MacroPore Biosurgery

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Disclaimer: Please note the disclaimer on the last page

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Price (USD)	**3,12**
12 Month H/L (USD)	5,1 / 2,5

Key Data	
Reuters Code	MACP
Bloomberg Code	XMP
Financial Year	31/12
Acc. Standard	US GAAP
Market Cap. (USD '000)	52.315
Adj. No. Of Shares ('000)	16.768
Free Float (%)	93,5
Av. Daily Trad. Vol. ('000)	17,3
5Y Estim. EPS Growth (%)	n/a

Valuation (x)	**02**	**03e**	**04e**	**05e**
MC/Tot. Sales	5,7	3,7	2,8	1,7
P/E	-3,6	-4,8	2,9	-10,6
P/E ex Goodwill	-3,7	-4,9	2,8	-11,3
P/CEPS	-5,0	-7,7	2,3	-2,1
Div. Yield (%)	0,0	0,0	0,0	0,0
EV/Tot. Sales	2,5	2,0	0,9	0,0
EV/EBIT	-1,8	-2,6	-2,0	-0,3

Per Share Data (€)	**02**	**03e**	**04e**	**05e**
EPS	-0,9	-0,7	1,1	-0,3
EPS ex Goodwill	-0,8	-0,6	1,1	-0,3
IBES-EPS (Mean)	-0,6	1,1	0,8	-0,1
CEPS	-0,6	-0,4	1,4	0,0
Net DPS	0,0	0,0	0,0	0,0
BVPS	1,7	0,9	2,0	1,7

Financials (USD m)	**02**	**03e**	**04e**	**05e**
Total Sales	9,2	14,1	18,5	30,3
EBIT	-12,5	-10,8	-8,3	-5,4
% of Sales	-136,6	-77,1	-44,9	-17,9
EBT	-12,6	-10,5	18,3	-4,9
% of Sales	-137,8	-74,4	99,1	-16,3
Adj. Net Profit	-13,0	-10,9	18,3	-4,9
% of Sales	-141,9	-77,7	99,1	-16,3

Performance (%)	**1m**	**3m**	**6m**	**12m**
Abs. Change	-6,8%	-10,3%	-17,5%	-35,0%
Chg. Rel. To Index	-11,4%	-15,3%	-26,6%	-57,0%

Main Shareholders (%)	
Medtronic	6,50%

Next information

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Life SciCon
Life Science Consulting

Pioneering the paradigm shift from tissue repair to regenerative medicine: Threat or Value Proposition?

MacroPore has a leading position in the bioresorbable implant-based spine surgery market. Together with its partner Medtronic Sofamor Danek, they will be introducing the first regenerative product for spinal interbody fusion.

The Company expected to post profits the first time in its history in 2003. Due to a delayed milestone payment this positive earnings situation will be postponed to 2004. This one-time profitability is reached not only due to a positive development of sales but also due to the well priced sale of a small business unit. Management proves that one of its core competencies is its ability to identify positive NPV projects for corporate investments and divestitures.

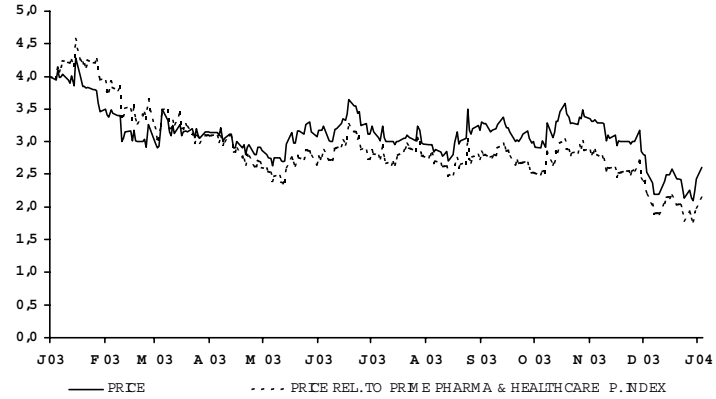
Most of the boost in 2004 results from the sale of the crano-maxillo-facial (CMF) unit sold to Medtronic by the end of 2002. Most recently, by the End of 2003 MacroPore announced the sale of its surgical thin film product line SurgiWrap™ to Medicis Ventures Management GmbH for US$ 12 Mill. which reflects a significant project ROI. This cash inflow - while not operative - will further contribute to the positive bottom line in fiscal 2004 and possibly beyond.

We expect continued sales growth coming from their developments in orthobiologics, marketed on a joint effort basis with Medtronic, a leading Medtech company. Growth rates > 60% should not be a surprise. While developing the core business into a cash positive status, MacroPore will make significant efforts to develop its

Stem cell business

which will consume an annual R&D budget of approx. $ 8 Mill. If management´s plans materialize as forecasted, first sales in the highly innovative stem cell business could be realized in 2006.

Price (€) and price relative to INDEX



Source: Thomson Financial Datastream

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Investment Philosophy

With the divestiture of the business unit CMF and the SurgiWrap™ product line in parallel with the establishment of a proprietary stem cell technology the Company has evolved its R&D focus to regenerative medicine, a highly innovative emerging business opportunity.

While MacroPore is a small player it has strong ties to a partner with global reach.

Discarding some of its business, the Company released capacities to concentrate on technologies with a higher value added.

With the current share price of US$ 3.12, MacroPore is trading close to book value. We consider a fair market value of MacroPore to be in the range of € 80 Mill. which reflects an undervaluation of ca. 35%. MacroPore is preparing for a NASDAQ listing of its stock in 2004; the Company will maintain its listing in Germany (dual listing).

SWOT - Analysis

Strengths

- For more than 4 years MacroPore has developed extensive clinical experience in the application of bioresorbable implants with more than 500.000 procedures and with an extreme low complaint rate. MacroPore´s orthobiological products are perceived as brands.
- The Company´s devices enjoy an increasing rate of adoption / acceptance by physicians
- The distribution partnership with Medtronic as a strategic partner enables MacroPore to benefit from well established distribution channels and concentrate on further product developments.
- MacroPore has filed 110 patent applications; the Company received 44 regulatory approvals.

Weaknesses

- In its market segment MacroPore is a small company compared to its peers. Many of MacroPore´s competitors have substantially larger financial resources or assets available. It might be difficult for MacroPore´s management to execute the bargaining power necessary to obtain above average margins.
- When MacroPore entered the stem cell market in late 2002 the Company repositioned itself as an early stage developing company in this segment. The market will be watching management actions closely to decide on validity and ability to commercialize this technology.
- Competitor´s technologies for biodegradable implants include products which display osteoconductive and, as they claim, osteoinductive properties (i.e. hydroxyl apatite/tri-calcium phosphate).

Opportunities

- The demographic trend towards a more and more aging population will result in an increasing need for orthopedic, traumatic and chronic bone disease-related treatments and regenerative medicine. With the advantages of highly bio-compatible and -degradable implants and innovative bone regenerating therapies the Company addresses a market with a high potential. With MacroPore´s leadership position in this market segment the Company will profit most from this expanding market compared to its peers.
- Adult stem cell therapy is a very promising area in context of regenerative medicine. With MacroPore's focus on adipose-derived stem cells in conjunction with proprietary protocol for isolation and concentration of the cells positions MacroPore at the fore-front of adult stem cell therapy. This technological position - if marketable - might emerge as a significant further value driver.

