6-months 2018 Earnings Call

August 7, 2018

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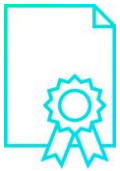
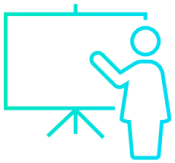
Major events since the beginning of 2018



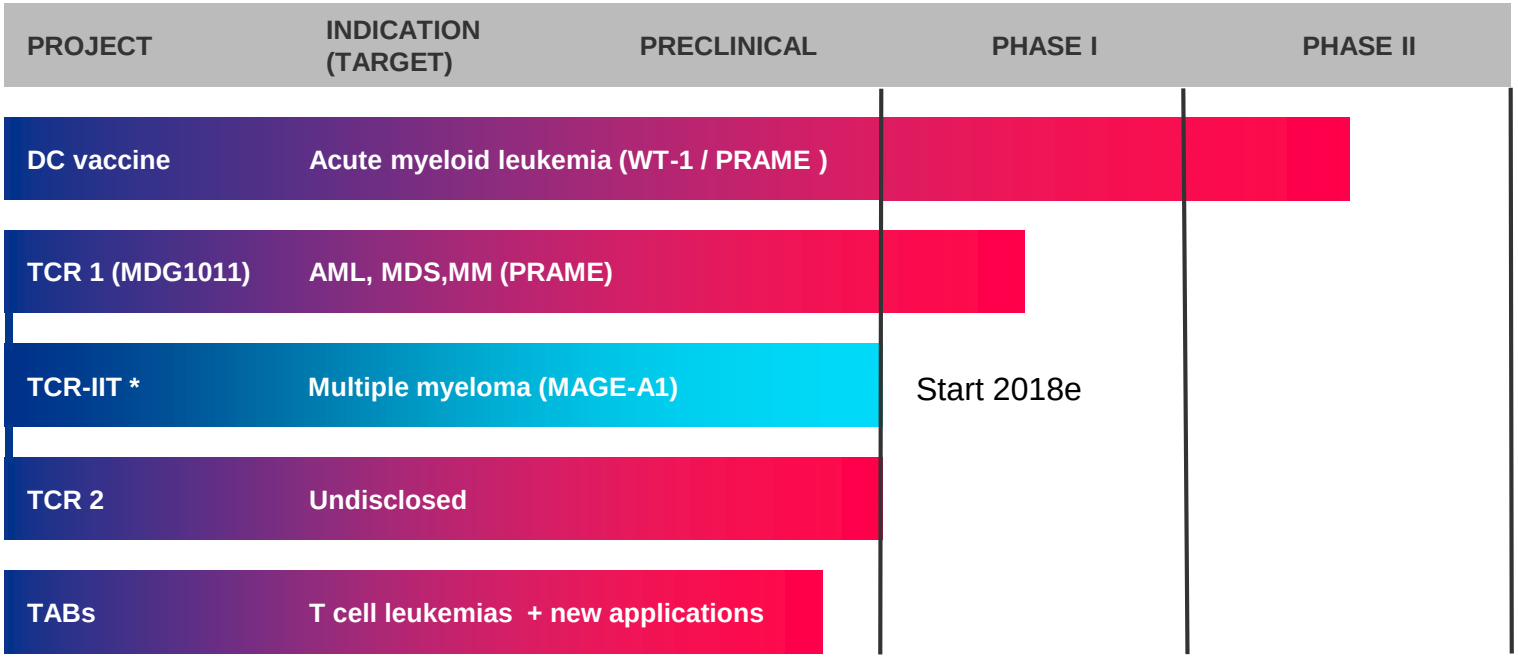


- Phase I/II trial with TCR-T cell therapy MDG1011 started
- TCR discovery alliance with bluebird bio significantly expanded
- Successful capital raise of € 32 m in oversubscribed private placement
- Presentations at AACR conference 2018
  - Data on the successful production of DC vaccines for AML
  - Clinical data for DC vaccine in prostate cancer IIT study (through Oslo University)

Expansion of strategic alliance with bluebird bio

- Number of T cell receptor (TCR) discovery projects increased from four to six
- Medigene received an additional one-time payment of USD 8 million
- Medigene received an additional payment of USD 1 million associated with the first collaboration project under the agreement.
- R&D funding and potential milestone payments to Medigene will significantly increase reflecting the extended scope of the collaboration

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)

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MDG1011

First TCR-T cell therapy clinical trial

Phase I/II clinical trial of MDG1011 in myeloid and lymphoid malignancies

Target:

- PRAME is a well characterized tumor antigen overexpressed in multiple hematological and solid tumor indications

The drug, MDG1011:

- T cells expressing a HLA-A*02:01-restricted T cell receptor (TCR) specific for PRAME

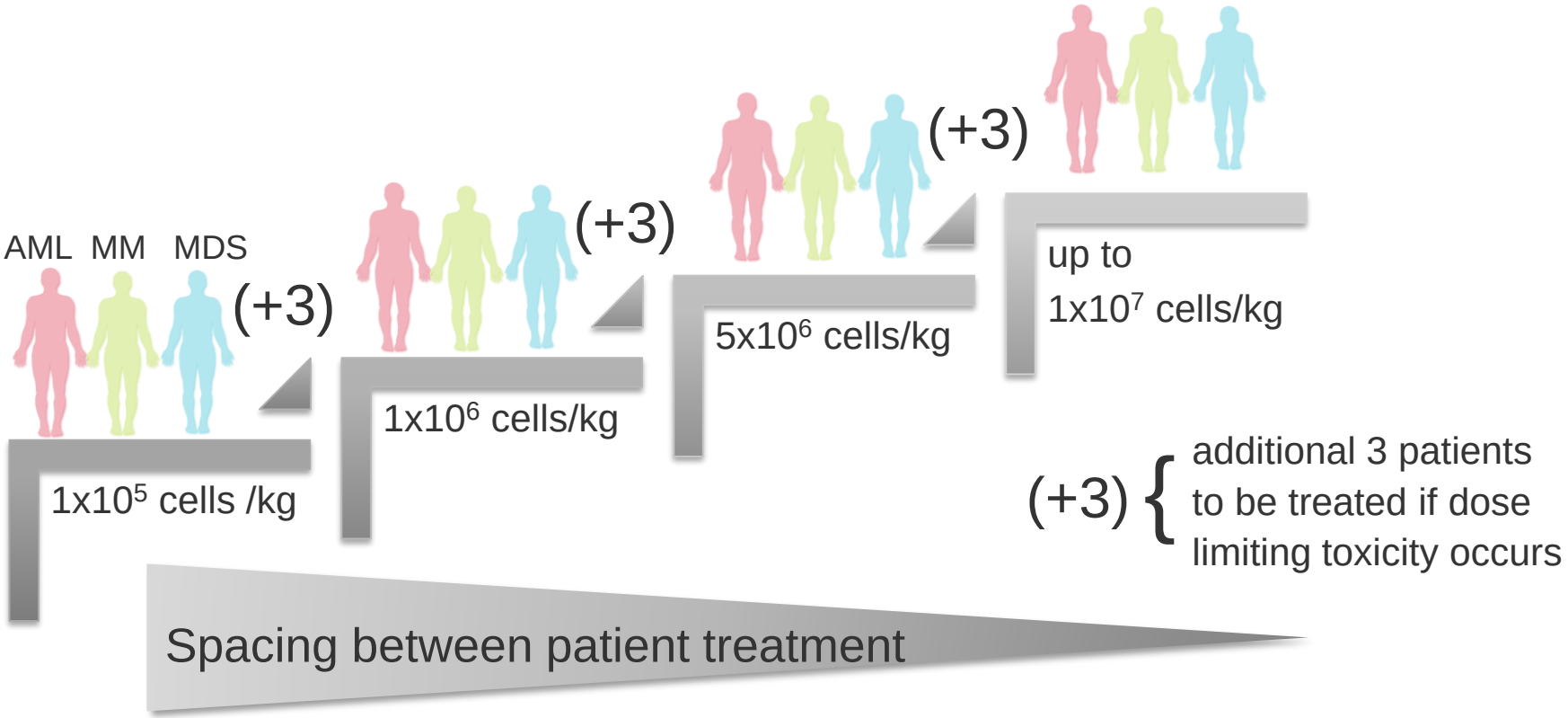
Trial outline:

- Combined Phase I/II clinical trial
- Primary endpoints: Safety and feasibility (Phase I), Safety and efficacy (Phase II)
- Disease indications for Phase I, all in advanced stages:
  - acute myeloid leukemia (AML)
  - myelodysplastic syndrome (MDS)
  - multiple myeloma (MM)
- 2 of the 3 indications will be carried over into Phase II

https://www.clinicaltrialsregister.eu/ctr-search/trial/2017-000440-18/DE

MDG1011 clinical trial design: Phase I

Multi-center study at three sites (University of Regensburg, Würzburg and Erlangen, Germany) with approx. 12 patients



= independent Data and Safety Monitoring Board (DSMB) decides on progression between dose cohorts.

