

A Retrospective Real-World Evidence Evaluation of the
Characteristics of Exocrine Pancreatic Insufficiency in Patients
With Chronic Pancreatitis and Type 2 Diabetes Treated With
Pancrelipase in the United States

SUPPLEMENTAL DIGITAL CONTENT

Contents

SUPPLEMENTAL TABLE 1. List of Prescribing Physician Specialties Classified as ‘Other’ 2

SUPPLEMENTAL TABLE 2. Treatment Effectiveness (CP Cohort) 3

SUPPLEMENTAL TABLE 3. Treatment Effectiveness by High vs Low Compliance (CP Cohort) 4

SUPPLEMENTAL TABLE 4. Treatment Effectiveness (T2D Cohort) 5

SUPPLEMENTAL TABLE 5. Treatment Effectiveness by High vs Low Compliance (T2D Cohort) 6

SUPPLEMENTAL TABLE 1. List of Prescribing Physician Specialties Classified as ‘Other’

Prescribing Physician Specialties Classified as ‘Other’

Nurse practitioner	Hepatology
Specialist	Urology
Medical	Medical-surgical
Hospitalist	Women's health
Pulmonary disease	Clinical cardiac electrophysiology
Surgery	General acute care hospital
Nephrology	Interventional cardiology
Psychiatry	Advanced heart failure and transplant cardiology
Acute care	Emergency medical services
Cardiovascular disease	Neurological surgery
Pediatric pulmonology	Otolaryngology
Emergency medicine	Transplant hepatology
Pediatrics	Thoracic surgery (cardiothoracic vascular surgery)
Physical medicine & rehabilitation	Podiatrist
Critical care medicine	Pediatric emergency medicine
Gerontology	Adult reconstructive orthopedic surgery
Neurology	Nuclear medicine
Neuromusculoskeletal medicine	Periodontics
Addiction medicine	Trauma surgery
Rheumatology	Primary podiatric medicine
Transplant surgery	Surgery of the hand
Allergy & immunology	Sleep medicine
Obstetrics & gynecology	Pediatric allergy/immunology
Colon & rectal surgery	Plastic surgery
Pain medicine	Clinical neurophysiology
Dermatology	Clinical pathology/laboratory medicine
Hospice and palliative medicine	Oral and maxillofacial surgery
Ophthalmology	Anatomic pathology & clinical pathology
Orthopedic surgery	Neuromuscular medicine
Vascular surgery	Allergy
Addiction psychiatry	

SUPPLEMENTAL TABLE 2. Treatment Effectiveness (CP Cohort)

