

Trial	Drug (if applicable)	Patent No.	Filed Date	Petitioner(s)	Patent Owner(s)	Inst. Dec.	Outcome	Details of FWD
<b>&lt;Information obtained primarily from Lex Machina™ and public sources on the Internet. If any errors are identified, please contact Lisa Mandrusiak at Oblon.&gt;</b>								
IPR2019-00037		6,596,296	9-Oct-18	Medtronic, Inc.; Tyrx, Inc.	Board of Regents of the University of Texas; TissueGen, Inc.	N/A	Pending	N/A
IPR2019-00038		7,033,603	9-Oct-18	Medtronic, Inc.; Tyrx, Inc.	Board of Regents of the University of Texas; TissueGen, Inc.	N/A	Pending	N/A
IPR2019-00130		9,598,731	7-Nov-18	Foundation Medicine, Inc.; Roche Finance Ltd.; Roche Holding Ltd.; Roche Holdings, Inc.	Guardant Health, Inc.	Denied	N/A	N/A
IPR2019-00136	Jevtana® Kit	5,847,170	31-Oct-18	GKC PII Holdings, LLC; Burford Capital Investment Management LLC; Burford Capical Ireland DAC et al.	Aventis Pharma S.A.	Denied	N/A	N/A
IPR2019-00164		8,880,350	5-Nov-18	Foundation Medicine, Inc.; Roche Finance Ltd.; Roche Holding Ltd.; Roche Holdings, Inc.	Caris MPI, Inc.	Instituted	Pending	N/A
IPR2019-00165		9,092,392	6-Nov-18	Foundation Medicine, Inc.; Roche Finance Ltd.; Roche Holding Ltd.; Roche Holdings, Inc.	Caris MPI, Inc.	Denied	N/A	N/A
IPR2019-00166		9,292,660	6-Nov-18	Foundation Medicine, Inc.; Roche Finance Ltd.; Roche Holding Ltd.; Roche Holdings, Inc.	Caris MPI, Inc.	Instituted	Pending	N/A
IPR2019-00170		9,372,193	5-Nov-18	Foundation Medicine, Inc.; Roche Finance Ltd.; Roche Holding Ltd.; Roche Holdings, Inc.	Caris MPI, Inc.	Instituted	Pending	N/A
IPR2019-00171		9,383,365	5-Nov-18	Foundation Medicine, Inc.; Roche Finance Ltd.; Roche Holding Ltd.; Roche Holdings, Inc.	Caris MPI, Inc.	Instituted	Pending	N/A
IPR2019-00203		9,292,660	6-Nov-18	Foundation Medicine, Inc.; Roche Finance Ltd.; Roche Holding Ltd.; Roche Holdings, Inc.	Caris MPI, Inc.	Instituted	Pending	N/A

IPR2019-00207	Aczone®	9,517,219	6-Nov-18	Amneal Pharmaceuticals LLC; Amneal Pharmaceuticals of New York LLC	Almirall LLC	Instituted	Pending	N/A
IPR2019-00230		9,422,345	7-Nov-18	Merck Sharp & Dohme Corp.; Merck & Co. Inc.	GlaxoSmithKline Biologicals S.A.	Instituted	Pending	N/A
IPR2019-00241		9,422,345	7-Nov-18	Merck Sharp & Dohme Corp.; Merck & Co. Inc.	GlaxoSmithKline Biologicals S.A.	Instituted	Pending	N/A
IPR2019-00266		8,236,504	9-Nov-18	Agilent Technologies, Inc.	Bio-Rad Laboratories, Inc.	Denied	N/A	N/A
IPR2019-00268		8,835,118	9-Nov-18	Agilent Technologies, Inc.	Bio-Rad Laboratories, Inc.	Denied	N/A	N/A
IPR2019-00271		7,148,043	9-Nov-18	Agilent Technologies, Inc.	Bio-Rad Laboratories, Inc.	Instituted	Pending	N/A
IPR2019-00313		9,776,941	12-Nov-18	Celanese International Corporation	Daicel Corporation	Settled pre- institution	N/A	N/A
IPR2019-00328	Suboxone®	9,687,454	13-Nov-18	Dr. Reddy's Laboratories S.A. and Dr. Reddy's Laboratories, Inc.	Indivior UK Limited	Denied	N/A	N/A