Threats

- In the ortho/bio business, competitors are realizing the market opportunity associated with the paradigm change and may enter and follow the market. Margins may decline.
- While Medtronic is a reliable partner to MacroPore, the dependence from this distribution partner is obvious. Medtronic's further commitment to market and/or prioritize MacroPore´s products of resorbable implants is pivotal.
- The field of adult stem cell therapy is still in its infancy awaiting profound clinical validation, regulatory approval and health insurance reimbursement policies. Commercialization will largely depend on the outcome of these procedures. R&D expenses are significant. It is not sure that the Company will be able to finance the complete development.

Valuation

With a share price of US$ 3.12, MacroPore is currently trading close to cash value and 1.6x 2004(e) book value.

Compared to its peers, the Company looks attractive. The Biomaterial companies in our peer group, in particular Biomet, IsoTis and Interpore trade on a far higher 2004(e) MarketCap to Book and EV/Sales value. Conmed/Linvatec is a special situation because Linvatec is integrated in Conmed Corporation with a broader product portfolio.

Also compared to our Stem cell peers MacroPore is trading at far lower multiples. We perceive MacroPore's stem cell technology at least as innovative as its competitor's approach who have to expand stem cells in culture prior to the application. It might even be argued that MacroPore's approach is more efficient leading to an earlier commercialization process.

Looking at our DCF calculation we can justify a fair value of MacroPore's future cash flow expectations of ca. US$ 6.80/shr equiv. to EUR 5.40/shr.

Taking into consideration that management was able to sell both business units (CMF and SurgiWrap) on a premium while streamlining their research portfolio, MacroPore consistently proves that they are able to realize solid business opportunities.

By the end of 2003, management sold 375,000 shares which they claim to be for private reasons, only. This might have provoked the recent decline of the stock.

MacroPore´s Peer Group

		MacroPore Biosurgery			IsoTis OrthoBiologics S.A.			Conmed / Linvatec		
		2002	2003e	2004e	2002	2003e	2004e	2002	2003e	2004e
Financial Data	N° of shares (in Mill.)	14,9	16,8	16,8	69,2	69,2	69,2	29,0	29,0	29,0
	Net Profit ('000)	-12.633	-10.479	18.325	-60.204	-31.140	-11.764	38.054	42.412	49.383
	Cash Flow ('000)	-10.346	-4.513	23.666	-53.284	-30.448	-17.992	47.640,4	9.295,7	60.131,4
	Net Debt Position (in Mill.)	-24,73	-24,08	-47,72	-65	-33	-22	270	261	200
	Revenues ('000)	9.166	14.077	18.500	4.715	14.400	23.700	453.062	491.248	524.538
Share Data	Net Profit/shr.	-0,85	-0,62	1,09	-0,87	-0,45	-0,17	1,31	1,46	1,70
	Cash Flow/shr.	-0,69	-0,27	1,41	-0,77	-0,44	-0,26	1,64	0,32	2,07
	Debt Position, net	-1,66	-1,44	-2,85	-0,93	-0,48	-0,31	9,29	8,97	6,90
	Book Value (in Mill.)	26,00	15,52	33,84	26,12	23,44	22,68	412,63	455,04	504,43
	Market Cap (in Mill.)	46,57	52,32	52,32	152,93	152,93	152,93	716,64	716,64	716,64
Valu-ation	Share Price (04-1-19)	3,1	3,1	3,1	2,2	2,2	2,2	24,7	24,7	24,7
	EV/shr.	1,5	1,7	0,3	1,2	1,6	1,9	34,0	33,6	31,6
	Sales/shr.	0,6	0,8	1,1	0,1	0,2	0,3	15,6	16,9	18,1
	EV/Sales	2,4	2,0	0,2	17,3	7,8	5,2	2,2	2,0	1,7
	Market Cap/Book	1,8	3,4	1,5	5,9	6,5	6,7	1,7	1,6	1,4

		MacroPore Biosurgery			Biomet			Interpore		
		2002	2003e	2004e	2002	2003e	2004e	2002	2003e	2004e
Financial Data	N° of shares (in Mill.)	14,9	16,8	16,8	255,7	255,7	255,7	17,9	17,9	17,9
	Net Profit ('000)	-12.633	-10.479	18.325	239.740	281.235	332.368	4.289	5.719	6.970
	Cahs Flow ('000)	-10.346	-4.513	23.666	184.237	314.472	373.275	4.111	5.719	6.970
	Net Debt Position (in Mill.)	-24,73	-24,08	-47,72	-111,53	-426,00	-799,28	-12,90	-18,62	-25,59
	Revenues ('000)	9.166	14.077	18.500	1.390.300	1.583.837	1.775.887	58.923	72.321	86.857
Share Data	Net Profit/shr.	-0,85	-0,62	1,09	0,94	1,10	1,30	0,24	0,32	0,39
	Cash Flow/shr.	-0,69	-0,27	1,41	0,72	1,23	1,46	0,23	0,32	0,39
	Debt Position, net	-1,66	-1,44	-2,85	-0,44	-1,67	-3,13	-0,72	-1,04	-1,43
	Book Value (in Mill.)	26,00	15,52	33,84	1.269,24	1.550,47	1.882,84	65,22	70,94	77,91
	Market Cap (in Mill.)	46,57	52,32	52,32	9.127,35	9.127,35	9.127,35	228,76	228,76	228,76
Valu-ation	Share Price (04-1-19)	3,1	3,1	3,1	35,7	35,7	35,7	12,8	12,8	12,8
	EV/shr.	1,5	1,7	0,3	35,3	34,0	32,6	12,1	11,8	11,4
	Sales/shr.	0,6	0,8	1,1	5,4	6,2	6,9	3,3	4,0	4,9
	EV/Sales	2,4	2,0	0,2	6,5	5,5	4,7	3,7	2,9	2,3
	Market Cap/Book	1,8	3,4	1,5	7,2	5,9	4,8	3,5	3,2	2,9

		MacroPore Biosurgery			Genvec			Aastrom		
		2002	2003e	2004e	2002	2003e	2004e	2002	2003e	2004e
Financial Data	N° of shares (in Mill.)	14,9	16,8	16,8	50,9	50,9	50,9	71,3	71,3	N/A
	Net Profit ('000)	-12.633	-10.479	18.325	-59.548	-35.627	-19.340	-7.902	-9.579	N/A
	Cahs Flow ('000)	-10.346	-4.513	23.666	-20.286,0	-6.627,2	9.659,5	-8.749	-8.990	N/A
	Net Debt Position (in Mill.)	-24,73	-24,08	-47,72	-1,90	33,73	53,07	-13,11	-3,53	N/A
	Revenues ('000)	9.166	14.077	18.500	8.414	10.811	15.300	877	844	N/A
Share Data	Net Profit/shr.	-0,85	-0,62	1,09	-1,17	-0,70	-0,38	-0,11	-0,13	N/A
	Cash Flow/shr.	-0,69	-0,27	1,41	-0,40	-0,13	0,19	-0,54	-0,35	N/A
	Debt Position, net	-1,66	-1,44	-2,85	-0,04	0,66	1,04	-0,18	-0,05	N/A
	Book Value (in Mill.)	26,00	15,52	33,84	15,63	9,70	4,30	11,75	2,17	N/A
	Market Cap (in Mill.)	46,57	52,32	52,32	174,57	174,57	174,57	105,49	105,49	N/A
Valu-ation	Share Price (04-1-19)	3,1	3,1	3,1	3,4	3,4	3,4	1,5	1,5	N/A
	EV/shr.	1,5	1,7	0,3	3,4	4,1	4,5	1,3	1,4	N/A
	Sales/shr.	0,6	0,8	1,1	0,2	0,2	0,3	0,0	0,0	N/A
	EV/Sales	2,4	2,0	0,2	20,5	19,3	14,9	105,3	120,8	N/A
	Market Cap/Book	1,8	3,4	1,5	11,2	18,0	40,6	9,0	48,6	N/A

Source: Company Reports, IBES, Thomson, Bloomberg

Please refer to our peer group description on page 13 pp.

