


investor update





Our fourth quarter of 2020 produced exceptional results and I'm proud of our growth to start 2021. We continued to work with United Therapeutics to advance Tyvaso DPI™ (aka TreT) to a regulatory submission. We completed the integration of Qrumpharma and focused our pipeline priorities in orphan lung diseases. With the recent completion of an offering of convertible debt, we are evaluating our growth strategy for Afrezza® (insulin human) Inhalation Powder, which includes (later this year) a Phase 3 study in pediatric patients. We are seeing the benefits of focusing on strong execution and we look forward to reporting more progress.


Michael Castagna, Chief Executive Officer


company news

 U.S. Afrezza net revenue was \$10.1M December 2020, a 30% increase vs 4Q of 2019.


 The clinical and product stability studies for TreT (Tyvaso DPI) have been completed, culminating an NDA submission to the FDA by United Therapeutics in April 2021.

 We bolstered our commitment to orphan lung diseases with the acquisition of Qrumpharma and its inhaled clofazimine program, expected to be in Phase 1 by year-end.

 We welcomed Thomas Hofmann, MD, PhD, as our Chief Scientific Officer. Dr. Hofmann most recently served as CEO of Qrumpharma. Dr. Hofmann has over 20 years of experience in inhaled drug development for cystic fibrosis and anti-infectives, including two FDA-approved products. He is a pediatric pulmonologist and has extensive experience with inhaled drug discovery and development.

 We expanded our presence in endocrine diseases through a collaboration agreement with Vertice to co-promote Thyquidity, which is indicated for hypothyroidism.

 We participated in the H.C. Wainwright Global Life Sciences Conference, the 10th Annual SVB Leerink Global Healthcare Virtual Conference, the BTIIG Webcast: Fireside Chat and H.C. Wainwright Bioconnect Conference.

 We closed an offering of \$230 million in aggregate principal amount of 2.5% Convertible Senior Notes due 2026. We intend to use the proceeds from this offering for the paydown of debt, working capital, and other corporate purposes, including the clinical trial of Afrezza in pediatric subjects and further development of the pipeline.

spotlight on:

MannKind and United Therapeutics reach a milestone in the development of Tyvaso DPI with NDA submitted to the FDA

A milestone was reached this April in the development of Tyvaso DPI as United Therapeutics submitted a new drug application (NDA) to the U.S. Food and Drug Administration (FDA). Following Afrezza, Tyvaso DPI becomes the second compound to be formulated with MannKind's Technosphere® technology that will be reviewed by the FDA.

If approved, Tyvaso DPI is expected to provide a major advancement in the delivery of inhaled treprostinil for PAH patients and PH-ILD patients. Their current indication is for approximately 45,000 treated PAH patients in the U.S. Tyvaso recently received its second FDA indication for PH-ILD patients – a landmark advancement helps a vulnerable population that United Therapeutics estimates at 30,000 treatable patients in the U.S.

United Therapeutics has applied a priority review voucher to the NDA that could provide for an FDA decision by December 2021.

MannKind Participates in Part D Senior Savings Model to Make Insulin More Affordable for Seniors

We recently announced that Afrezza will be included in the 2022 Medicare Part D Senior Savings Model, which is intended to improve the affordability of insulin for Medicare beneficiaries by capping the co-pay per 30-day supply at \$35.

The Medicare Part D Senior Savings Model, which launched earlier this year, provides seniors greater, and more affordable, access to the treatment options they need. Participating in this Model will allow us to ensure that Medicare beneficiaries have affordable access to Afrezza and will be a critical step towards addressing our current healthcare system's issues around access and affordability.

Our participation in the Model will commence in 2022. For additional info, you can view the full press release [here](#).

financial highlights

\$67.2M*

Cash as of December 31, 2020

\$18.4M

Total revenues for 4Q of 2020

30%

Increase in U.S. Afrezza net revenue for December YTD 2020 vs. 2019

105%

Increase in Afrezza gross profit in 4Q of 2020 vs. 4Q of 2019

*Not including net proceeds from convertible note offering

stock performance*

Equity/Index	Price: 12/31/19	Price: 12/31/20
MNKD	\$1.29	\$3.13
R3000 P&B Index	\$3,052.93	\$3,459.41

Equity/Index	% Change - 3 Yrs 1/1/18-12/31/20	% Change - 1 Yr 1/1/20-12/31/20	% Change - 6 Mos 10/1/20-3/31/21
MNKD	+34.9%	+142.6%	+109.6%
R3000 P&B Index	+29.4%	+13.3%	+8.7%

*Stock price return over the course of 2020 for both MannKind and the Russell 3000 Pharmaceuticals & Biotech index provided via Bloomberg.

MNKD pipeline and collaborations



The R&D team here at MannKind has recently seen a refocus and enhancement and we are excited to be further developing the pipeline.

Beyond adding MNKD-101 for NTM (nontuberculous mycobacteria), we are also focusing our pipeline on other valuable orphan drug indications, including Pulmonary Fibrosis (MNKD-201), Cystic Fibrosis (MNKD-301), and one more undisclosed indication. These complement the active partnership developments in Pulmonary Hypertension (Tyvaso DPI) and third party programs for other out-licensed programs.

Dr. Thomas Hofmann, Chief Scientific Officer

To view the pipeline, please visit www.mannkindcorp.com/pipeline.

2021 anticipated milestones



Tyvaso

- Tyvaso DPI FDA submission (April 2021)
- Expected PDUFA date (December 2021)



Afrezza

- New Afrezza data released at ADA and ATTD (2Q 2021)
- Afrezza pediatric Phase 3 trial



Clofazimine

- Clofazimine IND 1 (4Q 2021)

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Reach out anytime. We'd love to hear from you. Contact our Investor Relations team via email at ir@mannkindcorp.com.