



VBI VACCINES

Preclinical Coronavirus Program Data

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NASDAQ: VBIV

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Forward-Looking Statements

Certain statements in this press release that are forward-looking and not statements of historical fact are forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and are forward-looking information within the meaning of Canadian securities laws (collectively, “forward-looking statements”). The Company cautions that such statements involve risks and uncertainties that may materially affect the Company’s results of operations.

Such forward-looking statements are based on the beliefs of management as well as assumptions made by and information currently available to management. Actual results could differ materially from those contemplated by the forward-looking statements as a result of certain factors, including but not limited to, the impact of general economic, industry or political conditions in the United States or internationally; the impact of the ongoing COVID-19 pandemic on our clinical studies, manufacturing, business plan, and the global economy; the ability to establish that potential products are efficacious or safe in preclinical or clinical trials; the ability to establish or maintain collaborations on the development of therapeutic candidates; the ability to obtain appropriate or necessary governmental approvals to market potential products; the ability to obtain future funding for developmental products and working capital and to obtain such funding on commercially reasonable terms; the Company’s ability to manufacture product candidates on a commercial scale or in collaborations with third parties; changes in the size and nature of competitors; the ability to retain key executives and scientists; and the ability to secure and enforce legal rights related to the Company’s products.

A discussion of these and other factors, including risks and uncertainties with respect to the Company, is set forth in the Company’s filings with the SEC and the Canadian securities authorities, including its Annual Report on Form 10-K filed with the SEC on March 5, 2020, and filed with the Canadian security authorities at sedar.com on March 5, 2020, as may be supplemented or amended by the Company’s Quarterly Reports on Form 10-Q.

Given these risks, uncertainties and factors, you are cautioned not to place undue reliance on such forward-looking statements, which are qualified in their entirety by this cautionary statement. All such forward-looking statements made herein are based on our current expectations and we undertake no duty or obligation to update or revise any forward-looking statements for any reason, except as required by law.



VBI-2900: Coronavirus Program with Two Optimized Vaccine Candidates (VBI-2901 & VBI-2902)

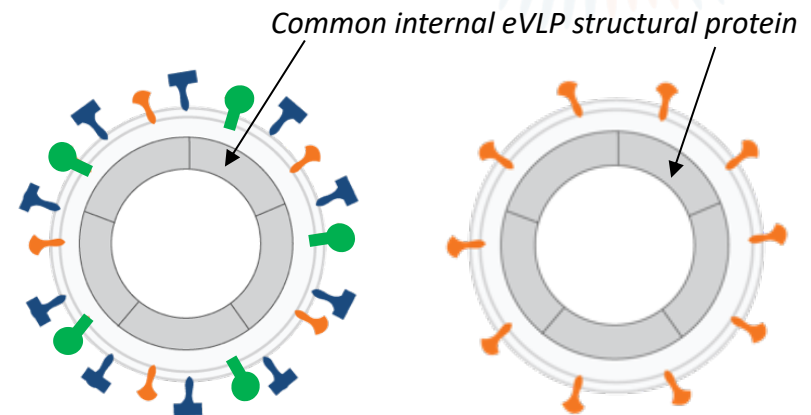
Vaccine Candidates Selected for Human Clinical Studies Based on Data From Three Preclinical Mouse Studies

Objectives of Preclinical Studies

Assess the impact of:

1. VBI's enveloped virus-like particle (eVLP) platform technology vs. recombinant vaccine candidates
2. Differences in the conformation of the spike protein
3. A variety of adjuvants

Optimized Vaccine Candidates



VBI-2901

Trivalent
Vaccine Candidate

VBI-2902

Monovalent
Vaccine Candidate

Spike Proteins:

👉 - SARS-CoV-2 (COVID-19)

👉 - SARS-CoV (Severe Acute Respiratory Syndrome – SARS)

👉 - MERS-CoV (Middle East Respiratory Syndrome – MERS)

