

H. Lundbeck A/S  
1H-2003



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## Safe Harbour Statement

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This presentation contains forward-looking statements that reflect the Management's current views with respect to certain future events and financial performance.

Statements containing the outlook for 2003 and the following years naturally involve uncertainties, and consequently actual results may differ materially from those projected or implied in the forward-looking statements.

Further, certain forward-looking statements are based on assumptions of future events, which may prove not to be accurate.

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## About Lundbeck

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### H. Lundbeck A/S

- A unique fully-integrated pharmaceutical company focusing solely on the treatment of diseases of the central nervous system
- Founded in 1915, listed on Copenhagen Stock Exchange June 1999
- Reuters: LUN.CO, Bloomberg: LUN DC
- More information: [www.lundbeck.com](http://www.lundbeck.com)

### Business and R&D focus areas

- Psychiatry
  - Depression
  - Schizophrenia
  - Anxiety
- Neurology
  - Dementia/Alzheimer's Disease
  - Parkinson's Disease
  - Epilepsy

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# Short-term Challenges & Financial Outlook 2003

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## Challenges

- Cipralex/Lexapro launch
- Ebixa launch
- Intensified generic impact on citalopram franchise

## Financial Outlook 2003

- Approx 10% revenue growth
- Approx 12% EBIT growth
- Operating margin approx. 25%

Due to backend-loaded YoY growth, ability to adjust costs end fiscal year 2003 is limited. Hence, +/-1 percentage point on revenue target equals approx. +/- 4 percentage points on EBIT level

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## Assumptions for 2003 guidance

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- Timing and impact of legal decisions on generic environment in Europe and Canada.
- Accelerated Cipralex sales through launch in major antidepressant markets
- Continuous high SG&A spending due to Cipralex and Ebixa launches
- High R&D costs due to late phase projects and the Synaptic acquisition
- Decreasing production costs as a percentage of sales through increased operational efficiency

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# Mid-/Long-term Growth Drivers & Financial Outlook

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## Mid/Long term Growth Drivers

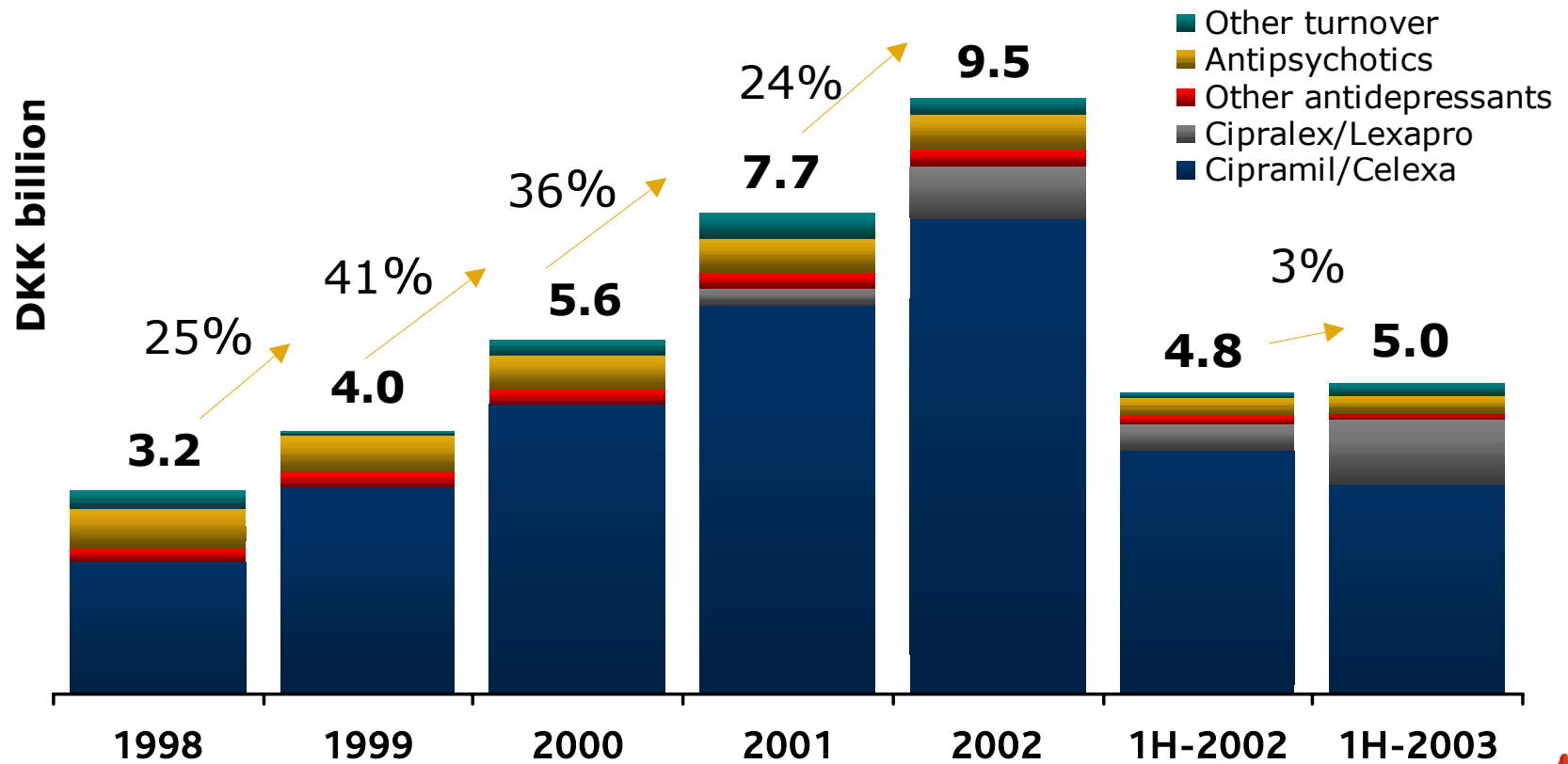
- Establish US Salesforce
- Continue to strengthen pipeline through in-house R&D and licensing
- Leverage on existing sales infrastructure
- Utilize investments made in production facilities

## Long-term Financial Outlook

- Improve growth rates beyond IPO targets
- Drive margin expansion through enhanced operational efficiency
- Specific targets on cost structure elements will be given to the market after full year 2003 results

# Revenue growth development

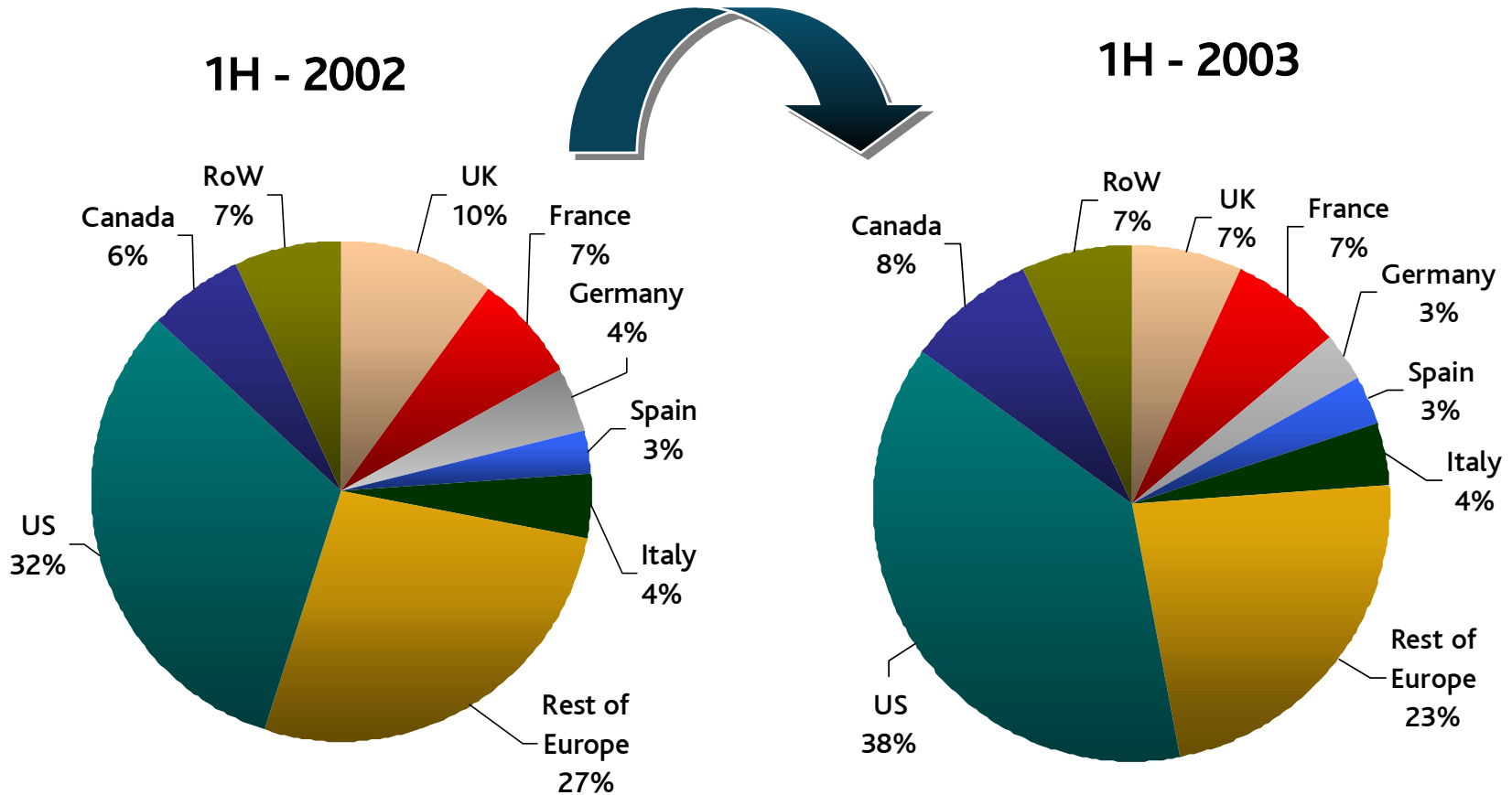
**CAGR 1998 - 2002: 31%**



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# 70% of total revenue from the 7 largest antidepressant markets in the world

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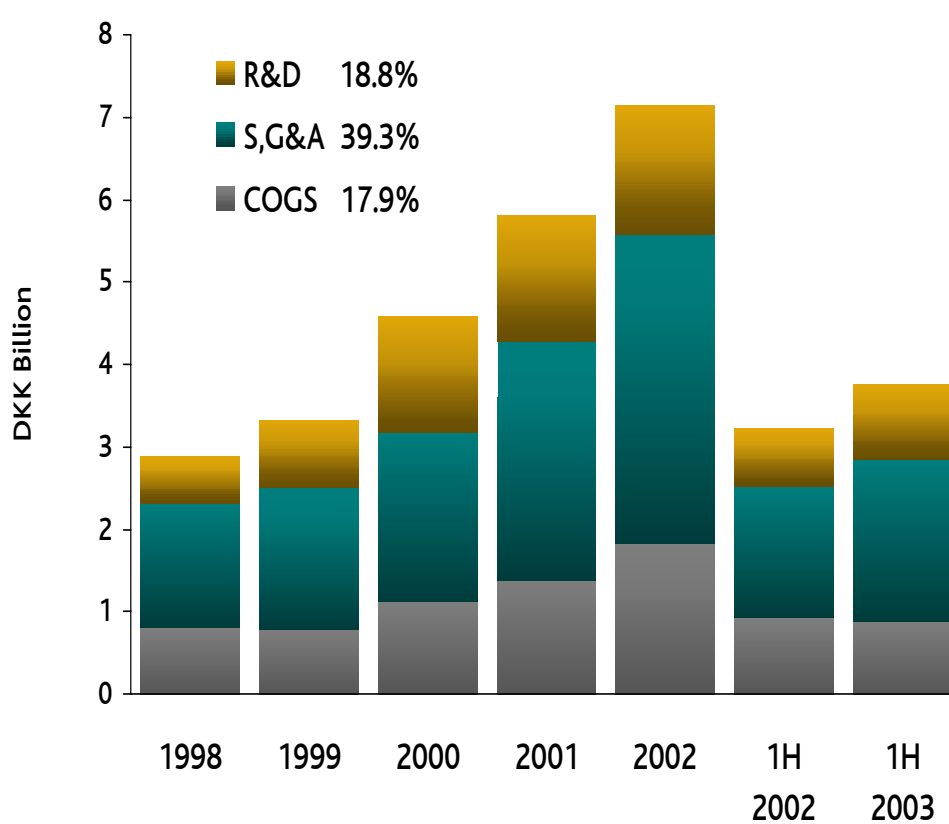


## Citalopram/escitalopram sales on the 7 largest markets for antidepressants

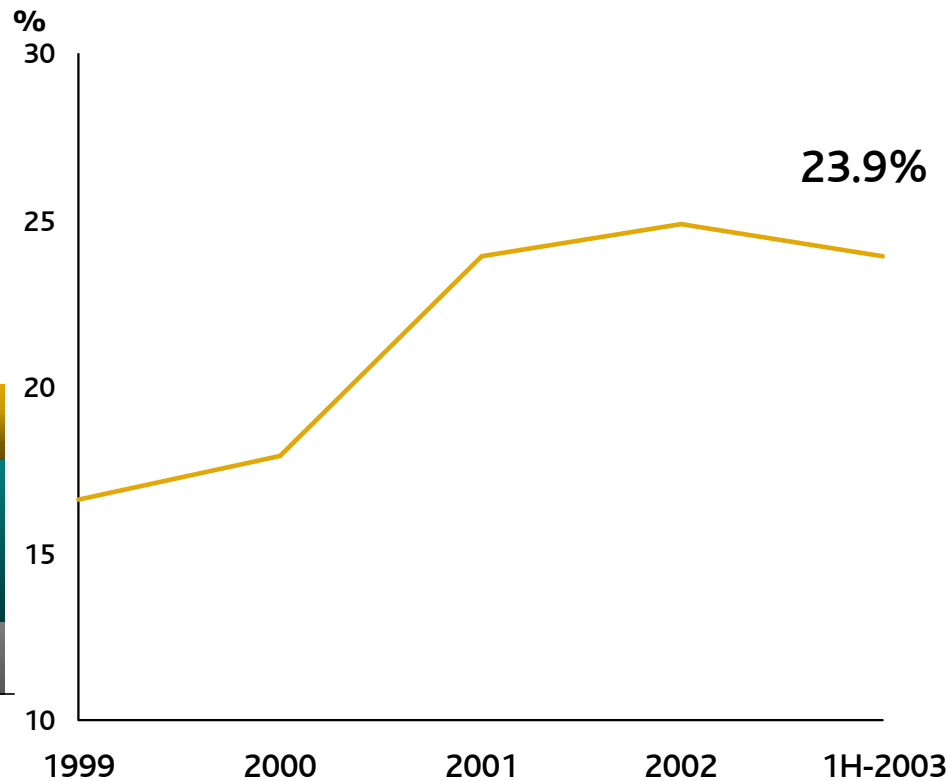
Sales DKKm	1H 2003	1H 2002	Change
<b>UK</b>	<b>286.5</b>	<b>410.8</b>	<b>-30%</b>
- Cipramil	218.8	410.8	-47%
- Ciprallex	67.7	0	----
<b>France</b>	<b>330.5</b>	<b>328.8</b>	<b>1%</b>
<b>Germany</b>	<b>62.0</b>	<b>138.6</b>	<b>-55%</b>
<b>Spain</b>	<b>138.0</b>	<b>132.3</b>	<b>4%</b>
<b>Italy</b>	<b>198.3</b>	<b>158.6</b>	<b>25%</b>
<b>Canada</b>	<b>351.8</b>	<b>282.2</b>	<b>25%</b>
<b>US income (Forest)</b>	<b>1,832.6</b>	<b>1,520.7</b>	<b>21%</b>
- Celexa	1008,1	1,106.4	-9%
- Lexapro	824,5	414.3	99%
<b>7 major countries</b>	<b>3,199.7</b>	<b>2,972,0</b>	<b>8%</b>
<b>Other markets</b>	<b>1,172.5</b>	<b>1,316.2</b>	<b>-11%</b>
<b>Total sales</b>	<b>4,372.2</b>	<b>4,288.2</b>	<b>2%</b>

