



*A research based specialty pharmaceutical company focused on
infectious diseases*

US Road Show December 2011

Maris Hartmanis, President and CEO
Charlotte Edenius, EVP Research & Development
Rein Piir, EVP Corporate Affairs & IR

An emerging research-based specialty pharmaceutical company

- Founded in 1988 as a spinout from AstraZeneca
- Listed in 1996 and traded on Nasdaq OMX Stockholm
- World leading science base in infectious diseases
- TMC435, a potential blockbuster for hepatitis C, in clinical phase 3
- Project portfolio of 11 projects, of which seven are run by partners. All rights for the Nordics are reserved
- First internally developed product, the cold sore pharmaceutical Xerclear®/ Xerese®, is currently in launch phase
- BioPhausia was acquired in 2011 to strengthen commercial platform
 - BioPhausia - marketing and sales of original Rx pharmaceuticals
 - Cross Pharma - marketing and sales of parallel imported pharmaceuticals



Strategy

- Add new products, both short and mid term to the Nordic commercial platform which will enable Medivir to approach its goal of becoming profitable
- Fine-tune the commercial platform for launch of TMC435 in the Nordic region
- Strengthen Medivir's position in the infectious disease, but also evaluate new therapeutic areas for the future through innovation based on the company's advanced protease and polymerase R&D platform



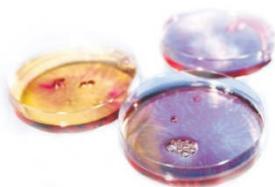
Our goal is to become a profitable research-based specialty pharmaceutical company focusing on infectious diseases, which creates value for our shareholders and enhances patients' quality of life

Key innovation and commercialisation advantages



Medivir has a strong position in HCV drug development – both partnered and internal programs for 3 different target classes

- The front runner, TMC435 – Considered “best in class PI” hepatitis C drug
- Global phase III trials fully recruited in G1 patients for TMC435, H1-2013 expected filing date
- Interferon-free combination trials is the next major development step



Strong pipeline in R&D

- Strong pipeline of innovative infectious disease drugs
- World class expertise in polymerase and protease drug targets



Commercial presence and platform in the Nordics

- Strong brand names in several therapy areas, annual sales of ~75 MUSD with an EBITDA of ~15 MUSD
- Established commercial platform ready for TMC435 launch in the Nordics



Xerclear® / Xerese® - global launch in 2011/2012

- Cold sore drug with an unique, differentiated profile and blue-chip marketing partners. First in-house developed product on the market.

Commercial presence and platform in the Nordics

The Annual R&D burn rate is around US 44m

Own Pharmaceuticals – Revenue US 30m
EBITDA US 10m

Parallel imported – Revenue US 43m
EBITDA US 4m

The net burn rate is around
US 30m

**Present cash at
bank US 78m**

Future revenues

Infectious disease products –
Prescription products directed to specialist
care - TMC435 and other that will be other
products in the future

TMC435 milestone payments at
registration and approval US 40m during
2013

TMC435

➤ Robust clinical data package in HCV G1-infected patients

- One pill, once-daily – “convenience translates into compliance”
- Very good safety and tolerability profile – no additional adverse effects
 - More than 3 years of global clinical experience in HCV G1-infected patients*
- Significantly higher SVR rates in all patient populations studied in phase IIb, when added to interferon/ribavirin, notably in null and partial responders

Regulatory filing for the treatment of HCV genotype-1 infected patients anticipated in first half of 2013

TMC435 is being developed along two major development lines

TMC435 plus PegIFN/RBV – Broad global regulatory filing for the HCV genotype 1 patient populations is anticipated in H1 2013

- **TMC435 plus a direct acting antiviral (PegIFN-free and RBV free)**

Medivir/Tibotec/JNJ is aiming to develop the most competitive TMC435 based PegIFN-free combination, with or without ribavirin

- TMC435 plus PSI-7977, phase II combination trial in genotype 1 null responders is under way. Data will be available 2013
- TMC435 in combination with daclatasvir (BMS-790052), phase II combination trial in genotype 1, to commence in H1-2012
- The aim is to achieve a broad label in both treatment experienced and in treatment naïve HCV genotype 1 infected patients (with or without RBV)

The TMC435 development strategy is aimed at becoming the preferred backbone component in future HCV treatments

Important key messages

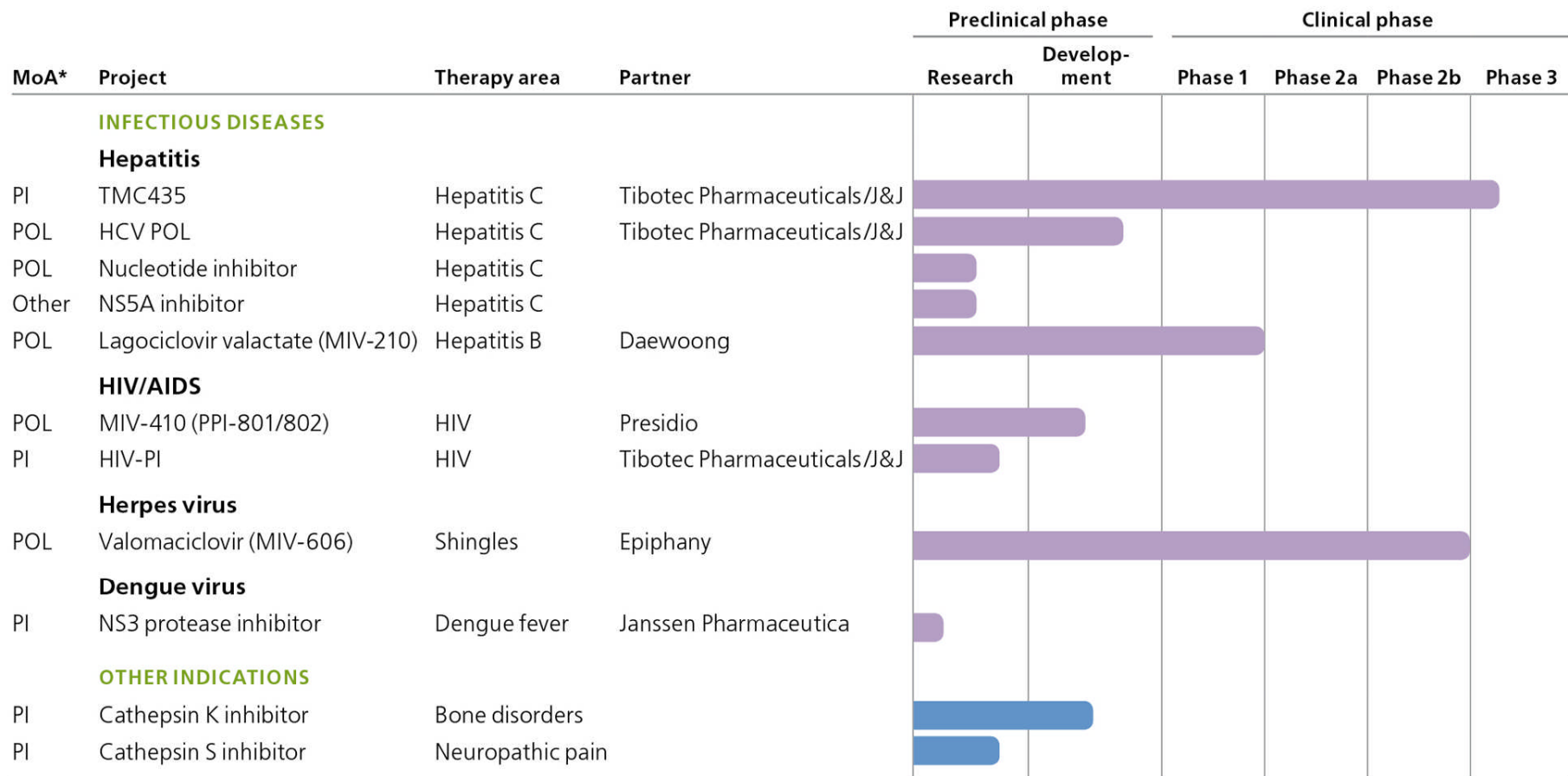
- Our commercial platform in the Nordic region will enable us to add new pharmaceuticals to the portfolio and move towards becoming a profitable research driven specialty pharmaceutical company
- The hepatitis C portfolio. including TMC43,5 gives room for a broad approach in hepatitis C drug development including DAA combinations.
- Strong track record in innovation
- Many external partnerships validating core R&D platform

