



Medivir presenting at

**Carnegie Health Care Seminar
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Basic facts - March 2009

- o **Listed since 1996**
(OME: MVIRB SS)
- o **Headquarter in:**
Stockholm, Sweden
- o **Partnerships:**
Several with Big Pharma and Biotech

Selected financials

- o **Cash position:**
SEK 284m (YE-2008)
- o **Revenues:**
SEK 97m (FY 2008)
- o **Loss:**
SEK 99m (FY 2008)

- o **MCap:**
~ SEK 940m
- o **Shareholder structure of capital:**
Private individual 14,9%
Founders 6,2%
Swedish Institutions 33,5%
EU / US Institutions 27,6%
Swedish Retail owners 17,8%

12 month performance



Medivir Pipeline March 2009

Prioritized projects

Project	Indication(s)	Partners/ Date of agreement	Terms	Medivir's markets	Exploratory phase	Optimization	Preclinical dev. *	Phase I	Phase II	Phase III	NDA
Lipsovir® (ME-609)	Labial herpes	In-house			[Green bar spanning from Exploratory phase to Phase III]						
TMC435 (HCV-PI)	Hepatitis C	Tibotec / 2004	EUR 80.5 m + royalties and FTE funding	Nordic region	[Orange bar spanning from Exploratory phase to Phase II]						
MIV-701 (Cath K)	Osteoporosis, osteoarthritis, bone metastases	In-house			[Orange bar spanning from Exploratory phase to Phase II]						
HCVPOL	Hepatitis C	Tibotec / 2008	EUR 142-272 m + royalties and FTE funding	Nordic region	[Purple bar spanning from Exploratory phase to Preclinical dev. *]						
MIV-710 (Cath K)	Osteoporosis, osteoarthritis, bone metastases	In-house			[Orange bar spanning from Exploratory phase to Preclinical dev. *]						
HIVPI	HIV	Tibotec / 2006	EUR 64 m + royalties and FTE funding	Nordic region	[Orange bar spanning from Exploratory phase to Optimization]						
BACE	Alzheimer's	In-house			[Orange bar spanning from Exploratory phase to Optimization]						
Cathepsin S	Rheumatoid arthritis, multiple sclerosis	In-house			[Orange bar spanning from Exploratory phase to Optimization]						
COPD PI	COPD	In-house		World	[Orange bar spanning from Exploratory phase to Optimization]						
Renin	Hypertension	In-house			[Orange bar spanning from Exploratory phase to Optimization]						

Inhouse preclinical program

Inhouse preclinical program

Inhouse preclinical program

Medivir - Key achievements during the last 12 months



- Medivir sharpens the strategic focus and strengthens its financial position. Cost savings to be carried out during 2009.
- Cathepsin K Candidate Drug MIV-710 selected on February 4th, 2009
- Cash position by end of year 2008 (SEK 284m) with present yearly structural burn rate of SEK 200m
- Hepatitis C polymerase Candidate Drug selected on December 9th in the JNJ/Tibotec collaboration program triggering a milestone payment of € 2.6m
- Applications for approval of Lipsovir (labial herpes) filed and validated in the US and Europe. Approval target date late autumn 2009
- Our biggest deal ever signed in May with JNJ/Tibotec for hepatitis C nucleoside polymerase inhibitors (>USD 190m)
- Strong phase IIa data presented for TMC435 (hepatitis C protease inhibitor)



Lipsovir

Avoid your next cold sore

- We filed an NDA with US (FDA) and EU regulatory authorities for Lipsovir® in October
- In December, these authorities announced that they had validated the NDA and that their review and evaluation process had begun
- We expect to receive the outcome of this process in autumn 2009
- The objective is to enter partnerships to commercialize Lipsovir® globally.