Market leader in ortho-biologicals with an extended business focus

Business Portrait

The Company

MacroPore Biosurgery, Inc. (XMP) is a Biotech Company with a market leadership position in the development, production, and marketing of bioresorbable implants in the orthopedic and spine surgery field.

In addition to this traditional business unit, MacroPore has extended its R&D portfolio by incorporating regenerative stem cell therapy. With these two pillars, MacroPore intends to extend its business focus to the broader spectrum of regenerative medicine realizing the available market opportunities and become a global player.

It is in particular the prolonged value chain and the in-house resources at hand that we consider to enable management to successfully grow the Company in the coming years and sustain their leadership position in both segments.

Following Mr. Ari Bizimis resignation, MacroPore is now operating with a slightly new organizational structure:

- Christopher J. Calhoun, President/Chief Executive Officer, Vice-Chairman and Director. He is a co-founder of MacroPore and has served as the Company's Chief Executive Officer, Vice-Chairman and Director of the Board since 1997, and as President since April 2002.
- Marc H. Hedrick, MD, Chief Scientific Officer, Medical Director and Director, joined MacroPore Biosurgery as Chief Scientific Officer, Medical Director and Director in October 2002. Previously Dr. Hedrick co-founded, and served as President and Chief Executive Officer of StemSource, Inc.
- Elizabeth A. Scarbrough, Vice President - Marketing & Development Biologics, joined MacroPore with the integration of StemSource in October 2002. Before that she was responsible for sales and marketing at StemSource.
- Sharon Schulzki, Chief Operating Officer. Ms. Schulzki joined the Company in July 2000. She has extensive industry experience in the ortho/spine business.
- Matthew Scott, Vice President – Sales. Before he joined MacroPore in 1998 he was a national sales manager at Strautmann.
- Bruce Reuter, Senior Vice President – International Business
- John K. Fraser, PhD, Vice President – Research & Technology Biologics
- John Ferris, Vice President - Europe
- Seijiro Shirahama, Vice President – Asia Pacific
- Charles E. Galetto, Senior Vice President - Finance and Administration/ Treasurer
- Marshall G. Cox. He has been Chairman of the Board and Director since May 1997. He is founder/co-founder of various growth companies in the US.

The Company currently has 90 employees comprised of 34 in R&D, 22 in manufacturing, 15 in management, finance and administration and 20 in sales and marketing..

Business Model

MacroPore is a research-oriented and development driven Biotech Company. The Company's strategic development in recent years made it possible that MacroPore is now at the forefront of most promising therapeutic developments that fuel their valuable R&D pipeline.

Strong R&D focus on biomaterials and stem cell therapy

With the sale of both product lines, CMF in 2002 to Medtronic and SurgiWrap™ in 2003/04 to Medicis Ventures, management was able to refocus, i.e. release R&D as well as manufacturing capacities and concentrate on products with a higher value added and. with a better fit to the Company's portfolio of regenerative applications.

These transactions generated a considerable cash flow to finance and streamline MacroPore´s core operations. Both transactions provided a solid Return on Investment.

Today, the Company is positioned in two promising business segments: Biomaterials for spine surgery and regenerative stem cell therapy.

Strong strategic distribution partnership

Bioresorbable implants for applications in spine surgery are co-developed with and marketed by Medtronic Sofamor Danek (Medtronic), the global market leader in spinal implant and instrumentation. With this strategic partnership the Company takes advantage of and benefits from efficient and established sales and distribution channels. Medtronic is the single largest customer, directly accounting for >90% of MacroPore´s revenues. Furthermore, Medtronic has adequate marketing and distribution channels to successfully carry MacroPore´s high quality products and positions them as brands. MacroPore is able to re-negotiate the pricing structure it has with its partner in a biannual cycle. The agreement with Medtronic has been extended to the year 2012.

Sale of SurgiWrap™ generates $12m cash = strong project ROI

The third product line within the business unit Biomaterials, was marketed through an own sales force in the U.S. and distributed with partners in Europe. In December 2003, MacroPore announced the sale of this product to a syndicate of international investors, led by Medicis Ventures Management GmbH and Ari Bizimis, former director and chief financial officer of MacroPore. The transaction is expected to close by January 21st 2004.

Heart infarction as the first indication of stem cell technology

In 2002, MacroPore decided to extend its value chain via biologics i.e. adult stem cell therapy by acquiring StemSource in which they had a prior interest of 13%.

Applications will initially be focused on heart infarction but other indications and target tissues will follow. Revenues will be generated by distribution of the device and disposible kit for the isolation and concentration of stem cells from lipo-aspirates. Management are working to identify suitable partners/licensees for the commercializing process although other options are evaluated in parallel. In addition, continuous banking (storage) of autologous adipose-derived stem cells might represent an up-and-coming business generating early and steady revenues.

Attractive R&D portfolio

Marketing and developing a more and more adopted diversified product line (Biomaterials) in tandem with a promising cutting-edge technology (stem cells) MacroPore has an attractive portfolio of products and technology platforms to further capitalize on regenerative medicine.

Business units and technology

Biomaterials

Rich product portfolio in spine/orthopedics with proven track record

The chemical basis of the devices is a polylactic copolymer which degrades by hydrolysis into single lactic acid molecules which are further metabolized by the liver into harmless water, and carbon dioxide being exhaled by the lungs. Along this chemical compound, MacroPore has developed and launched three successful product lines including the CMF and Hydrosorb™ series of rigid implants and SurgiWrap™ surgical thin films. Today, MacroPore generates annual sales of ca. $14 Mill. in the ortho/spine business with an annual growth rate of 60% for the past three business years.

Growing acceptance by physicians

In recent years, resorbable materials have received significant attention in the orthopedic practice; physician adoption is steadily increasing.

Hydrosorb™ is characterized by a degradation time of 18-36 months. The loss of strength during degradation has been extensively researched receiving positive reflections within the surgical community.

Product advantage in terms of defect restoration and economics

The clear advantages compared to non-degradable implants, such as titanium devices are the malleability and adaptability on site, the load shift from implant to newly formed bone during the regeneration process, avoidance of long-term stress shielding, and elimination of imaging interference. To avoid a second procedure, as is the case for removal of regular implants, Hydrosorb™ and related surgical treatment provide the largest advantage in terms of economics. A true silver bullet and a growth driver within the spine platform is the combination of MacroPore's biomaterials with the osteoinductive recombinant human bone morphogenic protein. This protein marketed under the INFUSE™ label adresses a market potential of approx. $500 Mill. p.a. at Medtronic level and ca. $100 Mill. at MacroPore level. **This combination product is the first regenerative medicine technology in the spine field**.

First regenerative spinal therapy

With BOOMERANG™ the Company has recently further extended its orthopedic/spinal implant product line. This product is offered by Medtronic since Q4/03 and is expected to represent another growth driver in MacroPore's biomaterials business unit. BOOMERANG's outstanding feature is in its handling process which is performed laterally instead of the traditional procedure (ventrally or dorsally). Surgeon's are inclined to adopt to this procedure rapidly since it provides a minimally invasive surgical approach.

