EDISON

aap Implantate

Initiation of coverage

Unlocking Loqteq's potential

Healthcare equipment & services

Continued roll-out of the Loqteq trauma plates should help cement aap's position as a specialised medtech player, aided by strategic relationships with physicians and global medtech partnerships. Loqteq's innovative design should drive uptake in a >$1bn market, owing to increased flexibility for surgeons, potential clinical advantages and cost benefits for payors. We value aap at €3.3/share based on a DCF.

Year end	Revenue (€m)	PBT* (€m)	EPS* (€)	DPS (€)	P/E (x)	Yield (%)
12/11	29.2	2.7	0.08	0.0	16.8	N/A
12/12	36.4	4.9	0.14	0.0	9.6	N/A
12/13e	40.1	6.0	0.17	0.0	8.4	N/A
12/14e	44.5	6.7	0.20	0.0	6.7	N/A

Note: *PBT and EPS are normalised, excluding intangible amortisation, exceptional items and share-based payments.

Loqteq is the key growth driver

Loqteq is aap's internally developed and recently launched trauma plating system. Loqteq's locking and compression technology improves fracture repair by providing more stable fixation, even in weak bones or multi-fragment fractures. The existing market for locking plate technology is estimated at up to $1bn in the US alone and is dominated by DePuy Synthes (J&J). Loqteq's innovative design could offer a number of advantages over the nearest competitor, including increased surgeon flexibility and potential clinical advantages upon plate removal. We conservatively forecast peak Loqteq sales of around €40m by 2020.

Strategy to simplify and specialise

Since 2009 aap has been simplifying the business to focus on the key areas of trauma and biomaterials (bone cements). These businesses take advantage of aap's existing relationships with leading orthopaedic surgeons and OEM partnerships with global medtech players (including Zimmer and Smith & Nephew). Both of these help drive innovation and demonstrate aap's know-how and manufacturing capabilities.

Share price underpinned by base business

Our model suggests that if aap only grows revenues 1-2% in the medium- to long-term, with limited margin expansion, our DCF valuation is €44m or €1.4/share, just above the current share price. This suggests the share price is underpinned by the existing business even in the absence of Loqteq.

Valuation: €100m based on DCF

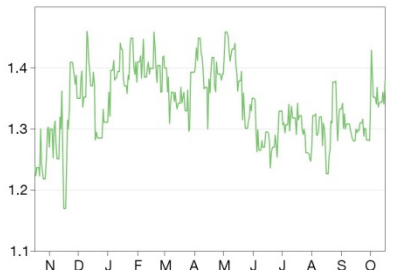
We value aap at €100m or €3.3/share, based on a DCF valuation. We forecast 10% 2012-15 revenue CAGR and a doubling of current sales to around €80m by 2020, driven by Loqteq. In addition we assume EBITDA margins can expand around 200 basis points over the next two to three years. In the longer term we expect operating margins to reach around 25% from 14% today.

17 October 2013

Price	**€1.38**
Market cap	**€42m**

Net cash (€m) as at end-June 2013	0.6
Shares in issue	30.7m
Free float	34%
Code	AAQ
Primary exchange	Xetra
Secondary exchange	N/A

Share price performance



%	1m	3m	12m
Abs	6.1	6.8	7.3
Rel (local)	3.3	(1.0)	(10.5)
52-week high/low		€1.46	€1.17

Business description

aap is a German medical technology company focused on developing, manufacturing and selling products for bone fractures. These include the recently launched Loqteq trauma plating system, in addition to bone cements.

Next events

Q3 financial results	11 November 2013
Loqteq additional regulatory approvals	H213

Analysts

Dr Philippa Gardner	+44 (0)20 3681 2521
Dr Mick Cooper	+44 (0)20 3077 5734
Robin Davison	+44 (0)20 3077 5737

healthcare@edisongroup.com

Edison profile page

Investment summary

Company description: Repairing fractures

aap is a German medical technology company that develops, manufactures and sells products for use in orthopaedic procedures. It has been through a number of changes in recent years following a 2009 strategy to simplify and focus the business around the key areas of trauma products to internally fix bone fractures and bone cements. These areas exploit aap's know-how and expertise, while leveraging partnerships with global medtech companies including Smith & Nephew. In addition, aap works with leading orthopaedic surgeons in Germany to develop innovative products to drive long-term growth.

The company recently launched its innovative Loqteq trauma plating system, which is the key growth driver and could lead to a doubling of sales over the next seven years. Loqteq could offer a number of advantages over its closest competitors in a market estimated at up to $1bn in the US alone. Beyond Loqteq, aap is working on a number of pipeline opportunities, including silver-coated trauma plates to reduce infection, and biodegradable magnesium implants for small bone fractures.

aap was founded in 1990 and went public in 1999. It employs over 280 people, is based in Berlin and has two manufacturing facilities in Germany (Dieburg and Berlin) and a third site in Nijmegen (Netherlands).

