A Focused Strategy for Sustainable Value Creation

Credit Suisse Health Care Conference
Phoenix 12 November 2014

Niklas Prager, CEO

MEDIVIR

A Nordic research-based pharmaceutical company focused on infectious diseases and oncology

Medivir is a Nordic research-based pharma company focused on infectious diseases and oncology (1/2)

Medivir has made significant progress in transforming into an integrated pharmaco

1988 – Originally a spin-out of Astra's anti-viral projects

1996 – Headquartered and listed in Stockholm

NASDAQ OMX

2004 – Simeprevir out-licensed to Janssen/Tibotec

janssen PHARMACEUTICAL COMPANIES OF Johnson & Johnson

2009 – Xerclear approved for sale in certain European markets and the US market ('09)

- Meda licenses NA and GSK EU (2010)
- Meda purchases rights for NA (2011)

2010 – BioPhausia acquired to strengthen the commercial platform

BioPhausia – a Medivir company

2011 – Nordic commercial organization established

2013 – Launch of Olysio™ and Adasuve® in Nordics

2014 – Simeprevir approved in Japan, Canada and US (2013) and EU (2014)

Research company → *R&D company* → *Integrated pharmaco*

Medivir is a Nordic research-based pharma company focused on infectious diseases and oncology (2/2)

Balanced platform consisting of four cornerstones

Innovation *High risk / high reward*

R&D	• Unrivaled expertise in protease inhibitor design and nucleoside/ nucleotide science with focus on infectious diseases and oncology • Strong pipeline from discovery to development with four internal projects disclosed
Royalties & Milestones	• Two products, Olysio and Xerclear, taken from idea to market and out-licensed to premier big pharma partners • New deals will add to high-margin cash flow
Innovative Specialty Care Portfolio	• Two innovative specialty care products, Olysio and Adasuve, recently launched in the Nordics and negotiations in process • Experienced and specialized commercial organization

Established Brands *stable revenue stream*

Nordic Brands	• 14 Rx pharmaceuticals with very stable revenue and earnings generation through efficient organization

World class high risk/high reward R&D capabilities with strong current and future cash generation from global milestones/royalties and Nordic commercial operations

Financial facts

CONSOLIDATED INCOME STATEMENT SUMMARY Continuing operations (MSEK)	Q2 2014	Q2 2013	FY 2013
Net turnover	564.0	40.7	446.1
Gross profit	518.8	23.5	374.3
EBITDA	424.4	-46.9	76.4
EBIT	416.2	-62.0	25.2
Profit/loss before tax	418.4	-62.1	27.7
Profit/loss after tax	327.8	-63.7	16.0

Net turnover breakdown (MSEK)	Q2 2014	Q2 2013	FY 2013
Outlicensing and partnership agreements: Non-recurrent payments	-	-	258.5
Pharmaceutical sales	62.9	40.7	176.1
Royalties	501.1	-	11.5
Other services	-	-	-
Total	**564.0**	**40.7**	**446.1**

- Listed on NASDAQ OMX Stockholm since 1996
- Market cap of ~3.5 BSEK / ~500 MUSD
- Shares Outstanding, fully diluted 31,7 M
- Broad institutional shareholder base, ~25% EU & US shareholders
- Solid financial position (900 MSEK / 120 MUSD end Q2, 14.)*
- Transforming to sustainable profitability

*Olysio (Simeprevir) royalties during Q3 of 516 MSEK / 69 MUSD where reported October 14 and are not accounted for in cash position

. Medivir Q3 full report will be published November 20.

Secure current and future value creation through profitable growth

Deliver sustainable value creation

Through world-class R&D productivity, increased commercial focus and operational excellence

Strengthen R&D pipeline without increasing costs
- Focus on areas of expertise: infectious disease and oncology
- Maintain an average of one project in phase I clinical development

Capture more pipeline value
- Advance projects further (e.g. Phase II)

Generate diversified revenue from milestones & royalties
- Out-license projects from R&D pipeline

Become top-tier pharma company in Nordic region, by sales
- Increase commercial focus
- Further expand Innovative Specialty Care Portfolio

Improve profit margin of Nordic brands
- Ensure operational excellence

Proven ability to create value through R&D efforts, Nordic commercial operation

Innovation

R&D
- Proven track record
- Will continue to be main driver of long term value creation

