

ADMA Biologics

Realizing the Potential of Plasma-Derived Therapies
with Groundbreaking Immunotechnology

December 2021

NASDAQ: ADMA



Forward-Looking Statements

This presentation contains "forward-looking statements," pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, about ADMA Biologics, Inc. and its subsidiaries (collectively, "we," "our" or the "Company"), including, without limitation, statements that may predict, forecast, indicate, or imply future results, performance or achievements, and may contain the words "estimate," "project," "potential," "possible," "forecast," "intend," "target," "anticipate," "plan," "expect," "believe," "will," "is likely," "will likely," "should," "could," "would," "may" or, in each case, their negative, or words or expressions of similar meaning. These forward-looking statements also include, without limitation, our plans to develop, manufacture, market, launch and expand our own commercial infrastructure and commercialize our current products and future products; our plans to expand our pipeline with differentiated immune globulin product candidates in development; potential near and mid-term value creation through certain milestones; the possibility of expanding our product portfolio with additional specialty immune globulin products; product expansions into new fields of use, indications, target populations and product candidates, and the labeling or nature of any such approvals; our dependence upon our third-party and related party customers and vendors and their compliance with regulatory bodies; our ability to obtain adequate quantities of U.S. Food and Drug Administration ("FDA")-approved plasma with proper specifications; the likelihood and timing of FDA action with respect to any further filings by the Company; the expected financial, strategic and commercial benefits of the FDA's approval of our VanRx SA25 Workcell aseptic fill finish machine; results of clinical development; the potential of specialty plasma-derived biologics to provide meaningful clinical improvement for patients living with Primary Immune Deficiency Disease ("PID"); expected market size growth in the U.S. immune globulin market through 2027; our ability to market and promote our products in the competitive environment and to generate meaningful revenues; our estimated revenue potential and related timing; certain revenue opportunities; our estimated revenue growth relative to our competitors; our production capacity and yield and ability to increase such capacity and yield; our ability to increase market share and grow revenue through anticipated product launches as well as expected peak market share; our ability to secure, build and obtain FDA approval for additional plasma collection centers and the timing related thereto; anticipated timing for achieving plasma supply self-sufficiency; estimated global supply and demand for plasma through 2027; the estimated value of our Boca Raton manufacturing facility; potential clinical trial initiations; potential investigational new product applications, Biologics License Applications, and expansion plans; our intellectual property position, including our expectations of the scope of patent protection with respect to our products or other future pipeline product candidates; the achievement of clinical and regulatory milestones; our manufacturing capabilities; third-party contractor capabilities and strategy; our plans relating to manufacturing, supply and other collaborative agreements; potential contract manufacturing opportunities and sales of our immune globulin products and intermediates; our estimates regarding expenses, capital requirements and needs for additional financing; possible or likely reimbursement levels for our currently marketed products and estimates regarding market size; projected growth and sales for our existing products as well as our expectations of market acceptance of BIVIGAM[®] and ASCENIV[™]; future economic conditions and performance; commercialization efforts relating to our products and the runway and limitation of our available cash; and our ability to identify alternative sources of cash. The forward-looking statements contained herein represent the Company's estimates and assumptions only as of the date of this presentation, and the Company undertakes no duty or obligation to update or revise publicly any forward-looking statements contained in this presentation, except as otherwise required by the federal securities laws. Forward-looking statements are subject to many risks, uncertainties and other factors that could cause our actual results, and the timing of certain events, to differ materially from any future results expressed or implied by these forward-looking statements, including, but not limited to, the continued safety and efficacy of, and our ability to obtain and maintain regulatory approvals of, our current products as well as our plans to increase our supplies of plasma; our ability to expand our plasma center network; regulatory processes and interpretations of final data of our products and product candidates; acceptability of any of our products for any purpose, by physicians, patients or payers; concurrence by the FDA with our conclusions and the satisfaction by us of its guidance the risks; and uncertainties described in our filings with the U.S. Securities and Exchange Commission, including our most recent reports on Form 10-K, 10-Q and 8-K, and any amendments thereto.

Who We Are



ADMA Biologics is an **end-to-end commercial biopharmaceutical company** committed to manufacturing, marketing and developing **specialty plasma-derived products** for the prevention and treatment of infectious diseases in the **immune compromised** and other patients at risk for infection



Our devotion to these underserved populations fuels us, and we believe our hands-on approach to production and development sets us apart

ADMA Investment Highlights



- 1 Differentiated U.S. Plasma Products Opportunity in a Large & Growing End-Market
- 2 Vertically Integrated with Leading Technology, Supply Chain & Production Processes
- 3 Well-Defined & Largely De-Risked Pathway to Profitability & Unique Scarcity Value
- 4 Potential Upside Through Operating Leverage & New Product Pipeline Opportunities

1 Differentiated Opportunity in a Large & Growing Market

ADMA is 1 of 6 Manufacturers in a Growing, Supply-Constrained U.S. Immunoglobulin (IG) Market

- One of six manufacturers in a historically undersupplied U.S. IG market
- The only fully vertically integrated U.S.-domiciled fractionator
- Four major producers (Grifols, CSL Behring, Shire and Octapharma) collectively account for >94% of U.S. IG market
- Existing competitors are at or near capacity; ADMA is in early stages of its growth and production ramp-up

~\$9.5Bn in 2020 Growing to \$17Bn+ U.S. IG Market



Source: The Plasma Proteins Market in The United States 2020, Marketing Research Bureau Inc., July 2021

