## Investors’ & Analysts’ Meeting 2017

Emeryville (California, USA)
June 7th and 8th, 2017

### Wednesday, June 7th 2017 Emeryville

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
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</thead>
<tbody>
<tr>
<td>08:30</td>
<td>Pick up from hotels</td>
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</tr>
<tr>
<td>09:00</td>
<td>Arrival at Grifols Diagnostic Solutions (GDS) headquarters</td>
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</tr>
<tr>
<td>09:00 - 09:30</td>
<td>Coffee + Welcome</td>
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<tr>
<td>09:30 - 9:45</td>
<td>Introductory remarks</td>
<td>V. Grifols Deu</td>
</tr>
<tr>
<td>09:45 - 10:15</td>
<td>Grifols global leadership</td>
<td>R. Riera</td>
</tr>
<tr>
<td>10:15</td>
<td>Plasma procurement strategy</td>
<td>E. Herrero</td>
</tr>
<tr>
<td>10:15 - 11:00</td>
<td>Coffee break</td>
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<tr>
<td>11:00 - 11:15</td>
<td>Commercial strategies to deliver sustainable growth</td>
<td>L. Morgan</td>
</tr>
<tr>
<td>11:15 - 12:15</td>
<td>Bioscience capacity expansion plan: keeping pace with growing demand</td>
<td>D. Fleta</td>
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<tr>
<td>12:15 - 13:00</td>
<td>Lunch</td>
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<td>13:00 - 14:00</td>
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<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
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</thead>
<tbody>
<tr>
<td>14:00 - 14:30</td>
<td>Hospital Division: expansion through integrated solutions</td>
<td>P. Allen</td>
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<tr>
<td>14:30 - 15:00</td>
<td>Diagnostic Division</td>
<td>C. Schroeder</td>
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<tr>
<td>15:00 - 15:30</td>
<td>Driving profitable growth</td>
<td>G. Rich</td>
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<tr>
<td>15:30 - 16:00</td>
<td>Maximizing value through effective integration</td>
<td>O. Duñach</td>
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<tr>
<td>16:00 - 16:30</td>
<td>Investing for growth</td>
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<tr>
<td>16:30 - 16:45</td>
<td>Q&amp;A</td>
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<tr>
<td>16:45 - 17:00</td>
<td>Coffee break</td>
<td>C. Roura / R. Biosca</td>
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<tr>
<td>17:00</td>
<td>Facility tour</td>
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<tr>
<td>18:00</td>
<td>Tour presentation</td>
<td>C. Roura / R. Biosca</td>
</tr>
<tr>
<td>18:45</td>
<td>Update on Alkahest</td>
<td>T. Wyss-Coray</td>
</tr>
<tr>
<td>19:00</td>
<td>Dinner</td>
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### Thursday, June 8th 2017 Emeryville

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>08:00</td>
<td>Pick up from hotels</td>
<td>A. Arroyo</td>
</tr>
<tr>
<td>08:30</td>
<td>Arrival at Grifols Diagnostic Solutions (GDS) headquarters</td>
<td>A. Arroyo</td>
</tr>
<tr>
<td>08:30 - 09:00</td>
<td>Coffee</td>
<td>A. Arroyo</td>
</tr>
<tr>
<td>09:00</td>
<td>Bio Supplies Division introduction</td>
<td>M. Crowley</td>
</tr>
<tr>
<td>09:00 - 09:30</td>
<td>Access Biologicals</td>
<td>M. Crowley</td>
</tr>
<tr>
<td>09:30 - 10:15</td>
<td>Innovation: redefining the industry</td>
<td>D. Bell</td>
</tr>
<tr>
<td>10:15 - 10:45</td>
<td>Coffee break</td>
<td>V. Grifols Deu</td>
</tr>
<tr>
<td>10:45 - 11:15</td>
<td>Financials: focus on profitable growth</td>
<td>A. Arroyo</td>
</tr>
<tr>
<td>11:45 - 12:15</td>
<td>Q&amp;A</td>
<td>V. Grifols Deu</td>
</tr>
<tr>
<td>12:15 - 12:45</td>
<td>Driving value creation through disciplined strategy execution</td>
<td>V. Grifols Deu</td>
</tr>
<tr>
<td>12:45</td>
<td>Lunch and transfers to airport</td>
<td></td>
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</tbody>
</table>
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This document contains forward-looking information and statements about Grifols based on current assumptions and forecast made by Grifols management, including proforma figures, estimates and their underlying assumptions, statements regarding plans, objectives and expectations with respect to capital expenditures, synergies, products and services, and statements regarding future performance. Forward-looking statements are statements that are not historical facts and are generally identified by the words “expected”, “potential”, “estimates” and similar expressions. Although Grifols believes that the expectations reflected in such forward-looking statements are reasonable, various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in our public reports filed with the Comisión Nacional del Mercado de Valores and the Securities and Exchange Commission, which are accessible to the public. The company assumes no liability whatsoever to update these forward-looking statements or conform them to future events or developments. Forward-looking statements are not guarantees of future performance. They have not been reviewed by the auditors of Grifols.

Introductory remarks

Víctor Grífols Deu
Co-Chief Executive Officer
An industry pioneer and market leader

Ramón Riera
Chief Operations Officer

Global leader in the plasma-derivatives sector
Market distribution by company 2016

Note: 1. Source: Grifols internal provisional data, 2016
Global leader in the plasma-derivatives sector

Leadership position for three major proteins

<table>
<thead>
<tr>
<th>Protein</th>
<th>GRIFOLS</th>
<th>CSL</th>
<th>SHIRE</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>IVIG</td>
<td>23%</td>
<td>21%</td>
<td>21%</td>
<td>35%</td>
</tr>
<tr>
<td>#1</td>
<td>23% share</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alpha-1 Antitrypsin</td>
<td>68%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#1</td>
<td>68% share</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albumin</td>
<td>17%</td>
<td>13%</td>
<td>9%</td>
<td>38%</td>
</tr>
<tr>
<td>#2</td>
<td>17% share</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PdFactor VIII</td>
<td>20%</td>
<td>13%</td>
<td>13%</td>
<td>16%</td>
</tr>
<tr>
<td>#1</td>
<td>20% share</td>
<td></td>
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</tbody>
</table>

Note: 1. Source: Grifols internal provisional data, 2016

Leadership and successful pioneering track record
Leadership and successful pioneering track record
Competitively positioned across the value chain

- Transfusion and transfusion safety
- Hospital pharmacy
- Quality and safety of our products
- Hemophilia community
- Alzheimer’s and liver diseases
- Alpha-1 deficient patients community
- Immunodeficient patients and neurological disorders
- Support of rare diseases
- Global footprint

Pioneers in blood transfusion and blood and plasma collection
Dedicated to developing innovative healthcare products and services since 1940

- Invention of the Flebula

  The double-ended device known as the flebula was introduced in 1928 by José Antonio Grifols Roig. The device resolved many of the inconveniences related to blood transfusions, including poor asepsis, severe vein damage in patients and transport challenges

- Development of Plasmapheresis

  Dr. José Antonio Grifols Lucas developed the process of plasmapheresis to obtain plasma for transfusion and fractionation. In 1951, he presented the results of his research at the 4th International Congress of Blood Transfusion. The paper was published in 1952 in the British Medical Journal

  Today, plasmapheresis continues to be a common procedure in plasma donation centers to obtain plasma for fractionation
Pioneers in blood transfusion and blood and plasma collection
Dedicated to developing innovative healthcare products and services since 1940

• Development of IV Solutions and micro-hematocrit

In 1951, Gri-Cel introduced the hematocrit technique in the Spanish market. The device reads the ratio of red cells in the blood in a simple step.

Manufacturing facilities of blood-collection bags

Pioneers in blood transfusion and blood and plasma collection
Automatic Coombs centrifuge
Leadership and successful pioneering track record
Competitively positioned across the value chain

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Innovation in IV fluid therapy, pharmacy compounding and medication delivery

Manufacturing facilities for parenteral solutions
Innovation in IV fluid therapy, pharmacy compounding and medication delivery

- Support for the hospital pharmacy in Spain and Latin America; development of specific software to manage hospital pharmacy inventories
- Unidose software
- Flebobag introduction
Innovation in IV fluid therapy, pharmacy compounding and medication delivery

Sterile compounding, Griffii®

Misterium®

Robots for compounding in hospital pharmacy
Leadership and successful pioneering track record

Competitively positioned across the value chain

- Transfusion and transfusion safety
- Hospital pharmacy
- **Quality and safety of our products**
  - Hemophilia community
  - Alzheimer’s and liver diseases
  - Alpha-1 deficient patients community
  - Immunodeficient patients and neurological disorders
  - Support of rare diseases
  - Global footprint

Leading the industry in product safety and innovation

A history of quality and safety fosters long-term value

<table>
<thead>
<tr>
<th>Single donor cryoprecipitate</th>
<th>Two donor fibrinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.jpg" alt="Image of cryoprecipitate" /></td>
<td><img src="image2.jpg" alt="Image of fibrinogen" /></td>
</tr>
</tbody>
</table>
Leading the industry in product safety and innovation
A history of quality and safety fosters long-term value

- First fractionator to apply pdFVIII viral inactivation
- Early adoption HCV testing (1984)
- Early adoption HIV testing (1985)
- FDA establishment license (1995)
- Academies in Barcelona, Glendale, Indianapolis

PediGri®

- Grifols has offered PediGri® to healthcare professionals for more than 20 years
- This unique service provides a simple yet effective means of tracing each unit of final product back through the production chain, providing additional information about the quality and safety of plasma-derived products
- PediGri® reflects the company’s beliefs in transparency and longstanding commitment to healthcare professionals
Leadership and successful pioneering track record
Competitively positioned across the value chain

- Transfusion and transfusion safety
- Hospital pharmacy
- Quality and safety of our products

**Hemophilia community**
- Alzheimer’s and liver diseases
- Alpha-1 deficient patients community
- Immunodeficient patients and neurological disorders
- Support of rare diseases
- Global footprint

First manufacturer of pdFVIII to apply double viral inactivation
Commitment to innovation for enhanced well-being

- Introduced in the early 1980s, Criostat® was Grifols’ first concentrated clotting pdFVIII
  - 1984 Criostat® HT, a heat-treated version
  - 1989 Criostat® SD-2, with double viral inactivation: heat treatment and solvent-detergent process
- Removal of inhibitors to pdFVIII through immunotolerance regimes with pdFVIII clinical experience
Grifols participation in SIPPET
Commitment to innovation for enhanced well-being

- The SIPPET\(^{(1)}\) Study (Survey of Inhibitors in Plasma-Product Exposed Toddlers) is an international multicenter clinical trial involving 42 sites and 14 countries in 5 continents, whose main objective is to evaluate the frequency of inhibitor development in previously untreated hemophilia patients, following exposure to plasma derived concentrates.

- The findings may shape the understanding of the condition and treatment strategies.

Note: 1. SIPPET Study results show that treatment with recombinant factor VIII (rFVIII) is associated with an 87% greater incidence of inhibitors than when using plasma-derived factor VIII with von Willebrand factor (pdFVIII/VWF) in previously untreated patients with severe hemophilia A.

World Federation of Hemophilia donation
Grifols continues to support the global hemophilia community

- Grifols will donate a minimum of 140 million international units (I.U.) of blood clotting factors to the World Federation of Hemophilia (WFH) over the next 5 years as a continuation of the company’s 3-year commitment, which began in 2014.

- The renewed partnership with WFH reaffirms Grifols’ commitment to the global hemophilia community. It is the company’s most significant contribution to date to the WFH Humanitarian Aid Program.
The Martín Villar Haemostasis Awards
Grifols continues to support the global hemophilia community

- Grifols is committed to promoting scientific research as part of an ongoing process to enhance the health and well-being of people worldwide.
- The Martín Villar Haemostasis Awards aim to support scientific excellence and innovation, by engaging both physicians and scientists early in their careers who are interested in investigating hemostasis and blood coagulation disorders and promoting new insights and innovation in this area.

Leadership and successful pioneering track record
Competitively positioned across the value chain

- Transfusion and transfusion safety
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- Hemophilia community
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  - Immunodeficient patients and neurological disorders
- Support of rare diseases
- Global footprint
More than 10 years of commitment with Alzheimer
Leading advocates in the fight against Alzheimer’s

- Research strategy:
  - Early diagnosis
  - Treatment that slows its progression
  - Vaccination to prevent and protect

- The medical study AMBAR (Alzheimer Management by Albumin Replacement) is based on the use of albumin and IVIG through hemapheresis (selective removal of certain components of blood) as a treatment for patients with mild-to-moderate Alzheimer’s disease

- In 2012, Grifols acquired 51% of Araclon Biotech’s share capital

- Development of a vaccine that would combat the disease in asymptomatic preclinical stages

Groundbreaking liver cirrhosis trials
Exploring new indications for albumin

- **APACHE**
  - Phase III study on acute-on-chronic liver failure (ACLF) based on albumin detoxification functions using Albutein® 5%

- **PRECIOSA**
  - Phase III study on administration of Albutein® 20% in patients with advanced cirrhosis and its impact on cardio circulatory, renal function and hepatic hemodynamics
The Albus Albumin Awards Program
Driving the benefits of albumin

- The Albus program seeks to foster the creation of a scientific network and spread the knowledge of use of albumin as a therapeutic alternative
- The program is further testament of Grifols’ commitment to innovation in this field

Leadership and successful pioneering track record
Competitively positioned across the value chain

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- Global footprint
The isolation and purification of alpha-1 antitrypsin and its therapeutic administration began in the 1980s

- **1987**: license for replacement therapy to treat severe congenital deficiency and impaired lung function
- **1988**: launch in the U.S. and licensed in Canada and Germany
- **1992**: license in Spain
- **2009**: Talecris Biotherapeutics receives approval for Prolastin®-C, a more concentrated version
- **2011**: Grifols acquires Talecris Biotherapeutics

**Alpha-1 antitrypsin deficiency**

Grifols is leading the industry in treating alpha-1 deficiency

Grifols is global leader in alpha-1 antitrypsin. The most common symptoms of alpha-1 antitrypsin deficiency (AATD) relate to gradual loss of lung function. An estimate 1 in every 2,500 patients suffers from AATD, 95% of which are undiagnosed

Grifols continuously invests in research and technology in order to:

- Expand awareness of AAT deficiency
- Increase product supply
- Enhance safety
- Offer innovative products and delivery techniques
International Alpha-1 Patient Congress, April 11-13, 2013
Grifols is leading the industry in treating alpha-1 deficiency

- On April 11, 2013 Grifols hosted the Alpha-1 Patient Congress to commemorate the 50th anniversary of the discovery of alpha-1 antitrypsin deficiency
- More than 200 delegates, including clinicians, researchers, educators, advocates, patients and Grifols representatives, participated in a special event held at the Sant Cugat Auditorium
- Delegates from over 20 countries attended the event. The congress was highly successful, achieving its overriding goal of increasing awareness about alpha-1 antitrypsin deficiency and gathering researchers and patients to work together toward a cure

The ALTA Alpha-1 Antitrypsin Laurell’s Training Award
Driving the benefits of alpha-1 deficiency

- The ALTA award strives to identify and engage researchers, both physicians and scientists, who are early in their careers and have a keen interest in researching alpha-1 antitrypsin deficiency
- The award also aims to reinforce collaborations among scientists and clinicians working in the field of alpha-1 antitrypsin deficiency
Leadership and successful pioneering track record
Competitively positioned across the value chain

- Transfusion and transfusion safety
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- Quality and safety of our products
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- Alzheimer’s and liver diseases
- Alpha-1 deficient patients community
- **Immunodeficient patients and neurological disorders**
- Support of rare diseases
- Global footprint

The SPIN Scientific Progress Immunoglobulins in Neurology
Proven commitment to address neurological diseases

- The SPIN Award Program was launched in 2008 to support research on the use of immunoglobulins in neurology
- Grifols considers the program a tangible contribution to improve the standards of care and outcomes for patients with neurological conditions
- Objectives:
  - Develop novel concepts in immunoglobulin research in the field of neurology
  - Encourage the discovery of beneficial immunoglobulin applications for neurologic disorders
  - Promote research of novel therapeutic options for patients with neurologic conditions
Leadership and successful pioneering track record
Competitively positioned across the value chain

- Transfusion and transfusion safety
- Hospital pharmacy
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- Hemophilia community
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- Immunodeficient patients and neurological disorders
- **Support of rare diseases**
- Global footprint

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**Hemophilia**
Support of rare diseases

**Hemophilia A**
- The most common form of hemophilia, present in about 1 in 5,000-10,000 male births
- Known as Factor VIII deficiency or classic hemophilia
- Treatment: Alphanate® and Fanhdi®

**Hemophilia B**
- A rare form of the disease caused by a deficiency of Factor IX which affects only 1 in every 30,000 males worldwide
- Treatment: AlphaNine® SD
Neurological diseases
Support of rare diseases

Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)
• A rare disorder of the peripheral nerves. The number of new cases per year is about 1-2 per 100,000 people. Early detection is critical to prevent long-term axonal damage
• Gamunex®-C is indicated for treatment of CIDP to improve neuromuscular disability and impairment, as well as for maintenance therapy to prevent relapse

Post-Polio Syndrome (PPS)
• Recognized as a rare disease. The U.S. FDA has granted orphan drug designation for the use of human immunoglobulin
• Immunoglobulin has shown significant and clinically meaningful results in endpoints such as pain, walking mobility and quality of life

Alpha-1 and specialty plasma products
Support of rare diseases

• Alpha-1 deficiency: a genetic disorder that causes significant reduction in the blood protein alpha-1 antitrypsin causing certain enzymes to attack healthy tissues, primarily in the lungs. To replace reduced levels of this protein, physicians often prescribe an alpha-1 proteinase inhibitor

• Hyperimmunoglobulins: concentrated, plasma-derived immunoglobulins which provide rapid passive immunity to patients with immune systems compromised or challenged by exposure to infectious agents

• Grifols produces hyperimmunes for a variety of diseases:
  • Tetanus
  • Rabies
  • Hepatitis A&B
  • Congenital Rubella
  • RH hemolytic disease of the newborn (HDN)
  • Varicella
The GATRA Program Research Awards
Grifols longstanding commitment to research

- Awarded annually, the GATRA Program (Grifols Scientific Awards about research on antithrombin) is designed to cultivate a scientific network and spread knowledge about antithrombin as a therapeutic product. Project proposals often relate to efficacy, mechanism of action, safety and tolerability, quality of life and pharmacoeconomics.