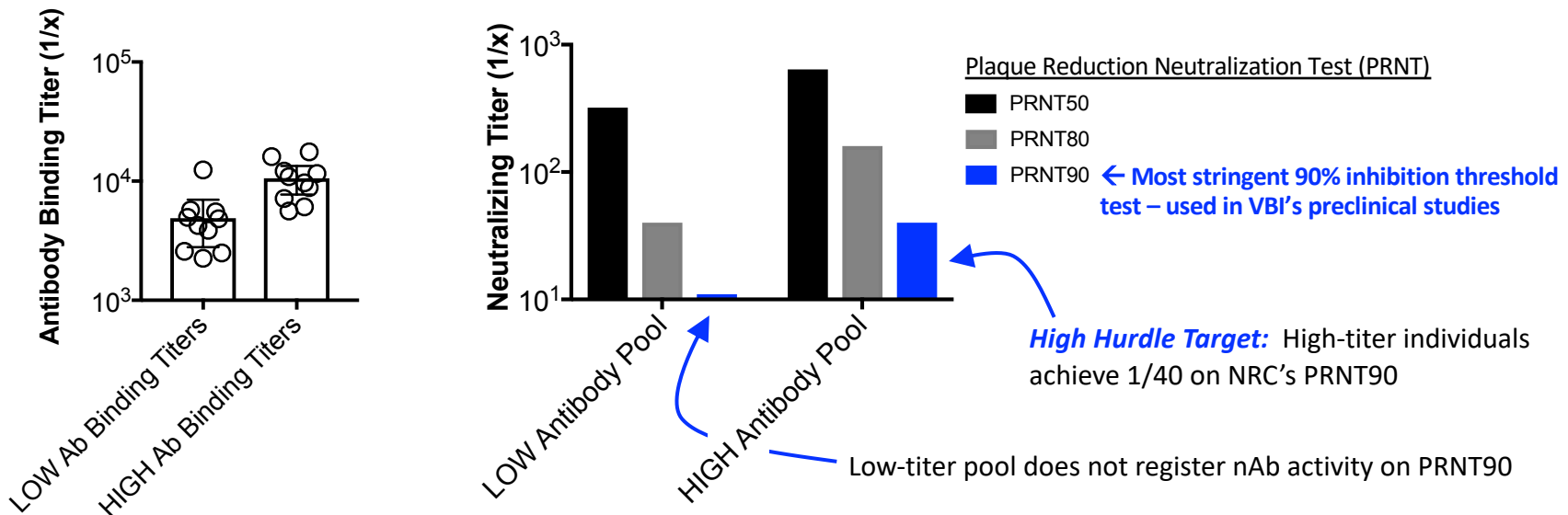
High-Titer COVID-19 Convalescent Sera Used as Benchmarking Data

Convalescent Sera From 20 Individuals Who Had Contracted and Recovered From COVID-19 Were Collected For Comparison

However, consistent with emerging literature, variance exists among recovered individuals → collected samples were grouped according to the strength of the immune response

High-Titer	Collected from individuals who mounted a robust, high-titer antibody binding response to infection
Low-Titer	Collected from individuals who mounted a weaker, lower-titer antibody binding response to infection

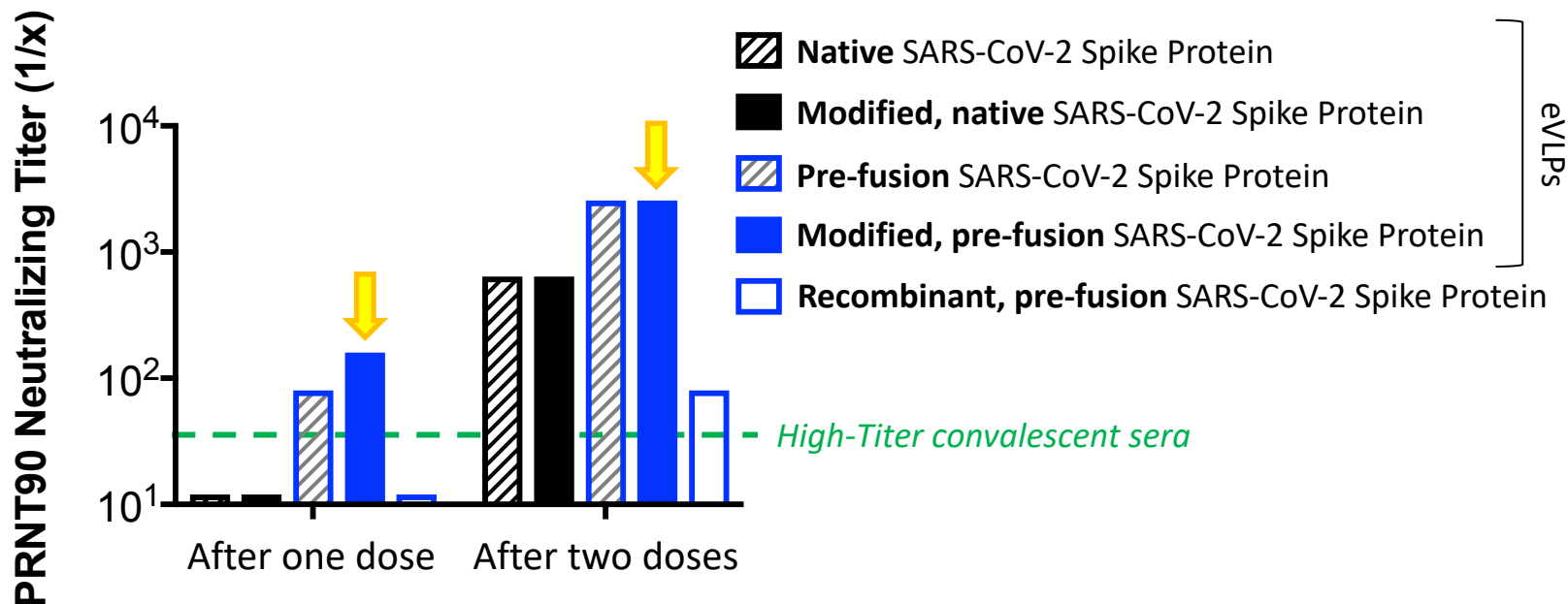
Neutralizing antibody (nAb) activity using infectious SARS-CoV-2 virus (performed at the NRC*) confirms higher nAb activity observed in high-titer pool of sera



