



BERONI GROUP FURTHER ADVANCES ITS SCIENTIFIC MILESTONE ACHIEVEMENTS ON SEVERAL DRUG DEVELOPMENT PLATFORMS

SYDNEY, Australia, September 30, 2026 - Beroni Group Limited (NSX: BTG) (“Beroni”) today provides a progress update following its July 6, 2026 announcement of four major preclinical milestones across NAS01 for NASH, targeted nucleic acid therapeutics for liver fibrosis and cirrhosis, microfluidic MTX-Lip oncology formulations, and long-acting PLGA brexpiprazole microspheres.

Since July 2026, Beroni has significantly expanded and deepened these achievements through the establishment of a globally pioneered aptamer-mediated two-stage targeted nucleic acid delivery platform, a proprietary in-vivo CellSELEX live-cell aptamer screening platform, new First-in-Class nucleic and therapeutic candidates addressing MASH, liver fibrosis, compensated cirrhosis and hepatocellular carcinoma, with strengthened IP and scientific validation. Together, these advances elevate the programs into a closed-loop, source-innovation system with global licensing readiness.

1. Expansion of the Two-Stage Targeted Delivery Architecture

Beroni has subsequently scaled the exclusive two-stage targeting platform into a unified engineering infrastructure:

- Stage 1 – Cellular Targeting: Pharmaceutically optimized aptamers now provide precise homing to hepatocytes, activated hepatic stellate cells (aHSCs), cardiomyocytes, M1 macrophages, and additional cell types under discovery.
- Stage 2 – Intracellular Gene-Level Intervention: siRNA, miRNA, and decoy ODN payloads are now integrated into covalent aptamer-nucleic acid conjugates, enabling high-precision intracellular modulation of pathogenic targets.
- GMP-ready synthetic routes: Compact molecular designs and reusable conjugation chemistries shorten development timelines for new candidates - an evolution from the “standardized production protocols” for NAS01.

2. Drug Development Pipeline – Further Milestones Achieved

NAS01 / NAS02

- NAS01 and its next-generation variant NAS02 demonstrated robust improvement in hepatic steatosis, reduced serum ALT and triglycerides, and defined therapeutic windows in MASH mouse models.
- A GalNAc-conjugated comparator has been developed to support global partner benchmarking.

- These results strengthen NAS01's positioning as a world-first dual-target siRNA with full global IP independence.

Liver Fibrosis & Cirrhosis

- Beroni's flagship AWCPDO (APTtan/AptWu aptamer + PU.1 decoy ODN) shows specific aHSC tropism, validated by in-vivo imaging and CCl₄ fibrosis reversal.
- The outcome was published in *Molecular Therapy: Nucleic Acids* (Q1) with editorial commentary—deepening July's "dual authoritative validation" and expanding the fibrosis portfolio beyond APT8.
- Beroni has advanced to a multi-miRNA gene cluster targeting compensated F4 cirrhosis.
- Demonstrated pathological reversal of cirrhosis via suppression of nine pro-fibrotic genes.
- Published in *CMGH* (Q1, IF 9.225), strengthening July's cirrhosis program with deeper mechanistic innovation.

Aptamer-Functionalized MTX-LNP Liposomes

- The oncology platform now incorporates aptamer functionalization, enabling tumor-specific accumulation, pH-triggered release, and enhanced in-vivo tumor inhibition.
- This has transformed the MTX-Lip into a targeted nano-oncology platform compatible with Beroni's two-stage delivery architecture.

Others

- Patent granted and proof-of-concept completed for APT15 cardiomyocyte-targeting aptamer
- Patent granted for M1 macrophage-targeting aptamer
- Blood-brain-barrier-crossing aptamer discovery for CNS indications expanding into multi-organ precision therapeutics.

3. Strengthened Intellectual Property Position

- 7 granted invention patents now covering aptamer sequences for hepatocytes, aHSCs, cardiomyocytes, M1 macrophages, and in-vivo CellSELEX screening.
- 11 patent applications under substantive examination cover decoy-ODN therapeutics, AAV-miRNA constructs, conjugation linkers, tumor-targeting liposomes, and sustained-release microspheres.

This significantly expands Beroni's IP foundation into a global defensive barrier across sequences, libraries, screening workflows, formulations, and delivery architectures.

4. Strategic Value: Developments Evolving into a Closed-Loop Innovation System

Beroni has transformed its developments into a globally licensing-ready, reusable, multi-asset drug discovery and delivery ecosystem.

- Unified these assets under a two-stage aptamer-mediated delivery platform.
- Established plug-and-play modularity enabling rapid generation of new First-in-Class therapeutics.
- Strengthened global competitiveness through Q1 publications, granted patents, and scalable GMP-ready engineering.
- Expanded cooperation models to include single-asset licensing, platform-driven joint discovery, full-platform licensing, and collaboration-with-option frameworks.

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About Beroni Group Limited

Beroni Group is an international biopharmaceutical enterprise dedicated to the innovation and commercialization of drugs and therapies to combat various global diseases such as cancer and infectious diseases. Its diversified portfolio is comprised of FDA/CE approved virus diagnostic kits, an e-commerce platform for the sale of pharmaceutical products and a development pipeline targeting oncology and cell therapies. Beroni has operations in Australia, United States, China and Japan. It is listed on the National Stock Exchange of Australia. To learn more about Beroni, please visit www.beronigroup.com.

For more information, please contact us at:

Tel: +61 2 9159 1827

Email: jacky.zhang@beronigroup.com; peter.wong@beronigroup.com

Website: www.beronigroup.com