



aap Implantate AG

**Company Report**  
**Listing** **Prospectus**  
(Nonbinding Translation)

# Listing Prospectus/ Company Report

for the admission of

**Euro 3,800,000.00**

**3,800,000 unit bearer shares**

each unit share conveying a current notional proportional entitlement in the registered capital of Euro 1.00

and conveying full dividend rights for the financial year 1999,

i.e. as of January 1, 1999,

and numbered from 0 000 001 - 3 800 000

– Securities Code Number: 506 660 –

of

**aap Implantate AG, Berlin**

to the Geregelter Markt (Second Trading Segment) and

Admission to Trading on the Neuer Markt of the Frankfurter Wertpapierbörse

(FWB Frankfurt Stock Exchange)

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## Three-Year Overview (IAS basis)<sup>1</sup>

	Pro-forma Group 1996 in DM thousand	Pro-forma Group 1997 in DM thousand	Group 1998 in DM thousand	Change 1998 from 1997 in %
<b>Selected data from the income statement</b>				
Sales revenues	7,956	8,338	10,527	26.3
Direct materials costs	1,526	1,871	3,090	65.2
Personnel expenses	3,479	3,661	5,615	53.4
Depreciation on fixed assets	635	487	704	44.6
Other operating expenses	2,414	2,905	4,102	41.2
Result from ordinary activities	442	587	-281	-147.8
Net profit for the year	420	538	16	-97.0
<b>Selected data from the balance sheet</b>				
Fixed assets	1,303	3,239	5,045	55.7
Current assets	7,953	8,359	12,373	48.0
Equity	431	2,187	7,003	220.2
Provisions	344	622	1,348	116.7
Liabilities	8,531	8,879	8,909	0.3
Balance sheet total	9,307	11,689	17,783	52.1
Equity ratio in %	4.6	18.7	39.4	110.6
Debt ratio in %	95.4	81.3	60.6	-25.5
<b>Employees</b>				
Average in year	48	48	82	70.8

<sup>1</sup> Summary comment on the three-year overview commences on page 67

Before deciding to buy shares, prospective investors should read and consider carefully all the specific investment considerations described below in conjunction with the other information presented in this Listing Prospectus/Company Report (hereafter also referred to as "Prospectus").

## Market Conditions and Competitors

*aap* Implantate AG (hereafter also referred to as "*aap*", "*aap* AG" and "the Company") operates as a "one-stop" or full-range supplier in the biotechnology field, developing and manufacturing engineered products for the treatment of bone fractures and damaged and diseased joints in the human organism. In its field, the Company's primary competition is with the industry's global players such as Synthes, Howmedica, Johnson & Johnson, Aesculap, Waldemar Link and Zimmer. Its competitors' products are frequently of extremely high caliber but often of only limited comparability in terms of their functionality. According to the Company this gives several of *aap*'s products advantages over their competitor products. However, the possibility cannot be excluded that competitors may use their potentially greater financial and human resources or strategic cooperations with other technology developers to bring new products to market which offer equivalent or even superior performance and flexibility to *aap*'s products. It is always possible that the companies named above – or others – could integrate elements of the functionality of *aap*'s products into their own products and thereby reduce the Company's potential for adding value.

The entire market is subject to rapid changes in technologies, alliances and other market forces. This inevitably entails enhanced entrepreneurial risk. At the same time, the global nature of the biotechnology industry per se harbors business risks. Some competitors have established distribution channels and considerable financial strength. These companies are in a position to massively expand their research and development and sales efforts. One possibility is that another successful niche player could attempt to win market shares at *aap*'s expense through, for instance, forcing the pace of development and marketing of a new product on the market. A relatively

small company such as *aap* will inevitably be increasingly exposed to global competition in the future. The risk cannot be excluded that the successful marketing of competing products or the development of new products could result in a loss of *aap*'s market share and a reduction its profits.

The existing competition in the industry has already produced a string of alliances and corporate acquisitions in recent years. Further concentration cannot be ruled out.

The concentration of *aap*'s sales activities on the German market in the past has restricted the Company's growth. The German market is currently characterized by a low rate of growth (3.5%). Additionally, the government's health care reform program has sharply reduced the sector's appetite for investing in new tools and equipment. The Company's objective of expanding into the US and Asian markets is intended to counter these weaknesses.

The surgical products market is typified by a degree of sluggishness as far as product innovation is concerned. The Company's experience is that the medical staff responsible for the selection of implants are frequently resistant to using unrecognized products. This hesitancy manifests itself firstly in a long product life cycle (20-25 years) and secondly in the need for extensive customer education if product innovations are to be adopted. This necessary persuasion effort is greater for young companies such as *aap* than for reputed manufacturers who can point to a long product history. Although the Company is confident that the high quality of its products and the positive results experienced from their use will help to overcome these obstacles, it is always possible that this potential outcome may not materialize.

## Protection of Intellectual Property Rights

*aap*'s commercial success stands and falls with the technical competitiveness of the products manufactured by the Company. It follows that the protection of its intellectual property rights is of central importance to *aap*, and it aims to achieve this primarily through con-

fideliarity agreements with staff and outside parties as well as by other means, including to a limited extent through the statutory protection afforded to trade names, origination rights and commercial secrets. To this end, the Company already holds several patents and also intends to make further use of patent protection in the future to the extent possible. In spite of the Company's efforts to protect its intellectual property rights, unauthorized third parties may attempt to copy elements of its products or obtain and utilize information which *aap* regards as its intellectual property. The unapproved use of the Company's intellectual property is difficult to monitor and *aap* will not always be in a position to establish the extent and nature of abuse. Another factor is that commercial confidentiality and copyright laws only offer limited protection. No guarantee can be offered that the measures employed by *aap* to protect its origination rights will be appropriate to the task. Nor can any guarantee be provided that the Company's confidentiality agreements with employees, consultants and others involved in product development will not be infringed, that *aap* will receive commensurate compensation in the event of a breach, or that *aap's* commercial secrets will not become known by other routes or independently developed by its competitors. It also open to question whether *aap's* efforts to protect its own industrial property rights through these means can successfully prevent the development and design of products and technologies which are similar in effect to or which compete with *aap's* products.

To the best of its knowledge, the Company does not infringe any patent or industrial property rights. Nevertheless, the possibility cannot be excluded that third parties might take action against the Company claiming infringement of industrial property rights. The predictable consequences of such an infringement action, whether justified or not, would be the expenditure of considerable time and money on defending the action, and the tying up of substantial management attention and resources. This could potentially result in delivery delays or, if the case were lost, an obligation on *aap* to pay user fees or enter into licensing agreements. These

copyright fees or licensing agreements might only be available on unacceptable terms. It follows that an action against the Company for infringement of industrial property rights, whether it were to succeed or fail, could significantly impair the Company's turnover, financial position and profitability.

### Fluctuation of quarterly Results

The Company's total expenditure is fixed in advance and is partly based on expectations of its future sales revenues. This means that the sales and profits of a specific quarter will generally be dependent on the volume and time sequence of the order intake, the fulfillment of the orders in the same fiscal quarter, and the - unpredictable - timing of the customer's product acceptance. It is possible that *aap* will not always be in a position to adjust its expenditures in time to compensate for unexpected falls in turnover. It also follows that every significant fall in the demand for the Company's products below expectations could have pronounced negative effects on the Company's turnover, financial position and profitability. At the same time, the Company expects its operating expenses to increase, most importantly due to the continuing need to finance the scale expansion of its research and development projects. To the extent that this expenditure is incurred in advance of higher sales revenues or that an expansion of sales does not ensue, this will damage *aap's* turnover, financial position and profitability.

The Company thinks it possible that its quarterly results will be subject to substantial fluctuations in the future. The possible causes of this volatility include:

- the speed of growth of the market for *aap's* products,
- the market acceptance and demand for new and improved *aap* products,
- the wide range of distribution channels and prices and the mix of the products sold
- changes in the pricing policy of the Company's competitors
- *aap's* ability to recruit and retain personnel in key positions
- *aap's* ability to avoid or limit product quality problems

- changes in the level of operating expenses,
- the volume and timing of incoming orders and general economic conditions.

The upshot, in the Company's view, is that inter-period comparisons of its operating results are of only limited value and should not be taken as indicative of its future profits. Rather it is probable that, for the reasons stated, in some future quarters the Company's results will turn out to be lower than market analysts and investors had expected. In this event, it is possible that the Company's share price will be significantly impacted.

### Dependence on qualified Personnel

*aap's* future success in achieving its business objectives will crucially depend on its ability to recruit and permanently retain highly qualified and skilled staff, especially in the areas of management, customer support, marketing and sales, and research and development. A balanced staffing structure within the R&D function is especially important to *aap* as a dynamic, innovation-centered company. But skilled people are in short supply throughout the sector and turnover rates are consequently high in some specialisms. The potential poaching of some of the employees engaged in the areas mentioned could do sustained damage to the Company's effectiveness.

The executive directors, Uwe Ahrens, Bruke Seyoum Alemu and Joachim Staub, and the production manager Bernhard Gottwald are crucial factors in the Company's success due to their personal reputations and relationships in the industry. Although this permits a degree of diversification and sharing of responsibilities, the risk cannot be excluded that the departure of one or more of these individuals could have a sustained negative impact on the business.

### Influence of existing Shareholders and Managing Board Members, Concentration of Share Ownership, Future Sale of Shares

After the capital increase and associated share placement, approximately 40% of the Company's total registered

capital will be held by unconstrained shareholders. Mr Uwe Ahrens, who holds around 46% of the Company's share capital (partly direct and partly through family members), is a unique personality and leadership figure within the Company. He has been the source of vital stimulus to *aap's* growth and will no doubt be so again.

The concentration of share ownership puts Uwe Ahrens in the position to crucially influence or at least control the outcome of important business decisions which require the approval of shareholders, without regard to the way that other shareholders vote.

Once the market protection agreement expires, Uwe Ahrens will be free to sell his shares. This could have a considerable negative impact on the price of the Company's shares.

### Managing Growth

*aap's* historic and projected future growth places significant demands on the Company in terms of its ability to integrate new employees, and requires organizational structures designed specifically to handle this growth. This expansion is not intended to be limited to Germany, rather the Company plans to break into the US market and subsequently the markets of Asia. Opening up these markets is causing an increase in personnel costs, specifically the costs of employing additional sales staff. The Company's plans show the number of people employed in marketing and distribution increasing sharply in the next few years. The Company has not yet completely succeeded in adapting its organizational structure to the rapid growth of the past. However, the necessary measures to create the requisite staff and technical structures, particularly in respect of accounting, planning and controlling, are in the course of implementation. These should improve the Company's organization and information structures and allow it adjust to future growth and its new corporate structure.

### Exchange Rate Fluctuations

The Company invoices most of its sales in deutschmarks ("DM") at present and aims to move in future to billing in euros ("€"). However, some of its export sales are

occasionally billed in the relevant foreign currency. Fluctuations in the relevant exchange rates, specifically the DM/US\$ and the € /US\$ rates, can accordingly have an impact on its turnover and financial and profit positions, especially its operating margins, which could generate either currency gains or currency losses. It remains to be seen whether the exchange rate hedging measures put in place by the Company will be successful in practice so that exchange rate fluctuations do not impair the Company's financial situation and profitability.

### Taxation

An external tax audit of the Company is currently in progress covering the years 1994 to 1997. There are differences of opinion over the level of the tax liability arising, as well as over the following specific issues:

#### - Interference screw

A complaint has been made that the Company assessed itself for tax on this product, the interference screw, at the privileged rate of 7% which applies to replacement body parts and not at the standard rate for screws of 14% or 15%; the tax inspectors are basing their imputation on a reference to the tariff numbers issued by the German customs office which does not exempt screws in general from VAT liability.

The customs office has been asked to make a definitive ruling on this issue to finally settle the facts of the case. The Company has already made a provision in its 1998 financial statements to cover any eventual back VAT liability.

#### - Tax recognition of the Company's conversion from limited partnership to PLC status

As far as the recognition for tax purposes of the Company's conversion from a limited partnership (GmbH & Co. KG) to a stock corporation (Aktiengesellschaft) is concerned, it is still too early to say whether the tax inspectors will finally accept the tax procedures followed by the Company to date.

The Company's tax advisers cannot currently exclude the risk that the conversion could ultimately generate a corporation tax liability. To cover this latent risk, the Company has made a provision in its 1998 financial statements for a potential back corporation tax liability.

Even allowing for the differences of interpretation described above, the Company believes that the tax returns prepared and submitted together with its tax advisers have been complete and correct. It does not expect the current inspection or any future external tax audits to produce any significant changes to tax assessments which could result in payment of tax arrears. Nevertheless, it is by definition possible that differing perceptions of facts and circumstances by the tax authorities could result in subsequent demands from the tax authorities for payment of back-tax which could significantly impact on the Company's profitability.

To minimize the tax risk arising from the current external audit as far as the Company's future shareholders are concerned, *aap*'s existing shareholders Uwe Ahrens and bmp AG have issued an indemnification declaration to the effect that they will indemnify *aap* against future back-tax claims arising from the external audit covering the years 1994-97 to the extent that the demand exceeds the provisions totaling DM 250,000.00 included in the 1998 accounts; the result is that any claims will have no impact on *aap*'s results from 1999 on.

### Year 2000

Many installed computer systems and software products are coded to permit the entry of two-digit date-field values only. Starting from the year 2000, these systems will need to be reprogrammed to accept four-digit date entries in order to distinguish the date values of the 21st century from those of the 20<sup>th</sup>. This means that in less than a year, many companies will need to upgrade the computer systems and/or software products they use to make them "year-2000-proof." The Company is currently reviewing the systems it uses to ensure their year-2000 compliance. However, no guarantee can be provided that

*aap*'s systems do not contain hidden date-function faults which could result in considerable cost expense for the Company. The Company expects its key networks and systems to be year-2000 compatible before December 31, 1999; however, it is not currently possible to estimate the eventual costs of checking and adapting the software. In the event that the Company, a significant supplier or a customer fails to convert their software in time, this could have a sustained negative impact on *aap*'s profitability.

#### Dependence on Products qualifying for Reimbursement by the Health Insurance Funds

As a manufacturer of biomedical technology, *aap* is especially dependent on the health insurance funds reimbursing the use of its products. Health insurance providers and comparable organizations are increasingly planning and introducing restrictions on the costs they will refund and the medical equipment and interventions they will finance. Restrictions of this kind on the assumption of costs may constrain the marketing of medical equipment and instruments. Additionally, political decisions to reduce the tariffs for the providers of medical services such as hospitals in the state-regulated sectors of the health service (services to the over-65s and poor people in the US case) may cause these institutions to tighten their procurement policies.

In the event that legislative measures cause the reimbursement situation to deteriorate further, this could have a negative impact on the turnover, financial situation and profitability of the Company.

#### Risks of Internationalization

The Company intends to expand its marketing operations abroad, especially in the USA, in order to gain better access to foreign customers and also improve the selling of its products abroad. One central component of the Company's business strategy is to systematically build on its existing competitive advantages within the framework of its internationalization drive. However,

the particular risk of moving into foreign markets is that sales are always low at first even if marketing and investment activities are on a sufficiently large scale.

This risk is further increased - in the USA at least - by what is known as "transatlantic mistrust." This term expresses the doubts many Americans feel over the seriousness and long-termism of European companies' commitment to the US market.

Given this situation, negative effects on the Company's turnover, financial strength and profitability cannot be ruled out.

The Company is additionally exposed to the standard risks which always attach to doing business internationally. These include most importantly the general economic framework conditions prevailing in the foreign country concerned, the overlaps between different tax structures, managing an organization across different legal jurisdictions, unexpected changes in regulatory requirements, and the need to comply with a wide range of foreign laws and regulations. Other risks which can go hand in hand with international operations potentially include the need to obtain import and export licenses, dual-use problems, trade restrictions and changes in tariffs and freight charges. Naturally, these framework conditions could also have a deleterious impact on the Company's financial position and profitability.

#### Lack of an existing Market, Fixing of Selling Price, Volatility of Market Price

Before the public offering, there was no public market for the Company's shares. The selling price will be fixed by DG BANK Deutsche Genossenschaftsbank in agreement with the Company using the order book created during the bookbuilding process. For this reason it is not automatically the case that the selling price of the shares will correspond to the price at which the shares will be traded on the Neuer Markt of the Frankfurt Stock Exchange subsequent to the offering, or that active trading in the shares will result and continue

after the offering. The number of free float shares, changes in the operating results of the Company and its competitors, and changes in the general business environment in the industry, economy or financial markets may cause substantial fluctuations in the price of the shares. In general, securities markets have experienced considerable fluctuations in price and turnover volumes in the past. This is particularly true of the Neuer Markt of the Frankfurt Stock Exchange, on which the Company's shares are to be traded after it goes public. Such fluctuations may have positive or negative effects on the share price in future, regardless of the operating result, the financial situation or the profitability of the Company.

#### Research and Development, Product Licensing

The Company's future success will depend especially on its ability to continue to rapidly develop and successfully market innovative medical technology products.

Before biomedical engineered products can be launched on the market, they generally require approval by a licensing authority. This is especially true of the official license situation in the USA and Japan.

If a product license is refused or subsequently revoked in spite of the R&D costs and other upfront investment the Company has made, this could have a negative impact on the Company's financial situation and profitability.

#### Use of the Offering Proceeds

The Company has not yet reached specific decisions on the purposes for which it will use the net proceeds from the sale of the shares described in this Prospectus. However, the Company intends to use the net offering proceeds to finance acquisitions with the objective of expanding its technical resources and meeting the needs posed by new technologies, to finance sales and marketing initiatives to achieve growth in its new markets, and to support new products. To ensure sufficient flexibility,

the Managing Board will have broad discretion over the deployment of the net issue proceeds. A misjudgment on their part could have a negative influence on the Company's financial position and profitability.

#### Dependence on Suppliers and Manufacturers

As part of its strategy of offering its customers a one-stop procurement source, the Company buys in a range of articles such as tools and half-finished "blanks" from several outside suppliers and manufacturers with whom it has negotiated call-off supply contracts. Although in the Company's view the potential dropping out of one or more suppliers would have no significant impact on its ability to complete orders, the possibility cannot be excluded that such an eventuality would have a negative effect on its product pricing and delivery times and therefore also on the Company's ability to compete.

#### Dependence on existing Business Relationships

The Company's success is also dependent on its continuing ability to sustain, foster and develop existing business relationships. The two most important factors in this are firstly product quality and secondly customer contacts. The second factor crucially depends on the skills of the Company's sales personnel and Managing Board. The Company is determined to continue to foster these contacts in the future; if it failed to do so, this could have an impact on the Company's results.

#### Demand-side Concentration Trends

The Company has identified increasing concentration on the customer side, especially in Germany, which operates through clinics and hospitals banding together to form joint purchasing associations. This concentration on the purchasing front is tending to intensify price competition and generate increasing demands for tighter delivery times and full product assortments. Although *aap* is already a full-range supplier the risk cannot be excluded that these factors could have an impact on the Company's results.

### Pricing Policy

The Company's products serve the higher-price segment of the biotechnology and surgical engineering markets. The Company can only maintain these prices in the marketplace provided it offers technologically and qualitatively high-grade or superior products. So far *aap* has been able to meet both these requirements thanks to its comprehensive quality control systems and continuous, customer-led research and development. In the event that competitors were to develop qualitatively or technologically superior products, this could impair the competitive position of the Company.

### Potential Product Liability Risk

The Company has product liability insurance in place which provides cover of DM 5 million per claim and a maximum of DM 20 million per year for personal injury and/or property damage. So far no claims have arisen. However, in a specific instance the insurance cover could prove to be too little.

Although according to the Company there have been no claims to date, it is impossible to state with certainty that the warranty provisions set aside for this purpose would be sufficient to meet a specific claim. It follows that the Company's profitability could be substantially impaired if it were found liable in a specific case.

