

**Buy** (old: Buy)

**Price target: EUR 2.40** (old: EUR 2.40)

**Price:** EUR 1.19 **Next result:** tba  
**Bloomberg:** AA@GR **Market cap:** EUR 34.1 m  
**Reuters:** AAQG.DE **Enterprise Value:** EUR 29.7 m

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## Focusing on what matters

In the wake of a slight postponement of the final FY18 results as the evaluation of certain undisclosed matters may need to be considered in the consolidated accounts (no risk of restatement of financials), **the recent major positive operational news flow may have gone unnoticed.**

- **Q1'19 prelims suggest a return to dynamic growth.** Notably, Q1 trauma sales were up 23% yoy to € 3.4m carried by all regions. When excluding the lumpy global partners business, this comes on top of 14% yoy growth in Q1'18 suggesting an ongoing strong dynamic. Consequently, mgmt. now expects Q1 EBITDA of minus € 1.2m to minus € 0.9m (old: € -1.8 to € -1.2m).

Given that aap is off to a good start into 2019 outperforming mgmt's initial Q1 sales and EBITDA forecast by € 0.9m € 0.5m at the mid-point respectively, **we see upside to the FY19E outlook** of sales between € 13m and € 15m and EBITDA of between € - 5m and € - 3.4m.

- **Further progress on aap's potentially breakthrough silver coating technology.** aap maintains a close dialog with a number of global orthopedic companies by briefing them on the current status of the development. Based on positive interaction with the Federal Institute for Drug and Medical Devices and growing interest from orthopedic companies aap is set to further intensify negotiations.

In our view, it is likely that **aap will enter some kind of cooperation even ahead of the final approval of the silver coating technology.** This may take form of a joint product development and approval projects. The final approval of the technology (expected by early 2022) should lead to potential licensing deals or other forms of commercialization, which should help to unlock the inherent value of the technological platform.

Our **€ 2.4 PT** is based on the average of comparable transaction (€ 2.8) and SOTP (€ 2.0). **BUY.**



Source: Company data, Hauck & Aufhäuser

**High/low 52 weeks:** 2.14 / 0.90

**Price/Book Ratio:** 0.9

**Relative performance (SDAX):**

3 months -  
6 months -  
12 months -36.5 %

### Changes in estimates

	Sales	EBIT	EPS
2018E	old: Δ		
2019E	old: Δ		
2020E	old: Δ		

### Key share data:

Number of shares: (in m pcs) 28.6  
Authorised capital: (in € m) 7.0  
Book value per share: (in €) 1.2  
Ø trading volume: (12 months) 7,448

### Major shareholders:

Free Float 48.7 %  
Ratio Capital 15.8 %  
Management BV  
Noes Beeheer B.V. 11.7 %  
Jürgen W. Krebs 11.6 %  
Taaleri Wealth Management 6.8 %  
Deepblue Holding AG 5.4 %

### Company description:

Pure-play trauma company focusing on the extremities market

Y/E 31.12 (EUR m)	2017	2018E	2019E	2020E	2021E	2022E	2023E
Sales	10.9	11.1	15.0	20.0	24.9	29.6	34.2
Sales growth	4 %	2 %	35 %	33 %	25 %	19 %	16 %
EBITDA	-6.2	-6.4	-3.2	-0.9	1.3	3.2	5.2
EBIT	-8.0	-8.2	-5.2	-2.9	-0.7	1.2	3.1
Net income	-8.9	-8.3	-5.3	-3.0	-0.8	0.9	2.2
Net debt	-12.1	-4.4	-2.7	0.4	1.4	1.3	0.3
Net gearing	-28.5 %	-12.8 %	-9.5 %	1.6 %	5.7 %	5.4 %	1.1 %
Net Debt/EBITDA	0.0	0.0	0.0	-0.4	1.1	0.4	0.1
EPS pro forma	-0.32	-0.29	-0.18	-0.10	-0.03	0.03	0.08
CPS	-0.25	-0.23	-0.08	-0.06	0.03	0.07	0.09
DPS	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dividend yield	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Gross profit margin	81.9 %	79.0 %	79.6 %	80.2 %	80.8 %	81.4 %	82.0 %
EBITDA margin	-53.2 %	-49.4 %	-18.3 %	-4.0 %	4.7 %	10.1 %	15.0 %
EBIT margin	-68.5 %	-63.5 %	-29.9 %	-13.0 %	-2.7 %	3.9 %	9.0 %
ROCE	-15.5 %	-20.5 %	-15.9 %	-9.2 %	-2.6 %	4.5 %	11.2 %
EV/sales	1.8	2.5	1.9	1.6	1.3	1.1	0.9
EV/EBITDA	n/a	n/a	n/a	n/a	25.4	10.3	6.1
EV/EBIT	n/a	n/a	n/a	n/a	n/a	26.6	10.2
PER	-3.4	-3.8	-6.0	-10.7	-42.1	37.1	14.5
Adjusted FCF yield	-52.3 %	-29.7 %	-14.0 %	-5.1 %	1.8 %	6.3 %	10.7 %

