9	19,495	31.0	148	28.3	66	26.4	11	29.7
41-64	38,638	60.6	38,124	60.6	331	63.3	159	63.6	24	64.9
65+	881	1.4	853	1.4	12	2.3	15	6.0	1	2.7
Jbrogepant	84,016	100.0	82,290	100.0	758	100.0	915	100.0	53	100.0
00-17	346	0.4	343	0.4	2	0.3	1	0.1	0	0.0
18-24	5,073	6.0	4,998	6.1	37	4.9	36	3.9	2	3.8
25-40	24,226	28.8	23,742	28.9	233	30.7	242	26.4	9	17.0
41-64	53,277	63.4	52,141	63.4	472	62.3	622	68.0	42	79.2
65+	1,094	1.3	1,066	1.3	14	1.8	14	1.5	0	0.0



Table 11a: Descriptive statistics of days supplied per dispensing												
Exposures	Total Dispensings	Mean	STD	Min	Q1	Median	Q3	Max				
Eptinezumab	248	45.20	27.25	1	30	30	84	90				
Eptinezumab PX	1,522	1.00	0.00	1	1	1	1	1				
Erenumab	282,409	30.93	13.05	1	28	30	30	336				
- remanezumab	117,166	33.51	17.16	1	30	30	30	360				
Fremanezumab PX	139	1.00	0.00	1	1	1	1	1				
Galcanezumab	241,792	30.60	12.77	1	28	30	30	420				
Rimegepant	63,730	22.11	11.53	1	8	30	30	421				
Ubrogepant	84,016	21.83	13.06	1	10	30	30	252				



Exposures	Total Dispensings	Mean	STD	Min	Q1	Median	Q3	Max
Eptinezumab	248	45.20	27.25	1	30	30	84	90
Female	196	45.33	27.44	1	30	30	84	90
Male	52	44.71	26.77	1	30	31	84	90
Eptinezumab PX	1,522	1.00	0.00	1	1	1	1	1
Female	1,321	1.00	0.00	1	1	1	1	1
Male	201	1.00	0.00	1	1	1	1	1
Erenumab	282,409	30.93	13.05	1	28	30	30	336
Female	242,806	30.90	13.00	1	28	30	30	336
Male	39,603	31.12	13.38	1	28	30	30	300
Fremanezumab	117,166	33.51	17.16	1	30	30	30	360
Female	101,467	33.43	17.06	1	30	30	30	350
Male	15,699	34.01	17.78	1	30	30	30	360
Fremanezumab PX	139	1.00	0.00	1	1	1	1	1
Female	106	1.00	0.00	1	1	1	1	1
Male	33	1.00	0.00	1	1	1	1	1
Galcanezumab	241,792	30.60	12.77	1	28	30	30	420
Female	208,471	30.59	12.61	1	28	30	30	420
Male	33,321	30.66	13.71	1	28	30	30	360
Rimegepant	63,730	22.11	11.53	1	8	30	30	421
Female	55,799	22.13	11.61	1	8	30	30	421
Male	7,931	21.99	10.93	1	8	30	30	94
Jbrogepant	84,016	21.83	13.06	1	10	30	30	252
Female	74,502	21.84	12.98	1	10	30	30	235
Male	9,514	21.77	13.68	1	10	29	30	252



Exposures	Total Dispensings	Mean	STD	Min	Q1	Median	Q3	Max
ptinezumab	248	45.20	27.25	1	30	30	84	90
00-17	3	40.00	17.32	30	30	30	60	60
18-24	33	45.76	26.16	14	30	30	84	90
25-40	42	52.52	29.76	1	30	31	84	90
41-64	155	40.84	25.55	1	30	30	41	90
65+	15	69.60	26.55	17	34	84	90	90
ptinezumab PX	1,522	1.00	0.00	1	1	1	1	1
00-17	11	1.00	0.00	1	1	1	1	1
18-24	104	1.00	0.00	1	1	1	1	1
25-40	416	1.00	0.00	1	1	1	1	1
41-64	956	1.00	0.00	1	1	1	1	1
65+	35	1.00	0.00	1	1	1	1	1
renumab	282,409	30.93	13.05	1	28	30	30	336
00-17	2,174	31.04	13.39	1	28	30	30	120
18-24	20,907	30.48	12.43	1	28	30	30	270
25-40	75,456	30.34	11.82	1	28	30	30	330
41-64	177,693	31.15	13.40	1	28	30	30	336
65+	6,179	33.59	17.84	1	28	30	30	118
remanezumab	117,166	33.51	17.16	1	30	30	30	360
00-17	689	32.50	15.13	2	30	30	30	90
18-24	8,382	33.41	17.42	1	30	30	30	350
25-40	30,972	33.22	16.96	1	30	30	30	331
41-64	75,395	33.57	17.10	1	30	30	30	360
65+	1,728	36.58	21.72	1	28	30	30	180
remanezumab PX	139	1.00	0.00	1	1	1	1	1
00-17	11	1.00	0.00	1	1	1	1	1
18-24	14	1.00	0.00	1	1	1	1	1
25-40	30	1.00	0.00	1	1	1	1	1
41-64	83	1.00	0.00	1	1	1	1	1
65+	1	1.00	-	1	1	1	1	1
ialcanezumab	241,792	30.60	12.77	1	28	30	30	420
00-17	1,363	30.86	13.69	1	28	30	30	210
18-24	17,193	30.23	12.25	1	28	30	30	300
25-40	67,367	30.48	12.53	1	28	30	30	336
41-64	152,371	30.67	12.85	1	28	30	30	420
65+	3,498	31.46	15.51	1	28	30	30	210
Rimegepant	63,730	22.11	11.53	1	8	30	30	421
00-17	275	20.62	11.95	2	8	23	30	80

