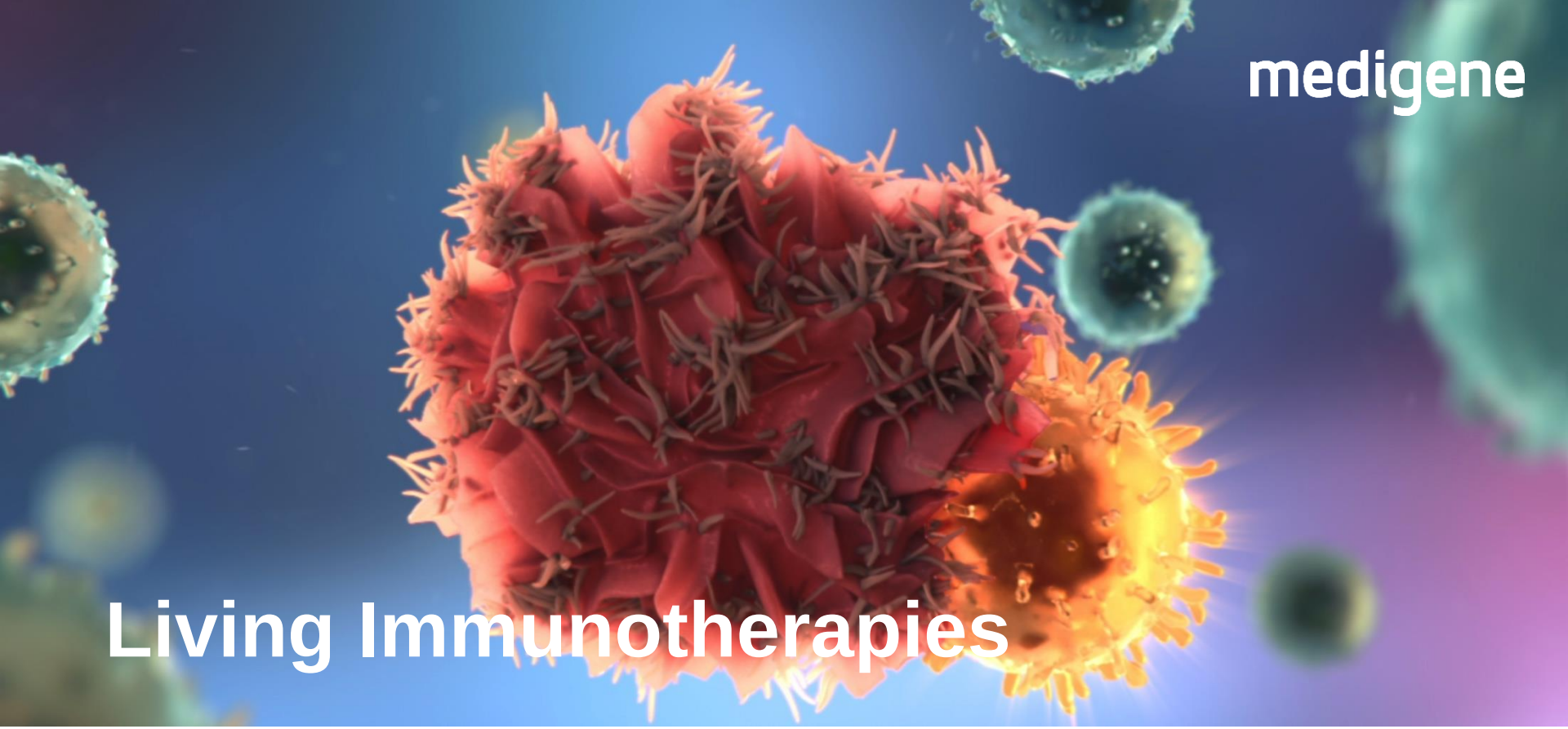


# Living Immunotherapies

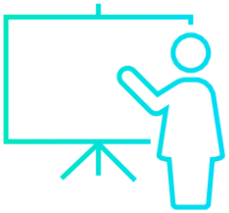
**ANALYST CONFERENCE CALL**
**RESULTS FOR THE FIRST 3 MONTHS OF 2017**
**11TH MAY 2017**

Prof. Dolores J. Schendel, CEO/ CSO
Dr. Thomas Taapken, CFO
Dr. Kai Pinkernell, CMO