Source: Company data, Hauck & Aufhäuser Close price as of: 04.04.2019

## Financials

Profit and loss (EUR m)	2017	2018E	2019E	2020E	2021E	2022E	2023E
<b>Net sales</b>	<b>10.9</b>	<b>11.1</b>	<b>15.0</b>	<b>20.0</b>	<b>24.9</b>	<b>29.6</b>	<b>34.2</b>
Sales growth	4.0 %	1.8 %	35.1 %	33.3 %	24.5 %	18.9 %	15.5 %
Increase/decrease in finished goods and work-in-process	0.8	1.9	2.5	2.5	2.5	2.0	0.5
<b>Total sales</b>	<b>11.7</b>	<b>13.0</b>	<b>17.5</b>	<b>22.5</b>	<b>27.4</b>	<b>31.6</b>	<b>34.7</b>
Other operating income	0.8	0.5	0.5	0.5	0.5	0.5	0.5
Material expenses	1.9	2.3	3.2	4.1	4.9	5.6	6.2
Personnel expenses	7.4	8.1	8.3	8.9	9.4	10.0	10.8
Other operating expenses	9.4	9.5	9.7	10.9	12.3	13.3	13.0
Total operating expenses	17.9	19.4	20.7	23.4	26.1	28.4	29.5
<b>EBITDA</b>	<b>-6.2</b>	<b>-6.4</b>	<b>-3.2</b>	<b>-0.9</b>	<b>1.3</b>	<b>3.2</b>	<b>5.2</b>
Depreciation	1.2	1.2	1.3	1.3	1.3	1.4	1.5
<b>EBITA</b>	<b>-7.4</b>	<b>-7.6</b>	<b>-4.5</b>	<b>-2.2</b>	<b>0.0</b>	<b>1.8</b>	<b>3.7</b>
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	0.6	0.6	0.7	0.7	0.7	0.6	0.6
Impairment charges	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>EBIT (inc revaluation net)</b>	<b>-8.0</b>	<b>-8.2</b>	<b>-5.2</b>	<b>-2.9</b>	<b>-0.7</b>	<b>1.2</b>	<b>3.1</b>
Interest income	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interest expenses	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Other financial result	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial result	-1.3	0.0	0.0	0.0	0.0	0.0	0.0
<b>Recurring pretax income from continuing operations</b>	<b>-9.3</b>	<b>-8.3</b>	<b>-5.3</b>	<b>-3.0</b>	<b>-0.8</b>	<b>1.2</b>	<b>3.1</b>
Extraordinary income/loss	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Earnings before taxes</b>	<b>-9.3</b>	<b>-8.3</b>	<b>-5.3</b>	<b>-3.0</b>	<b>-0.8</b>	<b>1.2</b>	<b>3.1</b>
Taxes	0.0	0.0	0.0	0.0	0.0	0.4	0.9
<b>Net income from continuing operations</b>	<b>-9.3</b>	<b>-8.3</b>	<b>-5.3</b>	<b>-3.0</b>	<b>-0.8</b>	<b>0.9</b>	<b>2.2</b>
Result from discontinued operations (net of tax)	-0.3	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net income</b>	<b>-8.9</b>	<b>-8.3</b>	<b>-5.3</b>	<b>-3.0</b>	<b>-0.8</b>	<b>0.9</b>	<b>2.2</b>
Minority interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net profit (reported)</b>	<b>-8.9</b>	<b>-8.3</b>	<b>-5.3</b>	<b>-3.0</b>	<b>-0.8</b>	<b>0.9</b>	<b>2.2</b>
Average number of shares	28.6	28.6	28.6	28.6	28.6	28.6	28.6
<b>EPS reported</b>	<b>-0.31</b>	<b>-0.29</b>	<b>-0.18</b>	<b>-0.10</b>	<b>-0.03</b>	<b>0.03</b>	<b>0.08</b>

