A collaborative and agile pharmaceutical company with an R&D focus on infectious diseases and a leading position in hepatitis C

EASL Medivir presentation 27 April

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Value proposition – a platform for growth and profitability

Innovative portfolio that will evolve over time

- World class expertise in polymerase and protease drug targets
- R&D focus on infectious diseases

Strong position in HCV – goal is take part in eradicating hepatitis C

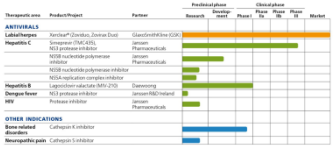
- Simeprevir, partnered with Janssen Pharmaceuticals
  - Regulatory files have been submitted in EU, US and Japan
  - Many interferon-free combination treatments opportunities
- In-house HCV programs will offer new combination opportunities

Commercial presence in the Nordic region creates stability

BioPhausia – a Medivir sales company

- Solid brand names with annual sales of ~85 MUSD
- Commercial platform for the launch of simeprevir in the Nordics in 2014
- Pharmaceutical portfolio will be broadened

2013 - Setting the framework for becoming
The Emerging European Pharma Company



Structure

- Broader, risk balanced, R&D pipeline
- Continued commitment towards targets in infectious diseases
- Addressing new therapeutic areas based on core competence

- Partner of choice for both pharmaceuticals and development programs

- Expansion of product portfolio, including simeprevir and other in-house developed pharmaceuticals

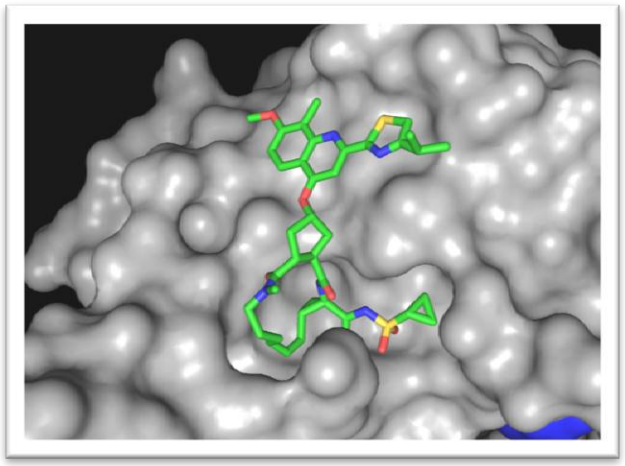
External perspective

- Top ranked as a listed company
- Profitable and fast growing Nordic based pharmaceutical company

Simeprevir – An update

Charlotte Edenius

Simeprevir



- One-pill, once-daily, investigational, oral HCV NS3/4A protease inhibitor

- Antiviral activity against HCV GT 1, 2, 4, 5, and 6
- Safe and well tolerated in clinical trials, with high SVR rates
- Three large pivotal phase III studies of SMV 150 mg QD plus PegIFN/RBV completed (QUEST-1 and QUEST-2 in treatment-naïve and PROMISE in prior relapsers)
- Simeprevir is currently being studied in a number of IFN-free regimens, including the COSMOS study

Simeprevir - clinical development programs in HCV G1 & 4 infected patients

Pivotal phase III studies:

- **QUEST 1** treatment-naïve
- **QUEST 2** treatment-naïve
- **PROMISE** prior relapsers
- **Japan** naïve & experienced (four studies)

Regulatory files submitted in US (March-13) and in EU (April-13)

Regulatory file submitted February 2013

Other ongoing phase III studies:

- **China:** Efficacy, PK, safety and tolerability in naïve patients
- **ATTAIN:** Simeprevir vs telaprevir in prior null or partial responders
- **RESTORE: HCV genotype 4 infected** naïve or treatment experienced patients
- **C212: HIV-HCV** co-infected treatment naïve and treatment experienced patients

