



BTIG Biotechnology Conference 2020

August 10-11

First-in-class drug delivery platform DPX™



Step 1:

IMV's novel platform – DPX – has advanced a new class of immunotherapies that can be leveraged in multiple diseases and markets. In a proprietary process, IMV encapsulates active ingredients within its patented delivery technology.

Step 2:

DPX can accommodate a wide range of active ingredients and co-deliver them to immune cells in-vivo to generate new synthetic therapeutic capabilities.

Step 3:

The formulation is freeze-dried, removing all traces of water, providing stable drug candidates. Active ingredients are completely solubilized in the oil formulation using a simple reconstitution procedure.

Step 4:

The end result: immunotherapies with a mechanism of action that directly accesses and programs immune cells, providing potential immune responses with a magnitude and duration that surpass other in vivo targeted cellular approaches.

Novel Delivery Platform with “NO-RELEASE” mechanism of action (DPX™)

No-release of at site of injection forcing active uptake of pharmaceutical ingredients by immune cells over greatly extended period of times (months)

Lipid nanoparticle technology

- Fully synthetic & easy to manufacture
- Lyophilized & reconstituted in lipids for injection
- Simple administration & extended shelf life

Clinical Pipeline

	Product (target)	Indication	Preclinical	Phase 1	Phase 2	Phase 3	Sponsor	Collaborators
Immunotherapies		Ovarian					IMV™	
	DPX-Survivac/CPA (Survivin)	DLBCL					Sunnybrook RESEARCH INSTITUTE	MERCK
		Basket Trial: Lung (NSCLC), Bladder, Liver, Ovarian, MSI-H					IMV™	MERCK
	DPX-SurMAGE /CPA (Survivin + MAGE A9)	Bladder					IMV™	CHU de Québec Université Laval
	DPX-BRAF/CPA (BRAF)	Melanoma					IMV™	THE WISTAR INSTITUTE
Vaccines	DPX-RSV (SheA)	Respiratory Syncytial Virus (RSV)					IMV™	CIRN
	DPX-COVID-19 (Spike)	COVID-19					IMV™	CIRN

Top line update in 2020

Updated results to be presented in 2020

Clinical phase 1 to be initiated during summer 2020

/CPA: oral intermittent low-dose cyclophosphamide (CPA) as an **immune modulator**

