

ATACs: a Unique New Mode of Action to Fight Cancer

March 25, 2021

FY 2020 Financial Results & Business Update

Forward looking statements

This communication contains certain forward-looking statements, relating to the Company's business, which can be identified by the use of forward-looking terminology such as "estimates", "believes", "expects", "may", "will" "should" "future", "potential" or similar expressions or by general discussion of strategy, plans or intentions of the Company. Such forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause our actual results of operations, financial condition, performance, or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements.

Such factors include, among others, the following: uncertainties related to results of our clinical trials, the uncertainty of regulatory approval and commercial uncertainty, reimbursement and drug price uncertainty, the absence of sales and marketing experience and limited manufacturing capabilities, attraction and retention of technologically skilled employees, dependence on licenses, patents and proprietary technology, dependence upon collaborators, future capital needs and the uncertainty of additional funding, risks of product liability and

limitations of insurance, limitations of supplies, competition from other biopharmaceutical, chemical and pharmaceutical companies, environmental, health and safety matters, availability of licensing arrangements, currency fluctuations, adverse changes in governmental rules and fiscal policies, civil unrest, acts of God, acts of war, and other factors referenced in this communication.

Given these uncertainties, prospective investors and partners are cautioned not to place undue reliance on such forward-looking statements. We disclaim any obligation to update any such forward-looking statements to reflect future events or developments.

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Developing new options to address major challenges in cancer therapy

Our Company



Listed as Heidelberg Pharma AG
Frankfurt Stock Exchange: HPHA

Shares outstanding: 31.06 million

Market cap: ~€230 million (25 Mar 2021)

Headquarters: Ladenburg, Germany

~ 80 employees

Our Mission



**New option in cancer therapy with
a unique mode of action**

Overcome resistance mechanisms

Kill dormant tumor cells

Biomarker for patient stratification and
expedited development

Our Approach



Inhibition of RNA Polymerase II

Amanitin as toxic payload

Targeted delivery via antibodies
(ADC technology)



**Antibody Targeted Amanitin Conjugates
(ATACs)**

**Business model: develop proprietary ATAC pipeline, partner ATAC technology
platform and generate upside potential from legacy clinical portfolio**

Management Team with Strong Pharma and R&D Experience



Dr. Jan Schmidt-Brand
CEO / CFO

@ Heidelberg Pharma since 2001

30 years' experience in commercial and financial leadership positions in pharma and chemical companies, including BASF

LLD from the University of Mannheim



Prof. Dr. Andreas Pahl
CSO

@ Heidelberg Pharma since 2012

Professor of Pharmacology and Toxicology at the University of Erlangen-Nuremberg (FAU) with 20 years' experience in research and higher education

PhD in chemistry from the University of Berlin



Dr. András Strasz
CMO

@ Heidelberg Pharma since 2020

More than 14 years experience in clinical drug development including roles at Sandoz, Amgen and biotech companies

MD and MBA from the University of Pécs



Dr. Mathias Locher
CDO

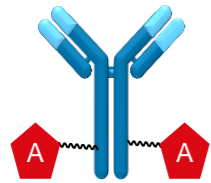
@ Heidelberg Pharma since 2021

30 years' experience in various industry roles in drug development at ASTA Medica, Viatrix, Micromet, Merck Serono, Covagen and Janssen

PhD in biology from the University of Tübingen

Build proprietary ATAC pipeline

HDP-101 – ATAC targeted against BCMA (multiple myeloma)



ATACs for additional oncology indications (HDP-102 & HDP-103)

Antibody discovery for further targets

ATAC collaborations

Licensing collaborations with pharma and biotech



Various research partnerships based on Material Transfer Agreements

Licensed legacy assets (non-ATACs)

Additional upside potential from clinical programs

TLX250-CDx – diagnostic imaging agent (REDECTANE®)



RHB-107 – serine protease inhibitor (upamostat / MESUPRON®)



GMP supply with Amanitin

R&D Highlights

Lead candidate HDP-101

- GLP toxicity study with HDP-101 completed (Jul)
- Meeting with the FDA to discuss the study design for the clinical trial with HDP-101 (Oct)
- Presentation of the clinical study design at the ASH (Dec)
- Completion of HDP-101 data package for submission to the FDA (Dec)

Kick off new development candidates HDP-102 and HDP-103

- Manufacturing of antibodies launched for HDP-102 (Mar) and for HDP-103 (May)

New patents granted in the US and Europe:

- US patent rights for diagnosing and treating patients with hemizygous T53 deletion with Amanitin-based drugs (Mar)
- European patent for amatoxin conjugates for tumor therapy (Mar)

