

<b>PATENT ASSIGNMENT COVER SHEET</b>
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EPAS ID: PAT5899775

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ABEONA THERAPEUTICS INC.	12/18/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	AMAG PHARMACEUTICALS, INC.
<b>Street Address:</b>	1100 WINTER STREET
<b>City:</b>	WALTHAM
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	02451
<b>PROPERTY NUMBERS Total: 3</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	60269049
<b>Patent Number:</b>	7547433
<b>Patent Number:</b>	7544348
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(781)622-5933
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
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<b>ATTORNEY DOCKET NUMBER:</b>	10089-33605
<b>NAME OF SUBMITTER:</b>	STANLEY F. CHALVIRE
<b>SIGNATURE:</b>	/Stanley F. Chalvire/
<b>DATE SIGNED:</b>	01/08/2020
<b>Total Attachments: 3</b>	
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## PATENT RIGHTS ASSIGNMENT

WHEREAS, **ABEONA THERAPEUTICS INC.** (hereinafter "ASSIGNOR"), a corporation organized and existing under the laws of the state of Delaware, has acquired rights in the subject matter disclosed in certain United States patent applications and/or granted Letters Patent, as indicated in **Exhibit A** attached hereto (hereinafter "PATENT RIGHTS"); and

WHEREAS, **AMAG PHARMACEUTICALS, INC.** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the state of Delaware, and having principal offices at 1100 Winter Street, Waltham, Massachusetts 02451, U.S.A., desires to acquire an interest therein in accordance with agreements duly entered into with ASSIGNOR;

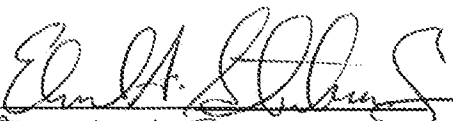
NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR has sold, assigned and transferred and by these presents does hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, all right, title and interest in and throughout the United States of America and its territories, in and to said PATENT RIGHTS, together with all right, title and interest in and to said PATENT RIGHTS and such Letters Patent issued or as may issue in whole or in part thereon, and any reissue or continuation applications thereof, as well as any Letters Patent issued or issuing in whole or in part thereon, and including the right to claim priority under any applicable statute, treaty or convention based on said PATENT RIGHTS; said PATENT RIGHTS to be held and enjoyed to the full end of their term by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives. ASSIGNOR hereby conveys all rights arising under or pursuant to any and all agreements, treaties or laws relating to the protection of industrial property by filing any applications for Letters Patent containing said PATENT RIGHTS, all choses in action pertaining to the applications or Letters Patent including the right to sue for and collect damages and other recoveries for past infringement thereof, all rights to initiate proceedings before government and administrative bodies, and all files, records and other materials arising from the prosecution, exploitation, or defense of rights and registrations pertaining to the applications or Letters Patent. ASSIGNOR hereby acknowledges that this assignment, being of all rights, title and interests in and to said PATENT RIGHTS, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, ASSIGNOR hereby further agrees for itself and its executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may reasonably be deemed necessary to secure fully the aforesaid PATENT RIGHTS to said ASSIGNEE, its successors, assigns and legal representatives, without charge to ASSIGNEE, its successors, assigns, and legal representatives, but at the cost and expense of ASSIGNEE, its successors, assigns, and legal representatives;

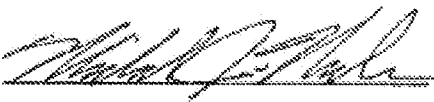
AND, ASSIGNOR does hereby authorize and request the Commissioner of Patents of the United States and/or any foreign patent offices to issue such Letters Patent as shall be granted

upon said PATENT RIGHTS to said ASSIGNEE, its successors, assigns, and legal representatives.

Assignor:  
ABEONA THERAPEUTICS INC.

Signature:   
Name: EDWARD A. SUPONKO  
Title: SVP, General Counsel

Assignee:  
AMAG PHARMACEUTICALS, INC.

Signature:   
Name: Michael Nesler  
Title: Director, IP and Legal Affairs

**Exhibit A**

<b>U.S. Application No.</b>	<b>Filing Date</b>	<b>Patent No.</b>	<b>Status</b>
60/269,049	02-15-2001	N/A	Expired Priority Document
10/077,459	02-15-2002	7,547,433	Granted
10/219,634	08-15-2002	7,544,348	Granted