Royalties & Milestones
- Balance risk/reward through partnerships at costly stages of drug development and global commercialization

Innovative Specialty Care Portfolio
- Significant upside & economies of scale
- Retain Nordic rights for out-licensed products
- In-license products with strong growth potential

Increasing revenue and earnings with long term stability through
- combination of Nordic sales from multiple products, and
- milestones and royalties from partnerships

Proven ability to discover and develop innovative breakthrough products, partner with premier big pharma companies for late stage development and global distribution, and commercialize own and in-licensed products through strong Nordic platform with economies of scale

Established brands enhance stability and strength of Nordic commercial operations

Established Brands

Nordic Commercial Operations
- Essential supporting functions are common between Nordic Brands & Innovative Specialty Care Portfolio

Nordic Brands
- Opportunity to further improve margins for the 14 Rx well-known brands with stable revenue stream

Innovative Specialty Care Portfolio
- Significant upside & economies of scale
- Retain Nordic rights for out-licensed products
- In-license products with strong growth potential

Stable revenue stream and economies of scale and scope with Innovative Specialty Care Portfolio

Broad portfolio of established brands with close operational synergies with Medivir's innovative product portfolio

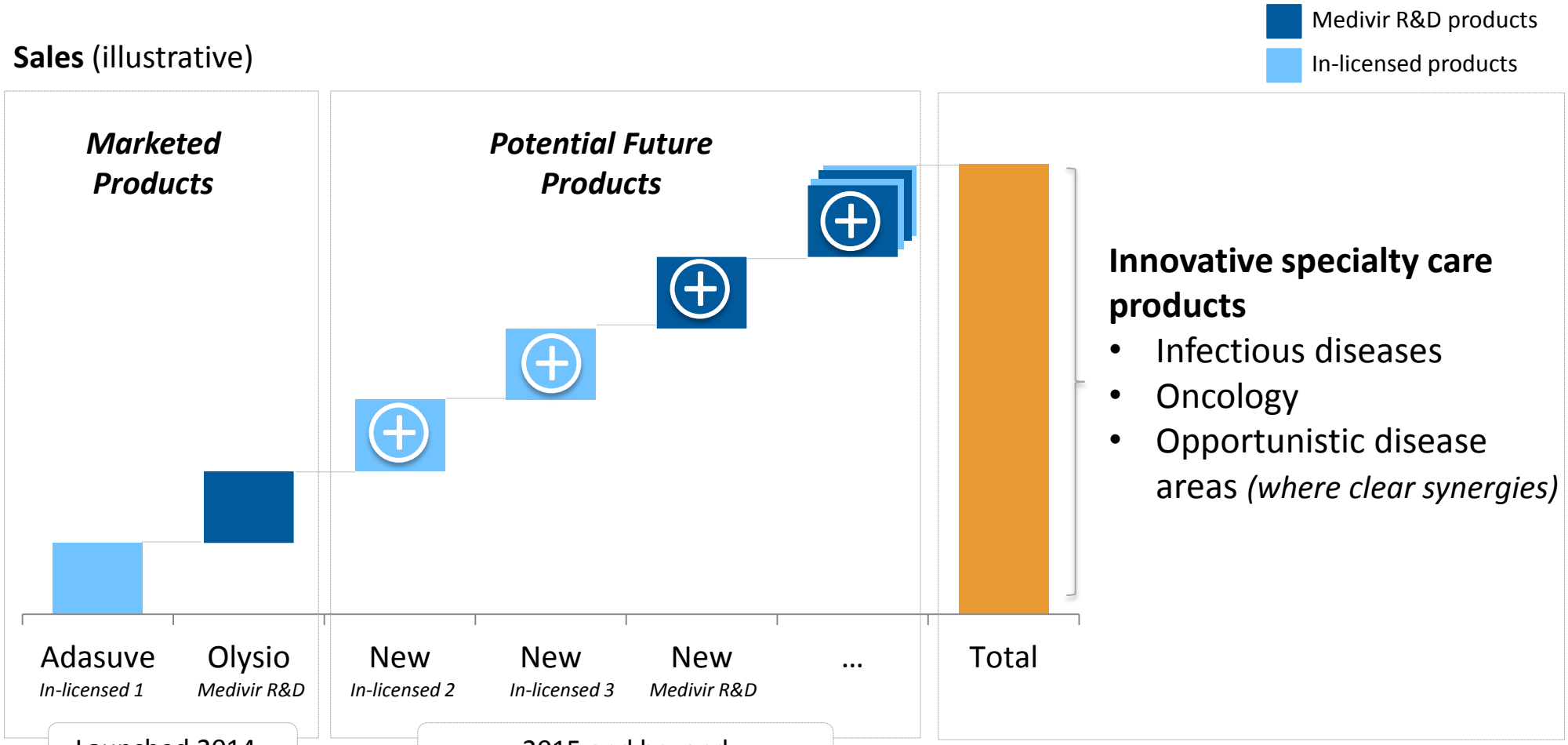
A focused strategy for value creation based on the four cornerstones

