



Medivir



R&D Day

18 November 2010, London

Agenda

1. Introduction to Medivir – Rein Piir, CFO / IR
2. Our Strategic Journey – Ron Long, CEO
3. An emerging partner of choice – Paul Wallace, VP Business Development
4. Xerclear™/ Xerese™: From Discovery to Commercialisation – Eva Arlander, VP Pharma
5. Our Pipeline – Bertil Samuelsson, CSO, Research & Development
6. TMC435 ASPIRE C206 Phase 2b Study Data – Bertil Samuelsson
7. Q&A
8. Conclusion – Ron Long, CEO



Medivir

- Key investment highlights

Rein Piir, CFO/IR

Key investment highlights



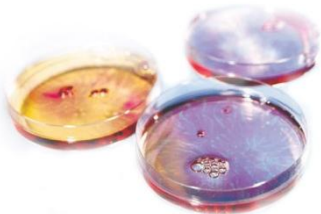
Potential Best in Class Hepatitis C drug

Strong presence in developing hepatitis C drugs - TMC435 is the frontrunner in our portfolio, potentially the best in class PI and a future blockbuster



A Marketed Product

Xerclear™ / Xerese™ has a unique indication text and will be a major step towards becoming a profitable research-based pharmaceutical company. Our partner GSK will market it OTC in Europe and Meda will market it Rx in North America



Strong Pipeline

Strong pipeline with many potential blockbuster drugs in development with leading pharma partners. Evaluation of new programs in infectious diseases ongoing, including new HCV targets



Medivir

- Our strategic journey

Ron Long, CEO

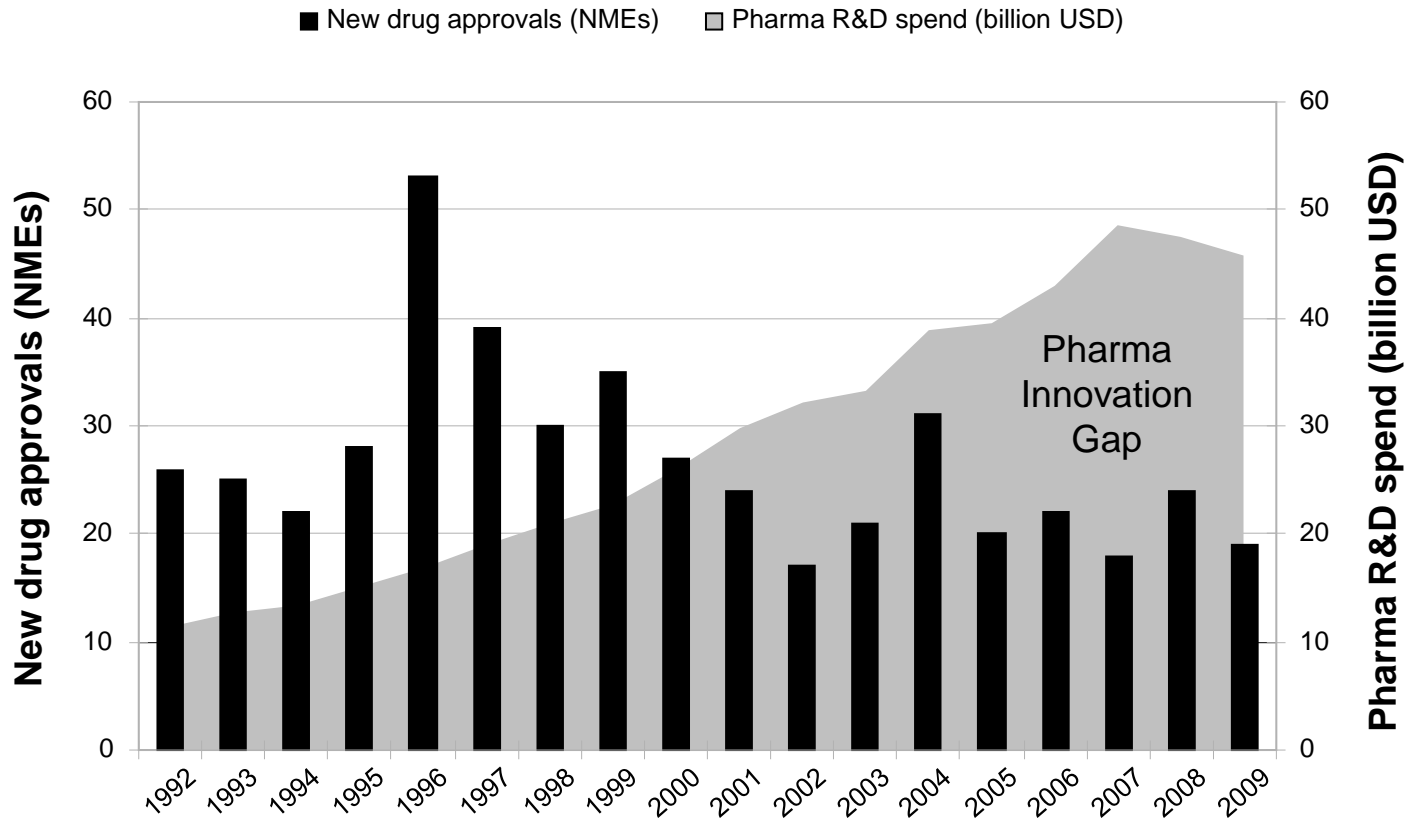


Medivir

- An emerging partner of choice

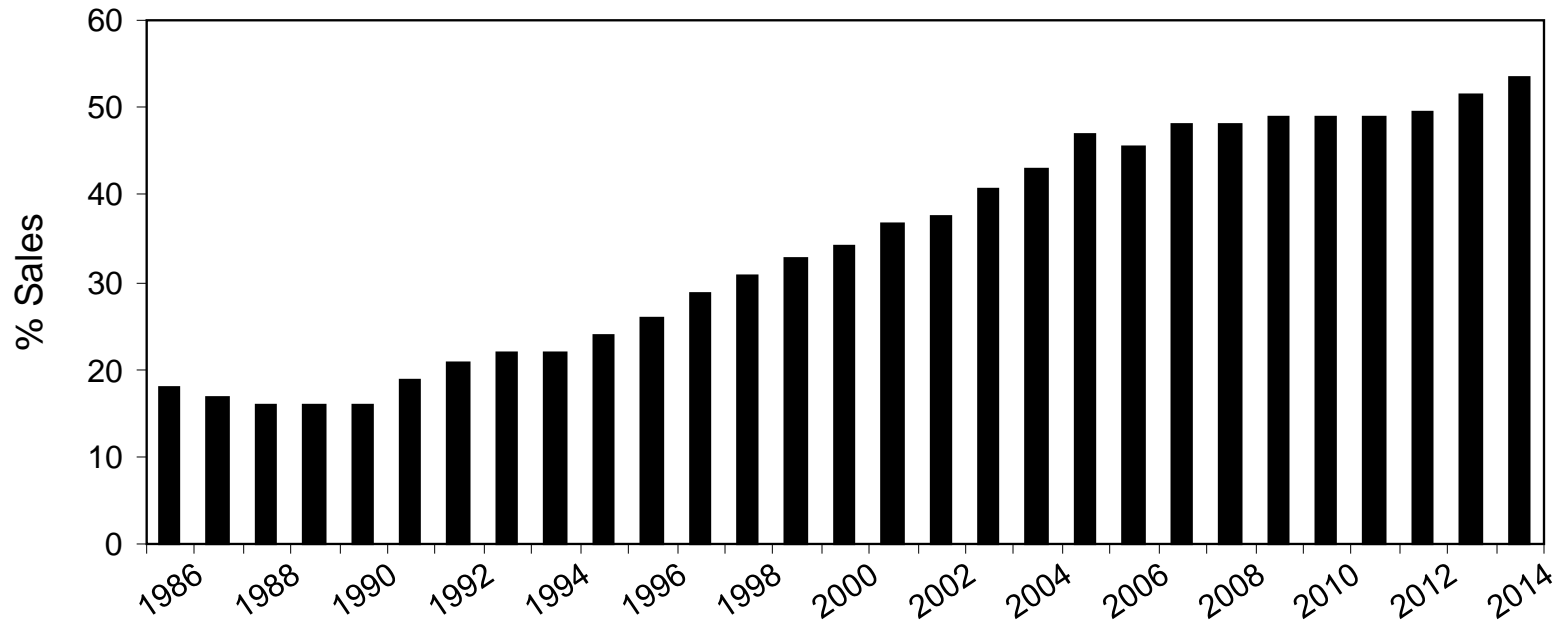
Paul Wallace, VP Business Development

“Two decades of futility”













