



**Immunic**  
THERAPEUTICS

# Immunic Therapeutics

IMU-838 – Impact on COVID-19

NASDAQ: IMUX | March 9, 2021 | 2nd Annual European HealthTech CEO Forum  
Advanced Therapeutics Panel

# Cautionary Note Regarding Forward-Looking Statements

→ This presentation contains “forward-looking statements” that involve substantial risks and uncertainties for purposes of the safe harbor within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These include statements regarding management’s intentions, plans, beliefs, expectations or forecasts for the future, and, therefore, you are cautioned not to place undue reliance on them. No forward-looking statement can be guaranteed, and actual results may differ materially from those projected. Immunic undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise, except to the extent required by law. We use words such as “anticipates,” “believes,” “plans,” “expects,” “projects,” “future,” “intends,” “may,” “will,” “should,” “could,” “estimates,” “predicts,” “potential,” “continue,” “guidance,” and similar expressions to identify these forward-looking statements that are intended to be covered by the safe-harbor provisions of the Private Securities Litigation Reform Act of 1995.

→ Such forward-looking statements are based on our expectations and involve risks and uncertainties; consequently, actual results may differ materially from those expressed or implied in the statements due to a number of factors, including, but not limited to, risks relating to strategy, future operations, future financial position, future revenue, projected expenses, prospects, plans and objectives of management. Risks and uncertainties that may cause actual results to differ materially from those expressed or implied in any forward-looking statement include, but are not limited to: Immunic’s plans to develop and commercialize its product candidates, including IMU-838, IMU-935 and IMU-856; the timing of initiation of Immunic’s planned clinical trials; the potential for IMU-838 to safely and effectively target and treat relapsing-remitting multiple sclerosis or infections associated with coronavirus disease 2019 (COVID-19); the impact of future preclinical and clinical data on IMU-838 and the Company’s other product candidates; the availability or efficacy of Immunic’s potential treatment options for patients with relapsing-remitting multiple sclerosis or other conditions, if any, that may be supported by the Company’s phase 2 EMPHASIS trial data discussed herein; expectations regarding potential market size; the timing of the availability of data from Immunic’s clinical trials; the timing of any planned investigational new drug application or new drug application; Immunic’s plans to research, develop and commercialize its current and future product candidates; Immunic’s ability to successfully collaborate with existing collaborators or enter into new collaboration agreements, and to fulfill its obligations under any such collaboration agreements; the clinical utility, potential benefits and market acceptance of Immunic’s product candidates; Immunic’s commercialization, marketing and manufacturing capabilities and strategy; Immunic’s ability to identify additional products or product candidates with significant commercial potential; developments and projections relating to Immunic’s competitors and industry; the impact of government laws and regulations; Immunic’s ability to protect its intellectual property position; Immunic’s listing on The Nasdaq Global Select Market; expectations regarding the capitalization, resources and ownership structure of the company; the executive and board structure of the company; Immunic’s estimates regarding future revenue, expenses, capital requirements and need for additional financing; the nature, strategy and focus of the company; and the other risks set forth in the company’s Annual Report on Form 10-K for the year ended December 31, 2019 and Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, filed with the Securities and Exchange Commission (“SEC”).

→ Forward-looking statements included in this presentation are based on information available to Immunic as of the date of this presentation. Immunic does not undertake any obligation to update such forward- looking statements except as required by applicable law.

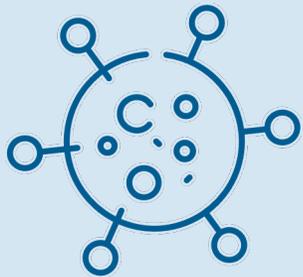
# Development Pipeline

Program	Indication	Target	Preclinical	Phase 1	Phase 2	Phase 3
<b>IMU-838</b>	Multiple Sclerosis	DHODH	Completed or ongoing	Completed or ongoing	Completed or ongoing	In preparation or planned
	Ulcerative Colitis	DHODH	Completed or ongoing	Completed or ongoing	Completed or ongoing	
	Crohn's Disease	DHODH	Completed or ongoing	Completed or ongoing		
	Primary Sclerosing Cholangitis	DHODH	Completed or ongoing	Completed or ongoing	Completed or ongoing	Investigator-Sponsored Trial performed at Mayo Clinic / NIH
	COVID-19*	DHODH	Completed or ongoing	Completed or ongoing	Completed or ongoing	In preparation or planned
<b>IMU-935</b>	Psoriasis	ROR $\gamma$ t	Completed or ongoing	Completed or ongoing		
	Guillain-Barré Syndrome	ROR $\gamma$ t	Completed or ongoing	In preparation or planned		
<b>IMU-856</b>	Gastrointestinal Diseases	Intestinal Barrier Function	Completed or ongoing	Completed or ongoing		