### Debtor default Risk

The Company currently permits most of its customers generous payment periods without collateral security. This is also true of foreign sales. To this extent its sales to foreign agents or dealers are effectively equivalent to sale-or-return business. These sales therefore carry the enhanced latent risk that the receivables reported from the date of completion of the transaction are not secured by the customers and there is therefore an increased potential default risk. In the event that this bad debt risk were realized under the Company's currently only partial system of debtor management, this could

have a negative impact on its financial strength and profitability, although it has to be said that the Company has only needed to write-off one bad debt so far in its history. This involved a sum of DM 82,000.00 on cumulative sales to date of DM 60 million. This works out at a default rate of 0.14%. To limit this risk, Uwe Ahrens and bmp AG have issued an indemnification declaration in favor of the Company which is worded as follows:

"Uwe Ahrens and bmp AG hereby indemnify *aap* against debtor defaults on the part of foreign agents or dealers occurring after January 1, 1999, which relate to accounts receivable reported in the balance sheet at December 31, 1998 and which exceed the value of the bad and dubious debt provisions reported in the balance sheet at December 31, 1998, with the effect that the earnings of *aap* AG will not be affected to this extent from 1999 on."

### Machinery Stock/Capacity Utilization

Because of the fact that part of the Company's machinery resource is elderly and some of the machines concerned are working at the upper limits of their loading capability, the Company intends to achieve the capacity it needs through new acquisitions. It is standard for new machines to need two to three months running in time before they can deliver their target production outputs. In the light of this situation, the risk of short-lived capacity bottlenecks cannot be excluded in the future which in their turn could have a negative impact on the Company's finances and profitability.

### Product Costing

At the time of the Company's IPO, its costings database for certain products has not been fully updated. Specifically, some of the economic aspects of its so-called C products have not been updated; only 50% of its B products (accounting for around 15% of group turnover) are completely up to date. Only the A products are accurately costed. To remedy this situation the Company has bought in a new management accounting software

package. This continuously updates purchasing and manufacturing costs so that process-oriented product costing will become possible in the future. Nevertheless, for the time being at least there is still a risk that the current situation will result in a drain on profits.

### Reliability of Opinions and Forecasts

The opinions and forecasts reproduced in this Prospectus are exclusively the opinions and forecasts of the Company and its management. Opinions and forecasts are statements which use terms and expressions such as "expect", "believe", "assume", "are of the opinion" and similar formulations. They reflect the current view of the Company's management with regard to possible future developments which are however uncertain in their outcome and therefore subject to risk. A number of factors can produce a significant variance between the predicted situation and the circumstances which actually transpire. Neither its management nor the Company guarantees the correctness of the opinions and forecasts reproduced in this prospectus.

The Neuer Markt is designed to provide access to the capital market particularly for innovative, fast-growing, small to medium-sized companies (referred to as "issuers" in this section). This officially recognized and supervised trading segment of the Frankfurter Wertpapierbörse (FWB Frankfurt Stock Exchange) has been operating since March 10, 1997.

The Neuer Markt is targeted at private and institutional investors who are willing to take risks.

All trading of shares listed on the Neuer Markt takes place exclusively at the FWB Frankfurt Stock Exchange. Neuer Markt shares are traded through open outcry on the floor of the FWB Frankfurt Stock Exchange, but also through the XETRA electronic trading system. The Neuer Markt's trading model combines a central order book maintained by a private broker (ledger broker) who establishes the price, with "Betreuer" or "designated sponsors" who provide liquidity when requests cannot be met from the order book. The designated sponsors act as market makers during the trading sessions, i.e. they quote ask and bid prices on request. Provided a quotation request has been submitted to that effect, shares can be traded on the Neuer Markt throughout the trading sessions subject to continuously quoted prices (variable price trading). The minimum unit quantity for variable-price trading of Neuer Markt stocks has been set at 1 share since April 1, 1998. In addition, it is standard practice to fix a daily published price for every Neuer Markt share at a specified time each trading day. Transactions through the Neuer Markt are settled on the second business day after their conclusion.

In addition to satisfying the admission requirements for the "Geregelter Markt" (Second Trading Segment), an issuer which wishes its shares to be admitted for trading on the Neuer Markt must in all cases also meet the following additional admission requirements:

- Minimum free float after listing should be 20% and preferably 25%;
- The initial offering must be for ordinary shares (common stock);

- Annual financial statements must be prepared in German and English complying with IAS (International Accounting Standards) or US GAAP (US Generally Accepted Accounting Principles);
- At least 50% of the placement must derive from a capital increase;
- The existing shareholders should undertake not to dispose of any further shares for at least six months from the date of the shares' admission to the Neuer Markt;
- The issuer must accept the "Übernahmekodex" (German Takeover Code) published by the relevant experts' committee of the Finance Ministry (Börsensachverständigenkommission);
- The anticipated market value of the shares admitted for trading must be at least EUR 5 million.

In addition, the following ongoing requirements apply to issuers:

- Preparation of quarterly reports in German and English;
- Publication of annual financial statements no later than three months, and publication of quarterly reports no later than two months after the relevant closing date;
- Publication of an annual corporate action calendar with all relevant dates;
- Presentations to analysts at least once a year;
- Publication of changes in the shareholdings of members of executive bodies, with separate disclosures for the Managing and Supervisory Boards, at least once a year;
- Appointment of at least two permanent designated sponsors.

Designated sponsors ("Betreuer") are either companies authorized to trade on the Frankfurter Wertpapierbörse or dealers who function as market makers during trading sessions. The duties of designated sponsors include:

- Continuous provision of firm bid and ask prices;
- Immediate execution of customer orders;
- Limitation of the bid/ask differential (spread) to a maximum of 5%;

- At least 50% of requests for the share by the ledger broker to a Betreuer must result in a bid/ask limit response;
- Regular analysis of the issuer from a capital market viewpoint;
- Advice to the issuer to ensure ad hoc publicity requirements are met and to provide continuous information coverage for its investors.

## Responsibility for the Content of this Listing Prospectus/Company Report

*aap* and the underwriting banks assume liability for the contents of this Listing Prospectus/Company Report in relation to Articles 77 and Article 45 ff. of the Börsengesetz (German stock exchange act), and herewith state that to the best of their knowledge, the information contained in this Listing Prospectus/Company Report is accurate, and that no material circumstances have been omitted.

## Inspection of Documents

The reports of the Company and source documents cited and drawn upon in this Prospectus are available from/may be inspected at the premises of *aap* Implantate AG, Lorenzweg 5, 12099 Berlin, Germany, and at DG BANK Deutsche Genossenschaftsbank AG, Am Platz der Republik, 60265 Frankfurt am Main, Germany (hereinafter also referred to as "DG BANK") during regular business hours. Future interim reports will also be obtainable from these addresses.

## Subject of this Listing Prospectus/Company Report

The subject of this Prospectus are the 3,800,000 bearer shares of *aap* AG in the form of no-par-value unit shares, each endowing a notional entitlement in the Company's registered capital of EUR 1.00.

The admission of the total quantity of 3,800,000 bearer shares in the form of no-par-value unit shares to the Geregelter Markt (Second Trading Segment) with admission to trading on the Neuer Markt of the Frankfurter Wertpapierbörse (FWB Frankfurt Stock Exchange) was applied for on March 24, 1999; the listing order was issued on April 28, 1999. Trading in the above-mentioned ordinary bearer shares is expected to commence on May 10, 1999.

## The Offering

A banking consortium with DG BANK Deutsche Genossenschaftsbank AG as lead manager, and comprising DG BANK, Bankgesellschaft Berlin AG and Deutsche Apotheker- und Ärztebank eG, has underwritten 966,400 bearer shares from the 1999 capital increase against cash contributions and 397,814 bearer shares contributed for sale from the holdings of the existing shareholders (out of the total 3,800,000 unit shares), and has undertaken to place these shares with a wide spread of investors as part of a public offering in the period between May 4 and May 6, 1999 inclusive (with reservation of the right to curtail the offering period).

Additionally, up to 60,000 bearer shares are subject to a right of preferential subscription by a restricted circle of employees and business associates of *aap*. Any of these shares not taken up on this basis will be included in the main placement.

Furthermore, the selling existing shareholders have granted the banking consortium an option to cover oversubscription by calling on up to a further 140,000 bearer shares (as a greenshoe facility). These additional shares can be placed with investors in the event the original issue is oversubscribed. If the greenshoe shares are not required in the event, then the remaining unit shares will revert to the selling shareholders. This option may be exercised within a period of 30 bank business days from the start of the price determination process.

The said total of up to 1,504,214 ordinary bearer shares will be offered for sale through the bookbuilding process within a price range from EUR 8.50 to EUR 10.00 per bearer share.

The final placement price at which all the bearer shares will be settled is expected to be fixed on May 7, 1999 by means of the order book created during the bookbuilding process and is scheduled to be officially published in the Börsen-Zeitung on May 8, 1999.

Investors are expected to be able to ascertain the number of shares allotted to them starting on May 10, 1999 at the financial institution managing their securities accounts.

Purchasers will probably be required to pay the purchase price for the total of up to 1,504,214 unit shares plus securities commission on May 11, 1999.

**DG BANK is empowered to perform surplus allocations or to take other measures as part of the allocation of the up to 1,504,214 bearer shares to be placed in order to stabilize the market price or to maintain this price at a level which it would not achieve otherwise. Such stabilization measures may be discontinued at any time.**

#### Net Offering Proceeds, Issuing Costs

The net offering proceeds from the placement of the total of up to 1,504,214 bearer shares consist of the placement price to be paid per bearer share multiplied by the number of shares placed, less the issuing and placement costs. The issuing and placement costs are anticipated to amount to between approximately Euro 1.2 million and Euro 1.4 million, including the total remuneration of the underwriting banks of between approximately Euro 0.7 million and Euro 0.86 million. The net offering proceeds are expected to amount to between approximately Euro 10.4 million and Euro 13.6 million.

The net proceeds of the placement of the 966,400 bearer shares arising from the capital increase against cash contributions in 1999 will accrue to the Company and will be used primarily to finance its continuing internal and external growth. The Company will bear the costs of this placement.

The net proceeds of the placement of the up to 537,814 bearer shares contributed from the holdings of the selling shareholders will accrue to the selling shareholders. The selling shareholders will bear the costs of this placement.

#### Securities Code Number

Securities code number: 506 660  
ISIN code: DE 000 506 660 9

The following section does not claim to present a comprehensive list of all tax considerations which could be of relevance in the acquisition of shares. The information provided is based on the tax regulations still effective in the Federal Republic of Germany at the time of preparation of this Prospectus, which by their nature are subject to change. These notes cover only the tax treatment of dividends, profits resulting from disposals, and gifts and inheritances. Since it would be impossible to comprehensively discuss all of the related taxation issues, the information presented does not address specific constellations of circumstances which could be of significance to individual purchasers of the shares.

Potential investors are strongly advised to seek the advice of their own tax advisors in the event of doubts about taxation.

#### Taxation of Shareholders with unlimited Tax Liability

##### a) Income and corporation tax

Dividends paid by an Aktiengesellschaft (a public limited company) whose registered place of business is in the Federal Republic of Germany to its shareholders in Germany are subject to income or corporation tax on the gross dividend (cash dividend plus corporation tax imputation credit). In addition, the cash dividend (gross dividend minus corporation tax imputation credit) is subject to an investment income tax of 25%, which can be offset against tax liability as part of the tax assessment process.

Since January 1, 1995, a Solidaritätszuschlag ("solidarity surcharge") has been levied in addition to income or corporation tax and investment income tax; this surcharge currently amounts to 5.5%. The tax levied on dividends is thereby increased to 26.375% (investment income tax plus 5.5% of investment income tax).

As part of the tax assessment procedure, the investment income tax and the solidarity surcharge levied on this tax are offset against the total tax liability. The same applies to the corporation tax that was paid by

the Company and levied on dividends in the corporation tax imputation procedure. This prevents double taxation of the Company's and the shareholder's profits. The result is that dividend income is taxed only at the individual income or corporation tax rate to which the shareholder is subject.

For example, if the Company approves the distribution of a dividend amounting to DM 70.00, the shareholder receives a cash amount of DM 51.54, or the total dividend less the withheld investment income tax of DM 17.50 and the solidarity surcharge on this tax of DM 0.96. The withheld taxes (investment income tax plus solidarity surcharge) amounting to DM 18.46 and DM 30.00 for the corporation tax paid by the Company are credited against the shareholder's individual tax liability. If the shareholder's personal tax liability is greater than the imputation amounts, he/she owes tax; if the reverse situation applies, a tax refund is due.

Persons resident for tax purposes who receive income from capital assets as part of their personal assets, are granted a savers tax allowance and a flat-rate allowance for income-related expenses totaling DM 6,100.00 for single persons (which will reduce to DM 3,100.00 as from January 1, 2000) or DM 12,200.00 for married couples (which will reduce to DM 6,200.00 as from January 1, 2000). The gross dividend (cash dividend plus corporation tax imputation credit) is offset against this allowance. Provided an exemption application is submitted to the financial institution managing the securities account, the gross amount of the dividend is paid out regularly, provided that a sufficient amount of the allowance remains unused.

##### b) Taxation of profits on disposals

Gains from the disposal of shares held as part of the business assets of a shareholder resident in Germany are as a rule subject to taxation.

Gains from the disposal of privately held shares are only subject to income tax under the legislation in force from January 1, 1999 if

- aa) disposal takes place within not more than twelve months of the acquisition of the shares. In this case, the profit from disposal is considered to be the amount by which the disposal price exceeds the acquisition price after deducting the disposal costs. These private disposal gains are subject to a tax-free allowance of DM 1,000.00 per year. Losses from private sale transactions can be offset in full against the private disposal gains that the taxpayer has achieved in the same calendar year. Contrary to the previous practice, losses on private disposals can be offset against the private disposal gains of future years or (subject to quantitative limits) the preceding year if the disposal gains in the current year are insufficient to cancel out the losses;
- bb) if the shareholder has directly or indirectly held an interest of at least 10% in the nominal capital of the company at any time during the last five years. The calculation of the disposal gain is subject to the points made above. Within certain limits, the profit from disposal is not subject to tax.

#### c) Inheritance and gift tax

The acquisition of shares by a living person by way of a gift or as inheritance on account of death is only subject to German inheritance or gift tax if the testator or donor was a resident of Germany pursuant to Section 2 of ErbStG (German Inheritance Tax Law).

For family members and relatives, tax-free allowances in varying amounts are applicable. If the shares are held as business assets, a tax allowance of DM 500,000.00 is granted in the event of inheritance or acquisition by way of anticipated succession.

#### d) Wealth tax

As the situation now stands, wealth tax will not be levied for assessment periods after January 1, 1997 until further notice, because the new legislation required by the German Federal Constitutional Court due to the unconstitutionality of certain provisions of the Wealth Tax Law had not been passed by December 31, 1996.

### Taxation of Shareholders with Limited Tax Liability (non-residents for Tax Purposes)

#### a) Income and corporation tax

Shareholders who are residents of countries other than Germany are subject to a limited tax liability on their income from dividends in Germany, if the beneficiary of the dividend has his/her habitual residence, company management, or registered place of business in Germany. However, the tax liability is considered to have been discharged on payment of investment income tax plus the solidarity surcharge.

This means that the cash dividend is subject to an investment income tax of 25% plus a solidarity surcharge amounting to 5.5% of the investment income tax levied, as is the case with shareholders who are residents of Germany. However, in numerous double taxation agreements, the right of the source state to levy a withholding tax is limited to a ceiling rate or is suspended. If this tax rate is lower than the 25% investment income tax charged in the Federal Republic of Germany plus solidarity surcharge, the non-resident shareholder may claim a reduction in the investment income tax. However, this reduction will only be granted in the form of a refund by the German tax authorities. Applications should be directed to the Federal Office of Finance, Friedhofstrasse 1, 53221 Bonn, Germany.

Shareholders with a limited tax liability are eligible neither for a corporation tax imputation credit, nor for a savers tax allowance.

On the other hand, where the shares belong to the assets of a business establishment or a permanent business facility in the Federal Republic of Germany maintained by the non-resident shareholder, taxes are levied as in the case of a shareholder resident in Germany who holds shares within the assets of a business establishment in Germany. (For more information, please see the section entitled "Taxation of shareholders with unlimited tax liability"). The hitherto applicable reduced corporation tax rate for shareholders with limited tax liability has

been abolished with effect from January 1, 1999 by the tax relief act 1999/2000/2002.

**b) Taxation of profits from disposal**

Gains from the disposal of shares held by a shareholder with limited tax liability are not subject to German income tax, unless

- the shares belong to a business establishment or a permanent business facility in the Federal Republic of Germany, or
- the shareholder has directly or indirectly held an interest of at least 10% in the share capital of a domestic Kapitalgesellschaft (public limited company) at any time during the previous five years, and no exemption based on a putatively applicable double taxation agreement exists.

**c) Inheritance and gift tax**

The acquisition of shares held by shareholders with limited tax liability by way of a lifetime gift or as inheritance on account of death is only subject to German inheritance or gift tax if

- the recipient is a resident of Germany pursuant to Art. 1 paragraph 2 of the ErbStG (German Inheritance Tax Law), or
- at the time of transfer to the recipient, the shares are part of the assets of a business establishment or a permanent business facility in the Federal Republic of Germany belonging to the shareholder, or
- the shareholder, either individually or together with other persons associated with him/her, directly or indirectly holds an interest in the nominal capital of the company amounting to at least 10%.

**d) Wealth tax**

Where applicable at all, wealth tax will not be levied for assessment periods after January 1, 1997 until further notice.

## Formation, Registered Office and Duration of the Company

*aap* Aktiengesellschaft was founded in 1990 under the name of *aap* Ahrens, Ahrens & Partner GmbH & Co. Betriebs KG through a management buy-out from the Johnson & Johnson group of companies, and recorded in the Commercial Register of the District Court of Berlin-Charlottenburg, Germany under No. HRA 23324. The unlimited partner (personal guarantor) in the partnership was *aap* Ahrens, Ahrens & Partner GmbH, domiciled in Berlin and recorded in the Commercial Register of the District Court of Berlin-Charlottenburg, Germany under No. HRB 35951.

A general meeting of shareholders held on August 22, 1997, as documented by notary Hans-Herman Rösch, Berlin, in instrument no. R 454/1997, resolved to change the Company's legal form to a stock corporation. The founders of the stock corporation within the meaning of Article 219 AktG were deemed to be the partners of *aap* Ahrens, Ahrens & Partner GmbH & Co. Betriebs KG (*aap* Ahrens, Ahrens & Partner GmbH) as the unlimited partner and Mr Uwe Ahrens, Mrs Andrea Ahrens and Bernhard Gottwald as limited partners. The formation audit report submitted by Birgit Exter MSc (Econ.), chartered auditor and tax adviser, on August 29, 1997 ended with the following conclusion: "In accordance with the conclusive finding of my professional examination, based on the documents, ledgers and written records and verbal explanations and proofs provided to me, I confirm that the information presented by the company's founders in its formation report is correct and complete. This is specifically the case for the statements made with regard to the assumption of the company's shares, the contributions to its registered capital and the declarations required by Arts. 26, 27 AktG. The value of the assets transferred through the transformation less the liabilities transferred is equal to the nominal value of the shares made available." The Company was entered in the Commercial Register of the District Court of Berlin-Charlottenburg on September 10, 1997 under No. HRB 64083.

The registered seat of the Company is Berlin.

The Company is subject to German law.

The Company has been formed for an unlimited duration.

## Object of the Company

The Company's business object is the development, manufacture and marketing of implants and surgical tools plus the provision of services in the field of precision metalworking and finishing. Within these limits, the Company is entitled to establish or acquire other businesses, to take equity stakes in such companies, to establish branch operations and to take all other measures and engage in all legal transactions which are necessary or conducive to achieving or promoting its business object.

## Dormant Partners and Capitalization

### Dormant Partners Contracts

1) By virtue of contracts signed on June 6 and 18, 1997, the Berlin branch of Deutsche Ausgleichsbank (hereafter referred to as "Dt. A." or "dormant partner I"), acting as trustee for the State of Berlin Innovation Fund, became a dormant equity partner in *aap* Ahrens, Ahrens & Partner GmbH & Co. Betriebs KG, Berlin, through a cash contribution of TDM 500 ("participation"). The exclusive purpose of this contribution was to co-finance the market launch of *aap*'s newly-developed undrilled thigh nail – the Femur BFS system. 39.4% of the money for the contribution came from the European Fund for Regional Development (EFRD) and 60.6% from federal state funds.

