# **Emergent BioSolutions Corporate Update** 39th Annual J.P. Morgan Healthcare Conference Robert G. Kramer President and Chief Executive Officer January 11, 2021 We Go

#### SAFE HARBOR STATEMENT / TRADEMARKS



This presentation includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Any statements, other than statements of historical fact, including, without limitation, our financial guidance and related projections and statements regarding our ability to meet such projections in the anticipated timeframe, if at all; statements regarding our ability to develop safe and effective freatments against the novel strain of coronavirus (SARS-CoV-2) causing COVID-19 disease; the timing of and results of clinical trials; the iming of the submission of our biologics licensing application (BLA) related to AV7909; our confident outlook; being positioned to achieve longer-term revenue and sustained profitability; the potential size and growth of our contract development and manufacturing (CDMO) portfolio, including the value of our CDMO opportunity funnet; being positioned to achieve longer-term revenue and sustained profitability; the durability of our core business; sustaining strong operating and financial momentum and our growth profile; expansion of our sales and business development teams; enhancement of our molecule-to-market offering; driving global awareness, investing to meet market needs; cross-selling to existing clients; increasing manufacturing capacity; partnership opportunities; growth through mergers & acquisitions; total contract and related option value; and any other statements containing the words "will," "believes," "expects," "anticipates," "intends," "plans," "targets," "forecasts," "estimates" and similar expressions in conjunction with, among other things, discussions of the Company's outlook, financial performance or financial condition, financial and operation goals, strategic goals, growth strategy, product sales, government are based on our current intentions, beliefs and expectations regarding future events. We cannot guarantee that any forward-looking statement will be accurate.

Investors should realize that if underlying assumptions prove inaccurate or unknown risks or uncertainties materialize, actual results could differ materially from our expectations, Investors are, therefore, cautioned not to place undue reliance on any forward-looking statement. Any forward-looking statements speak only as of the date of this presentation, and, except as required by law, we do not undertake to update any forward-looking statement to reflect new information, events or circumstances. There are a number of important factors that could cause our actual results to differ materially from those indicated by such forward-looking statements, including the impact of global economic conditions and public health crises and epidemics, such as the impact from the global pandemic that arose from COVID-19 disease, on the markets, our operations, and employees as well as those of our customers and suppliers; our ability to obtain or maintain FDA approval or authorization for emergency or broader patient use of our COVID-19 treatments and their actual safety and effectiveness; availability of U.S. government funding for procurement for our products and certain product candidates and the future exercise of options under contracts related to such procurement; the negotiation of further commitments or contracts related to the collaboration and deployment of capacity toward future commercial manufacturing under our CDMO contracts; our ability to perform under our contracts with the U.S. government and our CDMO clients, including the timing of and specifications relating to deliveries; the continued exercise of discretion by BARDA to procure additional doses of AV7909 (Anthrax Vaccine Adsorbed, Adjuvanted) prior to approval by the FDA; our ability to secure licensure of AV7909 from the FDA within the anticipated timeframe, if at all; our ability to secure follow-on procurement contracts for our solutions to public health threats that are under procurement contracts that have expired or will be expirina; our ability to successfully appeal the patent litigation decision related to NARCAN® (naloxone hydrochloride) Nasal Spray 4mg/spray; our ability and the ability of our collaborators to enforce patents related to NARCAN® Nasal Spray against potential generic entrants; our ability to identify and acquire companies, businesses, products or product candidates that satisfy our selection criteria; our ability and the ability of our contractors and suppliers to maintain compliance with Current Good Manufacturina Practices and other regulatory obligations; our ability to comply with the operating and financial covenants required by our senior secured credit facilities and the indenture governing our senior unsecured notes due 2028; our ability to obtain and maintain regulatory approvals for our other product candidates and the timing of any such approvals; the procurement by government entities outside of the United States under regulatory exemptions prior to approval by the corresponding regulatory authorities in the applicable country; the success of our commercialization, marketing and manufacturing capabilities and strategy; and the accuracy of our estimates regarding future revenues, expenses, and capital requirements and needs for additional financing. The foregoing sets forth many, but not all, of the factors that could cause actual results to differ from our expectations in any forward-looking statement. Investors should consider this cautionary statement as well as the risk factors identified in periodic reports filed with the Securities and Exchange Commission when evaluating our forward-looking statements.