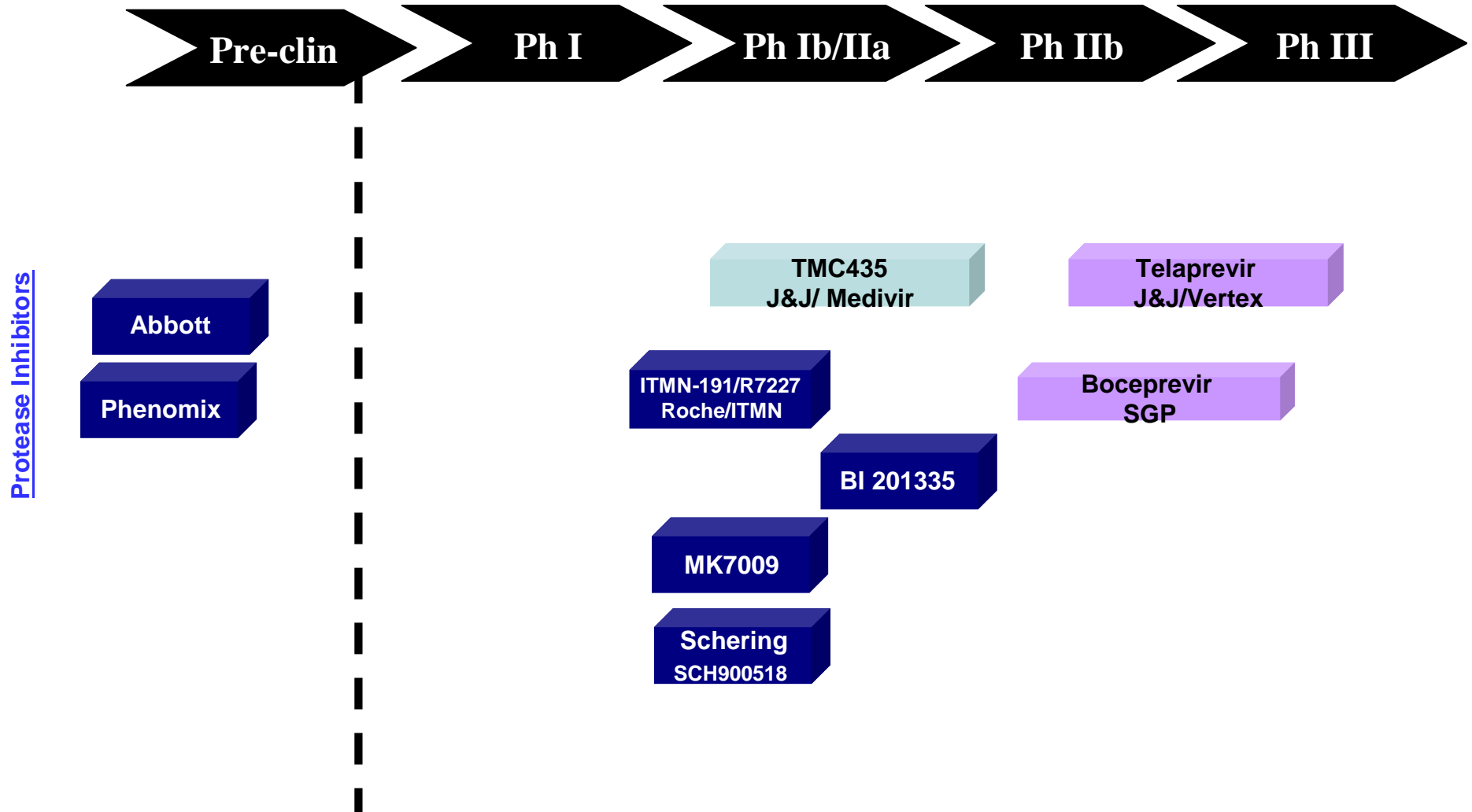
**TMC435 - in collaboration with
Tibotec / J&J**

**Presently in final stage of phase IIa for
genotype 1 treatment naïve patients and
treatment experienced patients**

Phase IIb will start in Q2



HCV PI Competitive Landscape



Hepatitis C protease - TMC435 - Medivir/Tibotec

Status

- Phase IIb will start Q2 2009

Results from IIa

- Data from 25 and 75 mg dose groups in naïve patients presented in November 2008.

