

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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **November 21, 2025**

ASP Isotopes Inc.

(Exact name of registrant as specified in its charter)

<u>Delaware</u> (State or other jurisdiction of incorporation)	<u>001-41555</u> (Commission File Number)	<u>87-2618235</u> (IRS Employer Identification No.)
<u>601 Pennsylvania Avenue NW, South Building, Suite 900 Washington, DC</u> (Address of principal executive offices)		<u>20004</u> (Zip Code)

Registrant's telephone number, including area code: **(202) 756-2245**

Not Applicable

(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- ☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- ☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- ☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock, par value \$0.01	ASPI	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act ☐

Item 7.01. Regulation FD Disclosure.

On November 21, 2025, ASP Isotopes Inc. (the “Company”) released a presentation in connection with its previously announced quarterly business update conference, which is attached hereto as Exhibit 99.1 and is incorporated by reference herein. All of the information in the attached presentation is presented as of November 2025, and the Company does not assume any obligation to update such information in the future.

The information in this Item 7.01 and in the Company presentation furnished as Exhibit 99.1 to this Current Report on Form 8-K shall not be deemed to be “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section or Sections 11 and 12(a)(2) of the Securities Act of 1933, as amended, and shall not be incorporated by reference into any filing with the U.S. Securities and Exchange Commission made by the Company, whether made before or after the date hereof, regardless of any general incorporation language in such filing.

The Company’s Company presentation furnished as Exhibit 99.1 to this Current Report on Form 8-K includes “safe harbor” language pursuant to the Private Securities Litigation Reform Act of 1995, as amended, indicating that certain statements contained therein are “forward-looking” rather than historical.

Item 9.01. Financial Statements and Exhibits.

Exhibit No.	Description
99.1	ASP Isotopes Inc. Third Quarter Update Call presentation dated as of November 2025.
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ASP ISOTOPES INC.

Date: November 21, 2025

By: /s/ Donald G. Ainscow

Name: Donald G. Ainscow

Title: Executive Vice President,
General Counsel and Secretary

Third Quarter Update Call

NOVEMBER 2025

ASP(isotopes)



Forward looking statements

Forward Looking Statements

This presentation contains, and our officers and representatives may from time to time make, "forward-looking statements" within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Forward-looking statements can be identified by words such as "believes," "anticipates," "expects," "estimates," "projects," "will," "may," "might" and words of a similar nature. Examples of forward-looking statements include, among others but are not limited to, statements we make regarding expected operating results, such as future revenues and prospects from the potential commercialization of isotopes, and our strategies for product development, engaging with potential customers, market position, and financial results. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict, many of which are outside our control. Our actual results, financial condition and events may differ materially from those indicated in the forward-looking statements based upon a number of factors. Forward-looking statements are not a guarantee of future performance or developments. You are strongly cautioned that reliance on any forward-looking statements involves known and unknown risks and uncertainties. Therefore, you should not rely on any of these forward-looking statements. There are many important factors that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements, including: the outcomes of various strategies and projects undertaken by the Company; the potential impact of laws or government regulations or policies in South Africa, the United Kingdom, the United States or elsewhere; our reliance on the efforts of third parties; our ability to complete the Renegen acquisition within the anticipated timeframe or at all; our ability to complete the construction and commissioning of our enrichment plants or to commercialize isotopes using the ASP technology or the Quantum Enrichment Process; our ability to obtain regulatory approvals for the production and distribution of isotopes; the financial terms of any current and future commercial arrangements; our ability to complete certain transactions and realize anticipated benefits from acquisitions; contracts, dependence on our Intellectual Property (IP) rights, certain IP rights of third parties; and the competitive nature of our industry. Any forward-looking statement made by us in this presentation is based only on information currently available to us and speaks only as of the date on which it is made. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise.