This contribution was conditional on consent for a further dormant equity investment also of DM 500 thousand by Deutsche Ausgleichsbank's specialist fund tbg-Technologie-Beteiligungsgesellschaft mbH der Deutschen Ausgleichsbank (hereafter referred to as "tbg" or "dormant partner II"), and the conclusion of a partner's loan agreement between Uwe Ahrens and the Company for DM 300 thousand.

The contract's provisions include the right of *aap* to insist on the conversion of this dormant partnership into a loan at the end of any calendar year.

In payment for its contribution, dormant partner I is paid a guaranteed minimum payment of 3.0% p.a. on the value of its contribution plus 25% of the annual net profit subject to an overall ceiling of 5% p.a. on the value of its contribution.

Dt. A. does not share in potential losses.

The partnership commenced on conclusion of the contract and expires on June 30, 2002. Unless the contract is terminated by one of the parties subject to six months notice, the partnership contract will be extended by one year.

The contract can also be terminated with immediate effect given grave and weighty cause.

In the event that the partnership expires through the passage of time, or is terminated subject to the agreed notice or for exceptional cause, the contribution will be repaid to Dt. A. at par.

2) The above-mentioned partnership came into being by agreements signed on June 6 and July 3, 1997 and *tbg* became dormant partner II through the contribution of DM 500 thousand.

It is a general condition of equity investments of this nature that the beneficiary undertaking must be a "small enterprise" within the meaning of the relevant EU directives, i.e. fewer than 50 employees and turnover of less than DM 10 million or a balance sheet total of less than DM 4 million, plus the Company may not be more than 25% owned by one or more other companies which do not satisfy this definition.

Other conditions needed to be complied with before the contribution could be made, namely a partnership contact with Dt. A., a direct debit authority in favor of *tbg* to ensure collection of the fixed payment when due, the

submission by Uwe Ahrens of a partner's loan contract to the value of DM 300 thousand, and the opening of a special bank account for depositing the contribution.

The Company is also obliged to verify the use it makes of the contribution.

In return, *tbg* is paid a minimum remuneration of 6% on its actual contribution, irrespective of the undertaking's annual profit. It is also paid 6% of the annual net profit as a profit share from the date the contribution is drawn down.

Supplementary contracts signed on August 11 and 17, 1998 amended these terms such that the profit share to be paid on top of the fixed minimum will not exceed a maximum of 5% on the contribution.

In the event that dormant partner II were to have more than one participation in the Company, then it would be paid a maximum of 8% of net profit in aggregate in respect of all the participations, over and above the defined minimum remuneration.

On expiry of the participation term, *tbg* is entitled to demand a one-off payment of 30% of the participation value. In respect of each complete further year beyond the end of the fifth full year of the participation, *tbg* is entitled to demand a payment of 6% of the participation value.

The respective annual profit share payable is to be offset against this payment.

The participation of dormant partner II in the undertaking's losses is excluded.

This partnership is scheduled to expire on December 31, 2007. The Company is also entitled to wholly or partially dissolve the participation of dormant partner II subject to three months notice to either June 30 or December 31 of any year. In this case, prior to the end of the fifth full year of participation, it will have to pay a premium of 30% on top of the value of dormant partner II's contribution.

Additionally, either partner can also terminate the dormant partnership with immediate effect given grave and weighty cause.

The contract additionally specifies extensive monitoring rights for tbg. For instance, the Company has to submit a brief monthly progress report and also report at end-March and end-September every year to tbg and the VDI/VDE Technology Center in Teltow on its business situation and the status of the grant-aided innovation project. These supervision rights are limited to the period prior to *aap*'s stock market listing. Once it has its own quotation, it will be subject to both the statutory reporting regulations and the contractual information requirements imposed by the rules of the Neuer Markt.

Also integral to the contract with tbg are the investment rules defined for the "Participation Capital For Small Technology Enterprises" program of tbg-Technologie-Beteiligungsgesellschaft mbH of Deutsche Ausgleichsbank, in the wording of June 15, 1996.

#### **Partner's loan**

By virtue of a contract signed on January 3, 1996 Uwe Ahrens and *aap* Ahrens, Ahrens & Partner GmbH & Co. Betriebs KG agreed for Uwe Ahrens to make a loan of DM 300 thousand available to the Company for a period of five years. The principal bears interest at 4.5% p.a.

The provision of a partner's loan of the said value was one of the conditions for receiving credit on privileged terms and for the participation of Dt. A. in the Company as a dormant partner.

The payment of the loan amount is tied to the payments from Dt. A. such that disbursements of Dt. A. funds are matched by disbursements of the partner loan in the ratio of 3:1.

#### **Evolution of the Company's capital structure**

At the time of the Company's conversion to a stock corporation on September 10, 1997, its registered capital

stood at DM 800 thousand. Its statutes authorized the Managing Board, with the approval of the Supervisory Board, to increase the Company's registered capital by a total of DM 400 thousand through the issue of new shares.

The Managing Board partially exercised this authority on three occasions, January 14, 1998, May 20, 1998 and August 13, 1998.

The new shares created were issued to the following individuals and bodies:

#### **Capital increase of January 14, 1998**

By virtue of a resolution of the Managing Board on January 14, 1998, the company's capital was increased by DM 100 thousand from DM 800 thousand to DM 900 thousand through an issue of new shares. bmp-Aktiengesellschaft Venture Capital & Network Management, Berlin (hereafter referred to as "bmp AG") was approved for the purpose of assuming the new shares.

The Company's Supervisory Board met on January 15, 1998 and approved the resolution to increase its registered capital. The capital increase was notified to the Berlin-Charlottenburg District Court on February 6, 1998 and recorded in the Commercial Register on February 23, 1998. The existing shareholders had previously declared their intention to waive their right to subscribe to the capital increase on December 22, 1997.

The reciprocal obligations of bmp AG and *aap* AG and of the shareholders of *aap* AG under contract law were agreed in the participation contract signed on December 18, 1998 and subsequently amended on January 13, 1998 and June 10, 1998.

In the participation contract of December 18, 1998, bmp AG undertook to assume 20,000 shares with a par value of DM 5.00 at an issue price of DM 75.00 per share.

The nominal value of the acquired shares (DM 100 thousand) and a down-payment on the share premium of DM 275 thousand, making a total of DM 375 thousand, was payable immediately. The rest of the premium was to be paid by

February 28, 1998 at the latest. The payment of the nominal value and the part-payment of the share premium ahead of the Managing Board's vote for a capital increase are legally problematic. To secure the Company's legal position, the participation contract was therefore amended on January 13, 1998 to make the price payable per share DM 56.25. The total amount of DM 1,125,000.00 consisting of the par value of DM 100,000.00 plus the premium of DM 1,025,000.00 was now payable by February 28, 1998.

As far as the already paid sum of DM 375 thousand was concerned, the contract of January 13, 1998 included the agreement that this sum would be made available to *aap* as an interest-free loan until the capital increase was registered, and then placed into a free reserve. At the same time, bmp irrevocably waived its right to repayment of the loan, subject to the official recording of the capital contribution in the Commercial Register.

By virtue of a contract signed on December 18, 1997 and in addition to acquiring the new shares, bmp AG further undertook to provide the Company with the sum of DM 500 thousand as an interest-free loan by June 30, 1999. This loan is repayable in the event of a contractually-defined exit by bmp from the Company, or by December 31, 2001 at the latest. The two exit scenarios defined are firstly the listing of the Company for trading on a national or foreign exchange, and secondly one or more agreements between bmp AG and a third party involving a binding purchase or other take-over obligation for at least 75% (i.e. 15,000) of bmp AG's shares. This definition excluded the transfer of bmp AG's shares to one of its own affiliates. A transfer of this nature from bmp AG to its 100%-owned subsidiary bmp Life Science AG Venture Capital did in fact subsequently take place with effect from December 11, 1998.

The size of the repayment in the event of the above-mentioned exit scenario is based on the realized exit value. In other words, in the case of the Company's stock market listing, it is the product of multiplying the IPO offering price by the number of the Company's shares

affected. In the case of the purchase or other form of take-over obligation in respect of the bmp shares now effectively held by bmp Life Science AG Venture Capital, it is the product of multiplying the purchase or take-over price of bmp's shares by the total number of shares.

In the event of an exit value below DM 30 million, the loan is repayable in full. If the exit value is between DM 30 million and DM 40 million, an amount of DM 250,000.00 is repayable to bmp, and bmp (i.e. effectively bmp Life Science AG Venture Capital as well) has waived repayment of the remaining DM 250,000.00 on the proviso that it is paid into the reserves. If the exit value is greater than DM 40 million, then no repayment is due providing the sum is paid into a capital reserve.

If a defined exit takes place before June 30, 1999, then the loan must be paid immediately into the capital reserve providing the qualifying conditions for this are satisfied.

If no defined exit takes place before December 31, 2001, then the exit value will be deemed to be the Company's market value.

#### **Capital increase of May 20, 1998**

The Managing Board resolution on May 20, 1998, increased the company's registered capital by DM 20 thousand from DM 900 thousand to DM 920 thousand through the issue of 4,000 bearer shares with a par value of DM 5.00. IBB Beteiligungsgesellschaft mbH, Berlin (hereafter referred to as "IBB" or "IBB GmbH") was approved as the acquirer of the new shares. The existing shareholders waived their right to subscribe to the capital increase.

The capital increase was approved by resolution of the Company's Supervisory Board on May 28 and June 2, 1998 and recorded in the Commercial Register of Berlin-Charlottenburg District Court on June 16, 1998.

The necessary contribution of DM 20 thousand and premium of DM 280 thousand were deposited and credited to the Company on June 9, 1998.

The details of the legal relationships arising from the participation were regulated in the accession contract of May 20, 1998 between IBB Beteiligungsgesellschaft mbH, Berlin and *aap* Implantate AG. The purpose of the contract is stated to be to furnish the Company with the necessary capital to exploit the technologies it possesses. However, its capital underpinning should be in a form which permits its resale through the capital market.

The participation contract is based on the assistance rules for grant aid from the Future Fund of Investitionsbank Berlin, as well as the Promotion Program For Financing Equity Investments In Small Technology Companies of Kreditanstalt für Wiederaufbau ("KfW").

The contract provides for IBB to enjoy extensive notification and supervision rights in addition to the Company's annual general meetings and quarterly reports. These specifically include monthly management accounting analyses, annuals accounts plus one interim account each year on request, reports on the Company's order intake and backlog at each quarter-end, plus six-monthly progress reports on its innovation project.

The Company is also obliged to document the use it makes of the funds for IBB to forward to Kreditanstalt für Wiederaufbau.

The existing shareholders, with the exception of *bmp* AG, have given IBB assurances and guarantees over the current situation of the Company, most importantly its business object, capital ownership structure and the encumbrance of shares. They have accordingly also assumed liability for the correctness of the information provided and for potential damages in the event of its inaccuracy. Their total liability is limited to DM 300,000.00. IBB's entitlements in this respect expire on June 30, 1999.

The contract gives IBB the right to terminate the contract subject to good and sufficient cause. Such exceptional grounds would be specifically constituted by the absence of the agreed conditions for IBB's participation, improper use of IBB's contribution, the subsequent redefinition or

non-continuance of the conditions for its participation, and a potential erosion of the Company's value.

The consequence of such a termination would be to free IBB from its commitment to contribute where this has not yet been paid-in. The clause makes no provision for the eventuality that the payment has already been made.

#### **Capital increase of August 13, 1998**

By virtue of a resolution of the general meeting on August 13, 1998, the company's registered capital was first converted to unit shares and then increased by DM 92,000.00 from DM 920,000.00 to DM 1,012,000.00 through the issue of 18,400 bearer unit shares.

The following were approved as recipients of the shares: Uwe Ahrens (6,133 shares), IBB Beteiligungsgesellschaft mbH, Berlin (3,067 shares), *bmp* AG Venture Capital & Network Management (3,067 shares) and *tbg*-Technologie-Beteiligungsgesellschaft mbH der Deutschen Ausgleichsbank (6,133 shares). The price required for the shares was DM 163.05.

The shareholders of *aap* AG declared their intention to partially waive their right to subscribe to the capital increase.

The Company's Supervisory Board approved the increase of its registered capital on August 13, 1998. The capital increase was notified to the Berlin-Charlottenburg District Court on August 13, 1998 and recorded in the Commercial Register on October 1, 1998.

#### **Capital increase of February 22, 1999**

By virtue of a resolution of the general meeting held on February 22, 1999, the Company's registered capital was first converted to no-par-value unit shares conveying a notional entitlement in the registered capital of EUR 1.00, i.e. was converted from DM 1,012,000.00 to EUR 517,427.38, and then increased by EUR 2,316,172.62 to EUR 2,833,600.00 from corporate funds. The capital increase did not involve the issue of any new shares. At the same time the Managing Board was given discretion

over an authorized capital of EUR 1,416,800.00. This capital increase was notified to the Berlin-Charlottenburg District Court on February 22, 1999 and recorded in the Commercial Register on February 25, 1999. The authority permits the exclusion of subscription in defined circumstances, including the following:

- to eliminate fractions,
- to distribute employee shares,
- to acquire equity interests, and
- to perform capital increases against cash contributions not exceeding 10% of the registered capital.

#### Capital increase of March 22/23, 1999

By virtue of a Managing Board resolution of March 22, 1999, approved by the Supervisory Board on March 23, 1999,

the Company's registered capital was increased by EUR 966,400.00 from EUR 2,833,600.00 to EUR 3,800,000.00 by the issue of 966,400 bearer unit shares, partly using up the existing authorized capital. This capital increase was notified to the Berlin-Charlottenburg District Court on April 19, 1999 and recorded in the Commercial Register on April 21, 1999.

#### Increase of authorized capital on April 19, 1999

A vote of the Company's general meeting on April 19, 1999 replaced the unutilized authorized capital of EUR 450,000.00 with a new authorized capital of EUR 1,900,000.00. The increase of the Company's authorized capital is expected to be registered during the week starting April 19, 1999.

## Major Shareholders

The following shareholders have the following interests in the Company:

	Pre-IPO		Post-IPO (assuming greenshoe is fully taken up)	
	Shares	%	Shares	%
Ahrens family	1,887,984	66.63	1,747,984	46.00
Bernhard Gottwald	191,072	6.74	140,000	3.68
Venture capital companies	649,572	22.92	320,009	8.42
Remaining shareholders	104,972	3.70	87,794	2.31
Free float			1,504,214	39.58
<b>Total</b>	<b>2,833,600</b>	<b>100.00</b>	<b>3,800,000</b>	<b>100.00</b>

The above existing shareholders and the Company have undertaken to Deutsche Börse AG not to directly or indirectly offer or sell any shares in the Company within a period of six months starting from the date on which the Company's shares are first admitted for trading on the Neuer Markt, nor to announce such an offer or sale or to take any other measures amounting in economic terms to such a disposal. In addition, the existing shareholders Uwe Ahrens, Bernhard Gottwald and Andrea

Ahrens have undertaken not to sell any shares into the market without the consent of DG BANK during the period of a further six months.

## Executive Bodies of the Company

According to the statutes of the Company, the **Managing Board** must consist of one or more persons. The Supervisory Board appoints its members, removes them from

office, and determines their number. The Supervisory Board may nominate a chairman of the Managing Board and a deputy chairman. The Supervisory Board may define, in the standing orders for Managing Board members or by resolution, that certain types of business require its own approval.

The Company can be represented in law by one member of the Managing Board if only one is appointed. Where more than one person has been appointed to the Managing Board, the Company is to be represented by two Managing Board members or one Managing Board member acting together with one authorized signatory ("Prokurist"). The Supervisory Board may resolve that one Managing Board member is authorized to represent the Company on his or her own even where several members have been appointed to the Managing Board. It may also authorize Managing Board members individually or collectively, specifically or generally, to transact legally binding business with itself as the representative of third parties. All the Managing Board members are currently authorized to represent the Company with full authority.

The current members of the Managing Board are:

**Mr Uwe Ahrens**

Berlin, MSc in avionics

Year and place of birth:

1953/Brunswick

1975:

Wolfsburg Kolleg; General high school graduation

1968 - 1971:

Volkswagenwerk AG in Wolfsburg;  
apprentice toolmaker

1971 - 1972:

Inspector in research and development department of Volkswagenwerk AG

1973:

Inspector in goods inward department of Volkswagen AG

1974:

Statistics analyst in BMW QA department, Berlin

1976:

Track assembly, Volkswagen AG

1976 - 1977:

Technical University Berlin: Study of physics

1977 - 1984:

Technical University Berlin: Study of engineering  
MSc in avionics

1984 - 1990:

Engineering department at Mecron med. Prod. GmbH:  
Design manager, production manager and authorized signatory

From 1990:

Chief executive and owner of *aap* Ahrens, Ahrens & Partner GmbH & Co. Betriebs KG

From 1997:

Chairman of Managing Board, *aap* Implantate AG

From 1998:

Various non-executive directorships (supervisory board positions)

**Bruke Seyoum Alemu**

Berlin, MSc in nuclear engineering

Year and place of birth:

1965/Addis Abeba

Education:

1984 - 1987:

Technical University Dresden: Study of thermodynamics and fluid mechanics

1987 - 1989:

Technical University Dresden: Study of nuclear engineering,  
MSc in nuclear engineering (with major in reactor physics)

1990 - 1994:

Research post at Technical University Berlin: Institute of  
Energy Engineering  
Continuation study in energy planning and management

Professional career:

From November 1993:

Computer manager at *aap* Ahrens, Ahrens & Partner  
GmbH & Co. Betriebs KG

From November 1996:

Member of senior management team at *aap* Ahrens,  
Ahrens & Partner GmbH & Co. Betriebs KG;  
Information management, organization and controlling

From June 1998:

Authorized signatory and head of information and  
financial management at *aap* Implantate AG

From January 1999:

Managing Board member at *aap* Implantate AG, finance  
director

### **Joachim Staub**

Rodgau, MSc in engineering

Year and place of birth:

1965/Malsch near Karlsruhe

August 1982 - July 1985:

Daimler-Benz AG, Gaggenau  
Apprentice fitter at Carl-Benz-Schule, Gaggenau  
Professional school graduation

August 1985 - February 1987:

Daimler-Benz AG, Gaggenau  
Fitter in prototype and small series production

March 1987 - February 1992:

MSc in engineering from Karlsruhe  
Technical College, major in automation engineering,  
thesis on "Defining guidelines for assembly-centered  
product design using the example of a clutch disk"

August 1989:

Overseas work placement, Kronos Seeger AG, Sao Paolo,  
project engineer

June 1992 - January 1993:

Otto Bechler GmbH, Malsch  
Installing data and communications networks

February 1993:

*aap* Ahrens, Ahrens & Partner GmbH & Co. Betriebs KG,  
Berlin

May 1998:

Manager, sales and marketing

January 1996 - April 1998:

Export sales engineer  
Support, recruitment and training of *aap*'s world-wide  
distribution organizations  
Organization of international fairs and congresses  
Establishment of subsidiary *aap* Implants Inc., Plymouth,  
USA

February 1993 - September 1997:

District sales engineer  
Building up the South-West Germany sales territory

From January 1999:

Managing Board member at *aap* Implantate AG, sales  
and marketing director

The total remuneration for the Managing Board for the  
1998 financial year was approximately DM 267 thousand.  
The sole executive director during this period was Uwe  
Ahrens.

The Managing Board held a total of 1,633,380 unit bearer shares in the Company on the date the admission approval was announced.

In compliance with the statutes of the Company, the **Supervisory Board** consists of six people.

Its members are elected for the period to the end of the general meeting which formally approves the conduct of the business during the fourth year following their taking up office. The year of election does not count in the calculation. Re-election is permitted. Except where the law expressly provides otherwise, votes of the Supervisory Board are decided by a simple majority of those voting. A proportional majority is sufficient for the purpose of elections. In the event of a tied vote, the chairman of the Supervisory Board casts a deciding vote; the same procedure applies for elections. If the chairman of the Supervisory Board does not participate in a vote, his deputy casts the deciding vote.

