

Today's Changes	Annual EPS No change	Annual Revenue No change	Target \$31.00 from \$34.00
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Thoratec

THOR : NASDAQ : US\$30.97

HOLD

Target: US\$31.00 ↓

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COMPANY STATISTICS:

Market Cap (M): US\$1,856.0
52-week Range: US\$22.96 - 38.07

EARNINGS SUMMARY:

FYE Dec	2010A	2011E	2012E
Revenue (M):	405.3	420.4	467.3
EPS:	1.22	1.51	1.70
Revenue (M):			
Q1	121.6A	99.5A	-
Q2	95.1	111.2A	-
Q3	91.0	102.6A	-
Q4	97.6	107.0	-
Total	405.3	420.4	467.3
EPS:			
Q1	0.29A	0.34A	-
Q2	0.34	0.44A	-
Q3	0.32	0.41A	-
Q4	0.28	0.31	-
Total	1.22	1.51	1.70

SHARE PRICE PERFORMANCE:



Source: Interactive Data Corporation

COMPANY DESCRIPTION:

Thoratec manufactures medical devices used for circulatory support, vascular graft applications, and blood coagulation testing. Thoratec's ventricular assist device (VAD) systems are currently marketed in the US and internationally for use as a bridge to heart transplant and for recovery of the heart after open-heart surgery. The company has the only VAD currently FDA-approved for the destination therapy indication.

All amounts in US\$ unless otherwise noted.

Life Sciences -- Biomedical Devices and Services

INCREASING REPORTS OF PUMP THROMBOSIS ISSUES WITH HM-II; STAY ON SIDELINES, REDUCE PT

Investment recommendation

We are bullish on the LVAD market potential overall, but maintain our HOLD rating on THOR as we believe growth will slow in 2012-2015E owing to expected US launch of HeartWare's HVAD (mid-'12E approval). We also think shares could pull back on reports of increased pump thrombosis events with HM-II at some centers, as discussed below.

Investment highlights

- Our checks at the Society of Thoracic Surgeons (STS) meeting in Florida elucidated increasing anecdotal reports of an alleged spike in pump thrombus issues with Thoratec's HeartMate II.
- Last night we communicated with 13 LVAD surgeons, four of whom confirmed they have experienced an increase in pump thrombus events in their practice over the past "few weeks/months." Notably, all four responded that the culprit device was HM-II. None of the surgeons have found the root cause for this spike – two hypothesized that INR levels with HM-II had dipped too low; one surmised the aortic valves are closing, while the fourth thought the new pre-clotted inflow graft THOR launched last year might play a part.
- That said, we caution investors not to place undue significance on such a small sample size. Why are we commenting on this then? The anecdotal reports we have been getting regarding this issue have increased markedly over the past few days, and we believe four separate hospitals reporting directly to us within the past 12 hours adds credibility to these reports, not to mention confirms an issue exists at least at these specific centers. Reduce target to \$31 from \$34.

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Valuation

We reduce our price target to \$31 from \$34 owing to an increase in the discount rate from 7.5% to 12.5%. Notably we still use a higher discount rate to value HTWR common.

Figure 1: THOR price target = \$31/share

CG Revenue Est.	2010A	2011E	2012E	2013E	2014E
Total	\$382.9	\$420.3	\$467.3	\$492.5	\$521.4

Assumptions	
Years to discount (back to 2012-end)	2
Net Cash (\$M-estimate end-2011)	\$233
Shares Outstanding end-'11E (mm)	61.0

Terminal Value (EV)			
Disc. Rate	3.5x	4.0x	4.5x
10.0%	\$1,741	\$1,965	\$2,180
12.5%	\$1,674	\$1,889	\$2,095
15.0%	\$1,612	\$1,817	\$2,014

Terminal Value/share			
Disc. Rate	3.5x	4.0x	4.5x
10.0%	\$29	\$32	\$36
12.5%	\$27	\$31	\$34
15.0%	\$26	\$30	\$33

Source: Canaccord Genuity estimates and company reports

Investment risks

Dependence on new product introductions. Revenue and earnings growth inherent in our expectations are reliant on HeartMate II uptake -- especially within the DT segment -- as well as bringing new, competitive next-generation devices to market in a timely fashion. The company's early 2011 pipeline discussion was robust in terms of breadth, but disappointing in terms of timing. If THOR is unable to get new products (e.g. HM-III/HM-X) to market within our forecasted timelines, it may result in sales below our out-year targets.

