



## **IMMUNOPRECISE ANTIBODIES LTD.**

### **MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

The following Management's Discussion and Analysis ("MD&A"), prepared as of December 18, 2020, should be read in conjunction with the unaudited condensed interim consolidated financial statements of ImmunoPrecise Antibodies Ltd. ("the Company", "ImmunoPrecise" or "IPA") for the three and six months ended October 31, 2020, together with the audited financial statements and accompanying MD&A of the Company for the year ended April 30, 2020. This MD&A is the responsibility of management and has been reviewed and approved by the Board of Directors of IPA.

The referenced financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board and as applicable to the preparation of interim financial statements, including IAS 34, *Interim Financial Reporting*. Except as otherwise noted, all dollar figures in this MD&A are stated in Canadian dollars, which is the Company's reporting currency.

### **FORWARD-LOOKING STATEMENTS**

This MD&A may contain certain statements that constitute "forward-looking statements" within the meaning of National Instrument 51-102, Continuous Disclosure Obligations of the Canadian Securities Administrators.

Forward-looking statements often, but not always, are identified by the use of words such as "seek", "anticipate", "believe", "plan", "estimate", "expect", "targeting" and "intend" and statements that an event or result "may", "will", "should", "could", or "might" occur or be achieved and other similar expressions.

In this MD&A, forward-looking statements include the Company's future plans and expenditures, the satisfaction of rights and performance of obligations under agreements to which the Company is a part, the ability of the Company to hire and retain employees and consultants and estimated administrative assessment and other expenses. The forward-looking statements that are contained in this MD&A involve a number of risks and uncertainties. As a consequence, actual results might differ materially from results forecast or suggested in these forward-looking statements. Some of these risks and uncertainties are identified under the heading "RISKS AND UNCERTAINTIES" in this MD&A.

Furthermore, forward-looking statements contained herein are made as of the date of this MD&A and the Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

### **GENERAL**

The Company was incorporated under the laws of Alberta on November 22, 1983 and is listed on the TSX Venture Exchange (the "Exchange") as a Tier 2 life science issuer under the trading symbol "IPA". The Company's OTC symbol is "IPATD". The address of the Company's head office is 3204 – 4464 Markham Street, Victoria, BC V8Z 7X8.

On November 23, 2020, the Company consolidated its issued and outstanding common shares on the basis of five pre-consolidation shares for one post-consolidation share (the "Consolidation"). All references to share and per share amounts in this MD&A have been retroactively restated to reflect the Consolidation.



## **IMMUNOPRECISE ANTIBODIES LTD.**

**MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

### **OVERVIEW**

The Company is an innovation-driven, technology platform company that supports its pharmaceutical and biotechnology company partners in their quest to discover and develop novel, therapeutic antibodies against all classes of disease targets. The Company aims to transform the conventional, multi-vendor, product development model by bringing innovative and high-throughput, data-driven technologies to its partners, incorporating the advantages of diverse antibody repertoires with the Company's therapeutic antibody discovery suite of technologies, to exploit antibodies of broad epitope coverage, multiple antibody formats, valency and size, and to discover antibodies against multiple/rare epitopes.

The Company offers comprehensive support to its partners, starting with customized, computational project design, antigen preparation, an on-site vivarium, proprietary immunization services, high-throughput discovery platforms, functional antibody testing, lead candidate selection, antibody optimization, antibody engineering and manufacturing, all under one contract.

The Company believes that its experience, innovation, technologies, scientific rigor, and focus on producing quality products, provide a unique experience in one-stop service offerings, and assist the Company in its aim to reduce the time required for, and the inherent risk associated with, conventional multi-vendor product development.

The Company has achieved organic revenue growth through market penetration and service diversification in the biologics, CRO space, as well as accretive growth through strategic expansion of its operations into Europe, by acquiring and integrating innovative technologies, and through investments in research and development ("R&D").

### **Services**

The Company's services include, but are not limited to, custom antigen modeling, design and manufacturing; proprietary B cell sorting, screening and sequencing; custom, immune and naïve phage display production and screening; hybridoma production with multiplexed, high-throughput screening and clone-picking; expertise with transgenic animals and multi-species antibody discovery; antibody characterization studies such as affinity measurements, functional assays, epitope mapping and binning; bi-specific, tri-specific, single domain (such as variable domain of the heavy chain "VHH", and variable new antigen receptor "VNAR" (shark)) antibody manufacturing; DNA synthesis and cloning, protein and antibody downstream processing with purification of protein in gram scale levels including characterization and validation; antibody engineering; transient and stable cell line generation; antibody optimization and humanization; and cryopreservation.

The Company's wholly owned subsidiaries, ImmunoPrecise Antibodies (Canada) Ltd. ("IPA Canada") and ImmunoPrecise Antibodies (Europe) B.V. ("IPA Europe", formerly ModiQuest Research B.V.) ("IPA Europe"), have both been designated as approved CROs for leading, transgenic animal platforms producing human antibodies. Through IPA Canada and IPA Europe, the Company has made strategic investments in R&D activities to develop proprietary technologies enabling the application of its B cell Select™ and DeepDisplay™ platforms to a broad range of transgenic animal species and strains.

### **Operations of the Company**

The Company's operations are based in Utrecht and Oss, the Netherlands (U-Protein Express ("UPE") and IPA Europe, respectively), Victoria, British Columbia, and Fargo, North Dakota.



## **IMMUNOPRECISE ANTIBODIES LTD.**

### **MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

IPA Canada operates from Victoria, British Columbia, offering custom antibody generation since its inception. Since the acquisitions of UPE and IPA Europe, the Company has redirected most of its focus from the North American diagnostic market to the therapeutic antibody market, bringing an expanded portfolio of products and services to clients in Europe, North America and the rest of the world. The Company has sought to increase its capabilities at its Victoria location by adding equipment for protein purification and measuring protein binding kinetics, enlarging the vivarium, and further developing and improving technologies such as its B cell Select™ platform.

The Company established its executive headquarters in Fargo, North Dakota in 2018 in an effort to bring key members of management under a streamlined chain of command that is responsible for pipeline selection and oversight, policy establishment, finances and accounting, sales and marketing, communication, contracts, information technology governance and administration. The Fargo site is also the address of ImmunoPrecise Antibodies (N.D.) and ImmunoPrecise Antibodies (USA) Ltd. (“**IPA USA**”) and offers the potential for future growth plans in the United States.

UPE is situated in the biotechnology hub of Utrecht, the Netherlands and has been operating in the recombinant protein community for close to twenty years, specializing in the manufacture of complex proteins and antibodies in a variety of formats, and from a range of mammalian cell types, using its proprietary expression platform rPEX™. UPE's operations have enabled it to successfully support over five thousand different programs for pharmaceutical and biotechnology industries as well as leading, academic institutions.