A solid platform for future growth



The Medivir Technology Platform and Project Pipeline

Strong pipeline with multiple paths to value creation



■ Projects targeting infectious diseases
 ■ Projects targeting other indications
 *Mode of Action

Cathepsin K inhibitors – osteoarthritis (OA) and osteoporosis

Disease and market

- **Osteoporosis, osteoarthritis and metastatic bone disease**
- Estimated combined global market opportunity in excess of USD 12 billion

Mechanism of Action (MoA) Cath K inhibition

- Reduced bone resorption and cartilage breakdown
- Maintained bone formation in contrast to other anti-resorptives

Dog OA model - Results

Urinary biomarkers for bone and cartilage resorption reduced by 86% and 80% respectively ($p < 0.001$)

Gross scores of bone and cartilage pathology reduced by 13-37 % in OA model in dog ($p < 0.05$)

Next decision point

- MIV-711 in preclinical development aiming for start of phase I clinical trials in H1 2012



Preclinical support for beneficial effects of cathepsin K inhibition in both osteoarthritis and osteoporosis

Cathepsin S inhibitor – neuropathic pain and rheumatoid arthritis

Disease and market

- Approximately 25 million patients worldwide suffer from neuropathic pain
- Estimated global market opportunity for neuropathic pain in excess of USD 2.3 billion, and rheumatoid arthritis (RA) is estimated to USD 7 billion

MoA for Cathepsin S inhibitor

- Inhibition of Cathepsin S prevents inflammatory damage to the sensory system in the spinal cord, by blocking fraktalkine activation

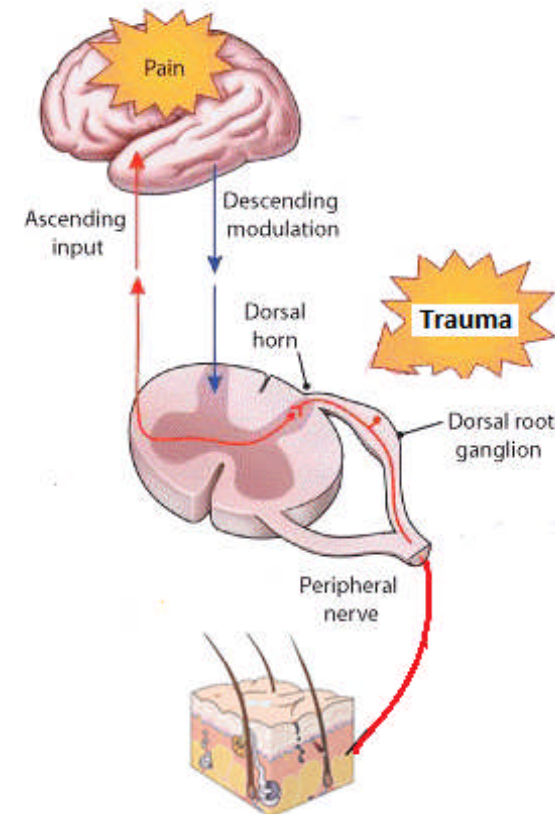
Cathepsin S inhibitor program

- Potent, selective and orally bioavailable inhibitors developed by Medivir

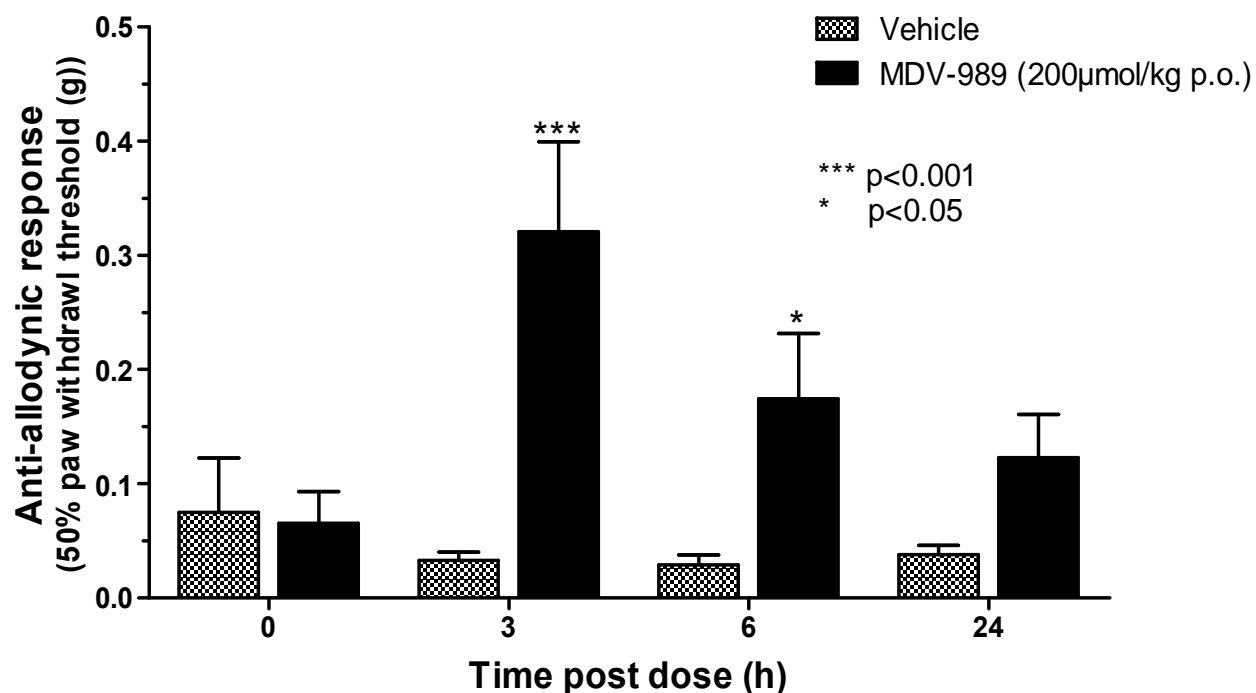
Next decision point

- Candidate drug selection

Principle for neuropathic pain



Cathepsin S inhibition and neuropathic pain



Excellent efficacy of a Medivir cathepsin S selective inhibitor in a murine neuropathic pain model

