

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

AMENDMENT NO. 1 TO
FORM S-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

INMED PHARMACEUTICALS INC.
(Exact name of registrant as specified in its charter)

British Columbia

(State or other jurisdiction of
incorporation or organization)

2834

(Primary Standard Industrial
Classification Code Number)

82-2726719

(I.R.S. Employer
Identification Number)

**InMed Pharmaceuticals Inc. Suite 310 -
815 W. Hastings Street, Vancouver, B.C.
V6C 1B4
Canada
(604) 669-7207**

(Address, including zip code and telephone number, including area code, of registrant's principal executive offices)

**Registered Agent Solutions, Inc.
1100 H Street NW Suite 840
Washington, DC 20005
(888) 705-7274**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

**Brian Fenske
Norton Rose Fulbright US LLP
1301 McKinney, Suite 5100
Houston, Texas 77010-3095
United States
(713) 651-5557**

**Trevor Zeyl
Norton Rose Fulbright Canada LLP
222 Bay Street, Suite 3000
Toronto, Ontario M5K 1E7
Canada
(416) 216-4726**

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement, as determined by market and other conditions.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering:

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering:

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering:

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer:	<input type="checkbox"/>	Accelerated filer:	<input type="checkbox"/>
Non-accelerated filer:	<input checked="" type="checkbox"/>	Smaller reporting company:	<input checked="" type="checkbox"/>
		Emerging Growth Company:	<input checked="" type="checkbox"/>

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 7(a)(2)(B) of the Securities Act

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. A registration statement relating to the securities has been filed with the Securities and Exchange Commission. The selling shareholder may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting offers to buy these securities in any state or other jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JUNE 24, 2022

PRELIMINARY PROSPECTUS

7,575,756 Common Shares



InMed Pharmaceuticals Inc.

This prospectus relates to the offering and resale by the selling shareholder identified herein of up to 7,575,756 of our common shares. The common shares being offered by the selling shareholder consist of the following common shares issued to the selling shareholder in our June 2022 private placement (the “**Private Placement**”): (i) 1,748,250 common shares issuable upon the exercise of pre-funded warrants at an exercise price of \$0.0001 per share and (ii) 5,827,506 common shares issuable upon the exercise of preferred investment options at an exercise price of \$0.74 per share. Please see “*Private Placement of Warrants*” beginning on page 26 of this prospectus.

We will not receive any proceeds from the sale of common shares by the selling shareholder. However, upon (i) the cash exercise of the pre-funded warrants, we will receive the exercise price of such warrants, for an aggregate of approximately \$175, and (ii) the cash exercise of the preferred investment options, we will receive the exercise price of such warrants, for an aggregate of approximately \$4.3 million.

The selling shareholder may sell all or a portion of the common shares beneficially owned by it and the common shares are offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. Please see “*Plan Of Distribution*” on page 28 of this prospectus for more information. For more information regarding the selling shareholder, see “*Selling Shareholder*” on page 27 of this prospectus.

Our common shares are currently quoted under the symbol “INM” on the Nasdaq Capital Market. We are an “emerging growth company” as defined by the Jumpstart Our Business Startups Act of 2012 and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings.

Investing in our common shares involves a high degree of risk. Please read “*Risk Factors*” beginning on page 12 of this prospectus.

We may amend or supplement this prospectus from time to time by filing amendments or supplements as required. You should read the entire prospectus and any amendments or supplements carefully before you make your investment decision.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Prospectus dated June 24, 2022

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ABOUT THIS PROSPECTUS AND EXCHANGE RATES

You should rely only on the information contained in this prospectus or contained in any prospectus supplement or free writing prospectus filed with the Securities and Exchange Commission (the “SEC”). Neither we nor the selling shareholder has authorized anyone to provide you with additional information or information different from that contained in this prospectus filed with the SEC. The selling shareholder is offering to sell, and seeking offers to buy, shares of our common shares only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common shares. Our business, financial condition, results of operations and prospects may have changed since that date.

We obtained the industry, market and competitive position data in this prospectus from our own internal estimates and research as well as from industry and general publications and research surveys and studies conducted by third parties. This information involves many assumptions and limitations, and you are cautioned not to give undue weight to these estimates. We have not independently verified the accuracy or completeness of the data contained in these industry publications and reports. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in “Risk Factors,” that could cause results to differ materially from those expressed in these publications and reports.

For investors outside the United States: Neither we nor the selling shareholder has done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common shares and the distribution of this prospectus outside the United States.

This prospectus contains references to our trademark and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other companies’ trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

Unless otherwise indicated, references in this prospectus to “\$”, “dollars”, “USD”, “US\$” or “United States dollars” are to United States dollars. Canadian dollars are referred to as “Canadian dollars” or “C\$”.

The high, low and closing rates for Canadian dollars in terms of the United States dollar for each of the periods indicated, as quoted by the Bank of Canada, were as follows:

	Year Ended June 30		Nine Months Ended March 31	
	2021	2020	2022	2021
High for period	C\$ 1.3616	C\$ 1.4496	C\$ 1.2942	C\$ 1.3616
Low for period	C\$ 1.2040	C\$ 1.2970	C\$ 1.2329	C\$ 1.2455
Rate at end of period	C\$ 1.2394	C\$ 1.3628	C\$ 1.2496	C\$ 1.2575

On March 31, 2022, the Bank of Canada daily rate of exchange was US\$1.00 = C\$1.2575 or C\$1.00 = US\$0.7959.

On June 17, 2022, the Bank of Canada daily rate of exchange was US\$1.00 = C\$1.3035 or C\$1.00 = US\$0.7672.

PROSPECTUS SUMMARY

This summary highlights information contained in other parts of this prospectus. Because it is only a summary, it does not contain all of the information that you should consider before investing in our securities and it is qualified in its entirety by, and should be read in conjunction with, this prospectus and the information incorporated herein by reference to our other filings with the SEC. Investing in our securities involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this prospectus, including our financial statements and related notes, before investing in our securities. If any of the following risks materialize, our business, financial condition, operating results and prospects could be materially and adversely affected. In that event, the price of our securities could decline, and you could lose part or all of your investment.

Unless the context indicates otherwise, as used in this prospectus, the terms “InMed,” “InMed Pharmaceuticals,” “we,” “us,” “our,” “our company” and “our business” refer to InMed Pharmaceuticals Inc.

BUSINESS

Overview

We are a clinical stage pharmaceutical company developing a pipeline of prescription-based products, including rare cannabinoids and novel cannabinoid analogs, targeting the treatment of diseases with high unmet medical needs (“Product Candidates”) as well as developing proprietary manufacturing technologies to produce rare cannabinoids for sale in the health and wellness industry (“Products”).

We are developing multiple manufacturing approaches for synthesizing rare cannabinoids for potential use in pharmaceutical Product Candidates as well as serving as a business to business (B2B) supplier to wholesalers and end-product manufacturers / marketers in the health and wellness sector. This includes traditional approaches such as chemical synthesis and biosynthesis, as well as a proprietary, integrated manufacturing approach called IntegraSyn™. We are dedicated to delivering new therapeutic alternatives to patients and consumers who may benefit from cannabinoid-based products. Our approach leverages on the several thousand years’ history of health benefits attributed to the Cannabis plant and brings this anecdotal information into the 21st century by applying tried, tested and true scientific approaches to establish non-plant-derived (synthetically manufactured), individual cannabinoid compounds as Product Candidates in important market segments including clinically proven, FDA-approved medicines and non-prescription, over-the-counter consumer products via B2B supply relationships with wholesalers and end-product manufacturers. While our activities do not involve direct use of Cannabis nor extracts from the plant, we note that the U.S. Food and Drug Administration (“FDA”) has, to date, not approved any marketing application for Cannabis for the treatment of any disease or condition and has approved only one Cannabis-derived and three Cannabis-related drug products. Our ingredients are synthetically made and, therefore, we have no interaction with the Cannabis plant. We do not grow nor utilize Cannabis nor its extracts in any of our Products or Product Candidates; our current pharmaceutical drug Product Candidates are applied topically (not inhaled nor ingested); and, we do not utilize THC or CBD, the most common cannabinoid compounds that are typically extracted from the Cannabis plant, in any of our Products or Product Candidates. The active pharmaceutical ingredient (“API”) under development for our initial two drug candidates, INM-755 for Epidermolysis bullosa (“EB”) and INM-088 for glaucoma, is cannabiniol (“CBN”). Additional uses of both INM-755 and INM-088 are being explored, as well as the application of additional rare cannabinoids to treat diseases including but not limited to neurodegenerative diseases such as Alzheimer’s, Parkinson’s, and Huntington’s.

This table summarizes the status of our therapeutic drug development programs:

	Preclinical Studies	IND-Enabling Toxicology	Phase 1 Safety	Phase 2 Safety/Efficacy	Advanced Clinical Trials
INM-755	Epidermolysis Bullosa (EB)			2022	TBD
INM-088	Glaucoma	2023	2024	TBD	TBD
Neurodegenerative Diseases	2022-23	TBD	TBD	TBD	TBD

We believe we are positioned to develop multiple pharmaceutical Product Candidates in diseases which may benefit from medicines based on rare cannabinoid compounds. Most currently approved cannabinoid therapies are based specifically on CBD and/or THC and are often delivered orally, which has limitations and drawbacks, such as side effects (including the intoxicating effects of THC). Currently, we intend to deliver our rare cannabinoid pharmaceutical drug candidates through various topical formulations (cream for dermatology, eye drops for ocular diseases) as a way of enabling treatment of the specific disease at the site of disease while seeking to minimize systemic exposure and any related unwanted systemic side effects, including any drug-drug interactions and any metabolism of the active pharmaceutical ingredient by the liver. The cannabinoids sold through our B2B raw material supply business are integrated into various product formats by the companies who then further commercializes such products. We plan to access rare cannabinoids via all non-extraction approaches, including chemical synthesis, biosynthesis and our proprietary integrated IntegraSyn™ approach, thus negating any interaction with or exposure to the Cannabis plant.

Focused on Research, Development, Manufacturing and Commercialization of Rare Cannabinoids



Researching the therapeutic drug potential of rare cannabinoids beginning with **cannabinol (CBN)** and expanding into other rare cannabinoids / analogs



Leveraging extensive manufacturing know-how to select the best approach based on type of cannabinoids, target quantity and requisite quality for each market segment. Industry-leading experience in biosynthesis, chemical synthesis and their combination (IntegraSyn™) to efficiently produce bio-identical rare cannabinoids



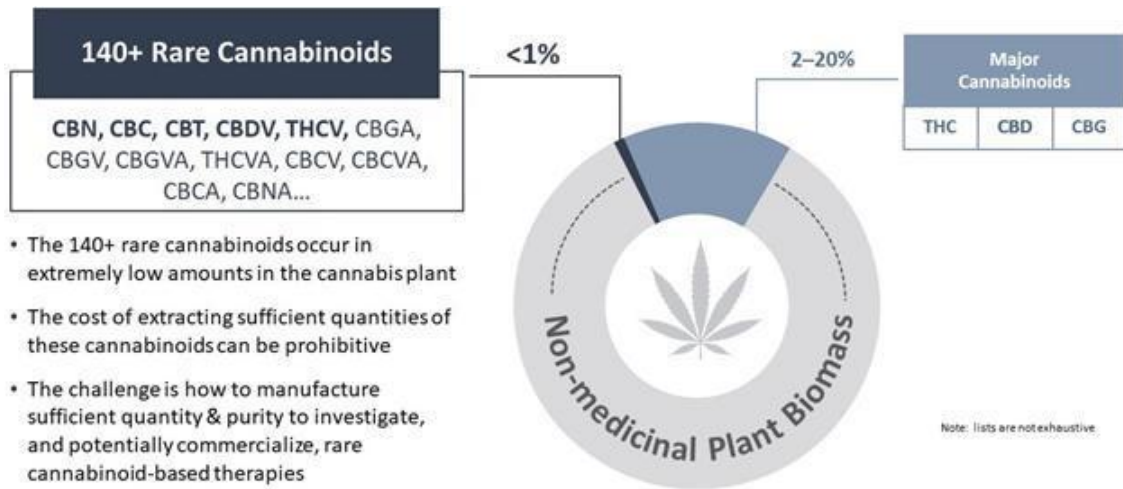
Providing rare cannabinoids to the health and wellness sector as raw ingredients for further manufacturing and commercialization by 3rd parties

On October 13, 2021, we acquired BayMedica Inc., now named BayMedica LLC (“BayMedica”). Upon closing of the transaction, BayMedica became a wholly-owned subsidiary of InMed.