Valuation: DCF valuation of €100m or €3.3/share

We value aap at €100m or €3.3/share, based on a DCF valuation assuming a WACC of 12.5%, terminal growth of 2.0% and a long-term tax rate of 25%. Our DCF includes three-year revenue growth of 10% primarily driven by the recent launch of Loqteq, which we estimate could reach sales of €40m by 2020 in a market estimated at up to $1bn in the US alone. This would effectively double aap's current sales. We forecast EBITDA margin expansion of around 200 basis points over the next two to three years and in the longer term we expect operating margins to reach around 25% from 14% today.

Sensitivities: Loqteq commercial success is key

The main sensitivity for aap is the commercial success of Loqteq, which is entering a market dominated by large, global medtech players with significant marketing muscle. Nevertheless the potential cost and clinical benefits of Loqteq should help drive physician uptake. The current share price suggests the market is even more cautious on Loqteq's prospects than our conservative €40m peak sales, with the current market cap justified with only 1-2% long-term top-line growth and a long-term operating margin of 16%. This is achievable even in the absence of Loqteq.

Financials: Improving performance under 2009 strategy

As the business transforms under the 2009 strategy to simplify and specialise, and in view of the Loqteq launch, we expect financial performance to improve in future years. We forecast around 10% revenue growth over the next three years and around 15% EBITDA and 19% EPS growth. The cash generated within Biomaterials should be sufficient to fund innovation in the Trauma business, without the need for external financing. aap is working to strengthen the balance sheet and has been reducing debt, with interest-bearing debt of €3m at June 30 (shown as €2.5m total borrowings in Exhibit 7 and €0.5m included within "Creditors" and "Other long-term liabilities") compared to nearly €8.0m at year end 2012 (€6.5m total borrowings and €1m of shareholder loans included within "Creditors" in Exhibit 7, which have now been paid off).

Strong foundations cement the future

aap's innovative Loqteq trauma plating system will be the key growth driver in future years, and could lead to a doubling of sales revenues by 2020. This innovative product offers a number of clinical advantages over the market leader in addition to cost efficiencies, which should drive uptake into a market worth up to $1bn in the US alone. Our €40m forecast supports our €3.3/share DCF valuation. In the absence of Loqteq, the existing base businesses of standard Tauma products and bone cements (Biomaterials) more than underpin the current share price.

From disparate and diverse to simplified and specialised

aap was originally aiming to become a complete supplier to the orthopaedics market, and growth was driven both by internal development and through external acquisitions, with a number made between 2000 and 2007. This led to a wide range of product lines and markets and when the current CEO, Biense Visser, was appointed in 2009, a new strategy was developed to focus and simplify the company around key businesses.

The strategic aims were to focus on sustainable, cash generative, growing businesses, protected by IP or know-how, where aap could compete and innovate. This led the company to concentrate on bone cement (biomaterials) and trauma implants – related areas where the company felt it was well positioned. Since the implementation of this strategy, a number of non-core assets have been divested, with further disposals and divestments of non-core assets possible.

The solid position in biomaterials is evidenced by original equipment manufacturer (OEM) partnerships with leading global medtech companies, including Smith & Nephew, in addition to the development of innovative products, such as Loqteq. A pipeline of next generation medtech solutions, aided by strong relationships with leading surgeons in Germany and academic collaborations, should ensure aap is well positioned to drive these businesses forward.

Exhibit 1: Overview of aap's key business lines

Business/product	2011 revenues (€m)	2012 revenues (€m)	Growth	Comments
Biomaterials	22.4	28.6	+28%	2012 includes €2.6m from licensing
Trauma & Orthopaedics	6.4	5.8	-10%	2012 includes €4.3m Trauma sales (ex-Loqteq), representing +19% y-o-y growth
Loqteq	0.4	2.1	+414%	US currently in "beta" launch; two further plate approvals expected during 2013

Source: aap, Edison Investment Research

Trauma: Loqteq the key growth driver

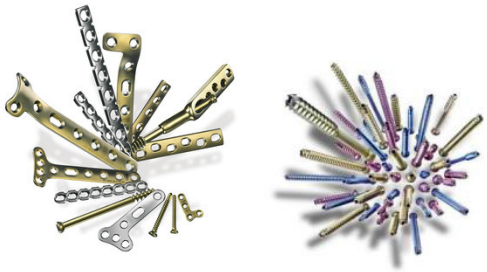
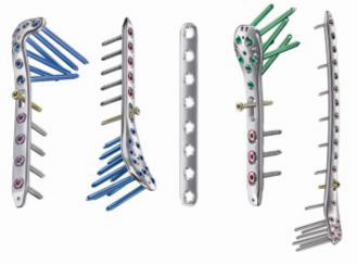
aap has a range of products for use in trauma surgery for the treatment of fractures and deformities. These consist of "me-too" products, from screws and plates for fixation that can address a wide variety of fractures, through to the innovative Loqteq portfolio. In the next few years, the key growth driver for the trauma business will be the ongoing Loqteq roll-out, which is discussed in more detail later in this report. Trauma (ex-Loqteq) grew +19% in 2012 and we expect future growth to be driven by continued uptake and additional distributors expanding the global footprint.