# Cost structure & operating margin development

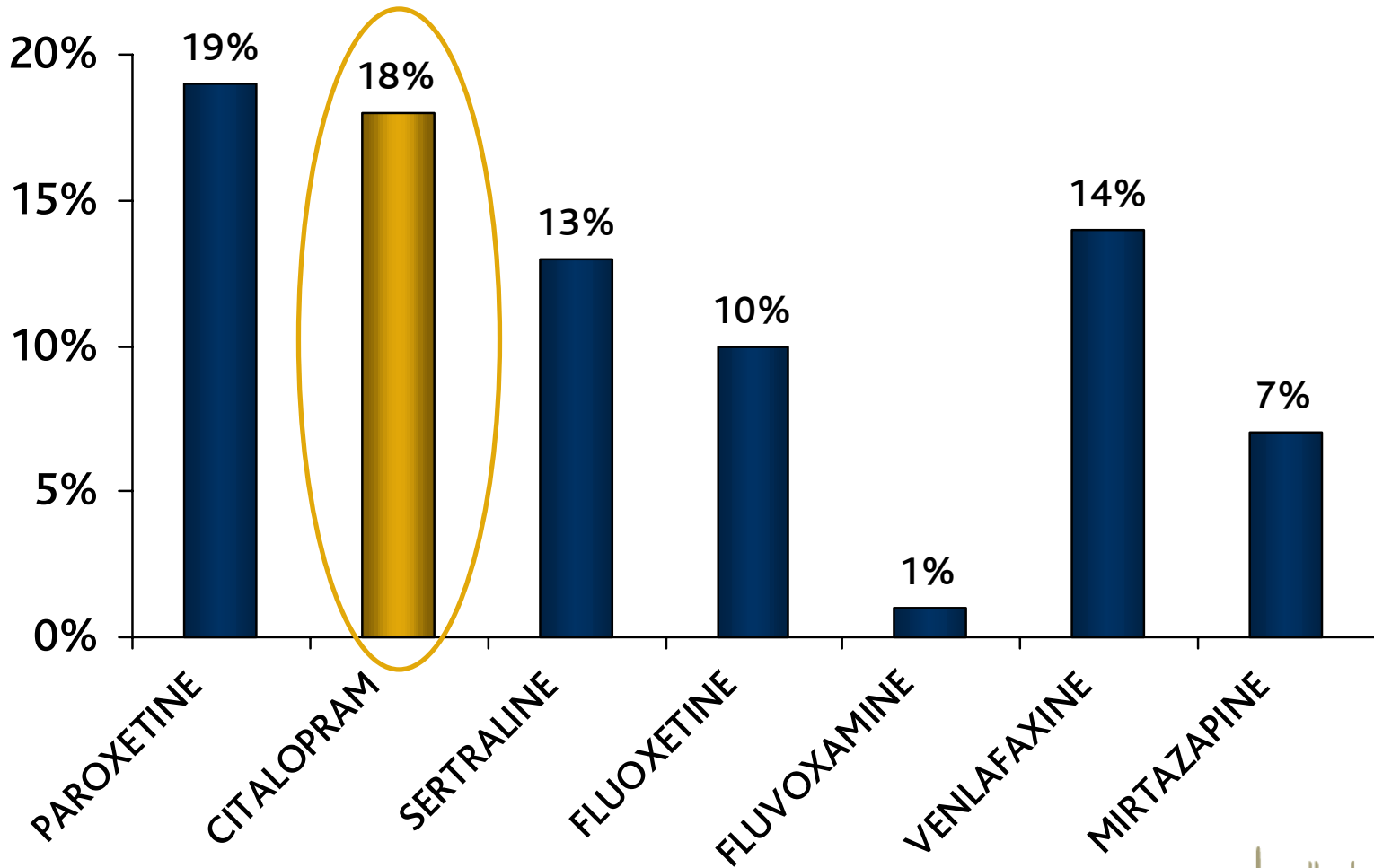
## Operating Costs



## Operating Margin



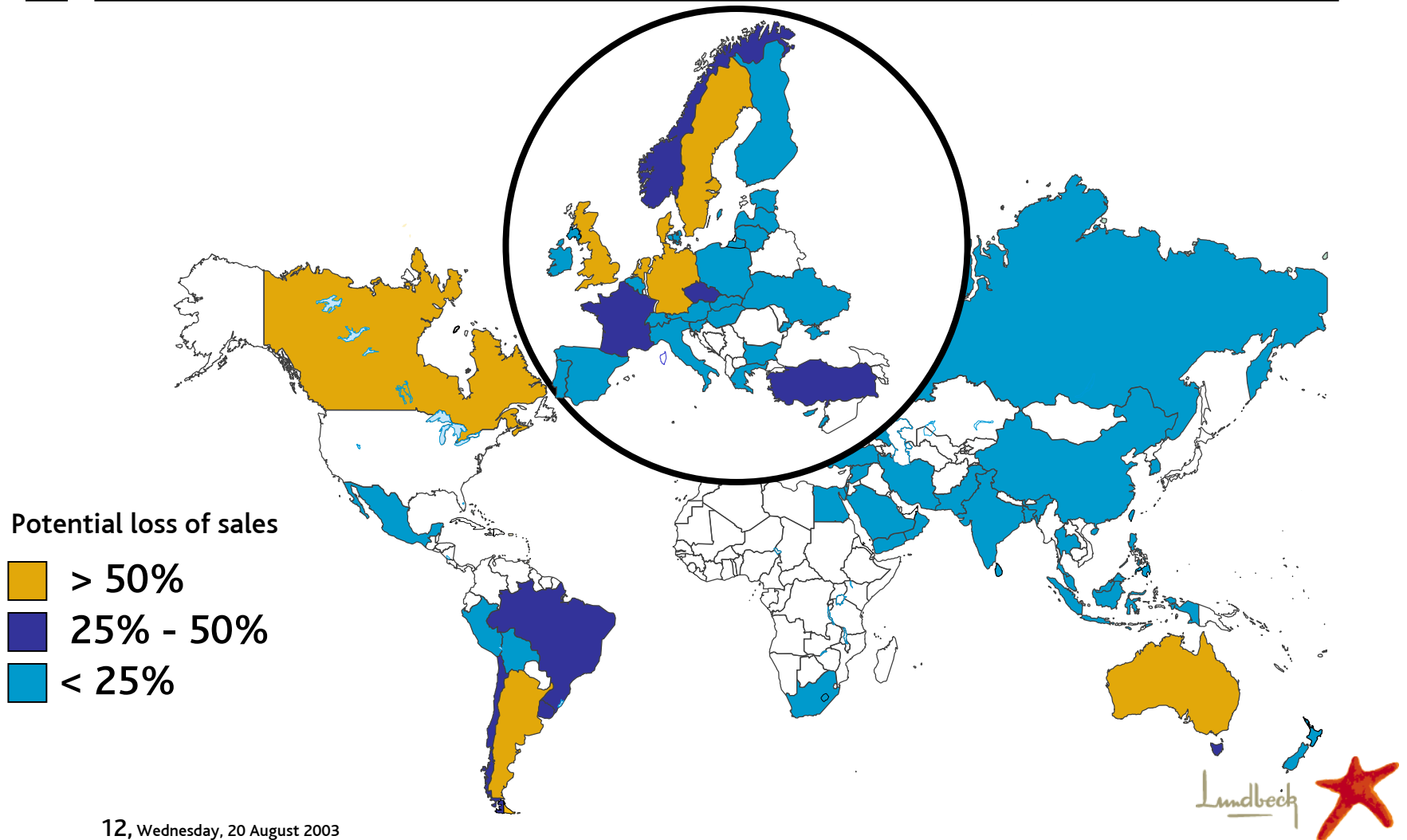
## N6A value market shares in Europe



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# Sensitivity to generic competition on Cipramil

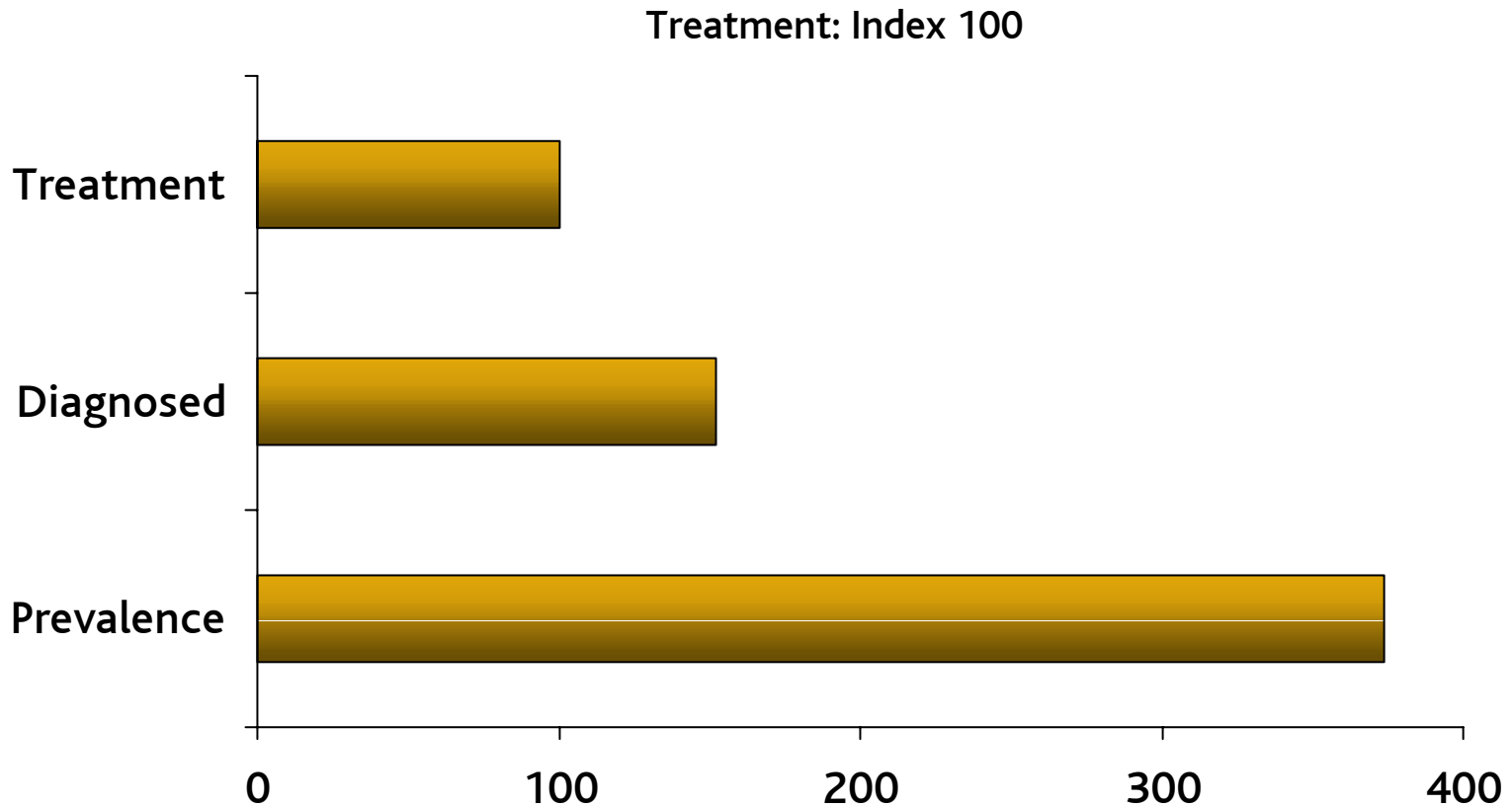
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# Huge growth potential in depression market

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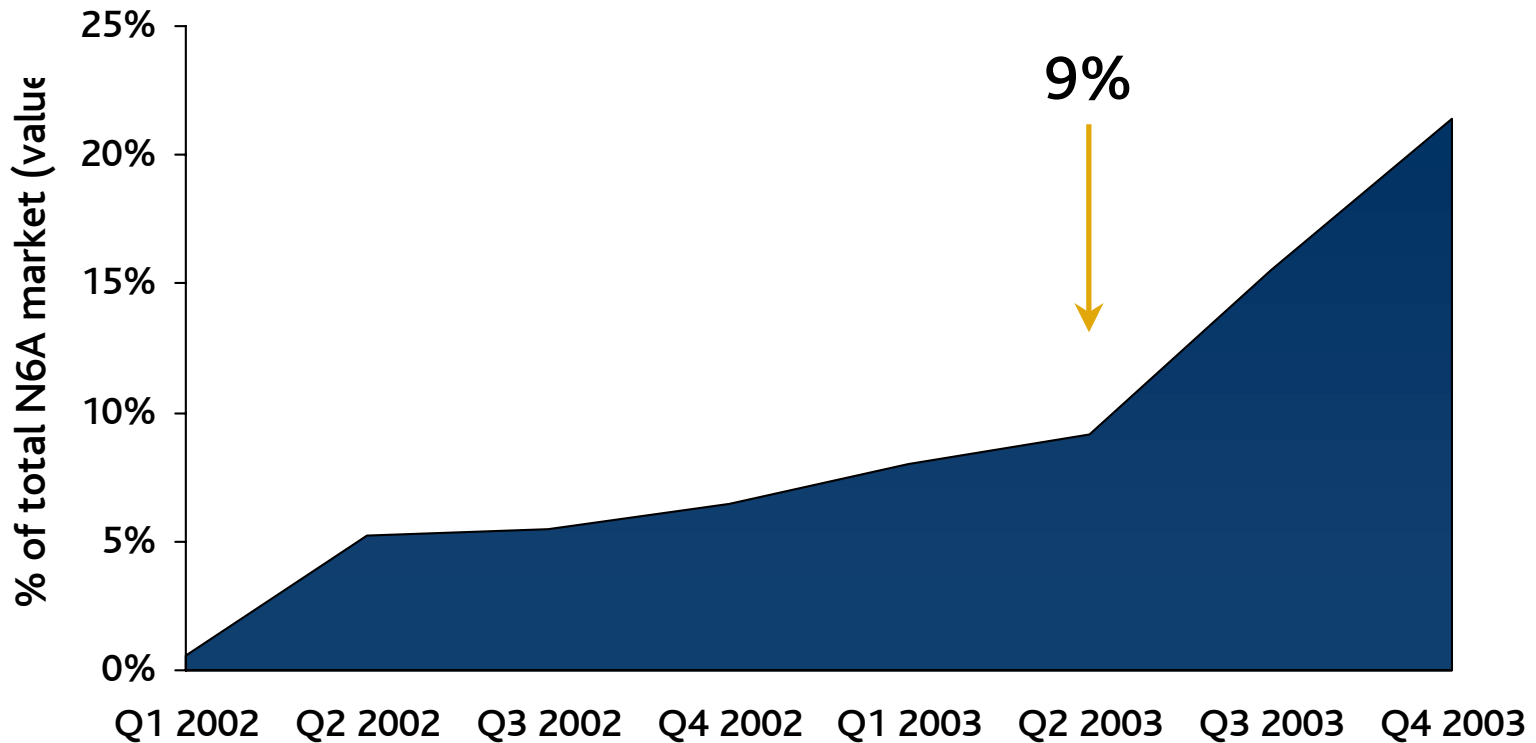