Our Drug Development Programs

Rationale for Use of CBN in Pharmaceutical Drug Development

CBN is one of several rare cannabinoids naturally produced in the *Cannabis* plant, albeit at significantly lower levels relative to the more commonly known THC and CBD. Despite their common origin, different cannabinoids have been observed to have distinct physiological properties. We are specifically exploring these unique effects of CBN, as well as other rare cannabinoids, and their therapeutic potential to treat disease.



Our extensive preclinical testing has identified several unique properties of CBN that outperformed both THC and CBD in various disease-related assays and models. CBN can act with higher potency when interacting with some receptor systems in the body, while acting with lower potency for others.

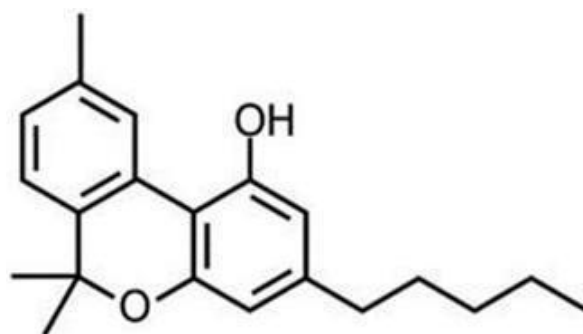
Physical and Chemical Properties of Active Pharmaceutical Ingredient CBN

CBN is a stable, highly lipophilic cannabinoid compound. It is insoluble in water, but soluble in organic solvents.

International Non-proprietary Name:	Cannabinol (abbreviated CBN)
International Union of Pure and Applied Chemistry Name:	6,6,9-trimethyl-3-pentyl-benzo[c]chromen-1-ol
Chemical Abstracts Service Registration Number:	521-35-7
United States Adopted Name:	Cannabinol

The molecular formula is C₂₁H₂₆O₂ and the molecular weight is 310.43 g/mol. CBN has no chiral centers.

Figure 1 Structural Formula of CBN



CBN occurs naturally as a trace component of *Cannabis*, or as a degradation product of D9-THC. However, our Product Candidates utilizing CBN contain highly purified synthetic CBN, rather than a biological extract.

CBN as our Lead API

As the API in our lead therapeutic programs in dermatology (INM-755) and ocular disease (INM-088), CBN has several compelling features, including:

- A rare cannabinoid with unique physiological properties;
- A natural compound, but designated as a new chemical entity, or “NCE” for pharmaceutical development;
- Found in trace amounts in the plant and impractical to extract; and
- Our preclinical studies show therapeutic potential for dermatology and ocular diseases.

We believe that we offer a differentiated approach to selecting and delivering rare cannabinoids vis-à-vis other current competitors, many of whom are exclusively focused on THC and/or CBD as their therapeutic agents. We believe that rare cannabinoids in general, and CBN in particular, represent significant opportunities to treat a wide spectrum of diseases with high unmet medical need. In our preclinical testing, CBN has demonstrated therapeutic potential beyond CBD for several symptoms and disease-modifying effects for dermatological conditions and has demonstrated benefits beyond CBD and THC for ocular diseases. We believe that a topical application of CBN may maximize the clinical benefit at the disease site (skin, eye) while minimizing the systemic exposure and any corresponding adverse effects.

INM-755, our lead product candidate, is being developed as a topical skin cream formulation containing CBN for the treatment of symptoms related to EB, a rare genetic skin disease characterized by fragile skin that blisters easily from minimal friction that causes shearing of the skin layers. The blisters become open wounds that do not heal well.

In addition to relief of symptoms, inflammation, pain, and others, we believe INM-755 may impact the underlying disease by enhancing skin integrity in a subset of EB patients. We have completed more than 30 preclinical pharmacology and toxicology studies to investigate the effects of CBN. Several of these nonclinical studies explored the effect on important symptoms such as pain and inflammation. In in vitro pharmacology studies, CBN demonstrated activity in reducing markers of prolonged inflammation. CBN upregulated expression of a type of keratin called keratin 15, or “K15”, which might lead to skin strengthening and reduced blister formation in EB simplex, or “EBS”, patients with mutations in another keratin called keratin 14, or “K14”. The anti-inflammatory activity of CBN may be beneficial in healing chronic wounds caused by prolonged inflammation. Following a review of our toxicology studies, a regulatory application to support our first Phase I clinical study in healthy volunteers with INM-755 (755-101-HV) was submitted November 4, 2019 and approved December 6, 2019 in the Netherlands. The initial Phase I clinical study evaluated the safety, tolerability, and pharmacokinetics of INM-755 cream in healthy volunteers with normal, intact skin; the volunteers had cream applied once daily for a period of 14 days. All subjects in this first clinical trial completed treatment and evaluations by March 27, 2020. A regulatory application was approved April 17, 2020, for a second Phase I clinical study of healthy volunteers to test the local safety and tolerability of applying sterile INM-755 cream to small wounds once daily for 14 days. As with the initial Phase I trial, the second trial (755-102-HV) was conducted with two different drug concentrations and a vehicle control. Enrollment began in early July 2020 and the clinical trial completed treatment and evaluations at the end of September 2020. The safety of INM-755 will continue to be assessed throughout its clinical development.

INM-755 cream was well tolerated in the two Phase I clinical studies in healthy volunteers and, based upon this outcome, we advanced the product candidate into a Phase II clinical trial in patients with EB (Study 755-201-EB). The 755-201-EB study is designed to enroll up to 20 patients using a within-patient design in which matched index areas are randomized to INM-755 cream or vehicle (no drug) cream in a blinded manner. InMed will evaluate the safety of INM-755 (cannabinol) cream and its preliminary efficacy in treating symptoms and wound healing over a 28-day treatment period, the longest period supported by nonclinical toxicology. All four subtypes of inherited EB; EB Simplex, Dystrophic EB, Junctional EB, and Kindler Syndrome are eligible for this study.

Regulatory applications to support this global trial were filed for review by the National Competent Authorities and Ethics Committees in 8 countries for 13 clinical sites. Approvals were obtained in all countries (Austria, France, Germany, Greece, Israel, Italy, Serbia, and Spain) as of March 2022. Enrollment and patient treatment began in December 2021 and are expected to complete during the calendar year 2022.

INM-088 for Ocular Diseases

CBN is also the active pharmaceutical ingredient in our second pharmaceutical drug candidate, INM-088, which is in preclinical studies as a potential treatment for glaucoma. Current treatments for glaucoma primarily focus on decreasing fluid build-up in the eye. We are conducting preclinical studies to test INM-088's ability to provide both neuroprotection and reduce intraocular pressure in the eye. We compared several cannabinoids, including CBD and THC, to determine which cannabinoid was the best drug candidate for the treatment of glaucoma. Of all the cannabinoids examined in preclinical studies, CBN demonstrated the most optimal neuroprotective effect. Notably, exposure of retinal neurons, called retinal ganglion cells ("RGCs") to increasing concentrations of several cannabinoids, including THC and CBD, resulted in dose dependent cytotoxicity, or cell death, over time. Importantly, CBN-exposed RGCs demonstrated the lowest level of toxicity among the cannabinoids used in these experiments. We also verified that CBN has an anti-apoptotic effect on differentiated RGCs when subjected to elevated hydrostatic pressure.

Furthermore, CBN also exhibited intraocular pressure reduction capability. We selected a final delivery technology (MiDrops®, EyeCRO LLC) based on the extensive data collected from assessments including solubility, drug delivery localization and sustained effect. We are in the planning and preparation phase for conducting IND-enabling toxicology studies for INM-088 in ocular disease.

For all current and future pharmaceutical Product Candidates we intend to submit new drug applications (NDAs) (or their international equivalents) in most major jurisdictions, including the U.S. either alone or with development/commercial partners.

We are actively establishing a broad patent portfolio to protect our commercial interests in utilizing CBN and other rare cannabinoids across these and other diseases. We have also filed multiple patent applications for our integrated, biosynthesis-based manufacturing approach. If granted, these patents may confer meaningful protection to the commercial potential for these technologies.

Our Strengths

We are the only clinical-stage company with both multiple cannabinoid drug candidates, in multiple therapeutic categories, that also is currently supplying rare cannabinoids to manufacturers in the health and wellness sector and that has internal expertise in multiple manufacturing approaches including chemical synthesis, biosynthesis and a proprietary, integrated biosynthesis-based manufacturing approach, called IntegraSyn™, to meet the needs of the rapidly evolving markets for rare cannabinoids. Key strengths include:

Experienced executive team and board of directors with proven track records.

One key critical success factor in the field of pharmaceutical drug development is the experience and skill set of the individuals leading the company. We have been successful in attracting and retaining executive and directors with extensive (20+ years) experience in all facets of the pharmaceutical industry, including fundamental research and development, multiple manufacturing techniques, drug formulation, clinical trial execution, regulatory approvals, pharmaceutical commercialization, company and capital formation, business development, legal, and corporate governance. Our leadership team is well-poised to lead us through all facets of drug development and product commercialization, either internally or externally via partnerships. It is this group of individuals that will help optimize our chances for success.

Multiple manufacturing approaches.

The combined manufacturing technologies from InMed and BayMedica provide us with a competitive advantage to utilize the most cost-efficient methodology (i.e. chemical synthesis, biosynthesis, IntegraSyn™) for the development and commercialization of new Products and Product Candidates and provision of rare bio-identical cannabinoids or their analogs to a wide spectrum of markets.

Early mover status as a B2B supplier of rare cannabinoids to the consumer health and wellness sector.

As demonstrated by the launch of CBC into the health and wellness sector over two years ago, and with the subsequent launches of additional non-intoxicating rare cannabinoids including CBDV, THCV, and CBT, the team at BayMedica has substantial expertise in the commercial manufacturing scale-up to produce rare cannabinoids at large scale. This know-how is important to establishing an early-mover status and to maintain cost leadership with regards to specific rare cannabinoids.

Leading experts in the therapeutic potential of the rare cannabinoid CBN.

We have invested significant time and effort in understanding the characteristics and therapeutic potential of our first rare cannabinoid drug candidate, CBN. As such, we are positioning ourselves to be a world leader in the pharmaceutical development of this rare cannabinoid. We anticipate that CBN will be the first of several such drug candidates.

Targeting medical applications of rare cannabinoids to treat diseases with high unmet medical needs.

Significant investment in understanding the therapeutic potential of CBN has provided us with important insight as to how best to develop this class of compounds for treating various diseases. We intend to apply this know-how across several diseases that may benefit from cannabinoid-based medicines.

Diverse portfolio of patent applications covering a spectrum of commercial opportunities.

Success in pharmaceutical markets often rests with the strength of intellectual property, including patents, to protect our commercialization interests. We have filed several patents on our novel findings and expect to continue to do so. The acquisition of BayMedica brought several additional new patent families to enrich our manufacturing as well as drug development opportunities.

Rare Cannabinoid Products in the Health and Wellness Sector

We are a world leader in the manufacturing and commercialization of rare cannabinoids including cannabichromene (CBC), cannabicitran (CBT), cannabidivarin (CBDV), and tetrahydrocannabivarin (THCV) as a B2B supplier to wholesalers and end-product manufacturers / marketers in the health and wellness sector. Since sales began at the end of 2019 for CBC, manufacturing has scaled to the several hundred kilograms level and the predecessor company, BayMedica Inc., had cumulative revenues of \$2.4 million for the 21-month period ending September 30, 2021. Since October 13, 2021, the date of acquisition, to March 31, 2022, BayMedica had revenues of approximately \$0.57 million. We continue to leverage our existing synthetic chemistry manufacturing capabilities to produce other non-intoxicating rare cannabinoids of high interest in the health and wellness segment, such as recently launched CBDV and THCV. Over time, we will continue to improve margins on these and other products by improving on manufacturing techniques, approaches and scale.

Our Business Strategy

Our goal is to develop a pipeline of prescription-based Product Candidates targeting treatments for diseases with high unmet medical needs as well as to develop proprietary manufacturing technologies to produce rare cannabinoid Products for sale in the health and wellness industry and to produce their novel analogs for our use in the pharmaceutical industry, by pursuing the following:

- **Advance INM-755 and INM-088 through preclinical and clinical development, thereby establishing important human proof-of-concept in multiple therapeutic applications.**

These activities are well underway, at various stages, for both INM-755 for diseases of the skin and INM-088 for diseases of the eye. We have the internal capabilities to design and execute, together with multiple external vendors, the preclinical data sets and clinical studies required to advance pharmaceutical drugs towards regulatory submission.

- **Expand portfolio and revenues of rare cannabinoids into existing distribution network and to end-product manufacturers of specialty health and wellness products.**

- **Develop and produce novel cannabinoid analogs for use in our drug development program and/or licensing, partnering or sale to external companies.**

These activities are well underway, at various stages, for both INM-755 for diseases of the skin and INM-088 for diseases of the eye. Building upon preclinical data sets, we have the internal capabilities to design and execute, together with multiple external vendors, the preclinical data sets and clinical studies required to advance pharmaceutical drug candidates towards commercialization. We will continue to build out and sell a catalog of rare cannabinoids to end-product manufacturers in the health and wellness sector as well as continue our internal development of novel cannabinoids and their analogs.