# "Safe Harbor" statement

This presentation contains forward-looking statements, which are based on our current expectations and assumptions. Due to various risks and uncertainties including changes in business, economic competitive conditions, regulatory reforms, foreign exchange rate fluctuations and the availability of financing, actual results, performance or achievements could differ materially from those included in the forward-looking statements. These and other risk factors are discussed in the Company’s public reports. The company does not assume any obligations to update or revise any of these forward-looking statements, even if new information becomes available in the future

# Major events since the beginning of 2017



- Target antigen and details announced on Medigene's first clinical trial with T-cell receptor-modified T cells
- Preclinical data presented on Medigene’s first clinical TCR candidate at AACR Annual Meeting, USA
- Academic partner Oslo University presented additional data on compassionate use for DC vaccines against AML at AACR Annual Meeting, USA

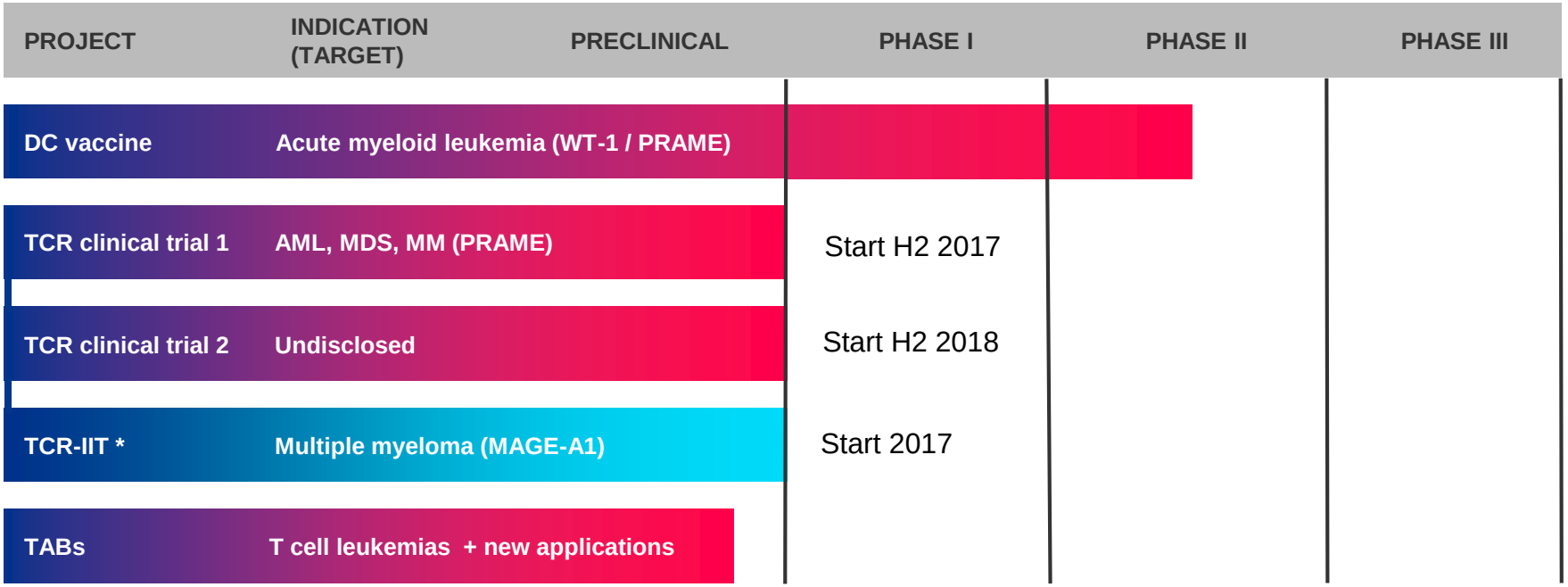
- New contractual arrangement signed with Mitsui Norin Co. Ltd, for Medigene‘s drug Veregen®

- Dr. Thomas Taapken joined as CFO,
  Dave Lemus stepped down from Executive Management Board

- Medigene raised €20.7 m  through placement of new shares at institutional investors

# Immunotherapy Pipeline, Clinical Progress and Outlook

# Progress of immunotherapy pipeline




* Investigator-initiated trial (IIT) of a publicly funded collaboration between MDC, Charité and Medigene.

