# Investors Meeting

May 27th - 28th, 2010



# Grifols Management Team

Name	Position
Victor Grifols	Chairman / CEO
Ramón Riera	VP Marketing & Sales
Alfredo Arroyo	CFO
Greg Rich	CEO Grifols Inc
Juan Ignacio Twose	VP Industrial
Shinji Wada	CEO Biomat USA
Toni Paez, M.D.	Clinical Operations Manager
Chris Healey	V. P. Governmental Public Affairs
Nuria Pascual	Dep.Finance Director / IR Officer



## Grifols Investors Meeting – Agenda Day 1

#### Thursday, May 27th, 2010: Phoenix (Arizona)

_	Pick up at hotel (Sheraton Phoenix)	07:30
_	Reception of participants	08:00
_	Plasma Economics	08:30
_	Q1 Results	09:00
_	Financial review	09:30
-	Coffee Break	10:00
_	The Incredible Journey of a Plasma Donation	10:30
_	Coffee Break	11:45
_	Plasma procurement overview	12:00
_	Site visit: donor centre	12:30
_	Q&A	13:30
_	Lunch	13:45
_	Transport to airport & Flight to Los Angeles	14:30

#### Thursday, May 27th, 2010: Los Angeles (California)

-	Pick up at the hotel (Sheraton Pasadena - Langham)	19:30
_	Dinner at Grifols Premises	20:00

Transport to hotel



# Grifols Investors Meeting – Agenda Day 2

#### Friday, May 28th, 2010: Los Angeles (California)

_	Pick up at hotel	(Sheraton Pasadena - Langham)	07:30
_	Market Overview		08:30
_	Impact of US hea	Ithcare reform	09:30
_	Coffee Break		10:00
-	Capex		10:30
-	R & D Review		11:00
_	Coffee Break		11:45
_	Site visit: Flebog	amma DIF & Coagulation	12:00
_	Q&A		13:00
_	Lunch		13:30
_	Site visit: Minifrac	<b>2*</b>	14:30
_	Transfers to airport	t	

<sup>\*</sup> Optional, gowning required



#### Forward Looking Statements

This presentation contains forward-looking statements based on current assumptions and forecasts made by Grifols Group Management

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 Madrid Stock Exchange.

The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.



#### Presentation Guidelines

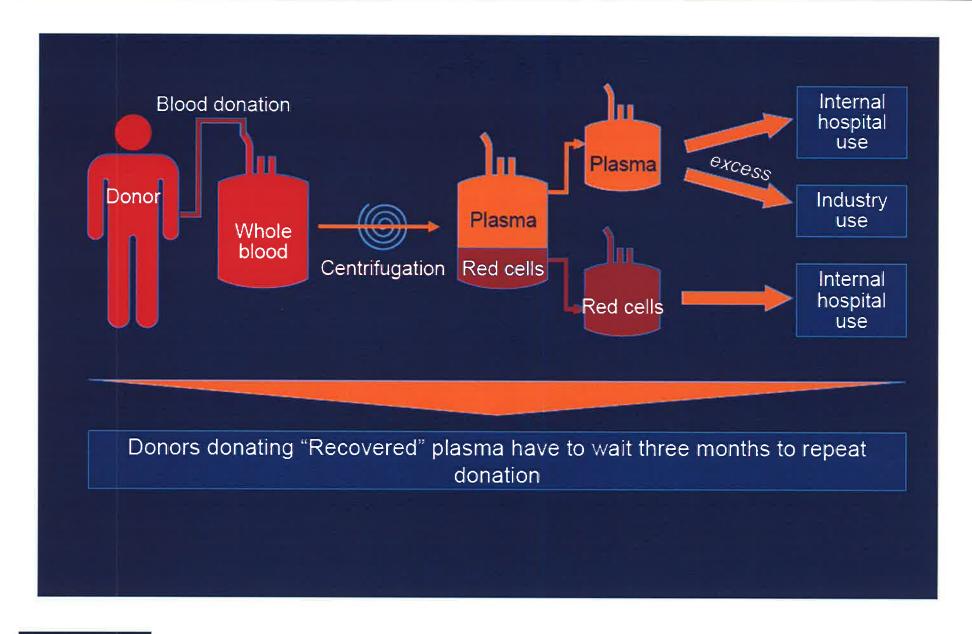
- ➤ Following the Spanish Stock Exchange (CNMV)
  Guidelines for investor meetings the information included in this presentation has been already filed in the CNMV.
- ➤ The Q&A session must be focused on the content of this presentation, including explanations and/or clarifications.
- ➤ Questions related to relevant information not included in this presentation can not be addressed.
- ➤ It is Grifols' investor relation policy not to provide with financial guidance in addition to the information contained in this presentation.



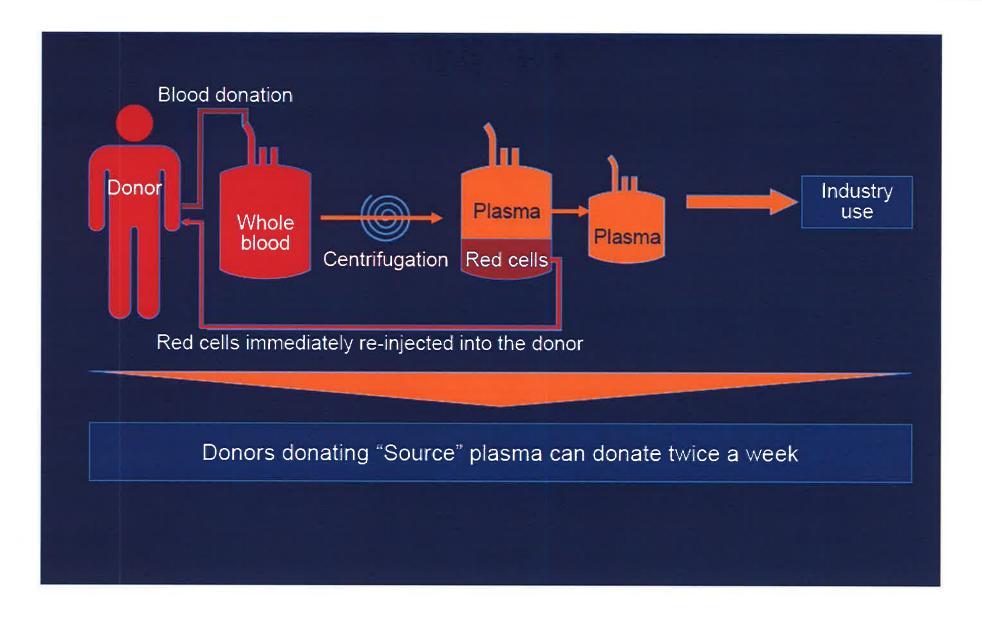
# Plasma Economics



#### "Recovered" plasma collection



## "Source" plasma collection





#### Output per liter of Plasma

1 L. OF PLASMA ALBUMIN

21 - 24 g.

**IVIG** 

3 - 4.2 g.

**FACTOR VIII** 

100 - 250 I.U.

**FACTOR IX** 

200 - 350 I.U.

ALPHA 1

0.125 - 0.350 g.

AT-III

100 - 270 I.U.

**FIBRINOGEN** 

0.5 - 1 g.

**THROMBIN** 

17,000 – 22,000 I.U.

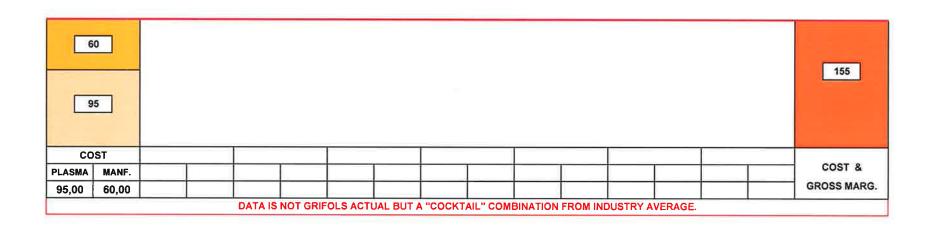
**PLASMIN** 

20 mcg.

TOTAL PROTEINS IN PLASMA

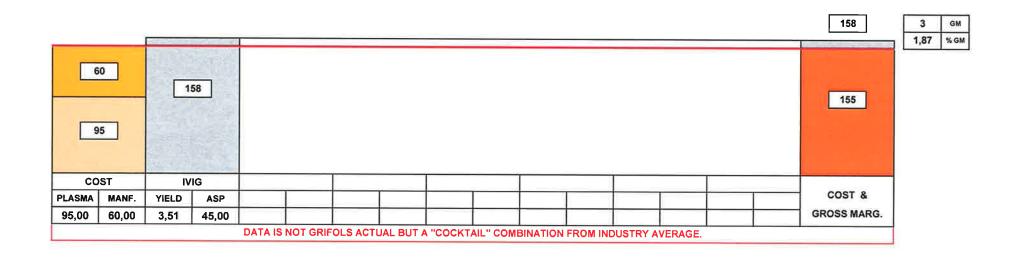
Approx. 3,000

20XX



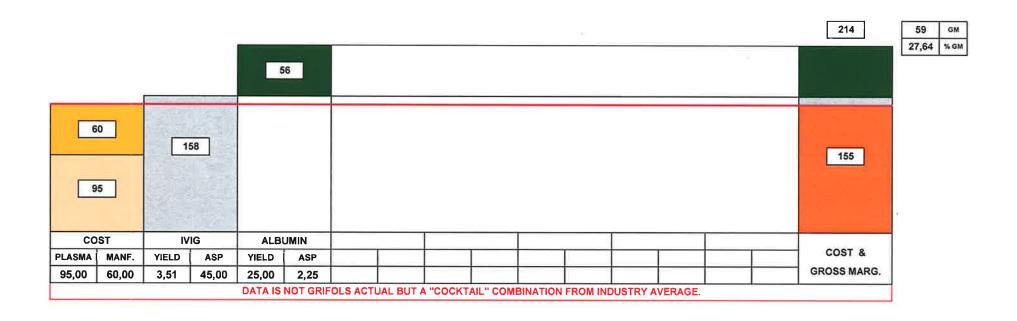


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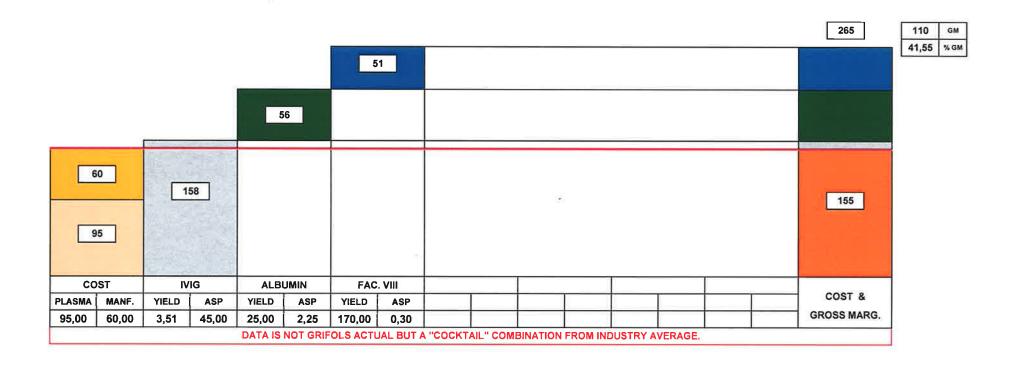


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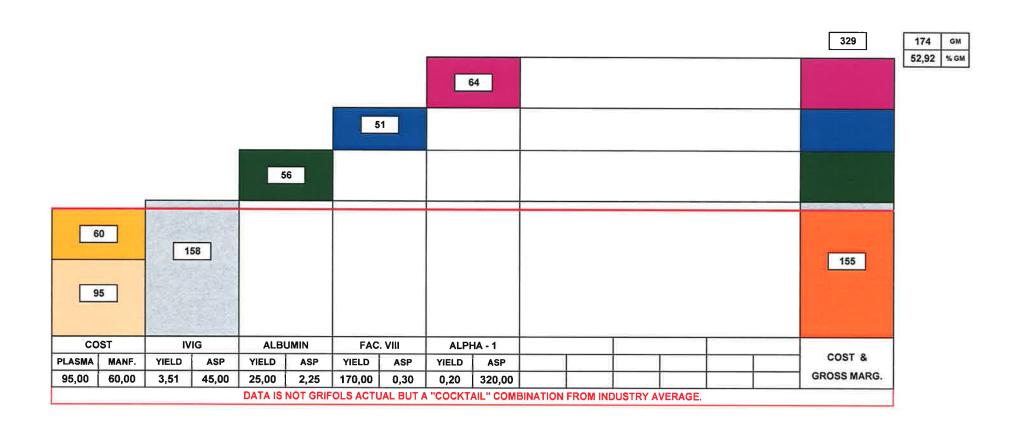


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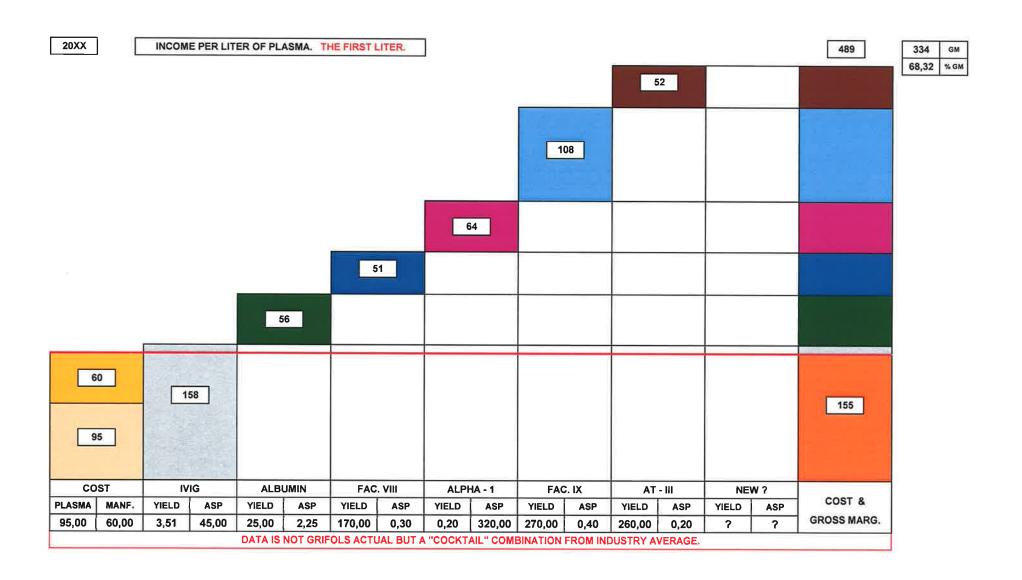
20XX





20XX INCOME PER LITER OF PLASMA. THE FIRST LITER. 437 64,55 % GM 108 64 51 56 60 158 155 95 COST IVIG **ALBUMIN** FAC. VIII ALPHA - 1 FAC. IX COST & PLASMA MANF. **YIELD** ASP YIELD ASP **YIELD** ASP YIELD **ASP YIELD** ASP GROSS MARG. 95,00 60,00 3,51 45,00 25,00 2,25 170,00 0,30 0,20 320,00 270,00 0,40 DATA IS NOT GRIFOLS ACTUAL BUT A "COCKTAIL" COMBINATION FROM INDUSTRY AVERAGE.

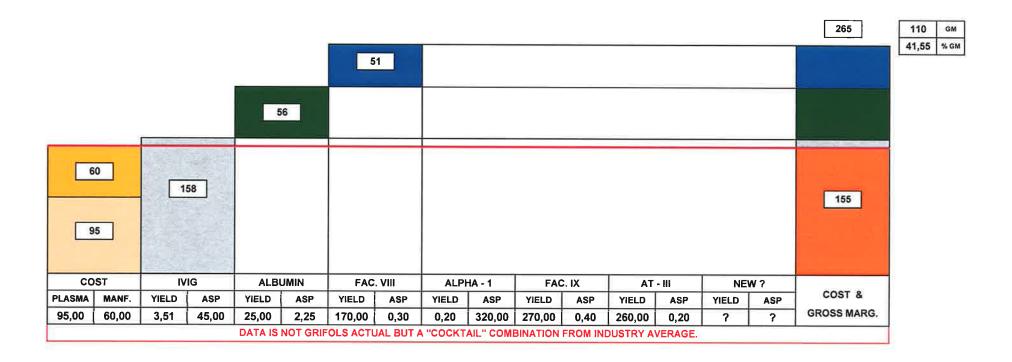






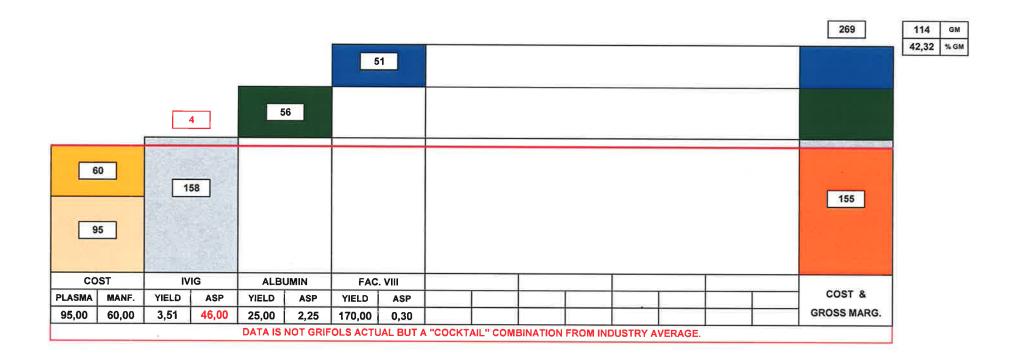
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INCOME PER LITER OF PLASMA



