UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

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SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant \boxtimes Filed by a Party other than the Registrant \square Check the appropriate box:

Preliminary Proxy Statement

□ Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

- Definitive Proxy Statement
- Definitive Additional Materials
- □ Soliciting Material under §240.14a-12

ASP Isotopes Inc.

(Name of Registrant as Specified In Its Charter) (Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- ☑ No fee required.
- □ Fee paid previously with preliminary materials.

Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(1) and 0-11.



1101 Pennsylvania Avenue NW, Suite 300 Washington, DC 20004

NOTICE OF 2023 ANNUAL MEETING OF STOCKHOLDERS AND PROXY STATEMENT

Dear Stockholder:

The Annual Meeting of Stockholders (the "Annual Meeting") of ASP Isotopes Inc. (the "Company") will be held on Monday, December 4, 2023, at 10:00 a.m., Eastern time. The Annual Meeting will be held in a virtual format via live webcast over the internet. You will be able to join the Annual Meeting and vote and submit your questions online during the Annual Meeting by visiting <u>https://web.lumiagm.com/253072518</u>. We have designed the virtual Annual Meeting to ensure that stockholders are afforded the same opportunity to participate as they would have at an in-person meeting, including the right to vote and ask questions through the virtual meeting platform. Reference to "in person" attendance or voting in our proxy materials refers, therefore, to attending or voting at the Annual Meeting virtually.

The Annual Meeting will take place for the following purposes:

- 1. To elect two directors to serve as Class I directors for a three-year term to expire at the 2026 annual meeting of stockholders;
- To consider and vote upon the ratification of the selection of EisnerAmper LLP as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2023; and
- 3. To transact such other business as may be properly brought before the annual meeting or any adjournment or postponement thereof.

The foregoing items of business are more fully described in the attached proxy statement, which forms a part of this notice and is incorporated herein by reference. Our board of directors has fixed the close of business on October 23, 2023 as the Record Date for the determination of stockholders entitled to notice of and to vote at the Annual Meeting or any adjournment or postponement thereof.

Your vote is important. Whether or not you expect to attend the Annual Meeting, we encourage you to read the proxy statement accompanying this notice and submit your proxy or voting instructions as soon as possible. For specific instructions on how to vote your shares, please refer to the instructions in the section entitled "General Information About the Annual Meeting and Voting" beginning on page 1 of the proxy statement accompanying this notice. If you plan to attend our Annual Meeting and wish to vote your shares at the meeting, you may do so at any time before the proxy is voted.

All stockholders are cordially invited to attend the meeting.

By Order of the Board of Directors,

Paul E. Mann Chair of the Board

Washington, DC November 1, 2023

Your vote is important. Whether or not you plan to attend the Annual Meeting, we urge you to submit your proxy or voting instructions via the Internet, telephone or mail as soon as possible.

This notice of annual meeting and proxy statement and form of proxy are first being distributed on or about November 3, 2023. The proxy materials and our Annual Report on Form 10-K for the fiscal year ended December 31, 2022 can be accessed as of November 3, 2023 by visiting http://www.astproxyportal.com/ast/27081.

i

TABLE OF CONTENTS

GENERAL INFORMATION ABOUT THE ANNUAL MEETING AND VOTING	1
BOARD OF DIRECTORS AND CORPORATE GOVERNANCE	6
PROPOSAL 1: ELECTION OF DIRECTORS	14
PROPOSAL 2: RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM	15
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT	17
EXECUTIVE OFFICERS	19
EXECUTIVE COMPENSATION AND OTHER INFORMATION	20
CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS	27
STOCKHOLDER PROPOSALS	30
ANNUAL REPORT	31
STOCKHOLDERS SHARING THE SAME ADDRESS	31
OTHER MATTERS	31

ii



1101 Pennsylvania Avenue NW, Suite 300 Washington, DC 20004

PROXY STATEMENT FOR THE 2023 ANNUAL MEETING OF STOCKHOLDERS To Be Held On Monday, December 4, 2023

The board of directors of ASP Isotopes Inc. (the "Company" or "ASPI") is soliciting proxies for use at the 2023 Annual Meeting of Stockholders (the "Annual Meeting") to be held on Monday, December 4, 2023, at 10:00 a.m., Eastern time, and any postponements or adjournments thereof. The Annual Meeting will be held in a virtual format only, via live webcast over the internet. You will be able to join the Annual Meeting and vote and submit your questions online during the Annual Meeting by visiting <u>https://web.lumiagm.com/253072518</u>. We have designed the virtual Annual Meeting to ensure that stockholders are afforded the same opportunity to participate as they would have at an in-person meeting, including the right to vote and ask questions through the virtual meeting platform. Reference to "in person" attendance or voting in our proxy materials refers, therefore, to attending or voting at the Annual Meeting virtually.

GENERAL INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

Why did I receive these proxy materials?

We have furnished these proxy materials to you because our board of directors is soliciting your proxy to vote at the Annual Meeting. This proxy statement summarizes information related to your vote at the Annual Meeting. All stockholders who find it convenient to do so are cordially invited to attend the Annual Meeting. However, you do not need to attend the meeting to vote your shares. Instead, you may simply complete and submit your proxy via phone or the Internet in accordance with the instructions provided on the Notice, or, if you requested a printed copy of the proxy materials, complete, sign and return the proxy card.

We intend to begin mailing our proxy materials and our Annual Report on Form 10-K for the fiscal year ended December 31, 2022 (the "2022 Annual Report") on or about November 3, 2023 to all stockholders of record as of October 23, 2023 (the "Record Date"). Our 2023 proxy materials and our 2022 Annual Report are also accessible at: *http://www.astproxyportal.com/ast/27081*. Only stockholders who owned our common stock on the Record Date are entitled to vote at the Annual Meeting. On the Record Date, there were 38,448,184 shares of our common stock outstanding. Common stock is our only class of stock entitled to vote.

Why is the meeting being held virtually this year?

We believe that a virtual meeting will provide expanded stockholder access and participation, as well as improved communications. You will be able to join the Annual Meeting and vote and submit questions online during the Annual Meeting by visiting <u>https://web.lumiagm.com/253072518</u> and using the 11-digit control number included on your proxy card or on your vote instruction form provided by your broker, bank or other nominee. Online check-in will be available at the virtual meeting site approximately 15 minutes prior to the beginning of the Annual Meeting.

What am I voting on?

There are two proposals scheduled for a vote:

Proposal 1: To elect two directors to serve as Class I directors for a three-year term.

Proposal 2: To consider and vote upon the ratification of the appointment of EisnerAmper LLP as our independent registered public accounting firm for the year ending December 31, 2023.

How many votes do I have?

Each share of our common stock that you own as of October 23, 2023, entitles you to one vote.

What is the difference between a stockholder of record and a beneficial owner of shares held in street name?

If your shares are registered directly in your name with our registrar and transfer agent, Equiniti Trust Company, LLC ("Equiniti") (formerly American Stock Transfer & Trust Company, LLC), you are considered a *stockholder of record* with respect to those shares and our proxy materials have been made available to you directly by us. If your shares are held in a stock brokerage account, by a bank, broker, or other agent, you are considered the beneficial owner of shares held in *street name* and our proxy materials are being forwarded to you by your bank, broker, or other agent that is considered the owner of record of those shares. As the beneficial owner, you have the right to instruct your bank, broker, or other agent on how to vote your shares. Since a beneficial owner is not the *stockholder of record*, you may not vote your shares in person at the Annual Meeting unless you obtain a "legal proxy" from the broker, bank, trustee or nominee that holds your shares giving you the right to vote the shares at the meeting. If you are a beneficial owner and do not wish to vote in person or you will not be attending the Annual Meeting, you may vote by following the instructions provided by your broker, bank, trustee, or other nominee.

How do I vote by proxy?

With respect to the election of Class I directors, you may either vote "For" or you may "Withhold" your vote for any nominee you specify. With respect to the ratification of the appointment of EisnerAmper LLP as our independent registered public accounting firm, you may vote "For" or "Against" or abstain from voting.

Stockholders of Record: Shares Registered in Your Name

If you are a stockholder of record, there are several ways for you to vote your shares. Whether or not you plan to attend the meeting, we urge you to vote by proxy to ensure that your vote is counted.

- Via the Internet: You may vote at <u>https://web.lumiagm.com/253072518</u>, 24 hours a day, seven days a week by following the Internet voting instructions on your Notice.
- **By Telephone**: You may vote using a touch-tone telephone by calling 1-800-776-9437, 24 hours a day, seven days a week by following the telephone voting instructions on your Notice.
- At the Meeting: To vote by "virtually" attending the Annual Meeting by accessing <u>https://web.lumiagm.com/253072518</u> and selecting the button "I have a Control Number." You will then be directed to a screen where you will enter: (1) the 11-digit control number on the proxy card; and (2) the meeting password "aspi2023". Please note the meeting password is case sensitive. Once you have completed these steps, select the "login" button, which will take you to the annual meeting page ("Meeting Page") where you can vote, submit written questions and listen to the meeting. If you are a stockholder of record and misplaced your 11-digit control number, please call Equiniti at (800) 937-5449.
- By Mail, if You Requested a Printed Copy of Your Proxy Materials: You may vote using your proxy card by completing, signing, dating and returning the proxy card in the self-addressed, postage-paid envelope provided. If you properly complete your proxy card and send it to us in time to vote, your proxy (one of the individuals named on your proxy card) will vote your shares as you have directed. If you sign the proxy card but do not make specific choices, your shares, as permitted, will be voted as recommended by our board of directors. If any other matter is presented at the Annual Meeting, your proxy will vote in accordance with his or her best judgment. As of the date of this proxy statement, we knew of no matters that needed to be acted on at the meeting, other than those discussed in this proxy statement.



Beneficial Owners: Shares Registered in the Name of a Broker or Bank

If you are a beneficial owner of shares registered in the name of your broker, bank or other agent, and requested a printed copy of the proxy materials, you should have received a voting instruction form and voting instructions with these proxy materials from that organization rather than directly from us. Simply complete and mail the voting instruction form to ensure that your vote is counted. You may be eligible to vote your shares electronically over the Internet or by telephone. A large number of banks and brokerage firms offer Internet and telephone voting. If you are a beneficial owner, to vote by "virtually" attending the Annual Meeting, you must obtain a valid proxy from your broker, bank or other agent. Follow the instructions from your broker, bank or other agent included with these proxy materials, or contact that organization to request a proxy form.

May I revoke my proxy?

If you are a *stockholder of record*, if you give us your proxy, you may revoke it at any time before it is exercised. You may revoke your proxy in any one of the three following ways:

- you may grant a new proxy bearing a later date (which automatically revokes the earlier proxy) using any of the methods described above (and until the applicable deadline for each method);
- you may notify our corporate secretary in writing before the Annual Meeting that you have revoked your proxy by mailing a written notice of revocation to the attention of Corporate Secretary, ASP Isotopes Inc., 1101 Pennsylvania Avenue NW, Suite 300, Washington, DC 20004; or
- you may vote in person at the Annual Meeting; however, your virtual attendance at the Annual Meeting alone will not revoke your proxy.

If you own your shares in *street name*, you may change your vote by submitting new voting instructions to your broker, bank, trustee, or nominee following the instructions they provided or, if you have obtained a legal proxy from your broker, bank, trustee, or nominee giving you the right to vote your shares, by attending the Annual Meeting and voting in person at the meeting.

Can I attend and vote at the virtual meeting?

Record Holders: If you were a stockholder of record as of the close of business on October 23, 2023 (i.e., you held your shares in your own name as reflected in the records of our transfer agent, Equiniti Trust Company, LLC ("Equiniti") (formerly American Stock Transfer & Trust Company, LLC)), you can attend the annual meeting by accessing <u>https://web.lumiagm.com/253072518</u> and selecting the button "I have a Control Number." You will then be directed to a screen where you will enter: (1) the 11-digit control number on the proxy card; and (2) the meeting password "aspi2023". Please note the meeting pagesword is case sensitive. Once you have completed these steps, select the "login" button, which will take you to the annual meeting page ("Meeting Page") where you can vote, submit written questions and listen to the meeting. If you are a stockholder of record and misplaced your 11-digit control number, please call Equiniti at (800) 937-5449.