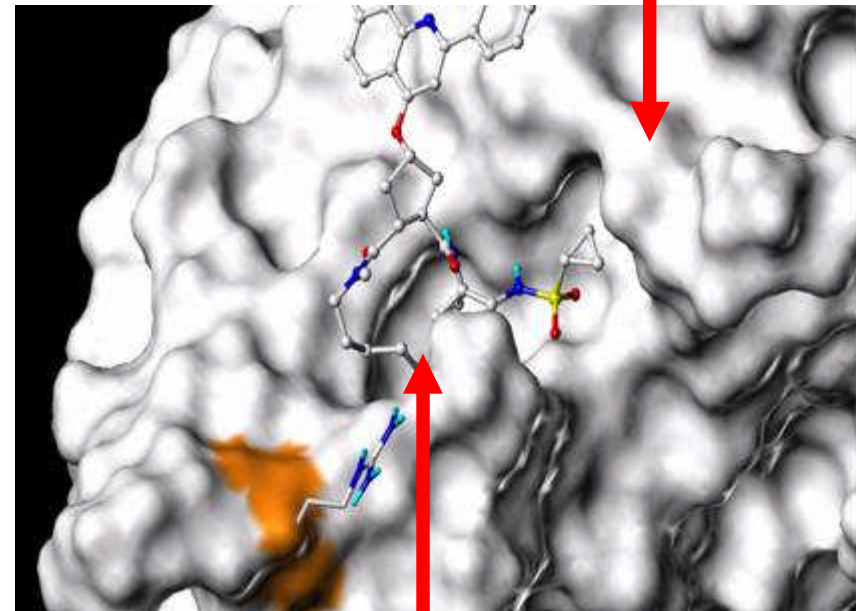
New data to be presented in April

- Data from 200 mg dose group in naïve patients and data in non-responders and relapsers from the 75, 150 and 200mg dose groups to be presented at EASL 23-25 April 2009

Licensing agreement

- Upfront & milestones of EUR 80.5m (EUR 47m remains)
 - + royalties on sales
- All development costs covered by Tibotec
- Nordic rights retained by Medivir

NS3/4A:
Key protease for
virus replication



Enzyme inhibiting compound

Opera-1 (cohort 1): Antiviral efficacy in 25 and 75 mg

Table 3: Mean HCV RNA changes from baseline and number of patients with HCV RNA levels below lower limit of quantification (LLQ) and detection (LLD) per treatment arm.

Dose/Treatment	Time point (Day)	Mean HCV-RNA change (Log ₁₀ IU/mL)	< LLQ n/N <25 IU/mL	< LLD n/N <10 IU/mL
Panel A Placebo	7	-0.08	0/6	0/6
Panel A TMC435 25 mg	7	-2.63	1/9	0/9
Panel A TMC435 75 mg	7	-3.43	0/9	0/9
Panel B Placebo	7	-1.77	0/6	0/6
	14	-2.56	0/6	0/6
	28	-3.83	3/6	2/6
Panel B TMC435 25 mg	7	-3.47	1/9	0/9
	14	-4.19	3/9	1/9
	28	-4.74	6/9	3/9
Panel B TMC435 75 mg	7	-4.55	1/9	0/9
	14	-5.15	7/9	3/9
	28	-5.52	9/9	8/9

RVR of 89%

HCV RNA levels were assessed with Roche COBAS Taq Man HCV/HPS assay v2 with an LLQ of 25 IU/mL and an LLD of ~10 IU/mL. To calculate mean HCV RNA values, results below LLQ are imputed with 24 IU/mL and values below LLD with 9 IU/mL.

