

MEDIVIR

A woman with short brown hair and glasses is smiling while putting on a green surgical gown. She is in a clinical setting, with other gowns hanging on a rack in the background. The image has a clean, professional look with a blue and white color scheme. There are three white circles overlaid on the image: one on the woman's face, one on the rack of gowns, and one on the right side of the frame. A blue horizontal line is also present, passing through the woman's chest area.

March 21, 2017

Improve life for cancer patients through transformative drugs

- R&D dedicated company focused on oncology
- Scientific platforms consistently delivering well-differentiated new projects
- Deep clinical pipeline with multiple value drivers
- Proven track record in generating revenue through partnerships
- Strong and experienced management team

Basic facts

- Headquarters in Stockholm, Sweden
- Listed on the Nasdaq Stockholm, ticker: MVIR



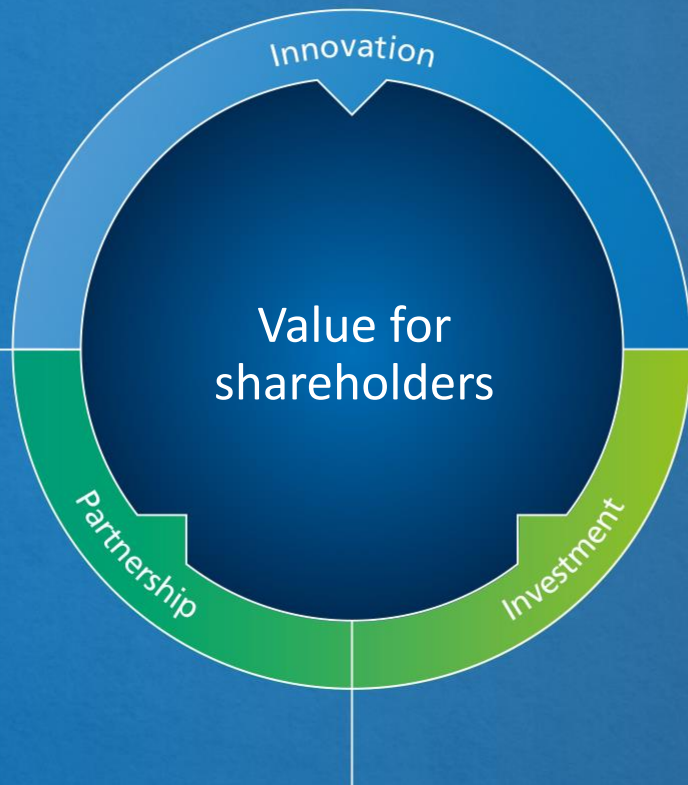
2016 Accomplishments

- ✓ Completed Tetralogic oncology projects acquisition
- ✓ MIV-711 Phase IIa study fully enrolled on schedule and extension study started
- ✓ MIV-818 (HCC nuc) entered preclinical development
- ✓ MIV-323 (RSV) CD nomination
- ✓ Partnered MIV-802 (HCV) with Trek Therapeutics
- ✓ Completed sale of BioPhausia (branded generics portfolio)
- ✓ Reorganized to reduce cost structure