Dengue Fever – an increasing global threat

Medical need and market opportunity

- Dengue virus is a mosquito-borne infection causing a severe flu-like illness, and sometimes a potentially lethal complication - dengue haemorrhagic fever
- Up to 50 million infections occur annually in over 100 endemic countries (death rate approx. 30,000/year)
- Appr. 40% of world population are now at risk¹

Development strategy

- Several viral targets exist in the dengue virus including both protease and polymerase targets, where Medivir has strong core competences
- First focus on inhibition of the dengue virus NS3 protease essential for viral replication
- Joint venture with Janssen Pharmaceutica

¹ World Health Organisation, Fact sheet N°117, March 2009.



Hepatitis C - A rapidly evolving treatment landscape

Hepatitis C

Disease Background

- HCV is a large and global disease
- HCV genotype-1, the most difficult-to-treat, accounts for estimated 70% of world-wide HCV infections and even higher, ~75%, in US/EU
- Approx. 10-12 million are chronic HCV infected in the US, Europe and Japan
- Recent estimates (S. Saab, *et al*, Liver International 2011) suggest that a more accurate rate of chronic infection in the US is 5.2 million, up from the current estimate of 3.2 million.

New treatments beyond Incivek and Victrelis

Goals with next generation treatments – a clinician's view

- Improvements of SVR in **all** genotypes (21-34 % still not cured)
- Reduce side effects
 - Peginterferon and ribavirin: flu-like sptms, mood changes, anemia
 - Telaprevir: rash anemia, anal pain
 - Boceprevir: anemia, dygeusia
- Reduce “pill” burden
 - Injections (shots) 24, up to 48, total
 - Ribaverin up to 6//d
 - Telaprevir 6/day (q8h, with food) x 3 months
 - Boceprevir 12/day from 24-44 weeks
- Reduce treatment duration
- Eliminate need for interferon (RBV is still necessary....)
- Reduce costs

The market is expanding and in several phases

US data	2010	2015	2020
Treated total	50k	92k	120k
Naïves	30k	-	70k
Experienced	20k	-	50k
Influx new patients	19k	increase	increase

➤ **Early market growth:**

- Driven by improved treatment options for the large “in waiting” experienced population, ~700k in the US, Europe and Japan (~300K in the US)

➤ **Market growth in later years:**

- Driven by the huge treatment naïve patient population, HCV PegIFN-ineligible, deferred patient segments and new treatment experienced patients

➤ **Increased diagnosis rate will be key for sustainable market growth**

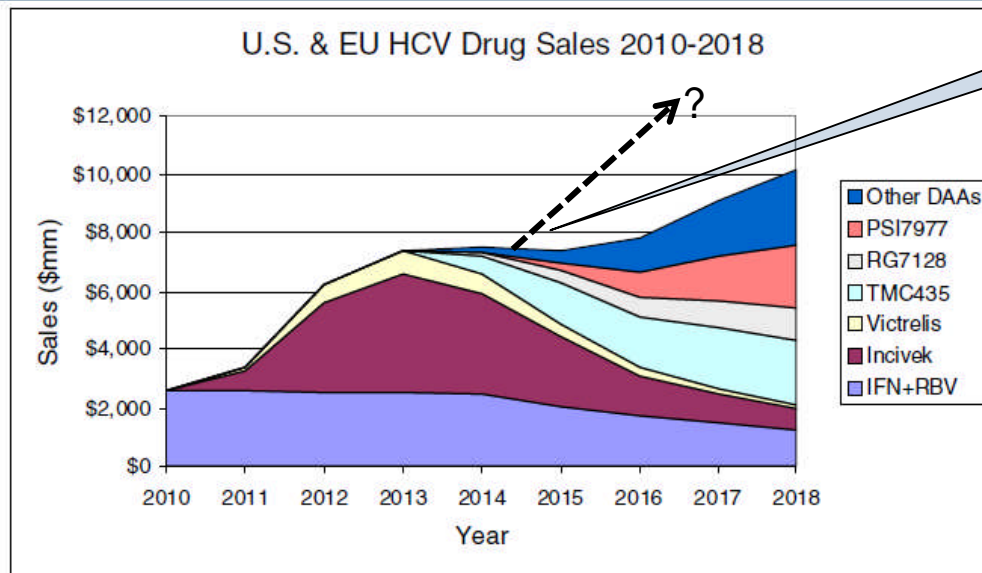
The Big Bang in Hepatitis C

Introduction of new competitive all-oral PegIFN-free treatment regimens, would be the largest driver for an increased market by triggering:

- increased treatment rates
- increased diagnosis rates
- new pool of eligible treaters

Exhibit 1: We Explosive Growth in the HCV Drug Market (18% CAGR from 2010-2018)

(Ex. JPN)



Source: Credit Suisse 2011

Introduction
PegIFN-free?

Next stage in market expansion is triggered by introduction of PegINF free therapies



Competitive Environment & Evolution of HCV Therapy

HCV genotype-1 infection is the most common and has the poorest treatment prognosis

There are six main genotypes, G1-G6 (G1-3 most common)