Beneficial Owners: If you were a beneficial owner as of the close of business on October 23, 2023 (i.e., you hold your shares in "street name" through an intermediary, such as a bank, broker or other nominee), you must register in advance to attend the annual meeting. To register, please obtain a legal proxy from the bank, broker or other nominee that is the record holder of your shares and then submit the legal proxy, along with your name and email address, to Equiniti to receive an 11-digit control number that may be used to access the annual meeting site provided above. Any control number that was provided with your proxy materials, likely a 16-digit number, will not provide access to the annual meeting site. Requests for registration and submission of legal proxies should be labeled as "Legal Proxy" and must be received by Equiniti no later than 5 p.m., ET, on May 10, 2023. All such requests should be submitted (1) by email to proxy@equinit.com, (2) by facsimile to (718) 765-8730, or (3) by mail to Equiniti Trust Company, LLC, Attn: Proxy Tabulation Department, 6201 15th Avenue, Brooklyn, NY 11219. Obtaining a legal proxy may take several days and stockholders are advised to register as far in advance as possible. Once you have obtained your 11-digit control number from Equiniti, please follow the steps set forth above for "Record Holders" to attend the annual meeting.

Attending as a Guest: If you are a record holder or beneficial owner and would like to enter the annual meeting as a guest in listen-only mode, go to <u>https://web.lumiagm.com/253072518</u> and select the button "I am a guest." Please note you will not have the ability to ask questions or vote during the meeting if you participate as a guest.

Record holders and beneficial owners should call Equiniti at (800) 937-5449 with any questions about attending the annual meeting. If you encounter any difficulty accessing the annual meeting, please visit https://go.lumiglobal.com/faq for assistance.

Asking Questions: If you are attending the annual meeting as a stockholder of record or beneficial owner who has registered for the meeting, you can ask questions by clicking the messaging icon on the right side of the toolbar appearing at the top of the Meeting Page and then typing and submitting your question.

Voting Shares: If you are attending the annual meeting as a stockholder of record or beneficial owner who has registered for the meeting, you can vote during the meeting by clicking the link "Proxy Voting Site" on the Meeting Page and following the prompts.

What constitutes a quorum?

The presence at the Annual Meeting, in person or by proxy, of holders representing a majority of our outstanding common stock as of October 23, 2023, or approximately 19,224,093 shares, constitutes a quorum at the meeting, permitting us to conduct our business.

What vote is required to approve each proposal?

Proposal 1: Election of Class I Directors. The two nominees who receive the most "For" votes (among votes properly cast in person or by proxy) will be elected.

Proposal 2: Ratification of Independent Registered Public Accounting Firm. The ratification of the appointment of EisnerAmper LLP must receive "For" votes from a majority of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote.

Voting results will be tabulated and certified by the inspector of election appointed for the Annual Meeting.

How will my shares be voted if I do not specify how they should be voted?

If you are a stockholder of record and you indicate when voting on the Internet or by telephone that you wish to vote as recommended by our board of directors, then your shares will be voted at the Annual Meeting in accordance with our board of directors's recommendation on all matters presented for a vote at the Annual Meeting. Similarly, if you requested a printed copy of the proxy materials and sign and return a proxy card but do not indicate how you want to vote your shares for a particular proposal or for all of the proposals, then for any proposal for which you do not so indicate, your shares will be voted in accordance with our board of director's recommendation.

If you are a beneficial owner of shares held in street name and do not provide the organization that holds your shares with specific voting instructions, then, the organization that holds your shares may generally vote your shares in their discretion on "routine" matters but cannot vote on "non-routine" matters. If the organization that holds your shares does not receive instructions from you on how to vote your shares on a non-routine matter, that organization will inform the inspector of election that it does not have the authority to vote on that matter with respect to your shares. This is generally referred to as a "broker non-vote."



What is the effect of withheld votes, abstentions and broker non-votes?

Shares of common stock held by persons attending the Annual Meeting, but not voting, and shares represented by proxies that reflect withheld votes or abstentions as to a particular proposal, will be counted as present for purposes of determining the presence of a quorum. For purposes of determining whether our stockholders have ratified the appointment of EisnerAmper LLP, our independent registered public accounting firm, abstentions will have the same effect as a vote "against" this proposal. With regard to the election of directors, because under our amended and restated bylaws and applicable state law, election is determined by a plurality of votes cast, withheld votes or abstentions will not be counted in determining the outcome of such proposal.

Shares represented by proxies that reflect a broker non-vote will be counted for purposes of determining whether a quorum exists. As discussed above, a broker non-vote occurs when an organization holding shares for a beneficial owner has not received instructions from the beneficial owner and does not have discretionary authority to vote the shares for certain non-routine matters. With regard to the election of directors, which is considered a non-routine matter, broker non-votes will not be counted as votes cast and will have no effect on the result of the vote. However, ratification of the appointment of EisnerAmper LLP is considered a routine matter on which a broker or other nominee has discretionary authority to vote. Accordingly, no broker non-votes will likely result from this proposal.

What if I need assistance with voting or have technical problems regarding the Annual Meeting?

If you have technical difficulties accessing or using the virtual meeting site during the Annual Meeting, you should call the technical support number on the virtual meeting site. The virtual meeting site is supported on browsers (e.g., Internet Explorer, Firefox, Chrome and Safari) and devices (desktops, laptops, tablets and cell phones) running the most updated version of applicable software and plug-ins. Each participant should ensure strong Wi-Fi or other internet connection.

Who is paying the costs of soliciting these proxies?

We will pay all of the costs of soliciting these proxies.

How do I obtain the 2022 Annual Report?

If you would like a copy of our 2022 Annual Report, we will send you one without charge. Please write to:

ASP Isotopes Inc. 1101 Pennsylvania Avenue NW, Suite 300 Washington, DC 20004 Attn: Corporate Secretary

All of our SEC filings are also available free of charge in the "Investor Relations-SEC Filings" section of our website at www.aspisotopes.com.

How can I find out the results of the voting at the annual meeting?

Preliminary voting results will be announced at the Annual Meeting. Final voting results will be published in our current report on Form 8-K to be filed with the SEC within four business days after the Annual Meeting. If final voting results are not available to us in time to file a Form 8-K within four business days after the meeting, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an additional Form 8-K to publish the final results.

BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

Our business affairs are managed under the direction of our board of directors, which is currently comprised of six members, four of whom are "independent" under the listing standards of the Nasdaq Stock Market LLC ("Nasdaq"). The board of directors is nominating two nominees for election. Our board of directors is divided into three classes with staggered three-year terms. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the same class whose term is then expiring. There are two Class I directors whose current term of office expires at the Annual Meeting: Paul Mann and Joshua Donfeld. Our board of directors has nominated Paul Mann and Joshua Donfeld for re-election at the Annual Meeting to serve as Class I directors until the 2026 annual meeting of stockholders or until their successors are duly elected and qualified.

The following table sets forth the names, ages as of October 23, 2023, and certain other information for each of the directors whose terms expire at the Annual Meeting and for each of the directors whose terms do not expire at the Annual Meeting.

Name Nominees for Director	Class	Age	Position	Director Since	Current Term Expires	Expiration of Term For Which Nominated
Paul Mann	Ι	47	President, Chief Executive Officer and Director	2021	2023	2026
Joshua Donfeld (1)(2) Directors	Ι	47	Director	2021	2023	2026
Michael Gorley, Ph.D. (2)	II	36	Director	2023	2024	
Duncan Moore, Ph.D. (1)(2)(3)(4)	II	64	Director	2021	2024	
Hendrik Strydom, Ph.D.	III	63	Director	2021	2025	
Todd Wider, M.D.(1)(3)	III	58	Director	2021	2025	—

(1) Member of our audit committee

(2) Member of our nominating and corporate governance committee

(3) Member of our compensation committee

(4) Member of our special projects committee

Nominees for Director

Paul E. Mann co-founded our company in September 2021 and has served as our Chairman and Chief Executive Officer and a member of our board of directors since incorporation. Paul also served as our Chief Financial Officer until September 2022. Prior to ASPI, Paul was Chief Financial Officer of PolarityTE, Inc. (Nasdaq: PTE), a biotechnology company, from June 2018 until April 2020. Prior to that, he responsible for Healthcare investments at DSAM Partners LLC, a global hedge fund. Earlier in his career, he was a portfolio manager at Highbridge Capital where he managed investments in healthcare and biotechnology. Prior to Highbridge Capital, from August 2013 to March 2016, he worked at Soros Fund Management where he was responsible for billions of dollars of investments in healthcare and chemicals companies. During his career as a healthcare and chemicals investor, Paul has helped create and fund numerous early stage and start-up companies. Prior to moving to the buy-side, Paul spent 11 years as a sell-side analyst at Morgan Stanley and Deutsche Bank. He co-managed the healthcare research team at Morgan Stanley, one of the top ranked teams in Institutional Investor, Greenwich and Reuters. He was also corporate broker to over half the UK Pharmaceutical Companies. Paul started his career as a research scientist at Procter and Gamble and he is named as the inventor of numerous skin creams in the Oil of Olay range of cosmetics. He is also a nonexecutive, independent director at Abeona Therapeutics (NASDAQ: ABEO), where he is the chair of the audit committee, and a director at Healthtech Solution Inc. (OTC: HLTT), where he is chairman of the board and serves on the audit committee. He is the co-founder and Chairman of Varian Biopharma, a private biotechnology company focused on precision oncology. Paul has an MA (Cantab) and an MEng from Cambridge University, UK where he studied Natural Sciences and Chemical Engineering and he is a CFA charter holder.

We believe Mr. Mann's detailed knowledge and unique perspective and insights as our founder and Chief Executive Officer, as well as his prior experience as Chief Financial Officer of another public company and extensive experience managing investments in healthcare, biotechnology and chemicals companies, qualify him to serve on our board of directors and position him well to serve as our Chairman.

Joshua Donfeld has served on our board of directors since October 2021. Joshua was most recently (May 2016-October 2020) a co-founding and co-managing partner of Castle Hook Partners, a New York-based investment management fund. At Castle Hook, among other responsibilities, he was responsible for overseeing the fund's equity investments in sectors such as healthcare and natural resources. Prior to Castle Hook, Mr. Donfeld was a portfolio manager at Soros Fund Management from May 2012-April 2016. At Soros he was responsible for managing a portfolio of assets across public and private investments in industries spanning Energy, Utilities, Materials, Industrials, Healthcare, Consumer, Infrastructure and Technology. Prior to Soros Joshua was a Managing Director at Canyon Partners in Los Angeles where he was responsible for the firm's Energy and Utilities investments in credit, distressed and equities. Mr. Donfeld has extensive experience in early-stage investing and he has extensive experience in capital markets, capital structuring, business planning, strategic planning, Wall Street management, corporate finance and accounting. Mr. Donfeld graduated Magna Cum Laude from Princeton University with a BA in Economics and a focus on Chinese language/East Asian Studies.

The Board believes that Mr. Donfeld's significant financial expertise and experience contribute to the Board's understanding and ability to analyze complex issues, particularly as the Company looks to grow its business, and qualify him to serve on our board of directors.

Continuing Directors

Professor Michael Gorley, Ph.D., joined our board of directors in October 2023. Prof. Gorley has served as Chief Technologist at the UK Atomic Energy Authority (UKAEA) since September 2020. In this role, for the past three years Prof. Gorley has served as a strategic leader and program area manager for fusion technology at UKAEA. Prior to assuming his current role at UKAEA, Prof. Gorley was Materials Technology Group Leader from August 2018 to September 2020 and Materials Technology Programme Manager from June 2016 to August 2018. In these roles, Prof. Gorley directed the establishment of the Materials Technology Group and supporting Materials Testing Laboratories, and led the EUROfusion Engineering Data and Design Integration group. In addition, Prof. Gorley has been a visiting professor at the University of Bristol, U.K. since June 2021. Prof. Gorley received a Ph.D. (DPhil) in Materials Science from Oxford University, U.K., with a thesis on ODS steels (specialized alloys for high-performance applications).

We believe that Prof. Gorley's significant expertise in fusion technology and fusion materials contributes to the Board's understanding and ability to analyze and navigate complex regulatory and business issues.

Duncan Moore, Ph.D. has served on our board of directors since October 2021. Duncan is a partner at East West Capital Partners since May 2008, which has a focus on making investments in the Healthcare Industry in Asia. Previously, from 1991 to 2008, Dr. Moore was a top-ranked pharmaceutical analyst at Morgan Stanley leading the firm's global healthcare equity research team. Whilst at the University of Cambridge, he co-founded a medical diagnostics company called Ultra Clone with two colleagues which led to the beginnings of a 20-year career in healthcare capital markets analysis. In 1986, he was involved in setting up the BankInvest biotechnology funds and was on its scientific advisory board. Dr. Moore was educated in Edinburgh and went to the University of Leeds where he studied Biochemistry and Microbiology. He has a M.Phil. and Ph.D. from the University of Cambridge where he was also a post-doctoral research fellow. Currently, he is an active investor in biomedical companies as Chairman of Lamellar Biomedical and Allarity Therapeutics A/S (previously Oncology Venture A/S). In addition, he has a board position at Forward Pharma A/S, Cycle Pharma and GH Research. Duncan is the Chairman of the Scottish Life Sciences Association.