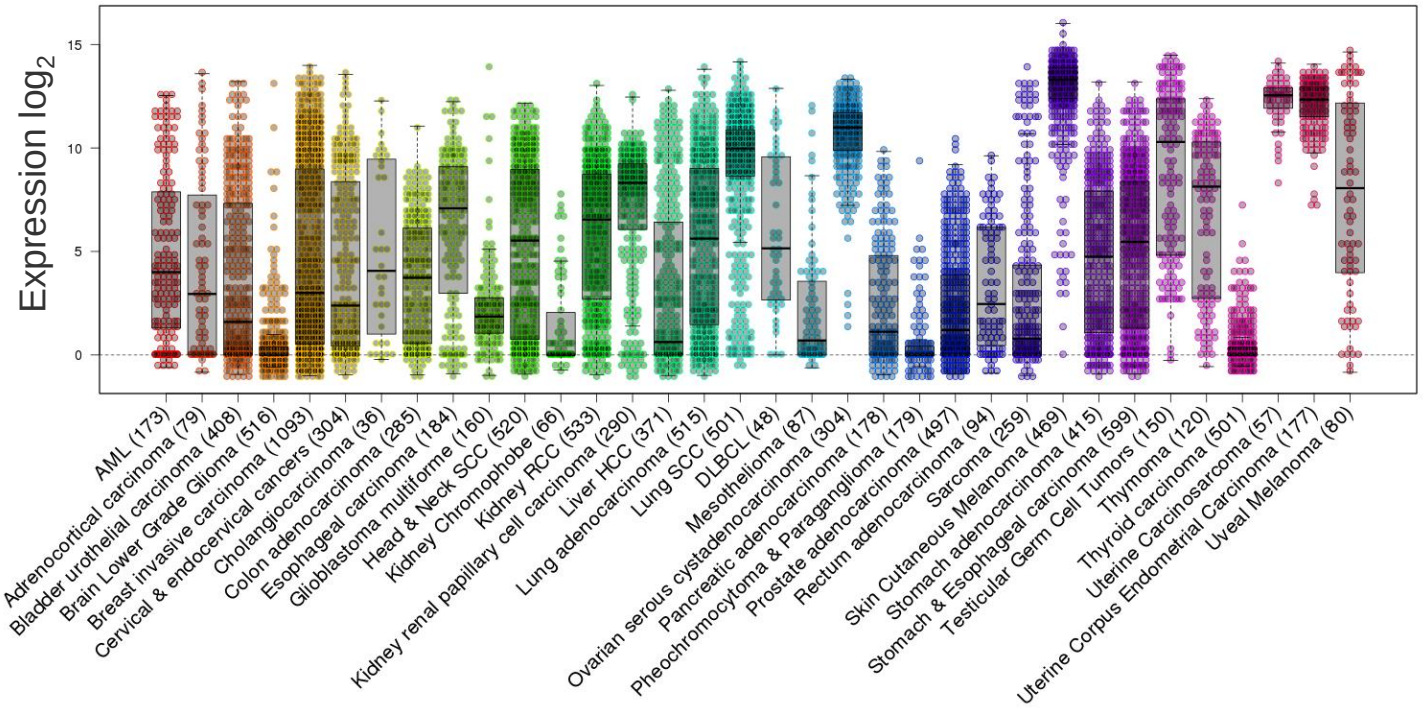
Additional IITs utilizing Medigene's DC vaccine technology are ongoing at
LMU Munich (Phase I/II in AML) and Oslo University Hospital (Phase II in prostate cancer)

# MDG1011 Phase I/II study to start H2 2017

- **Target:**
  - PRAME (**Pr**eferentially Expressed **A**ntigen in **Me**lanoma)
  - PRAME is a well characterized tumor antigen overexpressed in multiple hematological and solid tumor indications
- **MDG1011:**
  - T cells expressing a HLA-A2:01 restricted T-cell receptor (TCR) specific for PRAME
  - Has demonstrated favorable preclinical safety and efficacy
- **Clinical trial outline, pending regulatory discussion and approval:**
  - Planned is a combined Phase I/II safety and feasibility
  - Disease indications are acute myeloid leukemia (AML), myelodysplastic syndrome (MDS), multiple myeloma (MM); all in advanced stages
  - Phase I part: dose escalation, testing up to 4 dose cohorts in a 3+3 design
  - Phase II part: will expand the dose cohort from Phase I and include a prospective control group; could potentially be extended in size and into further malignancies