- **Establishing partnerships for our various technologies, at different stages of development, to expedite their path towards commercialization in a resource-efficient manner.**

We do not currently have an organization for the sales, marketing and distribution of pharmaceutical products. With respect to the commercialization of each Product Candidate, we may rely on either i) a “go-it-alone” commercialization effort; ii) out-licensing to third parties; or, iii) co-promotion agreements with strategic collaborators for our Product Candidates. Any decision on a “go-it-alone” commercialization effort versus out-licensing to third parties will depend on various factors including, but not limited to, the complexity, the expertise required and related cost of building any such infrastructure for our Product Candidates. For INM-755 in EB, we could oversee the clinical trials, given the relatively small patient sizes expected for such trials, and build the requisite internal commercialization infrastructure to self-market the product to EB clinics, which are limited in number and provide direct access to the vast majority of EB patients. For INM-088 in glaucoma, because of the potentially large number of clinical trial participants (possibly several thousand) and the extensive sales effort required to reach a large number of prescribing physicians, we may consider exploring partnership opportunities early in the development process.

- **Develop multiple cost-efficient manufacturing processes for high quality rare cannabinoids as APIs for our core internal drug candidate pipeline, for licensing opportunities of non-core drug candidates, as well as a source for rare cannabinoids in the health and wellness sector.**

We are developing an integrative cannabinoid synthesis approach designed to produce bio-identical, economical, pharmaceutical-grade cannabinoids in a cost-efficient manner, called IntegraSyn™. IntegraSyn™ is designed to offer superior yield, control, consistency and quality of rare cannabinoids when compared to alternative methods. Additionally, we continue to develop cost-effective manufacturing techniques to supply rare cannabinoids to end-product manufacturers and wholesalers in the health and wellness sector via our wholly-owned subsidiary BayMedica.

- **Continue to invent, manufacture and research the potential of a wide array of rare cannabinoid analogs to treat diseases based on our significant history in cannabinoid research and lead drug candidate identification.**

Individual cannabinoids affect a range of different receptors in the human body, including, but not limited to, known endocannabinoid receptors. As such, they are responsible for a wide variety of pharmacological effects. However, due to the limited research into these varying effects, a full understanding of the role of each cannabinoid compound remains elusive. As a company, we have been formally investigating the utility of cannabinoids in treating disease for over 6 years.

We have numerous options for commercializing our various technologies. At the core of our activities, we are a pharmaceutical drug development company and a developer and supplier of rare, naturally occurring cannabinoids and their analogs that is focused on commercializing important cannabinoid-based medicines to treat diseases with high unmet medical needs and, as a B2B supplier, selling rare cannabinoids to the health and wellness segments.

Risks Related to Our Business

Our ability to implement our business strategy is subject to numerous risks that you should be aware of before making an investment decision. These risks are described more fully in the section entitled “Risk Factors” in this prospectus. These risks include, among others:

- Our Products in the health and wellness sector may not meet our expectations in terms of launch timelines, sales, profit margins, or all these criteria.
- Our IntegraSyn™ or BayMedica yeast biosynthesis manufacturing approaches may prove unsuccessful in achieving yields and/or cost levels required to be economically competitive with alternative methods of manufacturing.
- Our prospects depend on the success of our Product Candidates which are at early-stages of development with a statistically high probability of failure and are subject to lengthy, time-consuming and inherently unpredictable regulatory processes.
- Our Products and Product Candidates contain compounds that may be classified as “controlled substances”, the use of which may generate public controversy and restrict their development or commercialization.
- The FDA or particular states may ultimately prohibit the sale of some or all dietary supplements or conventional foods containing cannabinoid ingredients and our downstream B2B customers may be required to submit a New Dietary Ingredient notification to the FDA, which may not be accepted without objection.
- U.S. Regulatory Framework for (non-THC) Cannabinoid Related products is rapidly evolving and changes could delay or prevent commercialization and result in materially adverse effects on our business.
- The COVID-19 coronavirus pandemic could adversely impact our business, including several key activities that are critical to our success.
- The market prices for our common shares are volatile and will fluctuate.
- Raising additional capital may cause dilution to our existing shareholders, restrict our operations or require us to relinquish rights to our technologies or Product Candidates.
- If we fail to maintain an effective system of internal control over financial reporting in the future, we may not be able to accurately report our financial condition, results of operations or cash flows, which may adversely affect investor confidence in us and, as a result, the value of our common shares.
- In connection with the audit of our financial statements as of and for the years ended June 30, 2021 and 2020, material weaknesses in our internal control over financial reporting were identified and we may identify additional material weaknesses in the future.
- We have incurred, and will continue to incur, increased costs as a result of operating as a public company, and our management has been required, and will continue to be required, to devote substantial time to new compliance initiatives.
- We have incurred significant losses since our inception, we anticipate that we will continue to incur losses in the future, we have had limited commercial revenue and we may never become profitable.
- We may become subject to claims or become involved in lawsuits related to intellectual property.
- We rely heavily on contract manufacturers over whom we have limited control and our existing collaboration agreements and any that we may enter into in the future may not be successful.
- We are dependent upon our key personnel to achieve our business objectives.
- Our insurance may be insufficient to cover losses that may occur as a result of our operations.

Corporate Information

We were originally incorporated in the Province of British Columbia, under the BCBCA, on May 19, 1981 and we have undergone a number of corporate name and business sector changes since this incorporation, ultimately changing our name to “InMed Pharmaceuticals Inc.” on October 6, 2014 to signify our intent to specialize in cannabinoid pharmaceutical product development. Our principal executive offices are located at Suite 310 – 815 W Hastings Street, Vancouver, BC, Canada, V6C 1B4 and our telephone number is +1-604-669-7207. Our internet address is <https://www.inmedpharma.com>. The information contained in or accessible from our website is not incorporated into this prospectus, and you should not consider it part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Employees and Human Capital

Our management team is comprised of highly experienced pharmaceutical and biotechnology executives with successful track records in researching, developing, gaining approval for and commercializing novel medicines to treat serious diseases. Each member of our management team has over 20 to 30 years of industry experience, including our CEO, CFO, General Manager, and (Sr.) Vice Presidents of Clinical and Regulatory Affairs, of Preclinical Research and Development, of Chemistry, Manufacturing and Controls, of Discovery Research, of Chemistry, of Synthetic Biology, of Sales & Marketing and of Commercial Operations. Together, this team has covered the spectrum of pharmaceutical drug discovery, preclinical research, formulation development, manufacturing, human clinical trials, regulatory submissions and approval, and global commercialization. Additionally, the team has significant experience in company formation, capital raises, mergers/acquisitions, business development, and sales and marketing in the pharmaceutical industry. Our Board is constituted by individuals with significant experience in the pharmaceutical and biotechnology industries. As of June 1, 2022, including our management team, we had 19 full time employees and we also utilize the services of several consultants. None of our employees are represented by a collective bargaining agreement, nor have we experienced any work stoppage. We believe that our relations with our employees are good.

We are committed to growing our business over the long-term. As a result of the competitive nature of the industry in which we operate, employees have significant career mobility and as a result, the competition for experienced employees is great. The existence of this competition, and the need for talented and experienced employees to realize our business objectives, underlies the design and implementation of our compensation programs. At the same time, we seek to keep our approach to compensation simple and streamlined to reflect the still relatively moderate size of our company. We have compensation, leave and benefits programs necessary to attract and retain the talented and experienced employees necessary to develop our business including competitive salaries, stock options awards to permanent employees, both upon initial hiring and annually thereafter, and pay annual bonuses to permanent employees based on the achievement of corporate and/or personal objectives. We have developed an Employee Handbook that contains all corporate policies and guidelines for professional behavior. Our policies and practices apply to all employees, regardless of title. These guidelines include our Code of Business Conduct as well as our corporate disclosure, insider trading and whistle blower policies.

In response to the COVID-19 pandemic, commencing in March 2020, we implemented a work-from-home mandate and ceased all non-essential business travel. In the recent months, some employees have recommenced limited business travel and some have transitioned back to working on-site. We continue to provide our employees with the option to work from home.

Implications of Being an Emerging Growth Company

We are an “emerging growth company,” as defined by the Jumpstart Our Business Startups Act of 2012. As such, we are eligible to take advantage of exemptions from various disclosure and reporting requirements that are applicable to other public companies that are not “emerging growth companies” including, but not limited to:

- our exemption from the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act of 2002;
- being permitted to present only two years of audited financial statements and only two years of related Management’s Discussion and Analysis of Financial Condition and Results of Operations, in each case, instead of three years;
- reduced disclosure obligations regarding executive compensation, including no Compensation Disclosure and Analysis;
- our exemption from any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements; and
- our exemption from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

We may take advantage of these exemptions for up to five years or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1.07 billion or more; (ii) the last day of our fiscal year following the fifth anniversary of the date of the completion of the initial public offering; the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years; or (iii) the date on which we are deemed to be a large accelerated filer under the rules of the SEC. We may choose to take advantage of some but not all of these exemptions. We have taken advantage of reduced reporting requirements in this prospectus. Accordingly, the information contained herein may be different from the information you receive from other public companies in which you hold stock.

We have elected not to “opt out” of the exemption for the delayed adoption of certain accounting standards and, therefore, we will adopt new or revised accounting standards at the time private companies adopt the new or revised accounting standard and will do so until such time that we either (i) irrevocably elect to “opt out” of such extended transition period or (ii) no longer qualify as an emerging growth company.

We are also a “smaller reporting company,” meaning that the market value of our common shares held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than \$700 million and our annual revenue was less than \$100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after this offering if either (i) the market value of our common shares held by non-affiliates is less than \$250 million or (ii) our annual revenue was less than \$100 million during the most recently completed fiscal year and the market value of our common shares held by non-affiliates is less than \$700 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

The Offering

Securities Offered by the Selling Shareholder	7,575,756 common shares, comprising of the following common shares underlying the securities obtained in the Private Placement: (i) 1,748,250 common shares issuable upon the exercise of the pre-funded warrants and (ii) 5,827,506 common shares issuable upon the exercise of preferred investment options.
Description of Warrants	Each pre-funded warrant has an exercise price of \$0.0001 per share, is immediately exercisable and may be exercised at any time until exercised in full. Each pre- preferred investment option has an exercise price of \$0.74 per share, is immediately exercisable and may be exercised at any time until exercised in full. For additional information regarding the pre-funded warrants and the preferred investments options, see “ <i>Private Placement of Warrants</i> ”.
Trading Market	Our common shares are currently quoted under the symbol “INM” on the Nasdaq Capital Market.
Common Shares Outstanding Before this Offering	16,266,687 ⁽¹⁾
Common Shares Outstanding After this Offering	23,842,443 ⁽²⁾
Use of Proceeds	We will not receive any of the proceeds from the sale of common shares being offered for sale by the selling shareholder. However, upon the cash exercise of the warrants we will receive an aggregate amount of approximately \$4.3 million. See “ <i>Use of Proceeds</i> ” for further information.
Plan of Distribution	The selling shareholder may sell all or a portion of the common shares beneficially owned by it and the common shares are offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. Registration of the common stock covered by this prospectus does not mean, however, that such shares necessarily will be offered or sold. See “ <i>Plan of Distribution</i> .”
Risk Factors	Please read “ <i>Risk Factors</i> ” and other information included in this prospectus and the other information included or incorporated by reference for a discussion of factors you should carefully consider before deciding to invest in the securities offered in this prospectus.

(1) The number of common shares outstanding before this offering is based on an aggregate of 16,266,687 shares outstanding as of June 14, 2022 and does not include:

- 6,421,896 common shares issuable upon the exercise of other outstanding warrants with a weighted average exercise price of \$1.78 per share;
- 378,788 common shares issuable upon the exercise of the placement agent, H.C. Wainwright & Co., LLC, preferred investment options with a weighted average exercise price of \$1.0725 per share; and
- 435,256 common shares which are reserved for issuance under InMed Pharmaceuticals Inc. Amended 2017 Stock Option Plan, of which 1,408,887 common shares are issuable upon exercise of outstanding options at an average exercise price of \$4.15 per share.
- 2,454,214 common shares issuable upon exercise of outstanding pre-funded warrants issued in connection with the registered direct offering on June 6, 2022.

(2) Assumes the exercise of (i) the pre-funded warrants held by the selling shareholder, and (ii) the preferred investment options held by the selling shareholder.