Profit and loss (common size)	2017	2018E	2019E	2020E	2021E	2022E	2023E
<b>Net sales</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>
Increase/decrease in finished goods and work-in-process	7.0 %	16.7 %	16.7 %	12.5 %	10.0 %	6.8 %	1.5 %
<b>Total sales</b>	<b>107.0 %</b>	<b>116.7 %</b>	<b>116.7 %</b>	<b>112.5 %</b>	<b>110.0 %</b>	<b>106.8 %</b>	<b>101.5 %</b>
Other operating income	6.9 %	4.5 %	3.3 %	2.5 %	2.0 %	1.7 %	1.5 %
Material expenses	17.2 %	20.4 %	21.1 %	20.3 %	19.6 %	18.9 %	18.3 %
Personnel expenses	67.7 %	73.0 %	55.6 %	44.5 %	37.8 %	33.8 %	31.6 %
Other operating expenses	86.0 %	85.5 %	64.7 %	54.7 %	49.5 %	44.9 %	37.9 %
Total operating expenses	164.0 %	174.3 %	138.0 %	117.0 %	104.8 %	95.9 %	86.3 %
<b>EBITDA</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>5.2 %</b>	<b>10.8 %</b>	<b>15.2 %</b>
Depreciation	10.6 %	10.8 %	8.7 %	6.5 %	5.2 %	4.7 %	4.4 %
<b>EBITA</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>0.0 %</b>	<b>6.1 %</b>	<b>10.8 %</b>
Amortisation of goodwill	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Amortisation of intangible assets	5.8 %	5.7 %	4.9 %	3.7 %	2.9 %	1.9 %	1.6 %
Impairment charges	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
<b>EBIT (inc revaluation net)</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>4.2 %</b>	<b>9.2 %</b>
Interest income	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Interest expenses	12.0 %	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.1 %
Other financial result	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Financial result	neg.	neg.	neg.	neg.	neg.	neg.	neg.
<b>Recurring pretax income from continuing operations</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>4.1 %</b>	<b>9.1 %</b>
Extraordinary income/loss	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
<b>Earnings before taxes</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>4.1 %</b>	<b>9.1 %</b>
Tax rate	0.3 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %	30.0 %
<b>Net income from continuing operations</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>2.9 %</b>	<b>6.4 %</b>
Income from discontinued operations (net of tax)	-3.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
<b>Net income</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>2.9 %</b>	<b>6.4 %</b>
Minority interest	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
<b>Net profit (reported)</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>neg.</b>	<b>2.9 %</b>	<b>6.4 %</b>