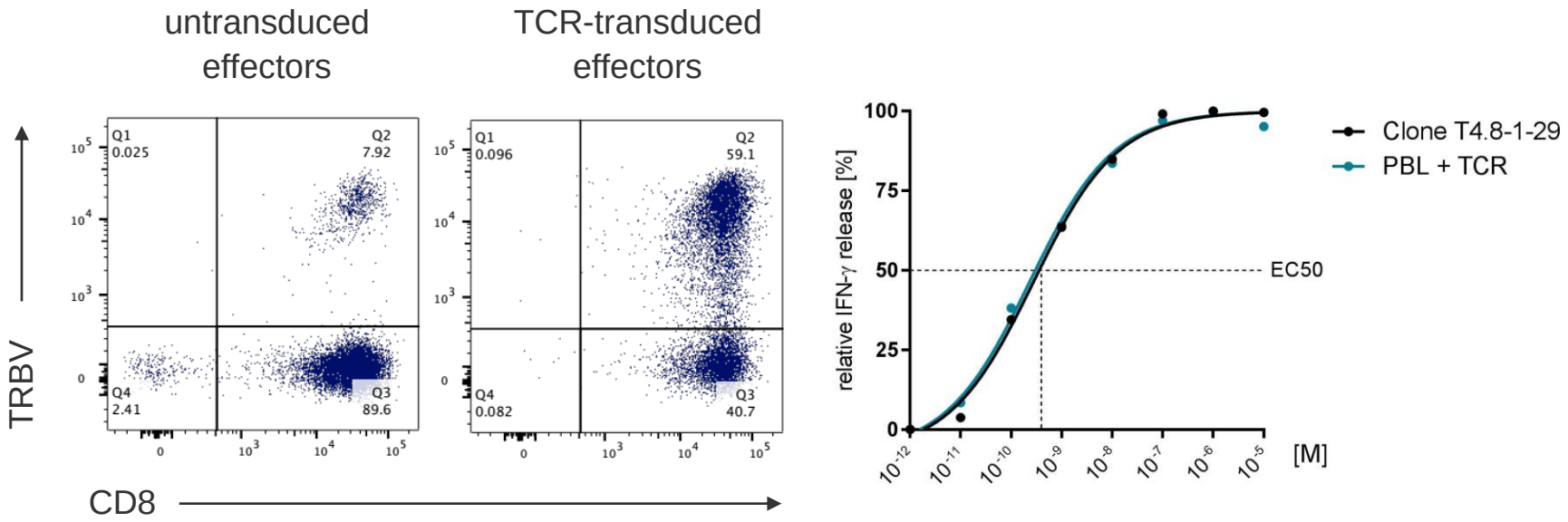
# PRAME – Analyses of prevalence in tumors shows broad expression

- Tumor expression patterns:




- Normal tissue expression: only testis among 30 tissues at RNA and 43 tissues at protein levels

# $PRAME_{VLD}$-specific TCR T4.8-1-29 shows high peptide sensitivity




- Transduced PBL are comparable to original T-cell clone in peptide sensitivity
- Sensitivity in the range of TCRs specific for viral antigens or mutated TCRs

# Collaboration with Charité and Max Delbrück Center

## Key features:

- MAGE-A1 TCR against Multiple Myeloma
- First TCR Clinical Trial to be conducted in Germany
- Grant-funded IIT with Charité and MDC Berlin

## Upcoming milestones:

- Submission of Clinical Trial Application (CTA), which includes the IMPD
- Official approval of CTA
- Start of the trial in 2017

| Scientific benefits | Regulatory benefits | Economic benefits |
|---|---|---|
| Validation of *in silico* work | Gain of experience with regulatory authorities | First right of negotiation for license of TCR candidate |
| Validation of several *in vitro* functional assays | IMPD content for our own TCR studies | Participation if another party acquires the rights |

# DC trial in AML: Phase II part ongoing

- Trial design:
  - **Phase I/II:** open-label, prospective, non-randomized trial
  - **20 AML patients:** 6 phase I + 14 phase II, complete remission after chemotherapy, not eligible for allo-transplantation
  - Patients selected with AML expressing the vaccine antigens:
    **WT-1** with or without **PRAME**
  - **Continuous vaccination for 2 years** or until progression/ death
  - Primary objectives: **feasibility** and **safety**
  - Secondary objectives: overall survival (**OS**), progression free survival (**PFS**), control of minimal residual disease (**MRD**), time to progression (**TTP**), induction of **immune responses**