IPR2019-00329	Suboxone®	9,687,454	13-Nov-18	Dr. Reddy's Laboratories S.A. and Dr. Reddy's Laboratories, Inc.	Indivior UK Limited	Instituted	Pending	N/A
IPR2019-00345	Kinevac®	6,803,046	19-Nov-18	Shilpa Medicare Ltd; Maia Pharmaceuticals, Inc.; BS&H Investors LLC; Gland Pharma Ltd.	Bracco Diagnostics Inc.	Denied	N/A	N/A
IPR2019-00374		9,610,345	30-Nov-18	Intervet Inc. a/k/a Merck Animal Health	Boehringer Ingelheim Vetmedica, Inc.	Denied	N/A	N/A
IPR2019-00381		9,669,087	30-Nov-18	Intervet Inc. a/k/a Merck Animal Health	Boehringer Ingelheim Vetmedica, Inc.	Instituted	Settled post-institution	N/A
IPR2019-00400		8,633,194	13-Dec-18	Apotex Pharmaceuticals Holdings Inc.; Apotex Holdings, Inc.; Apotex Inc.	UCB Biopharma S.A.	Instituted	Pending	N/A
IPR2019-00406		6,596,296	7-Dec-18	Ethicon PR Holdings Unlimited Co.; OMJ Pharma., Inc.; Janssen Pharma.s; Ethicon Holding S.A.R.L. et al.	Board of Regents of the University of Texas System	N/A	Pending	N/A
IPR2019-00407		7,033,603	7-Dec-18	Ethicon PR Holdings Unlimited Co.; OMJ Pharma., Inc.; Janssen Pharma.s; Ethicon Holding S.A.R.L. et al.	Board of Regents of the University of Texas System	N/A	Pending	N/A
IPR2019-00442	Dextenza®	9,463,114	14-Dec-18	Ocular Therapeutix	Mati Therapeutics, Inc.	Instituted	Pending	N/A
IPR2019-00448	Dextenza®	9,849,082	14-Dec-18	Ocular Therapeutix	Mati Therapeutics, Inc.	Instituted	Pending	N/A

IPR2019-00449		9,763,876	28-Jan-19	Aquestive Therapeutics, Inc.	Hale Biopharma Ventures, LLC	Denied	N/A	N/A
IPR2019-00450		9,763,876	29-Jan-19	Aquestive Therapeutics, Inc.	Hale Biopharma Ventures, LLC	Denied	N/A	N/A
IPR2019-00451		9,763,876	29-Jan-19	Aquestive Therapeutics, Inc.	Hale Biopharma Ventures, LLC	Instituted	Pending	N/A
IPR2019-00459		10,080,788	21-Dec-18	CSL Behring GmbH and CSL Behring LLC	Shire ViroPharma Inc.	Denied	N/A	N/A
IPR2019-00488		7,998,708	20-Dec-18	QIAGEN North American Holdings Inc.; Qiagen N.V.	HandyLab, Inc.	Instituted	Pending	N/A
IPR2019-00490		8,323,900	20-Dec-18	QIAGEN North American Holdings Inc.; Qiagen N.V.	HandyLab, Inc.	Instituted	Pending	N/A
IPR2019-00554	Onpattro™	8,058,069	9-Jan-19	Moderna Therapeutics, Inc.	Arbutus Biopharma Corp.	Instituted	Pending	N/A
IPR2019-00565	ddSEQ™ products	9,695,468	15-Jan-19	Bio-Rad Laboratories, Inc.	10X Genomics, Inc.	Denied	N/A	N/A
IPR2019-00566	ddSEQ™ products	9,695,468	15-Jan-19	Bio-Rad Laboratories, Inc.	10X Genomics, Inc.	Denied	N/A	N/A
IPR2019-00567	ddSEQ™ products	9,689,024	15-Jan-19	Bio-Rad Laboratories, Inc.	10X Genomics, Inc.	Denied	N/A	N/A
IPR2019-00568	ddSEQ™ products	9,856,530	15-Jan-19	Bio-Rad Laboratories, Inc.	10X Genomics, Inc.	Denied	N/A	N/A
IPR2019-00577		8,993,300	23-Jan-19	AB Enzymes, Inc.; Abitec Corp.; AB Vista, Inc.; et al.	Cornell Research Foundation, Inc.	Instituted	Pending	N/A
IPR2019-00578		8,455,232	23-Jan-19	AB Enzymes, Inc.; Abitec Corp.; AB Vista, Inc.; et al.	Cornell Research Foundation, Inc.	Instituted	Pending	N/A
IPR2019-00579		7,829,318	23-Jan-19	AB Enzymes, Inc.; Abitec Corp.; AB Vista, Inc.; et al.	Cornell Research Foundation, Inc.	Instituted	Pending	N/A