Source: Decision Resources, November 2002, major 7 pharmaceutical markets

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## Cipralex launch – coverage of N6A Lundbeck markets

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Source: IMS, 2002

**Lundbeck markets:** 25% of total N6A market  
**US:** 73% of total N6A market  
**Japan:** 2% of total N6A market

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# Cipralex launch

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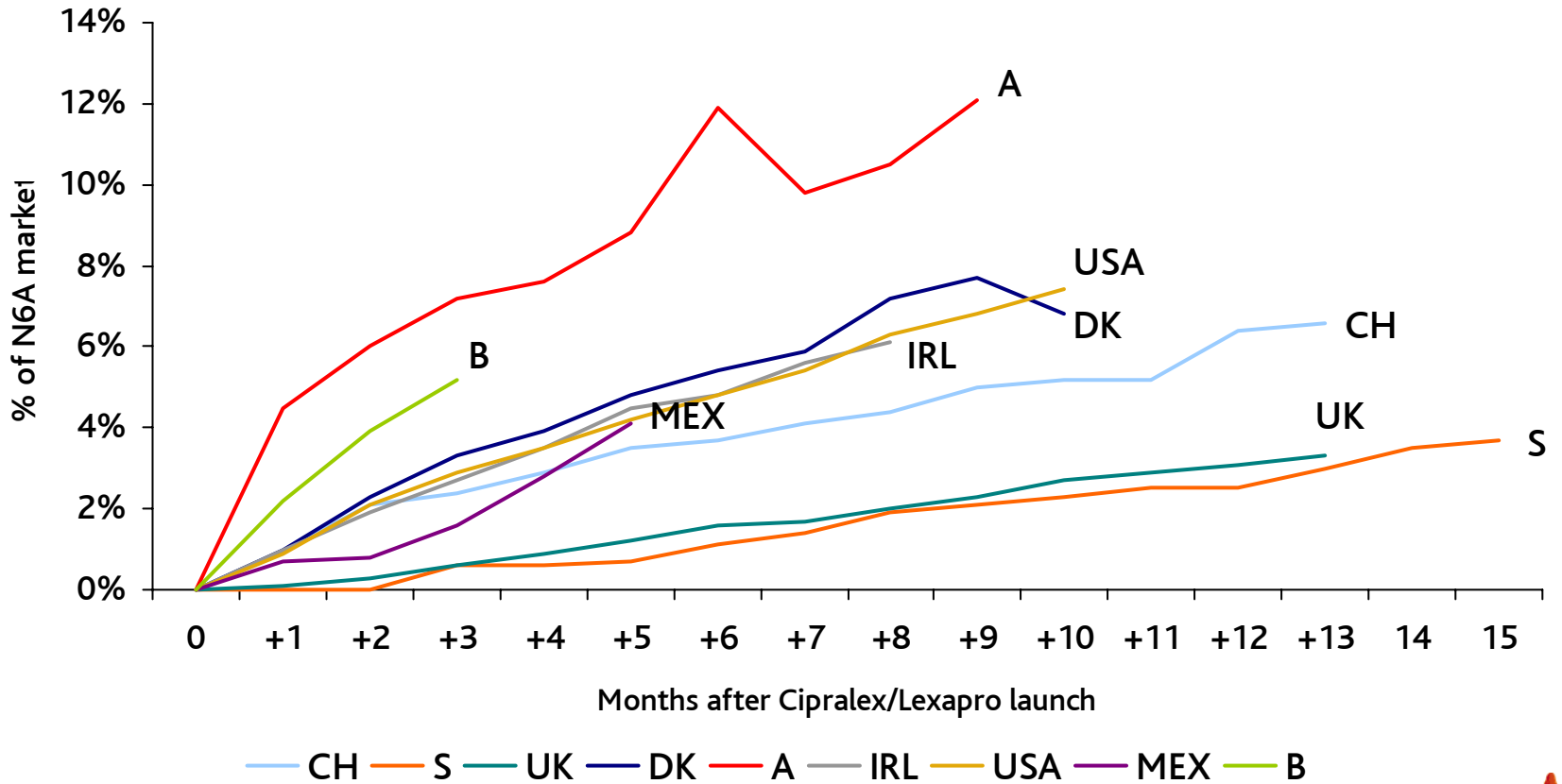
Cipralex Launched		Launch 2H 2003	Launch 2004
Austria	South America	Asian Region	Australia
Belgium	Sweden	Central Europe	Canada
Bulgaria	Switzerland	Eastern Europe	Greece
Czech Republic	Turkey *	France	Russia
Denmark	UK	Germany	
Estonia		India	
Finland **		Italy	
Ireland		Middle East Region	
Israel		Pakistan	
Latvia		Portugal	
Lebanon		South Africa	
Mexico		Spain	
New Zealand			
Norway			

\*) Launched after 30 June 2003

\*\*) Reimbursement pending

# Cipralex total market share, value

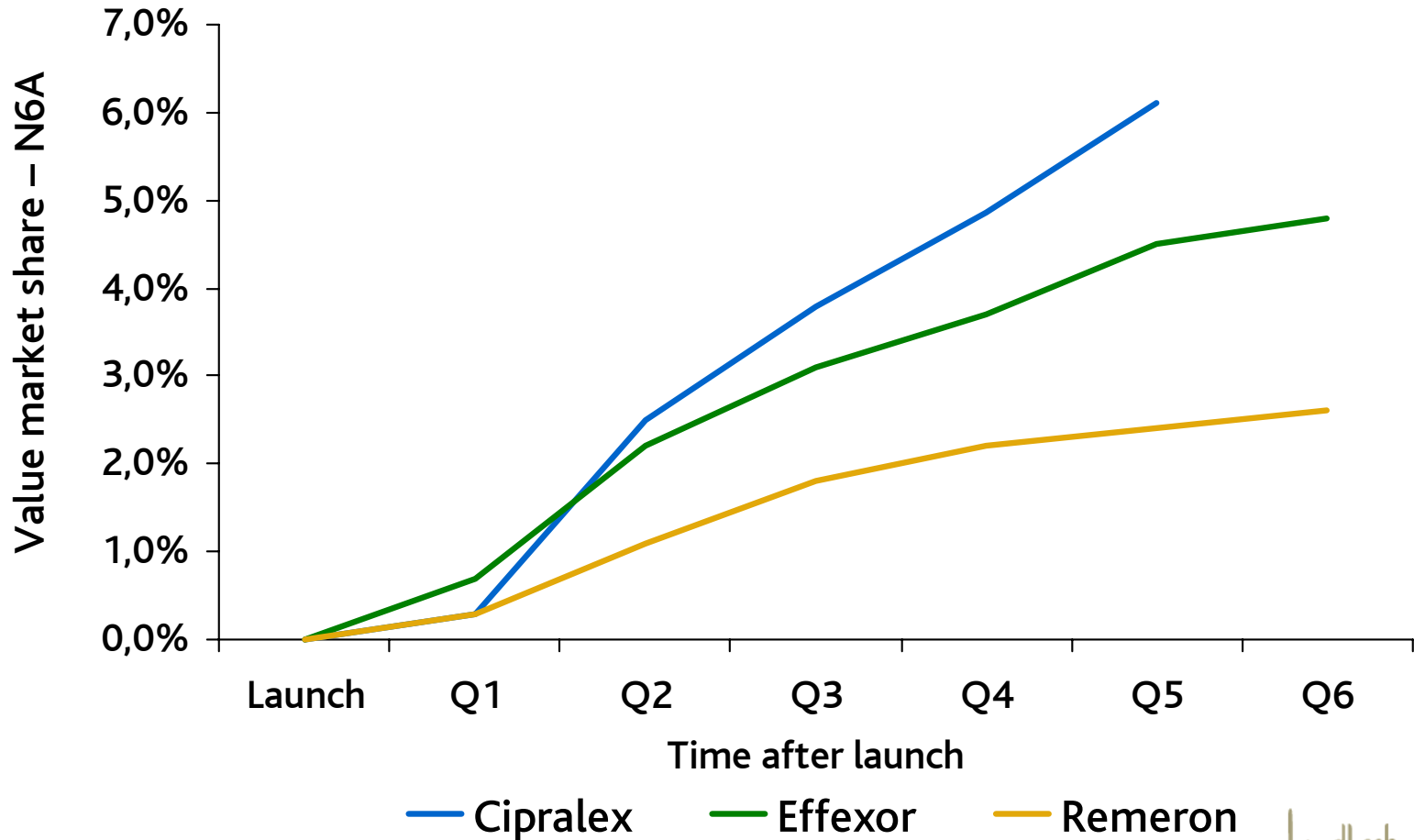
From launch with reimbursement





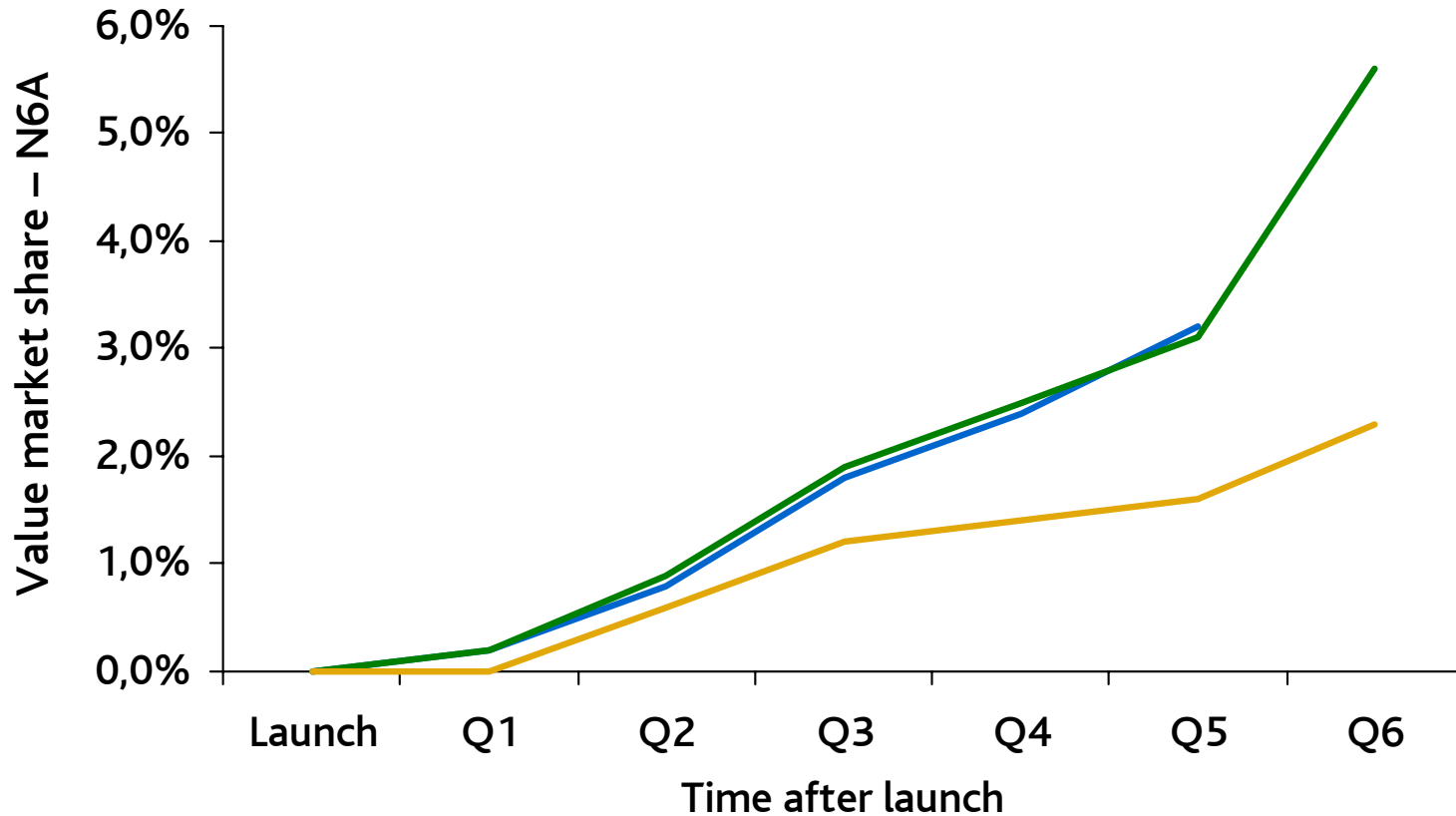
# Cipralex value market penetration - Switzerland