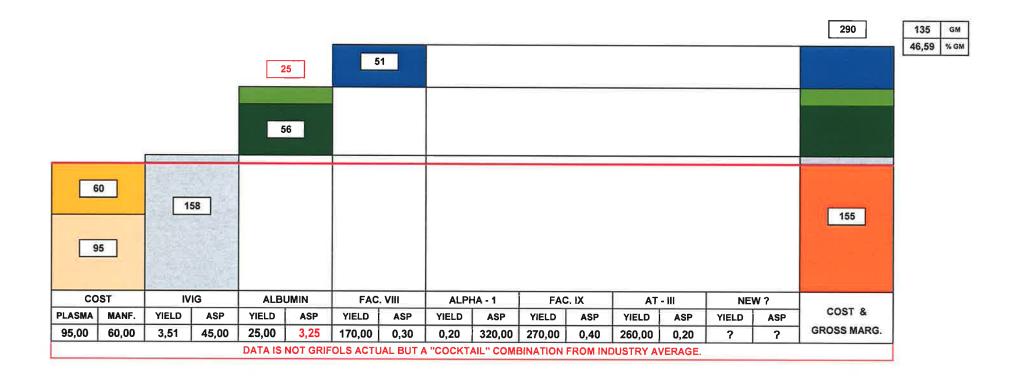


20XX INCOME PER LITER OF PLASMA. THE FIRST LITER. 3.000 M Lit. x 4 = 10.530 M €



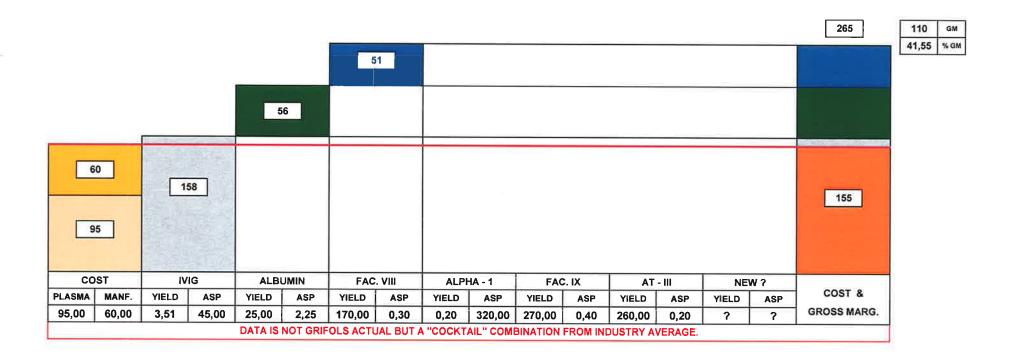


20XX INCOME PER LITER OF PLASMA. THE FIRST LITER. 3.000 M Lit. x 25 = 75.000 M €



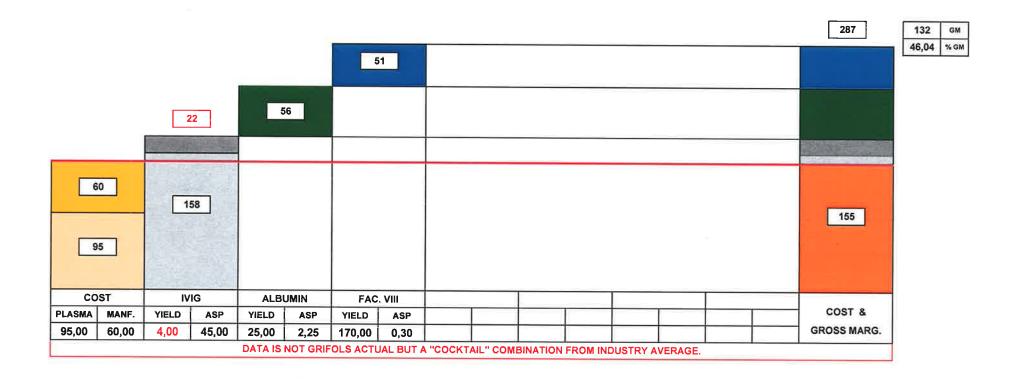


20XX INCOME PER LITER OF PLASMA



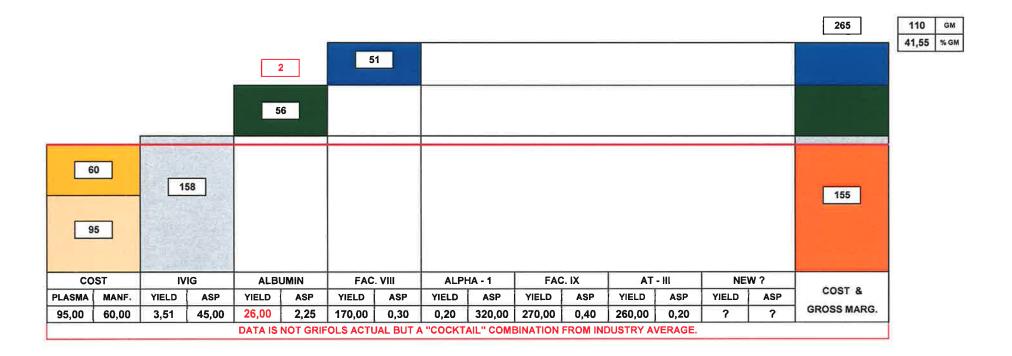


20XX INCOME PER LITER OF PLASMA. THE FIRST LITER. 3.000 M Lit. x 22 = 66.150 M €



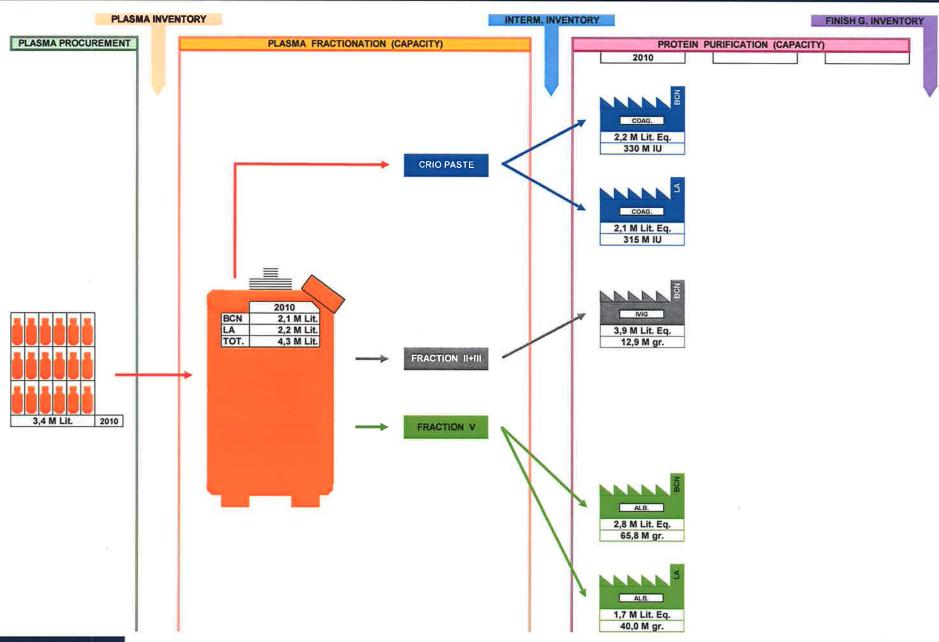


20XX INCOME PER LITER OF PLASMA 3.000 M Lit. × 2 = 6.750 M €

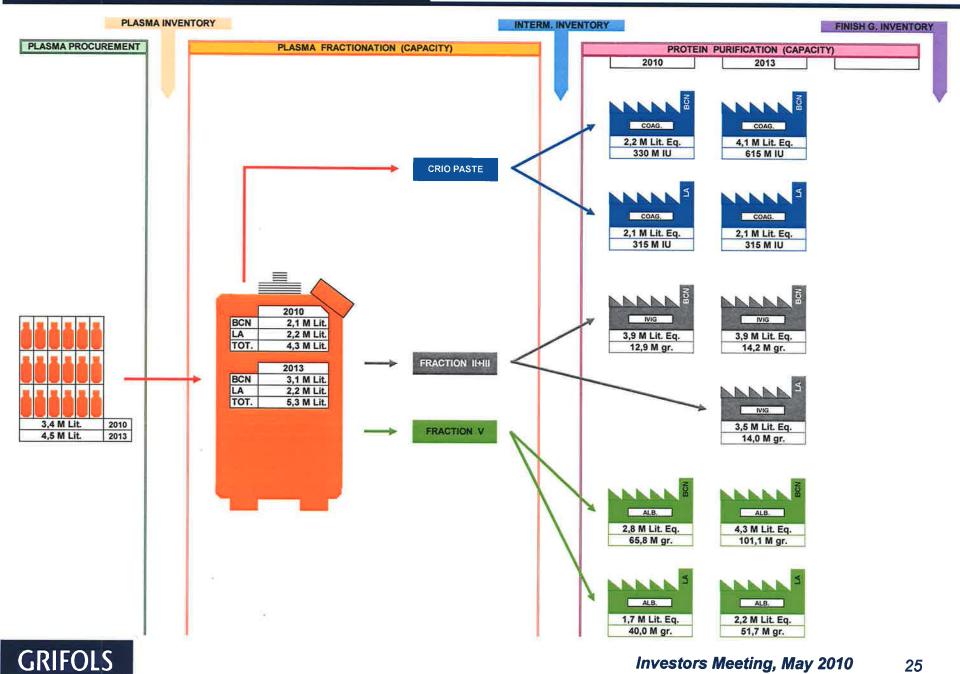




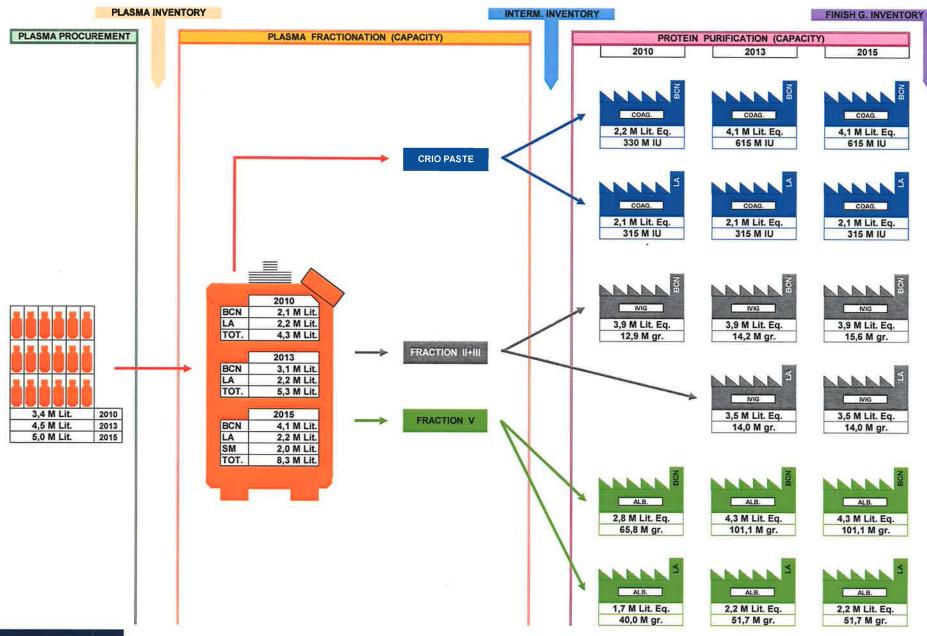
# **Global Capacity**



# Global Capacity



#### **Global Capacity**

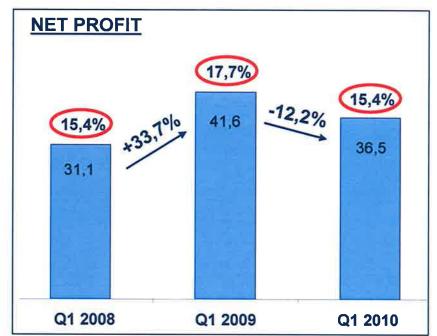


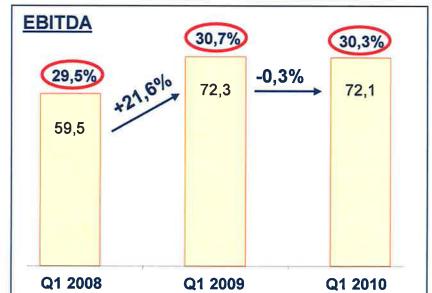
# Financial Review



# Q1 Performance









# Sales by Divisions - Q1

	YTD March 2009	%	YTD March 2010	%
Bioscience	175,3	74%	184,6	78%
% growth			5,3%	
% growth at constant rate			8,2%	
Hospital	21,9	9%	21,9	9%
% growth			-0,1%	
% growth at constant rate			-0,1%	
Diagnostic	25,8	11%	27,2	11%
% growth			5,5%	
% growth at constant rate			5,7%	
Subtotal	223,0	95%	233,7	98%
% growth			4,8%	
% growth at constant rate			(7,1%)	
Raw Materials & Others	12,6	5%	4,0	2%
% growth			-68,4%	
% growth at constant rate			-67,9%	
TOTAL	235,6	100%	237,7	100%
% growth			0,9%	
% growth at constant rate			3,1%	



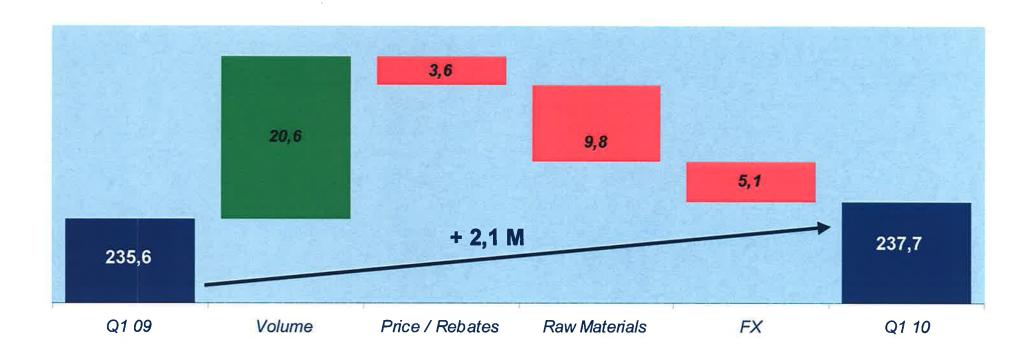
# Sales by Regions - Q1

	YTD		YTD	
	March 2009	%	March 2010	%
EU	109,3	46%	105,8	44%
% growth			-3,1%	
% growth at constant rate			-3,6%	
US	72,9	31%	70,7	30%
% growth			-3,0%	
% growth at constant rate			3,6%	
ROW	40,8	17%	57,2	24%
% growth			39,3%	
% growth at constant rate			41,0%	
Subtotal	223,0	95%	233,7	98%
% growth			4,8%	
% growth at constant rate			7,1%	
Raw Materials & Others	12,6	5%	4,0	2%
% growth			-68,4%	
% growth at constant rate			-67,9%	
TOTAL	235,6	100%	237,7	100%
% growth			0,9%	
% growth at constant rate			3,1%	



## Q1 2010 Sales Variance

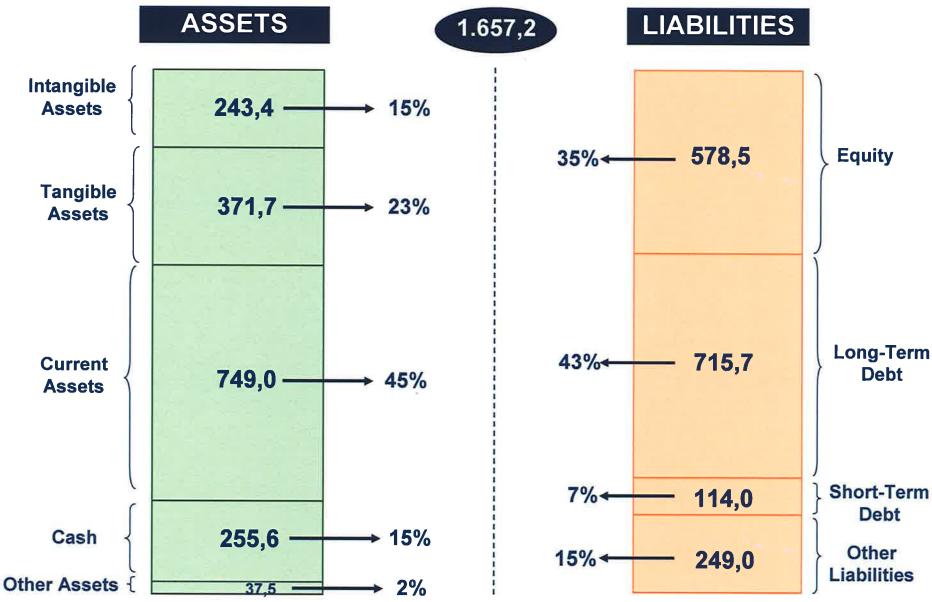
€ Million





#### 2009 Balance Sheet

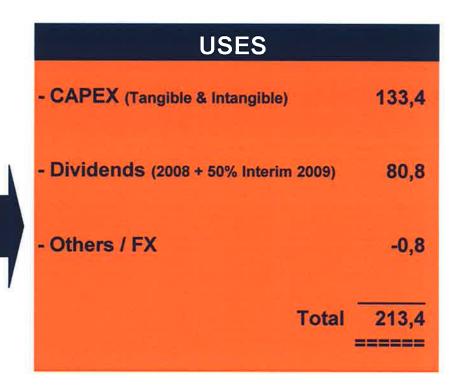




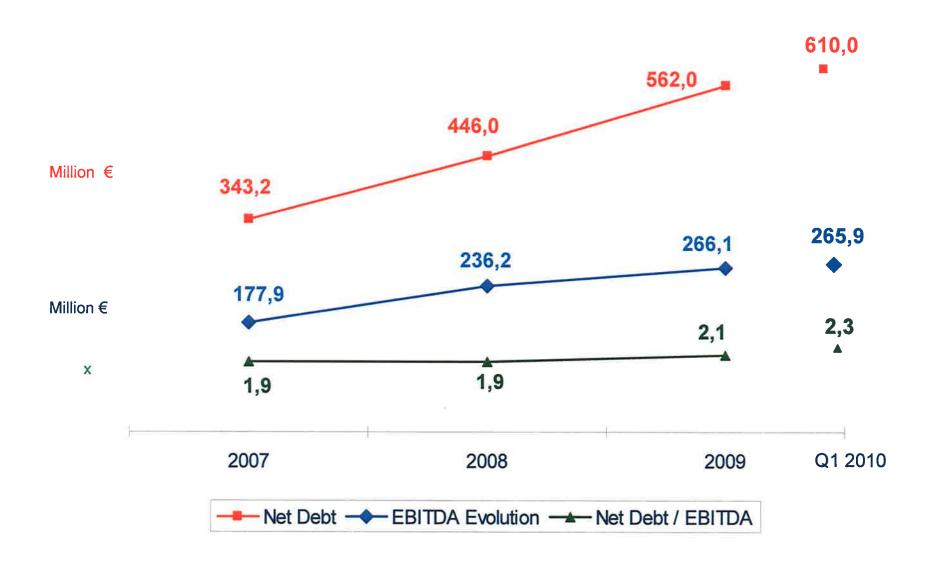
## 2009 Cash Flow

**€** Million

SOURCES	
Operating Cash Flow	204,2
- Working Capital Increase	-119,0
Net Operating Cash Flow	85,2
Sale of Treasury Stock	26,8
Net Debt Increase	01,4
Total 2	213,4