Treatment Effectiveness Metrics	Baseline			6 Months Post-Index			12 Months Post-Index			18 Months Post-Index		
	n (%)	M	MD (SD)	n (%)	M	MD (SD)	n (%)	M	MD (SD)	n (%)	M	MD (SD)
Overall												
Abdominal pain	966 (30)	1.9	1.0 (1.6)	692 (22)	4.7	3.0 (5)	566 (18)	4.1	3.0 (4.4)	502 (16)	3.7	2.0 (4.1)
Diarrhea & steatorrhea	262 (8)	1.7	1.0 (1.8)	133 (4)	3.3	2.0 (4)	81 (3)	2.5	1.0 (3.1)	69 (2)	2.6	1.0 (4.6)
Gas & bloating	43 (1)	1.1	1.0 (0.4)	10 (0)	2.1	1.5 (1)	4 (0)	1.8	1.0 (1.5)	5 (0)	1.8	1.0 (1.1)
Nausea & vomiting	334 (10)	1.6	1.0 (1.3)	191 (6)	3.5	2.0 (4)	149 (5)	2.8	2.0 (2.5)	125 (4)	2.8	2.0 (4.1)
Abdominal pain with diarrhea	117 (4)	1.3	1.0 (0.8)	37 (1)	2.1	2.0 (1)	19 (1)	1.4	1.0 (0.6)	24 (1)	1.3	1.0 (0.6)
Abdominal pain with nausea & vomiting	246 (8)	1.5	1.0 (1.0)	124 (4)	3.1	2.0 (3)	96 (3)	2.8	2.0 (2.4)	71 (2)	2.8	2.0 (2.7)
Diarrhea with nausea & vomiting	68 (2)	1.3	1.0 (0.6)	22 (1)	2.0	1.5 (2)	13 (0)	1.4	1.0 (1)	9 (0)	1.0	1.0 (–)
Abdominal pain with diarrhea and nausea & vomiting	51 (2)	1.2	1.0 (0.5)	15 (0)	1.9	1.0 (1)	7 (0)	1.1	1.0 (0)	6 (0)	1.0	1.0 (–)
Prescribing physician specialty												
Gastroenterology												
Abdominal pain	334 (27)	1.7	1.0 (1.0)	238 (19)	4.1	3.0 (4.2)	183 (15)	3.6	2.0 (4.1)	167 (14)	3.2	2.0 (3.4)
Diarrhea & steatorrhea	112 (9)	1.6	1.0 (1.2)	60 (5)	4.1	2.0 (6.0)	35 (3)	2.9	1.0 (3.8)	28 (2)	2.6	2.0 (5.0)
Gas & bloating	15 (1)	1.3	1.0 (0.6)	5 (0)	1.8	2.0 (0.8)	2 (0)	1.0	1.0 (0.0)	3 (0)	1.7	1.0 (1.2)
Nausea & vomiting	103 (8)	1.6	1.0 (1.4)	63 (5)	3.7	2.0 (5.5)	41 (3)	2.4	2.0 (2.4)	31 (3)	2.5	1.0 (2.3)
Abdominal pain with diarrhea	38 (3)	1.3	1.0 (0.8)	16 (1)	2.2	2.0 (1.6)	4 (0)	1.3	1.0 (0.5)	7 (1)	1.1	1.0 (0.4)
Abdominal pain with nausea & vomiting	81 (7)	1.5	1.0 (1.0)	39 (3)	3.3	2.0 (4.1)	25 (2)	2.4	1.0 (2.8)	17 (1)	2.7	2.0 (2.0)
Diarrhea with nausea & vomiting	24 (2)	1.3	1.0 (0.7)	7 (1)	2.3	2.0 (1.7)	4 (0)	1.5	1.5 (0.6)	3 (0)	1.0	1.0 (0.0)
Abdominal pain with diarrhea and nausea & vomiting	16 (1)	1.4	1.0 (0.8)	6 (0)	2.2	1.5 (1.9)	1 (0)	1.0	1.0 (–)	3 (0)	1.0	1.0 (0.0)
Internal medicine/general practitioner												
Abdominal pain	376 (30)	2.0	1.0 (1.7)	258 (21)	4.9	3.0 (4.9)	225 (18)	4.5	3.0 (4.2)	199 (16)	4.5	3.0 (5.1)
Diarrhea & steatorrhea	88 (7)	1.9	1.0 (2.5)	43 (3)	3.0	2.0 (2.6)	32 (3)	2.5	1.0 (2.9)	25 (2)	2.7	1.0 (5.3)
Gas & bloating	16 (1)	1.0	1.0 (0.0)	–	–	–	1 (0)	1.0	1.0 (–)	–	–	–
Nausea & vomiting	142 (12)	1.5	1.0 (1.1)	76 (6)	3.1	2.0 (2.8)	67 (5)	3.1	2.0 (2.4)	59 (5)	3.1	2.0 (5.3)
Abdominal pain with diarrhea	26 (5)	1.3	1.0 (0.6)	12 (2)	1.8	1.0 (1.4)	9 (2)	1.4	1.0 (0.5)	4 (1)	2.0	2.0 (1.2)
Abdominal pain with nausea & vomiting	60 (11)	1.6	1.0 (1.2)	33 (6)	3.1	2.0 (2.5)	33 (6)	3.2	3.0 (2.5)	23 (4)	2.8	2.0 (3.4)
Diarrhea with nausea & vomiting	15 (3)	1.3	1.0 (0.5)	6 (1)	2.3	1.0 (2.4)	4 (1)	1.8	1.5 (1.0)	–	–	–
Abdominal pain with diarrhea and nausea & vomiting	14 (3)	1.0	1.0 (0.0)	5 (1)	2.0	1.0 (1.4)	4 (1)	1.3	1.0 (0.5)	–	–	–

