

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): November 30, 2020

HOOKIPA PHARMA INC.

(Exact name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-38869
(Commission
File Number)

81-5395687
(IRS Employer
Identification No.)

350 Fifth Avenue, 72nd Floor, Suite 7240
New York, New York
(Address of principal executive offices)

10118
(zip code)

Registrant's telephone number, including area code: +43 1 890 63 60

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instructions A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

| Title of each class | Trading Symbol(s) | Name of exchange on which registered |
|------------------------|-------------------|--------------------------------------|
| Common stock, \$0.0001 | HOOK | The Nasdaq Global Select Market |

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 7.01 Regulation FD Disclosure.

On November 30, 2020, HOOKIPA Pharma Inc. (the “Company”) announced positive Phase 2 interim efficacy data for its cytomegalovirus, or CMV, vaccine candidate HB-101. A copy of the press release is attached hereto as Exhibit 99.1, and a copy of the investor presentation is attached hereto as Exhibit 99.2.

The information in this Item 7.01 of Form 8-K, including the accompanying Exhibit 99.1 and Exhibit 99.2, shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934 (the “Exchange Act”), or otherwise subject to the liability of such section, nor shall such information be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, regardless of the general incorporation language of such filing, except as shall be expressly set forth by specific reference in such filing.

Item 8.01 Other Events.

On November 30, 2020, the Company announced positive interim efficacy data for its prophylactic CMV vaccine candidate HB-101. HB-101 is being investigated in a double-blind Phase 2 clinical trial to assess safety, immunogenicity and efficacy in patients receiving a kidney transplant from a live donor. The Company observed that, consistent with its previous interim results, HB-101 was generally well tolerated with a low incidence of side effects. The Company also reported that patients who received three doses of HB-101 experienced reductions in CMV viremia, CMV disease and the use of antiviral therapy, and mounted CMV-neutralizing antibodies.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

| Exhibit Number | Description |
|---------------------------|---|
| 99.1 | Press release issued by HOOKIPA Pharma Inc. on November 30, 2020 |
| 99.2 | HOOKIPA Pharma Inc. Investor Presentation dated November 30, 2020 |

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

HOOKIPA Pharma Inc.

Date: November 30, 2020

By: /s/ Jörn Aldag
Jörn Aldag
Chief Executive Officer
(Principal Executive Officer)



HOOKIPA Announces Positive Phase 2 Interim Safety, Immunogenicity, and Efficacy Data for its Cytomegalovirus Vaccine Candidate HB-101

- Early interim data show Cytomegalovirus (CMV)-negative kidney transplant recipients vaccinated with three doses of HB-101 had reduced incidence of CMV viremia, reduced antiviral use and no CMV disease
- Observed CMV-neutralizing antibody responses and tolerability profile are consistent with previous interim results
- CMV can cause severe complications in kidney transplant recipients including organ rejection and death

New York, US and Vienna, Austria, November 30, 2020 - HOOKIPA Pharma Inc. (NASDAQ: HOOK, 'HOOKIPA'), a company developing a new class of immunotherapeutics based on its proprietary arenavirus platform, today announced positive interim efficacy results, as well as additional safety and immunogenicity data, for its prophylactic Cytomegalovirus (CMV) vaccine candidate HB-101. HB-101, a non-replicating arenavirus vaccine, is being investigated in a double-blind Phase 2 clinical trial (NCT03629080) to assess safety, immunogenicity and efficacy in individuals receiving a kidney transplant from a living donor. HOOKIPA will host a conference call and live audio webcast today at 8:30am EST.

CMV infection is one of the most common complications affecting solid organ transplant recipients and can result in serious conditions like hepatitis and pneumonia, as well as increase the likelihood of transplant rejection and graft-versus-host disease. Antiviral therapies are used to help control disease, but they are limited by toxicity and the emergence of viral resistance.¹

The interim efficacy analysis includes data from 41 participants as of the cut-off date; 8 were vaccinated with three doses of HB-101 pre-transplant, 19 were vaccinated with two doses and 14 received placebo.