Presentation of new data on ATAC technology from partners Magenta and MD Anderson at the 2020 ASH Annual Meeting (Oct)

Corporate & Financial Highlights

- Heidelberg Pharma receives milestone payment from Magenta for MGTA-117 (Sep)
- Contract extension with Takeda for ATAC-collaboration by 1 year
- €15 million financing commitment from dievini (Jan)
- €14.4 million raised in private placement (dievini & others) (Apr)
- Additional €15 million financing commitment from dievini for HDP-102 and HDP-103 (Jul), executed as shareholder loan (Dec)

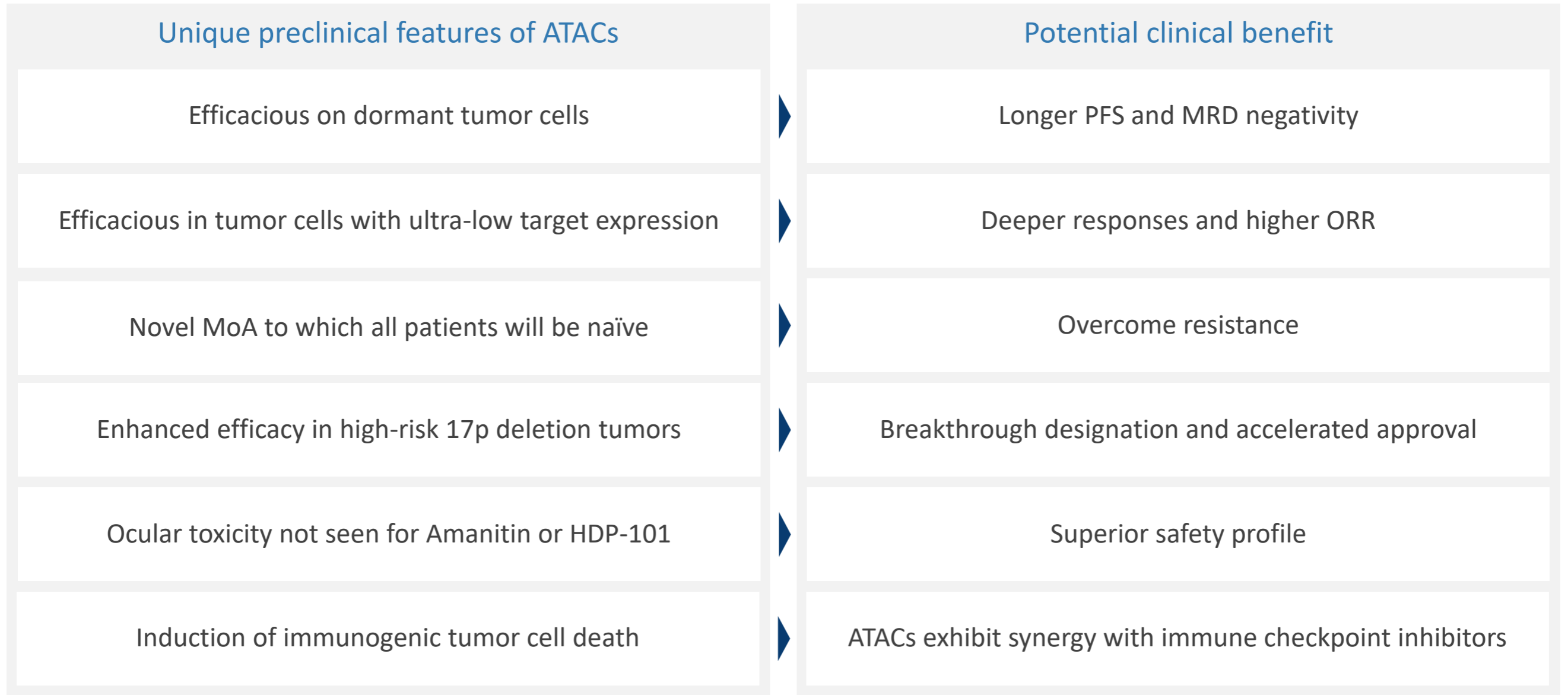
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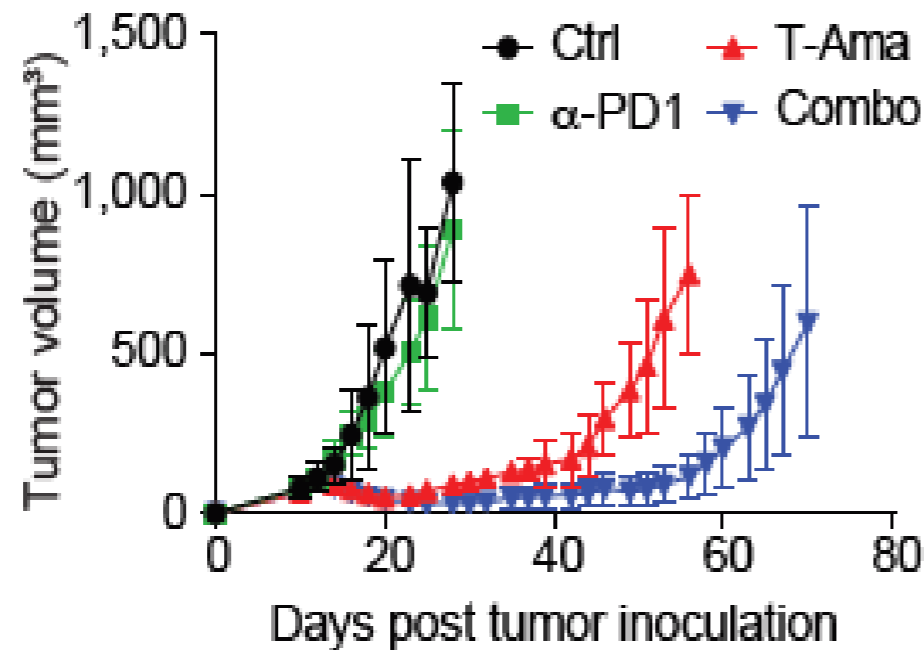
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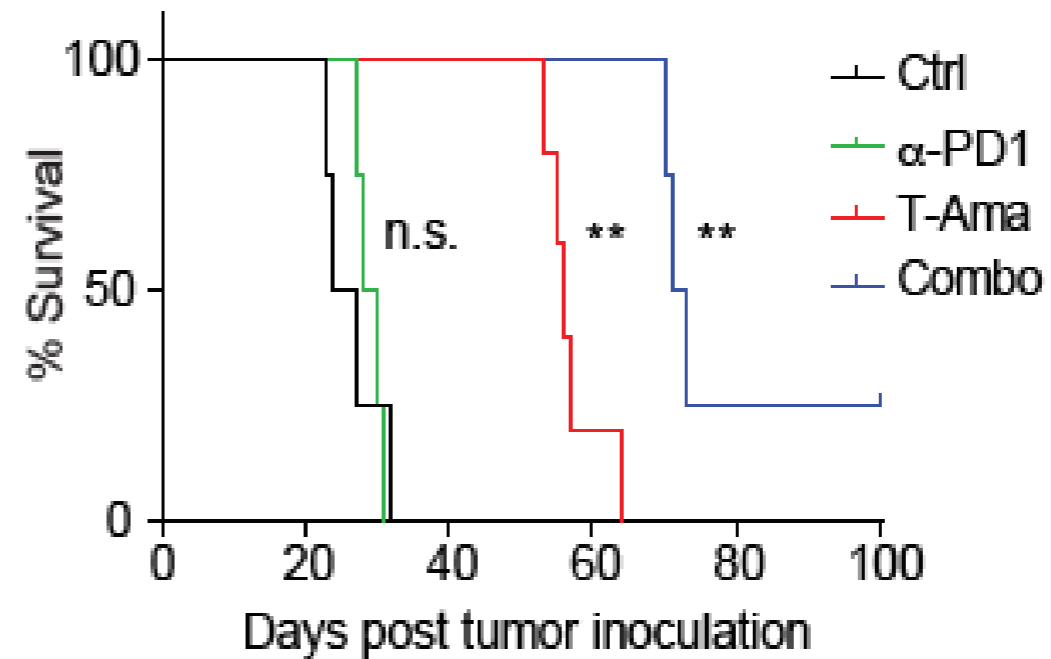