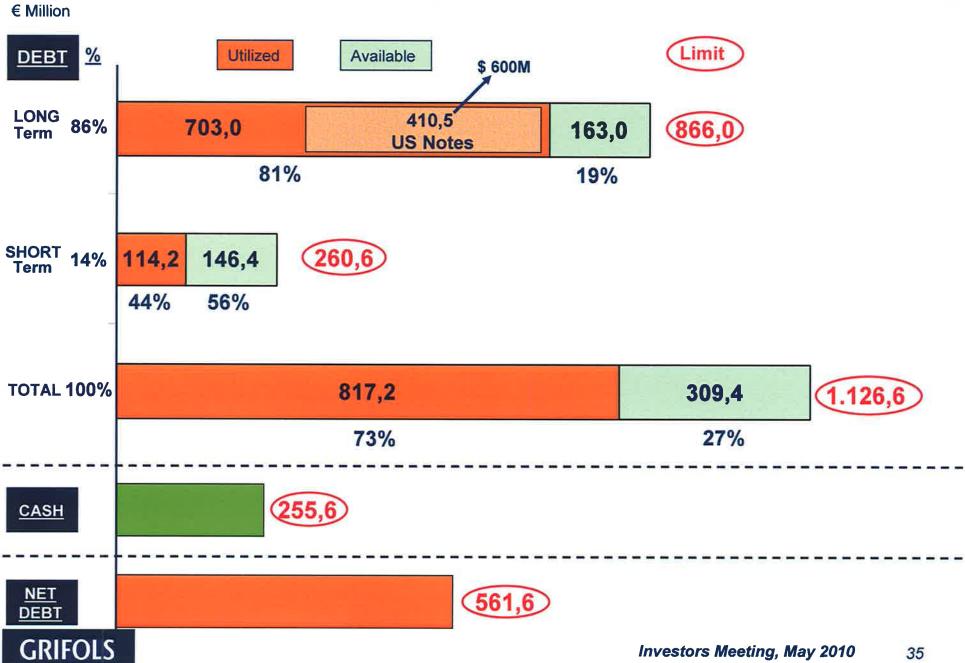


#### Net Debt - Evolution





## 2009 Liquidity Position



# Financial Ratios

	Dec 08 Actual	June 09 Actual	Dec 09 Actual			
Debt Covenants						
Net Debt (€ 000)	446,0	532,7	561,7			
Net Debt / EBITDA (< 3,5)	1,9	2,1	2,1			
Minimum Net Worth		392,4	408,9			
Actual Net Worth		490,5	567,5			
EBITDA/Financial expenses (>5,00)	7,7	10,8	11,8			
Return Ratios						
ROE %	25,3%	28,8%	26,1%			
ROIC %	15,3%	15,0%	13,9%			
Working Capital Ratios						
Inventory Turnover	327	353	379			
DSO	83	93	83			
DPO	65	69	64			



#### 2009 - Q1 2010 Main events

- > "Minifrac" obtains FDA approval and starts fractionation, increasing capacity by 700,000 ltrs pa.
- ➤ Opening of Grifols Plasmapheresis Academy in Arizona, evidencing our firm commitment to employee training and standardization of in-house knowledge. Over 500 employees have participated in the 25 courses organized since its opening last January.
- ➤ Acquisition of the Australian-Swiss group Lateral/Medion for 25 MM €, corresponding to the 49% stake of the economic rights and 99% of the voting rights, bringing significant synergies to Grifols in the Diagnostic Area.
- > Grifols gets a minority stake in Cardio3 BioSciences, specialized in stem-cell based biotherapeutic R&D for the treatment of cardiovascular diseases.
- > Grifols shares start trading in the US via ADR Level 1 Sponsored.
- ➢ Grifols promotes European research into cirrhosis of the liver with a 2 MM € contribution to fund the development of the European Consortium for the Study of Chronic Liver Failure.
- ➤ Grifols closed its \$ 600 MM corporate bond issue in the US, subscribed by qualified investors, mainly in dollars. The issue was heavily over-subscribed.
- ➤ Launch of Niuliva®, an anti-hepatitis B intravenous immunoglobin (IVIG), in Spain and Italy.
- > Exclusive distribution agreement with Accumetrics (US) for its VerityNOw® System in Spain, Portugal and Chile.



#### 2009 – Q1 2010 Main events

- > Partnership with Health-Robotics to distribute the robot i.v. STATION in Spain, Portugal and Latin America over the next 5 years.
- > Grifols starts the construction of the new lab in San Marcos, TX, scheduled for completion in 2010.
- > Release of interim results of the clinical trial on Alzheimer's disease.
- > Grifols obtains FDA approval for the new sterile albumin filling plant at Los Angeles.
- > Grifols starts a new IV solutions factory in Murcia.
- Grifols Engineering signs a turn key project for a Portuguese pharmaceutical company.
- Grifols introduces holographic seal for plasma product containers to increase safety levels.
- The number of hospital with Pyxis technology installed by Grifols reaches 100 in Spain. Since 1999 Grifols has a distribution agreement with Cardinal Health/ Carefusion to distribute this technology.
- > Grifols incorporates a new company (Gri-Cel) for the research into the regenerative medicine field.
- Production of diagnostic products starts in Australia.
- > Grifols to open direct subsidiaries in Sweden and Colombia.
- > Grifols to open a representation office in China (Shanghai).



# Plasma Procurement Overview

**Grifols US Plasma Operation** 



#### Infrastructure

- 2 Plasma Collection Companies with approx. 2,517 FTE
  - Biomat USA (64 Centers) 2,021 FTE
  - PlasmaCare (16 Centers)
     496 FTE
- Corporate Offices in Los Angeles and Cincinnati
- Divisional Office in Atlanta, Colorado Springs and Seattle
- Centralized Plasma Warehouse in City of Industry, CA
  - 20,000 Sq. Feet Freezer, 2 million liters storage capacity
- Centralized Testing Lab in Austin, TX
  - 26,000 Sq. Feet, 3.2 million donations testing capacity
  - 2<sup>nd</sup> Testing Laboratory under construction in San Marcos, Texas, (4Q 2010 completion)
- Grifols Academy of Plasmapheresis



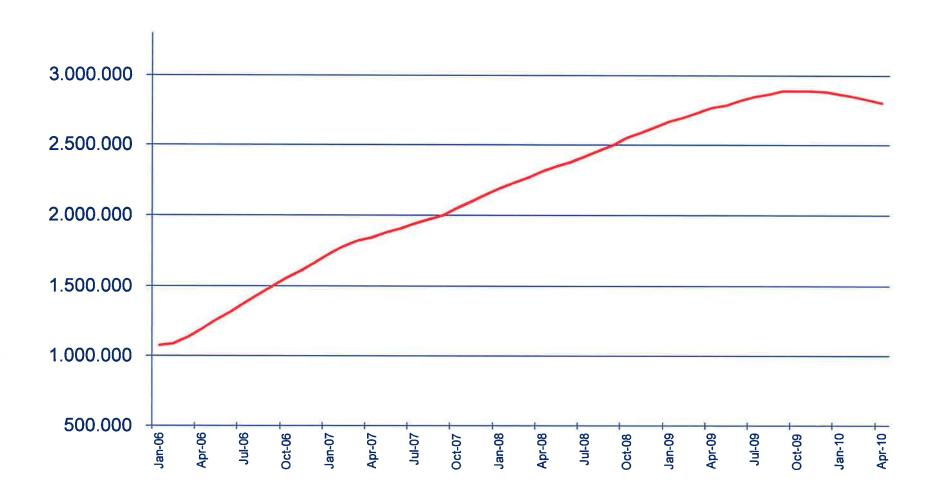
# Center map





# 2006 - 2010 LTM Plasma Collection

In Liters





# Donor Center Acquisition and New Center Opening

	2005	2006	2007	2008	2009
Acquisition	0	22	4	1	0
New Center	0	2	0	3	0
# of Centers	48	72	76	80	80

- ✓ As of May 2010, all 80 Grifols centers are FDA licensed, IQPP certified and fully operational.
- √ 66 among 80 centers have been audited and accepted by EMA.



# Opening of New Donor Center

✓	Planning Phase	3 - 6 months
	<ul> <li>Site Search</li> <li>Lease negotiation/execution</li> <li>Engineering and construction permit submission</li> </ul>	
✓	Construction Phase	3 - 12 months
	<ul><li>Leasehold Improvement</li><li>Ground-up</li></ul>	3 months 9 - 12 months
<b>√</b>	Regulatory Approval Phase	<u>15 - 24 months</u>
	<ul> <li>Pre-Inspection Operation</li> <li>Pre-Licensure FDA Inspection and Approval</li> <li>European PMF Amendment and approval</li> </ul>	3 months 6 - 9 months 6 - 12 months
✓	The entire process:	21 to 42 months



# Acquiring 3<sup>rd</sup> Party Donor Center

#### ✓ Key Success Parameters

- Minimize Down Time for Integration
- Quick Gap Analysis for Different SOP's and Conflict Resolution
- Swift Training of Employees with the "New" SOP
- Retention of Trained Employees with Positive Motivation
- Establishing Quality Operation
- Sensible HR and Administrative Policy Transition

#### Realistic Integration Strategy with Careful Attention to the Details

- IT Infrastructure and Donor Center Management system
- Critical Logistics Management
- ✓ Availability of Compassionate Regional Support Team



# Center Relocation and Facility Expansion

	<u>2005</u>	<u>2006</u>	<u>2007</u>	2008	2009
Center Relocation to New Facility	5	5	6	8	4
Major Expansion	1	2	5	4	4

Grifols new facility standards include +/- 10,000 sf foot print with 48 - 60 beds, medical grade finishing and adequate Freezer/Storage space

# Center License Relocation

- Closing small, inefficient or sub-standard donor center and relocate the FDA license to better location/facility
- No geographical limitation for the license transfer
- Avoid pre and post FDA inspection/approval cycle (9 to 12 months)
- Require fully certified and experienced management staff for opening
  - Facility Manager
    - 9 to 12 months for certification and minimum 3 months of position experience
  - Quality Supervisor
    - 6 to 9 months for certification and minimum 3 months of position experience
  - Medical Supervisor (Physician Sub.)
    - 2 to 9 months for certification and minimum 3 months of position experience
  - Line level staff
    - 2 to 3 months for certification
- No change/deviation allowed from the corporate S.O.P.



# 2005 – 2010 Monthly Plasma Collection

In Liters





# Physical Plasma Collection Capacity

Physical Plasma Collection Capacity depends on

		Gritois New Facility Standard
_	Number of Beds/Plasmapheresis Machines	48 - 60
_	Number of Medical Office	2 - 3
_	Number of Screening Booth	5 - 8
_	Freezers and Storage Space	OK for by-weekly delivery/pick-up
_	Parking	Minimum 40

- The existing 80 Grifols donor centers network has a sufficient physical plasma collection capacity to accommodate more than 50% increase of the current run rate.
- Long range CAPEX plan is in place to enhance other supporting infrastructure, including testing laboratory and warehouse.



Crifola Now Engility Standard

## Management of Plasma Collection Run Rate

- > By adjusting several operational parameters, each donor center is capable in controlling ± 5 to 15% of collection run rate.
  - Operation Days/Hours
  - Advertisement and Donor Recruitment Programs
  - Incentive Programs
  - Controlling new donor enrollment
- > The reaction time of a center is immediate after the corporate decision and an impact could be observed and assessed in 2 to 3 months.
- Simple increase of donor incentive does not always warrant a sustainable collection growth or donor's satisfaction. It could often impact customer service, sometime quality operation.



## 2009 Grifols 80 Donor Centers Statistics

# ➢ In 2009, Grifols Donor Centers had:

- 200,000 donors
- 150,000 Qualified Donors
- 111,000 New Donors donated
- Qualified 95,000 New Donors
- Overall turnover rate of Qualified Donor at 65%
- Qualified Donors donated avg. 21 times

# > This means, in 2009 each Donor Center had, in average:

- 2,500 Donors
- 1,875 Qualified Donors
- 14,000 New Donors donated
- Qualified 1,200 New Donors (100 per month, 4.2 per day)



# Development of Donor Center Employees

- Plasma collection process involves significant manual intervention of employees, continuous training and maintaining their competency level are essential for high quality operation.
- Donor center process is highly regulated and demands strict adherence to the company's SOP. Assuring employees compliance requires their ethical behaviors and knowledge beyond job skill.
- Employees understanding of the importance of plasma therapy and its impact to the health of patient, boosts their moral and motivation.
- ➤ Maintaining well trained, experienced and motivated employees has been the 1<sup>st</sup> priority of Grifols Donor Centers.



# Summary

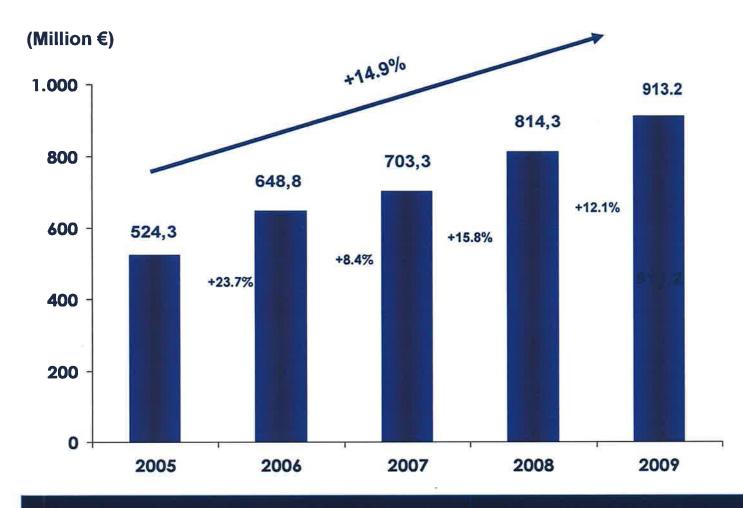
- Grifols has successfully established a solid plasma collection infrastructure, which is capable in fulfilling its source plasma demand in the coming years.
- ➤ Grifols has gained experiences in increasing plasma collection capacity applying several different business models, which could be selected to fit various business environments.
- > Grifols has various means in controlling plasma collection volume, center by center basis, to achieve an adequate level of inventory and maximize the cash flow.
- ➤ Grifols continues to invest in developing donor center management and employees. The company believes that the pool of well-trained, experienced and loyal employees are the key for its continuous success in the plasma collection industry.



# **Market Overview**



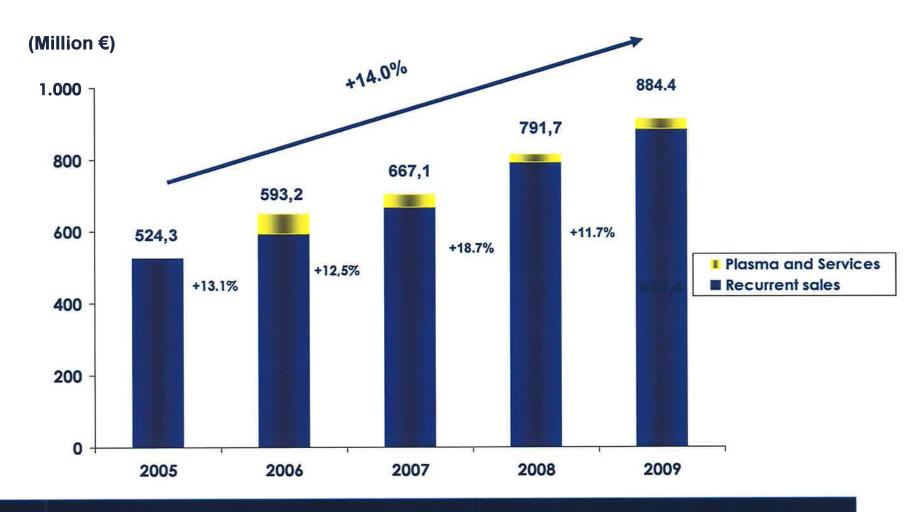
# Total Grifols Sales Evolution



Total sales increased by 12.1% in 2009 and 14.9% CAGR since 2005



# Total Grifols Sales Evolution



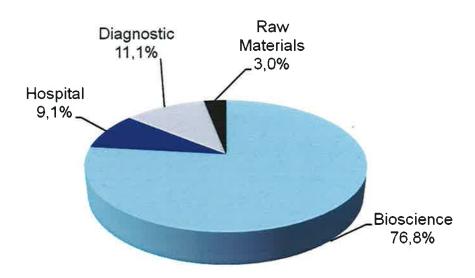
Recurrent sales increased at a sustained double digit rate with a 14% CAGR since 2005

# 2009 Sales by Region – Sales by Division

### 2009 Sales by Region (%)

# European Union 46,5% 21,0% US 32,5%

#### 2009 Sales by Division (%)



Balanced Sales by Region with significant increased contribution from ROW

Bioscience Division accounts for 77% of total sales Diagnostic Division increased its share in 2009 helped by the Lateral/Medion acquisition



# Sales growth by Division

	2009 sales (%)	2008 (m€)	2009 (m€)	2009 Δ (%)
Bioscience	77	618	695	13
Diagnostic	11	86	103	20
Hospital	9	83	86	5
Raw Materials	3	28	29	2
TOTAL	100	814	913	12