The Supervisory Board currently comprises the following members:

Mr Lothar Just, Chartered auditor and  
tax consultant, Berlin - Chairman -  
Mr Klaus Kosakowski, MSc (Econ),  
Business consultant, Berlin - Deputy Chairman -  
Mr Dieter Borrmann, MSc (Eng),  
Business consultant, Berlin  
Prof. Dr. Dr. h.c. Horst Cotta,  
Emeritus professor of  
surgery, Heidelberg  
Susanne Ropertz MSc (Econ), Bonn  
Dr. Heinz Helge Schauwecker,  
Professor of surgery and  
senior lecturer, Berlin

The members of the Supervisory Board may be contacted at the Company's business address.

The members of the Supervisory Board currently hold a total of 60,116 shares in the Company on the date the admission approval was announced.

In addition to the reimbursement of their expenses, the members of the Supervisory Board receive a payment each year (which includes VAT where applicable) which is determined by the General Shareholders Meeting.

The Company's **General Shareholders Meeting** must be held at the registered seat of the Company or at the location of a German stock exchange.

Each unit share carries the entitlement to one vote. Except where the law expressly requires a larger majority, General Shareholders Meeting resolutions are decided by a simple majority of those voting. A proportional majority is sufficient for the purpose of elections. Abstentions may not be counted as votes either way.

#### [Financial Year, Official Notices, Paying Agents and Depositories](#)

The **financial year** of the Company is the calendar year.

According to the statutes, the Company's **official notices** are to be published in the Bundesanzeiger (Federal Gazette). In addition, the Company will publish its official notices in a supraregional journal for statutory stock market notices issued by the Frankfurt Stock Exchange. Publication in the Bundesanzeiger is sufficient for the official notice to have legal effect.

The banks currently represented in the issuing consortium and listed later in this Prospectus are the designated **paying agents and depositories**, at whose counters, as applicable, all transactions concerning the shares may be effected.

Additionally, in order to secure attendance at the Company's general shareholders meeting, shares may be deposited with the Company, a German notary or a duly authorized securities clearing and deposit bank. In the event that the shares (which convey an entitlement to dividend payments) are deposited in a clearing system, then the dividends will be paid out in compliance with the rules of the relevant clearing system.

## Appropriation of Profits and Reserves

In determining the Company's annual net profits, the Management and Supervisory Boards may transfer up to half the annual net profit to other revenue reserves. The Boards are additionally empowered to transfer other sums up to one-quarter of the annual net profits to other retained profit reserves provided the said reserves do not (or would not after the endowment) exceed half of the Company's registered capital.

Once the general shareholders meeting confirms the Company's annual accounts, half of the net profit must be transferred to other revenue reserves.

In calculating the portion of the net profit to be allocated to other revenue reserves, the amounts required to be allocated to the statutory reserve and any carried-forward loss must first be deducted.

The appropriation of the attributable profit identified by the approval of the Company's annual accounts is at the disposition of the general shareholders meeting. In determining this, the meeting may also resolve other uses than those provided for in Art. 58 Para. 3 Sentence 1 AktG.

	Pro-forma AG		
	1996	1997	1998
Net profit (HGB basis) in DM thousand	491	545	1,231
Dividend-qualifying shares as at December 31, 1998	202,400	202,400	202,400
Resulting earnings per share in DM	2.43	2.69	6.08 <sup>1)</sup>
Distribution per share in DM	0.00	0.00	0.00

## Auditors

The annual financial statements of *aap* Implantate AG for the years ending December 31, 1998 and 1997 were audited by Dr. Röver & Partner KG Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft, Douglasstrasse 8, 14193 Berlin-Grunewald, and were granted an unqualified audit certificate in both cases.

The consolidated and pro-forma annual financial statements prepared in accordance with International Accounting Standards were also audited by the above-named firm and again granted an unqualified audit confirmation.

The pro-forma financial statements for *aap* Implantate AG for the 1996 financial year were prepared by Steuerberatungsgesellschaft Just, Englerallee 24a, 14195 Berlin.

<sup>1)</sup> Based on total dividend-qualifying shares as at December 31, 1998



of *aap* Implantate AG as at December 31, 1998 prepared in accordance with the German Commercial Code (HGB) and comparative Presentation of the Consolidated and Pro-forma Consolidated Accounts for the 1997 and 1996 Financial Years (HGB)

Balance Sheet of *aap* Implantate AG as at December 31, 1998

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**ASSETS**

	Note	Dec. 31, 1998 DM	Dec. 31, 1997 DM thousand	Dec. 31, 1996 DM thousand
<b>A. Business expansion expenses</b>	4	<b>662,073.00</b>	<b>974</b>	<b>556</b>
<b>B. Fixed assets</b>	4			
I. Intangible assets				
1. Industrial property rights and similar rights and values		398,471.00	13	14
2. Goodwill		1.00	0	0
		<u>398,472.00</u>	<u>13</u>	<u>14</u>
II. Tangible assets				
1. Land and buildings		1,609,182.00	1,625	0
2. Technical plant and machinery		1,239,872.26	284	189
3. Other plant, office systems and outfitting		1,267,920.00	786	567
		<u>4,116,974.26</u>	<u>2,695</u>	<u>756</u>
III. Financial assets				
1. Shares in affiliated companies		0.00	0	35
2. Equity investments		2,000.00	0	0
3. Other lendings		231,288.91	187	171
of which: to shareholders DM 35,000.00 (1997: DM 4 thousand; 1996: DM 0 thousand)				
		<u>233,288.91</u>	<u>187</u>	<u>206</u>
		<b>4,748,735.17</b>	<b>2,895</b>	<b>976</b>
<b>C. Current assets</b>				
I. Inventories				
1. Raw materials and supplies		1,280,425.85	718	604
2. Work in process		1,865,264.21	548	341
3. Finished products and merchandise		6,661,965.40	3,080	2,727
		<u>9,807,655.46</u>	<u>4,346</u>	<u>3,672</u>
II. Receivables and other assets	5			
1. Trade receivables		1,259,689.96	1,120	1,052
2. Due from affiliated companies		822,891.22	45	11
3. Due from shareholders		0.00	0	879
4. Other assets		1,026,942.94	322	357
		<u>3,109,524.12</u>	<u>1,487</u>	<u>2,299</u>
III. Checks, cash in hand, Bundesbank, bank and girobank balances		77,816.78	38	36
		<u>12,994,996.36</u>	<u>5,871</u>	<u>6,007</u>
<b>D. Deferred charges to operation, prepayments</b>	6	<b>169,819.91</b>	<b>80</b>	<b>47</b>
<b>E. Deficit not covered by equity</b>		<b>0.00</b>	<b>0</b>	<b>1,061</b>
		<b>18,575,624.44</b>	<b>9,820</b>	<b>8,647</b>

## EQUITY AND LIABILITIES

	Note	Dec. 31, 1998 DM	Dec. 31, 1997 DM thousand	Dec. 31, 1996 DM thousand
<b>A. Equity</b>	7			
I. Registered capital		1,012,000.00	800	310
II. Capital reserve		4,622,120.00	34	0
III. Revenue reserve				
1. Statutory reserves		81,565.83	28	0
2. Other revenue reserves		508,875.36	0	0
		<u>590,441.19</u>	<u>28</u>	<u>0</u>
IV. Attributable profit		508,875.36	-159	-1,371
V. Deficit not covered by equity		0.00	0	1,061
		<u>6,733,436.55</u>	<u>703</u>	<u>0</u>
<b>B. Special item in respect of fixed-asset investment subsidies</b>		<b>522,867.00</b>	<b>0</b>	<b>0</b>
<b>C. Provisions</b>	8			
1. Provisions for taxes		1,525,801.00	0	0
2. Other provisions		892,000.00	238	115
		<u>2,417,801.00</u>	<u>238</u>	<u>115</u>
<b>D. Liabilities</b>	9			
1. Liabilities to banks		4,809,542.42	5,565	5,402
2. Trade payables		1,669,414.54	1,353	1,079
3. Liabilities to associated companies		20,939.34	23	15
4. Liabilities to shareholders		0.00	0	781
5. Other liabilities				
of which arising from tax:				
DM 210,359.50 (1997: DM 157 thou.; 1996: DM 112 thou.)				
of which arising from social security:				
DM 143,980.78 (1997: DM 229 thou.; 1996: DM 190 thou.)		2,400,929.02	1,937	1,254
		<u>8,900,825.32</u>	<u>8,878</u>	<u>8,531</u>
<b>E. Deferred credits to income, prepayments</b>		<b>694.57</b>	<b>1</b>	<b>1</b>
		<b>18,575,624.44</b>	<b>9,820</b>	<b>8,647</b>

Income Statement of *aap* Implantate AG for the Year to December 31, 1998

	Note	Dec. 31, 1998 DM	Dec. 31, 1997 DM thousand	Dec. 31, 1996 DM thousand
1. Sales revenues	10	11,022,084.41	8,367	7,956
2. Increase in stocks of finished products and work in process		4,900,198.27	558	-42
3. Other capitalized own work		231,582.39	249	417
4. Other operating income		344,515.56	150	132
5. Materials expense				
a) Expenditures on raw materials and supplies and bought-in goods		-2,462,928.09	-1,547	-1,311
b) Expenditures on bought-in services		-577,624.31	-190	-157
		<u>-3,040,552.40</u>	<u>-1,737</u>	<u>-1,468</u>
6. Personnel expenses	11			
a) Wages and salaries		-4,620,122.08	-2,570	-2,706
b) Social security contributions, pension and welfare expenses		-884,134.78	-641	-601
		<u>-5,504,256.86</u>	<u>-3,211</u>	<u>-3,307</u>
7. Depreciation on tangible and intangible fixed assets and on capitalized business expansion expenses		-963,889.73	-543	-565
8. Other operating expenses		-3,963,961.99	-2,901	-2,404
9. Income from lending of financial assets		13,960.00	0	0
10. Other interest and similar income - of which from affiliated companies: DM 3,831.94 (1997: DM 0 thou.; 1996: DM 0 thou.)		11,766.79	15	9
11. Other interest and similar expenses		<u>-454,787.58</u>	<u>-502</u>	<u>-569</u>
<b>12. Profit/loss from ordinary operations</b>		<b>2,596,658.86</b>	<b>445</b>	<b>159</b>
13. Extraordinary income	12	157,937.50	111	336
14. Extraordinary expense		<u>0.00</u>	<u>-7</u>	<u>-1</u>
<b>15. Net extraordinary income/expense</b>		<b>157,937.50</b>	<b>104</b>	<b>335</b>
16. Taxes on income	13	-1,524,248.76	-3	0
17. Other taxes		<u>481.88</u>	<u>-1</u>	<u>-3</u>
<b>18. Net profit for the year</b>		<b>1,230,829.48</b>	<b>545</b>	<b>491</b>
19. Difference arising from change of legal form		-159,512.93	-676	0
20. Allocation to revenue reserves				
a) to the statutory reserve		-53,565.83	-28	0
b) to other revenue reserves		-508,875.36	0	0
		<u>-562,441.19</u>	<u>-28</u>	<u>0</u>
<b>21. Attributable profit/loss</b>		<b>508,875.36</b>	<b>-159</b>	<b>491</b>



Statement of Fixed-Asset Movements of *aap* Implantate AG for the Year to December 31, 1998

	Position at Jan. 1, 1998 DM	Historical acquisition costs		Position at Dec. 31, 1998 DM
		Additions DM	Disposals DM	
<b>A. Business start-up and expansion expenses</b>	1,249,941.84	0.00	0.00	1,249,941.84
<b>B. Fixed assets</b>				
<b>I. Intangible assets</b>				
1. Industrial property rights and similar rights and values	144,585.29	437,234.54	-14,967.47	566,852.36
2. Goodwill	100,000.00	0.00	0.00	100,000.00
	244,585.29	437,234.54	-14,967.47	666,852.36
<b>II. Tangible assets</b>				
1. Land and buildings	1,640,000.00	0.00	0.00	1,640,000.00
2. Technical plant and machinery	4,408,152.27	1,249,112.68	-53,685.00	5,603,579.95
3. Other plant, office systems and outfitting	1,599,770.20	822,871.65	-227,312.43	2,195,329.42
	7,647,922.47	2,071,984.33	-280,997.43	9,438,909.37
<b>III. Financial assets</b>				
1. Shares in affiliated companies	0.00	0.00	0.00	0.00
2. Equity investments	0.00	2,000.00	0.00	2,000.00
3. Other lendings	186,828.91	44,460.00	0.00	231,288.91
	186,828.91	46,460.00	0.00	233,288.91
<b>Total</b>	<b>9,329,278.51</b>	<b>2,555,678.87</b>	<b>-295,964.90</b>	<b>11,588,992.48</b>

Position at Jan. 1, 1998 DM	Cumulative depreciation			Book values	
	Depreciation in year DM	Disposals DM	Position at Dec. 31, 1998 DM	Position at Dec. 31, 1998 DM	Position at Jan. 1, 1998 DM
275,383.52	312,485.32	0.00	587,868.84	662,073.00	974,558.32
131,982.29	51,361.54	-14,962.47	168,381.36	398,471.00	12,603.00
99,999.00	0.00	0.00	99,999.00	1.00	1.00
231,981.29	51,361.54	-14,962.47	268,380.36	398,472.00	12,604.00
15,409.00	15,409.00	0.00	30,818.00	1,609,182.00	1,624,591.00
4,123,737.27	246,676.42	-6,706.00	4,363,707.69	1,239,872.26	284,415.00
813,144.40	337,957.45	-223,692.43	927,409.42	1,267,920.00	786,625.80
4,952,290.67	600,042.87	-230,398.43	5,321,935.11	4,116,974.26	2,695,631.80
0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	2,000.00	0.00
0.00	0.00	0.00	0.00	231,288.91	186,828.91
0.00	0.00	0.00	0.00	233,288.91	186,828.91
<b>5,459,655.48</b>	<b>963,889.73</b>	<b>-245,360.90</b>	<b>6,178,184.31</b>	<b>5,410,808.17</b>	<b>3,869,623.03</b>

## Notes to the financial statements

### (1) General

The financial statements for the year to December 31, 1998 have been prepared in accordance with the requirements of the German Commercial Code (HGB).

The universal requirements defined by Articles 238 to 263 HGB, which applies to all trading enterprises, and the supplementary requirements for incorporated entities imposed by Articles 264 ff. HGB, have been complied with.

The income statement was prepared on the total-cost basis.

The formats of the balance sheet and income statement are in accordance with Articles 266 and 275 HGB.

The Company is the successor, through a change of name and legal form which took effect as from January 1, 1997, to the limited company and partnership *aap* Ahrens, Ahrens & Partner GmbH & Co. Betriebs KG. The balance sheet values applying at December 31, 1996 were carried over. The registered capital is evidenced through undisclosed reserves for which no disclosure was necessary because there was no transfer of assets under civil law. The "difference arising from the change of legal form" was due to the offsetting of the limited partners' loss accounts against the contributions of the shareholders at the time of the Company's transformation; this difference has been carried forward as a residual loss and set against net profit.

### (2) Accounting and valuation principles

Contrary to the previous years' practice, business expansion expenditures during the year under report have not been capitalized.

The balance sheet allowance item created in previous years under the terms of Article 269 HGB is depreciated at the rate of 25% in the subsequent years under the provisions of Article 282 HGB.

Intangible assets were valued at their cost of acquisition less regular depreciation.

Tangible fixed assets have been valued at their cost of acquisition or manufacture, and the value of tangible assets with a limited useful life has been reduced by regular depreciation.

Capitalized own work has been valued at cost of production. The production costs are equivalent to the reported value of finished products.

Non-real-estate fixed assets are depreciated on a straight-line basis subject to the respective minimum standard service life permitted by the tax authorities, with additions in the first half of the year qualifying for the full depreciation rate applying to and additions during the second half of the year qualifying for half the relevant depreciation rate. Low-value assets with a purchase cost of up to DM 800.00 are written off in full in the year of accrual, as provided for by Article 6 (2) of the German income tax act (EStG).

Disposals are taken out of the books at cost of acquisition less cumulative depreciation at the date of retirement.

Financial assets are carried at cost of acquisition or updated book value.

The items included in the inventories heading are valued either at cost of acquisition or manufacture, or the lower of cost or market on the balance sheet date.

Raw materials and supplies were valued at procurement cost, subject to the strict principle of the lower of cost or market defined by Article 253 (3) HGB.

Work in process and stocks of finished products have been valued at cost of manufacture. This measure includes the capitalizable direct costs defined by Article 255 (2) 2 HGB plus appropriate portions of the essential materials and production overheads and fixed asset value erosion due to production, as defined by Article 255 (2) 3 HGB.

Contrary to the previous years' practice, the manufacturing costs also incorporated general administration costs.

To ensure observance with the principle of the lower of cost or market defined by Article 253 (3) HGB, some values were written down to reflect restricted salability.

Receivables and other assets are carried at their nominal value or at their realizable value at the accounting date if lower, as required by Article 253 (3) 2 HGB. General credit risk is accommodated through a global bad debt provision amounting to 3% of the stock of non-specifically-adjusted receivables.

Received investment grant aid is entered on the liabilities side as a "special item in respect of fixed-asset investment subsidies". This is liquidated in the income statement on a straight-line basis reflecting the service life of the subsidized assets.

Provisions have been made to take appropriate account of the foreseeable risks. They have been set at the levels commensurate with prudent commercial judgement.

Outstanding liabilities have been valued at their repayment value. Foreign currency liabilities have been translated at their repayment value at origination or at the selling rate applying on accounting date if higher.

### **(3) Impact of differing accounting and valuation principles on profitability**

The differences in accounting and valuation methods produce the following effects on the Company's earnings:

	DM thousand
Available but not utilized allocation to Article 269 HGB balance sheet allowance	-244
First-time inclusion of overhead administration costs in valuation of finished products and work in process	2,159
Negative impact of income tax on changes in valuation of finished products and work in process (60%)	-1,295
	<b>620</b>

### **Notes to the balance sheet and income statement**

#### **(4) Business and fixed-asset expansion expenses**

The statement of fixed assets movements shows the changes in the capitalized expenditure on business and fixed-asset expansion.

#### **(5) Current assets**

The **receivables and other assets** heading includes a loan repayable in more than one year

Loan to Mr Siewert	DM 14,600.00
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#### **(6) Deferred charges to operation, prepayments**

This heading includes discounts totaling DM 40,262.00.

#### **(7) Equity**

The Company's registered capital was DM 1,012,000.00 at December 31, 1998, divided into 202,400 unit bearer shares.

The Supervisory Board meeting held on January 15, 1998 approved the Managing Board's resolution of January 14, 1998 to undertake a DM 100,000.00 capital increase from authorized capital to a then new total of DM 900,000.00.

This measure was recorded in the Commercial Register on February 23, 1998. The capital increase was implemented through the issue of 20,000 bearer shares with a nominal value of DM 5.00.

Payment for the new shares was received during February 1998, and totaled DM 1,125,000.00 including premium. By agreement, the sum of DM 375,000.00 received as a loan in December 1997 was transferred to the capital reserve following the recording of the capital increase in the Commercial Register.

By virtue of a Managing Board resolution of May 20, 1998, affirmed by the Supervisory Board on May 28 and June 02, 1998, the Company's registered capital was raised to DM 920,000.00 by the issue of a further 4,000 bearer shares with a nominal value of DM 5.00. This measure was recorded in the Commercial Register on June 16, 1998 and the payment in respect of the new shares of DM 280,000.00 including premium was received on June 02, 1998.

A further Managing Board resolution of August 13, 1998, affirmed by the Supervisory Board on August 13, 1998, authorized an increase of the Company's registered capital by DM 92,000.00 to DM 1,012,000.00. This capital increase was implemented through the issue of 18,400 unit bearer shares. This measure was recorded in the Commercial Register on October 01, 1998 and the payment in respect of the new shares of DM 3,000,120.00 (including premium) was received on August 25, 26 and 28, 1998.

