

# NanoRepro AG

Germany / Medical Technology Frankfurt Bloomberg: NN6 GR ISIN: DE0006577109

Initiation of coverage

RATING PRICE TARGET

BUY € 2.00

Return Potential Risk Rating 40.4% High

# **UNLOCKING VALUE WITH RAPID DIAGNOSTICS**

NanoRepro AG develops, manufactures, and distributes CE-certified rapid diagnostic tests (self-tests) and food supplements for home and professional use. The company has made significant strides over the last year in boosting its operations with new partnerships for distribution and product development. This has resulted in a surge in sales with 2016 turnover growing 242% to €1.5m. We expect the recent performance to receive a boost with a move into retail channels and look for 63% Y/Y top line growth to €3m in 2018. We initiate coverage with a Buy recommendation and a price target of €2.00.

**Sizable "Made in Germany" portfolio** NanoRepro develops and distributes a line of rapid diagnostics (self-tests) on an international scale. The current portfolio contains 25 point-of-care kits for the consumer and professional marketplaces. Management have forged a partnership with a local specialist for a re-shoring of production allowing NanoRepo to stamp its products with the highly regarded "Made in Germany" brand. Management also hint that the development pipeline could yield six new products for distribution by the end of 2018.

Attractive growth potential in a nascent market Home self-testing is nothing new. Home pregnancy tests are widely accepted globally and appreciated for their first indication reliability. Recent innovations have spawned a variety of new rapid diagnostic products, which allow patients to self-diagnose suspected afflictions. Patients can now test for fertility, allergies and preventative healthcare issues. Tests are administered in the comfort of home without the hassle of having to get to the doctor in today's stretched health care system.

**Primed for strong growth** We model a top line CAGR of 46.4% for the period 2017 – 2019. We believe the company has an opportunity to reach the double digit million sales level in the next four years with its product and international expansion roadmap. Given a largely established and scalable operational structure, we believe the increase in revenues will quickly translate into profitability. We expect the company to be EBITDA positive in 2018 on 63% top line growth.

## **FINANCIAL HISTORY & PROJECTIONS**

|                    | 2014   | 2015   | 2016   | 2017E  | 2018E  | 2019E  |
|--------------------|--------|--------|--------|--------|--------|--------|
| Revenue (€m)       | 0.51   | 0.45   | 1.54   | 1.87   | 3.06   | 4.83   |
| Y/Y growth         | -50.5% | -12.6% | 242.0% | 21.8%  | 63.2%  | 58.0%  |
| EBITDA (€m)        | 0.06   | -0.96  | -0.85  | -0.51  | 0.01   | 0.79   |
| EBITDA margin      | n.a.%  | n.a.   | n.a.   | n.a.   | 0.3%   | 16.4%  |
| Net income (€m)    | -0.03  | -1.18  | -0.55  | -0.72  | -0.21  | 0.58   |
| EPS (diluted) (€)  | -0.01  | -0.27  | -0.12  | -0.12  | -0.03  | 0.09   |
| DPS (€)            | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |
| FCF (€m)           | 0.01   | -1.32  | -1.15  | -0.67  | -0.23  | 0.62   |
| Net gearing        | 48.6%  | -9.5%  | -12.3% | -31.1% | -26.2% | -37.4% |
| Liquid assets (€m) | 0.00   | 0.23   | 0.53   | 1.34   | 1.10   | 1.57   |

## RISKS

Risks include but are not limited to: small size, weak cash position, and untested marketplace.

## **COMPANY PROFILE**

NanoRepro AG develops, manufactures, and distributes CE-certified rapid diagnostic tests (self-tests) and food supplements for home and professional use. The company distributes both into domestic and international markets. NanoRepro has been publicly listed since 2008 and is headquartered in Marburg, Germany.

| MARKET DATA             | As of 10/16/2017 |
|-------------------------|------------------|
| Closing Price           | € 1.43           |
| Shares outstanding      | 6.22m            |
| Market Capitalisation   | € 8.86m          |
| 52-week Range           | € 0.93 / 2.25    |
| Avg. Volume (12 Months) | 17,431           |

| Multiples  | 2016 | 2017E | 2018E  |
|------------|------|-------|--------|
| P/E        | n.a. | n.a.  | n.a.   |
| EV/Sales   | 5.6  | 4.6   | 2.8    |
| EV/EBITDA  | n.a. | n.a.  | 1068.1 |
| Div. Yield | 0.0% | 0.0%  | 0.0%   |

## STOCK OVERVIEW



| COMPANY DATA         | As of 30 Jun 2017 |
|----------------------|-------------------|
| Liquid Assets        | € 0.48m           |
| Current Assets       | € 1.05m           |
| Intangible Assets    | € 1.88m           |
| Total Assets         | € 3.53m           |
| Current Liabilities  | € 0.23m           |
| Shareholders' Equity | € 3.27m           |
|                      |                   |

## **SHAREHOLDERS**

| Management     | 10.0% |
|----------------|-------|
| Kuschma Family | 8.9%  |
| Free Float     | 81.1% |

## **INVESTMENT CASE**

## Restructuring has company primed for exceptional growth

NanoRepro has undertaken a number of initiatives in the past year to boost operations, previously characterised by stagnating growth, and to strongly position itself in the nascent market for rapid diagnostics (self-tests). Management forged a distribution partnership with industry heavyweight Hartmann resulting in a 270% spike in domestic activities, while international operations have also jumped some 190%. The international footprint now covers the DACH region, Spain, England, South Africa, Brazil, and China. We also like the company for its broad portfolio of self-tests and low production costs thanks to re-shoring of production, which is now in the hands of a local partner.