ADMA Has Three FDA-Approved Products & Diversified Revenue Streams

- Comprehensive suite of three U.S. FDA-approved commercial IVIG products:
 - ✓ Standard IVIG (BIVIGAM), including a range of vial sizes and configurations
 - ✓ Hyperimmune IG portfolio, comprised of ASCENIV and Nabi-HB
 - ✓ ASCENIV is a novel IG and the only product in its class produced by blending normal plasma with hyperimmune plasma using ADMA's patented methods
 - ✓ Nabi-HB has been used for over 20 years to protect against hepatitis B infection among newly exposed individuals



Six diversified revenue streams with the potential to add a seventh with third-party CMO fill-finish capabilities

2

Vertically Integrated with Leading Technology, Supply Chain & Production Processes

End-to-End Control of Supply Chain

- End-to-end control of supply chain from plasma collection through plasma fractionation, purification, fill-finish and testing
- Among an elite group of U.S.-based biologic drug manufacturers with comprehensive in-house control of critical manufacturing and testing functions
- Operating in cGMP compliance with validated methods
- Successful implementation of supply chain enhancements largely de-risks production scale-up and growth outlook

**Raw Material Collections****Manufacturing****Filling & Packaging****Release & In-Process Testing**

Plasma Supply Self-Sufficiency Anticipated by YE2023

- Contractually obligated third-party supply agreements expected to complement and bridge to plasma supply self-sufficiency by YE2023
- 10+ FDA-licensed plasma collection facilities anticipated to be fully FDA approved by YE2023
- Well-positioned infrastructure to support near term revenue growth and ensure continuity of product supply into the supply-constrained U.S. IG market



In-House Fill-Finish Functions

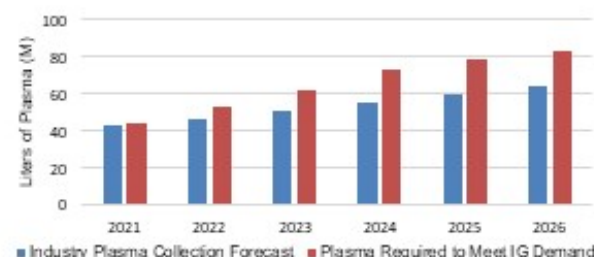
- FDA approved in-house aseptic fill-finish capabilities
- Ongoing exploration of potentially accretive third-party fill-finish opportunities
- VanRx anticipated to meet all internal production needs with additional idle capacity, potentially adding new third-party revenues



3 Well-Defined and De-Risked Pathway to Profitability & Unique Scarcity Value

Complex Manufacturing Process Validated and U.S. FDA Approved

- Capital requirements, regulatory approvals and manufacturing leadtime prohibit manufacturers from quickly increasing output and filling demand in end-market supply
- Unique and complex manufacturing process with a long production cycle (7-12 months)
- Market demand forecasted to outpace industry supply for the foreseeable future



Source: Wall Street research

Adhere to Strict Regulatory Requirements With Data, Compliant SOPs and Processes In-Place

- Strict regulatory requirements for plasma-derived therapeutics governed by the FDA and state health departments
- Validation, product registration and ultimate commercialization takes ~3 to 5+ years – all current and complete
- ADMA operates in cGMP compliance across its manufacturing footprint as per recent FDA inspections and approvals



Significant Scarcity Value for ADMA's Plant

- ADMA estimates, based upon publicly disclosed fractionator transactions, Boca Plant valuation estimated at \$400M+ and ~5 years to complete registrations, clinical trials and construction of a cGMP-compliant fractionation plant and fill-finish facility of equivalent capacity to ADMA's



4 Potential Upside Through Operating Leverage & New Product Pipeline Opportunities

Fractionation Facility Has 600,000 L Annual Plasma Processing Capacity, Supporting a ~\$300M+ Revenue Opportunity

- Well-defined pathway to \$300M+ revenues by 2025
- Fastest revenue growth profile forecasted within the plasma therapeutics landscape
- Potential capacity upside with modest capital investment requirements
- Expected to benefit from market share gains as well as end-market IG growth



Robust and Growing IP Estate to Support Potentially Attractive New Product Opportunities

- IP issued to screen hyperimmune donors, tailor compositions and form plasma pools – IP protection through 2035
- Attractive label expansion opportunities for specialty IGs targeting patient populations with high unmet need; robust and growing IP estate to support exploration of additional indications
- Published data supports potential evaluation of ASCENIV in immune-compromised patients infected with or at-risk for respiratory syncytial virus (RSV) infection and other respiratory viral pathogens in primary and secondary immune-deficient populations