C57BL76-Tg(WapHER2) mice orthotopically implanted with HER2-low EO771 cells with 11B loss

Tumor growth curve



Survival analysis



Sci. Transl. Med. **13** (2021)

HER2-ATAC potentiates immune checkpoint blockade therapy in treating HER2-low Breast Cancer

17p Deletion as Potential Predictive Biomarker

Co-deletion of TP53/POLR2A Genes

MD Anderson Cancer Center and Heidelberg Pharma collaboration

Biomarker approach for multiple tumor entities

17p deletion associated with more aggressive tumors

Deletion of TP53 gene with frequent co-deletion of nearby RNA Polymerase II gene POLR2A

Lower levels of RNA Polymerase II in tumor cells with 17p deletion

Higher sensitivity to treatment with ATACs

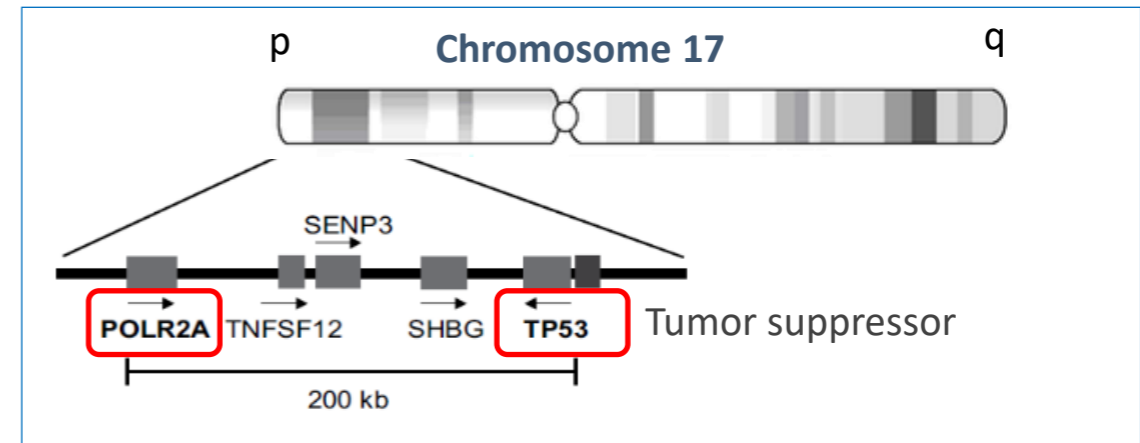
Incidence is 20-80% dependent on tumor type and stage

nature

doi:10.1038/nature14418

TP53 loss creates therapeutic vulnerability in colorectal cancer

Yunhua Liu¹, Xinna Zhang^{2,3}, Cecil Han¹, Guohui Wan¹, Xingxu Huang⁴, Cristina Ivan^{2,3}, Dahai Jiang^{2,3}, Cristian Rodriguez-Aguayo^{3,5}, Gabriel Lopez-Berestein^{3,5}, Pulivarthi H. Rao⁶, Dipen M. Maru⁷, Andreas Pahl⁸, Xiaoming He⁹, Anil K. Sood^{1,2,3}, Lee M. Ellis¹⁰, Jan Anderjaska⁸ & Xiongbin Lu^{1,3}



17p deletion / Loss of POLR2A is a potential biomarker to increase therapeutic window and to identify high-risk patients

Multiple Myeloma

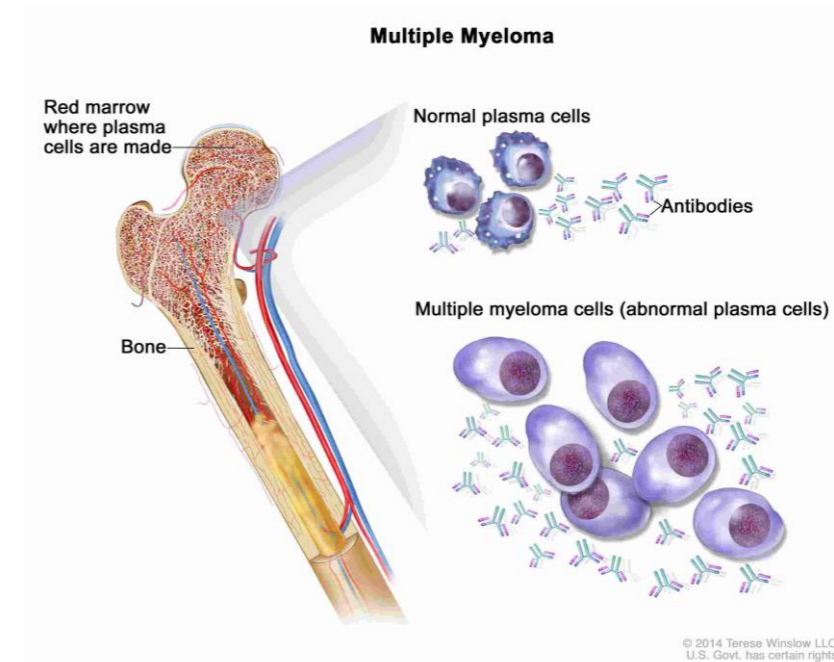
Major Unmet Medical Need

- Second most prevalent hematopoietic malignancy*
- 70,000 deaths due to MM annually; median age at diagnosis is 65-70 years
- Characterized by the proliferation of single clone of plasma cells derived from B-cells which produce abnormal antibodies
- Current treatment options: Chemotherapy, immunomodulatory drugs, proteasome inhibitors and autologous stem cell transplantation (ASCT)
- Median survival ~47-110 months

MM patients with 17p deletions have a particularly high medical need for new treatment options

