

Q4 2017 Presentation

01.02.2018, Oslo

Agenda

- **Highlights**
- **BetaGlucans**
 - Animal- and Consumer health
 - Cancer
 - Advanced wound care
- **Enzymes**
 - Molecular and new markets
- **Q4 Financials**
- **Outlook for 2018**



Biotec in brief

A corporation with two independent versatile technology platforms who both benefit from underlying market growth

Beta-glucans

- A common unique technology platform with immune modulating products for improved outcome
- Woulgan proven to reactivate wounds and with commercial progress in key markets
- An adjuvant in selective cancer treatments

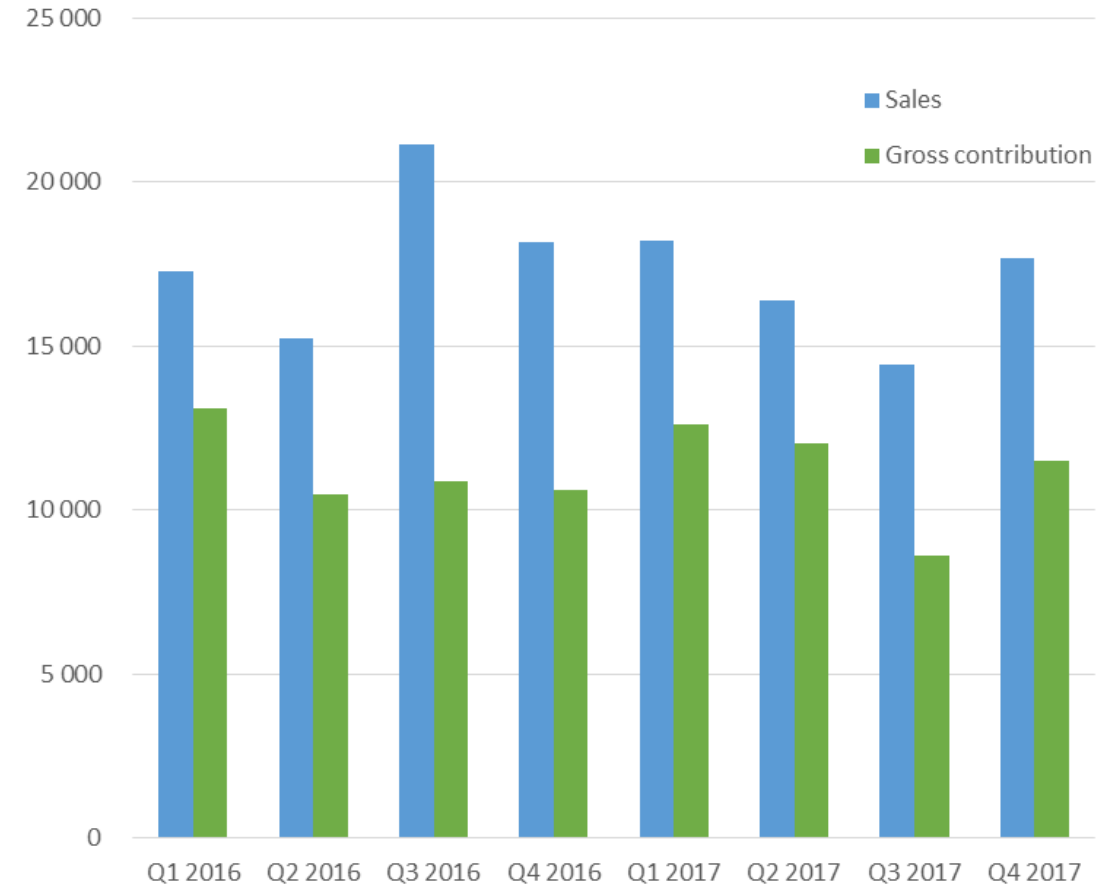
Enzymes

- Fast growing business in developing and selling unique enzymes for tomorrows personalized healthcare:
 - DNA sequencing
 - Gene therapy

Highlights Q4 2017

- Q4 sales of NOK 17.7 mill (NOK 18.2 mill)
- EBITDA of NOK -7.2 mill (NOK -8.1 mill)
- Woulgan reimbursed in the UK from December 1st
- ArcticZymes launched two versions of the SAN product

Sales & Gross contribution - Group



Beta-glucans

Activities for M-Glucan® and M-Gard®

Over 20 years experience with immune modulating beta-glucans

Animal health

- Sales experiences annual and seasonal fluctuations driven by demand for health feed within the aquaculture sector.
- Activities on-going to broaden co-operation with business partners.

Consumer Health:

- First delivery to major US customer.
- Actively working on expanding the customers base.
- Potential new customers perform stringent due-diligence as part of purchasing process.