Key focus on Bioscience, enjoying complementary growth from Hospital and Diagnostic divisions

# Sales growth by Region

	2009 sales (%)	2008 (m€)	2009 (m€)	2009 Δ (%)
European Union	46,5	404	424	5
US	32,5	291	297	2
ROW	21	119	192	61
TOTAL	100	814	913	12





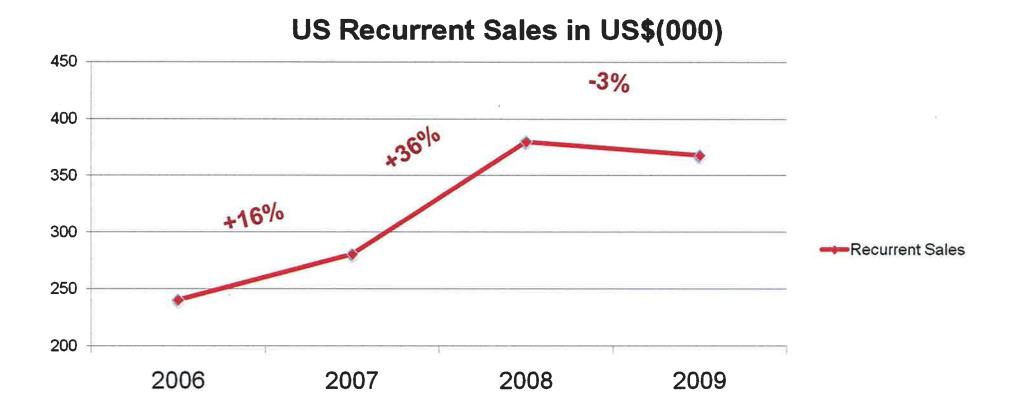




Total double digit sales growth supported by the important contribution of ROW markets during 2009



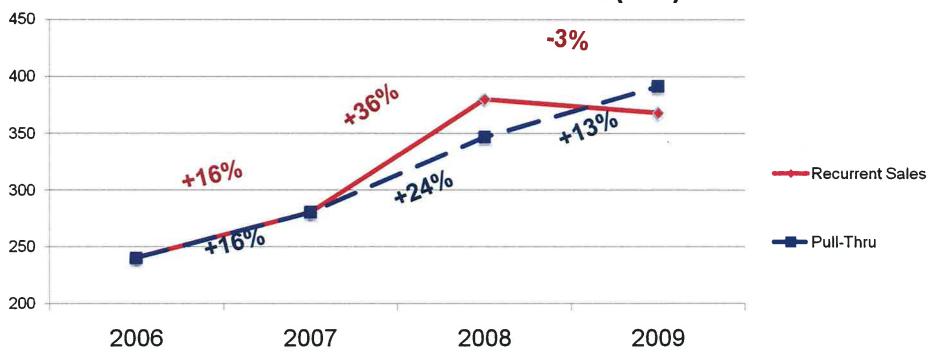
# US Market Grifols Sales excluding Raw Materials





# US Market Grifols Sales excluding Raw Materials





Inventory variations in the distribution channel have changed the shape of the growth line in the last couple of years.

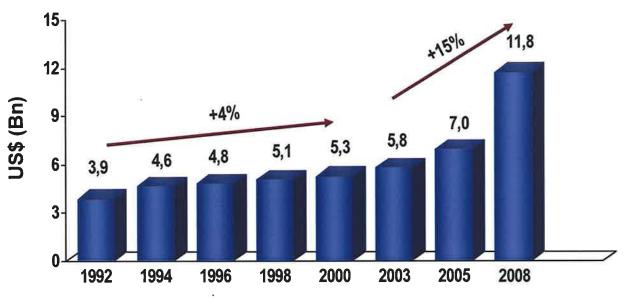
Source of Pull-thru data: internal company data



# **BIOSCIENCE DIVISION**



# The Worldwide Plasma Derivatives Market



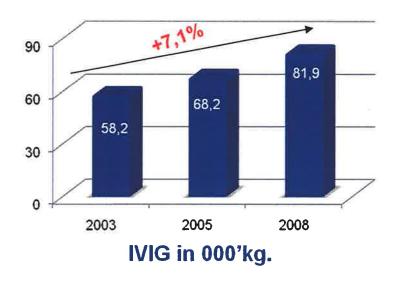
Sources: The Worldwide Plasma Fractions Market 2008, MRB.

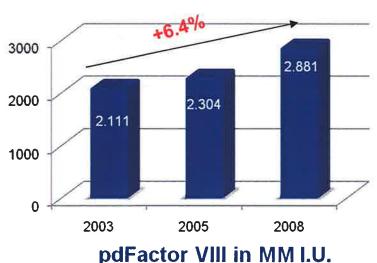
The world plasma derivatives market has grown consistently since the early 1990s. Since 2003, worldwide sales' growth has accelerated

Market growth continued at an accelerated rate until 2008

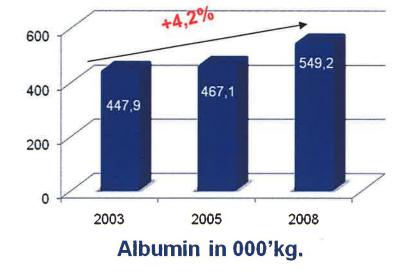


#### Demand Evolution for Plasma Proteins





Source: The Worldwide Plasma Fractions Market 2008. MRB

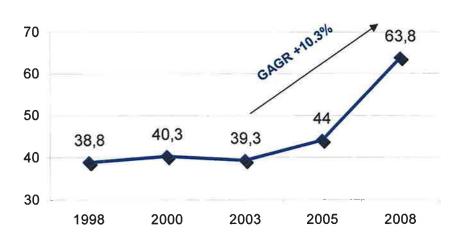


the genetically engineered at a competitive cost and price, and there are differences between the genetically engineered and the plasma-derived products. Some twenty years ago, the introduction of recombinant factor VIII was expected to compromise future sales of the plasma-derived products. The recent history of this market testifies that the plasma-derived products have recently regained a small part of their market shares, as they have shown superior efficacy in some treatment modalities over recombinant products.

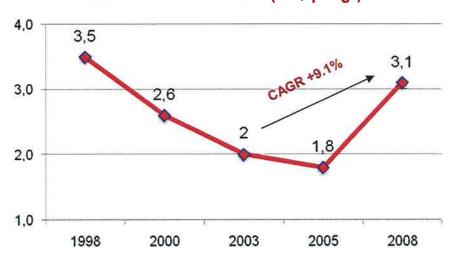
Recently published MRB data confirm main proteins W/W demand growth up to 2008.

#### Price evolution of main Plasma Proteins

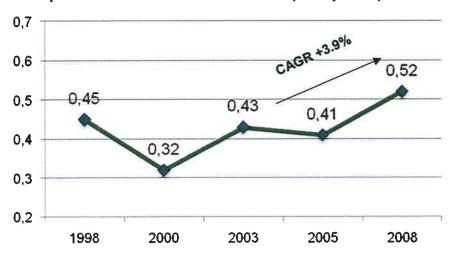
#### IVIG Evolution of ASP (US\$ per gr) - Worldwide



#### Albumin Evolution of ASP (US\$ per gr) - Worldwide



pd Factor VIII Evolution of ASP (US\$ per IU) - Worldwide

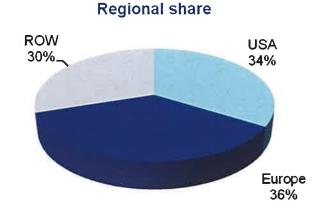


Albumin and pdFactor VIII prices have recovered similar levels than ten years ago.

Positive demand evolution for IVIG has driven prices up and is the product paying for the industry higher costs.

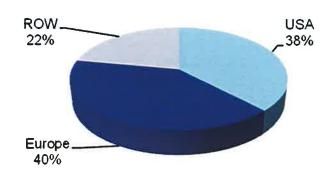
## The Worldwide Plasma Derivatives Market

## World Total Sales 2008 US\$ 11.8 (Bn)



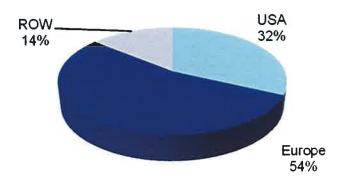
#### **Grifols Bioscience Sales**

2009 Regional share (%)



In 2009 Grifols Plasma Protein sales in ROW reached 22% of total sales

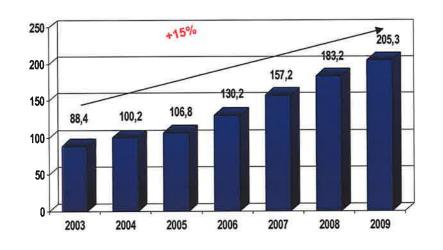
#### 2005 Regional share (%)

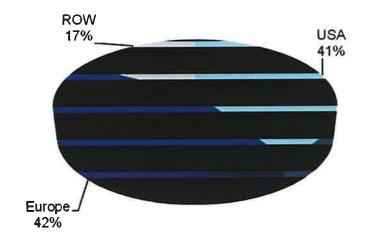


Source: The Worldwide Plasma Fractions Market 2008 MRB.



# Grifols pdFactor VIII Sales Evolution





Grifols Worldwide Factor VIII Sales (MM. US\$)

Geographical Distribution of Grifols Factor VIII Sales 2009 (I.U.)

Grifols Plasma Factor VIII Sales continue showing a healthy growth with significant presence in Europe and in the US



# IVIG demand future growth drivers

#### Market

- Continued diagnosis and treatment of new PID patients in developed markets
- Increased access to treatment of developing countries
- Promotion of CIDP by Talecris worldwide
- New potential indications: Alzheimer, MMN, PPS
- Economic environment improvement

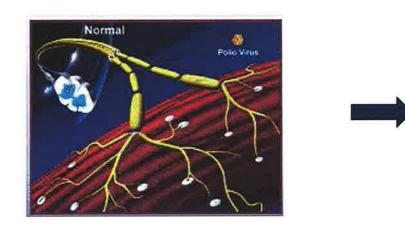
#### **Grifols**

- Flebogamma10% DIF in the US market by H2 2010 and in Europe by H1 2011
- IVIG US manufacturing facilities by 2013
- Alzheimer trial Plasmapheresis + Albumin + IVIG
- PPS indication



# Post-Polio Syndrome (PPS)

- Condition that affects polio survivors years after recovery from initial acute attack of the polio virus.
- Characterized by new or increased muscle weakness, fatigue, and muskuloskeletal pain.
- Ongoing denervation has been suggested to be the most important reason for increased muscle weakness.







# PPS: Epidemiology

- According to US National Institute of Neurological Diseases and Stroke (NINDS) the condition affects 25 to 50% of the survivors
- WHO estimates a 40% prevalence



Assuming a prevalence of 30%, only in major Western countries there would be around 300.000 PPS patients

300.000 patients x 90 g IVIG/year Treating 100% of patients



27Million grams of IVIG/year



# pdFactor VIII demand future growth drivers

# Market

- Hemophilia is an undertreated chronic disease. Only 25% of hemophiliacs in the world receive concentrates
- Increased prophylaxis treatment
- New countries starting to treat Hemophilia
- Increasing incidence of inhibitors to recombinant products
- Von Willebrand is an underdiagnosed and undertreated disease
- Increasing use in the treatment of Von Willebrand Disease

# **Grifols**

- Best data and experience in Immunotolerance treatment of inhibitors
- Active participation in the major ongoing trials like SIPPET, RESIST, PROWILL, etc.
- Strong presence in the major Hemophilia markets (US, Germany, Italy, UK, Spain)



# Albumin demand future growth drivers

# Market

- New indications in Liver Cirrhosis and Neurology
- Growing demand in developing markets (China,...)
- Albumin is normally the first Plasma Protein used in emerging markets.
- There is renewed interest in Albumin as a product, with new uses being researched widely.

# **Grifols**

- Direct participation in all major trials ongoing with Albumin
- Plasma exchange with albumin in Alzheimer
- Alzheimer trial Plasmapheresis + Albumin+ IVIG
- Non therapeutic applications
- Global presence



# Other products supporting the Bioscience Division Growth

# Grifols R&D

- Clinical Trials are being conducted with other Plasma Proteins and may represent new market opportunities in the near future.
- AT III, Fibrin Sealant, Fibrinogen, Thrombin, etc



# DIAGNOSTIC DIVISION



# Diagnostic Business - Overview

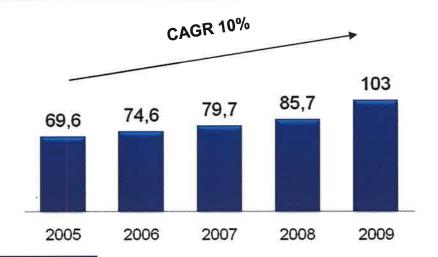
#### Diagnostic division accounted for 11% of Grifols' Sales in 2009

• The division manufactures and develops equipment, instrumentation and reagents for diagnosis, as well as blood bags

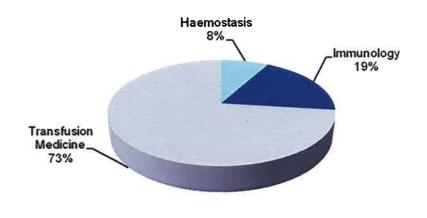


- · In-vitro diagnosis growth driven by the introduction of new analyses and novel technologies
- Improvement in diagnosis translates into a better application and monitoring of therapies, leading to an improvement in disease prevention and treatment
- The world market for IVD products in 2008 was approximately \$39,07bn (source Biotechnology Associates)
- > Grifols is active in certain IVD market niches that present synergies with its core Biological business and with global presence.
  - · Transfusional Medicine
  - Immunology
  - Haemostasis

#### **Diagnostic Sales Evolution**

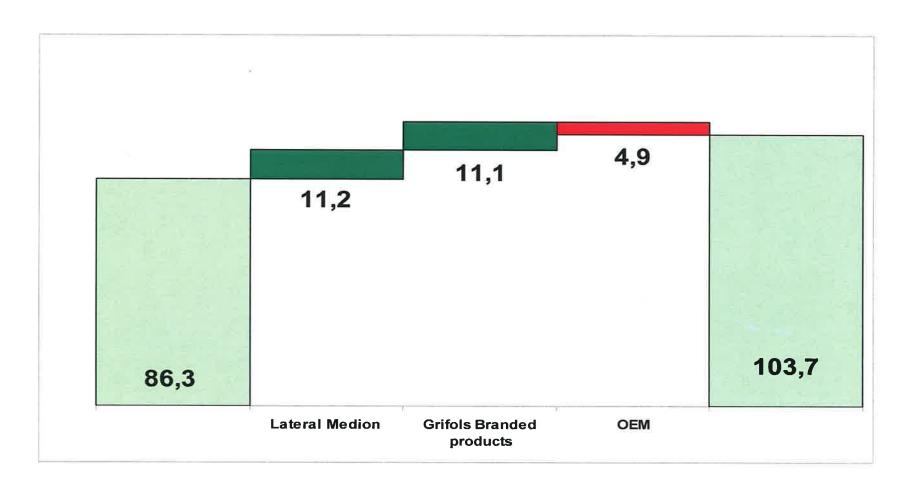


#### Diagnostic Division Sales by Business Segment - 2009





# Diagnostic Division Sales Bridge Analysis 2008/09 (M EUR)



- The OEM Sales drop is offset by the increase of sales of Grifols branded products.
- ➤ Lateral/Medion Sales contributes to the Division growth with an aditional +13%

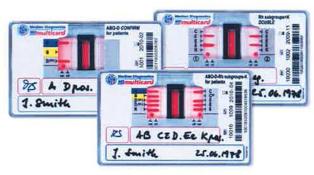


## Diagnostic Division future growth drivers short term

- DG Gel expansion will continue in existing markets and also in new European territories.
- Erytra IM Analyzer Launch in ISBT congress in Berlin next June, will provide a powerful tool to further penetrate the Immunohematology Market Worldwide.
- STATx Multicard reader expected EC mark will support the introduction of the new device in Europe.
- New line of Triturus Branded Elisa reagents in Infectious Serology







# Diagnostic Division future growth drivers longer term

- ➤ IM product line launch in US, after gel patent expiration (2012) and FDA approvals.
- ➤ Second Generation New Elisa Analyzer.
- ➤ New higher throughput Coagulometer under development.
- ➤ New Multicard formats and Automation of the Lateral Flow technology for Blood typing.