- HDP-101 has preferential activity on 17p deleted tumor cells derived from MM patients: potentially broader therapeutic window
- Potential for biomarker-based stratification
- Potential improvement on ocular toxicity risk seen in approved and marketed anti-BCMA ADC Blenrep from GSK

*Source: www.krebsgesellschaft.de



Source: healthcare-in-europe.com



Source:
Heidelberg Pharma

Activity	Status
Long-term stability studies of HDP-101	Ongoing
Contracts with the study centers in the US and GER	Partially completed
Investigational New Drug (IND) allowance from FDA for the US	Completed
Submission of the Clinical Trial Application (Germany)	Completed
Approval of Clinical Trial Application (Germany)	Q2 2021
First patient in clinical study	Q2 2021

Initiate study centers and enroll patients in the US and Germany

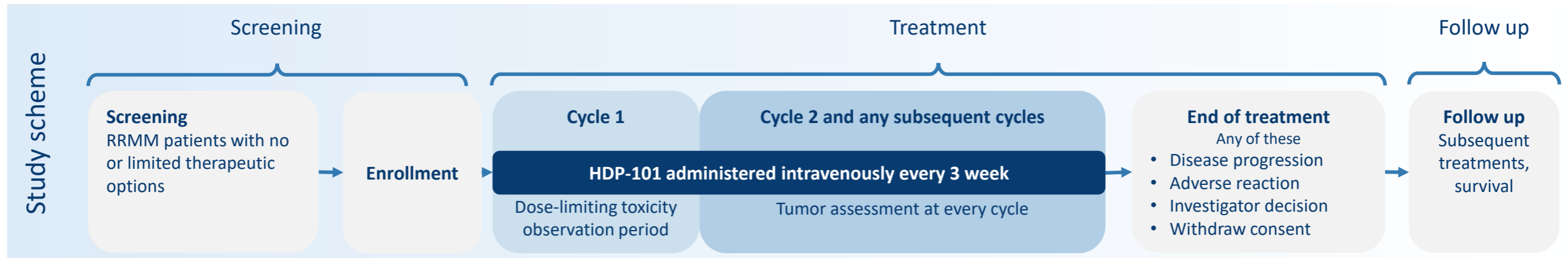
Clinical trial designed to determine safe dose and assess preliminary efficacy

Phase I:

- Up to 36 patients with relapsed / refractory multiple myeloma (RRMM)
- Dose-escalation of HDP-101
- Retrospective biomarker evaluation
- **Establish optimal and safe dose for Phase IIa part**

Phase IIa:

- Up to 30 patients with RRMM
- Biomarker stratification based on 17p deletion status
- **Preliminary anti-tumor activity of HDP-101 and clinical relevance of the 17p deletion**



- Adaptive study design applied using Bayesian Logistic Regression Model to guide dose escalation and select the best dose for the phase II part
- Robust safety features to ensure early detection of possible toxicities especially liver and kidney damage

HDP-102: CD37-ATAC

- CD37 is overexpressed on B-cell lymphoma cells
- Specific indication of non-Hodgkin lymphoma (NHL)
- High prevalence of 17p deletion in NHL
- Antibody and payload manufacturing ongoing

HDP-103: PSMA-ATAC

- PSMA is overexpressed in nearly all cases of prostate cancer; limited expression in normal tissue
- Target indication is Metastatic Castration-Resistant Prostate Cancer (mCRPC)
- Prevalence of 17p deletion in mCRPC is 60%
- 17p/POLR2A biomarker has been validated preclinically for prostate cancer (Nature Commun. 2018 22:4394)
- Antibody and payload manufacturing ongoing

Potential IND application for both candidates as early as 2022

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MGTA-117 – ATAC against CD117

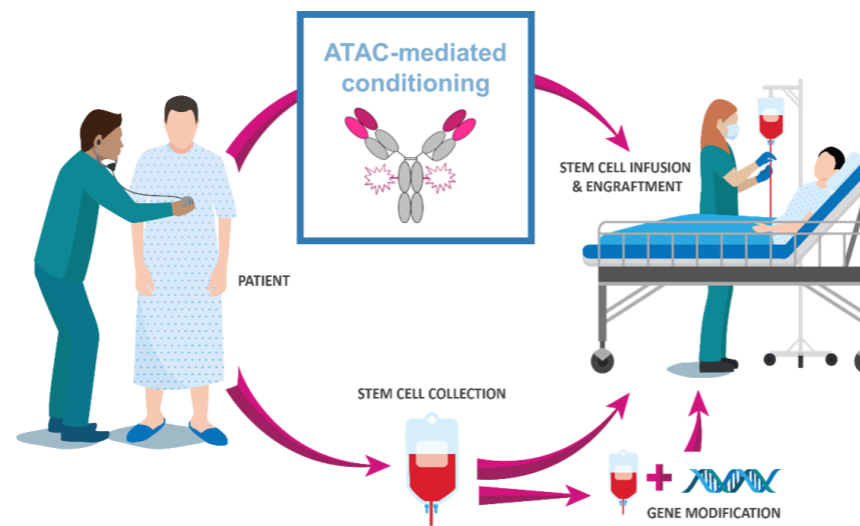
Antibody-drug conjugate (ADC) for depletion of hematopoietic stem and progenitor cells in the bone marrow