Innovation
Established Brands

Cornerstones	Strategy
R&D	**I. Project generation and development in R&D** • Cutting edge competence in protease inhibitor design and nucleoside/nucleotide science with distinct discovery focus on infectious diseases and oncology • Focus on true innovation for unmet medical needs to maximize patient benefit and value creation • Prudent R&D expense for defined portfolio scope and output (lower spend than 2013/2014) • Strategic investments outside of the run-rate to be made through in-licensing, partnerships/collaborations, advancing internal projects into phase II and M&A
Royalties & Milestones	**II. Partnerships and out-licensing** • Key component in business model established through proven track record with big pharma • Firm commitment to early development in-house before partnership with/out-licensing to global partner to balance risk and optimize value • Targeting strong global partners for high quality late stage development and maximum reach in global commercialization
Innovative Specialty Care Portfolio Nordic Brands	**III. Commercial operations in the Nordics with focus on innovative products** • Leverage Nordic commercial platform with focus on cost effective utilisation of highly specialised organization by: - in-licensing innovative growth products primarily in Infectious diseases and oncology to match R&D focus, but will act opportunistically if synergies can be secured - retaining Nordic rights for in-house developed products • Provides knowledge and insight into entire value chain, including patient benefits, health economics and regulatory matters

Growing through continuous addition of innovative specialty care pharmaceuticals

Innovative Specialty Care Portfolio



Key assumption for value creation from in-licensing:

- Net sales per product: Peak sales of approximately 50-150 MSEK within 5 years of launch

Research and Development

World class science working toward next breakthroughs

Extensive partnering and collaboration track record with major pharma

R&D portfolio

Therapeutic area	Product / Project	Partner	Preclinical phase: Research	Preclinical phase: Development	Clinical phase: Phase I	Clinical phase: Phase IIa	Clinical phase: Phase IIb	Clinical phase: Phase III	Market
Labial herpes	ZoviDuo®/Xerclear®	GlaxoSmithKline							
HCV infection	Olysio® (simeprevir)	Janssen							
Osteoarthritis	MIV-711 Cathepsin K inhibitor								
Neuropathic pain	MIV-247 Cathepsin S inhibitor								
HCV infection	HCV nucleotide NS5B polymerase inhibitor	Janssen							
HCV infection	HCV nucleotide NS5B polymerase inhibitor								
RSV	RSV fusion protein inhibitor								
HIV infection	HIV protease inhibitor	Janssen							

Partnered | Medivir internal | Outside focus areas

Comment

- **Strong and diverse early development pipeline**
- **All future projects will fall within the new focus of infectious disease and oncology**
- **Ongoing projects include 2 that are outside the new focus**

Medivir has a strong track record of bringing innovative discoveries to market

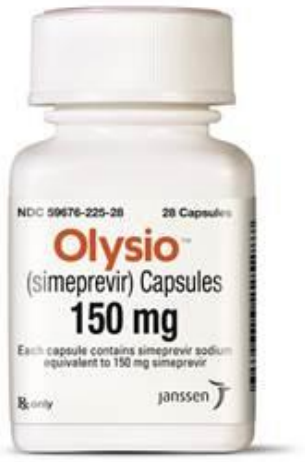
MEDIVIR

Marketed Products From Own Pipeline Development

Xerclear / Zoviduo

Nucleoside analogue-based treatment for labial herpes

Olysio (Simeprevir)



Protease inhibitor currently revolutionizing HCV therapy

Medivir's core technology platform:

- **Protease inhibitor discovery -** historically applied to several therapeutic areas including infectious diseases
- **Nucleoside/nucleotide science -** historically applied almost exclusively to infectious diseases
- **In the future these technologies will be targeted to specific indications in infectious diseases and oncology**

Xerclear: Strong payback from innovation

Xerclear / Zoviduo

Nucleoside analogue-based treatment for labial herpes

Royalties and Milestones

- **US rights sold to Meda: $45 million**
- **GSK RoW OTC rights: €3 million** (€1.4 million remaining)
- **Royalty agreement on OTC sales: up to 10%**
- **Royalty payments including Q2 2014: €0,1 million**

Next steps

- **Estimated OTC market approvals in key EU countries**
  - UK: November 2014 / May 2015
  - Spain: September 2015
  - France: September 2016
- **Medivir believes that there is still more potential in the brand which the merged GSK/Novartis OTC entity can capitalize on**

Simeprevir: Strong payback from innovation

Olysio® (simeprevir)

Protease inhibitor currently revolutionizing HCV therapy

Simeprevir on the global market

- Japan (SOVRIAD®)
- Canada (GALEXOS®)
- USA (OLYSIO®)
- Russia (SOVRIAD®)
- EU (OLYSIO®)
- Mexico (OLYSIO®)
- Australia (OLYSIO®)

Royalties and Milestones

- **FTE funding over 3 years: €11 million**
- **Milestones received: €68.5 million**
- **Royalty agreement on Global sales** (excl. Nordics)**: up to 10%**
- **Royalty payments including Q3 2014: €129 million**

Continued J&J support for OLYSIO®

Continued strong commitment from J&J in the HCV area

J&J's commitment is supported by concrete actions

Clinical trial programme

- Two phase III studies, OPTIMIST 1 and 2, evaluating treatment of genotype 1 HCV-infected patients with simeprevir and sofosbuvir, are well under way.
- Yet another phase II IFN-free triple combination of simeprevir, sofosbuvir, and daclatasvir (IMPACT) in decompensated cirrhotic HCV patients has been announced
- One phase II study of an IFN-free triple combination of the three compounds simeprevir, IDX719, and TMC055 (HELIX-2)
- One phase II study including another IFN-free triple combination; simeprevir, JNJ-56914845, and TMC055

M&A

- On November 7, J&J announced the closing of the acquisition of Alios BioPharma that has two anti-hepatitis C virus (HCV) nucleotides in development which, if successful, would complement simeprevir and secures J&J continues to be a leader in the disease area

Medivir believes that IFN-free treatments will be dominating, with many more options available for physicians and patients than today, but there are on-going studies including IFN and RBV that are worth highlighting:

- 12 weeks full stop single-arm phase III study in treatment naïve GT1 and GT4 patients
- China: efficacy, safety & tolerability and pharmacokinetics in treatment naive GT1 HCV

World class science working toward next breakthroughs

Flexible and productive R&D organization to ensure strong early development pipeline

MEDIVIR

R&D organization and capabilities

	Description
World class discovery R&D organization	• Core competence – developed and refined over 26 years - from idea through early clinical development • Infrastructure to support multiple projects in parallel
Prudent use of resources	• Efficient organization and infrastructure enables us to sustain internal pipeline, with future running annual expenditure below 2013-2014 levels - 2-3 LO projects at steady state, expected to deliver on average 1 well-differentiated candidate drug/yr (Sufficient lead identification capacity to sustain the targeted LO efforts) - Ambition to maintain an average of one project in phase I clinical development (Development capacity to support advancement of all internal candidates through phase 1)
Flexibility to expand / accelerate development	• Flexibly organized to enable acquisition or in-licensing of projects capable of expanding and accelerating pipeline development and value creation: - Strengthening of the early development pipeline (LO → Phase I) - Enabling expansion into oncology
Advancement of internal projects in the value chain	• Medivir will advance high-value projects into phase IIa (PoC) provided there is a strong business rationale - Progress into phase II will be based on robust financial rationale - Internal medical expertise available for designing Phase II clinical studies and managing CRO during clinical operations

Leverage our technology platform to capture opportunities in new focus areas for future value creation

Alongside continued focus on infectious diseases, we will direct the company's technological expertise towards specific areas in oncology over the course of the coming years

Infectious disease

Continue

\+

Oncology

New

The choice of oncology is based on our technology and competence base:

- Many opportunities in protease targets as well as the opportunity to exploit nucleoside/nucleotide expertise to identify targeted drugs for oncology indications such as hepatobiliary tumours, haematopoietic and lymphoid malignancies, pancreatic tumours and glioblastoma
- Opportunity to add value through early clinical studies in patients, with partnership for later stage development
- Significant remaining unmet medical needs and market for new treatment alternatives

MIV-711

a once daily potent and selective **cathepsin K protease inhibitor** in clinical development for the treatment of **osteoarthritis**

Osteoarthritis (OA) – a leading cause of chronic disability

Overview

- **Progressive disorder** characterized by degeneration of cartilage and subchondral bone in the joints
- **Most prevalent joint disease** with up to 40% over 65 suffering from knee or hip OA
- **Current treatments are inadequate** focusing on symptom relief e.g. physiotherapeutic exercise, intra-articular corticosteroids or hyaluronic acid and analgesics/anti-inflammatory agents (NSAIDs)

- **Large burden to society: 15 million QALYs* lost annually in US only**, comparable to cardiovascular disease and cancer

Key unmet needs

Suspend disease progression and relieve pain

- Prevent degradation of subchondral bone – recently recognized as a key target for OA
- Prevent degradation of cartilage
- Prevent the pain associated with the disease

A disease-modifying OA drug (DMOAD) meeting these unmet needs has great market potential based on large and growing patient population

**Quality Adjusted Life Years*

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

MIV-711 – has the potential to become the first disease-modifying osteoarthritis treatment on the market

Mode of Action

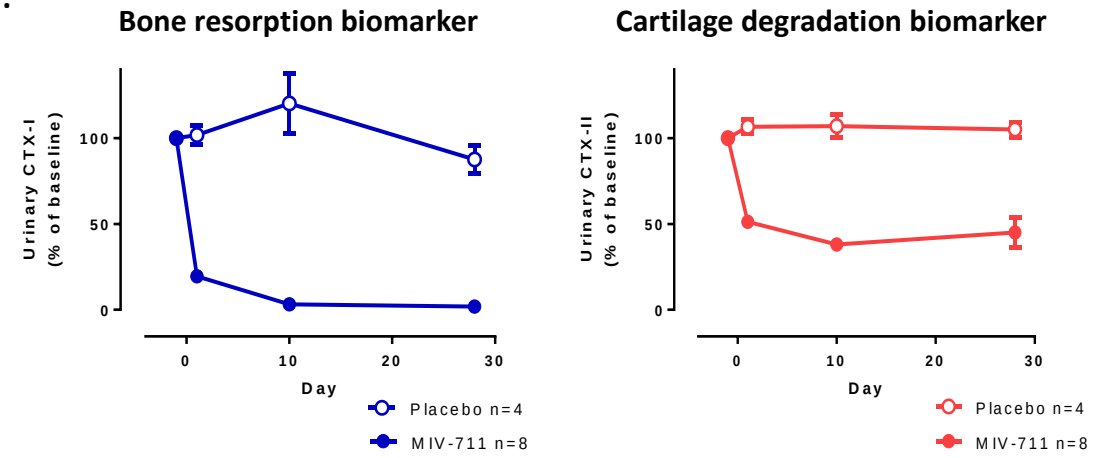
The protease Cathepsin K degrades both bone and cartilage collagen: inhibition of this enzyme is expected to have joint protective effects in humans

- Other bone-acting agents have demonstrated beneficial effects on human osteoarthritis (OA) disease progression, pain and function

MIV-711 Profile

A Cathepsin K inhibitor with strong profile

- Demonstrated joint protective effects in established preclinical OA models
- Generally safe and well tolerated up to 28 days in humans
- Markedly reduced bone and cartilage degradation in phase I as demonstrated by biomarkers:



Next steps

- **Toxicology studies (6 months) recently initiated to enable start of Phase IIa study in osteoarthritis patients late 2015**
- **Innovative biomarker driven development path**

MIV-711 – a large and growing market opportunity

Market opportunity

- **250 million people worldwide** estimated to suffer from knee OA in 2012 *(Nat. Rev. Rheumatol., 2014)*
- **Prevalence of OA is increasing** due to aging population and obesity epidemic

- **A DMOAD* cost of approx. 3,000 USD/Y** has been estimated to satisfy cost-effectiveness criteria based on suspended disease progression and pain relief *(Losina et al 2014)*