## A reliable alternative to "Dr Google" and waiting rooms

Patients are increasingly taking a more active self-diagnostic approach to health care, due to increasing difficulty in getting timely appointments with their trusted physicians. Long waits often send patients to "Dr Google" in search of answers. The information found online is almost always varied, inconclusive and often alarming. Self-tests represent an alternative to make a quick assessment or diagnosis of an indication, thus providing some comfort while waiting for appointments or eliminating the need for a visit all together. Aside from the widely known and accepted home pregnancy test, rapid diagnostics are largely new and innovative with insufficient market data at present to accurately gauge consumer acceptance. However, the market size for home pregnancy tests tops €85m p.a. in Germany alone. We therefore believe people will also increasingly use self-tests as awareness grows, given the higher ratio of patients who suffer from conditions now measurable with rapid diagnostic tests. For instance, one of six couples struggles to get pregnant. Couples can now take initial steps in the comfort of their home to assess fertility issues. We thus believe we are at the very beginning of a major market opportunity for self-diagnostic tests.

## Largest portfolio of self-diagnostic tests with Made in Germany branding

NanoRepro AG boasts a portfolio of 25 rapid tests for family planning, health care, allergy and food intolerance, as well as self-tests for professional use (B2B). A line of six food supplements rounds out the product line. This compares favourably to large players, such as Stada AG, which markets only six self diagnostic products. All products have the required CE-Marking allowing for European distribution. NanoRepro is currently developing a number of new self-tests in partnership with its German based R&D partner and plans to bring another six point-of-care diagnostic tests to market by the end of 2018 (table 2). The cooperation also allows the company to use the well regarded "Made in Germany" label, providing European patients with a higher degree of confidence in the products' quality.

## Portfolio expansion and internationalisation drive growth scenario

After years of struggling to reach escape velocity in terms of sales, we believe the company has the building blocks now in place to significantly grow its top line and drive results towards profitability. We look for a revenue CAGR of 46.4% for the period 2017—2019. The Hartmann agreement sparked Y/Y sales growth of 242% in 2016 to €1.5m and 63% in H1/17 to €0.5m, albeit from low volumes. Our confidence in further growth stems from agreements in place, which suggest a high likelihood that the company will get its products onto retail shelves of drugstore and grocery chains. Given NanoRepro's lean operating structure, the boost in sales should translate into profitability at the EBITDA level next year assuming volumes approach the €3m threshold.

## Current share price undervalues positive outlook

We use a DCF model to derive the fair value for NanoRepro. Relative metrics are largely unsuitable since NanoRepro will remain unprofitable below the EBITDA level over the near term. We set a price target of €2.00 and initiate coverage with a Buy rating. Our confidence in a sustainable growth scenario stems from management's ability to conclude key partnerships in its home and international markets, tap into emerging health care market trends, and develop a portfolio that positions NanoRepro at the forefront of the nascent self-diagnostics market. In our view, the main risks are: small size, financing needs, market acceptance, and low barriers to entry.

## **SWOT ANALYSIS**

## **STRENGTHS**

- Large portfolio NanoRepro boasts the largest portfolio of self-diagnostics in Germany and stamps them "Made in Germany."
- Strong partners Locking down a strong distribution and local production partner represents something of a coup for the company that is already paying dividends in terms operational performance.
- Scalable platform We believe the company has the infrastructure, sufficient staffing capacity and expertise in place to facilitate the projected growth over the next few years.

## **WEAKNESSES**

- **Profitability** The company has never truly reached escape velocity whereby the top line translates consistently into profitability
- **Small size** Even with the recent and projected growth the company will still have a small market capitalisation and balance sheet.
- Lack of financial firepower Limited financial resources handcuff the company's ability to develop its own brand at present and market its own web shop.

## **OPPORTUNITIES**

- **Own brand** With improving operations and sufficient access to capital, NanoRepro could introduce its own line of branded products to boost margins.
- Internationalisation "Made in Germany" products are valued abroad as the market for self diagnostics grows. We believe with the right partnerships, the company can be an early mover in the adoption of self-tests.
- Product innovation The health care system is constantly looking for ways to curb costs and provide better and faster service to patients. Self-tests represent a chance to help achieve these goals with continued innovation.