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Table 11c: Descriptive statistics of	days supplied per dispensing, b	y age group (yea	irs)					
Exposures	Total Dispensings	Mean	STD	Min	Q1	Median	Q3	Max
18-24	4,216	21.84	10.79	1	8	30	30	180
25-40	19,720	22.07	11.29	1	8	30	30	180
41-64	38,638	22.18	11.50	1	8	30	30	270
65+	881	22.01	19.01	1	8	28	30	421
Ubrogepant	84,016	21.83	13.06	1	10	30	30	252
00-17	346	21.19	11.31	2	10	28	30	90
18-24	5,073	22.31	12.00	1	10	30	30	120
25-40	24,226	21.66	12.85	1	10	30	30	210
41-64	53,277	21.91	13.25	1	10	30	30	252
65+	1 094	19 71	13.37	1	10	20	30	90



Table 12a: Descriptive statistics of the	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					
Eptinezumab	61	48.52	28.93	2	21	54	64	114					
Eptinezumab PX	423	93.34	29.75	1	83	90	93	300					
Erenumab	23,368	27.83	67.25	1	3	8	24	1,005					
Fremanezumab	10,878	27.01	63.78	1	3	8	24	930					
Fremanezumab PX	23	54.43	52.99	21	27	28	58	224					
Galcanezumab	21,283	23.59	51.16	1	3	9	25	846					
Rimegepant	10,586	48.70	60.95	1	10	27	62	518					
Ubrogepant	13,912	53.19	63.18	1	13	31	69	545					



Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Eptinezumab	61	48.52	28.93	2	21	54	64	114
Female	48	48.83	30.92	2	15	55	68	114
Male	13	47.38	20.97	5	45	51	56	89
Eptinezumab PX	423	93.34	29.75	1	83	90	93	300
Female	369	93.66	30.31	1	83	90	94	300
Male	54	91.11	25.77	7	86	90	92	186
Erenumab	23,368	27.83	67.25	1	3	8	24	1,005
Female	20,105	27.81	67.38	1	3	8	24	1,005
Male	3,263	27.95	66.42	1	3	8	24	851
Fremanezumab	10,878	27.01	63.78	1	3	8	24	930
Female	9,455	26.93	63.99	1	3	8	24	930
Male	1,423	27.52	62.40	1	3	8	24	719
Fremanezumab PX	23	54.43	52.99	21	27	28	58	224
Female	18	49.00	42.40	21	27	28	58	181
Male	5	74.00	84.80	27	28	33	58	224
Galcanezumab	21,283	23.59	51.16	1	3	9	25	846
Female	18,233	22.92	48.98	1	3	9	25	846
Male	3,050	27.62	62.49	1	4	9	26	747
Rimegepant	10,586	48.70	60.95	1	10	27	62	518
Female	9,281	48.62	60.41	1	11	27	62	518
Male	1,305	49.31	64.70	1	9	25	62	428
Jbrogepant	13,912	53.19	63.18	1	13	31	69	545
Female	12,353	53.22	63.11	1	13	31	69	545
Male	1,559	52.96	63.77	1	12	31	67	430



Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Eptinezumab	61	48.52	28.93	2	21	54	64	114
00-17	0	-	-	-	-	-	-	-
18-24	10	45.30	27.28	2	25	51	68	78
25-40	9	46.11	32.55	2	21	49	56	114
41-64	40	50.05	29.03	4	28	55	65	109
65+	2	45.00	43.84	14	14	45	76	76
ptinezumab PX	423	93.34	29.75	1	83	90	93	300
00-17	2	79.50	4.95	76	76	80	83	83
18-24	31	97.61	22.05	83	88	90	97	199
25-40	112	91.90	28.67	1	88	90	92	271
41-64	269	93.69	31.52	4	83	90	93	300
65+	9	88.89	3.48	83	90	90	90	93
renumab	23,368	27.83	67.25	1	3	8	24	1,005
00-17	204	21.82	46.71	1	3	8	21	406
18-24	1,881	23.43	52.35	1	3	7	21	526
25-40	6,658	27.21	69.34	1	3	7	22	971
41-64	14,107	28.56	68.03	1	3	8	24	1,005
65+	518	34.39	72.28	1	4	11	31	619
remanezumab	10,878	27.01	63.78	1	3	8	24	930
00-17	71	32.94	80.96	1	4	8	23	442
18-24	860	24.56	54.40	1	3	8	23	739
25-40	3,022	25.38	57.19	1	3	8	24	719
41-64	6,728	28.15	67.88	1	3	8	24	930
65+	197	21.50	41.51	1	3	8	21	363
remanezumab PX	23	54.43	52.99	21	27	28	58	224
00-17	1	27.00	-	27	27	27	27	27
18-24	3	26.33	6.11	21	21	25	33	33
25-40	4	43.50	31.03	27	27	29	60	90
41-64	15	64.80	61.87	25	27	30	90	224
65+	0	-	-	-	-	-	-	-
alcanezumab	21,283	23.59	51.16	1	3	9	25	846
00-17	124	24.94	65.85	1	3	7	23	488
18-24	1,691	21.30	44.13	1	3	9	24	831
25-40	6,351	23.55	51.14	1	3	9	25	729
41-64	12,776	23.81	51.81	1	3	9	25	846
65+	341	26.96	53.60	1	3	9	25	479
limegepant	10,586	48.70	60.95	1	10	27	62	518
00-17	57	62.98	81.79	1	13	30	69	370

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Table 12c: Descriptive statistics of the	he length of the first gap betv	veen treatment epis	sodes, in days, by	age group (years)			
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
18-24	760	52.75	60.20	1	12	30	70	423
25-40	3,344	47.61	58.27	1	11	28	61	474
41-64	6,274	48.72	62.28	1	10	27	61	518
65+	151	46.77	57.02	1	11	24	68	327
Ubrogepant	13,912	53.19	63.18	1	13	31	69	545
00-17	69	63.88	68.02	1	15	38	85	307
18-24	926	57.54	68.08	1	14	32	74	492
25-40	4,080	52.50	63.40	1	12	31	67	460
41-64	8,646	52.97	62.57	1	13	31	69	545
65±	191	52 85	58 82	1	14	28	68	300



Table 13a: Descriptive statistics of the length of second and subequent gaps between treatment episodes, in days											
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max			
Eptinezumab	46	56.26	48.92	1	46	56	66	347			
Eptinezumab PX	349	88.17	20.89	1	83	90	94	188			
Erenumab	65,536	19.04	46.76	1	3	6	17	979			
Fremanezumab	24,667	18.98	42.55	1	3	6	18	827			
Fremanezumab PX	42	50.50	52.89	22	27	29	51	316			
Galcanezumab	57,746	16.85	38.20	1	2	6	16	729			
Rimegepant	16,195	33.24	38.49	1	9	22	42	419			
Ubrogepant	25,369	35.10	40.83	1	10	22	44	476			



Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Eptinezumab	46	56.26	48.92	1	46	56	66	347
Female	36	56.92	54.42	1	46	54	65	347
Male	10	53.90	21.02	7	57	61	67	73
Eptinezumab PX	349	88.17	20.89	1	83	90	94	188
Female	303	87.84	21.01	1	83	90	94	188
Male	46	90.37	20.19	8	83	90	91	181
Erenumab	65,536	19.04	46.76	1	3	6	17	979
Female	56,726	19.08	47.39	1	3	6	17	979
Male	8,810	18.78	42.50	1	3	6	17	741
Fremanezumab	24,667	18.98	42.55	1	3	6	18	827
Female	21,392	19.10	42.87	1	3	6	18	827
Male	3,275	18.18	40.41	1	2	6	17	550
Fremanezumab PX	42	50.50	52.89	22	27	29	51	316
Female	23	51.52	61.96	22	27	30	44	316
Male	19	49.26	40.96	27	27	28	51	177
Galcanezumab	57,746	16.85	38.20	1	2	6	16	729
Female	49,895	16.72	37.87	1	2	6	16	729
Male	7,851	17.63	40.26	1	3	6	17	582
Rimegepant	16,195	33.24	38.49	1	9	22	42	419
Female	14,330	33.41	38.72	1	9	22	42	419
Male	1,865	31.97	36.64	1	8	21	41	397
Ubrogepant	25,369	35.10	40.83	1	10	22	44	476
Female	22,727	35.15	40.60	1	10	23	45	476
Male	2,642	34.66	42.76	1	9	22	42	414

