

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BLUEBIRD BIO, INC.
Petitioner

v.

SLOAN KETTERING INSTITUTE FOR CANCER RESEARCH,
Patent Owner

Case No. IPR2023-00070
Patent No. 7,541,179

PETITIONER'S CURRENT LIST OF EXHIBITS
(as of June 8, 2023)

LIST OF EXHIBITS

Exhibit	Document	Filed
1001	U.S. Patent No. 7,541,179 to Sadelain <i>et al.</i> (“the ’179 patent”)	X
1002	Declaration of Jörg Bungert, Ph.D.	X
1003	Curriculum Vitae of Jörg Bungert, Ph.D.	X
1004	May, “Therapeutic Hemoglobin Synthesis in Beta-Thalassemic Mice Expressing Lentivirus-Encoded Human Beta-Globin,” Cornell University (2001) (“the <i>May Thesis</i> ”)	X
1005	May, <i>et al.</i> , “Therapeutic Haemoglobin Synthesis in β -Thalassaemic Mice Expressing Lentivirus-Encoded Human β -globin,” <i>Nature</i> , 406:82-86 (2000) (“the <i>May Article</i> ”)	X
1006	May, <i>et al.</i> , “Lentiviral-Mediated Transfer of the Human β -Globin Gene and Large Locus Control Region Elements Permit Sustained Production of Therapeutic Levels of β -Globin in Long-Term Bone Marrow Chimeras,” <i>Mol. Therapy</i> , 1(5):S248-49 (2000) (“the <i>May Abstract</i> ”)	X
1007	Perutz, <i>et al.</i> , “Hemoglobin Structure and Respiratory Transport,” <i>Sci. Am.</i> , 239(6): 92-125 (1978)	X
1008	Thein & Rochette, “Disorders of Hemoglobin Structure and Synthesis,” <i>in Principles of Mol. Med.</i> 179 (Jameson, ed., 1998)	X
1009	Bank, <i>et. al.</i> , “Disorders of Human Hemoglobin,” <i>Science</i> , 207:486-93 (1980)	X

Exhibit	Document	Filed
1010	He & Russell, "Expression, Purification, and Characterization of Human Hemoglobins Gower-I ($\zeta_2\varepsilon_2$), Gower-2 ($\alpha_2\varepsilon_2$), and Portland-2 ($\zeta_2\beta_2$) Assembled in Complex Transgenic-Knockout Mice, <i>Blood</i> , 97(4):1099-1105 (2001)	X
1011	Bunn, "Pathogenesis and Treatment of Sickle Cell Disease," <i>N. Engl. J. Med.</i> , 337(11):762-69 (1997)	X
1012	Hardison, <i>et al.</i> , "Locus Control Regions of Mammalian β -globin Gene Clusters: Combining Phylogenetic Analyses and Experimental Results to Gain Function Insights, <i>Gene</i> , 205:73-94 (1997)	X
1013	Civin, <i>et al.</i> , "Sustained, Retransplantable, Multilineage Engraftment of Highly Purified Adult Human Bone Marrow Stem Cells <i>In Vivo</i> ," <i>Blood</i> , 88(11):4102-09 (1996)	X
1014	High, "Gene Therapy in Haematology and Oncology," <i>Lancet</i> , 356:S8 (2000)	X
1015	Ellis, <i>et al.</i> , "Evaluation of β -globin Gene Therapy Constructs in Single Copy Transgenic Mice," <i>Nucleic Acids Res.</i> , 25(6):1296-1302 (1997)	X
1016	Li, <i>et al.</i> , "Nucleotide Sequence of 16-Kilobase Pairs of DNA 5' to the Human ε -Globin Gene," <i>J. Biol. Chem.</i> , 260(28):14901-10 (1985)	X
1017	Mishima, <i>et al.</i> , "The DNA Deletion in an Indian $\delta\beta$ -thalassaemia Begins One Kilobase From the $\text{A}\gamma$ Globin Gene and Ends in an L1 Repetitive Sequence," <i>Br. J. Haematol.</i> , 73:375-79 (1989)	X
1018	Vosberg, "Molecular Cloning of DNA: An Introduction Into Techniques and Problems," <i>Hum. Genet.</i> 40(1):1-72 (1977)	X