- ClinicalTrials.gov Identifier: NCT02405338

medigene

# Corporate & financial highlights

# Financial overview for the first 3 months of 2017

€2.6 m

**Total revenues decreased due to one-time effect EndoTAG® sale in 2016**

€3.6 m

R&D expenses

**R&D expenses increased as planned**

€-3.0 m

**Increase in EBITDA loss as planned due to one-time effects in 2016**

€48.0 m

**Cash & cash equivalents (excl. proceeds from recent capital raise)**

☑

**Confirmation of financial guidance 2017**

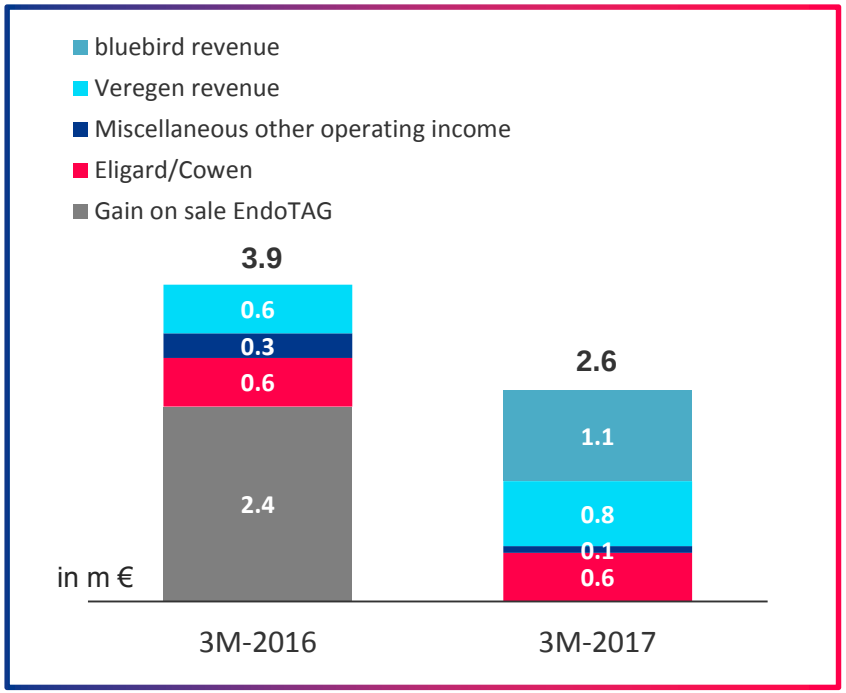
€20.7 m

**May 2017:**
**Successful capital increase**

# €20.7 m capital increase through private placement

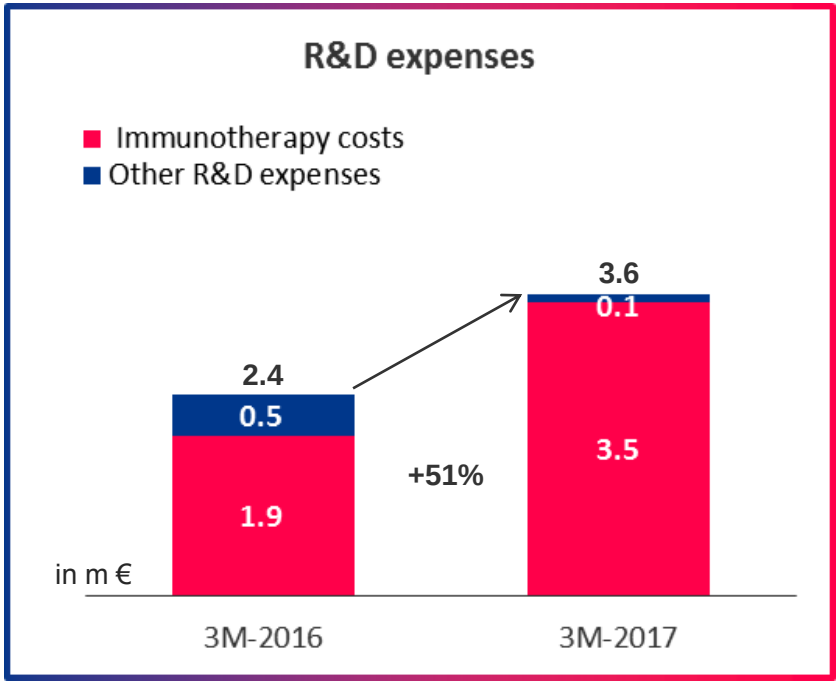
- After reporting period: €20.7 million in gross proceeds raised through a significantly oversubscribed private placement
- 1,964,599 new shares issued from authorized capital excluding pre-emptive rights
- Price: €10.55 per share
- Shares were allocated to existing and new institutional, healthcare specialized investors, especially in the USA
- Use of the net proceeds:
  - Intensify R&D activities in order to expand planned clinical TCR program into additional regions and indications as fast as possible

