Fourth Quarter & 2020 Results

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Agenda

Introduction	Frederic Ors, CEO
DLBCL, Ovarian Cancer and Basket Trial Update	Joanne Schindler, CMO
Commercial Opportunity	Andrew Hall, CBO
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IMV - Vision & Mission

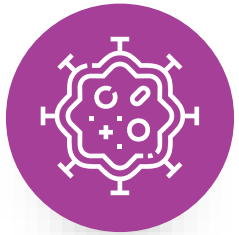
Everyone Deserves a Long and Healthy Life

At IMV, we believe that everyone deserves effective cancer treatments that respect patients' quality of life. Our unique DPX technology gives us the ability to create a new class of immunotherapy that generates targeted and long-lasting immune activation with limited side effects. With this unique ability, we are dedicated to improving cancer treatment and giving everyone a chance to enjoy a long and healthy life.

IMV Opportunity

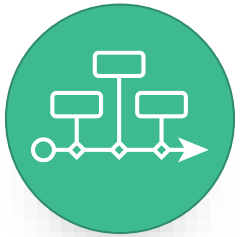
DPX™ delivery platform to create a novel class of immunotherapies

- Unique mechanism of action that generates targeted and sustained stimulation of immune system
- Immune cell activation that can be maintained over an extended period with limited side effects
- Clinically-demonstrated activity in solid / hematologic cancers as well as infectious diseases



DPX-Survivac, lead oncology program focused on unmet medical needs

- Demonstrated prolonged clinical benefit and tumor regression in solid and hematologic* cancers
- Excellent safety profile across all clinical Phase 1 and 2 studies (N=350)
- Potential to become a backbone of immunotherapy for cancer as single treatment, in different lines of settings and with a broad range of possibilities for combinations



Next Milestones

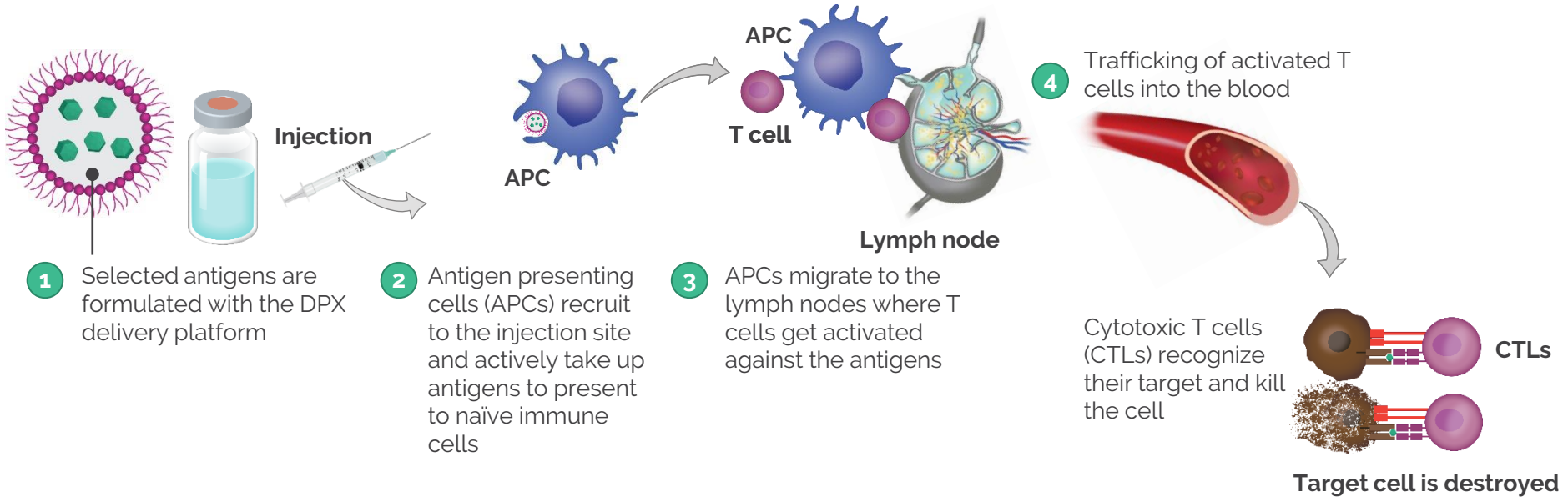
- Q1 2021: Finalization of clinical study design in DLBCL
- Q2 2021: Initiation of DLBCL trial
- Q2 2021: Translational and biomarker analysis update for ovarian cancer DeCidE trial
- H2 2021: Meeting with the FDA and final design for next clinical study in ovarian cancer
- H2 2021: Updated results of the basket trial
- H2 2021: initiation of a phase 1 clinical study in bladder cancer with DPX-SurMAGE