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Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Eptinezumab	46	56.26	48.92	1	46	56	66	347
00-17	0	-	-	-	-	-	-	-
18-24	8	54.13	22.83	2	53	56	70	74
25-40	2	14.00	9.90	7	7	14	21	21
41-64	35	60.31	53.72	1	46	57	66	347
65+	1	16.00	-	16	16	16	16	16
Eptinezumab PX	349	88.17	20.89	1	83	90	94	188
00-17	5	67.80	35.08	8	67	79	92	93
18-24	22	77.86	30.83	1	79	90	92	111
25-40	96	88.93	17.50	6	86	90	97	136
41-64	220	88.85	19.65	2	83	90	93	188
65+	6	106.17	36.78	89	90	90	97	181
Erenumab	65,536	19.04	46.76	1	3	6	17	979
00-17	491	16.17	36.02	1	2	6	17	471
18-24	5,154	18.10	42.90	1	3	6	16	734
25-40	17,344	19.09	46.74	1	3	6	17	872
41-64	41,331	19.15	47.39	1	3	6	17	979
65+	1,216	19.63	44.74	1	2	5	16	769
Fremanezumab	24,667	18.98	42.55	1	3	6	18	827
00-17	148	12.88	19.95	1	3	5	14	130
18-24	1,848	18.40	40.94	1	3	6	18	616
25-40	6,669	18.88	41.19	1	3	6	18	702
41-64	15,680	19.14	43.26	1	2	6	17	827
65+	322	19.24	51.33	1	2	6	17	517
Fremanezumab PX	42	50.50	52.89	22	27	29	51	316
00-17	7	34.00	14.73	27	27	27	33	67
18-24	4	25.75	2.63	22	24	27	28	28
25-40	2	85.50	48.79	51	51	86	120	120
41-64	29	55.48	60.79	24	27	31	51	316
65+	0	-	-	-	-	-	-	-
Galcanezumab	57,746	16.85	38.20	1	2	6	16	729
00-17	280	15.26	32.30	1	3	6	17	446
18-24	4,382	16.35	37.14	1	3	6	15	626
25-40	16,314	16.88	37.89	1	3	6	16	655
41-64	36,147	16.94	38.58	1	2	6	16	729
65+	623	14.76	34.35	1	2	4	12	461
Rimegepant	16,195	33.24	38.49	1	9	22	42	419
00-17	53	44.79	50.08	2	13	27	53	219

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Table 13c: Descriptive statistics of	the length of second and	subequent ga	ps between t	reatment epi	sodes, in da	ays, by age gro	up (years)	
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
18-24	912	38.91	42.66	1	10	25	51	324
25-40	5,044	33.46	37.73	1	9	22	43	419
41-64	10,067	32.62	38.40	1	9	21	41	397
65+	119	28.14	33.55	1	9	19	35	208
Ubrogepant	25,369	35.10	40.83	1	10	22	44	476
00-17	92	36.71	43.67	1	10	24	44	236
18-24	1,290	39.18	43.82	1	11	25	50	323
25-40	7,062	35.38	41.05	1	10	23	45	476
41-64	16,718	34.66	40.52	1	9	22	44	453
65+	207	34.49	35.59	1	12	25	46	231

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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		
Eptinezumab	107	51.85	38.79	1	37	55	65	347		
Eptinezumab PX	772	91.00	26.23	1	83	90	93	300		
Erenumab	88,904	21.35	53.06	1	3	6	19	1,005		
Fremanezumab	35,545	21.44	50.15	1	3	6	20	930		
Fremanezumab PX	65	51.89	52.55	21	27	28	51	316		
Galcanezumab	79,029	18.66	42.19	1	3	6	18	846		
Rimegepant	26,781	39.35	49.21	1	10	23	49	518		
Ubrogepant	39,281	41.50	50.65	1	10	25	52	545		



Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
Eptinezumab	107	51.85	38.79	1	37	55	65	347
Female	84	52.30	42.50	1	29	55	67	347
Male	23	50.22	20.77	5	45	56	63	89
Eptinezumab PX	772	91.00	26.23	1	83	90	93	300
Female	672	91.04	26.66	1	83	90	94	300
Male	100	90.77	23.26	7	84	90	92	186
Erenumab	88,904	21.35	53.06	1	3	6	19	1,005
Female	76,831	21.37	53.49	1	3	6	18	1,005
Male	12,073	21.26	50.26	1	3	6	19	851
Fremanezumab	35,545	21.44	50.15	1	3	6	20	930
Female	30,847	21.50	50.42	1	3	6	20	930
Male	4,698	21.01	48.33	1	3	6	19	719
Fremanezumab PX	65	51.89	52.55	21	27	28	51	316
Female	41	50.41	53.64	21	27	28	44	316
Male	24	54.42	51.66	27	27	30	55	224
Galcanezumab	79,029	18.66	42.19	1	3	6	18	846
Female	68,128	18.38	41.23	1	3	6	18	846
Male	10,901	20.43	47.75	1	3	7	19	747
Rimegepant	26,781	39.35	49.21	1	10	23	49	518
Female	23,611	39.39	48.99	1	10	24	49	518
Male	3,170	39.11	50.84	1	9	22	49	428
Jbrogepant	39,281	41.50	50.65	1	10	25	52	545
Female	35,080	41.51	50.44	1	11	25	52	545
Male	4,201	41.45	52.31	1	10	24	50	430



Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
ptinezumab	107	51.85	38.79	1	37	55	65	347
00-17	0	-	-	-	-	-	-	-
18-24	18	49.22	25.08	2	38	54	68	78
25-40	11	40.27	32.03	2	15	45	56	114
41-64	75	54.84	42.39	1	46	56	65	347
65+	3	35.33	35.23	14	14	16	76	76
ptinezumab PX	772	91.00	26.23	1	83	90	93	300
00-17	7	71.14	29.28	8	67	79	92	93
18-24	53	89.42	27.59	1	86	90	97	199
25-40	208	90.53	24.15	1	86	90	94	271
41-64	489	91.51	26.92	2	83	90	93	300
65+	15	95.80	23.81	83	90	90	91	181
renumab	88,904	21.35	53.06	1	3	6	19	1,005
00-17	695	17.83	39.51	1	3	6	18	471
18-24	7,035	19.53	45.68	1	3	6	18	734
25-40	24,002	21.34	54.09	1	3	6	19	971
41-64	55,438	21.55	53.56	1	3	6	19	1,005
65+	1,734	24.04	54.84	1	3	7	21	769
remanezumab	35,545	21.44	50.15	1	3	6	20	930
00-17	219	19.38	49.62	1	3	6	15	442
18-24	2,708	20.35	45.73	1	3	7	19	739
25-40	9,691	20.91	46.86	1	3	6	20	719
41-64	22,408	21.85	52.05	1	3	6	20	930
65+	519	20.10	47.81	1	3	7	20	517
remanezumab PX	65	51.89	52.55	21	27	28	51	316
00-17	8	33.13	13.86	27	27	27	32	67
18-24	7	26.00	4.00	21	22	26	28	33
25-40	6	57.50	39.04	27	27	41	90	120
41-64	44	58.66	60.60	24	27	31	60	316
65+	0	-	-	-	-	-	-	_
ialcanezumab	79,029	18.66	42.19	1	3	6	18	846
00-17	404	18.23	45.45	1	3	7	18	488
18-24	6,073	17.73	39.27	1	3	6	18	831
25-40	22,665	18.75	42.13	1	3	6	18	729
41-64	48,923	18.73	42.54	1	3	6	18	846
65+	964	19.08	42.55	1	2	5	17	479
Rimegepant	26,781	39.35	49.21	1	10	23	49	518
00-17	110	54.22	68.68	1	13	27	63	370

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Table 14c: Descriptive statistics of t	he length of all gaps between	treatment episode	s, in days, by age	group (years)				
Exposures	Total Gaps	Mean	STD	Min	Q1	Median	Q3	Max
18-24	1,672	45.20	51.83	1	11	27	60	423
25-40	8,388	39.10	47.51	1	10	24	49	474
41-64	16,341	38.80	49.59	1	9	23	48	518
65+	270	38.56	48.91	1	9	21	47	327
Ubrogepant	39,281	41.50	50.65	1	10	25	52	545
00-17	161	48.35	56.86	1	11	28	68	307
18-24	2,216	46.85	55.99	1	12	27	58	492
25-40	11,142	41.65	51.06	1	11	25	51	476
41-64	25,364	40.90	49.92	1	10	24	51	545
65+	398	43.30	48.96	1	13	26	56	300