Compared to placebo, participants vaccinated with three HB-101 doses had:

- a 48 percent reduction in CMV viremia (presence of CMV DNA in the blood);
- a 42 percent reduction in the use of antiviral therapy; and
- no CMV disease (compared to 2 out of 14 cases in the placebo group)

Response to a two-dose schedule did not show an improvement compared to placebo, which is consistent with the low levels of CMV-neutralizing antibody in the two-dose group as well as with the T cell data reported in June 2020 for the two-dose group.

“While these interim data are from a small group of patients, they offer early insight into the potential of a three-dose schedule of HB-101 to help protect kidney transplant recipients against CMV disease,” said Joern Aldag, Chief Executive Officer of HOOKIPA. “If these trends continue, HB-101 may be a promising first-in-class vaccine candidate to help address an unmet need in this vulnerable patient population. We are excited to explore a path to a Phase 3 CMV vaccine program, as well as to see how these early efficacy signals with our non-replicating arenavirus technology may translate to our replicating technology in oncology.”

¹ Gilbert C and Boivin G. Human Cytomegalovirus Resistance to Antiviral Drugs. *Antimicrobial Agents and Chemotherapy*. 2005; 49(3):873-883. Available at: <https://aac.asm.org/content/aac/49/3/873.full.pdf>

The interim immunogenicity analysis also included CMV-neutralizing antibody data assessed from 33 individuals, a subset of the 41 included in the efficacy analysis. 21 participants were vaccinated with HB-101 and 12 received placebo. In line with previous interim data, 100 percent of the participants who received three doses of HB-101 mounted CMV-neutralizing antibodies.

Safety and tolerability were evaluated in 69 participants who were enrolled in the trial by the cut-off date. HB-101 was generally well tolerated with a low incidence of side effects, which were mostly mild to moderate. Specifically, 17 percent of participants across the combined HB-101 and placebo groups showed side effects related to vaccine administration. Three cases of human leukocyte antigen (HLA)-sensitization have been reported, two as serious adverse events. HLA-sensitization can cause the recipient to identify the donor kidney as foreign and may require a new donor to be identified. HLA-sensitization is a known complication of dialysis patients waiting for kidney transplantation, affecting an estimated 4% of this patient population².

“CMV is a key threat to the health and overall prognosis of kidney transplant recipients,” said Paul Griffiths, MD DSc FRCPath, Professor of Virology, Institute of Immunity & Transplantation at University College London. “While antivirals are an important tool, we need better interventions to reduce the risk of CMV disease in this vulnerable population. These preliminary data highlight the potential for a new standard of care in the management of kidney transplant recipients.”

About the trial

This double-blind Phase 2 clinical trial is designed to assess safety, immunogenicity and efficacy in individuals receiving a kidney transplant from a live donor to measure the decrease of post-transplant viremia in the absence and presence of antivirals. Among CMV-negative participants, individuals are blinded and randomized 2:1 to receive either HB-101 or placebo. Depending on the transplantation time schedule, participants are vaccinated with either two or three doses prior to transplantation. Participants receive either pre-emptive or prophylactic antiviral therapy post-transplant and are followed for a 12-month observation period. Among CMV-positive participants, individuals receive either two or three doses of HB-101, pre-emptive or prophylactic antiviral therapy, and are followed for a 12-month observation period.

Conference call

HOOKIPA will host a conference call and live audio webcast today at 8:30am EST to discuss the CMV data. To access the conference call, please dial +1 877 870 9135 (from the US) or +44 2071 928338 (international) and refer to conference ID 4469307. The webcast and the presentation will be available within the Investors & Media section of HOOKIPA's website at <https://ir.hookipharma.com/events>. An archived replay will be accessible for 30 days following the event.