Biomaterials: Provides cash for Trauma innovation

aap's expertise in biomaterials has been developed over a number of years and originated in 2000 via the acquisition of the Mebio/Coripharm group of companies and the investment in Osartis, which was subsequently fully acquired in 2005. Products range from bone cements and accessories that are used for arthroplasty (joint reconstruction/replacement surgery) and vertebroplasty and kyphoplasty (procedures to treat spine fractures) to bone substitutes used as fillers in defective bone and products for infection control. aap has a number of OEM contracts with global medtech companies, including DePuy Synthes, validating aap's expertise and manufacturing capabilities. Key products are summarised in Exhibit 2.

Exhibit 2: Summary of key product lines

Biomaterials	Product	Product type	Indication	Description/comments
	BonOs R	Bone Cements & Accessories	Arthroplasty	PMMA cement - plain and genta
	BonOs Inject	Bone Cements & Accessories	Vertebroplasty and kyphoplasty	PMMA cement
	VerteStable	Bone Cements & Accessories	Vertebroplasty	Application system for BonOs Inject
	PulsaClean	Bone Cements & Accessories	Arthroplasty	Disposable lavage
	C~Plug	Bone Cements & Accessories	Arthroplasty	Porcine gelatine resorbable cement restrictor
	OsteoCem	Bone Substitutes	Bone defect filler	Calcium phosphate cement
	PerOssal	Bone Substitutes	Bone filler	Synthetic
	Artosal	Bone Substitutes	Bone defect filler	Synthetic
	Cerabone	Bone Substitutes	Bone defect filler	Xenograft
	Osnatal	Bone Substitutes	Bone defect filler	Allograft or autograft
	PerOssal	Infection Care	Bone infections	Synthetic
	Jason (G)	Infection Care	Haemostasis and infection prevention	Porcine collagen fleece (+genta)

Trauma and Orthopaedics	Product	Product type	Indication	Description/comments
	Cannulated Screws	Standard Trauma	Broad	Wide range of sizes; colour-coded
	Plates	Standard Trauma	Broad spectrum	Wide range of trauma plates
	APS	Standard Trauma	Hip injuries	Autodynamic plating system
	Acro Plate	Standard Trauma	Shoulder joint injuries	Anatomically shaped hook plate
	Loqteq	Trauma	Locking and compression fixation system Approved plates: Small Fragment Set 3.5 (straight plates) Large Fragment Set 4.5 (straight plates) Proximal Humerus 3.5 (arm) Distal Humerus 2.7/3.5 (arm) Distal Medial Tibia 3.5 (leg) Proximal Lateral Tibia 3.5 (leg) Proximal Lateral Tibia 4.5 (leg) Proximal Medial Tibia 3.5 (leg) Distal Lateral Femur 4.5 (leg) High Tibia Osteotomy/Femur Osteotomy Set (leg)	EU launch 2011 US launch 2012 Two additional plates expected during 2013

Source: aap, Edison Investment Research

Customers and markets

The global medtech market is driven by a number of factors, which include the ageing population, a drive for less invasive procedures and an increasing focus on costs. This is against a backdrop of challenging economic conditions, which has led to muted overall growth, especially in Europe. Nevertheless, certain regions, including emerging markets, and certain medtech sectors perform better than others; for example data from J&J's Medical Devices and Diagnostics investor event in January 2013 suggest that the trauma market within the orthopaedics sector is growing at around 4-5%, faster than hip and knee replacements, which are growing around 3%. In order to remain competitive, medtech companies must continually innovate and products must be cost effective.

In this regard, aap is well positioned with its focus on higher growth markets, such as Trauma, the development of innovative products, such as Loqteq and the pipeline of next generation trauma solutions. In addition, aap is addressing high-growth regions through its various sales channels:

1. **Direct sales in German speaking countries:** In 2012 11% of aap's revenues were generated in Germany via a direct sales network. aap works closely with a number of leading orthopaedic surgeons and centres in Germany to develop new, innovative products, in addition to line-extensions and product refinements. These relationships allow aap to focus on products that address key clinician and patient needs.
2. **Distributor network:** aap has a network of distributors targeting over 40 countries. These are focused on the key regions of the US, Europe (ex-Germany), Eastern Europe, BRICS (Brazil, Russia, India, China and South Africa), SMIT (South Korea, Mexico, Indonesia and Turkey) and the Middle East. During 2012 aap secured distribution partners in a number of countries including Spain, Italy, Turkey and Egypt in addition to a number of Latin American markets. Distributors are currently being sought for the UK and France.
3. **OEM partners:** aap's OEM business has grown from a single contract in 2004 with Smith & Nephew for a bone cement, to contracts with numerous leading medtech companies, including Zimmer, Medtronic, Stryker, Biomet and DePuy Synthes, with the majority of contracts focused on the biomaterials business. The range of OEM customers demonstrates and validates aap's expertise and manufacturing capabilities in this area.