* Clinical benefit in Heme malignancies demonstrated in combination with pembrolizumab

DPX™ Technology Induces Targeted and Sustained Immune Response

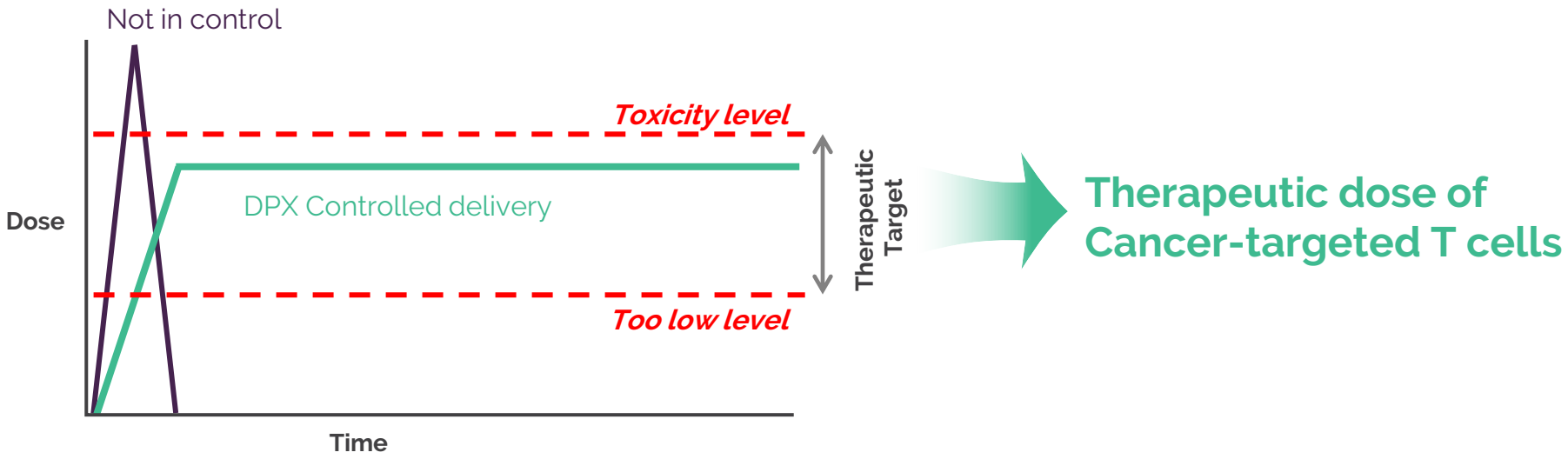
DPX™ delivery platform has a unique "no release" mechanism of action

- Unique lipid-based delivery platform
- The formulation does not release components at the injection site, allowing antigens to continuously interact with and stimulate the immune system over an extended period of time.
- Prolonged exposure by safely increasing the immune system's exposure to practically any antigen
- Versatility: can incorporate broad set of antigens, using peptides to activate T cells



DPX Platform Allows a Continuous Stimulation of Immune System Over Extended Period

- DPX™ extended delivery into immune cells enables highly targeted T and B cell therapies against cancer cells or pathogens
- Gradual immune system stimulation that can be maintained over an extended period, with limited side effects
- Opens way to a next generation of precision immunotherapy with potential for increased safety, efficacy and ease of care



Application potential demonstrated across a broad range of modalities:
small molecule drugs, peptides, mRNA, proteins, antibodies and larger biologics such as VLPs

Immunotherapy Challenges are Overcome by DPX Technology

Tolerability

Therapeutic exposure is limited to the injection site. Selective uptake by Antigen Presenting Cells (APCs) eliminates off target toxicity resulting in improved tolerability

Durability

Prolonged and protected peptide exposure results in sustained T-cell activation and proven durable clinical response

Patient Access

Infrequent subcutaneous injections.