### **Research, Development and Therapeutic Discovery Program**

CRO services are the main focus of the Company's business activities, though it also continues to develop an intellectual property portfolio of proprietary methods and physical assets through collaborations, acquisitions and in-licensing. The Company has invested strategically in the development and licensing of antibody technologies and related intellectual property assets. These investments have been accompanied by internal discovery programs focused on novel therapeutic antibodies and vaccines in areas such as oncology and COVID-19, and further enable companies to enter into non fee-for-service partnership models of drug discovery, as well as in-license or purchase later-stage programs.

In 2019, the Company formed Talem Therapeutics LLC (“**Talem**”), based in Cambridge, Massachusetts, to support its internal and partnered therapeutic discovery programs, which includes a license for the use of Ligand Pharmaceuticals' OmniAb® transgenic animals pursuant to a commercial platform license and services agreement dated October 30, 2019. Talem has the right to discover, develop and partner fully human antibodies from these animals. Talem offers strategic partnerships with pharma and biotech companies and is the only company to offer these services as a partnership in OmniAb transgenic animals. The ability for investors to support individual assets or portfolios generates an asymmetrical opportunity for investments, while avoiding ImmunoPrecise shareholder dilution. The depth and speed of IPA's offerings enables Talem to customize each program and leverages the Company's expertise and technologies in the antibody discovery.

### **STRATEGY AND OUTLOOK**

The Company's management team places an emphasis on initiatives designed to drive revenue, bolster internal assets and maximize shareholder value. The Company aims to continue to build on revenue and asset generation through internal development and well-informed, strategic acquisitions and joint ventures. The Company's strategy also includes growth through alliances and partnerships, within both its research (Talem) and service sectors, as well as potential new market sectors such as pre-clinical and clinical manufacturing.



## **IMMUNOPRECISE ANTIBODIES LTD.**

### **MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

The Company's objective is to continue growing as a preferred partner for therapeutic antibody researchers. Therefore, the Company's aim is to deliver a comprehensive and integrated continuum of technologically advanced and high-throughput, data-driven protein and antibody services to its clients and partners to enable them to bring novel therapies to the clinic faster. The Company intends to continue focusing on the development and refinement of its integrated end-to-end platform, which, when coupled with strong scientific know-how, can help clients navigate through the process of lead candidate advancement. The Company offers customized solutions for antibody discovery while providing details via the project management team to ensure clients have the project data they need, with the security measures required to ensure their peace of mind.

The Company believes its strategy is supported by growing trends in pharma and finance. Large pharmaceutical companies continue to outsource research, with trends showing an increase on the reliance of CROs to improve the efficiency and cost of development, increase turnaround time, and access advanced and integrated expertise. A report by Objective Capital Partners dated July 3, 2019 titled "CRO Sector Fundamentals Remain Hot for M&A Consolidation" identified several major drivers of the CRO industry growth, including robust biopharmaceutical funding, accelerated drug approval rates, the growing number of clinical trials, and proliferation of biopharmaceutical companies without own internal research and clinical capabilities.

To streamline, many large pharmaceutical companies are limiting the number of external CRO vendors that can be contracted. This is particularly promising for those CROs that fill multiple niches in the discovery and manufacturing pipeline, as the Company believes it can do.

According to a report titled "Global and China Monoclonal Antibody Industry Report, 2019-2025" published in April 2019 on ResearchandMarkets.com, the key industry participants serving the monoclonal antibodies market are Novartis, Merck & Co., Amgen, AbbVie, Johnson & Johnson and Roche. In 2016, Novartis invested U.S.\$9 billion in R&D, according to its own publication "Corporate Responsibility Performance Report 2016".

In May 2020 ResearchandMarkets.com stated in their report "Global Antibody Production Market (2020 to 2025) – Growth, Trends, and Forecasts" that investments by pharma and biotech companies in antibody R&D are expected to increase given the rising prevalence of cancer, autoimmune disease and other chronic diseases. Accordingly, a piece on the website for *Genetic Engineering & Biotechnology News* titled "Antibody Discovery Looks over the Horizon" published on February 7, 2019, antibodies are mainstay in oncology as physicians move away from other types of therapies such as small molecules. In recent years, the success of key pipeline drugs in the immuno-oncology space have been a key component of the record high capital market funding for the biotechnology sector, according to Objective Capital Partners' report on the CRO sector fundamentals, as noted above.

#### **COVID-19 R&D**

There is an ongoing need for therapeutics to protect against Covid-19 even when a vaccine is available, as vaccines do not provide protection for all individuals. This is particularly true for immunocompromised individuals such as the elderly, cancer patients, individuals with HIV or those undergoing bone marrow and organ transplants, whose immune systems are too weak to mount an effective response upon vaccination. Without 100% protection, important segments of higher exposure risk populations will likely be left unprotected – namely frontline workers and those living in group care.

Therapeutic antibodies are providing breakthrough medicines for cancer, inflammation, autoimmune and infectious diseases due in part to their high on-target affinity and exquisite specificity making them highly efficacious with good safety profiles.



## **IMMUNOPRECISE ANTIBODIES LTD.**

### **MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

Technological advances in antibody discovery methods such as B cell sorting now enable the rapid and systematic identification of high-quality fully human antibodies from healthy donors, diseased patients and transgenic animals. Furthermore, when therapeutic antibodies are combined into cocktails, they can provide unique protection against infectious diseases by working synergistically to neutralize pathogens via engaging multiple mechanism of action in concert, boosting potency beyond the sum of their individual components. Single antibodies are vulnerable to mutagenic escape and can be rendered ineffective by a single point mutation in the virus. In contrast, antibody cocktails may protect against mutagenic escape because they cover a larger epitope footprint on the pathogen's surface than possible with a single antibody, providing longer-lasting protection against emerging mutations.

The Company's diverse panel of antibodies with therapeutic potential can be curated into synergistic cocktails, providing opportunities for out-licensing and sponsorship deals which the Company believes would enable it to respond quickly to emerging viral mutants as well as formulation into bi- or multi-specifics.

The Company is presently manufacturing a selection of preliminary lead candidates of monoclonal antibodies in human format for preclinical testing and aim to use the resulting data to support conversations with sponsors, potential partners and funding agencies. The Company anticipates similar cocktail formulations, including its bi-specific, cocktail formulations, to also follow into pre-clinical testing in the near-term. As result, the Company anticipates that such developments will provide on-going opportunities for commercialization.

The Company is also testing adjuvanted, protein-based vaccines, based on a well-defined region of the SARS-CoV-2 spike protein. The Company anticipates moving this trial forward to a second pre-clinical study (two animal systems are recommended in the pre-clinical setting) which, following positive results, would be its first vaccine clinical candidate. The Company intends to combine the data obtained from this on-going trial with structural data from electron microscopy imaging of lead therapeutic candidates to inform the final formulation of its Polytope™ vaccine candidates.

### **OVERALL PERFORMANCE AND LIQUIDITY**

The Company continued to emphasize the value of diversified discovery programs utilizing distinctive animal repertoires and multiple technologies with unique advantages, while continuing to take on a larger volume of contracts in general. As a result, revenues of \$4,754,545 were achieved for the three months ended October 31, 2020 compared to revenues of \$3,162,365 in 2019, a 50% increase and revenues of \$8,519,522 were achieved during the six months ended October 31, 2020 compared to revenues of \$5,878,464 in 2019, a 45% increase in revenue for the period.