Regulatory filings for simeprevir triple combination submitted in US, EU & Japan

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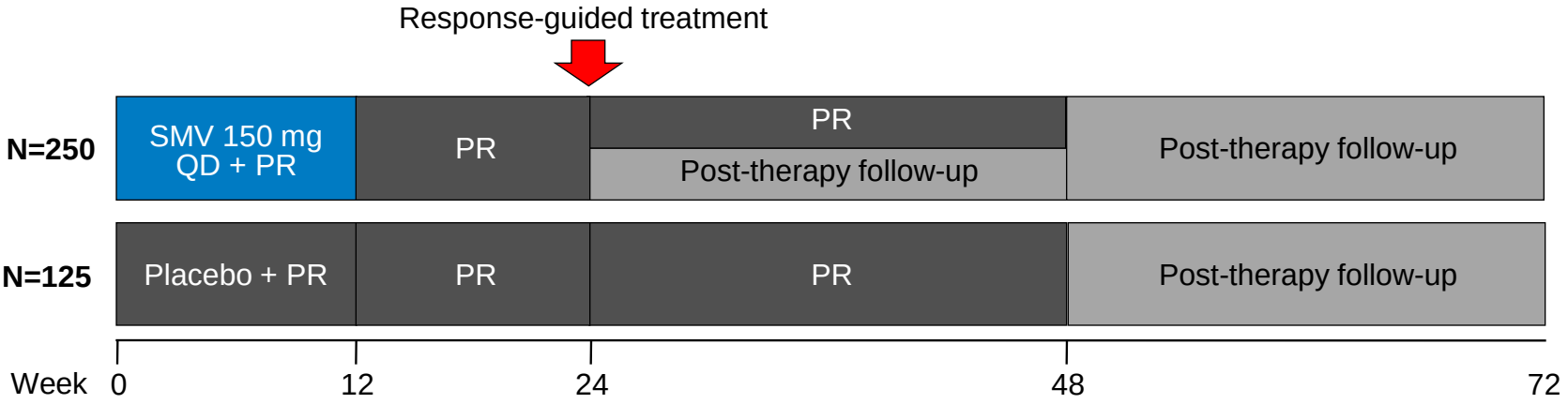
For additional information, please see www.clinicaltrials.gov

Simeprevir - Phase III Study designs in HCV GT1 infected patients (QUEST-1, QUEST-2 and PROMISE)

- Randomized, double-blind, placebo controlled design
- Patients were stratified by HCV subtype and IL28B genotype



PR: PegInterferon + Ribavirin

Studies:

QUEST-1: n=394, naive (METAVIR score F3-F4: 30%)

QUEST-2: n=391, naive, (METAVIR score F3-F4: 22%)

PROMISE: n=393, prior relapsers, (METAVIR score F3-F4: 31%)

Top line data Dec-12

Reported at EASL 2013

Summary: SVR12 data from QUEST-1 and QUEST-2

Patients with SVR12 %	QUEST-1		QUEST-2	
	SMV + PR	Placebo + PR	SMV + PR	Placebo + PR
All patients	**80**	50	**81**	50
SVR12 with 24 wks treatment (% pat meeting RGT criteria)	**91 (85)**	N/A	**86 (91)**	N/A
CC / CT / TT	**94 / 76 / 65**	78 / 42 / 24	**96 / 80 / 58**	81 / 41 / 19
GT1a & other / GT1b	**71 / 90**	49 / 52	**80 / 82**	46 / 53
F0-F2	**83**	60	**85**	51
F3-F4	**70**	28	**66**	47

Robust data from two large placebo-controlled studies including a large proportion of patients with advanced liver fibrosis (F3-F4)

Summary: adverse events QUEST-1 and QUEST-2 across all treatment phases

Patients, %	QUEST-1		QUEST-2	
	SMV/PR (N=257)	PBO/PR (N=134)	SMV/PR (N=257)	PBO/PR (N=134)
Most common AEs (≥25% in SMV arm)				
Fatigue	42	41	37	42
Pruritus	26	16	25	25
Headache	33	39	39	37
Pyrexia			31	40
Influenza-like illness			26	26
Other AEs of interest				
Rash (any type)	34	32	27	20
Anemia	20	28	21	28
Photosensitivity*	3	1	4	1

* Over the first 12 weeks treatment

Overall incidence of adverse events was similar to placebo control

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Simeprevir - Phase III triple therapy
Summary

Robust efficacy with high cure rates (SVR12):

- Naive and relapser patients in three large global studies: 79-81%[1]
- Confirmed in Japan program, where high cure rates where demonstrated[2]

✓Broad filing on treatment naive and non-responders

High cure rates with 24 weeks treatment duration

- 85-93% stopped all treatment at 24 weeks (QUEST-1 & -2 and PROMISE)
- High SVR12 rates 86-91% (QUEST-1 and -2, PROMISE data to be presented)

