Second Quarter 2021 Financial and Operational Results

August 11, 2021

Forward-looking Statement Disclaimer

This presentation and accompanying webinar contain forward-looking information under applicable securities law. All information that addresses activities or developments that we expect to occur in the future is forward-looking information. Forward-looking statements are based on the estimates and opinions of management on the date the statements are made. In the presentation, such forward-looking statements include, but are not limited to, statements regarding the FDA potentially granting accelerated regulatory approval of maveropepimut-S and the timing of expected results from other maveropepimut-S' studies with other tumor types. However, they should not be regarded as a representation that any of the plans will be achieved. Actual results may differ materially from those set forth in this presentation due to risks affecting the Corporation, including access to capital, the successful design and completion of clinical trials and the receipt and timely receipt of all regulatory approvals.

IMV Inc. assumes no responsibility to update forward-looking statements in this presentation except as required by law. These forward-looking statements involve known and unknown risks and uncertainties and those risks and uncertainties include, but are not limited to, our ability to access capital, the successful and timely completion of clinical trials and studies, the receipt of all regulatory approvals and other risks detailed from time to time in our ongoing quarterly filings and annual information form Investors are cautioned not to rely on these forward-looking statements and are encouraged to read IMV's continuous disclosure documents, including its current annual information form, as well as its audited annual consolidated financial statements which are available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov/edgar.

Agenda

Andrew Hall, MSc
Interim CEO

Celgene
MERCK

Pierre Labbé, CPA
Chief Financial Officer

medicago
LeddarTech

Jeremy Graff, Ph.D
Chief Scientific Officer

BIOTHERA pharmaceuticals
Lilly

Introduction and Corporate Highlights
Andrew Hall, Interim CEO

Clinical and Translational Update
Jeremy Graff, CSO

Q2 2021 Results
Pierre Labbe, CFO

Questions & Answers

Q2 2021 Highlights / Corporate

Andrew Hall appointed as interim CEO. The Board has initiated a process to identify a permanent replacement to outgoing Fred Ors.

Jeremy R. Graff Ph.D. is appointed as Chief Scientific Officer (CSO).

Two industry veterans, Stanley Frankel M.D. and Jose Iglesias, M.D. appointed to support IMV's clinical development programs.

IMV establishes a corporate office in Cambridge Massachusetts, a global hub of biotech research with an important geographical concentration of highly skilled researchers, specialized facilities, and world-renowned universities.

Q2 2021 Highlights / Clinical and Translational

In August, IMV announced final topline results of the DeCidE1 clinical trial in advanced recurrent ovarian cancer.

IMV unveils that translational analyses gathered thus far in the DeCide1 trial provide clear evidence that maveropepimut-S successfully elicits the generation of tumor antigen-specific T cells.

IMV recently initiated a Phase 2B clinical trial in r/r DLBCL evaluating maveropepimut-S (maveropepimut-S) in combination with Merck's Keytruda®.

Q2 2021 Highlights: Financial

IMV recently completed an equity financing for gross proceeds of $US 25M (estimated net $US 23M) resulting in pro-forma Cash and cash equivalents* of $US 45.8M

Monthly principal repayments on the $CAD 5M loan from the government of Nova Scotia have been renegotiated and deferred until July 1, 2023.

** Pro-forma including the public offering closed on July 20, 2021, for estimated net proceeds of $US 23M (Gross $US 25M)*

Clinical & Translational Update

Appointment of Dr. Jeremy Graff as Chief Scientific Officer

- Recently, Dr. Graff served as Chief Development Officer and Senior Vice President, Research at HiberCell, a biotechnology company developing novel therapeutics for cancer relapse and metastasis. He led the scientific and clinical development teams for HiberCell.
- Prior to that he was employed at Biothera Pharmaceuticals serving as President since 2018 and Chief Scientific Officer since 2014. In these executive roles, he implemented strategic translational studies along with clinical programs in immuno-oncology. He also managed corporate strategy for investor engagement and oversaw the acquisition of Biothera's lead asset Imprime PGG by HiberCell, Inc in 2020.
- Dr. Graff spent 16 years at Eli Lilly and Lilly Research Labs where he developed extensive experience in cancer drug discovery and development, immuno-oncology, biomarker discovery and patient stratification. During his last position at Eli Lilly as Group Leader, Cancer Biology and Patient Tailoring, he established a Translational Oncology Unit to improve the technical success of clinical trials.
- At Lilly Research Labs, he was the recipient of President's Recognition Award, the Company's highest annual award. Dr. Graff received a Ph.D. from the University of Kentucky's Markey Cancer Center and completed a post-doctoral fellowship at the John Hopkins University Oncology Center. He has authored 60 peer-reviewed publications and holds a number of patents for novel cancer therapies.