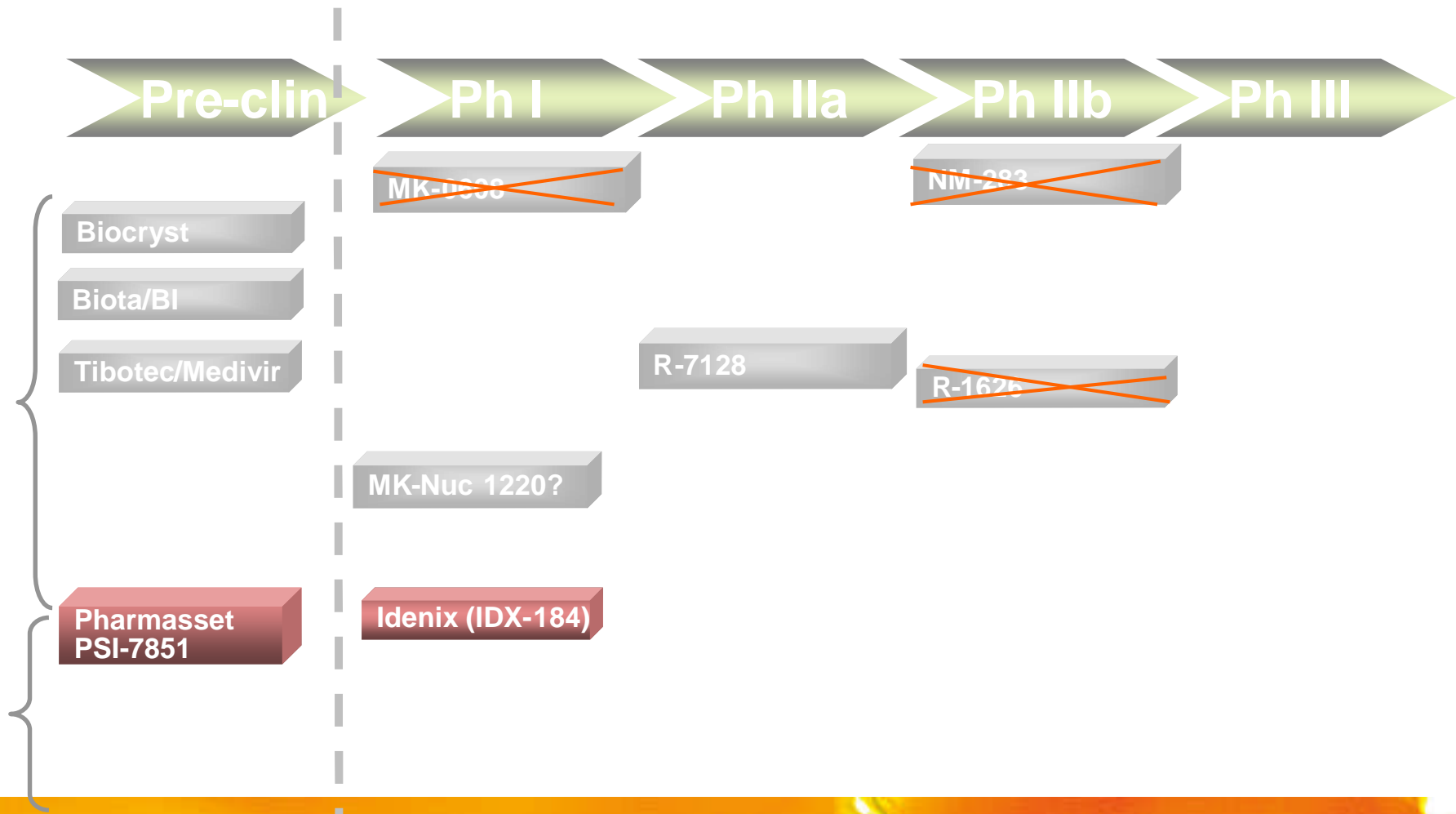


In collaboration with
Tibotec / JNJ

Nucleoside HCV Polymerase Inhibitors



HCV Nucleoside Competitive Landscape



Hepatitis C Polymerase - Medivir/J&J program

Status

- Partnership with Tibotec / Johnson & Johnson since May 15 2008
- Candidate Drug selected on December 9th, 2008, triggering a milestone of € 2.6m
- The selected CD now in preclinical development towards phase I