SBG® in current neuroblastoma vaccine trial

- Small but high impact indication in children
- Will serve as a proof of concept for use of SBG® in immunotherapy of cancer
- The treatment regime has a possibility of becoming approved without a regular phase III trial
- Biotec is in discussion with MSKCC on alternative ways to commercialise the combined treatment. MSKCC has licenced the rights to the vaccine to a US company, but is producing themselves for the trial

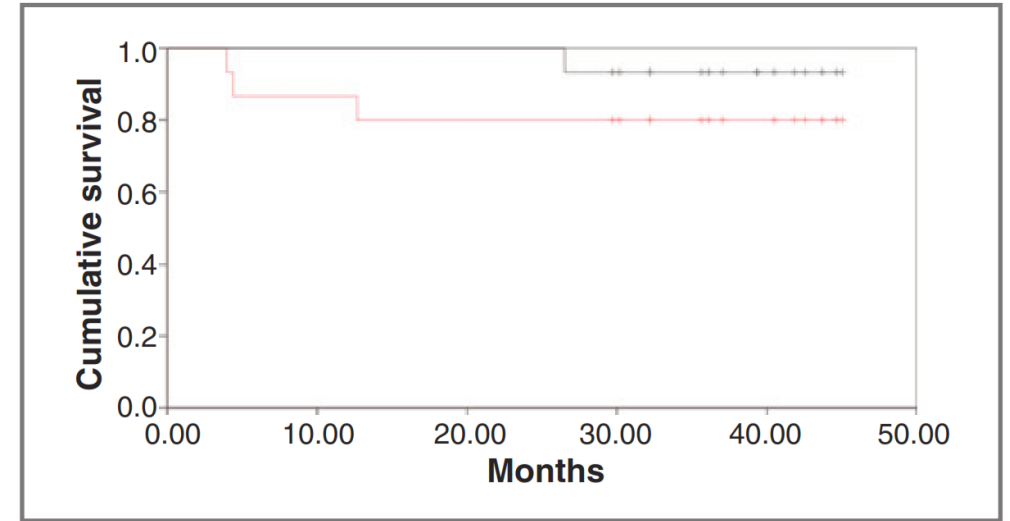
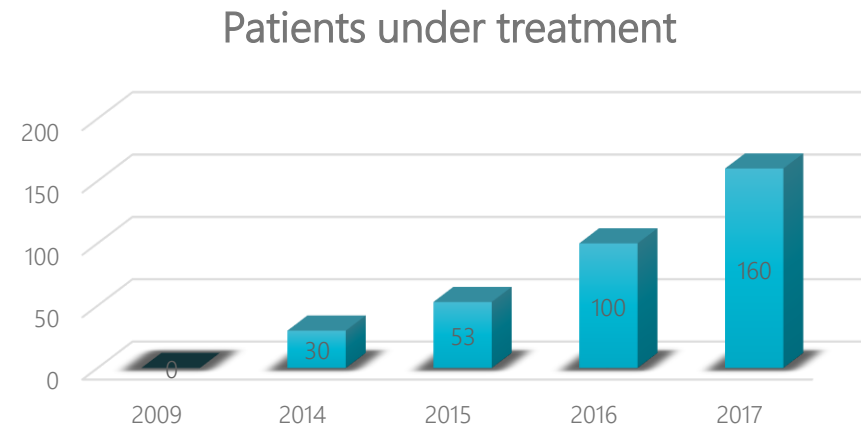
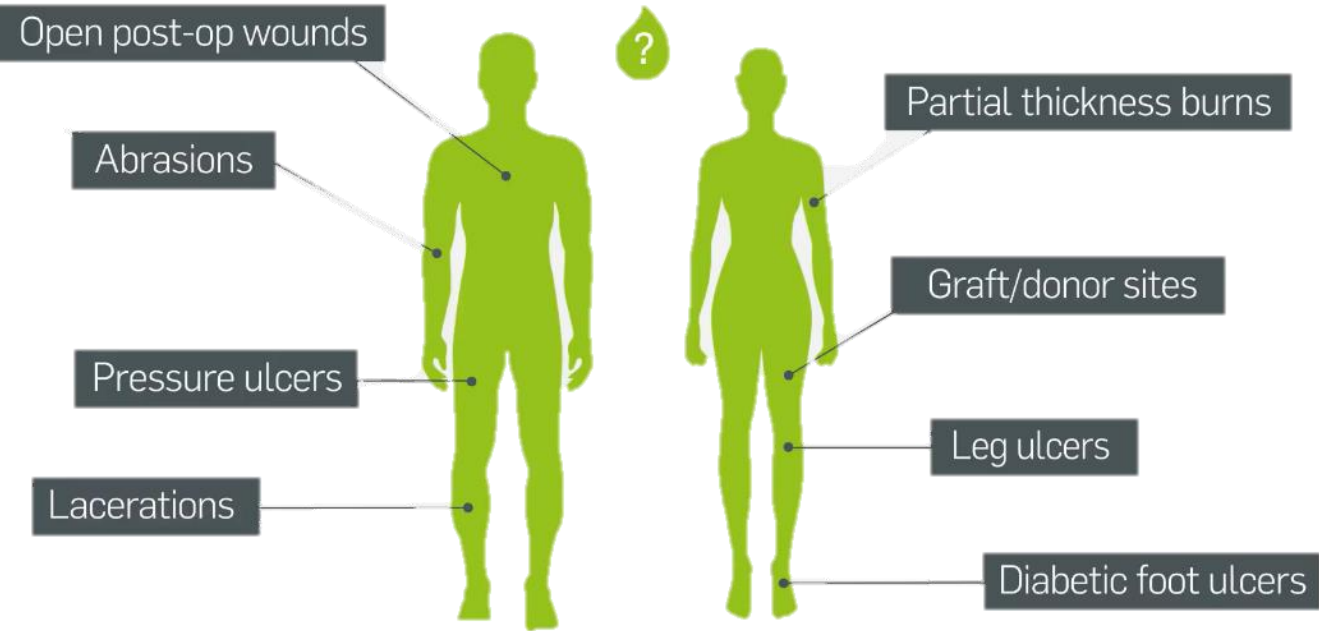