- Replace current conditioning by harsh chemotherapy or irradiation
- Support long-term engraftment and improved disease outcomes in patients
- MGTA-117 has shown to be highly selective with potent activity, efficacy and tolerability in preclinical models

• Status of MGTA-117 activities

- IND submission is planned for mid-2021
- Plans to Initiate Phase 1 Clinical Trial in 2H 2021

Source: Magenta



ATAC against CD45

CD45-ADC targets both patient HSCs and disease-causing immune cells

- Increase the number of patients eligible for a stem cell transplant, particularly with autoimmune diseases and acute leukemias
- Successful immune reset in murine models of autoimmune disease and allogeneic hematopoietic stem cell transplant
- A single dose achieves efficient depletion of immune cells in the periphery and hematopoietic stem cells in the bone marrow

• Status of CD45 activities

- Evaluation of CD45 preclinically in various transplant and autoimmune disease models to advance the program

Partner Telix – Next Steps with TLX250-CDx and Therapeutic Agent TLX250

TLX250-CDx – diagnostic imaging agent

TLX250-CDx – ⁸⁹Zirconium-labeled antibody girentuximab

ZIRCON Phase III trial ongoing:

- A confirmatory, prospective, open-label, multi-center Phase III study with up to 250 patients worldwide
- Method for the non-invasive detection of clear cell renal cell cancer (ccRCC) by PET/CT
- First patient in the USA enrolled in the study in early 2021
- Phase I enrollment of Phase I/II ZIRDAC-JP study in Japan completed

Next steps:

- Completion planned in mid-2021
- Rolling submission of the BLA in the US, accelerated procedure
- Attractive license payments expected from 2022



Telix entered into development, manufacturing and commercialization partnerships

- Strategic license and commercial partnership with China Grand Pharmaceutical and Healthcare Holdings Limited for several Telix product candidates, including TLX250-CDx and TLX-250
- Collaboration with Eczacıbaşı-Monrol Nuclear Products Co. for the manufacturing of TLX250-CDx in Turkey

TLX250 – therapeutic agent

TLX250 - ¹⁷⁷Lutetium-labeled antibody girentuximab:

Therapeutic radioimmunoconjugate for the treatment of renal cancer patients

- Basis: positive phase I and II trials in metastatic ccRCC

Next steps:

- Two Phase II combination studies (STARLITE 1 and 2) with different checkpoint inhibitor immunotherapies planned in the US
- IND preparations ongoing
- Study start planned in the first half of 2021

Partner RedHill – RHB-107 (upamostat) Evaluation in COVID-19 Ongoing

RHB-107 – serine protease inhibitor

- Potential first-in-class small molecule targeting cancer, inflammatory lung diseases, and gastrointestinal diseases
- So far: Positive Phase II trials in pancreatic and breast cancer (WILEX AG)
- Planned for further evaluation as the third arm in a Phase I/IIa combination study with opaganib in advanced cholangiocarcinoma, subject to discussions with the FDA
- New scientific findings show that the mechanism of serine proteases also plays a role in COVID-19:
 - Anti-viral activity – Interferes with cleavage of viral receptors that enable attachment to host cells during infection
 - Supportive pre-clinical and clinical safety data in over 300 patients
- **First patient dosed in a Phase II/III study in mild to moderate COVID-19 outpatients in February 2021**



Source: RedHill

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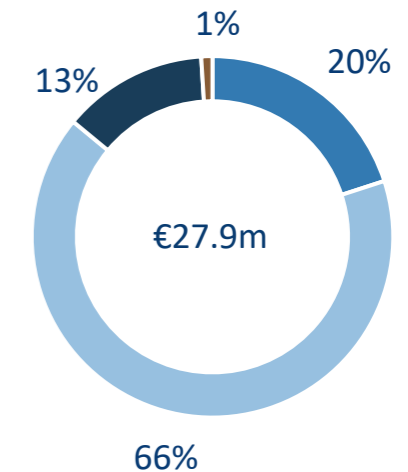
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in € m	Guidance	FYR 2020	FYR 2019	Change
Sales revenue and other income	9.0 – 10.0	9.6	8.0	20%
Operating expenses	26.0 – 28.0	27.9	18.1	54%
Cost of sales		5.6	3.7	51%
R&D costs		18.3	10.9	68%
Administrative costs		3.6	3.2	12%
Other expenses		0.4	0.3	33%
Operating result (EBIT)	16.0 – 19.0	18.3	10.1	81%
Net loss for the period		18.4	10.1	81%