We believe that the experience, insights and knowledge Dr. Moore possesses from his leadership roles in business activities are important qualifications, skills and experience that provide valuable assistance to the Board and greatly contribute to the overall knowledge of the Board and its ability to address the issues we confront.

Hendrik Strydom, Ph.D. has served as our Chief Technology Officer since January 2022 and has served on our board of directors since January 2022. Dr. Strydom co-developed the isotope separation technology, known as "Aerodynamic Separation Process" (ASP). In 1993 Dr. Strydom co-founded SDI Ltd (subsequently named Klydon), a research and development company which developed the ASP. Klydon, where Dr. Strydom served as CEO, successfully exploited the ASP technology by separating Silicon (Si28), Carbon (C13 & C14), Oxygen (O-18) and Molybdenum (Mo-100). Since the commencement of commercial operation of the O-18 plant over 3 years ago, Klydon sold O-18 into the South African radio pharmacy market. Dr. Strydom's work on separation of isotopes started when he was employed as a scientist at the South African Atomic Energy Corporation (AEC), where he specialized in the laser separation of heavy isotopes. Dr. Strydom left AEC in 1993 to co-found Klydon. Dr. Strydom holds a BSc- Hons (Physics) (1980) — University of Port Elizabeth, PhD (Physics) (2000) — University of Natal (Durban).

As the founder and CEO of Klydon, Dr. Strydom brings to the Board his detailed knowledge and unique perspective and insights regarding the strategic and operational opportunities and challenges, economic and industry trends, and competitive and financial positioning of our business.

Todd Wider, M.D. has served on our board of directors since October 2021. Dr. Wider is the Executive Chairman and Chief Medical Officer of Emendo Biotherapeutics, which focuses on highly specific and differentiated next generation gene editing. Dr. Wider served on the board of directors of ARYA Sciences Acquisition Corp I, which had a successful business combination with Immatics N.V. (IMTX) in 2020. He served on the board of ARYA Sciences Acquisition Corp II, which had a successful business combination with Nautilus Biotechnology (NAUT) in 2021. He also served on the board of ARYA Sciences Acquisition Corp IV and V (ARYD and ARYE), Abeona Therapeutics Inc. (Nasdaq: ABEO), Varian Biopharma, Xanadu Bio, and Lyfebulb. Dr. Wider previously consulted with a number of entities in the biotechnology space. Dr. Wider is an active, honorary member of the medical staff of Mount Sinai Hospital in New York, where he worked for over 20 years, focused on reconstructive surgery. Dr. Wider received an MD from Columbia College of Physicians and Surgeons, where he was Rudin Fellow, and an AB, with high honors and Phi Beta Kappa, from Princeton University. He did his residency in general surgery and plastic and reconstructive surgery at Columbia Presbyterian Medical Center, and postdoctoral fellowships in complex reconstructive surgery at Memorial Sloan Kettering Cancer Center, where he was Chief Microsurgery Fellow, and in craniofacial surgery at the University of Miami. Dr. Wider is also a principal in Wider Film Projects, a documentary film company focused on producing films with sociopolitical resonance that have won Academy, Emmy and Peabody Awards.

Table of Contents

We believe Dr. Wider, as a result of his vast public and private company board experience at a variety of companies, possesses knowledge and experience in various areas, including business leadership, finance and technology, which strengthens the Board's overall knowledge, capabilities and experience.

Board Independence

Our common stock is listed on the Nasdaq Capital Market. Under the rules of the Nasdaq Capital Market, independent directors must comprise a majority of a listed company's board of directors within a specified period of the completion of our initial public offering. In addition, the rules of the Nasdaq Capital Market require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and corporate governance committees be independent.

Audit committee members and compensation committee members must also satisfy the independence criteria set forth in Rule 10A-3 and Rule 10C-1, respectively, under the Securities Exchange Act of 1934, as amended ("Exchange Act"). Under the rules of the Nasdaq Global Select Market, a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

To be considered independent for purposes of Rule 10A-3 and under the rules of Nasdaq, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors or any other board committee: (1) accept, directly or indirectly, any consulting, advisory or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries.

To be considered independent for purposes of Rule 10C-1 and under the rules of Nasdaq, the board of directors must affirmatively determine that each member of the compensation committee is independent, including a consideration of all factors specifically relevant to determining whether the director has a relationship to the company which is material to that director's ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to: (i) the source of compensation of such director, including any consulting, advisory or other compensatory fee paid by the company to such director and (ii) whether such director is affiliated with the company, a subsidiary of the company or an affiliate of a subsidiary of the company.

Our board of directors has determined that each of Joshua Donfeld, Michael Gorley, Ph.D., Duncan Moore, Ph.D. and Todd Wider, M.D. are independent directors. In making this determination, our board of directors applied the standards set forth under Rule 10A-3 of the Exchange Act and related SEC and Nasdaq rules. Our board of directors considered all relevant facts and circumstances known to it in evaluating the independence of these directors, including their current and historical employment, any compensation we have given to them, any transactions we have with them, their beneficial ownership of our capital stock, their ability to exert control over us, all other material relationships they have had with us and the same facts with respect to their immediate families.

Although there is no specific policy regarding diversity in identifying director nominees, both the nominating and corporate governance committee and the board of directors seek the talents and backgrounds that would be most helpful to us in selecting director nominees. In particular, the nominating and corporate governance committee, when recommending director candidates to our board of directors for nomination, may consider whether a director candidate, if elected, assists in achieving a mix of board of directors' members that represents a diversity of background and experience.

Board Leadership Structure

Our board of directors is led by our Chair, Paul Mann. Our board of directors recognizes that one of its key responsibilities is to evaluate and determine its optimal leadership structure so as to provide effective oversight of management. Our Bylaws and corporate governance guidelines provide our board of directors with flexibility to combine or separate the positions of Chair of the Board and Chief Executive Officer. Our board of directors currently believes that our existing leadership structure is effective, under which Paul Mann serves as our chief executive officer, provides the appropriate balance of authority between independent and non-independent directors, and achieves the optimal governance model for us and for our stockholders.

The Board's Role in Risk Oversight

Although management is responsible for the day-to-day management of the risks our company faces, our board of directors and its committees take an active role in overseeing management of our risks and have the ultimate responsibility for the oversight of risk management. The board of directors regularly reviews information regarding our operational, financial, legal and strategic risks. Specifically, senior management attends quarterly meetings of the board of directors, provides presentations on operations including significant risks, and is available to address any questions or concerns raised by our board of directors.

In addition, our three standing committees assist the board of directors in fulfilling its oversight responsibilities regarding risk. The audit committee coordinates the board of directors' oversight of our internal control over financial reporting, disclosure controls and procedures, related party transactions and code of conduct and corporate governance guidelines and management regularly reports to the audit committee on these areas. The compensation committee assists the board of directors in fulfilling its oversight responsibilities with respect to the management of risks arising from our compensation policies and programs as well as succession planning as it relates to our chief executive officer. The nominating and corporate governance committee assists the board of directors in fulfilling its oversight responsibilities with respect to the management of risks associated with board organization, membership and structure, succession planning for our directors and corporate governance. When any of the three standing committees receives a report related to material risk oversight, the chair of the relevant committee reports on the discussion to the full board of directors.

Board of Directors Meetings

During fiscal year 2022, our board of directors met eight times, including telephonic meetings. In that year, each director attended at least 75% of the aggregate of (i) the total number of meetings of our board of directors held during the period for which he/she served as a director and (ii) the total number of meetings held by all committees of our board of directors on which he/she served during the periods that he/she served.

Committees of the Board of Directors

Our board of directors has three standing committees: the audit committee, the compensation committee, and the nominating and corporate governance committee, each of which operates pursuant to a charter adopted by our board of directors. Our board of directors may also establish other committees from time to time to assist the board of directors. As of the date of this proxy statement, the composition and functioning of all of our committees comply with all applicable requirements of the Sarbanes-Oxley Act, Nasdaq and SEC rules and regulations. Each committee's charter is available on the Investor Relations portion of our website at https://investors.aspisotopes.com under Governance.

Audit Committee

The members of our audit committee are Todd Wider, Joshua Donfeld and Duncan Moore, with Dr. Wider serving as chair. The audit committee, which was formed in November 2022 in connection with the listing of our stock on Nasdaq, did not meet during 2022. Our board of directors has determined that each member of the audit committee has sufficient knowledge in financial and auditing matters to serve on the audit committee. Our board of directors has determined that each member of the audit committee financial expert," as defined under the applicable rules of the SEC. Our board of directors has determined that each member of the audit committee meets the independence requirements for audit committees required under Section 10A of the Exchange Act and the applicable Nasdaq rules. The audit committee's responsibilities include:

Table of Contents

- appointing, approving the compensation of and assessing the independence of our independent registered public accounting firm;
- pre-approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing the overall audit plan with our independent registered public accounting firm and members of management responsible for preparing our financial statements;
- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures as well as critical accounting policies and practices used by us;
- coordinating the oversight and reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting-related complaints and concerns;
- recommending, based upon the audit committee's review and discussions with management and our independent registered public accounting firm, whether our audited financial statements are included in our Annual Report on Form 10-K;
- monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to our financial statements and accounting matters;
- preparing the audit committee report required by SEC rules to be included in our annual proxy statement;
- · reviewing all related person transactions for potential conflict of interest situations and approving all such transactions; and
- · reviewing quarterly earnings releases.

Compensation Committee

The members of our compensation committee are Duncan Moore and Todd Wider with Mr. Moore serving as chair. The compensation committee, which was formed in November 2022 in connection with the listing of our stock on Nasdaq, did not meet during 2022. Our board of directors has determined that each member of the compensation committee is "independent" as that term is defined in SEC and Nasdaq rules, meets the heightened independence requirements for compensation committee purposes under Section 10C of the Exchange Act and related SEC and Nasdaq rules, and are considered a "non-employee director" under Rule 16b-3 under the Exchange Act. The compensation committee's responsibilities include:

- · reviewing and approving our philosophy, policies and plans with respect to the compensation of our chief executive officer;
- making recommendations to our board of directors with respect to the compensation of our chief executive officer and our other executive officers:
- reviewing and assessing the independence of compensation advisors;
- overseeing and administering our equity incentive plans;
- reviewing and making recommendations to our board of directors with respect to director compensation; and
- preparing the compensation committee reports required by the SEC, including our "Executive Compensation" disclosure.

Nominating and Corporate Governance Committee

The members of our nominating and corporate governance committee are Joshua Donfeld, Duncan Moore and Michael Gorley (who replaced Sergey Vasnetsov in October 2023), with Mr. Donfeld serving as chair. The nominating and corporate governance committee, which was formed in November 2022 in connection with the listing of our stock on Nasdaq, did not meet during 2022. Our board of directors has determined that each member of the nominating and corporate governance committee is "independent" as defined in Nasdaq rules. The nominating and corporate governance committee's responsibilities include:

- · developing and recommending to the board of directors criteria for board and committee membership;
- establishing procedures for identifying and evaluating board of director candidates, including nominees recommended by stockholders;



Table of Contents

- reviewing the composition of the board of directors to ensure that it is composed of members containing the appropriate skills and expertise to advise us;
- · identifying and screening individuals qualified to become members of the board of directors;
- · recommending to the board of directors the persons to be nominated for election as directors and to each of the board's committees;
- developing and recommending to the board of directors a code of business conduct and ethics and a set of corporate governance guidelines; and
- · overseeing the evaluation of our board of directors and management.

Special Projects Committee

In August 2023, the board of directors created the special projects committee whose responsibilities include to research, evaluate and negotiate strategic opportunities and alternatives available to the company, including potential joint ventures, collaborations and other key strategic transactions, and to make reports and recommendations to the board of directors. Mr. Moore was appointed to the special projects committee.

Director Nomination Process

The nominating and corporate governance committee use the following procedures to identify and evaluate any individual recommended or offered for nomination to the board of directors. In its evaluation of director candidates, including the members of the board of directors eligible for re-election, the nominating and corporate governance committee considers the following:

- individual qualifications, including relevant career experience, strength of character, maturity of judgment, familiarity with the Company's business and industry;
- the experience and expertise of the Company's current directors; and
- all other factors it considers appropriate, which may include diversity of background, existing commitments to other businesses, potential conflicts of interest, legal considerations, corporate governance background, financial and accounting background, executive compensation background and the size, composition and combined expertise of the existing board or directors.

The board of directors, with the assistance of the nominating and corporate governance committee, monitors the mix of specific experiences, qualifications and skills of its directors in order to assure that the board of directors, as a whole, has the necessary tools to perform its oversight function effectively in light of the Company's business and structure. Although there is no specific policy regarding diversity in identifying director nominees, both the nominating and corporate governance committee and the board of directors seek the talents and backgrounds that would be most helpful to us in selecting director nominees. In particular, the nominating and corporate governance committee, when recommending directors' members that represents a directors for nomination, may consider whether a director candidate, if elected, assists in achieving a mix of board of directors' members that represents a diversity of background and experience. The Company has never received a director nomination proposal from a stockholder. Although the nominating and corporate governance committee has not adopted a formal policy with respect to stockholder nominaes, the nominating and corporate governance committee expects that the evaluation process for a stockholder nominee would be similar to the process outlined above.