imv™

Nasdaq & TSX: IMV

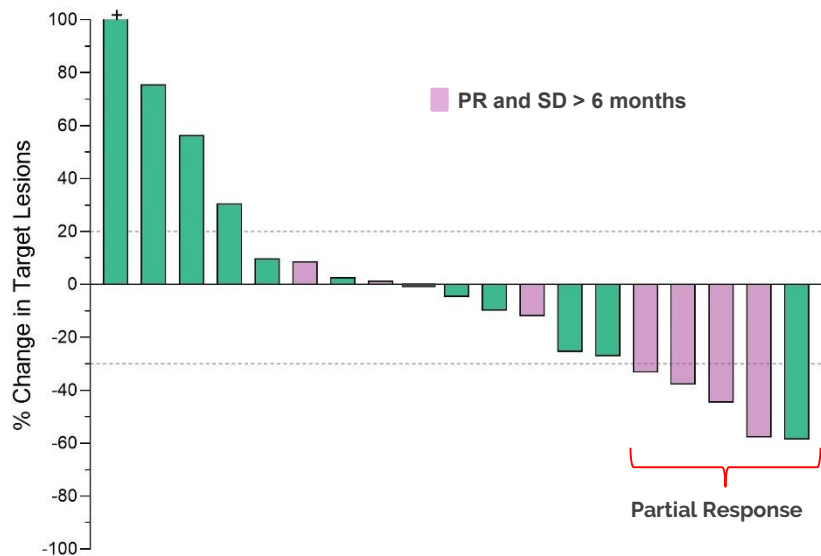


Phase 2 - Ovarian Cancer – Monotherapy*

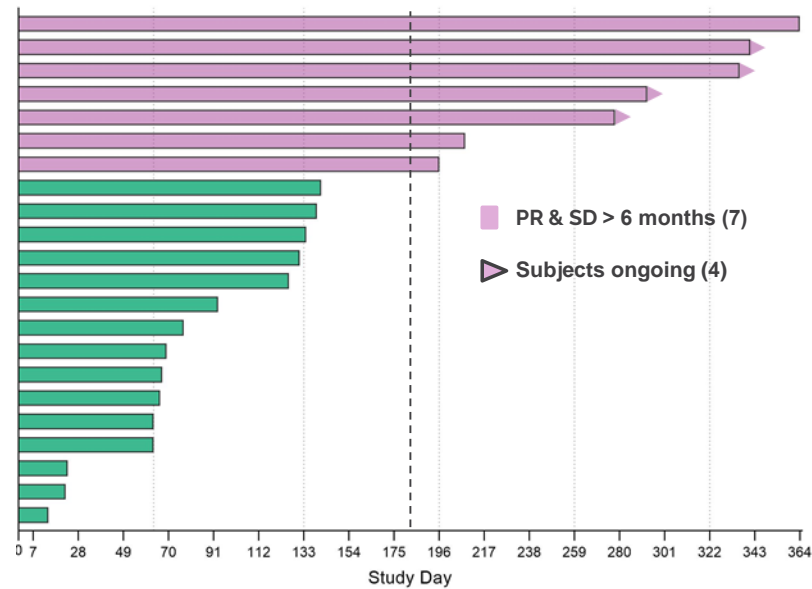
Confirmation of Clinical Activity (Treatment Arm 2, n=19)

- 26%** ORR - PR on target lesions (5/19) (*tumor regression > 30%*)
- 37%** Clinical benefits – PR or Stable Disease > 6 months (7/19)
- 79%** Disease Control Rate (15/19)
- 53%** Tumor regressions (10/19)

Best Response by Target Lesion (n=19)



Duration on Treatment (n=19)



- ✓ 21% (4/19) patients still on study
- ✓ No patient with clinical benefits was discontinued for progression on target lesions
- ✓ 3 stable diseases (SDs) with significant tumor regressions: -27%, -25%, -10% removed from study for other reasons than progression on target lesions

* DPX-Survivac with intermittent low-dose cyclophosphamide

Leveraging Our DPX Platform Against COVID-19

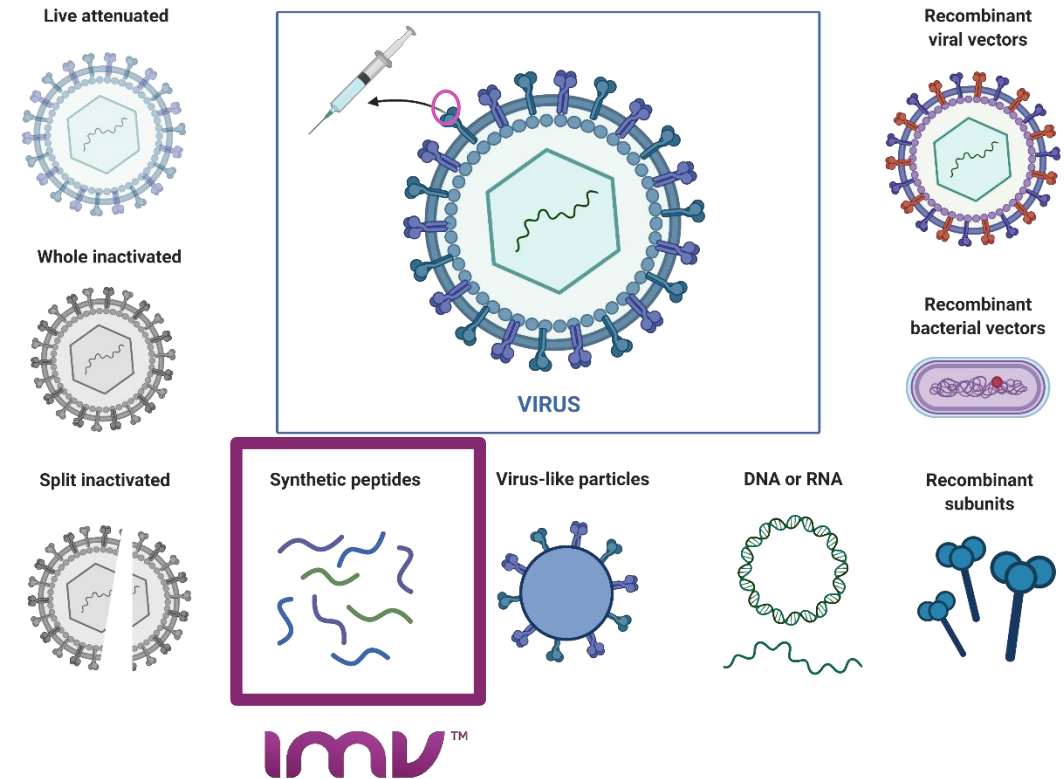
IMV's vaccine technology is unique and highly differentiated