RISK FACTORS

Investing in our common shares involves a high degree of risk. You should carefully consider each of the following risks and uncertainties described below, together with the information under the heading “Risk Factors” on page 12 of this prospectus, in our most recent Annual Report on Form 10-K for the fiscal year ended June 30, 2021 and our most recent Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2022, each of which are incorporated herein by reference, as updated or superseded by the risks and uncertainties described under similar headings in the other documents that are filed after the date hereof and incorporated by reference into this prospectus supplement and the accompanying prospectus, together with all of the other information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus, and any free writing prospectus that we have authorized for use in connection with this offering before you make a decision to invest in our common shares. If any of the following risks actually occurs, our business could be harmed. In that case, the trading price of our common shares could decline, and you may lose all or part of your investment.

Risks Related to our Securities

The market prices for our common shares are volatile and will fluctuate.

The market price for our common shares may be volatile and subject to wide fluctuations in response to numerous factors, many of which are beyond our control, including the following: (i) actual or anticipated fluctuations in our quarterly financial results; (ii) recommendations by securities research analysts; (iii) changes in the economic performance or market valuations of other issuers that investors deem comparable to ours; (iv) addition or departure of our executive officers or members of our Board and other key personnel; (v) release or expiration of lock-up or other transfer restrictions on outstanding common shares; (vi) sales or perceived sales of additional common shares; (vii) liquidity of the common shares; (viii) significant acquisitions or business combinations, strategic partnerships, joint ventures or capital commitments by or involving us or our competitors; and (ix) news reports relating to trends, concerns, technological or competitive developments, regulatory changes and other related issues in our industry or target markets. Financial markets often experience significant price and volume fluctuations that affect the market prices of equity securities of public entities and that are, in many cases, unrelated to the operating performance, underlying asset values or prospects of such entities. Accordingly, the market price of our common shares may decline even if our operating results, underlying asset values or prospects have not changed. Additionally, these factors, as well as other related factors, may cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses. As well, certain institutional investors may base their investment decisions on consideration of our environmental, governance and social practices and performance against such institutions’ respective investment guidelines and criteria, and failure to meet such criteria may result in limited or no investment in our common shares by those institutions, which could materially adversely affect the trading price of our common shares. There can be no assurance that continuing fluctuations in price and volume will not occur. If such increased levels of volatility and market turmoil continue for a protracted period of time, our operations could be materially adversely impacted and the trading price of our common shares may be materially adversely affected.

Raising additional capital may cause dilution to our existing shareholders, restrict our operations or require us to relinquish rights to our technologies or Product Candidates.

We may seek additional capital through a combination of private and public equity offerings, debt financings, strategic partnerships and alliances and licensing arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, existing ownership interests will be diluted and the terms of such financings may include liquidation or other preferences that adversely affect the rights of existing shareholders. Debt financings may be coupled with an equity component, such as warrants to purchase shares, which could also result in dilution of our existing shareholders' ownership. The incurrence of indebtedness would result in increased fixed payment obligations and could also result in certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business and may result in liens being placed on our assets and intellectual property. If we were to default on such indebtedness, we could lose such assets and intellectual property. If we raise additional funds through strategic partnerships and alliances and licensing arrangements with third parties, we may have to relinquish valuable rights to our Product Candidates or grant licenses on terms that are not favorable to us.

Future offerings of debt or equity securities may rank senior to common shares.

If we decide to issue debt or equity securities in the future ranking senior to our common shares or otherwise incur additional indebtedness, it is possible that these securities or indebtedness will be governed by an indenture or other instrument containing covenants restricting our operating flexibility and limiting our ability to pay dividends to shareholders. Additionally, any convertible or exchangeable securities that we issue in the future may have rights, preferences and privileges, including with respect to dividends, more favorable than those of common shares and may result in dilution to shareholders. Because our decision to issue debt or equity securities in any future offering or otherwise incur indebtedness will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of our future offerings or financings, any of which could reduce the market price of our common shares and dilute their value.

Future sales of common shares by officers and directors may negatively impact the market price for our common shares.

Subject to compliance with applicable securities laws, our directors and officers and their affiliates may sell some or all of their common shares in the future. No prediction can be made as to the effect, if any, such future sales of common shares may have on the market price of the common shares prevailing from time to time. However, the future sale of a substantial number of common shares by our directors and officers and their affiliates, or the perception that such sales could occur, could adversely affect prevailing market prices for our common shares.

We do not currently pay dividends on our common shares and have no intention to pay dividends on our common shares for the foreseeable future.

No dividends on our common shares have been paid by us to date. We do not intend to declare or pay any cash dividends in the foreseeable future. Payment of any future dividends will be at the discretion of our Board, after taking into account a multitude of factors appropriate in the circumstances, including our operating results, financial condition and current and anticipated cash needs. In addition, the terms of any future debt or credit facility may preclude us from paying any dividends unless certain consents are obtained and certain conditions are met.

We are exposed to risks related to currency exchange rates.

We currently hold the majority of our cash, cash equivalents and short-term investments in U.S. dollars which is our functional currency. A portion of our current operations is conducted in Canadian dollars. Exchange rate fluctuations between other currencies and the U.S. dollar create risk in several ways, including the following:

- weakening of the U.S. dollar may decrease the value of our U.S. dollar cash, cash equivalents and short-term investments;

- weakening of the U.S. dollar may increase the cost of operations and products/services sourced in Canada;
- the exchange rates on non-U.S. dollar transactions and cash deposits can distort our financial results; and
- commercial product pricing and profit margins are affected by currency fluctuations.

For as long as we are an “emerging growth company” we intend to take advantage of reduced disclosure and governance requirements applicable to emerging growth companies, which could result in our common shares being less attractive to investors and could make it more difficult for us to raise capital as and when we need it.

We are an “emerging growth company,” as defined in the JOBS Act, and we have taken advantage, and intend to continue to take advantage, of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a non-binding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

Investors may find our common shares less attractive because we rely on these exemptions, which could contribute to a less active trading market for our common shares or volatility in our share price. In addition, we may be less attractive to investors and it may be difficult for us to raise additional capital as and when we need it. Investors may be unable to compare our business with other companies in our industry if they believe that our financial accounting is not as transparent as other companies in our industry. If we are unable to raise additional capital as and when we need it, our financial condition and results of operations may be materially and adversely affected.

We may take advantage of these reporting exemptions until we are no longer an emerging growth company.

If we fail to maintain an effective system of internal control over financial reporting in the future, we may not be able to accurately report our financial condition, results of operations or cash flows, which may adversely affect investor confidence in us and, as a result, the value of our common shares.

We will be required, under Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting that results in more than a reasonable possibility that a material misstatement of annual or interim financial statements will not be prevented or detected on a timely basis. Section 404 of the Sarbanes-Oxley Act also generally requires an attestation from our independent registered public accounting firm on the effectiveness of our internal control over financial reporting. However, for as long as we remain an emerging growth company as defined in the JOBS Act, we intend to take advantage of the exemption permitting us not to comply with the independent registered public accounting firm attestation requirement.

Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management efforts. We may not be able to complete our evaluation, testing and any required remediation in a timely fashion. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal control over financial reporting is effective. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations or cash flows. This may expose us, including individual executives, to potential liability which could significantly affect our business. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting once that firm begins its audits of internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our common shares could decline, and we could be subject to sanctions or investigations by Nasdaq, the SEC, or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit under the Securities Exchange Act of 1934 is accumulated and communicated to management, recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements or insufficient disclosures due to error or fraud may occur and not be detected.

Deficiencies in disclosure controls and procedures and internal control over financial reporting could result in a material misstatement in our financial statements.

We could be adversely affected if there are deficiencies in our disclosure controls and procedures or in our internal controls over financial reporting. The design and effectiveness of our disclosure controls and procedures and our internal controls over financial reporting may not prevent all errors, misstatements or misrepresentations. Consistent with other entities in similar stages of development, we have a limited number of employees currently in the accounting group, limiting our ability to provide for segregation of duties and secondary review. A lack of resources in the accounting group could lead to material misstatements resulting from undetected errors occurring from an individual performing primarily all areas of accounting with limited secondary review. Deficiencies in internal controls over financial reporting which may occur could result in material misstatements of our results of operations, restatements of financial statements, other required remediations, a decline in the price of our common shares, or otherwise materially adversely affect our business, reputation, results of operations, financial condition or liquidity.

In connection with the audit of our financial statements as of and for the years ended June 30, 2021 and 2020, material weaknesses in our internal control over financial reporting were identified and we may identify additional material weaknesses in the future.

In connection with the preparation and audits of our financial statements as of and for the years ended June 30, 2021 and 2020, material weaknesses (as defined under the Exchange Act and by the auditing standards of the U.S. Public Company Accounting Oversight Board, or "PCAOB"), were identified in our internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual financial statements will not be prevented or detected on a timely basis. The identified material weaknesses arose from a lack of resources in our finance function that resulted in an overstatement of the valuation of warrants issued as part of a financing.

In light of the identified material weaknesses, it is possible that, had we performed a formal assessment of our internal control over financial reporting or had our independent registered public accounting firm performed an audit of our internal control over financial reporting in accordance with PCAOB standards, additional control deficiencies may have been identified.

We have begun taking measures, and plan to continue to take measures, to remediate these material weaknesses. However, the implementation of these measures may not fully address these material weaknesses in our internal control over financial reporting, and, if so, we would not be able to conclude that they have been fully remedied. Our failure to correct these material weaknesses or our failure to discover and address any other control deficiencies could result in inaccuracies in our financial statements and could also impair our ability to comply with applicable financial reporting requirements and make related regulatory filings on a timely basis. As a result, our business, financial condition, results of operations and prospects, as well as the trading price of our common shares, may be materially and adversely affected.

We have incurred, and will continue to incur, increased costs as a result of operating as a public company, and our management has been required, and will continue to be required, to devote substantial time to new compliance initiatives.

As a public company, we have incurred and are continuing to incur significant legal, accounting and other expenses and these expenses may increase even more after we are no longer an “emerging growth company.” We are subject to the reporting requirements of the Exchange Act and the rules adopted, and to be adopted, by the SEC. Our management and other personnel devote a substantial amount of time to these compliance initiatives.

Moreover, these rules and regulations have substantially increased our legal and financial compliance costs and made some activities more time-consuming and costly. The increased costs have increased our net loss. These rules and regulations may make it more difficult and more expensive for us to maintain sufficient director’s and officer’s liability insurance coverage. We cannot predict or estimate the amount or timing of additional costs we may continue to incur to respond to these requirements. The ongoing impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our Board, our Board committees or as executive officers.

Future sales and issuances of our common shares or rights to purchase common shares pursuant to our equity incentive plan could result in additional dilution of the percentage ownership of our shareholders and may cause our share price to fall.

We expect that significant additional capital will be needed in the future to continue our planned operations. To raise capital, we may sell substantial amounts of common shares or securities convertible into or exchangeable for common shares. These future issuances of common shares or common share-related securities, together with the exercise of outstanding options and any additional shares issued in connection with acquisitions, if any, may result in material dilution to our investors. Such sales may also result in material dilution to our existing shareholders, and new investors could gain rights, preferences and privileges senior to those of holders of our common shares.

Pursuant to our 2017 Amended and Restated Stock Option Plan, and as amended at our Annual General Meeting in November 2020, our compensation committee is authorized to grant equity-based incentive awards in the form of options to purchase common shares to our directors, executive officers and other employees and service providers. As of June 1, 2022, there were 435,256 options to purchase common shares available for future grant under our stock option plan. Future equity incentive grants under our stock option plan may result in material dilution to our shareholders and may have an adverse effect on the market price of our common shares.

Provisions in our corporate charter documents and certain Canadian laws could delay or deter a change of control.

Provisions in our articles and our by-laws, as well as certain provisions under the BCBCA and applicable Canadian securities laws, may discourage, delay or prevent a merger, acquisition, tender offer or other change in control of us that some shareholders may consider favorable. In addition, because our Board is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our shareholders to replace or remove our current management by making it more difficult for shareholders to replace members of our Board. As well, our preferred shares are available for issuance from time to time at the discretion of our Board, without shareholder approval. Our articles allow our Board, without shareholder approval, to determine the special rights to be attached to our preferred shares, and such rights may be superior to those of our common shares.

In addition, limitations on the ability to acquire and hold our common shares may be imposed by the Competition Act in Canada. This legislation permits the Commissioner of Competition of Canada, or “Commissioner”, to review any acquisition of a significant interest in us. This legislation grants the Commissioner jurisdiction to challenge such an acquisition before the Canadian Competition Tribunal if the Commissioner believes that it would, or would be likely to, result in a substantial lessening or prevention of competition in any market in Canada. The Investment Canada Act subjects an acquisition of control of a company by a non-Canadian to government review if the value of our assets, as calculated pursuant to the legislation, exceeds a threshold amount. A reviewable acquisition may not proceed unless the relevant minister is satisfied that the investment is likely to result in a net benefit to Canada. Any of the foregoing could prevent or delay a change of control and may deprive or limit strategic opportunities for our shareholders to sell their shares.