Competition. The LVAD market offers attractive growth and strong fundamentals. As a result, new competitors have developed innovative LVAD technology, which are at various stages in the regulatory path in the US and Europe. What's more, if a larger med-tech player were to acquire HTWR or other, smaller LVAD player and apply significant resources to VAD development, it could hinder THOR's ability to retain share in the market consistent with our future targets.

Potential increased costs as a result of healthcare reform legislation.

Figure 2: Thoratec income statement

THORATEC CORP.
INCOME STATEMENT
 Fiscal Year End - December
 (\$ millions, except EPS)

	FY 2008	FY 2009	2010				FY 2010	2011E				FY 2011E	FY 2012E	FY 2013E
			Mar	Jun ³	Sep	Dec		Mar	Jun	Sep	DecE			
Cash Earnings P&L:														
Cardiovascular (LVADs)	217.0	279.9	99.3	95.1	91.0	97.6	382.9	99.5	111.2	102.6	107.0	420.4	467.3	492.4
ITC ³	96.6	94.0	22.3	-	-	-	22.3	-	-	-	-	-	-	-
Total Revenue³	313.6	373.9	\$ 121.6	\$ 95.1	\$ 91.0	\$ 97.6	405.3	\$ 99.5	\$ 111.2	\$ 102.6	\$ 107.0	420.4	467.3	492.4
Cost of Operations	125.8	152.1	45.2	30.2	28.3	32.6	136.3	29.4	32.0	29.1	33.5	124.1	135.5	141.3
Gross Profit	187.7	221.9	76.4	64.9	62.7	65.0	269.0	70.1	79.2	73.5	73.5	296.2	331.8	351.1
S G & A	87.7	87.2	25.5	19.2	19.2	23.2	87.2	22.1	22.7	21.1	27.8	93.7	107.5	113.7
R&D	50.3	50.7	21.6	11.0	11.5	14.0	58.1	14.7	14.8	15.3	16.8	61.6	68.2	71.4
Operating Expense ¹	138.0	138.0	47.2	30.2	30.8	37.2	145.3	36.8	37.5	36.3	44.6	155.2	175.7	185.1
Operating Income (cash)¹	49.8	83.9	29.3	34.7	31.9	27.8	123.6	33.4	41.7	37.1	28.8	141.0	156.1	165.9
Interest/Other Income (Exp)	5.1	1.3	(1.1)	(0.0)	0.4	0.2	(0.6)	(0.2)	(0.0)	0.3	-	0.0	1.0	1.0
Pretax Income (cash)	54.9	85.2	28.1	34.7	32.3	28.0	123.1	33.1	41.6	37.4	28.8	141.0	157.1	166.9
Income Tax (pro forma) ²	17.9	29.1	9.8	12.3	11.4	9.9	43.4	11.3	14.3	12.3	9.8	47.7	53.4	56.8
Tax Rate	32.7%	34.2%	34.7%	35.4%	35.5%	35.4%	35.2%	34.1%	34.2%	32.9%	34.1%	33.8%	34.0%	34.0%
Interest Addback for CoCo Acct.	1.6	1.7	0.4	0.4	0.4	0.5	1.8	0.6	0.5	0.0	0.0	1.1	0.0	0.0
Net Income (cash - fully taxed)³	38.6	57.8	18.8	22.8	21.2	18.6	81.5	22.4	27.9	25.1	19.0	94.4	103.7	110.2
Shares Outstanding	63.4	65.3	65.9	66.4	66.9	66.7	66.5	66.1	63.3	60.7	61.0	62.8	61.0	61.0