# HOSPITAL DIVISION



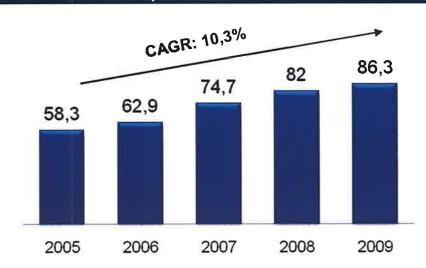
# Hospital Division - Overview

- > Hospital division accounted for 9.5% of Grifols' Sales in 2009
- ➤ The hospital division grew by 4.6% in 2009 with a leading market share in Spain in IV Solutions and Hospital Logistics.
- Figure 1 Grifols Hospital Division: a natural partner of the Bioscience Business
  - Grifols leverages its bioscience relationships by providing a wide range of products to the hospital market
  - This division manufactures primarily intravenous solutions and enteral and parenteral nutrition
    products as well as distribute certain products manufactured by third parties (complementary to
    the hospital products portfolio)
- > Sales predominantly in Spain. ROW include sales of Parenteral nutrition products in Asia

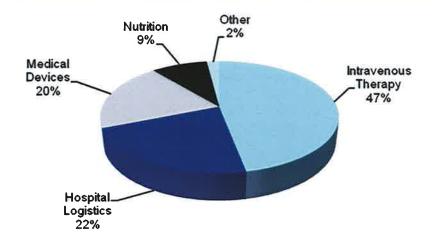




#### Hospital Sales Evolution



#### Hospital Division Sales by Business Segment - 2009





# Hospital Division future growth drivers

- Contract Manufacturing Agreements signed with several European big Pharmas will provide significant volume increase in our IV Solutions Manufacturing facilities for the next several years.
- Gradual **development of international presence** through Oncotools (Misterium. Grifill, Oncofarm software)
- New products developed internally in our Hospital Logistics segment like Blispack (unitdose packaging) will support the growth even in the actual difficult environment.
- Enteral Nutrition new products and extension of the business outside the Hospital (Homecare)

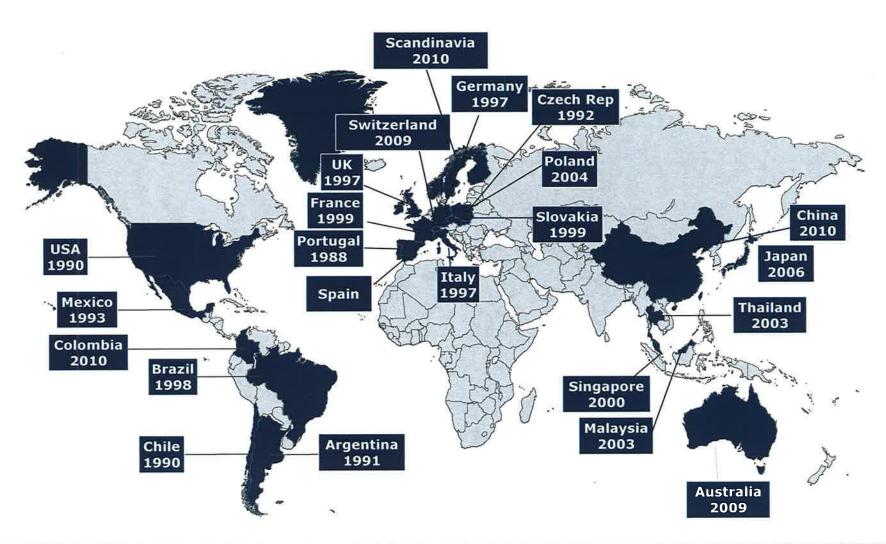












Grifols international expansion will continue trough the establishment of new subsidiaries in Colombia, Scandinavia and China in 2010



# Q1 2010 Grifols Sales Results

- Very positive Bioscience sales increase of 8,2% versus Q1 2009 at cc.
- US recurrent sales +8,8% vs. Q4 2009 and +3,6% vs. Q1 2009 at cc.
- Another outstanding ROW quarter sales with +41% cc versus previous year.
- Sales in Europe, although +1,9% better than Q4 2009, were 3,6% lower than Q1 2009, due to a slower start of the year in Spain and Germany.
- Total recurrent products sales (excluding raw materials) were 4,8% higher than
   Q1 2009 or +7,1% at cc.
- Diagnostic growth is again penalized by the decrease in our OEM sales during the quarter
- Hospital Division sales were flat for the quarter with Spanish Hospitals reducing inventory and postponing capital investments
- EBIDTA margin of 30,3% on sales confirms excellent operational profitability for the quarter



# Impact of US Healthcare Reform



No significant impact on business activity or patient communities we serve



## Areas of Interest

- ➤ Medicaid Drug Rebate
- ➤ 340B Discount Program
- Manufacturer Excise Tax
- ➤ Insurance Lifetime Caps
- Comparative Effectiveness Research
- > Biosimilars
- > Retired Employee Prescription Drug Plans



## Medicaid Drug Rebate

# Effective January 1, 2010

- ➤ Manufacturer rebates on drugs administered to Medicaid patients increased from 15.1% to 23.1%
- EXCEPT for blood clotting factors for which rebates are capped at 17.1%
- Companion increase to 340B drug discount program (implementation date not yet determined)



# 340B Drug Discount Program

- ➤ 340B Integrity Provisions require GAO study in 18 months to assess program effectiveness
- Program expansion potential to 1600 eligible new hospitals (excluding orphan drugs)
- "Must Sell" provisions requires 340B customers be on-par with others
- No expansion to inpatient setting under healthcare reform
- ➤ Possible limited future expansion to inpatient applicable to "truly uninsured"



## Manufacturer Excise Tax

- ➤ \$28 billion tax on pharmaceutical manufacturers over the years 2011 2019
- Sales weighted calculation based on market share
- Sales of orphan drugs and sales to government programs excluded from calculation
- Grifols impact estimated at less than \$1 million per year based on current market conditions
- Advocating to expand exclusion to drugs approved only to treat orphan diseases



## Other Provisions

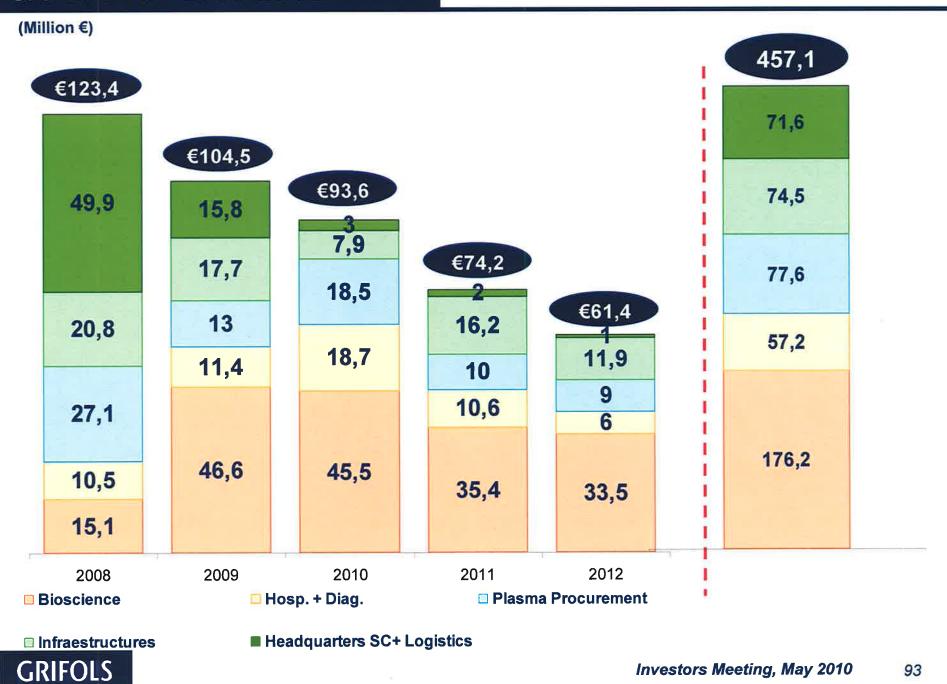
- ➤ Lifetime insurance caps eliminated
- Comparative effectiveness provisions creates rare disease panel
- > Biosimilars:
  - 12 years exclusivity
  - Recombinant products eligible for biosimilars
- ➤ Tax provisions for retired employee prescription plans do not apply to Grifols



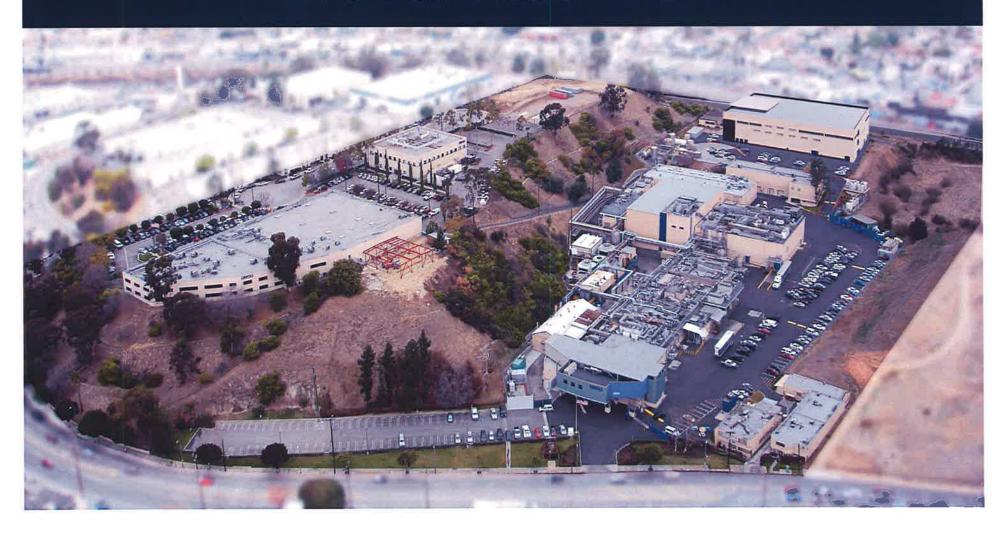
# Capex



# CAPEX Plan 2008-2012

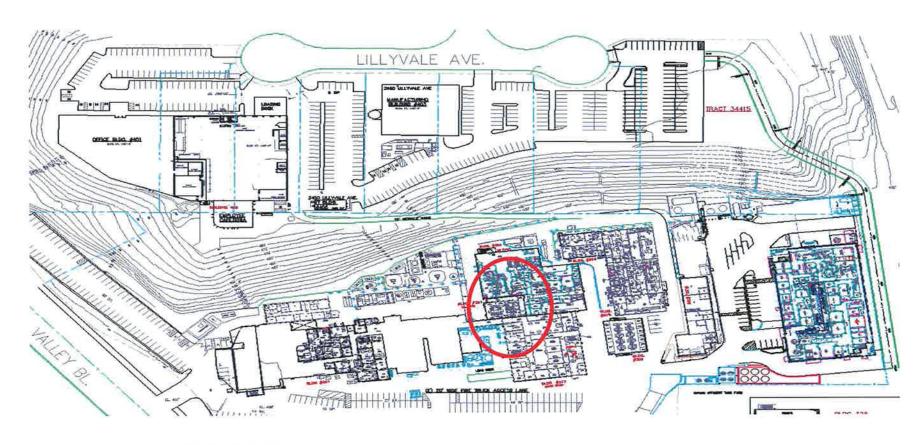


# Bioscience USA





# Building 321: Fractionation capacity increase



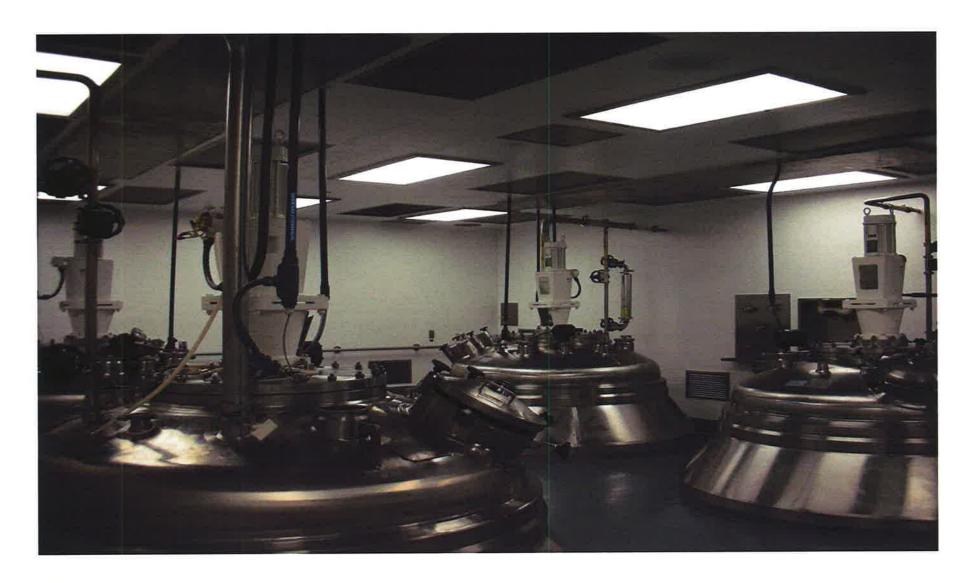
➤ Investment: € 2,0 MM➤ Surface: 1.970 m2

Capacity: 1.500.000 + 700.000 (Minifrac) →2.200.000 liters (total GBI)

> FDA approval December 2009

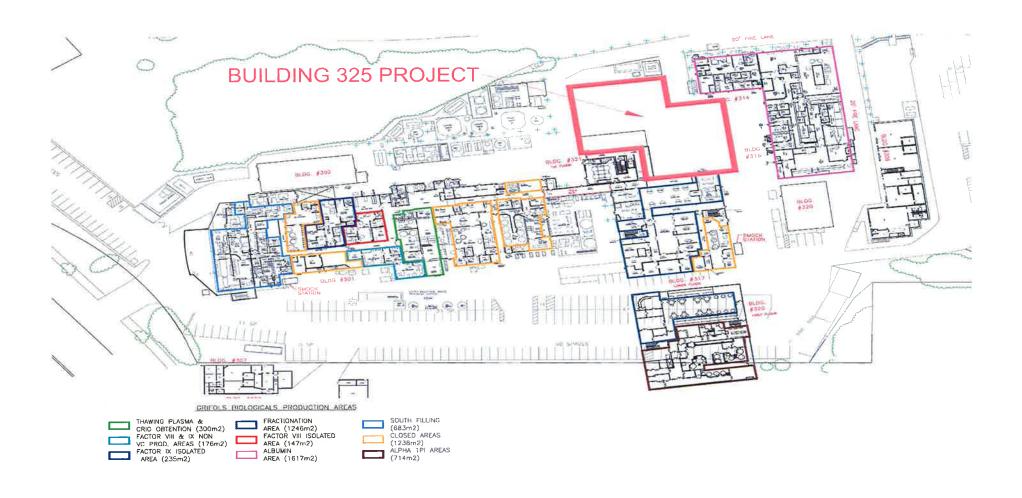


# Building 321: Fractionation capacity increase (Minifrac)



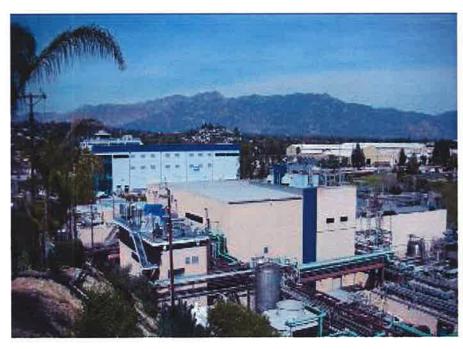


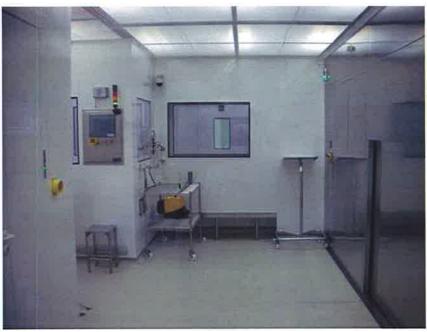
# Building 325: Coagulation Factors facility





# Building 325: Coagulation Factors facility



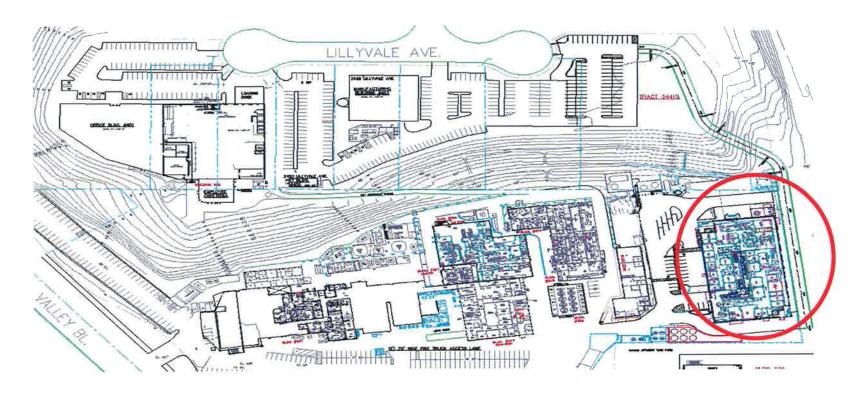


## 4.500 m<sup>2</sup> plant building in 3 levels for:

- Freeze dried products filling €12,3 MM FDA approved May 2008
- Liquid products filling € 3,5MM FDA approved December 2009
- Coagulation Factors purification € 9,0MM under construction
- Plasma thawing € 2,5MM under construction



# Building 330: Flebogamma DIF® Facility



Investment: € 44,0 MM

➤ Surface : 9.000 m² in three levels

➤ Capacity: 3.500.000 I plasma equiv.