Excellent safety and tolerability

- Overall incidence of adverse events similar to placebo, including rash and anemia
- Confirmed in Japanese studies

Regulatory filings for simeprevir triple combination submitted in US, EU & Japan

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1 All three trials included hard-to-cure patients with advanced liver fibrosis/cirrhosis (METAVIR score F3-F4)

2 To be presented at an upcoming medical meeting

Simeprevir - clinical development programs in HCV G1 & 4 infected patients

Pivotal phase III studies:

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Other ongoing phase III studies:

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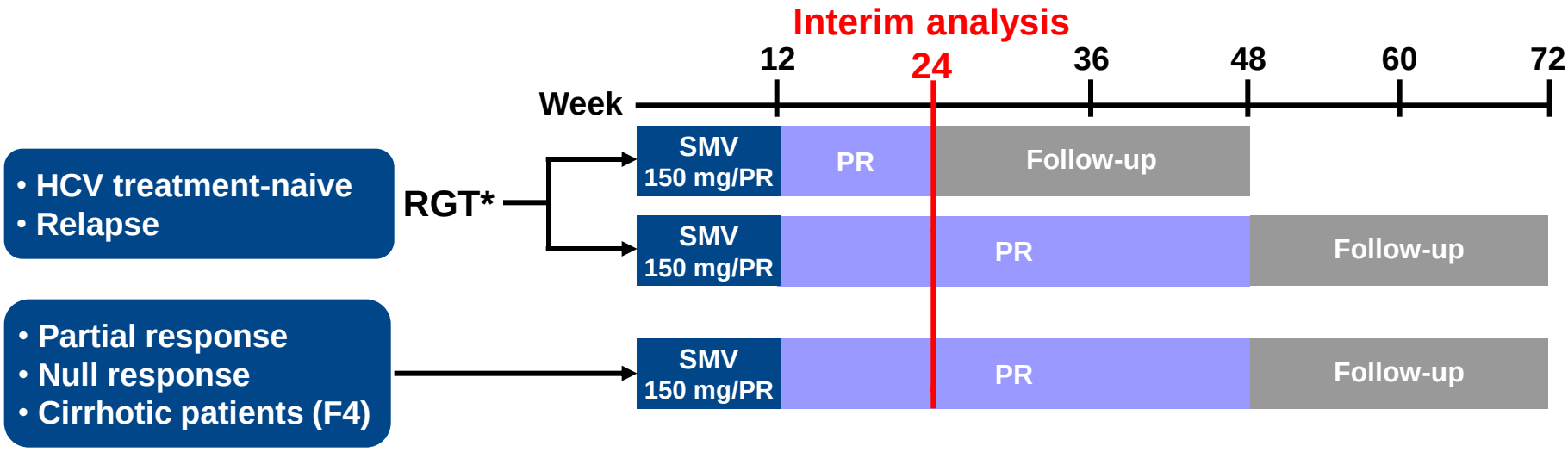
C212 HCV-HIV Co-infected

Study design



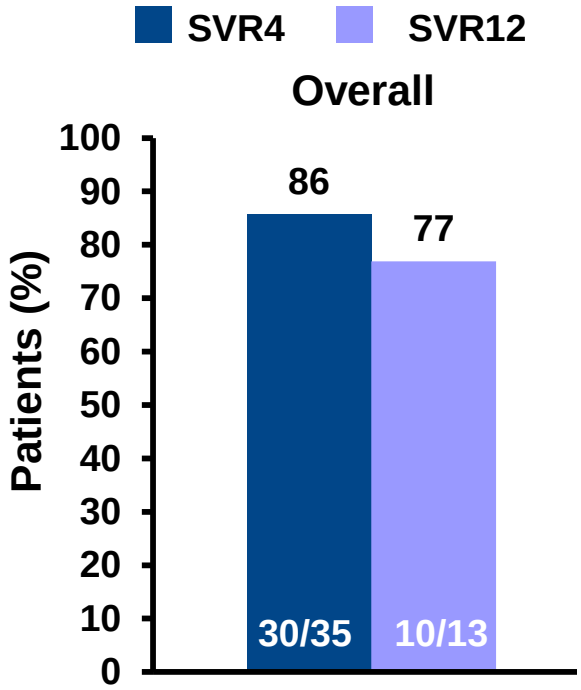
Interim analysis:

- **All patients included in the analysis had completed 24 weeks of treatment or had discontinued prior to that point**

- **No. of patients:** **Week 24: N=100**
  Week 28: N=71
  Week 36: N=27

C212: HCV-HIV Co-infected

Preliminary SVR4 and SVR12 rates in patients treated with SMV/PR



- 82% GT1a,
- 21% (METAVIR F3/4)
- 93 out of 106 patients on ARV therapy
- 88% met RGT criteria and stopped all treatment at W24
- Simeprevir was safe and well tolerated
- No HIV breakthroughs

In the US 25 % of HIV patients are coinfected with HCV

Simeprevir

- All oral interferon free combination update

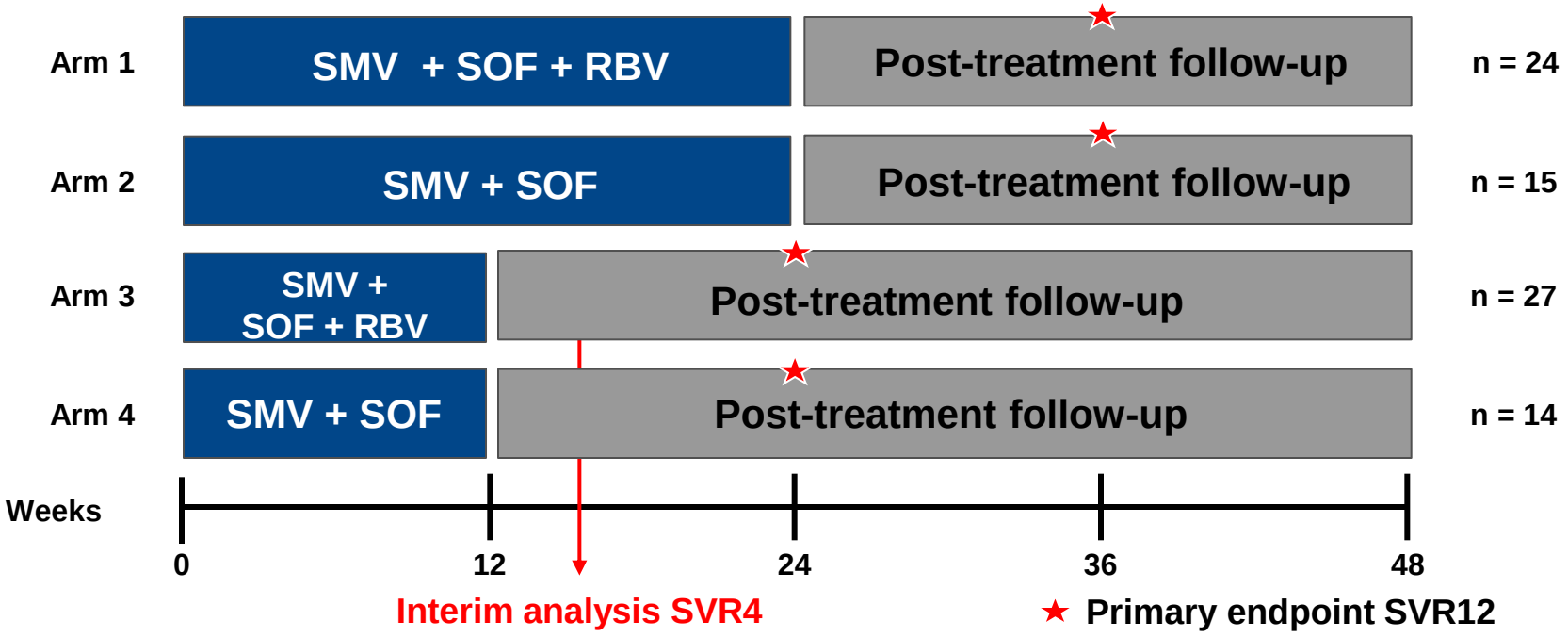
COSMOS Study

(interim analysis)

Once-daily regimen of simeprevir plus sofosbuvir with or without ribavirin in HCV genotype 1 null responders*

*The **COSMOS** study**: CO**mbination of **SiM**eprevir and s**O**fosbuvir in HCV infected patie**ntS**