Partnering set to escalate

% Pharma sales derived from external discovery



Partnering track record

Partner	Indication	Date	Phase	Value (\$M)	Terms
 GSK	HSV	June 2010	Registration	4	EU OTC Retained US
 Tibotec/J&J	HCV	May 2008	Research	428	Retained Nordic
 BMS	HIV	Sept 2006	Research	105	Retained Nordic
 Tibotec/J&J	HIV	June 2006	Phase II	30	Retained Nordic
 Tibotec/J&J	HIV	June 2006	Research	81	Retained Nordic
 Tibotec/J&J	HCV	Nov 2004	Research	116	Retained Nordic
 Roche	HCV	Nov 2003	Research	Not disclosed	Retained Nordic
 BI	HIV	July 2003	Phase II	144	Retained Nordic
 GSK	HIV	May 2003	Phase I	104	Retained Nordic
 Roche	HIV	April 2002	Pre-clinical	42	Retained Nordic

25 deals since 2002 – 10 with Pharma ranked in top 13

At the leading edge of deal trends

- 2/5 highest valued deals involving European biotechs 2002-2003
- 2/10 highest valued infectious disease deals worldwide 2006
- 2006: 0.7% of all deals; 1.8% of \$ value (6 deals, \$315M)
- 2008: highest preclinical infectious disease deal to date
- 2/3 highest upfronts for discovery-stage infectious disease deals

Medivir – a partner of choice

- A biotech with the standards and rigour of a Pharma
- Pedigree, technologies and proven technical competence
- Demonstrated commitment and respect in partnerships

Johnson & Johnson

 tibotec

 gsk
GlaxoSmithKline

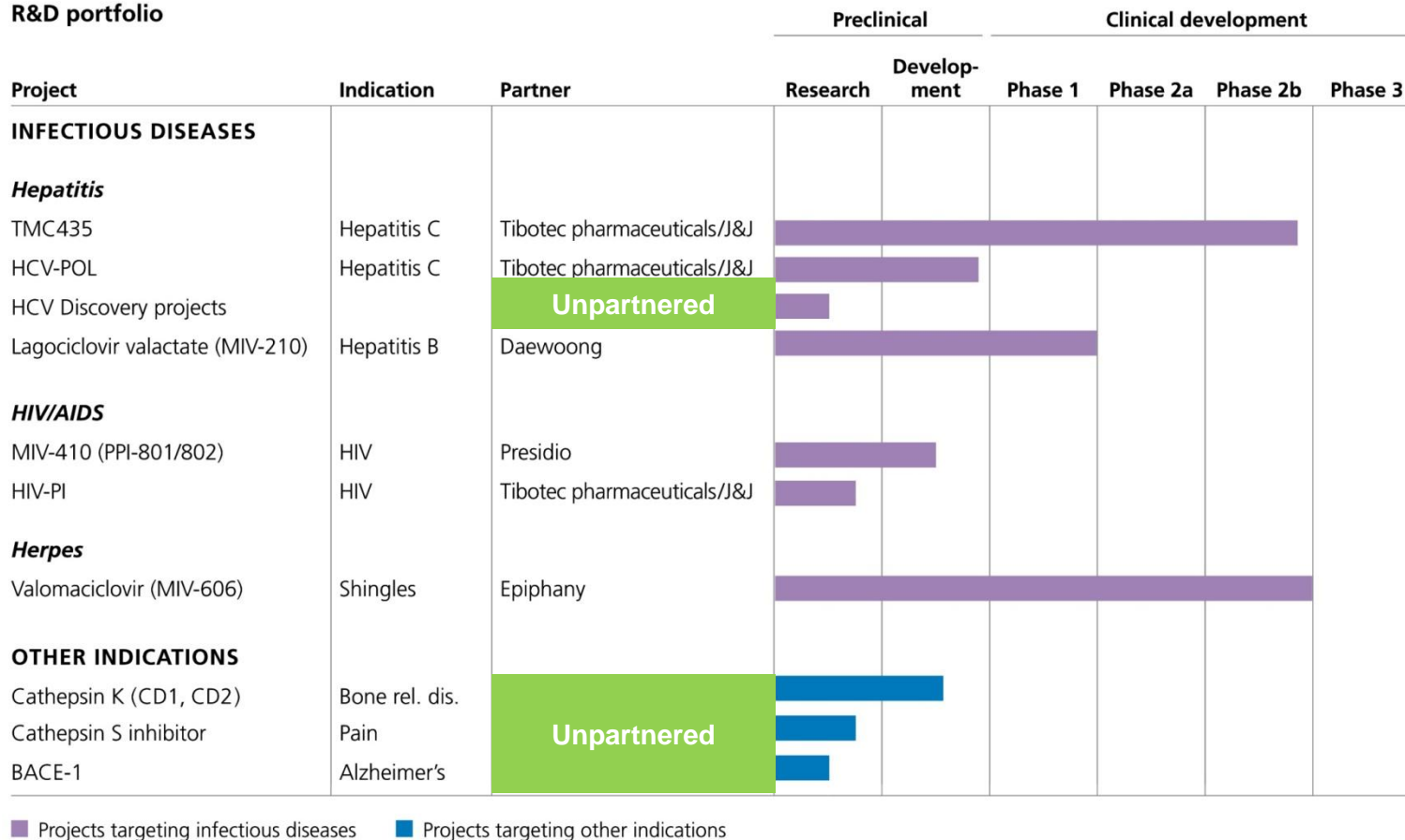
 Boehringer
Ingelheim

 Roche

 Bristol-Myers Squibb

Current partnerships and pipeline opportunities

R&D portfolio



Future partnering objectives

- Medivir will continue to innovate and be a partner of choice, creating value for Medivir and our partners
- Our strength will be that the negotiating power will favour Medivir, the innovator
- We will create and retain more value in our projects: later licensing, co-development rights, expanded territories
- All consistent with our ambition to become a specialty pharmaceutical company



Product overview

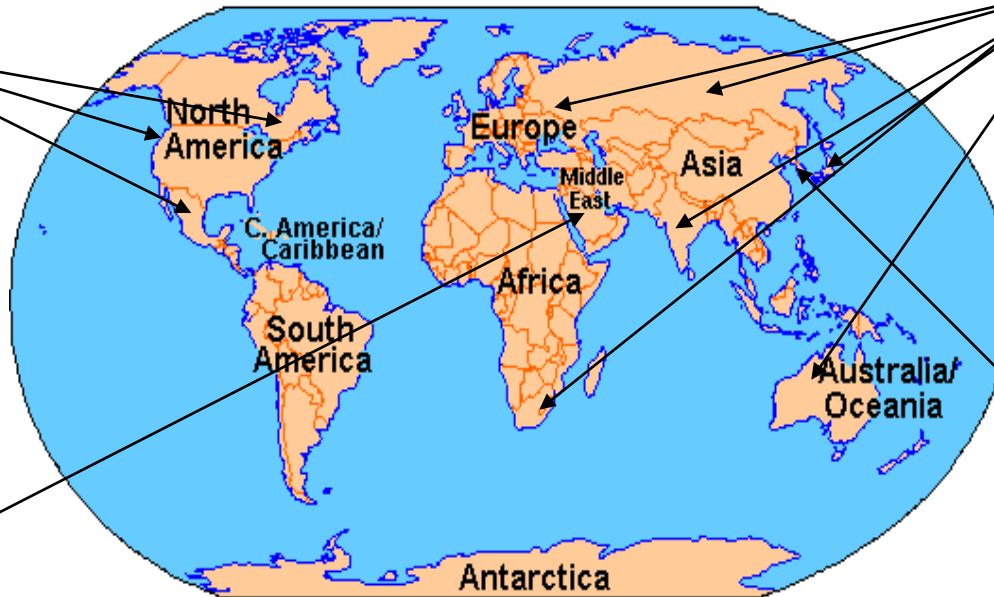
- Xerclear[®] /Xerese[™]:
From Discovery to Commercialisation