■ Completed or ongoing    ■ In preparation or planned

\* Additional investigator-sponsored phase 2 clinical trial of IMU-838 in combination with oseltamivir in patients with moderate-to-severe COVID-19 ongoing in collaboration with the University Hospitals Coventry and Warwickshire NHS Trust, UK

# IMU-838 Antiviral Activity Against SARS-CoV-2 and Other Viruses

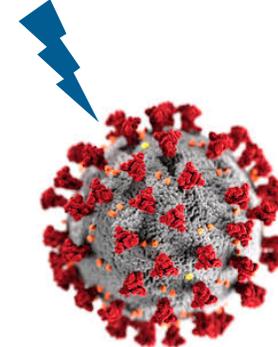


IMU-838 is active against SARS-CoV-2



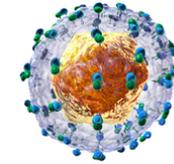
IMU-838 has shown broad-spectrum antiviral activity against different pathogenic viruses with  $EC_{50}$  values in single digit  $\mu M$  range

IMU-838

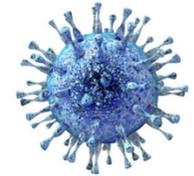


SARS-CoV-2

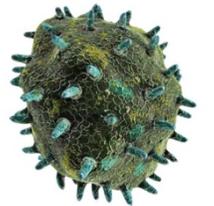
HCV  
( $EC_{50}$  4.6  $\mu M$ )



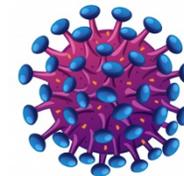
hCMV  
( $EC_{50}$  7.4  $\mu M$ )



Arenavirus  
( $EC_{50}$  2.9  $\mu M$ )

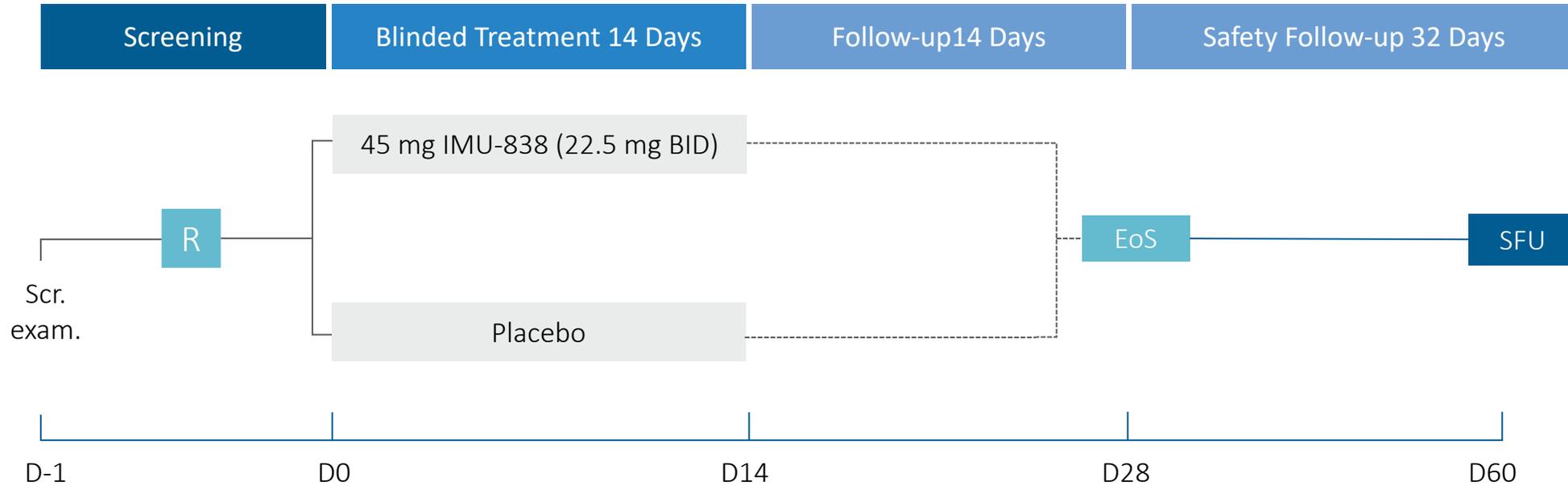


HIV  
( $EC_{50}$  2.1  $\mu M$ )