ADMA's Patented Immunotechnology



Screen and identify high-titer RSV plasma donors

Hyperimmune donors with sufficient antibodies to select pathogens are identified



Tailored compositions

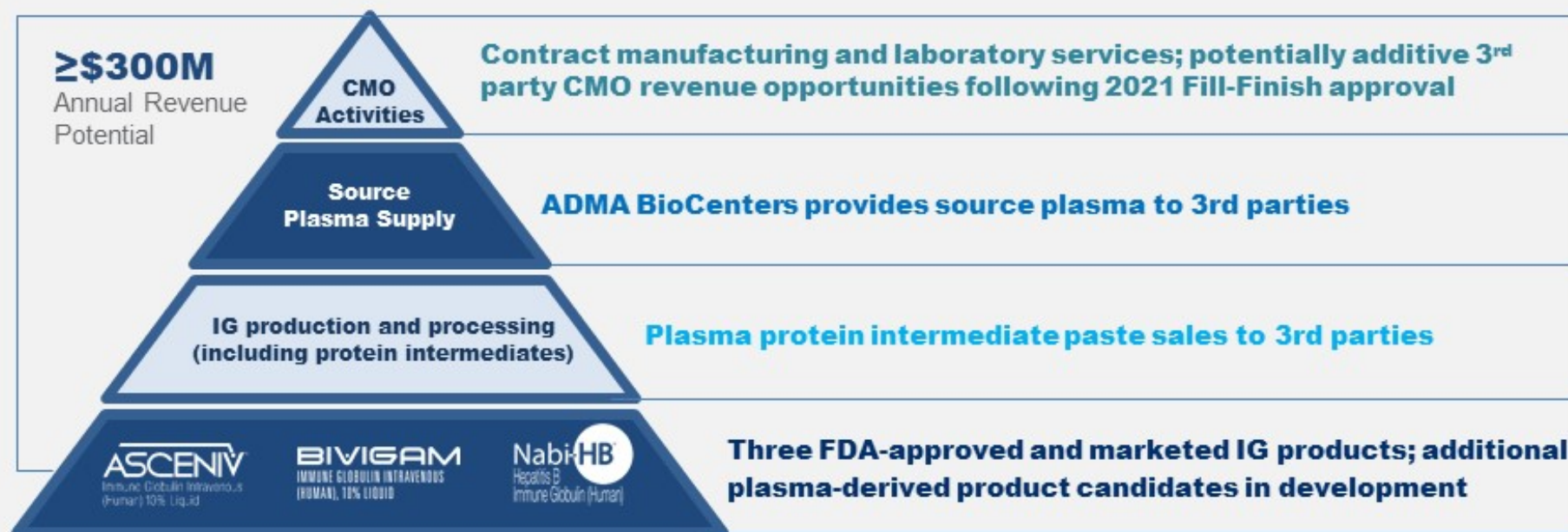
Tailored plasma pools are derived from a unique blend of normal source plasma and plasma obtained from the selected donors



Proprietary testing

A proprietary microneutralization assay quantitatively measures titer levels of neutralizing RSV antibodies in plasma donor samples

ADMA Offers a Multi-Faceted Revenue-Generation Platform



Existing infrastructure supports manufacturing and commercial product opportunities to generate multiple meaningful sources of revenue collectively amounting to ≥\$300M

COMMERCIAL Opportunities: PLASMA PRODUCTS PORTFOLIO

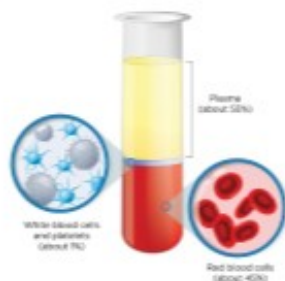
ASCENIV
Immune Globulin Intravenous
(Human) 10% Liquid

BIVIGAM
IMMUNE GLOBULIN INTRAVENOUS
(HUMAN), 10% LIQUID

Nabi-HB
Hepatitis B
Immune Globulin (Human)

Introduction to Plasma-Derived Therapies and Immunoglobulins (IG)

Plasma Therapeutics

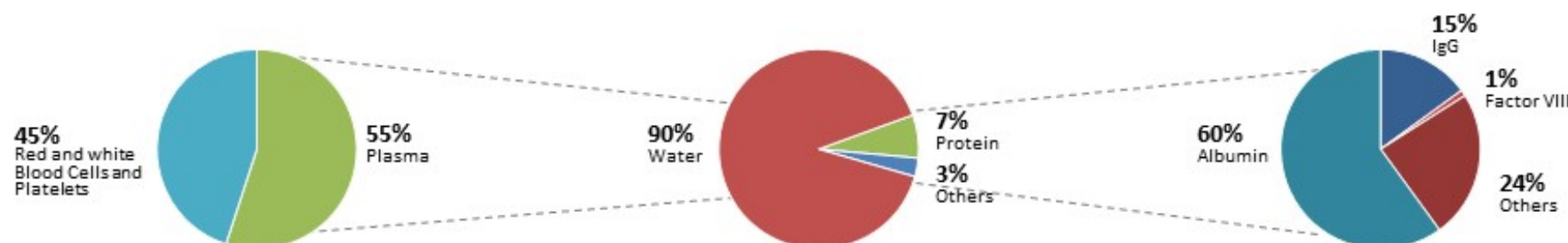


- Plasma-derived therapeutics are essential, life-sustaining biologic drugs that replace absent proteins due to genetic and acquired disorders in hundreds of thousands of patients in the U.S.
- Many of these naturally occurring proteins are unable to be replaced by new, innovative therapies
- Many patients require long-term treatments and some potentially for their entire life

Immunoglobulins (IG)



- Immunoglobulins (IG) or Intravenous Immune Globulins (IVIG) are pooled plasma-derived products from healthy plasma donors, containing a range of polyclonal antibodies against common pathogens (e.g., bacteria, fungi and viruses)
- Only 6 companies currently produce IVIG approved for the U.S. market, including CSL Behring, Grifols, Takeda, Octapharma, BPL and ADMA
- Other therapeutic products made from plasma proteins include: albumin, coagulation factors, alpha-1 and C-1 esterase, among others



ADMA's optimized IG manufacturing process and validation for intermediate fractions allows for the potential to maximize revenue from each liter of plasma while producing life-sustaining and saving therapies

Plasma IG Market Is Sizeable & Growing

Drivers of IG Market Growth

Aging Population

- Geriatric population more susceptible to rare diseases treatable by IG products
- Global population of 65+ expected to nearly double by 2050

Rise of Use of IGs in Medicine

- Surge in awareness related to treatment of rare diseases with IG products
- Widening scope of indications treatable with IG products

Improved Diagnostics

- Improvements in diagnostics leading to increased rates of PI diagnoses
- Condition remains under-diagnosed; average PI diagnosis still takes 12.4 years

Increased Use of Immunosuppressive Therapeutics

- Increased utilization of immuno-oncology agents and other immunosuppressive therapeutics necessitating antibody supplementation