Patents

- Extensive and non-limiting IP filed

Licensing agreement

- Remaining milestones of € 137m + royalties on sales for one product reaching market.
- Additional € 130m for second compound and indication reaching market + royalties on sales.
- FTE Funding for one year, ends May 2009
- All development costs covered by JNJ
- Nordic rights retained by Medivir



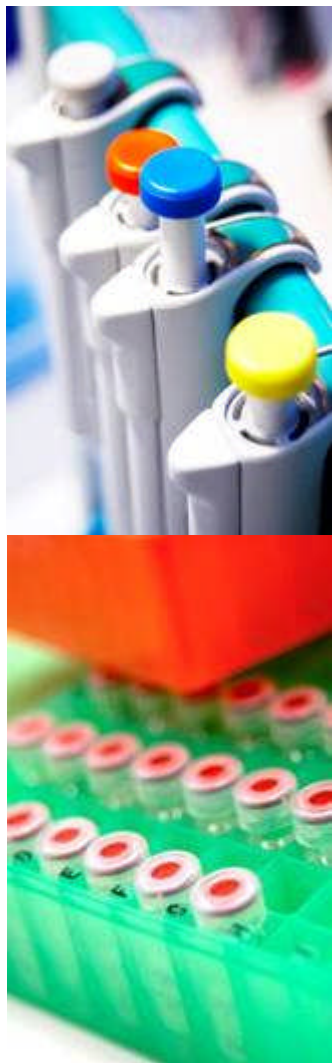


Cathepsin K inhibitors

Osteoporosis and Osteoarthritis



Medivir Cathepsin K Inhibitor Program - Status



- MIV-710 was selected as Candidate Drug in February 2009. This is a follow-on to MIV-701 having superior pharmacokinetic properties
- A program for a dual Cathepsin S & K inhibitors targeting rheumatoid arthritis, RA, is investigated and could be a part of the future partnering package.
- Strong IP position
- A broad initiative to identify a partner for the full program is now under way

Cathepsin K Inhibitor - many possibilities

- Major market opportunity in both osteoporosis (OP) and osteoarthritis (OA)
- Metastatic bone disease is a major and debilitating adverse complication of several advanced cancers, including breast cancer. Cathepsin K is up-regulated in tumour cells and hence in addition to its direct effect on bone, a cathepsin K inhibitor may well represent a more effective therapy for the prevention of bone metastases
- Cathepsin K inhibitors demonstrate potent and reversible anti-resorptive activity whilst not causing suppression of the beneficial bone formation as expected with other anti-resorptives