Target population / indication

MIV-711 - targeted towards adult patients with moderate osteoarthritis in weight bearing joints (>2 millions in US only) to:

- delay disease progression
- reduce need of pain relief and
- improve function

Summary

- **Very large and attractive market opportunity**
- **Every 10% of the target population on the US market alone represents a potential of 600 MUSD** in annual sales**
- **Opportunity also in other bone-related diseases**

* DMOAD: Disease-modifying Osteoarthritis drug

** 10% market share represents 200,000 patients multiplied by an annual treatment cost of 3,000 USD/Year

MIV-247

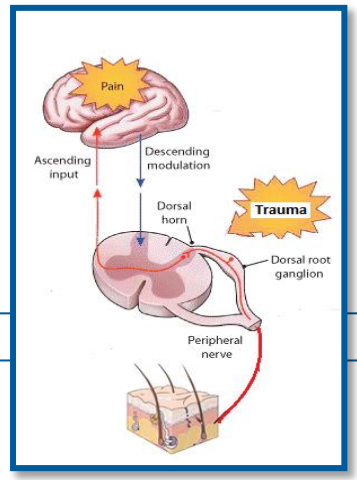
a potent, selective **cathepsin S protease inhibitor** in non-clinical development as an **oral** therapy for **neuropathic pain**

Neuropathic Pain (NP) – a large market opportunity for novel, safe and efficacious treatments

MEDIVIR

Overview

- **Affects ~30 M people** in the 7 major markets
- **Caused by a trauma or disease affecting the nervous system** such as diabetes, shingles, cancer or chronic lower back pain
- **Limited efficacy and poor side effect profiles of current treatments**, including anticonvulsants (e.g. pregabalin & gabapentin) and antidepressants, (e.g. amytriptyline)



- **Overall sales in NP market 2012: 6 BUSD** (pregabalin: 1.8 BUSD, Lidocaine 5% patch: 0.7 BUSD and Duloxetine 0.6 BUSD + generic opioids and/or NSAIDs)

Key unmet needs

- **More efficacious Neuropathic Pain specific drugs with less side-effects and rapid onset**

A novel Neuropathic Pain treatment meeting these needs will have a market opportunity of > 1BUSD in annual sales

Source: Decision Resources

MIV-247 – A new targeted Mode of Action in an underserved pain market

MEDIVIR

Mode of Action

Cathepsin S expression is increased in the nervous system post nerve injury where it may release of inflammatory mediators leading to pain

MIV-247 Profile

A potent cathepsin S inhibitor for oral treatment of NP

- **Efficacious as monotherapy** in preclinical neuropathic pain models
- **Markedly enhanced efficacy in combination** with pregabalin or gabapentin compared to either drug alone
- **No CNS side effects** at highest efficacious dose

Next Steps

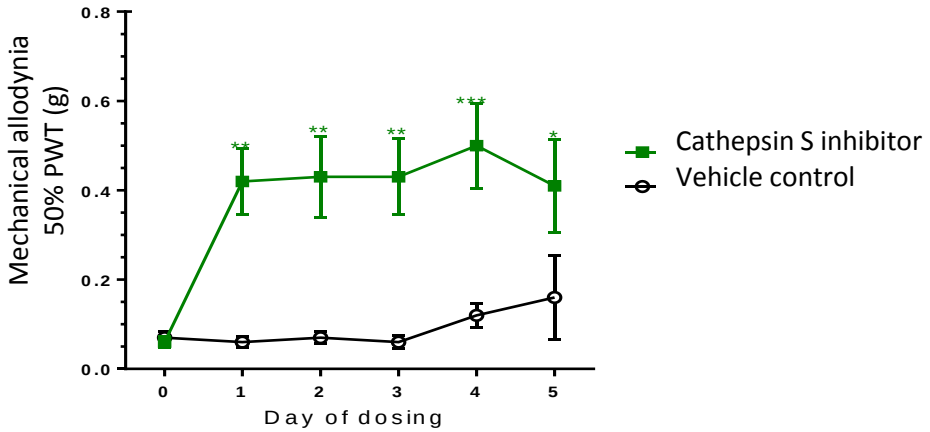
- Preclinical IND preparatory safety package recently initiated
- Start of clinical Phase I program planned in 2Q 2015