Remodeling of the product portfolio by the end of 2002; milestone payment now expected in 2004

With the sale of two product lines MacroPore consistently remodelled its portfolio of products towards regenerative medicine:

Selling the business unit "cranio-maxillo-facial (CMF)" to Medtronic by the end of Q3/02, MacroPore now focuses on the spine segment, where revenues are most promising. According to an agreement between the two companies, MacroPore earned a $5 Mill. milestone payment from Medtronic by the end of 2003 upon successful completion of a 12-months clinical study with the Faster Resorbing Polymer (FRP). The final $ 2 Mill. payment is expected to be received in Q2/04 at the latest as soon as MacroPore has completed the transfer of manufacturing know-how. We highly value MacroPore's co-development agreement with Medtronic in spine surgery which leads to significant savings on MacroPore's P&L with full upside potential to remain a market leader. With the partnership MacroPore enjoys with Medtronic, the Company has access to an efficient marketing infrastructure and distribution channels.

Sale of the surgery thin film product line generates a high ROI and continues to strengthen MacroPore´s cash position

As a product that did not belong to the regenerative line, Management decided to sell SurgiWrap™. Notably, the price received exceeded the past investments into this product by far. MacroPore will be receiving a total of $12 Mill. which reflects ca. 12 times annual sales. Medtec products are currently worth some 4.5x sales on industry average. There is a further option connected to a back-up supply and business development agreement for Japan that may generate another $ 13 Mill. within the next 3-5 years.

In any case, MacroPore will be receiving an immediate payment of $7 Mill. by closing the contract; the remainder will be cashed in by year-end of 2004.

Thus, instead of contributing $5-7 Mill. in expense in 2004, SurgiWrap will contribute to a significant increase in cash-flow.

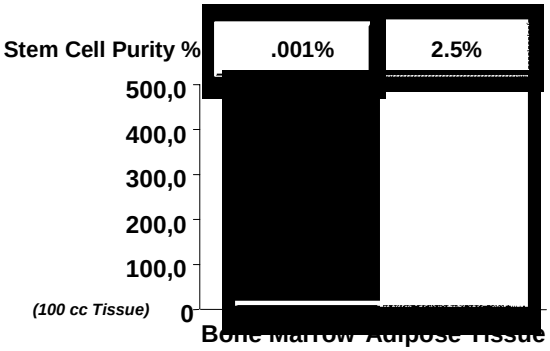
Adult stem cell therapy

Clear research focus on adipose-derived stem cells

With the strategic acquisition of StemSource in Q3/02, in which MarcroPore had a prior interest of 13,4% the Company underlines its commitment to pursue regenerative therapies using adult stem cells.

The Company aims to develop significant clinical applications for adult stem cells in regenerative medicine. Vis-a-vis their competitors, MacroPore has taken a clear position to focus on adipose tissue as the source, yielding a significant higher and therapeutically sufficient number of stem cells (Fig. 1).

Figure 1: MacroPore Regenerative Cell Technology
Key Advantage is Cell Number



Extract therapeutic quantities in real-time

Source: Macropore 2003

We consider MacroPore's approach as a viable and promising strategy, not only because of the higher chances of success using adipose tissue but also due to the Company's infrastructure (labs, technology, know-how) in place.

Annual R&D expenses of $8 Mill. – first sales expected in 2006

In order to perform clinical studies and to obtain Premarket Approval (PMA) at the FDA for the cardiac indication, MacroPore will initiate an Investigational Device Exemption (IDE) in 2004. We anticipate a cost consumption of ca. $8 Mill. p.a., primarily used for clinical studies in 2004 with a slightly increasing annual budget for this indication. We expect revenues in a significant magnitude to be generated not before 2nd half 2006/early '07. In our opinion it is pivotal that MacroPore will be able to identify a suitable partner to commercialize their highly innovative technology. Management are already in discussions.

Competitive arena

MacroPore´s product innovations and R&D capabilities are targeting significant markets. Especially in the spine/ortho business the Company is well positioned with Medtronic to realize market opportunities available. However, competing technologies are available for resorbable implants, which enjoy a proprietary character. The currently available/accepted technologies and respective companies are shown in the following table (table 1):

Table1: Comparison of technological platforms in orthobiologics

Company	platform	properties	indication	strategic partnerships/alliances
MacroPore Biosurgery, Inc.	Poly(L-lactide-co-D,L-lactide)	predictable resorption rate; in combination with Medtronic´s Infuse osteoconductive/-inductive; provokes (weak) immunological response; suitable for the delivery of drugs and growth factors	spinal fusion, bone graft containment, and other musculoskeletal reconstructive surgeries	R&D and marketing partnership with Medtronic
Linvatec Biomaterials Ltd.	Poly L-lactide and poly lactide-glycolic acid polymers	product line also comprises faster resorbing variants for pediatric patients only; not osteoconductive/-inductive	fixation of fragments of fratured non-load bearing bones	
Biomet, Inc.	Poly-lactic acid-poly-glycolic acid co-polymer (Lactosorb)	resorbable; provokes (weak) immunological respons; not osteoconductive/-inductive	fixation of metacarpal fractures and fusions; iliac crest autograft procedures	formed a joint venture with Merck
Interpore Cross International, Inc.	hydroxyl apatite	resorbable and non-resorbable derivatives; no immune response; osteoconductive; high biocompatibility	promote healing of bone graft sites	
aap Implantate AG	nanocrystalline hydroxyl apatite	resorbable; osteoconductive; no immun response; high biocompatibility	bone defect reconstruction in traumatology, orthopedic, dental, oral and maxillofacial surgery	
IsoTis OrthoBiologics S.A.	hydroxyl apatite/tri-calcium phosphate	osteoconductive/-inductive; high biocompatibility; no immune response	orthopedic/maxillofacial	
Curasan AG	tri-calcium phosphate/combined with autologous growth factors	resorbable, osteoconductive	hand and spine surgery, traumatology, sports medicine, face surgery, dental implantology	
Regeneration Technologie, Inc.	allograft (tissue from a foreign donor)	biocompatible, must be sterilized to avoid transfer of contaminants; not osteoconductive/-inductive	spinal vertebrae repair, fraction repair	Marketing partnership with Medtronic
co.don® AG	autologous osteoblast transplantation	autologous living cells; no immune response	general bone replacement; arthrosis	

References: Gutwald et al.: Bioresorbable implants in maxillo-facial osteosynthesis: Experimental and clinical experience. Injury 33, S-B4-16 (2002); Helm et al.: Bone graft substitutes for the promotion of spinal arthrodesis. Neurosurg. Focus 10(4), 1-5 (2001); Pilitsis et al.: Bone healing and spinal fusion. Neurosurg. Focus 13 (6), 1-6 (2002); Kalfas et al.: Principles of bone healing. Neurosurg. Focus 10(4), 1-4 (2001); Alexander et al.: Applications of a resorbable interbody spacer via a posterior lumbar interbody fusion technique. Orthopedics 25(10 Suppl), S1185-9 (2002); Warren et al.: New directions in bioabsorbable technology. Orthopedics 25(10 Suppl.), S1201-10 (2002); Vaccaro et al.: Spinal applications of bioresorbable implants. Orthopedics 25(10 Suppl.), S1115-20 (2002); Toth et al.: Evaluation of 70/30 D,L-PLa for use as a resorbable interbody fusion cage. Orthopedics 25(10 Suppl.), S1131-40 (2002).

Source: Life SciCon

All of the different technologies do have pros and cons. It is not only the individual physician´s decision - based on his or her practice and experience – which we consider as being crucial for the success of a given technology, but for the most part the distribution capacity, ideally in conjunction with a strong partner. It is especially the latter condition which is realized in the partnership of MacroPore with Medtronic.