If securities or industry analysts publish inaccurate or unfavorable research about our business, our share price and trading volume may decline.

The trading market for our common shares depends in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who cover us downgrade our shares or publish inaccurate or unfavorable research about our business, our shares price may decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our shares may decrease, which may cause our shares price and trading volume to decline.

We are incorporated in Canada, with our assets and officers primarily located in Canada, with the result that it may be difficult for investors to enforce judgments obtained against us or some of our officers.

We are a company organized and existing under the laws of British Columbia, Canada. Many of our directors and officers and the experts named in this registration statement are residents of Canada or otherwise reside outside the United States, and all or a substantial portion of their assets, and a substantial portion of our assets, are located outside the United States. It may be difficult for holders of common shares who reside in the United States to effect service within the United States upon those directors, officers and experts who are not residents of the United States. It may also be difficult for holders of securities who reside in the United States to realize in the United States upon judgments of courts of the United States predicated upon our civil liability and the civil liability of our directors, officers and experts under the U.S. federal securities laws. Our Canadian counsel has advised us that there is doubt as to the enforceability in Canada against us or against our directors, officers and experts who are not residents of the United States, in original actions or in actions for enforcement of judgments of courts of the United States, of liabilities predicated solely upon U.S. federal or state securities laws.

Conversely, some of our directors and officers reside outside Canada and some of our assets are also located outside Canada. Therefore, it may not be possible for you to enforce in Canada against our assets or those directors and officers residing outside Canada, judgments obtained in Canadian courts based upon the civil liability provisions of the Canadian securities laws or other laws of Canada.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections entitled “Prospectus Summary,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business,” contains forward-looking statements. We may, in some cases, use words such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “will,” “would,” and similar expressions that convey uncertainty of future events or outcomes to identify these forward-looking statements. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. Forward-looking statements in this prospectus include, but are not limited to, statements about:

- Our researching, developing, manufacturing and commercializing cannabinoid-based biopharmaceutical products will treat diseases with high unmet medical needs;
- The continued optimization of the cannabinoid manufacturing approaches;
- Our success in initiating discussions with potential partners for licensing various aspects of our Product Candidates;
- Our ability to commercialize and, where required, register Product Candidates and Products in the United States and other jurisdictions;
- Our ability to successfully access existing manufacturing capacity via leases with third-parties or to transfer our manufacturing processes to a contract manufacturing organizations;
- Our belief that our manufacturing approaches that we are developing are robust and effective and will result in high yields of cannabinoids and will be a significant improvement upon existing manufacturing platforms;
- Our belief that that INM-755 offers specific advantages and will prove to provide the extensive relief symptomology with the added potential of addressing the underlying disease in EB;
- The structure and timing of future INM-755 studies including that we will complete patient enrollment into our Phase II study in EB in 2022;
- Our ability of the IntegraSynTM approach to introduce a revenue stream to us before the expected commercial approval of our therapeutic programs;
- Our ability to successfully scale up our IntegraSynTM or other cost-effective approaches so that it will be commercial-scale ready after Phase II clinical trials are completed, after which time we may no longer need to source APIs from API manufacturers;
- The success of the key next steps in our manufacturing approach, including continuing efforts to diversify the number of cannabinoids produced, scaling-up the process to larger vessels and identifying external vendors to assist in the commercial scale-up of the process;
- Our ability to potentially grow existing BayMedica sales revenues from existing and new cannabinoid Products;
- Our ability to successfully make determinations as to which research and development programs to continue based on several strategic factors;
- Our ability to monetize our IntegraSynTM manufacturing approach to the broader pharmaceutical industry;
- Our ability to take an opportunistic approach in the rapidly emerging sector of cannabinoid pharmaceutical development and the sale of cannabinoids in the health and wellness sectors to maximize the return to investors/shareholders;
- Successfully developing and launching new rare cannabinoids, including CBDV, THCV, CBT and others, to meet expected customer demand in 2022 and beyond;

- Our ability to continue to outsource the majority of our research and development activities through scientific collaboration agreements and arrangements with various scientific collaborators, academic institutions and their personnel;
- The success of work to be conducted under the research and development collaboration between us and various CDMOs;
- Our ability to develop our therapies through early human testing;
- Our ability to evaluate the financial returns on various commercialization approaches for our Product Candidates, such as a ‘go it-alone’ commercialization effort, out-licensing to third parties, or co-promotion agreements with strategic collaborators;
- Our ability to oversee clinical trials for INM-755 in EB and building the requisite internal commercialization infrastructure to self-market the product to EB clinics;
- Our ability to find a partnership early in the development process for INM-088 in glaucoma;
- Our IntegraSyn™ or BayMedica derived products being bio-identical to the naturally occurring cannabinoids, and offering superior ease, control and quality of manufacturing when compared to alternative methods;
- Our ability to scale-up our IntegraSyn™ manufacturing approach to GMP batch size for pharmaceutical use;
- Our ability to explore our manufacturing technologies as processes which may confer certain benefits, either cost, yield, speed, or all of the above, when pursuing specific types of cannabinoids, and filing a provisional patent application for same;
- Plans regarding our next steps, options, and targeted benefits of our manufacturing technologies;
- Our ability to potentially earn revenue from our IntegraSyn™ approach by (i) becoming a supplier of APIs to the pharmaceutical industry and/or (ii) providing pharmaceutical-grade ingredients to the non-pharmaceutical market;
- Our plans to work closely with regulatory authorities and clinical experts in developing the clinical program for INM-755;
- Our ability to successfully prosecute patent applications;
- Our ability to complete formulation development and scale-up, conduct additional preclinical studies, and initiate and complete IND/CTA-enabling toxicology studies in calendar 2023 for INM-088, and that such studies could be used to support Phase 1 human clinical trials in 2024;
- INM-088 being a once-a-day or twice-a-day eye drop medication that will compete with treatment modalities in the medicines category, and with the potential of INM-088 assisting in reducing the high rate of non-adherence with current glaucoma therapies;
- Our belief that with a novel delivery system, the reduction of IOP and/or providing neuroprotection in glaucoma patients by topical (eye drop) application of cannabinoids will hold significant promise as a new therapy;
- The potential for any of our patent applications to provide intellectual property protection for us;

- Our ability to secure insurance coverage for shipping and storage of Product Candidates, and clinical trial insurance;
- Our ability to expand our insurance coverage to include the commercial sale of Products and Product Candidates;
- Developing patentable New Chemical Entities (“NCE”) which, if issued, will confer market exclusivity to us for the potential development into pharmaceutical Product Candidates, license, partner or sell to interested external parties;
- Our ability to initiate discussions and conclude strategic partnerships to assist with development of certain programs;
- Our ability to position ourselves to achieve value-driving, near term milestones for our Product Candidates with limited investment;
- Our ability to execute our business strategy;
- Critical accounting estimates;
- Management’s assessment of future plans and operations;
- The outlook of our business and the global economic and geopolitical conditions; and
- The competitive environment in which we and our business units operate.

These forward-looking statements reflect our management’s beliefs and views with respect to future events and are based on estimates and assumptions as of the date of this prospectus and are subject to risks and uncertainties. We discuss many of these risks in greater detail under “Risk Factors.” Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in this prospectus by these cautionary statements. Except as required by law, each forward-looking statement speaks only as of the date of the particular statement, and we undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale of the common shares being offered for sale by the selling shareholder. However, upon (i) the cash exercise of the pre-funded warrants, we will receive the exercise price of such warrants, for an aggregate of approximately \$175 and (ii) the cash exercise of the preferred investment options, we will receive the exercise price of such warrants, for an aggregate of approximately \$4.3 million. We will bear all fees and expenses incident to our obligation to register the common shares. Brokerage fees, commissions and similar expenses, if any, attributable to the sale of shares offered hereby will be borne by the applicable selling shareholder.

DIVIDEND POLICY

We do not anticipate declaring or paying, in the foreseeable future, any cash dividends on our common shares. We currently intend to retain all available funds and any future earnings to support our operations and finance the growth and development of our business. Any future determination related to our dividend policy will be made at the discretion of our Board and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions, business prospects and other factors our Board may deem relevant.

PRINCIPAL SHAREHOLDERS

The table below sets forth information known to us regarding the beneficial ownership of our common shares as of June 14, 2022 for:

- each person we believe beneficially holds more than 5% of our outstanding common shares;
- each of our directors and NEOs; and
- all our directors and executive officers as a group.

The number of common shares beneficially owned by a person includes shares subject to options held by that person that are currently exercisable or that become exercisable within 60 days of June 14, 2022. Percentage calculations assume, for each person and group, that all common shares that may be acquired by such person or group pursuant to options currently exercisable or that become exercisable within 60 days of June 14, 2022 are outstanding for the purpose of computing the percentage of common shares owned by such person or group. However, such unissued common shares described above are not deemed to be outstanding for calculating the percentage of common shares owned by any other person.

Except as otherwise indicated, the persons in the table below have sole voting and investment power with respect to all common shares shown as beneficially owned by them, subject to community property laws where applicable. We do not know of any arrangement, the operation of which may at a subsequent date result in a change in control of us.

Name and Address of Beneficial Owner	Number of Common Shares Beneficially Owned	Percentage of Common Shares Beneficially Owned (%)*
<i>Five Percent Shareholders:</i>		
Armistice Capital Master Fund Ltd. (1) c/o Armistice Capital, LLC, 510 Madison Ave, 7th Floor, New York, NY 10022	1,787,350	9.9
<i>NEOs and Directors:</i>		
Eric A. Adams, MIBS (2)	271,579	1.6
Adam Cutler (3)	9,122	**
William J. Garner, MD (4)	9,122	**
Andrew Hull (5)	28,061	**
Brenda Edwards (6)	0	**
Janet Grove (7)	1,950	**
Alexandra Mancini (8)	69,846	**
Bryan Baldasare (9)	780	**
All other executive officers as a group (10)	144,832	**
All executive officers and directors as a group (10 persons)	535,292	**

* Based on 16,266,687 common shares outstanding on June 14, 2022 after completion of the Private Placement.

** Less than 1%

- (1) Armistice Capital Master Fund Ltd.'s beneficial ownership consists of (1) 1,107,514 common shares, (2) up to 505,137 common shares issuable underlying the pre-funded warrants issued in connection with the concurrent registered direct offering and private placement that closed on June 6, 2022. The ability to exercise warrants held by Armistice is subject to a beneficial ownership limitation that, at the time of initial issuance of the warrants, was capped at 4.99% beneficial ownership of the Company's issued and outstanding common shares (post-exercise) for the common share warrants and 9.99% beneficial ownership for the Company's pre-funded warrants. These beneficial ownership limitations may be adjusted up or down, subject to providing advanced notice to the Company, provided that any increases in beneficial ownership limitations only take effect upon 61 days advance notice. The shares are directly held by Armistice Capital Master Fund Ltd., a Cayman Islands exempted company (the "Master Fund" or "selling shareholder"), and may be deemed to be indirectly beneficially owned by: (i) Armistice Capital, LLC ("Armistice Capital"), as the investment manager of the Master Fund; and (ii) Steven Boyd, as the Managing Member of Armistice Capital. Armistice Capital and Steven Boyd disclaim beneficial ownership of the securities except to the extent of their respective pecuniary interests therein.
- (2) Eric A. Adams' beneficial ownership consists of 59,003 common shares owned directly, 212,576 common shares issuable pursuant to presently exercisable options, and 14,935 common shares owned by his spouse. Mr. Adams disclaims beneficial ownership in the 14,935 common shares held by his spouse;
- (3) Adam Cutler's beneficial ownership consists of 9,122 common shares issuable pursuant to presently exercisable options;
- (4) William J. Garner's beneficial ownership consists of 9,122 common shares issuable pursuant to presently exercisable options and 3,788 common shares owned by his spouse. Mr. Garner disclaims beneficial ownership in the 3,788 common shares held by his spouse;
- (5) Andrew Hull's beneficial ownership consists of 18,939 common shares owned directly and 9,122 common shares issuable pursuant to presently exercisable options;
- (6) Brenda Edwards' beneficial ownership currently consists of no common shares and no common shares issuable pursuant to presently exercisable options;
- (7) Janet Grove's beneficial ownership consists of 1,950 common shares issuable pursuant to presently exercisable options;
- (8) Alexandra Mancini's beneficial ownership consists of 6,059 common shares owned directly and 63,787 common shares issuable pursuant to presently exercisable options;
- (9) Bryan Baldasare's beneficial ownership consists of 780 common shares issuable pursuant to presently exercisable options;
- (10) The beneficial ownership of all other executive officers as a group (two individuals) consists of 1,803 common shares owned directly and 143,029 common shares issuable pursuant to presently exercisable options.

