

## Lundbeck

### Gaboxadol Phase 3 - Some sleep quality, weak TST effect

#### Reduce

Unchanged

Current DKK 158.00

**Target DKK 120.00**

Previous Unchanged

#### Current price equivalent

€21.21

\$27.84

#### Market cap

DKK 33,521m

€4,500m

\$5,906m

#### 52-week high/low

DKK 170.2/DKK 124.5

Price perf.	1M	3M	12M
Price (DKK)	170.2	145.5	130.2
Absolute (%)	-7.2	8.6	21.3
Rel market (%)	-7.1	1.4	4.3
Rel sector (%)	-7.4	3.2	14.8

Source: Dresdner Kleinwort Equity research

#### Reuters

LUN.CO

#### Bloomberg

LUN DC Equity

Detailed **estimates, valuations** and additional **research** can be accessed directly from the links below

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#### Research Analysts

##### Tero Weckroth

+44 (0)20 7475 9277

tero.weckroth@dkib.com

##### Nigel Birks

+44 (0)20 7475 5694

nigel.birks@dkib.com

##### Erland Sternby

+44 (0)20 7475 1250

erland.sternby@dkib.com

**First glimpse of gaboxadol phase 3 data is now available on APA conference website. The data continues to show statistically significant but clinically inferior efficacy in conventional endpoints TST (Total Sleep Time) and WASO (Wakefulness After Sleep Onset). But we also see self-reported quality of sleep improvement. The share is likely to rally but we remain cautious.**

- ▶ Three abstracts are available at APA website [http://www.psych.org/edu/ann\\_mtgs/am/07/index.cfm](http://www.psych.org/edu/ann_mtgs/am/07/index.cfm). A 3-month primary insomnia study shows 20min increase in TST vs placebo on 15mg dose (P<0.01). 10mg dose did not have effect.
- ▶ A transient insomnia study shows both 10mg and 15mg doses cut WASO, the higher dose by 15.2min vs placebo (P<0.05). The amount of slow-wave sleep was greater with both doses of gaboxadol than with placebo (P<0.001).
- ▶ In a 4-week primary insomnia study patients reported improved sleep quality (P<0.01), felt more refreshed (P<0.01) and experienced more daytime energy (P<0.05). This is, to us, the most important outcome of the study.
- ▶ After this data, the product is likely to get an approval and Lundbeck should receive the milestone payment from Merck this year. We also welcome the positive news from sleep quality side, even if it remains unclear if this will be included in the label and if Lundbeck will be allowed to link the sleep quality to slow-wave sleep. This would give an edge for Lundbeck since this would link the sleep quality effect to gaboxadol's unique mechanism of action.

But although we are getting more positive on regulatory front, we remain cautious commercially. Previous data has shown that when compared to Ambien, TST and WASO efficacy of gaboxadol is inferior. Although cross-study comparison is always troublesome, the new data did not change this view (See the chart below). Furthermore, data published by Somaxon on Silenor (doxepine, expected to be filed in the US this year) also shows superior efficacy over gaboxadol.

Consequently, we don't see gaboxadol as good drug that will be made even greater by quality of sleep claims. Instead, we see gaboxadol as a drug that must get the sleep quality claim in the label in order to be commercially successful.

Our estimates and DCF-based target price is under review after today's FY 2006 report.

### New phase 3 data in light of previous phase 2 data - Conventional

#### Online research:

[www.dresdnerkleinwort.com/research](http://www.dresdnerkleinwort.com/research)

#### Bloomberg:

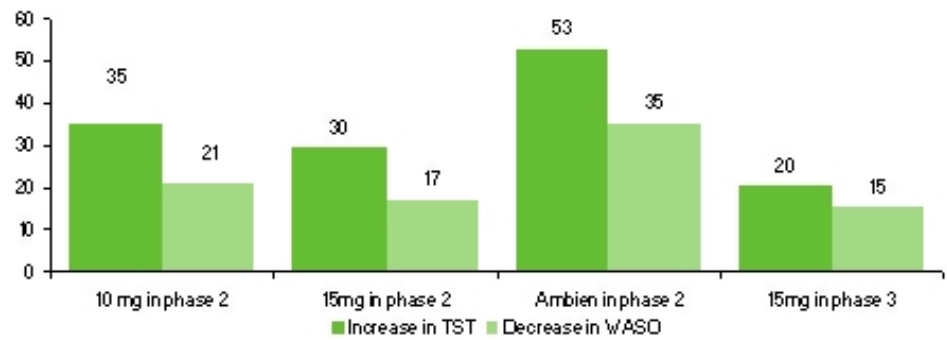
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endpoints



Source: Company data, Dresdner Kleinwort Equity research estimates

Lundbeck forecasts

Year	Sales DKK m	EBIT excl assocs DKK m	Dil EPS excl except, gw DKK	FCFPS DKK	DPS DKK	P/E x	P/FCF x	Yield %	EV/ EBITDA x
Dec-2004A	9,733	2,554	7.65	10.22	2.21	20.3	15.2	1.4	10.5
Dec-2005A	9,070	2,170	7.08	6.42	2.10	22.0	24.2	1.4	12.4
Dec-2006E	9,059	1,822	5.15	4.42	1.54	30.2	35.2	1.0	14.8
Dec-2007E	10,805	2,819	9.53	8.17	2.85	16.3	19.0	1.8	9.6
Dec-2008E	11,987	3,284	11.50	10.39	3.44	13.5	15.0	2.2	7.7

Source: Company data, Dresdner Kleinwort Equity research estimates

## Disclosure appendix

### Disclosures under US regulations

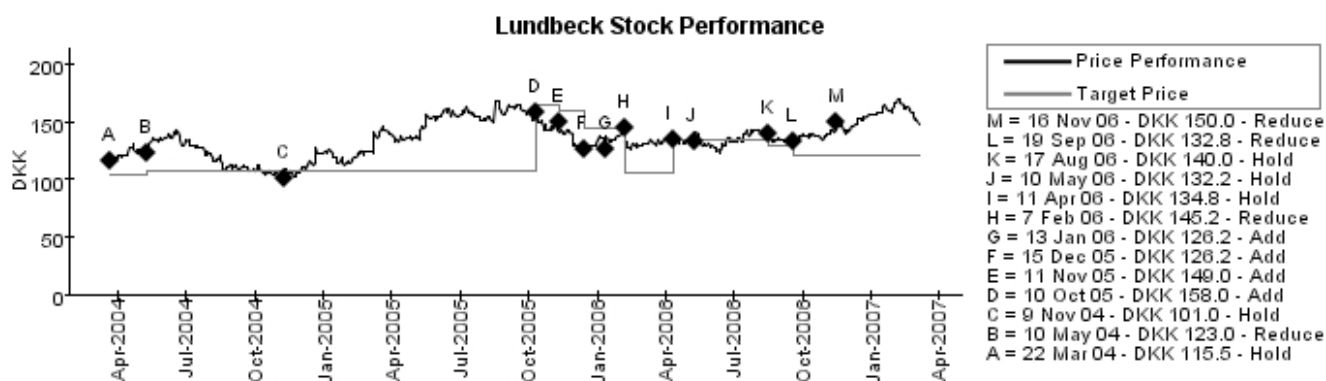
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Add:	5-10% increase in share price	Reduce:	5-10% decrease in share price
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Sell/Reduce	80	14%	9	11%
<b>Total</b>	<b>556</b>		<b>96</b>	

Source: Dresdner Kleinwort

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