Revenue outlook remains positive for the third quarter of the 2021 fiscal year.

The Company has been expanding its commitment to research and development initiatives aimed at introducing new services through both internal development as well as through partnerships. The Company has also undertaken research and development projects related to COVID-19 and has been awarded government grants and subsidies to support those efforts. The Company has invested \$1,358,529 in research and has recorded \$2,154,577 in grant income and subsidies through October 31, 2020.



## **IMMUNOPRECISE ANTIBODIES LTD.**

### **MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

To support management and the Board of Directors in exercising oversight, the Company has implemented information systems for marketing and sales automation and customer relationship management, as well as accounting and financial reporting, resource planning and project management. Comprehensive operational and management reporting capabilities are being implemented with a view to effectively support a geographically dispersed organization allowing managers access to company data globally. These continued efforts support the Company's preparation for its uplist to Nasdaq, and during the quarter and six months ended October 31, 2020 the Company spent \$155,313 on its Nasdaq readiness efforts.

Adjusted EBITDA for the three and six months ending October 31, 2020 was \$688,267 and \$1,727,875, respectively. This is a significant improvement from the adjusted EBITDA of (\$63,418) and (\$699,360) for the 2019 fiscal periods. The improvement is a result of the increase in revenue, higher gross profit and grant and subsidy income compared to the prior period. Adjusted EBITDA is a non-IFRS measure which is fully defined on page ten of this document.

During the three months ended October 31, 2020 the Company increased its cash on hand to \$16,840,908 from \$2,605,706 as a result of exercised warrants, and exercised stock options. Accordingly, management modified Footnote 1 Nature of Operations in its notes to the condensed interim consolidated financial statements. The Company's forecast indicates the cash on hand will sustain its existing operations, support its Nasdaq uplist cost and satisfy its obligations through at least 2022. The Company may need to raise additional capital to fund its strategic goals and there can be no assurances that sufficient funding, including adequate financing, will be available. The ability of the Company to arrange additional financing in the future depends in part, on the prevailing capital market conditions and profitability of its operations.

## **RESULTS OF OPERATIONS**

### *Comparison of Three months ended October 31, 2020 and 2019*

#### *Revenue*

The Company achieved revenues of \$4,754,545 during the three months ended October 31, 2020, compared to revenues of \$3,162,365 in 2019. This represents a 50% increase in revenue for the period. The increasing revenue trend is due to increases in both volume and financial values of client contracts as a result of continued focus on expanding the breadth and depth of services offered, new client onboarding including top pharma companies, and growing its core existing client business.

#### *Gross Profit*

During the three months ended October 31, 2020, the Company achieved a gross profit of \$2,788,669, compared to \$2,490,015 in 2019. The Company's gross margin was 59% in the three months ended October 31, 2020 and 79% in 2019. The current period's gross margin is in line with management's expectations where in 2019 gross margin was high as a result of IPA Europe reclassifying certain research and development costs previously recorded in cost of sales.



## **IMMUNOPRECISE ANTIBODIES LTD.**

### **MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

#### Expenses

Noteworthy expense variances include:

- Advertising and promotion fees of \$255,599 in 2020 (2019 - \$60,950) increased compared to 2019 as a result of engaging additional investor relations advisors in preparation for Nasdaq and an increase in press releases and other promotional expenses to increase brand awareness.
- Consulting fees of \$156,559 in 2020 (2019 - \$43,005) increased compared to 2019 as a result of costs incurred to achieve Nasdaq readiness, costs of a feasibility study for a monoclonal antibody GMP facility, and charges related to COVID research work.
- Office and general expenses decreased to \$208,197 from \$386,172 in 2019. The expenses were lower in 2020 as a result of reducing the information technology systems after implementing one enterprise resource planning system to support its multinational operations and rent expense decreased due to implementation of IFRS 16, lease accounting. Refer to Footnote 3 in the Company's Consolidated Financial Statements for additional information.
- Professional Fees of \$233,245 in 2020 compared to \$365,560 in 2019 are lower due to 2019 expenditures incurred to support the integration of acquisitions.
- Research and development increased to \$1,049,316 from \$445,842 in 2019, due to the extensive R&D the Company is undertaking on projects related to COVID-19. See Other Income (Expenses) for related Grant Income and Subsidies.
- Salaries and benefits expense increased to \$1,499,772 from \$997,473 in 2019. Key leaders and technical employees were added to the team during FY20 to aid in executing the Company's strategies. The increase in salaries and benefits is due to the fully staffed salaries and benefits in addition to routine salary adjustments and incentive compensation.
- The Company recorded share-based payments expense of \$476,571 in 2020 (2019 - \$214,120), the increase in expense relates to additional options being granted that are expensed over the vesting period. The option plan is aimed to align staff to the future company growth plans.

#### Other Income (Expenses)

The Company recorded other income of \$1,855,076 during the three months ended October 31, 2020 compared to other expense of (\$170,668) in 2019. The increase is primarily related to 2020 government grant income of \$1,312,472 and subsidies of \$134,821, primarily related to COVID-19. See Footnote 16 in the Company's Consolidated Financial Statements for further information on government grants.

#### Net Loss

The Company recorded a net loss of \$463,583 during the three months ended October 31, 2020, compared to net loss of \$1,363,545 for the three months ended October 31, 2019, primarily due to higher gross profit and an increase in Other Income as a result of being awarded research grants offset by higher expenses.

#### Comparison of the Six months ended October 31, 2020 and 2019

##### Revenue

The Company achieved revenues of \$8,519,522 during the six months ended October 31, 2020, compared to revenues of \$5,878,464 in 2019. This represents a 45% increase in revenue for the period. The increasing revenue trend is due to increases in both volume and financial values of client contracts as a result of continued focus on expanding the breadth and depth of services offered, new client onboarding including top pharma companies, and growing its core existing client business.



## **IMMUNOPRECISE ANTIBODIES LTD.**

### **MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

#### Gross Profit

During the six months ended October 31, 2020, the Company achieved a gross profit of \$5,198,995, compared to \$3,866,421 in 2019. In percentage terms, the Company's gross profit decreased to 61% in the six months ended October 31, 2020 from 66% in 2019. In 2019 gross margin was high as a result of IPA Europe reclassifying certain research and development costs previously recorded in cost of sales.

