# Aedivir

A specialty pharmaceutical company focused on infectious diseases

Bio€quity Conference, Paris, May 2011

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## **Medivir in Brief**

Listed:	1996
Ticker:	MVIR
Exchange:	OMX NASDAQ
Market Cap (SEK):	3,900 Million

#### First Product Xerclear<sup>™</sup> / Xerese<sup>™</sup> in Global Launch Phase

- Launch begun in Nordic region; Launched in US March 2011
- Nordic infrastructural and commercial capability secured through acquisition of BioPhausia

#### Focused infectious disease pipeline – multiple paths to value creation

- World leading science in the field of infectious disease R&D
- TMC435 a potential blockbuster in hepatitis C
- 10 projects in clinical and pre-clinical development
- 7 partnerships with pharmaceutical and biotech companies

#### Experienced international management team

 Company supported by a highly experienced team with a strong skill base to ensure Medivir's success

#### Strong long-term commitment of institutional shareholders

• Over 1/3 international shareholders



## **Medivir Vision**



Medivir aims to become a profitable specialty research based pharmaceutical company focused on the development and commercialisation of high-value infectious disease treatments



## **Medivir's Strategy**

Our goal is to become a profitable specialty pharmaceutical company focused on the development and commercialisation of high-value infectious disease treatments

- Continue to innovate and be a partner of choice, creating value for our partners and shareholders
- Create and retain more value in our projects: later licensing, co-development rights, expanded territories
- Be looking for product in-licensing and acquisition opportunities globally



## **Key Innovation and Commercialisation at Medivir**

#### TMC435 - Potentially best in class hepatitis C drug

- Strong safety profile no adverse events over SoC in P2b
- Excellent antiviral activity in P2b PILLAR and ASPIRE studies
- High convenience one pill, once daily, no food interactions
- Global Phase 3 trials ongoing



#### Xerclear® / Xerese<sup>™</sup> - in global launch phase 2011

- First step towards becoming a profitable research-based pharmaceutical company
- Differentiated product profile unique indication text
- Significant blue-chip marketing partners.

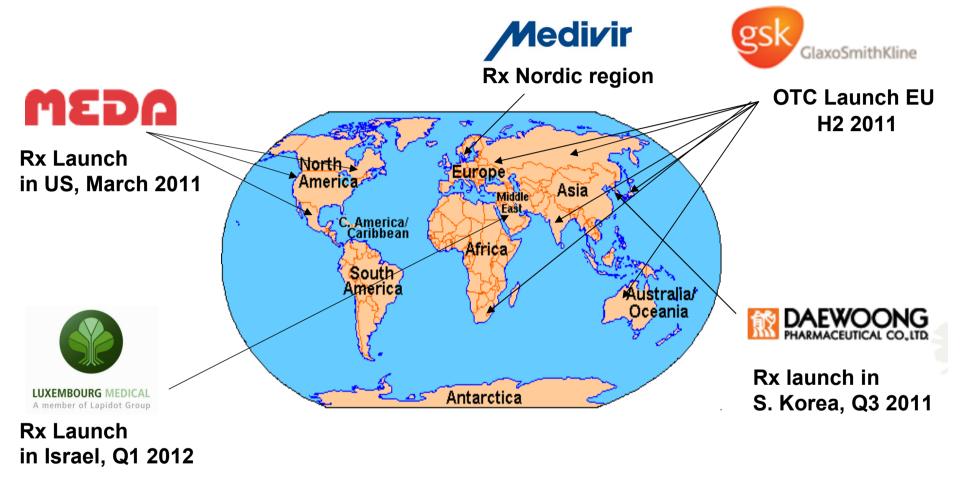
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#### **Strong Pipeline in development**

- A strong pipeline of innovative infectious disease drug candidates in development with leading pharma partners
- World class expertise in polymerase and protease drug targets and drug development



## **Global Launch of Xerclear®/Xerese® 2011**





### **Hepatitis C in the Nordic countries**

#### Medivir is in a unique position – Nordic commercial rights retained

- To launch one of the first products of a new treatment paradigm for a patient group with a distinct unmet medical need
- To capture a significant share of the protease inhibitor market due to highly competitive attributes of TMC435
- To give high priority and focus on pre-launch activities to facilitate broad and fast market access for TMC435 well in advance of launch