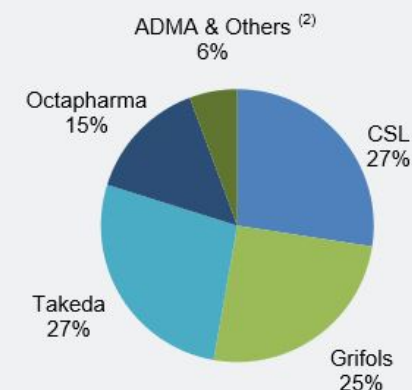
Increase in Number of Plasma Collection Centers

- Growing number of plasma collection centers worldwide
- Increase in public and private associations that spread awareness and information related to plasma collections

~\$9.5Bn U.S. IG Market in 2020 Set to Grow to \$17Bn+(¹)



Market Share of U.S. IG Producers



ADMA's peak production capacity could garner a ~1.5-2.5% share of the market at scale

Current \$9.5Bn U.S. IG market expected to grow to \$17.2Bn by 2027

Source: Marketing Research Bureau, 2020 U.S. Fractionation Market Report, ADMA internal analysis

1. The Plasma Proteins Market In The United States 2020, Marketing Research Bureau Inc., July 2021

2. Others include Kedrion and BPL

Primary Immunodeficiency is a Significant Market Opportunity

Primary Immunodeficiency (PI) Overview ⁽¹⁾

- PI is a class of inherited genetic disorders that causes an individual to have a deficient or absent immune system due to either a lack of necessary antibodies or a failure of these antibodies to function properly
- Estimated prevalence of **1:1,200** in the U.S., or approximately **250,000** people
 - NIH estimates **500,000** undiagnosed PI patients in the U.S.
- Over **400** genetic defects are responsible for PI
- Patients typically receive monthly outpatient infusions of IVIG therapy
 - Without this exogenous antibody immune support, these patients would be susceptible to a wide variety of infectious diseases

Potential Higher-Risk Target Populations ⁽¹⁾

Class	Est. Incidence (U.S.)	Est. Prevalence
Common variable immune deficiency (CVID)	1 in 25,000 to 1 in 50,000	2,000 to 5,000 patients
Severe combined immune deficiency (SCID) syndrome	~100 new cases each year	500-1,000 patients on IVIG post-transplant
Wiskott-Aldrich syndrome (WAS)	~4 in every 1,000,000 males	600 patients on IVIG therapy
DiGeorge syndrome (DGS)	1 in 4,000 births	1,000 patients on IVIG therapy
Ataxia telangiectasia (AT)	1 in 40,000 to 1 in 100,000	3,000 to 8,000 patients
X-linked hyper IgM deficiency (XHMD)	2 in every 1,000,000 males	350 patients on IVIG therapy
X-linked agammaglobulinemia (XLA)	1 in 10,000	3,500 patients more susceptible to viral infections

Despite Decades of IG Use, Improved Therapies Still Needed

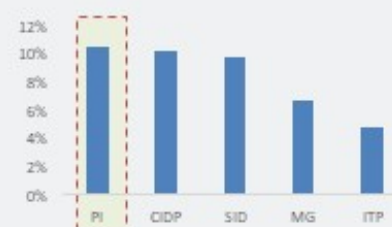
Despite standard IG therapy, patients continue to experience recurrent respiratory infection and chronic lung disease ⁽²⁾⁽³⁾

In a 40 year study of 473 patients with PI on standard IVIG ⁽³⁾



~10% Volume Growth Projected for IG to Treat PI ⁽⁶⁾

2015 – 2017 IG Volume Growth By Indication



2020 – 2030 IG Volume Growth By Indication



PI is a prevalent and under-diagnosed disorder long-treated with IG therapy, but a continual need for improved options remains

1. Centers for Disease Control, National Institute of Health

2. The broad spectrum of lung diseases in primary antibody deficiencies. Eur Respir Rev. 2018.

3. Morbidity and mortality in common variable immune deficiency over 4 decades.

4. The lung in primary immunodeficiencies: New concepts in infection and inflammation. Front Immunol. 2018.

5. Subclinical infection and dosing in primary immunodeficiencies. Clin Exp Immunol. 2014.

6. Wall Street research

IG is Widely Used and Reimbursed Across Payer Mix

FDA-Approved Uses*	Possible Additional Reimbursed Evidence-Based Uses		
Primary immunodeficiency (PI)	Acquired red cell aplasia	Multiple myeloma	Rasmussen's syndrome
Multifocal motor neuropathy	Bone marrow transplantation	Myasthenia gravis	Renal transplant from liver donor
B-cell chronic lymphocytic leukemia	Dermatomyositis	Neonatal hemochromatosis	Solid organ transplantation
Immune thrombocytopenic purpura	Enteroviral meningoencephalitis	Parvovirus B19	Staphylococcal toxic shock
Kawasaki syndrome	Established bacterial sepsis	Pediatric HIV	Systemic lupus erythematosus
Chronic inflammatory demyelinating polyneuropathy	Multiple sclerosis	Post transfusion purpura	Toxic epidermal necrolysis

FDA-approved use and evidence-based use is consistently expanding across therapeutic areas

*Source: ADMA information, on file, AAAAI, FDA, Product prescribing information, United Healthcare, Aetna, L.E.K. Consulting research and analysis. Not all uses approved for all IG products by FDA.