IPR2019-00580		7,312,063	23-Jan-19	AB Enzymes, Inc.; Abitec Corp.; AB Vista, Inc.; et al.	Cornell Research Foundation, Inc.	Instituted	Pending	N/A
IPR2019-00581		7,026,150	23-Jan-19	AB Enzymes, Inc.; Abitec Corp.; AB Vista, Inc.; et al.	Cornell Research Foundation, Inc.	Instituted	Pending	N/A
IPR2019-00582		6,451,572	23-Jan-19	AB Enzymes, Inc.; Abitec Corp.; AB Vista, Inc.; et al.	Cornell Research Foundation, Inc.	Instituted	Pending	N/A
IPR2019-00634		9,840,743	1-Feb-19	Roche Holding Ltd.; Roche Holdins, Inc.; et al.	Guardant Health, Inc.	Instituted	Pending	N/A
IPR2019-00636		9,902,992	1-Feb-19	Roche Holding Ltd.; Roche Holdins, Inc.; et al.	Guardant Health, Inc.	Denied	N/A	N/A
IPR2019-00637		9,902,992	1-Feb-19	Roche Holding Ltd.; Roche Holdins, Inc.; et al.	Guardant Health, Inc.	Denied	N/A	N/A
IPR2019-00652		9,834,822	1-Feb-19	Roche Holding Ltd.; Roche Holdins, Inc.; et al.	Guardant Health, Inc.	Instituted	Pending	N/A

IPR2019-00653		9,834,822	1-Feb-19	Roche Holding Ltd.; Roche Holdins, Inc.; et al.	Guardant Health, Inc.	Denied	N/A	N/A
IPR2019-00685	Narcan®	9,211,253	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.	Instituted	Pending	N/A
IPR2019-00686	Narcan®	9,211,253	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.	Denied	N/A	N/A
IPR2019-00687	Narcan®	9,211,253	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.	Denied	N/A	N/A
IPR2019-00688	Narcan®	9,468,747	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.	Instituted	Pending	N/A
IPR2019-00689	Narcan®	9,468,747	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.	Denied	N/A	N/A
IPR2019-00690	Narcan®	9,468,747	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.	Denied	N/A	N/A
IPR2019-00691	Narcan®	9,561,177	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.; Adapt Pharma Limited	Denied	N/A	N/A
IPR2019-00692	Narcan®	9,561,177	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.; Adapt Pharma Limited	Denied	N/A	N/A

IPR2019-00693	Narcan®	9,561,177	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.; Adapt Pharma Limited	Denied	N/A	N/A
IPR2019-00694	Narcan®	9,629,965	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.	Instituted	Pending	N/A
IPR2019-00695	Narcan®	9,629,965	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.	Denied	N/A	N/A
IPR2019-00696	Narcan®	9,629,965	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.	Denied	N/A	N/A
IPR2019-00697	Narcan®	9,775,838	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.; Adapt Pharma Limited	Denied	N/A	N/A
IPR2019-00698	Narcan®	9,775,838	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.; Adapt Pharma Limited	Denied	N/A	N/A
IPR2019-00699	Narcan®	9,775,838	19-Feb-19	Burford Capital Ltd.; Nalox-1 Pharmaceuticals, LLC; BCIM PIII Holdings, LLC.; Burford Capital Ireland DAC; et al.	Opiant Pharmaceuticals, Inc.; Adapt Pharma Limited	Denied	N/A	N/A