https://www.clinicaltrialsregister.eu/ctr-search/trial/2017-000440-18/DE

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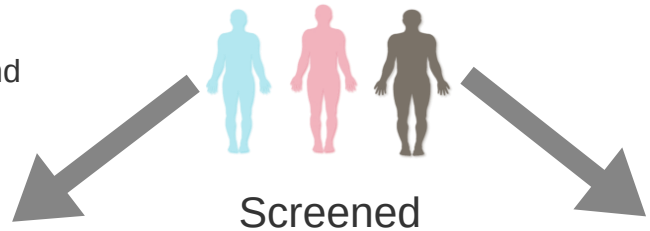
MDG1011 clinical trial design: Phase II

Estimate that 2 of 3 indications will be carried into Phase II (after a DSMB and PEI/ethics committee vote)

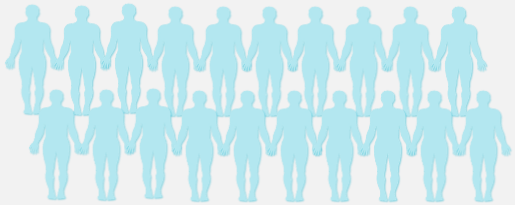


Screened patients

PRAME positive
HLA-A*02:01 postive

PRAME positive
HLA-A*02:01 negative

(genetically not suitable for MDG1011)



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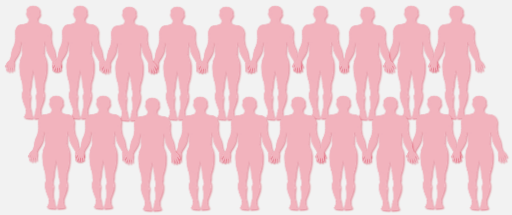
MDG1011 treatment



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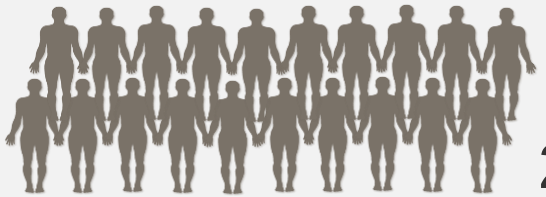
Indication 1

Indication 2



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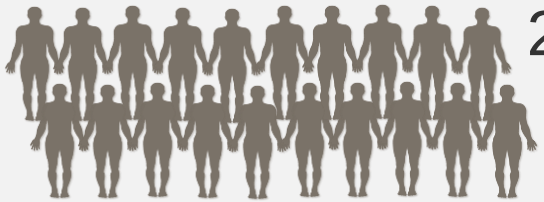
Investigator‘s choice treatment



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Treatment group

Control group

Necessary steps upon treatment with MDG1011

1) Screening:

- Patients are shown to be HLA-A*02:01 positive
- Cancer cells are shown to be PRAME positive

2) Apheresis

- Isolation of patient's own T cells

3) GMP

- Activation and modification of patient-derived T cells with Medigene‘s specific PRAME-TCR
- T cell expansion and freezing
- Extensive quality and release tests

Up to 6 weeks

4) Lymphodepleting, preparative treatment of the patient (5 days)

5) Infusion of MDG1011

Current status of MDG1011 phase I/II trial

- Three trial sites open for recruitment, initiation of further sites ongoing
- Ongoing dialogue with the regulatory authorities about clinical trial protocol to simplify enrollment:
  - Old: 1 patient per indication per dose cohort
  - New: At least 1 Multiple Myeloma patient and at least 1 AML or MDS patient per dose cohort
- Currently enrolling in first dose cohort
- Production ongoing of personalized cell therapy product MDG1011

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Financial Report 6M-2018

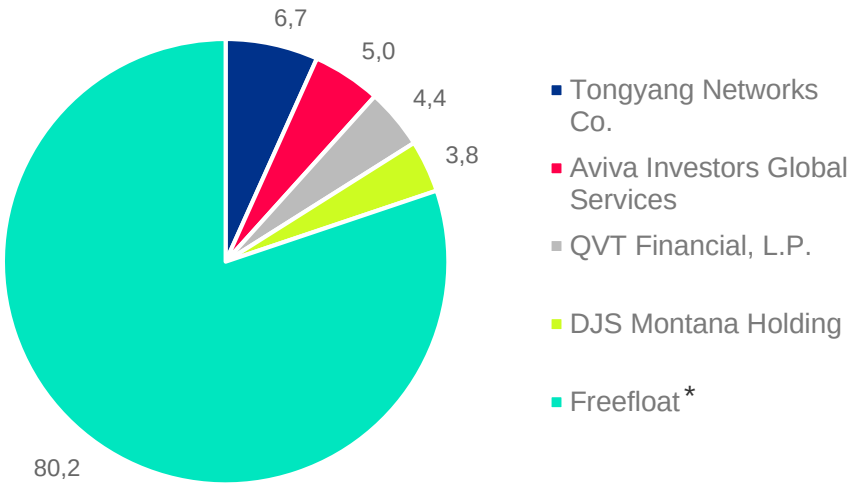
Revenue increased, loss reduced in 6M 2018