Source: Company data, Hauck &amp; Aufhäuser

Balance sheet (EUR m)	2017	2018E	2019E	2020E	2021E	2022E	2023E
<b>Intangible assets</b>	<b>11.8</b>	<b>13.4</b>	<b>14.2</b>	<b>14.9</b>	<b>15.7</b>	<b>16.2</b>	<b>17.1</b>
Property, plant and equipment	7.2	6.5	5.7	4.9	4.1	3.9	3.4
Financial assets	4.3	3.4	1.0	0.5	0.5	0.5	0.5
<b>FIXED ASSETS</b>	<b>23.3</b>	<b>23.3</b>	<b>20.9</b>	<b>20.3</b>	<b>20.4</b>	<b>20.5</b>	<b>21.0</b>
Inventories	9.6	9.2	9.0	9.5	9.5	9.9	10.9
Accounts receivable	2.5	2.8	2.1	2.7	3.4	4.1	4.7
Other current assets	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Liquid assets	13.3	5.3	3.6	2.0	1.0	1.1	2.1
Deferred taxes	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Deferred charges and prepaid expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>CURRENT ASSETS</b>	<b>27.2</b>	<b>19.0</b>	<b>16.4</b>	<b>16.0</b>	<b>15.7</b>	<b>16.8</b>	<b>19.4</b>
<b>TOTAL ASSETS</b>	<b>50.5</b>	<b>42.2</b>	<b>37.3</b>	<b>36.3</b>	<b>36.0</b>	<b>37.3</b>	<b>40.4</b>
<b>SHAREHOLDERS EQUITY</b>	<b>42.6</b>	<b>34.1</b>	<b>28.6</b>	<b>25.2</b>	<b>23.9</b>	<b>24.3</b>	<b>26.4</b>
MINORITY INTEREST	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Long-term debt	0.8	0.8	0.8	2.3	2.3	2.3	2.3
Provisions for pensions and similar obligations	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other provisions	0.8	0.8	0.5	0.5	0.5	0.5	0.5
<b>Non-current liabilities</b>	<b>1.5</b>	<b>1.5</b>	<b>1.3</b>	<b>2.8</b>	<b>2.8</b>	<b>2.8</b>	<b>2.8</b>
short-term liabilities to banks	0.3	0.1	0.1	0.1	0.1	0.1	0.1
Accounts payable	1.8	2.2	3.0	4.0	4.9	5.9	6.8
Advance payments received on orders	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other liabilities (incl. from lease and rental contracts)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Deferred taxes	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Deferred income	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Current liabilities</b>	<b>6.4</b>	<b>6.6</b>	<b>7.4</b>	<b>8.3</b>	<b>9.3</b>	<b>10.2</b>	<b>11.2</b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS EQUITY</b>	<b>50.5</b>	<b>42.2</b>	<b>37.3</b>	<b>36.3</b>	<b>36.0</b>	<b>37.3</b>	<b>40.4</b>

Balance sheet (common size)	2017	2018E	2019E	2020E	2021E	2022E	2023E
<b>Intangible assets</b>	<b>23.5 %</b>	<b>31.7 %</b>	<b>38.0 %</b>	<b>41.2 %</b>	<b>43.6 %</b>	<b>43.3 %</b>	<b>42.3 %</b>
Property, plant and equipment	14.3 %	15.4 %	15.3 %	13.5 %	11.5 %	10.4 %	8.4 %
Financial assets	8.4 %	7.9 %	2.7 %	1.4 %	1.4 %	1.3 %	1.2 %
<b>FIXED ASSETS</b>	<b>46.2 %</b>	<b>55.0 %</b>	<b>56.0 %</b>	<b>56.0 %</b>	<b>56.5 %</b>	<b>55.1 %</b>	<b>51.9 %</b>
Inventories	19.1 %	21.8 %	24.2 %	26.2 %	26.4 %	26.5 %	27.0 %
Accounts receivable	5.0 %	6.6 %	5.5 %	7.5 %	9.5 %	10.9 %	11.6 %
Other current assets	0.6 %	0.8 %	0.9 %	0.9 %	0.9 %	0.9 %	0.8 %
Liquid assets	26.3 %	12.5 %	9.7 %	5.5 %	2.8 %	2.9 %	5.2 %
Deferred taxes	2.8 %	3.3 %	3.8 %	3.9 %	3.9 %	3.8 %	3.5 %
Deferred charges and prepaid expenses	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
<b>CURRENT ASSETS</b>	<b>53.8 %</b>	<b>45.0 %</b>	<b>44.0 %</b>	<b>44.0 %</b>	<b>43.5 %</b>	<b>44.9 %</b>	<b>48.1 %</b>
<b>TOTAL ASSETS</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>
<b>SHAREHOLDERS EQUITY</b>	<b>84.3 %</b>	<b>80.8 %</b>	<b>76.8 %</b>	<b>69.3 %</b>	<b>66.4 %</b>	<b>65.0 %</b>	<b>65.5 %</b>
MINORITY INTEREST	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Long-term debt	1.6 %	1.9 %	2.1 %	6.3 %	6.4 %	6.2 %	5.7 %
Provisions for pensions and similar obligations	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Other provisions	1.5 %	1.8 %	1.3 %	1.4 %	1.4 %	1.3 %	1.2 %
<b>Non-current liabilities</b>	<b>3.1 %</b>	<b>3.7 %</b>	<b>3.5 %</b>	<b>7.7 %</b>	<b>7.8 %</b>	<b>7.5 %</b>	<b>6.9 %</b>
short-term liabilities to banks	0.7 %	0.2 %	0.3 %	0.3 %	0.3 %	0.3 %	0.2 %
Accounts payable	3.5 %	5.2 %	8.0 %	10.9 %	13.7 %	15.7 %	16.8 %
Advance payments received on orders	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
Other liabilities (incl. from lease and rental contracts)	5.8 %	7.0 %	7.9 %	8.1 %	8.2 %	7.9 %	7.3 %
Deferred taxes	2.6 %	3.1 %	3.6 %	3.7 %	3.7 %	3.6 %	3.3 %
Deferred income	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
<b>Current liabilities</b>	<b>12.6 %</b>	<b>15.6 %</b>	<b>19.7 %</b>	<b>23.0 %</b>	<b>25.8 %</b>	<b>27.5 %</b>	<b>27.6 %</b>
<b>TOTAL LIABILITIES AND SHAREHOLDERS EQUITY</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>	<b>100.0 %</b>