Cipralex penetration vs. competitors



# Cipralex value market penetration - Sweden

## Cipralex penetration vs. competitors



— Cipralex

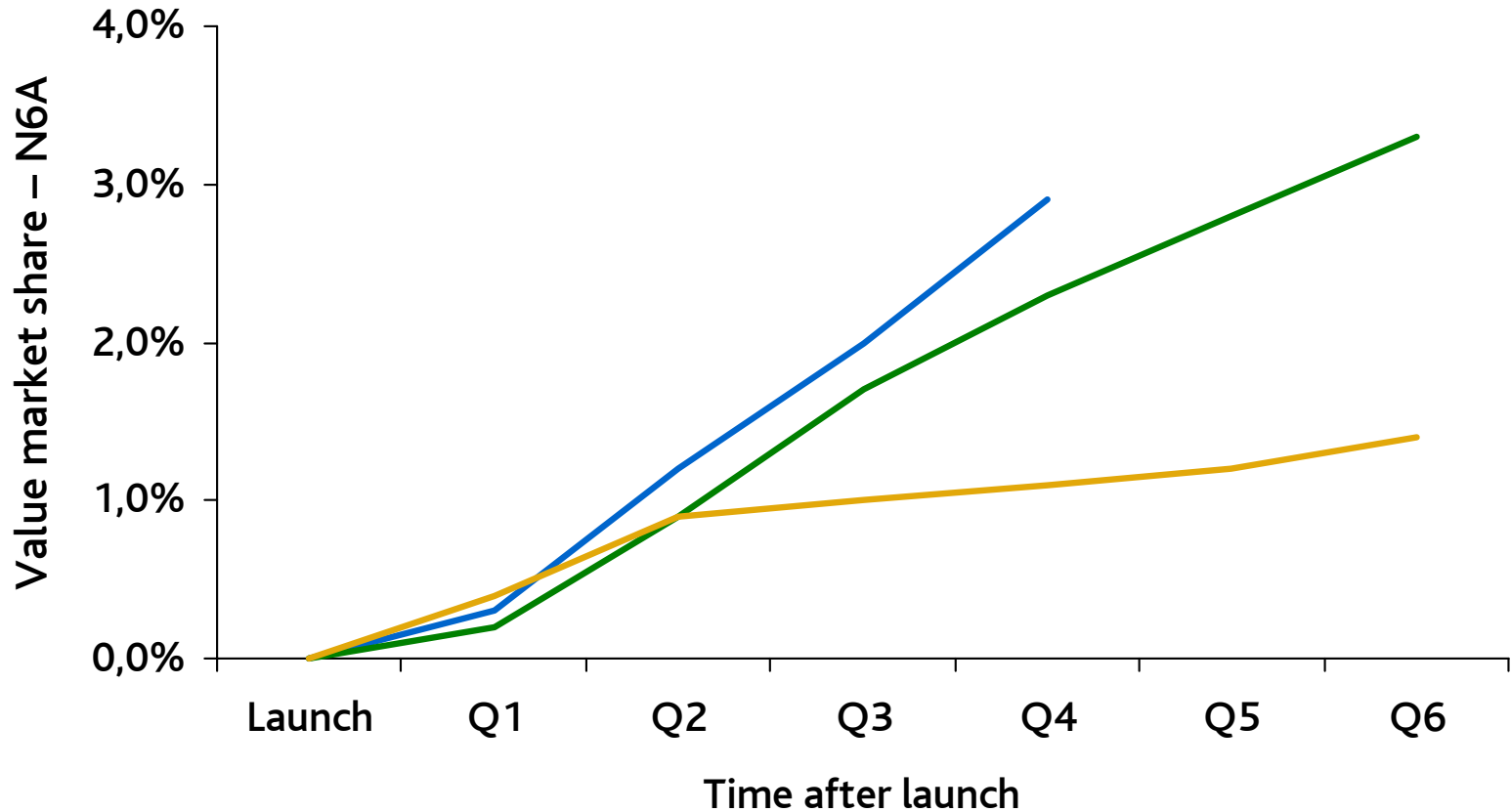
— Effexor

— Remeron



# Cipralex value market penetration - UK

## Cipralex penetration vs. competitors



— Cipralex

— Effexor

— Remeron

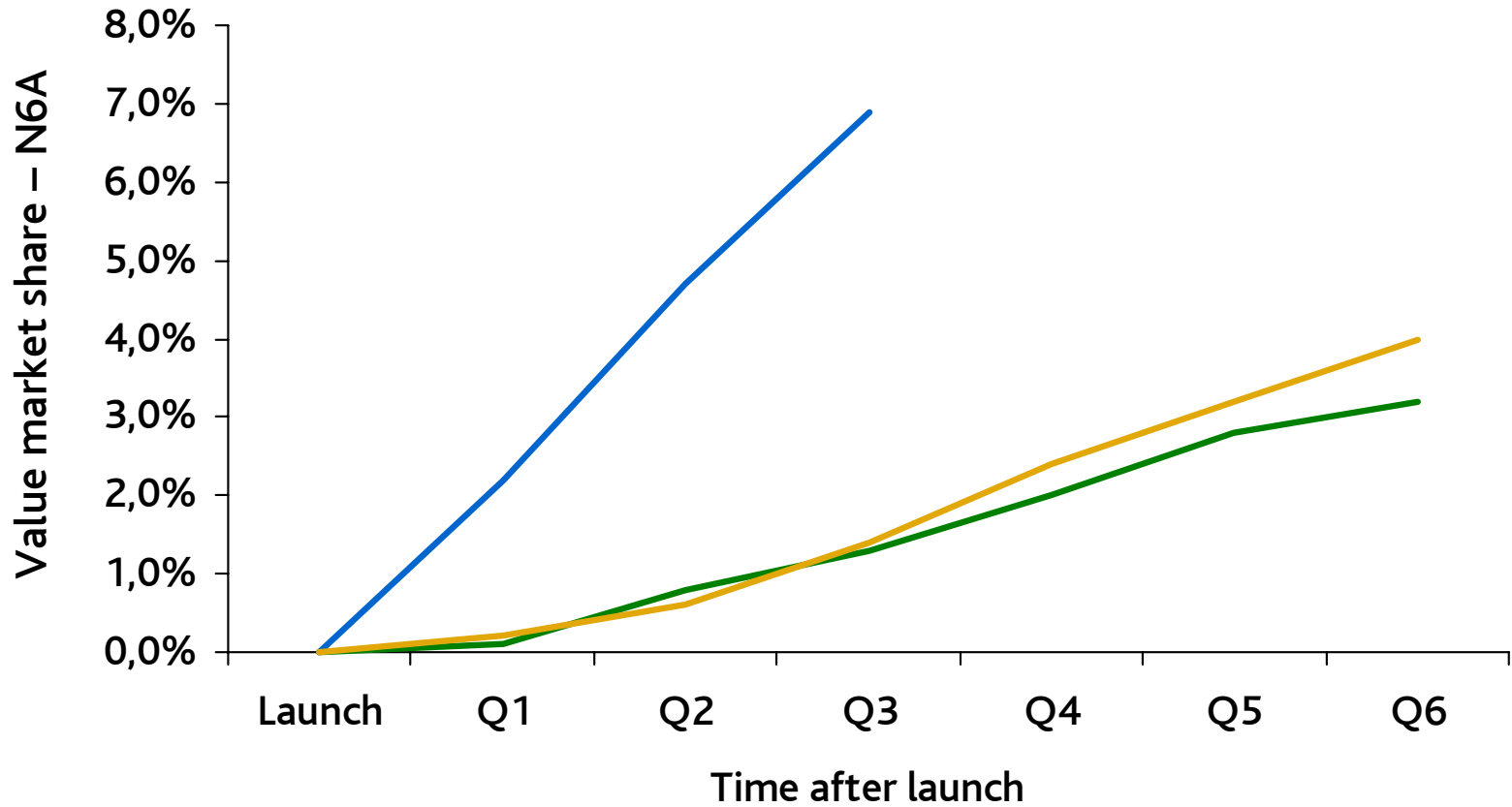


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# Cipralex value market penetration - Denmark

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Cipralex penetration vs. competitors



