

ASP Isotopes Inc.
1101 Pennsylvania Avenue NW, Suite 300
Washington, DC 20004

May 17, 2024

VIA EDGAR

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Washington, D.C. 20549
Attention: Juan Grana

**Re: ASP Isotopes Inc.
Registration Statement on Form S-3
File No. 333-279267**

**Acceleration Request
Requested Date: Tuesday, May 21, 2024
Requested Time: 4:00 P.M. Eastern Time**

Ladies and Gentlemen:

Pursuant to Rule 461 under the Securities Act of 1933, as amended, ASP Isotopes Inc. hereby requests that the Securities and Exchange Commission accelerate the effectiveness of the above-referenced Registration Statement to 4:00 p.m., Eastern Time, on May 21, 2024, or as soon thereafter as practicable.

Please confirm once the Registration Statement has been declared effective by calling Donald Ainscow of Blank Rome LLP at (972) 850-1474. Please also contact him should you have any questions.

Very truly yours,

ASP ISOTOPES INC.

/s/ Paul Mann

Paul Mann

Chief Executive Officer

cc: Donald Ainscow, Esq.
Blank Rome LLP