Figure 2. Relapse-free survival (red) and overall survival (black) of the 15 study patients from the start of the vaccine.



Status Woulgan®



- Clinical effects in user-friendly format- clear differentiation for Woulgan
- Progress with UK and Nordic market access (reimbursement, tenders and wholesaler listings).
- Woulgan is mainly used in out-patient settings – salesforce coverage is key:
 - Large number of call-points for salesforce.
 - Lack of scale for a “one-product” company.
 - Review go-to-market model, to secure further growth of the franchise with less consumption of the company's financial resources.

Activities in all markets



| | UK | Nordics | Germany |
|---------------|---|---|--|
| Clinical | <p>Completed recruitment of 300 patient study. Multiple wound types, real world study.</p> <p>Results written up in Q2 for publication after summer.</p> | <p>Completed patient recruitment early in Q4. Majority of patient data collected from sites.</p> <p>Analysis and manuscript for publication due in Q1 2018.</p> | |
| Market Access | <p>NHS approved Woulgan for listing on UK Drug Tariff from December.</p> <p>Appeal panel found that application demonstrated Woulgan is clinically effective and also cost effective.</p> <p>Woulgan can be prescribed and reimbursed across UK where local policy permits its use.</p> | <p>Listing grew to over 70% in Finnish tenders, Swedish tenders positive but not decision in Q4. Norway and Denmark still very low.</p> <p>Local wholesaler co-operations generating good numbers of leads in community sector.</p> | <p>Upcoming changes in the reimbursement system creates uncertainty around reimbursement for "active" wound products.</p> <p>Situation is being monitored to see, if an Annex V application is needed.</p> <p>Documentation for potential Annex V application planned in Q1.</p> |
| Go-to-market | <p>Dedicated sales team prepared for January launch.</p> | <p>Engaged wound industry expert to support our partner.</p> | <p>Ongoing delivery of trainings to wound expert nurses to support increasing and correct use of Woulgan.</p> |

Research and Development: Woulgan Dry Layer

- Woulgan® dry layer pilot plant is testing different formulations
- The gel-forming dry layer is well suited to more exuding and larger wounds
- Priority to develop proprietary production methods that can be patent protected



ArcticZymes

Molecular and new markets

Commercial Updates

- ArcticZymes main customer completes its consolidation efforts in transiting manufacturing to a centralized EU site
- Product sales resumed with the first shipments going out during the quarter
- Business is expected to return to the normal cadence during 2018



Biomanufacturing: Gene Therapy Business



AZ's SAN

- Tripled sales and broadened customer base during 2017
- Multipronged value proposition



Virus

- SAN is utilised in the manufacturing of viruses for use in gene therapy
- The virus acts as a vehicle to deliver therapeutic DNA into patients cells

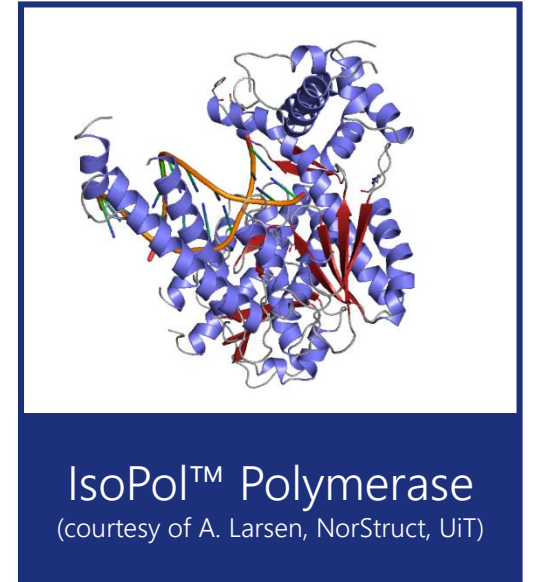


Gene Repair

- The virus has the tool kit and ability to repair the patients DNA
- Commercial exploitation is now a reality to cure inherited childhood and age related diseases