– END –

² Nephrol Dial Transplant (2013) 28: 2908–2918

About Cytomegalovirus

Cytomegalovirus, or CMV, is a type of herpesvirus that infects the majority of people over the course of their lifetime. The U.S. Centers for Disease Control and Prevention estimates that more than half of adults have been infected with CMV by age 40.³ The majority of CMV infections are not serious, and the virus can lay dormant in the body for years. However, CMV infection poses a considerable risk to infants in utero, as well as immune-compromised individuals, such as solid organ transplant recipients. There are currently more than 90,000 people on the kidney transplant waiting list in the United States.⁴

CMV is one of the most common complications affecting solid organ transplant recipients.⁵ Despite active monitoring and antiviral therapy, CMV infection occurs in 20-70 percent of transplant recipients the first year after transplant.⁶ Within this population, CMV disease most commonly causes fever, low white blood cell count (leukopenia), low platelet levels (thrombocytopenia) and elevated liver function. It also can cause more serious conditions like hepatitis and pneumonia, which often require hospitalization, as well as increase the likelihood of transplant rejection and graft-versus-host disease.⁷

About HOOKIPA

HOOKIPA Pharma Inc. (NASDAQ: HOOK) is a clinical stage biopharmaceutical company developing a new class of immunotherapeutics based on its proprietary arenavirus platform that reprograms the body's immune system. HOOKIPA's proprietary arenavirus-based technologies, non-replicating (VaxWave[®]) and replicating (TheraT[®]), induce robust antigen-specific CD8+ T cells and pathogen-neutralizing antibodies. HOOKIPA's viral vectors target antigen presenting cells in vivo to activate the immune system. Both technologies enable repeat administration to augment and refresh immune responses. As a monotherapy, our replicating arenavirus technology has the potential to induce CD8+ T cell response levels previously not achieved by other immunotherapy approaches.

HOOKIPA's non-replicating prophylactic cytomegalovirus (CMV) vaccine candidate is currently in a Phase 2 clinical trial for patients awaiting kidney transplantation. To expand its infectious disease portfolio, HOOKIPA entered into a collaboration and licensing agreement with Gilead Sciences, Inc. to research arenavirus-based functional cures for HIV and chronic Hepatitis B infections.

In addition, HOOKIPA is building a proprietary immuno-oncology pipeline by targeting virally mediated cancer antigens, self-antigens and next-generation antigens. The lead replicating arenavirus oncology product candidates, HB-201 and HB-202, are in development for the treatment of Human Papilloma Virus 16-positive cancers in a Phase 1/2 clinical trial.

Find out more about HOOKIPA online at www.hookipapharma.com.

³ Centers for Disease Control and Prevention. About Cytomegalovirus (CMV). Available at: <https://www.cdc.gov/cmV/overview.html>

⁴ Organ Procurement and Transplantation Network. Kidney transplant waiting list. Available at: <https://optn.transplant.hrsa.gov/data/>

⁵ Kotton CN et al. The Third International Consensus Guidelines on Management of Cytomegalovirus in Solid-organ Transplantation. *Transplantation*. 2019; 102: 900-931. Available at: https://journals.lww.com/transplantjournal/Fulltext/2018/06000/The_Third_International_Consensus_Guidelines_o_n.13.aspx

⁶ Cui X, CM Snapper. "Development of novel vaccines against human cytomegalovirus." *Human Vaccines & Immunotherapeutics*. 2019, vol 15, no 11, 2673-2683. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6930071/pdf/khvi-15-11-1593729.pdf>

⁷ Kotton CN et al. The Third International Consensus Guidelines on Management of Cytomegalovirus in Solid-organ Transplantation. *Transplantation*. 2019; 102: 900-931. Available at: https://journals.lww.com/transplantjournal/Fulltext/2018/06000/The_Third_International_Consensus_Guidelines_o_n.13.aspx