- Financials in line with adjusted guidance
- Sales revenue increased due to income from ATAC research collaborations
- Cost of sales higher mainly due to supply of Amanitin linkers to licensing partners
- R&D costs increased as a result of extended manufacturing costs and preparation of the clinical trial of HDP-101
- Net loss for the period nearly doubled as a result of the significantly higher operating expenses

Operating expenses



- Cost of sales
- R&D costs
- Administrative costs
- Other expenses

Balance Sheet and Cash 2020

Assets (€ m)	30.11.2020	30.11.2019
Non-current assets	12.1	11.4
Other current assets	2.5	1.7
Cash and cash equivalents	5.0	9.9
	19.6	23.00

Equity and liabilities (€ m)	30.11.2020	30.11.2019
Current liabilities	6.6	6.5
Non-current liabilities	0.1	0.2
Equity	12.9	16.3
	19.6	23.0

- Cash balance at Nov. 30, 2020: €5.0 m (2019: €9.9 m)
- Average cash usage per month €1.6 m (Guidance: €1.5 to 1.7 m; 2019: €0.8 m)
- Equity year-end 2020 decreased to €12.9 m (2019: € 16.3)
- Equity ratio was 65.7% (2019: 70.9%)

Financing 2020

- €14.4 m gross proceeds from private placement with dievini and selected institutional investors in April 2020
- €15 m shareholder loan in December 2020 based on commitment in July

2021

- €30 m commitment of the main shareholder dievini received in March 2021, details will be decided later in 2021
- **Cash reach is secured until mid-2022 based on current budget planning**

in € m	Actual 2020	Guidance 2021
Sales revenue and other income	9.6	5.5 to 7.5
Operating expenses	27.9	36.0 to 40.0
R&D costs	18.3	-
Operating result (EBIT)	(18.3)	(30.0) to (34.0)
Funds required	19.2	30.0 to 34.0
Funds required per month	1.6	2.5 to 2.8

2021

- Sales revenue:
 - Lower amount of Amanitin supply planned due to excellent yield in 2020
 - Includes potential income from existing ATAC collaborations including MTA contracts, excludes new licence agreements for ATAC technology
- Operating expenses:
 - R&D costs will increase due to clinical trial with HDP-101 as well as manufacturing and pre-clinical studies for HDP-102 and HDP-103
- Cash requirements will increase

Shares

- High: €9.30 (16 March 2020)
- Low: €2.06 (02 January 2020)
- Shares outstanding: 31,061,872 (as of 30 November 2020)
- Average daily trading volume: ~40,000 shares (all stock exchanges, ytd)