#### Expenses

Variances of note in the Company's expenses include:

- Advertising and promotion fees of \$288,905 in 2020 (2019 - \$178,150) increased compared to 2019 as a result of engaging additional investor relations advisors in preparation for Nasdaq, including public relations as well as an increased number of press releases.
- Consulting fees of \$193,980 in 2020 (2019 - \$65,345) increased compared to 2019 as a result of costs incurred to achieve NASDAQ readiness, costs of a feasibility study for a monoclonal antibody GMP facility, and charges related to COVID research work.
- \$204,825 of the management fees were attributed to accruing an estimate of profit-sharing to the former shareholders of U-Protein, as part of the acquisition agreement. The profit-sharing payout is a three-year, annual obligation, with declining percentage of profit sharing. Beginning August 24, 2020, the profit-sharing payout for U-Protein will cease and the Company will be under no further obligations to share profits with the former shareholders of U-Protein. An accrual of estimated profit sharing was not made as of October 31, 2019.
- Office and general expenses decreased to \$356,357 from \$609,507 in 2019. The expenses were lower in 2020 as a result of reducing the number of accounting systems after implementing one enterprise resource planning system to support its multinational operations and rent expense decreased due to implementation of IFRS 16, lease accounting. Refer to Footnote 3 in the Company's Consolidated Financial Statements for additional information.
- Repairs and maintenance increased to \$155,145 from \$32,133 in 2019, due to increased maintenance on equipment through all 3 labs.
- Research and development increased to \$1,358,529 from \$613,102 in 2019, due to the extensive R&D the Company is undertaking on projects related to COVID-19.
- Salaries and benefits expense increased to \$2,851,004 from \$2,093,717 in 2019. Key leaders and technical employees were added to the team during FY20 to aid in executing the Company's strategies. The increase in salaries and benefits is due to the fully staffed salaries and benefits in addition to routine salary adjustments and incentive compensation.

#### Other Income (Expenses)

The Company recorded other income of \$2,460,591 during the six months ended October 31, 2020 compared to other expense of (\$711,159) in 2019. The increase is primarily related to 2020 government grant income of \$1,880,607 and subsidies of \$273,970, primarily related to COVID-19 and a \$556,839 reduction in accretion expense related to its obligations.

#### Net Loss

The Company recorded a net loss of \$1,012,901 during the six months ended October 31, 2020, compared to net loss of \$3,375,743 for the six months ended October 31, 2019, primarily due to higher gross profit and an increase in Other Income as a result of being awarded research grants offset by higher expenses.



## IMMUNOPRECISE ANTIBODIES LTD.

MANAGEMENT DISCUSSION AND ANALYSIS  
FOR THE SIX MONTHS ENDED OCTOBER 31, 2020

### SUMMARY OF QUARTERLY RESULTS

The following table sets out financial information for the past eight quarters:

	Three Months Ended (\$)			
	October 31, 2020	July 31, 2020	April 30, 2020	January 31, 2020
Total revenue	4,754,545	3,764,977	4,145,023	4,034,440
Net loss	(463,583)	(549,318)	(945,846)	(625,837)
Basic and diluted loss per share*	(.03)	(0.05)	(0.05)	(0.05)

  

	Three Months Ended (\$)			
	October 31, 2019	July 31, 2019	April 30, 2019	January 31, 2019
Total revenue	3,162,365	2,716,099	2,641,109	2,695,583
Net (loss)	(1,363,545)	(2,012,198)	(3,842,317)	(1,187,056)
Basic and diluted loss per share*	(0.10)	(0.15)	(0.30)	(0.10)

\*The basic and fully diluted calculations result in the same value due to the anti-dilutive effect of outstanding stock options and warrants.

The Company achieved revenues of \$4,754,545 during the three months ended October 31, 2020, which was higher compared to revenues earned during the past seven quarters. The increasing revenue trend is due to increases in both volume and financial values of client contracts as a result of continued focus on expanding the breadth and depth of services offered, new client onboarding including top pharma companies, and growing its core existing client business.

The Company recorded a net loss of \$463,583 during the three months ended October 31, 2020 and \$549,318 during the three months ended July 31, 2020, which were lower compared to the net losses during the quarters ended April 30, 2020 and January 31, 2020. This trend is due to higher revenue, higher gross profit, and grant and subsidy income, partially offset by higher operating expenses.

The loss of \$2,012,198 for the quarter ended July 31, 2019 was also higher compared to the other quarters, primarily as a result of higher non-cash expenses: amortization of acquired companies' intangible assets, depreciation of leased assets as a result of implementing IFRS 16, Leases, and the accretion expense on deferred acquisition payments. In addition, the Company continued to invest in research and development in pursuit of its goal of broadening the breadth and value of its intellectual property assets in techniques inherent in the production of human antibodies through new working partnerships with several companies with leading transgenic platforms.

The loss of \$3,842,317 for the quarter ended April 30, 2019 was greater than other quarters, as the Company invested heavily in growth enabling initiatives during the quarter and also due to the catch-up amortization recorded of intangible assets which were acquired as a result of the acquisitions of U-Protein and IPA Europe.



## IMMUNOPRECISE ANTIBODIES LTD.

### MANAGEMENT DISCUSSION AND ANALYSIS

FOR THE SIX MONTHS ENDED OCTOBER 31, 2020

#### NON-IFRS MEASURES

The following are non-IFRS measures and investors are cautioned not to place undue reliance on them and are urged to read all IFRS accounting disclosures present in the condensed interim consolidated financial statements and accompanying notes for the three and six months ended October 31, 2020.

The Company uses certain non-IFRS financial measures as supplemental indicators of its financial and operating performance. These non-IFRS financial measures include adjusted operating EBITDA and adjusted operating expenses. The Company believes these supplementary financial measures reflect the Company's ongoing business in a manner that allows for meaningful period-to-period comparisons and analysis of trends in its business. These non-IFRS measures do not have any standardized meaning prescribed under IFRS and are therefore unlikely to be comparable to similar measures presented by other companies.

The Company defines adjusted operating EBITDA as operating earnings before interest, accretion, taxes, depreciation, amortization, share-based compensation, foreign exchange gain/loss, and asset impairment charges. Adjusted operating EBITDA is presented on a basis consistent with the Company's internal management reports. The Company discloses adjusted operating EBITDA to capture the profitability of its business before the impact of items not considered in management's evaluation of operating unit performance.

The Company defines adjusted operating expenses as operating expenses before taxes, interest, share-based compensation, depreciation, amortization, accretion, foreign exchange loss (gain), and asset impairment charges. Adjusted operating expenses are presented on a basis consistent with the Company's internal management reports. The non-IFRS measures are reconciled to reported IFRS figures in the tables below:

	Three months ended		Six months ended	
	2020	2019	2020	2019
	\$	\$	\$	\$
Net loss	(463,583)	(1,363,545)	(1,012,901)	(3,375,743)
Income taxes	53,446	58,339	234,453	54,284
Amortization expense	973,737	746,543	1,885,660	1,294,384
Accretion	107,876	212,967	209,021	765,860
Foreign exchange loss (gain)	25,547	(4,331)	45,803	(117,307)
Interest expense	137,224	114,788	307,030	233,748
Interest and other income	(515,659)	(42,299)	(515,035)	(54,701)
Share-based payments	476,571	214,120	573,844	500,115
<b>Adjusted EBITDA</b>	<b>795,159</b>	<b>(63,418)</b>	<b>1,727,875</b>	<b>(699,360)</b>

	Three months ended		Six months ended	
	2020	2019	2020	2019
	\$	\$	\$	\$
Operating expenses	(5,053,882)	(3,624,553)	(8,438,034)	(6,476,721)
Amortization expense	715,857	746,543	1,393,744	1,294,384
Foreign exchange loss (gain)	25,547	(4,331)	45,803	(117,307)
Interest expense	137,224	114,788	307,030	233,748
Share-based payments	476,571	214,120	573,844	500,115
<b>Adjusted Operating Expenses</b>	<b>(3,698,683)</b>	<b>(2,553,433)</b>	<b>(6,117,613)</b>	<b>(4,565,781)</b>



## **IMMUNOPRECISE ANTIBODIES LTD.**

### **MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

#### **FINANCING ACTIVITIES**

On September 26, 2019, the Company modified the terms of \$2,750,000 debentures to extend the due date by 6 months to March 26, 2020, with the ability to pay earlier with no penalty, and increased the interest rate to 12.5%. The remaining debentures of \$125,000 were paid on maturity.