*NRC– National Research Council of Canada

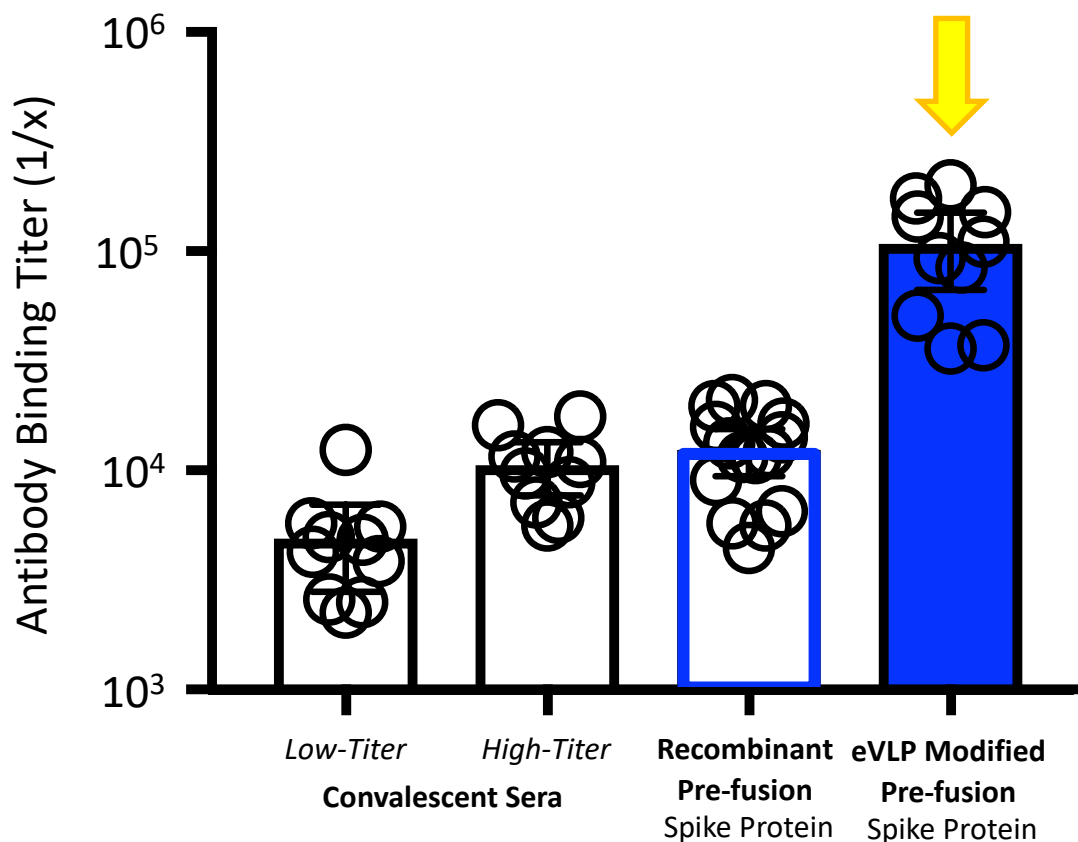
4x and 64x Higher Neutralizing Antibody GMT Induced with Optimized eVLPs after 1 and 2 Doses, Respectively, Compared to High-Titer Convalescent Sera

Optimized Neutralizing Activity Seen With eVLPs Expressing Stabilized, Modified Pre-fusion Form of SARS-CoV-2 Spike Protein