New Product Launches

- ArcticZymes expanded its IsoPol™ product line by launching 2 new polymerases: IsoPol™ SD⁺ and IsoPol™ BST⁺
- Each offers enhanced features purposely engineered into the enzymes based upon direct feedback from AZ's commercial customers and leading industrial players
- ArcticZymes will continue to expand the product line with the introduction of additional unique polymerase enzymes and synergistic support products
- Expanding the product line supports new technology development within In Vitro Diagnostics (IVD) and personalised medicine. Leading to increased accessibility for these technologies within the healthcare area



Enhancing Security of Supply

Security of Supply



Critical Supplier

Success in B2B is more than just the product:

- ✓ Robust and reproducible manufacturing
- ✓ Delivery on demand
- ✓ Scalable supply
- ✓ Traceability and relevant **Quality Standard**

Higher Quality Standard



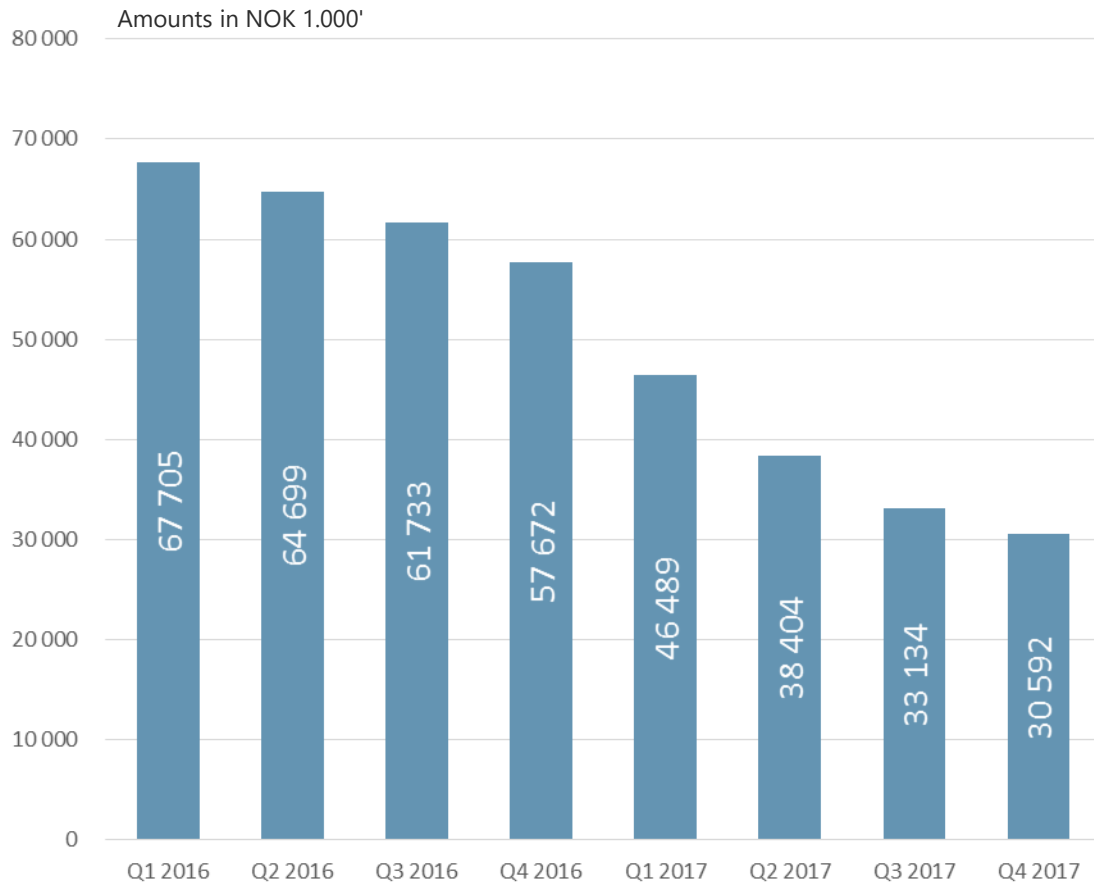
Future proofing the business:

- ✓ Achieved ISO13485 accreditation during Q4
- ✓ ISO13485 - Medical Devices
- ✓ Secures future business with diagnostic customers
- ✓ Value add towards customer