In addition to the above sales channels, aap also makes some of its non-core products and know-how available for out-licensing. In 2012 aap generated €2.6m of "Project" revenue from out-licensing Ostim (bone regeneration) to a medtech partner and Vebroplast (vertebral column cement) to a Chinese partner. aap has already realised €3.2m in 2013 from additional similar agreements.

Loqteq: Standing on the shoulders of giants

Loqteq is aap's internally designed and developed trauma plating system that encompasses both locking and compression technology, improving internal fixation of fractures. Approval for the first six trauma plates was granted in Europe in 2011 and in 2012 in the US. The product has since been launched in Europe and generated sales of €2m in 2012. A further four plates have been approved this year and approval for the next two plates is expected before year end 2013. Together these provide coverage for around 80% of surgical indications. aap is working on pipeline products, including periprosthetic implants (discussed later in the report) that could address the remainder of the market.

Understanding locking and compression technology

Anatomically shaped trauma plates are used in orthopaedic surgery to join fractured bones. This is referred to as internal fixation, as opposed to external fixation of a fracture via a splint or plaster cast. Internal fixation has been widely available for around the past 50 years, and plate and screw technology has evolved and developed to improve healing and repair.

The most recent advances combine the use of "locking" and "compression" technology, where screws have been designed to lock into the plates themselves, while at the same time allowing bone fracture compression, all with minimal bone-plate interaction, shown in Exhibit 3. This approach provides support and stability, even in weak or multi-fragment fractures.

Exhibit 3: Locking and compression schematic

Source: aap

Loqteq is differentiated from the market leader...

The locking compression market is dominated by DePuy Synthes, a J&J company formed by J&J's $21.3bn acquisition of Synthes in 2011. One of the drivers of the acquisition was Synthes' innovation in the trauma market, including locking and compression technology. Synthes launched its Locking Compression Plate (LCP) system over 10 years ago. It is based on a locking mechanism achieved by the screw alone. LCP sales are not disclosed but Orthopedic Network News estimates Synthes had nearly $1.5bn of sales in the US trauma market in 2010 and a 65% share of the locking plate market, which could be up to $1bn. Other locking and compression systems are also available, but these rely on more cumbersome procedures to achieve locking, for example screw and nut combinations, which make the surgery more complicated. The simplicity of the Synthes LCP system has been one of the drivers of its success and various patents have prevented significant competition.

Loqteq has been developed along the same principles as the LCP system but contains certain innovative features that differentiate the product:

- **Locking mechanism:** Loqteq's locking and compression is achieved by one screw in one hole with one step. The key locking mechanism difference versus LCP is the screw head design. Loqteq's locking screws are based on a cone and thread design (shown in Exhibit 4), as opposed to LCP fully threaded screw heads. This is the key innovative design feature, which should allow Loqteq freedom to operate and compete in this market. In addition the innovative design of Loqteq could avoid "cold-welding", discussed below, which would offer a clinical advantage at the point of plate removal.
- **Variable compression length:** Loqteq offers the surgeon variable stepwise compression of 0, 1mm and 2mm, making the product more flexible for various fractures. This is in contrast to LCP, which only offers 1mm compression.

Exhibit 4: Loqteq's locking screw – innovative thread and cone design, and locked into a plate

Source: aap

...and could offer clinical advantages

Aside from increased flexibility with the variable compression options, Loqteq could also potentially offer a clinically relevant advantage over LCP. One of the issues associated with the LCP system is the incidence of "cold welding". Cold welding is where the locking screw becomes jammed in the plate, making subsequent removal of the plate problematic.

Literature suggests that cold welding with Synthes' locking screws has been observed in 8.6% (versus 0.5% of non-locking screws)[1], to 17%[2] of screws. Loqteq's screw head conical design could therefore potentially overcome the issue of stripping and thus cold-welding, although this will need to be determined in a clinical trial. While aap is not aware of any cases of cold-welding with Loqteq, which has been used in over 300 procedures in Germany alone, any instances of cold welding will only become apparent upon explantation.

Loqteq commercialisation

The first six Loqteq plating systems were launched in Europe during 2011 and received FDA approval in Q412 with initial commercial US launch ongoing via an undisclosed US partner. These systems address small and large bone fragments (straight plates), arms (proximal humerus), and legs (distal lateral femur, proximal lateral tibia and distal medial tibia). A further four plates have been approved during 2013 (distal humerus, proximal lateral tibia, proximal medial tibia and high tibia/femur osteotomy set) with approval for an additional two plates expected before year end 2013. Together, these plating systems will provide coverage for around 80% of surgical indications.

aap markets Loqteq directly in Germany and has appointed distributors in a number of other countries, including China and the US. In the US, aap signed a pilot marketing agreement with an undisclosed medtech company during Q412 and following FDA approval for the first plates, Loqteq is being introduced to the US market. We do not believe the US partner has an existing locking plate trauma system, hence will not be one of the medtech peers in Exhibit 6 (JNJ, Smith & Nephew, Orthofix, Stryker, Zimmer), but more likely a smaller, more focused trauma specialist.