Eva Arlander, VP Pharma

Xerclear® / Xerese™ - partners



US
Canada
Mexico



Europe
Japan
India
Australia
New Zealand
South Africa



LUXEMBOURG MEDICAL
A member of Lapidot Group

Israel

TBC:
China
South America

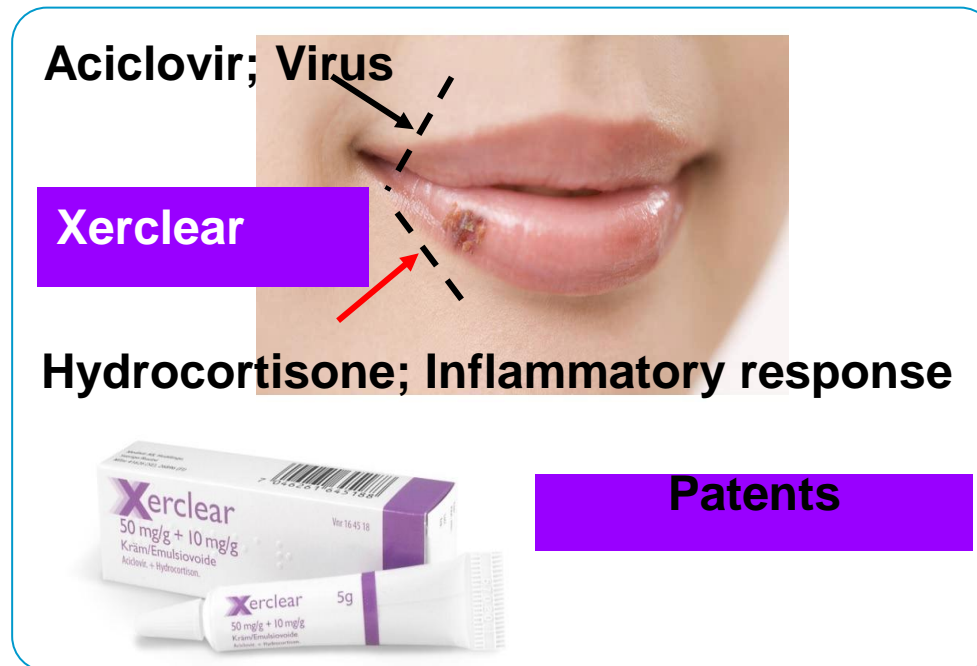


South Korea



How does it work and why is it different?

- First and only product to have shown reduction in progression of ulcerative cold sores
- Reduction in healing time
- Patent coverage through 2021



Market opportunity – the scale of the problem

Overview

- 7% of the Western population, or 60 million people, suffer from severe labial herpes
- Approved therapies offer poor results – opportunity to grow the existing market
- Limited development of current products on the market

North America

- Market value estimated to 230 MUSD
- Prescription (Rx) status for all antiviral treatments (aciclovir, penciclovir)
- Main competitors are Zovirax (Rx), Denavir (Rx) and Abreva (OTC)
- Zovirax dominates
- Slow generic penetration to date
- Primary Care Physician sales force

Europe

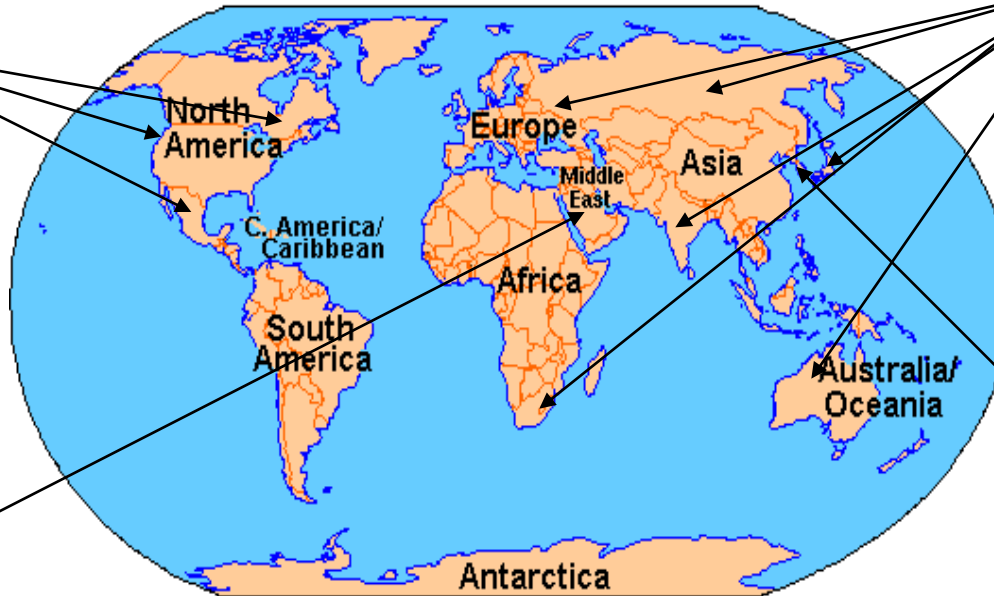
- Market value estimated to 170 MUSD
- Market dominated by OTC products
- Aciclovir has 75% market share
- Zovirax is market leader in majority of countries
- Generic competition

From Sweden to...