#### Unmet medical need – Large market with substantial growth potential

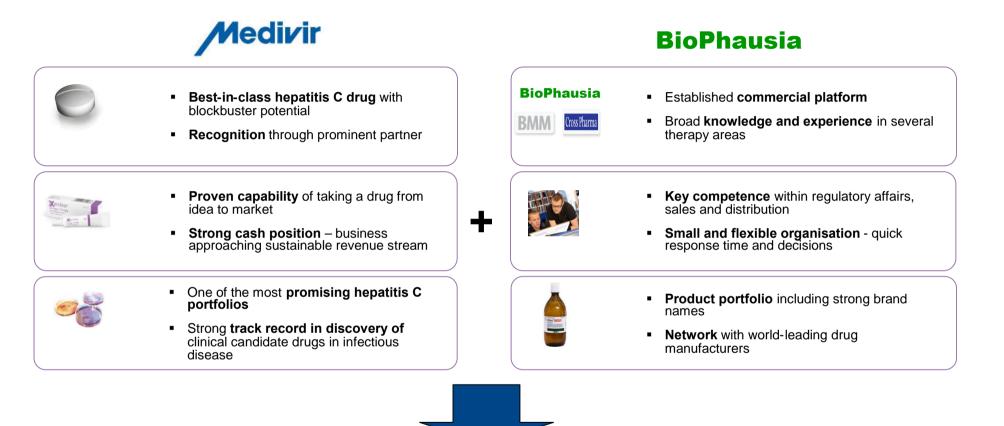
- 115,000 Chronic HCV patients in the Nordics
- 3,150 HCV receive treatment at a yearly treatment cost of SEK 175.000m (SoC)
- Poor efficacy and safety profile with current treatment. Less than 50% of patients reach a sustained virologic response
- This medical need will be addressed for the first time with the introduction of protease inhibitors (PI) on the market in 2012. TMC will be second generation protease inhibitor to enter market.

#### Treatment evolution – Main market driver

- Patient warehousing of HCV patients with G1 is acknowledged Approx 10-20% of these patients are in an acute phase and need treatment immediately
- Share of PI treated naïve patient will increase over time as PI's gain recognition



## Acquisition of BioPhausia – our new commercial capability



Expanded commercial platform

Customer facing brands maintained

Strengthened position to facilitate and optimise expected launch of TMC435 in the Nordic region



## **Strong Pipeline with Multiple Paths to Value Creation**

			Preclinical o	levelopment	<b>Clinical development</b>			
Project	Therapy area	Partner	Research	Develop- ment	Phase 1	Phase 2a	Phase 2b	Phase 3
INFECTIOUS DISEASES								
Hepatitis								
TMC435	Hepatitis C	Tibotec pharmaceuticals/J&J						
HCV-POL	Hepatitis C	Tibotec pharmaceuticals/J&J						
HCV projects								
Lagociclovir valactate (MIV-210)	Hepatitis B	Daewoong	C					
HIV/AIDS								
MIV-410 (PPI-801/802)	HIV	Presidio						
HIV-PI	HIV	Tibotec pharmaceuticals/J&J						
Herpes virus								
Valomaciclovir (MIV-606)	Shingles	Epiphany						
Dengue virus								
NS3 protease inhibitor	Dengue fever	Janssen Pharmaceutica						
OTHER INDICATIONS								
Cathepsin K inhibitor	Bone disorders							
Cathepsin S inhibitor	Neuropathic pain	Ì						

Projects targeting infectious diseases

Projects targeting other indications



## **Upcoming News Flow**



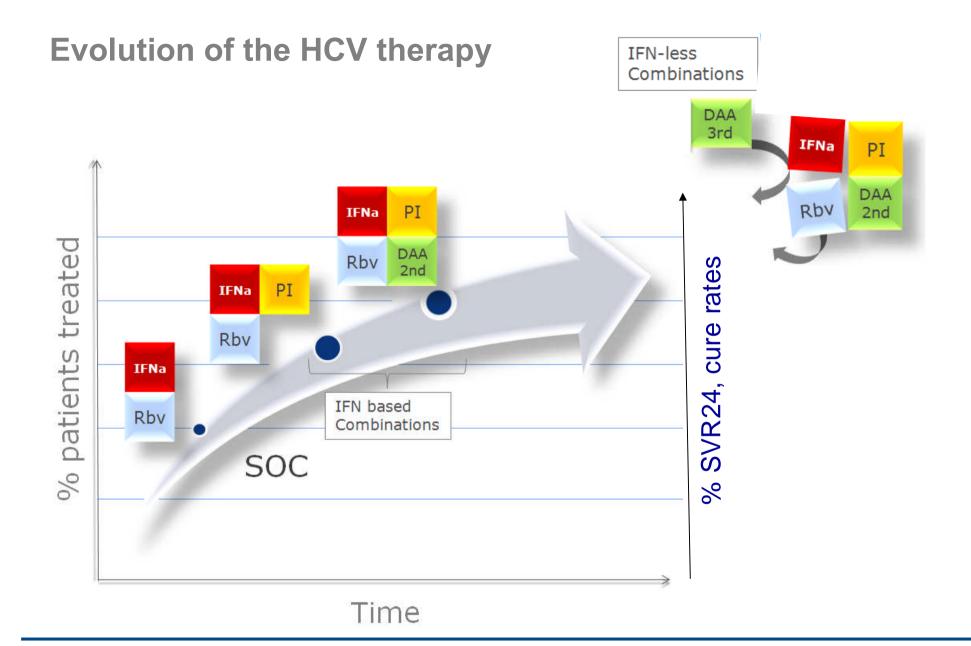
#### Expected key news flow highlights during 2011