Based on the available technologies, we have selected a peer group accordingly:

Biomaterials (spine/orthopedics)

IsoTis

1. IsoTis OrthoBiologics S.A., Lausanne, Switzerland

IsoTis´ product portfolio combines natural and synthetic technology platforms, i.e. demineralized bone matrix (protein fraction) and ceramic implants (hydroxyl apatite/tri-calcium phosphate), respectively. The products are used in promoting natural bone formation for purposes such as supplementing bone autografts, autograft backfills, spinal fusion (with appropriate fixation) etc. The products are characterized by their osteoconductive and osteoinductive properties.

In February 2003, IsoTis obtained the CE mark for its synthetic bone substitute OsSatura™. OsSatura™ is the first synthetic bone substitute that is approved on the basis of its osteoinductive properties, and is the only synthetic bone substitute today that combines both osteoconductive and osteoinductive properties. Since obtaining the CE mark, IsoTis has also received 510(k) clearance from the US Food and Drug Administration for OsSatura™ in orthopaedic indications, albeit not on the basis of the osteoinductivity claim. OsSatura has been launched in the EU in early 2003; market introduction in the US is currently being prepared. IsoTis intends to become a strong player in global orthobiology industry.

Linvatec

2. Linvatec Biomaterials Ltd., Swindon, UK

Linvatec, previously known as Bionx, produces bioresorbable pins and screws for applications in orthopedic trauma, sports medicine and cranofacial surgery, besides instruments for orthopedic surgery. The Company´s R&D efforts are focused on the development of new products and new materials for surgical procedures.

aap

3. aap Implantate AG, Berlin, D

aap Implantate is a corporate holding with an integrated operating network for an R&D-intensive Company:

- Coripharm GmbH & Co KG, Dieburg, Germany; 100% (R&D subsidiary)
- Osartis GmbH & Co KG, Obernburg, Germany; 49%; (production and patent management);
- distribution subsidiaries.

The company´s core competencies are the development, production and marketing of implants for healing bone fractures, for joint replacement (endoprosthetics) and for biological bone substitute (orthobiology). They have a range of more than 100 standardized and innovative products.

With the acquisition of Coripharm, aap Implantate is consistently addressing the orthobiological market and strives to become a market leader in this segment.

The bone replacement product PerOssal® (marketed in Germany as Ostim®) has osteoinductive characeristics and is bioresorbable over time enabling a load shift from implant to natural bone.

aap has a different technolgy compared to MacroPore in that aap works with hydroxyl apatite as the chemical basis.

Biomet

4. Biomet, Inc., Warsaw, IN.

Besides surgical instrumentation and bone cements the company produces resorbable implants and fixation devices (screws, pins, sheets and mesh panels) which are used in cranio-maxillo-facial defects and orthopedic applications. These products, marketed under the Reunite® label, are based on a copolymer of 82% L-lactid and 18% glycolic acid and are completely resorbed after 12-15 months. The Reunite® product line has an FDA clearance for use in iliac crest autograft procedures.

In January 1998 Biomet formed a joint venture with Merck KGaA. Merck KGaA is a significant player in the chemical, pharmaceutical and laboratory industry, located in Darmstadt, Germany. The joint venture offers additional opportunities for Biomet in Europe, particularly in France and Germany. Biomet also benefits by gaining exclusive rights to Merck's vast collection of biomaterials products, in addition to future developments in biomaterials research. The Biomet / Merck joint venture, based in Dordrecht, The Netherlands, has capitalized on the combined salesforces and the expanded product lines resulting from this partnership.

Curasan

5. Curasan AG, Kleinostheim, Germany

Curasan takes advantage of the paradigm change from bone repair to regenerating therapies and aims at participating in this emerging and constantly growing market.

With Cerasorb® Curasan developed and markets a bioresorbable and higly osteoconductive device (tri-calcium phosphate) for use in traumatology, orthopedics as well as spinal surgery. Resorption occurs within 3-24 months and the material is replaced by natural bone during this period. This product is certified for the regeneration of bone defects in the entire skeletal system.

co.don®

6. co.don® AG, Brandenburg, Germany

co.don is a biotechnology company dedicated to innovative cartilage and bone regenerative therapies based on tissue engeneering. The therapeutic approach for bone replacement is based on autologous osteoblast transplantation and marketed under the brand osteotransplant®. This is hitherto the one and only commercialized autologous bone cell transplant, featuring a manufacturing licence (as a biological drug) according to the German Drug Act (AMG).

co.don's® major disadvantage is the limited distribution capabilities for their products.

Interpore

7. Interpore Cross International Inc., Irvine, CA

Besides traditional devices for orthopedic and spinal applications, the company also markets orthobiologics comprising autologous growth factors (AGF™) isolated from the patient´s own blood during surgery, hydroxyl apatite-based devices for the treatment of fractures (resorbable and non-resorbable variants; Pro Osteon™) and BonePlast™, a resorbable temporary scaffold device for use, amongst others, in spinal and pelvis surgery.

Stem cell therapy

Since the area of adult stem cell therapy is still in its infancy, we can not speak about commercialization in a short-term horizon. This segment of MacroPore´s business will therefore have an impact starting in 2006. We will weight this business opportunity more and more in the future when we get more confident.

We are comparing the following companies:

Osiris

1. Osiris Therapeutics Inc., Baltimore, MD

The Company believes it is the clear leader in developing stem cell therapy for tissue regeneration without the need for immune suppression. Source of stem cells is bone marrow. Over the last year, a small Phase 1 human safety trial was completed in which autologous human mesenchymal stem cells were delivered on a hydroxylapatite matrix into the alveolar ridge region of the jaw to promote new bone formation in preparation for dental implants. The results of that study demonstrated significant new bone formation with no adverse events. Ongoing studies are focused on the ideal composition of a cell/matrix combination for delivery to load-bearing, long bone defects. By entering into an alliance with Boston Scientific Corp., Natick, MA. to co-develop and commercialize the therapeutic stem cell approach for heart infarction, Osiris benefits from the reputation and powerful distribution capacity of a global player in the medical device industry.

Bioheart

2. Bioheart, Inc., Weston, FL

Bioheart develops MyoCell™, an autologous cell-based product used for the treatment of myocardial infarction and congestive heart failure and which is currently being evaluated in clinical trials in the United States and Europe. Myocell is a preparation of autologous myoblasts obtained from a 5–10 g muscle biopsy. These cells have to be expanded in culture before re-administering them to the patient. Phase I/II human clinical trials are being conducted in Europe and phase I studies in the U.S.

GenVac

3. GenVac Inc., Gaithersburg, MD

GenVec (merged with Diacrin in August 2003) is an emerging biopharmaceutical company developing gene- and cell-based technologies for the treatment of major diseases, such as cancer and cardiovascular disease.

For treatment of cardiovascular defects, cells are isolated from a muscle biopsy of the patient who has suffered a heart attack. Thereafter the cells are cultured and transplanted into the patient´s heart. Pre-clinical studies in 2001 showed that transplantation of muscle cells after myocardial infarction in an animal model reduced the harmful effects of the heart attack and improved cardiac function. Patient recruitment has been completed in two Phase 1 clinical trials treating patients with damaged heart muscle.

Aastrom Biosciences

4. Aastrom Biosciences Inc., Ann Arbor, MI

Aastrom develops proprietary patient-specific cell therapeutics for stem cell tissue repair and the treatment of cancer and infectious diseases. The current products comprise tissue repair cell prescriptions which are grown from a small sample of a patient's bone marrow and are then re-administered to the patient to generate normal tissue. The primary applications are being developed for the therapy for bone grafting (fusions, fractures or dental defects), osteoporosis, and osteoarthritis, amongst others. Several products are being evaluated in different clinical stages ranging from pre-clinical to phase II.