#### **Trademarks**

BioThrax® (Anthrax Vaccine Adsorbed), RSDL® (Reactive Skin Decontamination Lotion Kit), BAT® (Botulism Antitoxin Heptavalent (A,B,C,D,E,F and G)-(Equine)), Anthrasil® (Anthrax Immune Globulin Intravenous (Human)), Trobigard® (atropine sulfate, obidoxime chloride), ACAM2000® (Smallpox (Vaccinia) Vaccine, Live), Vivotif® (Typhoid Vaccine Live Oral Ty21a), Vaxchora® (Cholera Vaccine, Live, Oral), NARCAN® (naloxone HCI) Nasal Spray and any and all Emergent BioSolutions Inc. brands, products, services and feature names, logos and slogans are trademarks or registered trademarks of Emergent BioSolutions Inc. or its subsidicries in the United States or other countries. All other brands, products, services and feature names or trademarks are the property of their respective owners.

#### NON-GAAP FINANCIAL MEASURES



This presentation contains two financial measures (Adjusted EBITDA (Earnings Before Depreciation and Amortization, Interest and Taxes) and Adjusted EBITDA Margin) that are considered "non-GAAP" financial measures under applicable Securities and Exchange Commission rules and regulations. These non-GAAP financial measures should be considered supplemental to and not a substitute for financial information prepared in accordance with generally accepted accounting principles. The Company's definition of these non-GAAP measures may differ from similarly titled measures used by others. Adjusted EBITDA reflects net income excluding the impact of depreciation, amortization, interest expense and income tax provision (benefit), excluding specified items that can be highly variable and the non-cash impact of certain accounting adjustments. Adjusted EBITDA margin is defined as Adjusted EBITDA divided by total revenues. The Company views these non-GAAP financial measures as a means to facilitate management's financial and operational decision-making, including evaluation of the Company's historical operating results and comparison to competitors' operating results. These non-GAAP financial measures reflect an additional way of viewing aspects of the Company's operations that, when viewed with GAAP results and the reconciliations to the corresponding GAAP financial measure may provide a more complete understanding of factors and trends affecting the Company's business.

The determination of the amounts that are excluded from these non-GAAP financial measures are a matter of management judgment and depend upon, among other factors, the nature of the underlying expense or income amounts. Because non-GAAP financial measures exclude the effect of items that will increase or decrease the Company's reported results of operations, management strongly encourages investors to review the Company's consolidated financial statements and publicly filed reports in their entirety.



# A life sciences company with a diversified portfolio of **products + pipeline** plus **CDMO services** focused on addressing public health threats.

- Proven 22-year track record in preparedness and response
- Leadership positions in key public health threat markets
- Trusted partner to governments, NGOs and pharma/biotech innovators
- Organized as four distinct business units with shared services
- Scalable and sustainable business model

#### Our four business units



## PRODUCTS + PIPELINE







VACCINES

**THERAPEUTICS** 

**DEVICES** 

- Multiple products against significant public health threats
- Robust pipeline using multiple proprietary technology modalities
- Excellence in manufacturing of complex biologics
- Trusted partner in rapid and on-going response to public health emergencies and crises

# **SERVICES**



# CONTRACT DEVELOPMENT AND MANUFACTURING

- Development Services
- Drug Substance
- Drug Product/Packaging

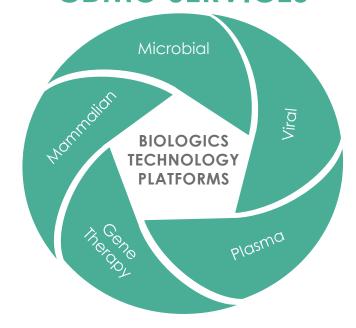


## PRODUCTS + PIPELINE



>\$30B<sup>1,2</sup> Market Opportunity

# **CDMO SERVICES**



>\$20B<sup>1,3</sup> Market Opportunity

<sup>1.</sup> Company and third-party sources.

<sup>2.</sup> Expected forward growth rate: Single digit CAGR.

<sup>3.</sup> Expected forward growth rate: Double digit CAGR.