Market and Industry Data

This presentation includes market and industry data and forecasts that we obtained from internal research, publicly available information and industry publications and surveys. Industry publications and surveys generally state that the information contained therein has been obtained from sources believed to be reliable. Unless otherwise noted, statements as to our potential market position relative to other companies are approximated and based on third-party data and internal analysis and estimates as of the date of this overview. Although we believe the industry and market data and statements as to potential market position to be reliable as of the date of this presentation, we have not independently verified this information, and it could prove inaccurate. Industry and market data could be wrong because of the method by which sources obtained their data and because information cannot always be verified with certainty due to the limits on the availability and reliability of raw data, the voluntary nature of the data-gathering process and other limitations and uncertainties. In addition, we do not know all of the assumptions regarding general economic conditions or growth that were used in preparing the information and forecasts from sources cited herein. All forward-looking statements herein are qualified by reference to the cautionary statements set forth herein and should not be relied upon.

ASP Isotopes: Senior Management on Today's Call

PAUL MANN

Executive Chairman



- ▶ Co-founded ASP Isotopes in September 2021
- ▶ 25+ years of experience on Wall Street investing in healthcare and chemicals companies at Soros Fund Management, Highbridge Capital and Morgan Stanley.
- ▶ M.A. and M.Eng (Chemical Engineering) from Cambridge University, Research Scientist at Procter and Gamble. CFA charter holder.

ROBERT AINSWORTH

Interim Chief Executive Officer
and Chief Operating Officer



- ▶ Co-founded ASP Isotopes in September 2021
- ▶ 20+ years experience on Wall Street in Capital Markets, Asset-Backed Finance, and Control at Investec Bank, Bear Stearns, and Morgan Stanley
- ▶ B.A. (Joint Hons) in Law and Modern Languages from Bristol University

HEATHER KIESSLING

Chief Financial Officer



- ▶ 30+ years experience with life sciences and high-tech companies
- ▶ Managing Director at Danforth Advisors LLC, a life science consulting firm
- ▶ Held finance leadership roles at Cytonome/ST, LLC and AutoImmune Inc.
- ▶ CPA and holds a BA from University of California, San Diego, and an MBA from University of Michigan Graduate School of Business.

RYNO PRETORIUS

Quantum Leap Energy
Chief Executive Officer



- ▶ 15+ years in chemical engineering and technology scale up
- ▶ Founder and CEO of Free Radical Design and Rare Earth Refiners
- ▶ Project Engineer at Bimstone and Magrethea Metals
- ▶ Early career at NECSA
- ▶ B.Eng, M.Eng, PhD in Chemical Engineering from the University of Pretoria

MICHAEL CUNNIFFE

Quantum Leap Energy
Chief Financial Officer



- ▶ Former Managing Director at Danforth Advisors LLC, a life sciences consulting firm
- ▶ CFO at Axovia Therapeutics, gene therapy firm
- ▶ Previous financial roles at ATAI Life Sciences, Neurogene, and Seqirus
- ▶ Masters of Finance from London Business School
- ▶ Currently pursuing a Masters degree in Cell and Gene Therapy from UCL

Semiconductor Business Update

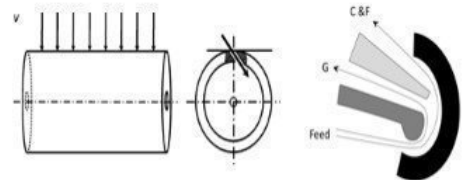


ASP Isotopes: 3Q 2025 Business Update

Silicon-28 Update

- ▶ Shipped commercial sample of Silicon-28 to customer. Enrichment level was confirmed and Isotopic purity validated.
- ▶ Our U.S. Semiconductor and Industrial Gas customers for Silicon-28 visited our South African facilities during September. Plant modifications agreed between customers and ASPI engineering team in order to:
 - 1) Improve enrichment rate.
 - 2) Smooth the transition to enriching Germane.
- ▶ Modifications are largely complete and the Silicon plan will continue processing commercial batches.
- ▶ Secured our largest Silicon-28 contract to date with a new U.S. based customer for delivery during 2026.