- Evidence of Grifols' commitment to innovation, GATRA aims to:
  - Develop novel concepts on antithrombin research
  - Encourage new applications of antithrombin
  - Further investigate mechanisms of action and clinical effects in different indications
  - Establish new and long-lasting collaborations among scientists and clinicians
  - Reinforce and build the existing network between the researcher community and Grifols
  - Foster relationships with key opinion leaders across different fields

Leadership and successful pioneering track record
Competitively positioned across the value chain

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- Support of rare diseases
- Global footprint
First steps toward international expansion
Increasing our global footprint

• In 1983, Grifols established trade connections with China via the Green Cross Corporation, initially exporting gammaglobulin, followed by albumin. China was Grifols’ first truly important export customer. In 1984, exports of gammaglobulin totaled approximately 2 million vials.

• Portugal was the company’s first foreign subsidiary. Established in Lisbon in 1988, it was our first step in a process of internationalization, offering important insights and laying the groundwork for our future global expansion.

Latin American subsidiaries and Miami
Increasing our global footprint

• Chile, established in 1990 in Santiago
  Among the first subsidiaries to sell nearly the entire portfolio

• Argentina, established in Buenos Aires in 1991
  Sells all main product lines for domestic market, as well as for Paraguay and Uruguay

• Mexico, established in 1993
  Also distributes to Bolivia, Ecuador, Venezuela and Central America

• Miami, inaugurated in 1990
  The site of our first U.S. office

• Brazil, established in Curitiba in 1998
  Branch in Sao Paulo
European subsidiaries/Czech Republic Fractionation Program
Increasing our global footprint

- **United Kingdom**, based in Cambridge and established in 1979 as a subsidiary of Alpha. Early in 1990, it became a distributor of Grifols IVIG and pdFVIII

- **Czech Republic**, Customer Fractionation Program. Grifols commenced its activities through Coyco Farma. A year later, the company won the tender from the Czech Department of Health to fractionate plasma collected in the country. In 1992, a subsidiary was established in Prague, which was also responsible for Albania, Poland and Bulgaria

- **Italy**, established in 1993 in Pisa by Alpha, acquired by Grifols in 1997

- **Germany**, Grifols Deutschland progressively took over in 1997 all activities previously performed by Alpha GmbH in the German plasma protein market. At that time one of the most important in the world

Presence in Asia
Increasing our global footprint

- **The first office in Asia** was opened in 2000 in Singapore, which serves as a springboard for entering other Southeast Asian markets. After acquiring the Alpha assets in 2003, it joined the Malaysian and Thai subsidiaries

- **Grifols Asia-Pacific** serves 15 countries in the region
U.S. entry through the acquisitions of Alpha and Talecris assets

Increasing our global footprint

- **In 2003**, Grifols acquired the assets of Alpha Therapeutic Corporation-Mitsubishi and established corporate offices in California. From this base, the company manages plasma therapy manufacturing and oversees the U.S. sales structure for the Bioscience and Diagnostic divisions.

- **2011**, acquisition of Talecris Biotherapeutics Inc., which made Grifols the third largest global manufacturer of plasma-derived protein therapies.

Direct commercial presence in 30 countries

Increasing our global footprint

Grifols continues to grow by broadening our product portfolio, expanding into new markets and acquiring companies around the world that offer innovative products and technologies.
Key takeaways
Grifols global leadership

• Grifols is a strong and well-positioned industry growth leader
• Successful track record built on sustainable strategies
• Grifols’ focus on patients, advancement of treatment options and production of innovative industry solutions is delivering results
• Grifols is a true global player with a worldwide presence to optimize the business
• Grifols’ pioneering mindset and approach is a competitive advantage
Plasma procurement strategy
Capacity leadership to maximize growth

Eduardo Herrero
Deputy President of Bioscience Industrial Group

Agenda
A comprehensive strategy to continue increasing plasma collection

1. An integrated model: a solid structure for a sustainable growth
2. Plasma procurement strategy: growth and plasma cost framework
3. Integrated supply chain model:
   • Logistics and transportation
   • Testing laboratories and capabilities
   • Talent management
   • Driving efficiencies through organizational and operational improvements
4. Key takeaways
A fully integrated plasma procurement model
Committed to support sustainable growth

- Grifols aims to consistently offer the safest and highest-quality plasma while delivering the best donor experience

- The 7,000+ Grifols Plasma Operation (GPO) professionals contribute toward sustainable growth by:
  - Opening new centers, as well as expanding or remodeling existing ones
  - Innovating and improving processes and systems to provide an enhanced donor service
  - Building an efficient supply chain by managing testing labs and logistics centers

- Grifols strives to ensure long-term sustainability by:
  - Moving toward decentralization, greater flexibility and adaptability in a dynamic environment
  - Generating business platforms that adapt more easily to change
Plasma procurement strategy:
Growth and plasma cost framework
Plasma procurement strategy
U.S. plasma collection growth\(^{(1)}\)

- Plasma collection is a large, growing industry
- Since 2012, the number of centers and volume collected have increased by 45%
- In 2016, the U.S. plasma market has collected c.31.5 million liters
- The number of donor centers reached 601 by the end of 2016
- Increasing collections and recruiting qualified staff are main challenges

Note: \(^{1}\) Source: PPTA - The Plasma Protein Therapeutics Association data

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Plasma procurement strategy
Grifols plasma donor centers: presence and opportunities ahead

- Grifols is the world-leading company with 180 plasma donation centers in the U.S.
- Grifols’ existing footprint outside the Western region aligns with the geographical distribution of the plasma collection market
- Grifols is expanding its presence in MO, NM, and SC
- Grifols has a much larger presence in UT, CA, South Texas, TN and IL than competitors\(^{(1)}\)

Note: \(^{1}\) Source: PPTA - The Plasma Protein Therapeutics Association data
Plasma procurement strategy
Expanding our plasma capacity organically and inorganically

- 2-year acceleration plan to reach target of 225+ plasma donor centers by 2019
- Acquisition of 6 plasma centers in February 2017
- IBBI operates 25 plasma donor centers in 2017, in addition to blood centers and laboratory
- Over 100 projects through 2022 to spearhead new locations, expansions, major remodeling and relocations
- Objective of establishing operations in new regions to create clusters and attain collection efficiency
- All projects adhere to Grifols standards and comply with U.S. FDA and EMA requirements, among others

### Grifols U.S. plasma centers

<table>
<thead>
<tr>
<th>Year</th>
<th>Grifols centers</th>
<th>Acquired from 3rd parties</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>150</td>
<td>100</td>
</tr>
<tr>
<td>2015</td>
<td>160</td>
<td>90</td>
</tr>
<tr>
<td>2016</td>
<td>171</td>
<td>81</td>
</tr>
<tr>
<td>2017F</td>
<td>184</td>
<td>72</td>
</tr>
<tr>
<td>2018F</td>
<td>194</td>
<td>64</td>
</tr>
<tr>
<td>2019F</td>
<td>230</td>
<td>51</td>
</tr>
</tbody>
</table>

### Plasma procurement strategy
Expanding our plasma capacity while working toward self-sufficiency

#### Regular source plasma

<table>
<thead>
<tr>
<th>Year</th>
<th>Grifols collections</th>
<th>3rd party</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>79%</td>
<td>21%</td>
</tr>
<tr>
<td>2018FC</td>
<td>84%</td>
<td>16%</td>
</tr>
<tr>
<td>2020FC</td>
<td>93%</td>
<td>7%</td>
</tr>
<tr>
<td>2022FC</td>
<td>96%</td>
<td>4%</td>
</tr>
</tbody>
</table>

#### Leadership on hyperimmune plasma

<table>
<thead>
<tr>
<th>Year</th>
<th>Grifols collections</th>
<th>3rd party</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>2018FC</td>
<td>68%</td>
<td>32%</td>
</tr>
<tr>
<td>2020FC</td>
<td>88%</td>
<td>12%</td>
</tr>
<tr>
<td>2022FC</td>
<td>89%</td>
<td>11%</td>
</tr>
</tbody>
</table>

**Note:**
1. As % of total items of fractionated plasma
2. Anti-Hepatitis B, Anti-D, Anti-Tetanus and Anti-Rabies programs

---

64 Investors' & Analysts’ Meeting 2017 | Emeryville
Plasma cost management
Continuous improvement of the entire value chain to promote cost containment

- Planned volume growth drives fixed cost leverage
- Maintain donor commitment compensation consistent with market
- Management of U.S. labor market consistent with the industry
- Process improvements and automations to further promote cost savings

Logistics: integrated plasma supply chain
New plasma warehouse multi-site system drives cost reductions

- 70% throughput increase with only a 25% increase in labor
- One shared database among multiple locations (LA, Clayton and Ireland)
- Grifols U.S. centers and warehouses currently operate with centralized release
- Semi-automated plasma clearing lines
- Automated freezer, conveyors and pallet automatic retrieval systems
- Efficiencies and greater control of inventory management
- RFID\(^1\) for crate count and maintenance
- Back-up systems to support emergency situations

\(^1\) RFID: Radio-frequency identification
## Logistics: integrated plasma supply chain

**Alignment across the supply chain drives cost reductions**

### Infrastructure

<table>
<thead>
<tr>
<th>Highly automated plasma logistics centers (7m liters global storage capacity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clayton</td>
</tr>
<tr>
<td>3.7m liter capacity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dedicated trucking companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialized ocean freight carriers</td>
</tr>
</tbody>
</table>

### Processes

- **Geographic alignment of centers to plasma logistic warehouse**
- **50+% U.S. freight cost/l reduction since 2011**
- **Integrated global plasma supply chain**
- **20% inventory reduction since 2011**
- **40% transit time reduction since 2016**
- **On-Test plasma shipments to plasma logistics centers**
- **50% center inventory reduction since 2011**
- **20% ocean freight cost reduction since Q1 2017**
- **50%+ U.S. freight cost/l reduction since 2011**
- **20% inventory reduction since 2011**
- **40% transit time reduction since 2016**
- **50% center inventory reduction since 2011**
- **20% inventory reduction since 2011**
- **20% inventory reduction since 2011**
- **20% inventory reduction since 2011**
- **20% inventory reduction since 2011**

#### Inventory and logistics management drives cost reductions

### Inventory management

<table>
<thead>
<tr>
<th>INVENTORY OPERATING TARGET (MONTHS-ON-HAND)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100.0</td>
</tr>
</tbody>
</table>

**-20%**

<table>
<thead>
<tr>
<th>CENTER INVENTORY (WEEKS-ON-HAND)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100.0</td>
</tr>
</tbody>
</table>

**-50%**

### Logistics

<table>
<thead>
<tr>
<th>U.S. FREIGHT COST (COST/LITER)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100.0</td>
</tr>
</tbody>
</table>

**-55%**

Plasma supply chain has been optimized to enable working capital reduction, operational efficiencies and cost savings

**Note:** 1. 2011 baseline
Plasma cost management
Continuous improvement of the entire value chain to promote cost containment

- Planned volume growth drives fixed cost leverage
- Maintain donor commitment compensation consistent with market
- Management of U.S. labor market consistent with the industry
- Process improvements and automations to further promote cost savings

Plasma testing laboratories: capabilities and efficiency
Focus on reducing costs while maintaining high operational integrity

Plasma screening and Blood HCT/P - Organ Donor Screening
- Serology: anti-HCV, anti-HIV1/2, HBsAg, anti-HBc, anti-CMV, anti-EBV, anti-Toxo, anti-T Cruci
- NAT (Grifols Diagnostic platform and back-up): HCV, HIV, HBV, pB19, HAV, WNV, ZIKA (IND(1))
- Immunohematology and Ancillary testing: ABO Grouping, Rh Typing, ALT, SPE, Total Protein, RPR (Syphilis), Hyperimmune testing (Anti-Tetanus, Anti-HB, Anti-Rabies)

San Marcos, TX
Austin, TX
Memphis, TN (call option in 2019)
Plasma testing laboratories: capabilities and efficiency

Focus on reducing costs while maintaining high operational integrity

The laboratory processes are designed for controlled high volume testing:

- Combined testing capacity:
  - Up to 17.5 million annual donations
  - More than 147 million reported test results
- Planned expansion of the Austin, TX facility in the design phase:
  - Increase total laboratory size from 25,000 to 50,000 square feet
  - Increase testing capacity up to 20.5 million donations

Expansion and automation provides excellent donor and product management

EIA/NAT\(^{1}\) combined testing turnaround time\(^{1,2}\)

Decide 83% in EIA/NAT combined testing turnaround time

Note:
1. EIA: Enzyme immunoassay. NAT: Nucleic Acid Testing
2. 2012 baseline
Plasma cost management
Continuous improvement of the entire value chain to promote cost containment

- Planned volume growth drives fixed cost leverage
- Maintain donor commitment compensation consistent with market
- Management of U.S. labor market consistent with the industry
- Process improvements and automations to further promote cost savings

Grifols Academy of plasmapheresis: talent retention
Commitment to continuous employee development

- 2016 classroom training:
  - 274 classes offered
  - 1,634 participants
  - 26,262 training hours
- 2016 online self-study:
  - 15,952 courses completed
- Academy campuses:
  - 12,000 square-foot expansion of the Glendale Academy completed in 2Q 2017
  - The Indianapolis and Glendale locations have 30,000 total square feet and capacity for 350 students
  - Auditorium with seating for 110
  - State-of-the-art audio and video systems
  - 6 satellite locations
Grifols Academy of plasmapheresis: partnerships
Commitment to continuous employee development

<table>
<thead>
<tr>
<th>Academy awarded accreditation 2014</th>
<th>38 degrees awarded 2016 and 2017</th>
<th>444 continuing education certificates issued in 2016</th>
<th>90 academy classes in articulation agreement</th>
<th>115 employee certifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-learning programs accredited 2016</td>
<td>100 employees enrolled in program</td>
<td>1,110 continuing education hours in 2016</td>
<td>UoP students convert to college credits</td>
<td>Academy offers preparation course &amp; proctors examination</td>
</tr>
</tbody>
</table>

Regulatory inspections 2016
Grifols high standards ensure operational efficiency and sustainable growth

<table>
<thead>
<tr>
<th>Agency</th>
<th>Inspection days(2)</th>
<th>Admin actions(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDA(1)</td>
<td>331</td>
<td>0</td>
</tr>
<tr>
<td>EU</td>
<td>262</td>
<td>0</td>
</tr>
<tr>
<td>COLA/CLIA</td>
<td>80</td>
<td>0</td>
</tr>
<tr>
<td>PPTA</td>
<td>58</td>
<td>0</td>
</tr>
<tr>
<td>Other(3)</td>
<td>16</td>
<td>0</td>
</tr>
</tbody>
</table>

Close to 100% of FDA inspections with “0” observations(4)

A proven track record: no administrative actions or other regulatory issues promote cost savings across the value chain

Note:
1. More than 90% of FDA inspections resulted in 0 observations
2. Suspension, revocation, or loss of any license or certification, Warning Letter, imposed suspension of any regulated activity, etc.
3. State environmental agencies, OSHA, ex-US/EU Agencie
4. Number of FDA inspections with “0” issues (Form-483)
Driving efficiencies through organizational and operational improvements

Operational improvements
Driving significant productivity gains through organizational efficiency

Process Standardization and Resource Management
Improve operational performance by standardizing processes, managing production costs and implementing quality assurance best practices

Integrated Resource Management
- Staff
- Procedures
- Materials
- Facilities
- Equipment

“The right number of people with the right skills, at the right place and at the right time”

- Minimize donor wait times (30% reduction)
- Optimize equipment turnover (16% increase)
- Maximize staff utilization
- Increased donor & employee satisfaction
- Increased competitive advantage
- Lower employee and donor turnover
- Increase skill level
- Greater competencies
Operational improvements
Driving significant productivity gains through organizational efficiency

Biometrics donor health history:
• Self-administered questionnaires at center kiosks
• Biometric donor verification
• Encourages donor self-screening
• Electronic donor history data retrieval
• Tracks and traces responses and deferrals
• Promotes safety for donors and product
• Technology improves donor satisfaction and reduces labor costs
• Automatic exchange of information with main systems

Operational improvements
Driving significant productivity gains through organizational efficiency

Process Modeling Tool:
• Emulates functionality of an operating site
• Assists operations in schedule and workflow creation
• Allows full simulation and proof of concept in process improvement