— Cipralex

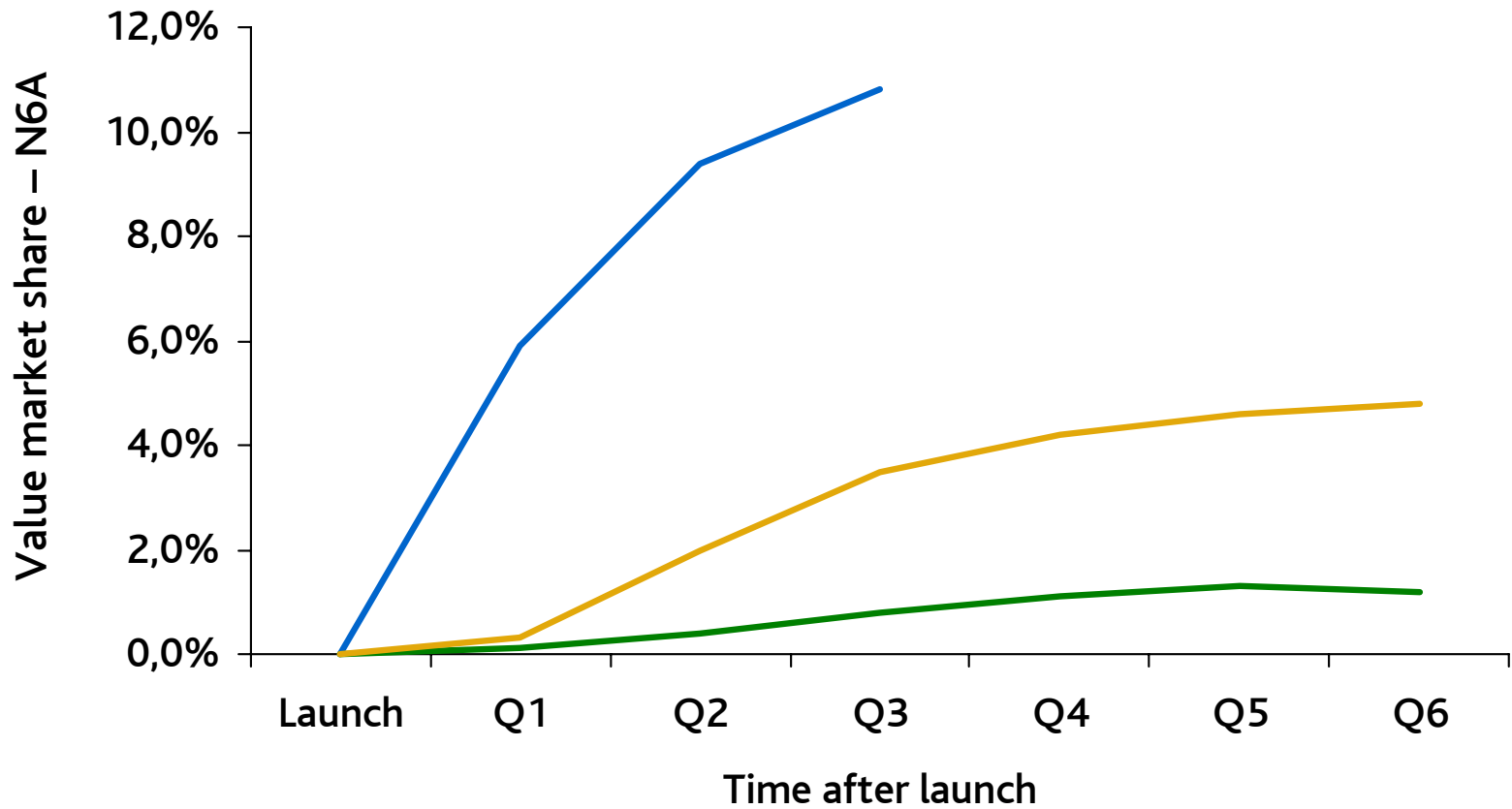
— Effexor

— Remeron



# Cipralex value market penetration - Austria

## Cipralex penetration vs. competitors



— Cipralex

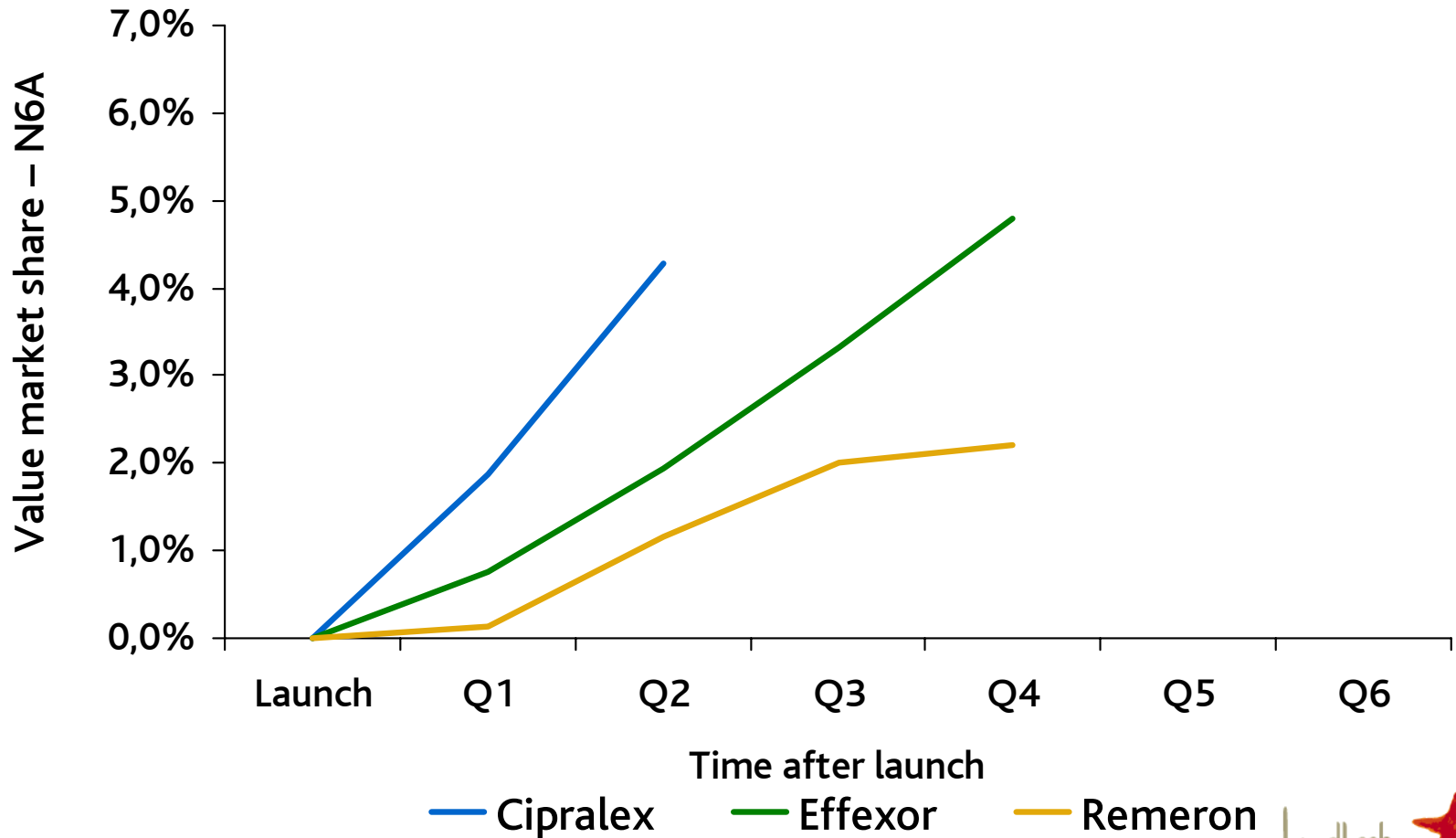
— Effexor

— Remeron



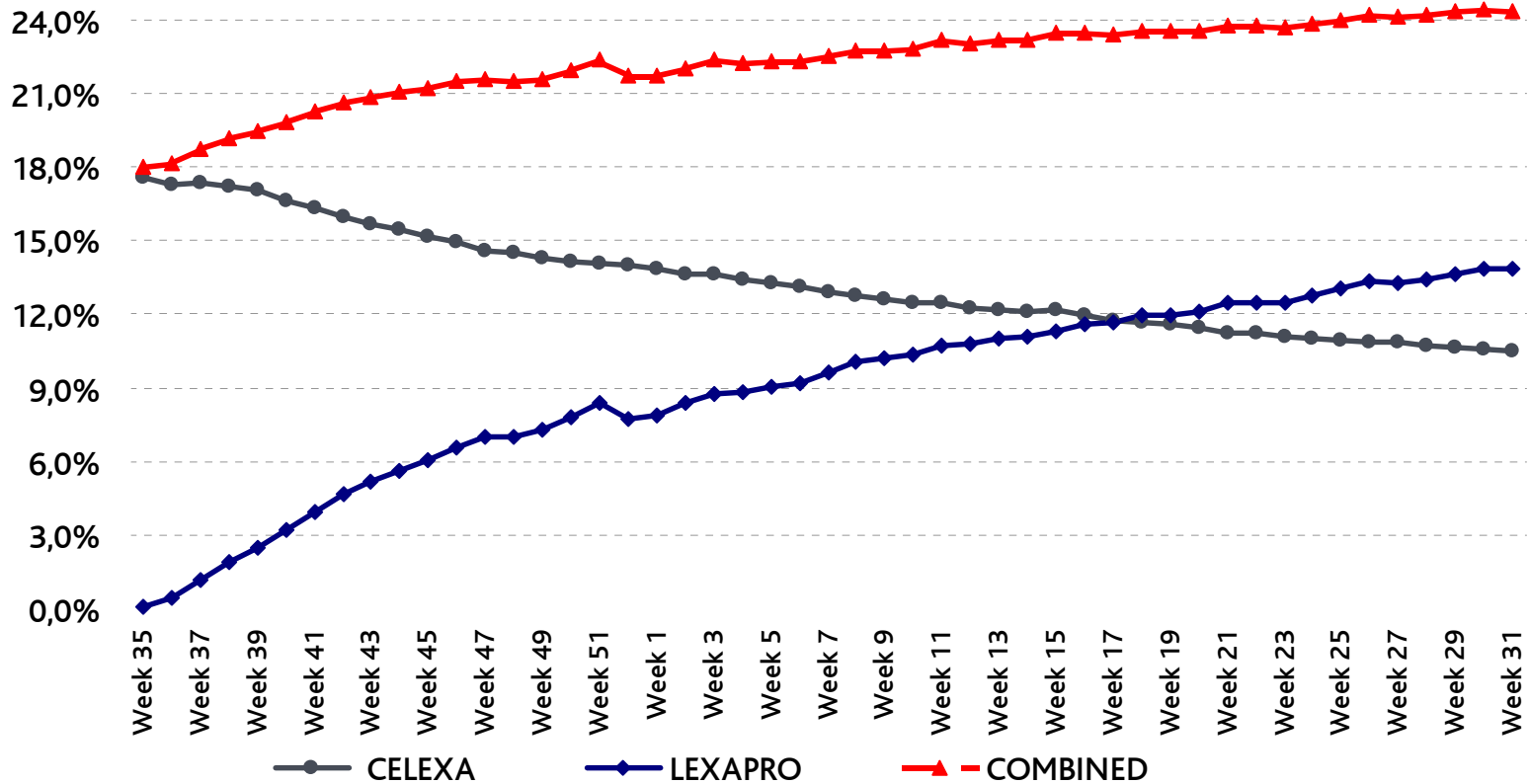
# Cipralex value market penetration - Ireland

## Cipralex penetration vs. competitors



# New Rx Market Share in USA

## Lexapro, 1 August 2003 – 13,83%



SSRI Market (Celexa, Lexapro, Effexor /XR, Luvox, Paxil, Prozac, Zoloft)

Source: IMS weekly RX's

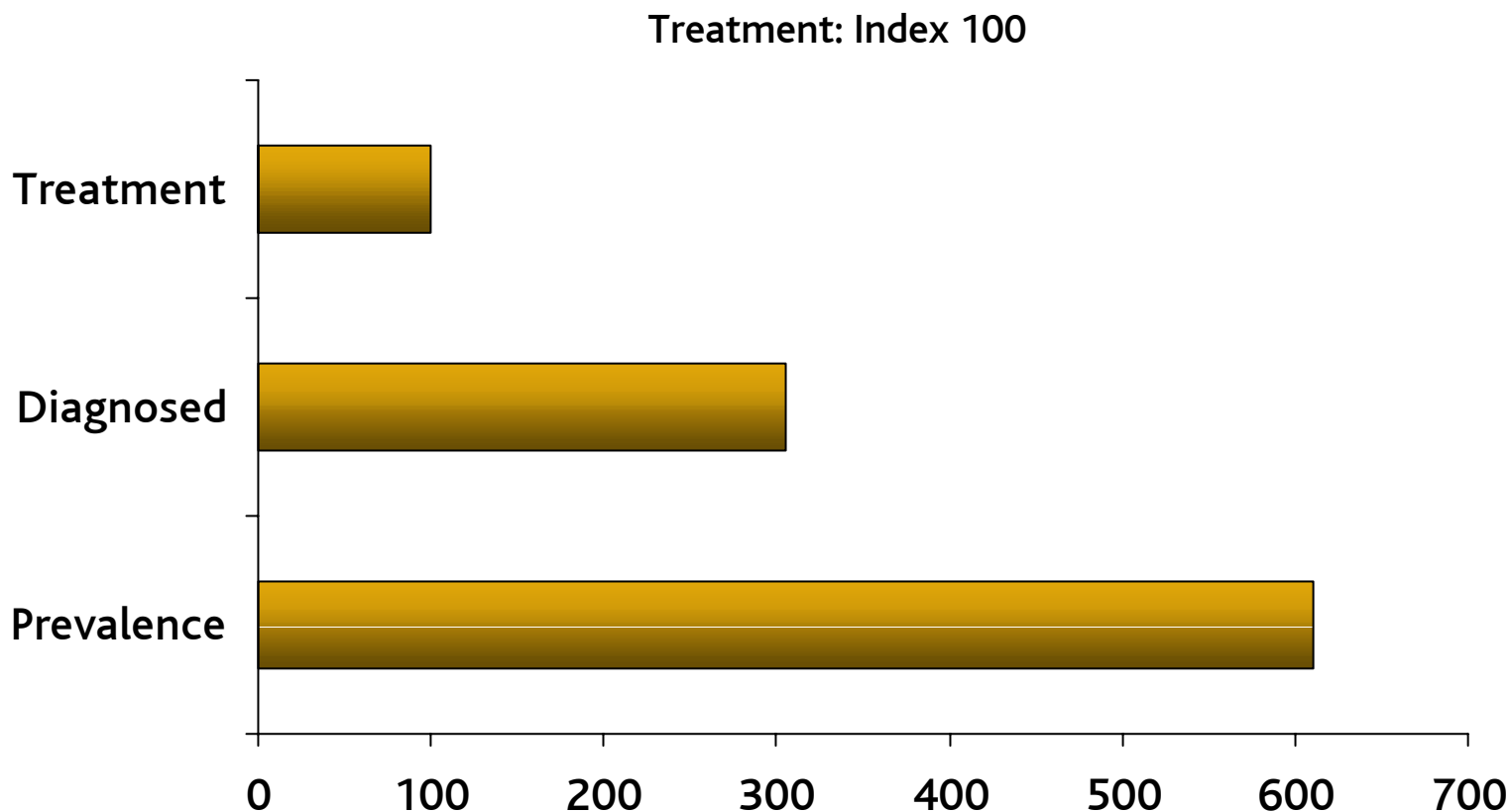
23, Wednesday, 20 August 2003



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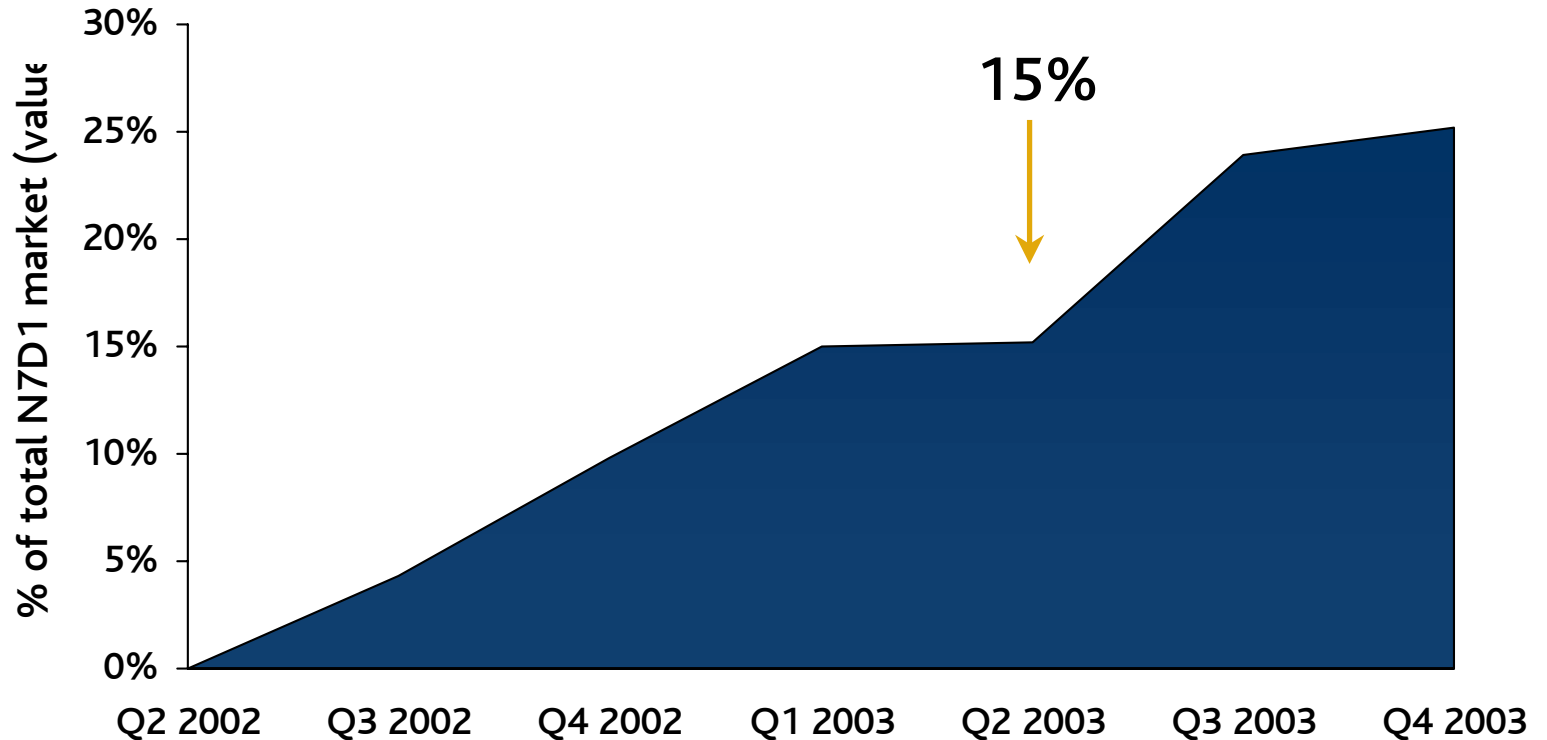
# A market being created – 46% growth within Alzheimer’s in 2002

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## Ebixa launch – coverage of N7D1 Lundbeck markets



Source: IMS, 2002

Lundbeck markets:	31% of total N7D1 market
US:	60% of total N7D1 market
Japan:	9% of total N7D1 market

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# Ebixa launch

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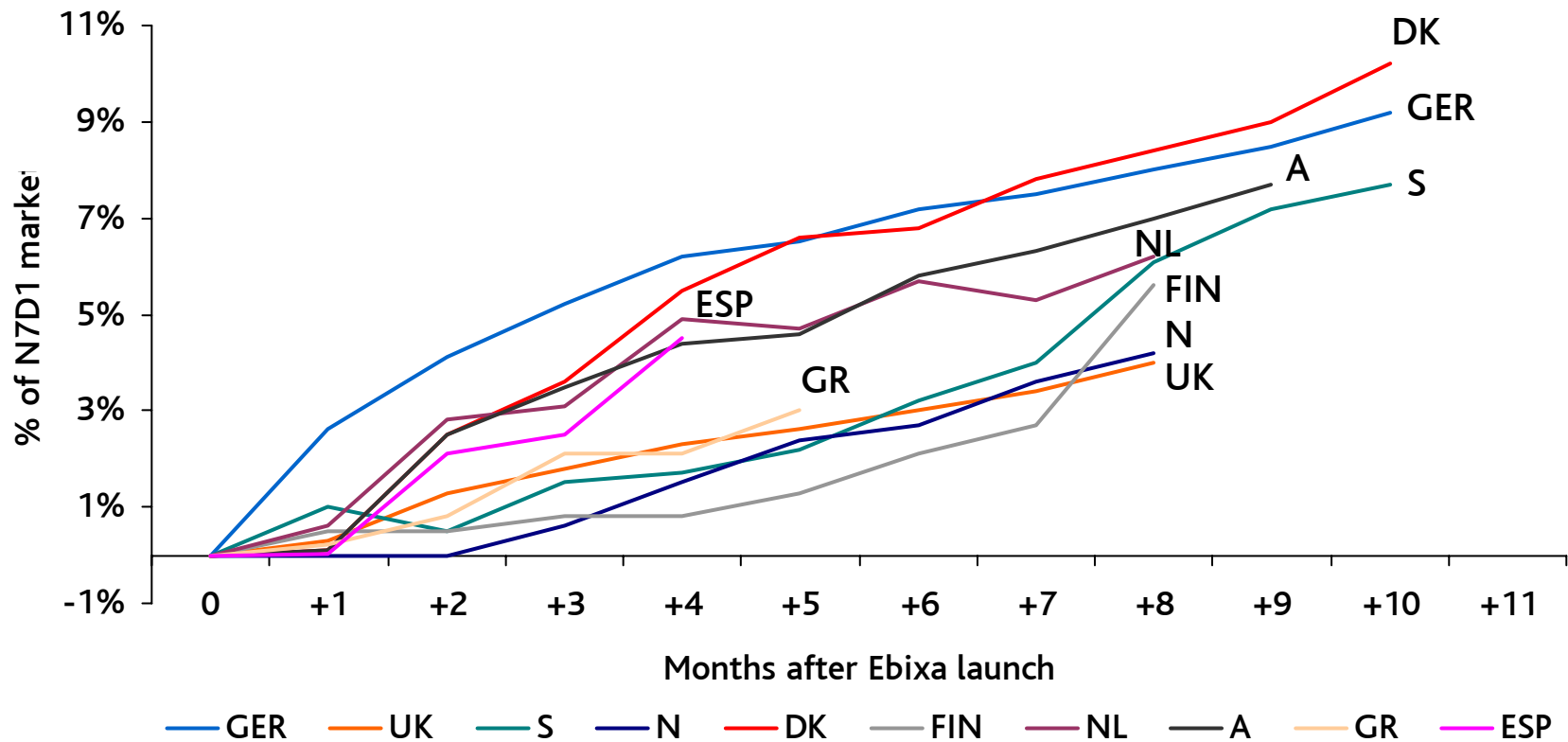
Ebixa Launched	Launch 2003	Launch 2004
Austria	Australia	Asia
France *	Belgium **	Italy
Germany	Central Europe	Latin America
Greece	Eastern Europe	Middle East
Holland	Hungary	South Africa
Ireland	Lebanon	
Mexico	Pakistan	
Scandinavia	Portugal	
Spain	Slovenia	
UK	Switzerland	
	Turkey	