Q4 Financials

Speed of cash outflow reduced

Net cash position



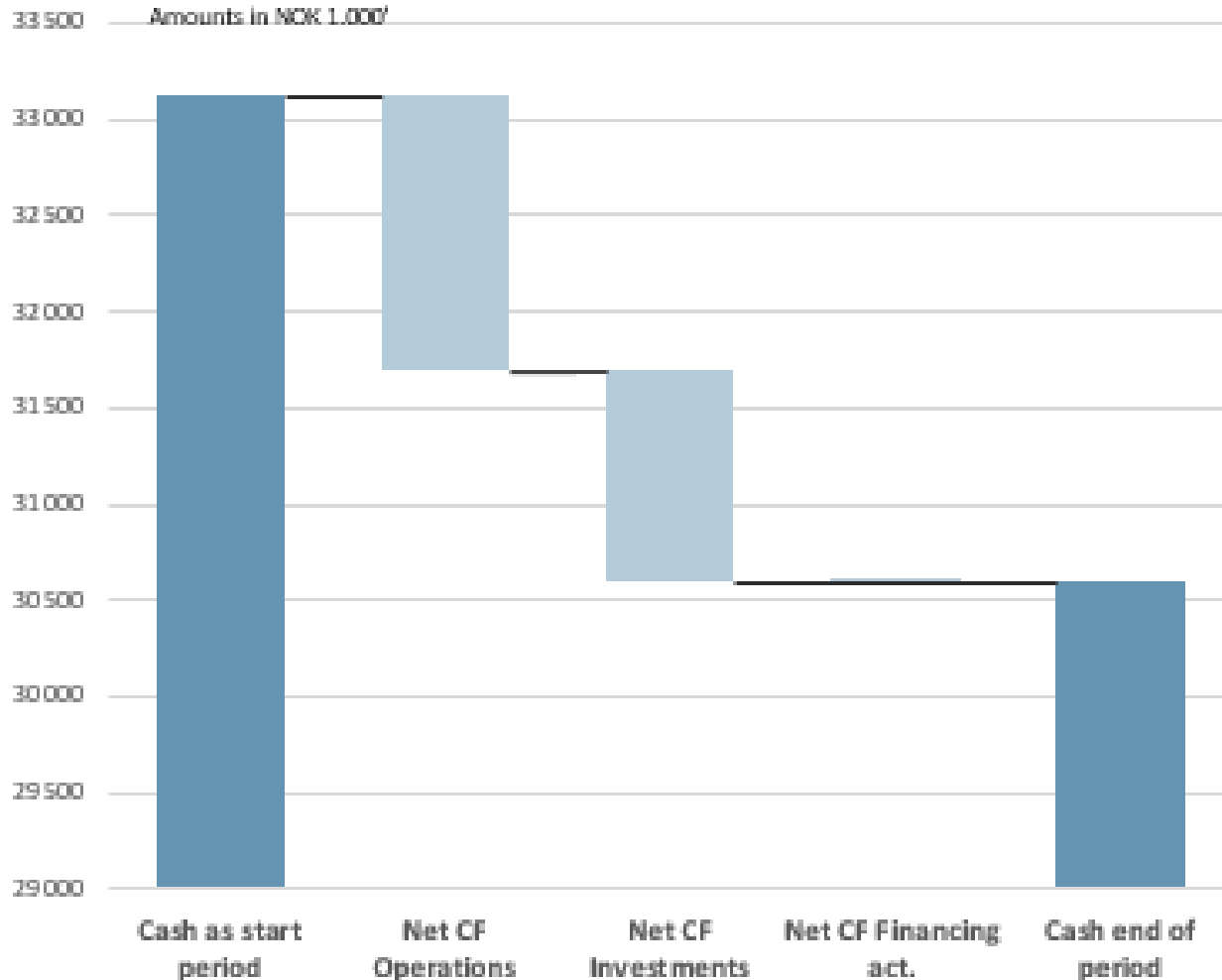
Fourth quarter changes in cash of -2.5 MNOK

- Best quarter last 24 months. Reduced net cash outflow
- 14.4 MNOK in short-term receivables
- 16.9 MNOK in short-term payables

Cash balance of 30.6 MNOK end of 2017

Q4 Cash flow detailed

Q4 2017 Cash flow



Q4 2017 Cash flow from operations ~ 1.5 MNOK

- Explained by change in working capital of
 - Receivables 4.8 MNOK
 - Payables 1.4 MNOK
 - Inventory -0.9