On March 26, 2020, the Company settled \$700,000 of the \$2,750,000 debentures plus accrued interest of \$46,875 by issuing 248,959 common shares. The fair value of the 248,959 common shares issued was determined to be \$858,906. The settlement resulted in a loss of \$112,031. \$50,000 of the Debentures were paid on maturity. The maturity date of the remaining debentures of \$2,000,000 was extended to September 26, 2020. The Company repaid the remaining balance of \$2,000,000 plus interest during the three months ended October 31, 2020.

On April 15, 2020, the Company was approved for a US\$209,000 loan under the Payroll Protection Program ("PPP") administered by the U.S. Small Business Administration. The loan accrued interest at 1% per annum and was to be repayable in monthly installments of US\$11,761 starting in November 2020 until April 2022. The PPP is a US\$349 billion loan program that originated from the U.S. Coronavirus Aid, Relief and Economic Security (CARES) Act. The PPP loan had a term of two years, was unsecured, and was guaranteed by the U.S. Small Business Administration. The loan is forgiven if the proceeds are used by the Company to cover payroll costs (including benefits), with up to 25% allowed for rent and utilities, during the eight-week period following the loan origination date. The Company applied for lender forgiveness and expects to meet the requirements for full loan forgiveness. Accordingly, the principal balance plus accrued interest (\$275,669) has been recognized as government grant / subsidy in other income.

During the year ended April 30, 2020, the Company issued 11,000 common shares pursuant to exercise of stock options for total gross proceeds of \$16,500.

During the year ended April 30, 2020, the Company issued 136,194 common shares pursuant to exercise of warrants for total gross proceeds of \$476,679.

On May 1, 2020, the Company issued 132,833 common shares pursuant to the second deferred payment for the acquisition of IPA Europe. The common shares were valued at \$511,405.

On May 15, 2020, the Company closed a non-brokered private placement financing by issuing 10% convertible debentures ("New Debentures") for total proceeds of \$2,592,000. On May 27, 2020, the Company issued an additional \$35,000 of the 10% New Debentures. In total, the Company issued \$2,627,000 of the New Debentures. The New Debentures are unsecured, bear interest at a rate of 10% per year and payable at maturity. The maturity date is May 15, 2022 for \$2,592,000 of the New Debentures and May 22, 2022 for \$35,000 of the New Debentures. The principal amount of the New Debentures may be convertible, at the option of the holder, into units of the Company at a conversion price of \$4.25 per share. The Company may force convert the principal amount of the New Debentures at \$4.25 per share if the average closing price is equal to or greater than \$7.50 for 20 trading days. The Company paid finders cash commissions totaling \$82,580 and incurred legal and filing fees of \$29,331.

During the six months ended October 31, 2020, the Company issued 130,100 common shares pursuant to exercise of stock options for total gross proceeds of \$387,805.

During the six months ended October 31, 2020, the Company issued 2,431,300 common shares pursuant to exercise of warrants and finder's warrants for total gross proceeds of \$14,535,775.



## **IMMUNOPRECISE ANTIBODIES LTD.**

### **MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

During the six months ended October 31, 2020, the Company issued 83,528 common shares pursuant to conversion of convertible debentures at a value of \$339,315.

Subsequent to October 31, 2020, the Company issued 17,646, common shares pursuant to conversion of convertible debentures at a value of \$68,327.

Subsequent to October 31, 2020, the Company issued 29,217 shares related to warrant exercise.

### **LIQUIDITY AND CAPITAL RESOURCES**

The Company's objectives when managing capital are to ensure sufficient liquidity for operations and adequate funding for growth and capital expenditures while maintaining an efficient balance between debt and equity. The capital structure of the Company consists of shareholders' equity.

The Company adjusts to its capital structure upon approval from its Board of Directors, considering economic conditions and the Company's working capital requirements. There were no changes in the Company's approach to capital management during the year. The Company is not subject to any externally imposed capital requirements.

As at October 31, 2020, the Company held cash of \$16,840,908 (April 30, 2020 – \$2,605,706) and had working capital of \$16,152,652 (April 30, 2020 – deficiency \$230,325). During the six months ended October 31, 2020, the cash provided by operating activities was \$848,611. As part of the investing activities, the Company made equipment purchases of \$467,827, internally generated development costs of \$278,995, and made a deferred acquisition payment of \$518,534. As part of the financing activities, the Company received \$14,923,580 from exercise of stock options and warrants, received convertible debenture proceeds net of transaction costs of \$2,201,821, offset by lease repayments of \$563,540, loan repayments of \$25,131 and debenture repayments of \$2,000,000.

The Company has historically incurred net losses. There is no assurance that sufficient revenues will be generated in the near future. To the extent that the Company has negative operating cash flows in future periods, it may need to deploy a portion of its existing working capital to fund such negative cash flows. The Company may need to raise additional funds through issuances of common shares or through loan financing. There is no assurance that additional capital or other types of financing will be available if needed or that these financings will be on terms at least as favourable to the Company as those previously obtained, or at all. If the Company is unable to obtain additional financing from outside sources and eventually generate enough revenues, the Company may be forced to sell a portion or all of the Company's assets, or curtail or discontinue the Company's operations.

As of October 31, 2020, the Company has commitments of \$562,557 for capital expenditures.

### **CAPITAL EXPENDITURES**

The Company made equipment purchases of \$467,827 during the six months ended October 31, 2020 (2019 - \$190,043). During the six months ended October 31, 2020, the Company also incurred internally generated development costs of \$278,995 (2019 – incurred costs of \$71,817).