# CALVID-1: Study Flow Chart

## NCT04379271



Investigator's Choice of Standard-of-Care Therapy

BID: bis in die = two times daily; D: day; EoS: end of study; Scr.: screening; exam.: examination; SFU: safety follow-up  
Stratification for randomization done for age category ( $\geq 65$  years,  $< 65$  years) and antiviral treatment as part of standard-of-care at time of randomization



- n=204 patients
- 20 clinical sites in the United States and Europe



- USD 29 million EIB venture loan accessible for further phase 2/3 development

# Proportion of Patients with Clinical Recovery

*IMU-838 Increases the Number of Patients Achieving Clinical Recovery*

Proportion of Patients With Clinical Recovery (Based on Symptoms Body Temperature, Respiratory Frequency and Blood Oxygenation)	IMU-838		Placebo	
	N	%	N	%
Day 7	15	18.5	10	12.8
Day 28	57	71.3	58	66.7

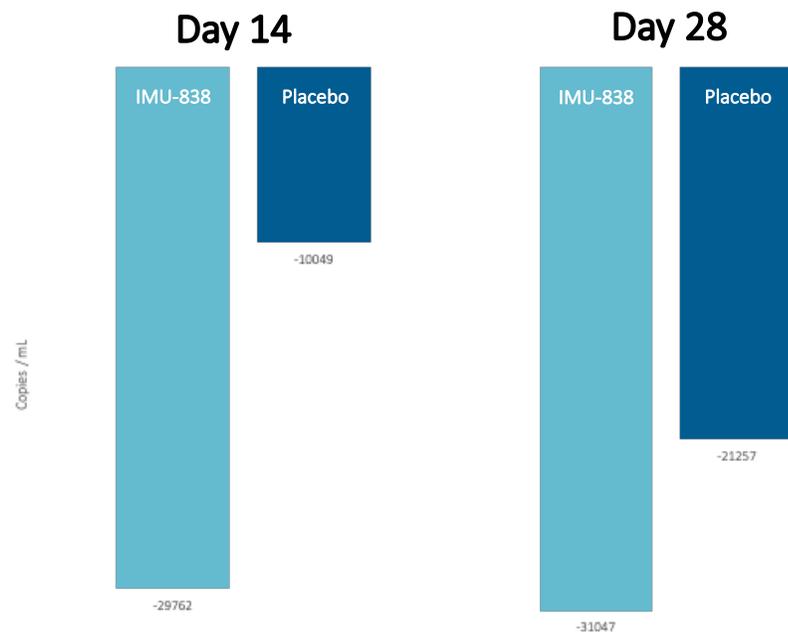
Full analysis set (FAS, n=99 for IMU-838, n=103 for Placebo)

Clinical recovery is defined as as axillary temperature  $\leq 36.6$  °C, or oral temperature  $\leq 37.2$  °C, or rectal or tympanic temperature  $\leq 37.8$  °C, and respiratory frequency  $\leq 24$  times/min without oxygen inhalation and oxygen saturation  $\geq 98\%$ . Clinical recovery is only assumed if it is confirmed in the evening and at the next visit (if applicable).

# IMU-838 Showed Activity Against COVID-19 on Several Readouts



## Decrease of SARS-CoV-2 Viral Load<sup>[1]</sup>



## Time to Clinical Improvement<sup>[2]</sup>

- Regarding 75% probability of clinical improvement, **IMU-838 patients showed a 2.9 days advantage** versus placebo
- For high-risk patients<sup>[3]</sup>, this advantage increased to 3.8 days
- For elderly patients (**≥ 65 years**), this **advantage increased to 4.8 days**

[1] Modified full analysis set (N = 90 for IMU-838, N = 91 Placebo). The viral load is set 0 cp/mL if the test result is 'No SARS-CoV2 detected' and set to 1018 cp/mL if the test result is '< 1018 cp/mL SARS-CoV2 detected'. Only patients with viral load measured from nasopharyngeal swab and results provided by the central laboratory are included. Analysis is based on the median of viral titers (as assessed by the central virology laboratory) on each individual day.