	Total		Disenrollr	nent	Evidence o	of death	DP/Query er	nd date	Episode (end
	N	%	N	%	N	%	N	%	N	%
Exposures										
Eptinezumab	231	100.0	46	19.9	0	0.0	30	13.0	231	100.0
Eptinezumab PX	1,522	100.0	7	0.5	0	0.0	5	0.3	1,522	100.0
Erenumab	122,890	100.0	16,161	13.2	0	0.0	9,822	8.0	122,890	100.0
Fremanezumab	52,653	100.0	7,921	15.0	0	0.0	4,916	9.3	52,653	100.0
Fremanezumab PX	139	100.0	0	0.0	0	0.0	0	0.0	139	100.0
Galcanezumab	109,851	100.0	15,025	13.7	0	0.0	9,773	8.9	109,851	100.0
Rimegepant	48,240	100.0	7,072	14.7	0	0.0	5,976	12.4	48,240	100.0
Ubrogepant	64,795	100.0	6,703	10.3	0	0.0	5,271	8.1	64,795	100.0
Patients' First Episode										
Eptinezumab	124	100.0	25	20.2	0	0.0	16	12.9	124	100.0
Eptinezumab PX	750	100.0	5	0.7	0	0.0	4	0.5	750	100.0
Erenumab	33,986	100.0	4,177	12.3	0	0.0	2,145	6.3	33,986	100.0
Fremanezumab	17,108	100.0	2,501	14.6	0	0.0	1,364	8.0	17,108	100.0
Fremanezumab PX	74	100.0	0	0.0	0	0.0	0	0.0	74	100.0
Galcanezumab	30,822	100.0	3,887	12.6	0	0.0	2,224	7.2	30,822	100.0
Rimegepant	21,459	100.0	2,985	13.9	0	0.0	2,449	11.4	21,459	100.0
Ubrogepant	25,514	100.0	2,189	8.6	0	0.0	1,614	6.3	25,514	100.0

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Fable 16: Cohort Attrition Table						
Attrition Criteria	Members					
ptinezumab						
nitial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	42,226,430 (100.0%) 40,440,102 (95.8%)					
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=N and MedCov=Y or A during the query period						
xclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period						
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	40,440,102 (95.8%)					
exclusion - Members must satisfy the age range condition within the query period	40,440,047 (95.8%)					
exclusion - Members must meet chart availability criterion within the query period	40,440,047 (95.8%)					
exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	40,440,047 (95.8%)					
exclusion - Members must have at least one claim with cohort-identifying codes within the query period	141 (0.0%)					
exclusion - Members must have at least one cohort episode index date within the age range condition	141 (0.0%)					
exclusion - Members must have at least one episode defining index claim during the query period	141 (0.0%)					
exclusion - Members must have at least one cohort episode incident with respect to other criteria	141 (0.0%)					
exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	124 (0.0%)					
exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	124 (0.0%)					
ixclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	124 (0.0%)					
ptinezumab PX						
nitial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	42,226,430 (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	40,440,102 (95.8%)					
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period						
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						
Exclusion - Members must satisfy the age range condition within the query period						
Exclusion - Members must meet chart availability criterion within the query period						
exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	40,440,047 (95.8%) 40,440,047 (95.8%)					
exclusion - Members must have at least one claim with cohort-identifying codes within the query period	846 (0.0%)					
exclusion - Members must have at least one cohort episode index date within the age range condition	846 (0.0%)					
exclusion - Members must have at least one episode defining index claim during the query period	846 (0.0%)					
exclusion - Members must have at least one cohort episode incident with respect to other criteria	846 (0.0%)					
exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	750 (0.0%)					
exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	750 (0.0%)					
exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	750 (0.0%)					
renumab	7 30 (0.070)					
nitial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	42,226,430 (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	40,440,102 (95.8%)					
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period	40,440,102 (95.8%)					
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	40,440,102 (95.8%)					
exclusion - Members must be excluded if they only have enforment episodes with brugcov - it and Medcov - it an	40,440,047 (95.8%)					
exclusion - Members must satisfy the age range condition within the query period	40,440,047 (95.8%)					
Actuation - Members must meet chart availability criterion within the query period	40,440,047 (93.0%)					