## IMMUNOPRECISE ANTIBODIES LTD.

### MANAGEMENT DISCUSSION AND ANALYSIS

FOR THE SIX MONTHS ENDED OCTOBER 31, 2020

#### RELATED PARTY TRANSACTIONS

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company. Key management consists of Dr. Jennifer Bath, President and CEO; Lisa Helbling, CFO; Dr. Stefan Lang, CBO; Dr. Yasmina Abdiche, CSO; and Former Employees: Charles Wheelock, CTO; Martin Hessing, Director of U-Protein; and Directors of the Company. During the six months ended October 31, 2020 and 2019, the compensation for key management is as follows:

	Six months ended	
	2020	2019
	\$	\$
Management fees <sup>(1)</sup>	15,737	89,479
Salaries and other short-term benefits <sup>(2)</sup>	1,242,196	771,376
Severance <sup>(3)</sup>	135,715	-
Share-based payments	459,239	269,870
	1,852,887	1,130,725

<sup>(1)</sup> At October 31, 2020, included in accounts payable and accrued liabilities is \$785,196 (April 30, 2020 - \$412,188) due to related parties.

These transactions are in the normal course of operations and are measured at the exchange amount, which is the amount of consideration established and agreed to by the related parties, unless otherwise noted.

#### OUTSTANDING SHARE DATA

The Company's outstanding share information as at December 18, 2020 is as follows:

Security	Number	Exercise Price	Expiry date
Issued and outstanding common shares	16,808,642	NA	NA
Stock options	40,000	\$5.00	October 1, 2021
Stock options	46,000	\$1.50	December 20, 2021
Stock options	166,900	\$5.05	September 18, 2022
Stock options	50,000	\$3.25	January 3, 2023
Stock options	140,000	\$2.35	February 7, 2023
Stock options	8,000	\$5.05	April 3, 2023
Stock Options	50,000	\$7.50	August 13, 2023
Stock options	19,000	\$4.75	September 24, 2023
Stock options	20,000	\$4.10	November 7, 2023
Stock options	250,000	\$5.00	December 31, 2023
Stock options	60,000	\$5.00	January 7, 2024
Stock options	3,000	\$5.00	January 11, 2024
Stock options	50,000	\$3.80	April 1, 2024
Stock options	50,000	\$2.375	October 1, 2024
Stock options	30,000	\$2.50	October 3, 2024
Stock options	270,000	\$8.50	September 1, 2025
Warrants	1,032,977	\$3.50	March 26, 2022
Total	19,094,519		



## **IMMUNOPRECISE ANTIBODIES LTD.**

**MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

### **OFF-BALANCE SHEET ARRANGEMENTS**

The Company does not utilize off-balance sheet transactions.

### **CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS**

The preparation of the consolidated financial statements in conformity with IFRS required estimates and judgments that affect the amounts reported in the financial statements. Actual results could differ from these estimates and judgments. Estimates are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the year in which the estimate is revised. Significant areas requiring the use of estimates and judgments are as follows:

#### Functional currency

The Company has used judgment in determining the currency of the primary economic environment in which the entity operates.

#### Amounts receivable

The Company monitors the financial stability of its customers and the environment in which they operate to make estimates regarding the likelihood that the individual trade receivable balances will be paid. Credit risks for outstanding customer receivables are regularly assessed and allowances are recorded for estimated losses, if required.

#### Equipment

The Company has used estimates in the determination of the expected useful lives of equipment and leasehold improvements.

#### Revenue recognition

The percentage-of-completion method requires the use of estimates to determine the stage of completion which is used to determine the recorded amount of revenue, unbilled revenue and deferred revenue on uncompleted contracts. The determination of anticipated revenues includes the contractually agreed revenue and may also involve estimates of future revenues if such additional revenues can be reliably estimated and it is considered probable that they will be recovered. The determination of anticipated costs for completing a contract is based on estimates that can be affected by a variety of factors, including the cost of materials, labor, and sub-contractors. The determination of estimates is based on the Company's business practices as well as its historical experience.

#### Impairments

For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows ("cash generating units" or "CGU"s). Each asset or CGU is evaluated every reporting period to determine whether there are any indicators of impairment. If any such indicators exist, which is often judgment-based, a formal estimate of recoverable amount is performed, and an impairment charge is recognized to the extent that the carrying amount exceeds the recoverable amount. The recoverable amount of an asset or CGU of assets is measured at the higher of fair value less costs of disposal or value in use. These determinations and their individual assumptions require that management make a decision based on the best available information at each reporting period. The estimates and assumptions are subject to risk and uncertainty; hence, there is the possibility that changes in circumstances will alter these projections, which may impact the recoverable amount of the assets. In such circumstances, some or all the carrying value of the assets may be further impaired or the impairment charge reversed with the impact recorded in profit or loss.



## **IMMUNOPRECISE ANTIBODIES LTD.**

### **MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

The Company performs a goodwill impairment test annually and when circumstances indicate that the carrying value may not be recoverable. For the purposes of impairment testing, goodwill acquired through business combinations has been allocated to two different CGUs. The recoverable amount of each CGU was based on value in use, determined by discounting the future cash flows to be generated from the continuing use of the CGU. The cash flows were projected over a five-year period based on past experience and actual operating results.

The Company performed its annual goodwill impairment test in April 2020 and no impairment was indicated for the period tested. The values assigned to the key assumptions represented management's assessment of future trends in the industry and were based on historical data from both internal and external sources. Weighted average costs of capital of 16.33% and 12.26%, respectively, was used in the assessments of the two CGUs.

#### Determination of segments

An operating segment is a component of the Company that engages in business activities from which it may earn revenues and incur expenses. All operating segments' results are reviewed by the Company's management in order to make decisions regarding the allocation of resources to the segment. Segment results include items directly attributable to a segment as those that can be allocated on a reasonable basis.

As the Company provides antibody production and related services in one distinct segment.

#### Life of intangible assets

Intangible assets are amortized based on estimated useful life less their estimated residual value. Significant assumptions are involved in the determination of useful life and residual values and no assurance can be given that actual useful lives and residual values will not differ significantly from current assumptions. Actual useful life and residual values may vary depending on a number of factors including internal technical evaluation, attributes of the assets and experience with similar assets. Changes to these estimates may affect the carrying value of assets, net income (loss) and comprehensive income (loss) in future periods.

#### Purchase price allocation

The acquisition of U-Protein on August 22, 2017 and the acquisition of IPA Europe and Immulease on April 5, 2018 were accounted for as business combinations at fair value in accordance with IFRS 3, *Business Combinations*. The acquired assets and assumed liabilities were adjusted to their fair values assigned through completion of a purchase price allocation, as described below.

The purchase price allocation process resulting from a business combination requires management to estimate the fair value of identifiable assets acquired including intangible assets and liabilities assumed including the deferred acquisition payment obligations. The Company uses valuation techniques, which are generally based on forecasted future net cash flows discounted to present value and relies on work performed by third-party valuation specialists. These valuations are closely linked to the assumptions used by management on the future performance of the related assets and the discount rates applied.



## **IMMUNOPRECISE ANTIBODIES LTD.**

**MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

### **ADOPTION OF NEW ACCOUNTING STANDARDS**

The Company has adopted the following new standards, along with any consequential amendments, effective May 1, 2019. These changes were made in accordance with the applicable transitional provisions.