## **THREATS**

- **Financing needs** NanoRepro may require further financing rounds to build its own brand and establish mind share in the personal healthcare community.
- Market acceptance Self-tests are largely new innovative products with low penetration aside from pregnancy tests. The market could fail to develop as envisioned if consumers fail to embrace the technology.
- Thin management structure We appreciate the combined experience of Lisa Jüngst (CEO) and Michael Fuchs (CFO). In our view, the departure of either would likely trigger a setback to the current operational momentum. That said, both executives are under contract through 2019 and have a long term vision for the company.

# **VALUATION**

We use a DCF model to calculate a fair value for NanoRepro. In our view, a peer group is unsuitable for determining a potential value for the company, given the early stage of the company's growth path. According to our estimates, NanoRepro will remain unprofitable over the near term as management unlock new distribution channels in international markets. We expect the company to generate a positive EBITDA in 2018.

We assign a WACC of 13.9% based on our multifactor risk model which takes into account company specific risks such as the strength of management, balance sheet risk and financial risk, the company's competitive position as well as company size and free float. The primary risk in our view is financing and weak balance sheet. We expect the company to raise new capital in the near future and have modelled the placement of up to 622,000 shares with investors by the end of the year. Without a successful cap hike, the company will have limited resources for marketing campaigns required to reach a broad customer base. Our 15% cost of equity estimate is also impacted by the small size of the company in terms of market cap. Forecasting future performance is likewise difficult, given the history of loss making. We have assumed a 2.0% terminal growth rate for sales and estimate a 30% tax rate, given expectations that Germany will remain the core market going forward.

Our model discounts cash flows from 2030 for a total enterprise value of €12.7m, of which 64% stems from the explicit period. We forecast a top-line CAGR of 46.4% for 2017-2019 including 2017 Y/Y growth of 22%. Our DCF valuation produces a post-money fair value of €13.9m adjusted for the net cash position of €0.4mat the end of 2016 plus €0.9m we expect NanoRepro to raise in Q4/17. Based on fully diluted (post-money) shares outstanding of 6.842m, our fair value estimate corresponds to €2.00 / share.

| All figures in EUR                 | 2017E     | 2018E     | 2019E     | 2020E     | 2021E     | 2022E      | 2023E      | 2024E      |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|
| Sales                              | 1,874,928 | 3,059,077 | 4,833,341 | 7,250,012 | 9,425,016 | 10,838,768 | 11,922,645 | 12,757,230 |
| NOPLAT                             | -706,680  | -196,932  | 412,268   | 1,230,922 | 1,871,525 | 2,246,560  | 2,463,503  | 2,673,667  |
| + depreciation & amortisation      | 194,992   | 204,958   | 203,000   | 72,500    | 94,250    | 108,388    | 119,226    | 127,572    |
| Net operating cash flow            | -511,688  | 8,026     | 615,268   | 1,303,422 | 1,965,775 | 2,354,948  | 2,582,729  | 2,801,240  |
| - total investments (CAPEX and WC) | -153,052  | -241,257  | -378,364  | -517,628  | -479,423  | -330,947   | -277,685   | -222,080   |
| Capital expenditures               | -45,561   | -12,542   | -19,817   | -29,725   | -38,643   | -44,439    | -48,883    | -52,305    |
| Working capital                    | -107,491  | -228,715  | -358,547  | -487,903  | -440,781  | -286,508   | -228,802   | -169,775   |
| Free cash flows (FCF)              | -664,740  | -233,231  | 236,904   | 785,795   | 1,486,351 | 2,024,001  | 2,305,044  | 2,579,160  |
| PV of FCF's                        | -647,406  | -199,394  | 177,786   | 517,648   | 859,501   | 1,027,391  | 1,027,080  | 1,008,796  |

| All figures in thousands             |            |
|--------------------------------------|------------|
| PV of FCFs in explicit period        | 8,165,690  |
| PV of FCFs in terminal period        | 4,579,991  |
| Enterprise value (EV)                | 12,745,681 |
| + Net cash / - net debt (post money) | 1,224,945  |
| + Investments / minority interests   | 0          |
| Shareholder value                    | 13,970,626 |
| Fair value per share (€)             | 2.04       |

| Cost of equity                             | 15.0%                         |
|--|-------------------------------|
| Pre-tax cost of debt                       | 6.0%                          |
| Tax rate                                   | 30.0%                         |
| After-tax cost of debt                     | 4.2%                          |
| Share of equity capital                    | 90.0%                         |
| Share of debt capital                      | 10.0%                         |
| WACC                                       | 13.9%                         |
| *Please note our model runs through 2030 a | and we have only shown the al |

|       | Terminal growth rate |      |      |      |      |      |      |
|-------|----------------------|------|------|------|------|------|------|
|       | 0.5%                 | 1.0% | 1.5% | 2.0% | 2.5% | 3.0% | 3.5% |
| 10.9% | 2.75                 | 2.81 | 2.88 | 2.95 | 3.04 | 3.13 | 3.23 |
| 11.9% | 2.44                 | 2.48 | 2.53 | 2.58 | 2.64 | 2.71 | 2.78 |
| 12.9% | 2.18                 | 2.21 | 2.25 | 2.29 | 2.33 | 2.38 | 2.43 |
| 13.9% | 1.96                 | 1.98 | 2.01 | 2.04 | 2.07 | 2.11 | 2.15 |
| 14.9% | 1.77                 | 1.79 | 1.81 | 1.84 | 1.86 | 1.89 | 1.92 |
| 15.9% | 1.61                 | 1.63 | 1.65 | 1.66 | 1.68 | 1.70 | 1.73 |
| 16.9% | 1.48                 | 1.49 | 1.50 | 1.51 | 1.53 | 1.55 | 1.56 |

