



Cybin Announces Positive Topline Data from Phase 1 Studies of Proprietary Deuterated DMT Molecules CYB004 and SPL028

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- Intravenous ("IV") CYB004 demonstrated robust and rapid-onset psychedelic effects at lower doses compared to native DMT, suggesting potential as a short-acting, scalable treatment -
- Intramuscular ("IM") dosing of SPL028 produced robust, short-duration psychedelic effects in the majority of participants -
- Both IV and IM routes were safe and well-tolerated, with potential for IM administration to provide more convenient, patient-friendly dosing -
- Combined Phase 1 results for deuterated DMT program support progression to a Phase 2 study in Generalized Anxiety Disorder ("GAD") in Q1 2024 -
- Patent portfolio includes 40 granted patents and over 170 pending applications, with 25 granted patents directly related to the deuterated DMT program -

TORONTO--(BUSINESS WIRE)-- [Cybin Inc.](#) (NYSE American:CYBN) (NEO:CYBN) ("**Cybin**" or the "**Company**"), a clinical-stage biopharmaceutical company committed to revolutionizing mental healthcare by developing new and innovative psychedelic-based treatment options, today announced positive safety, pharmacokinetic ("PK") and pharmacodynamic ("PD") data from its Phase 1 studies of CYB004 (IV) and SPL028 (IV and IM) in healthy volunteers. CYB004 and SPL028 are proprietary deuterated DMT molecules within the Company's DMT program in development for the treatment of generalized anxiety disorder.

Results from the Phase 1 studies in the CYB004 and SPL028 programs demonstrated PK and PD profiles with the potential to bridge data across these molecules, and the PK profiles for both molecules demonstrated concentrations in the effective range. Both IV (CYB004 and SPL028) and IM (SPL028) administration routes were safe and well-tolerated, with potential for IM dosing to provide a more convenient dosing method for patients when compared to IV infusion. IM dosing of SPL028 produced robust psychedelic effects lasting a short duration in the majority of subjects, a finding that supports IM administration as a well-tolerated and effective dosing method that is highly scalable.

"The positive data from our Phase 1 studies of CYB004 and SPL028 are highly encouraging with the combined data from these studies enabling us to prioritize our 2024 development plan for our deuterated DMT program. Importantly, these are the first-in-human studies of deuterated DMT in healthy participants. We are pleased that both the IV and IM administrations produced robust psychedelic effects and were safe and well-tolerated. We are especially encouraged that the IM route produced psychedelic effects in the majority of subjects, with a short-duration psychedelic experience from a single administration of SPL028," said Doug Drysdale, Chief Executive Officer of Cybin. "These results for IM dosing of deuterated DMT are highly promising and will help inform dosing in future clinical trials, saving time and resources by eliminating the need for further formulation studies of other methods such as subcutaneous dosing."

Dr. Amir Inamdar, Chief Medical Officer of Cybin, added: "The completion of our Phase 1 CYB004 and SPL028 studies represents a significant milestone in the clinical advancement of our deuterated DMT program. From these studies, we identified a dose that resulted in strong psychedelic effects, was well-tolerated and we believe will result in therapeutic efficacy. Collectively, these positive results will inform a more targeted approach and support an accelerated path to a Phase 2 deuterated DMT study in GAD in early 2024."

Phase 1 CYB004 Topline Results

The objective of the Phase 1 CYB004 study was to evaluate the safety, PK, and PD of escalating doses of DMT and CYB004 in healthy participants. This was a three-part study, consisting of Part A (90-minute IV DMT infusion) in 39 participants, Part B (IV DMT bolus + infusion) in 12 participants, and Part C (IV CYB004 bolus ± infusion) in 24 participants.

CYB004 was well-tolerated with no serious adverse events, and the majority of adverse events were mild to moderate and self-limiting. The Phase 1 study's robust dataset on safety, tolerability and PK/PD provided important dosing information allowing the Company to advance its deuterated DMT program into patients in a Phase 2 GAD study in Q1 2024.

Study highlights:

- Escalating doses of DMT IV infusion over 90 minutes were well-tolerated

- Robust psychedelic effects were produced, and the intensity of effects was related to the rate at which the peak concentration was achieved.
- Deuteration of DMT, as with CYB004, resulted in stronger psychedelic effects at lower plasma concentrations, compared with native DMT.
- These psychedelic effects were rapid in onset when administered as an IV bolus over 5 minutes and persisted for about 40 minutes after the bolus without the need for an extended infusion.
- This short duration of effects has the potential for CYB004 to be a scalable treatment that can be delivered in a shorter period of time compared with longer acting psychedelics.

Phase 1 IV/IM SPL028 Topline Results

The Company today also announced the completion of dosing in a Phase 1 study evaluating IV and IM doses of SPL028 (deuterated DMT) in healthy participants. The objective of this study was to evaluate the safety, PK, and PD of escalating doses of SPL028 in healthy participants. This was a two-part study, consisting of Part 1 (IV vs IM cross-over dosing in 16 psychedelic-experienced healthy participants) and Part 2 (single IV or IM doses of SPL028 in 22 healthy participants with little-to-no psychedelic experience).

IV and IM SPL028 demonstrated a favorable safety and tolerability profile. No serious adverse events were observed, and the majority of adverse events were mild to moderate and self-limiting. Furthermore, the study identified an IM dose of SPL028 that resulted in a breakthrough psychedelic experience, with a total duration ranging from 55 to 120 minutes.