Source: Datamonitor & Decision Resources

Medivir's cathepsin S inhibitors – efficacious as monotherapy and enhanced effects with gabapentin in a model of Neuropathic Pain

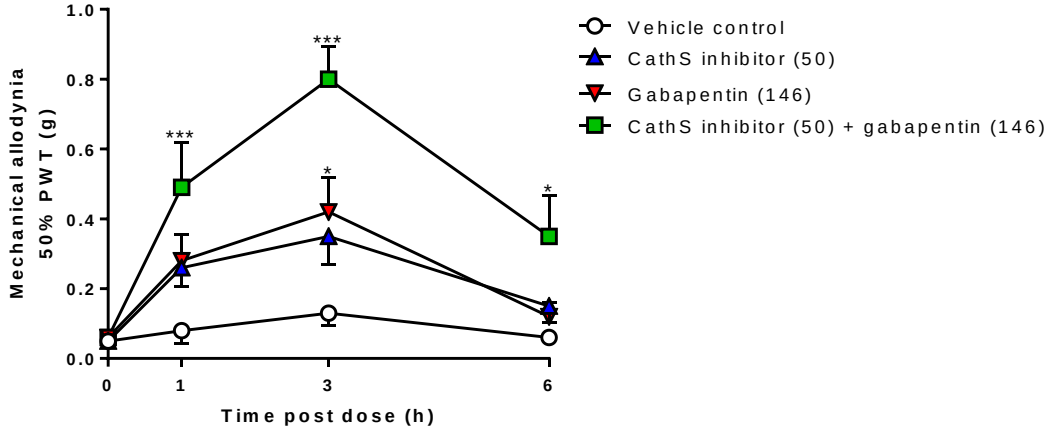
Monotherapy

Fast and sustained effects of cathepsin S inhibition in a model of neuropathic pain



Combination therapy

Markedly enhanced effects with a cathepsin S inhibitor and gabapentin at *minimal* effective doses



Data support therapeutic value in a broad Neuropathic Pain patient population

- **As first line monotherapy**
- **As an add-on to current SoC** with potential to increase efficacy while decreasing side effect by lowered doses of the companion drug

HCV Nucleotide

a wholly-owned uridine protide with potent activity against all genotypes of hepatitis C virus for use **as part of all-oral treatment regimens**

HCV Nucleotide: uridine protide

A cornerstone of HCV therapy

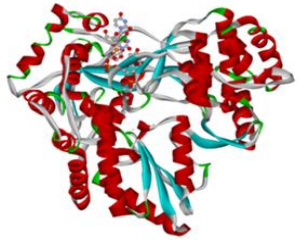
MEDIVIR

Hepatitis C Overview

- **HCV therapy being revolutionized by all-oral interferon free regimens**
- **Future therapy expected to be 3-drug combinations** with cross-genotype activity to achieve shortened durations of therapy
- **Nucleotides will be the cornerstone of such combinations** because of their high level of antiviral activity, cross-genotype activity and high barrier to resistance

Medivir's project

- **Leveraging of nucleoside expertise to pursue high value nucleotide compounds**
- Current effort **focused on novel uridine-based series**
- **Medivir protide's preclinical profile:**
  - Potent cross-genotype antiviral activity
  - Attractive pharmacokinetic and resistance profile



Market Opportunity

- Compound will be competition for Sovaldi™ and Idenix-21437
- Large potential for nucleotides overall but actual potential for Medivir's nucleotide is dependent on the competitive landscape at launch

Next Steps

- Profiling of the lead clinical candidates in progress, with potential decision on continued program by year end

RSV Fusion Inhibitor

Lead optimization project focused on delivery of a best-in-class orally administered antiviral drug **for the treatment and prophylaxis of RSV infection**

Respiratory Syncytial Virus (RSV) Infection – Significant market potential in an under-recognized disease

MEDIVIR

RSV infection Overview

- **Seasonal outbreaks of respiratory tract infections of children and adults**
  - Mild respiratory illnesses through life-threatening bronchiolitis and pneumonia
- **RSV causes repeated infections throughout life but especially dangerous in:**
  - Infants, especially premature babies and those with lung/heart disease
  - The elderly, especially those with cardiovascular morbidities
  - Immunocompromised patients
- **Principal RSV drug is restricted to prophylactic use exclusively in the highest risk infant population**