\*) Launched after 30 June 2003

\*\*) Reimbursement pending

# Ebixa market share, value

From launch with/without reimbursement



Source: IMS



# Existing late-stage pipeline

Compound	Activity	Indication	2003	2004	2005	2005+
Escitalopram	SSRI	SAD	III/NDA	Launch		
Rasagiline	MAO-B	Parkinson's	NDA	Launch		
Memantine	NMDA antagonist	Alzheimer's Mild to Moderate	III	NDA	Launch	
Sertindole	D <sub>2</sub> -5HT <sub>2</sub>	Schizophrenia	PMS		Launch	
Bifeprunox	Dopamine/serotonin	Schizophrenia	II/III		NDA	Launch
Gaboxadol	GABA <sub>A</sub> agonist	Sleep disorder	III			NDA
CEP 1347	Kinase inhibitor	Parkinson's+	II&III			NDA
Lu 35-138	D <sub>4</sub>	Schizophrenia	I/II			III

## Appendix

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## More information please contact Investor Relations & Corporate Reporting

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# 1H 2003 - Highlights

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- Revenue amounts to DKK 4,951 million compared to DKK 4,792 for 1H 2002
- Sales of Cipralex amounts to DKK 195 million
- Sales of Cipramil decreased 15% to DKK 2,344 million
- Sales of Ebixa amounts to DKK 78 million
- Income from Celexa sales in the USA decreased from DKK 1,106 million to DKK 1,008 million
- Income from Lexapro sales in the USA increased from DKK 414 million to DKK 825 million
- Profit from operations decreased by 24% to DKK 1,185 million
- Income from financial items amounts to DKK -34 million
- Profit before tax decreased by 3% and net profit increased by 4% to DKK 1,148 million and DKK 776 million respectively
- The free cash flow fell from DKK 119 million in the first half of 2002 to DKK -175 million in the first half of 2003

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## Cash flow

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(DKK million)	<u>1H 2003</u>	<u>1H 2002</u>
Cash flow from operating activities	778	451
Cash flow from investing activities	-954	-331
Cash flow from operating and investing activities, net	-175	119
Cash flow from financing activities	-15	-297
Increase in cash and cash equivalents	-190	-178



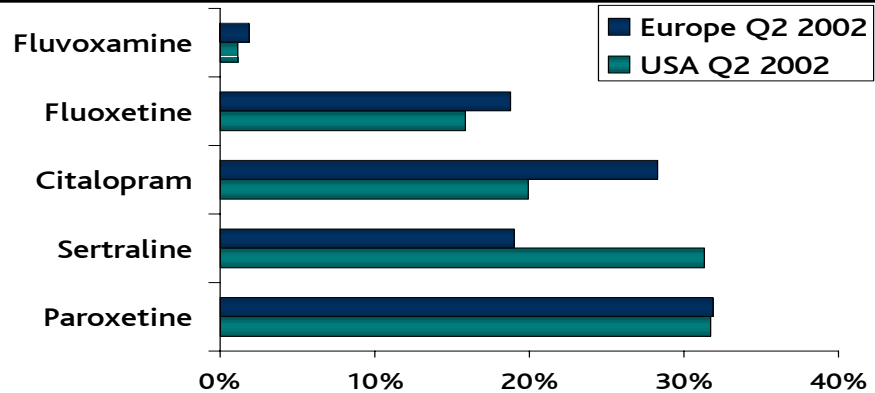
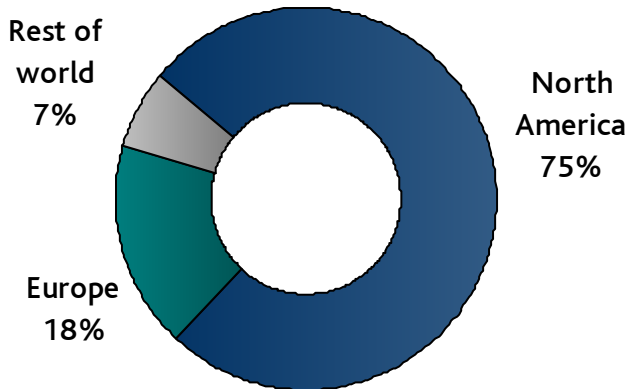
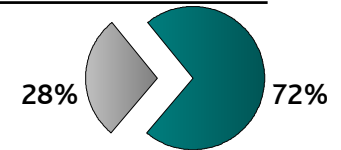
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## Key figures

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	<u>1H 2003</u>	<u>1H 2002</u>
Earnings per share – EPS (DKK)	3.32	3.20
Cash flow per share – CFPS (DKK)	3.33	1.93
Operating margin (%)	23.9	32.6
Return on net assets (%)	19.4	31.8
Return on equity (%)	12.8	15.0
Solvency ratio (%)	64.3	64.0
Net asset value per share (DKK)	26.98	22.43

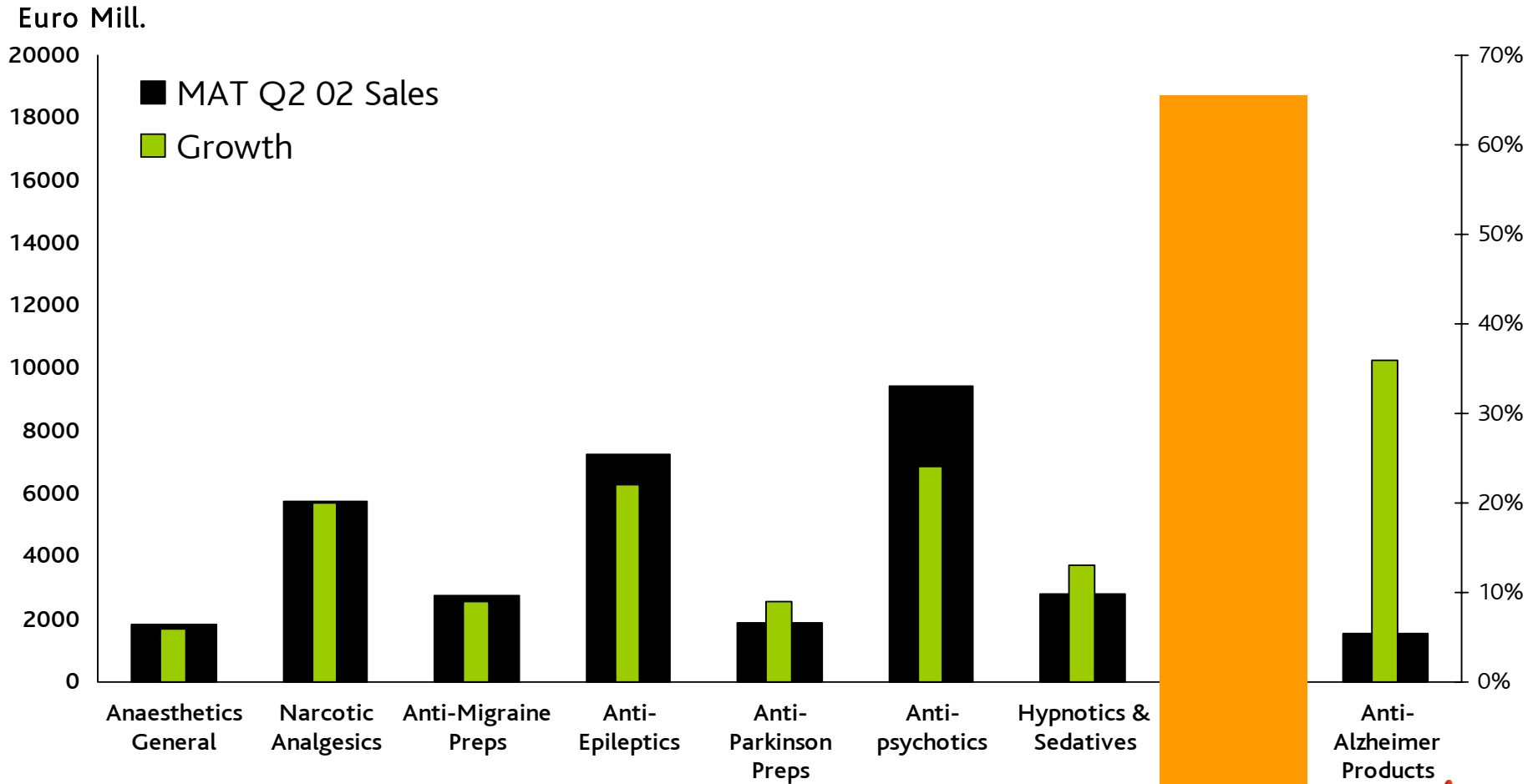
# Depression – 15.9 bill. USD



Leading product	Marketing Corporation	Sales 2001 (USDm)	Growth in %
Seroxat®/Paxil®	GlaxoSmithKline	2,848	18
Zoloft®	Pfizer	2,590	15
Prozac®	Eli Lilly	2,356	-18
Cipramil®/Celexa®	Lundbeck/Forest	1,632	48
Effexor®	American Home	1,609	38
Wellbutrin®	GlaxoSmithKline	1,143	40
Remeron®	Akzo Nobel	584	48
Serzone®	Bristol-Myers Squibb	390	8
Fluoxetine Barr®	Barr Labs	363	