### The public health threat market landscape



**CHEMICAL:** Nerve agents, cyanide, chlorine, toxic industrial chemicals

**BIOLOGICAL:** Anthrax, smallpox, botulism, Ebola, other category A threats

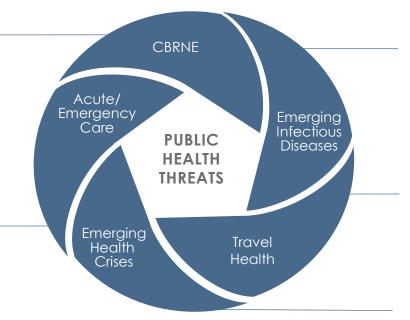
RADIOLOGICAL/NUCLEAR: Nuclear,

radiological agents

**EXPLOSIVES:** Trauma, burn, wound care

#### **ACUTE/EMERGENCY CARE:**

Hospitalized influenza, poison control/antidotes, burn, trauma, community use emergency medicine



#### **EMERGING INFECTIOUS DISEASES:**

Marburg, dengue, Gram-negative organisms, Ebola, Lassa, MERS, multidrug resistant pathogens, Nipah, pandemic influenza, SARS, Zika

#### TRAVEL HEALTH:

Cholera, ETEC, Hepatitis A/Hepatitis B, Japanese encephalitis, malaria, polio, rabies, Shigella, typhoid, yellow fever, chikungunya

#### **EMERGING HEALTH CRISES:**

Opioid crisis (overdose, opioid use disorder) and other emerging threats similar in nature

#### PRODUCTS + PIPELINE

# Diverse portfolio of products<sup>1</sup> addressing multiple public health threats





#### **ANTHRAX**

#### Anthrasil<sup>®</sup>

[Anthrax Immune Globulin Intravenous (human)]

#### AV79091

[Anthrax Vaccine Adsorbed (AVA), Adjuvanted]

#### BioThrax<sup>®</sup>

(Anthrax Vaccine Adsorbed)

# raxibacumab injection

A fully human monoclonal antibody

#### **SMALLPOX**

#### ACAM2000®

(Smallpox (Vaccinia) Vaccine, Live)

#### VIGIV CNJ-016®

[Vaccinia Immune Globulin Intravenous (Human)]

#### **CHEMICAL AGENTS**

#### **RSDL**<sup>®</sup>

(Reactive Skin Decontamination Lotion Kit)

#### Trobigard<sup>®1</sup>

(atropine sulfate, obidoxime chloride auto-injector)

#### **OPIOID CRISIS**

#### NARCAN<sup>®</sup>

(naloxone HCI) Nasal Spray

#### **BOTULISM**

#### **BAT**<sup>®</sup>

[Botulism Antitoxin Heptavalent (A, B, C, D, E, F, G) -(Equine)]

#### TRAVEL HEALTH

#### Vaxchora<sup>®</sup>

(Cholera Vaccine, Live, Oral)

#### Vivotif<sup>®</sup>

(Typhoid Vaccine Live Oral Ty21a)

<sup>1.</sup> AV7909 and Trobigard are not approved by the FDA or any other health regulatory authority but are procured by authorized government agencies under special circumstances.

#### PRODUCTS + PIPELINE

# Select R&D pipeline programs – sources of potential future growth



BUSINESS UNIT	CANDIDATE	THREAT	CURRENT PHASE
	AV7909 <sup>1</sup> [Anthrax Vaccine Adsorbed (AVA), adjuvanted]	CBRNE	Phase III; BLA filing anticipated 2021
VACCINES	CHIKV VLP (Chikungunya virus VLP vaccine)	Travel Health/EID	Phase II; Phase III initiation 2021
	WEVEE VLP (Western, Eastern and Venezuelan equine encephalitic VLP)	CBRNE/EID	Phase I
THERAPEUTICS	COVID-HIG (Treatment) (Human polyclonal hyperimmune with antibodies to SARS-CoV-2)	EID	Phase III; EUA potential 2021
	COVID-HIG (Post-Exposure Prophylaxis (PEP)) (Human polyclonal hyperimmune with antibodies to SARS-CoV-2)	EID	• Phase I
	<b>FLU-IGIV</b> (Seasonal influenza A therapeutic)	Acute Care	Phase II; Phase III initiation 2021 <sup>3</sup>
	Trobigard Auto-Injector <sup>1,2</sup> (Atropine sulfate, obidoxime chloride auto-injector)	CBRNE	• Late Stage <sup>1</sup>
DEVICES	D4 (2PAM/atropine)	CBRNE	Development Stage
	AP007 (Sustained-release nalmefene Injectable)	Opioids/Opioid Use Disorder	Early Stage/Feasibility Phase