- Precision immunology: synthetic peptides to generate targeted immune responses
- Direct and increase the potency of the immune response against epitopes with capacity to neutralize viral infections
- Eliminate non-functional component of the immune response (non-neutralizing epitopes)
- Potential for improved safety and efficacy and best-in-class in most at-risk populations (elderly, immuno-compromised and subjects with comorbidities)

Clinically proven and de-risked: clinical demonstration with another respiratory virus (RSV) provides blueprint for COVID-19

DPX vaccines are fully synthetic and lyophilized products

- Speed to cGMP production and clinic
- Easily scaled commercial production with billion doses capacity
- Stable product with long shelf-life facilitating stockpiling and distribution



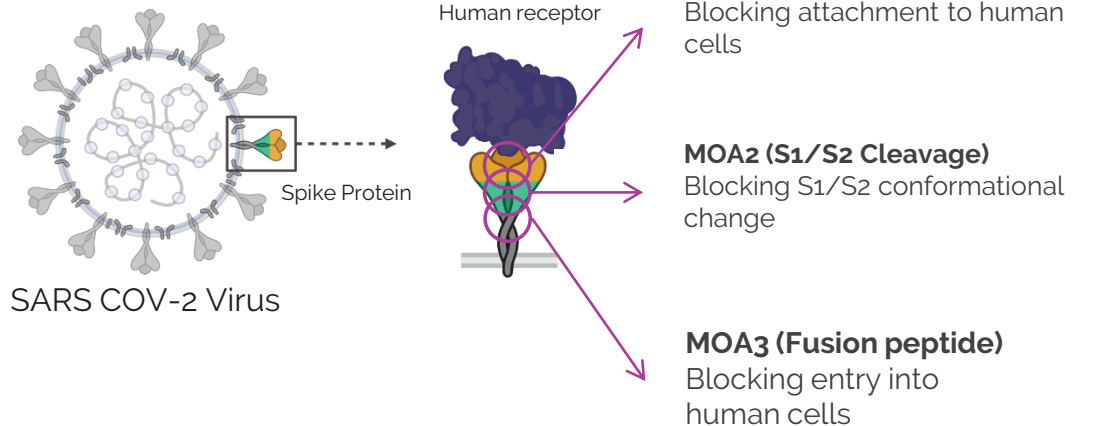
Different approaches to develop a vaccine against COVID-19

DPX-COVID-19 Vaccine Design

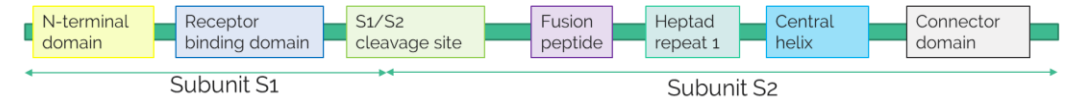
Mechanism of Action (MOA)

Coronavirus-neutralizing antibodies primarily target the trimeric spike (S) on the coronavirus surface that mediate entry into host cells. S1 subunit, mediates attachment to the host cell and the S2 domain mediates fusion and entry

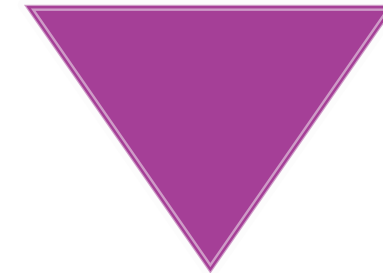
MOA based on a combination of neutralizing epitope targeting non-overlapping functional areas acting synergistically to increase protective efficacy and avoid risk of immune escape



Epitope Mapping



Hundreds peptide epitopes identified



23 targets selected for animal studies