Source: Company data, Hauck & Aufhäuser

Cash flow statement (EUR m)	2017	2018E	2019E	2020E	2021E	2022E	2023E
Net profit/loss	-8.9	-8.3	-5.3	-3.0	-0.8	0.9	2.2
Depreciation of fixed assets (incl. leases)	1.2	1.2	1.3	1.3	1.3	1.4	1.5
Amortisation of goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Amortisation of intangible assets	0.6	0.6	0.7	0.7	0.7	0.6	0.6
Others	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Cash flow from operations before changes in w/c	-6.5	-6.4	-3.2	-0.9	1.3	2.8	4.2
Increase/decrease in inventory	1.4	0.4	0.2	-0.5	0.0	-0.4	-1.0
Increase/decrease in accounts receivable	0.4	-0.3	0.7	-0.7	-0.7	-0.6	-0.6
Increase/decrease in accounts payable	-0.8	0.4	0.8	1.0	1.0	0.9	0.9
Increase/decrease in other working capital positions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Increase/decrease in working capital	1.0	0.6	1.7	-0.2	0.3	-0.1	-0.7
<b>Cash flow from operating activities</b>	<b>-5.4</b>	<b>-5.8</b>	<b>-1.5</b>	<b>-1.1</b>	<b>1.6</b>	<b>2.7</b>	<b>3.5</b>
CAPEX	2.1	2.7	2.5	2.5	2.6	2.7	2.5
Payments for acquisitions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial investments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Income from asset disposals	0.5	0.0	0.0	0.0	0.0	0.0	0.0
<b>Cash flow from investing activities</b>	<b>-1.5</b>	<b>-2.7</b>	<b>-2.5</b>	<b>-2.5</b>	<b>-2.6</b>	<b>-2.7</b>	<b>-2.5</b>
Cash flow before financing	-6.9	-8.5	-4.0	-3.6	-1.0	0.1	1.0
Increase/decrease in debt position	-0.1	-0.2	0.0	1.5	0.0	0.0	0.0
Purchase of own shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital measures	-3.4	0.0	0.0	0.0	0.0	0.0	0.0
Dividends paid	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Others	0.0	-0.9	-2.4	-0.5	0.0	0.0	0.0
Effects of exchange rate changes on cash	-0.2	0.0	0.0	0.0	0.0	0.0	0.0
<b>Cash flow from financing activities</b>	<b>-3.5</b>	<b>-1.1</b>	<b>-2.4</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Increase/decrease in liquid assets	-10.7	-9.6	-6.4	-2.6	-1.0	0.1	1.0
<b>Liquid assets at end of period</b>	<b>13.1</b>	<b>3.5</b>	<b>-2.9</b>	<b>-5.5</b>	<b>-6.5</b>	<b>-6.4</b>	<b>-5.4</b>