The Company's capital reserve evolved as follows over the year:

	<b>DM</b>
Position at 01.01.1998	34,000.00
Capital increase 15.01.1998	1,025,000.00
Deposit 23.02.1998	375,000.00
Capital increase 20.05.1998	280,000.00
Capital increase 13.10.1998	2,908,120.00
<b>Position at 31.12.1998</b>	<b>4,622,120.00</b>

One-twentieth of the annual net profit, after offsetting the brought-forward loss, was allocated to the statutory reserve as required by Article 150 (2) of Germany's stock corporation act (AktG). This accordingly stood at DM 81,565.83 at the end of the year and, taken together with the capital reserve, now exceeds one-tenth of the Company's registered capital.

The Company's statutory reserve evolved as follows over the year:

	<b>DM</b>
Position at 01.01.1998	28,000.00
Allocation from annual profit	53,565.83
<b>Position at 31.12.1998</b>	<b>81,565.83</b>

The table of reserves shows the detailed position.

In compliance with the first sub-sentence of Article 24 (1) 1 of the Company's statutes, the Managing Board and Supervisory Board transferred 50% of the 1998 net profit remaining after the cancellation of the loss-carryover and the allocation to the statutory reserve, to the Company's other revenue reserves.

In their invitation to the Annual General Shareholders Meeting scheduled for February 22, 1999, the Managing Board and Supervisory Board proposed allocating the attributable profit of DM 508,875.36 to the other revenue reserves.

**(8) Provisions**

Other provisions evolved as follows during the year:

	Position at 01.01.1998	(U) (L)	Utilization Liquidation	New allocation	Position at 31.12.1998
Staff holiday entitlements	96,200.00	(U)	-96,200.00	176,000.00	176,000.00
Annual accountancy and audit costs	30,000.00	(U) (L)	-22,171.20 -7,828.80	60,000.00	60,000.00
Bonus obligations	60,000.00	(U) (L)	-33,036.52 -26,963.48	115,000.00	115,000.00
Trade association	25,000.00	(U) (L)	-21,923.25 -3,076.75	25,000.00	25,000.00
Performance-related bonus	25,000.00		0.00	98,000.00	123,000.00
Commission obligations	0.00		0.00	60,000.00	60,000.00
Outstanding invoices	0.00		0.00	43,000.00	43,000.00
Litigation costs and risks	0.00		0.00	20,000.00	20,000.00
Disabled employment equalization levy	1,600.00	(L)	-1,600.00	0.00	0.00
Interest due to dormant shareholders	0.00		0.00	20,000.00	20,000.00
Other risks	0.00		0.00	250,000.00	250,000.00
	<b>237,800.00</b>	<b>(U) (L)</b>	<b>-173,330.97 -39,469.03</b>	<b>867,000.00</b>	<b>892,000.00</b>

**(9) Liabilities**

The table of liabilities shows the residual term of the Company's liabilities broken down by balance sheet headings.

**(10) Sales revenues**

The revenues relate to geographical regions as follows:

	DM thousand
Germany	6,666
Rest of EU	854
Rest of world	3,737
Revenue-deductions (non-operating expense)	-235
	<b>11,022</b>

**(11) Personnel expenses**

Breakdown of the workforce by groups:

Average employee total	80
of which: female	12
male	68
Hourly-paid	49
Salaried	31

**(12) Exceptional income**

The exceptional income heading includes government return-to-work subsidies from the Labor Office, amounting to DM 157,937.50 (1997: DM 110,888.09).

**(13) Taxes on income**

The impact of taxes on the Company's profit from its ordinary operations and net extraordinary income was as follows:

	<b>DM</b>
Profit from ordinary operations	1,436,756.89
Net extraordinary income	87,491.87
<b>Taxes on income</b>	<b>1,524,248.76</b>

**Other information****(14) Managing Board, Supervisory Board**

The sole member of the Company's Managing Board during the year was Dipl.-Ing. Uwe Ahrens (MSc Eng.).

The Company exercises its right under article 286 (4) HGB not to disclose the Managing Board's remuneration.

The Company has granted its Managing Board member Dipl.-Ing. Uwe Ahrens a deferment on paying its entitlement to a purchase price of DM 28,000.00 for the assignment of its shares in Prothos medizinische und Sportprodukte GmbH. Incremental interest of 5% is payable on this amount. The deferment may be revoked subject to three months notice to the year end.

The following were members of the Supervisory Board during the year under report:

**To August 12, 1998:**

Eckardt Manske MSc (Math),  
Berlin (Chairman)

Lothar Just, Berlin,  
chartered auditor and  
tax consultant (Deputy Chairman)  
Dr Heinz Helge Schauwecker, Berlin  
head physician and  
senior lecturer

**From August 13, 1998:**

Lothar Just, Berlin,  
chartered auditor and  
tax consultant (Chairman)  
Klaus Kosakowski,  
MSc (Econ), Berlin (Deputy Chairman)  
Dieter Borrmann,  
MSc (Eng.), Berlin  
Prof. Dr. Dr. h.c. Horst Cotta,  
Heidelberg  
Susanne Ropertz,  
MSc (Econ), Bonn  
Dr. Heinz Helge Schauwecker, Berlin  
head physician and  
senior lecturer

The Supervisory Board received total remuneration of DM 66,000.00 in the year.

Under the terms of an agreement dated April 23, 1998, the Company was co-founder of *aap* Implants Inc. in Plymouth, Massachusetts, USA. The ownership structure of this company is as follows:

<i>aap</i> Implantate AG	80%
Joachim Staub	10%
Wayne R. Knupp	5%
Ellen J. Knupp	5%
	<b>100%</b>

Berlin, January 15, 1999

Management Board

Uwe Ahrens MSc (Eng)

Bruke Seyoum Alemu MSc (Eng)

Joachim Staub MSc (Eng)

Table of liabilities as at December 31, 1998

	Total value 31.12.1998 DM	up to 1 year DM	Repayable in 1 to 5 years DM	Over 5 years DM
Liabilities to banks	4,809,542.42	1,966,312.35	2,413,268.79	429,961.28
Trade payables	1,669,414.54	1,669,414.54	0.00	0.00
Liabilities to associated companies	20,939.34	20,939.34	0.00	0.00
Other liabilities				
- in relation to social security	143,980.78	143,980.78	0.00	0.00
- in relation to taxation	210,359.50	210,359.50	0.00	0.00
- sundry liabilities	2,046,588.74	1,129,639.55	688,949.19	228,000.00
	<b>8,900,825.32</b>	<b>5,140,646.06</b>	<b>3,102,217.98</b>	<b>657,961.28</b>

The Company's liabilities to banks are secured to the value of DM 2,300,000.00 through mortgages and the assignment as security of various machines and receivables.

Table of reserves as at December 31, 1998

	Position at 01.01.1998 DM	Allocation from annual profit DM	Endowment during year DM	Position at 31.12.1998 DM
I. Capital reserve	34,000.00	0.00	4,588,120.00	4,622,120.00
II. Revenue reserves				
1. Statutory reserve	28,000.00	53,565.83	0.00	81,565.83
2. Other revenue reserves	0.00	508,875.36	0.00	508,875.36
	<b>62,000.00</b>	<b>562,441.19</b>	<b>4,588,120.00</b>	<b>5,212,561.19</b>

## The Company

Berlin-based *aap* Implantate AG is one of Germany's leading biomedical implants businesses. It also has a sales base in the USA. *aap*'s principal activity is the production and marketing of endoprosthetic products (which permanently replace damaged joints) and osteo-synthesis products (temporary implants which help the healing of bone fractures).

*aap* develops and produces its products in-house and markets them in Germany through its own field sales force and distribution partners. The Company's field force consists mainly of engineers, whose role is to make sales, provide advice to customers, and also collaborate with clinical specialists to develop new implants. *aap*'s business partners are hospitals and doctors. *aap* also works with specialist dealers both nationally and internationally.

## Information and financial management

### Financial position/Profitability

The Company is able to report highly satisfactory turnover growth in 1998. The net profit on the year was DM 1,231 thousand which was more than double the 1997 result. As a percentage of total operating performance, this works out at 7.7% compared to 5.7% in 1997. The positive trend was even more pronounced at the pre-tax profit level. The 1998 total of DM 2,754 thousand was DM 2,205 thousand higher than the previous year.

However, this marked increase in earnings over the previous year is also partially due to the changes in the valuation methods for the 1998 financial statements and to the adjustment of the inventories valuation to bring it into line with the current costs structure. These methodological changes were implemented in preparation for the Company's proposed stock market listing and the resulting need to adopt international accounting

standards. At the same time however, the 1998 financial statements do not include any capitalization of business expansion expenses, unlike the previous year.

The substantial increase in the asset value of the inventories heading is essentially due to the volume expansion of the stocks of goods held by the Company. This development again reflects preparation for the future expansion of business and is crucial to *aap*'s ability as a full-range supplier to offer short delivery times.

Three capital increases were undertaken in 1998 which have substantially improved the Company's financial position. In the process, the Company's registered capital was increased from DM 800,000.00 to DM 1.012 million, and the share premium added to the capital reserve amounted to DM 3.788 million. We were able to welcome new equity partners to the Company in the form of Investitionsbank Berlin, Technologiebeteiligungs-gesellschaft Berlin and bmp AG Venture Capital & Network Management.

### Information technology

During 1998 the Company installed a new fully integrated management accounting software package which is one of the market-leading, top-quality solutions. This application subsequently allowed the Company to make the necessary preparations for the switch to the euro and to tackle the year-2000 problem.

## Products, markets and sales

### Turnover growth

The evolution of turnover in 1998 was very satisfactory. Following the years of consolidation and the first upturn in 1997 (when turnover increased by 5.2% compared to the market's growth of 3.5%), the Company reaped the rewards in 1998 as turnover increased by 31.7%. The sales total reached DM 11.022 million and although this was DM 800,000.00 below plan, if we

allow for the problems with the FDA (the American drug licensing authority) which were beyond the Company's control and which prevented the delivery of around DM 600,000.00 worth of goods to the US market, then the Company achieved its turnover target with less than 2% deviation from budget.

### Market trends

The growth was spread across all the markets in which *aap* has had a years-long presence. The surge in growth which was signaled by the strong order book at the start of the year was sustained through the entire year and peaked in the fourth quarter, in which sales of more than DM 1 million were booked every month.

### Segment analysis

This increase is justly reflected in the fact that *aap* now figures for the first time in every independent market research study. We are especially proud of the second place we occupy in the most important market segment plates and screws (which accounts for more than 60% of the entire osteosynthesis market). We have achieved this eminence in just 8 years and in the face of extremely tough competition. This market position, the still-growing order book of DM 1.31 million (compared to last year's average of DM 476 thousand), and the action we have already taken to increase capacity, all make a repeat of the above-trend growth pattern in 1999 appear a certainty.

The sales growth can be broken down into the direct sales force, specialist dealers and exports. All of these markets reported increases of at least 20%. Our own field force, which posted 22% sales growth, was a major factor in helping the Company to achieve the market position we have outlined. In the specialist dealers segment, our track record of demonstrated service quality during 1997 enabled us to extend our contract to supply Hamburg's hospitals for a further year. This boosted sales in the dealers segment by over 30%. However, *aap* achieved by far its biggest growth in export sales, where an increase of more than 60% made this market the biggest contributor to earnings. It is particularly noteworthy in this context that this growth

was achieved in spite of the crisis in Asia, previously one of our strongest markets, which left its mark on the sales figures; however, declines here were much more than compensated by strong growth in other markets, principally North Africa and South America.

If we look at the figures by reference to the Company's main product groups, the breakdown is as follows. As is traditional, traumatology products enjoyed the strongest growth, at 44%. Within this total the plates and screws segments notched up increases of 45% and 50% respectively, a feat which was impressively confirmed by our second place in the market ranking. In the nails section too, we can be very satisfied with a growth rate of 23%, the product of our continuous product development and innovation. With sales of our biorigid tibia nail expanding by just under 79%, we can also point to the successful market launch of one more innovative engineered biomedical product. We will continue to concentrate in future on launching biologically optimized products.

The 20% sales growth recorded by the Endoprosthetics division was also way above the market growth (not to mention our own planning), which was a very good outcome in view of the division's current product range which needs renewing in some areas. New products will be the Company's number one priority in this division as well in the future, to ensure that *aap* becomes as firmly established in orthopedics as it is already in traumatology.

The Company's strategy for achieving this goal is to devote special attention to biological healing mechanisms and to the reactions at the interface between biology and engineering.

1999 will be dominated by the market launch of a pioneering modular system for the biologically-supported healing of femur fractures which will simultaneously lend itself to use as a joint replacement and as a tumor prosthesis. This modular system is currently unique on the market and has been developed with a particular eye to the market's needs. It offers doctors a total solution

which is not available in a similar form from any competitor. The Company's new hollow-point screw system, introduced in early 1998, will also drive sales and its now mature version will translate into significant market share.

During 1998 *aap* took part in 34 exhibitions and congresses. *aap* presented itself as one of the most innovative companies in the field of biomedical engineering at a total of seven international events.

*aap*'s successful participation in international events was also one of the factors which led to the decisive contact which has resulted in a new marketing alliance in Japan. The new partner the Company has acquired through this route is one of the most renowned players in the Japanese market for spinal column surgical products, where it leads the market. Backed by a reputation of this caliber, we are relatively confident that *aap*'s trauma and endo-prosthetics products will also experience a positive launch in Japan.

### Production and technology

We can assess the increase in productivity achieved last year as extremely positive. Output was expanded by 52% while the number of people employed in manufacturing only increased by 34%. Especially pleasing in this context were the productivity advances of over 45% in osteosynthesis plates and over 60% in osteosynthesis screws. It looks very much as if we will be able to improve significantly on these rates of increase again as we will be bringing new-technology manufacturing machines (high-speed machining centers) and more productive new capacity on stream during 1999. To this end, we implemented capital expenditures in the order of DM 1.3 million during 1998.

### Research and development

From its inception *aap* has always staked its future on high-speed development and high-power innovation. In

order not just to maintain but to surpass this exceptional level of R&D performance, we plan a range of joint initiatives with universities and opinion formers in the coming year.

A key feature of 1998 was the large number of projects in which we collaborated with our customers to jointly refine specific products. Equally, our new product development function again created successful articles for the market under the guidance of customers. The introduction of our new family of hollow-point screws in 1998 was a great success. A particular highlight of the year came in Autumn, when we launched the improved version of our undrilled tibia nail, the biorigid femur nail and the biorigid femur management system or BFS. This universal application system for trauma or wear-damaged femurs was extremely well received in the marketplace. Intensive marketing of this product will provide a significant stimulus to sales in 1999 as well.

Further new projects were commissioned for completion during 1998 and in the future to sustain our combined strategic focus on the biology and engineering dimensions. The spectrum of project goals ranges from the development of new highly-innovative implants to breakthrough bio-interface and joint cartilage applications.

In addition, 1998 brought the launch of our first international project with the USA. This will also produce a very promising bone organ supply product.

The Company's research and development expense again represented a more than 10% share of turnover in 1998.

### Quality and environmental management

#### Quality performance

The many product launches which fell into 1998 produced a slight setback in the improving trend of our quality statistics. We could not maintain the positive trend which had reduced the reject rate from 2.25% originally to 0.45% in 1997, and were obliged to report a slight rise due to problems in the manufacturing of new

products. The causes of the faults were identified and the quality management department is extremely confident that the statistics will resume their positive pattern again in 1999.

#### **Environmental audit**

Especially good news is that we gained certification as an environmentally responsive manufacturer during 1998 after three years of preparation. As from December 31, 1998, *aap* Implantate AG's site at Lorenzweg 5 is registered with Germany's environmental inspection agency, the IHK, (registration number: DE-S-107-0046) under the provisions of the European eco-audit directive (EEC 1836/93) as having a certified environmental management system. This makes *aap* one of the first producers in the biomedical engineering industry to adopt this strict standard.

#### **Employees**

The rapid growth of the Company will continue to present *aap* with a stiff human resources challenge in 1999. As always, *aap*'s policy is to prioritize the recruitment of highly qualified and intelligent personnel who are then given intensive training in-house for their future duties.

The average size of the workforce is planned to expand from 67 to 88 during 1999. A program of regular training courses, both internal and external, as described in our quality management procedures, is intended to ensure our employees maintain the high level of know-how and service quality which is universally acknowledged by our customers.

#### **Stock market listing and IPO**

The Company plans to list on the stock market in 1999. The necessary preparations, specifically the selection of the consortium banks and the generation of the listing prospectus, are largely completed.

#### **Outlook and prospects**

*aap* Implantate AG has demonstrated exceptional performance again in 1998, thanks to comprehensive controlling and benchmarking. This tradition arms us to embrace the future in 1999 and beyond with confidence.

In spite of the enormous surge in sales at the year-end, we open 1999 with orders in hand of over DM 1.9 million, which is more than DM 1.1 million higher than the figure at this time last year. Accordingly, we foresee further turnover significant growth in 1999.

The dominant theme of 1999 is our proposed stock market listing and IPO, which we expect to provide an especially positive boost.

Berlin, January 25, 1999

Uwe Ahrens  
Chairman, Managing Board

Bruke Seyoum Alemu  
Managing Board

## Auditor's Report and Certificate

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Based on an audit performed in accordance with our professional duties, the accounting records and the financial statements comply with the legal regulations. The financial statements present, in compliance with required accounting principles, a true and fair view of the net worth, financial position and results of *aap* Implantate AG. The management report is in agreement with the financial statements.