Note: Internal medicine/General practitioner includes endocrinologists.

CP indicates chronic pancreatitis; M, mean; MD, median; n, number; SD, standard deviation.

SUPPLEMENTAL TABLE 3. Treatment Effectiveness by High vs Low Compliance (CP Cohort)

Treatment Effectiveness Metrics	Baseline, n (%)			6 Months Post-index, n (%)			12 Months Post-Index, n (%)			18 Months Post-Index, n (%)		
	High Compliance (n = 1553)	Low Compliance (n = 1115)	Chi-square <i>P</i>	High Compliance (n = 1553)	Low Compliance (n = 1115)	Chi-square <i>P</i>	High Compliance (n = 1553)	Low Compliance (n = 1115)	Chi-square <i>P</i>	High Compliance (n = 1553)	Low Compliance (n = 1115)	Chi-square <i>P</i>
Abdominal pain	389 (25)	405 (36)	0.000	273 (18)	293 (26)	0.000	236 (15)	236 (21)	0.000	208 (13)	213 (19)	0.000
Diarrhea & steatorrhea	109 (7)	107 (10)	0.016	56 (4)	53 (5)	0.140	33 (2)	34 (3)	0.132	31 (2)	29 (3)	0.299
Gas & bloating	20 (1)	15 (1)	0.898	5 (0)	3 (0)	0.805	2 (0)	2 (0)	0.739	2 (0)	2 (0)	0.739
Nausea & vomiting	126 (8)	137 (12)	0.000	63 (4)	88 (8)	0.000	54 (3)	62 (6)	0.009	49 (3)	54 (5)	0.026
Abdominal pain with diarrhea	49 (3)	43 (4)	0.327	18 (1)	11 (1)	0.672	7 (0)	7 (1)	0.532	8 (1)	11 (1)	0.153
Abdominal pain with nausea & vomiting	102 (7)	101 (9)	0.017	45 (3)	59 (5)	0.002	37 (2)	41 (4)	0.050	34 (2)	27 (2)	0.692
Diarrhea with nausea & vomiting	32 (2)	23 (2)	0.997	11 (1)	7 (1)	0.802	7 (0)	4 (0)	0.715	4 (0)	4 (0)	0.637
Abdominal pain with diarrhea and nausea & vomiting	26 (2)	15 (1)	0.496	8 (1)	4 (0)	0.552	4 (0)	1 (0)	0.323	3 (0)	2 (0)	0.935
CP indicates chronic pancreatitis.												

SUPPLEMENTAL TABLE 4. Treatment Effectiveness (T2D Cohort)