> Start: 2008

Expected FDA approval in 2012

# Building 330: Flebogamma DIF® Facility





# Academy of Plasmapheresis

Start:

2nd Q 2008

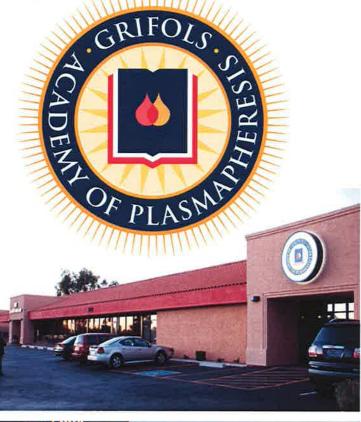
End:

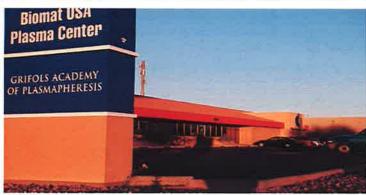
January 2009

Surface:

789 m<sup>2</sup>







# San Marcos (TX) Plasma Testing Lab



# San Marcos (TX) Plasma Testing Lab



Investment: € 11,5 MM Start : October 2009 Surface : 7.125 m<sup>2</sup> End : October 2010

# Bioscience Spain





# P1A Building. Fibrin Sealant Production, Sterile filling, R&D Pilot Plant (GMP)

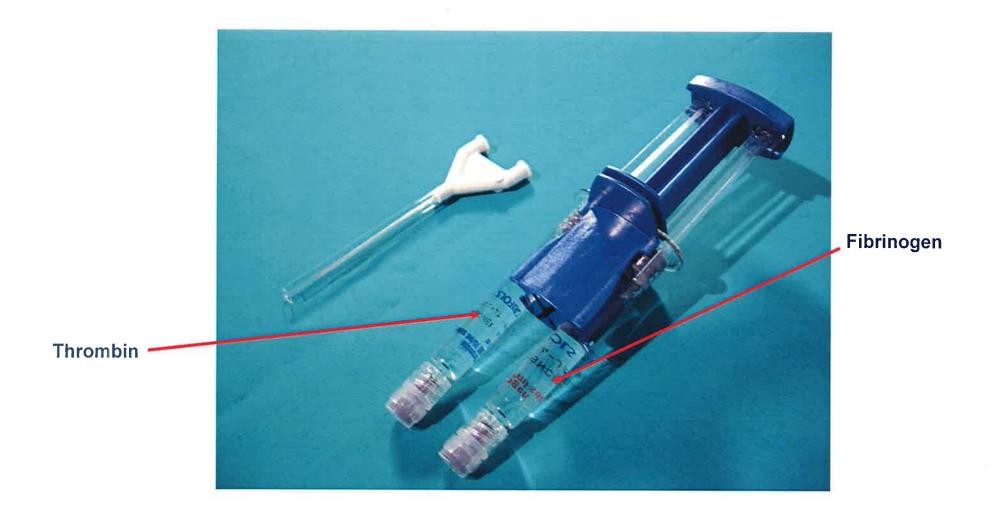


# P1A Building. Detail of Fibrin Sealant production area





# Fibrin Sealant Final Container





# P1A Building. Detail of R&D Pilot Plant (GMP)



#### P2 Building. New Microbiology Labs



Start: July 2009

Investment: € 1,3 MM

End: January 2010

Surface: 426 m<sup>2</sup>

## P1 Building. New R&D Labs addition



Start: July 2009

Investment: €1,8 MM

End: July 2010

Surface: 854 m<sup>2</sup>



## Fractionation expansion 2010 - 2012 Barcelona



Investment: : € 15,0 MM

Surface: 4.284 m<sup>2</sup>

Capacity: 1.000.000 liters (expandable to 2.000.000)

Start: Q4 2010

Expected EMEA approval Q4 2012

# Diagnostic Division



#### D+G: Gel Cards Production Increase



€ 2,5 MM

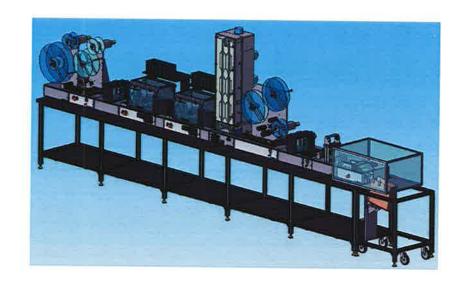
End: December 2010

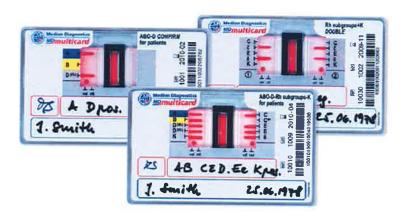
Surface: 347 m<sup>2</sup>

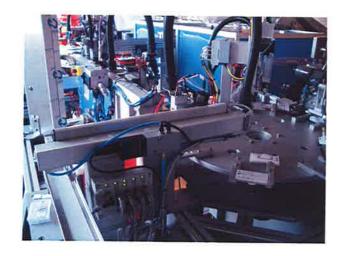
Yield: 5.000 cards/ hour



# MDmulticard® manufacturing in Medion GmbH Switzerland







Invest: € 1,8MM

MDmulticard® is a novel card device which uses lateral flow technology for the rapid determination of blood groups to assure RBC compatible transfusion.

It allows for simultaneous multi-parameter testing in a single assay and provides stable end-point results without centrifugation.

## New Gel Card Production Plan in Australia





Project start : April 2009 Project End : March 2010

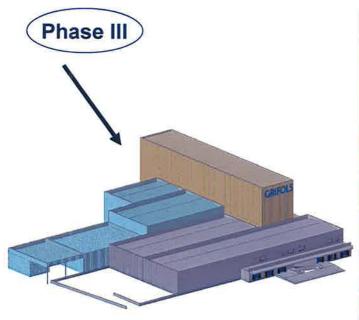
Investment : € 6,0 MM

Surface: 1.115m<sup>2</sup>

# **Hospital Division**



#### Murcia Phase III: Parenteral solutions plant







Project start:

Expected EMEA approval:
Investment:

Max.Capacity:

Surface:

March 2009 Q4 2011

€ 16,0 MM 30MM units

4.060 m<sup>2</sup>

# Infrastructures





# Corporate HeadQuarteres Sant Cugat



Surface: 33.100 m<sup>2</sup>

Invest: € 50,0 MM

Start: 2008

Offices occupied in Sept 2009

#### Logistics Warehouse in Barcelona





EMEA approval: May 2010 Investment: € 4,5 MM

Total Area: 9.100 m<sup>2</sup>

Automated Silo: 7.860 locations



# Logistics Warehouse in Barcelona



# R&D Review



#### Fibrin Sealant in Vascular Surgery

- Canada, Spain, UK & USA (20 centers)
- Preliminary phase:
  - Safety and training, 100 subjects
- Primary phase:
  - Randomized, single-blinded, efficacy and safety
  - Superiority trial (FS vs. manual pressure)
  - 250 subjects
- Current status:
  - Initiated in Canada, Spain and UK (FDA IND meeting pending)
  - 70 patients treated
- FPI LPO: Q4 08 Q1 12
- Facility ready for production



#### Fibrin Sealant in Non-Vascular Surgery

- Hepatic (main interest) and soft-tissue surgery
- Randomized, single-blinded, efficacy and safety
- FS vs. haemostatic agent
- 260 subjects, USA
- Current status :
  - Protocol (draft version available)
  - FDA IND meeting outstanding
- FPI LPO: Q3 10 Q1 12

#### Topical thrombin

- Natural derivation of the FS project
- Target indication: adjunct to hemostasis agent in surgery.
- Study design: Phase III study in 25 centers (USA). Double-blind compared with bovine topical thrombin
- At least 300 patients.
- 3 types of surgery: vascular, hepatic and softtissue.
- FDA IND meeting outstanding

#### Intravenous Fibrinogen

- Natural derivation of the FS project
- Grifols commercialized Fibrinogen until 1982
- First indication: Congenital deficiency (at least 2 studies):
  - Pharmacokinetics, safety and "in vitro" efficacy in 15 patients
  - Safety and efficacy. Treatment of bleeding episodes and prophylaxis before surgery or during pregnancy/delivery
  - Possible additional study: long-term prophylaxis
- Second indication: Secondary deficiency
  - Treatment/prophylaxis of bleeding in patients with acquired deficiency of fibrinogen (< 1g/dL)</li>
  - Study population: obstetrics/postpartum bleeding

#### Flebogamma DIF® 5% in immune deficiency

- Deficiency of IG: short life expentancy without treatment (absolute medical need)
- Pediatric trial (USA):
  - Post-marketing commitment with FDA
  - 25 patients <16 years; 9 centres</p>
  - 1 year follow-up/patient
  - Infections, IgG levels, Adverse Events
  - FPI LPO: Q3 08 Q2 11
  - Current status: 23 patients treated

# Flebogamma DIF® 10% in ITP (USA)

- Multi-centre, prospective, open-label clinical trial
- Efficacy & safety in Chronic ITP in acute phase
- USA & Canada (>35 centers, 75 subjects)
- 37 sites selected 29 with IRB approval
  - Ready to extend the study to India (11 new sites)
- 27 sites opened, 22 patients treated
- FPI LPO: Q2 08 Q2 11



#### Flebogamma DIF® 10% in ITP (Europe)

- Multi-centre, prospective, open-label clinical trial (extension of the 5% trial)
- Efficacy & safety in Chronic ITP in acute phase (adults).
- Spain, Russia & UK (12 centers, 20 subjects)
- Follow-up: 3 months
- FPI LPO: Q3 08 Q2 11
- Current status:
  - 14 patient treated (9 in Russia, 3 in Spain, 2 in UK)
  - Interim report written and submitted to EMEA

#### Subcutaneous IG in immune deficiency

- Interest: having the same as competitors
- Not a clear medical need
- 50 patients (25 <16 years); 9 centres</li>
- 1 year follow-up/patient
- Infections, IgG levels, Adverse Events
  - PK (25 patients)
- FPI LPO: Q1 11 Q4 12



# Niuliva® in newly HBV liver transplanted patients

- Niuliva® approved in Spain and Italy since 2008 for maintenance after liver HBV transplantation.
- Anhepatic phase (immediately after transplantation) not included.
- New study of Niuliva® to gain the anhepatic phase indication.
- Single arm, clinical study.
- 4 centers in Italy
- Sample size: 20 patients
- 6 months of follow-up
- FPI LPO: Q4 10 Q4 12



## Flebogamma DIF® in post-polio syndrome

- Post-polio syndrome (PPS): new muscle weakness and pain affecting survivors of poliomyelitis many years after the first attack.
- Previous study suggests efficacy of Flebogamma DIF® in PPS. This study was performed in Sweden by Pharmalink AB using Grifols Flebogamma®
- FDA orphan drug designation since 2006
- Clinical development planned to support the indication of Flebogamma DIF® in PPS
- Interestingly, the same model can be applied to other diseases with neuropathic chronic pain.



# Typsone® in congenital deficit with emphysema

- Alfa-1-antitrypsin: congenital deficit produces a severe form of emphysema
- Randomized, placebo-controlled, double-blind, clinical trial
  - Change on lung density measured by CT scan
  - Europe (14-15 countries, >30 sites)
  - 150 subjects
    - Pre-screening of 12,000 COPD subjects in Eastern Europe is expected
  - Enrolment: 1 year/site (+ pre-screening)
  - Follow-up: 2 years/pt
  - FPI LPO: Q4 10 Q4 13

# Anbinex® in congenital deficiency

- Grifols launched ATIII in Europe in the late 80's.
- Efficacy, safety and PK for prophylaxis of thrombosis in surgery and pregnancy/ delivery in at least 15 patients.
- 500 centres contacted (around 14,000 hematologists more by mailing).
- Current centres: 8 USA (4 open)
- 4 patients treated (2 for PK, 2 for surgery)
- Study kept at minimum clinical operation after GTC launch of transgenic ATIII



## Anbinex® in cardiac surgery

- New indications very valuable as GRIFOLS obtains only 10% of the available ATIII.
- Secondary deficiency even more valuable: many patients
- Study to evaluate efficacy and safety of preoperative administration of Anbinex in cardiac surgery with CPB.
  - Phase II trial
  - 200 patients, controlled with placebo
  - Single-center (Milan, Italy)
  - Dr. M. Ranucci, President of the European Association of Cardiothoracic Anesthesiologists (www.eacta.org).
  - Status: 90 patients included
  - FPI LPO: Q2 09 Q1 11

#### Anbinex® in severe burns

- Again, new indications are very valuable
- Previous studies suggest that ATIII in severe burns improves time to wound healing and morbi- mortality
- Recent study shows 25% reduction in mortality in the group treated with ATIII
- A study has been designed on the use of ATIII in severe burns
- Main site in Chicago (RUSH University, Dr. Kowal-Vern)
- Sample size and total number of sites to be decided



#### Alphanine<sup>®</sup>

- Comparative pharmacokinetics against BeneFIX®
- Efficacy (bleedings, surgery) and safety (inhibitors, viral, thrombogenicity) in severe haemophilia B
- Bulgaria, Poland, Spain
- Study finished but some analyses outstanding.
- Preliminary results:
  - Recovery 1-1.2 IU/dl per IU/kg (Alphanine®) VS 0.8 (BeneFIX®)
  - Dose required: Alphanine®: 2000 IU BeneFIX®: 2400 IU
  - Price: \$ 1300 \$ 2000



- Study to assess immunologic safety (inhibitors) of Alphanate in severe Hemophilia A
  - Post-marketing commitment with FDA
  - Countries: USA, Italy, Malaysia and Poland (13 centres)
  - Sample size required: 63 patients
  - Sample currently recruited: 30 patients (21 completed, Results: no inhibitors)



#### Alphanate® in VWD

- Approved in the US in 2007 for vWD.
- Post-marketing observational study in type III patients submitted to surgery (commitment with FDA):
  - Sample size: 15 patients (10 major surgeries)
  - Approved in 4 centers; other pending
  - 2 patients recruited and 2 more pending of surgery
  - 30 candidate subjects available in several centres



## Fandhi® in VWD in Europe

- Three clinical trials running: PK, bleedings and surgeries
- Approved in Italy since 1999
- Current centres: 4 in Spain, 1 in the UK
- Retrospective study presented to Spanish Agency in Q3 2009
- Positive assessment from Spanish Agency
- Dossier presented in Q1 2010
- Approval outstanding for Q4 2010



#### SIPPET: Fandhi® vs Recombinant

- Comparison between plasma-derived and recombinant FVIII in terms of inhibitor incidence.
- Expected outcome: pdFVIII less inhib than rFVIII
- Sponsor: Fundazione Bianchi Bonomi (Milan, Italy).
- Three participating companies: Kedrion, LFB and GRIFOLS.
- 300 patients, 76 sites, 18 countries.
- FPI: Jan 2010
- Current status: 25 patients recruited.

#### Albutein® in cirrhosis

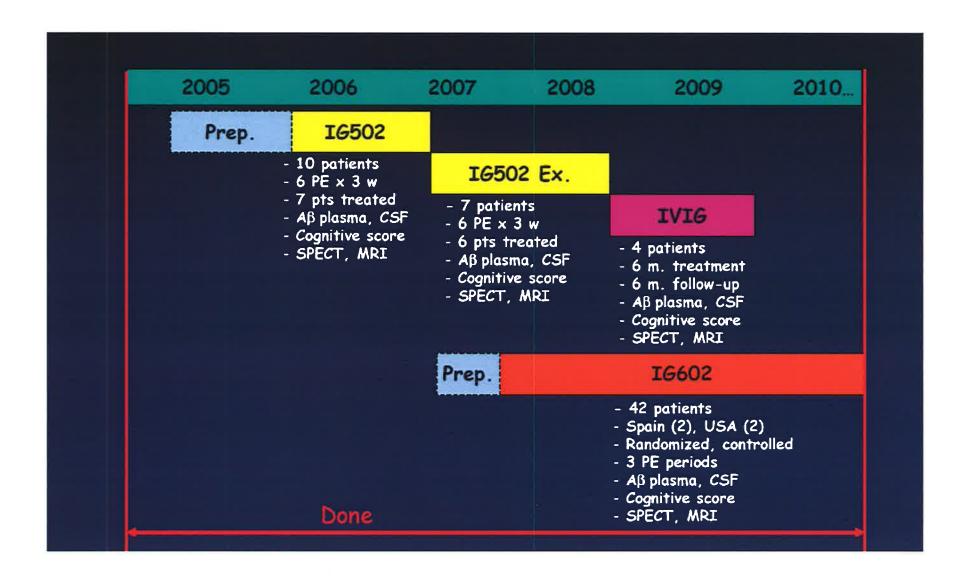
- Albumin 20% in liver cirrhosis patients: cardiovascular, renal and liver function.
- Single arm, open-label, clinical trial
- Six centers in Spain led by H. Clinic BCN (Dr. V. Arroyo, President of the European Consortium for the Study of Chronic Liver Failure with 70 hospitals across Europe).
- Sample size: 30 patients
- Dose: 1g/kg/2w x 3 m
- Status: 6 patients treated
- FPI LPO: Q3 09 Q3 11

#### Plasma Exchange with Albutein® in cirrhosis

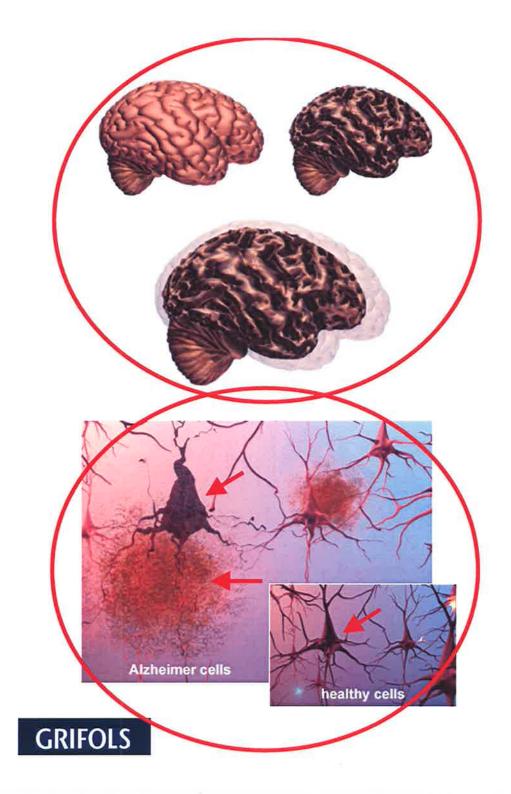
- Plasma Exchange with Albumin 5% in acute-on-chronic liver failure.
- Next step with regards to the Albumin 20% study
- Based on functional deterioration of albumin in cirrhotic patients found by Jalan et al. (UCL, London).
- Excellent relationship with Dr. Jalan
- Single arm, pilot study
- One center in Spain: H. Clinic BCN. Dr. V. Arroyo.
- Sample size: 10 patients
- 6 plasma exchanges in 10 days
- FPI LPO: Q3 10 Q3 11

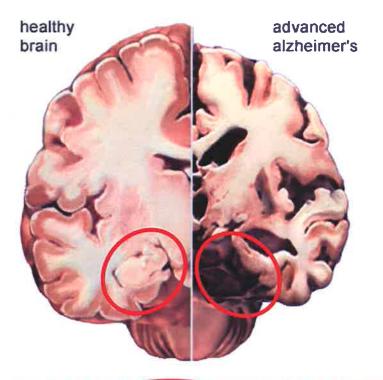


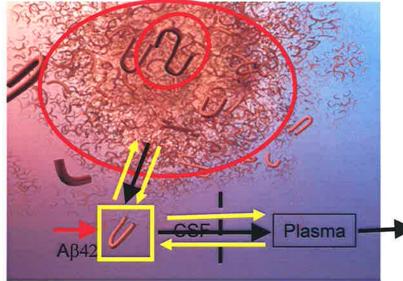
#### Plasma Exchange with Albutein® and Flebogamma DIF® in Alzheimer's Disease