Genotype 1

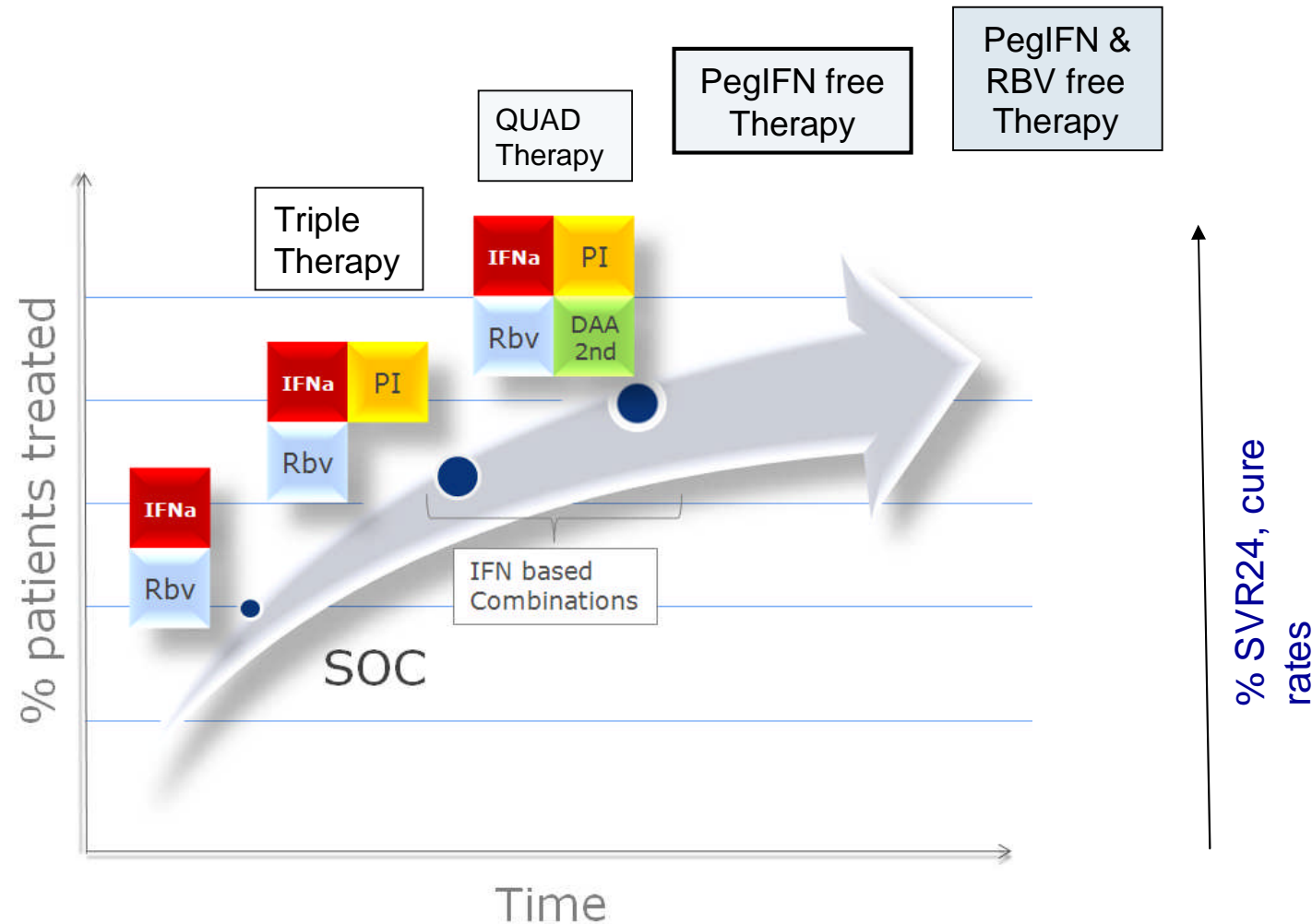
- the most common, ~75% in the US, EU and JPN.
- the most difficult to treat and to cure, only ~45%, with PegINF/RBV after 48 week treatment in treatment naïve patients

Genotype 2 and 3

- have generally a good treatment prognosis with PegINF/RBV with
- 24 weeks treatment
- Cure rates with 24 w of PegIFN/RBV:
 - G2: 80-93% SVR (cure rates)
 - G3: 66-80% SVR

TMC435 has broad genotypic coverage (1,2,4,5, and 6), development is focused on most difficult to treat G1 infected patients

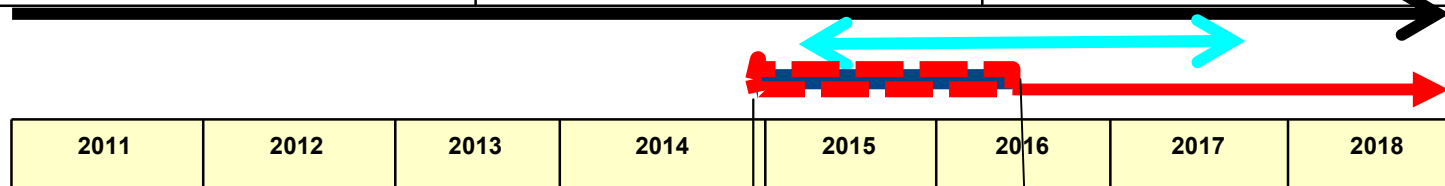
Evolution of HCV therapy in HCV genotype 1 infection



There are multiple paths leading to a PegIFN & RBV free therapy!

HCV Treatment Horizon – Genotype-1 focus on PegIFN free therapies

	Triple Therapy	QUAD Therapy	PegIFN free +/- R
Selected Competition	<ul style="list-style-type: none"> Telaprevir (Protease) +P/R Boceprevir (Protease) +P/R •TMC435 (Protease) +P/R BI201335 (Protease) +P/R DEB025 (Cyclophilin Inh) +P/R BMS790052 (NS5A) +P/R MK7009 (protease, JPN) +P/R 	Two DAAs + P/R	<ul style="list-style-type: none"> One DAA + R or Two DAAs +/- R or Three DAAs •TMC435 + PSI-7977 •TMC435 + daclatasavir PSI-7977 + daclatasavir PSI-7977 + R <p>Other combinations: Abbott, BMS, BI, Gilead</p>
Main Populations	Naïve & P/R treatment experienced	Null & partial responders Difficult to treat Naïve Triple Failure High price – high unmet need populations	PegIFN ineligible Treatment deferred Treatment experienced Naïve diagnosed patients (largest segment)
Key Attributes	Efficacy/Length of therapy Tolerability/AE profile Ease of Use	Efficacy Tolerability/AE profile Ease of use, Affordability	Efficacy, Ease of Use, FDC Length of Therapy



Evolution in HCV treatment

TMC435 well positioned to become the backbone of future HCV treatment

Before 2011

- Interferon (PegIFN) + Ribavirin (RBV)

Cure rates: 40-50 %

2011: First generation Protease Inhibitors

- Teleprevir and Boceprevir + PegIFN and RBV

Cure rates: 66-79 %

2013: Next generation Protease Inhibitors

- TMC435 + PegIFN and RBV

**Cure rates: 81-86 %
Most patients have
shorter treatment**

2014 and forwards: More treatment options

- New DAA's (Direct Acting Antivirals)
- PegIFN free treatment
- PegIFN and RBV free treatments
- Combinations of different DAA drugs

