Marvel Announces First of Two Final Data Sets from Rett Syndrome Study:
MB-204 Significantly Outperforms Trofinetide

Calgary, Alberta – March 13, 2025 – Marvel Biosciences Corp. (TSXV: MRVL OTC: MBCOF), and its wholly owned subsidiary, Marvel Biotechnology Inc. **(collectively the "Company" or "Marvel"),** is pleased to share part of the final data from its preclinical Rett syndrome study conducted in collaboration with the iBraiN Institute.

The study evaluated MB-204, Marvel's lead compound (10 mg/kg oral once daily), in comparison to Trofinetide (100 mg/kg injected once daily), the only FDA and Health Canada approved treatment for Rett syndrome. Mecp2 mice were treated for approximately two weeks with either compound, and multiple endpoints were assessed while on drug treatment. Analysis of the carry-over effect of MB-204 and Trofinetide is ongoing and will be released separately.

Key Data Highlights:

- MB-204 reversed social behavioural deficiencies as measured by the number and duration of nose touching and the number and duration of paw touching ($p<0.0001$ vs control). Trofinetide showed no improvement and MB-204 was significantly better than Trofinetide on the same endpoints ($p<0.0001$).
- MB-204 also reversed impairments in following behaviour ($p<0.0001$ vs control). Trofinetide showed no improvement and MB-204 was significantly better than Trofinetide on the same endpoint ($p<0.001$).
- Both MB-204 and Trofinetide reversed social preference behaviour measured by the three-chamber test (both $p<0.0001$ vs control). The three-chamber test is one of the most commonly used methods for evaluating social behavior in mouse models of autism spectrum disorder.
- MB-204 reversed the percentage of spontaneous alternations (%SPA) and the percentage of same arm returns (%SAR) in the Y-maze test ($p<0.0001$ vs control). Trofinetide showed no improvement and MB-204 was significantly better than Trofinetide on the same endpoints ($p<0.0001$). SPA typically measures spatial working memory and repetitive behaviours. SAR also reflects repetitive behaviour which often occurs in autism and obsessive-compulsive disorders models.

"We are very grateful to our collaborators for this excellent data, which clearly suggests MB-204 could be a very promising treatment for Rett Syndrome", said Chief Science Officer Dr. Mark Williams. "We also look forward to the remainder of the data, where we see how long the effect of MB-204 lasts after treatment has stopped".

The Company and its collaborators intend to publish and present the data at an upcoming scientific conference.

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. The Company is developing MB-204, a novel fluorinated derivative of the approved anti-Parkinson's drug Istradefylline, the only clinically approved adenosine A2a antagonist. A significant and growing body of scientific evidence suggests drugs that block the adenosine A2a receptor, such as MB-204, could be useful in treating other neurological diseases such as autism, depression and Alzheimer's Disease. The Company is actively investigating its potential in addressing other neurodevelopmental disorders, such as Rett Syndrome and Fragile X Syndrome, to expand its therapeutic reach.

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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.