Medivir's project

- **Clinically validated target**
- **Opportunity to exploit our proven strengths in antiviral discovery & early development**
- **In-licensing the RSV project represented a rapid and cost-effective opportunity to acquire a LO phase project into the R&D pipeline**
  - Most recent example of Medivir's strategic intent to enhance its R&D pipeline with high-value, commercial opportunities

Market Opportunity

- Market potential (based on health-care utilization by young children and elderly patients infected by RSV) is estimated to be 500 MUSD in annual sales

Next Steps

- Currently in lead optimization phase, with decision on CD nomination expected in 2016

Prioritized Opportunities for future R&D investments

Strategic investments will focus on:

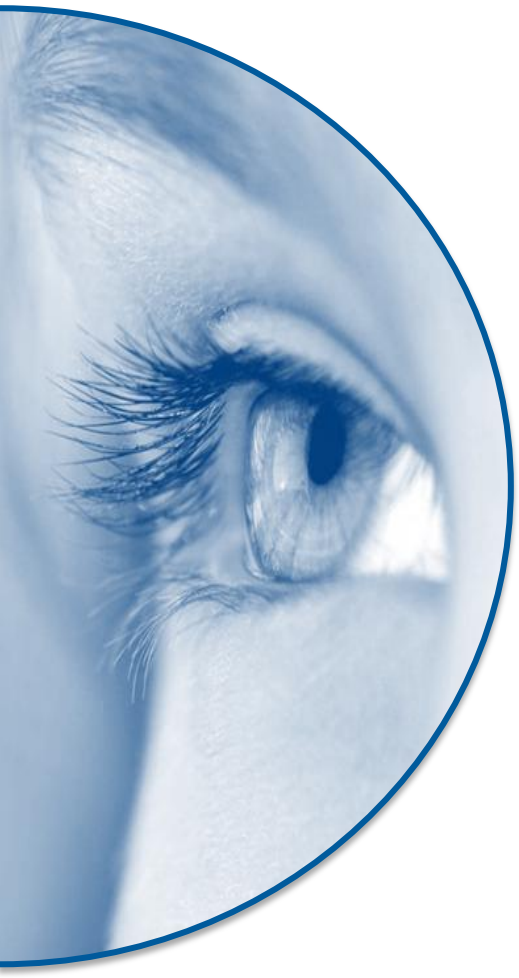
1) Bringing our internal projects to next value inflection point based on robust financial rationale, e.g.
   - MIV-711 phase IIa proof-of concept in osteoarthritis patients
   - MIV-247 phase IIa proof of concept study in neuropathic pain patients

2) In-licensing of oncology project(s)
   - Accelerate oncology pipeline using our internal competence in key areas

3) Intensify partnering and collaboration
   - Target access to external innovation and funding to accelerate portfolio development

4) Exploring targeted M&A
   - Strategic opportunities to expand the oncology portfolio

All opportunities evaluated as business cases



Strong outlook for coming years

Summary

Targeted investments to enhance value, while also distributing cash to shareholders (1/2)

Financial strength enables Medivir to benefit shareholders and ensure investment in future value creation

Optimization of capital structure	• **Strong financial position allows for cash distribution to shareholders and investments in future value creation**
Prudent use of resources	• **Corporate running costs will be tightly-controlled and reduced compared to 2014** • **Investments will be made in well-defined areas**: - to increase output from R&D - to maximize the value of current projects - to accelerate revenue growth in Innovative Specialty Care Portfolio

Targeted investments to enhance value of R&D portfolio and improve revenue growth, while also distributing cash to shareholders (2/2)

Innovation
Established Brands

Dedication and focus from everyone at Medivir on building and visualizing the value of each cornerstone

R&D	• R&D expected to: - **Focus on specific areas in oncology** in addition to infectious diseases - **Strengthen early development pipeline** - **Advance current projects to out-licensing** while balancing risk and value maximization
Royalties & Milestones	• **Royalties from simeprevir expected to decline vs. 2014, but to remain a significant contribution to Medivir both medium and long term** • **Income from new out-licensed projects expected to provide growth and risk diversification**
Innovative Specialty Care Portfolio	• **Sales expected to grow in the medium and long term on the launch of new products, after initial decline in Olysio sales in 2015**
Nordic Brands	• **Expected to provide stable revenues and become increasingly profitable as margins improve**