The Company adopted all the requirements of IFRS 16, *Leases* ("IFRS 16") as of May 1, 2019. IFRS 16 replaces IAS 17, *Leases* ("IAS 17"). IFRS 16 provides a single lessee accounting model, requiring lessees to recognize assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value. The Company has adopted IFRS 16 using the modified retrospective application method, where the 2019 comparatives are not restated and a cumulative catch up adjustment is recorded on May 1, 2019 for any differences identified, including adjustments to opening deficit balance.

The Company analyzed its contracts to identify whether they contain a lease arrangement for the application of IFRS 16. The following is the Company's new accounting policy for leases under IFRS 16:

At inception of a contract, the Company assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Leases of right-of-use assets are recognized at the lease commencement date at the present value of the lease payments that are not paid at that date. The lease payments are discounted using the interest rate implicit in the lease, if that rate can be readily determined, and otherwise at the Company's incremental borrowing rate. At the commencement date, a right-of-use asset is measured at cost, which is comprised of the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any decommissioning and restoration costs, less any lease incentives received.

Each lease payment is allocated between repayment of the lease principal and interest. Interest on the lease liability in each period during the lease term is allocated to produce a constant periodic rate of interest on the remaining balance of the lease liability. Except where the costs are included in the carrying amount of another asset, the Company recognizes in profit or loss (a) the interest on a lease liability and (b) variable lease payments not included in the measurement of a lease liability in the period in which the event or condition that triggers those payments occurs. The Company subsequently measures the right-of-use asset at cost less any accumulated depreciation and any accumulated impairment losses; and adjusted for any remeasurement of the lease liability. Right-of-use assets are depreciated over the shorter of the asset's useful life and the lease term, except where the lease contains a bargain purchase option a right-of-use asset is depreciated over the asset's useful life.

On the date of transition, the Company recorded a right-of-use asset of \$1,668,533 related to the office rent in property and equipment, and the lease obligation of \$1,723,277 was recorded as at May 1, 2019, discounted using the Company's incremental borrowing rate of 8%, and measured at an amount equal to the lease obligation as if IFRS 16 had been applied since the commencement date. The net difference between right-of-use assets and lease liabilities on the date of transition was recognized as a deficit adjustment of \$54,744 on May 1, 2019.



## **IMMUNOPRECISE ANTIBODIES LTD.**

**MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

### **DISCLOSURE CONTROLS AND PROCEDURES**

In connection with National Instrument 52-109 (Certificate of Disclosure in Issuer's Annual and Interim Filings) ("NI 52-109"), the Chief Executive Officer and Chief Financial Officer of the Company have filed a Venture Issuer Basic Certificate with respect to the financial information contained in the unaudited condensed interim consolidated financial statements for the six months ended October 31, 2020 and this accompanying MD&A.

In contrast to the full certificate under NI 52-109, the Venture Issuer Basic Certificate does not include representations relating to the establishment and maintenance of disclosure controls and procedures and internal control over financial reporting, as defined in NI 52-109. For further information the reader should refer to the Venture Issuer Basic Certificates filed by the Company with the Annual Filings on SEDAR at [www.sedar.com](http://www.sedar.com).

### **FINANCIAL INSTRUMENTS**

The Company's financial instruments include cash, amounts receivable, restricted cash, investment, accounts payable and accrued liabilities, debentures, convertible debentures, loans payable, leases and deferred acquisition payments. The fair value of investment is determined based on "Level 1" inputs which consist of quoted prices in active markets for identical assets. As at October 31, 2020, the Company believes that the carrying values of cash, amounts receivable, restricted cash, accounts payable and accrued liabilities, deferred payments, debentures, convertible debentures, and loans payable approximate their fair values because of their nature and relatively short maturity dates or durations.

### **RISKS AND UNCERTAINTIES**

There are numerous and varied risks, known and unknown, that may prevent the Company from achieving its goals. The risks described below are not the only ones the Company will face. If any of these risks actually occurs, the Company business, financial condition or results of operations may be materially and adversely affected. In that case, the trading price of the Company's securities could decline and investors in such securities could lose all or part of their investment.

#### **Financial Position and Additional Needs for Liquidity and Capital**

The Company is a biopharmaceutical company focused on the development of novel, therapeutic antibodies. Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that a product candidate will fail to prove effective, gain regulatory approval or become commercially viable. The Company does not have any products approved by regulatory authorities and has not generated substantial revenues from collaboration and licensing agreements or clinical product sales to date, and has incurred significant research, development and other expenses related to ongoing operations and expects to continue to incur such expenses. As a result, the Company has not been profitable and has incurred operating losses in every reporting period since its inception and has a significant accumulated deficit. Operating costs are expected to increase in the near term as the Company continues product development efforts and expects to continue until such time as any future product sales, royalty payments, licensing fees, and/or milestone payments are sufficient to generate revenues to fund continuing operations. In addition, the Company's operating expenses are expected to increase compared to last year as a result of its U.S. public reporting company status. The Company is unable to predict the extent of any future losses or when this business section will become profitable, if ever. Even if the Company achieves profitability, it may not be able to sustain or increase profitability on an ongoing basis.



## **IMMUNOPRECISE ANTIBODIES LTD.**

**MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

### **Research and Development and Product Development**

The Company is a life science company that makes customized antibodies and is engaged in the research and product development of new antibodies, processes, procedures and innovative approaches to the antibody production. The Company has been engaged in such research and development activities for over 30 years and has had significant success. Continued investment in retaining key scientific staff, as well as an ongoing commitment in research and development activities, will continue to be a cornerstone in the Company's development of new services, processes, and competitive advantages such as Rapid Prime™, B cell Select™, DeepDisplay™ and its methods for the production of human antibodies. The Company realizes that such research and product development activities endeavour, but cannot assure, the production of new and innovative processes, procedures or innovative approaches to antibody production or new antibodies. Furthermore, if it does not achieve sufficient market acceptance of its expansion of its commercialization of its products and services, it will be difficult for the Company to achieve consistent profitability. The Company's marketing and sales approach and external sales personnel continues to introduce a steady stream of new partners.

### **Competition**

Although the Company believes that there are only a limited number of full-service, biologics, CRO firms, the Company may face intense competition in selling its products and services. Some competitors may have marketing, financial, development and personnel resources which exceed those of the Company. As a result of this competition, the Company may be unable to maintain its operations or develop them as currently proposed on terms it considers acceptable or at all. Increased competition by larger, better-financed competitors with geographic advantages could materially and adversely affect the Company's business, financial condition and results of operations. To remain competitive, the Company believes that it must effectively and economically provide: (i) products and services that satisfy partner demands, (ii) superior partner service, (iii) high levels of quality and reliability, and (iv) dependable and efficient distribution networks. Increased competition may require the Company to reduce prices or increase spending on sales and marketing and partner support, which may have a material adverse effect on its financial condition and results of operations. Any decrease in the quality of the Company's products or level of service to partners or any occurrence of a price war among the Company's competitors may adversely affect the business and results of operations. Partner reach, service and on-time delivery will continue to be a hallmark of the Company's ability to compete with other market players. Further, the acquisitions translate to spreading the Company's footprint on two continents. In addition, the Company has deployed a sales team tasked with continually sourcing and providing market intelligence as part of its activities.