<sup>\*</sup>Please note our model runs through 2030 and we have only shown the abbreviated version for formatting purposes

WACC

## **COMPANY PROFILE**

Founded in 2006 by a group led by Dr Stiller, NanoRepro AG specialises in the development and marketing of CE-certified rapid diagnostic tests (90% of revenue) and food supplements (10% of revenue). Self-tests are sold into the home and professional healthcare channels. Germany accounts for 81% of the sales and the company is making strong inroads into international markets throughout the EU and South Africa.

In 2016, the company employed a staff of 14 at its headquarters in Marburg, Germany. NanoRepro is led by Lisa Jüngst, who was elected to the Executive Board in April 2013. The company floated its shares on the Frankfurt Stock Exchange in 2008 and aims to capitalise on the trends in personal health care, where self-diagnostic products are growing in popularity. In a world, where health management is becoming increasing difficult and costly to manage, NanoRepro aims to support individuals with a line of simple and effective products. The line of self-tests are appreciated by patients for their ability deliver a speedy and reliable result in a world where health care management is becoming increasingly complex and time consuming. Patients can now benefit from the same quality standards from tests administered at the doctor or hospital, as they take greater responsibility for their health and well being.

# **PRODUCT PORTFOLIO**

NanoRepro currently has a portfolio of 25 rapid diagnostic tests for home use and professional practitioners. The product line comprises solutions for family planning, preventive healthcare, allergies, and infectious diseases. The manufacturer's suggested retail price (MSRP) for items in the product catalogue ranges from €5—€25. All products have CE-Certification for European admission and a PZN (Central Pharmaceutical Number). The company also markets a line of supplements for a variety of indications as shown below.

Table 1: Current product offerings with local production

|                            | PRODUCT PORTFOLIO                 |  |  |  |  |
|----------------------------|-----------------------------------|--|--|--|--|
| FAMILY PLANNING            | ·                                 |  |  |  |  |
| OvuQuick (Cassette & Mic   | dstream)                          | Ovulation Test                                 |  |  |  |
| GraviQuick (Cassette & M   | idstream)                         | Pregnancy Test                                 |  |  |  |
| GraviQuick Early (Cassette | e & Midstream)                    | Early Pregnancy Test                           |  |  |  |
| MenoQuick                  |                                   | Menopause Test                                 |  |  |  |
| VagiQuick                  |                                   | Vaginal Yeast Infection Test                   |  |  |  |
| FertiQuick                 |                                   | Male Fertility Test                            |  |  |  |
| FerritinCheck              |                                   | Ferritin Concentration Test                    |  |  |  |
| TSHCheck                   |                                   | Thyroid Insufficiency Test                     |  |  |  |
| PREVENTIVE HEALTCAR        | RE LINE                           |  |  |  |  |
| FOBCheck                   |                                   | Fecal Occult Blood Test                        |  |  |  |
| Heli-C-Check               |                                   | Helicobacter Pylori Test                       |  |  |  |
| Alcohol Test               |                                   | Alcohol Test                                   |  |  |  |
| Drug Test                  |                                   | Drug Test                                      |  |  |  |
| ALLERGY LINE               |                                   |  |  |  |  |
| GlutenCheck                |                                   | Gluten Intolerance Test                        |  |  |  |
| AllergoCheck               |                                   | Grass Pollen, Dust Mite, Cat Hair Allergy Test |  |  |  |
| MilkCheck                  |                                   | Milk Allergy Test                              |  |  |  |
| EggCheck                   |                                   | Egg White Protein Allergy Test                 |  |  |  |
|                            |                                   |  |  |  |  |
| TESTS FO                   | OR PROFESSIONAL USE               | FOOD SUPLEMENTS                                |  |  |  |
| HIV-QUICK                  | Anti-HIV (1&2) Test               | alphabiol Fertility                            |  |  |  |
| Troponin I                 | Cardiac Troponin Test             | alphabiol Pregnancy                            |  |  |  |
| D-DIMER                    | <b>D-Dimer Concentration Test</b> | alphabiol Cranberry                            |  |  |  |
| Influenza AB               | Influenza Type A and B Test       | alphabiol Menopause                            |  |  |  |
| STREP A                    | Streptokokki A Test               | alphabiol Hair & Skin                          |  |  |  |

alphabiol Ferritin

Source: First Berlin Equity Research; Company

**More products on the way** The company has a promising product pipeline and plans to roll out the following products over the coming quarters. The launch dates are only indications and may be subject to delays and financing needs.