A decision on full US launch will be made during the next six to 12 months. The current US agreement is non-exclusive and therefore provides aap with flexibility should other partners be interested in licensing Loqteq, for example, as part of a global agreement, or on more favourable terms.

[1] Bae J.H., Oh J.K., Oh C.W., Hur C.R. Technical difficulties of removal of locking screw after locking compression plating Arch Orthop Trauma Surg 2009; 129 : 91-95

[2] Georgiadis G.M., Gove N.K., Smith A.D., Rodway I.P. Removal of the less invasive stabilization system J Orthop Trauma 2004; 18 : 562-564

Loqteq could conservatively reach at least €40m sales by 2020

Estimating Loqteq's market potential is not straightforward as market data is limited and sales of competitor products are not disclosed. According to data from J&J's Medical Devices and Diagnostics investor event in January 2013, the global market for trauma products in 2011 was c $5bn, which J&J expects to grow to $6.5bn by 2016. According to "Orthopedic Network News" (ONN) the US trauma market alone was around $3bn in 2010, of which plates and screws are the largest contributor, representing around 46%. ONN estimates that locking plates and screws represent around 63% of medium/large plate units and 78% of medium/large plate sales. This suggests that the market for locking plates and screws in the US alone could be up to $1bn.

This market is dominated by global medtech companies with substantial sales and marketing budgets, which could make market penetration somewhat challenging. Hence we conservatively estimate that Loqteq sales could reach €40m by 2020, growing from company expectations of €5m in 2013. This would represent only a small portion of the locking plate market.

In addition to the potential advantages that Loqteq can offer over market leader LCP, we understand that Loqteq is priced at around a 5-15% discount (ONN estimates an average LCP cost of $1,180 versus $328 for non-locking plates). These together could help drive Loqteq sales beyond our forecasts, particularly once the additional plates are available this year, providing more complete coverage of various surgical indications.

Loqteq pipeline to address remaining market opportunities

Beyond the initial 12 Loqteq plating systems, aap is also developing polyaxial locking screws, which allow the surgeon to determine the angle and trajectory of the screw, which can therefore be used to place a plate according to the patient's anatomy, rather than the existing "monoaxial" plates whereby the screw angle is predetermined by the plate design. Loqteq plates already allow for polyaxial fixation but only with a non-locking screw.

aap is also developing periprosthetic implants for bone fractures that occur around an existing implant. This is a growing problem with the ageing population and the increasing number of orthopaedic implants, including hip and knee replacements, combined with age-related bone weakening.

Pipeline beyond Loqteq

aap is also working on a number of other innovative medtech products, both in collaboration with leading academics and with companies with expertise in key areas. These include:

- **Silver-coated trauma products:** aap is working to develop silver-coated trauma implants in order to improve infection prevention. Current trauma implants are not coated and hence the application of certain coatings, such as silver, or controlled release of an antibiotic could prevent infections and improve healing. Initial animal trials are due to commence imminently, which could allow for first market entry from 2015.
- **Resorbable magnesium implants:** In March 2013 aap and eontec Co Ltd, a Chinese magnesium specialist, agreed to form a 50:50 JV for the development of resorbable magnesium implants. Such implants could be used in trauma applications, particularly for small implants in, for example, hands and feet, and would remove the need for later explantation (removal) of the implant. eontec develops and produces magnesium products for the electronics industry. Hence the JV combines aap's trauma expertise with eontec's magnesium knowledge. Human clinical trials are expected to start within the next 12 to18 months, with costs shared equally.

Valuation

We value aap at €100m or €3.3/share based on a DCF valuation assuming a WACC of 12.5%, terminal growth of 2.0% and a long-term tax rate of 25%. Our key revenue growth assumptions are shown in Exhibit 5. We expect around a 200 basis point improvement in product gross margin owing to the changing product mix, and anticipate some cost efficiencies in the future, driving operating margin expansion to c 16% by 2015 from 14% in 2012. In the longer term as Loqteq grows, we believe operating margins could reach around 25% from 14% currently.