MEDA

Rx Launch
in US, Q1 2011



OTC Launch EU
summer 2011



LUXEMBOURG MEDICAL
A member of Lapidot Group

Rx Launch
in Israel, Q1 2012



Rx launch in
S. Korea, Q3 2011

Short Q&A

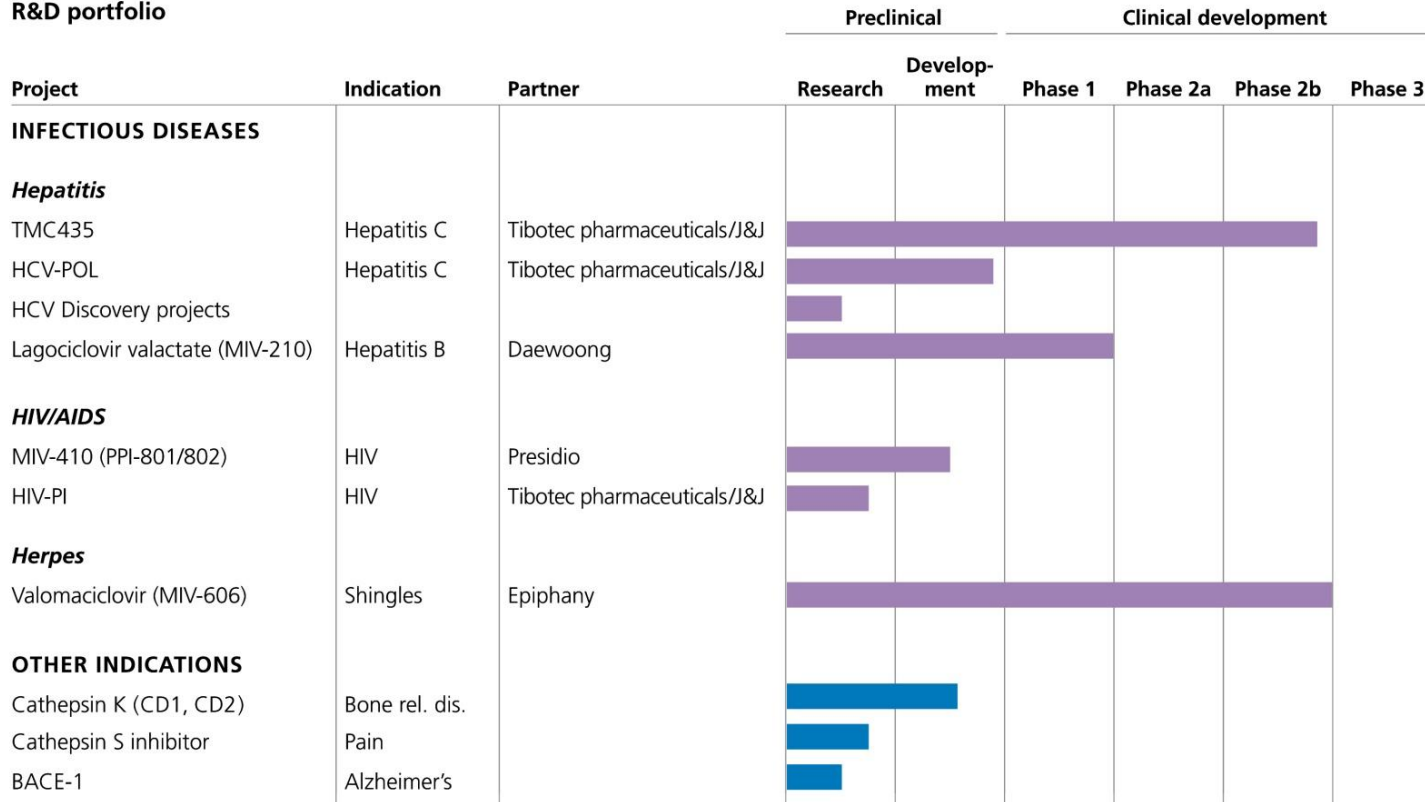


Our Pipeline

**Bertil Samuelsson, CSO,
Research & Development**

Strong pipeline with multiple paths to value creation

R&D portfolio



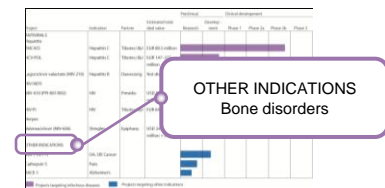
■ Projects targeting infectious diseases ■ Projects targeting other indications

Best-in-class protease and polymerase platform



Key programmes in our earlier stage pipeline

Bone disorders – MIV-710/711



Creating value for shareholders by developing products further under own management

Disease and market

- This class of inhibitors intervene in disease states where there is excessive bone loss, e.g. osteoporosis, osteoarthritis and metastatic bone disease
- Estimated combined global market opportunity in excess of USD 12 billion

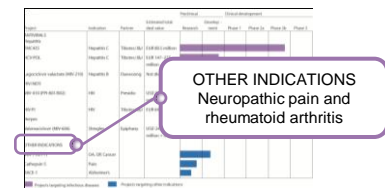
Upcoming events in the coming 12 month

- Start of phase 1 clinical trials potentially in 3 different therapeutic areas, OP; OA and Bone metastasis

MIV-710 and MIV-711

- Cathepsin K inhibitor program
- Targeting multiple indications of great unmet medical need (osteoporosis, osteoarthritis and metastatic bone disease)
- Two Candidate Drugs selected, MIV-710 and MIV-711, which are in preclinical development
- Maintain the beneficial bone formation, in contrast to other anti-resorptives
- Low once daily efficacious dose, estimated at 50 mg QD
- Strong IP position
- Furnish potent and long duration of activity
- Development status: MIV-710 (CD1) and MIV-711 (CD2) both in preclinical development stage

Neuropathic pain and RA – Cathespin S Inhibitor



Creating value for shareholders by developing products further under own management

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

Upcoming events in the coming 12 month

- Candidate drug selection

Cathespin S inhibitor program

- Potent, selective and orally bioavailable inhibitors developed
- Proof-of-principle has been demonstrated for Medivir lead inhibitor in a preclinical rodent model of neuropathic pain
- Strong link to neuropathic pain
 - Upregulated in DRG infiltrating macrophages and near site of peripheral injury in rodent models
 - Secreted by activated microglial cells in CNS in rodent models
 - Cathepsin S is essential for the activation of the soluble fractalkine on neurons
- Strong link to RA
 - Crucial role in MHC Class II antigen presentation
 - Performs final step in processing of invariant chain
 - Antigen presentation is key to establishing an immune response



Our hepatitis C franchise

TMC435 – the leading next generation Protease Inhibitor



- Strong safety profile: no adverse events over SoC in the phase 2b PILLAR study

- Excellent anti-viral efficacy shown in phase 2b PILLAR and ASPIRE studies

- High convenience: one pill and once daily

Hepatitis C

	Cholera	Dysentery	Hepatitis A	Hepatitis B	Hepatitis C	Shigellosis	Typhoid	Yellow fever
Number of cases	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Number of deaths	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Number of DALYs	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

Disease

- Globally 180 million are infected with hepatitis C virus, of which 80% develop chronic disease
 - Approximately 12 million infected in the US, Europe and Japan
- The difficult to treat genotype 1 account for 70% of the HCV population
 - Sustained viral response (SVR) in genotype 1 patients is very low, 42-48% on SoC

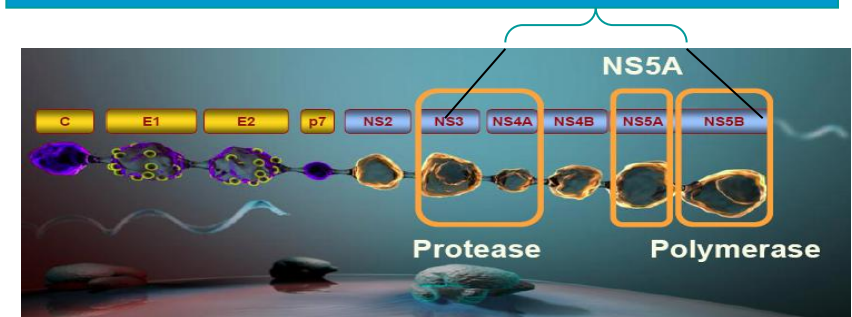
Market

- Estimated market value of over USD 10 billion in 2015
- The treatment-experienced patients, in desperate need of efficacious therapy, comprise ~half of the market value

Medivir HCV commitment

- HCV PI – TMC435
 - Tibotec/Johnson & Johnson
- HCV nucleoside NS5B inhibitor
 - Tibotec/Johnson & Johnson
- HCV discovery programs
 - Medivir

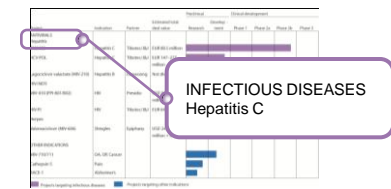
Programs in collaboration with Tibotec/ JNJ



In-house HCV programs

Broad commitment in HCV

Hepatitis C – HCV-POL



Status

- Partnership entered with Tibotec/Johnson & Johnson in May 2008
- Program in late preclinical development phase
- Synergy shown with both TMC435 and non-nucleoside NS5B inhibitors (DAA agents)
- An ideal DAA agent for future TMC435 combination regimens