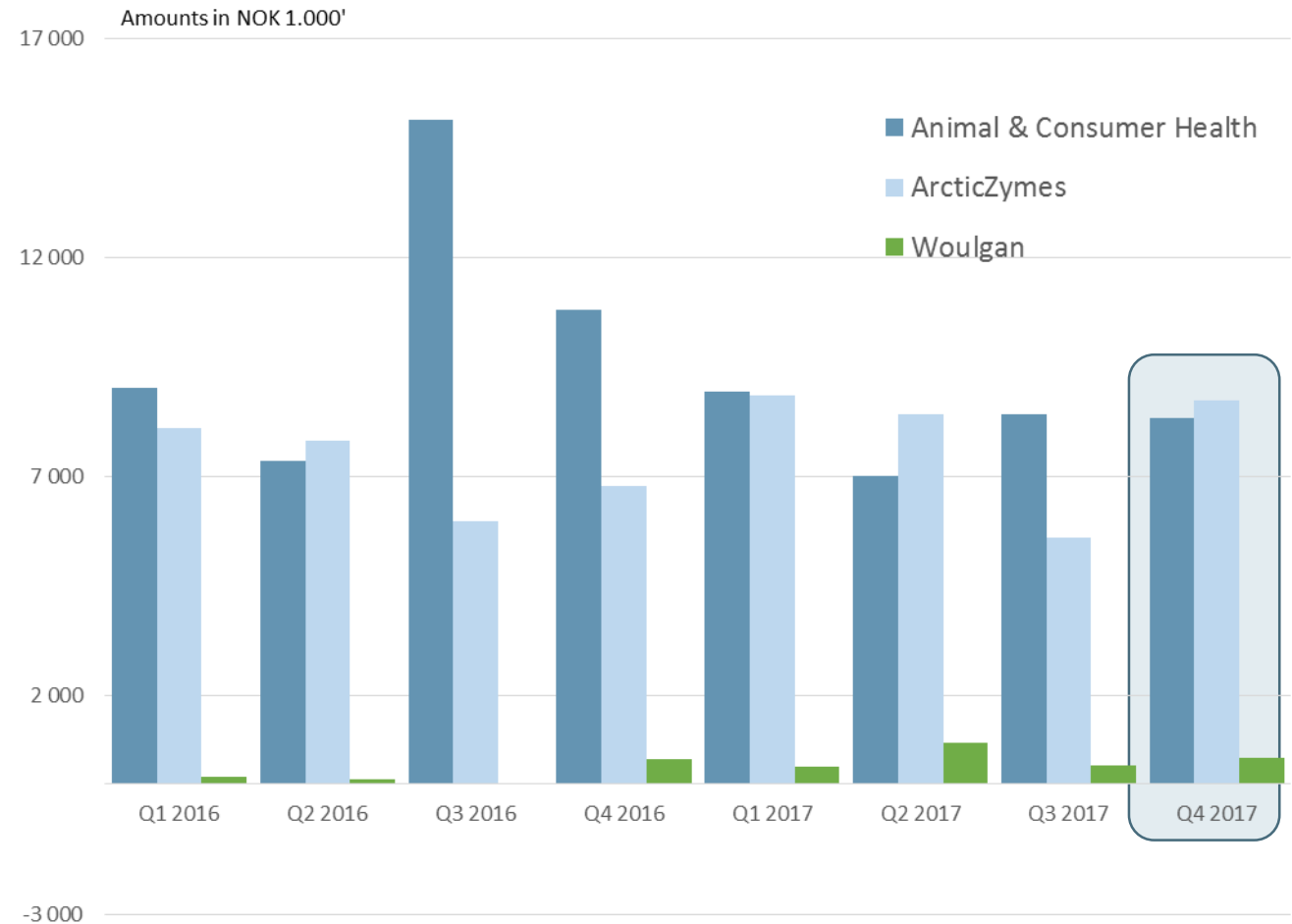
Q4 2017 Cash flow from investments ~ 1.5 MNOK

- Investments 1.1 in fixed assets

An average quarter for sales

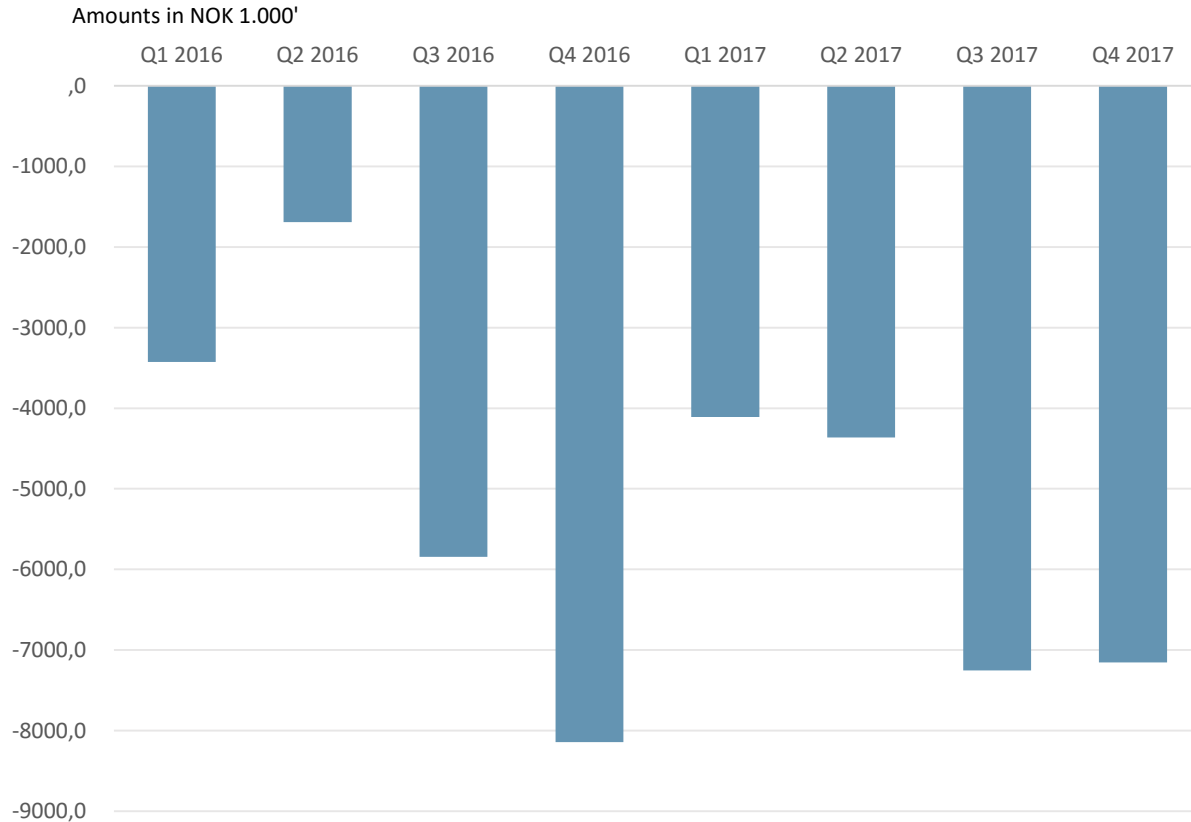
- ArcticZymes NOK 8.8M
- Animal & Consumer Health NOK 8.3M
- Woulgan NOK 0.6M
- Group NOK 17.7M