DESCRIPTION OF SECURITIES

General

Our authorized share capital consists of an unlimited number of common shares without par value and an unlimited number of preferred shares without par value. As of the date of this registration statement, we had 16,266,687 common shares issued and outstanding and no preferred shares issued and outstanding.

The description of our securities contained herein is a summary only and may be exclusive of certain information that may be important to you. For more complete information, you should read our Amended and Restated Articles (the "Articles"), which have been filed with the SEC as an exhibit to our annual report on Form 10-K.

Common Shares

Each common share entitles the holder thereof to one vote at all meetings of shareholders.

There are no limitations on the rights of non-Canadian owners to hold or vote common shares.

In the event of our liquidation, dissolution or winding-up, whether voluntary or involuntary, or other distribution of our assets among shareholders for the purpose of winding up our affairs, subject to the rights, privileges and restrictions attaching to any preferred shares that may then be outstanding, the shareholders shall be entitled to receive our remaining property.

The shareholders are entitled to receive dividends, as and when declared by our Board, subject to the rights, privileges and restrictions attaching to our securities, which may be paid in money, property or by the issue of fully paid shares in our capital.

However, we do not anticipate paying any cash dividends for the foreseeable future, and instead intend to retain future earnings, if any, for use in the operation and expansion of our business.

Certain Takeover Bid Requirements

Unless such offer constitutes an exempt transaction, an offer made by a person to acquire outstanding shares of a Canadian entity that, when aggregated with the offeror's holdings (and those of persons or companies acting jointly with the offeror), would constitute 20% or more of the outstanding shares, would be subject to the take-over provisions of Canadian securities laws. The foregoing is a limited and general summary of certain aspects of applicable securities law in the provinces and territories of Canada, all in effect as of the date hereof.

In addition to the take-over bid requirements noted above, the acquisition of shares may trigger the application of additional statutory regimes including amongst others, the Investment Canada Act and the Competition Act.

This summary is not a comprehensive description of relevant or applicable considerations regarding such requirements and, accordingly, is not intended to be, and should not be interpreted as, legal advice to any prospective purchaser and no representation with respect to such requirements to any prospective purchaser is made. Prospective investors should consult their own Canadian legal advisors with respect to any questions regarding securities law in the provinces and territories of Canada.

Actions Requiring a Special Majority

Under the BCBCA, unless otherwise stated in the Articles, certain corporate actions require the approval of a special majority of shareholders, meaning holders of shares representing 66 2/3% of those votes cast in respect of a shareholder vote addressing such matter. Those items requiring the approval of a special majority generally relate to fundamental changes with respect to our business, and include amongst others, resolutions: (i) removing a director prior to the expiry of his or her term; (ii) altering the Articles, (iii) approving an amalgamation; (iv) approving a plan of arrangement; and (v) providing for a sale of all or substantially all of our assets.

Transfer Agent and Registrar

The transfer agent and registrar for our common shares is Computershare Investor Services Inc., 100 University Avenue, 9th Floor, Toronto, Ontario, Canada M5J 2Y1.

Reports to Shareholders

We are subject to the periodic reporting requirements of the Exchange Act and in accordance therewith file periodic reports, including, but not limited to, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports, proxy statements and other information filed or furnished with the Securities and Exchange Commission pursuant to Section 13(a) or 15(d) of the Exchange Act. We plan to furnish our shareholders with an annual report for each fiscal year beginning for the fiscal year ending June 30, 2021 containing financial statements audited by our independent registered public accounting firm. You may read and copy (at prescribed rates) any such reports, proxy statements and other information at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference room. Our SEC filings will also be available to you on the SEC's website at .sec.gov. Our website address is www.inmedpharma.com. The information contained in or accessible from our website is not incorporated into this prospectus, and you should not consider it part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Market Price of and Dividends on the Our Common Shares

Our common shares are currently quoted under the symbol "INM" on the Nasdaq Capital Market.

While there are no restrictions on the payment of dividends, we have never declared nor paid any cash dividends on our common shares, and we presently have no intention of paying any cash dividend in the foreseeable future. Our current policy is to retain earnings, if any, to finance the expansion of our business. The future payment of dividends will depend on our results of operations, financial condition, capital expenditure plans and other factors that we deem relevant and will be at the sole discretion of our Board.

Holders

As of March 31, 2022, there were 3,878 holders of record of our issued and outstanding common shares.

PRIVATE PLACEMENT OF WARRANTS

In concurrent private placements to the same institutional investor on June 6, 2022, we issued to such investor (i) unregistered pre-funded warrants to purchase up to 1,748,250 common shares (the “Private Pre-Funded Warrants”), and (ii) unregistered preferred investment options to purchase up to 5,827,506 common shares (the “Preferred Investment Options”). Each Private Pre-Funded Warrant is exercisable for one common share at an exercise price of \$0.0001 per share, is immediately exercisable and will not expire until fully exercised. Each Preferred Investment Option is exercisable for one common share at an exercise price of \$0.74 per share, is immediately exercisable and will expire six and one-half years from the date of issuance.

The Private Pre-Funded Warrants, the Private Preferred Investment Options and the common shares issuable upon the exercise of each such security were offered pursuant to the exemptions provided in Section 4(a)(2) under the Securities Act of 1933, as amended, or the Securities Act, and Rule 506(b) promulgated thereunder, and they were not offered pursuant to this prospectus supplement and the accompanying prospectus. None of the securities issued in the concurrent private placements are or will be listed for trading on any national securities exchange. The Private Pre-Funded Warrants and Preferred Investment Options were offered for an aggregate purchase price of approximately \$1.5 million.

Accordingly, the investors in the private placements may exercise each of the Private Pre-Funded Warrant and the Preferred Investment Options and sell the common shares issuable upon the exercise of such security only pursuant to an effective registration statement under the Securities Act covering the resale of those shares, an exemption under Rule 144 under the Securities Act or another applicable exemption under the Securities Act.

All purchasers are required to be “accredited investors” as such term is defined in Rule 501(a) under the Securities Act.

A holder of pre-funded warrants or preferred investment options does not have the right to exercise any portion thereof if the holder, together with its affiliates, would beneficially own in excess of 4.99% (or, at the election of a holder prior to the date of issuance, 9.99%) of the number of common shares outstanding immediately after giving effect to such exercise; provided, however, that upon notice to the Company, the holder may increase or decrease such beneficial ownership limitation, provided that in no event shall such beneficial ownership limitation exceed 9.99% and any increase in the beneficial ownership limitation will not be effective until 61 days following notice of such increase from the holder to us. In addition, the holders of the pre-funded warrants and preferred investment options have the right to participate in any rights offering or distribution of assets together with our shareholders on an as-exercised basis.

The exercise price and number of our common shares issuable upon the exercise of each of the pre-funded warrants and preferred investment options are subject to adjustment for stock splits, reverse splits, and similar capital transactions, as described in the warrants. Such securities are exercisable on a “cashless” basis in certain circumstances.

If a fundamental transaction occurs, then the successor entity will succeed to, and be substituted for us, and may exercise every right and power that we may exercise and will assume all of our obligations under the pre-funded warrants and the preferred investment options with the same effect as if such successor entity had been named in such security itself. If our shareholders are given a choice as to the securities, cash or property to be received in a fundamental transaction, then the holder shall be given the same choice as to the consideration it receives upon any exercise of a pre-funded warrant or preferred investment option following such fundamental transaction. In addition, the holder will have the right to require us to repurchase its pre-funded warrants or preferred investment options for cash in an amount equal to the value of the remaining unexercised portion of the pre-funded warrants or preferred investment options based on the Black Scholes option pricing formula. However, if the fundamental transaction is not within our control, including not approved by our board of directors, then the holder will only be entitled to receive the same type or form of consideration (and in the same proportion), at the value per common share in the fundamental transaction for each common shares underlying the unexercised portion of the pre-funded warrants or preferred investment options, that is being offered and paid to our shareholder in connection with the fundamental transaction.

As part of the concurrent private placements, we have agreed to register for resale the common shares issuable upon exercise of the pre-funded warrants and preferred investment options sold in the concurrent private placement.

SELLING SHAREHOLDER

The common shares being offered by the selling shareholder are those issuable to the selling shareholder upon exercise of the warrants. For additional information regarding the issuances of those common shares and warrants, see “*Private Placement of Warrants*” above. We are registering the common shares in order to permit the selling shareholder to offer the shares for resale from time to time. Except for the ownership of the common shares and the warrants, the selling shareholder has not had any material relationship with us within the past three years.

The table below lists the selling shareholder and other information regarding the beneficial ownership of the common shares by the selling shareholder. The second column lists the number of common shares beneficially owned by the selling shareholder, based on its ownership of the common shares and warrants, as of June 14, 2022, assuming exercise of the warrants held by the selling shareholder on that date, without regard to any limitations on exercises.

The third column lists the common shares being offered by this prospectus by the selling shareholder.

In accordance with the terms of a registration rights agreement with the selling shareholder, this prospectus generally covers the resale of the sum of the maximum number of common shares issuable to the selling shareholder upon exercise of the warrants described in the “*Private Placement of Warrants*” described above, determined as if the outstanding warrants were exercised in full as of the trading day immediately preceding the date this registration statement was initially filed with the SEC, each as of the trading day immediately preceding the applicable date of determination and all subject to adjustment as provided in the registration right agreement, without regard to any limitations on the exercise of the warrants. The fourth column assumes the sale of all of the shares offered by the selling shareholder pursuant to this prospectus.

Under the terms of the warrants and other warrants held by selling shareholder, a selling shareholder may not exercise any such warrants to the extent such exercise would cause such selling shareholder, together with its affiliates and attribution parties, to beneficially own a number of common shares which would exceed 4.99% or 9.99%, as applicable, of our then outstanding common shares following such exercise, excluding for purposes of such determination common shares issuable upon exercise of such warrants which have not been exercised. The number of shares in the second and fourth columns do not reflect this limitation. The selling shareholder may sell all, some or none of their shares in this offering. See “*Plan of Distribution*.”

Name of Selling Shareholder	Number of Common Shares Owned Prior to Offering	Maximum Number of Common Shares to be Sold Pursuant to this Prospectus ⁽¹⁾	Number of Common Shares Owned After Offering ⁽¹⁾
Armistice Capital Master Fund Ltd. ⁽²⁾	1,094,696	7,575,756	8,670,452

(1) Consists of (i) 1,748,250 common shares issuable upon the exercise of pre-funded warrants issued in connection with the private placement closed on June 6, 2022, and (ii) 5,827,506 common shares issuable upon the exercise of preferred investment options issued in connection with the registered direct offering and the private placement closed on June 6, 2022, all of which are directly held by Armistice Capital Master Fund Ltd., a Cayman Islands exempted company (the “Master Fund”), and may be deemed to be indirectly beneficially owned by: (i) Armistice Capital, LLC (“Armistice Capital”), as the investment manager of the Master Fund; and (ii) Steven Boyd, as the Managing Member of Armistice Capital. Armistice Capital and Steven Boyd disclaim beneficial ownership of the securities except to the extent of their respective pecuniary interests therein. The pre-funded warrants, preferred investment options and common warrants are subject to certain beneficial ownership limitations that preclude the Master Fund from exercising any portion of either to the extent that, following such exercise, the Master Fund’s ownership of the Company’s common shares would exceed the applicable ownership limitation (9.99% for the pre-funded warrants and 4.99% for the common warrants).

(2) The shares are directly held by Armistice Capital Master Fund Ltd., a Cayman Islands exempted company (the “Master Fund” or “selling shareholder”), and may be deemed to be indirectly beneficially owned by: (i) Armistice Capital, LLC (“Armistice Capital”), as the investment manager of the Master Fund; and (ii) Steven Boyd, as the Managing Member of Armistice Capital. All of the shares of common stock are issuable only upon the exercise of certain warrants, which, as noted above, are subject to beneficial ownership limitations. Armistice Capital and Steven Boyd disclaim beneficial ownership of the securities except to the extent of their respective pecuniary interests therein. The address of the Master Fund is c/o Armistice Capital, LLC, 510 Madison Ave, 7th Floor, New York, NY 10022.

PLAN OF DISTRIBUTION

The Selling Shareholder (the “Selling Shareholder”) of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the principal Trading Market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. The Selling Shareholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the Selling Shareholder to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The Selling Shareholder may also sell securities under Rule 144 or any other exemption from registration under the Securities Act of 1933, as amended (the “Securities Act”), if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Shareholder may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Shareholder (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2121; and in the case of a principal transaction a markup or markdown in compliance with FINRA Rule 2121.