Stockholder Recommendations for Nominations to the Board

A stockholder that wishes to recommend a candidate for consideration by the nominating and corporate governance committee as a potential candidate for director must direct the recommendation in writing to ASP Isotopes Inc., 1101 Pennsylvania Avenue NW, Suite 300, Washington, DC 20004, Attention: Corporate Secretary, and must include the candidate's name, home and business contact information, detailed biographical data, relevant qualifications, class and number of shares of our capital stock that are held by the nominee, a signed letter from the candidate confirming willingness to serve, information regarding any relationships between us and the candidate and evidence of the recommending stockholder's ownership of our stock. Such recommendation must also include a statement from the recommending stockholder in support of the candidate, particularly within the context of the criteria for board membership, including issues of character, integrity, judgment, and diversity of experience, independence, area of experience, potential conflicts of interest, other commitments and the like and personal references. Our board of directors will consider the recommendation but will not be obligated to take any further action with respect to the recommendation.

Director Attendance at Annual Meetings

Although our Company does not have a formal policy regarding attendance by members of our board of directors at our Annual Meeting, we encourage all of our directors to attend. This Annual Meeting will be the first annual meeting of our stockholders.

Communications with our Board of Directors

Stockholders seeking to communicate with our board of directors should submit their written comments to our corporate secretary, ASP Isotopes Inc., 1101 Pennsylvania Avenue NW, Suite 300, Washington, DC 20004. The corporate secretary will forward such communications to each member of our board of directors; provided that, if in the opinion of our corporate secretary it would be inappropriate to send a particular stockholder communication to a specific director, such communication will only be sent to the remaining directors (subject to the remaining directors concurring with such opinion).

Code of Business Conduct

We have adopted a written code of business conduct that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. A copy of the code is posted on the Investor Relations section of our website at www.aspisotopes.com. If we make any substantive amendments to, or grant any waivers from, the code of business conduct and ethics for any officer or director, we will disclose the nature of such amendment or waiver on our website or in a current report on Form 8-K within four business days of such amendment or waiver.

Director Compensation

The following table sets forth information regarding compensation earned by our non-employee-directors for service on our board of directors during the year ended December 31, 2022. Hendrik Strydom, Ph.D. joined our board of directors in January 2022.

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Options (\$)	Total (\$)
Josh Donfeld		526,000	111,029	637,029
Duncan Moore, Ph.D.		526,000	111,029	637,029
Sergey Vasnetsov(1)		3,568,000	—	3,568,000
Todd Wider, M.D.	—	526,000	111,029	637,029

(1) Mr. Vasnetsov's compensation for 2022 consists of stock awards for his services as a director and a consultant to the Company.

We have entered into director agreements with Messrs. Donfeld, Gorley, Moore and Wider, pursuant to which we agreed to pay to each such director a fee for his service of \$60,000 per year, payable at the director's discretion in cash or Common Stock at market value. The fee is paid quarterly in arrears (\$15,000 quarterly instalments) on the last business day of each December, March, June and September during the director's term. In addition, we agreed to award a Common Stock award with a market value of \$100,000 on October 13, 2022, and annually each year thereafter during the director's term. Directors who are also our employees will not receive fees for service on our board of directors.

PROPOSAL NO. 1 ELECTION OF CLASS I DIRECTORS

Under our governing documents our board of directors has the power to set the number of directors from time to time by resolution. We currently have six authorized directors serving on our board of directors, four of whom are "independent" as defined under the Nasdaq listing standards. In accordance with our certificate of incorporation, our board of directors is divided into three classes with staggered three-year terms. Any increase or decrease in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of our directors. This classification of our board of directors may have the effect of delaying or preventing changes in control of our company.

At the Annual Meeting, two Class I directors will be elected for three-year terms. Based upon the recommendation of our nominating and corporate governance committee, our board of directors has nominated each of the director nominees set forth below to stand for election by our stockholders, in each case for a three-year term expiring at our 2026 annual meeting of stockholders or until his successor is duly elected and qualified.

Nominees for Director

Our nominating and corporate governance committee has recommended, and our board of directors has approved, Paul Mann and Joshua Donfeld as nominees for election as Class I directors at the Annual Meeting.

If elected, Paul Mann and Joshua Donfeld will serve as Class I directors until the 2026 annual meeting of stockholders or until their successors are duly elected and qualified. For information concerning the nominees, please see the section titled "*Board of Directors and Corporate Governance — Nominees for Director.*"

If you are a stockholder of record and you vote but do not give instructions with respect to the voting of directors, your shares will be voted FOR the election of Paul Mann and Joshua Donfeld. We expect that Paul Mann and Joshua Donfeld will accept such nomination; however, in the event that a nominee is unable or declines to serve as a director at the time of the Annual Meeting, the proxies will be voted for any nominee who shall be designated by our board of directors to fill such vacancy. If you are a beneficial owner of shares of our common stock and you do not give voting instructions to your broker, bank or other nominee, then your broker, bank or other nominee will leave your shares unvoted on this matter.

Vote Required

The election of the Class I directors requires a plurality vote of the shares of our common stock present in person or by proxy at the Annual Meeting and entitled to vote thereon to be approved. Abstentions, "withhold" votes and broker non-votes will have no effect on this proposal.

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE ELECTION OF THE DIRECTORS NOMINATED BY OUR BOARD OF DIRECTORS AND NAMED IN THIS PROXY STATEMENT AS CLASS I DIRECTORS TO SERVE FOR THREE-YEAR TERMS.

PROPOSAL 2: RATIFICATION OF SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The audit committee has selected EisnerAmper LLP ("EisnerAmper") as the Company's independent registered public accounting firm for the year ending December 31, 2023, and has further directed that management submit the selection of the independent registered public accounting firm for ratification by the stockholders at the Annual Meeting. EisnerAmper has served as the Company's auditor since 2021 and has audited the Company's financial statements for the year ended December 31, 2022. Representatives of EisnerAmper are expected to be present at the Annual Meeting, will have an opportunity to make a statement if they so desire, and will be available to respond to appropriate questions.

Stockholder ratification of the selection of EisnerAmper as the Company's independent registered public accounting firm is not required by Delaware law, the Company's amended and restated certificate of incorporation, or the Company's amended and restated bylaws. However, the audit committee is submitting the selection of EisnerAmper to the stockholders for ratification as a matter of good corporate practice. If the stockholders fail to ratify the selection, the audit committee will reconsider whether to retain that firm. Even if the selection is ratified, the audit committee in its discretion may direct the appointment of a different independent registered public accounting firm at any time during the year if the audit committee determines that such a change would be in the best interests of the Company and its stockholders.

Independent Registered Public Accountants' Fees

The following table is a summary of fees billed to the Company by EisnerAmper for professional services rendered for the fiscal years ended December 31, 2022 and 2021.

	 2022	202	1
Audit Fees(1)	\$ 243,607	\$ 6	58,250
Audit Related Fees	_		
Tax Fees(2)			
All Other Fees	 		
Total	\$ 243,607	\$ 6	58,250

(1) Audit fees in 2022 include audit, reviews, and work related to the filing of Form S-1, including issuances of consents and comfort letter. (2) Tax fees are related to tax compliance and advisory services.

Pre-Approval Policies and Procedures

Our audit committee has established a policy that all audit and permissible non-audit services provided by our independent registered public accounting firm will be pre-approved by the audit committee, and all such services were pre-approved in accordance with this policy during the fiscal years ended December 31, 2022 and 2021. These services may include audit services, audit-related services, tax services and other services. The audit committee considers whether the provision of each non-audit service is compatible with maintaining the independence of our auditors. Pre-approval is detailed as to the particular service or category of services and is generally subject to a specific budget. Our independent registered public accounting firm and management are required to periodically report to the audit committee regarding the extent of services provided by the independent registered public accounting firm in accordance with this pre-approval, and the fees for the services performed to date.

Vote Required; Recommendation of the Board of Directors

The affirmative vote from a majority of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote will be required to ratify the selection of EisnerAmper. Abstentions will have the same effect as a vote "against" this proposal. As ratification of the appointment of EisnerAmper LLP is considered a routine matter on which a broker or other nominee has discretionary authority to vote, no broker non-votes will likely result from this proposal.

OUR BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE TO RATIFY THE SELECTION OF EISNERAMPER AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2023. PROXIES SOLICITED BY THE BOARD OF DIRECTORS WILL BE SO VOTED UNLESS STOCKHOLDERS SPECIFY OTHERWISE.

Report of the Audit Committee of the Board of Directors

The audit committee oversees the Company's financial reporting process on behalf of the Company's board of directors. Management has the primary responsibility for the financial statements and the reporting process, including the systems of internal controls. In fulfilling its oversight responsibilities, the audit committee reviewed and discussed with management the audited financial statements for the fiscal year ended December 31, 2022, including a discussion of any significant changes in the selection or application of accounting principles, the reasonableness of significant judgments, the clarity of disclosures in the financial statements and the effect of any new accounting initiatives.

The audit committee reviewed with EisnerAmper, which is responsible for expressing an opinion on the conformity of the Company's audited financial statements with generally accepted accounting principles, its judgments as to the quality, not just the acceptability, of the Company's accounting principles and such other matters as are required to be discussed with the audit committee under generally accepted auditing standards and the matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board ("PCAOB") and the SEC. In addition, the audit committee has discussed with EisnerAmper its independence from management and the company, has received from EisnerAmper the written disclosures and the letter required by applicable requirements of the PCAOB regarding EisnerAmper's communications with the audit committee concerning independence, and has considered the compatibility of non-audit services with the auditors' independence.

The audit committee met with EisnerAmper to discuss the overall scope of its services, the results of its audit and reviews, its evaluation of the Company's internal controls and the overall quality of the Company's financial reporting. EisnerAmper, as the Company's independent registered public accounting firm, also periodically updates the audit committee about new accounting developments and their potential impact on the Company's reporting. The audit committee's meetings with EisnerAmper were held with and without management present. The audit committee is not employed by the Company, nor does it provide any expert assurance or professional certification regarding the Company's financial statements.

The audit committee relies, without independent verification, on the accuracy and integrity of the information provided, and representations made, by management and the Company's independent registered public accounting firm.

In reliance on the reviews and discussions referred to above, the audit committee recommended to the Company's board of directors that the audited financial statements of the Company be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2022 that was filed with the SEC. The audit committee and the Company's board of directors also have recommended, subject to stockholder approval, the ratification of the appointment of EisnerAmper as the Company's independent registered public accounting firm for 2023.

This report of the audit committee is not "soliciting material," shall not be deemed "filed" with the SEC and shall not be incorporated by reference by any general statement incorporating by reference this proxy statement into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language in any such filing, except to the extent that we specifically incorporate this information by reference, and shall not otherwise be deemed filed under such acts.

The foregoing report has been furnished by the audit committee.

Submitted by the Audit Committee of the Board of Directors Todd Wider, M.D. (Chair) Joshua Donfeld Duncan Moore, Ph.D.



SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information relating to the beneficial ownership of our common stock as of October 27, 2023, by:

- · each person, or group of affiliated persons, known by us to beneficially own more than 5% of our outstanding shares of common stock;
- · each of our directors;
- · each of our named executive officers; and
- · all directors and executive officers as a group.

The number of shares beneficially owned by each entity, person, director or executive officer is determined in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares over which the individual has sole or shared voting power or investment power as well as any shares that the individual has the right to acquire within 60 days of October 27, 2023, through the exercise of any stock option, warrants or other rights or vesting of restricted stock units. Except as otherwise indicated, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock held by that person.

The percentage of shares beneficially owned is computed on the basis of 48,873,276 shares of our common stock outstanding as of October 27, 2023. Shares of our common stock that a person has the right to acquire within 60 days of October 27, 2023, are deemed outstanding for purposes of computing the percentage ownership of the person holding such rights, but are not deemed outstanding for purposes of computing the percentage ownership of all directors and executive officers as a group. Unless otherwise indicated below, the address for each beneficial owner listed is c/o ASP Isotopes Inc., 1101 Pennsylvania Avenue NW, Suite 300, Washington, DC 20004.