**Even better cure rates
Reduced side effects
Reduced treatment
time**

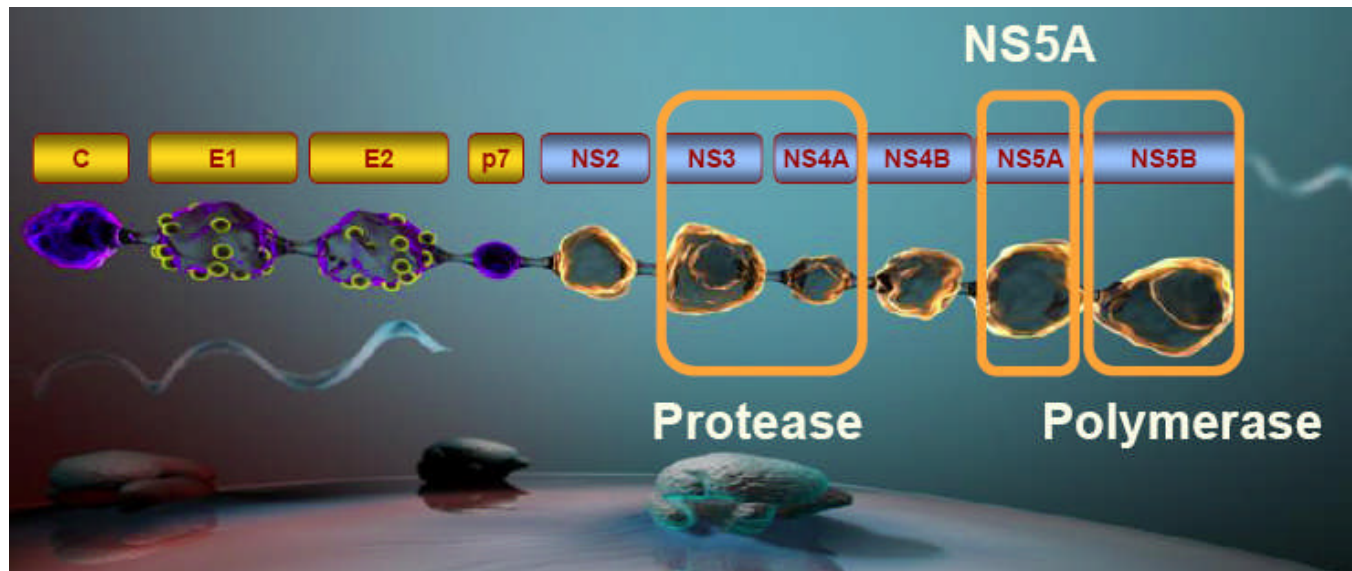


Our hepatitis C franchise

Medivir is committed to building a leading position in hepatitis C

Medivir is committed to building a leading position in Hepatitis C

Three major targets for Direct Acting Antivirals (DAAs) in HCV:



Kwong A, et al. Drug Discovery Today: Therapeutic Strategies 2006;3:211-220 Schmitz U, Tan SL. Recent Pat Antiinfect Drug Discov 2008;3:77-92

Medivir has active programs versus all three HCV targets

Medivir is committed to build a leadership position in Hepatitis C

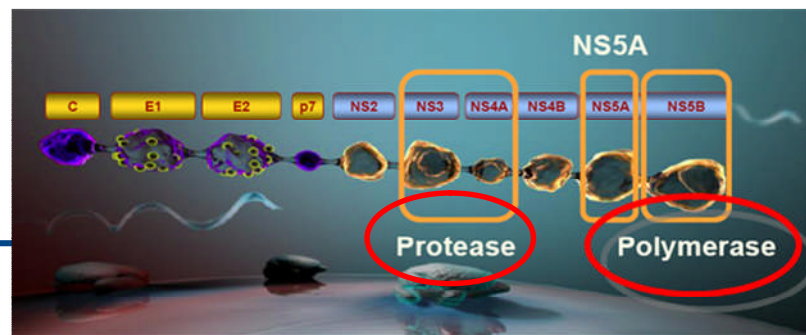
Partnered programs with  

Protease inhibitor (PI) – TMC435

- A potent, once-daily, safe and efficacious PI with broad genotypic coverage (1,2,4,5 and 6)
- Broad global phase III development program ongoing in genotype 1 infected patients

Polymerase inhibitors – nucleotide NS5B inhibitor

- A next generation, liver targeted nucleotide polymerase inhibitor program as part of ongoing partnership
Clinical Drug (CD) selected - approaching clinical development



Medivir is committed to build a leadership position in Hepatitis C

In-house, unpartnered programs

Polymerase nucleotide inhibitors

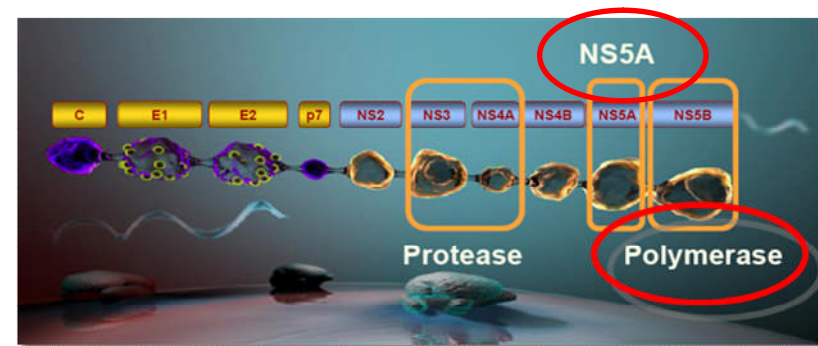
A novel liver targeting nucleotide inhibitor program - in preclinical phase

NS5A inhibitors

A next generation NS5A inhibitor with high barrier to resistance - in preclinical phase

Additional HCV activities

- Host factors as therapeutic targets
- Pharmacological tools and models





TMC435

**Phase III programs and other
clinical activities**

TMC435 – Broad clinical development program in HCV genotype 1 infected patients

Phase IIb

PILLAR (C205) n=386
G1 infected treatment-naïve patients

DRAGON (C215) n=92
G1 infected treatment-naïve patients in Japan

ASPIRE (C206) n=462
G1 infected *treatment-experienced* patients

Phase III

QUEST1 and QUEST2
n=375 per study
G1 infected treatment-naïve patients

PROMISE (C3007) n=375
G1 infected *prior relapsed* patients

Japan phase III program
Genotype-1 infected *naïve and treatment experienced* patients (four studies)

C3001
Genotype-1 infected *prior partial and null responders*
To be initiated

IFN free combinations

TMC435 and TMC647055, a non-nucleoside NS5B inhibitor developed by Tibotec Pharmaceuticals

TMC435 and PSI-7977*, a nucleotide NS5B inhibitor. A Phase II, interferon-free, 12 or 24 weeks, +/- ribavirin PoC study in G1 prior null responders

TMC435 and daclatasvir (BMS-790052), a NS5A inhibitor. A Phase II study in G1 patients

Regulatory filings anticipated H1-2013

TMC435 Phase IIb program in HCV G1 infected patients – *Summary of data*

Study	Patient population	SVR24	IFN/RBV treatment shortened from 48 to 24 weeks (RGT)
PILLAR	Treatment naive	81 - 86%	79 - 86%
DRAGON	Treatment naive (Japan)	82%	87%
ASPIRE	Relapsers	85%	-
	Partial responders	75%	-
	Null responders	51%	-

TMC435 added once daily to PegIFN/RBV treatment

- Is safe and well tolerated
- Significantly increases cure rates (SVR24) in HCV G1 infected patients

Robust clinical data with more than 1000 patients exposed

TMC435 – Phase III clinical development program in HCV G1-infected patients

QUEST 1 (C208) and QUEST 2 (C216)

- 375 x 2 *treatment-naïve* patients
- Once daily 150 mg TMC435 for 12 weeks plus IFN/RBV, RGT
- Primary endpoint: SVR12 (*as recently agreed with FDA*)

PROMISE (C3007)

- 375 *treatment-relapsed* patients per study
- Once daily 150 mg TMC435 for 12 weeks plus IFN/RBV, RGT
- Primary endpoint: SVR12 (*as recently agreed with FDA*)

