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CYCLOTRON SYSTEMS, INC.

ACSI SUCCESSFULLY COMPLETES FACTORY TESTING OF THE FIRST TR-ALPHA CYCLOTRON

Vancouver, Canada, January 16, 2025 – Advanced Cyclotron Systems Inc. (ACSI), a market leader in cyclotron technology innovation and manufacturing, announces the successful completion of the Factory Acceptance Test for the first TR-ALPHA cyclotron, with over 200 µA of alpha beam current achieved.

The TR-ALPHA is the only commercial cyclotron in the world designed specifically for large-scale production of Astatine-211 (At-211). This cyclotron has the footprint of a small PET cyclotron and can accelerate alpha particles to an energy of up to 30 MeV.

The beam intensity, demonstrated during the factory acceptance test, positions the TR-ALPHA as the cyclotron with the highest alpha particle beam current, more than doubling the production capacity of any other installed cyclotron with alpha beam capabilities.

At-211 is one of the most promising alpha-particle emitting radionuclide for Targeted Alpha Therapy. However, its use has been constrained by its limited availability. Historically, production of At-211 required large multi-particle cyclotrons or older machines that are not suited for production of commercial quantities of this isotope.

ACSI CEO, Richard Eppich: "*The successful testing of the TR-ALPHA cyclotron, its small footprint and affordability, opens up the possibility of creating a global, robust supply chain for the production and clinical applications of Astatine-211. In contrast with other radionuclides used in Targeted Alpha Therapy, the production of Astatine-211 does not require the use of expensive and dangerous raw material. ACSI's latest development, the TR-ALPHA, will greatly contribute to patients' accessibility to this very promising cancer treatment.*"

This first TR-ALPHA cyclotron was acquired by Alpha Nuclide, a radiopharmaceutical infrastructure company with extensive experience in At-211 production. Headquartered in Ningbo, China, Alpha Nuclide is focused on the supply of diagnostic and therapeutic radionuclides and radiopharmaceuticals. The installation of the TR-ALPHA cyclotron will allow Alpha Nuclide to achieve large-scale commercial supply of At-211 in China in 2025.

Yutian Feng, PhD, Co-Founder and CEO of Alpha Nuclide: "*We are very excited about the successful completion of the factory testing of the first TR-ALPHA. This cyclotron is capable of producing 4 Curies of Astatine-211 daily. This will allow us to treat over 130 patients every day within a 7-hour radius, and over 60 patients within a 14-hour radius. Increased production capacity will mitigate the constraint of Astatine-211's 7-hour half-life on supply chain and also lower the cost of treatment significantly. At the same time, we will be best positioned to lead the innovation in developing and manufacturing of Astatine-211 radiopharmaceuticals at a higher radioactivity level than what was possible previously. Alpha Nuclide and ACSI will continue working together to demonstrate that a global supply network of Astatine-211 has a realistic and economical pathway.*"

About ACSI

Advanced Cyclotron Systems, Inc. is a world leader in the design and manufacturing of cyclotron systems. For over 30 years, ACSI has been at the forefront of cyclotron design and innovation.

ACSI's TR-24 and TR-FLEX cyclotrons were first-of -their-kind in the industry, breaking barriers and opening the possibility for economical production of multiple radioisotopes for PET and SPECT scans, within a small footprint. The latest addition to the ACSI's family of cyclotrons, the TR-ALPHA, ratifies ACSI as an industry leader in cyclotron innovation.

ACSI cyclotrons are designed, manufactured, and assembled in Richmond, BC, Canada.

For more information contact info@advancedcyclotron.com

About Alpha Nuclide

Alpha Nuclide Inc. is an infrastructure company focusing on the supply of At-211 and its Targeted Alpha Therapy radiopharmaceuticals. Our R&D center is based in Ningbo China and equipped with a state-of-the-art radiochemistry lab, GMP processing lab, cell culture facility and a small animal facility. Our production center is based in Jiaxing China, where we are installing a 30 MeV TR-FLEX and a TR-ALPHA cyclotron. Productions will begin in Q2 2025.