Name and Address of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned(1)
5% and Greater Stockholders		
AK Jensen Investment Management Ltd (2)	6,516,874	13.3%
Einar Ronander, Ph.D. (3)	2,097,424	4.3%
Sergey Vasnetsov (4)	3,838,607	7.9%
Named Executive Officers and Directors		
Paul Mann (5)	6,493,865	13.3%
Robert Ainscow (6)	1,079,917	2.2%
Hendrick Strydom, Ph.D. (7)	2,422,563	5.0%
Josh Donfeld (8)	1,200,167	2.5%
Michael Gorley, Ph.D. (9)	100,000	*
Duncan Moore, Ph.D. (10)	950,167	1.9%
Todd Wider, M.D. (11)	590,844	1.2%
All current executive officers and directors as a group (7 persons) (12)	12,837,523	26.3%

* Less than one percent.

- (1) Percentage ownership is calculated based on 48,873,276 shares of our common stock outstanding on October 27, 2023.
- (2) The securities are directly held by Tees River Critical Resources Fund or other funds and accounts ("AK Jensen Funds") to which AK Jensen Investment Management Limited ("AK Jensen") serves as the investment manager. Anders K. Jensen ("Mr. Jensen") and Duncan P. Saville ("Mr. Saville") may be deemed to indirectly control AK Jensen. AK Jensen and Messrs. Jensen and Saville disclaim beneficial ownership of the securities except to the extent of their pecuniary interest therein, if any. The address of AK Jensen is 1 Cornhill, London, EC3V 3ND.
- (3) Such shares are held by Carlein Investments (Pty) Ltd whose address is Building 46, CSIR Campus, Meiring Naude Road, Brummeria, Pretoria, 0184. Dr. Ronander has voting and dispositive power over such shares.
- (4) Consists of (i) 1,000,000 shares held by Elista LLC, (ii) 600,000 restricted shares of Common Stock granted by us to ChemBridges LLC in October 2021, which vest quarterly over one year and are subject to forfeiture, (iii) 600,000 restricted shares of Common Stock granted by us to ChemBridges LLC in July 2022, which vest quarterly over one year, (iv) 600,000 restricted shares of Common Stock awarded by us to ChemBridges LLC on November 15, 2022, which vest over four years, (v) 500,000 restricted shares of Common Stock awarded by us to ChemBridges LLC on December 30, 2022, which vest over one year, and (vi) 538,607 restricted shares of Common Stock awarded by us to ChemBridges LLC on March 1, 2023, which vest over one year, and (vi) 538,607 restricted shares of Common Stock awarded by us to ChemBridges LLC on March 1, 2023, which vest over one year. Mr. Vasnetsov has voting and dispositive power over the securities held by Elista LLC, whose address is P.O. Box 2291, Toa Baja 00951 Puerto Rico, as trustee of Eliona Trust (a family trust and owner of Elista LLC). Mr. Vasnetsov has voting and dispositive power over the securities held by ChemBridges LLC, whose address is P.O. Box 2291, Toa Baja 00951 Puerto Rico, as the President and owner of ChemBridges LLC.
- (5) Consists of (i) 1,550,000 shares of Common Stock held by Mr. Mann, (ii) 1,500,000 shares of performance-based restricted Common Stock granted by us to Mr. Mann in October 2021, (iii) 37,500 shares of common stock purchased in our Initial Public Offering, (iv) 1,000,000 restricted shares awarded by us to Mr. Mann on November 15, 2022, which vest over four years (v) 1,000,000 restricted shares of common stock awarded by us to Mr. Mann on December 30, 2022, which vest over one year (vi) 718,143 restricted shares of common stock awarded by us to Mr. Mann on March 1, 2023, which vest over one year, and (vii) 688,222 shares of Common Stock issuable upon exercise of options held by Mr. Mann exercisable within 60 days of October 27, 2023.
- (6) Consists of (i) 250,000 shares of Common Stock held by Mr. Ainscow (ii) 600,000 shares of Common Stock awarded by us to Mr. Ainscow on November 15, 2022, which vest over four years (iii) 50,000 restricted shares of Common Stock awarded by us to Mr. Ainscow on December 30, 2022, which vest over one year, and (iv) 179,917 shares of Common Stock issuable upon exercise of options held by Mr. Ainscow exercisable within 60 days of October 27, 2023.
- (7) Consists of (i) 2,097,474 shares held by Tianne Holdings (Pty) Ltd whose address is Building 46, CSIR Campus, Meiring Naude Road, Brummeria, Pretoria, 0184. Dr. Strydom has voting and dispositive power over such shares, (ii) 200,000 restricted shares of Common Stock awarded by us to Mr. Strydom on November 15, 2022, which vest over two years, and (iii) 125,139 shares of Common Stock issuable upon exercise of options held by Dr. Strydom within 60 days of October 27, 2023.
- (8) Consists of (i) 904,167 shares of Common Stock held by Mr. Donfeld, (ii) 200,000 restricted shares of Common Stock awarded by us to Mr. Donfeld on November 15, 2022, which vest over two years, and (iii) 96,000 shares of Common Stock issuable upon exercise of options held by Mr. Donfeld exercisable within 60 days of October 27, 2023.
- (9) Consists of 100,000 shares of Common Stock awarded by us to Mr. Gorley on October 23, 2023.
- (10) Consists of (i) 454,167 shares of Common Stock held by Mr. Moore, (ii) 200,000 restricted shares of Common Stock awarded by us to Mr. Moore on November 15, 2022, which vest over two years, (iii) 200,000 Shares of Common Stock awarded by us to Mr. Moore on August 16, 2023, and (iv) 96,000 shares of Common Stock issuable upon exercise of options held by Dr. Moore exercisable within 60 days of October 27, 2023.
- (11) Consists of (i) 294,844 shares of Common Stock held by Mr. Wider, (ii) 200,000 restricted shares of Common Stock awarded by us to Mr. Wider on November 15, 2022, which vest over two years, and (iii) 96,000 shares of Common Stock issuable upon exercise of options held by Dr. Wider exercisable within 60 days of October 27, 2023.
- (12) Includes the shares described in notes 5, 6, 7, 8, 9, 10 and 11 above.

EXECUTIVE OFFICERS

Our Executive Officers

The following table sets forth information regarding our executive officers as of October 27, 2023:

Name	Age	Position(s)
Paul E. Mann	47	Chairman and Chief Executive Officer
Hendrik Strydom, Ph.D.	63	Chief Technology Officer and Director
Robert Ainscow	47	Interim Chief Financial Officer

Paul E. Mann. Please see the biographical information provided above in the section entitled 'Board of Directors and Corporate Governance."

Hendrik Strydom, Ph.D. Please see the biographical information provided above in the section entitled "Board of Directors and Corporate Governance."

Robert Ainscow. Mr. Ainscow co-founded our company in September 2021 and served as our VP and Head of Business Development until September 2022 when he was appointed Interim Chief Financial Officer. Prior to ASP Isotopes, Robert was head of capital markets at Zenzic Partners Limited from October 2017 to February 2021 and a founder of Bluezest Mortgages since November 2015. Robert has over 20 years' experience in financing operating companies and lending platforms through the provision of structured finance and securitisation structures in the debt capital markets. He has developed, executed and managed innovative structures to fund credit, renewable energy and transport and logistics assets encompassing all major financial jurisdictions, on and offshore. Robert began his career at the first ever internet-bank, First-E; in the investment banking division, WIT-Soundview. Following the ".com" correction he entered mainstream investment banking at U.S. firms Morgan Stanley and Bear Stearns in London where he was an analyst in the Law Division with responsibility for capital markets oversight and a Vice President in the Principal and Asset-Backed Finance Group with responsibility for securitisation respectively. He subsequently worked at Investe bank twice over the subsequent years as well as a variety of directorships, consultancies and investments in start-up and growth phase lending and securitisation platform.

EXECUTIVE COMPENSATION AND OTHER INFORMATION

Processes and Procedures for Compensation Decisions

Our compensation committee is responsible for the executive compensation programs for our executive officers and reports to our board of directors on its discussions, decisions and other actions. Typically, our Chief Executive Officer makes recommendations to our compensation committee, often attends committee meetings and is involved in the determination of compensation for the respective executive officers who report to him, except that the Chief Executive Officer does not make recommendations as to his own compensation. Our Chief Executive Officer makes recommendations to our compensation committee regarding short- and long-term compensation for all executive officers (other than himself) based on our results, an individual executive officer's contribution toward these results and performance toward individual goal achievement. Our compensation committee then reviews the recommendations and other data and makes decisions as to total compensation for each executive officer, as well as each individual compensation component. Our compensation committee reviews and approves, or makes recommendations for approval by the independent members of the board of directors regarding, the compensation of each executive officer.

Our compensation committee is authorized to retain the services of one or more executive compensation advisors, as it sees fit, in connection with the establishment of our compensation programs and related policies.

Our named executive officers for 2022, which consist of our principal executive officer and our next two most highly compensated executive officers, were as follows:

- · Paul Mann, our Chief Executive Officer;
- · Hendrik Strydom, Ph.D., our Chief Technology Officer; and
- · Robert Ainscow, our Interim Chief Financial Officer.

2022 Summary Compensation Table

The following table sets forth information concerning the compensation of our named executive officers for the years ended December 31, 2022 and 2021.

	Salary (\$)	Bonus (\$)	Stock Award (\$) ⁽⁴⁾	Option Awards (\$) ⁽⁴⁾	Non-Equity Incentive Plan Compensation (\$)	All Other Compensation (\$)	Total (\$)
2021 2022	60,000 260.000		375,000 4.210,000	1.429.007			435,000 5,899,007
2021 2022	240,000		526,000	312,486			1,078,486
2021 2022	133,333		1,657,000	173,070			1,963,403
	2022 2021 2022 2021	(\$) 2021 60,000 2022 260,000 2021 2022 240,000 2021	(\$) 2021 60,000 2022 260,000 2021 2022 240,000 2021	Salary (\$) Bonus (\$) Award (\$) 2021 60,000 375,000 2022 260,000 4,210,000 2021 2022 240,000 2022 240,000 526,000 2021	Salary (\$) Bonus (\$) Award (\$) ⁽⁴⁾ Awards (\$) ⁽⁴⁾ 2021 60,000 375,000 4,210,000 1,429,007 2021 2020 240,000 526,000 312,486 2021 312,486 312,486 312,486	Salary (\$) Bonus (\$) Stock Award (\$) ⁽⁴⁾ Option Awards (\$) ⁽⁴⁾ Incentive Plan Compensation (\$) 2021 60,000 375,000 (\$) ⁽⁴⁾ (\$) (\$) (\$) (\$) (\$) (\$) (\$)	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

- Mr. Mann served as our Chairman, Chief Executive Officer since September 2021. He also served as our Chief Financial Officer from September 2021 until September 2022.
- (2) Mr. Strydom served as our Chief Technology Officer since January 2022.
- (3) Mr. Ainscow served as our Interim Chief Financial Officer since September 2022.
- (4) In accordance with SEC rules, these columns reflect the aggregate grant date fair value of the restricted stock awards granted during 2022. This amount has been computed in accordance with Financial Accounting Standards Board (FASB), Accounting Standards Codification (ASC) Topic 718. Assumptions used in the calculation of this amount are described in Note 2 to our audited consolidated financial statements included elsewhere in this prospectus. This amount does not reflect the actual economic value that will be realized by Mr. Mann upon the vesting of the stock awards or the sale of the Common Stock underlying such awards.

Employment arrangements

Below is a description of our employment agreements with, Paul Mann, our named executive officer for fiscal year 2021, including a discussion of the severance pay and other benefits to be provided in connection with a termination of employment and/or a change in control under the arrangements with our named executive officer. Additionally, below is a description of our employment agreement with Robert Ainscow, our current Interim Chief Financial Officer.

Paul Mann.

We entered into an executive employment agreement with Mr. Mann in October 2021, which governs the current terms of his employment with us as Chief Executive Officer. Pursuant to the agreement, Mr. Mann is entitled to an annual base salary of \$240,000 per annum for the first six months and \$480,000 per annum for the remainder of the employment period, a target annual discretionary bonus equal to 100% of his annual base salary, and milestone-based bonuses paid in shares of our Common Stock based on the achievement of revenue milestones. Annual bonuses will be paid in a mixture of cash and Common Stock, as determined by the compensation committee.

Subject to our achievement of \$4.167 million in average monthly revenues for a trailing three- month period Mr. Mann will be paid a \$1,000,000 bonus. Subject to our achievement of \$8.33 million in average monthly revenues for a trailing three-month period Mr. Mann will be paid an additional \$1,000,000 bonus. Subject to our achievement of \$12.5 million in average monthly revenues for a trailing three-month period Mr. Mann will be paid an additional \$1,000,000 bonus. Subject to our achievement of \$16.67 million in average monthly revenues for a trailing three-month period Mr. Mann will be paid an additional \$1,000,000 bonus. Subject to our achievement of \$16.67 million in average monthly revenues for a trailing three-month period Mr. Mann will be paid an additional \$1,000,000 bonus. Any earned milestone-based bonuses will be paid within 30 days of the achievement of the applicable revenue goal and the number of vested shares issued to Mr. Mann shall be determined by dividing the \$1,000,000 bonus amount by either the then fair market value per share of Common Stock, as determined in good faith by our board of directors, or the closing sale price of our Common Stock on the trading day immediately preceding the applicable payment date, as reported by the principal trading market for our Common Stock.