Phase 1 Data Summary: CYB004 and SPL028

- IV and IM routes both safe and well-tolerated
- CYB004 and SPL028 demonstrated similar PK and PD profiles which allows bridging of data across molecules
- PK profiles for both molecules demonstrated concentrations in the effective range
- IM dosing of SPL028 produced robust psychedelic effects lasting a short duration in the majority of subjects

“With these important deuterated DMT datasets in hand, as well as the recently announced positive findings from our Phase 2 study of CYB003, our deuterated psilocybin analog in development for the treatment of Major Depressive Disorder, we are well positioned to advance both programs as we pursue our goal of creating safe and effective treatments for multiple mental health disorders,” concluded Drysdale.

About Cybin

Cybin is a clinical-stage biopharmaceutical company on a mission to create safe and effective psychedelic-based therapeutics to address the large unmet need for new and innovative treatment options for people who suffer from mental health conditions.

Cybin’s goal of revolutionizing mental healthcare is supported by a network of world-class partners and internationally recognized scientists aimed at progressing proprietary drug discovery platforms, innovative drug delivery systems, and novel formulation approaches and treatment regimens. The Company is currently developing CYB003, a proprietary deuterated psilocybin analog for the treatment of major depressive disorder and CYB004, a proprietary deuterated DMT molecule for generalized anxiety disorder and has a research pipeline of investigational psychedelic-based compounds.

Headquartered in Canada and founded in 2019, Cybin is operational in Canada, the United States, the United Kingdom, the Netherlands and Ireland. For company updates and to learn more about Cybin, visit www.cybin.com or follow the team on X, LinkedIn, YouTube and Instagram.

Cautionary Notes and Forward-Looking Statements

Certain statements in this news release relating to the Company are forward-looking statements and are prospective in nature. Forward-looking statements are not based on historical facts, but rather on current expectations and projections about future events and are therefore subject to risks and uncertainties which could cause actual results to differ materially from the future results expressed or implied by the forward-looking statements. These statements generally can be identified by the use of forward-looking words such as “may”, “should”, “could”, “intend”, “estimate”, “plan”, “anticipate”, “expect”, “believe” or “continue”, or the negative thereof or similar variations. Forward-looking statements in this news release include statements regarding the Company’s plans to progress to a Phase 2 deuterated DMT study in patients with generalized anxiety disorder in Q1 2024; potential for IM administration to provide more convenient, patient-friendly dosing; the therapeutic efficacy of the deuterated DMT program; the potential of the deuterated DMT program to be a scalable treatment that can be delivered in a short period of time compared with longer acting psychedelics; and the Company’s plans to engineer proprietary drug discovery platforms, innovative drug delivery systems, novel formulation approaches and treatment regimens for mental health conditions.

These forward-looking statements are based on reasonable assumptions and estimates of management of the Company at the time such statements were made. Actual future results may differ materially as forward-looking statements involve known and unknown risks, uncertainties, and other factors which may cause the actual results, performance, or achievements of the Company to materially differ from any future results, performance, or achievements expressed or implied by such forward-looking statements. Such factors, among other things, include: implications of the spread of COVID-19 on the Company’s operations; fluctuations in general macroeconomic conditions; fluctuations in securities markets; expectations regarding the size of the

psychedelics market; the ability of the Company to successfully achieve its business objectives; plans for growth; political, social and environmental uncertainties; employee relations; the presence of laws and regulations that may impose restrictions in the markets where the Company operates; and the risk factors set out in each of the Company's management's discussion and analysis for the three and six month periods ended September 30, 2023 and the Company's annual information form for the year ended March 31, 2023, which are available under the Company's profile on www.sedarplus.ca and with the U.S. Securities and Exchange Commission on EDGAR at www.sec.gov. Although the forward-looking statements contained in this news release are based upon what management of the Company believes, or believed at the time, to be reasonable assumptions, the Company cannot assure shareholders that actual results will be consistent with such forward-looking statements, as there may be other factors that cause results not to be as anticipated, estimated or intended. Readers should not place undue reliance on the forward-looking statements and information contained in this news release. The Company assumes no obligation to update the forward-looking statements of beliefs, opinions, projections, or other factors, should they change, except as required by law.

Cybin makes no medical, treatment or health benefit claims about Cybin's proposed products. The U.S. Food and Drug Administration, Health Canada or other similar regulatory authorities have not evaluated claims regarding psilocybin, psychedelic tryptamine, tryptamine derivatives or other psychedelic compounds. The efficacy of such products has not been confirmed by approved research. There is no assurance that the use of psilocybin, psychedelic tryptamine, tryptamine derivatives or other psychedelic compounds can diagnose, treat, cure or prevent any disease or condition. Rigorous scientific research and clinical trials are needed. Cybin has not conducted clinical trials for the use of its proposed products. Any references to quality, consistency, efficacy and safety of potential products do not imply that Cybin verified such in clinical trials or that Cybin will complete such trials. If Cybin cannot obtain the approvals or research necessary to commercialize its business, it may have a material adverse effect on Cybin's performance and operations.

Neither Cboe Canada, operating as the Neo Exchange Inc., nor the NYSE American LLC stock exchange have approved or disapproved the contents of this news release and are not responsible for the adequacy and accuracy of the contents herein.



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