€5.5 m	**Total revenues increased by 12%**
+17%	**Increase in R&D expenses to 8.7 m due to progress in clinical programs**
€3.4 m	**Revenues from immunotherapies increased by 49%**
€80.8 m	**Liquid assets & time deposits – Capital raise of €32 m**
€6.2 m	**Reduction of SG&A costs by 22% to € 3.4 m resulting in EBITDA loss reduced by 10%**
	**Financial guidance 2018 improved**

Successful capital raise in May 2018

- €32.3 million in gross proceeds raised through a significantly oversubscribed private placement
- Shares allocated to existing and new institutional, healthcare focused investors, especially in the USA and Asia;
- New anchor investor gained, Tongyang Networks
- Cash position strengthened in order to expand ongoing clinical program with TCR-Ts and to progress pipeline of potential TCR-T candidates for future clinical development

Shareholder structure
(as of July 2018)



24.6 m total shares outstanding

Numbers based on last voting right notifications
*shareholding below 3%

Financial guidance 2018 improved

	FY 2017	PREVIOUS FINANCIAL GUIDANCE	RAISED GUIDANCE 2018
Total revenue	€11.4 m	7.5-9.5	€9.5-10.5 m
R&D expenses	€14.9 m	€22-24 m	€21-23 m
EBITDA loss	€12.1 m	€21-23 m	€18-20 m
Cash usage	€20.4 m	€16-19 m	€15-17 m

- Liquid assets as of June 30, 2018 amounted to €80.8 m
- Medigene expects it has sufficient financial resources for at least the planning horizon of two years
- No milestone payments or additional cash inflows are included from existing or future partnerships or transactions

Outlook 2018

MDG1011, Medigene's first TCR trial:

- Treatment of first patient
- Conduct of first dose cohort

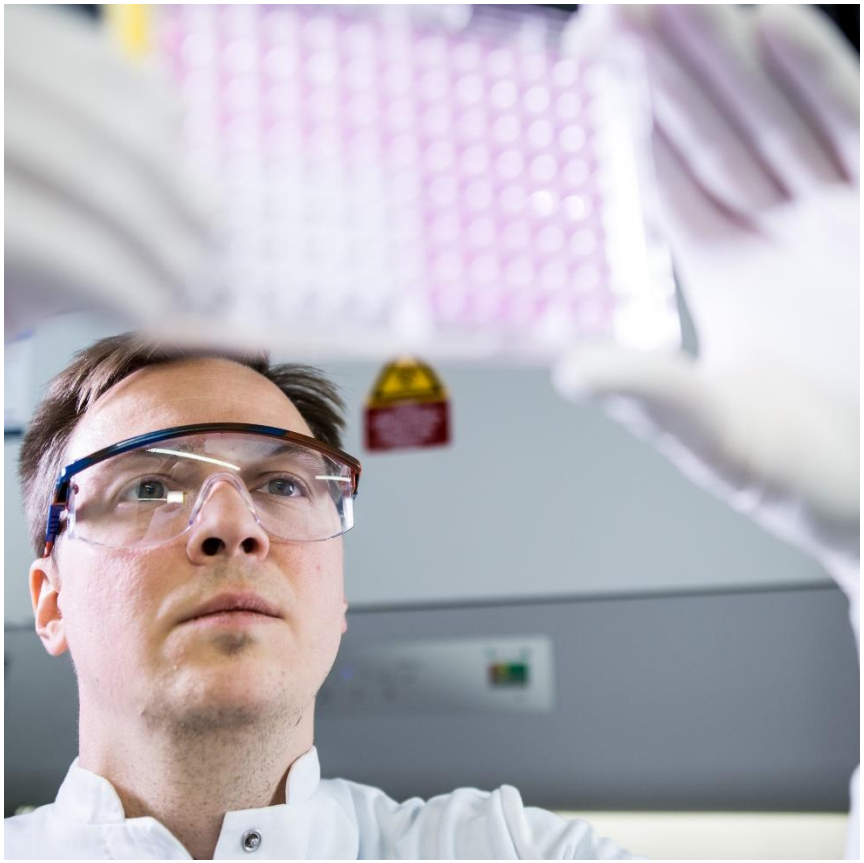
DC trial in AML, Oslo:

- Presentation of preliminary data on certain aspects of the trial
- Final read-out expected in 2019

TCR IIT, Berlin:

- Clinical trial authorization
- Study start

Progress in expanded bluebird collaboration



Questions & Answers

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