Off-the-shelf technology permits immediate treatment post-diagnosis

Manufacturing Costs

Fully synthetic and optimized low-cost manufacturing results in a stable (up to three years) and scalable manufacturing process

Clinical Updates

Phase 2 SPiReL Study in r/r DLBCL

Dr. Neil Berinstein presented results from the SPiReL study at the SITC conference and ASH annual meeting, highlighting

- PD-L1 as a potential biomarker of clinical responses
- PD-L1+ population (n=7), subjects demonstrated an Overall Response Rate (ORR) and a Disease Control Rate (DCR) at both 85.7% in evaluable subjects, including three subjects who have completed one-year of study treatment
- Peripheral blood was assessed for survivin-specific ELISpot responses in 15 subjects with available samples. All 3 subjects with a Complete Response (CR), and 3 of 4 subjects with a Partial Response (PR) had positive ELISpot responses while only 1 subject with Stable Disease (SD) and 1 subject with Progressive Disease (PD) demonstrated survivin-specific ELISpot response, suggestive of an association between the clinical responses with the mechanism of action of DPX-Survivac.
- Treatment was well tolerated. The majority of treatment-related adverse events were grade 1 and 2 severity. A majority of these were injection site reactions associated with the subcutaneous administration of DPX-Survivac.

Next Milestones in r/r DLBCL

- Based on these results, IMV engaged with the FDA which provided productive feedback in a recent meeting
- Clarified endpoints and study population for future registration path
- The Company is working with Merck to finalize the protocol of the Phase 2b clinical study which is expected to begin in Q2 2021
- The trial design will be announced upon signature of the collaboration agreement

Phase 2 Basket Trial in Multiple Advanced Metastatic Solid Tumors

Primary objectives:

objective response rate (ORR) using RECIST v1.1; Safety

Secondary objectives:

ORR, DoR, DCR, and PFS using iRECIST; overall survival

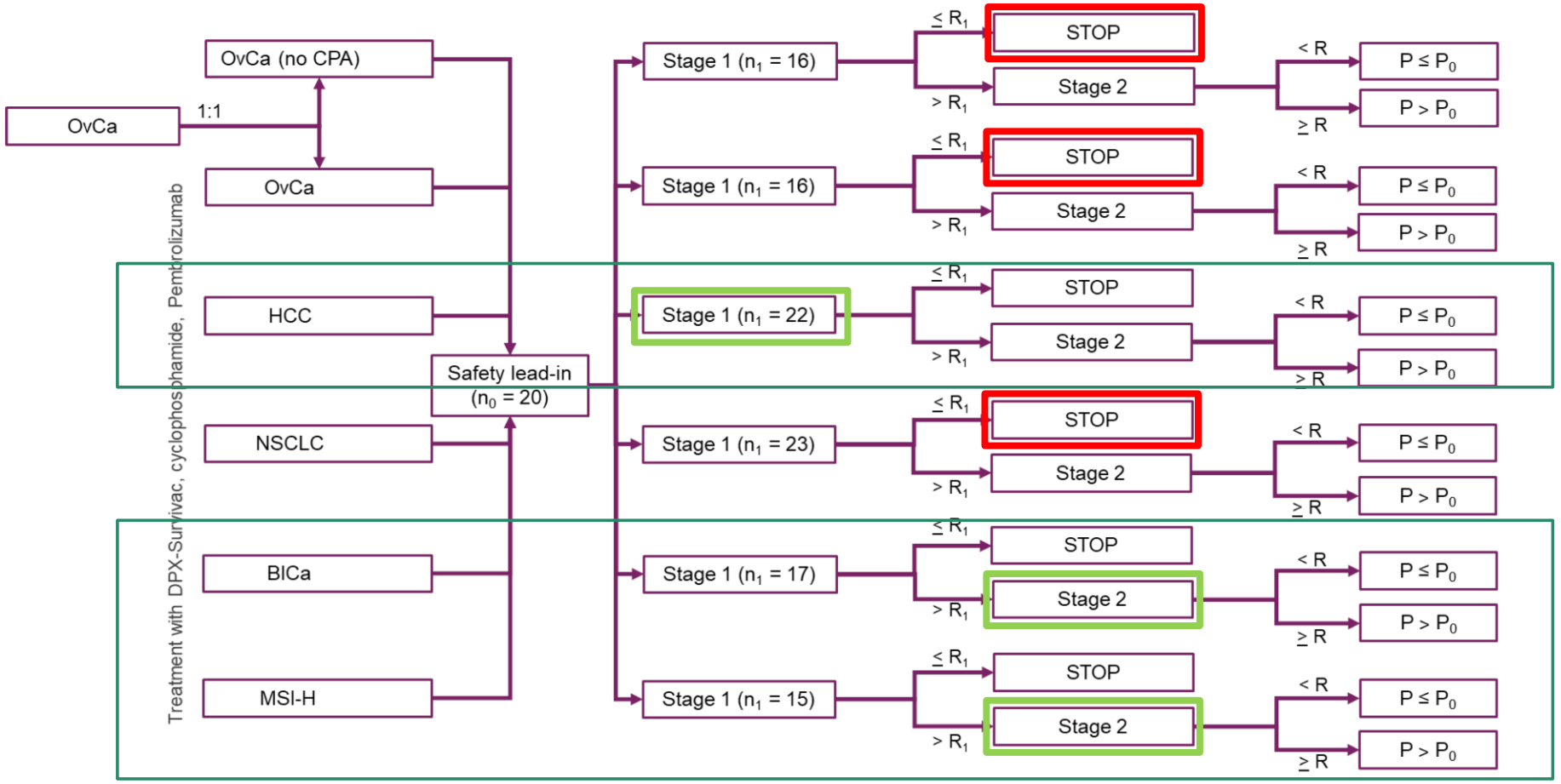
Exploratory objectives:

changes in immune cell infiltration; assessment of potential biomarkers; peripheral levels of cell mediated immunity; patient reported outcomes

Treatment: DPX-Survivac 2 x 0.25 mL SC q3w followed by up to 11 x 0.1 mL q9w; oral CPA 50 mg BID on alternating weeks; pembrolizumab 200 mg IV every three weeks

Phase 2 Basket Trial in Multiple Advanced Metastatic Solid Tumors

Promising Preliminary Results



n = number of subjects; P = alternative hypothesis; P_0 = null hypothesis; R = minimal number of responders

Protocol amended to accelerate enrollment in hepatocellular carcinoma (liver cancer)

Promising preliminary results in two solid cancer indications in the basket trial: ***metastatic bladder and MSI-H tumor cancers***

Phase 2 DeCidE1 Study in Advanced, Recurrent Ovarian Cancer

Top line data presented in December 2020 demonstrated clinically meaningful activity with long-lasting clinical benefits, and an excellent safety / tolerability profile

- 15/19 (79%) evaluable subjects demonstrated disease control. Clinical responses were observed across platinum-sensitive, platinum-resistant, and platinum-refractory patients
- 7/19 evaluable subjects (37%) achieved clinical benefit with partial/stable responses lasting > 6 months including 5 subjects (26%) who achieved clinical benefit with partial/stable responses lasting > 12 months
- Treatment well-tolerated with majority of adverse events being grade 1-2 reactions at the injection site

Next milestones

We are currently analyzing translational data with the goal of better understanding the mechanism of action of Maveropepimut-S and identifying potential predictive biomarkers

Once the analysis of the translational data is completed, the Company will request a meeting with the FDA in the second half of the year to finalize the design of a Phase 2b trial.