# Decrease in total revenue by 33% influenced by last year's sale of EndoTAG®



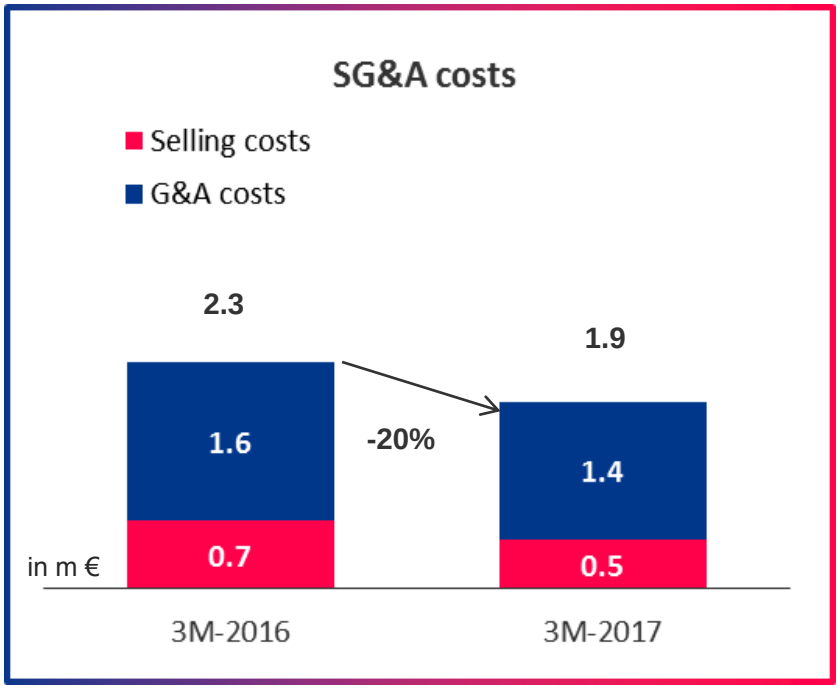

- Last year one-off effect of €2.4 m from EndoTAG®
- Last year R&D Funding of €0.3 m from Syncore for EndoTAG®
- Revenue from bluebird bio collaboration increased to €1.1 m
- Increased Veregen® income of €0.2 m

# Increase in R&D expenses by 51% due to progress in clinical programs



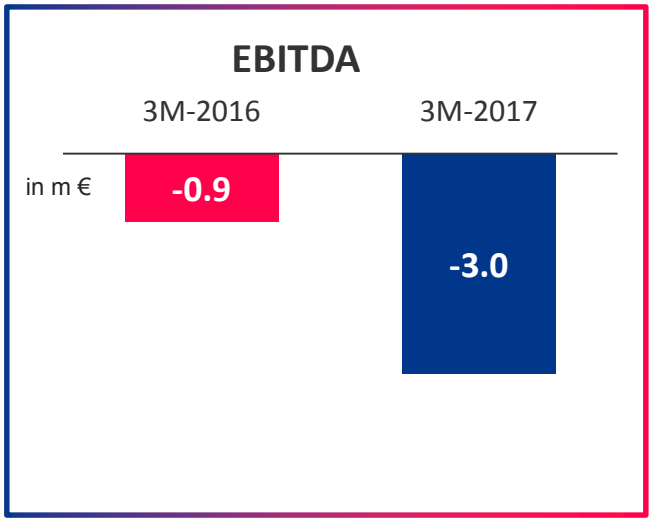

- Progress of DC study
- Preparation of clinical development of TCRs
- New hirings to total headcount of 92 (~60% working in R&D)