Donor Center laboratory:
• Complete model of a working center
• Test bed for process improvement research and development
• Full testing of new technologies before deployment
Operational improvements
Driving significant productivity gains through organizational efficiency

Commitment to excellence

• Automated temperature monitoring and management on freezing location
• Investigation of unexpected test results with potential retesting of individual unit
• Sample archive system for all collected plasma: health studies and IND
• PediGri®
• RFID on supply chain

Operational improvements
Driving significant productivity gains through organizational efficiency

Plasma sampling machine and verification system (PBS/GSV)

• 100% automation of sample to unit verification
• Automated label printing per sample eliminating batch label set and potential for mislabeling
• Specifically designed for the plasma operations by Grifols Engineering and Grifols IT
• Removal of human error leads to superior product integrity
**Operational improvements**

Driving significant productivity gains through organizational efficiency

**Plasma rejected and downgraded**

- Decrease of c. -32.5% in unsuitable plasma post collection
- Focus on process improvement, training and education of staff and donors
- Continuous improvements by monitoring of KPIs
- Quality program in place to attain further reductions in 2017-2018

*Note:* 1. Plasma available for further fractionation but with some markets restrictions
2. 2012 baseline

---

**Evolution of rejected plasma**

Looking ahead: plasma productivity journey

<table>
<thead>
<tr>
<th>Up to 2016</th>
<th>2017</th>
<th>Next steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core systems identification</td>
<td>Strategic roadmap</td>
<td>Pilot</td>
</tr>
<tr>
<td>Digital transformation</td>
<td>Improved Business Process Management (BPM) tool selection</td>
<td>Initiate plasma critical process transformation through BPM</td>
</tr>
<tr>
<td>Strategic Technology Office</td>
<td>Upgraded productivity metrics</td>
<td>End-to-end operations visibility</td>
</tr>
</tbody>
</table>

**Foundation**

- CORE SYSTEMS IDENTIFICATION

**Plan**

- INITIATIVES SELECTION

**Pilot**

- PILOT SELECTED INITIATIVES

**Deploy**

- TRANSFORM KEY CRITICAL PROCESSES

**Evolve**

- END-TO-END SYSTEM GUIDED PROCESSES
### Strategic roadmap

**Solid, comprehensive strategy to increase productivity: 3 core pillars**

| Donor          | • **Recruit**: CRM implementation. Collaborate with marketing on BI development campaigns  
                  | • **Retain**: Payment system. Bonus application and reminder notification system for donors  
                  | • **Interact**: Donor application development. Rewards and “Donation Rapid Pass” systems  |
| Center         | • **Operate**: Flow and donor 360 dashboards. Mobility. Queue management and resources planning  
                  | • **Comply**: Plasma quality database. System traceability. Quality metrics and audit trail  
                  | • **Collect**: Continue to reduce donor door-to-door flow time. System-driven operations  |
| Corporate      | • **Govern**: Right information, at the right place and at the right time. BPM systems integration. Big data  
                  | • **Monitor**: End-to-end operations visibility  
                  | • **Support**: Enable full corporate-center interaction via Grifols collaboration tools  |

### Key takeaways

**Continuous improvement of the entire value chain to promote cost containment**
Key takeaways
Continuous improvement of the entire value chain to promote cost containment

- Grifols strategy is built on a solid foundation of quality and safety
- Grifols is committed to maintaining its leadership through a sustainable growth in plasma collection by promoting a fully integrated and balanced plasma procurement organization
- Grifols is investing in new centers to accelerate our 2-year goal of reaching 225+ by 2019; innovation and operational efficiency improvements
- Grifols is driving continuous improvement of the entire value chain to promote cost containment
- Operational efficiency improvements include continuously upgrade our plasma centers; excellent turnaround results and flexibility in testing laboratories; achieve efficient inventory management, deliver high-impact education and training opportunities for employees; and positive medical outcomes with outstanding quality
- Grifols multifaceted approach will be a competitive advantage now and in the future
Bioscience commercial strategies
Maintaining strong sustainable growth

Lafmin Morgan
President of Bioscience Commercial

Bioscience commercial strategy
Strategies to deliver sustainable growth

Sustaining market leadership
• Grifols Bioscience has sustained growth of approximately 6% or more over the last 8 quarters
• Grifols has successfully built leading market positions for the four key proteins
• Grifols continues to consolidate a leading market position in the U.S., the largest market for plasma proteins

Expanding total market
• Grifols is spearheading efforts to expand markets through promotional activities aimed at supporting appropriate diagnosis and treatment
• Grifols leads the industry in plasma research investments aimed at attaining approval for new indications and formulations of existing proteins

Geographic expansion
• Grifols Bioscience will continue its global expansion
• In 2016, noteworthy inroads were made in Australia, France and India

Note: 1. At constant currency (CC), which excludes the impact of exchange rate movements
**Bioscience commercial strategy**

Bioscience revenue growth\(^{(1),(2)}\) has consistently accelerated over the last 8 quarters

![Graph showing bioscience revenue growth](image)

**Note:**
1. All data at constant currency (CC), which excludes the impact of exchange rate movements.
2. Starting in 2017, a non-significant amount of Bioscience Division sales were moved to Bio Supplies Division.

**Bioscience product strategy**

Focused product strategies to deliver continued growth

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Strategy Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunoglobulin (IG)</td>
<td>• Grifols is investing to grow markets by focusing efforts on diagnosis and treatment</td>
</tr>
<tr>
<td></td>
<td>• Grifols is making investments in new indications like myasthenia gravis</td>
</tr>
<tr>
<td></td>
<td>• Grifols is investing to expand subcutaneous immunoglobulin (SCIG) offering to include a 20% product</td>
</tr>
<tr>
<td>Albumin</td>
<td>• Grifols is the only company investing to expand albumin indications</td>
</tr>
<tr>
<td></td>
<td>• Grifols has strengthened its market position in the most attractive albumin markets</td>
</tr>
<tr>
<td></td>
<td>• Grifols will submit new albumin container for U.S. approval in 2018</td>
</tr>
<tr>
<td>Alpha-1 Antitrypsin</td>
<td>• Grifols continues to invest to support appropriate diagnosis and treatment</td>
</tr>
<tr>
<td></td>
<td>• Grifols has an ongoing program to develop new indications and formulations</td>
</tr>
<tr>
<td></td>
<td>• Grifols continues to expand geographic markets with Australian approval</td>
</tr>
</tbody>
</table>
Bioscience product strategy
Focused product strategies to deliver continued growth

| PdFactor VIII | • Grifols has demonstrated the benefits of pdFVIII in the hemophilia market
|             | • Grifols is focused on market segments that will benefit from pdFVIII
|             | • Grifols has a strong presence in key tender and emerging markets
| Speciality plasma products | • Grifols leverages synergies in promoting a portfolio of hypermunes, along with tetanus and diphtheria (Td) vaccine
|             | • Thrombate® III continues to lead the antithrombin III market
|             | • Grifols is making progress with the Biologics License Application (BLA) and EMA submissions for its fibrin sealant product

Grifols plasma derived products market summary
Growth fundamentals remain strong

Grifols sustains a leading position(1) within our core business of plasma-derived therapies

<table>
<thead>
<tr>
<th></th>
<th>Grifols global market share</th>
<th>Grifols global position</th>
<th>Grifols U.S. market share</th>
<th>Grifols U.S. market position</th>
</tr>
</thead>
<tbody>
<tr>
<td>IVIG</td>
<td>23%</td>
<td>#1</td>
<td>32%</td>
<td>#1</td>
</tr>
<tr>
<td>Alpha-1</td>
<td>68%</td>
<td>#1</td>
<td>64%</td>
<td>#1</td>
</tr>
<tr>
<td>Albumin</td>
<td>17%</td>
<td>#2</td>
<td>26%</td>
<td>#2</td>
</tr>
<tr>
<td>PdFVIII</td>
<td>20%</td>
<td>#1</td>
<td>54%</td>
<td>#1</td>
</tr>
</tbody>
</table>

• Per capita utilization and diagnosis are growing for IG, albumin and alpha-1
• Market growth and geographic expansion strategies continue to deliver results
• Grifols continues investing in the Bioscience Division to sustain growth

Note: 1. Grifols internal provisional data, 2016
### Plasma proteins market summary

Plasma proteins market has demonstrated consistent growth

- Sustained growth continues, while opportunities to expand use remain strong
- Grifols maintains a leadership position as:
  - #1 in 3 of the major proteins
  - One of the leading companies in the overall plasma-derived market
- IG market continues to show strong growth across the major markets
- Robust growth of albumin continues in China and other markets
- Alpha-1 market growth continues in North America, Europe and other markets
- New evidence of unique benefits of pdFVIII, which has both clinical and economic implications

---

**Grifols Immunoglobulin**
Top 10 countries in per capita\(^{1}(2)\) utilization, 2012 vs. 2015

Strong momentum in IG per capita utilization

- Top markets in per capita utilization continue to grow at brisk rates
- Growth seen consistently across markets
- Aging demographics fuel IG growth
- Growth continues in 2016:
  - U.S.: +9%(3)
  - Germany: +8%(3)
  - Spain: +11%(4)
  - England: +8%(5)

IG market shares\(^{(1)}\)

Grifols maintains leading IG market share

\(^{1}\) Source: TPIA - The Plasma Protein Therapeutics Association data
\(^{2}\) Source: TPIA - The Plasma Protein Therapeutics Association data and internal data
\(^{3}\) Source: MRB - National Health Service
\(^{4}\) Source: MRB - National Health Service
\(^{5}\) Source: MRB - National Health Service

Note: \(^{1}\) Per inhabitant-year
2016 U.S. IG market performance\(^{(1)}\)
Accelerated growth in the mid to high single digits

Note: \(^{(1)}\) Source: PPTA - The Plasma Protein Therapeutics Association data

U.S. IG market performance\(^{(1)}\)
Grifols IG share in the U.S. remains strong - Data for LTM

Note: \(^{(1)}\) Source: PPTA (The Plasma Protein Therapeutics Association) volume data and Grifols internal volume in kg sold
Grifols IG continues to strengthen its leadership position

Gamunex®-C is the leading IG treatment in CIDP

- CIDP focus: accurate recognition, confirmation and treatment
  - Gamunex®-C is the #1 prescribed IG therapy for CIDP
  - First-ever CIDP fellows ambassador program
  - Grifols IG representatives complete the AANEM CIDP Knowledge Assessment (94% of IG representatives passed)

Grifols IG continues to strengthen its leadership position

Gamunex®-C grew more than other leading IVIG in PIDD\(^1\)

Note: 1. Source: Lexis-Nexis, Medical claims data only; Gamunex®-C data includes GammaKed\(^{®}\) due to shared J-code
Grifols IG continues to strengthen its leadership position
Grifols IG growth sustained despite 10 years of SCIG\(^1\)

- 92% of all grams in the global IG market were IV
  87% of growth in the global IG market derived from IV
- 90% of grams in the U.S. were IVIG and 10% were SCIG
  Most growth in the U.S. market was driven by IVIG
- Grifols is consolidating a long-term leadership position
  Grifols is preparing for the future launch of a 20% SCIG product

\(^1\) Source: Internal data, 2016

Grifols hyperimmunem market\(^1\)
Grifols is the market leader in the U.S. hyperimmunes market

<table>
<thead>
<tr>
<th>A leading and differentiated portfolio</th>
<th>U.S. market for hyperimmunes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Market leader in the rabies market</td>
<td></td>
</tr>
<tr>
<td>• GammaSTAN(^\circledR) is only treatment for post-exposure Hep A &amp; measles</td>
<td></td>
</tr>
<tr>
<td>• HyperHepB(^\circledR) is the only immunoglobulin specifically designed for pediatric use</td>
<td></td>
</tr>
<tr>
<td>• Grifols is the only company that offers products for passive and active tetanus immunity</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Source: Internal data, 2016
Key takeaways
Grifols Immunoglobulin portfolio is the cornerstone of the division

- Grifols is the IVIG leader and continues to build on its leadership position
- Grifols is investing to grow markets by focusing efforts on diagnosis and treatment
- Grifols is making investments in new indications such as myasthenia gravis
- Grifols continues to grow in Primary Immune Deficiency (PIDD) market
- Grifols is investing to expand its SCIG offering to include a 20% treatment
- Grifols is the market leader in the hyperimmunes market
Top 10 countries in per capita utilization, 2012 vs. 2015

Momentum continues in per capita utilization of albumin

- Albumin growth continues in most markets
- The world’s largest market (China) is not among top 10 by per capita consumption
- New clinical data will fuel future growth
- Growth continues in 2016:
  - China: +18%
  - Germany: +11%

Note: 1. g/1,000 inhabitants-year
2. Source: Grifols global plasma industry database per capita difference explanation adapted from MIR report
3. Source: Import official data
4. Source: PPTA - The Plasma Protein Therapeutics Association data

Albumin market shares

Grifols is a global leader, with solid positions in China and the U.S.
ANSWER clinical trial results presented at EASL(1)

New clinical data supports future growth of albumin

The rate of survival was significantly higher in patients receiving human albumin plus to standard therapy, compared with those receiving standard therapy only. Treatment with human albumin reduced the risk of death by 38%. Statistically significant benefits of administering human albumin rather than standard therapy alone were demonstrated for the management of ascites, complications of cirrhosis, quality of life and hospital admissions. The reduction in mortality observed in the albumin-treated arm of this randomised controlled study is a novel and important piece of information. Based on this data, weekly administration of albumin should be considered in patients with cirrhosis and ascites to prevent life-threatening complications," said Prof Annalisa Berzigotti, University Clinic for Visceral Surgery and Medicine, University of Berne, Switzerland, and EASL Governing Board Member.


China albumin market

Grifols is growing faster than the market in China

- China continued to achieve double-digit growth(1)
- Grifols sales in the country grew well above the market(2)

Note: 1. Source: Imported official data 2. Grifols 2016 net revenues
China albumin market

In 2016 Grifols gained the #2 albumin market share(1)

Grifols performance surpassed China’s growth rate in 2016

- In 2016, Grifols’ sales grew by 32% in China, making Grifols a significant contributor to China’s growth
- In 2016, Grifols gained the no. 2 position in the China albumin market, with 14% market share
- Grifols is actively pursuing further expansion strategies in the Chinese market to support the continued growth of albumin
Key takeaways
Albumin continues to be a driver of Bioscience growth

• Grifols is well positioned in the market
• Growth driven by the U.S. and China, where Grifols is expected to grow above the market
• Developing countries are expected to grow at double-digit rates in the coming years
• Grifols continues to invest in albumin:
  • New indications: Alzheimer, cirrhosis, acute-on chronic liver failure and ALS\(^{(1)}\)
  • Field promotion in key markets
  • New packaging: albumin in bags
  • Expanded manufacturing capacity
• New data will reinforce albumin benefits beyond fluid management (ANSWER)

Note: 1. ALS: Amyotrophic lateral sclerosis
**Alpha-1 antitrypsin market shares**<sup>(1)</sup>
Grifols is the leader in the worldwide alpha-1 business

![Alpha-1 market shares](image)

**Grifols regional split**<sup>(2)</sup>

<table>
<thead>
<tr>
<th>Region</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>LATAM</td>
<td>22%</td>
</tr>
<tr>
<td>NORTH AMERICA</td>
<td>78%</td>
</tr>
<tr>
<td>EUROPE</td>
<td>0%</td>
</tr>
</tbody>
</table>

Note: 1. Source: Grifols internal provisional data, 2016. In value
2. Grifols 2016 net revenues

---

**Alpha-1 potential market**
Significant opportunity to increase diagnosis

As many as 350,000 diagnosed COPD patients in accessible global markets may have severe alpha-1 antitrypsin deficiency as the underlying cause of COPD; however, less than 5% of these cases has been identified

![Alpha-1 potential market](image)

Note: 1. Sources and assumptions: Grifols patients based in Q1 2017 patient counts (last update 10 May 2017). It is assumed that Grifols holds 66% of total patients. It is assumed that two-thirds of diagnosed patients receive treatment based on market knowledge and affiliate input
Grifols is the clear leader in alpha-1
On-going commitment to patient diagnosis and differentiation of Prolastin®-C

- Continued commitment of Grifols alpha-1 national testing program, with more than 500,000 patients tested
- Patient management put at HCP’s fingertips through diagnosis and treatment portals, providing HCP access to secure patient-level information and electronic prescribing
  
  MyAlphaKit.com and MyProlastinDirect.com

- Comprehensive patient support every step of the way with the assist program: first promotional co-pay program

Grifols is the clear leader in alpha-1
Strengthening alpha-1 leadership

What about the competition?