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Table 16: Cohort Attrition Table							
Attrition Criteria	Members						
Exclusion - Members must have at least one claim with cohort-identifying codes within the query period	42,646 (0.1%)						
Exclusion - Members must have at least one cohort episode index date within the age range condition							
Exclusion - Members must have at least one episode defining index claim during the query period							
Exclusion - Members must have at least one cohort episode incident with respect to other criteria							
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	33,986 (0.1%)						
Exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	33,986 (0.1%)						
Exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	33,986 (0.1%)						
Fremanezumab							
nitial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	42,226,430 (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	40,440,102 (95.8%)						
exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period	40,440,102 (95.8%)						
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	40,440,102 (95.8%)						
xclusion - Members must satisfy the age range condition within the query period	40,440,047 (95.8%)						
exclusion - Members must meet chart availability criterion within the query period	40,440,047 (95.8%)						
exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	40,440,047 (95.8%)						
xclusion - Members must have at least one claim with cohort-identifying codes within the query period	20,690 (0.0%)						
exclusion - Members must have at least one cohort episode index date within the age range condition	20,690 (0.0%)						
Exclusion - Members must have at least one episode defining index claim during the query period							
Exclusion - Members must have at least one cohort episode incident with respect to other criteria							
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion							
Exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	17,108 (0.0%)						
Exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	17,108 (0.0%)						
remanezumab PX							
nitial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	42,226,430 (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	40,440,102 (95.8%)						
exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period	40,440,102 (95.8%)						
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	40,440,102 (95.8%)						
Exclusion - Members must satisfy the age range condition within the query period	40,440,047 (95.8%)						
Exclusion - Members must meet chart availability criterion within the query period	40,440,047 (95.8%)						
Exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	40,440,047 (95.8%)						
exclusion - Members must have at least one claim with cohort-identifying codes within the query period	82 (0.0%)						
Exclusion - Members must have at least one cohort episode index date within the age range condition	82 (0.0%)						
xclusion - Members must have at least one episode defining index claim during the query period	82 (0.0%)						
exclusion - Members must have at least one cohort episode incident with respect to other criteria	82 (0.0%)						
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	74 (0.0%)						
Exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	74 (0.0%)						
exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	74 (0.0%)						
ialcanezumab							

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Table 16: Cohort Attrition Table						
Attrition Criteria	Members					
nitial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	42,226,430 (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						
Exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period						
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	40,440,102 (95.8%)					
exclusion - Members must satisfy the age range condition within the query period	40,440,047 (95.8%)					
exclusion - Members must meet chart availability criterion within the query period	40,440,047 (95.8%)					
exclusion - Members must satisfy the demographic (sex, race and hispanic) condition	40,440,047 (95.8%)					
exclusion - Members must have at least one claim with cohort-identifying codes within the query period	38,635 (0.1%)					
exclusion - Members must have at least one cohort episode index date within the age range condition	38,635 (0.1%)					
exclusion - Members must have at least one episode defining index claim during the query period	38,635 (0.1%)					
Exclusion - Members must have at least one cohort episode incident with respect to other criteria	38,635 (0.1%)					
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	30,822 (0.1%)					
exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	30,822 (0.1%)					
exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	30,822 (0.1%)					
limegepant						
nitial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	42,226,430 (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	40,440,102 (95.8%)					
exclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period						
xclusion - 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						
Exclusion - Members must satisfy the age range condition within the query period						
xclusion - Members must meet chart availability criterion within the query period						
Exclusion - Members must satisfy the demographic (sex, race and hispanic) condition						
Exclusion - Members must have at least one claim with cohort-identifying codes within the query period						
Exclusion - Members must have at least one cohort episode index date within the age range condition						
exclusion - Members must have at least one episode defining index claim during the query period	24,314 (0.1%)					
exclusion - Members must have at least one cohort episode incident with respect to other criteria	24,314 (0.1%)					
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	21,459 (0.1%)					
exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	21,459 (0.1%)					
exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	21,459 (0.1%)					
lbrogepant						
nitial Member Count - Members with a non-missing birth date/sex at any enrollment episode overlapping the query period	42,226,430 (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	40,440,102 (95.8%)					
xclusion - Members must be excluded if they only have enrollment episodes with DrugCov=Y and MedCov=N during the query period	40,440,102 (95.8%)					
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						
xclusion - Members must satisfy the age range condition within the query period	40,440,047 (95.8%)					
Exclusion - Members must meet chart availability criterion within the query period 40,440,047 (95.8%						
Exclusion - Members must satisfy the demographic (sex, race and hispanic) condition 40,440,047 (95.8%)						
Exclusion - Members must have at least one claim with cohort-identifying codes within the guery period						