In connection with the sale of the securities or interests therein, the Selling Shareholder may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Shareholder may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The Selling Shareholder may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The Selling Shareholder and any broker-dealers or agents that are involved in selling the securities may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. The Selling Shareholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the Selling Shareholder against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the Selling Shareholder without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale securities will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common shares for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Shareholder will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of the common shares by the Selling Shareholder or any other person. We will make copies of this prospectus available to the Selling Shareholder and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to “incorporate by reference” certain information into this prospectus, which means that we can disclose important information about us by referring you to another document filed separately with the SEC. The information incorporated by reference is considered to be a part of this prospectus. Because we are incorporating by reference future filings with the SEC, this prospectus is continually updated and those future filings may modify or supersede some of the information included or incorporated in this prospectus. This means that you must carefully review all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any document previously incorporated by reference have been modified or superseded. However, we undertake no obligation to update or revise any statements we make, except as required by law.

This prospectus incorporates by reference the documents listed below and any filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act of 1934, as amended (the “Exchange Act”) (in each case, other than those documents or the portions of those documents furnished and not filed with the SEC, including information furnished under Item 2.02 or Item 7.01 of Form 8-K and any corresponding information furnished with respect to such Items under Item 9.01 or as an exhibit) prior to the termination of the offering covered by this prospectus and any prospectus supplement:

- the Company’s Annual Report on [Form 10-K](#) for the fiscal year ended June 30, 2021, filed with the SEC on September 24, 2021;
- the Company’s Quarterly Report on Form 10-Q for the quarter ended [September 30, 2021](#), filed with the SEC on November 10, 2021, the quarter ended [December 31, 2021](#), filed with the SEC on February 14, 2022 and the quarter ended [March 31, 2022](#), filed with the SEC on May 13, 2022;
- the Company’s Current Reports on Form 8-K, filed with the SEC on [October 1, 2021](#), [October 13, 2021](#), [October 28, 2021](#), [November 3, 2021](#), [November 10, 2021](#), [November 23, 2021](#), [December 20, 2021](#), [December 22, 2021](#), [February 23, 2022](#), [March 18, 2022](#), [March 22, 2022](#), [April 7, 2022](#), [May 18, 2022](#), [June 6, 2022](#), [June 22, 2022](#) and the Form 8-K/A filed with the SEC on [June 23, 2022](#) (except, in each case, any information, including exhibits, furnished to the SEC pursuant Items 2.02 and 7.01);
- the description of our common shares in our Registration Statement on [Form 8-A](#) filed on November 5, 2020 and any subsequent amendment thereto filed for the purpose of updating such description.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed to be modified or superseded to the extent that a statement contained in any subsequently filed document which is or is deemed to be incorporated by reference in this prospectus modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

LEGAL MATTERS

Norton Rose Fulbright US LLP, which has acted as our United States counsel in connection with this offering, will pass on certain legal matters with respect to United States federal law in connection with this offering. Norton Rose Fulbright Canada LLP, which has acted as our Canadian counsel in connection with this offering, will pass on certain legal matters with respect to Canadian law in connection with this offering.

EXPERTS

The consolidated financial statements of InMed Pharmaceuticals Inc. as of June 30, 2021 and 2020, and for each of the years in the two-year period ended June 30, 2021 have been incorporated by reference herein in reliance upon the report of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. The audit report covering the June 30, 2021 consolidated financial statements contains an explanatory paragraph that states that the Company has incurred recurring losses and negative cash flows and has an accumulated deficit that raise substantial doubt about its ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of that uncertainty.

ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the common shares offered by this prospectus. This prospectus, which constitutes a part of the registration statement, does not contain all the information set forth in the registration statement, some of which is contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and our common shares, we refer you to the registration statement, including the exhibits filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The SEC maintains an internet website that contains reports and other information about issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov.

We also maintain a website at www.inmedpharma.com. Information contained in, or accessible through, our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is only as an inactive textual reference.



7,575,756 Common Shares

PROSPECTUS

June 24, 2022

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other expenses of issuance and distribution

Set forth below is an estimate (except in the case of the registration fee) of the amount of fees and expenses to be incurred in connection with the issuance and distribution of the offered securities, other than underwriting discounts and commissions. The selling shareholder will not bear any portion of the below expenses.

SEC registration fee	\$	399.77
FINRA filing fee		*
Nasdaq listing fee		*
Printing and engraving expenses		*
Legal fees and expenses		*
Accounting fees and expenses		*
Blue Sky fees and expenses (including legal fees)		*
Transfer agent and registrar fees and expenses		*
Miscellaneous		*
Total	\$	*

* These fees are calculated based on the number of issuances and amount of securities offered and accordingly cannot be estimated at this time.

Item 14. Indemnification of directors and officers

We are subject to the provisions of Part 5, Division 5 of the Business Corporations Act (British Columbia), or "BCBCA". Under Section 160 of the BCBCA, we may, subject to Section 163 of the BCBCA:

1. indemnify an individual who:
 - is or was a director or officer of our company;
 - is or was a director or officer of another corporation (i) at a time when such corporation is or was an affiliate of our company; or (ii) at our request, or
 - at our request, is or was, or holds or held a position equivalent to that of, a director or officer of a partnership, trust, joint venture or other unincorporated entity, and including, subject to certain limited exceptions, the heirs and personal or other legal representatives of that individual (collectively, an "eligible party"), against all eligible penalties to which the eligible party is or may be liable; and
2. after final disposition of an eligible proceeding, pay the expenses actually and reasonably incurred by an eligible party in respect of that proceeding, where:
 - "eligible penalty" means a judgment, penalty or fine awarded or imposed in, or an amount paid in settlement of, and eligible proceeding.
 - "eligible proceeding" means a proceeding in which an eligible party or any of the heirs and personal or other legal representatives of the eligible party, by reason of the eligible party being or having been a director or officer of, or holding or having held a position equivalent to that of a director or officer of, our company or an associated corporation (a) is or may be joined as a party, or (b) is or may be liable for or in respect of a judgment, penalty or fine in, or expenses related to, the proceeding.
 - "proceeding" includes any legal proceeding or investigative action, whether current, threatened, pending or completed.

Under Section 161 of the BCBCA, and subject to Section 163 of the BCBCA, we must, after the final disposition of an eligible proceeding, pay the expenses actually and reasonably incurred by an eligible party in respect of that proceeding if the eligible party (a) has not been reimbursed for those expenses, and (b) is wholly successful, on the merits or otherwise, in the outcome of the proceeding or is substantially successful on the merits in the outcome of the proceeding.

Under Section 162 of the BCBCA, and subject to Section 163 of the BCBCA, we may pay, as they are incurred in advance of the final disposition of an eligible proceeding, the expenses actually and reasonably incurred by an eligible party in respect of the proceeding, provided that we must not make such payments unless we first receive from the eligible party a written undertaking that, if it is ultimately determined that the payment of expenses is prohibited under Section 163 of the BCBCA, the eligible party will repay the amounts advanced.

Under Section 163 of the BCBCA, we must not indemnify an eligible party against eligible penalties to which the eligible party is or may be liable or pay the expenses of an eligible party in respect of that proceeding under Sections 160, 161 or 162 of the BCBCA, as the case may be, if any of the following circumstances apply:

- if the indemnity or payment is made under an earlier agreement to indemnify or pay expenses and, at the time that the agreement to indemnify or pay expenses was made, we were prohibited from giving the indemnity or paying the expenses by our memorandum or articles;
- if the indemnity or payment is made otherwise than under an earlier agreement to indemnify or pay expenses and, at the time that the indemnity or payment is made, we are prohibited from giving the indemnity or paying the expenses by our memorandum or articles;
- if, in relation to the subject matter of the eligible proceeding, the eligible party did not act honestly and in good faith with a view to the best interests of our company or the associated corporation, as the case may be; or
- in the case of an eligible proceeding other than a civil proceeding, if the eligible party did not have reasonable grounds for believing that the eligible party's conduct in respect of which the proceeding was brought was lawful.

If an eligible proceeding is brought against an eligible party by or on behalf of our company or by or on behalf of an associated corporation, we must not either indemnify the eligible party against eligible penalties to which the eligible party is or may be liable, or pay the expenses of the eligible party under Sections 160, 161 or 162 of the BCBCA, as the case may be, in respect of the proceeding.

Under Section 164 of the BCBCA, and despite any other provision of Part 5, Division 5 of the BCBCA and whether or not payment of expenses or indemnification has been sought, authorized or declined under Part 5, Division 5 of the BCBCA, on application of our company or an eligible party, the Supreme Court of British Columbia may do one or more of the following:

- order us to indemnify an eligible party against any liability incurred by the eligible party in respect of an eligible proceeding;
- order us to pay some or all of the expenses incurred by an eligible party in respect of an eligible proceeding;
- order the enforcement of, or payment under, an agreement of indemnification entered into by us;
- order us to pay some or all of the expenses actually and reasonably incurred by any person in obtaining an order under Section 164 of the BCBCA; or
- make any other order the court considers appropriate.

Section 165 of the BCBCA provides that we may purchase and maintain insurance for the benefit of an eligible party or the heirs and personal or other legal representatives of the eligible party against any liability that may be incurred by reason of the eligible party being or having been a director or officer of, or holding or having held a position equivalent to that of a director or officer of, our company or an associated corporation.

Under our articles, and subject to the BCBCA, we must indemnify our directors, former directors or alternate directors and his or her heirs and legal personal representatives against all eligible penalties to which such person is or may be liable, and we must, after the final disposition of an eligible proceeding, pay the expenses actually and reasonably incurred by such person in respect of that proceeding. Each director and alternate director is deemed to have contracted with our company on the terms of the indemnity contained in our articles.

Under our articles, and subject to the BCBCA, we may agree to indemnify and may indemnify any person (including an eligible party) against eligible penalties and pay expenses incurred in connection with the performance of services by that person for us. We have entered into indemnity agreements with our directors and certain of our officers.

Pursuant to our articles, the failure of an eligible party to comply with the BCBCA or our articles does not, of itself, invalidate any indemnity to which he or she is entitled under our articles.

Under our articles, we may purchase and maintain insurance for the benefit of any person (or his or her heirs or legal personal representatives) who:

- is or was our director, alternate director, officer, employee or agent;
- is or was a director, alternate director, officer, employee or agent of a corporation at a time when the corporation is or was our affiliate;
- at our request, is or was a director, alternate director, officer, employee or agent of a corporation or of a partnership, trust, joint venture or other unincorporated entity; or
- at our request, holds or held a position equivalent to that of a director, alternate director or officer of a partnership, trust, joint venture or other unincorporated entity;
- against any liability incurred by him or her as such director, alternate director, officer, employee or agent or person who holds or held such equivalent position.

In addition, we have entered into an indemnification agreement with each of our directors and our Chief Financial Officer, which requires us to indemnify them.