- ✓ Q211 TMC435, 48-week interim data from the phase 2b C206 (ASPIRE) trial in treatment-experienced patients
- Q211 Closing of the BioPhausia offer
- Q3-11 C205 (PILLAR) full SVR24 data
- Q3-11 Start of phase 1b trials with TMC649
- Q4-11 Start of phase 3 trials with TMC435 in treatment-experienced null responders and partial responders patients
- Q4 Phase 1a/1b results with TMC649
- Q4-11 Start of phase 1 trials with MIV-711
- Q4 AASLD additional data on TMC435
- Q4-11 OTC launch of Xerclear® in Europe by GSK



## Our hepatitis C franchise

Partnered and in-house product portfolio





## **HCV Clinical Pipeline**

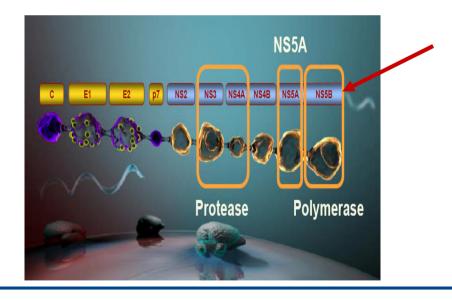
#### TMC649 (HCV Pol) – a major commercial opportunity

- EUR 147 million deal value
  - ~ EUR 100 million outstanding
  - Royalties on global sales
- Medivir retain Nordic market rights
  - Prevalence of chronic HCV infected ~115,000
  - Current treatment rates ~ 3 000



#### TMC649 (HCV Pol) – summary status

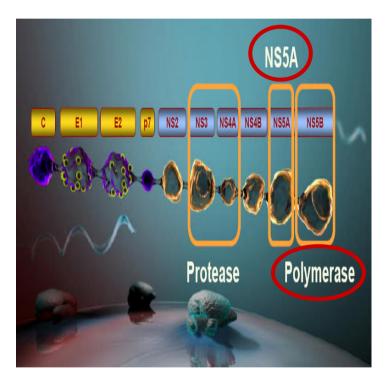
- Nucleoside/tide NS5B inhibitor
- An ideal DAA agent for future TMC435 combination regimens
- High barrier to resistance and broad genotype coverage
- Long patent life
  - IP extending to 2027 and 2029
- <u>Phase 1 trials ongoing</u>





## **HCV Preclinical In-House Programs**

- An internal NS5B nucleoside/tide program
- A NS5A program in LO phase





## **Commercializing TMC435 – Our Core Product**



- Strong safety profile: no adverse events over SoC in the Phase 2b PILLAR and ASPIRE studies
- Excellent anti-viral efficacy shown in Phase 2b PILLAR and ASPIRE studies
- Convenient: one pill and once daily, no food interactions
- Phase 3 clinical trials: underway since Feb 2011, recruitment progressing well



## Hepatitis C PI – the competitive landscape

Phase 1a	Phase 1b	Phase 2a		Phase 2b		Phase 3	Registration
VPY-376	ACH-1625	ABT-450		anoprevir -7227 <b>?</b>	TN	IC435	Telaprevir VX-950
PHX1766			В	MS-650032			Boceprevir SCH-503034
IDX320			G	S-9256			
MK-5172				aniprevir <b>?</b> IK-7009			
HCV PI's in co	mbination with <b>D</b>	AAs and SoC		BI201335			
<ul> <li>Combinations of DAA agents:         <ul> <li>Telaprevir in phase 2a in combination with VX-222 (NNRTI) +/- SoC</li> <li>Danoprevir in phase 2a in combination with R7128 (NI) +/- SoC</li> <li>BMS-650032 in phase 2a in combination with BMS-790052 (NS5A inh) +/- SoC</li> <li>GS-9256 in combination with GS-9190 (NNRTI) +/- Ribavarin</li> </ul> </li> </ul>			٦	Varlaprevir <b>?</b>	]		
Note: nanoprevir and ABT-4	50 require ritonavir-boosting						