[2] Modified full analysis set (mFAS), all patients (n=61 for IMU-838, n=69 for Placebo), high-risk patients (n=41 for IMU-838, n=41 for Placebo), elderly patients (n=17 for IMU-838, n=17 for Placebo), N.C.= not calculated because of too few patients in this category

[3] High-risk factors are age ≥65 years, cardiovascular disease (including hypertension), pre-existing pulmonary disease, diabetes, malignancy, medical conditions leading to immunodeficiency, current or recent (within three months) immunosuppressive treatment.

Clinical improvement is defined as an improvement of at least two points on the derived WHO nine-category ordinal scale, or live discharge from hospital without oxygen supplementation, whichever comes first. The WHO nine-category ordinal scale is derived using SARS-CoV-2 test results provided by the central laboratory (only nasopharyngeal swabs). The evaluations of high-risk and elderly populations are a post hoc analysis and were not pre-specified in the statistical analysis plan.

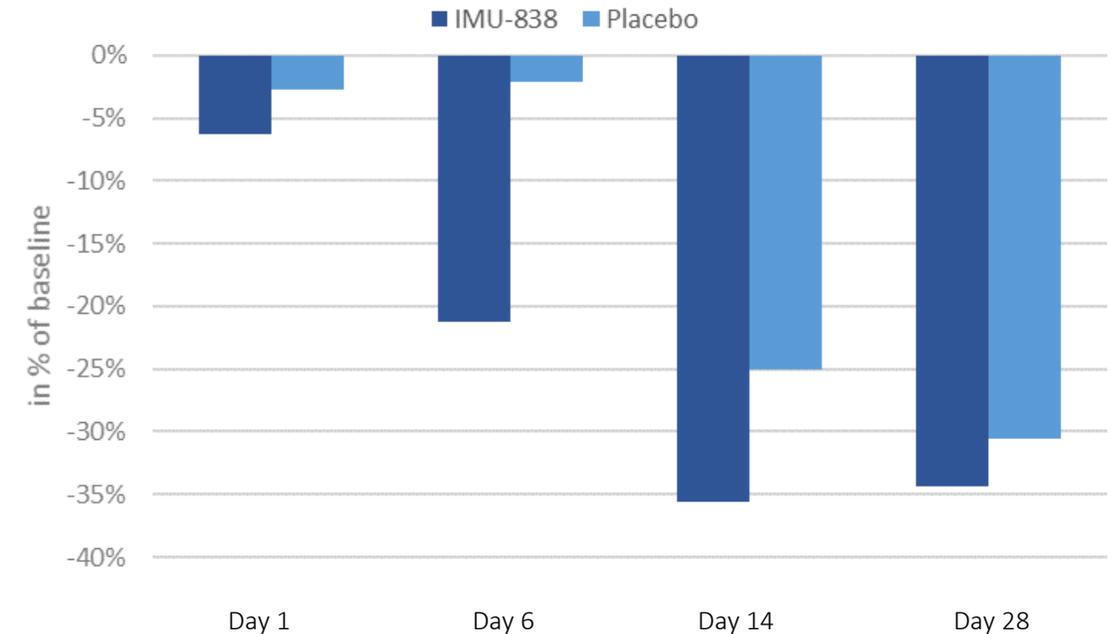
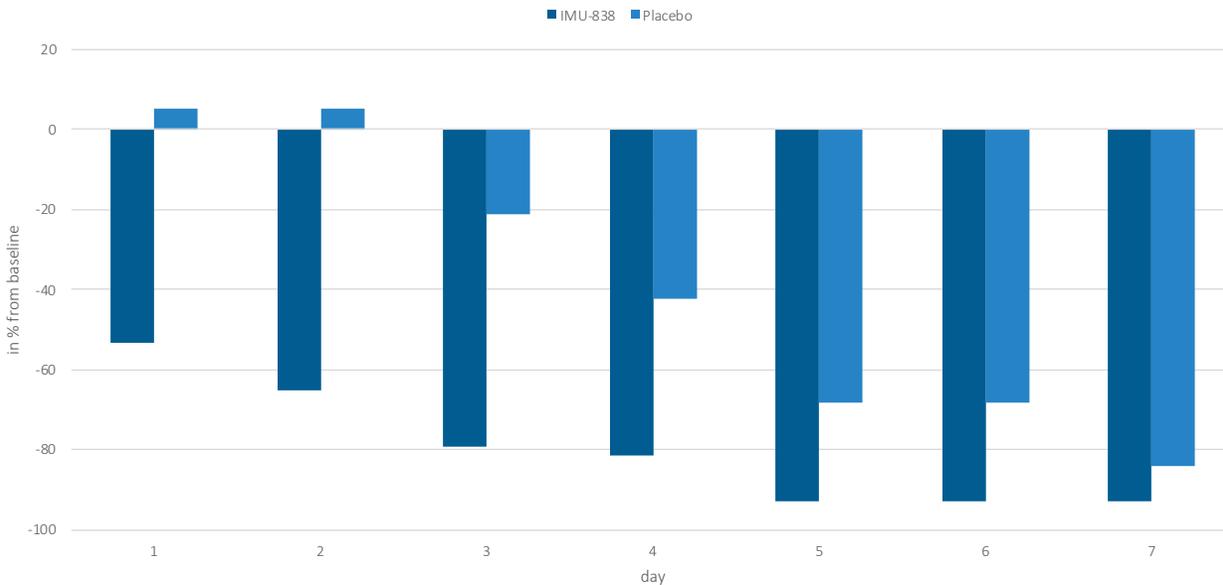
# IMU-838 Shown Activity against COVID-19 on Several Readouts