HOOKIPA Forward Looking Statements

Certain statements set forth in this press release constitute “forward-looking” statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. Forward-looking statements can be identified by terms such as “believes,” “expects,” “plans,” “potential,” “would” or similar expressions and the negative of those terms. Such forward-looking statements involve substantial risks and uncertainties that could cause HOOKIPA’s research and clinical development programs, future results, performance or achievements to differ significantly from those expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the uncertainties inherent in the drug development process, including HOOKIPA’s programs’ early stage of development, the process of designing and conducting preclinical and clinical trials, the regulatory approval processes, the timing of regulatory filings, the challenges associated with manufacturing drug products, HOOKIPA’s ability to successfully establish, protect and defend its intellectual property, risks relating to business interruptions resulting from the coronavirus (COVID-19) disease outbreak or similar public health crises, the impact of COVID-19 on the enrollment of patients and timing of clinical results for HB-101 and other programs, and other matters that could affect the sufficiency of existing cash to fund operations and HOOKIPA’s ability to achieve the milestones under the agreement with Gilead. HOOKIPA undertakes no obligation to update or revise any forward-looking statements. For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to the business of the company in general, see HOOKIPA’s quarterly report on Form 10-Q for the quarter ended September 30, 2020 which is available on the Security and Exchange Commission’s website at www.sec.gov and HOOKIPA’s website at www.hookipapharma.com.

Investors and others should note that we announce material financial information to our investors using our investor relations website (<https://ir.hookipapharma.com/>), SEC filings, press releases, public conference calls and webcasts. We use these channels, as well as social media, to communicate with our members and the public about our company, our services and other issues. It is possible that the information we post on social media could be deemed to be material information. Therefore, we encourage investors, the media, and others interested in our company to review the information we post on the U.S. social media channels listed on our investor relations website.

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HB-101 CMV Vaccine
Phase 2 Trial in Kidney Transplantation
Preliminary Results of Interim Analysis



November 30, 2020

This presentation and other related material may contain a number of "forward looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 as amended, including statements regarding HOOKIPA's expectation about any or all of the following (i) the success, cost, results and timing of HOOKIPA's product development activities and clinical trials; (ii) the timing, scope or likelihood of regulatory filings and approvals, including timing of Investigational New Drug Application and Biological Licensing Application filings for HOOKIPA's current and future product candidates, and final U.S. Food and Drug Administration, European Medicines Agency or other foreign regulatory authority approval of HOOKIPA's current and future product candidates; (iii) HOOKIPA's ability to develop and advance its current product candidates and programs into, and successfully complete, clinical studies; (iv) HOOKIPA's manufacturing, commercialization and marketing capabilities and strategy; (v) the potential benefits of and HOOKIPA's ability to maintain its collaboration with Gilead Sciences, Inc. and establish or maintain future collaborations or strategic relationships or obtain additional funding; (vi) risks relating to business interruptions resulting from the coronavirus (COVID-19) disease outbreak or similar public health crises and other matters that could affect the sufficiency of existing cash to fund operations and HOOKIPA's ability to achieve the milestones under the agreement with Gilead and (vii) the rate and degree of market acceptance and clinical utility of HOOKIPA's current and future product candidates. Forward looking statements can be identified by terms such as "believes," "expects," "plans," "potential," or similar expressions and the negative of those terms. HOOKIPA has based these forward looking statements largely on its current expectations and projections about future events and financial trends that it believes may affect its business, financial condition and results of operations. Although HOOKIPA believes that such statements are based on reasonable assumptions, forward looking statements are neither promises nor guarantees and they are necessarily subject to a high degree of uncertainty and risk. Because forward looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond HOOKIPA's control, you should not rely on these forward looking statements as predictions of future events. These risks and uncertainties include, among others outcomes of HOOKIPA's planned clinical trials and studies may not be favorable that one or more of HOOKIPA's product candidate programs will not proceed as planned for technical, scientific or commercial reasons availability and timing of results from preclinical studies and clinical trials uncertainty about regulatory approval to conduct clinical trials or to market a products uncertainties regarding intellectual property protection and those risk and uncertainties described under the heading "Risk Factors" in HOOKIPA's Annual Report on Form 10-K filed with the U.S. Securities and Exchange Commission on March 19, 2020, and HOOKIPA's Quarterly Reports on Form 10-Q filed with the U.S. Securities and Exchange Commission on May 14, 2020, August 13, 2020, and November 12, 2020 and in any other subsequent filings made by HOOKIPA with the U.S. Securities and Exchange Commission, which are available at www.sec.gov. Existing and prospective investors are cautioned not to place undue reliance on these forward looking statements, which speak only as of the date they are made. HOOKIPA disclaims any obligation or undertaking to update or revise any forward looking statements contained in this presentation, other than to the extent required by law.