### **Competition and Obsolescence**

The pharmaceutical and biotechnology industries are characterized by rapid and continuous technological innovation. The Company competes with companies around the world that are engaged in the development and production of products and services, including pharmaceutical companies, biotechnology companies, and contract research companies. Academic institutions, governmental agencies and other research organizations also are conducting research and developing technologies in areas in which the Company provides services, either on its own or through collaborative efforts. The Company's pharmaceutical and biotechnology company partners have internal departments that provide products and services that directly compete with the Company's products and services. Many of the Company's competitors offer a broader range of products and services and have greater access to financial, technical, scientific, business development, recruiting and other resources than the Company does, and some of its competitors may also operate with a lower cost structure. The Company anticipates that it will face increased competition in the future as it expands its operations and its products and services and as new companies enter the market and advanced technologies become available. The Company's products, services and expertise may become obsolete or uneconomical due to technological advances or entirely different approaches developed by the Company, its clients or one or more of its competitors. For example, advances in databases and molecular modeling tools that predict how effectively compounds will treat a targeted disease may render some of its technologies obsolete. While the Company plans to develop technologies that will give it a competitive advantage, it may not be able to develop the technologies necessary



## **IMMUNOPRECISE ANTIBODIES LTD.**

### **MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

for it to successfully compete in the future. Additionally, the existing approaches of the Company's competitors or new approaches or technologies developed by its competitors may be more effective than those it develops. The Company may not be able to compete successfully with existing or future competitors.

Other competitive factors could force the Company to lower prices or could result in reduced sales. In addition, new products developed by others could emerge as competitors to the Company's drug candidates. If the Company is not able to compete effectively against current and future competitors, its business will not grow and its financial condition and operations will suffer.

#### **Intellectual Property Protection**

The Company's success will depend on its ability to obtain, protect and enforce patents on its technology and products. Any patents that the Company may own or license in the future may not afford meaningful protection for its technology and products. The Company's efforts to enforce and maintain its intellectual property rights may not be successful and may result in substantial costs and diversion of management time. In addition, others may challenge patents the Company may obtain in the future and, as a result, these patents could be narrowed, invalidated or rendered unenforceable or it may be forced to stop using the technology covered by these patents or to license the technology from third parties. In addition, current and future patent applications on which the Company depends may not result in the issuance of patents. Even if the Company's rights are valid, enforceable and broad in scope, competitors may develop products based on similar technology that is not covered by the Company's patents. Further, since there is a substantial backlog of patent applications at the various patent offices, the approval or rejection of the Company and its competitors' patent applications may take several years.

In addition to patent protection, the Company also relies on copyright and trademark protection, trade secrets, know-how, continuing technological innovation and licensing opportunities. In an effort to maintain the confidentiality and ownership of the Company's trade secrets and proprietary information, the Company requires its employees, consultants and advisors to execute confidentiality and proprietary information agreements. However, these agreements may not provide the Company with adequate protection against improper use or disclosure of confidential information and there may not be adequate remedies in the event of unauthorized use or disclosure. Furthermore, like many companies in the Company's industry, the Company may from time to time hire scientific personnel formerly employed by other companies involved in one or more areas similar to the activities the Company conducts. In some situations, the Company's confidentiality and proprietary information agreements may conflict with, or be subject to, the rights of third parties with whom its employees, consultants or advisors have prior employment or consulting relationships. Although the Company requires its employees and consultants to maintain the confidentiality of all confidential information of previous employers, the Company or these individuals may be subject to allegations of trade secret misappropriation or other similar claims as a result of their prior affiliations. Finally, others may independently develop substantially equivalent proprietary information and techniques, or otherwise gain access to its trade secrets. The Company's failure to protect its proprietary information and techniques may inhibit or limit its ability to exclude certain competitors from the market and execute its business strategies.

#### **Failure of Laboratory Facilities**

The Company's operations could suffer as a result of a failure of its laboratory facilities. The Company's business will be dependent upon a laboratory infrastructure to produce products and services. These systems and operations are vulnerable to damage and interruption from fires, earthquakes, telecommunications failures, and other events. Any such errors or inadequacies in the software that may be encountered could adversely affect operations, and such errors may be expensive or difficult to correct in a timely manner.



## **IMMUNOPRECISE ANTIBODIES LTD.**

**MANAGEMENT DISCUSSION AND ANALYSIS**

**FOR THE SIX MONTHS ENDED OCTOBER 31, 2020**

---

Further, many of the Company's operations are comprised of complex mechanical systems that are subject to periodic failure, including aging fatigue. Such failures are unpredictable, and while the Company has made significant capital expenditures designed to create redundancy within these mechanical systems, strengthened biosecurity, improved operating procedures to protect against such contaminations, and replaced impaired systems and equipment in advance of such events, failures and/or contaminations may still occur.

The production of monoclonal and polyclonal antibodies requires state of the art laboratory facilities and the success of these laboratory services depends on the recruitment and retention of highly qualified technical staff to maintain the level and quality of standard of the Company's products and services expected from partners. There is no assurance that the Company will be able to expand and operate such state of the art laboratory services and recruit and retain qualified staff.

The Company produces and supplies antibodies and there is no guarantee that such production will be successful and produce the desired results. As a result, the Company continues to be exposed to potential liability that may exceed any insurance coverage that the Company may obtain in the future. As a result, the Company may incur significant liability exposure, which may exceed any insurance coverage that the Company may obtain in the future. Even if the Company elects to purchase such insurance in the future, the Company may not be able to maintain adequate levels of insurance at reasonable cost and/or reasonable terms. Excessive insurance costs or uninsured claims may increase the Company's operating loss and affect its financial condition.

### **Pandemic Risk**

The Company is currently unable to determine whether the ongoing COVID-19 pandemic will have a negative effect on the Company's results in the remainder of 2020 or beyond, and the future course and duration of the outbreak remain unknown. There has been minimal impact on the Company's operations and results to date, and the Company has not experienced negative impact on client sales or the supply chain. The Company's sales, operations and financial performance could suffer given a potential rapidly spreading virus. Internally, the virus may infect its employees resulting in operating at lower productivity levels or even a complete laboratory shutdown. The Company's business is dependent on its laboratories to produce its products and services which if not operating will impact the financial performance of the company and its ability to meet its obligations. The Company has diversified geographic locations with the ability to perform similar services at other sites. In addition, certain roles have the ability to work remotely and the Company has business interruption insurance which may aid in the recovery of lost profits. External factors may also contribute to this risk, such as the impact of a pandemic on the Company's partners and suppliers.

Additional information related to the Company's risk disclosures can be found in the Annual Information Form on SEDAR at [www.sedar.com](http://www.sedar.com)

### **FURTHER INFORMATION:**

Additional information relating to the Company can be found on SEDAR at [www.sedar.com](http://www.sedar.com).