Japan

- Four separate studies in naïve and treatment experienced patients including prior partial and null responders, all RGT

C3001 (To be initiated)

- *prior partial and null responder* patients
- Non-inferiority study TMC435 (150 mg, once daily) vs telaprevir (750 mg every 8 hours)
- Primary endpoint SVR12 (*as recently agreed with the FDA*)

All studies fully enrolled in Aug 2011

Regulatory filing for HCV G1-infected patients anticipated H1-2013

TMC435 – embarking on PegIFN (and RBV) free development programs

Phase II trials in g1 HCV infected patients with once daily combination treatments with TMC435 and:

A) a nucleotide NS5B inhibitor - PSI-7977

- Prior null responders patients (n=180)
- Treatments: 12 or 24 weeks and +/- ribavirin
- Primary endpoint: SVR12
- Status: initiated

B) an NS5A inhibitor - daclatasvir (BMS-790052)

- TMC435 and daclatasvir with Peg/IFN and ribavirin
- TMC435 and daclatasvir with ribavirin
- TMC435 and daclatasvir
- Endpoints: SVR12 and SVR24
- To be initiated first half of 2012

The TMC435 development strategy is aimed at becoming the preferred backbone component in future HCV treatments

TMC435 – Robust clinical data package in HCV G1-infected patients

- **More than 3 years clinical experience** in HCV G1-infected patients*
- **Significantly higher SVR rates in all patient populations** studied in phase IIb, when added to IFN/RBV
 - In treatment naïve AND treatment experienced, including null responders
 - Including patients with advanced liver disease
 - In Japan
- **Very good safety** and tolerability profile – no additional AEs
- **One pill, once-daily** – “convenience translates into compliance”
- **Phase II IFN-free combination studies** with PSI-7977(nucleotide inhibitor) and daclatasvir (NS5A inhibitor)

Regulatory filing for the treatment of HCV genotype-1 infected patients anticipated H1-2013



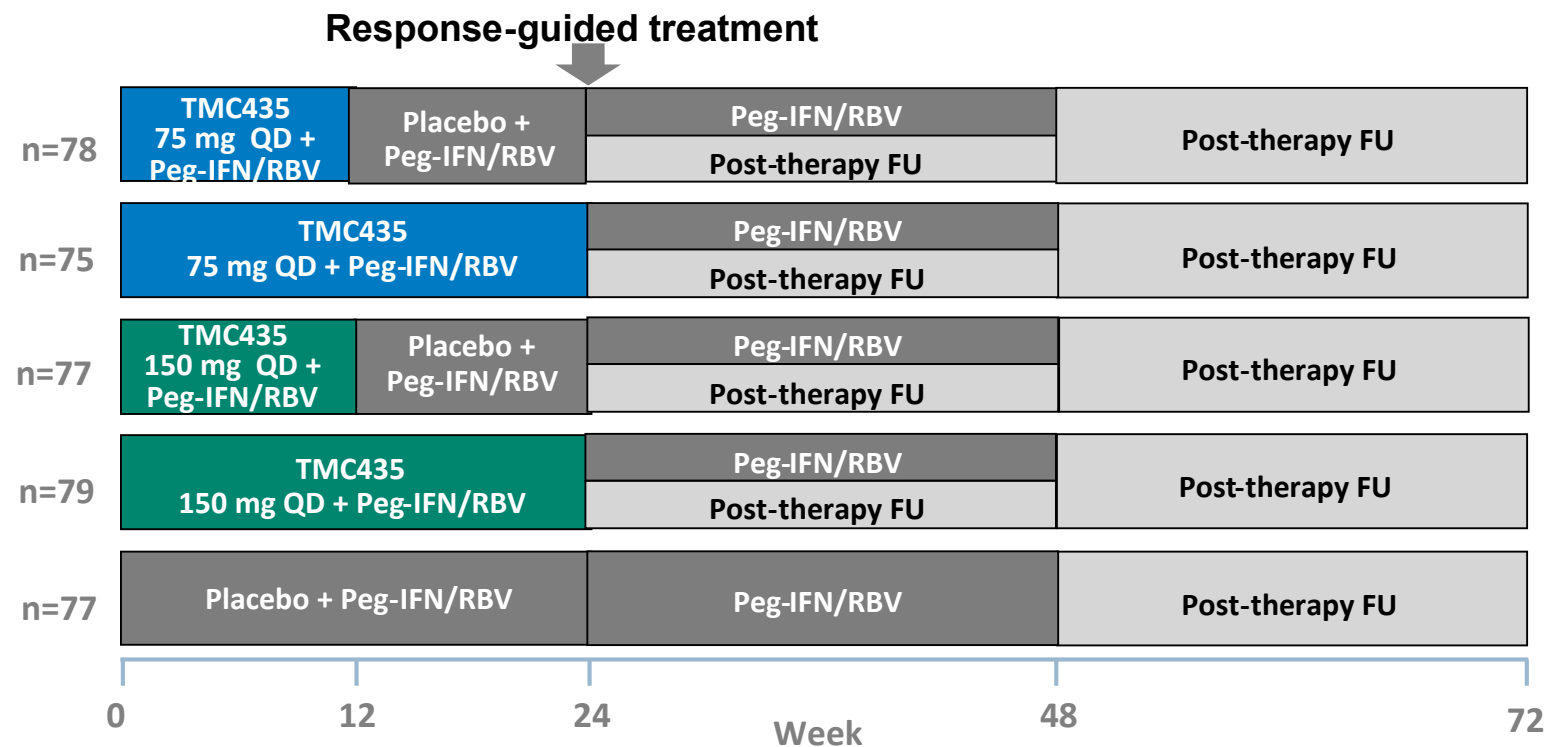
TMC435

Clinical phase IIb results

TMC435 Phase IIb (PILLAR) in treatment naïve patients - *study design*

Patients: 386 HCV genotype I infected patients

Dosage: Once daily TMC435 (75 or 150 mg) added to PegIFN/RBV for 12 or 24w



TMC435 Phase IIb (PILLAR) in treatment naïve patients - *efficacy results*

Response % (n/N)	TMC435 150 mg 12W P/R RGT N=77	TMC435 150 mg 24W P/R RGT N=79	Placebo 48W P/R N=77
RVR ¹	75(58/77)	75 (59/79)	5.2 (4/77)
EOT ²	92 (71/77)	94 (74/79)	79 (61/77)
SVR24³	81 (62/77)*	86 (68/79)**	65 (50/77)
Viral relapse	8.7 (6/69)	8.0 (6/75)	18 (11/62)
<p>* $p < 0.05$, **$p < 0.005$, significant difference versus placebo control; P/R, peginterferon α-2a + ribavirin; RGT: Response guided treatment</p>			

- 81-86% SVR24 rates in TMC435 (150 mg) dose arms
- 79-86% of patients could shorten IFN/RBV-treatment duration from 48 to 24 weeks and 93-96% of these achieved SVR24

TMC435 Phase IIb (PILLAR) in treatment naïve patients - *safety & tolerability results*