- HB-101 is a Cytomegalovirus (CMV) vaccine based on HOOKIPA's non-replicating technology
- This interim analysis of the ongoing Phase 2 study of HB-101 supports dose-finding for the 3-dose schedule
- The 3-dose schedule of HB-101 has demonstrated:
 - Good tolerability profile
 - Promising immunogenicity
 - Encouraging interim efficacy in decreasing rates of viremia, antiviral use, and CMV disease
- While from a small number of patients, early efficacy data show the potential of HB-101 to help address the unmet need in CMV

CMV can cause severe complications in solid organ transplant recipients



TWO TREATMENT APPROACHES

Pre-emptive antivirals
vs.
Prophylactic antivirals

CMV Risk to Organ Recipient

| | | | | |
|-----------|---|---|---|---|
| Donor | - | - | + | + |
| Recipient | - | + | + | - |

Majority of kidney donors are deceased; living donor transplants offer the ideal opportunity to assess post-transplant efficacy relatively quickly

Kotton CN et al. The Third International Consensus Guidelines on Management of Cytomegalovirus in Solid-organ Transplantation. *Transplantation*. 2019;102:900-931; Ljungman P et al. Definitions of Cytomegalovirus Infection and Disease in Transplant Patients for Use in Clinical Trials. *Clinical Infectious Disease*. 2017;64(1):87-91; Global Observatory on Donation and Transplantation. 2019; Azevedo LS et al. Cytomegalovirus infection in transplant recipients. *Clinics*. 2015;70(70):515-523.

HB-101 Product Details

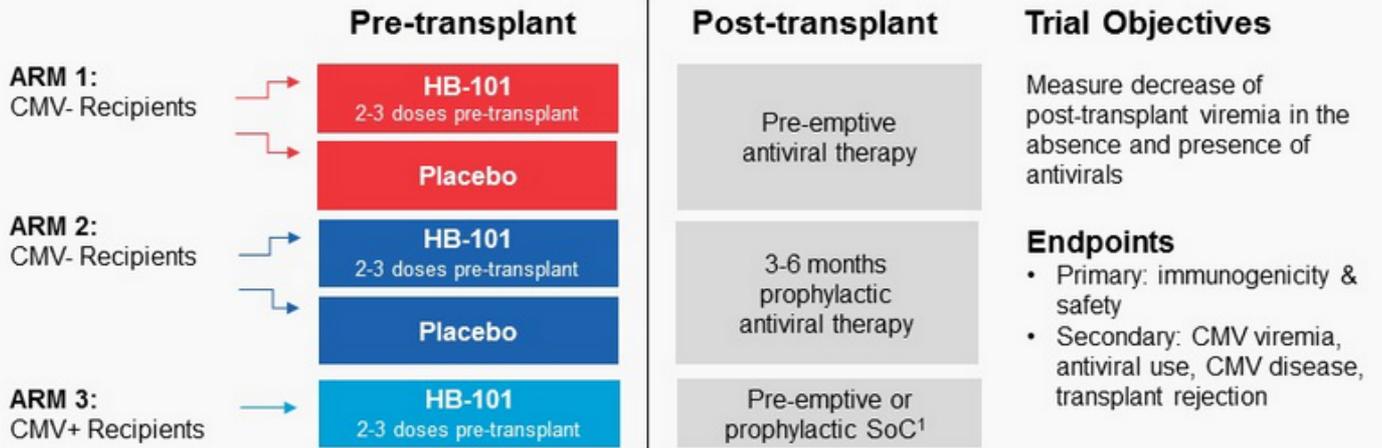
- **Uses our proprietary non-replicating technology, with two arenaviral vectors (LCMV)**
- **Bi-valent vaccine incorporating 2 CMV antigens:**
 - Glycoprotein B ("gB") fusion protein, a B cell antigen
 - Phosphoprotein 65 kDa ("pp65"), a T cell antigen
- **Vaccine stimulates both arms of the adaptive immune system:**
 - Antibodies against gB fusion protein
 - T cells against pp65 T cell antigen
- **Intra-muscular delivery**

