RECORDATION FORM COVER SH PATENTS ONLY			SHEET U.S. Department of Commerce Patent and Trademark Office Attorney Docket No. 07680.0064-01000			
To the Director of the U.S. Patent and Trademark Office:  Please record the attached original documents or copy thereof.  Mail Stop Assignment Recordation						
Name of conveying party(ies):			<ol><li>Name and address of receiving party(ies):</li></ol>			
Tracey LODIE Michele YOUD Ross TUBO Scott EISENBEIS			Name: Genzyme Corporation			
Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No			Internal Address:			
3. Nature of conveyance:			Street Address: 500 Kendall Street			
	☐ Merger	City:	Cambridge	4		
Security Agreement	☐ Change of Name	State:	Massachusetts	Zip Code:	02142	
Joint Research Agreement	Government Interest Assignment	Additional name(s) & Address(es) attached?				
Executive Order 9494, Confirmatory License	Other:		☐ Yes			
June 18	, 2008; June 17, 2008; , 2008; and June 18, 2008	·		A A B PORTE BUT DESCRIPTION OF THE		
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application:						
A. Patent Application Number(s):			Patent Number(s):			
13/193,469						
	Additional numbers attached?	☐ Yes	⊠ No			
Name and address of party to whom correspondence concerning document should be mailed:			Total number of applications and patents involved:     1			
Name: Leslie A. McDonell	(202) 408-4000	7.	Total fee (37 CFR 1.21(h	n) and 3.41):	<b>540</b>	
Internal Address: FINNEGAN, HENDERSON, FARABOW, GARRETT			Enclosed (Please choverpayment to dep	narge deficien osit account 0	cy or credit 6-0916)	
& DUNNER, L.L.P. Street Address: 901 New York Avenue, N.W.			Authorized to be ch	arged to depo	sit account	
City: Washington, [	D.C.					
State:	Zip: 20001-4413	8.	Deposit Account No.: 06	5-0 <u>916</u>		
9. Statement and signat	ure.					
To the best of my knowledge a document.	and belief, the foregoing information is true	and corre	ct and any attached copy i	s a true copy	of the original	
Signed:	Signed: October 16, 2012					
Gigilieu.	Adam M. Breier, Ph.D. Reg. No. 63,718	**************************************		Date		
Total number of pages including cover sheet, attachments and documents: 6						

6/2007

PATENT

700494895 REEL: 029148 FRAME: 0038

Attorney Docket No. 5422 P

## ASSIGNMENT

WHEREAS, We, Tracey Lodie, Michele Youd, Ross Tubo, and Scott Eisenbeis residing respectively at 16B Millers Way, Sutton, MA 01590, 10 Centre Street, Lexington, MA 02421, 208 Wilson Avenue, Quincy, MA 02170 and [INVENTOR ADRESS] have made a new and useful invention described in a national application for Letters Patent of the United States, entitled

## METHOD OF TREATING AUTOIMMUNE DISEASE WITH MESENCHYMAL STEM CELLS

filed on August 9, 2007 in the United States Patent and Trademark Office and having Serial No. 60/954,973 and

WHEREAS, Genzyme Corporation (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts, and having a usual place of business at 500 Kendall Street Cambridge, Massachusetts 02142, U.S.A., desires to acquire our entire right, title and interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern, be it known that for and in consideration of the said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories, and all foreign countries, including but not limited to Canada, in and to any and all said inventions as described in said national application, together with our entire right, title and interest in and to the said national application and all U.S. and foreign applications which correspond to or claim priority therefrom (including any provisional, substitution, divisional, continuation, continuing prosecution or continuation-in-part applications and the like), and all Letters Patent that issue from any of the above, including re-issues, re-examinations, and extensions thereof; said inventions, applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said inventions, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world, including but not limited to Canada, any and all Letters Patent by attorneys and agents of ASSIGNEE'S selection and the right to procure the grant of, license, and enforce all such Letters Patent to ASSIGNEE for its own name as ASSIGNEE of our entire right, title and interest therein;

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Assignment U.S. Serial No. 60/954,973 Page 2

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid inventions, applications and Letters Patent to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, including but not limited to Canada, and the execution of said aforementioned provisional, substitution, divisional, continuation, continuing prosecution or continuation-inpart applications, and all Letters Patent that issue from any of the above, including re-issues, re-examinations, and extensions thereof, and preliminary or other statements and the giving of testimony in any interference or any other legal proceeding in which said invention or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives;

AND, we hereby further Covenant with said ASSIGNEE that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us, and that full right to convey the same as herein expressed is possessed by us.

Signature Inventor	Tracey Lodie Date 6-19-08
	of MASSACHUSETTS )  One of MASSACHUSETTS )  One of MASSACHUSETTS )
County of	Middlesex ) ss
On th undersigned	is 19th day of June , 20 08 before me, the notary public, personally appeared Tracey Leade,  personally known to me, or proved to me through satisfactory evidence of identification, which was
(SEAL)	Blu lensa Jean Hages_ Notary Public

My commission expires June 25, 2010

My commission expires 10/04/2019

Assignment U.S. Serial No. 60/954,973 Page 3

Signature Inventor Michele Yourd

Commonwealth of MASSACHUSETTS

SS

County of Joseph SS

On this 199 day of Joseph Joseph Joseph SS

undersigned notary public, personally appeared Joseph Joseph Joseph SS

personally known to me, or proved to me through satisfactory evidence of identification, which was

(SEAL)

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HETTY ORRINGER
Notary Public
Commonwealth of Massachusetts
My Commission Expires
March 8, 2013

My commission expires 3/8/2013

Assignment U.S. Serial No. 60/954,973 Page 5

Signature Inventor	Scott Eisenbeis  Date Tune 18, 2008
	th of MASSACHUSETTS ) ) SS
On thi undersigned n	day of June , 2008, before me, the otary public, personally appeared Scott Elsewbers,  personally known to me, or proved to me through satisfactory evidence of identification, which was
(SEAL)	Actualisme Notary Public

HETTY ORRINGER
Notery Public
Commonwealth of Massachusetts
My Commission Expires
March 8, 2013

My commission expires 3/8/2013

PATENT REEL: 029148 FRAME: 0043