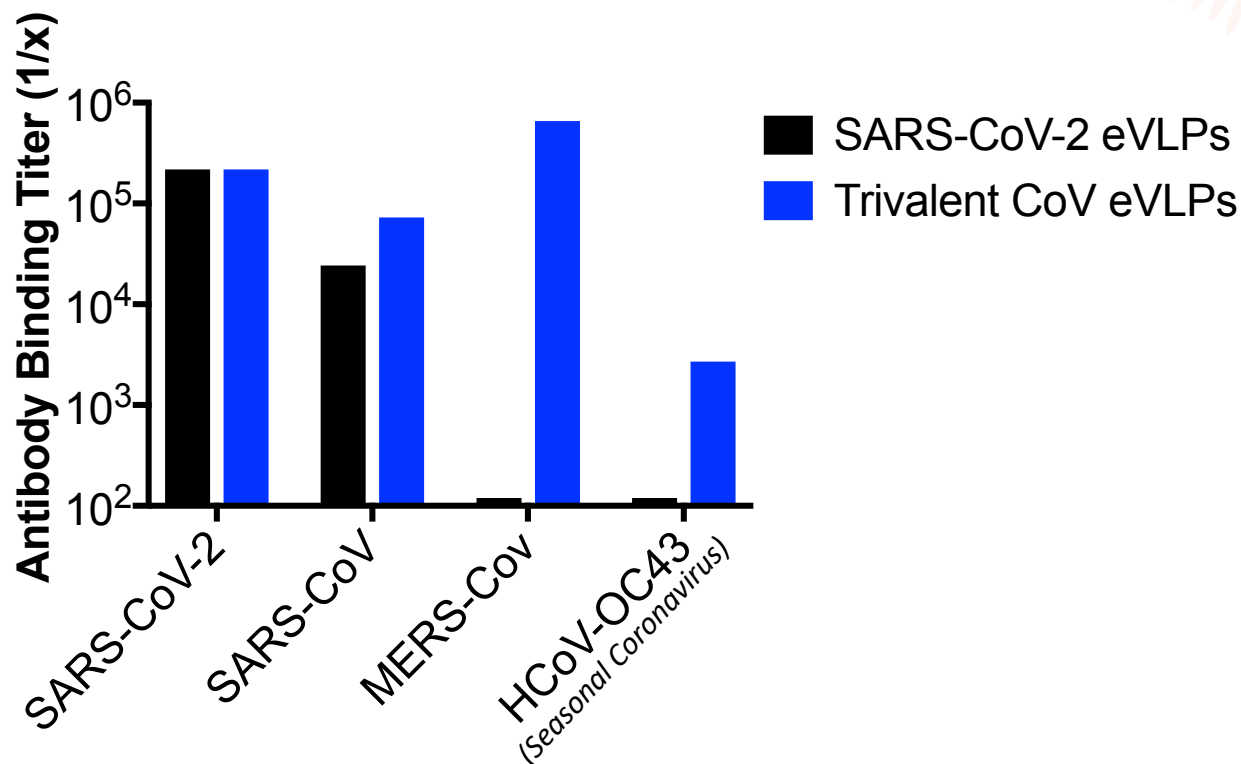
A variety of adjuvants tested further improved the induction of nAb titers ~5x

Optimized eVLPs Induced 10x Higher Antibody Binding GMT Compared to Both High-Titer Convalescent Sera and Recombinant Constructs After One Dose



Trivalent eVLP Offered Additional Breadth of Reactivity Across Coronaviruses

The Trivalent eVLP Vaccine Construct Further Induced Antibody Binding Titers Across COVID-19, SARS, and MERS Spike Proteins in Addition to Broadening Reactivity to Seasonal Circulating Coronavirus Not Expressed in the Vaccine



Note: Data generated is from the first mouse study using an eVLP expressing the native form of the spike protein – not the optimized modified pre-fusion form. While this data is after 3 doses, incorporation of the optimized COVID-19 spike protein in the trivalent candidate is expected to further increase antibody binding titers after fewer doses.

VBI-2900 Data Summary & Next Steps

Preclinical data demonstrated:

- ✓ Induction of **robust neutralizing activity and antibody binding activity** after one dose with eVLPs expressing the stabilized, modified pre-fusion form of the COVID-19 spike protein → potential for one-dose vaccines
- ✓ **Increased breadth of reactivity with trivalent vaccine candidate**, including to seasonal coronaviruses whose spike proteins are not expressed in the vaccine candidate

Next Steps:

- **September 2020** : GMP clinical manufacturing expected to begin at Therapure Biomanufacturing, potential to leverage capacity to support large-scale manufacturing in the future
- **Q4 2020** : Clinical materials expected to be available

Subject to outcome of discussions with regulatory bodies:

- **Around Year-end 2020** : Expected initiation of adaptive Phase 1/2 human clinical study testing both VBI-2901 and VBI-2902 at doses of 2-5mcg



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