Aerodynamic Separation Process (ASP): Silane (Silicon-28)



ASP Isotopes: 3Q 2025 Business Update

Renergen Virginia Gas Project (Pending Acquisition)

- ▶ Awaiting the final regulatory approval for the merger (Financial Surveillance Department of the South African Reserve Bank (FinSurv) as provided for in the South African Exchange Control Regulations - expected imminently).
- ▶ Received REN shareholder approval on 10 July 2025 (>99% voting in favor).
- ▶ Received South African Competition Commission approval on 23 July 2025.
- ▶ Listed ASPI on Johannesburg Stock Exchange (JSE) on 27 August 2025.

Phase 1C

- ▶ Kinley Exploration fully mobilized, supporting reservoir modelling, well targeting and design, drilling.
- ▶ Seven drilling rigs are operating concurrently. On target to have 18 additional wells completed during 1Q 2026.
- ▶ Additional compressor station constructed and installation at 84% complete.
- ▶ ASPI Engineering team supporting several continuous initiatives related to cryogenic processes. With laser focused approach to engineering and project excellence, we expect Renergen to generate free cash flow during 2026.

RENERGEN
FUTURE ENERGY, TODAY

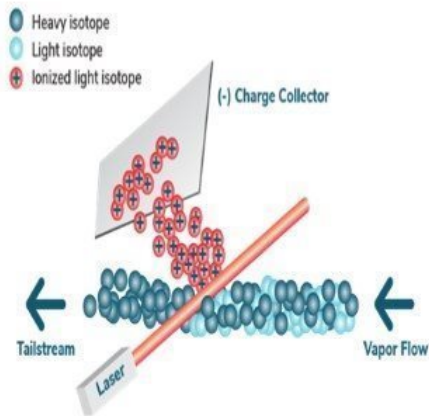


A photograph of a PET-CT scanner in a clinical setting, with a patient bed positioned inside the circular gantry. The image is overlaid with a dark teal gradient. The text "Nuclear Medicine Business Update" is written in a white serif font on the left side of the image.

Nuclear Medicine Business Update

ASP Isotopes: 3Q 2025 Business Update

Quantum Enrichment (QE)



Enlightened Isotopes Update

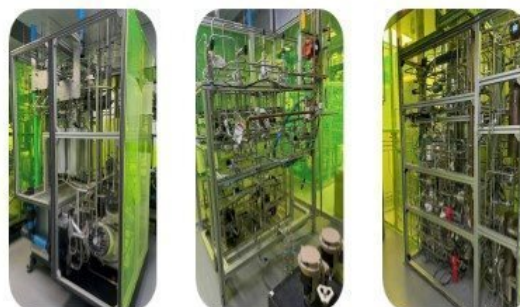
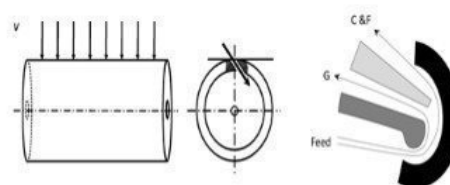
- ▶ First Ytterbium-176 (Yb-176) production plant completed and operational
- ▶ Shipped commercial sample of Yb-176 to customer for independent analysis
- ▶ Delivery of commercial quantity of Yb-176 expected over the course of 1H 2026
- ▶ Procurement started for second production line driven by customer demand
- ▶ Secured permits for the import of equipment to enrich Gd-160, Ni-64 and Zn-68
- ▶ Signed purchase order for the supply of Ba-137

ASP Isotopes: 3Q 2025 Business Update

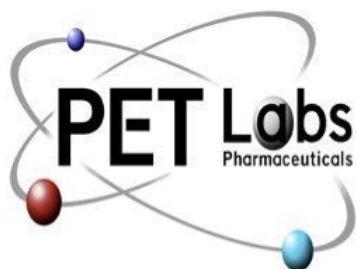
Carbon Update

- ▶ Expect to receive large quantities of feedstock suitable for Carbon-14 production during January 2026 with first shipment of enriched Carbon-14 during 1H 2026.
- ▶ Realigned Carbon-14 feedstock supply chain with Canadian customer.
- ▶ Commercial sample of Carbon-12 was shipped during November. Initial feedback has been positive. Expect to ship commercial product during December.