Strategy to deliver value

Strong development pipeline
based in scientific platform
competence



Scientific Platforms

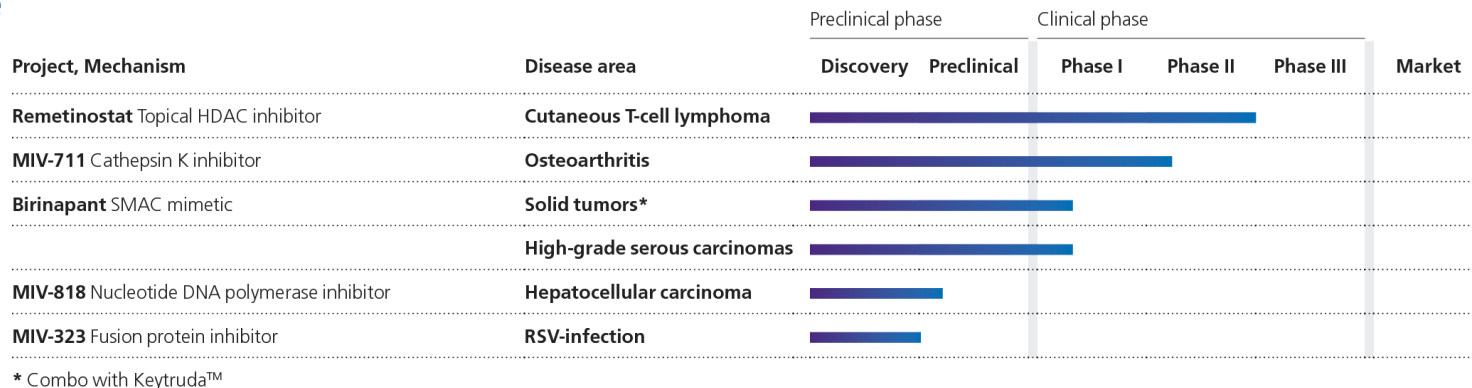
Partnership Pipeline

Proprietary Pipeline

Deep pipeline with multiple value drivers

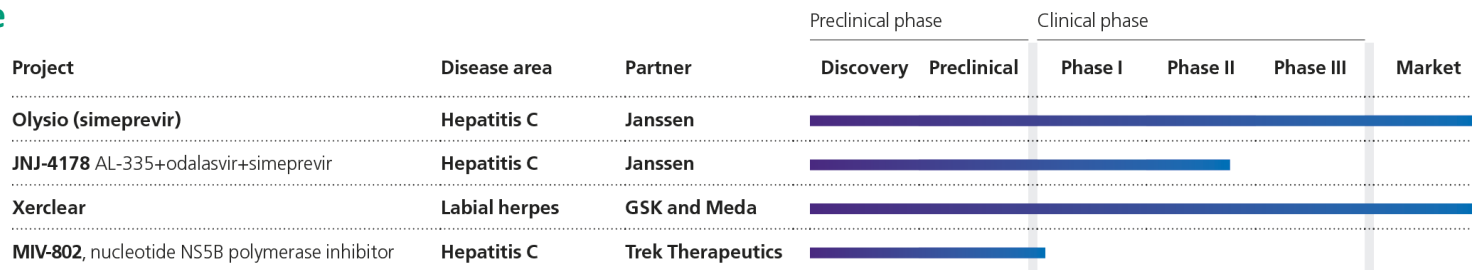
Proprietary Pipeline

Diversified
from early to late
stages of
development



Partnership Pipeline

Partnerships where
they meaningfully
enhance project
value