Exhibit	Document	Filed
1019	Roberts, "Restriction Enzymes and Their Isoschizomers," Nucleic Acids Res., 15(Suppl.):r189-r217 (1987)	X
1020	Zufferey, <i>et al.</i> , "Multiply Attenuated Lentiviral Vector Achieves Efficient Gene Delivery <i>in Vivo</i> ," Nature Biotech., 15:871-75 (1997)	X
1021	Miyoshi, <i>et al.</i> , "Transduction of Human CD34 ⁺ Cells that Mediate Long-Term Engraftment of NOD/SCID Mice by HIV Vectors," Science, 283:682-86 (1999)	X
1022	Sadelain, <i>et al.</i> , "Generation of a High-titer Retroviral Vector Capable of Expressing High Levels of the Human β -Globin Gene," Proc. Natl. Acad. Sci. USA, 92:6728-32 (1995)	X
1023	Bouhassira, <i>et al.</i> , "Transcriptional Behavior of LCR Enhancer Elements Integrated at the Same Chromosomal Locus by Recombinase-Mediated Cassette Exchange," Blood 90(9):3332-44 (1997)	X
1024	Fraser, <i>et al.</i> , "Each Hypersensitive Site of the Human β -Globin Locus Control Regions Confers a Different Developmental Pattern of Expression on the Globin Genes," Genes Dev., 7:106-113 (1993)	X
1025	Engel, "Developmental Regulation of Human β -Globin Gene Transcription: A Switch of Loyalties?," Trend. Genet., 9(9):304-09 (1993)	X
1026	Roberts & Macelis, "REBASE – Restriction Enzymes and Methylases," Nucleic Acids Res., 26(1):338-350 (1998)	X
1027	Roberts & Macelis, "REBASE – Restriction Enzymes and Methylases," Nucleic Acids Res., 27(1):312-13 (1999)	X
1028	Roberts & Macelis, "REBASE – Restriction Enzymes and Methylases," Nucleic Acids Res., 28(1):306-07 (2000)	X

Exhibit	Document	Filed
1029	Roberts & Macelis, "REBASE – Restriction Enzymes and Methylases," <i>Nucleic Acids Res.</i> , 29(1):268-69 (2001)	X
1030	Sequence Manipulation Suite (last visited October 11, 2022) (Website)	X
1031	Restriction Mapper, April 20, 2001 Wayback Machine Capture (last visited October 11, 2022) (Website)	X
1032	Prosecution History of the '179 Patent (U.S. Patent Application No. 10/188,221)	X
1033	<i>Reserved</i>	
1034	U.S. Provisional Application 60/301,861 to Sadelain	X
1035	U.S. Provisional Application 60/302,852 to Sadelain	X
1036	Declaration by Ingrid Hsieh-Yee, Ph.D.	X
1037	SciMago, Nature (last visited October 11, 2022) (Website)	X
1038	SciMago, Molecular Therapy (last visited October 11, 2022) (Website)	X
1039	<i>Reserved</i>	
1040	Steele, "Editorial," <i>Mol. Therapy</i> , 1(5):S1 (2000)	X
1041	Glorioso, "Highlights from the Third Annual ASGT Meeting," <i>Mol. Therapy</i> , 2(2):96-100 (2000)	X
1042	"Author Index," <i>Mol. Therapy</i> , 1(5):S345-61 (2000)	X
1043	<i>San Rocco Therapeutics, LLC v. bluebird bio, Inc., et al.</i> , C.A. No. 21-1478-RGA, D.I. 75 (D. Del. July 26, 2022)	X
1044	<i>San Rocco Therapeutics, LLC v. bluebird bio, Inc., et al.</i> , C.A. No. 21-1478-RGA, D.I. 76 (D. Del. July 26, 2022)	X

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