Exhibit 5: Base case revenue assumptions

€m	2011	2012	2013e	2014e	2015e
Biomaterials	22.4	28.6	30.0	28.4	28.9
Trauma & Orthopaedics (ex-Loqteq)	6.4	5.8	5.0	5.6	6.1
Loqteq	0.4	2.1	5.0	10.5	14.0

Source: aap, Edison Investment Research

While we do not value individual products or segments, if we assume Loqteq peaks at sales of €5m, and that long-term operating margins remain at 16%, our DCF valuation is €44m or €1.4/share. This is just above the current share price, suggesting that the current valuation is more than underpinned by the business as it exists today, assuming only limited top-line growth and margin expansion in the future. If Loqteq is more successful than we expect, every incremental €10m of sales by 2020 is worth around an additional €30m to our DCF valuation, equivalent to around €1/share, as we assume only limited additional spend by aap will be needed to drive these sales.

aap is trading at a discount to global orthopaedic peers

aap is trading at around a 45-55% P/E discount to global medtech peers, out to 2015, as shown in Exhibit 6. Given aap is a fraction of the market cap of these peers and is entering a significant growth phase with the launch of Loqteq, in our view a multiple-based valuation is not appropriate, as this does not capture aap's above-average sales and earnings growth.

Exhibit 6: Peer group multiple comparison

Company	Price	2013 P/E	2014 P/E	2015 P/E	2012-15e 3 yr sales CAGR	2012-15e 3 yr EPS CAGR	PEG
JNJ	$89.5	16.4	15.4	14.4	5.0%	7.0%	N/A
Orthofix International	$20.0	12.4	9.0	9.4	(1.0%)	(11.0%)	2.4
Smith & Nephew	772p	16.3	14.8	13.6	5.0%	6.0%	N/A
Stryker	$70.2	16.6	15.2	13.9	4.0%	7.0%	2.6
Zimmer	$86.7	15.1	13.9	12.7	3.0%	9.0%	2.2
Average		**15.4**	**13.7**	**12.8**	**3.2%**	**3.6%**	**2.4**
aap	€1.3	7.9	6.8	5.9	10.4%	18.5%	0.4

Source: Edison Investment Research, IBES consensus estimates from 14 Oct 2013

Sensitivities

The key sensitivity for aap is the commercial success of Loqteq. The product has already achieved €2m sales in 2012 without entry into the significant US market. The US market is likely to be key, but is dominated by large global medtech competitors with significant marketing muscle, which could make entry and uptake challenging. Nevertheless, the cost and potential clinical benefits of Loqteq could help convince physicians to adopt it. Loqteq is also subject to regulatory risks: the first 10 Loqteq trauma plates have been approved and the next two plates are undergoing regulatory review with approval expected during 2013. These 12 plates will cover around 80% of indications.

Any regulatory setbacks or delays could adversely affect its launch until the complete portfolio of plates is available.

Loqteq patents have been filed and those covering the key differential and innovative design of the screw head have been issued in Germany. The international patents are currently under review. These patents should help prevent significant competition and protect Loqteq's franchise.

Beyond Loqteq, aap will need to grow the Biomaterials and Trauma businesses. Continual innovation will be needed to drive growth, and aap is already working on a number of pipeline opportunities. In addition, aap will need to maintain existing OEM relationships, which are often built around aap's know-how, particularly in Biomaterials. Hence any knowledge transfer could make these more challenging to renew in the future.

Aside from Loqteq sensitivities, aap is also exposed to exchange rate risk, given its international markets and partners. It is also exposed to any slowdowns in market growth in various regions, for example in Europe, where market growth has been sluggish.

Financials

Revenues, consisting of product sales and licensing income from the various sales channels, have been variable over the past few years. This is due to fluctuating product sales growth, from a 10% decline in 2009 through to 15% growth in 2012, in addition to unpredictable and lumpy licensing income. EBITDA margins declined post-implementation of the new strategy and have since been increasing. With the recent launch of Loqteq the business is undergoing a transformation, which should drive revenue growth of 10% 2012-15 revenue CAGR, and profits growing faster than revenues. Our detailed financial forecasts are shown in Exhibit 7.

Our revenue forecasts are based on our assumptions for Loqteq, Biomaterials and Trauma & Orthopaedics (ex-Loqteq) growth. We assume Loqteq can grow from €2m in 2012 to around €40m by 2020. We forecast 2-3% Biomaterials sales growth and Trauma growth (ex-Loqteq) of 10% declining to a stable 2% by 2020. Our forecasts include minimal future licensing revenues. Thus our 2013 revenue forecast is €40.1m, just above management's guidance of €40m.

We do not forecast any improvement in underlying gross margin in the Biomaterials business, but do expect to see some small gross margin expansion in the Trauma business (ex-Loqteq). We anticipate Loqteq gross margins to improve substantially as the product grows in the future. This should drive around a 200 basis point improvement in underlying product gross margin (as a function of Product Sales, excluding licensing income) over the next few years.

We expect around a 10% increase in personnel expenses and c 15% increase in other operating expenses in 2013 as the Loqteq roll-out continues. Beyond 2013 we forecast around 5% growth in both. Hence, we forecast €7.3m EBITDA in 2013, just above management's €7m guidance. In the medium term, taken together with our gross margin forecasts, we expect EBITDA margins to improve around 200 basis points by 2015 from 17% in 2012.