Two focused scientific platforms

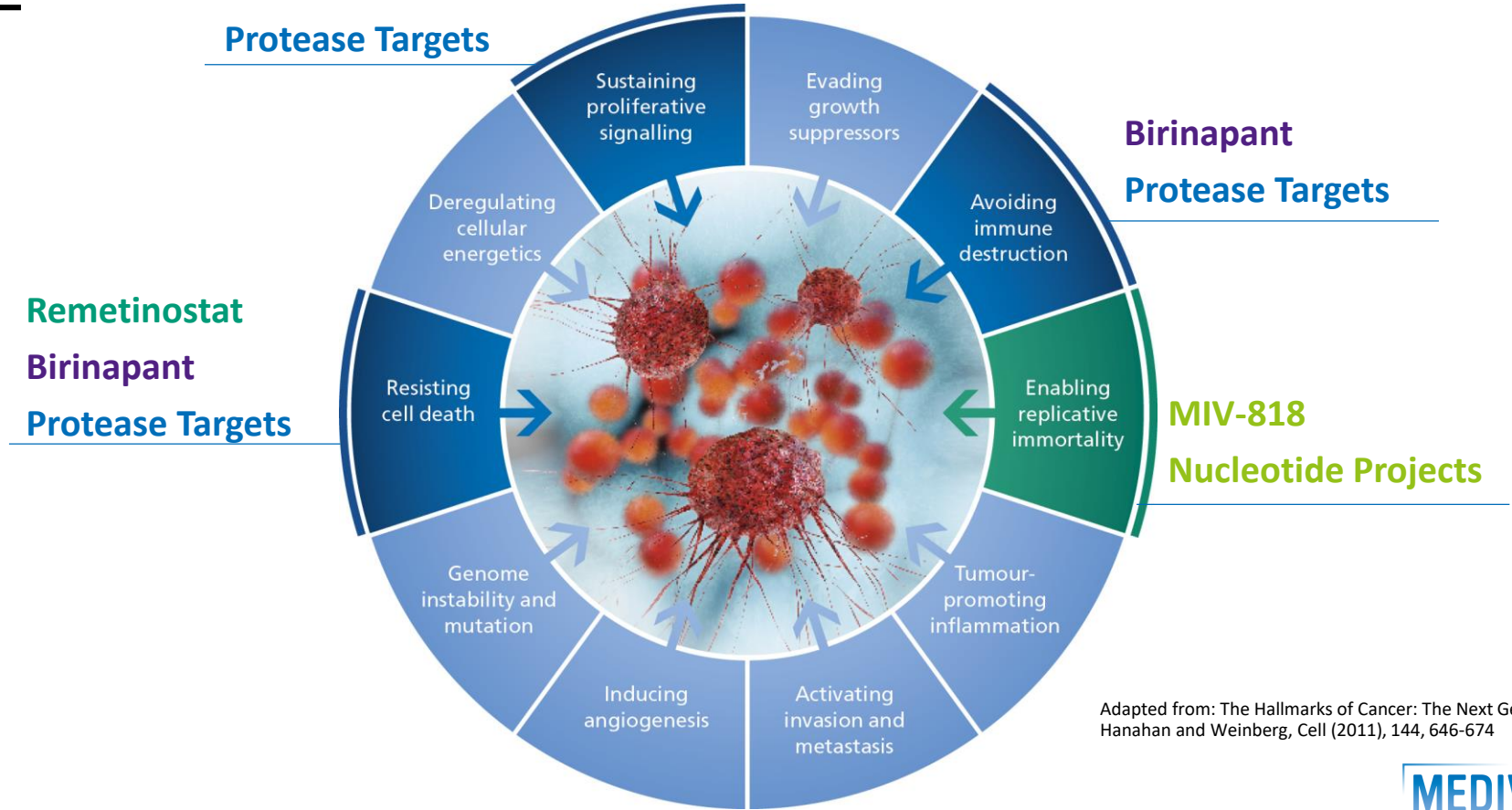
Protease inhibitors

Nucleot(s)ides



The expertise and knowledge to deliver well-differentiated new projects cost-effectively

Medivir approaches to cancer treatment



Medivir protease inhibitor platform example: competitive in DUBs

Protease research area: Deubiquitinases

- Potential to control regulation of cancer cells
- Application to blood and lymphoid cancers, and glioblastoma