**Table 2: Development pipeline** 

Microalbumin

| Indication                          | Launch |
|-------------------------------------|--------|
| TSH Test (Thyroid deficiency)       | Q4/17  |
| CRP Test (Infection Indicator)      | Q1/18  |
| Rheumatism Test                     | Q2/18  |
| Cholesterol Test                    | Q3/18  |
| Calprotectin (Intestinal infection) | Q4/18  |
| Heart Attack Marker                 | Q4/18  |
| Serotonin Test (Depression)         | Q1/19  |

Microalbumin Test

Source: First Berlin Equity Research; Company

# FINANCIAL FORECASTS—STRONG GROWTH AHEAD

Sales segmentation is divided into domestic and international channels. At home, NanoRepro handles some marketing activities for the brands "QUICK" and "CHECK." Moreover, OEM partners purchase products from NanoRepro to sell and market under their own brand. In this case, the OEM assumes approval responsibilities and promotional and activities. International sales are orchestrated by a distribution partner, who also assumes the associated approval and marketing duties and costs. Sales from NanoRepro's online shop, ZuhauseTEST (zuhausetest.de), and Amazon (AMZN US) make up only a fraction of our forecasts until we see an improved track record. Presently, wholesale makes up the lion's share of revenues, but we look for the company to make a strong move into the retail channel in the near future.

Table 3: Six month 2017 profit and loss KPIs

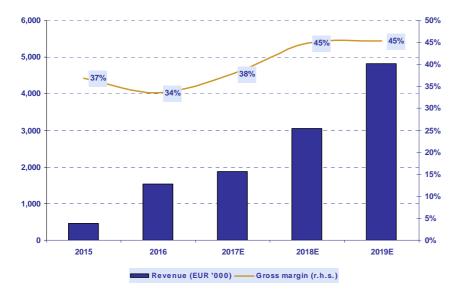
| All figures in EUR     | H1/17    | H1/16    | % delta |
|------------------------|----------|----------|---------|
| Revenue                | 855,333  | 524,774  | 63.0%   |
| Gross profit           | 466,225  | 437,392  | 6.6%    |
| Margin (% on revenues) | 37.3%    | 37.8%    | -       |
| EBITDA                 | -261,026 | -371,677 | -29.8%  |
| Margin (% on revenues) | -30.5%   | -70.8%   | -       |
| Net income             | -382,025 | -479,911 | -20.4%  |

Source: First Berlin Equity Research; Company

Six month reporting showed a sharp increase in sales of 63% albeit from a very low base of €524k. EBITDA improved to €-261k (H1/16: €-372k). We expect to see continued signs that business is improving, thanks to the Hartmann partnership and a move into retail. We model a three year sales CAGR of 46.4% for the period 2017—2019, driven predominantly by self-test revenue streams. We look for sales to top the €3m mark in 2018.

We model a gross margin (GM) of 45% for the company with the expected sales mix of the aforementioned channels. ZuhauseTEST offers the largest GM uplift potential. However, the contribution is still too small to significantly impact the metric. The recent upswing is traced to the new production partnerships. Not only has the reshoring of production resulted in a "Made in Germany" product line, it has also cut costs.

Figure 1: Revenue and gross margin development



Source: First Berlin Equity Research; Company

The staff headcount is 14 giving the company a lean operating structure capable of orchestrating the pending growth with no required additions. Personnel expenses consumed some 43% of sales in 2016. We expect this ratio fall to below 18% in 2019 and trend even lower due to scalability and low staffing needs.

Other OpEx mainly encompasses SG&A. We note that distribution partners shoulder the bulk of outward marketing costs, thus the line item reflects standard operational costs. Initial research for product development occurs in house, while the production partner assumes production and testing. We also see great potential to improve on the 65% other OpEx / sales ratio realised last year. We target 15.7% by 2019. We expect the other OpEx line to also decrease Y/Y, given the one-off costs incurred last year in conjunction with a build-up in operations and securing new partners. The combined scale effects should allow the company to produce a positive result at the EBITDA level in 2018, if the expected spike in retail sales actually materialises.

We expect depreciation and amortisation to remain around €200k per annum over the next few years as the company writes down capitalised legacy costs. We therefore expect EBIT to remain negative until 2019. Given our expectation that financing needs will be chiefly met with equity financing rounds, our model contains only marginal interest costs. Loss carry forwards will also keep tax expenses low over the mid term.

Figure 2: EBITDA development



Source: First Berlin Equity Research; Company

Capital increase in the works to shore up the balance sheet and finance growth The balance sheet is characterised by sizable working capital (WC) and intangible asset positions. The latter contains capitalised product approval expenses for previous activities in Russia. We expect these to be fully amortised over a five year period.