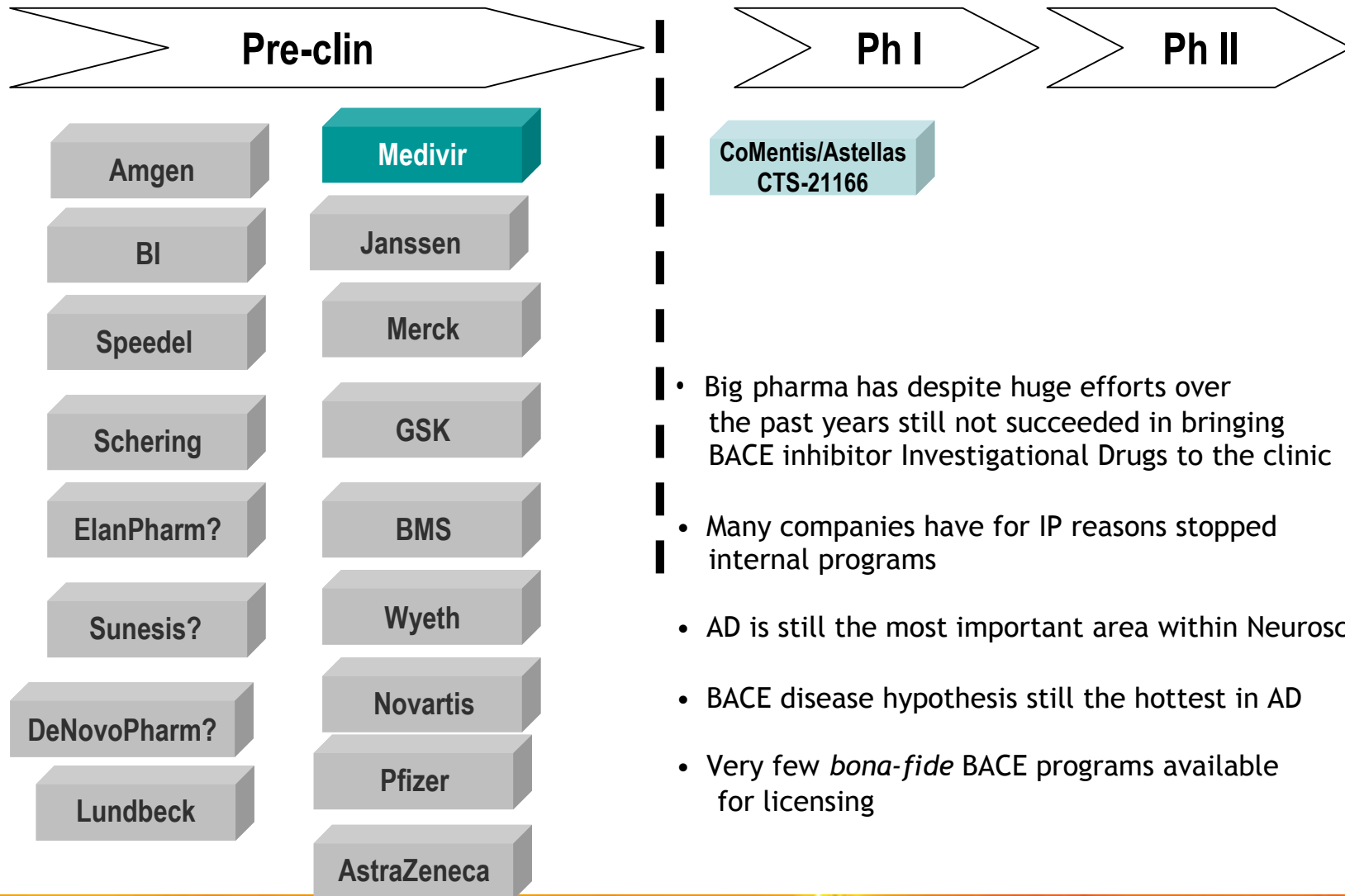


BACE Inhibitors

Alzheimer's disease



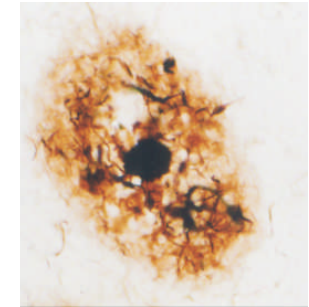
BACE-1 Inhibitors in development



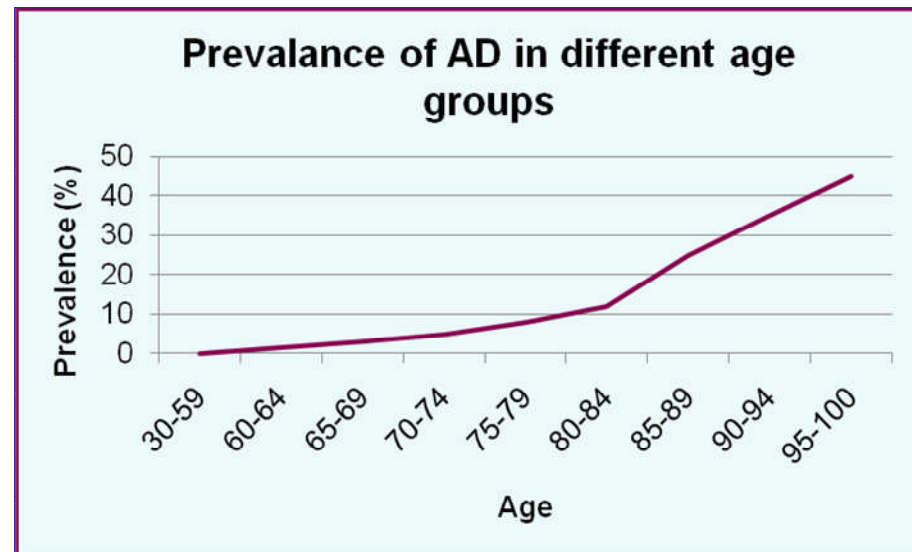
- Big pharma has despite huge efforts over the past years still not succeeded in bringing BACE inhibitor Investigational Drugs to the clinic
- Many companies have for IP reasons stopped internal programs
- AD is still the most important area within Neuroscience
- BACE disease hypothesis still the hottest in AD
- Very few *bona-fide* BACE programs available for licensing

Alzheimer's disease, AD

- Around 24 million AD cases world-wide
- Life expectancy from diagnosis: Approx. 10 years
- Stage 1 (1-3 y):
 - Memory impairment
- Stage 2 (2-6 y):
 - Difficulties to recognize people and objects
- Stage 3 (4-6 y):
 - Very passive, hard to reach
 - Need help with hygiene, dressing, eating
 - Psychotic problems (paranoia, aggression...)
 - Incontinence, low blood pressure, infections
- The cost for dementia care in Sweden is around 40 billion SEK/ year (\approx heart/vascular diseases and cancer together)
- 60% of all institutional care places are kept by demented persons (30% in the 70s)
- No available drugs cures/prevents the disease
 - Acetylcholine esterase inhibitors
 - Glutamate antagonist



Reduced brain volume
Neuronal cell death Plaque (Amyloid β -peptide)
Synaptic degeneration



Medivir BACE Program

Novel and patentable lead series

- ✓ 3 validated novel Lead Series
- ✓ 2 additional series are at an earlier stage