Aerodynamic Separation Process (ASP): Carbon-12/14



ASP Isotopes: 3Q 2025 Business Update



PET Labs Update

Business Update

- ▶ 3Q YoY growth in volumes was 16%, 3Q YoY growth in revenues was 18%.
- ▶ YTD volume growth is 16%, YTD growth in revenues is 24%.
- ▶ New cyclotron now fully operational. Hot cells currently being installed.

SPECT Update

- ▶ Shipped first SPECT Radio diagnostics from new SPECT Lab.

Therapeutics Update

- ▶ Shipped first Lu-177 radiotherapeutics.

Business Development Update

- ▶ Continue to advance four therapeutics towards the clinic.
- ▶ Acquired an additional radio pharmacy in USA and signed letter of intent for a second radio pharmacy in USA.

The Opportunity in Nuclear Energy

The logo for Quantum Leap Energy features a stylized white wave or arc above the company name. A small blue icon of a nuclear atom with a central sphere and three orbiting electrons is positioned at the right end of the arc.

QUANTUM LEAP ENERGY

Quantum Leap Energy: 3Q 2025 Business Update

Quantum Leap Energy Updates

Acquired Nuclear Waste Processing Company

- ▶ Acquired "One30Seven" accelerated beta-decay technology.
- ▶ Development of cesium-137 to barium-137 Creber Units underway.

Signed Fermi America Memorandum of Understanding (MOU)

- ▶ Amarillo, Texas location of the Fermi America 11GW datacenter, intended as the location for uranium isotope enrichment for QLE.

Nuclear Regulatory Progress

- ▶ QLE is undergoing development of demonstration production plants in the United States, United Kingdom and South Africa.
- ▶ UK Office for Nuclear Regulation (ONR) early engagement commencement, local site construction is underway.

IPO and Spin-Off Progress

- ▶ S-1 registration statement confidentially submitted to SEC on November 12, 2025, updated IPO timeline expected after SEC initial response, potential delay following U.S. government shutdown.

Quantum Leap Energy: Commercial Progress



Office for
Nuclear Regulation

Quantum Leap Energy: Strong Momentum & Scalable Growth

Our mission is to address gaps in the nuclear fuel cycle, promote safe nuclear power, and enhance the sustainability of the nuclear fuel cycle for advanced nuclear reactors and fusion systems, as well as the existing nuclear fleet.

Highlights:

- ✓ Commercial momentum through partnerships for supply and funding.
- ✓ Experienced leadership and growing team with unique R&D expertise.
- ✓ Relying on demonstrated isotope separation, nuclear chemistry, and execution capability.
- ✓ Scalable modular approach to de-risk regulatory approval.
- ✓ Exclusive access to ASP Isotopes' 150+ team and infrastructure.

Roadmap:

- Commercial demonstration of enrichment, conversion, deconversion and waste treatment capability.
- Engagement with regulators to accelerate timelines towards commercialization.
- Expanding commercial agreements.
- Establishment of US and UK research and development hubs, team build-out and expansion.
- Ongoing development of corporate functions.

Quantum Leap Energy: Future-Ready Solutions

Commercial Scale Supply of Critical Materials Lacking in the West.

Key Trends:

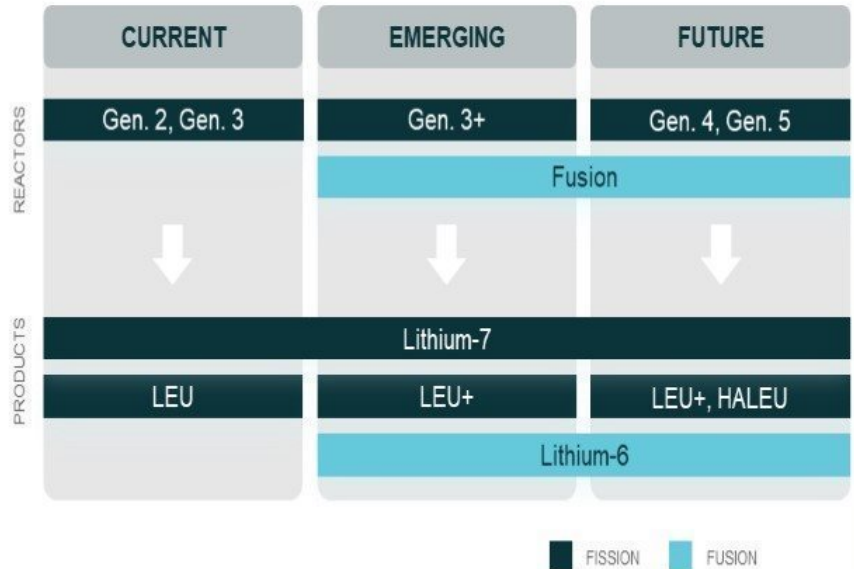
Upgrade of Generation 3 reactors to Generation 3+ via LEU+ introduction.