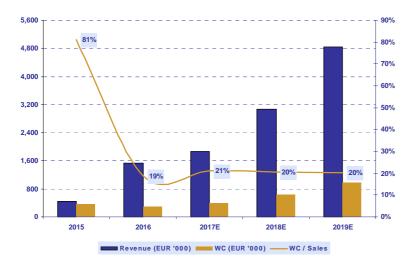
Table 4: Six month 2017 financial highlights

| All figures in EUR                    | H1/17     | 2016      | Delta  |
|---------------------------------------|-----------|-----------|--------|
| Cash                                  | 476,940   | 530,121   | -10.0% |
| Financial debt (short- and long-term) | 155,976   | 155,976   | 0.0%   |
| Net debt                              | -320,964  | -374,145  | -14.2% |
| Total assets                          | 3,530,102 | 3,513,398 | 0.5%   |
| Shareholders' equity                  | 3,274,125 | 3,034,620 | 7.9%   |
| Equity ratio                          | 92.7%     | 86.4%     | -      |

Source: First Berlin Equity Research; Company

NanoRepro is working on curbing working capital consumption and has been writing down obsolete inventories since Mr Fuchs took over the financing helm a year ago. With stricter discipline, we believe the company will be able to keep inventory days at two months. We also expect receivables to remain below two months going forward with the future sales mix, while payables will range between 20-30 days. We thus expect the company to run at a WC/Sales ratio of some 20% going forward.

Figure 3: Working capital development



Source: First Berlin Equity Research; Company

NanoRepro has a one year revolver (H1/17: €155k) on the balance sheet, which we believe represents the peak debt load assuming near term equity capital raises. We model the issuance of up to 622,000 new shares (10% of share capital) by the end of this year. We have assumed a successful placement at €1.40 / share—a 2% discount to the current share price. This should give the company sufficient funds to move into planned distribution abroad and cover the associated working capital needs. We have not assumed development of branded products in our model at this stage. This would require additional financing rounds.

We expect net operating cash flow to remain negative through the end of next year (2018E: €-193k), owing mainly to working capital consumption. The rise in sales should translate into adequate profitability to yield positive net operating cash flow the following year. Given low CapEx intensity, we expect this to convert into positive free cash flows (FCF) in 2019. We expect the company to offset negative FCF with the aforementioned cap hike.

# **MANAGEMENT**

## **CEO**

Lisa Jüngst has been with NanoRepro since 2006 and was named to the executive team in April 2013. Her company roots are in marketing, finance, personnel, and investor relations, giving her first hand insight into operations. Today, she cultivates relationships with key partners and customers and spearheads internationalisation. Ms Jüngst studied Business Management at the University of Fulda and is a founding member of PaediProtect AG. She is also a member of the Young Entrepreneurs Alliance.

## **CFO**

Michael Fuchs joined NanoRepro in September 2016 as CFO and recently extended his contact by two years. Mr Fuchs has 25 years experience working in the financial sector including a stint at Generali Group, where he had a senior position. He studied Business Administration at the University of Cologne with a focus on finance and taxation.

## **Supervisory Board Chairman**

Dr Olaf Stiller brings seven years experience at NanoRepro having previously served as Managing Director and CEO. He helped guide NanoRepro and Formycon AG from start-up to public listing and continues to serve as Supervisory Board Chairman of Formycon. Dr Stiller obtained his doctorate with the scholarship for talented individuals from the Federal Ministry of Education and Research.

## **Deputy Chairman of Supervisory Board**

Michael Tillmann is CEO of Vela Holding Pte. Ltd. Singapore and supports NanoRepro with strategic planning. Previously, Mr Tillmann was CEO at Roche Diagnostics. He has over 20 years of experience in top management positions at international companies.

## **Supervisory Board Member**

Dr Michael Kern serves as Supervisory Board Chairman of SPORTTOTAL AG. Among his previous posts, he was responsible for the marketing and after sales divisions at Volkswagen, served as Chairman of the Management Board of A.T.U., and as Chairman and Chief Executive Officer at Kamps AG. He also held a number of senior positions at Kaufhof Group. Dr Kern holds a doctorate in economics and is a graduate of the Bergische Universität Wuppertal.

## **Supervisory Board Member**

Dr Bhuwnesh Agrawal combines over 40 years of industry experience and academic credentials across a number of corporate positions. At the start of his career, he spent 15 years at the Free University of Berlin in research, teaching and in patient management. Dr Agrawal is a medical doctor by training specialised in internal medicine, clinical pharmacology, pharmacology and toxicology in Germany. He received his MBA from the Open University, UK and his PhD from the Free University of Berlin.