# Lower general administrative costs

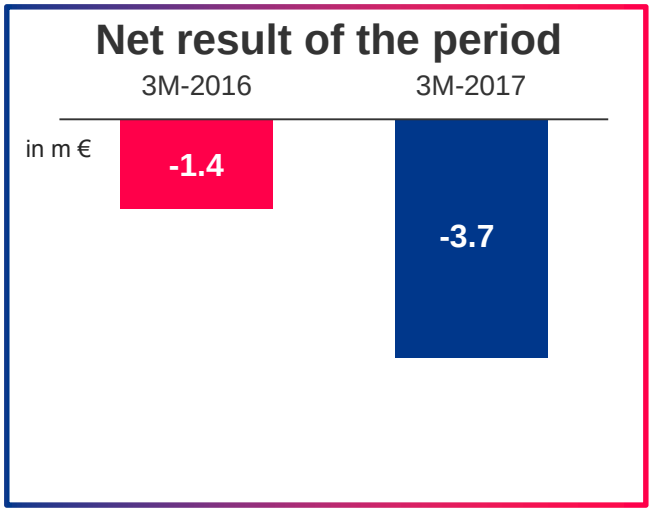



- 2016: One time management structure changes
- 2016: Extension of IT infrastructure

# Intensified R&D activities led to increased EBITDA loss




- Lower SG&A Expenses - €0.4 m
- Lower revenues - €1.3 m
- Higher cost of goods + €0.1 m
- Higher R&D Expenses + €1.2m




- Differences between EBITDA and net result due to:
  - Foreign exchange gain
  - Financial result
  - Taxes

# Financial guidance for 2017 confirmed

| | 2016 | GUIDANCE 2017 |
|---|---|---|
| Total revenue | € 9.7m | € 8-10m |
| R&D expenses | € 11.5m | € 16-18m |
| EBITDA loss | € 12.3m | € 16-18m |
| Cash usage | | € 23-27m |

- Sufficient financial resources beyond the forecast horizon of two years and to the time points that data from DC trial and TCR trials become available
- No bluebird milestone payments included in 2017 guidance

# Outlook for 2017

## TCR IIT, Berlin:

- IMPD submission as part of the clinical trial application
- Authorization and start

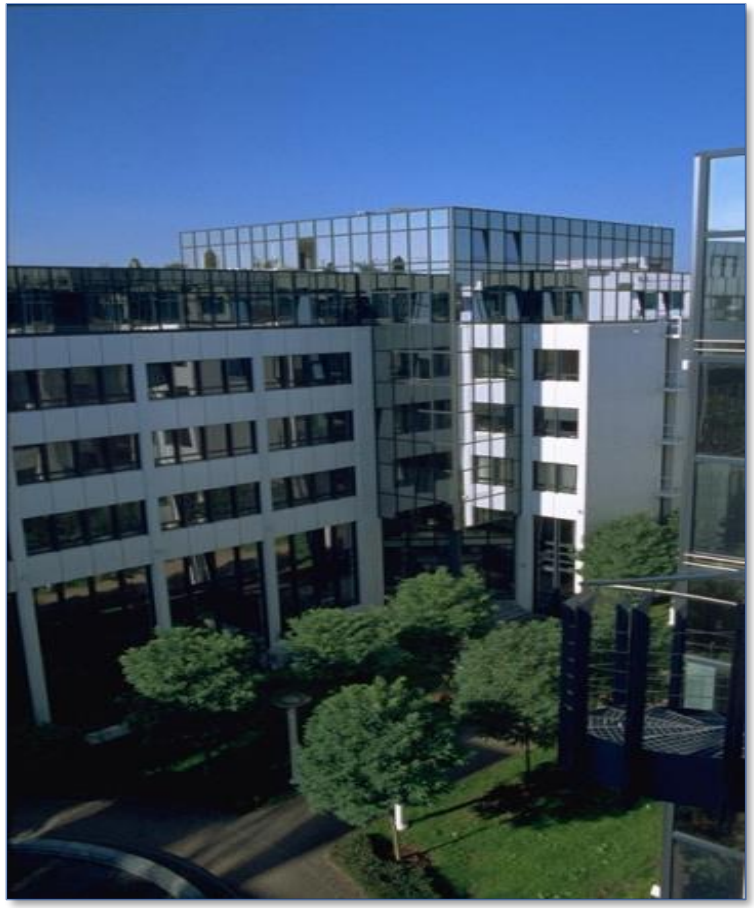
## MDG1011, Medigene's first TCR trial:

- GMP process finalization and validation
- Clinical trial application and authorization
- Study start

## DC trial in AML, Oslo:

- Completion of enrollment
- Final read-out in 2019

## Progress in bluebird collaboration



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