Thanks to a unique business model and excellent execution, Grifols continues to strengthen its alpha-1 business, including markets with new competitors like Germany, Spain and Italy
Key takeaways
Alpha-1 extends contribution to balance the liter

- Grifols continues to build on its leadership position in the alpha-1 market, with 68%\(^{(1)}\) global share which is increasing revenue efficiency per liter
- Significant opportunities worldwide in alpha-1 patient identification and treatment, with new and underdeveloped markets a core part of our growth strategy
- Our model of driving patient identification through dedicated pulmonary teams and disease management for alpha-1 patients has proven successful in North America, Germany, Canada and Spain. We plan to implement this strategy in new markets

Note: \(^{(1)}\) Source: Grifols internal provisional data, 2016. In value
**PdFVIII market shares**

Grifols holds leading pdFVIII market position

![PdFVIII market shares](image)

**Grifols regional split**

- AFRICA: 3%
- ASIA & PACIFIC: 7%
- LATAM: 14%
- NORTH AMERICA: 23%
- EUROPE: 53%

**SIPPET study results**

Greater opportunities for pdFVIII therapies

**SIPPET awareness campaign:**

- Published in May 2016, SIPPET results are considered scientifically compelling:
  - Major hemophilia organizations have opened the door to treat PUPs with pdFVIII/VWF
  - More than 35 articles have cited SIPPET results and its implications
  - SIPPET study has spotlighted pdFVIII as a valid treatment option
  - SIPPET study has created a halo effect for Grifols’ pdFVIII beyond PUPs

87% higher rate of inhibitor development for rFVIII than pdFVIII/VWF
SIPPET study results
Leading organizations have modified their recommendations

SIPPET statements released shortly after publication of findings

All major haemophilia organizations have published SIPPET statements on treating PUPs with pdFVIII/VWF

"pd products containing VWF should be presented as an option for the treatment […]"

"Individuals should consider the new data from the SIPPET study."

"the new data from the SIPPET study should be considered in the choice of product classes with which to initiate therapy."

"UK clinicians should counsel parents on the implications of known inhibitor studies. [...] Plasma-derived concentrates should be considered."

"Many physicians are likely to recommend the use of a pdFVIII/VWF concentrate [...] This is a very reasonable option, based on the results of the SIPPET study."

SIPPET study results
Clinical and regulatory views in Europe continue to evolve
SIPPET study results
Clinical and regulatory views in Europe continue to evolve

Key takeaways
Grifols pdFVIII represents significant opportunities ahead

- Grifols maintains a leading position in the pdFVIII market with 20%<sup>(1)</sup> global share and volume increase above the market
- In the U.S., Grifols pdFVIII is growing faster than the market thanks to the diffusion of positive results regarding the use of natural FVIII/VWF complex to treat patients who developed inhibitors
- SIPPET results have been considered scientifically compelling and put pdFVIII back in the conversation as a treatment option
- SIPPET study has created a halo effect for Grifols pdFVIII beyond previously untreated patients (PUPs), with 2017 promotional campaign building on 2016 momentum
- Emerging countries are a relevant growth source as their budget allocations for healthcare resources increase

Note: 1. Source: Grifols internal provisional data, 2016
**Key Bioscience takeaways**
Commercial leadership will continue to deliver sustainable growth

| Sustaining market leadership | • Grifols Bioscience has sustained growth\(^{(1)}\) of approximately 6% or more over the last 8 quarters  
  • Grifols has successfully built leading market positions for the four key proteins  
  • Grifols continues to consolidate a leading market position in the U.S., the largest market for plasma proteins |
| Expanding total market | • Grifols is spearheading efforts to expand markets through promotional activities aimed at supporting appropriate diagnosis and treatment  
  • Grifols leads the industry in plasma research investments aimed at attaining approval for new indications and formulations of existing proteins |
| Geographic expansion | • Grifols Bioscience will continue its global expansion  
  • In 2016, noteworthy inroads were made in Australia, France and India |

\(^{(1)}\) At constant currency (CC), which excludes the impact of exchange rate movements
Bioscience Capacity Expansion Plan
Solid headway to keep pace with growing demand

Daniel Fleta
Grifols Engineering Managing Director

Plasma procurement
Expanding plasma collection capacity
Plasma procurement
Expanding collection capacity to meet growing demand

Grifols U.S. plasma donor centers

Grifols U.S. plasma donor center projects

Plasma procurement investment 2016-2017

Capital allocation 2016-2020

5 years plasma procurement expansion plan
Plasma fractionation
Increasing global capacity up to 19m liter/year

Investment in new capacity to address growing demand

Grifols fractionation growth(1)

Grifols fractionation capacity by site in 2022(1)

Note: 1. In million plasma liters/year
New Fractionation Building (NFB) project at Clayton (NC)
Engineered for maximum efficiency and flexibility

- Fractionation capacity: 5.9m liter plasma/year
- CAPEX: USD90m
- Two parallel plasma pooling and fractionation lines will enable greater production flexibility

1st level:
- Separation equipment in 2 parallel lines
- Plasma, pastes and RM shipping and receiving

2nd level:
- 36 vessels in 2 parallel lines
- 2 Plasma pooling Automatic Bottle Opener ABO6

120,000 square feet in 2 manufacturing levels
Automatic plasma Bottle Opener (ABO₆)
Enhancing plasma-pooling efficiency and enabling full real-time traceability

ABO₄
900 bottles/h
Manual bottle loading

ABO₆
50% increased output and productivity
Full automatic bottle handling from the freezer to the thawing vessel
100% bottles RFID check

Automatic plasma Bottle Opener (ABO₆)
Closing the plasma pooling automation loop

Current manual loading

New automatic bottles handling
**Automatic plasma Bottle Opener (ABO₆)**
Twin robots to double productivity

Protein purification and Fill-Finish
Balanced growth to bolster fractionation expansion
New IG purification and filling facility at Clayton
First-in-class facility for the next generation of IGs

- World’s first sterile filling facility for IGs in flexible containers
- Purification and Filling Plant for 6m eqL plasma/year IG
  - Subcutaneous
  - Intravenous
  - Intramuscular
- CAPEX: USD120m

New IG purification and filling facility at Clayton
First-in-class facility for the next generation of IGs

3rd level:
- IG buffer preparation area

2nd level:
- IG purification areas

1st level:
- Aseptic filling & FD operations
  - Pastes, RM and finished products shipping and receiving

- 150,000 square feet on 3 levels
- Provides aseptic operations flexibility to the Clayton site
New albumin purification and filling facility in Dublin
State-of-the-art facility for global supply of the albumin in a flexible container

- Purification and Filling Plant for 6m eqL plasma/year of albumin
- CAPEX: USD85m
- 4 sterile filling lines for albumin in bags. Implementation of online continuous process, from bag forming to pasteurization, to enhance production efficiency

2017 2018 2019 2020 2021
Interiors constr. Start-up Approval
Shell construction Validation

3rd level:
- QC laboratory
- Office space

2nd level:
- Albumin purification areas
- Pasteurizers

1st level:
- Aseptic filling operations
- Pastes, RM and finished products shipping and receiving
- Quarantine

215,000 square feet on 3 levels
Alpha-1 purification and filling facility in Barcelona
New plant ready to provide continued support of alpha-1 contribution

- Purification and Filling Plant for 4.3m eqLplasma/year of Prolastin®-C
- New Formulation for Prolastin®-C Liquid presentation
- GSF® proprietary technology used for aseptic filling operations
- CAPEX: USD65m
- 80,000 square feet on 3 levels
**Alpha-1 purification and filling facility in Barcelona**
New plant ready to provide continued support of alpha-1 contribution

**Aseptic processing area**

**Immunoglobulin 2nd purification train in Los Angeles**
Leveraging capabilities for maximum efficiency

- Expand the purification plant from 2.6 to 5.1 m eqL plasma/year for Gamunex®
- CAPEX: USD10m
- 2nd Gamunex® purification train
- Provides expansion and flexibility both for Los Angeles and Clayton Gamunex® existing purification plants
**Immunoglobulin 2\textsuperscript{nd} purification train in Los Angeles**

Leveraging capabilities for maximum efficiency

**New flexible container aseptic filling line in Los Angeles**

Broadening the portfolio with unique technology

- Sterile filling of albumin 5%, 20% and 25%
- Flexible container volume range: 50, 100, 250 and 500 mL
- Groundbreaking design for the sterile filling of bags for biological products leveraging 30+ years experience with the Grifols Sterile Filling GSF\textsuperscript{®} Technology
New flexible container aseptic filling line in Los Angeles
Broadening the portfolio with unique technology

Capital expenditures benchmarking\(^{(1)}\) across the industry
Competitively advantaged in capital investment

<table>
<thead>
<tr>
<th>Sector</th>
<th>Global average regular project costs (USD/square feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biologicals Mfg.</td>
<td>1,430</td>
</tr>
<tr>
<td>Fill &amp; Finish</td>
<td>1,380</td>
</tr>
<tr>
<td>R&amp;D / Labs</td>
<td>830</td>
</tr>
<tr>
<td>Grifols</td>
<td>800</td>
</tr>
</tbody>
</table>

Note: \(^{(1)}\) Source data: Facility of the Year Awards (2007-2016), ISPE Pharmaceutical Engineering
Key takeaways
Capital expenditure discipline focused on creating value

- Bioscience capacity expansion plan on track and outperforming plans
- The capacity expansion plan and the investments execution strategy follow Grifols holistic approach for plasma fractionation
- Proven advantage in project management; industry-leading capital efficiency
- The new facilities expands current capacity while offering additional operations flexibility
- Unique innovation forms the cornerstone of the design of the new facilities, devised to develop new products and optimize processes to enhance efficiency and product safety
- Grifols capital investments costs for facilities are significantly below the average pharmaceutical industry
Investors’ & Analysts’ Meeting 2017

Emeryville (California, USA)
June 7th and 8th, 2017

Hospital
Expansion through integrated solutions

Peter Allen
President of Hospital Commercial
Sustain mid-single digit growth in OUS markets while accelerating growth in U.S. through organic and acquisition strategies

Last year we said...
Grifols maintains a strong position and reputation in Spain
Strong legacy business - Spain

- Broad portfolio:
  - IV therapy base
  - Medical devices
  - Pharmatech
  - Clinical nutrition
- Advanced hospital pharmacies
- Good “backyard” customer base; learning, trialing
- Manufacturing and engineering advantages

Grifols poised for penetration in U.S. market
U.S. market drivers align with Grifols strengths

- Novel Pharmatech portfolio - alignment of trends
  - Regulatory specific
  - Personalized medicine individualized outcomes
  - Accountability care organization outcomes
- Opportunity for end to end compounding portfolio: control, efficiency, data
Strategic considerations inform future; U.S. focus
Methodical pursuit of a successful strategy

- Current market position
  - Spain
  - United States
  - ROW/LATAM
- Customer/Technology advising the future
- Gap assessment
- Revised strategy - emphasis on U.S. market

This year we now know...
Base business poised to match mid-single digit market growth
Iberia and LATAM are 90% of sales revenue; product mix

- Execute on EBIT- improving growth strategies
  - Revitalize Nutrition portfolio sales
  - Gain new Medical devices distribution
  - Optimize IV therapy and Pharmatech markets

- Implement plant utilization tactics
  - Increase volume
  - Leverage plant footprints for optimal utilization

Pharmatech portfolio with software addition underpins growth
Strategy poised to meet growing market needs and future demands

- Pharmacy market trends worldwide will demand changes in technology and information
- Current solutions are inadequate; current providers are beholden to legacy technology
- OUS markets strapped for access to capital
- Distinguishing Grifols devices through smart integration (non-capital intensive)
- Expand from cleanroom centric to pharmacy operations and adjacencies
- Design systems for OUS market

Note: 1. Source: American Journal of Health-System Pharmacy

U.S. drug expenditures in non-federal hospital increasing substantially(1)

<table>
<thead>
<tr>
<th>(USDbn)</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.4</td>
<td>33.6</td>
<td>37.0</td>
<td></td>
</tr>
</tbody>
</table>

(1) Increasing substantially

GRIFOLS
Industry drivers impacting hospital & compounding pharmacies
Global pharmacy market trends will continue to demand changes in tech. & info

Cost management pressures / Economic advantages
- Consolidation
- Technology leverage
- Evolving decision-maker and consumer demographics
- Accountability care

Regulatory / Safety – Intensifying
- Personalized medicine
- Regulation authorities expanding

Data Ecosystem
- Inter-connectivity
- Outcomes data justifying costs (drugs!)
- Controls

Clear path to strengthening portfolio for growth
A robust strategy dynamically positions the division

Enhance current portfolio
- Kiro device and implementation improvements
- Pharmatech integration to software platform
- Launch new nutrition products and expand markets
- Enhance profit models with services

Expanding into systems
- Design platform to meet current and future market needs
- Expand sales capabilities with dedicated force
- Establish service and support infrastructure

Optimize LVP\(^{(*)}\) business
- Organize manufacturing for optimal production
- Rationalize portfolio for strategic and production benefit
- Secure Bioscience advantages through business continuity access

Note: LVP: Large volume parenterals

165 Investors’ & Analysts’ Meeting 2017 | Emeryville
Just gained U.S. IV solution market access
An attractive and immediate growth opportunity

- FDA approved Grifols manufactured saline for export to U.S.
- Establishing self-sufficiency for Grifols Plasma Operations
- Engaging distribution channel for U.S. market (excluding GPO)
- Optimizing plant capacity
- Evaluating additional export opportunities

Plan strengthens division and sets up escalating growth
Building a financial track record

<table>
<thead>
<tr>
<th>Near Term Milestones:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portfolio improvements with software commercialization that increases U.S. market opportunity to USD950m (from USD600m)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mid- to Long-Term Milestones:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakeven EBIT with targeted positive EBIT growth over 5 years</td>
</tr>
</tbody>
</table>
Key takeaways
Strategy poised to meet growing market needs and future demands

- Leverage saline approval to successfully enter into the U.S. market
- Iberia and LATAM leverage portfolio strengths for mid-single digit growth
- Expand our systems capabilities to underpin smart device benefits
- Build / acquire software infrastructure for support and service
- Reconfigure all device software for thorough integration
- Optimize LVP manufacturing and logistics for Bioscience continuity benefits
- The Hospital Division is well positioned to regain growth and profitability
Diagnostic
Driving profitable growth

Carsten Schroeder
President of Diagnostic Commercial

The global leader in transfusion medicine
Building a Specialty Diagnostics portfolio

The Diagnostic Division is a global organization

At a glance:

1,450+ full-time employees supporting Diagnostic success
Integrated from assay/instrumentation development through commercialization
FDA, GMP and CE licenses
With a clear mandate…

Build a global diagnostics company focused on select, high-value markets, providing innovative solutions to ensure the safety of the blood and plasma supply, detect human diseases and monitor therapies.

Our product portfolio spans the healthcare continuum
We serve blood banks, hospital-based transfusion services and plasma.

<table>
<thead>
<tr>
<th>Screening</th>
<th>Diagnosis</th>
<th>Prognosis</th>
<th>Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collection</strong>&lt;br&gt;Offers safe, efficient &amp; high quality collection and processing of donor blood&lt;br&gt;BLOOD COLLECTION SYSTEMS</td>
<td><strong>Detection</strong>&lt;br&gt;Provides high, sensitive &amp; automated tests to detect infectious diseases&lt;br&gt;DONOR SCREENING &amp; IMMUNOASSAYS</td>
<td><strong>Typing</strong>&lt;br&gt;Determines blood type compatibility between donor &amp; patient; characterizes blood&lt;br&gt;BLOOD TYPING SOLUTIONS</td>
<td><strong>Early Detection</strong>&lt;br&gt;Ensures detection at the onset&lt;br&gt;INFECTIOUS DISEASES, AUTOIMMUNITY</td>
</tr>
<tr>
<td><strong>Likely Outcome</strong>&lt;br&gt;Predicts likely outcome enabling better care pathways&lt;br&gt;HEMOSTASIS, AUTOIMMUNITY</td>
<td><strong>Effective Treatment</strong>&lt;br&gt;Monitors patients ensuring effective therapies &amp; outcomes&lt;br&gt;BLOOD COLLECTION SYSTEMS, PROMONITOR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Diagnostic had EUR 664m in net revenues in 2016
Donor screening, immunoassays and immunohematology are our core businesses

<table>
<thead>
<tr>
<th>2016 Diagnostic revenue</th>
<th>2016 sales by product line</th>
<th>2016 sales by region</th>
</tr>
</thead>
<tbody>
<tr>
<td>664</td>
<td>BCS SDx BTS IA</td>
<td>LATAM EMEA APAC NA</td>
</tr>
</tbody>
</table>

Transfusion medicine is ~95% of our business

Note: DS = Donor Screening; BTS = Blood Typing Solutions; BCS = Blood Collection Systems
SDx = Specialty Diagnostics; IA = Immunoassays (not assigned to regions)
NA = North America; EMEA = Europe, Middle East and Africa; APAC = Asia-Pacific; LATAM = Latin America

Diagnostic had EUR 171m in sales in 1Q 2017
Delivered a growth of 3.3% vs. 1Q 2016

<table>
<thead>
<tr>
<th>1Q 2017 Diagnostic revenue</th>
<th>1Q 2017 sales by product line</th>
<th>1Q 2017 sales by region</th>
</tr>
</thead>
<tbody>
<tr>
<td>171</td>
<td>BCS SDx BTS IA</td>
<td>LATAM EMEA APAC NA</td>
</tr>
</tbody>
</table>

Our sales are well balanced geographically
Global manufacturing footprint to serve worldwide customers