>\$1_{bn}

invested in DUBs companies to date ¹⁾

Medivir's DUBs programs are as advanced as the leaders

ALMAC

CLEAVE
BIOSCIENCES

ENSEMBLE
THERAPEUTICS

evotec

FORMA
THERAPEUTICS

HYBRIGENICS

mission
therapeutics

nurix

Progenra

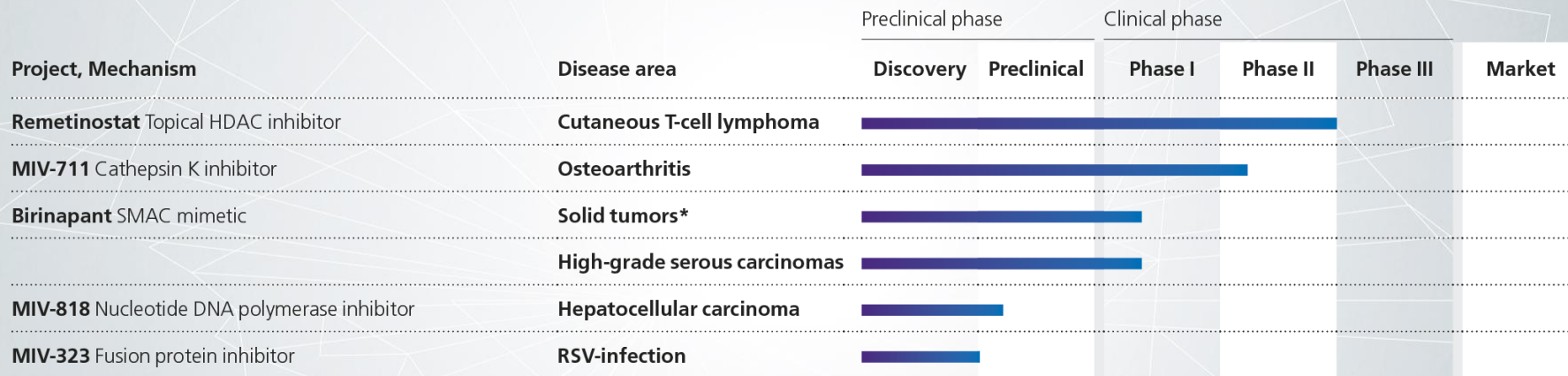
pti PROTEOSTASIS
THERAPEUTICS, INC.

vivolux

¹⁾ Investments by strategic partners and venture capital. Medivir research from public disclosures.

Medivir's proprietary pipeline is diversified from early to late stages of development

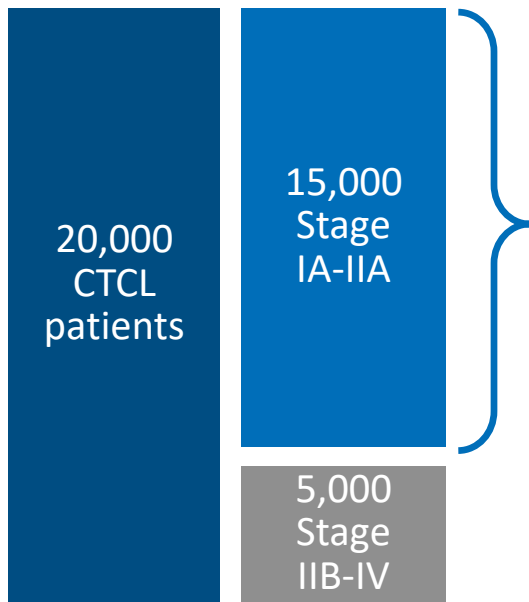
Proprietary Pipeline



* Combo with Keytruda™

CTCL: orphan cancer disease with significant market opportunity

US patients¹⁾



>\$50k
per patient year pricing²⁾

Early-stage
CTCL market ³⁾
\$900m



**A 15% market share in the US would translate
into over 1 BSEK in annual revenue**

¹⁾ Leukemia & Lymphoma Society

²⁾ Competitive treatment pricing. The Medical Letter, Issue 1467, April 27, 2015 and Actelion public information

³⁾ Early-stage patients at expected per patient year price

Manageable phase III clinical development for CTCL

About remetinostat

- HDACs: group of enzymes related to proteases
- Topical HDAC inhibitor

Market Exclusivity

- Expected patent life to around 2034, including extensions
- Remetinostat has orphan drug designation

Program Timing

- Phase II final data expected Q1
- End of Phase II meeting with FDA
- Phase III start expected 2H 2017
- Potential for launch in 2021

Costs

SEK 405m (\$47m) expected costs to NDA submission over a 3 year period (incl. Phase III study and third party milestones)



“As a topical, skin-specific HDAC inhibitor, remetinostat has the potential to be efficacious and have an improved safety profile compared to other available treatments.”