- ✓ 1 series at advanced stage

Strong IP (patent) position

- ✓ Extensive and non-limiting IP filed on the 3 Lead Series
- ✓ Novelty on 2 earlier series where IP is still not filed

Potent BACE inhibitors both on enzyme and in cell-based assay

- ✓ Lead inhibitors display potent $IC_{50} < 5$ nM in both BACE enzyme and in cell-based assay, measuring AB40 release

Activity *in vivo* on reduction of AB40 release in the CNS upon administration of BACE inhibitor

CD selection expected in approximately 12 month

Partnering discussions have been initiated

Commercial focus in the coming 12 months

LIPSOVIR	<ul style="list-style-type: none">◆ Regulatory approval in EU & US◆ Secure optimal partnership structure for both EU, US & RoW
HEPATITIS C	<ul style="list-style-type: none">◆ HCV PI, TMC435: start of phase IIb clinical trials◆ HCV PI, TMC435: Present more data from the phase IIa study◆ HCV-Polymerase inhibitors: Completion of preclinical GLP safety studies and start of phase I clinical trials
CATHEPSIN K	<ul style="list-style-type: none">◆ Partnering process initiated
HIV PI	<ul style="list-style-type: none">◆ Candidate Drug selection by Tibotec/J&J
BACE, Alzheimer's	<ul style="list-style-type: none">◆ CD selection and partnering of the BACE program
PHARMA SALES	<ul style="list-style-type: none">◆ Strategic evaluation of Lipsovir for the Nordic markets◆ Secure new co-promotion deals and potential own product(s)
Financial	<ul style="list-style-type: none">◆ Secure a lower cost base