We continue to expand our production capacity to enable growth

<table>
<thead>
<tr>
<th>Location</th>
<th>Established in</th>
<th>Key Products/Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMERYVILLE, CA</td>
<td>USA</td>
<td>Manufacture of antigens for diagnostic tests, Expansion: Project Horizon</td>
</tr>
<tr>
<td>SAN DIEGO, CA</td>
<td>USA</td>
<td>Production of Procleix® NAT tests, Acquired from Hologic</td>
</tr>
<tr>
<td>CURITIBA, BRAZIL</td>
<td>USA</td>
<td>New factory for production of blood collection systems</td>
</tr>
<tr>
<td>PARETS DEL VALLES, Spain</td>
<td></td>
<td>Instruments and IVD reagents for immunohematology, autoimmunity and hemostasis</td>
</tr>
<tr>
<td>DÜDINGEN, Switzerland</td>
<td></td>
<td>Production of tests for the rapid identification of blood type (MDmulticard®), gel-technology test cards (DG GEL®) and reagent RBC</td>
</tr>
<tr>
<td>MELBOURNE, Australia</td>
<td></td>
<td>Production of gel-technology test cards (DG GEL®) and red blood cells</td>
</tr>
<tr>
<td>DERIO, Vizcaya, Spain</td>
<td></td>
<td>Design and manufacture of molecular biology tests and immunoassays</td>
</tr>
<tr>
<td>MURCIA, Spain</td>
<td></td>
<td>Production of intravenous serums in flexible packaging and blood collection systems</td>
</tr>
</tbody>
</table>

Donor screening
Committed to the blood safety and plasma supply
Acquisition of NAT blood donor screening unit
Strengthening our leading position in transfusion medicine

**STRATEGIC RATIONALE**
- Providing Grifols Diagnostic with control over the NAT business
- Solidify our position in the diagnostic market as a leader in Transfusion Safety

**MANUFACTURING FACILITY**
- 94,000 square feet CBER and ISO certified in San Diego

**PEOPLE**
- ~175 positions now fully integrated into Grifols Diagnostic
- Expertise in assay development and manufacturing, quality assurance and regulatory affairs

**ASSAY DEVELOPMENT**
- Full control of the NAT development and manufacturing processes
- Provide flexibility to prioritize projects (i.e. Babesia and Arboplex) and quickly meet customer needs

**PRE-ACQUISITION**
- Revenue share agreement (until 2025)

**GRIFOLS**
- Assay development
- Assay manufacturing
- Instrument development
- Distribution
- Sales & Marketing
- Service

**POST-ACQUISITION & INTEGRATION**
- Instrument co-development
- Assay development
- Assay manufacturing
- Distribution
- Sales & Marketing
- Service

The global leader in NAT blood donor screening
Despite market challenges there is potential for growth

**Global market split (~94 million donations)**
- Adopted: 76%
- Unadopted: 24%

**Global share of adopted (~71 million donations)**
- Adopted: 55%
- Unadopted: 45%

**United States (~13 million donations)**
- Adopted: 82%
- Unadopted: 18%

**Rest of the world (~58 million donations)**
- Adopted: 47%
- Unadopted: 53%

**Future Growth Drivers**
- Geographic expansion into non-adopted countries
- Plasma fractionators (in addition to Grifols) will be addressed with new Procleix Ultrio Elite & Panther in large pool sizes
- Emerging pathogens: Zika and Babesia

**Market Challenges**
- Declining number of blood donations in developed countries due to blood management programs

Note: Source: Q1 2017 Internal Data. It does not include plasma collection.
NAT Plasma donor screening represents a growth opportunity
Panther® in large pool sizes submitted to FDA for approval

**NAT Plasma Testing Market = USD150m**

**Market Outlook**
- “Big 6” commercial fractionators represent ~75% of the source plasma market
- Plasma fractionation (and plasma testing) market is expected to continue to grow, driven by an increase in global demand for plasma therapeutics
- Due to whole blood volume contraction in the U.S. and E.U., blood banks are looking to enter the recovered plasma testing market
- APAC is the fastest growing region in the plasma industry and represents an area of growth

**Grifols delivered in response to the 2016 Zika outbreak**
Recently started screening for Babesia under IND in the U.S.

**World map of areas with risk of Zika**

**Outcome of Zika IND**
- Use of Procleix® Zika assay
- In U.S., 67 Panther® systems installed at 15 locations
- +100 operators trained
- Evaluation and routine testing in Singapore, New Zealand, Malaysia and France

**Babesia IND in the US**
- Use of Procleix® Babesia assay on the fully automated Procleix® Panther® system
- Use in selected blood banks and donor centers
- Further increase safety of blood supply
Automation will further support our NAT portfolio

Strengthening our NAT portfolio

1. **Next Gen Middleware**
   Streamline customer operations with dashboards, flexibility and streamlined data. Modular, flexible middleware to enhance laboratory operational efficiency.

2. **Panther® AR**
   Panthers share data on tests and reagents for efficiency; Dashboard display.

3. **Panther® AR Track-compatible**
   Modifications to Panther to enable connectivity to a track tube transport system.

4. **Panther® AR Workcell**
   I/O Module and Track system that routes sample tubes for testing.

---

**Immunoassays**

*Worldwide market leader in hep/retro*
**Leader in antigen supply for immunoassays**

Worldwide market leader in hep/retro immunoassays antigens

Grifols supplies HCV / HIV antigens to top immunoassay manufacturers covering more than 80% of the immunoassay market

**Main Grifols customers:**

- Siemens
- Ortho Clinical Diagnostics
- Abbott

**Immonoassay market value = USD1.0bn**(1)

**Profit share agreement (until 2039)**

- HCV & HIV patents
- Antigen research, manufacturing & supply
- Assay research support

**GRIFOLS Ortho Clinical Diagnostics**

- Assay development & manufacturing
- Instrument development & manufacturing
- Product commercialization

**Future Growth Drivers**

- New HIV Combo for OGD’s VITROS platform
- Expand customer base for antigens
- Expand portfolio of antigens

---

**Note:** Source: In Vitro Diagnostic Market Segment Review 2013-2014 and 2019 Forecast

Ad hoc report from Boston Biomedical Consultants, Inc., 2015 and internal estimations

1. If includes whole blood and source plasma

---

**Immunohematology**

Fastest growing player in blood typing solutions
Grifols is the fastest growing player in Immunohematology
We continue to drive double-digit growth

We continue to drive double-digit growth

Grifols is the fastest growing player in Immunohematology
We continue to drive double-digit growth

Grifols is the fastest growing player in Immunohematology
We continue to drive double-digit growth

Penetration in the U.S. market will continue to drive mid-term growth

Note: Source: Worldwide Blood Typing Product Market Analysis, Intelab Corporation, May 2015; Grifols sales data

U.S. IH - Over 100 customer sites under contract
Our investments in sales, marketing and service are paying off

Grifols IH revenues geographic split:

Key facts about U.S. IH growth:
• 58 new customers in 2016
• 33 new Erytras placed

Doubled the number of customers in 2016
A complete portfolio of instruments, gel cards, RBC and reagents
Continuously improving our competitive portfolio of products

<table>
<thead>
<tr>
<th>INSTRUMENTS</th>
<th>GEL CARDS</th>
<th>RED BLOOD CELLS &amp; ANTISERA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-Automated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Automated</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Erytra® Eflexis®** being launched in CE-marked countries
Fully automated, flexible, mid-sized analyzer

The **Erytra® Eflexis®** performs pre-transfusion compatibility testing using DG Gel® technology with a smart and compact design offering intuitive operations

**Upcoming portfolio updates:**
- New version of Erytra® software with improved features
- New middleware solutions worldwide
- New reagent blood cells and antisera to support U.S. expansion
**Completing our portfolio of BLOODChip® ID products**

FDA approval of ID CORE XT expected by 4Q 2017

<table>
<thead>
<tr>
<th></th>
<th>CE</th>
<th>FDA</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID CORE XT</td>
<td>✓</td>
<td>✔</td>
<td>4Q, 2017</td>
</tr>
<tr>
<td>ID HPA XT</td>
<td>✓</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>ID RHD XT</td>
<td>✓</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>ID CORE CONTROL</td>
<td>--</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>BIDS XT</td>
<td>✓</td>
<td>--</td>
<td></td>
</tr>
</tbody>
</table>

**BLOODchip ID**

An effective and innovative solution for the genetic identification of red blood cell and platelet antigens

- **EASY**
  - Ready to use reagents
  - No washing or filtration

- **FAST**
  - Results in 4 hours
  - Hands on time only 30 min

- **FLEXIBLE**
  - Standard Luminex equipment
  - Multiple product batch

Proven accuracy and reliability

Blood Collection Systems
Leveraging new manufacturing capabilities
Leverage new manufacturing facilities in Spain and Brazil
Strengthen our position in LATAM and expansion plans in EMEA

BCS global market value(1) = USD2.9bn

We produce high quality blood collection bags for collecting and processing whole blood and storing blood components

Key initiatives
- Take full advantage of manufacturing facility in Brazil
- Re-launch in EMEA with a soft filter product
- Explore possibility of entering the U.S. market

Hemostasis
Global exclusive distribution agreement
Hemostasis
Grifols and Beckman Coulter enter into an exclusive distribution agreement

- Early June, Grifols has reached an exclusive worldwide agreement with Beckman Coulter for the global distribution of Grifols’ hemostasis instruments, reagents and consumables
- The agreement has an initial term of 15 years and it may be extended for up to five additional years
- The agreement leverages Grifols’ strength in manufacturing reliable instruments and reagents with that of Beckman Coulter’s commercial strength

- Hemostasis is a USD2.4bn market growing at approximately 7% annually
- We have an attractive scalable portfolio of hemostasis analyzers, Q system, and a broad catalogue of reagents for routine and special techniques

Specialty Diagnostics
Building our portfolio in Specialty Diagnostics
Building our portfolio in Specialty Diagnostic
Making progress in all product lines

**PROMONITOR**
- We continue to expand our portfolio, to other biological drugs and biosimilars, single dilution tests and a point of care solution
- Dedicated sales force in Europe

<table>
<thead>
<tr>
<th>CE-marked references</th>
<th>2 Dil.</th>
<th>1 Dil.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DL</td>
<td>ADA</td>
</tr>
<tr>
<td>Infliximab</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Adalimumab</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Etanercept</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Rituximab</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Golimumab</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**CLIA US**
- The Center of Excellence for Immunohematology now offers molecular and serological tests
- Launched new lab services for biological drug monitoring

**AESKU**
- Helios system obtained FDA approval in 2016. Commercial launch in the U.S. ongoing
- Full pipeline of additional tests awaiting registration in the U.S.

**PROMONITOR** ELISA test offers key information about drug bioavailability and immunogenicity in patients prescribed with biological therapy for the treatment of chronic inflammatory diseases and other indications.

**Point of Care (Poc)**
Promonitor® Quick Anti-IFX

**Building our portfolio in Specialty Diagnostic
Making progress in all product lines

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- Full pipeline of additional tests awaiting registration in the U.S.

**TDMonitor Tests**

<table>
<thead>
<tr>
<th>TDMonitor Tests</th>
<th>DL</th>
<th>ADA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infliximab</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Adalimumab</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Vedolizumab</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

The IH center offers
- A broad variety of molecular and serology tests
- Several courses and workshops, including transfusion science educational courses (TSECs), webinars and hands-on workshops

Tests also available
- Familial Hypercholesterolemia (FH)
- Araclon AB assay for AMBAR study
- ApoE assay for Alzheimer prognosis

The American Gastroenterological Association (AGA) recommends the use of therapeutic drug monitoring for inflammatory bowel disease management in non-responding patients in its latest guideline draft.
### Building our portfolio in Specialty Diagnostic

**Making progress in all product lines**

| PROMONITOR | **•** We continue to expand our portfolio, to other biological drugs and biosimilars, single dilution tests and a point of care solution  
**•** Dedicated sales force in Europe |
| CLIA US | **•** The Center of Excellence for Immunohematology now offers molecular and serological tests  
**•** Launched new lab services for biological drug monitoring |
| AESKU | **•** Helios system obtained FDA approval in 2016. Commercial launch in the U.S. ongoing  
**•** Full pipeline of additional tests awaiting registration in the U.S. |

---

**Key takeaways**  
The global leader in transfusion medicine building a portfolio in Specialty Diagnostic
Key takeaways
The global leader in transfusion medicine building a portfolio in Specialty Diagnostic

- Grifols Diagnostic is the global leader in transfusion medicine:
  - Acquisition of NAT R&D and manufacturing assets gives us full control over our Donor Screening business
  - Antigens - expanding the capabilities of our new antigen manufacturing facility in Emeryville
  - Immunohematology - the fastest growing player with a complete portfolio of products
- We continue to build a diversified portfolio of businesses in Specialty Diagnostics
- Hemostasis - growing our product line of instruments and reagents through a worldwide distribution agreement just signed with Beckman Coulter
- We will continue exploring business development opportunities and long-term partnerships

Diagnostic
Maximizing value through effective integration

Greg Rich
Head of the Integration Office
President and CEO of Grifols Shared Services NA
Executive Summary
Integration, a core capability of Grifols

- Grifols has successfully integrated businesses for over 15 years
- Grifols has established an Integration Management Office (IMO) to oversee, in collaboration with senior management, all integration activities
- Transitional Services Agreement established to provide an orderly and efficient transition of the NAT blood screening business
- The integration of the NAT blood screening business is on track
- Grifols will continue to collaborate with Hologic

Integration, a core capability of Grifols
Proven track record

<table>
<thead>
<tr>
<th>Year</th>
<th>100%</th>
<th>Assets</th>
</tr>
</thead>
</table>

- Grifols has the intellectual know-how to integrate businesses from the simplest to the most complicated eliminating the need for consultants
- The internal know-how culminated in the establishment of the Integration Management Office, as part of the Corporate Strategy Office
**Integration governance structure**
Comprised of teams from Grifols and Hologic

- Managed by the Grifols Integration Management Office
- Using a structured and repeatable integration model, the IMO drives execution of the integration plan focusing on milestones and value-drivers
- Includes a cross-functional workstream members
- Transitional Services Agreement ensures continued, un-interrupted operations until full segregation has been obtained

**Hologic Partnership Evolution**
Capturing maximum value chain benefit, leveraging capabilities

[Diagram showing the integration and partnership evolution between Grifols and Hologic]
NAT Hologic integration milestones

Key integration activities
Integration process is on track. Support functions fully integrated within 12 months

<table>
<thead>
<tr>
<th>Activity</th>
<th>Q1 2017</th>
<th>Q2 2017</th>
<th>Q3 2017</th>
<th>Q4 2017</th>
<th>Q1 2018</th>
<th>Q2 2018</th>
<th>Q3 2018</th>
<th>Q4 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Resources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regulatory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research &amp; Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilities/Engineering</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Key integration activities

**Milestones are on track**

<table>
<thead>
<tr>
<th>Facilities/Engineering</th>
<th>Q1 2017</th>
<th>Q2 2017</th>
<th>Q3 2017</th>
<th>Q4 2017</th>
<th>Q1 2018</th>
<th>Q2 2018</th>
<th>Q3 2018</th>
<th>Q4 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>• R&amp;D, Quality and raw material buildings leased</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Third party facilities vendor contracts transitioned</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Construction completed:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Ambient warehouse completed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Raw materials, cold chain warehouses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• R&amp;D and Quality facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Packaging areas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Pilot plant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Template positive manufacturing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### Manufacturing operations - Vision

**Improving and streamlining product workflow**

Moving dispersed manufacturing activities to a more efficient, scalable flow
Manufacturing facilities
Close proximity of facilities

Manufacturing facilities - Future state
Close proximity of facilities
## Continued partnership

Leveraging strengths and capabilities

<table>
<thead>
<tr>
<th>Co-development agreement</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Continued collaboration:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ongoing development projects</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Future instrumentation development activities</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Purchasing power</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Volume combined in select purchases to minimize costs:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Consumables</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Enzymes</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other opportunities</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Leverage in-house expertise and new state-of-the-art manufacturing facilities:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Supply agreement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Contract manufacturing</td>
<td></td>
</tr>
</tbody>
</table>
Key takeaways
Capturing the value of integration

- Integration is a value add capability and is a competitive advantage for Grifols
- Grifols has a proven track record of integrating businesses
- Integration of the NAT testing blood screening business is on track
  - Support functions will be fully integrated within 12 months
- The Transitional Services Agreement is in place to ensure no interruption to either companies
- Collaboration will continue:
  - Co-development of instruments
  - Joint purchasing power
  - Future opportunities
# Diagnostic

## Investing for growth

**Oriol Duñach**  
President of Diagnostic Industrial Group

---

## Leveraging the Chiron legacy and investing for the future

*From the tradition to realizing our potential*

<table>
<thead>
<tr>
<th>Past</th>
<th>Present</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Chiron legacy</strong></td>
<td><strong>Investing for growth</strong></td>
<td><strong>Realizing our potential</strong></td>
</tr>
<tr>
<td>• HCV, HIV, HBV discoveries</td>
<td>• Optimize efficiencies with consolidated</td>
<td>• New Grifols immunoassay products</td>
</tr>
<tr>
<td></td>
<td>manufacturing facility (CMF)</td>
<td>• New customers</td>
</tr>
<tr>
<td>• License and antigen supply</td>
<td>• Update equipment and utilities for future</td>
<td>• Expand Dx menu</td>
</tr>
<tr>
<td>agreements</td>
<td>growth</td>
<td>• New capabilities and services</td>
</tr>
</tbody>
</table>

---

---
The Past
A tradition of innovation

Emeryville site
A tradition of innovation

**Past**
- Founded 1972
- Developed polymerase chain reaction (PCR) DNA amplification technique (1983) - awarded Nobel Prize in Chemistry
- Cloned and sequenced the HIV genome (1984)
- Cloned and identified the Hepatitis C virus (1987)
- Pioneered Nucleic Acid Testing for blood screening (1988)
- GDS becomes part of Grifols: Global leader in NAT systems and recombinant protein manufacturing
- Initiate immunoassay and platform development
- Ongoing investments in advanced solutions to advance blood safety and laboratory efficiency

