

## Appendix Q

### Query 1:

((“social media”[Title/Abstract]) AND (patient[Title/Abstract]) AND ((listening[Title/Abstract]) OR monitoring[Title/Abstract])) NOT ((survey[Title/Abstract] OR engage[Title/Abstract] OR engagement[Title/Abstract] OR recruit[Title/Abstract] OR recruitment[Title/Abstract] OR use[Title]))

### Query 2:

Set#	Searched for	Databases
S1	TI,AB(“drug* development*” OR “ R&D” OR “research and development” OR “clinical research” OR “patient focused drug development*” OR “drug discovery” OR “patient-centered drug* development” OR “patient centered drug* development” OR “patient-focused drug development*” OR “pharma* R&D” OR “pharmaceutical development*” OR “early research” OR “drug research” OR “scientific research” OR “utilised for research*” OR “patient-centric drug development” OR “patient centric drug development” OR “clinical stud*” OR “clinical trial*”)	embase1974date, medlineprof1950date
S2	MJMESH.EXACT.EXPLODE(“Drug Industry”) OR MJEMB.EXACT.EXPLODE(“drug industry”) OR “TI,AB(“pharmaceutical companies” OR “pharmaceutical company” OR “pharmaceutical industr*” OR “Pharm* development” OR “Pharma compan*” OR “drug* development” OR “drug* research”)	embase1974date, medlineprof1950date
S3	MJEMB.EXACT(“social media analysis”) OR MJEMB.EXACT.EXPLODE(“social media monitoring”) OR MJMESH.EXACT(“Social Media”) OR MJEMB.EXACT(“social media”)	embase1974date, medlineprof1950date
S4	TI,AB(“Social media listening” OR “social media mining” OR “social media monitoring”) OR TI(“social media” OR “social listening”)	embase1974date, medlineprof1950date

S5	S4 OR S3	embase1974date, medlineprof1950date
S6	S5 AND S2 AND S1	embase1974date, medlineprof1950date
S7	TI,AB(("drug* development*" OR " R&D" OR "research and development" OR "clinical research" OR "patient focused drug development*" OR "drug discovery" OR "patient-centered drug* development" OR "patient centered drug* development" OR "patient-focused drug development*" OR "pharma* R&D" OR "pharmaceutical development*" OR "early research" OR "drug research" OR "scientific research" OR "utilised for research*" OR "patient- centric drug development" OR "patient centric drug development" OR "clinical stud*" OR "clinical trial*" OR "Real world data" OR "real world evidence" OR "RWE" OR "RWD" OR "real world stud*"))	embase1974date, medlineprof1950date
S8	S7 AND S4	embase1974date, medlineprof1950date
S9	(S8 OR S6) and (pd(2013-2023))	embase1974date, medlineprof1950date