Macropore´s relevant market segments and size

Market for biomaterials

With respect to the (pre)clinical status of the adult stem cell therapeutic approach we primarily address the spine/orthopedic market as being relevant for Macropore´s business.

Changing demographics increases demand; biomaterials offer cost advantages

Macropore´s market size for the core business is huge. In light of the demographic development, the orthobiologics market will gain more and more emphasis since it expands treatment options, avoids follow-up surgeries, and thus improves patient´s quality of life. Overall costs for health care are expected to be reduced. due to the higher percentage of patients with fusions accomplished by the combination of Hydrosorb/INFUSE.

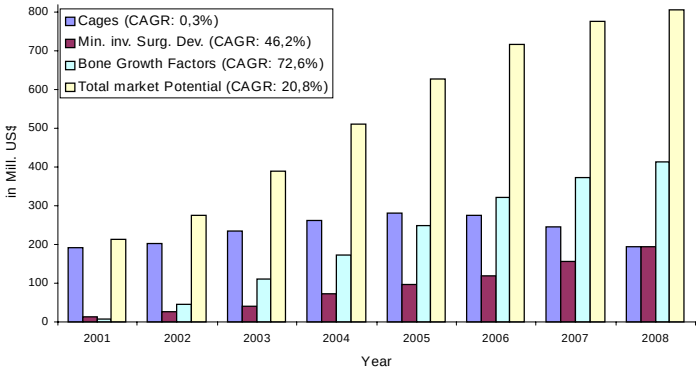
Orthobiologics promises to dramatically transform the clinical focus of orthopedics/spine surgery from traditional metal implants, plates, and screws to biologically based products for hard tissue regeneration. In combination with INFUSE, MacroPore and Medtronic are gaining a leading position in regenerative medicine in the spinal market.

Two million spine procedures worldwide (2001)

Spine procedures (the major application of MacroPore´s Biomaterials), exceeded two million worldwide in 2001, including fusion, discectomy, laminectomy and fracture repair. Growth in the global spine market is fueled from demographic population developments.

In Fig. 2 we have shown the market potential of spine procedures. MacroPore has access to ca. 20% in the Bone Growth Factor segment (combination of Hydrosorb with INFUSE), which amounts to $35 Mill. in 2004 with a CAGR of ca. 72% until 2008. Also, most of MacroPore´s other products have a solid growth rate except for Cages that will meet a declining market starting in 2006 (Fig. 2).

Figure 2: Product Sales potential – USA
Spinal Fusion Market



Sources: Health Research International; Life SciCon

Market for stem cells

MacroPore approaches the stem cell therapy development as a platform technology.

The first application to be addressed is acute myocardial infarction and advanced heart disease. To get hold of this market we consider the patient situation as relevant.

There are more than 1 Mill. new patients p.a. who survive heart infarction and ca. 5,5 Mill. patients with advanced heart disease in the US. In the US, cost for treatment of vascular disease is calculated as much as all cancer treatments combined times two. Stem cell therapy achieves an improvement of an additional success/outcome of up to 20% compared to the conventional treatment. The cost savings are significant due to a reduction of the hospital cure time and savings on expensive drugs.

Since stem cell therapy is still in its infancy it is hard to make accurate predictions concerning the $-market potential. From the treatment potential we estimate an overall market size for stem cell-based therapies of some $5 Bn. worldwide in 2006 increasing to $24 Bn. in 2010. It is also our estimate that by 2006 no Biotech Company will have a proven technology ready to satisfy this market.

Considerations and Assumptions in the forecasting model

While Fiscal 2003 has not been reported by MacroPore, we extrapolated on actual Q1/03 to Q3/03 results and on management's guidance throughout 2003 with a most recent update given in XMP's January 15, 2004 investor call.

Extraordinary Results

Earlier in the year we expected that MacroPore would be able to recognize milestone payments from Medtronic totaling ca. US$ 7 Mill in 2003, which would have triggered a positive net earnings situation in 2003.

However, these payments expected to be booked by December 2003 were delayed due to a fault of a raw material received (deficiency). Therefore, the product did not comply with the agreement necessary to finish the execution of the final trial that provides "proof of feasibility" to Medtronic.

We now expect that MacroPore will be receiving these payments in Q1 and Q2/04.

As per today we expect the Company to cash-in a total of US$ 19 Mill. in milestone payments and revenues from the sale of assets within fiscal 2004.

i.e.: $ 2,0 Mill. from CMF transaction (total $10 Mill.; 8 has already been deferred on Balance sheet)

$ 5,0 Mill. from FRP

$ 12,0 Mill. from the sale of SurgiWrap

In our earnings model we calculate with US$ 26 Mill.

Sales

The Company has reported 9-M/03 revenues of US$ 8,4 Mill.; with ca. 5.5 Mill. to be recognized in Q4/03 MacroPore should be able to report revenues of about 14.1 Mill. in 2003. This is also in line with managment's most recent guidance.

We calculated with 10 Mill. sales from the ortho/spine business, ca. 1 Mill. sales of SurgiWrap.

Generally, we expect that MacroPore is able to increase sales within their ortho/spine business by ca. 50-60% p.a. which translates into the following segment sales expectations in 2004:

$ 15,5 Mill. - Ortho / Spine

$ 2,0 Mill. - SurgiWrap within back-up supply agreement

ca. $ 1,0 Mill. - other sources, like research grants, etc.

Expenses

Cost of Sales were forecasted with a %-age of 30 to 35 of actual sales; distribution expenses with a margin of ca. 35% of sales in 2003. In 2004 distribution expenses will be declining due to the sale of SurgiWrap for which MacroPore maintained an own sales force. Therefore, we considered costs in connection with sales support to Medtronic and Corporate Marketing purposes.

Research & Development expenses will be approximately US$ 8 Mill. p.a. in connection with the stem cell business in addition to other ongoing R&D efforts for ortho/spine products.

Cash & Capex

Regarding MacroPore's Asset situation, the Company will be cash-rich in the foreseeable future due to the heavy divestiture activities in 2002 and 2003.

We calculated with annual capital expenditure of US$ 2-2,5 Mill. p.a. in our long term forecasting period.

Profit and Loss account (USD '000)