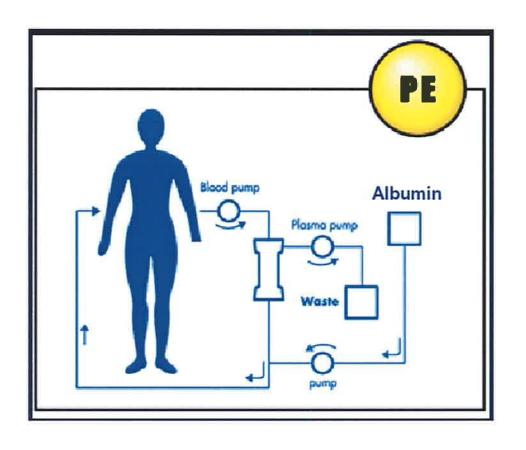






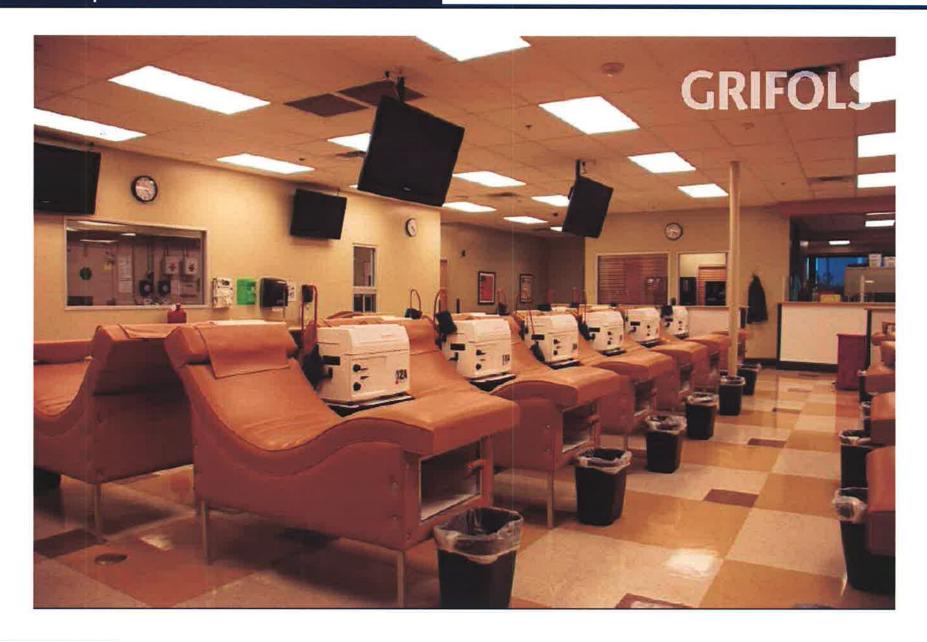


# Plasma Exchange (PE) with Albumin





# Plasmapheresis Center





# Plasmapheresis Center



# Hospital Gregorio Marañón (Madrid)

Disease		Year						
		2006		2007		2008		Total
	No	%Col	Йā	%Col	Na	%Col	Йa	%Co
Cryoglobulinemia	0	,0%	18	3,7%	21	2,6%	39	2,5%
Multiple Myeloma	0	,0%	6	1,2%	32	4,0%	38	2,5%
TTP	4	1,5%	33	6,8%	87	10,9%	124	8,0%
HLA Hypersensitiviy	20	7,4%	0	,0%	0	,0%	20	1,39
Renal transplant rejection	12	4,5%	11	2,3%	59	7,4%	82	5,3%
GN recurrence	72	26,8%	175	36,3%	148	18,6%	395	25,5
Guillain-Barré	0	,0%	0	,0%	6	,8%	6	,4%
Miastenia Gravis	11	4,1%	42	8,7%	31	3,9%	84	5,49
Múltiple Esclerosis	5	1,9%	24	5,0%	12	1,5%	41	2,79
Hypercolesterolemia	85	31,6%	91	18,9%	121	15,2%	297	19,2
Cholestasis pruritus	0	,0%	0	,0%	1	,1%	1	,1%
SLE	0	,0%	0	,0%	2	,3%	2	,1%
Waldestrong's Macrogulinemia	9	3,3%	0	,0%	0	,0%	9	,6%
Wegener	6	2,2%	0	,0%	6	,8%	12	,89
Vasculitis	19	7,1%	22	4,6%	59	7,4%	100	6,59
Ulcerative cholitis	26	9,7%	23	4,8%	27	3,4%	76	4,99
Crohn's disease	0	,0%	37	7,7%	6	,8%	43	2,89
Stiff-man syndrome	0	,0%	0	,0%	29	3,6%	29	1,99
Septic shock	0	,0%	o	,0%	2	,3%	2	,1%
HIS-HLA-Trasplante de Medula	0	,0%	0	,0%	14	1,8%	14	,9%
Encefalitis de Rasshussen	0	,0%	0	,0%	12	1,5%	12	,8%
Good-Pasture	0	,0%	0	,0%	12	1,5%	12	,8%
Total	269	100,0%	482	100,0%	795	100,0%	1392	100,0

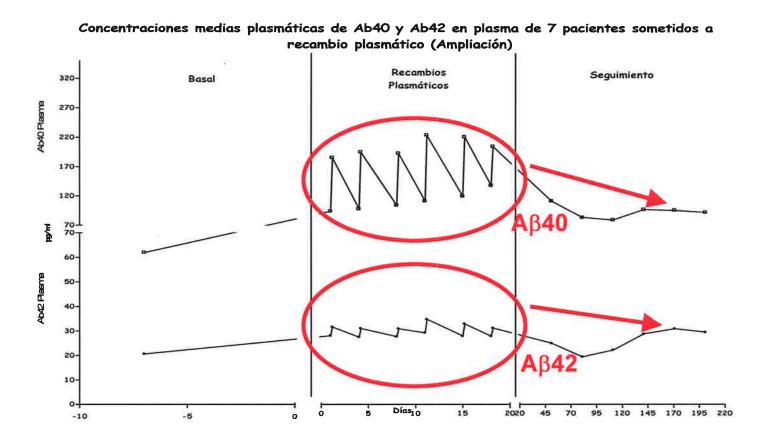


#### Plasma Exchange with Albutein® in Alzheimer's Disease

- Pilot study in mild-moderate AD
- First stage (Sep 05 Nov 06):
  - 7 patients treated, 2 control
  - 3-5 Exchanges, 12 months follow-up
- 2nd stage (Jan 07 Jan 08):
  - 7 patients treated, 2 control
  - 5-6 Exchanges, 12 months follow-up
- 3rd stage (Feb 09 Jan 10): Treatment with Flebogamma DIF<sup>®</sup> 5% & follow-up period
- Final Report: Q3 10
- Results presented in several meetings

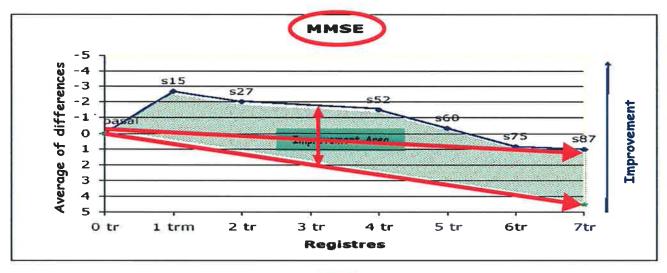


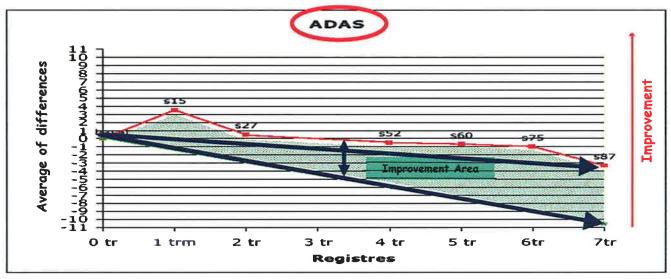
### Pilot Study: Plasma Ab Results





# Pilot Study: Cognitive Results







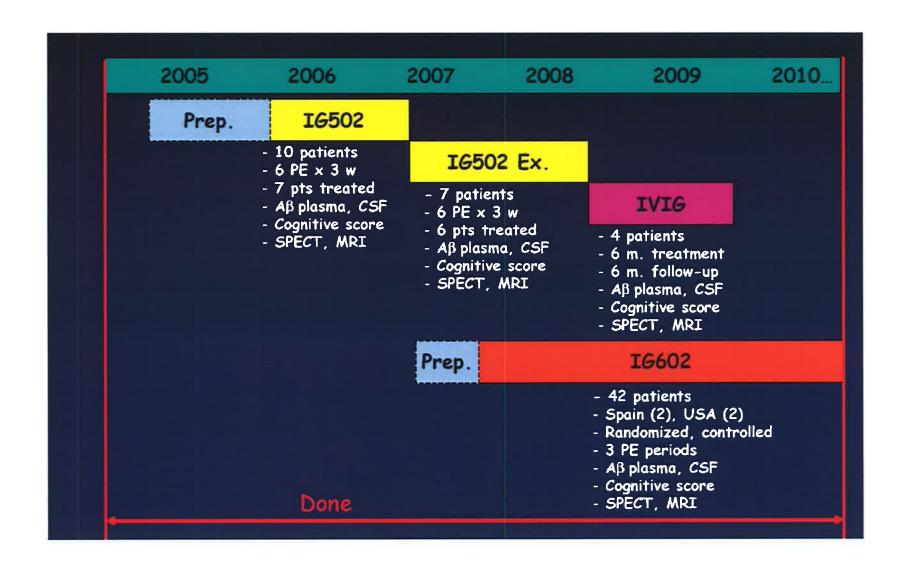
#### Pilot Study: Global Conclusions

- PE is feasible in AD patients
- Plasma Aβ40 and 42 consitently oscillates during PE
- MMSE and Adas-Cog better than expected after 2 years of follow-up

Main objectives considered to be achieved and a Phase II randomized, controlled study was planned.



#### Plasma Exchange with Albutein® and Flebogamma DIF® in Alzheimer's Disease



#### Plasma Exchange with Albutein® in Alzheimer's Disease

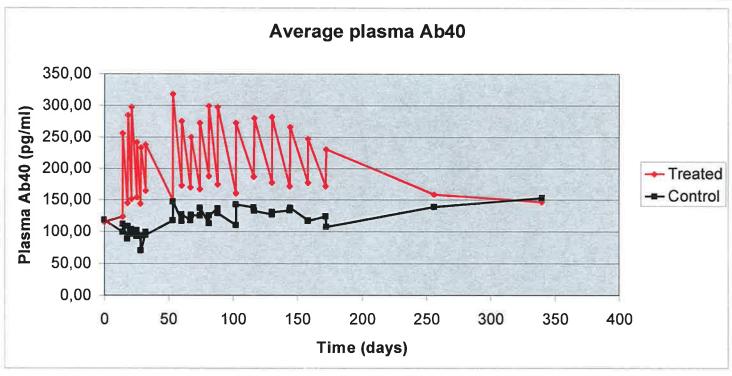
- Phase II, randomized, controlled clinical trial:
  - 4 centres (2 Spain, 2 USA), 42 patients
  - Continued treatment for 5 months (active group)
  - 3 PE periods: a) 2 PE/w x 3w; b) 1 PE/w x 6w; c) 1 PE/2w x 12w.
  - Follow-up: 6 additional months
  - Main measurements: plasma Abeta, cognitive scores
  - Recruitment: All patients (42) recruited
  - Last-patient-out: Dec 2010
  - Interim analysis with 29 patients

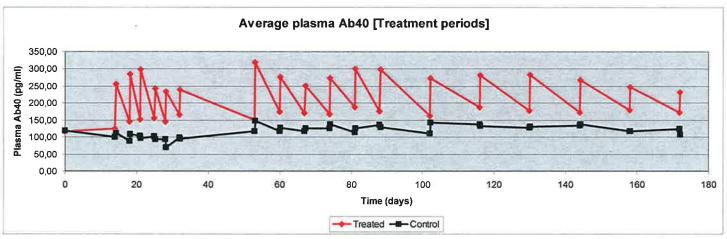


#### Plasma Exchange with Albutein® in Alzheimer's Disease

- Phase II, Spanish sites:
  - Fundació ACE (Barcelona).
     One of the best recruiters in the world and the site organizing the biannual Conference BCN-Pittsburgh during the last 14 years.
  - Hospital Gregorio Marañón (Madrid)
- Phase II, U.S. sites
  - Howard University Hospital (Washington DC)
  - Mid-Atlantic Geriatric Association (Manchester, NJ)

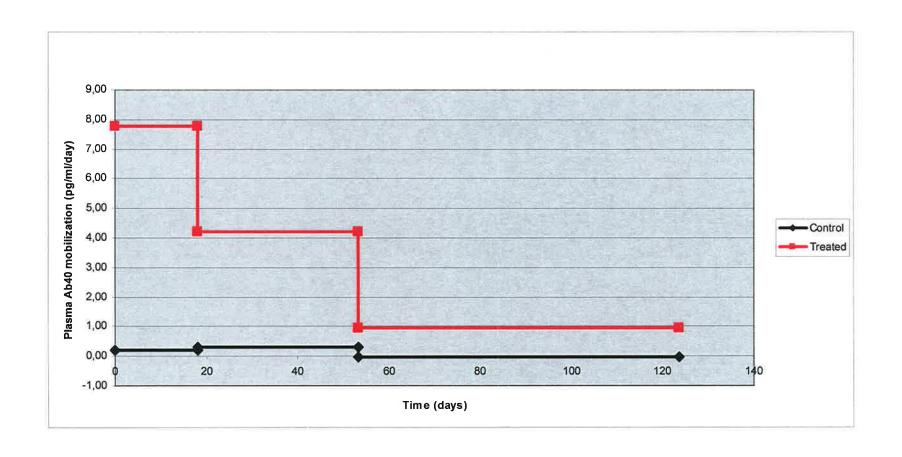
### Average Plasma Ab40





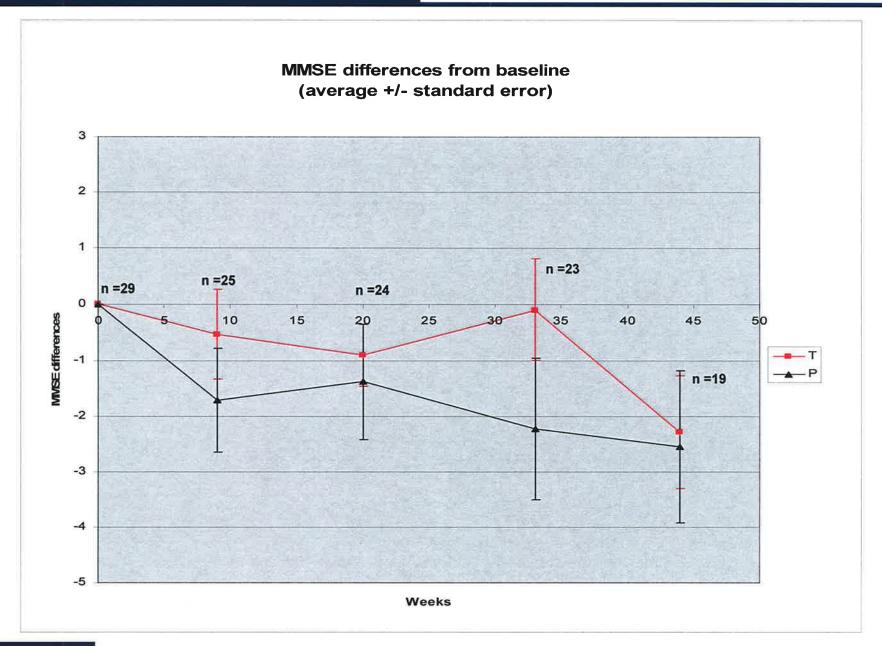


## Plasma Ab40 mobilization

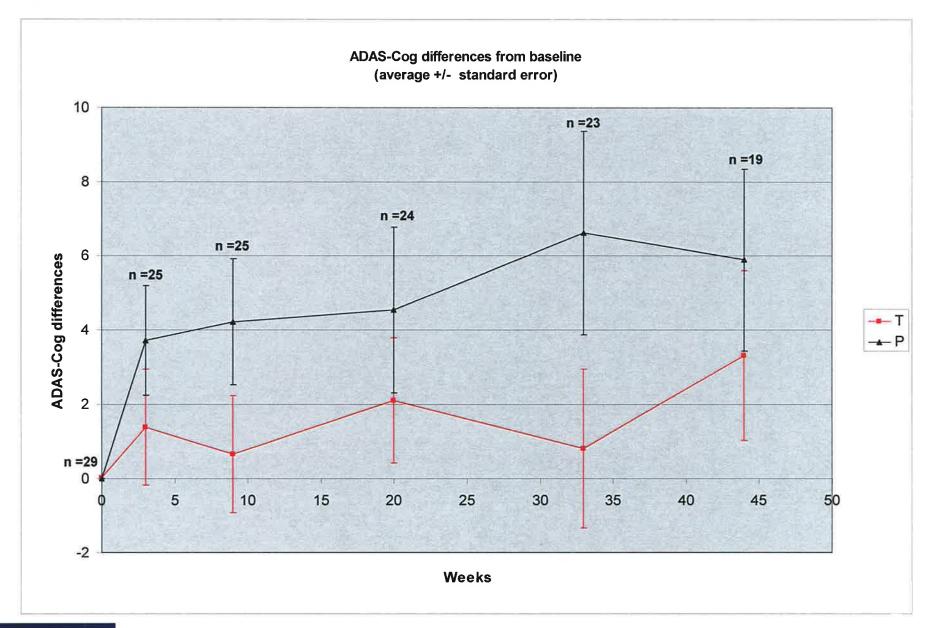




# MMSE Differences



# ADAS-Cog Differences



#### **Drug News Perspectives**

Drug News Perspect 22(6), July/August 2009

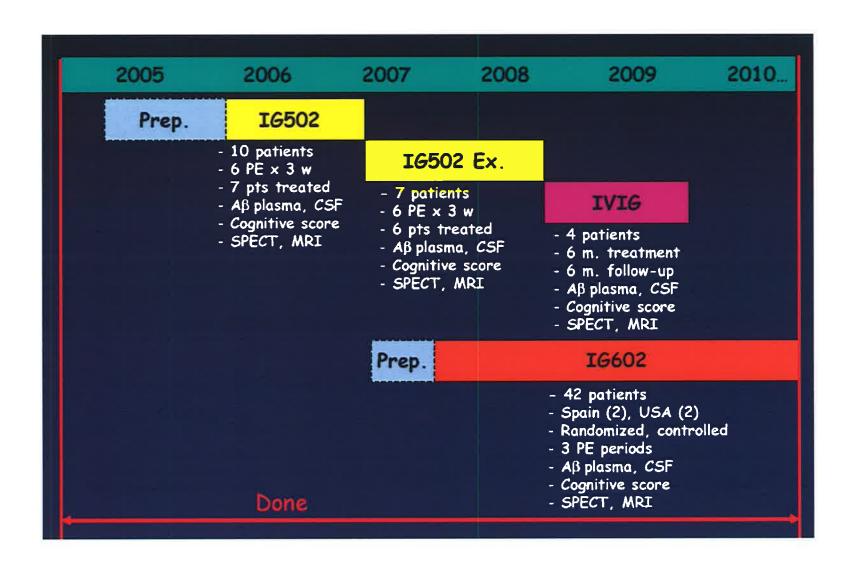
#### LOOKING AHEAD

AMYLOID-TARGETED
THERAPEUTICS IN ALZHEIMER'S
DISEASE: USE OF HUMAN
ALBUMIN IN PLASMA
EXCHANGE AS A NOVEL
APPROACH FOR AB
MOBILIZATION