Other Clinical Programs

DPX-SurMAGE

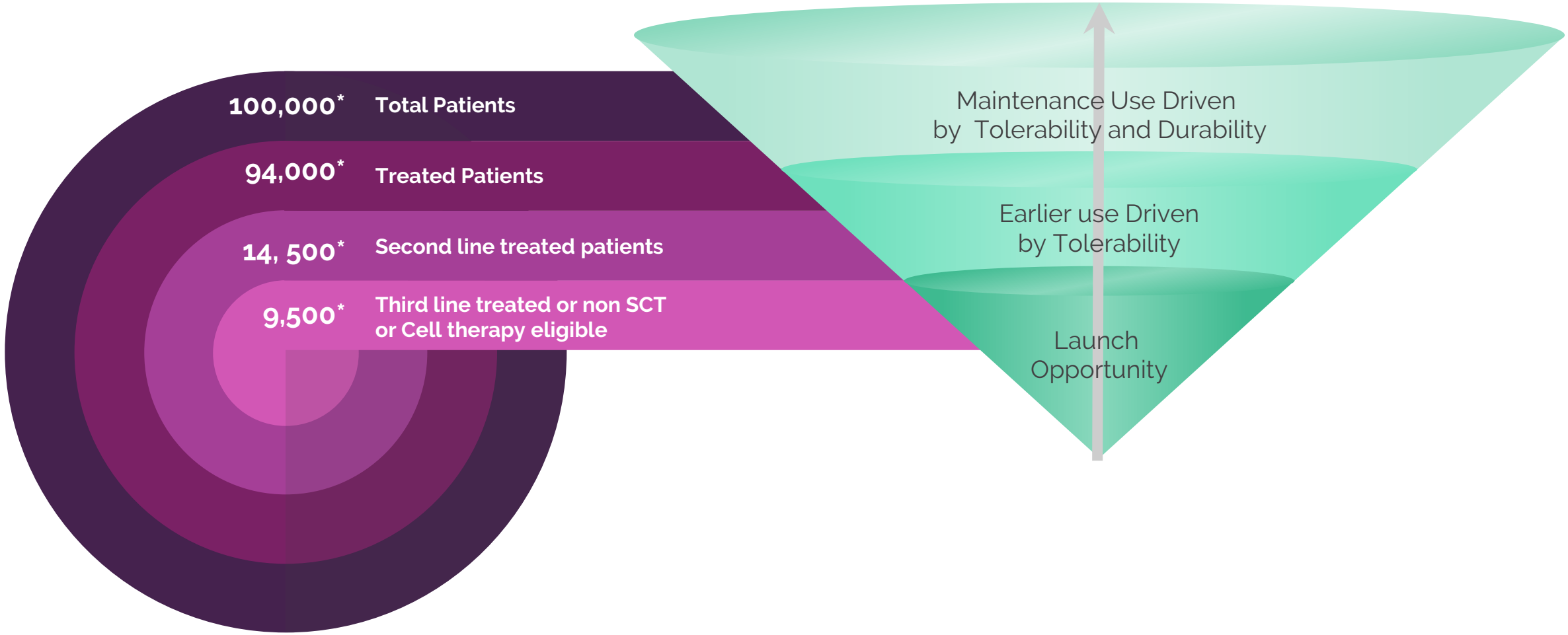
- Dual-targeted immunotherapy
- Formulation of the DPX delivery platform with Immunogenic peptides from survivin and MAGE protein family
- H2 2021: First-in-human study in patients with non-muscle invasive bladder cancer
- Collaboration with the Research Centre of Québec – Laval University

DPX-COVID-19

- Due to the evolution of the regulatory landscape, the emergence of new variants and the approval of vaccines in different areas of the world, the Company is conducting complementary preclinical studies including evaluating the impact of new variants.
- Complementary preclinical studies are ongoing

Maveropepimut-S, Commercial Opportunity

Maveropepimut-S – DLBCL 2024 US Commercial Opportunity



* Data Monitor, 2019 syndicated report

The Value of Maveropepimut-S

Unique MOA may be Synergistic with Other Immunotherapies
- Enhanced Therapeutic Response and Duration
- Mechanistic synergy with most/all Oncology therapeutics

Favorable Safety & Tolerability Profile Supports Broad Use
- Efficacy without consequence
- Earlier Line Treatment
- Maintenance as Well as Advanced, Elderly, Fragile Patients

Sub Cutaneous Administration Enables Flexibility for Patient Dosing
- Room temperature storage
- Extended shelf life
- In clinic/On site administration

Cost Effective Manufacturing & Long and Durable Exclusivity
- Low COGS enables disruptive pricing opportunity
- Research activity enabled by long period of exclusivity