Number of subjects with AE: n (%)	All TMC435 N=309	Pbo/P/R 48W N=77
AE leading to permanent stop of TMC435/Pbo & PegIFN/RBV	11 (3.6)	4 (5.2)
Grade 3 or 4 AE	99 (32.0)	27 (35.1)
Serious AE	20 (6.5)	10 (13.0)
Five most common AEs		
Fatigue	131 (42.4)	37 (48.1)
Influenza-like illness	98 (31.7)	29 (37.7)
Pruritus	96 (31.1)	35 (45.5)
Headache	142 (46.0)	40 (51.9)
Nausea	86 (27.8)	21 (27.3)
AEs of interest		
Rash (any type)	65 (21.0)	18 (23.4)
Anemia	63 (20.4)	16 (20.8)
Neutropenia	75 (24.3)	16 (20.8)

No difference between TMC435 and placebo groups in incidence of:

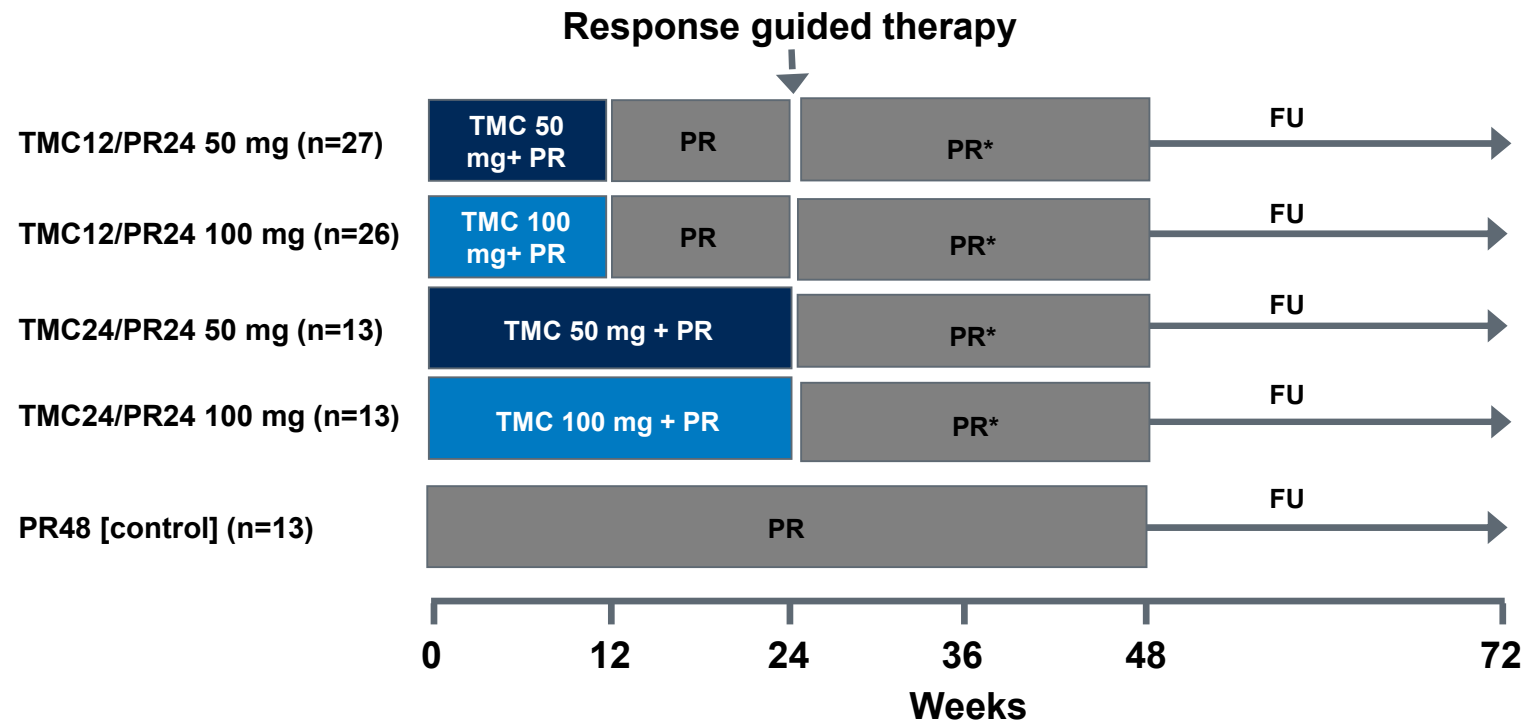
- AEs leading to discontinuations
- SAEs
- Grade 3 or 4 AEs or
- rash, anemia, or neutropenia

TMC435 was safe and well tolerated at all doses and durations

TMC435 Phase IIb (DRAGON) in treatment naïve Japanese patients - *study design*

Patients: 92 HCV genotype I infected patients in Japan

Dosage: Once daily TMC435 (50 or 100 mg) added to PegIFN/RBV for 12 or 24w



TMC435 Phase IIb (DRAGON) in treatment naïve Japanese patients - *study design*

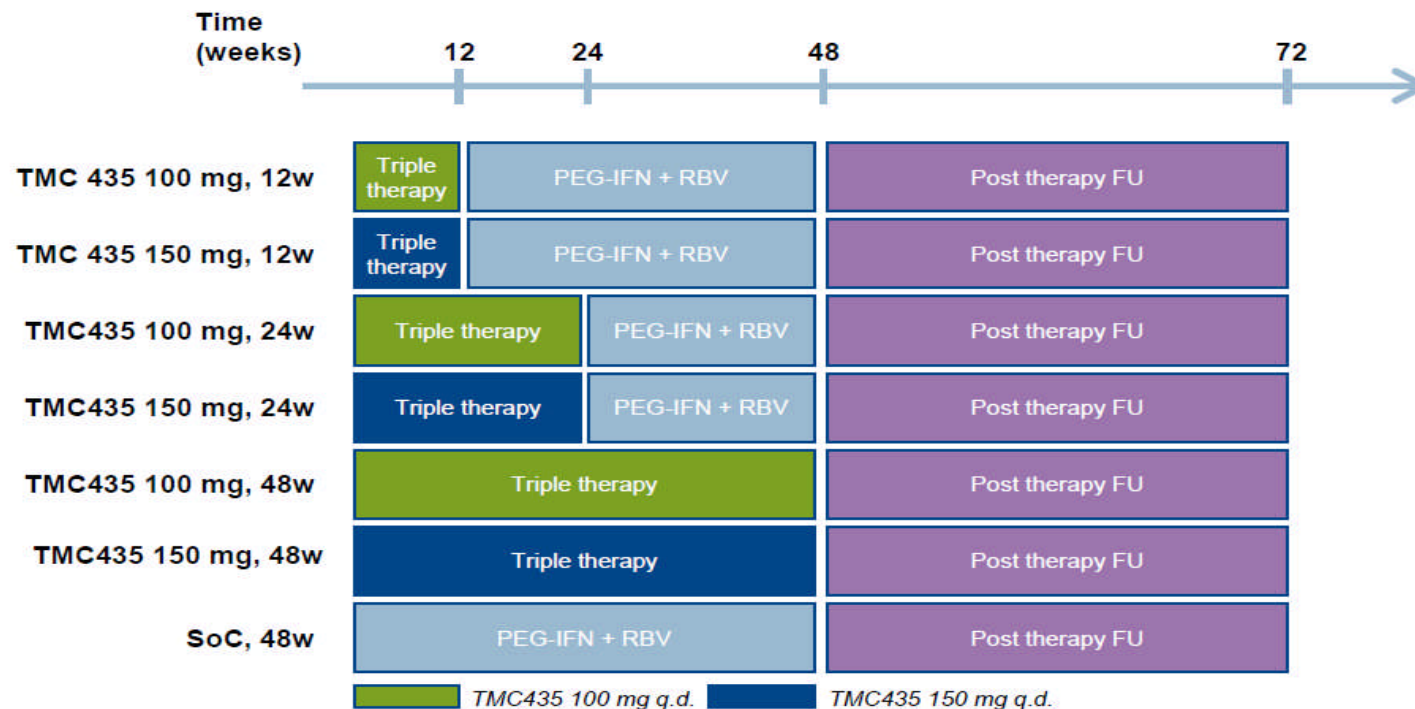
- **82% of patients achieved SVR24** in the 100 mg TMC435 versus 46% in the placebo control group
- **87% of patients received shortened treatment** duration of 24 weeks based on RGT criteria,
- TMC435 was safe and well tolerated

