

J.P. Morgan Securities LLC  
383 Madison Avenue  
New York, New York 10179

Goldman Sachs & Co. LLC  
200 West Street  
New York, New York 10282-2198

Morgan Stanley & Co. LLC  
1585 Broadway  
New York, New York 10036

Jefferies LLC  
520 Madison Avenue  
New York, New York 10022

October 17, 2022

***VIA EDGAR***

U.S. Securities and Exchange Commission  
Division of Corporation Finance  
Office of Life Sciences  
100 F Street, N.E.  
Washington, D.C. 20549

Attn: Dillon Hagius  
Tim Buchmiller  
Tracey Houser  
Angela Connell

**Re: Prime Medicine, Inc.  
Registration Statement on Form S-1 (File No. 333-267579)  
Request for Acceleration of Effective Date**

Ladies and Gentlemen:

In accordance with Rule 461 under the Securities Act of 1933, as amended (the “Act”), we, as representatives of the several underwriters, hereby join in the request of Prime Medicine, Inc. (the “Company”) for acceleration of the effective date of the above-referenced Registration Statement on Form S-1, as amended, so that it becomes effective at 4:00 p.m. Eastern time on October 19, 2022, or as soon thereafter as practicable, or at such other time as the Company or its outside counsel, Goodwin Procter LLP, request by telephone that such Registration Statement be declared effective.

Pursuant to Rule 460 under the Act, we, as representatives of the several underwriters, wish to advise you that there will be distributed to each underwriter or dealer, who is reasonably anticipated to participate in the distribution of the security, as many copies of the preliminary prospectus as appears to be reasonable to secure adequate distribution of the preliminary prospectus.

We, the undersigned, as representatives of the several underwriters, have complied and will comply, and we have been informed by the participating underwriters that they have complied and will comply, with the requirements of Rule 15c2-8 under the Securities Exchange Act of 1934, as amended.

Very truly yours,

J.P. MORGAN SECURITIES LLC  
GOLDMAN SACHS & CO. LLC  
MORGAN STANLEY & CO. LLC  
JEFFERIES LLC

As representatives of the several underwriters listed in Schedule 1 to  
the Underwriting Agreement

J.P. MORGAN SECURITIES LLC

By: /s/ David Ke  
Name: David Ke  
Title: Managing Director

GOLDMAN SACHS & CO. LLC

By: /s/ Dan Cocks  
Name: Dan Cocks  
Title: Managing Director

MORGAN STANLEY & CO. LLC

By: /s/ Sam Jones  
Name: Sam Jones  
Title: Executive Director

JEFFERIES LLC

By: /s/ Matthew Kim  
Name: Matthew Kim  
Title: Managing Director

*[Signature Page to Underwriters' Acceleration Request]*