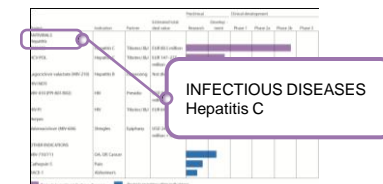
Events in coming 12 month - HCV Pol

- Start of phase 1 clinical trials
- Presentation of phase 1 clinical trial data
- Presentation on antiviral potency, mechanism of action and DAA synergy data

Nucleoside/nucleotide NS5B polymerase inhibitors

- Nucleoside/nucleotide polymerase inhibitors are chain-terminators
- High *in vivo* potency demonstrated
- Wide genotype coverage
- High barrier to resistance
- Five nucleoside/nucleotide analogues in clinical development (phase 1 and 2)

Hepatitis C PI – the competitive landscape

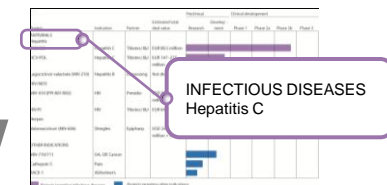


Pre-clinical	Phase 1a	Phase 1b	Phase 2a	Phase 2b	Phase 3
Intermune	VPY-376	ACH-1625	Danoprevir R-7227	TMC435	Telaprevir VX-950
Taigen	PHX1766		ABT-450	BI201335	Boceprevir SCH-503034
Novartis	IDX320		BMS-650032	Vaniprevir MK-7009	
Vertex	MK-5172		GS-9256		
AVL-181,192					
ACH-2684					

HCV PI's in combination with DAAs and SoC

- Combinations of DAA agents:
 - Telaprevir in phase 2a in combination with VX-222 (NNRTI) +/- SoC
 - Danoprevir in phase 2a in combination with R7128 (NI) +/- SoC
 - BMS-650032 in phase 2a in combination with BMS-790052 (NS5A inh) +/- SoC
 - GS-9256 in combination with GS-9190 (NNRTI) +/- Ribavirin
- Note: nanoprevir and ABT-450 require ritonavir-boosting

TMC435 clinical trial programme overview



Phase 1 studies

- Extensive drug-drug interaction program ongoing with commonly used drugs

Phase 2a studies

Opera-1 (C201)

- 4-week antiviral activity, safety and PK data available
- TMC435 displayed potent antiviral activity and was well tolerated in treatment-naïve and treatment-experienced patients with genotype-1 HCV infection - completed

Opera-2 (C202)

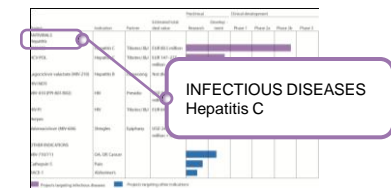
- PoC study in 37 patients with non-genotype-1 HCV infection – completed

Phase 2b studies ongoing

– includes approximately 950 patients

- **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

TMC435 AASLD presentations



Late Breaker Oral Presentation for presentation at Monday 1 Nov. 17:45 (EST):

LB-5. “Efficacy and safety of TMC435 in combination with peginterferon α -2a and ribavirin in treatment-naïve genotype-1 HCV patients: 24-week interim results from the PILLAR study.”

Poster Presentations:

278. “In vitro studies investigating the mechanism of interaction between TMC435 and hepatic transporters.” To be presented: Saturday 30 Oct, 14:00 (EST).

812. “Virologic analysis of genotype-1-infected patients treated with once-daily TMC435 during the Optimal Protease inhibitor Enhancement of Response to Therapy (OPERA)-1 study.” To be presented: Sunday 31 Oct, 08:00 (EST).

895. “A Phase 2a, open-label study to assess the antiviral activity of TMC435 monotherapy in patients infected with HCV genotypes 2–6.” To be presented: Sunday 31 Oct, 08:00 (EST).

1873. “Pharmacokinetic-pharmacodynamic analyses of TMC435 in patients infected with Hepatitis C Virus (HCV) genotypes 2 to 6.” To be presented: Tuesday 2 Nov, 07:00 (EST).

Five presentations at the 2010 AASLD meeting in Boston

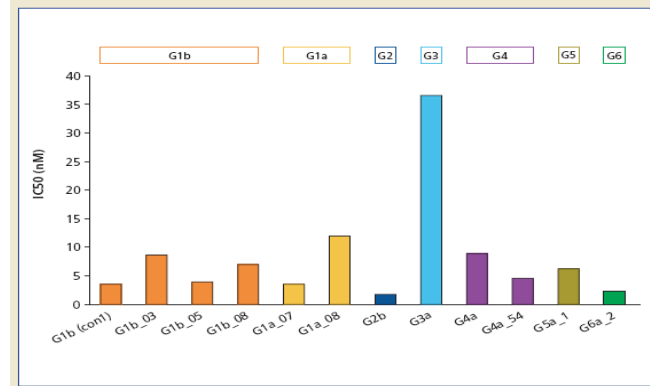
TMC435 C202 phase 2a study: Monotherapy in G2-6 infected patients

- Monotherapy with oral TMC435 200 mg QD for seven days resulted in potent antiviral activity in patients infected with HCV GT 2, 4, 5, and 6

In vitro inhibition values of genotype 1 to 6 NS3/4A protease:

- *In vitro*, TMC435 is a potent inhibitor of NS3/4A protease from genotype 1 to 6, except for genotype 3A

Figure 3: Inhibition of NS3 protease by TMC435 determined in a biochemical protease assay.

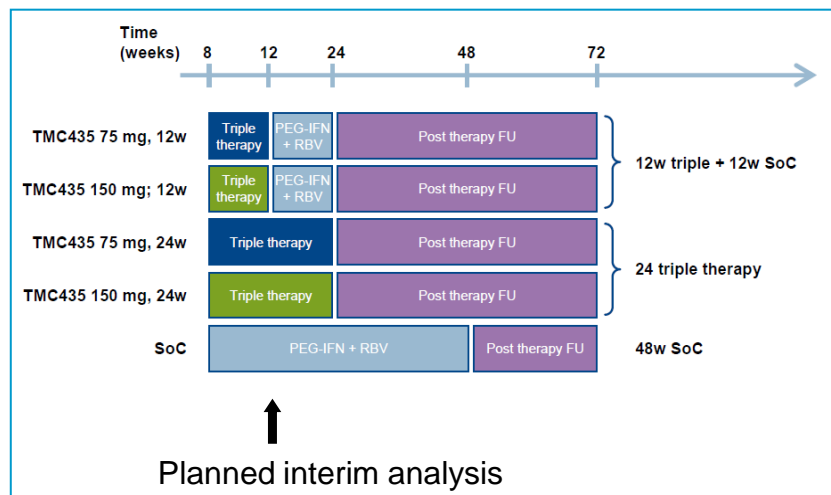


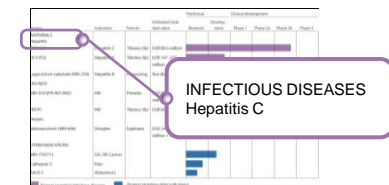
Broad genotype coverage

TMC435 phase 2b: study design

PILLAR (C205)

- TMC435-C205 is a global phase 2b study in 386 genotype-1 treatment-naïve patients
- Response-guided treatment duration in TMC435 arms
 - End treatment at Week 24, if
 - HCV RNA <25 IU/mL detectable or undetectable at Week 4, and
 - HCV RNA <25 IU/mL undetectable at Weeks 12, 16, and 20
 - All other patients continued Peg/RBV for up to 48 weeks
- Once daily (*q.d.*), 75 mg and 150 mg, of TMC435 + SoC:
 - 12-week triple therapy followed by SoC alone up to week 24
 - 24-week triple therapy