COSMOS study - Design



- **Cohort 1: n=80, nulls, F0-F2**
- **Cohort 2: n=87, naives and nulls, F3-F4**
- **SMV 150 mg QD + SOF 400 mg QD with/without RBV**
- **Interim analysis of Cohort 1 conducted when all patients in 12 week treatment arms reached SVR4 time point or discontinued early**

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COSMOS study - Baseline patient demographics and HCV disease characteristics

Patients		Total (n=80)
Patient demographics		
Male		61%
Race	Caucasian	71%
	African American	29%
Ethnicity	Hispanic/Latino	25%
Age, years, median		56.0
BMI, kg/m^2, median		27.5
IL28B	nonCC	94%
Baseline characteristics		
HCV subtype 1a		78%
HCV RNA, median, $\log_{10}$ IU/mL		6.8
METAVIR score	F0-F1	41%
	F2	59%

COSMOS study – Efficacy results (interim analysis)

Patients	24 weeks		12 weeks	
	SMV + SOF +RBV (n=24)	SMV + SOF (n=15)	SMV + SOF+ RBV (n=27)	SMV + SOF (n=14)
RVR[1], n/N (%)	18/22 (81.8)	10/15 (66.7)	23/27 (85.2)	8/14 (57.1)
Undetectable end of treatment, n/N (%)	10/12 (83.3)	8/9 (88.9)	27/27 (100)	14/14 (100)
Relapse, n	0	0	1	1
SVR4, n/N (%)	4/6 (66.7)	5/5 (100)	26/27 (96.3)	13/14 (92.9)
SVR8, n/N (%)	**4/6 (66.7)**	**5/5 (100)**	**26/27 (96.3)**	**13/14 (92.9)**

Of the patients in the **12 week arms** who achieved SVR8

– **24/24** who reached post-treatment Week 12 had achieved **SVR12**

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[1]RVR is based on patients with available data at Week 4 (2 patients discontinued before Week 4)
EOT, end of treatment; RVR, rapid virologic response; SMV, simeprevir;
SOF, sofosbuvir; SVR, sustained virologic response

COSMOS study - Summary & Conclusions

- SMV + SOF with or without RBV for 12 weeks yielded high SVR rates in prior null responders with mild to moderate fibrosis (METAVIR F0-F2)
  - ✓ **SVR8 rate of 96% with RBV and 93% without RBV**

- SMV + SOF was safe and well tolerated
  - ✓ Anemia was seen only in RBV arms
  - ✓ Bilirubin increases only occurred in RBV containing arms

Enrollment of Cohort 2 is complete and include prior null responders and treatment-naïve patients all with advanced fibrosis (METAVIR F3-F4)

Simeprevir in interferon-free combinations

			Ribavirin		
Simeprevir	**+**	**Sofosbuvir** (nucleotide)	**+/-**	12w	N=80+87 ✓Cohort a: nulls, F0-F2 Cohort b: nulls + naives; **F3/4 (cirrhotics)**
			+/-	24w	
Simeprevir	**+**	**Daclatasvir** (NS5A inhibitor)	**+/-**	12w	N=180 Naives and nulls **Incl. F3/4 up to 35 %**
			+/-	24w	
Simeprevir	**+**	**TMC647055/r** (NNI; non-nucleoside)	**+/-**	12w	Naives/relapser and nulls Non-cirrhotics
Simeprevir	**+**	**VX-135** (nucleotide)	**+/-**	12w	Phase II to start H1 2013
Simeprevir	**+**	**IDX719** (NS5A inhibitor) **+/- TMC647055/r**	**+/-**	12w	DDI study started

Simeprevir is strongly positioned to become a principal component of future IFN-free therapies