Mr. Mann's employment agreement has an initial term of three years and will automatically renew for successive one-year periods unless either party provides notice of termination. Mr. Mann is also entitled to certain severance benefits under the terms of his employment agreement.

Upon a termination of Mr. Mann's employment for any reason, Mr. Mann is entitled to receive a pro-rata annual bonus for the year of termination.



Table of Contents

Upon a termination of Mr. Mann's employment for any reason other than due to his voluntary resignation without good reason and which does not occur in connection with a change in control, Mr. Mann will receive continued payment of Mr. Mann's base salary until the end of the then-applicable remaining employment period term and reimbursement of COBRA premiums for up to an 18-month period.

Upon a termination of Mr. Mann's employment due to his death, disability, termination without cause, resignation for good reason, or resignation in connection with a change of control, the vesting and exercisability of all equity awards held by Mr. Mann shall immediately accelerate, so that all such equity awards shall be fully vested and exercisable as of the date of his termination. Additionally, upon such termination Mr. Mann's stock options (as well as any other exercisable equity awards) will remain exercisable until the earlier one year after Mr. Mann's termination or the original maximum permitted term of the equity award.

On December 20, 2022, the Company entered into an amendment (the "Amended Employment Agreement") to the executive employment agreement with Mr. Mann dated October 4, 2022. Under the terms of the Amended Employment Agreement:

- Mr. Mann's employment shall continue for a period of four (4) years following the Amended Employment Agreement's effective date of December 20, 2022, and automatically renew for successive one (1) year periods unless either party provides the other with notice of nonrenewal at least three (3) months prior to expiration.
- Mr. Mann shall receive a base salary of \$480,000 per annum, subject to annual adjustments by the Board after the first year of the Amended Employment Agreement.
- During his employment, Mr. Mann shall receive an equity award equal to two percent (2%) of the Company's outstanding common shares as of the Company's immediately preceding fiscal year, which shall be granted on March 1 of each year and vest quarterly over a twelve (12) month period.

All other terms of the Employment Agreement remain in full force and effect.

Robert Ainscow.

We also entered into an executive employment agreement with Robert Ainscow in October 2021 pursuant to which he was appointed as Vice President and Head of Business Development. We entered into an amendment to Mr. Ainscow's employment agreement in September 2022 in connection with his appointment as Interim Chief Financial Officer. Pursuant to the agreement (as amended), Mr. Ainscow is entitled to an initial base salary of \$160,000 per annum (which will increase to \$300,000 per annum when the company has produced 250 grams of commercial product), a target annual discretionary bonus equal to 40% of his annual base salary, and milestone-based bonuses paid in shares of our Common Stock based on the achievement of revenue milestones. Annual bonuses will be paid in a mixture of cash and Common Stock, as determined by the compensation committee.

Mr. Ainscow's employment agreement has an initial term of one year and will automatically renew for successive one-year periods unless either party provides notice of termination. Mr. Ainscow is also entitled to certain severance benefits under his employment agreement.

Upon a termination of Mr. Ainscow's employment for any reason other than due to his voluntary resignation without good reason and which does not occur in connection with a change in control, Mr. Ainscow will receive reimbursement of COBRA premiums for up to an 18-month period.

Upon a termination of Mr. Ainscow's employment due to his death, disability, or termination without cause, resignation for good reason, or resignation in connection with a change in control the vesting and exercisability of all equity awards held by Mr. Ainscow shall immediately accelerate, so that all such equity awards shall be fully vested and exercisable as of the date of his termination. Additionally, upon such termination Mr. Ainscow's stock options (as well as any other exercisable equity awards) will remain exercisable until the earlier of one year after Mr. Ainscow's termination or the original maximum permitted term of the equity award.

Henrik Strydom.

We also entered into an executive employment agreement with Henrik Strydom in January 2022 pursuant to which he was appointed as Executive Vice President and Chief Technology Officer. Pursuant to the agreement, Mr. Strydom is entitled to an initial base salary of \$240,000 per annum (which will increase to \$480,000 per annum when the company has produced 250 grams of commercial product), a target annual discretionary bonus equal to 100% of his annual base salary, and milestone-based bonuses paid in shares of our Common Stock based on the achievement of revenue milestones. Annual bonuses will be paid in a mixture of cash and Common Stock, as determined by the compensation committee.

Subject to our achievement of \$4.167 million in average monthly revenues for a trailing three-month period Mr. Strydom will be paid a \$250,000 bonus. Subject to our achievement of \$8.33 million in average monthly revenues for a trailing three-month period Mr. Strydom will be paid an additional \$250,000 bonus. Subject to our achievement of \$12.5 million in average monthly revenues for a trailing three-month period Mr. Strydom will be paid an additional \$250,000 bonus. Subject to our achievement of \$16.67 million in average monthly revenues for a trailing three-month period Mr. Strydom will be paid an additional \$250,000 bonus. Subject to our achievement of \$16.67 million in average monthly revenues for a trailing three-month period Mr. Strydom will be paid an additional \$250,000 bonus. Any earned milestone-based bonuses will be paid within 30 days of the achievement of the applicable revenue goal and the number of vested shares issued to Mr. Strydom shall be determined by dividing the \$250,000 bonus amount by either the then fair market value per share of Common Stock, as determined in good faith by our board of directors, or the closing sale price of our Common Stock on the trading day immediately preceding the applicable payment date, as reported by the principal trading market for our Common Stock.

Mr. Strydom's employment agreement has an initial term of one year and will automatically renew for successive one-year periods unless either party provides notice of termination. Mr. Strydom is also entitled to certain severance benefits under his employment agreement.

Upon a termination of Mr. Strydom's employment for any reason other than due to his voluntary resignation without good reason and which does not occur in connection with a change in control, Mr. Strydom will receive reimbursement of COBRA premiums for up to an 18-month period.

Upon a termination of Mr. Strydom's employment due to his death, disability, or termination without cause, resignation for good reason, or resignation in connection with a change in control the vesting and exercisability of all equity awards held by Mr. Strydom shall immediately accelerate, so that all such equity awards shall be fully vested and exercisable as of the date of his termination. Additionally, upon such termination Mr. Strydom's stock options (as well as any other exercisable equity awards) will remain exercisable until the earlier of one year after Mr. Strydom's termination or the original maximum permitted term of the equity award.

Performance Share Award.

On October 4, 2021 Mr. Mann was awarded 1,500,000 shares of performance-based restricted Common Stock. The number of shares that may become vested and nonforfeitable will range for zero to 1,500,000 and be determined on the third anniversary of the grant (or, if earlier, the date on which a change in control transaction occurs), which is the "measurement date," based on the "adjusted share price" on the measurement date, which will be calculated based on the average of the adjusted closing prices of our Common Stock during the 90 consecutive trading days ending on the specified measurement date, divided by the total number of shares Common Stock outstanding and underlying any convertible preferred stock outstanding as of the measurement date. If, on the measurement date, the "adjusted share price" (a) is less than \$0.25, then all shares subject to the award will be immediately forfeited for no consideration; (b) equals or exceeds \$0.50, then 20% of the shares subject to the award will vest on the measurement date; (c) equals or exceeds \$0.75, then 40% of the shares subject to the award will vest on the measurement date; (e) equals or exceeds \$1.25, then 80% of the shares subject to the award will vest on the measurement date; (e) equals or exceeds \$1.50, then 100% of the shares subject to the award will vest on the measurement date; if the adjusted share price exceeds any of the prices described in foregoing clauses (a)-(f) for 90 consecutive trading days before the measurement date, then the corresponding number of shares subject to the award will immediately vest.



2022 Plan Awards at IPO.

2022 Plan Awards at End of Year.

On December 30, 2022, we made special one-time awards of restricted stock to some of our officers, directors and consultants in recognition of their contributions during the year and their ongoing service to the company. The shares are subject to time-based vesting and are not subject to further performance-based criteria. Mr. Mann received 1,000,000 shares of restricted Common Stock, Mr. Vasnetsov received 500,000 shares of restricted Common Stock. The restricted stock awards will become 25% vested on each March 30, 2023, June 30, 2023, September 30, 2023, and December 30, 2023.

March 1st Stock Awards.

On March 1, 2023, we made special one-time awards of restricted stock to Mr. Mann, pursuant to his Amended Employment Agreement, and to Mr. Vasnetsov, pursuant to his Amended Advisory Agreement. The shares are subject to time-based vesting and are not subject to further performancebased criteria. Mr. Mann received 718,143 shares of restricted Common Stock (or 2% of the Company's outstanding common shares as of the Company's immediately preceding fiscal year), and Mr. Vasnetsov received 538,607 shares of restricted Common Stock (or 1.5% of the Company's outstanding common shares as of the Company's immediately preceding fiscal year). The restricted stock awards will become 25% vested on each June 1, 2023, September 1, 2023, December 1, 2023, and March 1, 2024.

Health benefits

We provide customary employee benefits to eligible employees, including to our NEOs, including medical, dental and vision benefits, short-term and long-term disability insurance, basic and supplemental life insurance and basic and supplemental accidental death and dismemberment insurance.

Nonqualified deferred compensation

We do not maintain nonqualified defined contribution plans or other nonqualified deferred compensation plans.

Perquisites

We generally do not provide perquisites or personal benefits to our NEOs.

Outstanding Equity Awards at December 31, 2022

The following table sets forth information regarding outstanding option awards held by our named executive officers as of December 31, 2022.

			Stock Av	war	ds		
	Number of Securities Underlying Unexercised Options	Number of Securities Underlying Unexercised Options	Option Exercise	Option Expiration	Number of Shares of Stock that Have Not		Market Value of Shares that Have Not
Name	Exercisable	Unexercisable	 Price	Date	Vested		Vested (7)
Paul Mann	194,444	1,021,556	\$ 2.00	(1)	3,500,000(2)	\$	5,530,000
Hendrik Strydom, Ph.D.	51,528	213,472	\$ 2.00	(3)	200,000(4)	\$	316,000
Robert Ainscow	88,750	208,250	\$ 2.00	(5)	650,000(6)	\$	1,027,000

(1) The amounts reported include 216,000 options granted on April 4, 2022, which vest on April 4, 2023 and expire on April 4, 2032, and 1,000,000 options granted on June 10, 2022, which vest monthly over three years and expire on June 10, 2032.

(2) This amount reported reflects (i) 1,500,000 shares of performance-based restricted Common Stock granted by us to Mr. Mann in October 2021, which vest upon achieving certain performance conditions and market conditions upon the third anniversary of the date of grant, (ii) 1,000,000 restricted shares of Common Stock awarded by us to Mr. Mann on November 15, 2022 upon completion of our IPO, which vest annually over four years, and (iii) 1,000,000 restricted shares of our Common Stock awarded by us to Mr. Mann on December 30, 2022, which vest quarterly over one year.

(3) The amounts reported include 265,000 options granted on June 10, 2022, which vest monthly over three years and expire on June 10, 2032.

- (4) The amount reported includes 200,000 restricted shares of Common Stock awarded by us to Mr. Strydom on November 15, 2022, upon completion of our IPO, which vest annually over two years.
- (5) The amounts reported include (i) 150,000 options granted in October 2021, which vest monthly over 36 months and expire on October 4, 2031, (ii) 12,000 options granted on April 4, 2022, which will vest on April 4, 2023 and expire on April 4, 2032, and (iii) 135,000 options granted on June 10, 2022, which vest monthly over three years and expire on June 10, 2032.
- (6) The amount reported includes (i) 600,000 restricted shares of Common Stock awarded by us to Mr. Ainscow on November 15, 2022, upon completion of our IPO, which vest annually over three years, and (ii) 50,000 restricted shares of our Common Stock awarded by us to Mr. Ainscow on December 30, 2022, which vest quarterly over one year.
- (7) This amount reflects the market value of our Common Stock of \$1.58 per share as of December 31, 2022 multiplied by the amount shown in the column for the number of shares that have not vested.

Hedging and Pledging Prohibitions

As part of our Insider Trading Policy, our employees (including our executive officers and the non-employee members of our board of directors) are prohibited from trading in publicly-traded options, such as puts and calls, and other derivative securities with respect to our securities. This includes any hedging or similar transaction designed to decrease the risks associated with holding shares of our common stock.

In addition, our employees (including our executive officers and the non-employee members of our board of directors) are prohibited from holding our common stock in a margin account or pledging our securities as collateral for a loan.