Youn Kim, MD, Stanford, California US

Birinapant: multiple opportunities in one compound

Despite immuno-oncology breakthroughs patients have unmet needs



< 1/2

of patients derive meaningful clinical benefit

New effective treatment options: potential to significantly expand ovarian cancer market



6-18 months

time to relapse after chemotherapy

Opportunities for new indications incl. through NIH Cancer Therapy Evaluation Program (CTEP)

About birinapant

- Link to Medivir's interests in DUBs

Market Exclusivity

- Expected patent life to around 2034, including extensions

¹⁾ Merck and Bristol-Myers Squibb financial reports, full year 2016

²⁾ Decision Resources, LLC

Birinapant entering two Phase I/II Studies in collaborations

Collaboration with MERCK

- Development collaboration for the Phase I/II study in solid tumors
- Keytruda™ provided at no cost
- Joint Development Committee to oversee the study, bringing Merck's immuno-oncology expertise
- Medivir retains full global rights to birinapant and data

Costs

~SEK 150m (\$18m) expected costs to completion of planned studies (incl. Phase I/II study over 3 years; no third party milestones)

Investigator-initiated

- Phase I/II study in high-grade serous carcinomas (incl. ovarian cancer)
- Medivir support primarily with drug supply, with full rights to generated data

Costs

Drug supply; no third-party milestones

Liver cancer is 2nd leading cause of cancer related death worldwide

Liver cancer market¹⁾

- Liver cancer is a orphan disease in Western markets, but much more common in Asia
- One of fastest growing and most deadly cancers in US

≈\$700_m → ≈\$5.6_{bn}²⁾
2015E major market sales 2025E major market sales

One approved treatment for advanced liver cancer

Sorafenib (kinase inhibitor)

- Only ~3 month survival benefit



Untapped market potential with only one approved targeted drug

¹⁾ Howlader et al. (eds). SEER Cancer Statistics Review, 1975-2011, National Cancer Institute. Bethesda, MD, http://seer.cancer.gov/csr/1975_2011/

²⁾ Decision Resources, LLC

Take a nucleoside, improve it with Medivir prodrug technology

Troxacitabine

(nucleoside)

- **Active** in preclinical cancer models and in clinic
- Failed in clinic due to systemic dose limiting **toxicities**

Medivir prodrug technology

MIV-818

(liver-targeted nucleotide prodrug)

Improve efficacy

- Increase cancer cell killing

Improve safety

- Directed delivery to the liver

Timing

- Pre-clinical safety studies ongoing
- Phase I start expected 2018



MIV-818 potential to address entire advanced liver cancer market, standalone or in combinations

No disease modifying osteoarthritis drug exists today

- Prevalence increasing due to aging population and obesity epidemic
- Current treatments are insufficient focusing on symptom relief only



Blockbuster revenue opportunity for a disease-modifying OA drug (DMOAD)

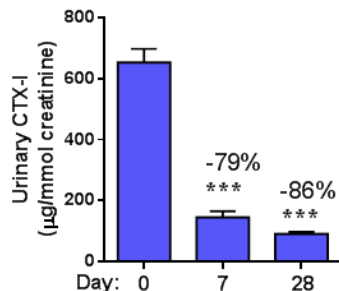
Sources: Hunter et al, Nat Rev Rheumatol, 2014; Reginster et al, Ann Rheum Dis 2013

1) >2M adults in US with moderate osteoarthritis in weight bearing joints at annual treatment cost for a drug that impacts disease progression of 3,000 USD/Year (Losina et al 2014)

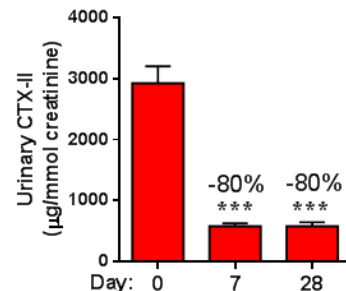
MIV-711 data: Indication of efficacy with safety and tolerability

Pre-clinical OA model efficacy data...