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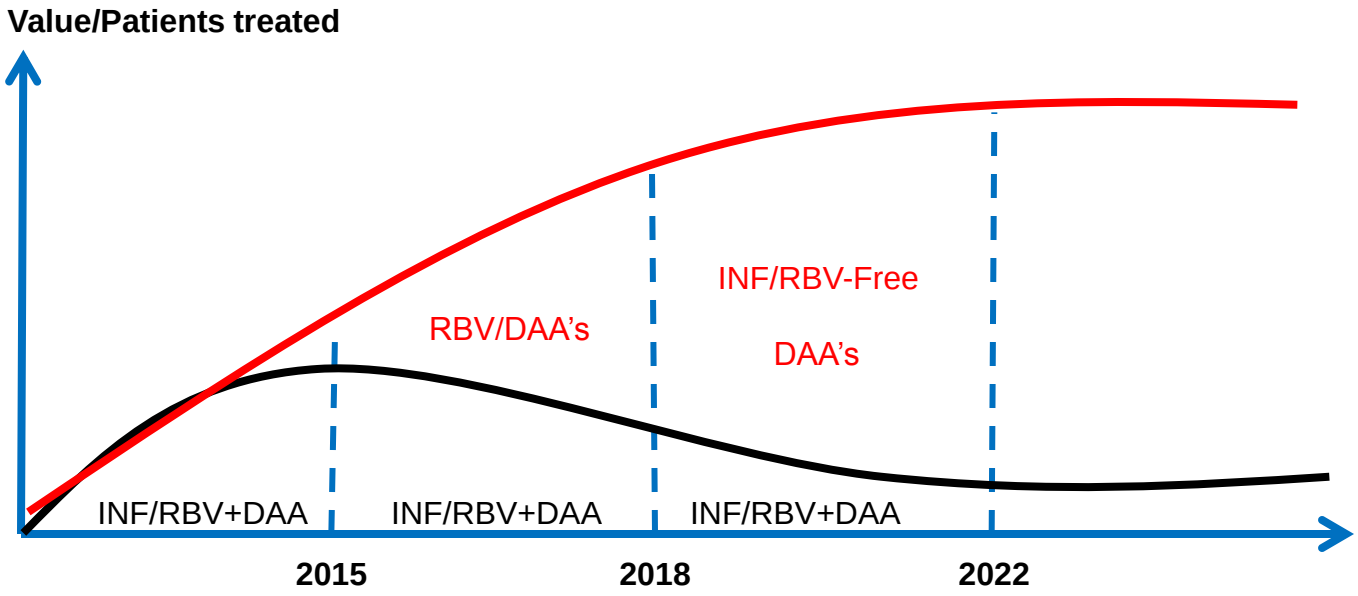
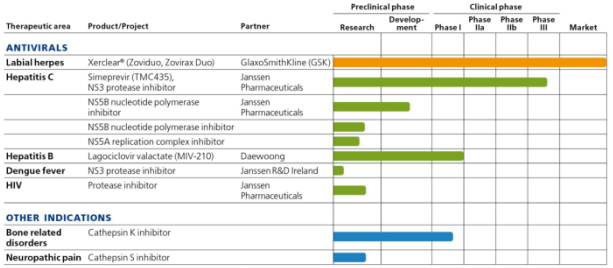
For additional information, please see www.clinicaltrials.gov

Long term goal – eradication of hepatitis C

The evolution in treating hepatitis C will expand the market value, number of patients treated and regions over the next 10-15 years



News flow - highlights



- ✓ Q4-12 Start of Cohort 2 with simeprevir and GS7977 phase II study
- ✓ Q4-12 Top line results from phase III trials with simeprevir (Quest 1+2 and Promise)
- ✓ Q1-13 Filing for regulatory approval in Japan
- ✓ H1-13 EoT and partial SVR data from Cohort 1 with simeprevir and sofosbuvir phase II study
- ✓ H1-13 Filing of simeprevir in Japan, the US and EU
- H1-13 Potential CD selection in Cathepsin S (neuropathic pain) program
- H1-13 Results from phase I-study with MIV-711, our cathepsin K inhibitor (bone related disorders)
- H1-13 Start of Phase II with simeprevir and VX-135
- H1-13 Step two in GSK launch strategy for Xerclear® (ZoviDuo), launch in major European OTC markets
- H2-13 Potential CD selection in our internal Nucleotide NS5B inhibitor program
- H2-13 Potential CD selection in our internal NS5A inhibitor program
- H2-13 Goal to start phase I trials with Medivir/Janssen nucleotide NS5B-inhibitor
- H2-13 Data from the phase II combination study with simeprevir and daclatasvir
- H2-13 SVR data from Cohort 2 with simeprevir and sofosbuvir phase II study

www.medivir.com

Ticker: MVIR
Exchange: OMX / NASDAQ

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