- 1. AV7909 and Trobigard Auto-Injector are not approved by the FDA or any other health regulatory authority but are procured by authorized government agencies under special circumstances.
- 2. Application submitted to a regulatory health authority in the European Union.
- 3. Contingent on completion of stage gate assessment and timing of seasonal influenza.

#### CDMO SERVICES

# Biologics-focused CDMO services add diversification and growth opportunities





4Q2020 New Contracted Value<sup>1</sup> 12/31/2020 Rolling Opportunity Funnel<sup>2</sup>





- Represents the new contracted value secured which we expect to realize in 2021 and beyond; includes a combination of COVID-19 and non-COVID-19 related work as well as a combination of new work with new customers, new work with existing customers, and extensions/expansions of existing contracts with existing customers.
- 2. Represents the initial contract value we may realize in 2021 and beyond based on issued proposals and includes value of existing project extensions; excludes the JNJ and AZN CSA option periods.

#### CDMO SERVICES

# Site network and related capabilities



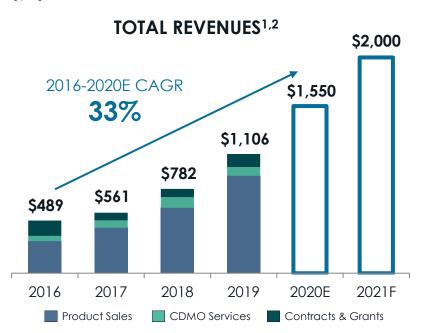
SITE	TECHNOLOGIES	SERVICE PILLARS			CIADMI	REVENUE GENERATING	
3115		DVS	DS	DP	CIADM <sup>1</sup>	2020	2024F
Baltimore, MD (Bayview)	Mammalian, Viral, Microbial						
Baltimore, MD (Camden)	Mammalian, Microbial			•			•
Lansing, MI	Microbial						
Winnipeg, Manitoba, Canada	Plasma, Mammalian, Microbial	•		•			•
Gaithersburg, MD	Mammalian, Microbial, Viral, Gene Therapy	•					
Rockville, MD	Viral, Gene Therapy			•	•		
Bern, Switzerland	Mammalian, Microbial						
Canton, MA	Viral, Gene Therapy		•				
Hattiesburg, MS	Packaging			•			

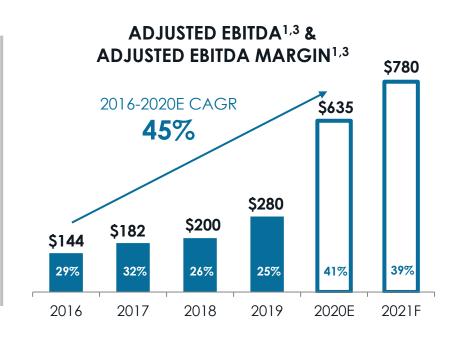
Committed investments of >\$200M in capabilities and capacities: \$50M Camden; \$75M Canton; \$85.5M Rockville/Camden (funded by BARDA)

# Diversified revenue growth complemented by sustained profitability



[\$M]





- 1. 2020E (preliminary and unaudited) and 2021F (forecasted) reflect the midpoint of ranges provided in the press release issued by the Company on January 10, 2021.
- 2. AV7909 and Trobigard are not approved by the FDA or any other health regulatory authority but are procured by authorized government agencies under special circumstances.
- 3. See the Appendix for a definition of non-GAAP terms and reconciliation tables.