BIVIGAM® Overview

BIVIGAM
IMMUNE GLOBULIN INTRAVENOUS
(HUMAN), 10% LIQUID

ADMA
BIOLOGICS

BIVIGAM: FDA-Approved Protection Against Serious Infections

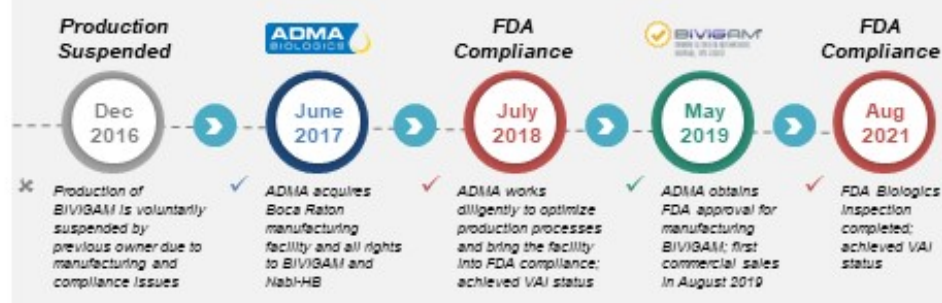


- Plasma-derived IVIG that contains a broad range of antibodies similar to those found in normal human plasma
- Indicated for the treatment of patients with primary immunodeficiency (PI)
- ADMA received FDA approval for manufacturing BIVIGAM in May 2019 and recorded first commercial sale in August 2019

**Approved and
Reintroduced
in May 2019
by ADMA**

The Reintroduction of BIVIGAM

RESULTS FROM ADMA'S STRONG EXECUTION AND REGULATORY EXPERTISE



Proven Efficacy in Treating Patients with PI

**IN A 1-YEAR STUDY OF PATIENTS WITH PI,
BIVIGAM met all primary endpoints ⁽¹⁾⁽²⁾**



Demonstrated protection from serious bacterial infections (SBIs)

- 0.037 rate of SBIs per year*
- During the 12-month study period, 2 serious acute bacterial infections occurred in 2 patients with an onset date between the first infusion of BIVIGAM and the first follow-up visit
 - 197 total infections in 58 patients were reported (3.7 infections PPPY)
 - 86% of patients were administered antibiotics (39.1 days PPPY)



Reduced health-related burdens

- Low rate of hospitalizations (0.21 days / PPPY)
 - 2 patients (3.4%) hospitalized for a total of 11 days (0.06%)
- Fewer missed days of school / work (2.3 days / PPPY)
 - 21 patients (36%) with total of 122 days (0.6%)

* Target was 1 SBI / year; 99% CI of 0.136 SBI / patient/year; of 63 adult patients in the enrolled in the study, 58 were included in efficiency analysis PPPY= per patient per year.

Ongoing reintroduction of BIVIGAM well-received in a high-demand IG market

1. BIVIGAM Prescribing Information. Boca Raton, FL: ADMA Biologics; 2019.
2. A new intravenous immunoglobulin (BIVIGAM) for primary humoral immunodeficiency. Expert Rev Clin Immunol. 2014.

ASCENIV™ Overview

ASCENIV™
IMMUNE GLOBULIN INTRAVENOUS
(HUMAN) — 10% LIQUID

ADMA
BIOLOGICS

ASCENIV: FDA-Approved Protection Against Serious Infections



- Novel IVIG with differentiation based on patented methods for donor selection and pooling process blending normal source and hyperimmune RSV plasma
- Indicated for the treatment of patients with primary immunodeficiency (PI)
- ADMA received FDA approval in April 2019 and recorded first commercial sale in October 2019

Approved
and
introduced
in April 2019
by ADMA

THE PRODUCTION OF ASCENIV ONLY IVIG PRODUCT MANUFACTURED USING PATENTED DONOR SCREENING AND PLASMA POOLING METHODS ⁽¹⁾

- Manufactured through a patented process using source plasma, which is acquired from donors screened using a microneutralization assay to detect and identify which donors possess naturally occurring neutralizing antibody titers to respiratory syncytial virus (RSV)
- Plasma pool is derived from a minimum of 1,000 unique donors and blends normal source plasma with RSV plasma
- Plasma collected from U.S. FDA-licensed plasma collection centers
- Meets potency requirements for 21CFR640

Proven Efficacy in Treating Patients with PI ⁽²⁾

IN A 1-YEAR STUDY OF PATIENTS WITH PI, ASCENIV reported zero serious bacterial infections (SBIs)*

Patients and physicians can count on ASCENIV to reduce infection-related quality-of-life impact



- Zero hospitalizations due to infection
 - One patient from the study group was hospitalized because of a postoperative local wound infection from elective surgery
- <1 unscheduled medical visits PPPY
 - 24 out of 59 patients (41%) had a total of 54 unscheduled medical visits due to infections
- 1.7 missed days of work / school / activity PPPY due to infection
 - 23 patients (39%) had a total of 93 missed days of work / school / activity due to infections out of a total of 21,535 patient days (<0.5%)
- 32.9 days of antibiotic use PPPY
 - 37 patients (63%) used antibiotics due to infection (includes therapeutic use)



* SBIs were defined as a rate of <1.0 cases of bacterial pneumonia, bacteremia/septicemia, osteomyelitis/septic arthritis, visceral abscess and bacterial meningitis per person year
PPPY = per patient per year.

Potential additional target populations across patients at risk for RSV infection, including in organ transplants and chemotherapy

1. ADMA Biologics patents issued 9,107,906 – 9,714,283 – 9,815,885
2. ASCENIV Prescribing Information, ADMA Biologics, 2019

Nabi-HB® Overview



Nabi-HB: FDA-Approved for Enhanced Immunity Against Hepatitis-B



- Successfully used for over 20 years to protect against hepatitis B infection among newly exposed individuals (post-exposure prophylaxis PEP)
- Manufactured from plasma obtained from vaccinated donors with high titers of antibodies to hepatitis B surface antigen, anti-HBs
- Received FDA approval in March 1999 under Nabi Biopharma; recorded first commercial sale under ADMA in April 2018