Shareholder

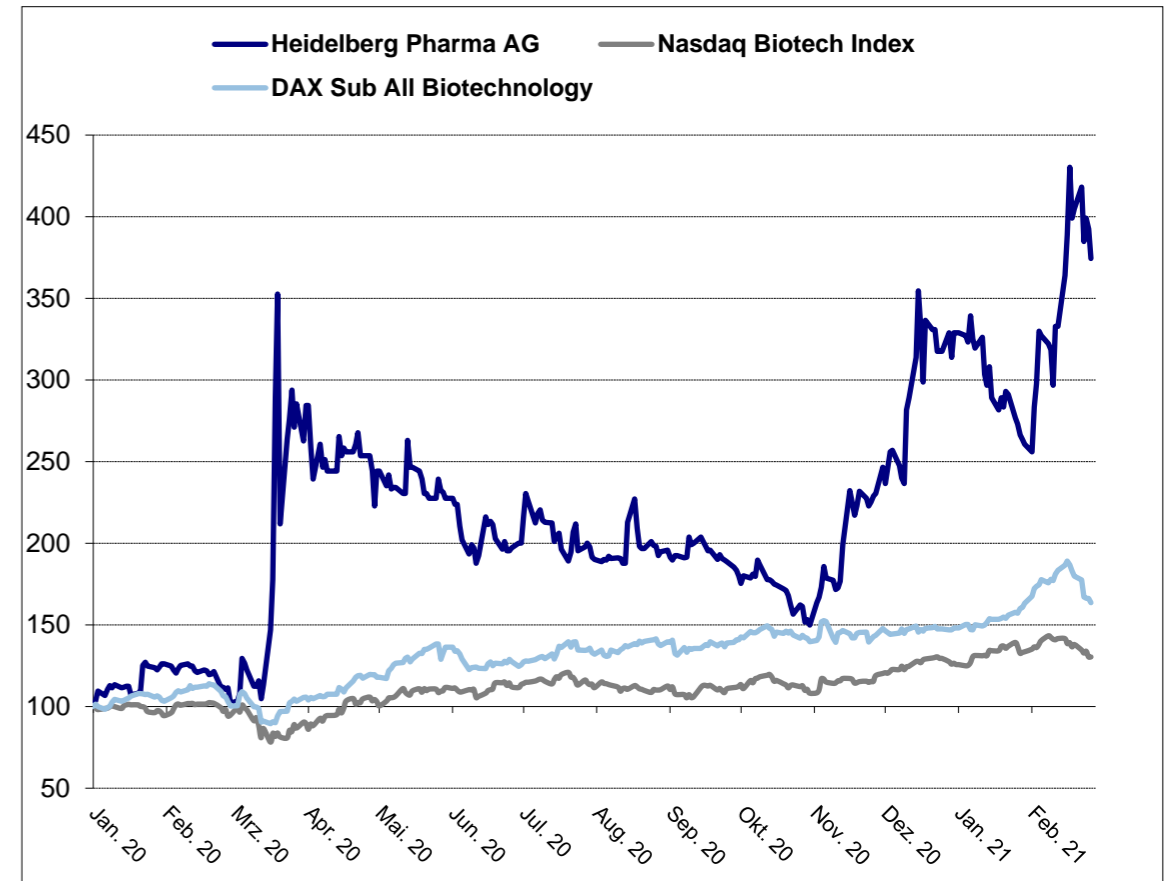
- 77% Dietmar Hopp and affiliated companies*
- 3% UCB
- 20% Freefloat and Corporate Bodies

*dievini Hopp BioTech holding GmbH & Co. KG + DH Holding Verwaltungs GmbH

Analysts and banks

- Stifel 02/21: target € 9.40
- Pareto 02/21: target € 10.30
- EQUI.TS 02/21: target € 8.15
- Bryan Garnier for international roadshows hired

Share performance



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HDP-101 – next steps planned

- Initiation of clinical study in Germany after approval of CTA
- Site activation & First Patient In in the US and Germany
- 17p biomarker validation

Proprietary pipeline

- HDP-102 & HDP-103 to advance as next proprietary development candidates
- Expansion of development capacities

ATAC technology und partnerships

- Advance ongoing research projects on a MTA basis and Amanitin GMP supply
- Sign additional license and collaboration agreements

Partner programs (selected highlights)

- Magenta: start of Phase I study with MGTA-117 in 2021
- Telix: completion of Phase III study with TLX250-CDx, start of Phase I study with TLX250
- RedHill: enrolment of 310 pts in Phase II/III trial with RHB-107 (upamostat) in COVID-19 and preparation of clinical trial in cholangiocarcinoma

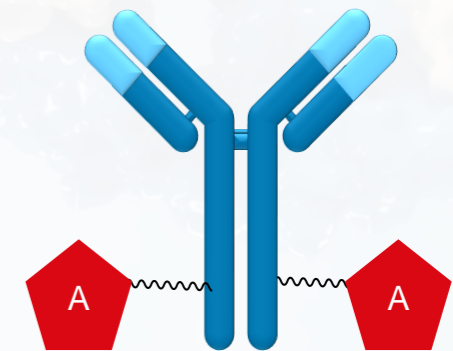
Investment Summary

Disruptive first-in-humans mode of action provides **high efficacy** and **potential for unique clinical advantages**, including treatment of dormant tumor cells

Increased efficacy against 17p deleted and aggressive tumor cells based on **biomarker**

Validated by **high quality collaborations** (early validation and cash)

High value potential with growing proprietary portfolio



Upcoming conferences & events	Venue	Date
BIO Europe Spring	Virtually delivered	22 – 25 March 2021
Spring Meeting Oncology Investor Conference 2021	Virtually delivered	30 March – 2 April 2021
European Biotech Investor Days 2021	Virtually delivered	7 – 8 April 2021
AACR Annual Meeting 2021	Virtually delivered	10 – 15 April 2021
Q1 – Interim Results on the first three months of 2021		29 April 2021
PEGS The Essential Protein Engineering Summit 2021	Virtually delivered	11 – 13 May 2021
Annual General Meeting	Virtually delivered	18 May 2021
9 th AIS – Antibody Industrial Symposium	Virtually delivered	22 – 25 June 2021
Half-year Financial Results		8 July 2021
Q3 – Interim Results on the first nine months of 2021		7 October 2021

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Ticker data

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