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Table 16: Cohort Attrition Table				
Attrition Criteria	Members			
Exclusion - Members must have at least one cohort episode index date within the age range condition	29,339 (0.1%)			
Exclusion - Members must have at least one episode defining index claim during the query period	29,339 (0.1%)			
Exclusion - Members must have at least one cohort episode incident with respect to other criteria	29,339 (0.1%)			
Exclusion - Members must have at least one cohort episode satisfying the pre-index enrollment criterion	25,514 (0.1%)			
Exclusion - Members must have at least one cohort episode satisfying all exclusion and inclusion criteria	25,514 (0.1%)			
Exclusion - Members must have at least one cohort episode satisfying the post-index enrollment criterion	25,514 (0.1%)			

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Dates of Available Data for Each Data Partner (DP) up to Request End Date (09/30/2021) as of Query Distribution Date		
Data Partner	Start Date	End Date
DP01	01/01/2010	09/30/2021

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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: 05/01/2018-09/30/2021 Baseline Characteristics Table: Yes Baseline Evaluation Window (Day): -183,0

#	Cohort Name	Index Exposure	Pre-Index Enrollment Period (Days)	Washout Period (Days)	Treatment Episode Gap (Days)	Treatment Episode Extension (Days)	Inclusion/ Exclusion	Criteria	Criteria Definition	Evaluation Period Start (Day)	Evaluation Period End (Day)
1	Erenumab	erenumab ^[1]	183	183	0	0					
2	Fremanezumab	fremanezumab ^[2]	183	183	0	0					
3	Galcanezumab	galcanezumab ^[3]	183	183	0	0					
4	Eptinezumab	eptinezumab ^[4]	183	183	0	0					
5	Rimegepant	rimegepant ^[5]	183	183	0	0					
6	Ubrogepant	ubrogepant ^[6]	183	183	0	0					
7	Eptinezumab PX	eptinezumab HCPCS ^[7]	183	183	0	0					
8	Fremanezumab PX	fremanezumab HCPCS ^[8]	183	183	0	0					

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

See Appendix C

See Appendix C See Appendix D

See Appendix D

Baseline Characteristics Table

Acquired Hypothyroidism Acute Myocardial Infarction Alzheimer's Disease Alzheimer's Disease, Related Disorders, or Senile Dementia

Anemia Asthma

Atrial Fibrillation Benign Prostatic Hyperplasia **Breast Cancer**

Cataracts

Chronic Kidney Disease Chronic Obstructive Pulmonary Disease Colorectal Cancer

Depression Diabetes **Endometrial Cancer** Glaucoma Heart Failure

Hip / Pelvic Fracture Hyperlipidemia

Hypertension Ischemic Heart Disease Lung Cancer Osteoporosis Prostate Cancer

Rheumatoid Arthritis / Osteoarthritis

Stroke / Transient Ischemic Attack

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 - Optional table containing general characteristics of study population, including background rates of 27 chronic conditions from the CMS Chronic Condition 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 Hospital Stay (IP), Non-Acute Institutional Stay (IS), Emergency Department (ED), Ambulatory Visit (AV), and Other Ambulatory Visit (OA). For laboratory results, possible care settings include: Emergency Department (I), Outpatient (I), Outpatient (I), Outpatient (I), Outpatient (II), Outpatient (III), Outpat (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 Institutional Stay (IS) - A care setting value including hospice, skilled nursing facility (SNF), rehab center, nursing home, residential, overnight non-hospital dialysis and other non-hospital stays.

Other Ambulatory Visit (OA) - A care setting value including other non-overnight AV encounters such as hospice visits, home health visits, skilled nursing facility visits, other non-hospital visits, as well as telemedicine, 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 index-defining 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 selected number of days to 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.

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

Generic Name		
	Erenumab	
erenumab-aoee		
	Fremanezumab	
fremanezumab-vfrm		
	Galcanezumab	
galcanezumab-gnlm		
	Eptinezumab	
eptinezumab		
	Rimegepant	
rimegepant sulfate		
	Ubrogepant	
ubrogepant		

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Appendix D. List of Healthcare Common Procedure Coding System (HCPCS) Codes Used to Define Index Exposures in this Request

Code	Code Category	Code Type	Description		
	Eptinezumab HCPCS				
C9063	Procedure	HCPCS	Injection, eptinezumab-jjmr, 1 mg		
J3032	Procedure	HCPCS	Injection, eptinezumab-jjmr, 1 mg		
	Fremanezumab HCPCS				
C9040	Procedure	HCPCS	Injection, fremanezumab-vfrm, 1 mg		
J3031	Procedure	HCPCS	Injection, fremanezumab-vfrm, 1 mg (code may be used for Medicare when drug administered under the direct supervision of a physician, not		
			for use when drug is self-administered)		

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