# Key pillars of our Growth Strategy







- 1. Proven partner and established leader
- 2. Diversified product + pipeline and services mix
- 3. Scalable and sustainable business model
- 4. Strong financial foundation
- 5. POISED FOR CONTINUED GROWTH AND EXPANSION







# Reconciliation of net income to adjusted EBITDA 2021F and 2020E – 2016.



(\$ in millions)	Full Year Forecast	Twelve Months Ended December 31,				<b>6</b>	
(\$ iii millions)	2021F	2020E	2019	2018	2017	2016	Source
Net Income	\$420.0 - \$470.0	\$295.0 - \$310.0	\$54.5	\$62.7	\$82.6	\$62.5	
Adjustments:							
+ Depreciation & amortization	133.0	115.0	110.7	61.3	40.8	34.9	COGS; SG&A R&D
+ Income taxes	161.0 - 171.0	106.0 - 111.0	22.9	18.8	36.0	36.7	Income Taxes
+ Total interest expense, net	31.0	30.0	36.1	8.3	4.8	6.6	Other Expense
+ Changes in fair value of contingent consideration	3.0	32.0	24.8	3.1	7.8	-10.8	cogs
+ Impairment of IPR&D intangible asset		29.0	12.0				R&D
+ Exit and disposal costs		17.0		0.4	1.5	11.7	COGS; SG&A Other Income
+ Acquisition-related costs (transaction & integration)	2.0	1.0	12.6	27.3	5.6	1.7	SG&A
+ Impact of purchase accounting on inventory step-up			6.1	18.4	2.6	1.1	cogs
Total adjustments	\$330.0 - \$340.0	\$330.0 - \$335.0	\$225.2	\$137.6	\$99.1	\$81.9	
Adjusted EBITDA	\$750.0 - \$810.0	\$625.0 - \$645.0	\$279.7	\$200.3	\$181.7	\$144.4	

# APPENDIX Glossary of terms (1 of 2)



Term	Definition
ANVISA	National Health Surveillance Agency Brazil
BARDA	Biomedical Advanced Research and Development Authority
BMGS	Federal Ministry of Health Germany
BSL3	A biosafety level of biocontainment precautions required to isolate dangerous agents in an enclosed laboratory facility
CAGR	Compound annual growth rate
CBRNE	Chemical, Biological, Radiological, Nuclear, and Explosives
CDC	Centers for Disease Control and Prevention
CDMO	Contract development and manufacturing organization
CEPI	Coalition for Epidemic Preparedness Innovations
cGMP	Current Good Manufacturing Practices
DHS	U.S. Department of Homeland Security
DoD	U.S. Department of Defense
DOS	U.S. Department of State
DTRA	U.S. Defense Threat Reduction Agency
EBITDA	Earnings before interest, tax, depreciation and amortization
EID	Emerging Infectious Disease

# APPENDIX Glossary of terms (2 of 2)



Term	Definition
EMA	European Medicines Agency
EUA	Emergency Use Authorization
FDA	U.S. Food and Drug Administration
GAAP	U.S. Generally Accepted Accounting Principles
HHS	U.S. Department of Health and Human Services
M&A	Mergers and acquisitions
MCS	Medical Countermeasure Systems
MCMs	Medical countermeasures
MHRA	Medicines and Healthcare Products Regulatory Agency U.K.
MRMC	United States Army Medical Research and Materiel Command
NGOs	Non-governmental organizations
PHAC	Public Health Agency Canada
PMDA	Pharmaceuticals and Medical Devices Agency
SwRI	Southwest Research Institute
USG	United States Government