IPR2019-00738		8,409,862	25-Feb-19	Laboratory Corporation (of America)	Quest Diagnostics Investments LLC	Instituted	Pending	N/A
IPR2019-00739	Soliris®	9,725,504	28-Feb-19	Amgen Inc.	Alexion Pharmaceuticals	Instituted	Pending	N/A
IPR2019-00740	Soliris®	9,718,880	28-Feb-19	Amgen Inc.	Alexion Pharmaceuticals	Instituted	Pending	N/A
IPR2019-00741	Soliris®	9,732,149	28-Feb-19	Amgen Inc.	Alexion Pharmaceuticals	Instituted	Pending	N/A
IPR2019-00789	Tecfidera®	8,399,514	5-Mar-19	Sawai USA, Inc.; Stason Pharmaceuticals, Inc. et al.	Biogen MA Inc.	Instituted	Pending	N/A

IPR2019-00791		8,940,878	7-Mar-19	Amneal Pharmaceuticals LLC; Amneal Pharmaceuticals, Inc.;	Kashiv BioSciences, LLC	Amgen Inc.	Instituted	Pending	N/A
IPR2019-00797		9,643,997	7-Mar-19	Amneal Pharmaceuticals LLC; Amneal Pharmaceuticals, Inc.;	Kashiv BioSciences, LLC	Amgen Inc.	Instituted	Pending	N/A
IPR2019-00865	Imbruvica®	9,795,604	21-Mar-19	Lek Pharmaceuticals d.d. Sandoz, Inc.		Pharmacyclics LLC	Instituted	Pending	N/A
IPR2019-00867		9,428,740	21-Mar-19	Reactive Surfaces Ltd., LLP		Toyota Motor Corp., Toyota Jidosha Kabushiki Kaisha	Denied	N/A	N/A
IPR2019-00971		9,856,287	14-Apr-19	Fresenius Kabi USA, LLC; Fresenius Kabi SwissBioSim GmbH		Amgen, Inc. and Amgen Manufacturing Ltd.	Denied	N/A	N/A
IPR2019-01010		10,035,973	1-May-19	Danisco USA Inc.		Novozymes A/S	Instituted	Pending	N/A
IPR2019-01017	Stevia	9,243,273	25-Apr-19	Conagen Inc.; SweeGen, Inc.;	Phyto Tech Corp. DBA Blue California	PureCircle USA Inc.; PureCircle Sdn Bhd	Denied	N/A	N/A
IPR2019-01021	Epinephrine	9,283,197	26-Apr-19	Adamis Pharmaceuticals Corp.		Belcher Pharmaceuticals, LLC	N/A	Settled pre-institution	N/A
IPR2019-01027		9,422,345	6-May-19	Pfenex Inc.		GlaxoSmithKline Biologicals S.A.	Denied	N/A	N/A
IPR2019-01028		9,422,345	6-May-19	Pfenex Inc.		GlaxoSmithKline Biologicals S.A.	Instituted	Pending	N/A
IPR2019-01086	Eylea®; Zaltrap®	5,688,688	14-May-19	Regeneron Pharmaceuticals, Inc.		Grifols Worldwide Operations Ltd; Novartis Vaccines and Diagnostics, Inc.	N/A	Settled pre-institution	N/A
IPR2019-01095	Aczone®	9,517,219	7-Jun-19	DPT Labs., Ltd.; Mylan N.V.;	Mylan, Inc.; et al.	Almirall, LLC	Instituted	Pending	N/A
IPR2019-01141		6,613,356	3-Jun-19	New U Life Corporation		VND Butyrate, LLC	Instituted	Pending	N/A
IPR2019-01142		8,431,549	14-Jun-19	Pharmacosmos A/S		American Regent, Inc.	Denied	N/A	N/A
IPR2019-01183		9,643,997	8-Jun-19	Fresenius Kabi SwissBioSim GmbH; Fresenius Kabi Deutschland GmbH; et al.		Amgen Inc.	Instituted	Pending	N/A
IPR2019-01201		8,682,592	13-Jun-19	Illumina, Inc.		Natera, Inc.	Instituted	Pending	N/A
IPR2019-01392		7,026,440	25-Jul-19	NOF Corporation		Nektar Therapeutics	Denied	N/A	N/A
IPR2019-01394		7,026,440	25-Jul-19	NOF Corporation		Nektar Therapeutics	Instituted	Pending	N/A
IPR2019-01395		7,872,072	25-Jul-19	NOF Corporation		Nektar Therapeutics	Denied	N/A	N/A
IPR2019-01396		8,809,453	25-Jul-19	NOF Corporation		Nektar Therapeutics	Denied	N/A	N/A