The DPX™ Delivery Platform Offers Multiple Possibilities

Our unique delivery platform can be used to create:

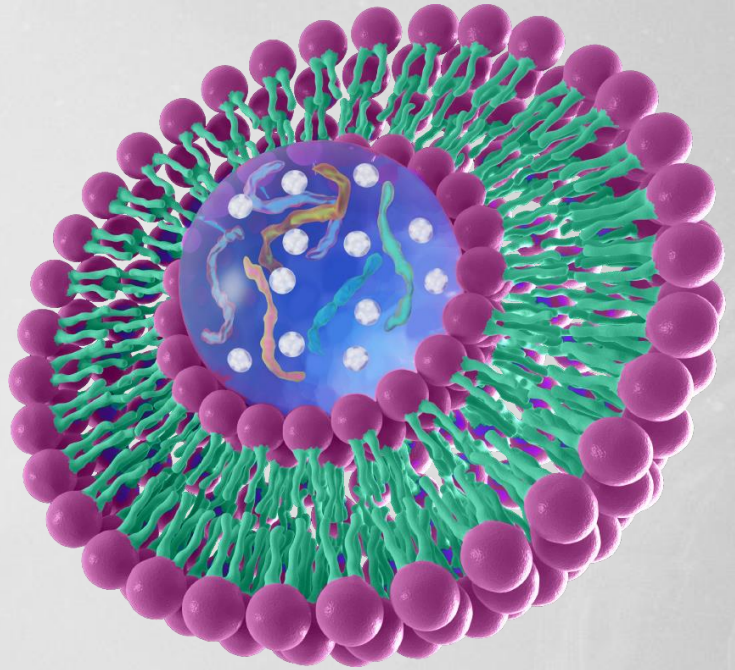
A novel class of targeted **T cell activating immunotherapies**

- ✓ Clinically demonstrated in 5 cancer indications
- ✓ Demonstrated a highly favorable safety profile in more than 350 patients

DPX-based **vaccines** (RSV)

- ✓ Clinically demonstrated, the protection induced by DPX-RSV was demonstrated after more than one year after vaccination

Potential to **deliver** small-molecules, mRNA, antibodies, VLPs



The DPX platform is the engine for the development of all IMV's products

DPX™ Has Potential Important Commercial Advantages

Lipid Nanoparticle Technology

- Fully synthetic and easy to manufacture
- Can accommodate hydrophilic and hydrophobic compounds
- Lyophilized and reconstituted in lipids in convenient low mL doses
- Subcutaneous injection for simple in office administration
- Long term stability (3 years)
- Low cost of goods scalable manufacturing

Advanced Recurrent Ovarian Cancer – DeCidE Trial

IMV announces final top line results

- Heavily pre-treated population. 57.9% (11/19) were platinum resistant
- Final patient completed the study after more than 2 years of clinical benefit with maveropepimut-S
- Median Overall Survival was 19.9 months
- Overall survival rate was 44.9% at 23.8 months
- Translational analyses confirm generation of tumor-antigen directed T cells by maveropepimut-S

Phase 2B Study in Relapsed/Refractory DLBCL (r/r DLBCL)

- Combination of maveropepimut-S/CPA with KEYTRUDA® (pembrolizumab), Merck's anti-PD-1 therapy.
- Agreement reached in April with Merck (NYSE: MRK) to initiate this Phase 2B clinical trial.
- Trial initiated in June 2021; first sites have since been activated.
- PD-L1 expression has been identified as a potential predictive biomarker and will be assessed for all enrolled patients.