Berlin, January 28, 1999

Dr. Röver & Partner KG  
Wirtschaftsprüfungsgesellschaft  
Steuerberatungsgesellschaft

Helmut Schuhmann  
Wirtschaftsprüfer

of *aap* Implantate AG as at December 31, 1998 prepared in accordance with International Accounting Standards (IAS) and comparative Presentation of the Pro-forma Consolidated Accounts for the 1997 and 1996 Financial Years

Balance Sheet of *aap* Implantate AG as at December 31, 1998

**ASSETS**

	1998	1997	1996
	DM	DM thousand	DM thousand
<b>A. Fixed assets</b>			
I. Intangible assets			
1. Concessions, industrial property rights and similar rights and values, and licenses	398,471.00	13	14
2. Goodwill	1.00	0	0
	398,472.00	13	14
II. Tangible assets			
1. Land and equivalent rights, and buildings including buildings on non-Company land	1,609,182.00	1,625	0
2. Technical plant and machinery	1,511,633.34	518	433
3. Other plant, office systems and outfitting	1,291,971.85	897	651
	4,412,787.19	3,040	1,084
III. Financial assets			
1. Shares in affiliated companies	0.00	0	35
2. Equity investments	2,000.00	0	0
3. Other lendings	231,288.91	187	171
	233,288.91	187	206
<b>B. Current assets</b>			
I. Inventories			
1. Raw materials and supplies	1,280,425.86	718	605
2. Work in process	1,777,805.52	1,001	563
3. Finished products and merchandise	6,899,877.40	5,160	4,461
	9,958,108.78	6,879	5,629
II. Receivables and other assets			
1. Trade receivables	1,293,362.26	1,120	1,052
2. Due from affiliated companies	0.00	0	0
3. Due from shareholders	0.00	0	879
4. Other assets	1,026,942.94	322	357
	2,320,305.20	1,442	2,288
III. Checks, cash in hand, Bundesbank, bank and girobank balances	94,586.37	38	36
<b>C. Deferred charges to operation, prepayments</b>	169,819.91	80	47
<b>D. Deferred taxes on income</b>	196,000.00	10	3
	17,783,368.36	11,689	9,307

## EQUITY AND LIABILITIES

	1998 DM	1997 DM thousand	1996 DM thousand
<b>A. Equity</b>			
I. Registered capital	1,012,000.00	800	310
II. Capital reserve	4,622,120.00	34	0
III. Revenue reserve			
1. Statutory reserves	81,565.83	28	0
2. Other reserves	508,875.36	0	0
IV. Minority interests balancing item	-30,621.19	0	0
V. Attributable profit	808,908.09	1,325	121
	<u>7,002,848.09</u>	<u>2,187</u>	<u>431</u>
<b>B. Special item</b>	522,867.00	0	0
<b>C. Provisions</b>			
1. Provisions for taxes	439,662.98	384	228
2. Other provisions	908,730.00	238	116
	<u>1,348,392.98</u>	<u>622</u>	<u>344</u>
<b>D. Liabilities</b>			
1. Liabilities to banks	4,809,542.42	5,565	5,402
2. Trade payables	1,672,141.53	1,352	1,079
3. Liabilities to affiliated companies	0.00	0	0
4. Liabilities to associated companies	20,939.34	24	15
5. Liabilities to shareholders	0.00	0	781
6. Other liabilities	2,405,942.43	1,938	1,254
	<u>8,908,565.72</u>	<u>8,879</u>	<u>8,531</u>
<b>E. Deferred credits to income, prepayments</b>	694.57	1	1
	<b>17,783,368.36</b>	<b>11,689</b>	<b>9,307</b>

Income Statement of *aap* Implantate AG for the Year to December 31, 1998

	1998 DM	1997 DM thousand	1996 DM thousand
1. Sales revenues	10,526,927.42	8,338	7,956
2. Increase in stocks of finished products and work in process	2,546,135.56	1,137	340
3. Other capitalized own work	223,472.09	375	627
4. Other operating income	367,152.58	150	132
5. Materials expense			
a) Expenditures on raw materials and supplies and bought-in goods	-2,512,393.32	-1,682	-1,368
b) Expenditures on bought-in services	-577,624.31	-190	-157
	<u>-3,090,017.63</u>	<u>-1,872</u>	<u>-1,525</u>
6. Personnel expenses			
a) Wages and salaries	-4,727,071.26	-3,020	-2,878
b) Social security contributions, pension and welfare expenses	-888,349.55	-641	-601
	<u>-5,615,420.81</u>	<u>-3,661</u>	<u>-3,479</u>
7. Depreciation on tangible and intangible fixed assets	-704,111.00	-487	-635
8. Other operating expenses	-4,102,452.71	-2,905	-2,414
9. Income from lending of financial assets	13,960.00	0	0
10. Other interest and similar income	7,934.85	14	9
11. Other interest and similar expenses	-454,906.25	-502	-569
<b>12. Profit/loss from ordinary operations</b>	<b>-281,325.90</b>	<b>587</b>	<b>442</b>
13. Extraordinary income	157,937.50	111	336
14. Extraordinary expense	0.00	-7	-2
<b>15. Net extraordinary income/expense</b>	<b>157,937.50</b>	<b>104</b>	<b>334</b>
16. Taxes on income	-138,511.19	-152	-353
17. Other taxes	-481.88	-1	-3
<b>18. Net profit for the year</b>	<b>15,604.67</b>	<b>538</b>	<b>420</b>
19. Due to minorities	30,621.19	0	0
20. Carried-forward profit from the previous year	1,325,123.42	121	-299
21. Shareholder contributions in conjunction with conversion to AG	0.00	694	0
22. Allocation to revenue reserves			
a) to the statutory reserve	-53,565.83	-28	0
b) to other revenue reserves	-508,875.36	0	0
	<u>-562,441.19</u>	<u>-28</u>	<u>0</u>
<b>23. Consolidated attributable profit</b>	<b>808,908.09</b>	<b>1,325</b>	<b>121</b>

## Cash Flow Statement

	1998 DM thousand	1997 DM thousand	1996 DM thousand
1. Net profit/loss for the year	16	538	420
2. + Depreciation on fixed assets	704	487	635
3. + Increase in provisions	726	279	175
4. + Loss on the disposal of fixed assets	51	0	0
5. - Increase in inventories, trade receivables and other assets	-4,234	-444	-916
6. +/- Increase/decrease in trade payables and other liabilities	-665	184	403
7. + Increase in special item for investment subsidies	524	0	0
<b>8. = Cash inflow/outflow from current operating activities</b>	<b>-2,878</b>	<b>1,044</b>	<b>717</b>
9. - Outflow of funds for fixed-asset investment	-1,062	-1,189	-883
<b>10. = Cash inflow/outflow from investing activities</b>	<b>-1,062</b>	<b>-1,189</b>	<b>-883</b>
11. Inflow of funds from capital increases	4,800	0	0
12. Increase in lending	-46	-16	-36
13. + Inflow of funds from loans taken up	863	163	236
14. - Outflow of funds for the redemption of loans	-1,620	0	0
<b>15. = Cash inflow/outflow from financing activities</b>	<b>3,997</b>	<b>147</b>	<b>236</b>
16. + Funds at the start of the reporting period	38	36	2
<b>17. = Funds at the close of the reporting period</b>	<b>95</b>	<b>38</b>	<b>36</b>

## A. Company information

### Name and place of registration

*aap* Implantate AG, Berlin

### Headquarters address

12099 Berlin, Lorenzweg 5

### Commercial Register

The Company is registered with the District Court of Berlin-Charlottenburg under reference HRB 64083 and was entered in the Commercial Register on September 10, 1997.

### Origin in transformation

The Company is the successor, through a change of name and legal form which took effect as from January 1, 1997, to the limited company and partnership *aap* Ahrens, Ahrens & Partner GmbH & Co. Betriebs KG (hereafter referred to as *aap* GmbH & Co. KG).

### Objects of the Company

The Company's business objects are the development, manufacture and marketing of implants and surgical tools and the provision of services in the field of precision metalworking and finishing.

The Company has production facilities located in rented premises at Lorenzweg/Berlin-Tempelhof and in its own premises at Spreehagener Strasse, Markgrafpieske/ Brandenburg. It also has research and development operations based at both sites.

## B. General information

### 1. Accounting basis

The consolidated IAS financial statements of *aap* Implantate AG, Berlin, have been prepared on the basis of the current accounting rules and procedures of the International Accounting Standards Committee (IASC).

*aap* Implantate AG plans to further increase its registered capital and to offer the new shares to a wide investing public for subscription on a German stock exchange during the 1999 financial year. To this end it has prepared consolidated IAS financial statements in respect of 1996, 1997 and 1998.

In view of the size of the group, the current German accounting regulations do not oblige *aap* Implantate AG to prepare consolidated accounts.

The consolidated IAS financial statements of *aap* Implantate AG for the years to December 31, 1998, 1997 and 1996 have been based on the annual financial statements of the group companies, which were in turn drawn up subject to uniform accounting and valuation principles as required by Germany's Commercial Code (HGB) and stock corporation act (AktG). These were reconciled to the IAS rules at the level of the individual companies. The adjustments for the years up to December 31, 1995 were taken through the balance sheet and included in the profit carried forward at January 01, 1996.

The formats of the balance sheet and income statement are in accordance with IAS rules.

The income statement was prepared on the total-cost basis.

All values have been stated in deutschmarks (DM), the parent company's national currency.

### 2. Pro-forma AG 1996 accounts

What are known as "pro-forma AG" financial statements have been prepared for *aap* GmbH & Co. KG in respect of the 1996 financial year.

Most importantly, these incorporate the following adjustments:

The sums paid as advance remuneration for the management activity of the principal shareholder and reported as a profit appropriation in the accounts of *aap GmbH & Co. KG* (DM 150 thousand) and the interest paid on loans advanced (DM14 thousand) have been taken through the income statement and treated as expenses.

The shareholders' capital accounts have been broken down and classified as profits or losses and contributions or withdrawals depending on their nature. The latter categories are shown as accounts receivable from or payable to shareholders.

This produces a deficiency of DM 1,371 thousand in the HGB pro-forma AG balance sheet which is not covered by equity but which is covered by undisclosed reserves included under fixed assets and by the contribution of a real estate plot in conjunction with the change in legal status effective from January 1, 1997.

### 3. 1996 and 1997 IAS consolidated pro-forma accounts

Consolidated pro-forma accounts were prepared for the 1996 and 1997 financial years. During 1996 and 1997 *aap Implantate AG* held 100% of the stock of *aap America Inc.*, New Jersey, USA. This subsidiary never commenced trading and was liquidated in at the start of 1998.

The only business transactions which needed consolidating were the provision of a loan by *aap Implantate AG* and a single delivery of goods in 1997.

*aap Implants Inc.*, Plymouth, USA was founded by virtue of an agreement dated April 23, 1998. The parent Company holds 80% of the stock.

For reasons of comparability, the 70% stake in *Prothos medizinische und Sportprodukte GmbH* held during 1996 was not included in the consolidation sphere since the Company sold this participation in 1997.

## C. Consolidation principles

### 1. Consolidation sphere

	Size of stake in %
<i>aap Implantate AG</i> , Berlin	Parent company
<i>aap Implants Inc.</i> , Plymouth, USA	80

### 2. Closing date for consolidated financial statements

The consolidated companies both take the calendar year as their financial year. The consolidated statements have accordingly been prepared as at December 31, 1998.

### 3. Currency translation

The financial statements for the consolidated subsidiary have been translated into deutschmarks in line with IAS 21 and the functional currency concept.

Since the subsidiary company is an integral sub-unit of *aap Implantate AG* in financial, operating and organizational terms, its functional currency is the same as the parent company's national currency.

Accordingly, monetary headings have been translated at the accounting date exchange rate rather than at historic rates.

For reasons of economy, inventory components have been translated at the exchange rate applying on the accounting date.

Expenses and income which do not relate to monetary account headings have been translated at the corresponding historic exchange rate or the accounting date exchange rate, and the remaining expenses and income at average rates.

Differences arising from currency translation have been incorporated in the income statement.

#### 4. Capital consolidation

There was no need to consolidate capital relationships since the consolidated subsidiary did not possess any equity capital at the date of its first consolidation, and in the absence of acquisition costs the parent company did not report a book value for the participation.

#### 5. Debt consolidation

Intra-group receivables and payables were netted off. Netting differences arising during the period under report were included in the income statement.

#### 6. Profit consolidation

For the purposes of profit consolidation, intra-group sales and intra-group income and expenses were netted off. Inter-company profits were eliminated.

### D. Accounting and valuation principles

The financial statements of the consolidated companies have been prepared in accordance with uniform principles of presentation and valuation.

Intangible assets were valued at their cost of acquisition less regular depreciation.

Tangible fixed assets have been valued at their cost of acquisition or manufacture, and the value of tangible assets with a limited useful life has been reduced by regular depreciation.

Interest paid on borrowings is not capitalized.

Non-real-estate assets with a purchase cost of up to DM 800.00 are written off in full in the year of accrual.

Financial assets are carried at cost of acquisition or updated book value.

The items included in the inventories heading are valued either at cost of acquisition or manufacture, or the lower of cost or market on the balance sheet date.

Raw materials and supplies were valued at procurement cost.

Work in process and finished products have been valued at cost of manufacture. This measure includes the assignable direct costs plus appropriate portions of the essential production overheads. These include materials and production overheads and production-related administrative costs, as well as straight-line depreciation on production plant.

Interest paid on borrowings is not capitalized.

The strict principle of valuation at the lower of cost or market was observed.

Receivables and other assets are carried at their nominal value or at their realizable value at the accounting date if lower. General credit risk is accommodated through a global bad debt provision amounting to 3% of the stock of non-specifically-adjusted receivables.

Received investment grant aid is entered on the liabilities side as a "special item in respect of fixed-asset investment subsidies". This is liquidated in the income statement on a straight-line basis reflecting the service life of the subsidized assets.

Provisions have been made to take appropriate account of the foreseeable risks and reported liabilities. The provisions have been set at levels commensurate with prudent commercial judgement.

Outstanding liabilities have been valued at their repayment value.

Foreign currency liabilities have been translated at their repayment value at origination or at the selling rate applying on accounting date if higher.

## E. Notes to the balance sheet

### I. Fixed assets

The table of fixed-asset movements shows the changes during the period.

#### 1. Intangible assets

From their historic acquisition cost, the value of intangible assets is depreciated on a straight-line basis pro rata temporis.

The following service life assumptions are applied:

	Years
Industrial property rights and similar rights and values	5
Goodwill	15

#### 2. Development costs

Development costs of DM 244 thousand were booked as expense during the period under report.

#### 3. Tangible fixed assets

From their historic acquisition or manufacturing cost, the value of tangible assets is depreciated on a straight-line basis.

The following average lives apply:

	Years
Land and buildings	50
Technical plant and machinery	
- Machinery	5
- Essential machine tooling	2
Other plant, factory and office systems and outfitting	
- Factory equipment	5
- Hardware	5
- Tenants improvements	10
- Office systems	5
- Other factory and office outfitting	5
- Sample cases	5

There were no exceptional write-downs or revaluations during the year.

The book value of leased tangible assets was DM 1,113 thousand at December 31, 1998.

#### 4. Financial assets

	DM thou.	%
Shares in affiliated companies		
<i>aap</i> Implants Inc., Plymouth, USA	0	80
Equity investments		
Cybernetic Vision Aktiengesellschaft		
Health Monitoring Technologies, Berlin	2	5
Other lending	231	
	<b>233</b>	

### II. Current assets

#### 1. Other assets

	1998 DM thou.	1997 DM thou.
Due from the tax authority	326	253
Outstanding investment		
grants receivable	550	0
Balances with creditors	74	29
Due from employees, loans, advances of pay	60	22
Other	17	18
	<b>1,027</b>	<b>322</b>

#### 2. Deferred charges to operation, prepayments

This heading includes discounts totaling DM 40 thousand.

### 3. *Deferred taxes on income*

This deferral item is short-term and is composed as follows:

	1998	1997
	DM thou.	DM thou.
Deferred tax set-off entitlement on the carried-forward loss of <i>aap</i> Implants Inc., Plymouth, USA	86	5
Deferred tax set-off entitlement from the elimination of inter-company profits	110	5
	<b>196</b>	<b>10</b>

The deferred tax entitlement on the carried-forward loss of *aap* Implants Inc., Plymouth, USA was calculated on the assumption of an average tax rates of 35%. The Company expects to make profits in the years to come when it will take advantage of its tax-allowable business start-up losses of DM 234 thousand.

The deferred tax credit arising from consolidation was calculated on the basis of an average tax rate for the group of 50%.

### III. Equity

The parent company's registered capital was DM 1,012,000.00 at December 31, 1998, divided into 202,400 unit bearer shares. The nominal value of each share was DM 5.00.

The Supervisory Board met on January 15, 1998 and approved the Managing Board's resolution of January 14, 1998 to undertake a DM 100,000.00 capital increase from authorized capital to a then new total of DM 900,000.00.

This measure was recorded in the Commercial Register on February 23, 1998. The capital increase was implemented through the issue of 20,000 bearer shares with a nominal value of DM 5.00.

Payment for the new shares was received during February 1998, and totaled DM 1,125,000.00 including premium. By agreement, the sum of DM 375,000.00 received as a loan in December 1997 was transferred to the capital reserve following the recording of the capital increase in the Commercial Register.

By virtue of a Managing Board resolution of May 20, 1998, affirmed by the Supervisory Board on May 28 and June 02, 1998, the Company's registered capital was raised to DM 920,000.00 by the issue of a further 4,000 bearer shares with a nominal value of DM 5.00. This measure was recorded in the Commercial Register on June 16, 1998 and the payment in respect of the new shares of DM 280,000.00 including premium was received on June 02, 1998.

A further Managing Board resolution of August 13, 1998, affirmed by the Supervisory Board on August 13, 1998, authorized an increase of the Company's registered capital by DM 92,000.00 to DM 1,012,000.00. This capital increase was implemented through the issue of 18,400 unit bearer shares. This measure was recorded in the Commercial Register on October 01, 1998 and the payment in respect of the new shares of DM 3,000,120.00 (including premium) was received on August 25, 26 and 28, 1998.

The Company's registered capital therefore evolved as follows over the year:

	DM
Position at 01.01.1998	800,000.00
Capital increase 01.15.1998	100,000.00
Capital increase 05.20.1998	20,000.00
Capital increase 08.13.1998	92,000.00
	<b>1,012,000.00</b>

The Company's capital reserve evolved as follows over the year:

	<b>DM</b>
Position at 01.01.1998	34,000.00
Capital increase 15.01.1998	1,025,000.00
Deposit 23.02.1998	375,000.00
Capital increase 20.05.1998	280,000.00
Capital increase 13.08.1998	2,908,120.00
	<b>4,622,120.00</b>

Table of reserves as at December 31, 1998

	Position at 01.01.1998 DM thousand	Allocation from annual profit DM thousand	Endowment during year DM thousand	Position at 31.12.1998 DM thousand
I. Capital reserve	34	0	4,588	4,622
II. Revenue reserves				
1. Statutory reserve	28	53	0	81
2. Other revenue reserves	0	509	0	509
	<b>62</b>	<b>562</b>	<b>4,588</b>	<b>5,212</b>

In compliance with the first sub-sentence of Article 24 (1) 1 of the Company's statutes, the parent company's Managing Board and Supervisory Board transferred 50% of the 1998 commercial balance sheet (HGB) net profit remaining after the cancellation of the loss-carryover and the allocation to the statutory reserve, to the Company's other revenue reserves.

In their invitation to the parent company Annual General Meeting scheduled for February 22, 1999, the Managing Board and Supervisory Board proposed allocating the HGB attributable profit of DM 508,875.36 to the other revenue reserves.

One-twentieth of the parent company's annual net profit on the HGB basis, after offsetting the brought-forward loss, was allocated to the statutory reserve as required by Article 150 (2) of Germany's stock corporation act (AktG). This accordingly stood at DM 81,565.83 at the end of the year and, taken together with the capital reserve, now exceeds one-tenth of the Company's registered capital.

#### IV. Provisions

##### 1. Provisions for tax

	1998 DM thou.	1997 DM thou.
Deferred 1995 income tax offset entitlement	-128	-128
Provision for deferred 1996 income tax liability	356	356
Provision for deferred 1997 income tax liability	159	156
HGB provision for 1998 income tax liability	1,525	0
Deferred 1998 income tax offset entitlement	-1,472	0
	<b>440</b>	<b>384</b>

The provision for deferred taxes on income needed to be made to cover the timing differences between the reported values of the HGB and IAS financial statements of *aap* Implantate AG's unconsolidated financial statements for 1995 through 1998.

The municipal trade earnings tax calculation started from the IAS net profit and added or deducted the relevant tax factors to identify the relevant earnings base for assessing this tax. Depending on the increase in the tax factor between 1995 and 1998, the resulting municipal tax ratio ranged from 15% in 1995 to 19.5% in 1998.

The deferred corporation tax calculation assumed a tax rate of 30% on distributions since irrespective of the planned or approved distributions, the retention of earnings generates a deferred corporation tax relief entitlement to the value of the difference between the distribution and retention rates which on its own falls within the scope of the Company's discretion.

Provision was also made for the solidarity surcharge levied at the rate of 7.5% (1998: 5.5%) on the calculated corporation tax liability.

## 2. Other provisions

Other provisions evolved as follows during the year:

	Position at 31.12.1998	Position at 31.12.1997
	DM thou.	DM thou.
Staff holiday entitlements	176	96
Annual accountancy and audit costs	68	30
Bonus obligations	115	60
Trade association	25	25
Performance-related bonus	123	25
Commission obligations	60	0
Outstanding invoices	52	0
Litigation costs and risks	20	0
Disabled employment equalization levy	0	2
Profit-related remuneration of dormant shareholders	20	0
Other risks	250	0
	<b>909</b>	<b>238</b>

## V. Liabilities

The following table shows the residual term of the consolidated liabilities broken down by balance sheet headings.

	Total value 31.12.1998 DM thousand	Repayable in		
		Up to 1 year DM thousand	1 to 5 years DM thousand	Over
				5 years DM thousand
Liabilities to banks	4,809	1,966	2,413	430
Trade payables	1,672	1,672	0	0
Liabilities to associated companies	21	21	0	0
Other liabilities				
- in relation to social security	144	144	0	0
- in relation to taxation	210	210	0	0
- leasing liabilities	1,154	693	461	0
- sundry liabilities	899	443	228	228
	<b>8,909</b>	<b>5,149</b>	<b>3,102</b>	<b>658</b>

The reported liabilities to banks are secured to the value of DM 2,300 thousand through mortgages and the assignment as security of various machines and receivables.