HB-101 Ongoing Phase 2 Clinical Trial: Prophylactic CMV Vaccine in Kidney Transplant Patients



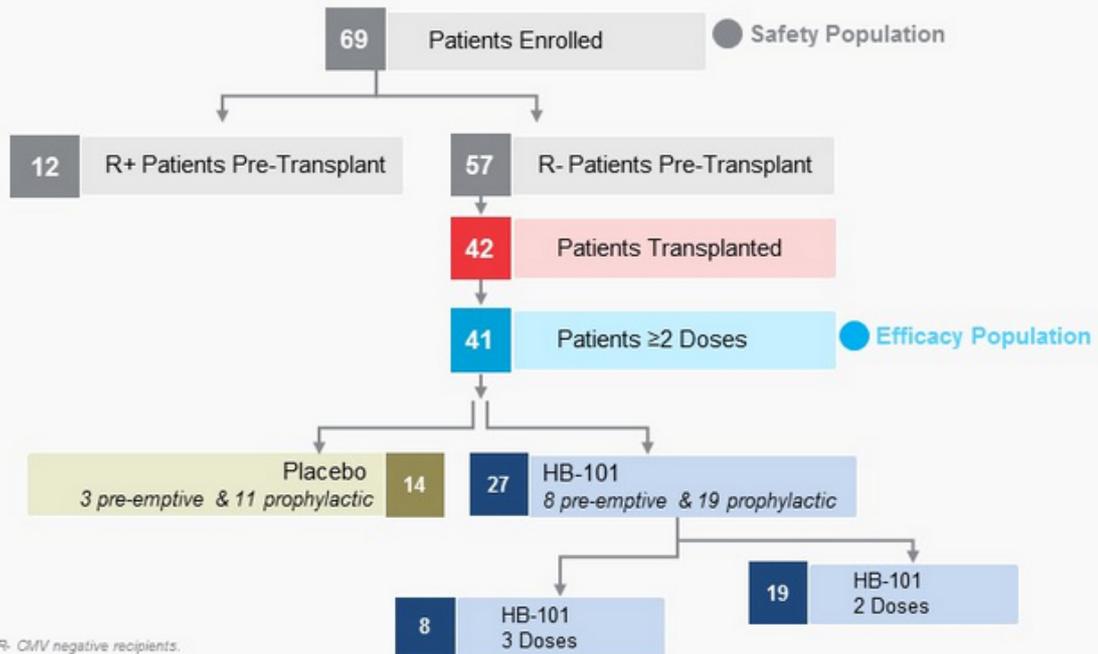
Patients Eligible for a Kidney Transplant from a Live Donor

Randomized to HB-101 or Placebo Pre-transplant
Stratified by Post-transplant Treatment Intent



¹SoC: Standard of care.