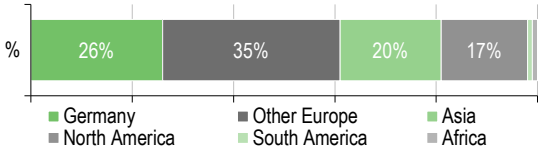
aap currently only pays tax on certain entities, owing to a number of tax loss carry forwards, hence the effective tax rate in 2012 was 11.4%. We forecast a long-term tax rate of 25% once these carry forwards are exhausted. aap had €2.55m total borrowings at end-June 2013, reduced from €6.52m (as shown in Exhibit 7) at YE12 with €4.3m cash from a Biomaterials licensing agreement received in April. With €3.19m cash at 30 June, this suggests net cash of €0.64m.

Exhibit 7: Financial summary

€000s	2008	2009	2010	2011	2012	2013e	2014e	2015e
December	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS
PROFIT & LOSS								
Revenue	31,884	33,101	28,440	29,205	36,414	40,053	44,523	48,978
Total Output	36,476	34,788	32,560	33,003	39,337	42,806	47,210	51,653
Cost of Sales	(9,233)	(7,411)	(9,535)	(8,078)	(10,776)	(11,706)	(13,842)	(15,110)
Gross Profit	22,651	25,690	18,905	21,127	25,638	28,347	30,680	33,868
EBITDA	3,713	6,563	3,448	4,126	6,106	7,300	8,107	9,260
Operating Profit (before amort. and except.)	2,300	5,313	2,406	3,072	5,034	6,125	6,763	7,746
Intangible Amortisation	(6,935)	(1,719)	(1,687)	(1,907)	(2,837)	(2,095)	(2,136)	(2,240)
Exceptionals	0	0	0	0	1,015	0	0	0
Other	(6)	(306)	(174)	(220)	(316)	(300)	0	0
Operating Profit	(4,641)	3,288	545	945	2,896	3,730	4,628	5,506
Net Interest	(917)	(534)	(359)	(327)	(176)	(129)	(76)	(35)
Profit Before Tax (norm)	1,383	4,779	2,047	2,745	4,858	5,996	6,688	7,712
Profit Before Tax (FRS 3)	(5,558)	2,754	186	618	2,720	3,601	4,552	5,472
Tax	324	(816)	(135)	(223)	(310)	(500)	(600)	(675)
Profit After Tax (norm)	1,701	3,657	1,738	2,302	4,232	5,196	6,088	7,037
Profit After Tax (FRS 3)	(5,234)	1,938	51	395	2,410	3,101	3,952	4,797
Average Number of Shares Outstanding (m)	26.2	27.6	27.8	29.6	30.7	30.7	30.7	30.7
EPS - normalised (€)	0.07	0.13	0.06	0.08	0.14	0.17	0.20	0.23
EPS - normalised and fully diluted (€)	6.62	0.13	0.06	0.08	0.14	0.17	0.20	0.23
EPS - (IFRS) (€)	(0.20)	0.07	0.00	0.01	0.08	0.10	0.13	0.16
Dividend per share (p)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Margin (%)*	71.0	74.1	65.4	72.3	68.1	68.1	68.3	68.8
EBITDA Margin (%)	11.6	19.8	12.1	14.1	16.8	18.2	18.2	18.9
Operating Margin (before GW and except.) (%)	7.2	16.1	8.5	10.5	13.8	15.3	15.2	15.8
BALANCE SHEET								
Fixed Assets	44,493	41,066	42,597	43,675	44,921	45,797	48,306	50,588
Intangible Assets	34,506	35,528	37,000	38,248	39,403	36,549	37,063	37,430
Tangible Assets	7,309	5,055	5,200	5,071	5,107	7,337	9,333	11,248
Investments	2,678	483	397	356	411	1,911	1,911	1,911
Current Assets	22,537	21,589	21,035	22,476	23,669	24,085	25,922	28,824
Stocks	13,714	11,538	12,688	13,991	13,943	12,791	14,411	14,870
Debtors	6,795	6,007	6,204	5,508	4,226	6,487	6,099	6,709
Cash	96	2,406	909	2,152	3,698	3,005	3,610	5,442
Other	1,932	1,638	1,234	825	1,802	1,802	1,802	1,802
Current Liabilities	(16,334)	(13,596)	(14,986)	(15,126)	(13,018)	(9,139)	(9,446)	(9,755)
Creditors	(8,900)	(7,912)	(9,485)	(9,647)	(8,521)	(8,123)	(8,430)	(8,739)
Short term borrowings	(7,434)	(5,684)	(5,501)	(5,479)	(4,497)	(1,016)	(1,016)	(1,016)
Long Term Liabilities	(9,393)	(4,344)	(3,794)	(2,675)	(4,706)	(6,567)	(6,447)	(6,318)
Long term borrowings	(3,008)	(1,836)	(1,163)	(74)	(2,019)	(4,000)	(4,000)	(4,000)
Other long term liabilities	(6,385)	(2,508)	(2,631)	(2,601)	(2,687)	(2,567)	(2,447)	(2,318)
Net Assets	41,303	44,715	44,852	48,350	50,866	54,175	58,335	63,340
CASH FLOW								
Operating Cash Flow	544	4,761	2,654	3,213	7,088	6,164	7,364	8,679
Net Interest	0	0	0	0	0	(129)	(76)	(35)
Tax	0	0	0	0	0	(453)	(575)	(656)
Capex	(2,459)	(645)	(1,191)	(928)	(1,205)	(3,405)	(3,339)	(3,428)
Acquisitions/disposals	10	5,001	961	138	261	3,000	0	0
Financing	2,763	1,267	45	3,039	(101)	0	0	0
Dividends	0	0	0	(34)	0	0	0	0
Net Cash Flow	858	10,384	2,469	5,428	6,043	5,178	3,374	4,560
Opening net debt/(cash)	9,101	10,346	5,114	5,755	3,401	2,818	2,011	1,406
HP finance leases initiated	0	0	0	0	0	0	0	0
Other**	(2,103)	(5,152)	(3,110)	(3,074)	(5,460)	(4,371)	(2,769)	(2,727)
Closing net debt/(cash)	10,346	5,114	5,755	3,401	2,818	2,011	1,406	(426)