# **SHAREHOLDERS & STOCK INFORMATION**

| Stock Information     |                |  |  |  |
|-----------------------|----------------|--|--|--|
| ISIN                  | DE0006577109   |  |  |  |
| WKN                   | 657 710        |  |  |  |
| Bloomberg ticker      | NN6 GR         |  |  |  |
| No. of issued shares  | 6,220,000      |  |  |  |
| Transparency Standard | Entry Standard |  |  |  |
| Country               | Germany        |  |  |  |
| Sector                | Med -Tech      |  |  |  |
| Subsector             | Health care    |  |  |  |

Source: Börse Frankfurt, First Berlin Equity Research

|                | Shareholder Structure |       |
|----------------|-----------------------|-------|
| Management     |                       | 10.0% |
| Kuschma Family |                       | 8.9%  |
| Free Float     |                       | 81.1% |
|                |                       |       |

Source: NanoRepro AG

# **INCOME STATEMENT**

| All figures in EUR          | 2015       | 2016       | 2017E      | 2018E      | 2019E      |
|-----------------------------|------------|------------|------------|------------|------------|
| Revenues                    | 450,116    | 1,539,295  | 1,874,928  | 3,059,077  | 4,833,341  |
| Capitalised own work        | 174,891    | 281,833    | 243,480    | 192,000    | 192,000    |
| Total output                | 625,007    | 1,821,128  | 2,118,408  | 3,251,077  | 5,025,341  |
| Cost of goods sold          | -284,126   | -1,022,131 | -1,163,638 | -1,687,999 | -2,639,004 |
| Gross profit                | 340,881    | 798,997    | 954,770    | 1,563,078  | 2,386,337  |
| Personnel expenses          | -496,354   | -657,836   | -773,343   | -824,944   | -840,854   |
| Other OpEx                  | -885,585   | -1,003,373 | -712,605   | -739,285   | -760,456   |
| Other income                | 82,499     | 8,935      | 19,490     | 9,177      | 6,928      |
| EBITDA                      | -958,559   | -853,277   | -511,688   | 8,026      | 791,954    |
| Depreciation & amortisation | -216,769   | -250,760   | -194,992   | -204,958   | -203,000   |
| Operating income (EBIT)     | -1,175,328 | -1,104,037 | -706,680   | -196,932   | 588,954    |
| Net financial result        | -427       | -4,332     | -9,358     | -7,750     | -3,875     |
| Pre-tax income (EBT)        | -1,175,755 | -1,108,369 | -716,039   | -204,682   | 585,079    |
| Income taxes                | -101       | 556,692    | -838       | -472       | -5,851     |
| Net income / loss           | -1,175,855 | -551,677   | -716,876   | -205,154   | 579,228    |
| Diluted EPS (in €)          | -0.27      | -0.12      | -0.12      | -0.03      | 0.09       |
| Ratios                      |            |            |            |            |            |
| Gross margin on revenues    | 36.9%      | 33.6%      | 37.9%      | 44.8%      | 45.4%      |
| EBITDA margin on revenues   | -213.0%    | -55.4%     | -27.3%     | 0.3%       | 16.4%      |
| EBIT margin on revenues     | -261.1%    | -71.7%     | -37.7%     | -6.4%      | 12.2%      |
| Net margin on revenues      | -261.2%    | -35.8%     | -38.2%     | -6.7%      | 12.0%      |
| Tax rate                    | 0.0%       | 50.2%      | -0.1%      | -0.2%      | -1.0%      |
| Expenses as % of revenues   |            |            |            |            |            |
| Personnel expenses          | -110.3%    | -42.7%     | -41.2%     | -27.0%     | -17.4%     |
| Other OpEx                  | -196.7%    | -65.2%     | -38.0%     | -24.2%     | -15.7%     |
| Depreciation & amortisation | -48.2%     | -16.3%     | -10.4%     | -6.7%      | -4.2%      |
| Y-Y Growth                  |            |            |            |            |            |
| Revenues                    | -12.6%     | 242.0%     | 21.8%      | 63.2%      | 58.0%      |
| Operating income            | n.m.       | n.m.       | n.m.       | n.m.       | n.m.       |
| Net income/ loss            | n.m.       | n.m.       | n.m.       | n.m.       | n.m.       |