## F. Notes to the income statement

### I. Sales revenues

	1998	1997
	DM thou.	DM thou.
Sales revenues in the Federal Republic of Germany:		
Vat rate 15%/16%	4,390	1,733
Vat rate 7%	2,276	3,705
	6,666	5,438
Sales revenues in the rest of the European Union	854	774
Sales revenues in the rest of world	3,242	2,298
Revenue-deductions (non-operating expense)	-235	-172
	<b>10,527</b>	<b>8,338</b>

### II. Other operating income

	1998	1997
	DM thou.	DM thou.
Private car usage	86	55
Income from forgiveness of debt	70	0
Income from unwinding of contracts	47	0
Income from writing back provisions	39	1
Exchange rate gains	43	8
Income from liquidating the investment subsidy special item	27	0
Rent income	12	0
Income from management services	0	18
Income from the sale of assets	0	27
Other	43	41
	<b>367</b>	<b>150</b>

### III. Depreciation

	1998	1997
	DM thou.	DM thou.
Depreciation in intangible fixed assets	51	6
Depreciation on tangible fixed assets of which on low-ticket items of less than DM 800.00: DM 47 thou.	653	481
	<b>704</b>	<b>487</b>

### IV. Other operating expenses

	1998	1997
	DM thou.	DM thou.
Advertising and travel costs	919	497
Accommodation costs	660	647
Consultancy costs	344	206
Leasing	265	190
Office consumables, phone, fax, postage	247	194
Sales commission	202	190
Shipping costs, packaging materials	161	91
Vehicle costs	129	167
Repairs and maintenance	105	94
Insurance, contributions, levies	100	62
Losses and write-downs on receivables	75	25
Other costs	895	542
	<b>4,102</b>	<b>2,905</b>

### V. Net financial expense

	1998	1997
	DM thou.	DM thou.
Income from other lending	14	0
Other interest and similar income	8	15
Other interest and similar expense		
- Interest on long-term credit liabilities	-300	-418
- Interest on short-term bank liabilities	-52	-40
- Interest due to dormant shareholders	-61	-2
- Liquidation of financing costs	-27	-7
- Other interest expenses	-15	-35
	-455	-502
	<b>-433</b>	<b>-487</b>

## VI. Exchange rate differences

The currency gains and losses which were offset during the period under report and taken to the income statement were:

	1998	1997
	DM thou.	DM thou.
Income from exchange rate variances	43	8
Expense from exchange rate variances	21	3

## VII. Net exceptional income

This heading includes government return-to-work subsidies from the Labor Office, amounting to DM 158 thousand (1997: DM 111 thousand).

## G. Information on developments since the end of the financial year

The Company plans to further increase its registered capital and to offer the new shares to a wide investing public for subscription on a German stock exchange during the 1999 financial year. The necessary reparations for the initial public offering, such as selecting the banks for the placement syndicate and preparing a prospectus, are already virtually complete.

## H. Other information

Breakdown of the workforce by groups:

	1998	1997
Average employee total	82	48
of which: female	12	6
male	70	42
Hourly paid	49	31
Salaried	33	17

The sole member of the Company's Managing Board during the year was Dipl.-Ing. Uwe Ahrens (MSc Eng.).

The Company has granted its sole executive director Dipl.-Ing. Uwe Ahrens a deferment on payment of its entitlement to a purchase price of DM 28,000.00 for the assignment of its shares in Prothos medizinische und Sportprodukte GmbH. Incremental interest of 5% is payable on this amount. The deferment may be revoked subject to three months notice to the year end.

The following were members of the Supervisory Board during the year under report:

### To August 12, 1998:

Eckardt Manske MSc (Math), Berlin (Chairman)  
 Lothar Just, Berlin  
     chartered auditor and  
     tax consultant (Deputy Chairman)  
 Dr Heinz Helge Schauwecker, Berlin  
     head physician and senior lecturer

### From August 13, 1998:

Lothar Just, Berlin  
     chartered auditor and  
     tax consultant (Chairman)  
 Klaus Kosakowski MSc (Econ), Berlin (Deputy Chairman)  
 Dieter Borrmann, MSc (Eng.), Berlin  
 Prof. Dr. Dr. h.c. Horst Cotta, Heidelberg  
 Susanne Ropertz, MSc (Econ), Bonn  
 Dr Heinz Helge Schauwecker, Berlin  
     head physician and senior lecturer

The Supervisory Board received total remuneration of DM 66,000.00 in the year.

Under the terms of an agreement dated April 23, 1998, the Company was co-founder of *aap* Implants Inc. in Plymouth, Massachusetts, USA. The ownership structure of this company is as follows:

<i>aap</i> Implantate AG	80%
Joachim Staub	10%
Wayne R. Knupp	5%
Ellen J. Knupp	5%
	<b>100%</b>

Berlin, January 29, 1999

Management Board

Uwe Ahrens MSc (Eng)

Bruke Seyoum Alemu MSc (Eng)

Joachim Staub MSc (Eng)

Statement of Fixed-Asset Movements of *aap* Implantate AG over the Year to December 31, 1998

	Position at 01.01.1998 DM	Historical acquisition costs		Position at 31.12.1998 DM
		Additions DM	Disposals DM	
<b>B. Fixed assets</b>				
<b>I. Intangible assets</b>				
1. Industrial property rights and similar rights and values	144,585.29	437,234.54	-14,967.47	566,852.36
2. Goodwill	100,000.00	0.00	0.00	100,000.00
	<u>244,585.29</u>	<u>437,234.54</u>	<u>-14,967.47</u>	<u>666,852.36</u>
<b>II. Tangible assets</b>				
1. Land and buildings	1,640,000.00	0.00	0.00	1,640,000.00
2. Technical plant and machinery	4,408,152.27	1,249,112.68	-53,685.00	5,603,579.95
3. Other plant, office systems and outfitting	1,935,225.38	827,091.90	-227,312.43	2,535,004.85
	<u>7,983,377.65</u>	<u>2,076,204.58</u>	<u>-280,997.43</u>	<u>9,778,584.80</u>
<b>III. Financial assets</b>				
1. Shares in affiliated companies	0.00	2,000.00	0.00	2,000.00
2. Other lendings	186,828.91	44,460.00	0.00	231,288.91
	<u>186,828.91</u>	<u>46,460.00</u>	<u>0.00</u>	<u>233,288.91</u>
<b>Total</b>	<b>8,414,791.85</b>	<b>2,559,899.12</b>	<b>-295,964.90</b>	<b>10,678,726.07</b>

Position at 01.01.1998 DM	Cumulative depreciation		Position at 31.12.1998 DM	Book values	
	Depreciation in year DM	Disposals DM		Position at 31.12.1998 DM	Position at 31.12.1997 DM
131,982.29	51,361.54	-14,962.47	168,381.36	398,471.00	12,603.00
99,999.00	0.00	0.00	99,999.00	1.00	1.00
231,981.29	51,361.54	-14,962.47	268,380.36	398,472.00	12,604.00
15,409.00	15,409.00	0.00	30,818.00	1,609,182.00	1,624,591.00
3,890,152.32	208,500.29	-6,706.00	4,091,946.61	1,511,633.34	517,999.95
1,037,885.26	428,840.17	-223,692.43	1,243,033.00	1,291,971.85	897,340.12
4,943,446.58	652,749.46	-230,398.43	5,365,797.61	4,412,787.19	3,039,931.07
0.00	0.00	0.00	0.00	2,000.00	0.00
0.00	0.00	0.00	0.00	231,288.91	186,828.91
0.00	0.00	0.00	0.00	233,288.91	186,828.91
<b>5,175,427.87</b>	<b>704,111.00</b>	<b>-245,360.90</b>	<b>5,634,177.97</b>	<b>5,044,548.10</b>	<b>3,239,363.98</b>

## Auditor's Report and Confirmation

We have duly audited the consolidated financial statements for the year 1998, and the consolidated pro-forma financial statements for 1996 and 1997 including the cash flow statements. The preparation and the contents of the financial statements are the responsibility of the Management Board of the Company. It is our task to provide an opinion on the basis of the audit conducted by our company whether the consolidated financial statements and the consolidated pro-forma financial statements present a true and fair view of the company's net worth, financial position and results in all essential respects, subject to the premises defined and in accordance with International Accounting Standards (IAS).

We have conducted our audit examination in accordance with generally accepted auditing principles. These principles require a sufficiently detailed audit to permit an auditor's opinion to be given beyond reasonable doubt that the financial statements and pro-forma statements do not contain significant inaccuracies. The audit includes an audit trail with random sampling of the documentary proofs on which the accounting and figures in the consolidated financial statements are based.

Furthermore, it contains an audit of the accounting and valuation methods applied, significant estimates provided by management and an assessment of the general testimony of the consolidated pro-forma financial statements for 1996 and 1997 and the consolidated financial statements for 1998. We are satisfied that our audit examination provides a sufficiently secure and precise foundation for our audit opinion.

The company has prepared these consolidated pro-forma financial statements for 1996 and 1997 and the consolidated financial statements for 1998 and the cash flow statements in accordance with the premises defined in the notes to the accounts and the standards of the International Accounting Standards Committee in force at December 31, 1998. It is our conviction that the consolidated financial statements and the cash flow statement represent a true and faithful picture of the net worth, financial position and results of *aap* Implantate AG for the years concerned in all major respects and that they are in conformance with the standards of the International Accounting Standards Committee.

Berlin, February 12, 1999

Dr. Röver & Partner KG  
Wirtschaftsprüfungsgesellschaft  
Steuerberatungsgesellschaft

Helmut Schuhmann  
Wirtschaftsprüfer

## 1. Total Operating Performance

	1996	Approx. change	1997	Approx. change	1998
	DM thousand	in %	DM thousand	in %	DM thousand
Sales revenues	7,956	4.8	8,338	26.3	10,527
Increase in inventories	340	234.4	1,137	123.9	2,546
Capitalized own work	627	-40.2	375	-40.5	223
	<b>8,923</b>	<b>10.4</b>	<b>9,850</b>	<b>35.0</b>	<b>13,296</b>

Most of the Company's sales revenues have been derived from osteosynthesis products (help in the healing of bone fractures). These accounted for around 79% of group turnover in 1998. The remaining sales are accounted for by endoprosthesis products (artificial replacement joints).

The substantial surge of sales revenues in the 1998 financial year is explained in part by the Company's more extensive foreign business.

However, Germany remained the principal market during the year, accounting for around 62% of turnover (1997: 64%). The states of the European Union accounted for around 8% of total sales revenues (PY: approximately 9%) and the rest of the world for around 30% (PY: 27%). In this category, the most significant customer markets during 1998 were North and South America, followed by Asia.

The Company plans for the proportion of foreign sales to continue to rise strongly in the next few years, most significantly as it breaks into the US and Japanese markets. In this context, it signed a marketing cooperation

agreement with a big Japanese distribution partner on January 11, 1999. The Company is forcing the pace of its US marketing expansion through its American subsidiary *aap* Implants Inc, Plymouth.

The increases in inventories during the period under report were caused by the substantial increase in business volumes. This is evidenced by the orders backlog, which opened 1999 at DM 1.9 million in spite of the substantially higher sales achieved; this level is no less than DM 1.1 million higher than the equivalent measure a year earlier. Intra-group supplies account for approximately DM 1 million of the orders in hand.

As a full-range supplier, the Company is obliged to hold substantial stocks if it is to fulfil the short delivery times it promises. Its sales growth and its plans for expanding into new markets therefore both demanded a strategic expansion of its inventories.

The capitalized own work reported relates to what are known as sample cases. This is the stock of products and tools which the Company's sales force uses for demonstration purposes.

## 2. Materials Expense

	1996	Approx. change	1997	Approx. change	1998
	DM thousand	in %	DM thousand	in %	DM thousand
	1,525	22.7	1,871	65.2	3,090

The proportion of materials expense relative to total operating performance has increased over the period of the comparison.

In 1996 the ratio stood at around 17%, in 1997 it was around 19%, and in 1998 around 23%. However, the considerable build-up of inventories over the same period needs to be borne in mind. The 1998 TOP total

comprises around 19% inventory increases, which are only carried at cost of manufacture (PY: around 11%), and just 79% sales revenues booked at selling prices.

This change in the composition of the reference base puts the inventories increase into better perspective.

### 3. Personnel Expense

1996 DM thousand	Approx. change in %	1997 DM thousand	Approx. change in %	1998 DM thousand
3,479	5.2	3,661	53.4	5,615

The increase in labor costs over the comparison period was almost entirely due to the expansion of the workforce in the light of the Company's actual and planned future expansion.

The average number of persons employed has increased by 34. The appointment of new staff entailed extensive

training and induction time expense, which put a not inconsiderable burden on 1998 earnings. However, the rise in the ratio of personnel expenses to TOP to around 42% (compared to around 37% in 1997) was also partially due to the changed make-up of the total operating performance heading (see the explanation in 2. Materials expense).

### 4. Depreciation

1996 DM thousand	Approx. change in %	1997 DM thousand	Approx. change in %	1998 DM thousand
635	-23.3	487	44.6	704

The depreciation heading increased again in 1998, due to the investment effected in 1997 and 1998, and its

ratio to TOP was around 5.3% (PY: 4.9%).

### 5. Other Operating Expense

1996 DM thousand	Approx. change in %	1997 DM thousand	Approx. change in %	1998 DM thousand
2,414	20.3	2,905	41.2	4,102

The other operating expense heading has increased sharply in the last three years. However, the increase relative to total operating performance has only been moderate. This ratio stood at around 27.1% in 1996, rose to around 29.6% in 1997, and stood at 30.9% in 1998.

The increased was primarily due to the expansion of the Company's marketing activities and the greater use

made of external legal, auditing and consultancy services in connection with the Company's conversion to a stock corporation and in the runup to its forthcoming listing and IPO.

Additionally, the Company has made provision against risks arising from previous years to the value of DM 250 thousand.

## 6. Other Operating Income

1996	Approx. change	1997	Approx. change	1998
DM thousand	in %	DM thousand	in %	DM thousand
132	13.6	150	144.6	367

The ratio of other operating income to total operating performance increased in 1998 to 2.8% (1997: 1.5%, 1996: 1.5%).

The increase is essentially due to income from the writing back of provisions (1998: DM 40 thousand, 1997: DM 1

thousand) and non-recurring income from debt forgiveness of DM 70 thousand.

Additional significant factors were the increased private use of cars (1998: DM 86 thousand, 1997: DM 55 thousand) and higher exchange rate gains of DM 43 thousand compared to DM 8 thousand in the previous year.

## 7. Operating Profit

1996	Approx. change	1997	Approx. change	1998
DM thousand	in %	DM thousand	in %	DM thousand
1,003	7.2	1,076	-85.7	153

Operating profit deteriorated markedly in 1998 compared to the previous year. Expressed as a percentage of total operating performance, it was 1.1% compared to 10.9% in 1997.

However, this turn of events was essentially due to non-recurring and extraordinary factors.

For instance, the consolidated result was shaped by the loss at the US marketing subsidiary which was obliged

to post an after-tax start-up loss of around DM 153 thousand in its first year of business. This initial loss was partially due to coordination problems with the US licensing authority, the Food & Drug Administration (FDA), which were not of the Company's making and have meanwhile been rectified.

The 1998 operating result was also affected by expenditures ahead of the Company's planned stock market listing and IPO.

## 8. Consolidated Net Profit

1996	Approx. change	1997	Approx. change	1998
DM thousand	in %	DM thousand	in %	DM thousand
420	28.1	538	-97.0	16

The exceptional burdens imposed during 1998 by the Company's planned IPO and the first-year loss at its American sales subsidiary are also reflected in the outcome at the consolidated net profit level.

This makes a comparison of the results over the three year period of only qualified value.

Since the US subsidiary had not commenced its operations in 1996 and 1997, its absence from the pro-forma

consolidated statements for these years artificially depresses the 1998 account to the corresponding extent.

Additionally, the Company substantially expanded its marketing activities during 1998 in order to move into new markets such as Japan. It was accordingly obliged to commit to considerable upfront spending in areas such as staff training and inventory build-up.

## 9. Fixed Assets

1996	Approx. change	1997	Approx. change	1998
DM thousand	in %	DM thousand	in %	DM thousand
1,303	148.6	3,239	55.7	5,045

The increase in the fixed assets total during 1997 was essentially the result of the contribution in kind of operating premises by two of the original shareholders in conjunction with the change in the parent company's legal status which took effect from January 1, 1997.

There were also investments in machinery and factory and office equipment and outfitting.

The renewed increase in fixed assets during 1998 was caused by the substantial further investment necessitated

by the actual expansion of business volumes and their planned future expansion.

Most importantly, the additional investments related to a new full-integrated computer system (DM 583 thousand), two production machines (DM 876 thousand), office and telephone systems (DM 279 thousand) and sample cases (DM 232 thousand).

Capital expenditure at the American marketing subsidiary during 1998 was of only secondary importance (DM 12 thousand).

## 10. Inventories

1996	Approx. change	1997	Approx. change	1998
DM thousand	in %	DM thousand	in %	DM thousand
5,629	22.2	6,880	44.7	9,958

The inventories heading has also increased strongly in absolute terms during the comparison period. However, relative to the balance sheet total, it actually reduced from around 60.1% in 1996 to around 58.8% in 1997. Inventories also fell again as a proportion of the balance sheet total in 1998, to 56.0%.

The rise in the inventories total reflects the volume expansion of the Company's business and the future development of the group, which is focused on opening up new markets and further stepping up the intensity with which it services its existing markets. This strategy requires the Company to hold large stocks in readiness in order to guarantee the short delivery times it promises as a "one-stop" supplier.

## 11. Receivables and other Assets

1996	Approx. change	1997	Approx. change	1998
DM thousand	in %	DM thousand	in %	DM thousand
2,289	-37.0	1,442	60.8	2,320

The most significant item in the receivables and other assets total is trade payables. These have increased absolutely in the last three years, rising from DM 1,052 thousand in 1996 through DM 1,120 thousand to DM 1,293 thousand last year. However, this measure has reduced as a proportion of the balance sheet total in spite of the now increased share of exports - where invoices tend to take longer to be settled.

The distinct increase in other assets in 1998 compared to the preceding years was due to the investment grant aid of DM 550 thousand accrued in the 1998 financial year but not yet paid out.

## 12. Equity

1996	Approx. change	1997	Approx. change	1998
DM thousand	in %	DM thousand	in %	DM thousand
431	407.4	2,187	220.2	7,003

The increase in the equity heading over the comparison period was due to the retention of the entire attributable profit and the capital increases undertaken by the parent company during 1998.

*aap* Implantate AG's registered capital has increased from DM 800 thousand to DM 1,012 thousand, and

share price premiums of DM 4,588 thousand were allocated to the capital reserve.

The group's American marketing subsidiary, *aap* Implants Inc., has no registered capital, and its attributable loss in 1998 amounted to DM 154 thousand.

## 13. Provisions

1996	Approx. change	1997	Approx. change	1998
DM thousand	in %	DM thousand	in %	DM thousand
343	81.3	622	116.7	1,348

The provisions heading includes both provisions for taxation and other provisions. The Company's tax provisions have increased over the last three years from DM 228 thousand in 1996 through DM 384 thousand in 1997 to DM 440 thousand at December 31, 1998.

The figure includes both liabilities for back-tax and deferred taxes on income under the tax accounting regulations, which were necessitated by timing differences between the values stated in the headings of the unconsolidated HGB and IAS financial statements of *aap* Implantate AG, Berlin.

The tax provisions should be seen in conjunction with the deferred taxes on income item shown on the assets side of the balance sheet, which arose firstly from the tax-allowable loss carryover for *aap* Implants Inc., Plymouth, USA, and secondly from the elimination of inter-company profits during consolidation.

Other provisions have increased over the comparison period from DM 116 thousand in 1996 through DM 238 thousand in 1997 to DM 908 thousand in 1998.

The 1998 increase was due to the increase in bonus and commission obligations arising from the Company's expansion and from the increase in its obligations to employees in respect of unused holiday entitlements.

Other factors behind the increase in this heading were the need to make larger provision for the performance-related remuneration of the Managing Board resulting from the increase in the commercial account result, plus increased provision against risks from previous years.

#### 14. Liabilities

1996	Approx. change	1997	Approx. change	1998
DM thousand	in %	DM thousand	in %	DM thousand
8,531	4.1	8,879	0.3	8,909

The group's total liabilities have increased at a below-trend rate in the last three financial years and have reduced dramatically in relation to the balance sheet total.