IPR2019-01397	9,187,569	25-Jul-19	NOF Corporation	Nektar Therapeutics	Instituted	Pending	N/A	
IPR2019-01398	8,273,833	25-Jul-19	NOF Corporation	Nektar Therapeutics	Instituted	Pending	N/A	
IPR2019-01446	9,913,853	1-Aug-19	Nevakar, Inc.; Leiutis Pharmaceuticals Pvt. Ltd.	Cipla Limited	Instituted	Pending	N/A	
IPR2019-01453	9,044,509	21-Aug-19	Gilead Sciences, Inc.	USA, as represented by the Dept. of Health and Human Services	Denied	Pending	N/A	
IPR2019-01454	9,578,333	21-Aug-19	Gilead Sciences, Inc.	USA, as represented by the Dept. of Health and Human Services	Denied	Pending	N/A	
IPR2019-01455	9,937,191	23-Aug-19	Gilead Sciences, Inc.	USA, as represented by the Dept. of Health and Human Services	Denied	Pending	N/A	
IPR2019-01456	10,335,423	23-Aug-19	Gilead Sciences, Inc.	USA, as represented by the Dept. of Health and Human Services	Denied	Pending	N/A	
IPR2019-01478	9,422,345	9-Aug-19	Pfenex Inc.	GlaxoSmithKline Biologicals S.A.	Denied	N/A	N/A	
IPR2019-01480	8,715,669	12-Aug-19	UCB, Inc.	NovImmune S.A.	N/A	Settled pre-institution	N/A	
IPR2019-01481	8,771,697	12-Aug-19	UCB, Inc.	NovImmune S.A.	N/A	Settled pre-institution	N/A	
IPR2019-01493	7,998,708	15-Aug-19	NeuMoDx Molecular, Inc.; QuiGen N.V.; Qiagen North American Holdings Inc.	HandyLab, Inc.	Instituted	Pending	N/A	
IPR2019-01494	8,323,900	15-Aug-19	NeuMoDx Molecular, Inc.; QuiGen N.V.; Qiagen North American Holdings Inc.	HandyLab, Inc.	Instituted	Pending	N/A	
IPR2019-01497	9,723,842	15-Aug-19	Sherwin-Williams Co.	Arch Chemicals, Inc.	N/A	Settled pre-institution	N/A	
IPR2019-01498	9,723,842	15-Aug-19	Sherwin-Williams Co.	Arch Chemicals, Inc.	N/A	Settled pre-institution	N/A	
IPR2019-01499	9,717,250	15-Aug-19	Sherwin-Williams Co.	Arch Chemicals, Inc.	N/A	Settled pre-institution	N/A	
IPR2019-01505	Juvéderm®	8,450,475	3-Sep-19	Prollenium US Inc.; Prollenium Medical Technologies, Inc.	Allergan Industrie SAS	N/A	Pending	N/A
IPR2019-01506	Juvéderm®	8,357,795	20-Sep-19	Prollenium US Inc.; Prollenium Medical Technologies, Inc.	Allergan Industrie SAS	N/A	Pending	N/A
IPR2019-01508	Juvéderm®	9,238,013	23-Aug-19	Prollenium US Inc.; Prollenium Medical Technologies, Inc.	Allergan Industrie SAS	N/A	Pending	N/A
IPR2019-01509	Juvéderm®	9,358,322	3-Sep-19	Prollenium US Inc.; Prollenium Medical Technologies, Inc.	Allergan Industrie SAS	N/A	Pending	N/A
IPR2019-01577	9,505,827	20-Sep-19	Regeneron Pharmaceuticals, Inc.	Kymab Ltd.	N/A	Pending	N/A	

IPR2019-01578		9,434,782	20-Sep-19	Regeneron Pharmaceuticals, Inc.	Kymab Ltd.	N/A	Pending	N/A
IPR2019-01579		9,447,177	20-Sep-19	Regeneron Pharmaceuticals, Inc.	Kymab Ltd.	N/A	Pending	N/A
IPR2019-01580		10,064,398	20-Sep-19	Regeneron Pharmaceuticals, Inc.	Kymab Ltd.	N/A	Pending	N/A
IPR2019-01617	Juvéderm®	8,822,676	16-Sep-19	Prollenium US Inc.; Prollenium Medical Technologies, Inc.	Allergan Industrie SAS	N/A	Pending	N/A
IPR2019-01632	Juvéderm®	8,357,795	20-Sep-19	Prollenium US Inc.; Prollenium Medical Technologies, Inc.	Allergan Industrie SAS	N/A	Pending	N/A