Bone resorption



Cartilage degradation

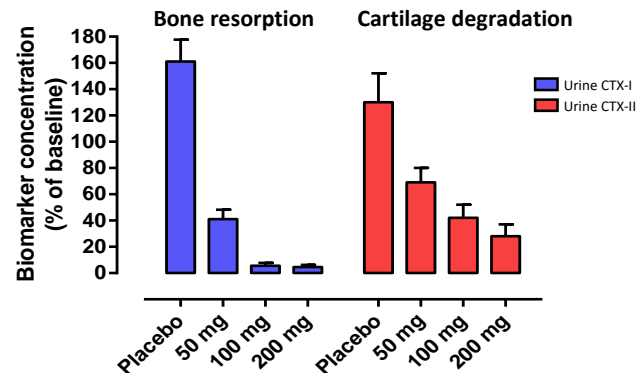


Mean ± SEM, n = 15
***Statistically significant

...reflected in Phase I data

Results by dose, 7 day QD dosing, measurement on day 7

Average for all patients per dose



MIV-711

Ongoing phase IIa studies in osteoarthritis

Phase IIa progressing as expected

- MIV-711.201 enrollment completed (n=244) end October 2016
- Phase IIa extension study (MIV-711.202) started
- Safety: all four planned DMC meetings concluded “continue as planned”

About MIV-711

- Cathepsin K (a protease) inhibitor

Market Exclusivity

- Expected patent life to around 2034, including extensions

Timing

- Primary 6 month data expected 3Q'17
- 12 and 6 month data from extension study expected 1Q'18

Costs

~SEK 85m (\$10m) expected costs to completion of ongoing Phase IIa studies







**Medivir expects to partner MIV-711
upon successful Phase IIa data**

Partnerships where they meaningfully enhance the value of a project

Partnership Pipeline

Project	Disease area	Partner	Preclinical phase		Clinical phase			
			Discovery	Preclinical	Phase I	Phase II	Phase III	Market
Olysio (simeprevir)	Hepatitis C	Janssen						
JNJ-4178 AL-335+odalasvir+simeprevir	Hepatitis C	Janssen						
Xerclear	Labial herpes	GSK and Meda						
MIV-802, nucleotide NS5B polymerase inhibitor	Hepatitis C	Trek Therapeutics						

Partnerships enhance the value of programs

Product/Project	Platform Link	Partner	Status	Medivir Interests
Zovido/Xerclear (labial herpes) <i>acyclovir + hydrocortisone</i>	Nucleoside analogue		≈350_m SEK Cumulative revenues	<ul style="list-style-type: none">▪ Royalties from sales▪ Approval milestones for additional OTC switches
Olysio (HCV) <i>simeprevir</i>	Protease inhibitor		≈2.5_{bn} SEK Cumulative revenues	<ul style="list-style-type: none">▪ Royalties from sales
JNJ-4178 (HCV) <i>AL-335 + odalasvir + simeprevir</i>	Protease inhibitor		Phase IIa/IIb studies ongoing	<ul style="list-style-type: none">▪ Approval and commercial milestones▪ Royalties from sales
MIV-802 (HCV) <i>Nucleotide NS5B polymerase inhibitor</i>	Nucleotide		Phase I ready	<ul style="list-style-type: none">▪ Development milestones▪ Royalties up to mid-teens %▪ Retained rights for Greater China

MIV-323: Best-in-class RSV Fusion inhibitor

RSV background ¹⁾

- Respiratory syncytial virus (RSV) is a virus that causes respiratory tract infections

<1 year old, >65 years old, immune-compromised
at greatest risk

75,000 - 125,000

children under 1 year old hospitalized annually

No *approved treatment*

Best-in-class profile

- MIV-323 is expected to deliver superior treatment efficacy to competitors based on preclinical data
- Presented at



Medivir is actively pursuing partnering discussions

¹⁾ Source: US Center for Disease Control and Prevention

Medivir's R&D is highly respected in the scientific community

2016

April 2016: **MALT1**

AACR American Association
for Cancer Research

New Orleans, LA USA

June 2016: **remetinostat**

ASCO American Society of Clinical Oncology

Chicago, IL USA

September 2016: **MIV-818**



Vancouver, Canada

October 2016: **MIV-323**



Patagonia, Argentina

2017

February 2017: **MIV-818**



The Asian Pacific
Association for the Study
of the Liver (APASL)