Treatment Effectiveness Metrics	Baseline			6 Months Post-Index			12 Months Post-Index			18 Months Post-Index		
	n (%)	M	MD (SD)	n (%)	M	MD (SD)	n (%)	M	MD (SD)	n (%)	M	MD (SD)
Overall												
Abdominal pain	953 (13)	1.6	1.0 (1.2)	539 (7)	2.8	2.0 (3.6)	356 (5)	2.7	2.0 (3.0)	297 (4)	2.7	2.0 (3.5)
Diarrhea & steatorrhea	685 (9)	1.6	1.0 (1.3)	361 (5)	2.4	2.0 (2.5)	187 (3)	2.3	1.0 (2.1)	137 (2)	2.3	1.0 (2.5)
Gas & bloating	187 (3)	1.2	1.0 (0.4)	71 (1)	1.7	1.0 (1.4)	38 (1)	1.8	1.0 (1.3)	21 (0)	1.7	1.0 (1.3)
Nausea & vomiting	332 (4)	1.6	1.0 (1.8)	148 (2)	3.7	2.0 (4.8)	97 (1)	3.7	1.0 (5.7)	73 (1)	3.7	2.0 (6.0)
Abdominal pain with diarrhea	176 (2)	1.3	1.0 (0.7)	51 (1)	1.6	1.0 (1.1)	28 (0)	1.9	1.0 (1.9)	17 (0)	1.8	1.0 (1.1)
Abdominal pain with nausea & vomiting	173 (2)	1.3	1.0 (1.0)	53 (1)	2.3	1.0 (3.5)	32 (0)	2.4	1.0 (4.2)	27 (0)	2.5	1.0 (3.7)
Diarrhea with nausea & vomiting	91 (1)	1.2	1.0 (0.7)	22 (0)	1.7	1.0 (1.0)	7 (0)	1.4	1.0 (0.8)	5 (0)	1.2	1.0 (0.4)
Abdominal pain with diarrhea and nausea & vomiting	47 (1)	1.1	1.0 (0.2)	5 (0)	1.4	1.0 (0.9)	4 (0)	1.5	1.0 (1.0)	3 (0)	1.3	1.0 (0.6)
Prescribing physician specialty												
Gastroenterology												
Abdominal pain	335 (16)	1.5	1.0 (1.0)	191 (9)	2.4	2.0 (2.1)	108 (5)	2.2	1.0 (1.9)	101 (5)	2.9	2.0 (4.6)
Diarrhea & steatorrhea	286 (13)	1.4	1.0 (0.7)	153 (7)	2.3	2.0 (2.0)	72 (3)	2.3	2.0 (1.9)	51 (2)	2.7	2.0 (3.2)
Gas & bloating	88 (4)	1.2	1.0 (0.4)	37 (2)	1.5	1.0 (1.0)	21 (1)	1.8	1.0 (1.0)	10 (0)	1.4	1.0 (0.5)
Nausea & vomiting	90 (4)	1.2	1.0 (0.5)	41 (2)	2.6	2.0 (2.6)	27 (1)	2.3	1.0 (2.0)	20 (1)	2.4	2.0 (1.8)
Abdominal pain with diarrhea	71 (3)	1.2	1.0 (0.5)	23 (1)	1.7	1.0 (1.1)	7 (0)	2.1	1.0 (1.5)	5 (0)	2.4	2.0 (1.7)
Abdominal pain with nausea & vomiting	48 (2)	1.1	1.0 (0.4)	13 (1)	2.0	2.0 (1.9)	10 (0)	1.4	1.0 (0.7)	10 (0)	2.2	2.0 (1.3)
Diarrhea with nausea & vomiting	29 (1)	1.0	1.0 (0.2)	4 (0)	2.3	2.0 (1.5)	3 (0)	1.3	1.0 (0.6)	2 (0)	1.5	1.5 (0.7)
Abdominal pain with diarrhea and nausea & vomiting	15 (1)	1.0	1.0 (0.0)	1 (0)	3.0	3.0 (–)	2 (0)	1.0	1.0 (0.0)	2 (0)	1.5	1.5 (0.7)
Internal medicine/general practitioner												
Abdominal pain	382 (11)	1.6	1.0 (1.5)	216 (6)	3.1	2.0 (4.3)	157 (5)	2.8	2.0 (2.8)	107 (3)	2.4	2.0 (2.2)
Diarrhea & steatorrhea	222 (6)	1.8	1.0 (1.9)	117 (3)	2.7	2.0 (3.5)	65 (2)	2.3	1.0 (2.6)	43 (1)	1.8	1.0 (1.4)
Gas & bloating	54 (2)	1.1	1.0 (0.3)	20 (1)	2.0	1.0 (1.2)	9 (0)	2.3	1.0 (2.2)	5 (0)	2.6	1.0 (2.6)
Nausea & vomiting	131 (4)	1.7	1.0 (2.4)	49 (1)	3.5	2.0 (3.8)	35 (1)	2.6	1.0 (2.1)	27 (1)	2.4	2.0 (1.8)
Abdominal pain with diarrhea	26 (2)	1.3	1.0 (0.8)	6 (0)	1.2	1.0 (0.4)	5 (0)	3.0	1.0 (3.9)	1 (0)	3.0	3.0 (0.0)
Abdominal pain with nausea & vomiting	33 (2)	1.6	1.0 (1.9)	8 (0)	3.5	2.5 (3.7)	6 (0)	2.0	1.5 (1.3)	3 (0)	1.7	1.0 (1.2)
Diarrhea with nausea & vomiting	19 (1)	1.4	1.0 (1.0)	5 (0)	1.8	1.0 (1.3)	2 (0)	1.0	1.0 (0.0)	2 (0)	1.0	1.0 (0.0)
Abdominal pain with diarrhea and nausea & vomiting	10 (1)	1.0	1.0 (0.0)	1 (0)	1.0	1.0 (0.0)	–	–	–	–	–	–