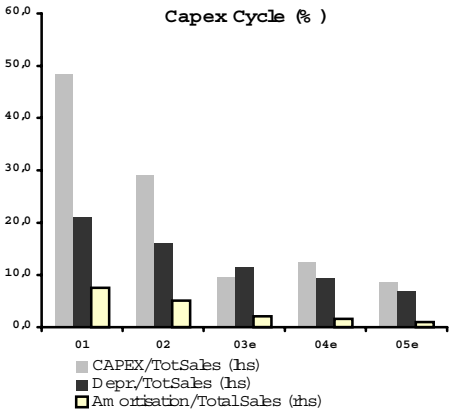
Fiscal Year 31/12 • US GAAP	01	02	03e	04e	05e	02	03e	04e	05e	5Y ø
						y-o-y changes (%)				
Total Sales	**5.648,0**	**9.166,0**	**14.077,0**	**18.500,0**	**30.250,0**	**62,3**	**53,6**	**31,4**	**63,5**	**52,1**
Cost of Sales	4.151,0	4.564,0	4.500,0	5.550,0	9.075,0	9,9	-1,4	23,3	63,5	21,6
Gross Profit	**1.497,0**	**4.602,0**	**9.577,0**	**12.950,0**	**21.175,0**	**207,4**	**108,1**	**35,2**	**63,5**	**93,9**
Other Operating Income	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	—
Distribution Expenses	4.493,0	3.987,0	4.700,0	1.750,0	2.500,0	-11,3	17,9	-62,8	42,9	-13,6
Administative Expenses	3.578,0	3.952,0	4.925,0	5.000,0	5.100,0	10,5	24,6	1,5	2,0	9,3
Other Operating and R&D Expenses	6.610,0	9.188,0	10.800,0	14.500,0	19.000,0	39,0	17,5	34,3	31,0	30,2
EBIT	**-13.184,0**	**-12.525,0**	**-10.848,0**	**-8.300,0**	**-5.425,0**	**-5,0**	**-13,4**	**-23,5**	**-34,6**	**-24,3**
Interest Income	2.249,0	1.037,0	392,0	625,0	500,0	-53,9	-62,2	59,4	-20,0	-31,3
Interest Expenses	168,0	263,0	23,0	0,0	0,0	56,5	-91,3	-100,0	0,0	-100,0
Income from Particip. & Assoc.	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	—
Other Financial Expenses	104,0	882,0	0,0	0,0	0,0	748,1	-100,0	0,0	0,0	-100,0
Financial Result	**1.977,0**	**-108,0**	**369,0**	**625,0**	**500,0**	**-105,5**	**-441,7**	**69,4**	**-20,0**	**-29,1**
Income from Ord. Business	**-11.207,0**	**-12.633,0**	**-10.479,0**	**-7.675,0**	**-4.925,0**	**12,7**	**-17,1**	**-26,8**	**-35,8**	**-26,9**
Extraordinary Result (Inc.+ ,Exp.-)	0,0	0,0	0,0	26.000,0	0,0	0,0	0,0	0,0	-100,0	—
EBT	**-11.207,0**	**-12.633,0**	**-10.479,0**	**18.325,0**	**-4.925,0**	**12,7**	**-17,1**	**-274,9**	**-126,9**	**-26,9**
Taxes on Income	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	—
Other Taxes	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	—
Net Profit	**-11.207,0**	**-12.633,0**	**-10.479,0**	**18.325,0**	**-4.925,0**	**12,7**	**-17,1**	**-274,9**	**-126,9**	**-26,9**
Minorities	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	—
Adjustments	0,0	-370,0	-460,0	0,0	0,0	0,0	24,3	-100,0	0,0	-100,0
Adjusted Net Profit	**-11.207,0**	**-13.003,0**	**-10.939,0**	**18.325,0**	**-4.925,0**	**16,0**	**-15,9**	**-267,5**	**-126,9**	**-27,6**
Dep. on Tang. Ass. and o. Op. Ass.	1.184,0	1.471,0	1.621,2	1.750,0	2.100,0	24,2	10,2	7,9	20,0	15,4
Amortization of Intangibles + Goodwill	426,0	463,0	300,0	300,0	300,0	8,7	-35,2	0,0	0,0	-8,4
EBITDA	**-11.574,0**	**-10.591,0**	**-8.926,8**	**-6.250,0**	**-3.025,0**	**-8,5**	**-15,7**	**-30,0**	**-51,6**	**-34,1**
EBITA	**-12.758,0**	**-12.062,0**	**-10.548,0**	**-8.000,0**	**-5.125,0**	**-5,5**	**-12,6**	**-24,2**	**-35,9**	**-24,8**
Material Expenses	2.150,0	2.500,0	2.600,0	3.350,0	5.100,0	16,3	4,0	28,8	52,2	24,1
R & D Expenses	5.598,0	5.816,0	9.950,0	12.500,0	16.500,0	3,9	71,1	25,6	32,0	31,0
Adj. No. of Shares	8.202	14.926	16.768	16.768	16.768	82,0	12,3	0,0	0,0	19,6
Adj. Net Profit/Share (EPS)	**-1,37**	**-0,87**	**-0,65**	**1,09**	**-0,29**	**-36,2**	**-25,1**	**-267,5**	**-126,9**	**-30,4**
Adj. Net Profit/Share ex Goodwill	**-1,31**	**-0,84**	**-0,63**	**1,11**	**-0,28**	**-36,1**	**-24,5**	**-275,1**	**-124,8**	**-31,0**
Adj. Cash Earnings (CE)/Share	**-0,47**	**-0,62**	**-0,41**	**1,35**	**0,00**	**30,7**	**-34,3**	**-432,6**	**-100,1**	**-86,6**

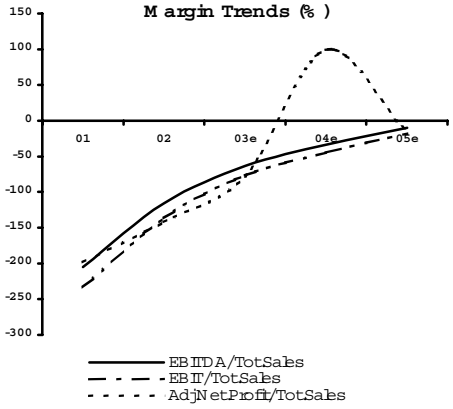
Cash Flow Statement (USD '000)

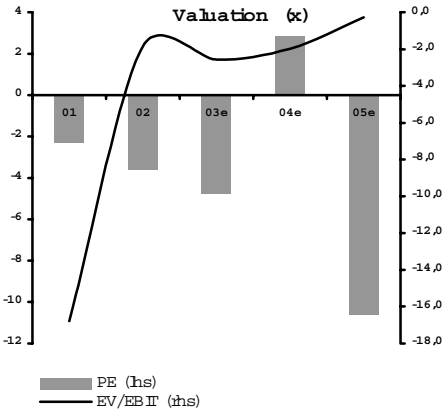
Fiscal Year 31/12 • US GAAP	01	02	03e	04e	05e	02	03e	04e	05e	5Y ø
						y-o-y changes (%)				
Adjusted Net Profit	-11.207	-13.003	-10.939	18.325	-4.925	16,0	-15,9	-267,5	-126,9	-27,6
+ Depreciation & Amortisation	1.610	1.934	1.921	2.050	2.400	20,1	-0,7	6,7	17,1	10,5
+ Chg. in long-term Provisions	5.716	1.837	2.200	2.300	2.500	-67,9	19,8	4,5	8,7	-18,7
= Cash Earnings	**-3.881**	**-9.232**	**-6.818**	**22.675**	**-25**	**137,9**	**-26,2**	**-432,6**	**-100,1**	**-86,1**
+ Minorities	0	0	0	0	0	0,0	0,0	0,0	0,0	—
- Chg. in Net Working Capital	494	-1.550	-3.655	-3.291	-8.744	-413,8	135,8	-9,9	165,7	—
= Operating Cash Flow	-4.375	-7.682	-3.163	25.966	8.719	75,6	-58,8	-920,9	-66,4	-204,3
- Capex	2.732	2.664	1.350	2.300	2.600	-2,5	-49,3	70,4	13,0	-1,2
= Free Cash Flow	**-7.107**	**-10.346**	**-4.513**	**23.666**	**6.119**	**45,6**	**-56,4**	**-624,4**	**-74,1**	**-183,9**
- Net Other Items	0	-10.700	-3.500	0	0	0,0	-67,3	-100,0	0,0	-100,0
- Dividends (Previous Year)	0	0	0	0	0	0,0	0,0	0,0	0,0	—
+ Increase in Share Capital	43.244	0	0	0	0	-100,0	0,0	0,0	0,0	-100,0
- Outflow from Share Buy Backs	0	0	0	0	0	0,0	0,0	0,0	0,0	—
+ Bank Loans	4.193	1.283	500	100	500	-69,4	-61,0	-80,0	400,0	-41,2
= Incr. in Cash (+)/Decr. in Cash (-)	**40.330**	**1.637**	**-513**	**23.766**	**6.619**	**-95,9**	**-131,4**	**---**	**-72,2**	**-36,4**