**Novartis Vaccines and Diagnostics and Novartis Institute of BioMedical Research continue tradition of innovation**
Strategic relationships
Grifols antigens in essential blood and plasma assays

<table>
<thead>
<tr>
<th>Ortho Clinical Diagnostics</th>
<th>Abbott</th>
<th>Siemens Healthineers</th>
<th>OraSure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Business Partner</td>
<td>HCV licensee and antigen customer</td>
<td>HCV licensee and antigen customer</td>
<td>HCV licensee and antigen customer</td>
</tr>
<tr>
<td>since 1989</td>
<td>since 1989</td>
<td>since 2001</td>
<td></td>
</tr>
<tr>
<td>Develops and markets a</td>
<td>Donor screening and clinical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>complete line of antibody-</td>
<td>diagnostic immunoassays</td>
<td></td>
<td></td>
</tr>
<tr>
<td>based screening immunoassays</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grifols manufactures and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>performs research on the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCV, HIV, HBV antigens</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Present
Investing in manufacturing and R&D
**Project Horizon: Consolidated Manufacturing Facility (CMF)**

**October 2014: Grifols project redesign objectives**

- State-of-the-art manufacturing facility, based on Grifols know-how
- Increase manufacturing process flow efficiency
- Incorporate mammalian cell fermentation capability
- Consolidate all GMP materials handling and warehouse operations with manufacturing operations
- Increase overall plant efficiency in order to continue reducing costs

---

**Project Horizon: Consolidated Manufacturing Facility (CMF)**

**Investing for future growth**

- GMP manufacturing of 21 commercial products used for testing blood
- GMP warehouse and raw materials sampling space
- Mechanical and process utilities (existing + upgrades of selected systems)
- Office and collaboration space
- Consolidation of existing manufacturing operations into a single building
- Space for future manufacturing growth
Project Horizon
Investing for future growth
**Project Horizon: Timeline and regulatory**

The project is on track

<table>
<thead>
<tr>
<th>Jan 2016</th>
<th>Jan 2017</th>
<th>Jan 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Construction</strong></td>
<td><strong>Commissioning / Qualification</strong></td>
<td><strong>Validation</strong></td>
</tr>
<tr>
<td><strong>Aug 2015</strong></td>
<td><strong>Dec 2016</strong></td>
<td><strong>Dec 2018</strong></td>
</tr>
<tr>
<td>Construction start</td>
<td>Warehouse operations transfer</td>
<td>Tech transfer complete</td>
</tr>
<tr>
<td>Sept 2016</td>
<td>GMP start</td>
<td></td>
</tr>
<tr>
<td>Building occupancy</td>
<td>C&amp;Q start</td>
<td></td>
</tr>
<tr>
<td>C&amp;Q start</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warehouse operations transfer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>June 2017</td>
<td>First FDA submission</td>
<td></td>
</tr>
<tr>
<td>July 2017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GMP start</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 2017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First FDA submission</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tech transfer complete</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Strengthening long-standing relationships**

Extending agreements. Launching new products

- New agreement signed in 2015
- Term through 2026
- Extend production of current antigens
- Add five new antigens

“OraSure is committed to delivering high quality infectious disease diagnostic products for our customers. As one of our trusted suppliers, Grifols’ focus on service, quality and collaboration play a key role in our ongoing relationship.”

Douglas A. Michels, President and CEO of OraSure Technologies

Press Release April 24, 2017

- Receive CE mark for HIV Combo Test (June 2016)
- Submit HIV Combo Test for FDA review (February 2017)
Three main protein expression platforms for growth

Addressing proteins complexity

<table>
<thead>
<tr>
<th>Bacteria (prokaryote)</th>
<th>Yeast (eukaryote)</th>
<th>Mammalian Cells (eukaryote) (CHO, NS0, HEK293, etc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Cell is designed for speedy replication</td>
<td>• Cell is designed for speedy replication</td>
<td>• Excellent for expression of glycoproteins (complex secretion systems)</td>
</tr>
<tr>
<td>• Good for simple proteins</td>
<td>• Some complex protein production</td>
<td>• Monoclonal Antibodies, hemostasis and blood group antigens</td>
</tr>
</tbody>
</table>

Surge in Mammalian produced proteins due to need for complex glycoproteins and mAbs

R&D capabilities that span the development continuum

Expanding our existing approach
### Strategies for value creation

#### Realizing our potential

<table>
<thead>
<tr>
<th>Future</th>
<th>Near-term</th>
<th>Approaching diagnostic companies with infectious disease menu without HCV, HIV or HBV:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Critical to approach early in the development process before antigen decisions are made. Expect 2-3 year timeline before product launch and regular supply.</td>
</tr>
<tr>
<td>Mid-term</td>
<td>Explore collaboration opportunities with other organizations that sell diagnostic reagents:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Fill gaps in 3rd party portfolios and leverage their sales organization to sell Grifols current antigens</td>
<td></td>
</tr>
<tr>
<td>Long-term</td>
<td>Explore partnering on development and supply of new molecules:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Opportunity to engage at early stage and be strategic partner for therapeutic and diagnostic pipelines</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Start a revenue generating development program in R&amp;D with plan for future GMP manufacturing</td>
<td></td>
</tr>
</tbody>
</table>
New R&D antigens for internal Diagnostics Projects

Robust pipeline to support and accelerate growth

Hemostasis
- Novel vWF receptor derivatives (for clotting assay)
- Recombinant tissue factor (for improved clotting assay performance and cost efficiencies)

Immunohematology
- Fc fusion blocking protein (to resolve interference of daratumumab in antiglobulin testing)
- Novel rare blood group antigens (stable reagents for extended blood typing menu)

Infectious Disease
- New or improved HIV, HBV, HCV, and HTLV antigens (for ultrasensitive donor screening assays)
- New antigens for WNV, Zika, Babesia, Ebola to extend menu for donor screening and clinical diagnostics

Hemostasis reagents

Robust pipeline to support and accelerate growth

Bleeding Disorders
- DG-FI
- DG-FV
- DG-FVIII
- DG-FIX
- DG-FX
- DG-Latex VWF: Gp1b: iGPIIb (Activity)

Thrombotic Disorders
- DG-Chrom AT L
- DG-Chrom PC
- DG-Chrom PS
- DG-Chrom Anti Xa
- DG-Chrom Anti Xa DOAC

Calibrators & Controls
- DG-Ref
- DG-C1 (6x1)
- DG-C2 (20x1)

Routine
- DG-PT
- DG-APTT Synth G-Fib L Human
- DG-TT L Human
- DG-Latex D-Dimer

Future

Reagents highlighted in yellow will profit from recombinant proteins or antibodies developed and manufactured at Emeryville site
**Immunohematology reagents**

Robust pipeline to support and accelerate growth

<table>
<thead>
<tr>
<th>Automation range</th>
<th>RBC antigen typing</th>
<th>RBC AB detection</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Automation images]</td>
<td>![RBC antigen typing images]</td>
<td>![RBC AB detection images]</td>
</tr>
</tbody>
</table>

Recombinant blood antigens, manufactured in Emeryville, will be used to manufacture reagents able to complement/substitute current red cells.

---

**New R&D monoclonal antibodies**

Robust pipeline to support and accelerate growth

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
</table>
| **Hemostasis** | • Proprietary mAb for improved thrombosis assay (cost reduction)  
• mAbs against clotting factors as improved controls (selectively depleted plasma) for clotting assays |
| **Autoimmune (biological drug monitoring)** | • Biosimilars for TNF-alpha (for improved cost efficiency for ProMonitor assays) |
| **Infectious disease** | • Mabs against HIV, HBV, HCV, HTLV as capture/detection reagents for donor screening assays; mabs against other pathogens for clinical diagnostics (Ebola, Zika) |
**Immunochemistry program for donor screening**

Innovative technology in recombinant proteins

**GRIFOLS**

Leveraging Grifols Proprietary New and Legacy Recombinant Proteins

- HBV Ags
- HCV Ags
- HIV-1 Ags
- HTLV Ags

**Design, Development, V&V, and Manufacturing of IMMUNOASSAY Reagents & Assays**

- Singulex®
  - Proprietary ultra-sensitive Single Molecule Counting (SMC™) technology

- Technology expertise and co-development of HIV and HCV Assays; reader (Laser Scanner) likely to be reused in Grifols platform

**Grifols fully automated immunoanalyzer platform with proprietary assays for blood and plasma screening**

- Design, Development, V&V, and Manufacturing Transfer* of Instrument, Consumables, and Software

**3rd Party Platform Vendor**

**Key takeaways**

Focus on innovation and growth
Key takeaways
Focus on innovation for growth

- Manufacturing and R&D capabilities provide a strategic growth competency and platform
- Grifols is investing in manufacturing to support future growth, increase efficiency and lower costs
- Grifols is investing in R&D to enlarge pipeline and capabilities
- Multiple recombinant proteins in research progressing rapidly towards development phase
- Trusted development partner for molecular design, expression, purification, characterization, and process development, also for other focus areas
Project Horizon tour visit

Ramón Biosca
VP/GM Grifols Diagnostic Solutions

GDS manufacturing / R&D
Snapshot
GDS Manufacturing

Snapshot

<table>
<thead>
<tr>
<th>22 products</th>
<th>6 licensed</th>
<th>140 grams</th>
<th>10-250 l. scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCV HIV HBV</td>
<td>With FDA HCV HBV</td>
<td>Product shipped in 2016</td>
<td>E. Coli Yeast</td>
</tr>
</tbody>
</table>

High-quality manufacturing:
- FDA licensed manufacturer, compliant with cGMP standards (CFR 210, 211 & 820)
- First HCV antigen manufactured in the late 1980s (5-1-1)
- Grifols continues to develop new antigens and improve processes: HIV combo launched in 2016 uses a new HIV antigen

GDS R&D

A global operation with multiple geographic centers of excellence

200+ full-time employees

Areas of expertise:
- Molecular biology assay development
- Recombinant protein design, expression and purification
- Immunoassay development
- Reagent development
- Platform/Technology evaluations
- Instrumentation and software
- Systems integration
- Project and portfolio management
- Global clinical trials (+CLIA Lab) and data management

In Emeryville, novel Grifols recombinant proteins are designed with state-of-the-art protein engineering capabilities in research, shepherded through robust development processes and become components of proprietary Grifols assays.
CMF: Consolidated Manufacturing Facility
Investing for future growth

4-story facility

1st Floor

GMP warehouse, spare parts, QC raw materials, office space
CMF: Consolidated Manufacturing Facility
Investing for future growth

4-story facility

2nd Floor

- Expansion Space
- Office Area
- Shipping / receiving, label center, MFG expansion / 9,000 sqf

CMF: Consolidated Manufacturing Facility
Investing for future growth

4-story facility

3rd Floor

- Purification Suites
- Column Prep
- Reaction Prep
- Glassware
- Bulk Fill
- Product Testing
- Yeast Fermentation
- E. Coli Fermentation

Fermentation, purification, bulk Fill, tech services
CMF: Consolidated Manufacturing Facility
Investing for future growth

4-story facility

4th Floor

Utilities / Maintenance space

Tour logistics

Presenters at CMF
- Zack McGahey
- Rodger Sheppa
- Christian Mayer
- Kim Berger

Presenters at R&D
- Norbert Piel
- Jody Berry

Group A
Preston Thomas
Head Facilities

Group B
Rino Lee
Head Quality

Group C
Grace Ching
R&D

Group D
Josep Salvador Maturana
Grifols Engineering

Please leave your belongings in the tent
You may collect your items at the end of the tour
### Thursday, June 8th 2017 Emeryville

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00</td>
<td>Pick up from hotels</td>
<td></td>
</tr>
<tr>
<td>08:30</td>
<td>Arrival at Grifols Diagnostic Solutions (GDS) headquarters</td>
<td></td>
</tr>
<tr>
<td>08:30 - 09:00</td>
<td>Coffee</td>
<td></td>
</tr>
<tr>
<td>09:00</td>
<td>Bio Supplies Division introduction</td>
<td>A. Arroyo</td>
</tr>
<tr>
<td>09:00 - 09:30</td>
<td>Access Biologicals</td>
<td>M. Crowley</td>
</tr>
<tr>
<td>09:30 - 10:15</td>
<td>Innovation: redefining the industry</td>
<td>D. Bell</td>
</tr>
<tr>
<td>10:15 - 10:45</td>
<td>Coffee break</td>
<td></td>
</tr>
<tr>
<td>10:45 - 11:45</td>
<td>Financials: focus on profitable growth</td>
<td>A. Arroyo</td>
</tr>
<tr>
<td>11:45 - 12:15</td>
<td>Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>12:15 - 12:45</td>
<td>Driving value creation through disciplined strategy execution</td>
<td>V. Grífols Deu</td>
</tr>
<tr>
<td>12:45</td>
<td>Lunch and transfers to airport</td>
<td></td>
</tr>
</tbody>
</table>

---

**Bio Supplies Division**

**Strengthening our diversified recurring revenue base**

**Alfredo Arroyo**

Chief Financial Officer
Bio Supplies Division
Strengthening our diversified recurring revenue base

- The new Bio Supplies Division includes revenues from manufacturing agreements, biological products for non-therapeutic use and other biological products
- Current revenues were previously included in Raw Materials and Bioscience
- To enhance its business, Grifols acquired 49% of Access Biologicals, with a 5-year call option
- Access Biologicals, serving the Diagnostic and Life Sciences industries, manufactures biological products for biopharmaceutical, in-vitro Diagnostic cell culture companies and Diagnostic research and development
- Supply agreement to sell to Access Biologicals plasma products for non-therapeutic use
- In the future, this new division will make a very positive revenue and margin contribution

Access Biologicals LLC
Powering growth through optimization and innovation

Mike Crowley
Managing Director
The Access Biologicals’ model

**What we do:**
- Access Biologicals manufactures non-injectable plasma into diagnostic controls/calibrators used by large instrument manufactures as reagents.
- We provide the liquid component used for testing patient samples to validate accuracy and performance of the instrument prior to reporting the test results.

**Closed loop supply chain:**
- Access Biologicals owns a collection center and the licensing for numerous disease state markers.
- Our testing lab includes an extensive selection of instruments for customization of plasma characteristics per customer specifications.
Robust strategy to increase market share

| Sales Channels | • Capitalize on Access Biologicals’ sales channels of over 275 unique corporate customers to increase sales volume of the non-therapeutic products |
| Vendor Approvals | • Leverage Access Biologicals’ customer vendor approvals for the introduction of new products.  
• As vendor consolidation continues, we are able to strengthen our market position. |
| Cell Culture Manufacturing | • Use Access Biologicals’ manufacturing capabilities to produce serum media components for the fast growing immunotherapy market.  
• The immunotherapy market has substantial high-margin growth opportunities as we internally source all raw materials and own the manufacturing facilities. |

Margin enhancement through better utilization of existing facilities and resources

Utilization rate of existing facilities

AB’s Vista, CA capabilities are ideally suited to manufacture raw materials into value-added diagnostic reagents

<table>
<thead>
<tr>
<th>1Q17</th>
<th>2Q17</th>
<th>3Q17</th>
<th>4Q17</th>
<th>1Q18</th>
<th>2Q18</th>
<th>3Q18</th>
<th>4Q18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilization rate %</td>
<td>20%</td>
<td>30%</td>
<td>40%</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
<td></td>
</tr>
</tbody>
</table>
The Access Biologicals-Grifols strategic advantage:

- Capitalize on the availability of new inventory by converting them into Diagnostic and Cell Culture materials.
- Increase utilization of the manufacturing facility by selling higher margin finished goods and the use of technology transfers.
- Maximize our innovation to create media components for the immunotherapy market.

Research, development and innovation
Redefining the industry

David Bell
Chief Innovation Office. General Counsel
Grifols has a long history of transformative innovation
...which has defined the very essence of our industry

Grifols remains a recognized leader in innovation by advancing the field of plasma therapeutics while also exploring new platforms for growth

Grifols is a recognized leader of innovation
Ranked among the world’s 100 most innovative companies for fourth consecutive year
### Innovation across divisions
2016-2017 regulatory submissions snapshot

<table>
<thead>
<tr>
<th>864 regulatory submissions for product approvals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>FDA approvals</td>
</tr>
<tr>
<td>EMA approvals (or other European)</td>
</tr>
<tr>
<td>Other regulatory authorities</td>
</tr>
<tr>
<td>Total approvals</td>
</tr>
</tbody>
</table>

- **Under the Grifols Investigator Sponsored Research (ISR) Program covering 7 varied disease states**
- **Covering 46 distinct inventions**

### Innovation is embedded in Grifols pioneering spirit
The objective is R&D drives long-term growth and profitability

**Creativity**
- Foster an environment of creativity, actively looking for disruptive technologies and value-enhancing opportunities

**Broad Engagement**
- Ensure all employees are engaged across commercial divisions and Engineering
- Drive an interdisciplinary approach to discovering and capitalizing on emerging technology and business: incorporating R&D, Commercial (Sales/Marketing), Regulatory, Manufacturing, Medical & Scientific Affairs

**Latitude**
- Drive innovation that includes internal and external R&D projects, collaborations, investments, licensing, ISRs and IP

**Differentiation**
- Ensure industry leadership in all of our product and service offerings

**INNOVATION OBJECTIVES:**
- Meet market requirements and support the business by keeping it competitive
- Broaden and deepen our product offerings to drive long-term growth and profitability
- Bring innovative therapies and services to global markets to further the company’s mission
Our simple goal: redefine the industry

Our innovation strategy
Exploit existing capabilities while exploring new opportunities

**A broad and differentiated portfolio**
- Maximize the liter (new proteins, new indications)
- Expand the market (adjacencies/complementary opportunities)
- Pursue incremental improvements in existing products/operations to drive efficiencies and deliver ever-greater value

**Exploratory breakthroughs**
- Leverage and apply technological/process advances to fundamentally change our business
- Develop new testing solutions for product and patient safety
- Advance disruptive technologies that profoundly enhance our portfolio

**Strategic collaborations**
- Partnerships with over 35 leading universities and institutions, including Stanford University, Harvard University, the Mayo Clinic, Hospital Clinic Barcelona, University of Pittsburgh and Fundación Ace
- GIANT: Leveraging our external investments for commercial success
Strategic collaborations: leveraging internal & external expertise

Side-by-side exploration of basic science and disruptive technology

Our partnerships and investments act as an extension to our internal R&D department allowing our teams to collaborate with world-renowned researchers on the exploration of basic science and disruptive technologies.