Approved in March 1999 (via Nabi); marketed by ADMA beginning in June 2017

THE THREAT OF HEPATITIS B

Poses An Immediate Threat to Sexual Assault Patients

- HBV is 50-100x more infectious than HIV⁽¹⁾
- The risk of blood-borne infections being transmitted after a sexual assault is greater than with consensual sex⁽¹⁾⁽²⁾
- Incidence of HBV exposure during sexual assault is unknown since the HBV status of perpetrators is rarely known⁽³⁾

Once someone is exposed to HBV, it may take hold and develop into potentially deadly chronic liver disease⁽⁴⁾

Seroprotection Remains a Serious Issue

- The HBV vaccine series alone takes up to 2 weeks to achieve initial serum levels and 3 doses (across 6 months) to provide seroprotection in ~90% of patients⁽¹⁾⁽⁵⁾⁽⁶⁾
- Waning antibody levels may compromise seroprotection over time
- Among immunocompetent HBV vaccine responders, protection lasts 15 to 20 years⁽¹⁾
- ~67% of U.S. adults 19-49 years old do not have adequate HBV vaccination coverage⁽⁴⁾

Proven Efficacy in Treating Hepatitis B

NABI-HB PROVIDES PROTECTION AGAINST HEPATITIS B INFECTION WITHIN 24 HOURS OF ADMINISTRATION⁽⁷⁾

Highly protective potency with Nabi-HB⁽⁷⁾

- Each milliliter of Nabi-HB contains >312 IU/mL of anti-HBs
- The potency of each milliliter of Nabi-HB exceeds the potency of anti-HBs in a U.S. reference hepatitis B immune globulin
 - The U.S. reference has been tested against the WHO standard and found to be equal to 208 IU/mL

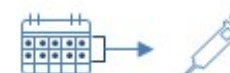


Delivers highly effective protection⁽⁷⁾

- Nabi-HB is 75% effective in preventing an HBV carrier state in those at risk following sexual exposure to persons with acute hepatitis B
 - If administered as a single dose within 2 weeks of exposure



75%
Effective



EFFICACY WHEN ADMINISTERED AS A SINGLE DOSE WITHIN 2 WEEKS OF EXPOSURE

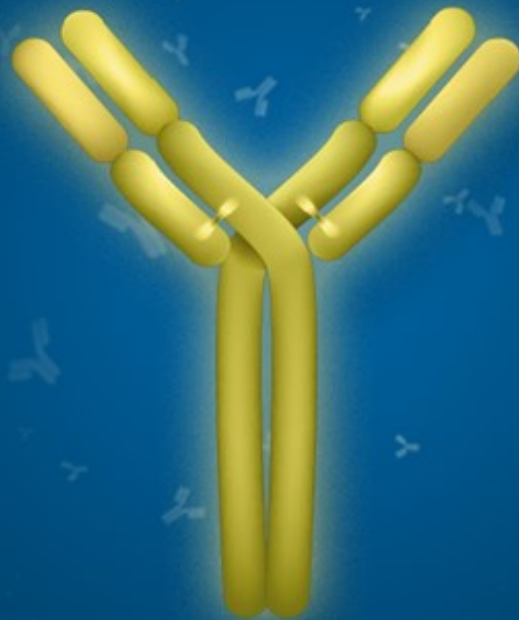
CDC Recommendations for Prophylaxis: Administering an HBIG with the HBV vaccine series is highly effective in preventing transmission following exposure to HBV⁽¹⁾

Anti-HBs = anti hepatitis B surface antibodies; IU = international units; WHO = World Health Organization; HBIG = hepatitis immunoglobulin; HBV = hepatitis B virus; HIV = human immunodeficiency virus.

Established brand and distribution channels driving increased utilization in PEP and sexual assault patients

1. Centers for Disease Control and Prevention.
2. Middlesex/London Health Unit. Post exposure management: hepatitis B, hepatitis C and HIV
3. Roberts and Hedges' Clinical Procedures in Emergency Medicine and Acute Care
4. World Health Organization

5. Do patients who received only two doses of hepatitis B vaccine need a booster? *Cleve Clin J Med* 2014
6. PDR: prescriber's digital reference. Engerix (hepatitis B vaccine recombinant) drug summary
7. Data on file, ADMA Biologics



Discover ADMA Biologics Patented Immunotechnology*

DESIGNED FOR THE IMMUNOCOMPROMISED

We manufacture, develop and commercialize specialized, targeted, plasma-derived therapeutics to extend and enhance the lives of individuals who are naturally or medically immunocompromised at risk for certain infections.



Screen and identify high-titer donors

Hyperimmune donors with high-titer antibodies to select pathogens are identified.



Tailored compositions

Tailored plasma pools are derived from a unique blend of normal source plasma and plasma obtained from the selected donors.



Proprietary testing

A proprietary microneutralization assay quantitatively measures titer levels of neutralizing RSV antibodies in plasma donor samples.

PATENTS ISSUED

9,107,906 - Composition
9,714,283 - Use
9,815,886 - Methods
Expiration 2035

*These patents include the use of IG for treatment and prevention of all viral induced respiratory infections

Pipeline & Label Expansion Opportunities



Potential additional target populations for ASCENIV™

As previously disclosed, we believe the published data and **FDA approval of ASCENIV™ better positions ADMA to further its mission** to evaluate ASCENIV™ in immune-compromised patients infected with or at-risk for **Respiratory Syncytial Virus (RSV) infection**

- **HSCT/Bone Marrow Transplant**
~22,000 procedures/year performed in the US
- **Solid Organ Transplant (lung, heart, liver and multi-organ)**
~14,000 solid organ transplants/year (excluding kidney transplants) performed in the US
- **Cancer Patients Receiving Chemotherapy**
~650,000 patients/year receive chemotherapy in the US
- **Others At-Risk for RSV Infection**