Item 15. Recent sales of unregistered securities

In the three years preceding the filing of this registration statement, without giving effect to the June 30, 2020 Share Consolidation, we have issued the following securities that were not registered under the Securities Act of 1933:

- On January 3, 2018, we completed a non-brokered private placement (“Jan-2018 Financing”) for 13,428,571 units (“Jan-2018 Units”), at a price of C\$0.70 per Jan-2018 Unit for gross proceeds of C\$9,400,000. Each Jan-2018 Unit consisted of one common share and one non-transferable share purchase warrant (a “Jan-2018 Warrant”). Each Jan-2018 Warrant was exercisable by the holder to acquire one additional common share at a price of C\$1.25 for a period of eighteen (18) months expiring on July 3, 2019. Share issue costs from the sale of Jan-2018 Units of \$1,200,847 is comprised of \$496,040 in finders’ fees, the non-cash fair value of \$554,183 for 433,556 warrants (“January-2018 Agent Warrants”) issued to finders and \$150,624 of other transaction costs. The January-2018 Agent Warrants have identical terms as the January-2018 Warrants described above. Of the \$496,040 in finders’ fees, \$32,903 was settled on February 9, 2018 via the issuance of 35,718 common shares at the C\$1.17 closing price on the date of issuance of these shares. The issuance of the securities was exempt from registration under the Securities Act as the securities were either issued outside the U.S. pursuant to Regulation S under the Securities Act or were issued to two U.S. purchasers pursuant to Regulation D under the Securities Act in that such sales did not involve a public offering. The finder’s fees paid in respect of sales to U.S. purchasers were paid to a registered broker-dealer.
- On June 21, 2018, we completed a public offering in Canada (“June-2018 Financing”) of 16,611,244 units (“June-2018 Units”), at a price of C\$0.90 per June-2018 Unit for gross proceeds of \$11,232,247 (C\$14,950,120). Each June-2018 Unit consists of one common share and one share purchase warrant (a “June-2018 Warrant”), or an aggregate of 16,611,244 full June-2018 Warrants. Each full June-2018 Warrant is exercisable by the holder to acquire one additional common share at a price of C\$1.25 for a period of twenty-four (24) months expiring on June 21, 2020. The June-2018 Warrants trade on the TSX under the symbol “IN.WT”. The underwriter for this transaction was Eight Capital. Share issue costs from the sale of June-2018 Units of \$1,499,625 is comprised of \$748,128 in underwriter’s commission, the non-cash fair value of \$415,626 for 1,106,397 warrants (“June-2018 Agent Warrants”) issued to the underwriter and \$335,871 of other transaction costs. Each June-2018 Agent Warrant is exercisable in whole or in part at an exercise price of C\$1.05 for a period of twenty-four (24) months expiring on June 21, 2020. The securities were exempt from registration under the Securities Act as they were issued outside the U.S. pursuant to Regulation S under the Securities Act.
- During the year ending June 30, 2018, we issued an aggregate 5,895,775 common shares pursuant to the exercise of 8,232,095 share purchase warrants at a weighted average exercise price of C\$0.44 per share. Included in the total number of share purchase warrants exercised were 3,710,984 share purchase warrants, with a weighted average exercise price of C\$0.19 each, that were exercised for cash and 4,521,111 share purchase warrants with an exercise price of C\$0.65 each that, pursuant to the terms of a May 31, 2017 financing, were exercised on a net cashless basis, based on the five-day volume-weighted average trading price of our common shares on the stock exchange that our common shares were trading on at that time (either the TSX or CSE) ending on the date immediately preceding the date of exercise. The exercise of these 4,521,111 share purchase warrants resulted in the issuance of 2,184,791 common shares but, as they were exercised on a net cashless basis, no cash was received. The securities were exempt from registration under the Securities Act as they were either issued outside the U.S. pursuant to Regulation S under the Securities Act or were issued to a total of eight U.S. purchasers, upon exercise of investor or agent warrants issued in either the July-2016 Financing or May-2017 Financing, pursuant to Section 4(a)(2) of the Securities Act in that such sales did not involve a public offering.

- During the year ending June 30, 2018, we issued an aggregate 7,230,295 common shares pursuant to the exercise of 7,345,000 stock options at a weighted average exercise price of C\$0.23 per share. Included in the total number of stock options exercised were 300,000 stock options with an exercise price of C\$0.195 per share that, pursuant to the terms of a settlement agreement with the stock option holder, were exercised on a net cashless basis, based on the C\$0.51 per common share closing price of our common shares on the CSE on the date immediately preceding the date of exercise. The exercise of these 300,000 stock options resulted in the issuance of 185,295 common shares. The securities were exempt from registration under the Securities Act as they were issued outside the U.S. pursuant to Regulation S under the Securities Act or pursuant to Rule 701 under the Securities Act, in that they were offered and sold either pursuant to written compensatory plans or pursuant to a written contract relating to compensation.
- During the year ending June 30, 2019, we issued an aggregate 7,564 common shares pursuant to the exercise of 35,000 share purchase warrants. The 35,000 share purchase warrants that were exercised had an exercise price of C\$0.65 each and, pursuant to the terms of a May 31, 2017 financing, were exercised on a net cashless basis, based on the five-day volume-weighted average trading price of our common shares on the TSX ending on the date immediately preceding the date of exercise. The exercise of these 35,000 share purchase warrants resulted in the issuance of 7,564 common shares but, as they were exercised on a net cashless basis, no cash was received. The issuance of the securities was exempt from registration under the Securities Act as they were issued outside the U.S. pursuant to Regulation S under the Securities Act.
- During the year ending June 30, 2019, we issued an aggregate 1,425,000 common shares pursuant to the exercise of 1,425,000 stock options at a weighted average exercise price of C\$0.14 per share. The issuance of the securities was exempt from registration under the Securities Act as they were issued outside the U.S. pursuant to Regulation S under the Securities Act.
- On February 12, 2021, we closed the Private Placement with 11 accredited institutional investors for approximately \$4.5 million of units. We issued 1,050,000 common shares and warrants exercisable for 690,000 common shares. The issuance was made in reliance upon an exemption from registration under Section 4(a)(2) of the Securities Act in that such sales did not involve a public offering.
- On July 2, 2021, we closed the Private Placement with an accredited institutional investors for approximately \$12 million of common shares and warrants. We issued 890,000 common shares and warrants exercisable for 7,182,654 common shares. The issuance was made in reliance upon an exemption from registration under Section 4(a)(2) of the Securities Act in that such sales did not involve a public offering.
- On June 6, 2022, we closed a registered direct issuance and sale of 4,079,256 of its common shares (or pre-funded warrants in lieu thereto), as well as a concurrent private placement to issue and sell 1,748,250 common shares (or pre-funded warrants in lieu thereto), for a gross aggregate amount of US\$5 million. In addition, we issued to the investor in the offerings unregistered preferred investment options to purchase up to an aggregate of 5,827,506 common shares. We also amended certain existing warrants to purchase up to an aggregate of 4,480,771 common shares of the Company that were previously issued to the investor.

Item 16. Exhibits and financial statement schedules

(a) Exhibits

Exhibit No.	Description of Exhibit
2.1 [^]	<u>Agreement and Plan of Reorganization, dated as of September 10, 2021, by and among InMed Pharmaceuticals Inc., InMed LLC, BayMedica, Inc., BM REP, LLC, as the stockholder representative, and certain stockholders thereto. (incorporated by reference to Exhibit 2.1 to the Company's Form 8-K filed on October 13, 2021).</u>
3.1	<u>Amended and Restated Articles of InMed Pharmaceuticals Inc. (incorporated by reference to Exhibit 3.1 to the Company's Form S-1 filed on June 19, 2020).</u>
4.1	<u>Form of Series A Warrant (incorporated by reference to Exhibit 4.1 to the Company's Form 8-K filed on June 29, 2021).</u>
4.2	<u>Form of Pre-Funded Warrants (incorporated by reference to Exhibit 4.2 to the Company's Form 8-K filed on June 29, 2021).</u>
4.3	<u>Form of Series A Warrant (incorporated by reference to Exhibit 4.6 to the Company's Form 10-K filed on September 24, 2021).</u>
4.4	<u>Form of Series B Warrant (incorporated by reference to Exhibit 4.7 to the Company's Form 10-K filed on September 24, 2021).</u>
4.5	<u>Form of Pre-Funded Warrants (incorporated by reference to Exhibit 4.2 to the Company's Form 8-K filed on June 6, 2022).</u>
4.6	<u>Form of Pre-Funded Warrants (incorporated by reference to Exhibit 4.3 to the Company's Form 8-K filed on June 6, 2022).</u>
4.7	<u>Form of Preferred Investment Option (incorporated by reference to Exhibit 4.1 to the Company's Form 8-K filed on June 6, 2022).</u>
4.8	<u>Warrant Amendment Agreement (incorporated by reference to Exhibit 4.4 to the Company's Form 8-K filed on June 6, 2022).</u>
4.9	<u>Form of Specific Common Share Certificate (incorporated by reference to Exhibit 4.3 to the Company's Form S-1 filed on July 13, 2021).</u>
4.10	<u>Form of Common Shares Purchase Warrant (incorporated by reference to Exhibit 4.1 to the Company's Form 8-K filed on November 12, 2020).</u>
4.11	<u>Form of Common Shares Purchase Warrant (incorporated by reference to Exhibit 4.1 to the Company's Form 8-K filed on February 5, 2021).</u>
5.1	<u>Opinion of Norton Rose Fulbright Canada LLP (previously filed).</u>
10.1 [†]	<u>InMed Pharmaceuticals Inc. 2017 Amended and Restated Stock Option Plan, as amended (incorporated by reference to Exhibit 4.2 to the Company's Form S-8 filed on March 5, 2021).</u>
10.2 [†]	<u>Form of Stock Option Agreement pursuant to the InMed Pharmaceuticals Inc. 2017 Amended and Restated Stock Option Plan (incorporated by reference to Exhibit 4.3 to the Company's Form S-8 filed on March 5, 2021).</u>

10.3†	Amended and Restated Executive Employment Agreement, dated March 1, 2021, between Eric A. Adams and InMed Pharmaceuticals Inc. (incorporated by reference to Exhibit 10.3 to the Company's Form S-1 filed on July 13, 2021).
10.4†	Amended and Restated Executive Employment Agreement, dated March 1, 2021, between Eric Hsu and InMed Pharmaceuticals Inc. (incorporated by reference to Exhibit 10.4 to the Company's Form S-1 filed on July 13, 2021).
10.5†	Amended and Restated Executive Employment Agreement, dated March 1, 2021, between Alexandra Mancini and InMed Pharmaceuticals Inc. (incorporated by reference to Exhibit 10.5 to the Company's Form S-1 filed on July 13, 2021).
10.6†	Amended and Restated Executive Employment Agreement, dated March 1, 2021, between Michael Woudenberg and InMed Pharmaceuticals Inc. (incorporated by reference to Exhibit 10.6 to the Company's Form S-1 filed on July 13, 2021).
10.7†	Form of InMed Pharmaceuticals Inc. Indemnification Agreement entered into with each member of the board of directors (incorporated by reference to Exhibit 10.10 to the Company's Form 10-K filed on September 24, 2021).
10.8	Office Premises Lease, dated January 14, 2019, between InMed Pharmaceuticals Inc. and 815 West Hastings Ltd. (incorporated by reference to Exhibit 10.8 to the Company's Form S-1 filed on June 19, 2020).
10.9	Form of Amendment of Purchase Agreement and Common Stock Purchase Warrant, dated March 21, 2022 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on March 22, 2022).
10.10	At the Market Offering Agreement dated April 7, 2021 by and between InMed Pharmaceuticals Inc., and H.C. Wainwright & Co., LLC (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on April 7, 2022).
10.11	Form of Securities Purchase Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 29, 2021).
10.12	Form of Securities Purchase Agreement (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on June 6, 2022).
10.13	Form of Securities Purchase Agreement (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed on June 6, 2022).
10.14	Form of Registration Rights Agreement, dated February 5, 2021, between InMed Pharmaceuticals Inc. and several purchasers hereto (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K filed on February 5, 2021).
10.15	Form of Registration Rights Agreement dated June 28, 2021, between InMed Pharmaceuticals Inc. and several purchasers hereto (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on June 29, 2021).
10.16	Form of Registration Rights Agreement (incorporated by reference to Exhibit 10.3 to the Company's Form 8-K filed on June 6, 2022).
21.1	Subsidiaries of InMed Pharmaceuticals Inc. (incorporated by reference to Exhibit 21.1 to the Company's Form 10-K filed on September 24, 2021).
23.1	Consent of KPMG LLP, independent registered public accounting firm (previously filed)
23.2	Consent of Norton Rose Fulbright Canada LLP (included in opinion filed as Exhibit 5.1)
24.3	Powers of Attorney (previously filed on the signature page to this registration statement)
104*	Cover Page Interactive Data File (embedded within the Inline XBRL document)
107	Filing Fee Table (previously filed)

* Filed herewith.

† Indicates exhibits that constitute management contracts or compensation plans or arrangements.

^ Portions of this exhibit have been omitted pursuant to Rule 601(b)(10) of Regulation S-K.

(b) Financial Statement Schedules

None

Item 17. Undertakings

The undersigned registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, InMed Pharmaceuticals Inc. has duly caused this Amendment No. 1 to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Vancouver, British Columbia, Canada, on June 24, 2022.

INMED PHARMACEUTICALS INC.

By: /s/ Eric A. Adams
Name: Eric A. Adams
Title: President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities indicated and on June 24, 2022.

Signature	Title
<u>/s/ Eric A. Adams</u> Eric A. Adams	President, Chief Executive Officer and Director (Principal Executive Officer)
<u>/s/ Brenda Edwards</u> Brenda Edwards	Interim Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)
<u>*</u> William J. Garner	Director (Chairman of the Board of Directors)
<u>*</u> Janet Grove	Director
<u>*</u> Adam Cutler	Director
<u>*</u> Andrew Hull	Director
<u>*</u> Bryan Baldasare	Director

* By: /s/ Eric A. Adams
Name: Eric A. Adams
Title: Attorney-in-fact

AUTHORIZED REPRESENTATIVE

Pursuant to the requirements of Section 6(a) of the Securities Act of 1933, the undersigned has signed this registration statement, solely in its capacity as the duly authorized representative of InMed Pharmaceuticals Inc. in the United States, on June 24, 2022.

Andrew Hull

/s/ Andrew Hull

Authorized Representative