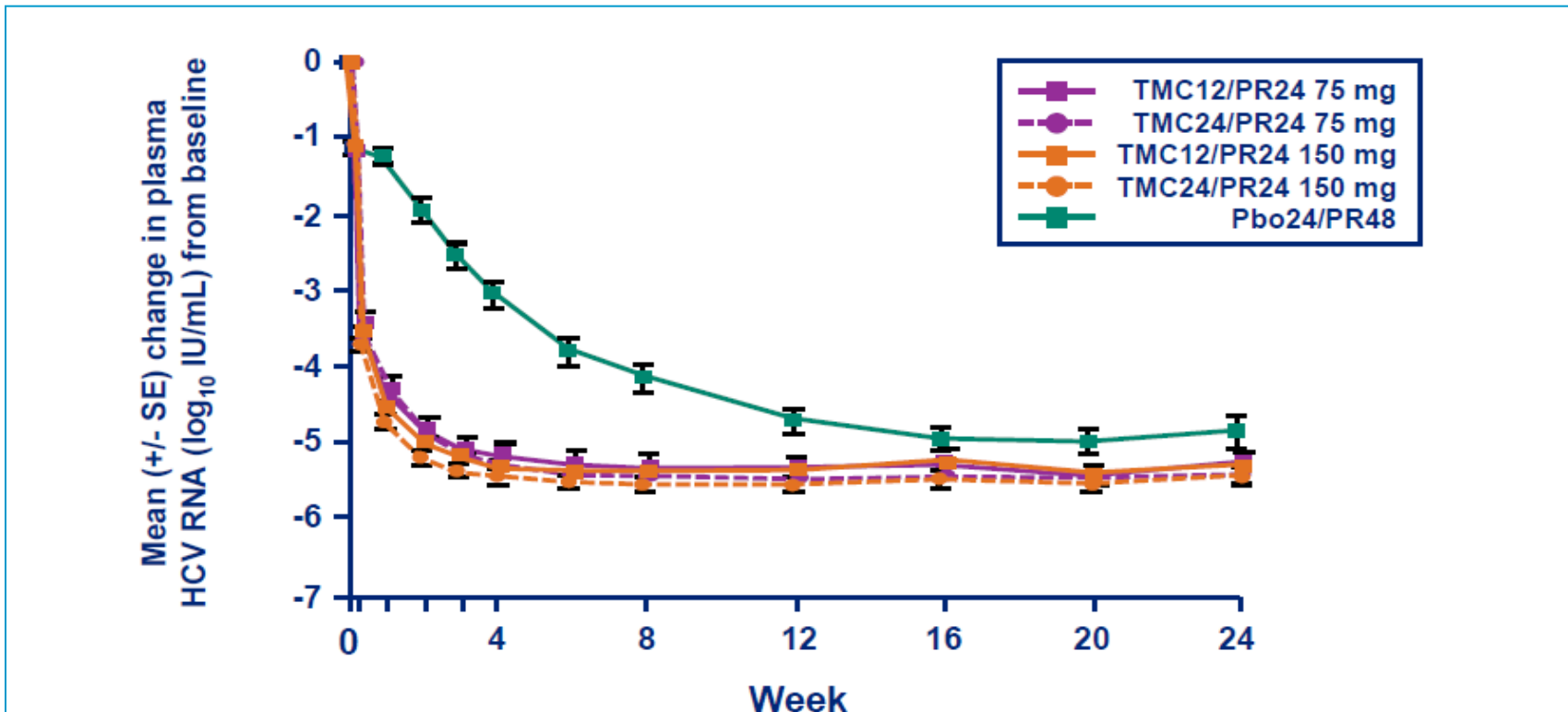
TMC435 PILLAR phase 2b study: 24-Week interim results in 386 treatment-naïve HCV patients

- **83% of patients were able to stop all therapy at Week 24 in TMC435 treatment groups:**
 - Response guided design in TMC435-C205 PILLAR Phase 2b study
- Both the viral breakthrough rate (4.9%) and relapse rate (1.6%) were low in the TMC435 treatment groups.

Excellent antiviral activity

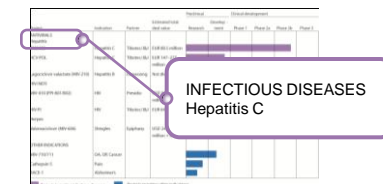
PILLAR week 24 analysis:

Mean change in Plasma HCV RNA from baseline



TMC435 treatment arms had a rapid and steep decline in HCV RNA during the first 4 weeks that was maintained throughout the 12- or 24-week triple-therapy dosing periods

TMC435 PILLAR – Virologic response overview



HCV RNA (<25IU/mL undetectable)	TMC12-PR24 75mg (n=78)	TMC24-PR24 75mg (n=75)	TMC12-PR24 150mg (n=77)	TMC24-PR24 150mg (n=79)	Pbo24- PR48 (n=77)
Week 4 (RVR)	77% 59/77	68% 51/75	76% 58/76	79% 59/75	5% 4/75
Week 12 (cEVR)	91% 71/78	96% 70/73	94% 72/77	97% 75/77	58% 43/74
Week 24	94% 72/77	97% 70/72	94% 65/69	95% 69/73	82% 60/73
Follow-up after planned end of treatment					
SVR4	91% 59/65	93% 56/60	93% 57/61	91% 62/68	n/a
SVR12	97% 32/33	93% 27/29	89% 32/36	88% 28/32	n/a

Potent and consistent antiviral effects demonstrated at Week 24 end-of-treatment

PILLAR:

Demographics and baseline disease characteristics

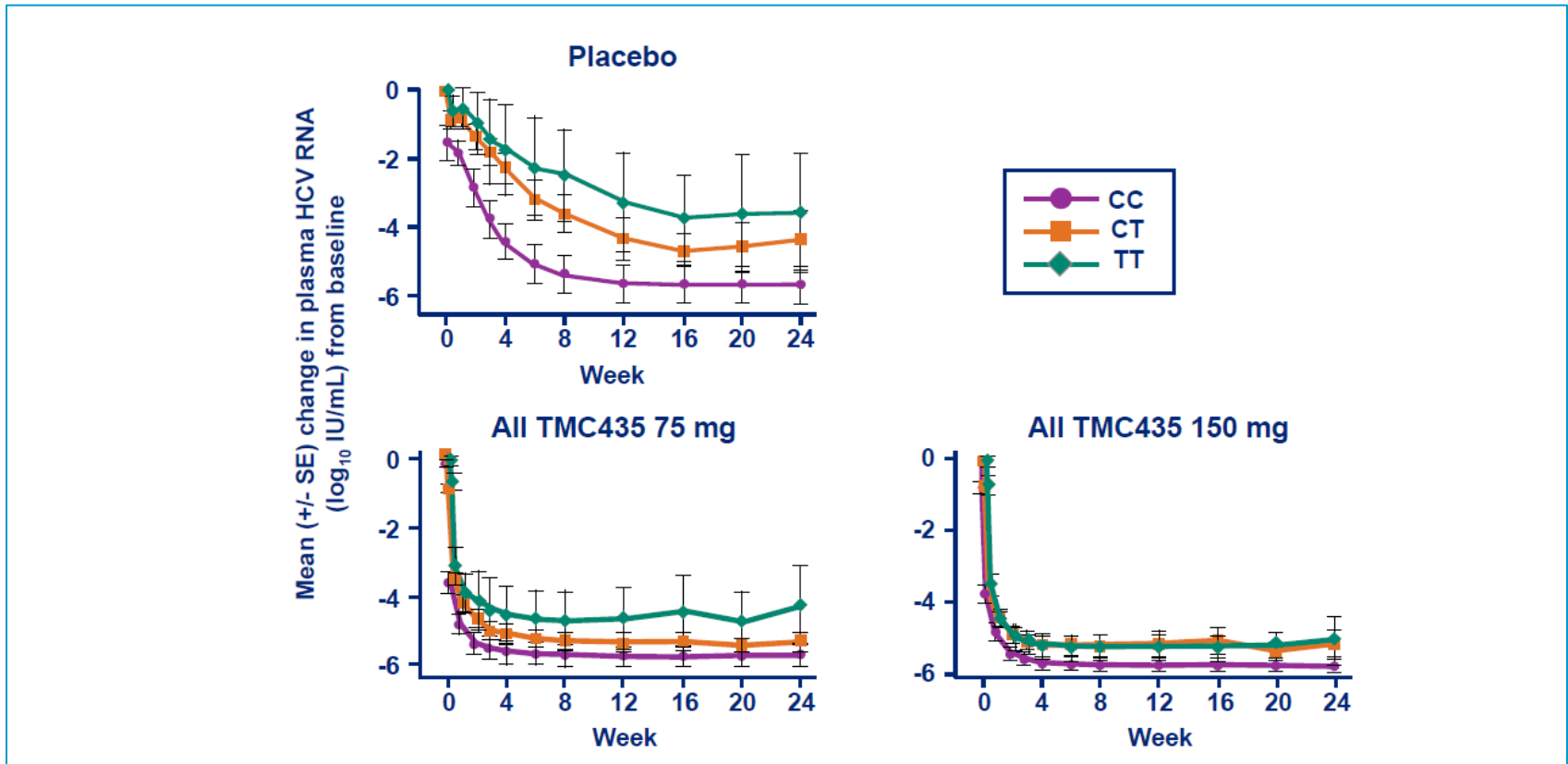
Parameter	TMC12/ PR24 75 mg N=78	TMC24/ PR24 75 mg N=75	TMC12/ PR24 150 mg N=77	TMC24/ PR24 150 mg N=79	Pbo24/ PR48 N=77	All subjects N=386
Patient demographics						
Male, %	51.3	62.7	55.8	55.7	50.6	55.2
White, %	89.7	94.7	96.1	92.4	96.1	93.8
Age, years, median	47.0	46.0	47.0	47.0	45.0	46.5
Body mass index, median	25.9	24.2	24.7	24.9	25.6	25.0
Disease characteristics						
HCV subtype 1a, %*	46.8	45.9	48.0	48.1	38.2	45.4
HCV subtype 1b, %*	53.2	54.1	52.0	51.9	61.8	54.6
HCV RNA, log ₁₀ ≥800,000 IU/mL at baseline, median, %	82.1	84.0	89.6	91.1	81.8	85.8
Metavir score F3, %†	12.8	22.7	9.1	15.2	9.1	13.7
IL28B at baseline, CC, %‡	22.4	35.3	40.0	25.0	26.1	29.8

*As determined by NS5B sequence-based assay

† Patients with cirrhosis (F4) were not eligible

‡ Polymorphism on chromosome 19 s12979860, data available for patients who consented only (67.9%)

PILLAR week 24 analysis: Baseline according to *IL28B* genotype*



In the TMC435 150 mg arms the CT or TT genotypes had rapid and steep decreases in HCV RNA, quite similar, although not identical, to the CC genotype.

PILLAR week 24 analysis:

Adverse events

	TMC12/ PR24 75 mg N=78	TMC24/ PR24 75 mg N=75	TMC12/ PR24 150 mg N=77	TMC24/ PR24 150 mg N=79	All TMC435 N=309	Pbo24/ PR48 N=77
Adverse events leading to permanent discontinuation						
Discontinuation	9.0	2.7	9.1	7.6	7.1	7.8
Most common adverse events*						
Headache	52.6	45.3	45.5	40.5	46.0	50.6
Fatigue	30.8	46.7	41.6	48.1	41.7	46.8
Influenza-like illness	26.9	42.7	23.4	34.2	31.7	37.7
Pruritus	32.1	22.7	39.0	30.4	31.1	44.2
Nausea	33.3	20.0	26.0	30.4	27.5	27.3
Adverse events of interest						
Rash (any type)†	35.9	17.3	29.9	30.4	28.5	27.3
Anemia‡	17.9	20.0	22.1	17.7	19.4	20.8

*Reported in ≥25% of subjects in the 'All TMC435' group (all dose groups combined)

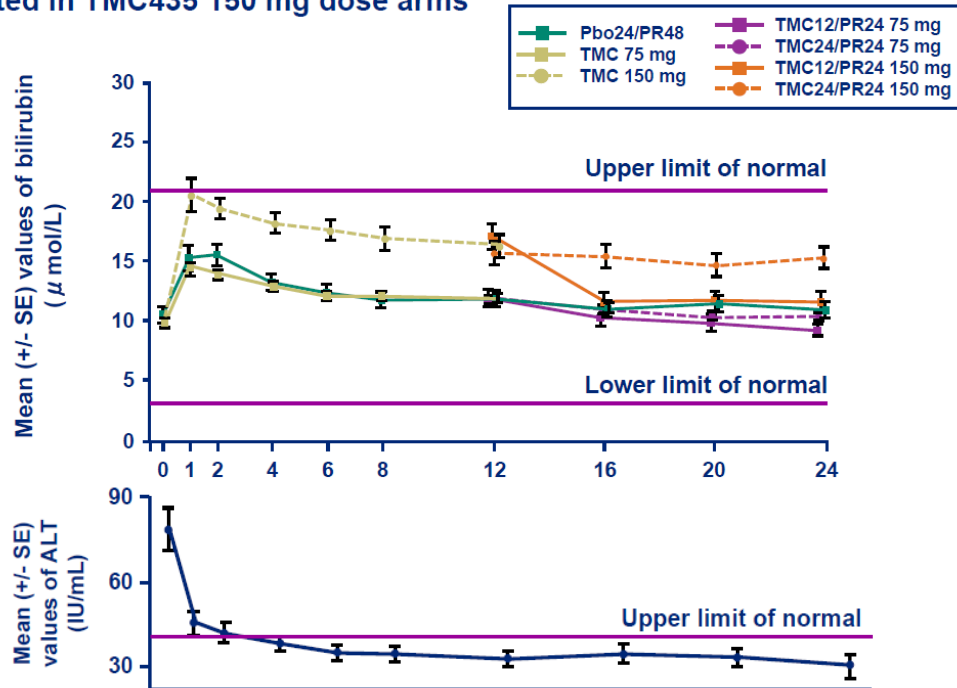
† Rash (any type) combines all reported types of rash

‡ Reported as an adverse event by study investigator if laboratory abnormalities considered clinically relevant

TMC435 was safe and well tolerated at all doses and regimens studied.

TMC435 PILLAR phase 2b study: Laboratory parameters - Bilirubin over time

- Mild and reversible increases in bilirubin (direct and indirect) were noted in TMC435 150 mg dose arms

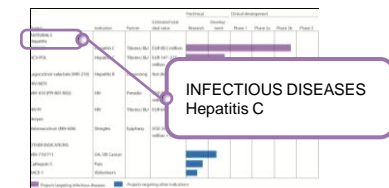


- Mild, non-progressive reversible elevations in bilirubin were noted in the TMC435 150 mg dose arm
- Significant decreases in transaminases (ALT and AST) observed in all treatment groups.