Approximately 1,000 Grifols employees are involved in R&D. Over 100 additional researchers help drive our innovation strategy from within our partnerships and investments.

Grifols R&D sites:

- Emeryville, LA and San Diego, CA (Bioscience and Diagnostic)
- Barcelona, Bilbao and Zaragoza, Spain (Bioscience and Diagnostic)
- Research Triangle Park, NC (Bioscience)
- Düdingen, Switzerland (Diagnostic)

Group R&D investment evolution (EURm)

<table>
<thead>
<tr>
<th>Year</th>
<th>In house R&amp;D</th>
<th>External R&amp;D</th>
<th>R&amp;D % on NR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>122</td>
<td>12</td>
<td>5.4%</td>
</tr>
<tr>
<td>2012</td>
<td>127</td>
<td>12</td>
<td>5.3%</td>
</tr>
<tr>
<td>2013</td>
<td>114</td>
<td>30</td>
<td>8.7%</td>
</tr>
<tr>
<td>2014</td>
<td>169</td>
<td>56</td>
<td>5.9%</td>
</tr>
<tr>
<td>2015</td>
<td>218</td>
<td>77</td>
<td>7.0%</td>
</tr>
<tr>
<td>2016</td>
<td>218</td>
<td>77</td>
<td>7.3%</td>
</tr>
</tbody>
</table>

Broad and differentiated portfolio - Selected projects

Three innovation horizons for Bioscience

<table>
<thead>
<tr>
<th>Near-term</th>
<th>Mid-term</th>
<th>Long-term</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 3 years</td>
<td>3-5 years</td>
<td>5-10 years</td>
</tr>
</tbody>
</table>

**New technology**
- SCIG (Subcutaneous)
- Albumin in bags
- Liquid A-1PI
- Reduced volume pdFVIII
- IgM Hyperimmunes
- Flexible dosing
- IVIG in bags
- Transdermal
- Inhaled

**New instrumentation**
- Neurologic disease modulation
- Alzheimer’s (AMBAR)
- MMN
- Myasthenia Gravis (crisis)
- Diseases associated with aging (cognitive and motor function)
- Albumin
- Liver failure
- Cirrhosis
- Myasthenia Gravis (maintenance)
- Biosurgery

**New products**
- Fibrin sealant
- Thrombin
- Inhaled antibiotics for BE
- Plasma youth factors for disease modulation
- Aging inhibitors and youth factors
# Broad and Differentiated Portfolio - Selected Projects

Three innovation horizons for Diagnostic

<table>
<thead>
<tr>
<th></th>
<th>Near-term &lt; 3 years</th>
<th>Mid-term 3-5 years</th>
<th>Long-term 5-10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New technology</strong></td>
<td>• Enhanced blood collection systems&lt;br&gt;• Reagent red blood cells manufacturing using recombinant red cells antigens&lt;br&gt;• Promonitor Quick (lateral flow) for anti-IFX</td>
<td>• Next generation donor screening - single molecule counting&lt;br&gt; • Next generation donor screening - single molecule counting&lt;br&gt; • Next generation sequencing</td>
<td></td>
</tr>
<tr>
<td><strong>New instrumentation</strong></td>
<td>• High throughput Hemostasis instrument&lt;br&gt; • NAT automation&lt;br&gt; • Immunohematology gel card reader</td>
<td>• Middleware software&lt;br&gt; • IH Multicard automation</td>
<td>• Next generation immunoassay instrument</td>
</tr>
<tr>
<td><strong>New products</strong></td>
<td>• New NAT virus test development (Zika, Babesia)&lt;br&gt; • A1AT genotyping test (for alpha-1 deficiency)&lt;br&gt; • IH Blood genotyping (D) kit&lt;br&gt; • New kits for biologicals treatments monitoring</td>
<td>• New assays for emerging pathogens&lt;br&gt; • Multiple target testing (multiplexed)</td>
<td>• Reagents: D-Dimer Hemostasis kits&lt;br&gt; • Pathogen detection by NextGen sequencing</td>
</tr>
</tbody>
</table>

---

## Expanding Indications through Partnerships

Investigator Sponsored Research (ISR) Studies

### Immunoglobulin
- Refine diagnosis in CIDP
- Biomarkers of azonal changes in solid organ transplantation
- Cutaneous lupus erythematosus
- Small fiber neuropathy
- Demyelination in diabetes mellitus

### Alpha-1 Antitrypsin
- Assessing risk of COPD in PI MZ genotype
- Dose adjustment on microbiome profiles
- ST-Segment elevation acute myocardial infarction
- Bronchiolitis obliterans

### Albumin
- Management of patients requiring dialysis for acute kidney failure
- Prevention of renal failure from complications of cirrhosis
- Improvement of coronary integrity in heart transplant
**Expanding indications through partnerships**

Investigator Sponsored Research (ISR) studies

<table>
<thead>
<tr>
<th>Antithrombin</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Prevent bleeding complications in pediatric patients requiring heart-lung machine support (ECMO)</td>
<td></td>
</tr>
<tr>
<td>• Acute respiratory distress syndrome (ARDS)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>pdFactor VIII</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mechanisms of immunotolerance</td>
<td></td>
</tr>
<tr>
<td>• Superiority as an hemostatic drug vs. rFVIII</td>
<td></td>
</tr>
</tbody>
</table>

**Exploratory breakthroughs**

Redefining the future through disruptive technology

- Identifying disease biomarkers for predictive diagnosis and treatment
- Aging and youth factors in plasma proteins
- Polyclonal recombinant antibodies
- Therapeutics for the prevention of disease
- Unlocking the human proteome for therapeutic value
Tackling neurodegenerative diseases
Comprehensive approach to the fight against Alzheimer's

- **Grifols AMBAR** study (launched 2012), combines the use of plasma products (albumin, IVIG) and plasmapheresis to treat Alzheimer's disease. In November 2015, the study released intermediate results that support the feasibility of the treatment. The last patient visit is scheduled for 2017

- **Diagnostics:** Early detection of Alzheimer’s Disease - ability to differentiate from other dementias

- **Treatment:** Alzheimer’s - Preventative therapeutic against scientifically accepted targets

- **Testing:** Capabilities in our CLIA Laboratory in San Marcos, TX

Transformative therapies relating to the aging process
Expanding our plasma-derived proteins

- Identify plasma-based proteins that function as “youth” or “aging” factors/triggers

- Develop function-restoring and enhancing therapies derived from plasma and its recombinant analogs

- Proteomic analysis of plasma and plasma fractions occurring at a remarkable rate, accelerating the pathway to therapeutic success

- Clinical trials initiated in humans
Next generation immunoassay
Highly sensitive technology applicable to both transfusion and specialty diagnostics

- Single Molecule Counting (SMC™) technology is 100 times more sensitive than contemporary immunoassay platforms, enabling unprecedented high precision and digital detection of viral markers.
- Sets a new standard for immunoassay sensitivity
  - Enhanced safety for blood and plasma donations
- Compliment to NAT
- Provides for geographic expansion

Key takeaways
Redefining the industry
Key takeaways
Redefining our industry

Innovation
We are redefining the Plasma Therapeutics and Specialty Diagnostics fields with a differentiated product portfolio and disruptive technologies that will change the course of these industries.

Collaboration
Our collaborative model of innovation leverages internal expertise, partnerships and strategic investments - providing access to top researchers, creative ideas and disruptive technologies.

Success
Our success will ensure our continued status as an industry leader, commercializing cutting-edge technologies that enhance patient health and product quality.

Investors’ & Analysts’ Meeting 2017
Emeryville (California, USA)
June 7th and 8th, 2017
Financials
Focus on profitable growth

Alfredo Arroyo
Chief Financial Officer

Grifols investment case
Grifols investment case

Positioned for success

• Global presence with a diversified revenue base
• Leading player in plasma-derivatives industry
• Vertically integrated business model
• Improved market dynamic for plasma-derivatives products with strong fundamentals and barriers to entry
• Leading market position and a full product portfolio in transfusion medicine
• Attractive margins with significant cash flow generation
• Significant value creation through acquisitions
• Refinance process completed: value creation

Grifols revenue evolution

<table>
<thead>
<tr>
<th>Year</th>
<th>EURm</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2,303</td>
</tr>
<tr>
<td>2012</td>
<td>2,621</td>
</tr>
<tr>
<td>2013</td>
<td>2,748</td>
</tr>
<tr>
<td>2014</td>
<td>3,355</td>
</tr>
<tr>
<td>2015</td>
<td>3,935</td>
</tr>
<tr>
<td>2016</td>
<td>4,050</td>
</tr>
<tr>
<td>Q 2017A</td>
<td>4,153</td>
</tr>
</tbody>
</table>

CAGR: +11.7%

By division:
- Hospital 2%
- Diagnostic 16%
- Bio Supplies 1%
- Bioscience 81%

By geography:
- US & Canada 69%
- EU 15%
- RoW 16%
- LTM

1. 2011 figures are proforma for Talecris acquisition
2. Net revenue in millions based on 2017 figures

Grifols investment case

Strengthening the value chain across the 3 main divisions

<table>
<thead>
<tr>
<th>Division</th>
<th>Highlights</th>
</tr>
</thead>
</table>
| **Bioscience** | • Global producer with market leadership to be further enhanced by ongoing capacity expansion programs  
• Plasma derived therapies expected to continue growing supported by favorable demand and supply dynamics  
• Focused R&D to support and contribute future growth |
| **Diagnostic** | • Steady growth. Highly profitable business  
• Market leadership in transfusion medicine  
• Continuous investment in new diagnostic technologies |
| **Hospital** | • Maintain leadership in Spain  
• Leader in the introduction of hospital logistics automation systems in Spain and Latin America  
• Strengthening presence in the U.S. market |
Grifols investment case
Strengthening the value chain: New Bio Supplies Division

- The new Bio Supplies Division includes revenues from manufacturing agreements, biological products for non-therapeutic use and other biological products
- Current revenues were previously included in Raw Materials and Bioscience
- To enhance its business, Grifols acquired 49% of Access Biologicals, with a 5-year call option
- Access Biologicals, serving the Diagnostic and Life Sciences industries, manufactures biological products for biopharmaceutical, in-vitro Diagnostic cell culture companies and Diagnostic research and development
- Supply agreement to sell to Access Biologicals plasma products for non-therapeutic use
- In the future, this new division will make a very positive revenue and margin contribution

Grifols by the numbers
Long-term growth trajectory
Grifols by the numbers: long-term growth trajectory
Building a financial track record (EURm except %)

**BIOSCIENCE**

<table>
<thead>
<tr>
<th>Year</th>
<th>2011 (1)</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>1Q 2017 (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>2,031</td>
<td>2,325</td>
<td>2,449</td>
<td>2,514</td>
<td>3,032</td>
<td>3,228</td>
<td></td>
</tr>
</tbody>
</table>

**CAGR:** +9.7%

**1Q 2017:** +15.1%

**Note:**
1. 2011 figures are proforma for Talecris acquisition.
2. 1Q2017 growth includes the reclassification of the biological products for non-therapeutic use that since January of 2017 are reported in the Bio Supplies Division.

---

**DIAGNOSTIC**

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>1Q 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>117</td>
<td>134</td>
<td>130</td>
<td>620</td>
<td>691</td>
<td>664</td>
<td></td>
</tr>
</tbody>
</table>

**CAGR:** +41.4%

**1Q 2017:** +6.0%
Grifols by the numbers: long-term growth trajectory
Building a financial track record (EURm except %)

HOSPITAL

CAGR: +0.7%

95 96 97 95 96 99


1Q 2017: +0.6%

Note: 1. 2011 figures are proforma for Talecris acquisition
2. 2011 and 1Q 2017 EBITDA are Adjusted EBITDA

Grifols by the numbers: long-term growth trajectory
High margins with significant cash flow generation (EURm except %)

EBITDA(1),(2)

CAGR: +9.6%

27.4% 30.1% 31.5% 31.2% 29.5% 28.2% 30.4%

700 789 865 1,047 1,162 1,141


1Q 2017

Note: 1. 2011 figures are proforma for Talecris acquisition
2. 2011 and 1Q 2017 EBITDA are Adjusted EBITDA
Grifols by the numbers: long-term growth trajectory
High margins with significant cash flow generation (EURm except %)

**NET PROFIT**

<table>
<thead>
<tr>
<th>Year</th>
<th>Net Profit (EURm)</th>
<th>CAGR: +30.4%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>145</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>257</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>346</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>470</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>532</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>546</td>
<td></td>
</tr>
<tr>
<td>1Q 2017</td>
<td>546</td>
<td>+7.0%</td>
</tr>
</tbody>
</table>

Note: 1. Cash conversion: (EBITDA - Capex - Δ Working Capital) / EBITDA

Grifols by the numbers: long-term growth trajectory
High margins with significant cash flow generation

**CASH CONVERSION (1)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Conversion (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>66.8%</td>
</tr>
<tr>
<td>2012</td>
<td>81.0%</td>
</tr>
<tr>
<td>2013</td>
<td>87.0%</td>
</tr>
<tr>
<td>2014</td>
<td>80.2%</td>
</tr>
<tr>
<td>2015</td>
<td>75.2%</td>
</tr>
<tr>
<td>2016</td>
<td>64.9%</td>
</tr>
<tr>
<td>1Q 2017</td>
<td>74.3%</td>
</tr>
</tbody>
</table>
Grifols by the numbers: long-term growth trajectory
Financial strengths: 2016 through 1Q 2017

<table>
<thead>
<tr>
<th>Sector</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bioscience</strong></td>
<td>Steady growth in 2016 (+6.6% cc in 2016). Improved market dynamics in H1 2017 (+11.9% cc in 1Q 2017)</td>
</tr>
<tr>
<td>Revenues</td>
<td>• Alpha-1 continued its double-digit hike</td>
</tr>
<tr>
<td></td>
<td>• Albumin banked on China sales increase</td>
</tr>
<tr>
<td></td>
<td>• IVIG robust growth in the U.S.</td>
</tr>
<tr>
<td></td>
<td>• pdFVIII: lower volumes offset by a shift to higher-priced areas (positive geographic mix)</td>
</tr>
<tr>
<td><strong>Diagnostic</strong></td>
<td>Turning into positive growth in H2 2016 and 1Q 2017 (+3.3% cc in 1Q 2017)</td>
</tr>
<tr>
<td>Revenues</td>
<td>• NAT reversed H1 low sales in H2 2016. NAT integrated business delivered further growth in 1Q 2017 driven by the U.S., China and Japan</td>
</tr>
<tr>
<td></td>
<td>• Immunoassay impacted by Abbott contract (H1 2016) and lower manufacturing costs</td>
</tr>
<tr>
<td></td>
<td>• Immunohematology strengthening its position in U.S.</td>
</tr>
<tr>
<td><strong>Hospital</strong></td>
<td>Flat performance in 2016 and 1Q 2017</td>
</tr>
<tr>
<td>Revenues</td>
<td>• Main contributions from Intravenous Solutions and Pharmatech</td>
</tr>
<tr>
<td></td>
<td>• Internationalization with presence in the U.S., Portugal, Chile and several countries of Asia-Pacific</td>
</tr>
</tbody>
</table>

**Margin**
- Bioscience impacted by the plasma costs related with a significant opening of new donation centers
- Diagnostic margins improved in H2 2016. Margin boosted as a result of the NAT acquisition in 1Q 2017
- Significant royalty revenues drop as planned in 2016

**Cash flow**
- Net operating cash flow of EUR 553m in 2016 and EUR 640m for 1Q 2017 LTM
- 1Q 2017 strong cash position despite of the NAT acquisition cash payment and transaction and refinancing costs
- Leverage ratio increased to 4.45x at 1Q 2017 from 3.55x at December 31, 2016 due to the NAT acquisition
**Grifols by the numbers: long-term growth trajectory**

**Capital allocation: Capex for growth**

- Managed 1Q 2017 LTM Capex to EUR 273m
- Continued emphasis on execution and capital allocation efficacy and return
- New wave of investment for additional capacity in Bioscience Division
- Maintenance vs expansion capex: half-and-half

**Capex evolution**

<table>
<thead>
<tr>
<th>Year</th>
<th>Capex (EURm)</th>
<th>As % of sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>152</td>
<td>5.5%</td>
</tr>
<tr>
<td>2014</td>
<td>252</td>
<td>7.5%</td>
</tr>
<tr>
<td>2015</td>
<td>266</td>
<td>6.8%</td>
</tr>
<tr>
<td>2016</td>
<td>268</td>
<td>6.7%</td>
</tr>
<tr>
<td>1Q 2017A</td>
<td>273</td>
<td>6.6%</td>
</tr>
</tbody>
</table>