HB-101 Phase 2 Interim Analysis: Safety on All 69 Enrolled Patients and First Efficacy Analysis of 41 CMV Negative Recipient Transplanted Patients



R+ CMV positive recipients; R- CMV negative recipients.
Data cut-off August 24, 2020.

| Pre-Transplant AEs Related to Study Medication | |
|--|-----------|
| | N (%) |
| Grade 1 – Mild | 8 (11.6%) |
| Grade 2 – Moderate | 2 (2.9%) |
| Grade 3 – Severe | 2 (2.9%)* |
| Grade 4 – Life-Threatening | 0 (0.0%) |
| Death | 0 (0.0%) |
| Serious (SAE) | 2 (2.9%)* |
| Discontinued Study Medication Due to AE | 0 (0.0%) |

*Recipient HLA-sensitization

Safety Population:

- 69 patients prior to kidney transplantation

Most common mild AEs:

- Influenza-like illness (N=2)
- Injection site pain (N=2)

Human Leukocyte Antigen (HLA) Sensitization:

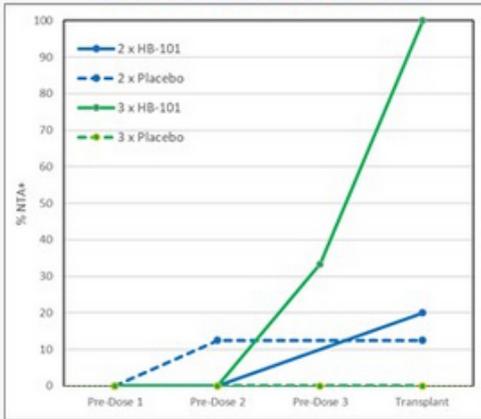
- HLA-sensitization is a known complication in renal dialysis patients awaiting transplantation, occurring at a rate of 4%²
- HLA sensitization requires identification of a new donor organ; it can be managed clinically via risk stratification based on recipient's HLA profile
- 2 cases were classified as both severe and serious AEs; 1 additional case was not considered an AE

¹Data cut-off August 24, 2020. ²Nephrol Dial Transplant (2013) 28: 2908-2918.

HB-101 Phase 2 Interim Analysis of CMV-Neutralizing Antibody Responses: 3 Doses Induce 100% Seroconversion at Levels Superior to 2 Doses or Placebo



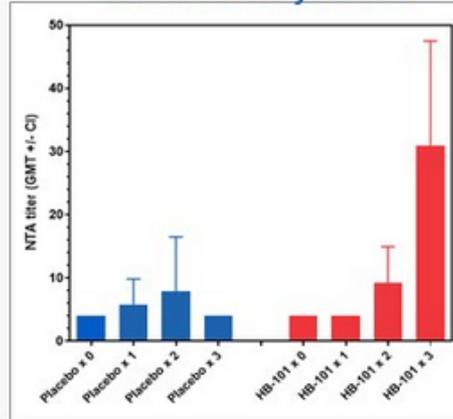
Seroconversion Rates



Rates of CMV-neutralizing antibodies development:

- 100% in 3 dose group (N=6)
- 20% in 2 dose group (N=15)

CMV Antibody Levels



3 doses of HB-101 more immunogenic than 2 doses

Antibody level induced by 3 doses of HB-101 was significantly superior to that induced by:

- 2 doses of HB-101 ($p=0.03$)
- Placebo ($p=0.0095$)

33 R- patients measured on the day of transplant

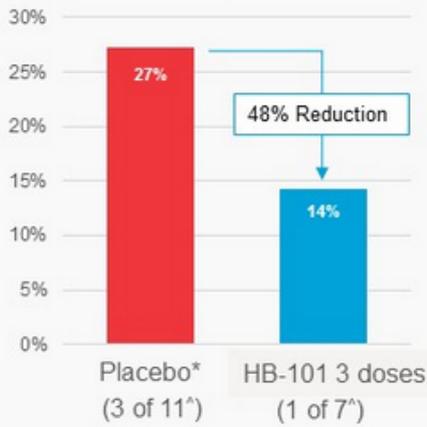
- 21 patients received vaccine
- 12 patients received placebo

Assessment of antibody responses was completed for a subset of the 41-patient efficacy group at the time of cut-off. Data cut-off August 24, 2020.