Source: aap, Edison Investment Research. Note: Total output consists of revenues, capitalised development costs and inventory changes. aap's expenses are classified according to nature (material, personnel and other) rather than by function (R&D, sales & marketing etc), hence cost of sales refers to material costs. *Gross margin refers to underlying product gross margins, based on product sales and excluding licensing income. **Other in the cash flow includes capitalised development costs.

EDISON

Contact details	Revenue by geography
aap Implantate AG Lorenzweg 5 D-12099 Berlin Germany +49 30 750 19 134 www.aap.de/en	

CAGR metrics		Profitability metrics		Balance sheet metrics		Sensitivities evaluation	
EPS 2011-15e	30.8%	ROCE 2014e	10.6%	Gearing 2014e	2.4%	Litigation/regulatory	◖
EPS 2013-15e	16.4%	Avg ROCE 2011-15e	9.4%	Interest cover 2014e	89.2x	Pensions	○
EBITDA 2011-15e	22.4%	ROE 2014e	10.4%	CA/CL 2014e	2.7x	Currency	◖
EBITDA 2013-15e	12.6%	Gross margin 2014e	68.9%	Stock days 2014e	118	Stock overhang	◖
Sales 2011-15e	13.8%	Operating margin 2014e	15.2%	Debtor days 2014e	50	Interest rates	○
Sales 2013-15e	10.6%	Gr mgn / Op mgn 2014e	4.5x	Creditor days 2014e	23	Oil/commodity prices	○

Management team

CEO: Biense Visser

Mr Visser has been CEO and chairman of the management board since the start of 2009, having previously been a member of aap's supervisory board. Prior to aap, he was CEO of Dutch company De RuiterSeeds B.V. Mr Visser studied pharmacy and holds an MBA. He has held senior management positions at a number of pharmaceutical and healthcare companies including president and CEO of Teva Europe.

COO: Bruke Seyoum Alemu

Mr Seyoum Alemu joined aap in 1993 and has held various positions within the company. He has been a member of the management board since 1999 and has been chief operating officer in charge of development, production, sales and marketing since 1 December 2008. Mr Seyoum Alemu holds a master's degree in nuclear engineering from the Technical University Dresden and a postgraduate degree in management and planning from Berlin.

CFO: Marek Hahn

Mr Hahn has been CFO and a member of the management board at aap since April 2010, having joined the company in 2007 as director of finance. Prior to aap, he worked for KPMG in the field of auditing, accounting and executive consulting in Germany and other countries.

Chairman of the Supervisory Board: Rubino Di Girolamo

Mr Di Girolamo has been chairman of the supervisory board since August 2007 and was previously deputy chairman since 2004. Mr Di Girolamo is CEO of Z-Systems AG. He is also on the board of Deepblue Holding AG and Metalor Dental Holding AG.

Principal shareholders	(%)
Elocin B.V.	20.89
Noes Beheer B.V.	16.66
Jurgen W. Krebs	12.56
Management and other investors with a close relationship to aap	10.00
Deepblue Holding AG	5.30

Companies named in this report

J&J (JNJ US); Smith & Nephew (SN/ LN); Zimmer (ZMH US); Medtronic (MDT US); Stryker (SYK US); Biomet (private); Orthofix (OFIX US)

Frankfurt +49 (0)69 78 8076 960
Schumannstrasse 34b
60325 Frankfurt
Germany

London +44 (0)20 3077 5700
280 High Holborn
London, WC1V 7EE
United Kingdom

New York +1 646 653 7026
245 Park Avenue, 39th Floor
10167, New York
US

Sydney +61 (0)2 9258 1162
Level 33, Australia Square
264 George St, Sydney
NSW 2000, Australia

Wellington +64 (0)4 8948 555
Level 15, 171 Featherston St
Wellington 6011
New Zealand