## **TMC435 Late Stage Clinical Trial Programme**

Follow Up Phase

Phase 2b studies

PILLAR (C205) – 386 genotype-1 infected treatment-naïve patients

DRAGON (C215) – 92 genotype-1 infected treatment-naïve patients

ASPIRE (C206) – 462 genotype-1 infected treatment-experienced patients

#### **Recently Initiated**

Phase 3 studies

QUEST 1 (C208) 375

genotype-1 infected treatment-naïve patients

QUEST 2 (C216) 375

genotype-1 infected treatment-naïve patients

PROMISE (C3007) 375 genotype-1 infected relapsed patients

Phase 3 studies started in Japan both in naïve and treatment experienced genotype-1 infected patients

For additional information on inclusion and exclusion criteria for these studies, please see <u>www.clinicaltrials.gov</u>



## TMC435 Phase 2b: Strong Safety and Efficacy Data

SVR24 Data from 24-Week Interim analysis Phase 2b PILLAR Trial in Treatment-naïve Hepatitis C Patients

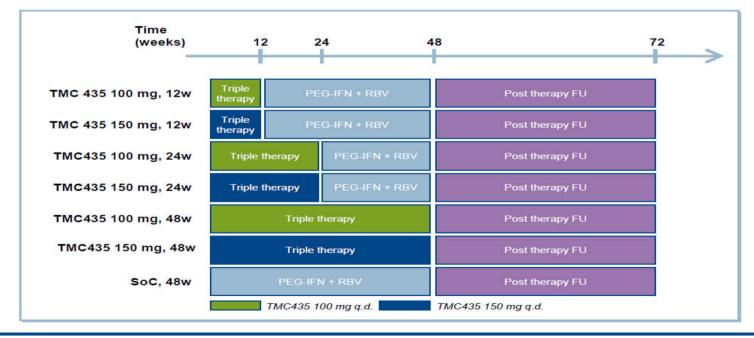
- In the TMC435 treatment groups 83% of patients were able to stop all therapy at week 24
- Potent and consistent antiviral efficacy was demonstrated with SVR24 rates of up to 84%
- TMC435 was safe and well tolerated



## TMC435 Phase 2b study design

#### ASPIRE (C206)

- TMC435-C206 is a global phase 2b study in 462 genotype-1 treatment-experienced patients
- Once daily (*q.d.*), 100 mg and 150 mg, of TMC435 + SoC:
  - 12-week triple therapy followed by 36 weeks of SoC
  - 24-week triple therapy followed by 24 weeks of SoC
  - 48-week triple therapy

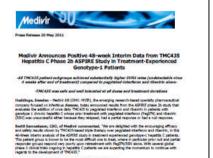




## TMC435 - Further Positive Phase 2b 48-Week ASPIRE Interim Data

- All TMC435 patient subgroups achieved substantially higher SVR4 rates (undetectable virus 4 weeks after end of treatment) compared to pegylated-interferon and ribavirin alone
- SVR4 rates: 88% vs. 50% in prior relapsers, 77% vs. 11% in prior partial responders and 57% vs. 23% in prior null responders
- Patient experienced patient group most difficult to treat
- 62 percent (287/462) of patients overall had advanced liver disease
- TMC435 was safe and well tolerated at all doses and treatment durations

Virological Response Rates in TMC435 Dose Groups (150 mg q.d.) vs Placebo										
% (n/N)		TMC435 <b>12</b> PR48 N=66	TMC435 <b>24</b> PR48 N=68	TMC435 <b>48</b> PR48 N=65	All TMC435 PR48 N=199	Placebo PR48 N=66				
Prior Relapser	ЕоТ	92 (24/26)	93 (25/27)	92 (24/26)	92 (73/79)	70 (19/27)				
	SVR4	84 (21/25)	93 (25/27)	85 (22/26)	87 (68/78)	50 (12/24)				
Prior Partial	ЕоТ	78 (18/23)	83 (20/24)	86 (19/22)	83 (57/69)	17 (4/23)				
Responder	SVR4	64 (14/22)	86 (18/21)	82 (18/22)	77 (50/65)	11 (2/18)				
Prior Null Responder	ЕоТ	65 (11/17)	71 (12/17)	77 (13/17)	71 (36/51)	25 (4/16)				
	SVR4	56 (9/16)	60 (9/15)	56 (9/16)	57 (27/47)	23 (3/13)				



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