## Clear Signal on C-Reactive Protein (CRP)<sup>[1]</sup>



## D-Dimer Substantially Reduced<sup>[2]</sup>



[1] Systemic inflammation, as measured by CRP, is strongly associated with thrombotic events, kidney injury, critical illness, and mortality in COVID-19 patients. (Smilowitz et al. C-reactive protein and clinical outcomes in patients with COVID-19. Eur Heart J. 2021 Jan 15;ehaa1103). Safety analysis set (n= 99 for IMU-838, n= 103 for Placebo). Analysis is based on the median of CRP on each individual day

[2] D-dimer is commonly elevated in patients with COVID-19. D-dimer levels correlate with disease severity and are a reliable prognostic marker for in-hospital mortality in patients admitted for COVID-19. (Yao et al. D-dimer as a biomarker for disease severity and mortality in COVID-19 patients: a case control study. J Intensive Care Med 8, 49 (2020)). D-dimer levels are also correlated with thromboembolic events in COVID-19 patients (Vidali et al. D-dimer as an indicator of prognosis in SARS-CoV-2 infection: a systematic review, ERJ Open Research Apr 2020, 6 (2) 00260-2020). Safety analysis set (n= 99 for IMU-838, n= 103 for Placebo); Analysis is based on the median of D-dimer on each individual day

# Summary of the Overall Rate of Adverse Events

## *No General Safety Signals, as Compared to Placebo*

	45 mg IMU-838			Placebo			Total		
	Number of AEs (N#)	No. of patients with AE (N)	Patients with AE (%)	Number of AEs (N#)	No. of patients with AE (N)	Patients with AE (%)	Number of AEs (N#)	No. of patients with AE (N)	Patients with AE (%)
Any TEAE	290	73	73.7	242	67	65.0	532	140	69.3
Any SAE	2	2	2.0	5	4	3.9	7	6	3.0
Any TEAE Related to Study Medication and/or Study Procedure	25	18	18.2	12	10	9.7	37	28	13.9
Any TEAE Leading to Withdrawal of Study Drug	3	2	2.0	3	2	1.9	6	4	2.0
<b>Any TEAE of Increased Severity Related to COVID-19</b>	<b>9</b>	<b>7</b>	<b>7.1</b>	<b>17</b>	<b>13</b>	<b>12.6</b>	<b>26</b>	<b>20</b>	<b>9.9</b>

Safety analysis set (n=99 for IMU-838, n=103 for Placebo)

AE: adverse event; TEAE: treatment-emergent adverse event; SAE: serious adverse event

Adverse events as coded by MedDRA version 23.0



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IMU-838 demonstrated efficacy in treating COVID-19 by targeting a host cell-based mechanism for viral replication AND repression of overshooting inflammation