Source: Company data, Hauck & Aufhäuser

Regional split (EUR m)	2017	2018E	2019E	2020E	2021E	2022E	2023E
Domestic	2.4	3.5	3.0	3.5	4.3	5.0	5.7
yoy change	3.2 %	42.5 %	-13.3 %	16.7 %	22.9 %	16.3 %	14.0 %
Rest of Europe	0.0	0.0	0.0	0.0	0.0	0.0	0.0
yoy change	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NAFTA	3.1	2.2	3.8	6.4	8.8	11.0	13.5
yoy change	26.1 %	-27.1 %	69.6 %	68.4 %	37.5 %	25.0 %	22.7 %
Asia Pacific	0.0	0.0	0.0	0.0	0.0	0.0	0.0
yoy change	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Rest of world	5.1	5.4	8.2	10.1	11.8	13.6	15.0
yoy change	25.9 %	4.9 %	51.8 %	23.2 %	16.8 %	15.3 %	10.3 %
<b>TTL</b>	<b>10.6</b>	<b>11.1</b>	<b>15.0</b>	<b>20.0</b>	<b>24.9</b>	<b>29.6</b>	<b>34.2</b>
yoy change	20.0 %	4.3 %	35.1 %	33.3 %	24.5 %	18.9 %	15.5 %

Source: Company data, Hauck & Aufhäuser

Key ratios (EUR m)	2017	2018E	2019E	2020E	2021E	2022E	2023E
<b>P&amp;L growth analysis</b>							
Sales growth	4.0 %	1.8 %	35.1 %	33.3 %	24.5 %	18.9 %	15.5 %
EBITDA growth	-21.3 %	3.0 %	-50.0 %	-71.9 %	-244.4 %	146.2 %	62.5 %
EBIT growth	-21.5 %	3.0 %	-36.5 %	-44.0 %	-75.1 %	-269.9 %	153.2 %
EPS growth	3.2 %	-7.7 %	-36.4 %	-43.8 %	-74.5 %	-213.5 %	155.9 %
<b>Efficiency</b>							
Total operating costs / sales	164.0 %	174.3 %	138.0 %	117.0 %	104.8 %	95.9 %	86.3 %
Sales per employee	147.3	76.3	102.4	133.3	158.6	180.5	201.2
EBITDA per employee	-83.9	-44.0	-21.8	-6.0	8.3	19.5	30.6
<b>Balance sheet analysis</b>							
Avg. working capital / sales	100.2 %	91.0 %	59.6 %	45.2 %	32.2 %	27.6 %	24.5 %
Inventory turnover (sales/inventory)	1.1	1.2	1.7	2.1	2.6	3.0	3.1
Trade debtors in days of sales	85.1	92.0	50.0	50.0	50.0	50.0	50.0
A/P turnover [(A/P*365)/sales]	58.7	72.3	72.3	72.3	72.3	72.3	72.3
Cash conversion cycle (days)	1,618.6	1,221.6	745.8	547.9	391.8	313.1	291.0
<b>Cash flow analysis</b>							
Free cash flow	-7.5	-8.5	-4.0	-3.6	-1.0	0.1	1.0
Free cash flow/sales	-68.7 %	-76.5 %	-26.7 %	-18.1 %	-3.9 %	0.2 %	3.0 %
FCF / net profit	neg.	neg.	neg.	neg.	neg.	5.9 %	46.9 %
Capex / depn	115.4 %	146.6 %	123.2 %	123.2 %	125.6 %	135.2 %	121.4 %
Capex / maintenance capex	39.3 %	71.4 %	71.4 %	71.4 %	78.6 %	143.8 %	111.1 %
Capex / sales	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Security</b>							
Net debt	-12.1	-4.4	-2.7	0.4	1.4	1.3	0.3
Net Debt/EBITDA	0.0	0.0	0.0	-0.4	1.1	0.4	0.1
Net debt / equity	neg.	neg.	neg.	0.0	0.1	0.1	0.0
Interest cover	0.0	0.0	0.0	0.0	0.0	57.5	145.5
Dividend payout ratio	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
<b>Asset utilisation</b>							
Capital employed turnover	0.2	0.3	0.5	0.7	0.9	1.1	1.2
Operating assets turnover	0.6	0.7	1.1	1.5	2.1	2.5	2.8
Plant turnover	1.5	1.7	2.6	4.1	6.0	7.6	10.1
Inventory turnover (sales/inventory)	1.1	1.2	1.7	2.1	2.6	3.0	3.1
<b>Returns</b>							
ROCE	-15.5 %	-20.5 %	-15.9 %	-9.2 %	-2.6 %	4.5 %	11.2 %
ROE	-21.0 %	-24.2 %	-18.4 %	-11.7 %	-3.1 %	3.5 %	8.3 %
<b>Other</b>							
Interest paid / avg. debt	57.8 %	2.1 %	2.4 %	1.3 %	1.3 %	0.9 %	0.9 %
No. employees (average)	74	146	147	150	157	164	170
Number of shares	28.6	28.6	28.6	28.6	28.6	28.6	28.6
DPS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EPS reported	-0.31	-0.29	-0.18	-0.10	-0.03	0.03	0.08
<b>Valuation ratios</b>							
P/BV	0.7	0.9	1.1	1.3	1.3	1.3	1.2
EV/sales	1.8	2.5	1.9	1.6	1.3	1.1	0.9
EV/EBITDA	n/a	n/a	n/a	n/a	25.4	10.3	6.1
EV/EBITA	n/a	n/a	n/a	n/a	n/a	18.3	8.6
EV/EBIT	n/a	n/a	n/a	n/a	n/a	26.6	10.2
EV/FCF	-2.6	-3.2	-7.2	-8.9	-34.0	654.7	31.2
Adjusted FCF yield	-52.3 %	-29.7 %	-14.0 %	-5.1 %	1.8 %	6.3 %	10.7 %
Dividend yield	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %

Source: Company data, Hauck &amp; Aufhäuser

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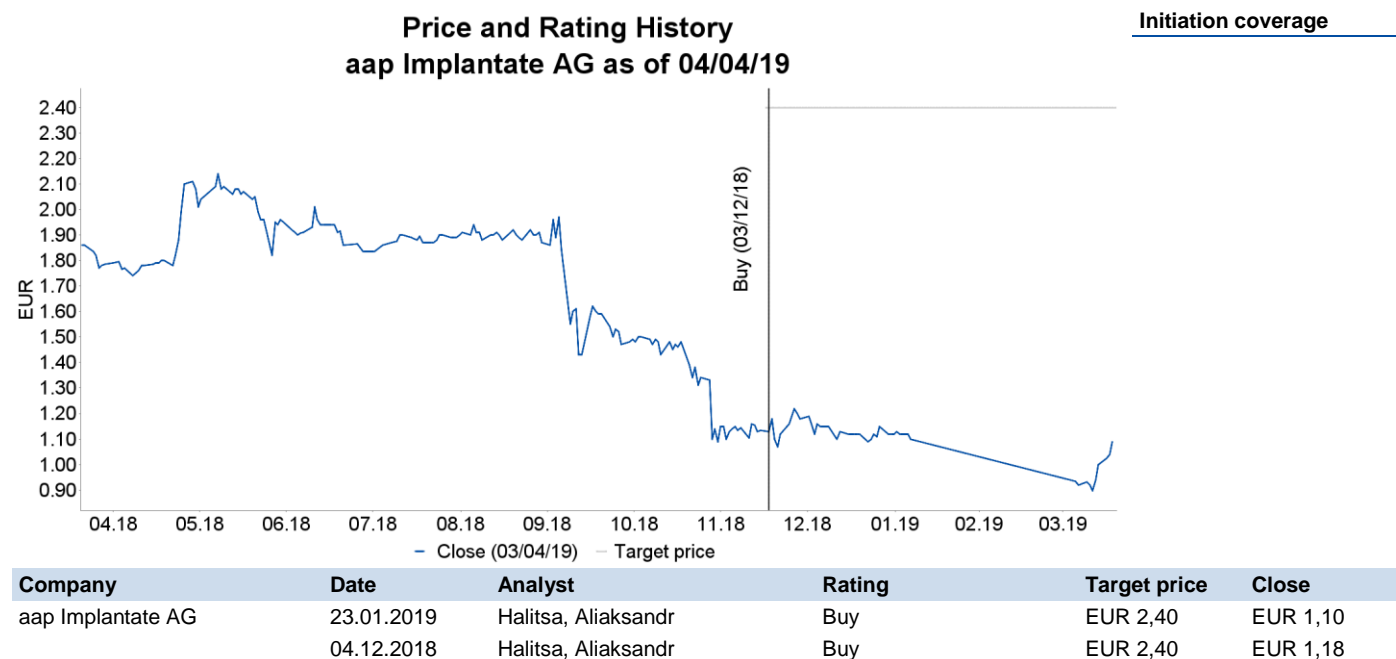
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Company	Disclosure
aap Implantate AG	2, 8

### Historical target price and rating changes for aap Implantate AG in the last 12 months



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