Shanghai, China

February 2017: **MIV-818**



EASL | HCC SUMMIT

Geneva, Switzerland

September 2016: **DUBs**



Boston, MA USA

April 2016: **MIV-711**

Osteoarthritis Research
Society International
(OARSI) world congress

*Amsterdam,
Netherlands*

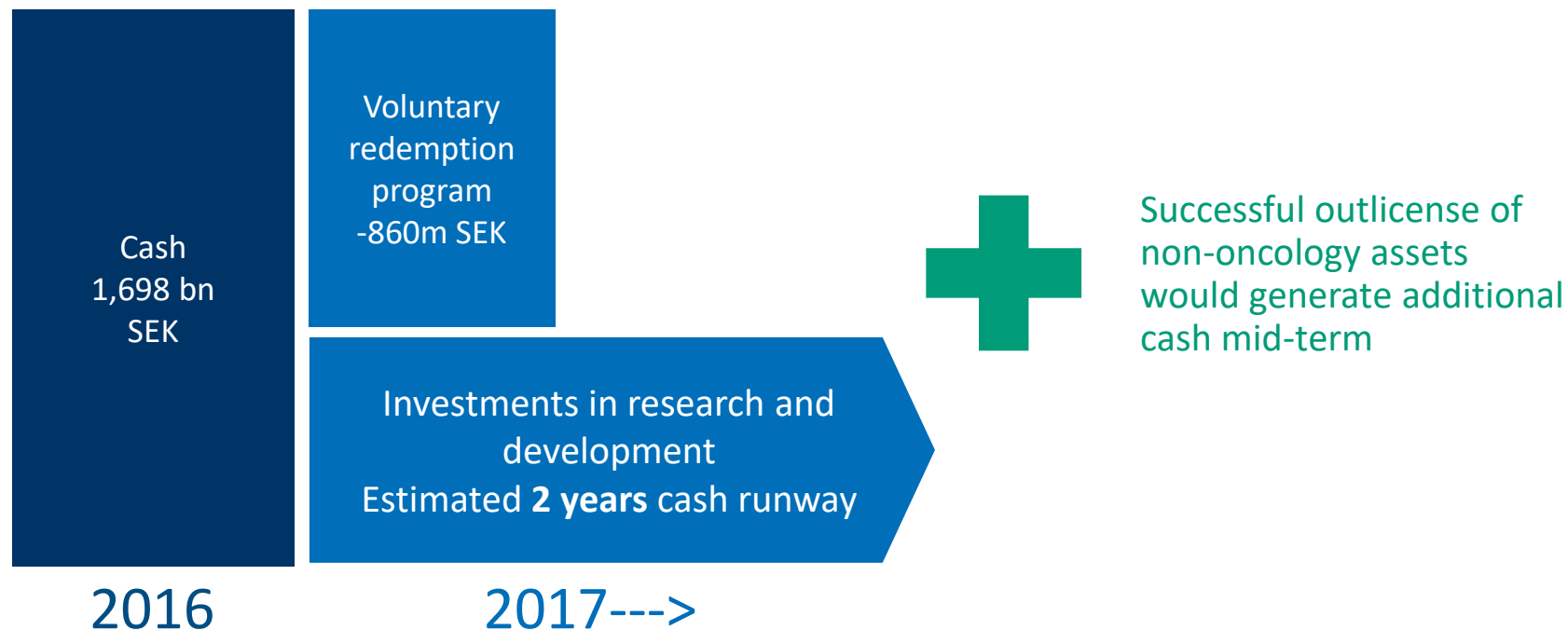
June 2016: **MIV-802**



Outlook

2017

Strong cash position to fund development



2017 Upcoming Milestones

- ❑ Complete remetinostat Phase II study (1Q 2017) and start remetinostat Phase III (2H 2017)
- ❑ Start birinapant Phase I/II study in combination with Keytruda™
- ❑ Start investigator initiated Phase I/II birinapant study in gynecological cancers
- ❑ Complete MIV-711.201 Phase IIa study (3Q 2017)
- ❑ Complete MIV-818 IND-enabling preclinical studies (YE 2017)
- ❑ Further data on JNJ-4178 program in HCV



Improve life for cancer patients through transformative drugs

- R&D dedicated company focused on oncology
- Scientific platforms consistently delivering well-differentiated new projects
- Deep clinical pipeline with multiple value drivers
- Proven track record in generating revenue through partnerships
- Strong and experienced management team

