Marvel Biosciences Announces Promising New Data from Rett Syndrome Study and Plans to Discuss Orphan and Rare Disease Status with the FDA

Calgary, Alberta – November 26, 2024 – Marvel Biosciences Corp. (TSXV: MRVL OTCQB: MBCOF), and its wholly owned subsidiary, Marvel Biotechnology Inc. **(collectively the "Company" or "Marvel"),** are pleased to share additional data from its ongoing preclinical Rett syndrome study conducted in collaboration with the iBraiN Institute. Marvel also announces plans to engage with the FDA to discuss these promising pilot results.

The study evaluated MB204, Marvel's lead compound, in comparison to Trofinetide, the only FDA and Health Canada approved treatment for Rett syndrome. Mice were treated for two weeks with either compound, and social behaviour endpoints were assessed when the treatment was ceased and weekly thereafter. New data from our collaborations reveal the MB204 exhibited sustained post-treatment benefits, surpassing Trofinetide.

Key Data Highlights:

- MB204 demonstrated strong carry-over effects on multiple social behaviour endpoints, persisting for 21 days post-treatment. This new data suggests a durable post-treatment and potential neuromodulator effect.
- In contrast, Trofinetide showed minimal carry-over effects, lasting only 14 days.
- Full study results are expected in Q1 of 2025.

Building on these results in two models of autism, Marvel intends to begin the process with the FDA of obtaining Orphan and/or rare disease designation for MB204 in Rett Syndrome. Such designation could provide market exclusivity, tax incentives, and priority review waivers.

"MB204 continues to exceed our expectations in pre-clinical studies," said Dr. Mark Williams, Chief Science Officer of Marvel Biosciences. "MB204's long-last effects are particularly exciting and encouraging."

"Alongside this program, we are advancing preclinical studies in Fragile X syndrome and recently secured a major grant to support preclinical research in Alzheimer's disease," added Rod Matheson, CEO of Marvel Biosciences. "Achieving orphan or rare disease designation for MB204 could also add significant value to our lead asset."

About Marvel Biosciences Corp.

Marvel Biosciences Corp., and its wholly owned subsidiary, Marvel Biotechnology Inc., is a Calgary-based pre-clinical stage pharmaceutical development biotechnology company that utilizes a "drug redevelopment" approach to drug development. Historically, when a new class of drug is developed, it is optimized for a particular target, but typically only approved for a specific disease. Often, a new disease is identified which involves the same target, however, pending the remaining patent life, the originally approved drug may not have sufficient time left for it to be commercially viable to be developed for the new disease indication. Marvel develops new synthetic chemical derivatives of the original approved drug

for the new disease indication. Patent protection is sought, as the new potential asset is developed by the Company. The Company believes the business model results in significantly less risk, cost and time to develop its assets compared to traditional biotechnology companies.

Marvel Biotechnology Inc. has currently developed several new chemical entities, using synthetic chemical derivatives of known, off-patent drugs, that inhibit the A2a adenosine receptor with application to neurological diseases (depression & anxiety, Alzheimer's, ADHD), and the non-neurological conditions of cancer and non-alcoholic steatohepatitis. Marvel is also exploring additional undisclosed targets to expand its asset pipeline.

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All information contained in this news release with respect to the Company and its subsidiary, (collectively, the "Parties") were supplied by Marvel, respectively, for inclusion herein and each parties' directors and officers have relied on each other for any information concerning such Party.

This news release may contain forward-looking statements and other statements that are not historical facts. Forward-looking statements are often identified by terms such as "will", "may", "should", "anticipate", "expects" and similar expressions. All statements other than statements of historical fact, included in this release, including, without limitation, statements regarding the future plans and objectives of the Company are forward-looking statements that involve risks and uncertainties. There can be no assurance that such statements will prove to be accurate and actual results and future events could differ materially from those anticipated in such statements. Important factors that could cause actual results to differ materially from the expectations of the Company and include other risks detailed from time to time in the filings made by the Company under securities regulations.

The reader is cautioned that assumptions used in the preparation of any forward-looking information may prove to be incorrect. Events or circumstances may cause actual results to differ materially from those predicted, as a result of numerous known and unknown risks, uncertainties, and other factors, many of which are beyond the control of the Company. As a result, the Company cannot guarantee that the above events on the terms will occur and within the time disclosed herein or at all. The reader is cautioned not to place undue reliance on any forward-looking information. Such information, although considered reasonable by management at the time of preparation, may prove to be incorrect and actual results may differ materially from those anticipated. Forward-looking statements contained in this news release are expressly qualified by this cautionary statement. The forward-looking statements contained in this news release are made as of the date of this news release and the Company will update or revise publicly any of the included forward-looking statements as expressly required by Canadian securities law.