Balance Sheet (USD '000)

Fiscal Year 31/12 • US GAAP	01	02	03e	04e	05e	02	03e	04e	05e
Assets						% of Balance Sheet Total			
Tangible Assets	5.171	3.626	3.355	3.905	4.405	9,2	7,6	5,9	5,4
Other Assets	1.022	7.479	11.486	7.095	11.601	19,0	25,9	10,8	14,2
t/o Goodwill	0,0	6.917	0,0	0,0	0,0	17,6	0,0	0,0	0,0
Total Fixed Assets	**6.193**	**11.105**	**14.841**	**11.000**	**16.006**	**28,2**	**33,5**	**16,7**	**19,6**
Inventories	1.685	1.150	1.766	2.321	3.795	2,9	4,0	3,5	4,7
Accounts Receivable	463	1.238	1.901	2.499	4.086	3,1	4,3	3,8	5,0
Total Liquid Funds	33.951	24.983	24.470	48.236	54.855	63,5	55,3	73,4	67,3
Other Current Assets	851	843	1.295	1.701	2.782	2,1	2,9	2,6	3,4
Total Current Assets	**36.950**	**28.214**	**29.432**	**54.757**	**65.518**	**71,8**	**66,5**	**83,3**	**80,4**
Balance Sheet Total	**43.143**	**39.319**	**44.273**	**65.757**	**81.524**	**100,0**	**100,0**	**100,0**	**100,0**
Liabilities						% of Balance Sheet Total			
Subscribed Capital	15	17	17	17	17	0,0	0,0	0,0	0,0
Share Premium	68.402	74.730	74.730	74.730	74.730	190,1	168,8	113,6	91,7
Retained Earnings & Other Reserves	-29.931	-48.752	-59.231	-40.906	-45.831	-124,0	-133,8	-62,2	-56,2
Shareholders Equity	**38.486**	**25.995**	**15.516**	**33.841**	**28.916**	**66,1**	**35,0**	**51,5**	**35,5**
Minorities	0	0	0	0	0	0,0	0,0	0,0	0,0
Group Equity	**38.486**	**25.995**	**15.516**	**33.841**	**28.916**	**66,1**	**35,0**	**51,5**	**35,5**
Provisions	0	0	0	0	0	0,0	0,0	0,0	0,0
t/o Pension Provisions	0	0	0	0	0	0,0	0,0	0,0	0,0
Other Liabilities	4.657	13.324	28.757	31.916	52.608	33,9	65,0	48,5	64,5
Total Liabilities	**4.657**	**13.324**	**28.757**	**31.916**	**52.608**	**33,9**	**65,0**	**48,5**	**64,5**
t/o Interest Bearing Liabilities	256	256	393	517	845	0,7	0,9	0,8	1,0
t/o Non Interest Bearing Liab. < 1Y	2.610	10.052	15.438	20.288	33.174	25,6	34,9	30,9	40,7
Balance Sheet Total	**43.143**	**39.319**	**44.273**	**65.757**	**81.524**	**100,0**	**100,0**	**100,0**	**100,0**







Key Ratios & Margins

Fiscal Year 31/12 • US GAAP	01	02	03e	04e	05e
Profitability (%)					
Gross Profit/Total Sales	26,5	50,2	68,0	70,0	70,0
EBITDA/Total Sales	-204,9	-115,5	-63,4	-33,8	-10,0
EBITA/Total Sales	-225,9	-131,6	-74,9	-43,2	-16,9
EBIT/Total Sales	-233,4	-136,6	-77,1	-44,9	-17,9
EBT/Total Sales	-198,4	-137,8	-74,4	99,1	-16,3
Adj. Net Profit/Total Sales	-198,4	-141,9	-77,7	99,1	-16,3
Free Cash Flow/Total Sales	-125,8	-112,9	-32,1	127,9	20,2
Cost-Structure (%)					
Material Exp./Total Sales	38,1	27,3	18,5	18,1	16,9
Personnel Exp./Total Sales	97,4	61,6	47,2	39,2	26,3
Marketing Exp./Total Sales	82,7	45,0	38,5	46,8	34,4
Depreciation/Total Sales	21,0	16,0	11,5	9,5	6,9
Amortisation/Total Sales	7,5	5,1	2,1	1,6	1,0
Taxes/EBT	0,0	0,0	0,0	0,0	0,0
Productivity (€)					
No. of Employees (Avg./Year)	70	94	100	110	120
Total Sales/Employee	80.686	97.511	140.770	168.182	252.083
Personnel Exp./Employee	78.571	60.106	66.500	65.909	66.250
EBIT/Employee	-188.343	-133.245	-108.480	-75.455	-45.208
Value Added/Employee	-86.771	-52.564	-22.768	9.091	41.042
Cross Ratios (%)					
Capex/Total Sales	48,4	29,1	9,6	12,4	8,6
Inventories/Total Sales	29,8	12,5	12,5	12,5	12,5
Net Working Capital/Total Sales	6,9	-74,4	-74,4	-74,4	-74,4
Equity Ratio	89,2	66,1	35,0	51,5	35,5
Gearing	0,6	0,7	0,9	0,8	1,0
Net Debt/Equity	-87,6	-95,1	-155,2	-141,0	-186,8
Net Debt/Free Cash Flow	474,1	239,0	533,5	-201,6	-882,7
Return on Equity (net)	-29,1	-50,0	-70,5	54,2	-17,0
Return on Capital Employed	-178,7	-191,2	-131,5	-289,2	-440,2
Goodwill/Equity	0,0	26,6	0,0	0,0	0,0
Goodwill/Balance Sheet Total	0,0	17,6	0,0	0,0	0,0
EBITDA/Goodwill	—	-153,1	—	—	—
EV-Based Valuation (x)					
EV/Tot.Sales	39,2	2,5	2,0	0,9	0,0
EV/EBITDA	-19,1	-2,2	-3,1	-2,6	-0,5
EV/EBITA	-17,3	-1,9	-2,6	-2,1	-0,3
EV/EBIT	-16,8	-1,8	-2,6	-2,0	-0,3
EV/Free Cash Flow	-31,1	-2,2	-6,2	0,7	0,2
EV/Capital Employed	30,0	3,5	3,4	5,7	1,2
Calc. of Capital Invested (€ '000)					
Total Fixed Assets	6.193	11.105	14.841	11.000	16.006
Accumulated Depreciation of TFA	795	2.266	3.887	5.637	7.737
Net Working Capital (NWC)	389	-6.821	-10.476	-13.767	-22.511
Capital Employed (CE)	**7.377**	**6.550**	**8.253**	**2.870**	**1.232**
Net Debt (+) / Cash (-)	-33.695	-24.727	-24.077	-47.720	-54.010
Avg. Market Cap.	244.372	52.315	52.315	52.315	52.315
Avg. Net Debt (+) / Cash (-)	-23.151	-29.211	-24.402	-35.898	-50.865
Other Items	0	0	0	0	0
Enterprise Value (EV)	**221.221**	**23.104**	**27.913**	**16.417**	**1.450**

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