

## PATENT ASSIGNMENT COVER SHEET

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|---|---|-----------------------|
| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT  |                       |
| <b>NATURE OF CONVEYANCE:</b>  | ASSIGNMENT  |                       |
| <b>CONVEYING PARTY DATA</b>   |   |                       |
|   | <b>Name</b>   | <b>Execution Date</b> |
|   | UTPAL PAJVANI   | 08/13/2018            |
| <b>RECEIVING PARTY DATA</b>   |   |                       |
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| <b>PROPERTY NUMBERS Total: 1</b>  |   |                       |
| <b>Property Type</b>  | <b>Number</b>   |                       |
| <b>Application Number:</b>  | 15768701  |                       |
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| <b>ATTORNEY DOCKET NUMBER:</b>  | 88081-PCT-US/JPW/CAE  |                       |
| <b>NAME OF SUBMITTER:</b>   | JAMES T. CORCORAN   |                       |
| <b>SIGNATURE:</b>   | 88081-PCT-US/JTC/for John P. White                          |                       |
| <b>DATE SIGNED:</b>   | 09/11/2018  |                       |
| <b>Total Attachments: 2</b>   |   |                       |
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| source=180911_88081-PCT-US_Assignment_CAE#page2.tif   |   |                       |

***Assignment of Non-Provisional Application***

*In consideration of One Dollar (\$1.00), and other good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned,*

Utpal Pajvani of 462 Golf Course Drive, Leonia, NJ 07605, U.S.A.  
Effective October 14, 2016

***Hereby sell, assign and transfer*** to The Trustees of Columbia University in the City of New York, a not for profit corporation of the State of New York, having a place of business at 412 Low Memorial Library, 535 W. 116<sup>th</sup> St., in the County of New York and State of New York, 10027, its successors, assigns and legal representatives, the entire right, title and interest for all countries, in and to any and all inventions which are disclosed and claimed, and any and all inventions which are disclosed but not claimed, in the application for United States Patent, which has been executed by the undersigned on August 13, 2018 and is entitled

JAG1 EXPRESSION PREDICTS THERAPEUTIC RESPONSE IN NASH  
(U.S. Application No. 15/768,701, filed April 16, 2018, §371 national stage of PCT International Application No. PCT/US2016/057166, filed October 14, 2016, claiming the benefit of U.S. Provisional Application No. 62/242,888, filed October 16, 2015)

*and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other applications for U.S. Letters Patent or other related property rights in any and all foreign countries which have been or shall be filed on any of said inventions disclosed in said application; and in and to all original and reissued patents or related foreign documents which have been or shall be issued on said inventions;*

***Authorize and request*** the Commissioner for Patents of the United States to issue to said Assignee, the corporation above named, its successors, assigns and legal representatives, in accordance with this assignment, any and all United States Letters Patent on said inventions or any of them disclosed in said application;

*Agree that said Assignee may apply for and receive foreign Letters Patent or rights of any other kind for said inventions, or any of them; and may claim, in applications for said foreign Letters Patent or other rights, the priority of the aforesaid United States patent application under the provisions of the International Convention of 1883 and later modifications thereof, under the Patent Cooperation Treaty, under the European Patent Convention or under any other available international agreement; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned or the undersigned's executors or administrators will, for the United States and all foreign countries, execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications or other documents on any and all said inventions; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns and representatives, all facts known and documents available to the undersigned relating to said inventions and the history thereof; testify in all legal proceedings; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said inventions and for vesting title to said inventions and all applications for patents or related foreign rights and all patents on said inventions, in said Assignee, its successors, assigns and legal representatives; and*

*Covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.*

Date: 8/13/9  
 Witness: Thomas Kolar [signature]  
Thomas Kolar [printed name]  
1150 St Nicholas Ln 234 [address]  
NY NY 10032

Utpal Pajvani [Signature] [LS]