The fact that 90% of circulating  $A\beta$  is bound to albumin led to the hypothesis that if endogenous albumin were replaced through a plasma exchange schedule, the existing dynamic equilibrium set between the CSF and plasma  $A\beta$  may be altered.

by Mercè Boada, Pilar Ortiz, Fernando Anaya, Isabel Hernández, Joan Muñoz, Laura Núñez, Javier Olazarán, Isabel Roca, Gemma Cuberas, Lluís Tárraga, Mar Buendia, Ramón P. Pla, Isidre Ferrer and Antonio Páez

#### Plasma Exchange with Albutein® and Flebogamma DIF® in Alzheimer's Disease





#### Flebogamma DIF® 5% in Alzheimer

- Pilot study, efficacy and safety in mildmoderate Alzheimer Disease (AD) patients
- Extension of the pilot plasmapheresis study Single treatment period: 0.5 g/kg/2w during 6 months + 6 months follow-up = Total of 12 months
- Same measurements and objectives
- 4 patients treated
- FPI LPO: Q1 09 Q1 10



### Analysis of Baxter Treatment

	TREATMENT 1 (0,2gr. / Kg.)	
SNC	PATIENTS	1
E	WEIGHT IN Kg.	65
STUDY DEFINITIONS	DOSE OF IVIG IN gr./Kg.	0,2
AGN.	gr. OF IVIG EACH TREATMENT	13
ST	TREATMENTS PER YEAR	26
	TOTAL gr. OF IVIG PER YEAR	338

100.000	500.000	1.000.000
65	65	65
0,2	0,2	0,2
1300000	6500000	13000000
26	26	26
33.800.000	169.000.000	338.000.000

IVIG YIELD (gr. / Lit.)

PLASMA NEEDED PER PATIENT (Lit.)

PLASMA NEEDED PER POPULATION (Lit.)

4	4	4
84,5	84,5	84,5
8.450.000	42.250.000	84.500.000

84,5

84,5

65	65	65
21970	21970	21970
2.197.000.000	10.985.000.000	21.970.000.000

# Analysis of Baxter Treatment

	TREATMENT 2 (0,4gr. / Kg.)	
SN	PATIENTS	1
OITIN	WEIGHT IN Kg.	65
DEFINITIONS	DOSE OF IVIG IN gr./Kg.	0,4
STUDY	gr. OF IVIG EACH TREATMENT	26
ST	TREATMENTS PER YEAR	26
	TOTAL gr. OF IVIG PER YEAR	676

100.000	500.000	1.000.000
65	65	65
	0.4	0.4
0,4	0,4	0,4
2600000	13000000	26000000
26	26	26
67.600.000	338.000.000	676.000.000

4		IVIG YIELD (gr. / Lit.)	4
2	- S		
SY	Ž	PLASMA NEEDED PER PATIENT (Lit.)	169
اڭ	Z		
	=	PLASMA NEEDED PER POPULATION (Lit.)	169

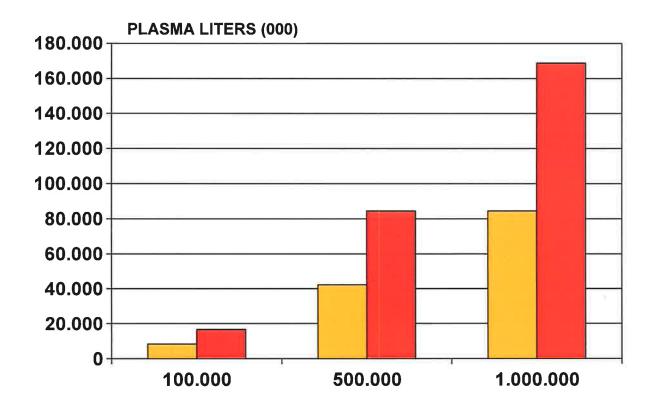
4	4	4
169	169	169
16.900.000	84.500.000	169.000.000

<u>U</u>		IVIG PRICE (\$ / gr.)	65
Z	S		
2	اڌ	TREATMENT COST PER PATIENT (\$)	43940
9	불		
Ш	ا	TREATMENT COST PER POPULATION (\$)	43.940

4.394.000.000	21.970.000.000	43.940.000.000
43940	43940	43940
10010	100.10	100.10
65	65	65



# Plasma needs (Baxter)



■ BAXTER DOSE 1 ■ BAXTER DOSE 2



#### Grifols: Triple mechanism of action

- Plasmapheresis:
  - Removes albumin saturated with Abeta.
  - Removes other proteins that may affect Abeta.
- Albutein® infusion:
  - Restores albumin with "fresh" binding capacity of Abeta
- Flebogamma DIF®:
  - Contains antibodies against Abeta.
  - Binds Abeta and avoids accumulation.

PERIPHERAL SEQUESTRATION OF AMILOYD BETA

# **Grifols Treatment**

25.000 NEW PATIENTS PER YEAR (GRIFOLS TREATMENT)	
	1st YEAR NEW PATIENTS
NUMBER OF PATIENTS	25.000
ALBUMIN CONSUMPTION (PER PATIENT PER YEAR IN gr.) (AVG)	1.030
IVIG CONSUMPTION (PER PATIENT PER YEAR IN gr.) (AVG)	60
TOTAL CONSUMPTION OF ALBUMIN	25.750.000
TOTAL CONSUMPTION OF IVIG	1.500.000
ASP ALBUMIN (PER GRAM) (€)	2,50
ALBUMIN REVENUE (€)	64.375.000
ASP IVIG (PER GRAM) (€)	40,00
IVIG REVENUE (€)	60.000.000
TREATMENT COST PER PATIENT (W/O MEDICAL SERVICE) (AVG) (€)	4.975
TOTAL REVENUE A.D. TREATMENT RELATED (€)	124.375.000
PLASMA NEEDS (FOR ALBUMIN) IN Lit. PLASMA NEEDS (FOR IVIG) IN Lit.	1.072.917 375.000

2nd YEAR				
NEW PATIENTS	MAINTENANCE	TOTAL		
25.000	25.000	E0 000		
25.000	25.000	50.000		
1.030	360	695		
1.030	300	090		
60	60	60		
	-			
25.750.000	9.000.000	34.750.000		
1.500.000	1.500.000	3.000.000		
2,50	2,50	2,50		
64.375.000	22.500.000	86.875.000		
40.00				
40,00	40,00	40,00		
60.000.000	60.000.000	120.000.000		
60.000.000	60.000.000	120.000.000		
4.975	3,300	4.138		
124.375.000	82.500.000	206.875.000		
1.072.917	375.000	1.447.917		
375.000	375.000	750.000		



# **Grifols Treatment**

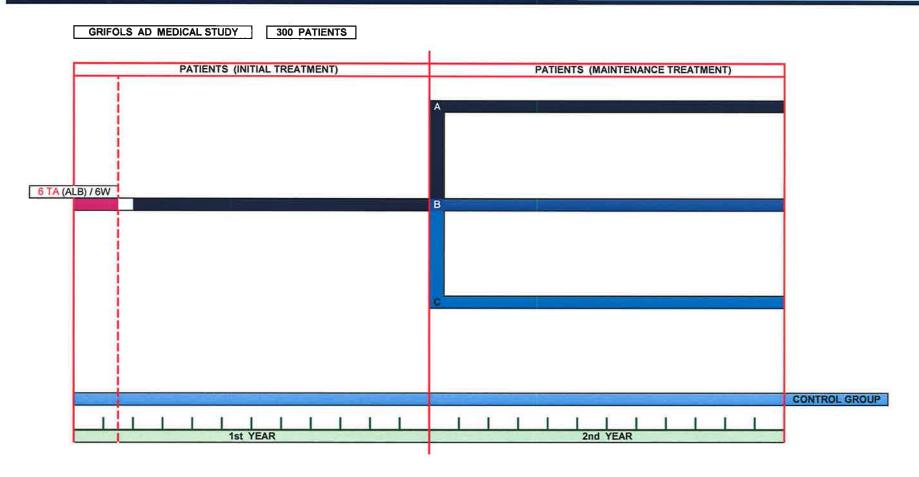
#### 25.000 NEW PATIENTS PER YEAR (GRIFOLS TREATMENT)

NUMBER OF	PATIENTS
ALBUMIN CO	NSUMPTION (PER PATIENT PER YEAR IN gr.) (AVG)
IVIG CONSUM	IPTION (PER PATIENT PER YEAR IN gr.) (AVG)
TOTAL CONS	SUMPTION OF ALBUMIN
TOTAL CONS	SUMPTION OF IVIG
ASP ALBUMII	N (PER GRAM) (€)
ALBUMIN RE	VENUE (€)
ASP IVIG (PE	R GRAM) (€)
IVIG REVENU	IE (€)
TREATMENT	COST PER PATIENT (W/O MEDICAL SERVICE) (AVG) (€)
TOTAL REVE	NUE A.D. TREATMENT RELATED (€)
	DS (FOR ALBUMIN) IN Lit.
PLASMA NEE	EDS (FOR IVIG) IN Lit.

4th YEAR					
NEW PATIENTS	MAINTENANCE	TOTAL			
25.000	75.000	100.000			
1.030	360	528			
	00	60			
60	60	60			
25.750.000	27.000.000	52.750.000			
25.750.000	27.000.000	02.7 00.000			
1.500.000	4.500.000	6.000.000			
2,50	2,50	2,50			
64.375.000	67.500.000	131.875.000			
40,00	40,00	40,00			
	400 000 000	040 000 000			
60.000.000	180.000.000	240.000.000			
4.975	3.300	3.719			
4.510	0.000	0.110			
124.375.000	247.500.000	371.875.000			
1.072.917	1.125.000	2.197.917			
375.000	1.125.000	1.500.000			

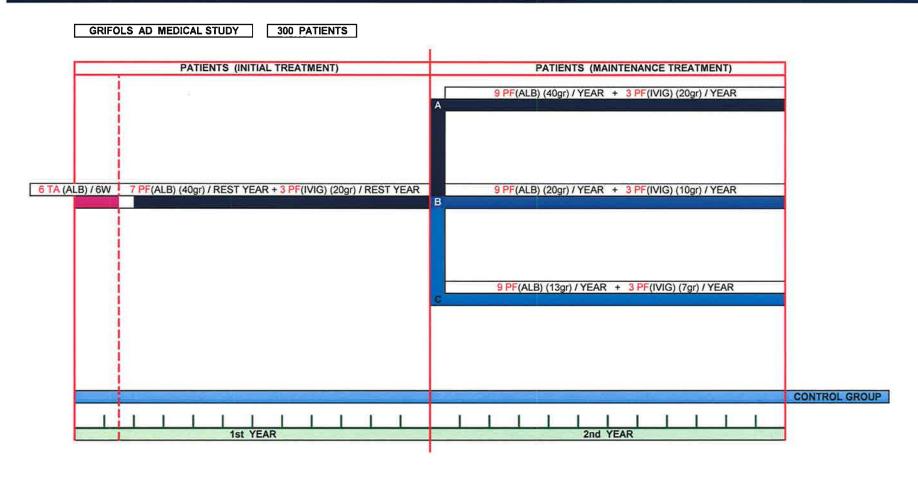


# Grifols AD Medical Study



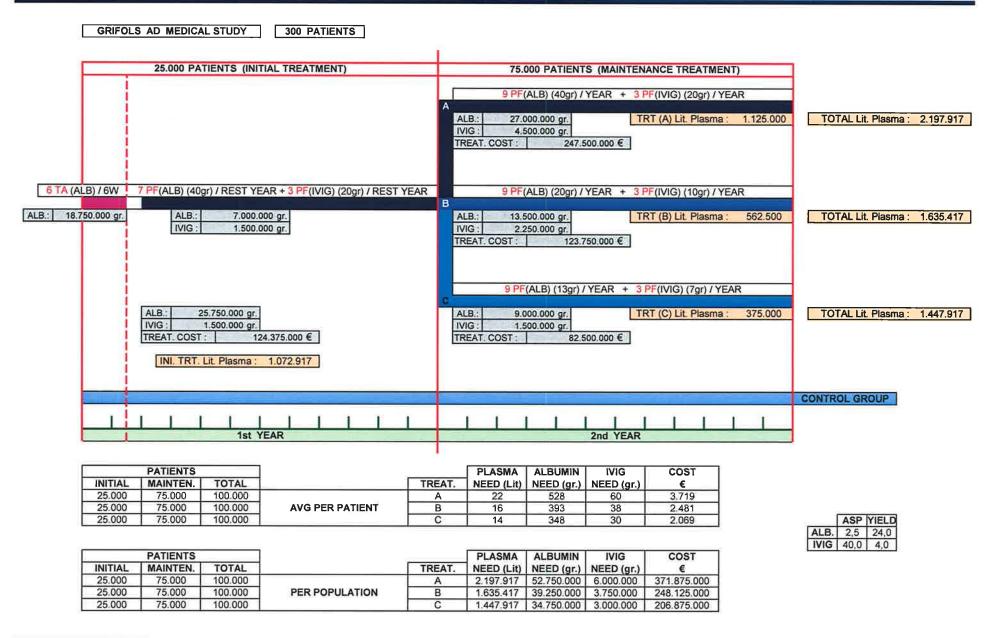


## Grifols AD Medical Study





#### Grifols AD Medical Study

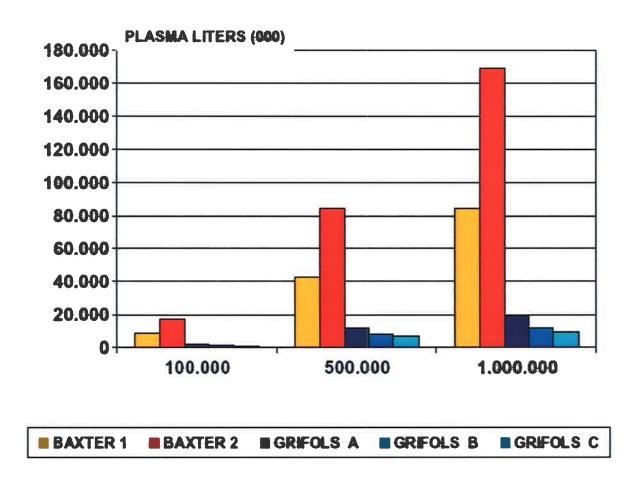




#### Plasma Exchange with Albutein® combined with Flebogamma DIF® in Alzheimer

- Effects of PE with albumin combined with IVIG on the cognitive function, Abeta levels and neuroimaging in mildmoderate Alzheimer's disease
- Randomized, controlled study (Medical/Therapeutic Trial)
- Spain and USA (at least); maximum of 400 patients
- 2 years duration: 1<sup>st</sup> year: single arm with 1 full PE/w x 6w followed by 1 PF /m (Alb:40g) + IVIG/3m (20g)
  - 2<sup>nd</sup> year: 3 arms with a) 1 PF/m (Alb:40g) + IVIG/4m (20g), b) 1 PF /m (Alb:20g) + IVIG/4m (10g) and c) 1 PF/m (Alb:13g) + IVIG/4m (7g)
- Contract signed with Fenwal to produce specific machines
- FPI LPO: Q4 10 Q3 13

#### Differences between Plasma needs (Grifols vs Baxter)





#### Clinical Research Projects

- Hematology
  - Haemophilias (9; Fanhdi®, Alphanate®, Alphanine®)
  - ATIII congenital deficit (1; Anbinex<sup>®</sup>)
  - ITP (2; Flebogamma® DIF)
- Hepatology
  - Liver transplant (2; Niuliva®)
  - Cirrhosis (3; Albutein<sup>®</sup>)
- Immunology
  - PID (2; Flebogamma DIF®, SCIG)



#### Clinical Research Projects

- Intensive care
  - Burns (1; Anbinex<sup>®</sup>)
- Neurology
  - Alzheimer (4; Albutein®, Flebogamma® DIF)
- Pneumology
  - AAT congenital deficit with enphysema (2; Trypsone<sup>®</sup>)
- Surgery
  - Cardiac surgery (1; Anbinex®)
  - Vascular, parenchyima (hepatic) and soft-tissue surgery (3; fibrin glue, thrombin)

# Clinical Research Projects

<ul> <li>Clinical research projects</li> </ul>	30			
• Countries	38			
– USA	13			
– Spain	12			
– Bulgaria, Canada, Italy, Poland, Russia, UK 3-5				
<ul><li>Other (IND, MYS, UKR, TUR, GRC, SVK, HUN,</li></ul>				
ROU, GRC, LVA, LTU, SRB, HRV, BIH)	1			
• Sites 270-	300			
<ul><li>Subjects included ≈ 40</li></ul>	0			
<ul> <li>Subjects pending to be included ≈ 18</li> </ul>	00			
<ul> <li>Subjects/physicians pre-screened ≈ 30</li> </ul>	000			

Information related to comparisons with Baxter is sourced and compiled from different public available sources



# Investors Meeting

**May 2010** 

