BRIGHT MINDS ANNOUNCES OVERNIGHT MARKETED OFFERING OF UNITS

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Vancouver, BC – August 22, 2022 – Bright Minds Biosciences Inc. ("**Bright Minds**" or the "**Company**") (Nasdaq: DRUG) (CSE: DRUG), a biotechnology company focused on developing novel drugs for targeted treatment of neuropsychiatric disorders, epilepsy and pain, is pleased to announce that is has entered into a letter of engagement with Eight Capital, under which Eight Capital has been appointed as agent in connection with the offer for sale units of the Company (the "**Units**") on a best efforts overnight marketed basis (the "**Offering**").

The Offering is expected to be priced in the context of the market, with the final terms of the Offering to be determined at the time of pricing. There can be no assurance as to whether or when the Offering may be completed, or as to the actual size or terms of the Offering. The closing of the Offering will be subject to certain conditions including, but not limited to, the receipt of all necessary approvals, including the approval of the Canadian Securities Exchange.

The Company intends to grant Eight Capital an option, exercisable in whole or in part, at any time not later than the 30th day following the closing of the Offering, to purchase up to an additional 15% of the Units offered in the proposed Offering for market stabilization purposes and to cover over-allotments, if any.

The net proceeds of the Offering are expected to be used for working capital and general corporate purposes.

It is expected that the units will be offered in each of the provinces of Canada, other than Quebec, pursuant to Bright Mind's short form base shelf prospectus dated June 7, 2021 (the "Base Prospectus") and may also be offered in the United States or to, or for the account or benefit of, U.S. persons pursuant to available exemptions from the registration requirements of the United States Securities Act of 1933, as amended and in compliance with similar exemptions under applicable state securities laws, as well as in jurisdictions outside of Canada and the United States as are agreed to by the Company and the Underwriters on a private placement or equivalent basis. The terms of any Offering will be described in a prospectus supplement to be filed with the securities commissions in each of the provinces and territories of Canada (the "Prospectus Supplement").

Copies of the Prospectus Supplement, following filing thereof, and accompanying Base Prospectus may be obtained on SEDAR at www.sedar.com and from Eight Capital at ecm@viiicapital.com. The Base Prospectus contains, and the Prospectus Supplement will contain, important detailed information about the Company and the proposed Offering. Prospective investors should read the Prospectus Supplement and accompanying Base Prospectus and the documents that are incorporated by reference into the Base Prospectus that the Company has filed on SEDAR at www.sedar.com before making an investment decision.

The securities being offered have not been, nor will they be, registered under the United States Securities Act of 1933, as amended, and may not be offered or sold in the United States or to, or for the account or benefit of, U.S. persons absent registration or an applicable exemption from the registration requirements. This press release shall not constitute an offer to sell or the solicitation of an offer to buy nor shall there be any sale of the securities in any State in which such offer, solicitation or sale would be unlawful.

About Bright Minds:

Bright Minds is focused on developing novel transformative treatments for neuropsychiatric disorders, epilepsy, and pain. Bright Minds has a portfolio of next-generation serotonin agonists designed to target neurocircuit abnormalities that are responsible for difficult to treat disorders such as resistant epilepsy, treatment resistant depression, PTSD, and pain. The Company leverages its world-class scientific and drug development expertise to bring forward the next

generation of safe and efficacious drugs. Bright Minds' drugs have been designed to potentially retain the powerful therapeutic aspects of psychedelic and other serotonergic compounds, while minimizing the side effects, thereby creating superior drugs to first-generation compounds, such as psilocybin.

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This news release may contain assumptions, estimates, and other forward-looking statements regarding future events. Such forward-looking statements involve inherent risks and uncertainties and are subject to factors, many of which are beyond the Company's control that may cause actual results or performance to differ materially from those currently anticipated in such statements.