- TMC435 show affinity for the hepatic efflux and influx bilirubin transporters

The mechanism for the interaction between TMC435 and hepatic transporters has been investigated

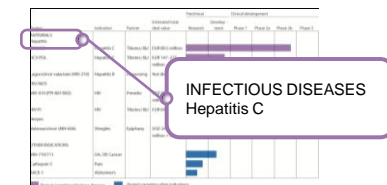
PILLAR week 24 analysis: Safety summary



No clinically relevant difference in safety and tolerability between TMC435 and placebo groups

- Frequency of rash, gastrointestinal events, and anemia were similar to placebo group
- Mild and reversible increases in bilirubin concentration observed with 150 mg dose
- ALT concentration decreased in all treatment groups
- Discontinuation in TMC435 groups was low and similar to placebo group

TMC435 was safe and well tolerated



PILLAR week 24 analysis: Efficacy summary

- TMC435 dosed once-daily with PegIFN/RBV over 12 or 24 weeks demonstrated potent antiviral activity
- The majority of patients in TMC435 groups (83%) met the criteria to stop treatment at Week 24
- In patients who completed therapy at or before Week 24, response rates remained high (92%) 12 weeks after planned end of therapy
- Addition of TMC435 to PegIFN/RBV increased response rates in all *IL28B* genotypes
- Planning of Phase III studies of TMC435 is underway

Potent and consistent antiviral efficacy

TMC435 – recent and upcoming events next 6 months

Study	Start	End
INFECTIOUS DISEASES Hepatitis C	2010-01-01	2010-06-30
Other Study 1	2010-01-01	2010-03-31
Other Study 2	2010-04-01	2010-07-31
Other Study 3	2010-08-01	2010-11-30
Other Study 4	2010-12-01	2011-03-31

- **DRAGON (C215)**
 - Presentation of 24 week interim data from the phase 2b study in treatment-naïve Japanese genotype-1 HCV patients at Japan Digestive Disease Week, October 13 – 16, 2010, Yokohama
- **PILLAR (C205)**
 - Presentation of top-line 24 week interim data at the AASLD meeting in Boston
 - 48 week end of treatment data available late Q4
- **Opera-2 (C202)**
 - Presentation of data from the phase 2a study in treatment-naïve genotype 2–6 HCV patients at the AASLD meeting in Boston
- **Presentation of mechanism of action (MOA) behind the transient reversible increases in bilirubin**
 - The AASLD meeting in Boston
- **ASPIRE (C206)**
 - Top-line 24 Week interim data from the phase 2b study in treatment-experienced genotype-1 HCV patients
 - PR on 18 Nov
- **Phase 3**
 - Start of phase 3 in treatment-naïve genotype-1 HCV patients

Short Q&A

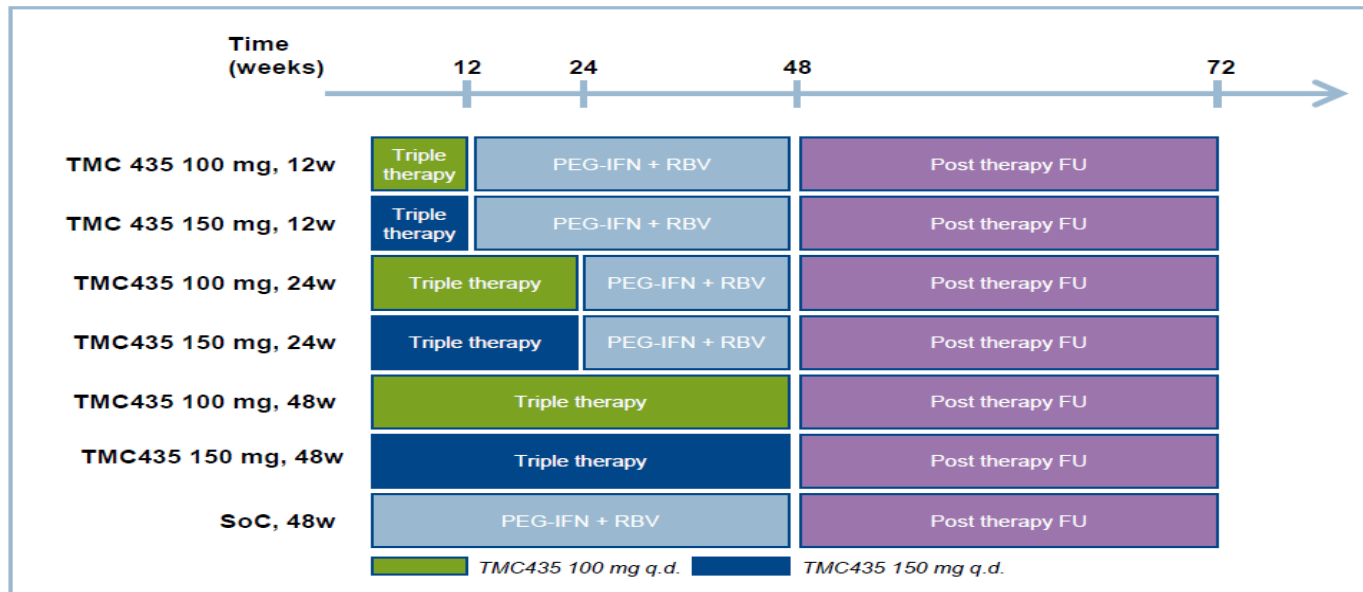
TMC435 ASPIRE C206 Phase 2b Study:

**24-week Interim Data in 463 Treatment-Experienced Hepatitis
C Patients**

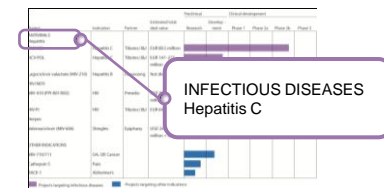
TMC 435 phase 2b: study design

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



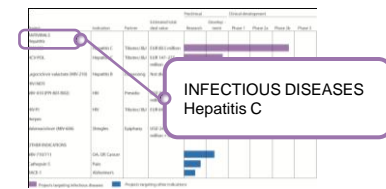
TMC435 ASPIRE C206 phase 2b study: 24-week interim data in 462 treatment-experienced Hepatitis C patients



- Prior response to standard of care treatment for patients in the ASPIRE study:
 - relapse: undetectable at EOT but detectable within 24 weeks of Follow-up
 - partial response: >2 log reduction at Week 12 but not achieving undetectable at EOT or
 - null response : <2 log reduction in HCV RNA at Week 12

Results:

- TMC435 added to standard of care:
 - Significantly increased the response rates and antiviral efficacy, which progressed through to week 24
 - Increased the number of patients with undetectable Hepatitis C Virus (HCV) levels through week 4, 12 and 24
 - Was safe and well tolerated



Antiviral efficacy in TMC435 ASPIRE C206 phase 2b study: 24-week interim data

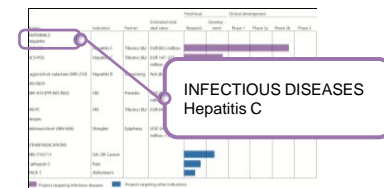
- TMC435 data are pooled and all data are taken into account at the specific time point

**An Intention-to-Treat analysis of Virologic Response: HCV RNA<25IU/mL undetectable.
All patients continue on active treatment up until week 48**

(%)	Relapser		Partial responder		Null responder	
	TMC435 N = 158	Placebo N = 27	TMC435 N = 138	Placebo N = 23	TMC435 N = 100	Placebo N = 16
RVR WEEK 4	81	4	62	0	38	0.0
cEVR WEEK 12	92	31	84	10	64	21
WEEK 24	94	83	86	19	78	44
WEEK 48	NA	NA	NA	NA	NA	NA

- The TMC435 treatment arms demonstrate high response rates
- The antiviral efficacy was enhanced in all patient groups through week 12 and 24
- Notably, the null responder group demonstrated significant response rates

Excellent antiviral activity



Safety and tolerability in TMC435 ASPIRE C206 phase 2b study: 24-week interim data

- TMC435 was generally safe and well tolerated consistent with the previously reported phase 2b PILLAR C205 study
- Significant decreases in transaminases (ALT and AST) were observed in all TMC435 treatment groups
- The two most frequently reported AEs were fatigue and headache, with comparable results shown in the placebo group

%	All TMC435 N = 396	Placebo N = 66
Fatigue	41	42
Headache	33	33

Safe and well tolerated

TMC435 – the leading next generation protease inhibitor



- 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

- High convenience: one pill and once daily

Conclusion & Final Remarks

– Ron Long, CEO

Q&A