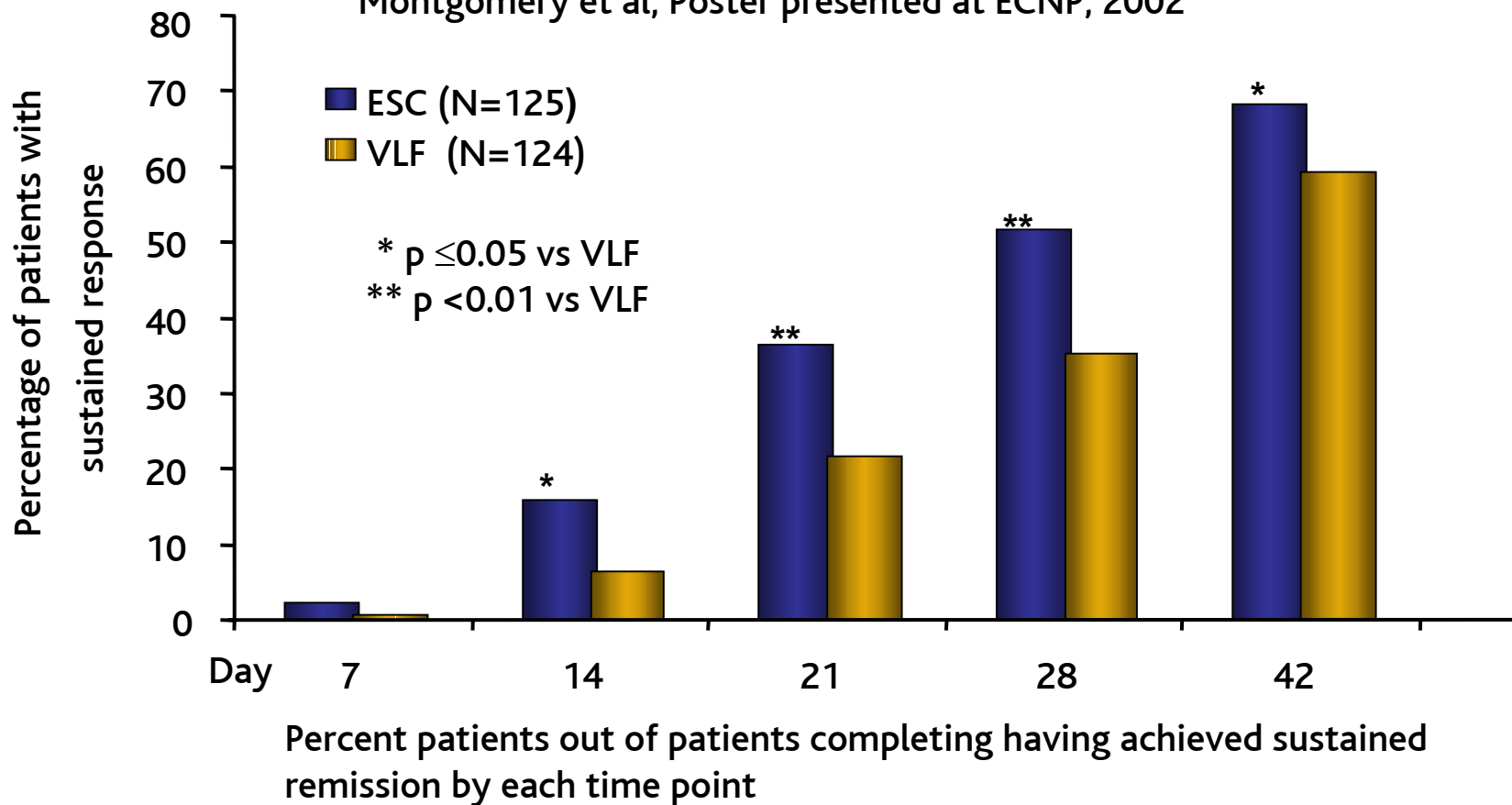


# Mature but still growing – healthy growth



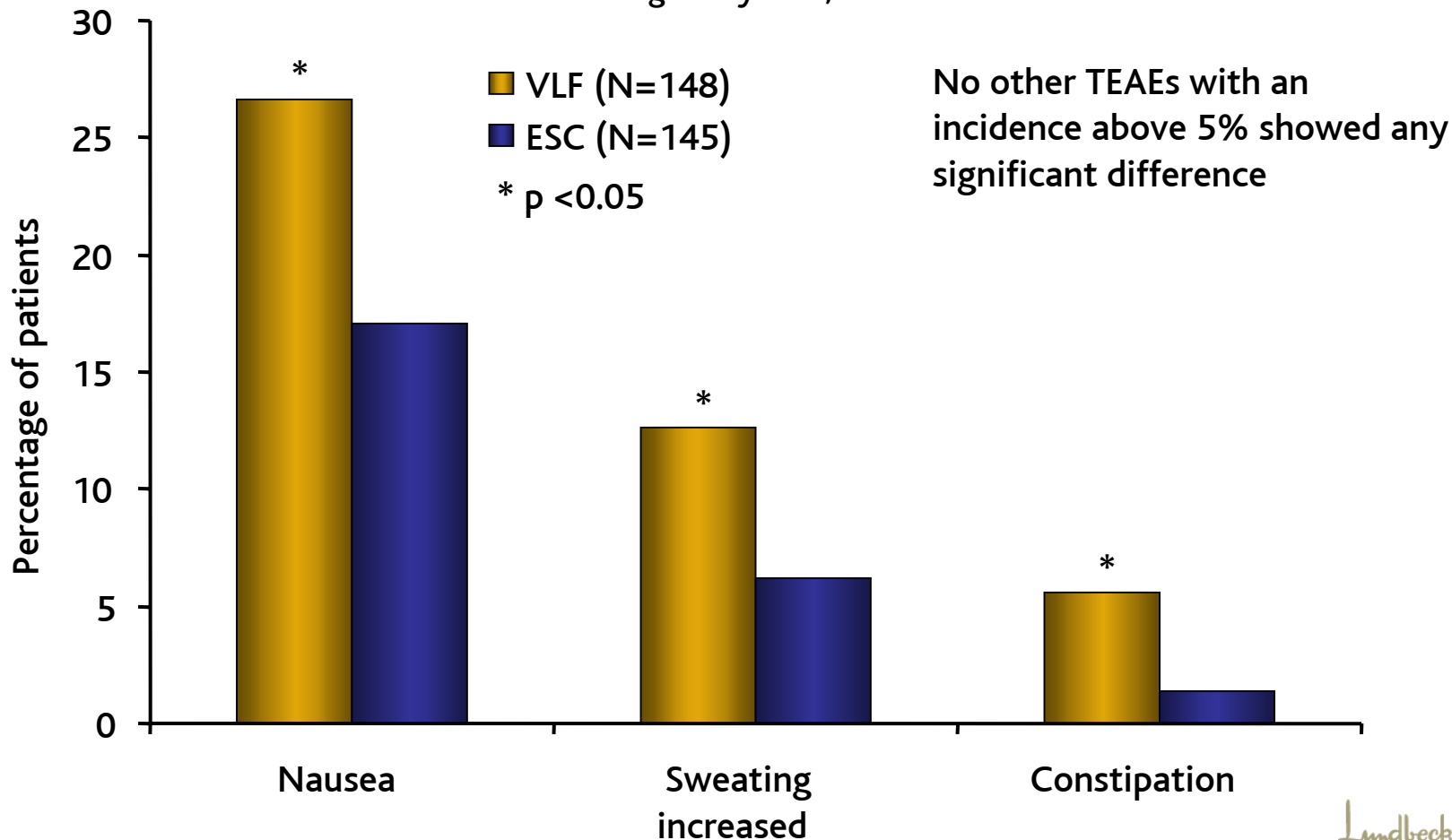
# Patients achieved sustained remission 6.6 days faster on ESC than on venlafaxine XR

Montgomery et al, Poster presented at ECNP, 2002

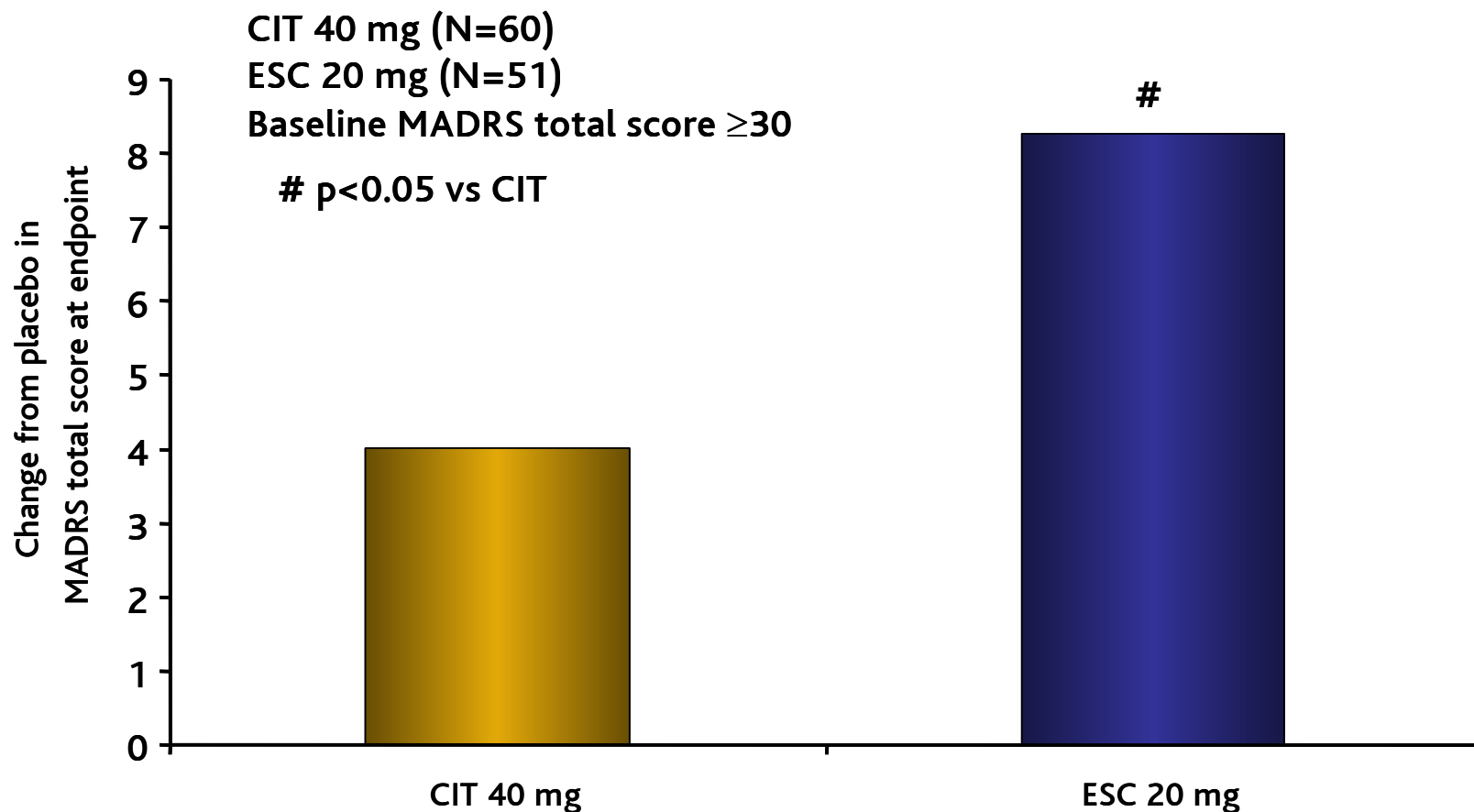


# Escitalopram offers significant tolerability advantages compared with venlafaxine

Montgomery et al, ECNP 2002

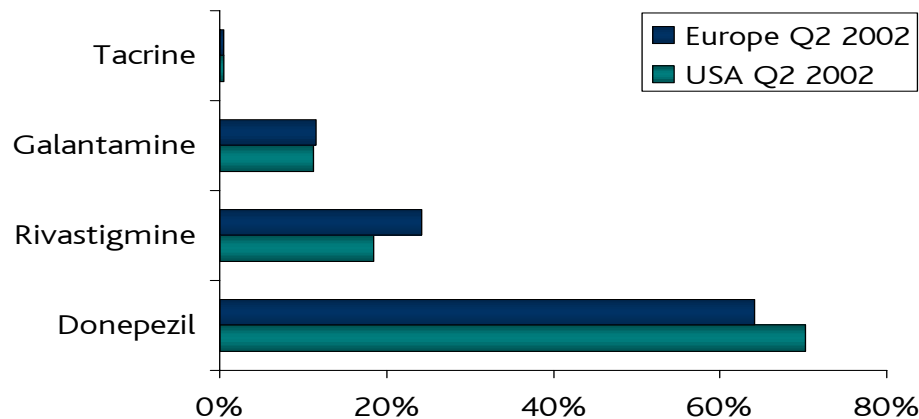
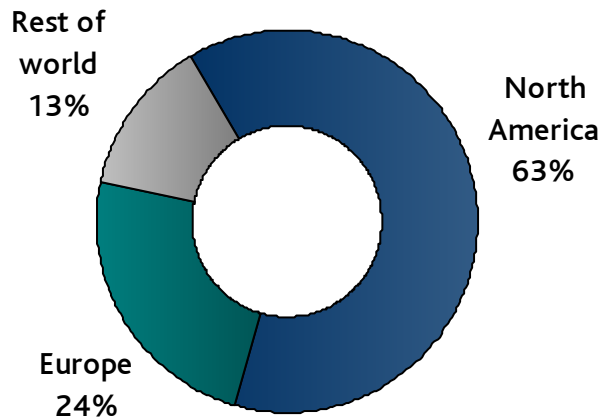
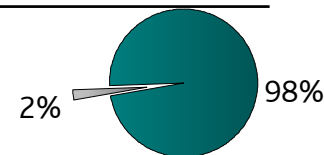


# Escitalopram compared to citalopram in severe depression



H. Lundbeck, data on file (study MD-01)

# Alzheimer's – 1.2 bill. USD

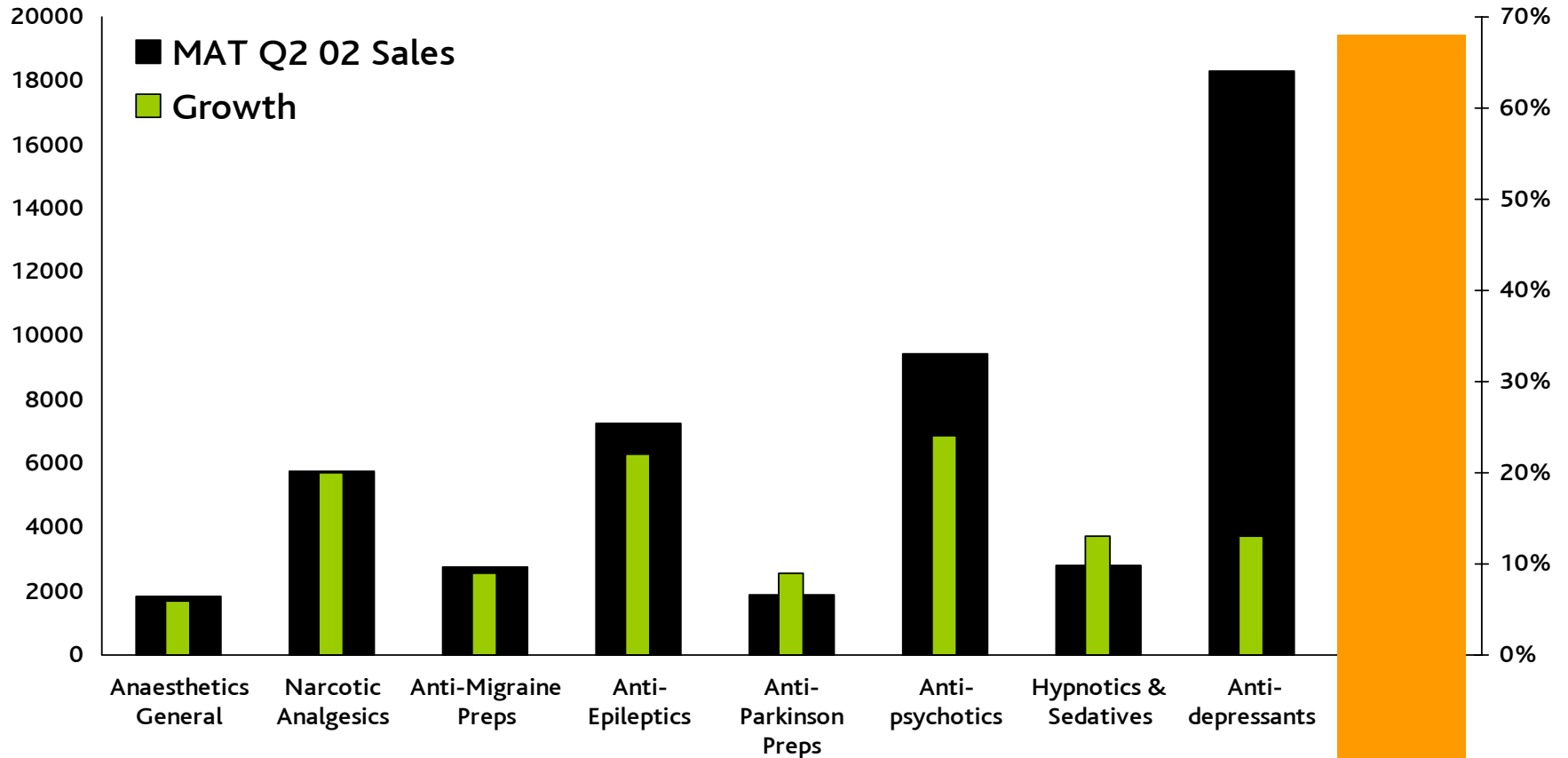


Leading product	Marketing Corporation	Sales 2001 (USDm)	Growth in %
Aricept®	Pfizer	923	26
Exelon®	Novartis	228	119
Reminyl®	Johnson & Johnson	45	--



# Alzheimer's - high growth market

Euro Mill.