Phase III clinical trials well underway in Japan (fully enrolled) in both treatment naïve and treatment experienced patients

TMC435 Phase IIb ASPIRE study in genotype 1 treatment experienced patients* - *study design*

Patients: 462 HCV genotype 1 infected prior relapser, partial or null responder patients

Dosage: Once daily TMC435 (100 or 150 mg) added to PegIFN/RBV for 12, 24 or 48 weeks in combination with PEG-IFN/RBV



TMC435 Phase IIb ASPIRE study in genotype 1 treatment experienced patients* - *results*

SVR24 in TMC435 (150 mg q.d.) vs placebo dose groups					
% (n/N)	TMC435 12w PR48 N=66	TMC435 24w PR48 N=68	TMC435 48w PR48 N=65	All TMC435 PR48 N=199	Placebo PR48 N=66
Relapser	77 (20/26)	89 (24/27)	89 (23/26)	85 (67/79)	37 (10/27)
Partial Responder	65 (15/23)	75 (18/24)	86 (19/22)	75 (52/69)	9 (2/23)
Null Responder	53 (9/17)	41 (7/17)	59 (10/17)	51 (26/51)	19 (3/16)

*62 % of patients (287/462) had advanced liver disease (Metavir F2-F4)

- TMC435 once daily at 150 mg induced high SVR24 rates in prior partial and null responders
- TMC435 was safe and well tolerated

Commercializing TMC435 – our core product



- **Favorable safety profile**, comparable with placebo in phase IIb clinical trials
- **Excellent anti-viral efficacy**, shown in phase IIb program
- **High convenience**, one-pill, once-daily treatment
- **Global regulatory filing in H1-2013**, all Phase III clinical trials fully enrolled

Upcoming News Flow

- ✓ Q3 TMC435 Phase III enrollment completed
- ✓ Q4 Digestive week Japan - DRAGON full SVR24 data
- ✓ Q4 ASPIRE top line SVR24 data
- ✓ Q4 AASLD - PILLAR full SVR24 data
- ✓ Q4 Change of primary end point in ongoing and coming Phase 3 studies, SVR24 → SVR12
- ✓ Q4 TMC649128 compound discontinued – Nucleotide program continues towards clinical development
- ✓ Q4 Agreement signed to evaluate TMC435 and daclatasvir (BMS-790052) in DAA combination trials
- Q4 TMC435 and PSI-7977 enters in DAA combination trials
- Q1-12 FY report and update on projects and financials
- Q1-12 OTC launch of Xerclear® in Europe by GSK
- Q1-12 EASL – ASPIRE full SVR24 data
- Q1-12 Start of Phase III trials with TMC435 in prior null and partial responder patients
- H1-12 Aiming to start Phase I trials with MIV-711

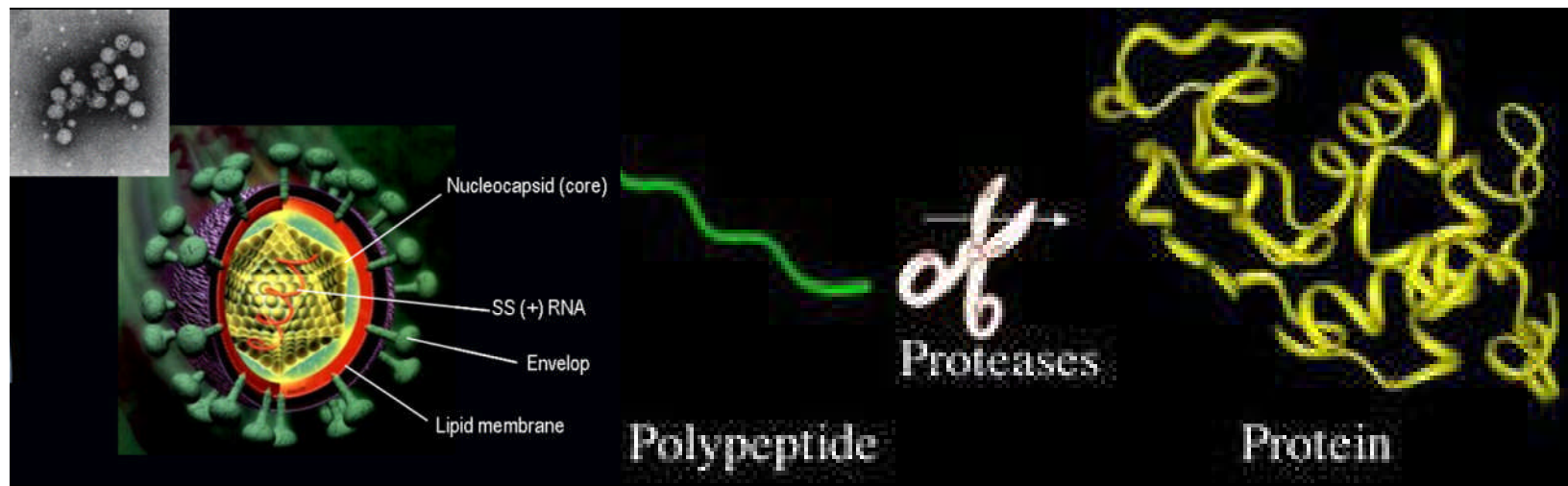
Expected key news flow highlights during the coming 6 months



The Medivir Technology Platform

Medivir - a leading company in the development of protease and polymerase inhibitors

Proteases cut polypeptides/proteins to activate or inactivate their respective biological actions



Protease inhibitors inhibit viral replication by blocking formation of viral polypeptides and subsequently their assembly into active viral particles

Medivir - a leading company in the development of protease and polymerase inhibitors