## Our track record of key M&A since 2013







Hattiesburg, MS







Winnipeg, Canada



2015 Auto-injector platform

2017





Canton, MA



Rockville,



2018







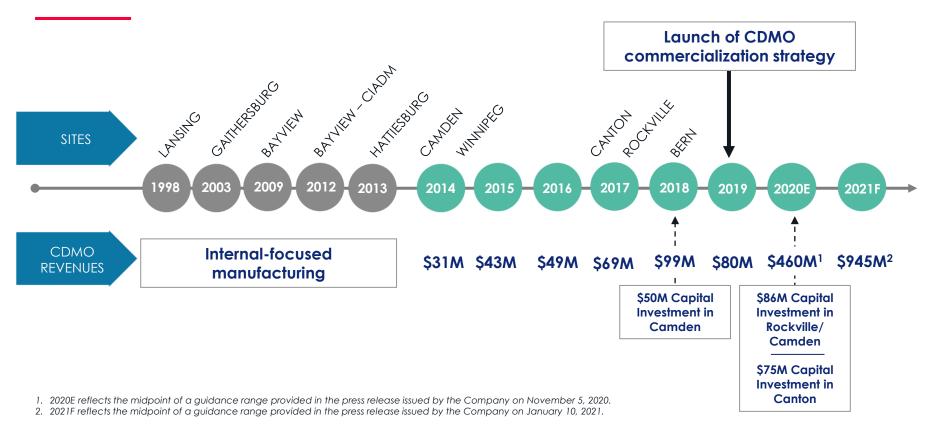
Bern, Switzerland



Combined added ~\$1.4B to total revenues since 2017<sup>1</sup>

### The growth of CDMO at Emergent





## Our CDMO holds a unique position in the landscape

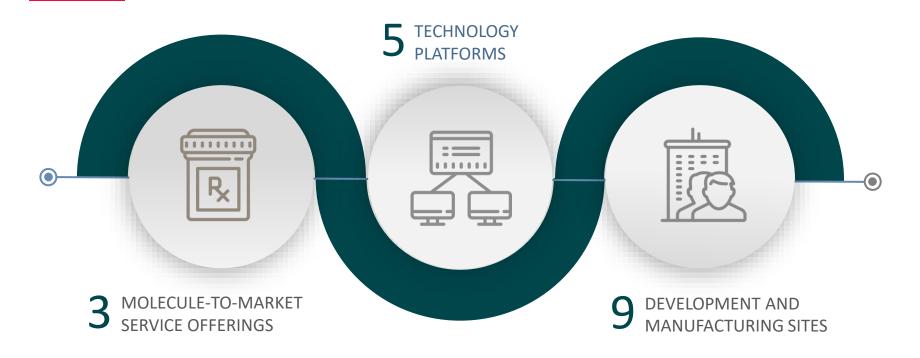




Emergent combines the best of both worlds: the customer focus and capacity of a pure play CDMO, plus all the expertise and experience of a successful innovator. We have the technology and facilities to bring products all the way from concept to market.

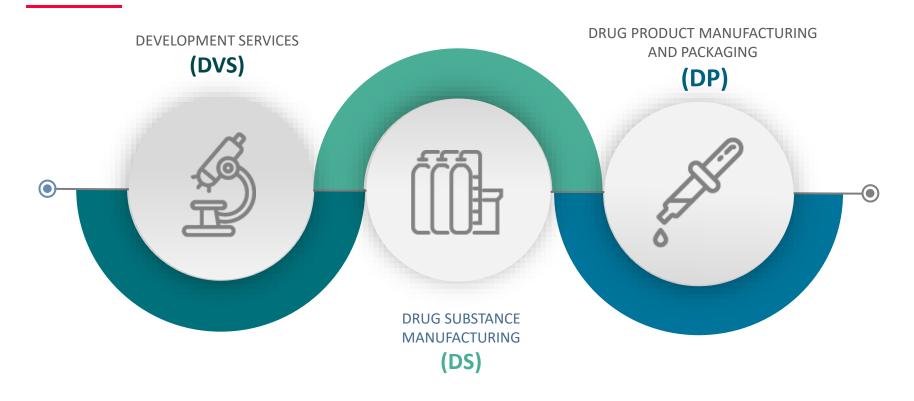
## Our CDMO capabilities at a glance





# Our CDMO offers end-to-end integrated services





# Our CDMO business utilizes multiple platform technologies addressing compelling market opportunities emerg





**EMERGENT CDMO FORMULA FOR GROWTH:** 

- Molecule-to-market development and manufacturing services with successful track record of innovation.
- Enterprise team of more than 1400 technical and quality compliance professionals.
- Facilities and capabilities located in proximity to pharma and biotech hubs.
- Unique platform of customizable offerings across entire drug development lifecycle.

# CDMO key growth initiatives





EXPAND SALES AND BUSINESS DEVELOPMENT TEAMS



ENHANCE MOLECULE-TO-MARKET OFFERING



DRIVE GLOBAL
BRAND AWARENESS



INVEST TO MEET MARKET NEEDS



CROSS-SELL TO EXISTING CLIENTS



INCREASE MANUFAC-TURING CAPACITY



EXPLORE PARTNERSHIP OPPORTUNITIES



BALANCE CLINICAL WITH COMMERCIAL