# Overview of Marketed Compounds for AD

	Donepezil	Rivastigmine	Galantamine	Memantine
Indications	Mild to moderate (M-M)	Mild to moderate (M-M)	Mild to moderate (M-M)	Moderately severe to severe (MS-S)
MMSE	24-12	24-12	24-12	15-4
Launch	1997	1998	2000	2002
Position in class	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	1 <sup>st</sup>
Titration	Not required	Required	Required	Required (trial for improved titration)
Administration	Once daily	Twice daily	Twice daily	Twice daily (trial for once-daily)
Trials for new indications	Mod-severe AD VaD MCI	Lewy body VaD Mixed dementia	VaD MCI Mixed dementia	Mild to Moderate Diabetic Neuropathy

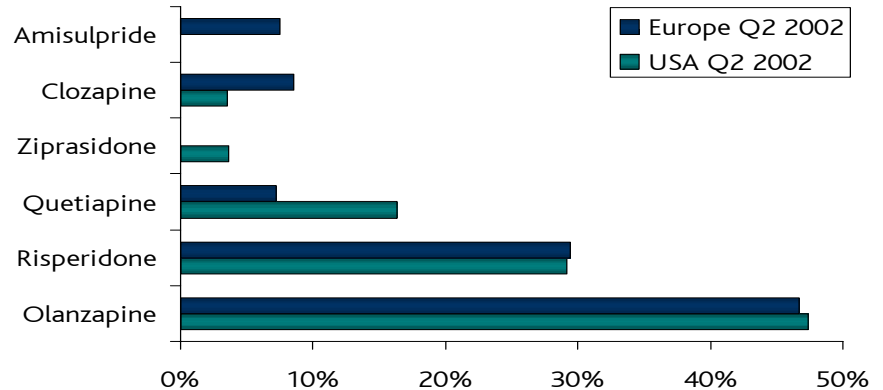
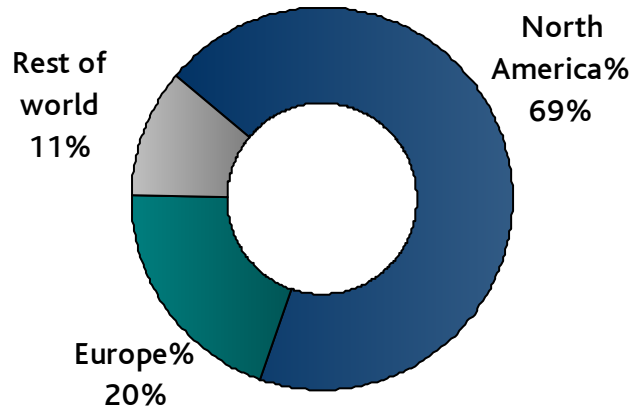
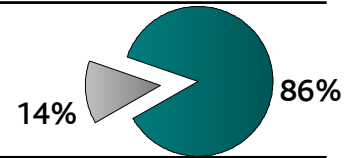
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## Selected pipeline compounds for AD

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Name	Class	Company	Phase
Phenserine	AchEI	Axonyx	II
Lovastatin	Statin	Andrx	II
NS 2330	DA, NA and AchE activity	NeuroSearch/BI	II
Colostrinin	Immunomodulator	ReGen Therapeutics	III
Xaliproden	NGF agonist	Sanofi-Synthelabo	II
Amyloid $\beta$ vaccine	Aggregate modulators/ gamma secretators Immunomodulator	Elan	I-II

# Antipsychotics – 7.7 bill. USD

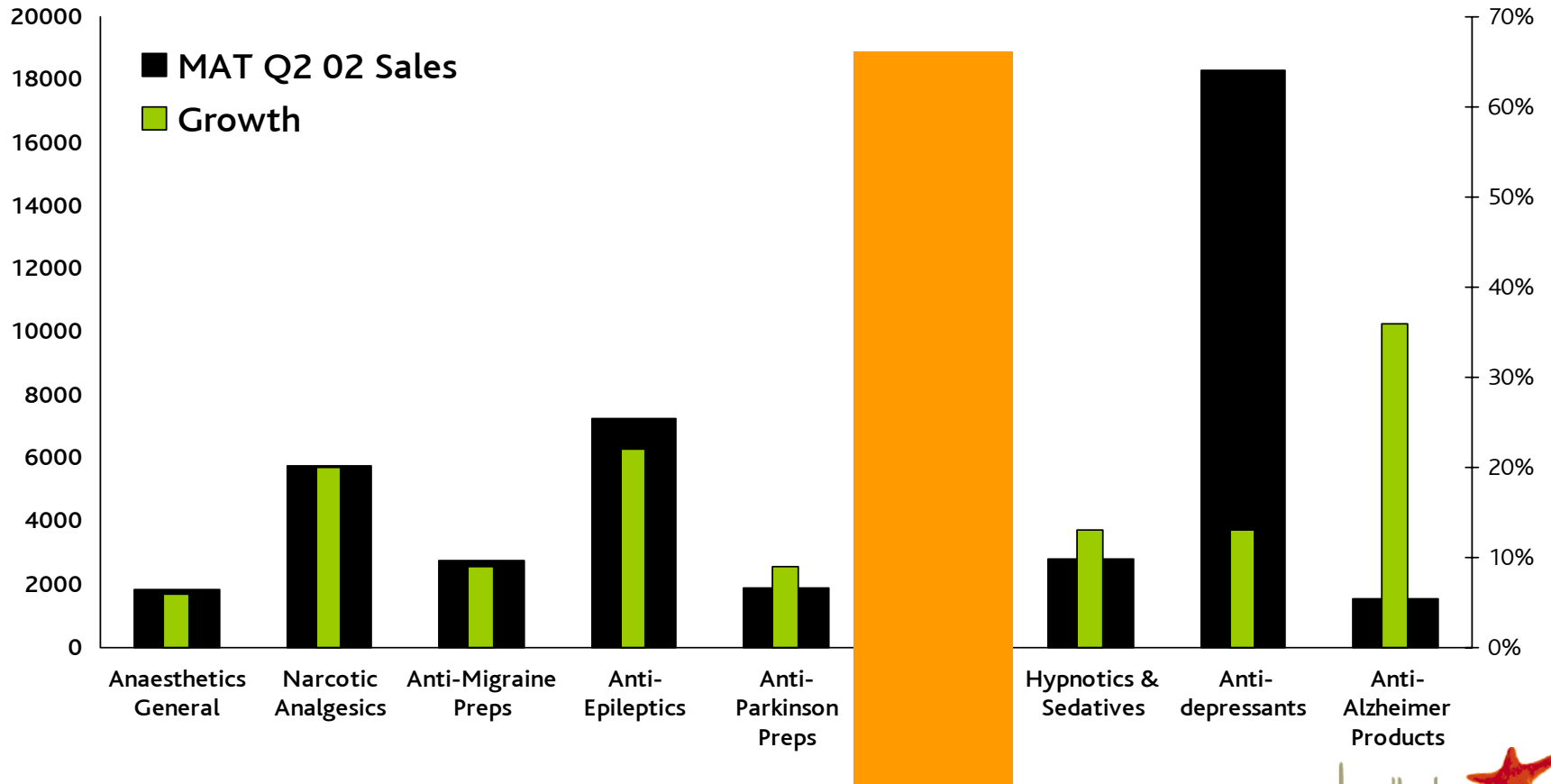


Leading product	Marketing Corporation	Sales 2001 (USDm)	Growth in %
Zyprexa®	Eli Lilly	3,226	35
Risperdal®	Johnson & Johnson	2,110	23
Seroquel®	AstraZeneca	793	82
Leponex®	Novartis	322	-1
Zeldox®	Pfizer	137	--
Solian®	Sanofi-Synthelabo	89	18
Haldol®	Johnson & Johnson	73	-15
Tiapridal®	Sanofi-Synthelabo	63	

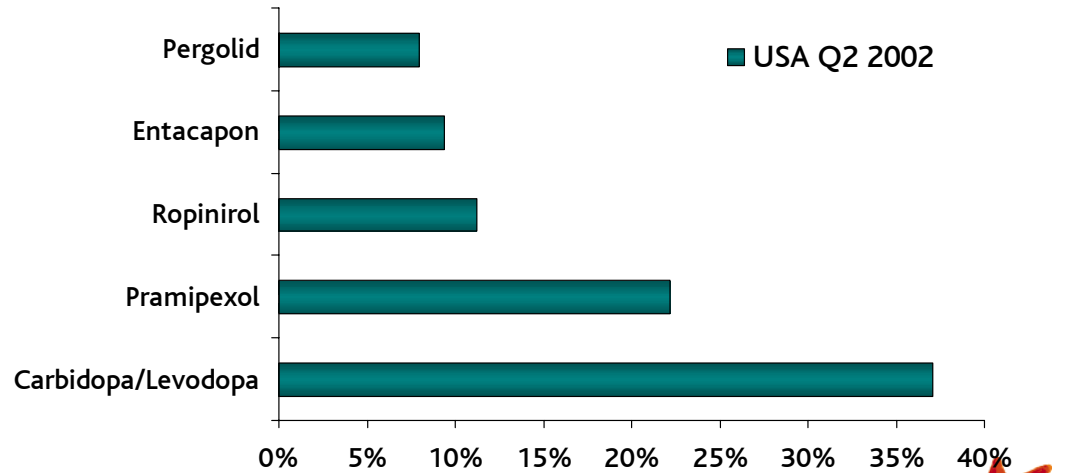
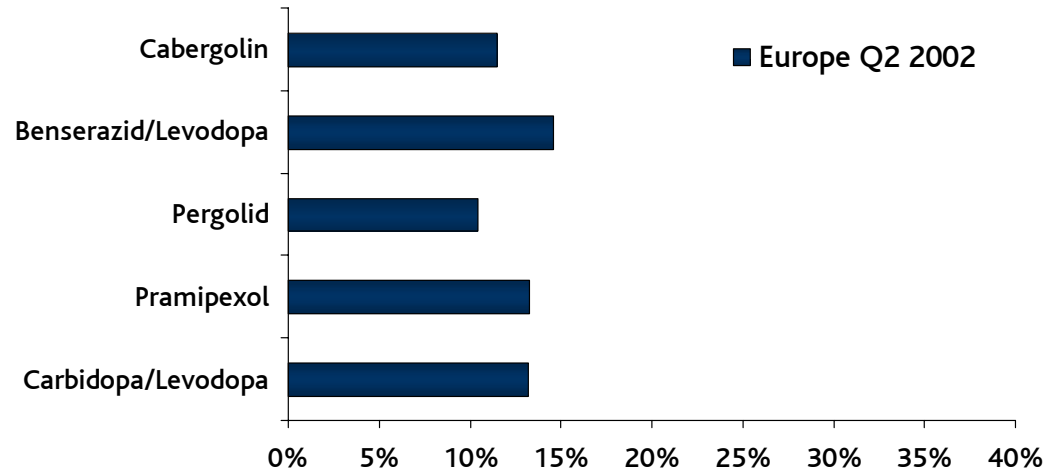
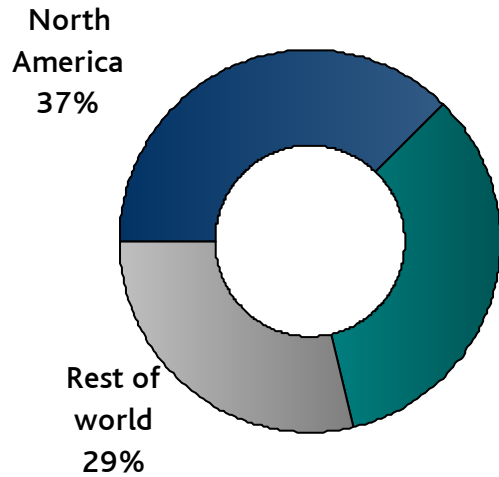
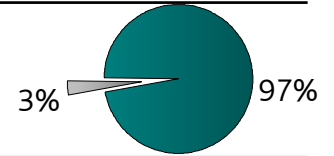


# Antipsychotics - Major value conversion

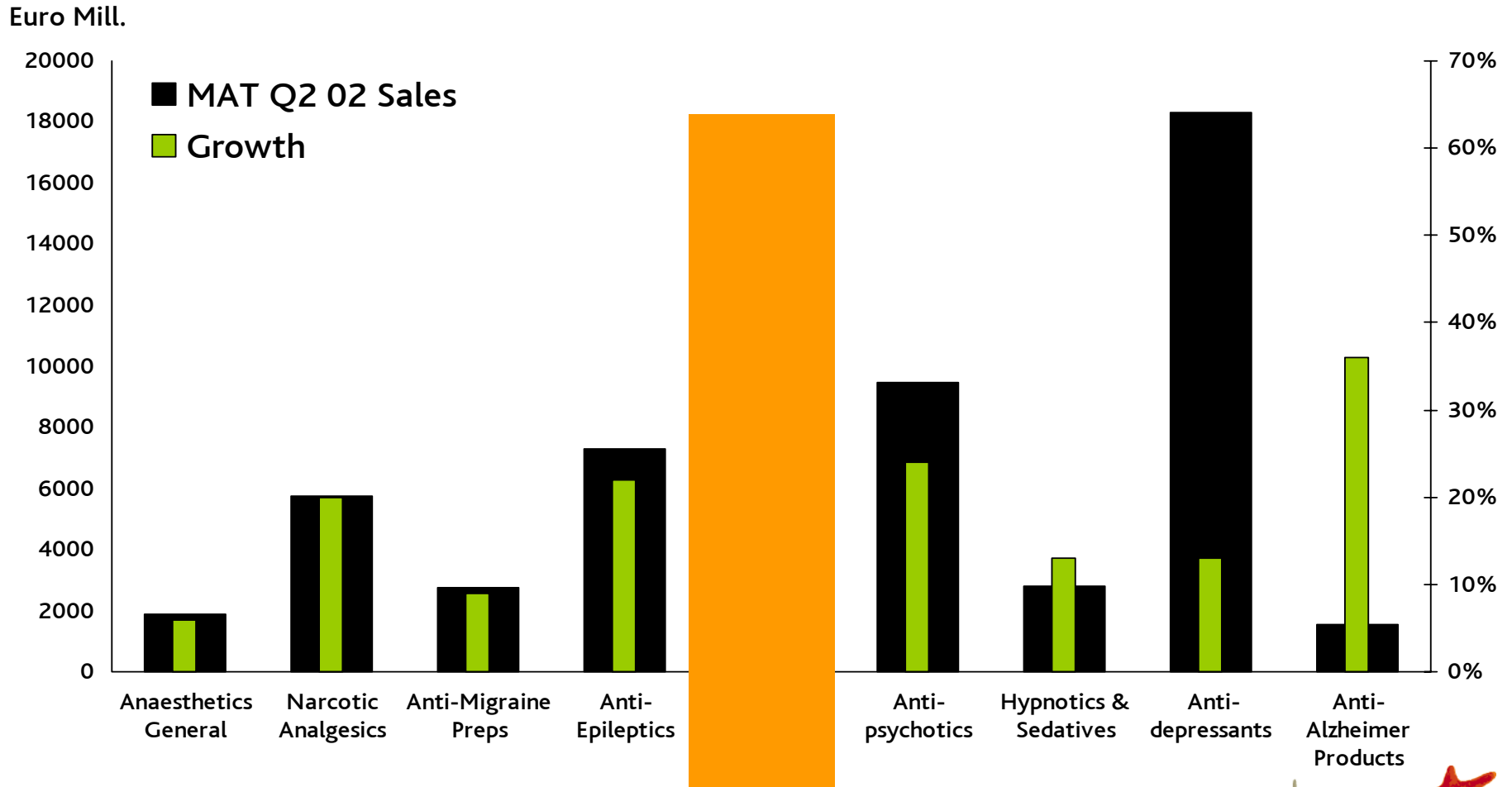
Euro Mill.



# Parkinson's – 1.7 bill. USD



# Parkinson's - A mature & relatively stable market



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## Drugs in Development – Parkinson's disease

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Compound	Mode of action	Company	Clinical Phase
Chiesi 1512 Levodopa methyl ester + carbidopa	Dopamine precursor + decarboxylase inhibitor	Chiesi	Launch date 2004
Levodopa+ Carbidopa+ entacapone	D precursor+ decarb+ COMT inhibitor	Novartis	Launch date 2003
KW 6002	Adenosine A2A antagonist	Kyowa Hakko	Phase II
Rotigotine (transdermal)	D2 selective DA	Schwarz Pharma	Phase III