SECURITIES AUTHORIZED FOR ISSUANCE UNDER EQUITY COMPENSATION PLANS

The following table gives information as of December 31, 2022, about shares of our common stock that may be issued upon the exercise of options under our existing equity compensation plans:

<u>Plan category</u>	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted- average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity commencetion along engagined by committy holders	(a) $2.151.000(1)$	(b)	(c)
Equity compensation plans approved by security holders	3,151,000(1)		450,000(3)
Equity compensation plans not approved by security holders	2 151 000	¢ 1.70	450.000
Total	3,151,000	\$ 1.78	450,000

(1) Represents 3,151,000 shares of common stock issuable upon the exercise of outstanding stock options that will entitle the holder to one share of common stock for each unit that vests over the holder's vesting period.

(2) The weighted-average exercise price is calculated based solely on outstanding stock options and does not include outstanding restricted stock units, which do not have an exercise price.

(3) Consists of shares of common stock that remain available for future issuance under the Company's 2022 Equity Incentive Plan (2022 Plan). The 2022 Plan provides for annual increases in the number of shares available for issuance under the 2022 Plan on the first day of each fiscal year beginning in 2023, equal to the lesser of: (i) 5% of the number of shares of common stock issued and outstanding on the immediately preceding December 31, and (ii) an amount determined by our board of directors. Accordingly, on January 1, 2023, the number of shares available under the 2022 Plan increased by 1,795,356 shares.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

Other than the compensation agreements and other arrangements described in the "*Executive Compensation*" section of this prospectus and the transactions described below, since January 1, 2022, there has not been and there is not currently proposed, any transaction or series of similar transactions to which we were, or will be, a party in which the amount involved exceeded, or will exceed, \$120,000 and in which any director, executive officer, holder of 5% or more of any class of our capital stock or any member of the immediate family of, or entities affiliated with, any of the foregoing persons, had, or will have, a direct or indirect material interest.

Our Relationship with Klydon Proprietary Limited ("Klydon")

Dr Einar Ronander, who serves as Chief Scientific Adviser to our board of directors, and Dr Hendrik Strydom, one of our directors, previously co-founded and served as Executive Chairperson and Chief Executive Officer, of Klydon. Dr Ronander and Dr Strydom were the controlling shareholders of Klydon through Isotope Separation Technology (Pty) Ltd, a company jointly owned by Dr Ronander and Dr Strydom and the largest shareholder of Klydon.

Exclusive Mo-100 License(superseded and replaced by new license (see "Omnibus Klydon License" below)).On September 30, 2021, our subsidiary, ASP Isotopes South Africa (Proprietary) Limited ("ASP South Africa"), as licensee, entered into a license with Klydon, as licensor, pursuant to which ASP South Africa acquired from Klydon an exclusive license to use, subcontract and sublicense certain intellectual property rights relating to the ASP technology for the development and/or otherwise disposing of the ASP technology and production, distribution, marketing and or sale of Mo-100 isotope produced using the ASP technology (as amended on June 8, 2022, the "Mo-100 license"). The intellectual property rights granted to us through the Mo-100 license included all existing and/or future proprietary rights of Klydon relating to the ASP technology, whether or not such rights have been registered including the copyright, designs, know-how, patents and trademarks (although Klydon currently has no such patents, patent applications or copyrights). The exclusive Mo-100 license was royalty-free, had a term of 999 years and was for the global development of the ASP Technology and production of the Mo-100 license. Klydon had the right to terminate the exclusivity of the Mo-100 license in the event that the licensee ceased in connection with the Mo-100 license. Klydon had the right to terminate the exclusivity of the Mo-100 license in the event that the licensee ceased carrying on activities of Mo-100 enrichment for a period of greater than 24 consecutive months. Klydon had no other rights to terminate the Mo-100 license, which was superseded and replaced by a new license agreement (described under the heading "Omnibus Klydon License" below).

Exclusive U-235 License(superseded and replaced by new license (see "Omnibus Klydon License" below). On January 25, 2022, ASP South Africa, as license, entered into a license with Klydon, as licensor, pursuant to which ASP South Africa acquired from Klydon an exclusive license to use, subcontract and sublicense certain intellectual property rights relating to the ASP technology for the development and/or otherwise disposing of the ASP technology and production, distribution, marketing and or sale of U-235 produced using the ASP (as so amended, the "U-235 license"). The exclusive U-235 license was for the global development of the ASP technology and production of U-235 and global for the distribution, marketing and sale of U-235. In connection with the U-235 license we made an upfront payment of \$100,000 and agreed to pay certain royalties (the greater of \$50 per k.g. of U-235 and 10% of profits) and a 33% sublicensing revenue share of any cash consideration we may receive for any sublicenses we may grant. Klydon had the right to terminate the exclusivity of the U-235 license in the event that the license ceased carrying on activities of U-235 enrichment for a period longer than 24 consecutive months. Klydon had no other rights to terminate the U-235 license. Effective July 26, 2022, the parties agreed to terminate the U-235 license, which was superseded and replaced by a new license agreement (described under the heading "Omnibus Klydon License" below).

Omnibus Klydon License. On July 26, 2022, ASP Isotopes UK Ltd, as licensee, entered into a license agreement with Klydon, as licensor, pursuant to which ASP Isotopes UK Ltd acquired from Klydon an exclusive license to use, develop, modify, improve, subcontract and sublicense certain intellectual property rights relating to the ASP technology for the production, distribution, marketing and sale of all isotopes produced using the ASP technology (the "Klydon license agreement"). The intellectual property rights granted to us through the Klydon license agreement include all existing and/or future proprietary rights of Klydon relating to the ASP technology, whether or not such rights have been registered including the copyright, designs, know-how, patents and trademarks (although Klydon currently has no such patents, patent applications or copyrights). The Klydon license agreement superseded and replaced the Mo-100 license and U-235 license described above. The Klydon license agreement is royalty-free, has a term of 999 years and is worldwide for the development of the ASP technology and the distribution, marketing and sale of isotopes. Future production of isotopes is limited to member countries of the Nuclear Suppliers Group. In connection with the Klydon license agreement we agreed to make an upfront payment of \$100,000 (to be included within the payments we make under the Turnkey Contract (described below) and deferred payments of \$300,000 ore 24 months. Klydon license at right to terminate the exclusivity of the Klydon license agreement in the event that the licensee ceases to carry on activities related to isotope enrichment for a period longer than 24 consecutive months.

*Turnkey Contract.*On November 1, 2021, ASP South Africa and Klydon, as the contractor, entered into a contract under which Klydon has been appointed to supply to ASP South Africa a complete turnkey Molybdenum-100 enrichment plant (the "Turnkey Contract"). The activities to be undertaken or performed by Klydon include: taking control of the assets acquired in the Molybdos Business Rescue Auction; the design of a Molybdenum-100 enrichment facility with target manufacturing capability of 20 Kg p.a. of 95% and above enriched Molybdenum isotope; the supply of components, equipment and labor required for 20 Kg p.a.; the installation, testing and commissioning of the Molybdenum enrichment plant, including production of targets to be used by customers in cyclotrons; securing all required approvals, regulatory authorizations and other required consents for the operation of the plant; providing training to local ASP Isotopes South Africa (Proprietary) Limited personnel to enable them to operate the plant going forward; and providing warranties in relation to the performance targets of the plant which are required to be met. Klydon will be responsible for liaising with the relevant South Africa authorities including the South Africa Non Proliferation Council, the Nuclear Suppliers Group and International Atomic Energy Agency to ensure that the Turnkey Contract and the Molybdenum-100 enrichment plant are compliant with international laws and guidelines. The consideration to be paid by ASP Isotopes South Africa (Proprietary) Limited under the Turnkey Contract is a maximum of \$12.8 million, in the following stages: (1) \$6.8 million in an initial proof of concept stage (which stage will end at the point of first production of Mo-100); and (2) \$6.0 million for increasing production capacity through modular construction (from the expected initial capacity of 5 kg p.a. to 20 kg p.a. of 95% enriched molybdenum-100). As of June 30, 2023 and December 31, 2022, approximately \$7,233,000 had been paid under this contract and recorded

Klydon performed a portion of the services required under the Turnkey Contract; however, services were incomplete and many of the services were not completed within the time frame required. As a result, Klydon and ASP South Africa entered into an Acknowledgement of Debt Agreement dated November 30, 2022, whereby Klydon (i) agreed to pledge its assets (the "Pledged Assets") to ASP South Africa to secure its performance of the Turnkey Contract by December 31, 2022, and (ii) acknowledged that ASP South Africa would suffer damages in the amount of \$6,050,000 ("Damage Amount") should it fail to perform. Under the Acknowledgement of Debt Agreement, the Pledged Assets would serve as collateral for Klydon's obligation to pay the Damage Amount Should Klydon failed to complete its obligations under the Turnkey Contract by December 31, 2022, all of Klydon failed to complete its obligations under the Turnkey Contract by December 31, 2022, all of Klydon and the Pledged Assets would be transferred to ASP South Africa. Klydon failed to complete its obligations under the Turnkey Contract by December 31, 2022, all of Klydon's rights of any nature to and interests of any nature in the Pledged Assets would be transferred to ASP South Africa. Klydon failed to complete its obligations under the Turnkey Contract by December 31, 2022, however, the Company did not perfect its interests in the assets until April 4, 2023.

Acknowledgement of Debt Agreement. On April 4, 2023, the Company perfected its interest under the Acknowledgement of Debt Agreement, pursuant to which the Company acquired certain intellectual property from Klydon ("Klydon Settlement"). In addition, the Company acquired Klydon's interest in four entities which are inactive and in the process of being dissolved. In conjunction with the Klydon Settlement, the Company recorded an increase to additional paid-in capital for the settlement of all liabilities owed to Klydon at the time of settlement totaling \$626,223.

Acquisition of Silicon-28 Plant Assets. On July 26, 2022, we acquired assets comprising a dormant Silicon-28 aerodynamic separation processing plant from Klydon for ZAR 6,000,000 (which at the then current exchange rate was approximately \$364,000), which will be payable to Klydon on the later of 180 days of the acquisition and the date on which the assets generate any revenues of any nature.

Chief Scientific Adviser Agreement with Dr Ronander. In January 2022, we entered into an agreement with Dr Einar Ronander pursuant to which he agreed to serve as chief scientific adviser to the board of directors for quarterly payments of \$50,000. The agreement has an initial term of one year and will automatically renew for successive one-year periods unless either party provides notice of termination.

Consulting Agreements with Dr Strydom and Dr Ronander. In January 2022, we entered into consulting agreements with Dr Einar Ronander, who serves as Chief Scientific Adviser to our board of directors, and Dr Hendrik Strydom, one of our directors, pursuant to which each of Dr Ronander and Dr Strydom agreed to assist us in developing the ASP technology for the enrichment of uranium and potentially forming a licensing transaction relating to the enrichment of uranium. In addition, Dr Ronander agreed to assist us obtaining all regulatory approvals and permits for the company's operations. The consulting agreements had no upfront cash payment or regular payment but provide for cash payments to the consultants in the event that a licensing upfront payment is paid to the company in connection with any type of licensing transaction relating to the enrichment of uranium, with the amount of such cash payments to the consultants to be determined based upon the date of receipt of any such licensing upfront payment: 25% of any licensing upfront payment received within 3 months will be paid to the consultants (85% retained by the company), 15% of any licensing upfront payment received after 9 months will be paid to the consultants (95% retained by the company). The consulting agreement have no fixed term but either party may terminate the consulting agreement (i) without cause upon 30 days' written notice to the other party or (ii) effective immediately upon written notice to the other party, if the other party breaches the agreement (subject to a 10-day cure period if such breach is capable of cure).

Indemnification Arrangements with Drs Ronander and StrydomIn connection with the other agreements entered into with Dr Einar Ronander and Dr Hendrik Strydom in January 2022, we have agreed to indemnify each of Dr Ronander and Dr Strydom against any and all losses, damages, liabilities, deficiencies, claims, actions, judgments, settlements, interest, awards, penalties, fines, costs, or expenses of whatever kind, including professional fees and reasonable attorneys' fees, that are incurred by the indemnitees, arising out of any claim by a third party creditor related to an agreement such third party creditor entered into with Klydon, Dr Einar and Dr Strydom and Klydon, and Isotope Separation Technology (Pty) Ltd (the largest shareholder of Klydon, which is owned by Dr Ronander and Dr Strydom) in May 2012 related to, among other things, (i) the sale of shares in Isotope Separation Technology (Pty) Ltd by such third party creditor to Dr Ronander and Dr Strydom and (ii) the acknowledgment of certain loan obligations owed by Klydon to Isotope Separation Technology (Pty) Ltd and such third party creditor and the repayment terms for such loan obligations. Our indemnification obligations under the letter agreements with Dr Ronander and Dr Strydom are subject to a maximum aggregate liability of \$3,200,000 (which is approximately the amount that may be owed to the third-party creditor). We are aware of the possibility of claims by the third-party creditor related to the failure by Klydon to make repayment of certain loan obligations under this May 2012 agreement, but no such claim or litigation has been asserted or threatened. We do not believe Klydon, Isotope Separation Technology (Pty) Ltd or any other third party is obligated to provide indemnity against any such claim. We do not believe any payment obligation under our indemnification arrangements with Dr Ronander and Dr Strydom is currently probable.