2020 Financial Results

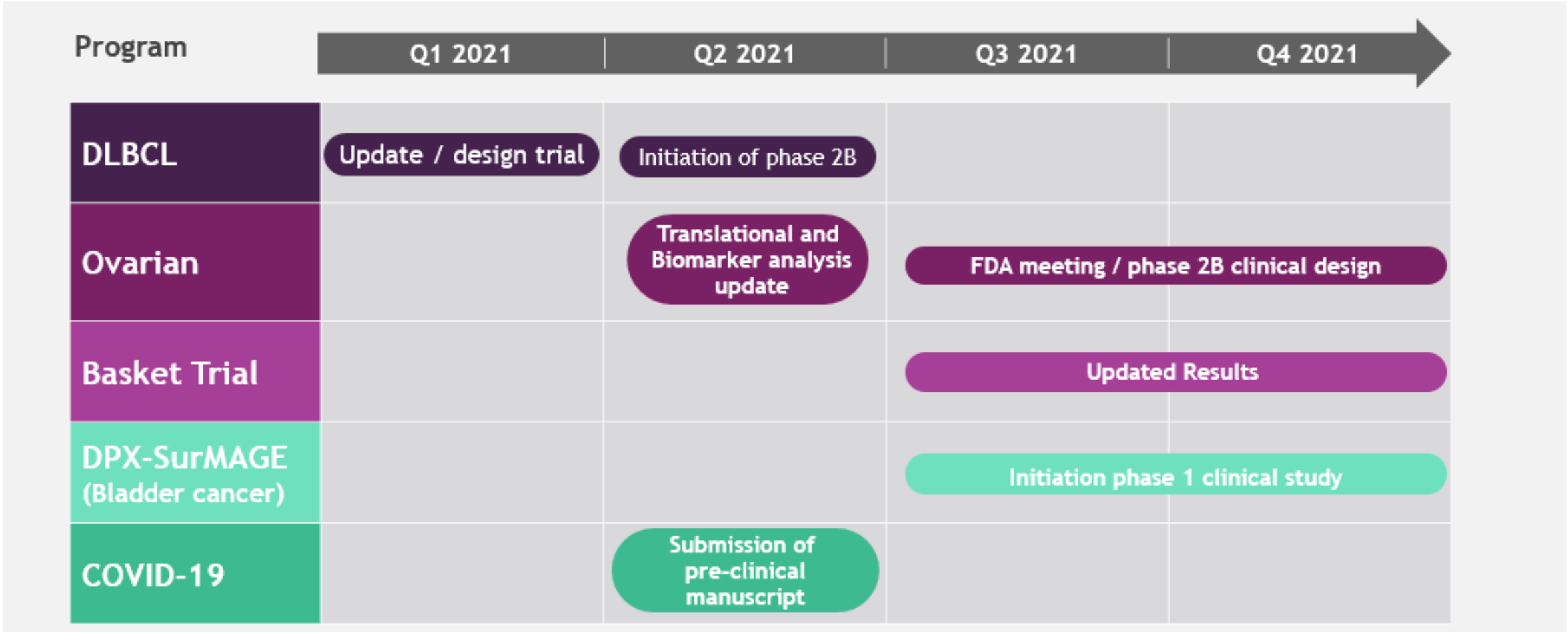
2020 Financial Results

	Years ended December 31,		
	2020	2019	Change ($)
Revenue			
Subcontract revenue	$ 3	$ 59	$ (56)
Interest revenue	298	509	(211)
Total revenue	301	568	(267)
Operating Expenses			
Research and development	26,605	18,986	7,619
General and administrative	15,205	10,140	5,065
Government assistance	(6,690)	(2,432)	(4,258)
Accreted interest	36	1,239	(1,203)
Total operating expenses	35,156	27,933	7,223
Net loss and comprehensive loss	$ (34,855)	$ (27,365)	$ (7,490)

2020 Financial Results

	As of December 31,	
	2020	2019
Statement of financial position data:	**(in thousands of Canadian dollars)**	
Cash and cash equivalents	$ 46,362	$ 14,066
Working capital (1)	45,488	13,199
Total assets	58,800	22,434
Total liabilities	19,425	15,986
Accumulated deficit	(154,974)	(120,119)
Total shareholder's equity	39,375	6,448

Upcoming Milestones



Questions & Answers