A Highly Selective and Potent HPK1 Inhibitor Enhances Immune Cell Activation and Induces Robust Tumor Growth Inhibition in a Syngeneic Tumor Model

David Ciccone1, Vad Lazari2, Ian Linney1, Michael Briggs2, Samantha Carreiro1, Ben Whittaker2, Grant Wishart2, Eric Feyfant3, Jeremy Greenwood3, Abba Leffler3, Alexandre Cote3, Steven Albanese3, Ian Waddell2, Chris Hill2, Christine Loh1, Peter Tummino1, Joshua McElwee1, Alan Collis1, and Neelu Kaila1

Nimbus Therapeutics, Cambridge, MA, USA; 2Charles River Laboratories, Chesterford Research Park, United Kingdom; 3Schrödinger, New York, NY, USA

Inhibition in a Syngeneic Tumor Model

A Highly Selective and Potent HPK1 Inhibitor Enhances Immune Cell Activation and Induces Robust Tumor Growth Inhibition as a Single Agent and in Combination with anti-PD1 in the CT-26 Syngeneic Model

Figure 1. NMBS-2 is a Highly Potent and Exquisitely Selective HPK1 Inhibitor

Figure 2. HPK1 Inhibition Enhances IL-2 and IFNy Production From Stimulated Human T Cells

Figure 3. NMBS-2 In Vivo Dosing of 50mpk Results in Complete HPK1 Target Engagement

Figure 4. NMBS-2 Induces Robust Tumor Growth Inhibition as a Single Agent and in Combination with anti-PD1 in the CT-26 Syngeneic Model

Figure 5. Increased Serum Cytokines and Circulating Antibodies (Pharmacodynamic Responses) in NMBS-2 Treated CT-26 Animals

Figure 6. NMBS-2 Induces Robust Tumor Growth Inhibition as a Single Agent in the B16-F10 Syngeneic Model

CONCLUSIONS AND FUTURE STEPS

An oral, potent, highly selective small molecule HPK1 inhibitor demonstrates in vivo tumor growth inhibition as a single agent and in combination with anti-PD1 in syngeneic models. Observed pharmacodynamic responses in syngeneic models, including increased serum cytokines and circulating plasma antibody levels, are consistent with comprehensive immune cell activation. Further evaluation of this selective inhibitor in additional immune cell-based assays will continue to build upon the mechanistic understanding of HPK1 inhibition as a novel immunomodulatory approach for anti-tumor immunity.

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