Next Generation Nuclear is heading for commercial operation.

First fusion tech expected by 2030.

Gen 4 reactors likely after 2030.

Molten salt reactors held back by limited heat-transfer material availability.



Quantum Leap Energy: Expected Company Development Roadmap



ASP Isotopes: 3Q 2025 Business Update

Skyline Builders Acquisition and Strategy

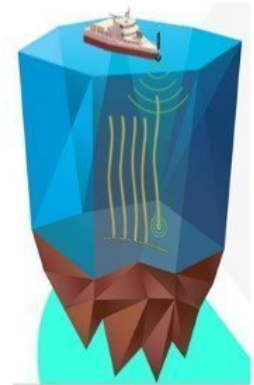
- ▶ QLE acquired a controlling stake in Skyline Builders Group Holding Limited, a Cayman Islands company with its Class A ordinary shares listed on Nasdaq under the symbol "SKBL". The current business, a construction company in Asia, is considered non-core and will likely be divested.
- ▶ We expect to change its name to Super Critical Materials Inc. and move headquarters to Washington DC (versus Hong Kong currently).
- ▶ Raised \$41.7m of gross proceeds to facilitate acquisitions and business growth.
- ▶ Paul Mann became Executive Chairman, QLE has two board members.
- ▶ Expect to announce CEO during next two months.
- ▶ **Goal is to acquire assets that are central to supply chains or materials critical to the United States and ASPI/QLE.**
- ▶ First Acquisition: A 20% interest in privately held Delaware LLC with significant critical minerals assets in Asia. We expect to disclose the exact nature of this asset during 4Q 2025.
- ▶ Rich acquisition pipeline with support expected from multiple governments.



ASP Isotopes: 3Q 2025 Business Update

SKBL Proposed Acquisition of SuperCritical

- ▶ SKBL entered into a non-binding Letter of Intent for the acquisition of SuperCritical Technologies Corp.
- ▶ SuperCritical is pioneering a new era in metals production by extracting uranium and critical metals from seawater cost-competitively and at global industrial scale.
- ▶ Leverages proven technology developed by the U.S. Government that is environmentally benign, using specialized fibers to adsorb valuable resources from the ocean.
- ▶ The world's oceans contain 4.5 billion metric tons, or roughly 10 trillion lbs, of uranium alone, over 1,000 times what is on land, and sufficient to power nuclear reactors for over 400,000 years.
- ▶ The domestic production of uranium and critical metals is directly aligned with three Executive Orders:
 - ▶ Immediate Measures to Increase American Mineral Production
 - ▶ Unleashing American's Offshore Critical Minerals and Resources
 - ▶ Reinvigorating the Nuclear Industrial Base
- ▶ The SuperCritical team is comprised of former Pacific Northwest National Lab scientists and management, including Dr. Gary Gill, former Deputy Director of the Marine Sciences Division of PNNL.