Biotec revenues per segment

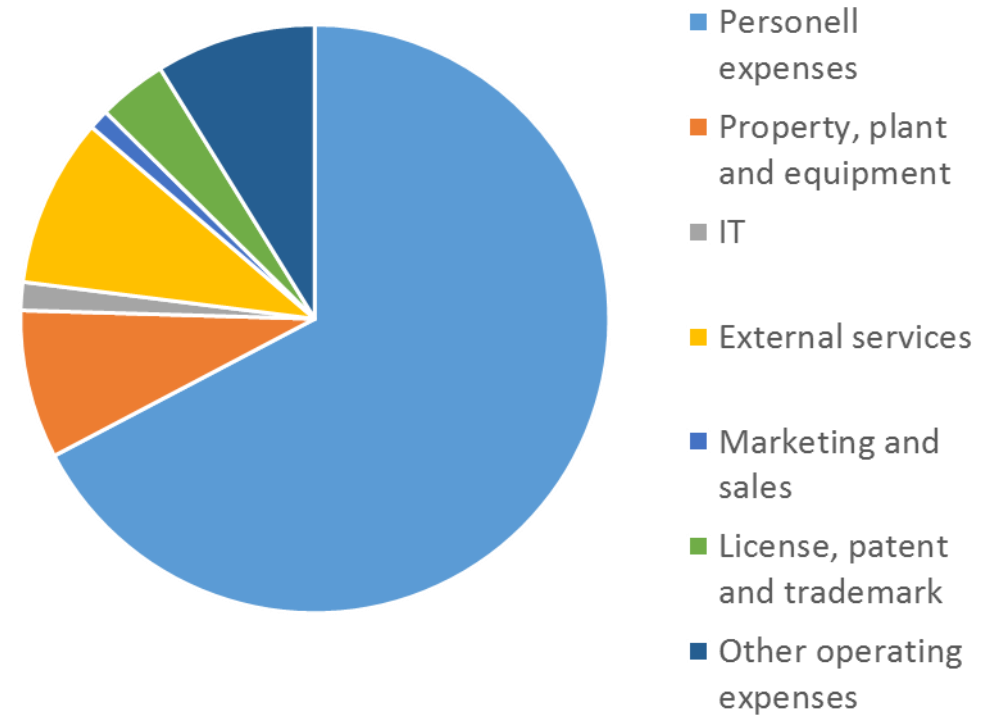


Loss in Q4 characterized by extraordinary

EBITDA



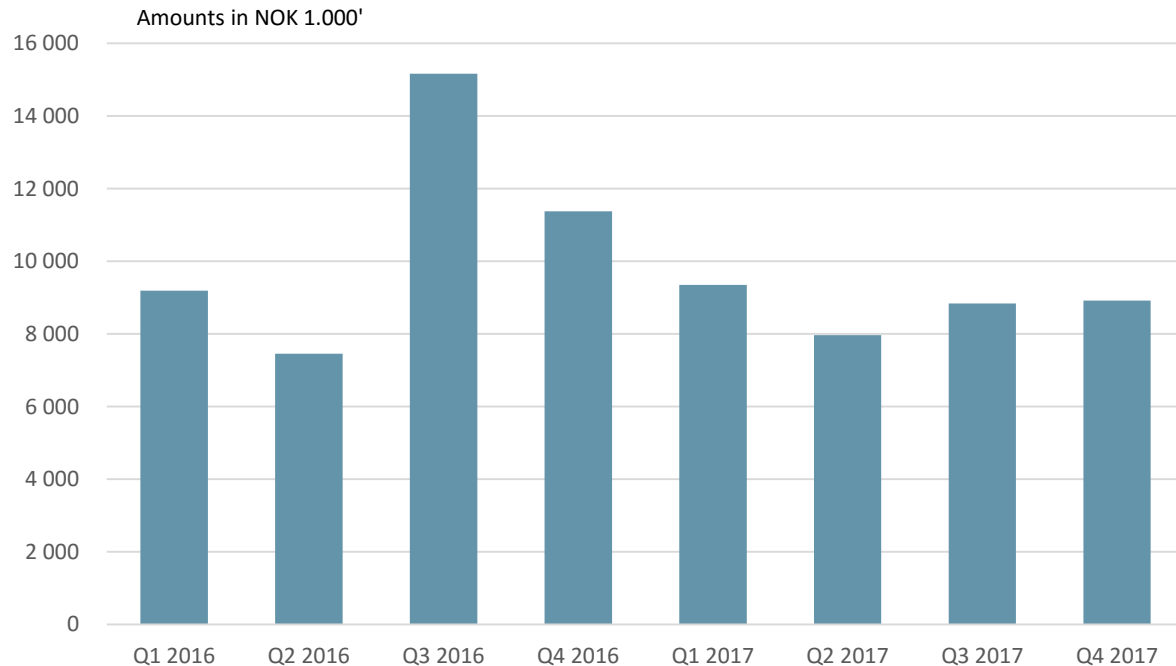
Operating Expenses



Beta-Glucan performance

| Beta-Glucans <i>(Amounts in NOK 1.000)</i> | Q4 | | YTD | |
|---|--------|--------|---------|---------|
| | 2017 | 2016 | 2017 | 2016 |
| Sales revenues | 8 911 | 11 430 | 35 051 | 43 190 |
| Operating expenses | -8 468 | -9 760 | -34 812 | -36 821 |
| EBITDA | -4 930 | -4 785 | -18 990 | -17 094 |

Sales

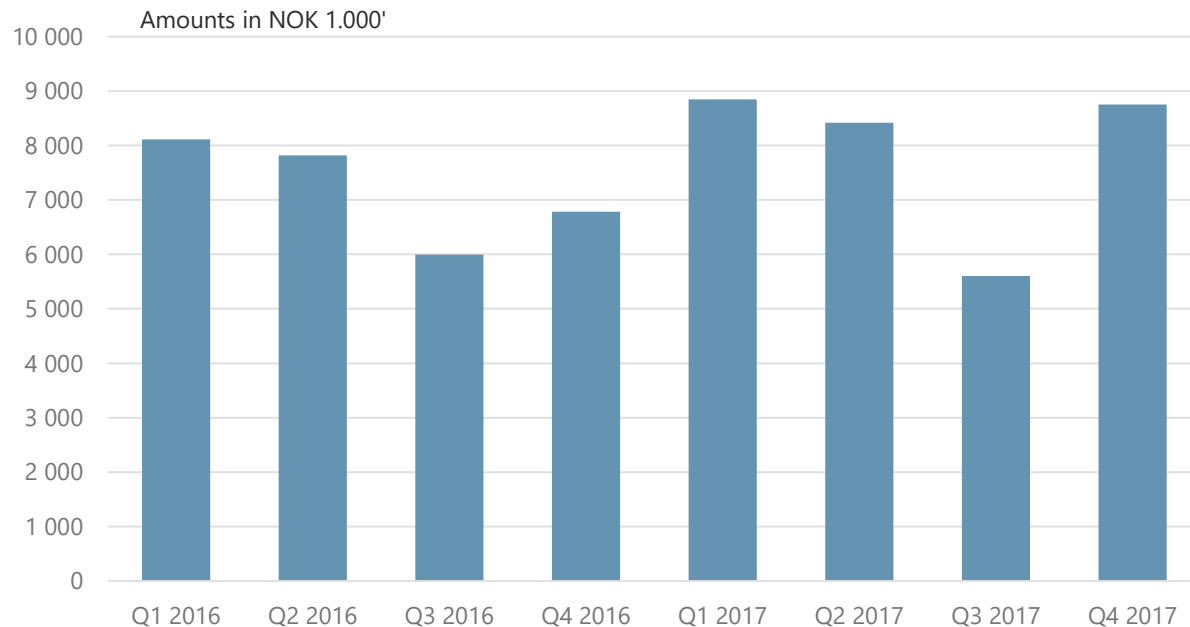


- Sales driven primarily by Animal Health in
- Q4 2017 expenses reduced compared to Q4 2016
- First delivery under the new M-Gard agreement to the US
- Woulgan continues to deliver sales
- Gross Contribution is dependant on product sales. Animal Health is the segment with the lowest margin

ArcticZymes performance

| Enzymes <i>(Amounts in NOK 1.000)</i> | Q4 | | YTD | |
|--|--------|--------|---------|---------|
| | 2017 | 2016 | 2017 | 2016 |
| Sales revenues | 8 757 | 6 785 | 31 628 | 28 714 |
| Operating expenses | -8 432 | -8 818 | -29 856 | -28 297 |
| EBITDA | 798 | -1 384 | 5 209 | 3 847 |

Sales



- Q4 2017 are NOK 2.0 million improved compared to Q4 2016
- Expenses are reduced from Q4 2016 to Q4 2017
- Launch of new products within the SAN portfolio contributed with a trebling in sales for the portfolio compared to 2016. Continuous growth in this portfolio is important for the 2020 goals

Outlook 2018

Outlook 2018



- Overall sales growth versus 2017
- Significant reduction in cash consumption due to increased sales and reduced expenses
- Review of Woulgan go-to-market model to ensure further growth
- AZ expects to grow the business organically while also looking for inorganic growth opportunities