Published data suggests additional label expansion opportunities may be explored for ASCENIV™

Commercialization/Distribution Strategy for ADMA's Immunoglobulins

Distribution channel is well defined

- Inpatients – hospital based
- Outpatients – infusion center / physician office / homecare

- ✓ INDEPENDENT INFUSION CENTERS
- ✓ HOME CARE COMPANIES
- ✓ INDEPENDENT GPOs



HOSPITAL
PHARMACY
TIER ONE INSTITUTIONS

Well established distribution organizations handle cold-chain products efficiently

- Have existing product serialization tracking systems
- Have existing relationships with hospital pharmacy buyers and infusion center/homecare purchasing departments

BioCare SD™
MCKESSON

AmerisourceBergen®

ADMA's product portfolio offerings have overlapping prescriber call points

- Clinical immunologists
- Infectious diseases
- Hematology/oncology
- Critical care & emergency medicine



CLINICAL IMMUNOLOGY



INFECTIOUS DISEASE



EMERGENCY MEDICINE



HEMATOLOGY/ONCOLOGY

Identified and engaged with appropriate channel partners that align with our call plan and sites-of-service where there is demand across our immunoglobulin portfolio



Plasma Product Manufacturing Overview



ADMA Manufacturing

One of Few Manufacturers of Specialty IGs in the U.S.



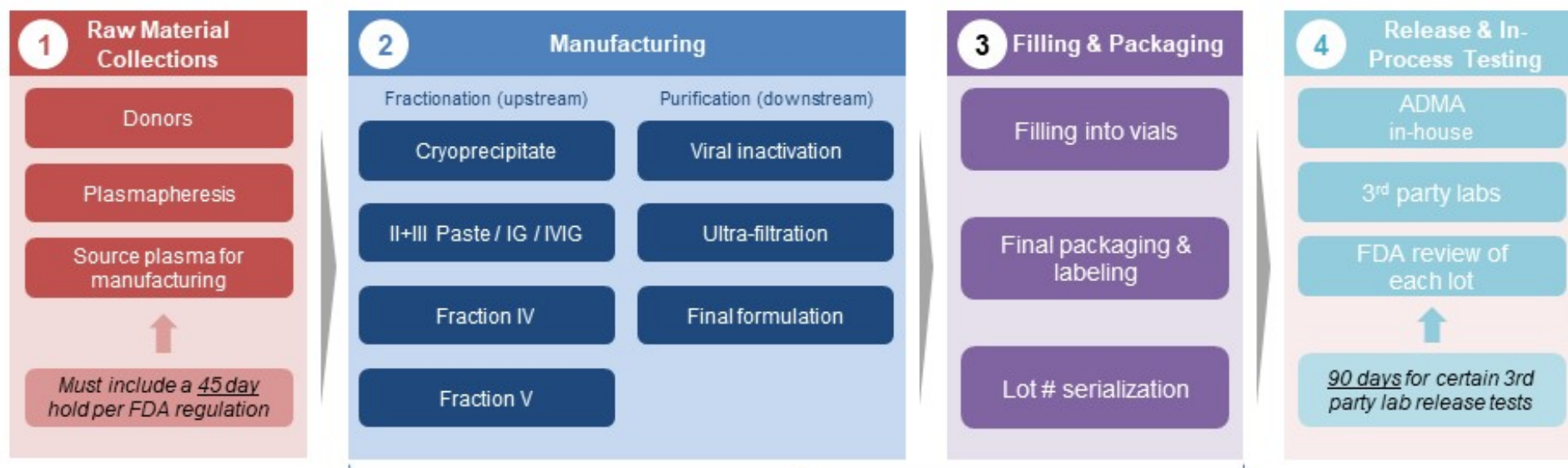
- **World-class, cGMP-compliant** plasma fractionation facility and laboratories in Boca Raton, FL; acquired in June 2017
- Recent **FDA compliance inspection** completed in August 2021
- One of **few FDA-approved fractionation facilities** in the U.S.
- Total staff: ~350
- Annual capacity of up to 600,000 liters, or ~2.4M grams of finished IG, **supporting a \$300M+ revenue opportunity**
- Yield of **~3.5-4 g / L** and revenue / liter of **\$600-\$800**
- **Patented immunotechnology** to screen hyperimmune donors, tailor plasma pool compositions and conduct proprietary antibody detection testing
- Capable of full product transfers as well as initial phase plasma product concept development
- **In-house fill-finish capabilities** following the 2021 FDA approval of the VanRx machine
- Plasma Intermediates are harvested with each batch of IG produced (e.g., Cryoprecipitate and Fraction V). **Potential for up to \$20M annual revenue opportunity**



Fractionation plants are scarce with only a few companies operating FDA-approved facilities in the U.S.

Production of Plasma-Derived Therapies

Cohn-Oncley Cold Ethanol Fractionation Process (Estimated 7-12 Months)



End-to-end control of the supply chain and production process to produce our products and leverage our expertise as a CMO for others

Contract Manufacturing Opportunities: Fill-Finish, Packaging and Serialization



Fill-Finish Capabilities

- ✓ In-house fill-finish capabilities with the 2021 FDA approval of the VanRx SA25 workcell
- ✓ In-house specialty team to oversee third-party operations
- ✓ Potential to improve final product yield and enhance margins, speed and time to release product to market

Product Labeling, Packaging and Serialization



VanRx Machine Brings Fill-Finish Capabilities In-House

New VanRx SA25
aseptic fill-finish
machine received
FDA approval



Internal fill-finish production capabilities expected to result in:



Greater product
supply consistency



Significantly
improved gross margins



Significantly improved
operational efficiencies



Reduced
manufacturing
cycle times

Plasma Collection Centers:



ADMA BioCenters Overview: Advancing Towards Plasma Self-Sufficiency



- Plasma collection centers are essential to ensure raw material supply to produce IG and other plasma proteins
- ADMA BioCenters currently consists of a network of 9 plasma collection centers in various stages of approval and development
- Total staff: ~150
- First center opened in 2011; network now includes 6 fully operational BioCenters in Tennessee, South Carolina and Georgia
- On track to have 10+ FDA approved centers by 2023 to achieve substantial plasma supply self-sufficiency
- ADMA BioCenters collects hyperimmune and normal source plasma
- In addition to providing plasma supply for ADMA products, collected plasma is sold through supply contracts to leading plasma companies



**Plasma centers are essential to ensure raw material supply to produce IG and other plasma proteins;
Supply self-sufficiency forecasted to be achieved by 2023**

Expanding the ADMA BioCenter Network - 2021 Forward



FDA-approved validation, SOPs, and training documentation in place

Opening additional centers

– low regulatory risk and rapid time to first collections due to current FDA approval of documentation and methods

Vertical integration

provides ADMA with increased speed to ramp to peak collection volumes in FDA-approved biologics manufacturing plants

Plan to have 10 or more collection centers in approved

in various geographic locations across the U.S. by 2023

Use what we need, sell what we don't

– decrease COGS, and generate additional revenue

Goals

Realize forecasted economies of scale as collections increase reducing the overall cost per L

Enhance efficiencies and ensure self-sufficiency into the future

Growth of the ADMA plasma collection network to firm up the ability to ramp IG production and grow market share

Enhance economies of scale, speed to market, self-reliance, and increase market share

Milestones, Corporate and Financial Highlights

Experienced Management Team and Board of Directors

NAME	SELECTED CURRENT OR PAST AFFILIATIONS				
Adam Grossman Founder, President, CEO & Director	 MedImmune	 GENESIS biosciences	 Genesis Bio-Pharmaceuticals, Inc.	 nhs NATIONAL HOSPITAL SPECIALTIES	 American Red Cross
Brian Lenz, CPA Executive Vice President, Chief Financial Officer	 KPMG	 BioNJ Advancing the New Jersey Biotech Industry	 CorMedix		
Steven Elms Chairman	 AISLING CAPITAL	 HAMBRECHT & QUIST Investment Banking for the New Economy	 LOXO ONCOLOGY		
Dr. Jerrold Grossman Founder & Vice Chairman	 GENESIS biosciences	 Genesis Bio-Pharmaceuticals, Inc.	 nhs NATIONAL HOSPITAL SPECIALTIES	 Immuno improving life through science	 New York Blood Center
Lawrence Guiheen Director	 Baxter	 PPTA Protein Protein Therapeutics Association	 KEDRION BIOPHARMA		
Martha Demski Director	 Aji BIO-PHARMA SERVICES	 equillium	 CHIMERIX	 ADAMAS	 BANK OF AMERICA
Bryant Fong Director	 BIOMARK CAPITAL	 NEOS Therapeutics			
Young Kwon, Ph.D. Director	 LIGHTSTONE VENTURES	 Momenta Driven by impossible	 Biogen	 ALCHEMAB THERAPEUTICS	

Financials

Current Financial Overview	Nine Months Ended September 30, 2021	Nine Months Ended September 30, 2020
Revenues	\$54.6M	\$28.3M
Net Loss	\$(55.0M)	\$(56.3M)
Loss per common share	\$(0.44)	\$(0.68)
Cash and cash equivalents	\$34.4M	\$59.7M
Total assets	\$238.7M	\$190.0M
Total liabilities	\$135.9M	\$118.6M
Total stockholders' equity	\$102.8M	\$71.4M
Common stock outstanding	195.8M	94.5M
Fully diluted common stock outstanding	212.6M	103.9M

Cash Balance Excludes Gross Proceeds of \$57.5M From Equity Financing Completed October 2021

Upcoming Milestones

OBJECTIVES

- ☒ Execute on supply chain robustness for increased BIVIGAM® plasma pool scale
- ☒ Execute on supply chain robustness for aseptic fill/finish machine
- ☐ Expand our BioCenters plasma collection facility network to a total of 10 or more
- ☐ Expand commercial production and penetration of our marketed IVIG product portfolio
- ☐ Disclose potential product development pipeline consisting of additional specialty plasma and/or hyperimmune IG products

ADMA Investment Highlights



Unique and Different Supply-Chain Nuances and Regulatory Requirements

Long production cycle-time – it can take 7 to 12 months for the end-to-end production, fill/finish, testing and release of a batch of IG

To market plasma products for the U.S., **products must be made from U.S. donor plasma** in FDA-approved biologics manufacturing plants

Regulatory Barriers – Strict rules and regulations from FDA and State health departments; FDA performs **release testing** for each batch of ADMA's IG products

Large inventories required for raw material and in-process product are needed to ensure consistent and routine supply

Raw material U.S. source plasma is in high demand globally with commodity-like pricing

Patent portfolio across hyperimmune IG landscape including the production of ASCENIV™

Working capital requirements are substantial due to product production cycle and sales receivable cycle

Commercial Sales & Production Ramp Underway

ADMA manufactures and markets 3 FDA-approved IG products in the U.S.:

- **BIVIGAM®** relaunched and marketed in 2019
- **ASCENIV™** first commercial sales in 2019
- **NABI-HB®** marketed in the US since 1999

Potential peak revenues of all ADMA's IG products and production processes to reach >\$300M as we ramp production

ADMA controls all aspects of manufacturing, regulatory affairs and quality assurance

Opportunities to **expand production capacity, increase production yield and revenue while enhancing margins**

ADMA Biologics has existing infrastructure and processes in place to manage plasma-derived products distinctive requirements

Thank You