Advisor Agreement with ChemBridges LLC

We have entered into an Advisor Agreement with ChemBridges LLC dated October 27, 2021. One of our directors, Sergey Vasnetsov, is the President and owner of ChemBridges LLC. Under the Advisor Agreement, ChemBridges LLC agreed to provide subject matter expertise on a wide range of commercial activity and strategic execution of key global business objectives, including but not limited to the advisory services on strategy, M&A, R&D, organic growth, operational optimization, commercial excellence, IR and corporate governance. Compensation under the Advisor Agreement includes (i) an initial grant of 600,000 shares of restricted Common Stock that vest annually over three years and (ii) an award of Common Stock with a value of \$40,000 each quarter for the first 8 calendar quarters following the first anniversary of the Advisor Agreement (totaling \$160,000 annually). We issued 600,000 shares of restricted Common Stock that vest quarterly over one year in connection with an amendment to the Advisor Agreement in July 2022. The Advisor Agreement may be terminated by either party without cause upon 180 days advance written notice. We may terminate the Advisor upon any termination of the agreement if not cured after two weeks' written notice. We will have no obligation to the advisor upon any termination of the agreement of any unreimbursed expenses and pro-rata vesting of the equity awards issued under the agreement through the effective date of the termination.

On December 12, 2022, the Company entered into a second amendment (the "Amended Advisory Agreement") to the Advisory Agreement with ChemBridges LLC dated October 27, 2021. Under the terms of the Amended Advisory Agreement, ChemBridges LLC shall be eligible to receive up to one and a half percent (1.5%) of the number of shares of Common Stock outstanding as of the Company's immediately preceding fiscal year. The shares shall be granted on March 1 of each year and vest quarterly over a twelve (12) month period.

Policies and Procedures for Related Party Transactions

Our board of directors has adopted a written related person transaction policy setting forth the policies and procedures for the review and approval or ratification of related person transactions. This policy covers, with certain exceptions set forth in Item 404 of Regulation S-K under the Securities Act, any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships in which we were or are to be a participant, where the amount involved exceeds \$120,000 and a related person had or will have a direct or indirect material interest, including, without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness and employment by us of a related person. In reviewing and approving any such transactions, our audit committee is tasked to consider all relevant facts and circumstances, including, but not limited to, whether the transaction is on terms comparable to those that could be obtained in an arm's length transaction with an unrelated third party and the extent of the related person's interest in the transaction. All of the transactions described in this section occurred prior to the adoption of this policy.

DELINQUENT SECTION 16(A) REPORTS

Section 16(a) of the Exchange Act requires our executive officers, directors and persons who own more than ten percent of a registered class of our equity securities to file reports of ownership and changes in ownership with the SEC. Executive officers, directors and greater than ten-percent shareholders are required by SEC regulation to furnish us with copies of all Section 16(a) forms they file.

Based solely on our review of the copies of such forms furnished to us and the written representations from certain of the reporting persons that no other reports were required during the year ended December 31, 2022, all executive officers, directors and greater than ten-percent beneficial owners complied with the reporting requirements of Section 16(a).

STOCKHOLDER PROPOSALS

Proposals of stockholders intended to be presented at our annual meeting of stockholders to be held in 2024 must be received by us no later than July 6, 2024, which is 120 days prior to the first anniversary of the date the 2022 proxy materials were furnished to stockholders, in order to be included in our proxy statement and form of proxy relating to that meeting, unless the date of the 2024 annual meeting of stockholders is changed by more than 30 days from the first anniversary of our 2023 annual meeting, in which case the deadline for such proposals will be a reasonable time before we begin to print and send our proxy materials. These proposals must comply with the requirements as to form and substance established by the SEC for such proposals in order to be included in the proxy statement.

In addition, our amended and restated bylaws establish an advance notice procedure with regard to certain matters, including stockholder proposals and nominations not included in our proxy statement, to be brought before an annual meeting of stockholders. In general, notice must meet the requirements in our amended and restated bylaws and be received at our principal executive offices not less than 90 calendar days before nor more than 120 calendar days before the one year anniversary of the previous year's annual meeting of stockholders. Therefore, to be presented at our 2024 annual meeting of stockholders, such a proposal must be received by us no earlier than August 6, 2024 and no later than September 5, 2024. However, if the date of the annual meeting is more than 30 days earlier or more than 60 days later than such anniversary date, notice must be received not earlier than the 120th day prior to such annual meeting and no later than the 90th calendar day prior to such annual meeting or, if later, ten calendar days following the date on which public announcement of the date of the meeting is first made. If the stockholder fails to give notice by these dates, then the persons named as proxies in the proxies solicited by the board of directors for the 2024 annual meeting may exercise discretionary voting power regarding any such proposal. Stockholders are advised to review our amended and restated bylaws which also specify requirements as to the form and content of a stockholder's notice.

To comply with the universal proxy rules, stockholders who intend to solicit proxies in support of director nominees other than the Company's nominees in connection with our 2024 annual meeting must provide notice that sets forth the information required by Rule 14a-19 under the Exchange Act no later than October 15, 2024 (except that if the date of the meeting has changed by more than 30 calendar days from the previous year, then notice must be provided no later than 50 calendar days prior to the date of the annual meeting).

2022 Annual Report

Our financial statements for our fiscal year ended December 31, 2022, are included in our 2022 Annual Report, which we will make available to stockholders at the same time as this proxy statement. Our proxy materials and our Annual Report are posted on our website at www.aspisotopes.com and are available from the SEC at its website at *www.sec.gov*. You may also obtain a copy of our Annual Report, free of charge, by sending a written request to ASP Isotopes Inc., 1101 Pennsylvania Avenue NW, Suite 300, Washington, DC 20004, Attention: Investor Relations.

Information contained on, or that can be accessed through, our website is not intended to be incorporated by reference into this proxy statement, and references to our website address in this proxy statement are inactive textual references only.

STOCKHOLDERS SHARING THE SAME ADDRESS

The rules promulgated by the SEC permit companies, brokers, banks or other intermediaries to deliver a single copy of the Notice to households at which two or more stockholders reside. This practice, known as "householding," is designed to reduce duplicate mailings and save significant printing and postage costs as well as natural resources. Stockholders sharing an address who have been previously notified by their broker, bank or other intermediary and have consented to householding will receive only one copy of the Notice. If you would like to opt out of this practice for future mailings and receive separate Notices for each stockholder sharing the same address, please contact your broker, bank or other intermediary. You may also obtain a separate Notice, or if applicable, proxy materials, without charge by sending a written request to ASP Isotopes Inc., 1101 Pennsylvania Avenue NW, Suite 300, Washington, DC 20004, Attention: Corporate Secretary or by calling (202) 756-2245. We will promptly send additional copies of the Notice can request delivery of a single copy of the Notice by contacting their broker, bank or other intermediary and dileves that are receiving multiple copies of the Notice can request delivery of a single copy of the Notice by contacting their broker, bank or other intermediary or sending a written request to ASP Isotopes Inc., 1101 Pennsylvania Avenue NW, Suite 300, Washington, DC 20004, Attention: Corporate Secretary or by calling (202) 756-2245.

OTHER MATTERS

We do not know of any business other than that described in this proxy statement that will be presented for consideration or action by the stockholders at the Annual Meeting. If, however, any other business is properly brought before the meeting, shares represented by proxies will be voted in accordance with the best judgment of the persons named in the proxies or their substitutes. It is important that your shares be represented at the Annual Meeting, regardless of the number of shares that you hold. You are, therefore, urged to vote as promptly as possible to ensure your vote is recorded.

By Order of the Board of Directors

Paul E. Mann Chair of the Board Washington, DC November 1, 2023

ANNUAL	MEETING	OF S	STOCKHOL	DERS	OF
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ASP ISOTOPES INC.

December 4, 2023

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NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIAL:

The notice of meeting, proxy statement and proxy card are available at http://www.astproxyportal.com/ast/27081

Please sign, date and mail your proxy card in the envelope provided as soon as possible.

Please detach along perforated line and mail in the envelope provided.

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The Board of Directors recommends a vote FOR Proposal 2. FOR AGMIST ABSTAIN Proposal 2. Ratification of the appointment of EisnerAmper LLP as the independent registered public accounting firm of ASP isotopes inc. for 2023. In their discretion, the proxies are authorized to vote upon such other business as may properly come before the Annual Meeting. This proxy when properly executed will be voted as directed herein by the undersigned stockholder. If no direction is made, this proxy will be voted FOR ALL NOMINEES in Proposal 1 and FOR Proposal 2.
Signature of Stockholder Date:

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ASP ISOTOPES INC.

THIS PROXY IS SOLICITED ON BEHALF OF THE BOARD OF DIRECTORS FOR THE ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON DECEMBER 4, 2023

The undersigned stockholder of ASP Isotopes Inc., a Delaware corporation (the "Company"), hereby appoints Paul Mann and Robert Ainscow, and each of them, the proxy or proxies of the undersigned, with full power of substitution in each of them, to attend the Annual Meeting of Stockholders of the Company to be held on December 4, 2023 at 10:00 a.m., Eastern Time, in a virtual-only format at https://web.lumiagm.com/253072518 (password: aspi2023), and any postponements or adjournments thereof, to cast on behalf of the undersigned all votes that the undersigned is entitled to cast at such meeting and otherwise to represent the undersigned at the meeting with all proxies possessed by the undersigned if personally present at the meeting.

This proxy, when properly executed, will be voted in the manner directed on the reverse side. If this proxy is executed but no instruction is given, this proxy will be voted "FOR" all the nominees listed in Proposal 1 and "FOR" Proposal 2. The proxies are hereby authorized to vote in their discretion upon such other matters as may properly come before the meeting or any adjournment or postponement thereof.

(Continued and to be signed on the reverse side)



ANNUAL MEETING OF STOCKHOLDERS OF

ASP ISOTOPES INC.

December 4, 2023

PROXY VOTING INSTRUCTIONS

INTERNET - Access "www.voteproxy.com" and follow the on-screen instructions or scan the QR code with your smartphone. Have your proxy card available when you access the web page.

<u>TELEPHONE</u> - Call toll-free **1-800-PROXIES** (1-800-776-9437) in the United States or **1-718-921-8500** from foreign countries and follow the instructions. Have your proxy card available when you call.

Vote online/phone until 11:59 PM EST the day before the meeting.

MAIL - Sign, date and mail your proxy card in the envelope provided as soon as possible.

<u>VIRTUALLY AT THE MEETING</u> - The company will be hosting the meeting live via the Internet this year. To attend the meeting via the Internet, please visit https://web.lumiagm.com/253072518 (password: aspi2023) and be sure to have your control number available.

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COMPANY NUMBER ACCOUNT NUMBER

NOTICE OF INTERNET AVAILABILITY OF PROXY MATERIAL: The notice of meeting, proxy statement and proxy card are available at http://www.astproxyportal.com/ast/27081

Please detach along perforated line and mail in the envelope provided IF you are not voting via telephone or the Internet.

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	MMENDS A VOTE "FOR" ALL NOMINEES LISTED IN PROPOSAL 1 AND "FOR" PROPOSAL 2. DSED ENVELOPE. PLEASE MARK YOUR VOTE IN BLUE OR BLACK INK AS SHOWN HERE X
The Board of Directors recommends a vote FOR all nominees listed in Prop Proposal 1. Election of directors to serve as Class I directors for a three-year FOR ALL NOMINEES O Paul Mann O Joshua Donfeld WITHHOLD AUTHORTY FOR ALL NOMINEES FOR ALL EXCEPT (See instructions below)	The Board of Directors recommends a vote FOK Proposal 2.
INSTRUCTIONS: To withhold authority to vote for any individual nominee(s), mark "FOR ALLI and fill in the circle next to each nominee you wish to withhold, as shown he	
To change the address on your account, please check the box at right and indicate your new address in the address space above. Please note that changes to the registered name(s) on the account may not be submitted via this method.	
Signature of Stockholder Date:	Signature of Stockholder Date:
Note: Please sign exactly as your name or names appear on this Proxy. When shares a tile as such. If the signer is a corporation, please sign full corporate name by duly	re held joinfly, each holder should sign. When signing as executor, administrator, attorney, trustee or guardian, please give full authorized officer, giving full title as such. If signer is a partnership, please sign in partnership name by authorized person.