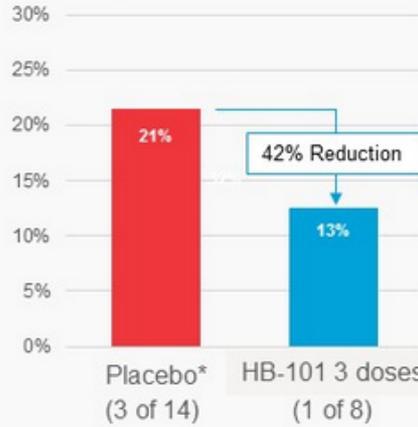
HB-101 Phase 2 Interim Analysis Preliminary Efficacy: Reduced Incidence of CMV Infection, Reduced Use of Antivirals, and No CMV Disease



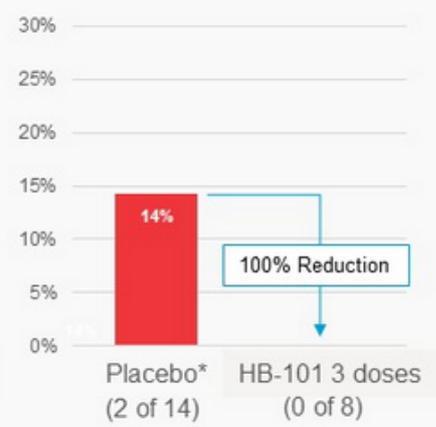
CMV Viremia



Required Use of Antivirals



CMV Disease



[^]Patients received either 2 or 3 doses of placebo.

*Not all patients had PCR data at the time of the August 24, 2020 data cut-off, and therefore some were not evaluable for CMV viremia assessment.

- No reduction in immune-mediated pathology

Based on Phase 2 Interim Analysis, HB-101 Appears to be Well Tolerated, and in Patients Receiving Three Doses, Immunogenic and Efficacious (Preliminary Data)



Safety:

- HB-101 appears to be well tolerated with a low incidence of adverse events (mostly mild to moderate)
- Three cases of HLA-sensitization were reported, two as serious adverse events

Immunogenicity:

- Patients who received three doses of HB-101 had 100% response rate for CMV-neutralizing antibodies (N=6)
- CMV-neutralizing antibody levels induced by the three doses of HB-101 are statistically superior to those seen with placebo ($p=0.0095$)
- Patients who received three doses of HB-101 had 100% response rate for CMV-specific cellular (T cell) responses (N=3, as reported in June 2020 interim analysis)

Efficacy:

- Reduced viremia in patients who received three doses of HB-101 compared to placebo by 48%
- Reduced antiviral use required in patients who received three doses of HB-101 compared to placebo by 42%
- No CMV disease in eight patients who received three doses of HB-101

- Interim Phase 2 safety and immunogenicity data have been reviewed with investigators:
 - Encouraged to complete the pre-transplant **three dose vaccination protocol** (whenever possible in the context of these live donor transplants) and thereby **maximize immunogenicity** at transplantation and **potential patients benefits**.
- Continuing accrual, as permitted by COVID-19 considerations at our participating sites
- Phase 2 data will enable us to explore a path to a Phase 3 registration study in a real world, all-comers population, wherein most recipients are on a transplant waiting list and a three-dose vaccination schedule is easily managed
- Next Phase 2 data update will be provided in H2 2021



- From non-replicating to single-vector replicating to dual vector replicating technology
 - HB-101 is an immunogenic, single-vector non-replicating technology
 - HB-201 is expected to be more immunogenic, single-vector replicating technology
 - HB-202/HB-201 is expected to be most immunogenic, alternating two-vector replicating technology
- Based on published preclinical data, we hope to demonstrate
 - **Favorable safety** across the non-replicating and replicating platforms
 - **Increasing immunogenicity and efficacy** for single-vector replicating as compared to non-replicating
 - **Increasing immunogenicity and efficacy** for alternating two-vector replicating therapy as compared to single-vector replicating therapy
- Initial clinical data release from the HB-201 Phase 1/2 study is planned for early 2021
- Funded to reach beyond major value inflections: \$82m cash (30 September 2020)