Q2 2021 Financial Results

Q2 2021 Financial Results

(in Thousands of US Dollars) *(except per share $)*

	Q2 2021	Q2 2020	Change ($)
Interest income	42	40	2
Expenses			
Research and development	5,219	3,798	1,421
General and administrative	3,416	2,200	1,216
Government assistance	(1,169)	(1,015)	(154)
Accreted interest and valuation adjustments	15	305	(290)
Total expenses	7,481	5,288	2,193
Net loss	(7,439)	(5,248)	(2,191)
Currency translation adjustments	-	471	(471)
Total comprehensive loss	(7,439)	(4,777)	(2,662)
Net loss and comprehensive loss	(0.11)	(0.08)	(0.03)

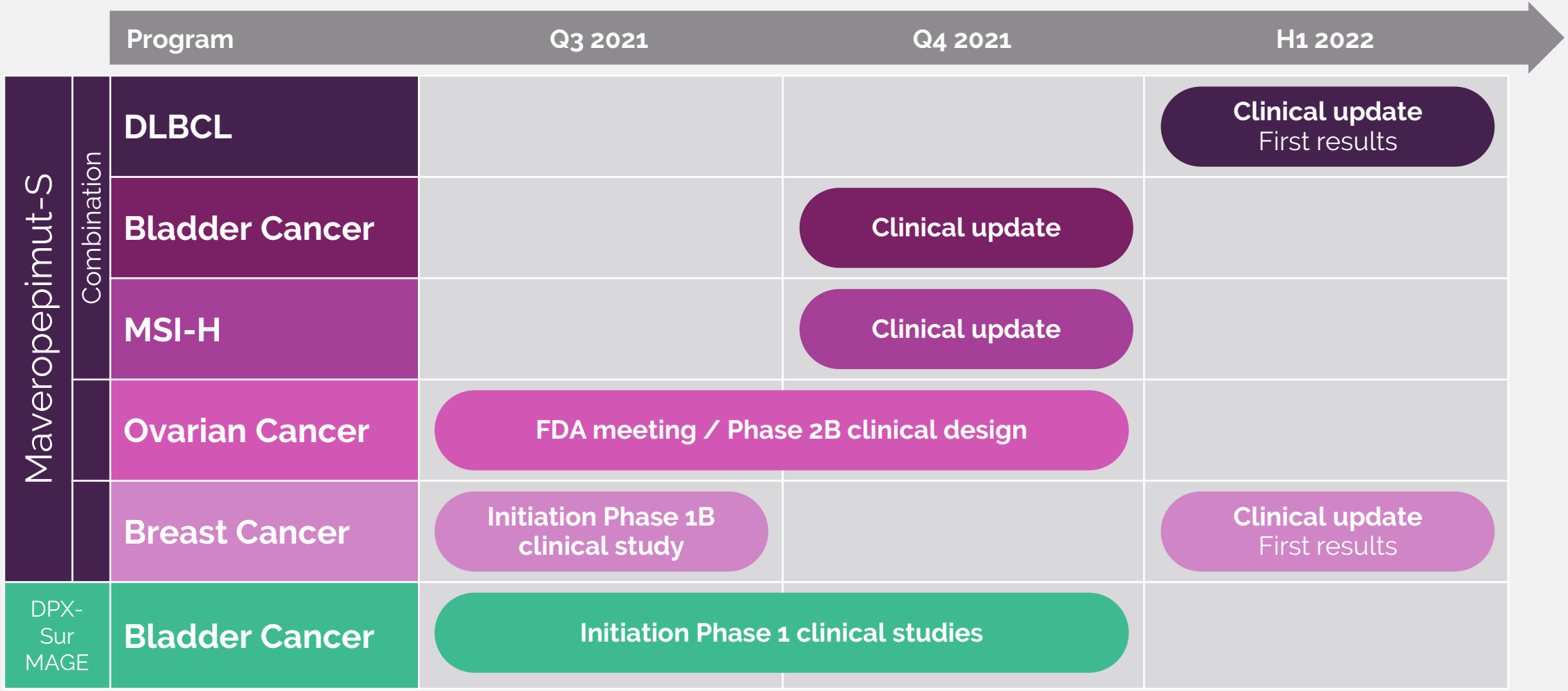
Q2 2021 Financial Results

(in thousands of US dollars)

	June 30, 2021	Dec. 31, 2020
Statements of financial position data:		
Cash and cash equivalents	22,826	36,268
Pro-forma Cash and cash equivalents*	**45,826**	**-**
Working capital	24,608	35,584
Pro-forma Working Capital*	**47,608**	**-**
Total assets	33,172	45,998
Total liabilities	13,489	15,196
Total shareholder's equity	19,683	30,802

** Pro-forma including the public offering closed on July 20, 2021, for estimated net proceeds of $US 23M (Gross $US 25M)*

IMV's Upcoming Oncology Milestones



Questions & Answers