Note: Internal medicine/General practitioner includes endocrinologists.

M indicates mean; MD, median; n, number; SD, standard deviation; T2D, type 2 diabetes.

SUPPLEMENTAL TABLE 5. Treatment Effectiveness by High vs Low Compliance (T2D Cohort)												
Treatment Effectiveness Metrics	Baseline			6 Months Post-Index, n (%)			12 Months Post-Index, n (%)			18 Months Post-Index, n (%)		
	High Compliance (n = 1553)	Low Compliance (n = 1115)	Chi-square <i>P</i>	High Compliance (n = 1553)	Low Compliance (n = 1115)	Chi-square <i>P</i>	High Compliance (n = 1553)	Low Compliance (n = 1115)	Chi-square <i>P</i>	High Compliance (n = 1553)	Low Compliance (n = 1115)	Chi-square <i>P</i>
Abdominal pain	257 (9)	512 (17)	0.000	131 (4)	301 (10)	0.000	94 (3)	192 (6)	0.000	85 (3)	164 (6)	0.000
Diarrhea & steatorrhea	187 (6)	365 (12)	0.000	106 (4)	194 (7)	0.000	53 (2)	94 (3)	0.001	43 (1)	67 (2)	0.020
Gas & bloating	46 (2)	98 (3)	0.000	18 (1)	41 (1)	0.003	11 (0)	21 (1)	0.076	4 (0)	16 (1)	0.007
Nausea & vomiting	96 (3)	183 (6)	0.000	43 (1)	77 (3)	0.002	34 (1)	48 (2)	0.118	25 (1)	36 (1)	0.155
Abdominal pain with diarrhea	35 (1)	102 (3)	0.000	11 (0)	31 (1)	0.002	3 (0)	19 (1)	0.001	5 (0)	8 (0)	0.403
Abdominal pain with nausea & vomiting	47 (2)	101 (3)	0.000	13 (0)	32 (1)	0.004	10 (0)	15 (1)	0.314	8 (0)	14 (0)	0.199
Diarrhea with nausea & vomiting	18 (1)	58 (2)	0.000	2 (0)	14 (0)	0.003	3 (0)	3 (0)	0.998	1 (0)	3 (0)	0.316
Abdominal pain with diarrhea and nausea & vomiting	9 (0)	30 (1)	0.001	1 (0)	4 (0)	0.179	1 (0)	2 (0)	0.563	1 (0)	2 (0)	0.563
T2D indicates type 2 diabetes.												