## Appendix A

Indications	Goals/Objectives	Sources	Sponsors
Acute Myeloid Leukemia [3]	Analyze online communication behavior and influence of key opinion leaders [33, 62, 67]	Consumer reviews [53]	AstraZeneca [28]
Amblyopia [59]		Facebook [7, 10, 14, 18, 21, 22, 29, 31, 39, 43, 49, 58, 61]	Boehringer Ingelheim [2, 24]
Ankylosing spondylitis [38]	Barriers to care [39, 52]	Instagram [7, 53]	BMS [23, 35, 36]
Atopic dermatitis [53, 65]	Common mental health symptoms [27, 51]	News [17, 53, 59, 63, 64, 67]	Chiesi [28]
Bronchiectasis [28]	Disease burden, key symptoms [4, 8, 22, 25, 30, 34, 36, 40-46, 49, 50, 53-60]	Online forums, blogs [5-7, 10-12, 17, 21, 29, 31, 32, 34, 39, 42, 45, 48-50, 53, 56, 58, 59, 63, 64, 66, 67]	GSK [37, 58]
Cancer [23]	Emotional impact of disease, diagnosis and treatment [10, 15, 18, 22, 26, 48, 65]	Patient Communities [8, 9, 16, 19, 20, 23, 25, 28, 34, 35, 37, 38, 44-46, 49, 50, 54, 55, 58, 60]	Horizon Therapeutics [18]
Chronic Kidney Disease [28]	HRQoL impacts [7, 17, 21, 23, 42, 49, 54-56, 59-61, 63-65, 67]	Reddit [11, 18, 42, 43, 53, 58]	Johnson & Johnson [8, 30]
Chronic ocular pain [21]	Identify perceived causes for disease [21]	Tumblr [29, 53, 58]	Merck [54, 55]
Complement 3 Glomerulopathy (C3G) [63]	Identify/Predict condition [25, 32, 44, 50]	Twitter [1, 3, 5, 6, 10, 11, 14, 15, 17, 21, 27, 32-34, 39, 42, 46, 47, 49, 52, 53, 57-59, 62-64, 66, 67]	Neurocrine Biosciences [15, 32]
COVID-19 / Long COVID [25, 26, 39, 43]	Impact on caregivers [15, 16, 19, 22, 32, 34, 40, 58]	Youtube [7, 8, 26, 29, 49, 58]	Novartis [5, 6, 16, 17, 19, 21, 34, 38, 40, 42, 48, 49, 59, 63, 64, 67]
Crohn's Disease [2]	Patient-reported experiences, symptoms, outcomes and patient journeys [1, 4, 8, 16, 17, 20, 21, 25, 28, 34, 36, 40,		Novo Nordisk [49]
Dental medicine [1, 14]			Pfizer [3, 8, 53]
Diseases that require hysterectomy [27]			Pierre Fabre [60]
Dry Eye Disease [22]			Roche [11, 20, 46, 51, 56]
Eosinophil-Driven Diseases (EGPA & HES) [58]			
GI Discomfort [50]			
Gout [18]			
Hematologic cancers [37]			

<p><b>Immunoglobulin A nephropathy (IgAN)</b> [64]</p> <p><b>Inflammatory bowel disease</b> [29]</p> <p><b>Lung cancer</b> [49]</p> <p><b>Melanoma</b> [16, 18, 35, 60]</p> <p><b>Metastatic Breast Cancer</b> [31, 34, 44, 52]</p> <p><b>Multiple Myeloma</b> [8, 23]</p> <p><b>Multiple Sclerosis</b> 12, [29, 30, 48]</p> <p><b>Myelodysplastic syndromes</b> [19]</p> <p><b>Nutrition</b> [33]</p> <p><b>Obesity</b> [24]</p> <p><b>Parkinson’s disease</b> [45, 56, 68]</p> <p><b>Personality disorder</b> [32]</p> <p><b>Presbyopia</b> [17, 67]</p> <p><b>Psoriasis</b> [47]</p> <p><b>Renal cell carcinoma</b> [36]</p> <p><b>Sarcoma</b> [62]</p> <p><b>Schizophrenia</b> [27]</p> <p><b>SLC6A1 disorder</b> [22]</p> <p><b>Sjögren’s disease</b> [42]</p> <p><b>Systemic juvenile idiopathic arthritis</b> [40]</p> <p><b>Lupus</b> [54, 55, 57]</p>	<p>42, 43, 46, 48-50, 54, 55, 57-60, 63, 64]</p> <p><b>Treatment coverage/Treatment experience</b> [7-9, 26, 35-38, 41, 45, 49, 54, 55, 60, 65, 66]</p> <p><b>Treatment seeking / selection</b> [3, 11, 12, 14, 29, 31, 37-39, 46-49, 54, 66]</p> <p><b>Unmet needs</b> [5, 18, 19, 32, 54, 55, 57, 63, 64, 68]</p>		<p><b>Sanofi</b> [65]</p> <p><b>UCB</b> [68]</p>
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<b>Tardive Dyskinesia</b> [15, 32]  <b>Undefined</b> [46, 66]			
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*Table A 1: Overview of findings from literature review on published social listening articles with PFDD focus since 2015.*

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