



RATINGS REVISION | COMMENT

JUNE 13, 2011

United Therapeutics Corp. (NASDAQ: UTHR)
Downgrading to SP: It's Not Adding Up; Clinical + Regulatory + Commercial = Risk?

Sector Perform (prev: Outperform)
Above Average Risk

Table with 4 columns: Metric, Current Value, Target Value, Change. Includes Price (57.96), Price Target (60.00), Implied All-In Return (4%), Market Cap (3,628), and Yield (0.0%).

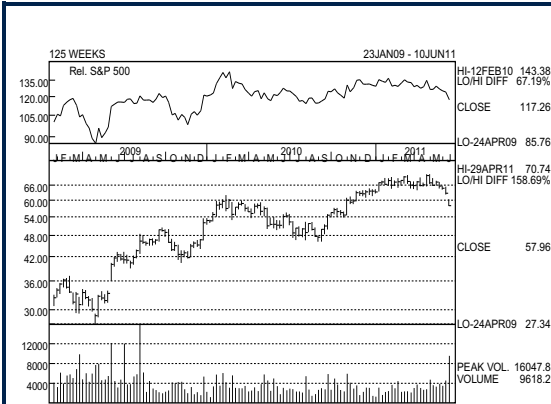
Event

We see unfavorable risk/reward over long term, leading to downgrade. Conference call at 11 a.m. ET today: 800-602-4090.

Investment Opinion

We see clinical, regulatory, and – most of all – commercial/reimbursement risk. We believe Street is assuming too much optimism for C-2 to be positive, FDA approval will be fine (stock down only 5-6% since release of data), and a big \$1B blockbuster drug. We lower our price target to \$60 from \$75. We can't recommend owning for the regulatory or, longer-term commercial risks and believe risk/reward is not favorable.

- We think C-2 has reasonable clinical risk to not be statistically significant, and in our view, importantly it needs to be clinically meaningful of at least 15-20m or more...
• Issues to consider that don't add up: 1) Freedom-M average dose of 3.3mg was just not as high as expected...
• Our new price target of \$60 is based on \$45 for the base business on a DCF and \$15 for oral remodulin.



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Table with 5 columns: Metric, 2010A, 2011E, 2012E, 2013E. Includes FY Dec Revenue, EPS, P/E, and quarterly Revenue/EPS data.

All values in USD unless otherwise noted.

### Comparative Profiles of Approved and Investigational PAH Therapies

Compound	Indicated	6MWD (median pbo adjusted *)	Market Share	Annual Cost (\$)
<b>Prostacyclins</b>				
Tyvaso	Class III	20m (p =0.0004), w/ Tracleer or Revatio	7%	\$160,000
IV/SubQ Remodulin	Class II/III/IV	16m (p = 0.00064), monotherapy	13%	\$100,000
Oral Remodulin	Class II/III			
<b>PDE5</b>				
Letairis	Class II/III	27 - 39m (p = 0.008), monotherapy	12%	\$65,160
Tracleer	Class II/III/IV	35m mean (p=0.01), monotherapy, stat sig time to clinical worsening	50%	\$53,000
<b>ERAs</b>				
Adcirca	Class II/III	44m mean, monotherapy, 23m mean w/ Tracleer	2%	\$12,000
Revatio	Class II/III	26m mean. w/ IV epoprostenol	16%	\$20,000

Source: Company Reports, Bloomberg and RBC Capital Markets estimates

\* Outcomes are placebo adjusted median differences unless otherwise stated

### Common Adverse Events of Approved and Investigational PAH Therapies

Drug	Headache	Flushing	Nausea	Vomiting	Pain*
Oral Remodulin	86% vs 38%	49% vs 15%	63% vs 35%	43% vs 9%	42% vs 13%
Letairis	15% vs 14%	4% vs 1%	N/A	N/A	3% vs 1%
Tracleer	15% vs 14%	4% vs 3%	N/A	N/A	5% vs 5%
Revatio	46% vs 39%	10% vs 4%	N/A	N/A	N/A
Adcirca	42% vs 15%	13% vs 2%	10 vs 6%	N/A	12% vs 6%
Ventavis	30% vs 20%	27% vs 9%	13% vs 8%	7% vs 2%	11% vs 3%
Tyvaso	41% vs 23%	15% vs 1%	19% vs 11%	N/A	N/A

Source: Company reports. Adverse events for oral Remodulin are those reported in the FREEDOM C-1 trial, and as described in prescribing information for all other therapies. \*Pain is cumulative across jaw, tongue, back, chest and other categories.

- Reimbursement concerns in face of pending generics and a higher priority for generics are likely.** Because of multiple generics likely in 2015-2016+ (and oral Remodulin's approval likely only in 2013), the low-cost drugs may get pushed ahead of oral Remodulin on the formulary. This may put much more pressure on doctors and providers to use generics before branded prostacyclin, pushing oral Remodulin farther down the treatment sequence before patients start to get the drug (i.e., later in Class III). In fact, we note that BCBS of North Carolina is already trying to block combo use without data, which suggests that it is at least aware of the high price and lack of data, and a new expensive oral without strong clinical benefit is unlikely to better or reverse this trend.
- Europe is a whole separate risky story.** UTHR has had less success in EU to date even with good regulatory packages in the past, and the potential oral remodulin package may cause issues for EMA approval. Europe may find the efficacy on the lower end of expectations particularly against other therapies, which may lead to lower pricing than expected. Also, based on color from Actelion, EMA may ask for survival endpoints and not view 6MWD alone as a sufficiently compelling endpoint, which may make the oral Remodulin package risky in Europe.