# **BALANCE SHEET**

| All figures in EUR                 | 2015      | 2016      | 2017E      | 2018E     | 2019E      |
|------------------------------------|-----------|-----------|------------|-----------|------------|
| Assets                             |           |           |            |           |            |
| Current assets, total              | 797,742   | 1,143,150 | 1,875,555  | 1,900,288 | 2,789,451  |
| Cash and equivalents               | 230,506   | 530,121   | 1,340,383  | 1,100,426 | 1,565,842  |
| Trade receivables                  | 35,832    | 31,064    | 282,523    | 460,957   | 728,312    |
| Inventories                        | 403,260   | 422,780   | 191,283    | 277,479   | 433,809    |
| Other ST assets                    | 128,144   | 159,185   | 61,365     | 61,426    | 61,488     |
| Non-current assets, total          | 1,641,059 | 2,370,248 | 2,220,816  | 2,028,400 | 1,630,228  |
| Property, plant & equipment        | 20,507    | 13,302    | 13,864     | 14,170    | 14,654     |
| Goodwill & other intangibles       | 1,595,552 | 1,774,946 | 1,624,952  | 1,432,230 | 1,248,563  |
| Financial assets                   | 25,000    | 25,000    | 25,000     | 25,000    | 25,000     |
| Deferred taxes                     | 0         | 557,000   | 557,000    | 557,000   | 342,011    |
| Total assets                       | 2,438,801 | 3,513,398 | 4,096,371  | 3,928,689 | 4,419,679  |
| Shareholders' equity & debt        |           |           |            |           |            |
| Current liabilities, total         | 106,119   | 353,911   | 260,885    | 297,086   | 207,514    |
| Trade payables                     | 73,592    | 167,230   | 79,701     | 115,616   | 180,754    |
| ST debt                            | 13,451    | 155,976   | 155,000    | 155,000   | 0          |
| Other ST financial liabilities     | 0         | 12,988    | 8,201      | 8,217     | 8,234      |
| Other current liabilities          | 19,076    | 17,717    | 17,983     | 18,252    | 18,526     |
| Long-term liabilities, total       | 58,500    | 124,867   | 25,411     | 26,682    | 28,016     |
| LT provisions                      | 58,500    | 124,867   | 25,411     | 26,682    | 28,016     |
| Shareholders' equity               | 2,274,182 | 3,034,620 | 3,810,075  | 3,604,921 | 4,184,149  |
| Total consolidated equity and debt | 2,438,801 | 3,513,398 | 4,096,371  | 3,928,689 | 4,419,679  |
| Ratios                             |           |           |            |           |            |
| Current ratio (x)                  | 7.5       | 3.2       | 7.2        | 6.4       | 13.4       |
| Quick ratio (x)                    | 3.7       | 2.0       | 6.5        | 5.5       | 11.4       |
| Net debt                           | -217,055  | -374,145  | -1,185,383 | -945,426  | -1,565,842 |
| Net gearing                        | -10%      | -12%      | -31%       | -26%      | -37%       |
| Return on equity (ROE)             | -51.7%    | -18.2%    | -18.8%     | -5.7%     | 13.8%      |
| Capital employed (CE)              | 1,981,559 | 2,074,862 | 2,032,921  | 2,069,220 | 2,244,584  |
| Return on capital employed (ROCE)  | -59%      | -53%      | -35%       | -10%      | 26%        |



| All figures in EUR                    | 2015       | 2016       | 2017E     | 2018E     | 2019E     |
|---------------------------------------|------------|------------|-----------|-----------|-----------|
| Pre-tax income                        | -1,175,855 | -551,677   | -716,039  | -204,682  | 585,079   |
| Depreciation and amortisation         | 216,769    | 208,808    | 194,992   | 204,958   | 203,000   |
| Change in trade rec & other assets    | 17,359     | -45,800    | 77,858    | -264,691  | -208,757  |
| Change in payable & other liabilities | 7,000      | 171,700    | -191,506  | 37,472    | 66,762    |
| Operating cash flow                   | -934,727   | -216,969   | -634,695  | -226,944  | 646,084   |
| Interest expense paid                 | 427        | 4,332      | 9,360     | 7,750     | 3,875     |
| Tax paid                              | -300       | -556,456   | -838      | -472      | -5,851    |
| Net operating cash flow               | -934,600   | -769,093   | -626,172  | -219,665  | 644,108   |
| CapEx                                 | -390,013   | -380,994   | -45,561   | -12,542   | -19,817   |
| Cash flow from investing              | -390,013   | -380,994   | -45,561   | -12,542   | -19,817   |
| Free cash flow (FCF)                  | -1,324,613 | -1,150,087 | -671,732  | -232,207  | 624,292   |
| Equity inflow, net                    | 1,542,900  | 1,312,115  | 1,492,331 | 0         | 0         |
| Debt inflow, net                      | -107,500   | 142,500    | -976      | 0         | -155,000  |
| Interest paid                         | 0          | -4,913     | -9,360    | -7,750    | -3,875    |
| Cash flow from financing              | 1,435,400  | 1,449,702  | 1,481,995 | -7,750    | -158,875  |
| Net cash flows                        | 110,787    | 299,615    | 810,262   | -239,957  | 465,417   |
| Cash, start of the year               | 119,720    | 230,506    | 530,121   | 1,340,383 | 1,100,426 |
| Cash, end of the year                 | 230,506    | 530,121    | 1,340,383 | 1,100,426 | 1,565,842 |
| EBITDA/share (in €)                   | 0.00       | -0.18      | -0.08     | 0.00      | 0.12      |
| Y-Y Growth                            |            |            |           |           |           |
| Operating cash flow                   | n.m.       | n.m.       | n.m.      | n.m.      | n.m.      |
| Free cash flow                        | n.m.       | n.m.       | n.m.      | n.m.      | n.m.      |
| EBITDA/share                          | n.m.       | n.m.       | n.m.      | n.m.      | 9767.7%   |



## FIRST BERLIN RECOMMENDATION & PRICE TARGET HISTORY

| Report<br>No.:    | Date of publication | Previous day<br>closing price | Recommendation | Price<br>target |
|-------------------|---------------------|-------------------------------|----------------|-----------------|
| Initial<br>Report | 17 October 2017     | € 1.43                        | Buy            | € 2.00          |

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- valuation methods and principles
- sensitivity of valuation parameters

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# FIRST BERLIN Equity Research

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