While total liabilities stood at around 91.6% of the balance sheet total in 1996, this ratio was reduced to around 75.9% in 1997 and stood at only approximately 50.0% in 1998.

This outcome was due to the injection of substantial equity by the contribution in kind of real estate in 1997 and by the capital increases undertaken in 1998.

This improvement in the Company's capital resources enabled it most importantly to pay down its liabilities

to banks (1998: DM –757 thousand) and in the process improve its net financial result (1998: DM –433 thousand, 1997: DM –488 thousand). Trade liabilities moved in the opposite direction, rising absolutely over the comparison period in line with the expansion of sales (1998: DM 1,672 thousand, 1997: DM 1,352 thousand, 1996: DM 1,079 thousand).

Other liabilities also recorded an increase, rising by DM 468 thousand absolutely from DM 1,938 thousand at December 31, 1997 to DM 2,406 thousand at December 31, 1998. The principal factor behind this rise was the additional leasing liabilities entered into in connection with investments in fixed assets.

#### 15. Balance Sheet Total

1996	Approx. change	1997	Approx. change	1998
DM thousand	in %	DM thousand	in %	DM thousand
9,307	25.6	11,689	52.1	17,783

The increase in the balance sheet total was due to the contribution in kind of a plot of land, investment in machinery and factory equipment, and higher inventories.

In addition, the other assets heading was increased, especially by the granting of an investment subsidy. The increase on the liabilities side was primarily due to the pronounced expansion of shareholders equity.

#### 16. Equity Ratio

1996	Approx. change	1997	Approx. change	1998
in %	in %	in %	in %	in %
4.6	306.5	18.7	110.6	39.4

In spite of the higher balance sheet total, there was a pronounced increase in the Company's equity ratio, which was attributable to the inflows of capital from

the capital increases implemented in 1998 and the retention of annual profits in all three years.

## 17. Personnel

<b>1996</b>	<b>Approx. change</b>	<b>1997</b>	<b>Approx. change</b>	<b>1998</b>
<b>Employees</b>	<b>in %</b>	<b>Employees</b>	<b>in %</b>	<b>Employees</b>
48	0.0	48	70.8	82

The growth of the workforce is commensurate with the continuous expansion of the group's business volume and its future expansion plans, which are targeted on increasing sales, opening up new markets, and increasing the penetration of existing markets.

*aap* Implantate AG held equity participations at December 31, 1998 in the following companies:

### *aap* Implants Inc., Plymouth, USA

The Company owns 80% of *aap* Implants Inc., Plymouth, USA, whose business objects cover the same principal activities as the parent company. During 1998 the subsidiary company started training up staff and building up its sales activities.

Original capital	DM	0.00
Annual net profit/Loss (IAS basis)	DM	153,105.92
Size of stake		80%
Book value	DM	0.00
Liabilities to parent company	DM	822,891.23
Claims on parent company	DM	0.00
Turnover	DM	62,046.57
Employees		2

### Cybernetic Vision Aktiengesellschaft Health Monitoring Technologies, Berlin

The Company remains a joint founding shareholder in Cybernetic Vision Aktiengesellschaft Health Monitoring Technologies, Berlin, in which it holds 1,200 shares each conveying a nominal entitlement of DM 5.00 in its registered capital of DM 300,000.00.

- 1990 Foundation of *aap* GmbH & Co. KG through a management buy-out by Uwe Ahrens of the Johnson & Johnson subsidiary Mecron. Transfer of plant and machinery, personnel, customers and part of Johnson & Johnson's product range to *aap*. Business originally produces and sells osteosynthesis products with a workforce of 40.
- 1991 *aap* turnover reaches approximately DM 6.7 million.
- 1992 Focused expansion of the product range to include in-house-developed osteosynthesis products plus addition and expansion of endo-prosthetics group. Complete overhaul of product portfolio is accompanied by establishment of a direct sales force, initially in Germany. Continuous investment in R&D and production technology.
- 1994 Completion of *aap*'s culture-change process away from the flair of the me-too product manufacturer as in-house-developments start to come on stream. Launch of first in-house-developed products.
- 1997 Conversion of *aap* GmbH & Co. KG into *aap* Implantate AG with retroactive effect from January 1, 1997; registered capital of DM 800,000.00.
- 1999 Listing of *aap*'s shares on the Neuer Markt.

## Main Business Fields

As a manufacturer of skeletal implants, *aap*'s main business fields are artificial joint replacements (known as endoprosthesis) and bone fracture healing supports in the form of plates, nails and screws (known as osteosynthesis). Endoprosthesis products account for around 21% of *aap*'s turnover and osteosynthesis products provide the remaining 79%.

The human bone is an organ just like the heart, kidney or liver, complete with its own internal and external blood supply. It supports the body and is occasionally subjected to great stress. Healing a broken bone or replacing an entire joint requires not just surgical skill but above all an intelligent, long-life implant. For the recipient to regain their mobility, the bone has to "accept" the implant as a part of itself. The development and manufacture of implants accordingly need to satisfy the most stringent standards.

The Company supplies a range of approximately 4,000 different products and individual parts for the above applications.

## Market Evolution and Corporate Strategy

### The German market

The Company estimates that the sales volume of the medical products and treatments market in Germany was approximately DM 4 billion in 1998. The endoprosthesis market expanded to a volume of around DM 500 million in the same year. Overall, the market for medical products and treatments has been characterized by a somewhat mediocre average annual growth rate of around 3.5% in the last few years. The subdued growth of this market is explained by the currently restrictive nature of government health policy.

The implants market essentially breaks down into three categories. The source for the market volume data we quote is a 1998 study by Market Line International. Hip-related implants (53%), knee implants (25%) and trauma implants (15%) between them account for (93%) of the total turnover of the skeletal implants segment.

*aap* already offers products which cover the entire spectrum of the hip and trauma-related market segments, and the Company will soon be in a position to supply knee-related products as well. In the other implants segment of the market, *aap* will in future offer a leg length equalization product (sales volume: around DM 20.0 million) and a spinal column immobilization product (DM 4.0 million). The following table shows the evolution of the markets *aap* is active in.

### Growth of German market

Skeletal implants	1996	1997	1998
Hip-related	300,150	310,655	321,528
Knee-related	144,900	149,972	155,221
Trauma-related	85,905	88,912	92,024
Leg length equalization	20,700	21,425	22,174
Spinal column fixateurs	4,140	4,285	4,435
<b>Total</b>	<b>555,795</b>	<b>575,248</b>	<b>595,381</b>

Market volume in DM thousand

Source: MarketLine International

### The Asian market

The Asian market is potentially worth more than DM 1.2 billion, with the Japanese market a particularly important component. Its volume is around DM 800 million, divided between traumatology at DM 300 million and orthopedics at DM 500 million. The years-long trend of rising prosperity in Asia has induced a rising pattern of demand for medical products. The required technical standard of treatment technologies is also increasing, boosting the demand for *aap's* products.

### The US market

The market for orthopedic products in the USA expanded at a compound annual growth rate of around 10% in the years 1991 to 1996. Its total turnover was US\$ 3.1 billion in 1996. For the sake of simplicity, the US orthopedic market can be broken down into six segments: knee implants, hip implants, trauma, arthroscopy, spine and other joints. All these segments have recorded significant growth since 1991.

The greatest volume growth (125%) was achieved in the spine segment between 1991 and 1996. The total growth rates of the remaining segments, apart from hip implants (15%) and arthroscopy (48%), were all above 53% over the same period. The aggregate market volume of the segments relevant to *aap* in 1996 was US\$ 1.3 billion. These segments expanded by just under 85% in the period 1991 through 1996 which is approximately 35% higher than the average growth of the total orthopedic products market.

In terms of *aap's* expansion plans, which are to market its biorigid nail, APS plate and new hollow-point screws in the USA, the US trauma market is of primary strategic importance. The total market for trauma products recorded continuous year-on-year growth of around 4.5% between 1991 and 1998. A major feature of this market is its penetration by new technologies, in which the conventional practice of fixing bones with plates and screws is being replaced by nails inserted in the bone marrow cavity – intramedullar (IM) nailing. *aap's* biorigid nail falls into this category.

The IM nails sub-segment will be crucial to *aap's* entry to and growth in the US market. The market for IM nails expanded by around 8.7% in 1996, compared to the 4.8% growth rate of the total internal fixation market that year.

### Customer Structure

*aap's* customers include hospitals and joint purchasing associations of hospitals. While doctors exercise direct control over the selection of innovative products, hospitals frequently band together to jointly manage the procurement of standard products. The formation of joint purchasing associations is currently more widespread in the USA and Asia than in Germany.

As a rule, *aap* supplies German hospitals direct. Of the 1,200 hospitals in Germany, 860 use bone implants. *aap* has initially focused its marketing effort on what are called the B and C hospitals, since the A-class hospitals – essentially the big university clinics – tend to have long-standing, closely-tied customer-supplier relationships with the big Swiss implant makers, especially Synthes.

*aap* sees its launches of innovative products as providing the key for it to break into the domain of its big competitors, i.e. the university clinics. Some of Germany's big teaching hospitals are already committed customers of *aap*. The Company was also able to win over a purchasing association representing nine hospitals at the end of 1997.

### Marketing and Distribution

*aap* currently employs 2 marketing managers, 12 marketing representatives and 6 marketing assistants. The Company prioritizes the fostering of close customer relationships through this department, which is why it maintains its own team. Because of the complexity of medical products and the extensive information needs of the customers (surgeons), the Company sees face-to-face advice as its most important sales tool. The advantages of *aap's* products would be almost impossible for anyone without a technical training to understand. For this reason, *aap* only employs

qualified engineers in its sales function. Such people are able to better grasp the benefits of the Company's products and therefore explain them more clearly to customers than representatives with a generalist background. At the same time, they are able to feed back customer requests and suggestions much more accurately into new product development. The Company plans to transfer the proven advantages of direct marketing to its foreign operations, and specifically the US market. The Company's increasing market acceptance means that decision makers on the customer side frequently recommend *aap* to their colleagues so that the marketing team receive active approaches from potential new customers.

### Business Strategy

*aap*'s aim is to maintain and extend its position as a modern and innovative skeletal implants manufacturer. Its strategy comprises the following key elements:

*aap* would like to grow from a national company into a global player which is the international leader in innovation in the orthopedics market. The Company is therefore working towards the objective of internationalizing its business. In this context, *aap* intends to expand its marketing operation outside Germany, especially in the USA, in order to achieve better on-the-spot access to foreign customers.

It is an integral part of *aap*'s corporate strategy to systematically build on its existing competitive advantages as it goes international. Specifically, it aims to export the advantages of direct marketing to the US market.

The Company also aims to bring about an unbreakable association in the marketplace between its identity as *aap* the manufacturer and concepts such as quality, biotechnology, structural mechanics, bioactive surfaces, human tissue engineering, innovation and leading-edge technology. At the same time, it aims to further establish the name of *aap* in the skeletal implants market.

Furthermore the Company – which sees itself as the market-leading innovator in Germany – aims to maintain

and expand the technological leads it has already established. For this reason, *aap*'s R&D department is currently collaborating closely with a large number of universities on joint development projects, a strategy which it fully intends to continue to pursue in the future as well.

### Competition

The company is subject to fierce competitive pressure both in Germany and in foreign markets (USA and Asia). Its principal competitors in the field of skeletal implants are mostly the industry's global players. The most significant are Synthes, Howmedica and Depuy. Each of these companies is distinguished by the breadth of their hospital needs product ranges and a strong position in the US skeletal implants market. This group is followed by the companies Aesculap, Waldemar Link and Zimmer USA. While Zimmer is an important player in the US market, Aesculap and Waldemar Link belong to the very large category of smaller competitors in the USA.

Aesculap and Link are German companies which have already made a successful move into the US and Japanese markets. Both companies also have a wider product portfolio than *aap*.

Alongside these major competitors, there are also a multitude of small rivals. Of these, Biomet merits a special mention because of its rapid sales expansion. It is a big player on the US market.

### Sales Overview

*aap* has increased its turnover from DM 7,956 thousand in 1996 to DM 8,338 thousand in 1997 (rate of increase: around 5%) and again to DM 10,527 thousand in 1998 (around 26%). The following table shows its turnover growth for the period 1996 to 1998:

Year	Turnover (in DM thousand)
1996	7,956
1997	8,338
1998	10,527

## Research and Development

Research and development ("R&D") has a high priority at *aap*. The most important objective identified when the Company was founded was to put new ideas and technologies into practice quickly, unconventionally and market-responsively. In a market characterized by a low level of development and innovation dynamism, *aap* resolutely pursues a policy of innovation. This is evidenced by the fact that R&D investment is equivalent to between 10% and 12% of turnover. *aap* works closely with its customers, the universities, and has already completed joint development projects.

The following new developments were typical milestones along *aap*'s road to its current eminence:

- Sliding joint plate to assist healing of collar bone fractures  
Whereas all the conventional plates used in this application are rigid, *aap*'s plate is articulated which increases the patient's freedom of movement.
- Biorigid nail  
Whereas the very design of conventional bone marrow nails involves a breakage risk of between 12% and 24%, the innovative design of *aap*'s biorigid nail (known as the "Schauwecker nail") reduces the breakage risk to 0.1%.
- Roller bearing for hip prostheses  
Whereas the sliding bearings used in conventional hip prostheses have to resist extreme localized stresses and therefore suffer higher wear, *aap*'s hip joint incorporates a roller bearing which eliminates the harmful abrasion responsible for prosthesis loosening.

The dynamic pace of *aap*'s development activity, its innovation-focused team spirit, and its exceptional medical engineering and biomedical expertise, mark *aap* as a coming player in the industry.

The new concepts and solutions which are vital to skeletal implant companies are developed by a team of creative and motivated staff. Their close collaboration with a large number of university clinics ensures that many of the team's developments are backed by academic support. A range of development projects have already been successfully completed. In addition, these contacts provide an excellent basis for the management strengthening currently under way and for bringing internationally recognized opinion formers on board.

## Investment

*aap* invested approximately DM 737 thousand in 1996, DM 935 thousand in 1997 and DM 1,020 thousand in 1998 in the research and development of its products and the initial phases of their launches. Its investment in this activity is planned to reach DM 1,470 thousand in 1999. Other investments in 1998 were:

- Machinery DM thousand 1,384
- Organizational investment DM thousand 460

## Employees

The average number of persons employed during 1998 was 82. The following chart shows the growth in employment at *aap* AG and the *aap* Group. The average employees figures were arrived at calculating the average workforce at March 31, June 30, September 30 and December 31 of each year. Employees outside Germany were included but apprentices were excluded.

### *aap* workforce

Composition	1996	1997	1998
<i>aap</i> AG	48	48	80
<i>aap</i> Implants Inc.	0	0	2
<b>Total</b>	<b>48</b>	<b>48</b>	<b>82</b>

## Patents, Licenses

Since it was founded, the Company has been determined to safeguard its product innovations against third-party infringement through the industrial property rights law. Its own inventive rights and products are supplemented by selected purchases of patents or licenses. Since the Company operates in many coun-

tries, it generally seeks international protection. All applications in respect of new developments are made in the name of *aap* Implantate AG.

The Company holds or has applied for 16 patents or registered designs. Its inventive rights are further protected by 15 registered trade names, with one international application still in process.

### Overview of patents held by *aap*

Skeletal implants	Product	Technical advantage	Patient benefit
Hip-related	Bipolar hip joint (socket)	Roller bearing	Reduced wear
	Slotted prosthesis	Improved force absorption	Reduced shaft loosening risk
Trauma-related	Bipolar ball elements	State of the art	Reduced operation time
	Biorigid nail – femur and tibia	Minimized stress concentration	Virtually no breakage risk, enhanced isoelasticity
	Interlocking nail	120-offset lamellae	Femur head torsion eliminated
Shoulder-related	AC joint plate	Articulated plate	Restriction of mobility reduced
Tools	Ball-head screwdriver	Screwing angle up to 20	Greater access to screws

The Company sees no risk that its current R&D projects could infringe third-party rights by commercially exploiting protected rights. However, if this were to prove to be the case, the risk cannot be excluded that this would eliminate or reduce the expected benefits of the new products.

## Real Estate

The Company owns the following real estate as of March 31, 1999:

*aap* owns the lot located at Spreenhagener Strasse 32, size 20,000 m<sup>2</sup>, recorded in the Fürstenwalde Land Register. Section III of the entry shows a mortgage of DM 2.3 million in favor of Berliner Volksbank eG and IKB. 1,400 m<sup>2</sup> of this 20,000 m<sup>2</sup> plot are built on.

The Company's other building are leased. The total rent on these amounted to DM 697 thousand in 1998 (1997: DM 670 thousand). The leases on the Company's office accommodation run to 2008.

## Litigation

No court or arbitration proceedings which might have a significant influence on the economic situation of the Company and/or its subsidiaries or which have had such an influence in the past two financial years are currently under way, nor to the best of the Company's knowledge are any such proceedings pending, threatened, or anticipated.

Health technology combines insights and discoveries from the fields of biology and engineering. The result is products which significantly enhance the quality of human life.

As life expectancy inexorably continues to rise in our society, so the market for engineered biomedical products also expands. Simultaneously, the demand increases for exceptional-quality implants which offer a long service life combined with versatility of application. *aap* Implantate AG is well equipped to meet the growing demands of this market and its innovative products will continue in future to redefine the state of the art. On the basis of its experience in the last five years, the Company views health technology as a market of the future which promises certain growth.

Last year *aap* achieved turnover growth of 26 percent. 1999 has also begun very positively; the first-quarter sales expansion not only matched up to the Company's planning, but exceeded it.

The increases of turnover are due firstly to the introduction of new product systems such as our biorigid femur nail in 1998, and secondly to the winning of new sales markets. The acceptance of the *aap* brand name is also now so firmly established that we have been able to agree a series of cooperation initiatives with internationally renowned medical institutions. Together with these centers of excellence, *aap* is developing new, innovative products which promise huge potential. In particular, the IM nailing segment can be expected to expand even faster in the next few years as the trend to switch "from plates to nails" becomes universally established. The Company recognized this trend early and its new products are well positioned to take advantage.

Most importantly, *aap* Implantate AG has gained recognition in the past for its development of titanium implants. *aap* is one of the few companies which offer titanium implants in addition to the standard steel products. *aap* has acquired an excellent reputation for machining this material which is both high-strength and easily flammable for a metal.

The Company's exceptional innovation capacity gives it the opportunity to break into new markets. *aap* has been preparing the ground for its move into the US market since the middle of 1998 and is already systematically structuring its sales and marketing activities and systems development to appeal to American customers. The resulting contacts and breakthrough sales confirm the correctness of this approach and the value of this preparatory work; the evidence is our first joint project in the USA.

Another success we can register is the conclusion of a cooperation agreement with a big Japanese partner at the start of this year. The registration of our products for the Japanese market is proceeding apace, and the licensing procedures should be completed by July. This will signal the start of the product launch phase, for which the Company has already appointed its own marketing personnel.

*aap* and its products will inject fresh stimulus into the still-young (only thirty years old) implants market and counter its fierce competition with trail-blazing innovations. The long-term strategy of increasing the incorporation of biological discoveries into products, and the possibility of future products made entirely from the body's own natural materials, mean that we at *aap* can look to the future with very great confidence.

Berlin, April 1999

*aap* Implantate AG

On the basis of the above Listing Prospectus/Company Report, the said

**Euro 3,800,000.00**

**3,800,000 unit bearer shares**

each unit share conveying a current notional proportional entitlement in the registered capital of Euro 1.00

and conveying full dividend rights for the financial year 1999,

i.e. as of January 1, 1999,

and numbered from 0 000 001 - 3 800 000

of

**aap Implantate AG, Berlin**

have been admitted to the Regulierter Markt (Second Trading Segment) and to trading on the Neuer Markt of the Frankfurter Wertpapierbörse (FWB Frankfurt Stock Exchange).

Frankfurt am Main, Düsseldorf and Berlin, April 1999

**DG BANK**  
**Deutsche Genossenschaftsbank AG**

**Bankgesellschaft Berlin**  
Aktiengesellschaft

**Deutsche Apotheker- und Ärztebank eG**



*... makes you move!*

**aap Implantate AG**

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