Note: 1. Includes investments in P&P&E; excludes extraordinary cash flow items

---

**Grifols by the numbers: long-term growth trajectory**

**Capital allocation: 2016-2020 Capex plan**

<table>
<thead>
<tr>
<th>(EURm)</th>
<th>1.2bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioscience Division</td>
<td>540</td>
</tr>
<tr>
<td>Diagnostic Division</td>
<td>300</td>
</tr>
<tr>
<td>Hologic</td>
<td>130</td>
</tr>
<tr>
<td>Hospital Division</td>
<td>180</td>
</tr>
<tr>
<td>Commercial &amp; Corporate</td>
<td>35</td>
</tr>
<tr>
<td>TOTAL</td>
<td>180</td>
</tr>
</tbody>
</table>

- **540 Bioscience manufacturing**
  - New fractionation plant
  - IVIG, alpha-1 and albumin purification and filling facility
- **300 Plasma procurement**
  - New plasma collection centers
  - Relocation/improvements/expansions
- **130**
- **180**
- **35**
- **15**
- **180**
- **35**
- **15**
- **540**
- **300**

---
### Grifols by the numbers: long-term growth trajectory

Enhancing the portfolio and securing future growth through acquisitions

<table>
<thead>
<tr>
<th>United States</th>
<th>United States</th>
<th>United States</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>May 2016</strong></td>
<td><strong>May 2016</strong></td>
<td><strong>January 2017</strong></td>
<td><strong>February 2017</strong></td>
</tr>
<tr>
<td>Stake of 49% USD100m</td>
<td>Stake of 20% USD50m</td>
<td>Stake of 49% USD51m</td>
<td>6 plasma centers in the U.S. USD47m</td>
</tr>
<tr>
<td>One of the main private and independent plasma suppliers in the U.S. Currently one of Grifols' external plasma suppliers</td>
<td>Highly sensitive technology applicable to both transfusion and specialty diagnostics</td>
<td>Manufacture of biological products, such as specific intravenous and plasma reagents, which are used by biotechnological and biopharmaceutical companies for in-vitro diagnosis, cell culture and research and development in the field of diagnosis</td>
<td>Grifols already runs the 6 plasma centers from March 1, 2017</td>
</tr>
<tr>
<td>The acquisition enables to strengthen plasma sources 3-year call option</td>
<td>Enable high-value assays using rare biomarkers</td>
<td>5-year call option</td>
<td></td>
</tr>
</tbody>
</table>

### Grifols by the numbers: long-term growth trajectory

Solid Balance Sheet: Sound financial position

<table>
<thead>
<tr>
<th>(EURbn)</th>
<th>2016</th>
<th>2016 Q1</th>
<th>2017 Q1</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S/T Asset</strong></td>
<td>3.1bn</td>
<td>1.1bn</td>
<td>3.0bn</td>
<td>0.9bn</td>
</tr>
<tr>
<td><strong>L/T Liability</strong></td>
<td>5.3bn</td>
<td>1.1bn</td>
<td>7.0bn</td>
<td>0.9bn</td>
</tr>
<tr>
<td><strong>Cash on hand: €895m</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>S/T Asset</strong></td>
<td>3.7bn</td>
<td>3.7bn</td>
<td>8.7bn</td>
<td>3.8bn</td>
</tr>
<tr>
<td><strong>L/T Liability</strong></td>
<td>7.0bn</td>
<td>7.0bn</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td>7.0bn</td>
<td>3.8bn</td>
<td>11.7bn</td>
<td></td>
</tr>
</tbody>
</table>

+15.6%
Grifols by the numbers: long-term growth trajectory

Solid Balance Sheet: Sound financial position

<table>
<thead>
<tr>
<th>(EURbn)</th>
<th>2016</th>
<th>2016 Q1</th>
<th>2017 Q1</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>L/T Asset</td>
<td>7.0bn</td>
<td>3.7bn</td>
<td>8.7bn</td>
<td>3.8bn</td>
</tr>
<tr>
<td>Equity</td>
<td>3.1bn</td>
<td>5.3bn</td>
<td>7.0bn</td>
<td>1.1bn</td>
</tr>
<tr>
<td>L/T Liability</td>
<td>3.0bn</td>
<td>1.1bn</td>
<td>9.1bn</td>
<td>0.9bn</td>
</tr>
<tr>
<td>Equity</td>
<td>4.1bn</td>
<td>8.5bn</td>
<td>11.7bn</td>
<td>6.8bn</td>
</tr>
</tbody>
</table>

+15.6% growth

Cash on hand: €895m

Liquidity: €1,150m

NAT Acquisition

Capturing the value of integration
Capturing the value of integration
The acquisition transforms Diagnostic into an integrated, high-margin business

Vertically integrated NAT business
- Creates a vertically integrated NAT business across R&D, manufacturing, sales & marketing and corporate functions
- Captures operational efficiency across the whole value chain

Consolidated diagnostics platform
- Further consolidates diagnostics capabilities, combining NAT Blood Screening, Immunoassay Blood Donor Screening and Immunohematology businesses

Enhanced market leadership
- Enhances Grifols Diagnostic leadership position in the global diagnostics market, with an estimated c.60% share global blood donations

Significant margin expansion
- The transaction improves Diagnostic EBITDA margin from c.17% to c.40% and Grifols Group EBITDA margin by +350bps

Capturing the value of integration
Significant increase in profitability

- This transaction is part of the growth strategy envisaged for the Diagnostic Division
- The acquisition enables Grifols to continue strengthening its leading position in transfusion medicine
- The integration of manufacturing and R&D capabilities makes a significant margin contribution
- The entire cash flow is transferred to Grifols
Building value through debt refinancing

Leveraging our strength: targets achieved

<table>
<thead>
<tr>
<th>TLA (USD3.0bn)</th>
<th>RCF (USD0.3bn)</th>
<th>TLB (USD3.0bn)</th>
<th>HY Bond EUR 1.0bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Margin: L+175bps</td>
<td>Margin: L+225bps</td>
<td>Coupon: 3.2%</td>
<td></td>
</tr>
<tr>
<td>Tenor: 6 years</td>
<td>Tenor: 8 years</td>
<td>Tenor: 8 years</td>
<td></td>
</tr>
<tr>
<td>Quasi-Bullet amortization</td>
<td>Bullet amortization</td>
<td>Bullet amortization</td>
<td></td>
</tr>
</tbody>
</table>

→ Interest rate reduction\(^1\): c.-120bps
→ Financial expenses\(^1\) annual reduction: c.EUR -80m
→ Average Interest Cost lower than 3%

Note: 1. Like-for-like
2. Weighted average annual interest rate reduction
Building value through debt refinancing
Debt(1) maturity profile c.7 years average tenor in USDm(2)

Note: 1. Excludes RCF and any other non-financial debt
2. Fixed USD/EUR exchange rate of 1.1

Enhanced growth and margin
Broad portfolio of opportunities
## Enhanced growth and margin
Managing the business to achieve industry-leading returns

<table>
<thead>
<tr>
<th>Bioscience</th>
<th>Diagnostic</th>
<th>Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Effectively drive organic growth through diagnosis and treatments</td>
<td>• Effectively drive growth and profitability across the value chain</td>
<td>• Increase scale and profitability</td>
</tr>
<tr>
<td>• Accelerate market development in relevant global markets</td>
<td>• Expand commercial reach through products and customers, geographies and distribution networks</td>
<td>• Global expansion increasing presence in the U.S. market</td>
</tr>
<tr>
<td>• Capacity leadership in plasma collection and manufacturing to maximize growth opportunities</td>
<td>• Increase manufacturing capabilities</td>
<td>• Optimize current manufacturing capabilities</td>
</tr>
<tr>
<td>• Drive revenue growth through delivery of innovation of new plasma products and new formulations</td>
<td>• Enhance product portfolio to strengthen competitive edge and investment in new technologies with broad applicability</td>
<td>• Timely innovation projects to support future division growth and value creation</td>
</tr>
<tr>
<td></td>
<td>• Volume and scale driving costs improvements</td>
<td>• Leverage existing business capabilities and product portfolios</td>
</tr>
</tbody>
</table>

---

**Return to shareholders**
Return to shareholders
Sharing success with shareholders

- Accumulated annual dividend up 17.0% over the last 4 years
- Over EUR 660m returned to shareholders since 2011
- Pay-out ratio 40% of reported consolidated profits
- Continuous DPS increase on the back of profit growth

Key takeaways
Creating long-term value
Key takeaways
Creating long-term value

• Maintain long-term industry growth and returns
  • Global plasma industry has historically enjoyed significant and steady growth and is expected to experience further 6-7% annual sustainable growth
  • Strengthen market leadership in a high margin transfusion medicine industry
• NAT acquisition: capture value-chain benefits, leverage capabilities
• Refinancing process: long-term value creation
• Target profitable growth together with cash flow generation
• Financial policy and capital allocation well established, efficient, disciplined and focused
• Continued dividend distribution to create value through profitable growth

Strategy Update
Driving value creation through disciplined strategy execution
Víctor Grífols Deu
Co-CEO
Grifols Mission

Grifols is a leading, diversified, global Bioscience company with a growing position in the Diagnostic and Hospital fields.

Our mission is to provide state-of-the-art therapies, products and services to our patients and customers around the world while delivering value to shareholders.

Grifols in 2017: company profile and global footprint

Subsidiaries in 30+ countries

Distribution in 100+ countries

New assets in San Diego, CA

Manufacturing in 10 sites worldwide

Nearly 16,000 employees worldwide
Three growth horizons

To Date
Build On Core Business
Bioscience Focus  Diagnostic Focus
Balance the Portfolio  Drive Leadership, Scale & Profitability
Bioscience Diagnostic Hospital

Future

Highlights of our focused and disciplined growth strategy to date

Core Business Optimization
- Alpha and Talecris acquisitions
- Biomat and other donor center acquisitions
- Global market share leader for IVIG, alpha-1, albumin, pdFVIII
- Yield improvements

Global Expansion
- Commercial subsidiaries in over 30 countries
- Distribution in over 100 countries
- GWWO in Dublin
- Expansion into Mid East and Asia growth markets

Capacity Leadership
- 180 plasma collection centers
- 13.9m liters fractionation capacity
- Optimal flexibility for paste exchange
- Antigen manufacturing expansion in Emeryville

Innovation Acceleration
- GIANT and Office of Innovation
- Alkahest, Araclon, etc., partnerships
- 35+ academic collaborations
- Grifols Engineering (ABO) etc.

Multi-Business Build
- Novartis Dx and Hologic NAT acquisitions
- Access Biologicals acquisition
- Kiro Oncology Robot partnership and launch
- Linhaliq bolt-on

Note: 1. ABO: Automated plasma Bottle Opener
Results: top-line growth

![Graph showing top-line growth over time with key events labeled, including: Alpha acquires 50% of Grifols, Barcelona Plant licensed by FDA, Grifols acquires Alpha shares, Internationalization starts, Spain joins EU, Biomat acquisition, Acquisition PlasmaCare, Inc & Banter centers, Acquisition of ATC Assets & Pleugonave FDA licensed, Acquisition of Australian Group - Diagnostic, Novartis Diagnostic Acquisition, Taliecris Acquisition, and Heliotic NAT Acquisition.]

Results: diversified revenue base

<table>
<thead>
<tr>
<th>Year</th>
<th>Diagnostic</th>
<th>Hospital</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>4%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>2016</td>
<td>16%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

![Pie chart showing revenue distribution for 2010 and 2016 with Bioscience at 89% and other segments at 11% and 9% respectively.]

![Pie chart showing revenue distribution for 2016 with Bioscience at 79% and other segments at 21%.]
Results: profitability evolution

% Adjusted EBITDA

Looking ahead
We are well positioned for the future

Operating in growth markets

<table>
<thead>
<tr>
<th>Market Growth</th>
<th>Executing on these opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plasma Market Growth 6-7%</td>
<td>• Capabilities, platforms and infrastructure to drive growth</td>
</tr>
<tr>
<td>IVD Market Growth 5%</td>
<td>• Vertically integrated businesses to manage margins and value chain</td>
</tr>
<tr>
<td>Compounding Pharmacy Market Growth 6%</td>
<td>• FCF(^{(1)}) to take advantage of opportunities that enhance shareholder value</td>
</tr>
</tbody>
</table>

Note: 1. FCF: Free Cash flow

Focus going forward

Unlocking value for profitable growth across all businesses

**BIOSCIENCE DIVISION**
Continued leadership in the plasma therapeutics industry

**DIAGNOSTICS DIVISION**
Expanding an integrated, high margin, specialty business

**HOSPITAL DIVISION**
Building a profitable niche leader with synergistic strength
Continued leadership in the plasma therapeutics industry
Grifols is the global market leader for 3 major proteins(1)

<table>
<thead>
<tr>
<th></th>
<th>Revenue (EURbn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>0.0</td>
</tr>
<tr>
<td>2011</td>
<td>0.5</td>
</tr>
<tr>
<td>2012</td>
<td>1.0</td>
</tr>
<tr>
<td>2013</td>
<td>1.5</td>
</tr>
<tr>
<td>2014</td>
<td>2.0</td>
</tr>
<tr>
<td>2015</td>
<td>2.5</td>
</tr>
<tr>
<td>2016</td>
<td>3.0</td>
</tr>
<tr>
<td>2017</td>
<td>3.5</td>
</tr>
</tbody>
</table>

**Sustained Bioscience revenue growth**
18% global market share in 2016(1)

- 23% Global market share for IVIG
  #1 position
- 68% Global market share for Alpha-1
  #1 position
- 20% Global market share for pdFVIII
  #1 position
- 17% Global market share for Albumin
  #2 position

Note: 1. Source: Grifols internal provisional data, 2016

Drive organic growth through diagnosis and treatments bolstered by excellent supply/demand dynamics
Drive geographic expansion in relevant global markets while balancing whole liter economics for margin protection
Increase plasma collection and processing capabilities while controlling cost-per-unit evolution
Lead the market in new products and indications (Alzheimer's), while investing in exploratory breakthroughs (Alkahest)
- Expand and leverage current uses of plasma (Bio-supplies)
- Execute on partnerships that expand our portfolio

Continued leadership in the plasma therapeutics industry
Bioscience has a clear roadmap

Plasma protein therapeutics will continue to be at the core of our Bioscience Division strategy
**Continued leadership in the plasma therapeutics industry**

The foundations of successful growth

<table>
<thead>
<tr>
<th>Donor center growth (# of Centers)</th>
<th>Fractionation capacity growth (m liters)</th>
<th>Innovation investment (EURm)</th>
</tr>
</thead>
</table>

Plasma procurement and fractionation capacity expansions are aligned, on track and able to support dynamic growth

A consistent investment in innovation

**Expanding an integrated, high-margin specialty business**

Diagnostic is a fast evolving business

- **Grifols Diagnostic**
  - Building a foundation

- **Novartis Dx Acquisition**
  - Increasing scale

- **Hologic Acquisition**
  - Enhancing profitability

---

To Date

Future

**Organic growth**

**Complementary BD activities**

High margin and specialty
Expanding an integrated, high-margin specialty business

Diagnostic has a clear niche leadership roadmap

We will leverage our leadership in transfusion medicine to build a specialty Dx business - focused on niche markets

- Grow and harness the full profitability of our NAT blood screening business
- Profit from the broadest Blood Typing Solutions portfolio in the market
- Leverage recombinant protein expertise and capacity, further growing specialty diagnostics manufacturing (Project Horizon)
- Optimize investments in new platforms (Singulex technology) to develop high specialty products and enter new segments
- Complement organic growth with synergistic partnerships and business development

Expanding an integrated, high-margin specialty business

Diagnostic value creation path
Building a niche hospital leader with synergistic strengths
Hospital focus on core business development and profitable growth

Core Business
Strengthen and grow core business in Iberia/LATAM

Portfolio and Market Development
Develop our position in the U.S. hospital pharmacy market

Hospital pharmacy market drivers align with Grifols strengths

Integrated, “smart” hospital pharmacy solutions will drive our Hospital Division strategy

- Rebalance portfolio and refocus on profitability
- Accelerate U.S. expansion with IV solutions and KIRO through organic and BD strategies
- Leverage highly automated facilities for LVPs for low unit cost and adaptability to profit from market conditions
- Leverage sterile compounding expertise and products to develop new software applications and next generation enhancements
- Explore opportunities to build portfolio through BD activities and leverage capabilities for Bioscience
Key takeaways
Driving value creation through disciplined strategy execution

- **Core Business Optimization**
  - Plasma therapeutics as the core business - now and tomorrow

- **Global Expansion**
  - Profitable growth and expansion organically and through BD

- **Capacity Leadership**
  - A foundation for leadership and profitable, multi-business growth

- **Innovation Acceleration**
  - Innovation from all businesses as a focus and priority

- **Multi-Business Build**
  - Diagnostic a profitable growth engine and Hospital an emerging business with opportunities

---

Drive sales growth and manage EBITDA margins
The future
Building on over 75 years of leadership, innovation and commitment to patients

Our recent leadership succession ensures that our mission, vision and priorities remain unchanged.

This commitment and consistent approach to strategy formulation and execution will continue to deliver profitable growth and drive value creation.