Quantum Leap Energy: Capturing a Fragile Nuclear Fuel Line

Capacity Issues

- ▶ Limited capacity
- ▶ Concentrated material availability

Geopolitical & Market Risks

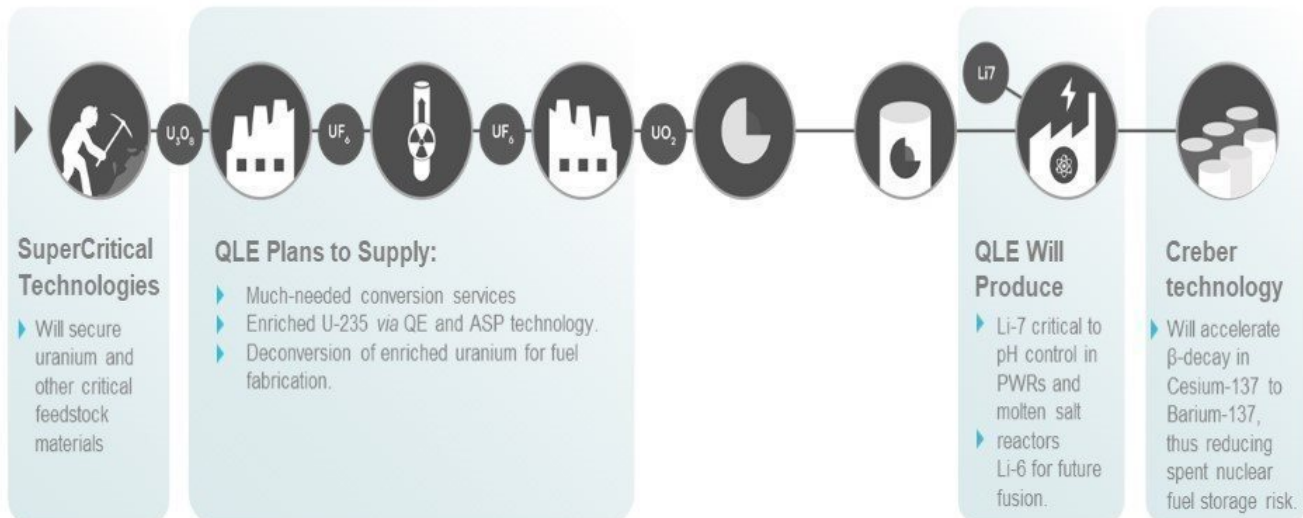
- ▶ Non-NATO oligopolies
- ▶ Materials diverted from the West
- ▶ Increasing geopolitical risk

Operational & Safety Risks

- ▶ Logistics and storage hazards
- ▶ Poor hazard mitigation for beta-emitting isotopes

Fuel & Reactor Constraints

- ▶ Insufficient materials for advanced reactors
- ▶ LEU+ required for reactor life extension



Milestones



ASP Isotopes Future Milestones



Future Milestone Targets

- Complete our optimization and efficiency plan for the Silicon-28 plant by the end of 2025.
- Fulfill all initial commercial contracts of Silicon-28 in 1H 2026.
- Ytterbium-176 customer validation and Ytterbium-176 commercial contract fulfillment in H1 2026.
- Close the Renergen acquisition in 4Q of 2025.
- Begin Construction of Iceland facilities, US facilities, and UK facilities in 2026 with a goal of enriching isotopes in the US and UK in 2026.
 - Goal to begin new global plant construction including Xe-129, Gd-160, Ni-64, and Zn-68 plants by the end of 2026.
- Continue our expansion of the global radiopharmaceutical strategy into new markets.
- Execute separate listing of QLE on NASDAQ.

Financial Updates



ASP Isotopes:

Core Financial Updates - Revenue, Expenses and Cashburn



ASP Isotopes: Other Core Financial Updates

- ▶ Cash balance of \$113.9 million as of September 30, 2025.
- ▶ This cash balance includes the net proceeds of \$56.3 million received during the third quarter from the issuance of ASP Isotopes common stock and \$108.0 million YTD from the issuance of ASP Isotopes common stock and the exercise of warrants.
- ▶ Received net proceeds of \$199.7 million in October 2025 from the issuance of ASP Isotopes common stock.
- ▶ Announced the private placement of Quantum Leap Energy LLC Convertible Notes in November 2025, closing of \$72.2 million.
- ▶ Property and Equipment growth from \$22.8 million as of December 31, 2024 to \$33.0 million as of September 30, 2025. Approximately 70% is for plant construction.



Third Quarter Update Call Q&A

NOVEMBER 2025

ASP(isotopes)