EPS (cash - fully taxed)^{1,2}	\$ 0.61	\$ 0.89	\$ 0.29	\$ 0.34	\$ 0.32	\$ 0.28	\$ 1.22	\$ 0.34	\$ 0.44	\$ 0.41	\$ 0.31	\$ 1.51	\$ 1.70	\$ 1.81
EPS (cash - incl. FASB 123r)	\$ 0.47	\$ 0.73	\$ 0.23	\$ 0.31	\$ 0.28	\$ 0.24	\$ 1.06	\$ 0.29	\$ 0.39	\$ 0.37	\$ 0.27	\$ 1.32	\$ 1.51	\$ 1.60
Reconciliation of Cash Earnings to GAAP Earnings:														
Intangibles Amort.	13.2	11.8	2.6	2.5	2.4	2.4	11.8	2.3	2.2	2.6	2.5	9.6	9.5	9.5
Total Non-recurring expenses	23.3	44.6	9.3	7.5	7.5	7.4	33.2	8.1	9.4	9.4	14.5	41.5	26.8	28.5
Tax benefit (expense)	(13.7)	(11.4)	(7.0)	(9.6)	(9.4)	(8.7)	(25.2)	(8.5)	(11.2)	(9.0)	(5.0)	(33.7)	(43.8)	(46.1)
Net Income (GAAP)	23.7	31.0	12.3	17.9	15.7	12.6	66.5	17.1	21.5	19.0	9.4	67.0	86.5	92.3
EPS (GAAP)	\$ 0.37	\$ 0.47	\$ 0.21	\$ 0.27	\$ 0.24	\$ 0.21	\$ 0.93	\$ 0.27	\$ 0.37	\$ 0.31	\$ 0.15	\$ 1.10	\$ 1.40	\$ 1.49
Shares Outstanding -GAAP	61.6	65.3	58.1	59.0	66.6	59.3	60.8	64.0	58.2	60.7	61.0	61.0	62.0	62.0
Margin Analysis:														
Gross Margin	59.9%	59.3%	62.9%	68.2%	68.9%	66.6%	66.4%	70.5%	71.2%	71.6%	68.7%	70.5%	71.0%	71.3%
Operating Margin	11.7%	19.3%	21.9%	33.9%	32.4%	28.0%	27.6%	31.2%	35.5%	33.7%	24.6%	31.3%	31.4%	31.8%
Pretax Margin	13.3%	19.6%	21.0%	33.9%	32.8%	26.2%	27.5%	31.0%	35.5%	33.9%	24.6%	31.3%	31.6%	32.0%
Net Margin	12.3%	15.5%	15.5%	24.0%	23.3%	19.1%	20.1%	22.5%	25.1%	24.5%	17.8%	22.5%	22.2%	22.4%
Cost as % of Revenue	44.0%	36.9%	38.8%	31.7%	33.8%	38.1%	35.9%	36.9%	33.7%	35.4%	41.7%	36.9%	37.6%	37.6%
SG&A as % of Revenue	28.0%	23.3%	21.0%	20.2%	21.2%	23.8%	21.5%	22.2%	20.4%	20.5%	26.0%	22.3%	23.0%	23.1%
R & D as % of Revenue	16.0%	13.6%	17.8%	11.6%	12.7%	14.3%	14.3%	14.7%	13.3%	14.9%	15.7%	14.6%	14.6%	14.5%
Growth (y/y):														
Revenue Growth (cont ops - LVAD)	50.5%	29.0%	53.6%	37.4%	39.8%	20.5%	36.8%	0.3%	16.9%	12.8%	9.6%	9.8%	11.2%	5.4%
Revenue Growth	33.6%	19.3%	35.9%	3.3%	3.5%	-6.6%	8.4%	-18.1%	16.9%	12.8%	9.6%	3.7%	11.2%	5.4%
Cost Growth	17.2%	-0.5%	20.9%	-10.0%	-9.4%	-1.4%	-0.1%	-13.4%	18.2%	9.4%	19.8%	7.4%	14.7%	5.8%
Op. Exp Growth (cash)	18.9%	0.0%	38.4%	-11.1%	-8.9%	3.0%	5.3%	-22.0%	24.3%	18.0%	20.0%	6.8%	13.2%	5.4%
Operating Income (cash)	128.2%	68.6%	43.1%	100.4%	56.0%	8.2%	47.4%	14.0%	20.1%	16.5%	3.7%	14.0%	10.7%	6.3%
Net Income (cash - fully taxed)	107.2%	49.7%	32.4%	93.7%	48.6%	6.2%	40.9%	19.3%	22.3%	18.4%	1.9%	15.9%	9.8%	6.3%
EPS (cash - fully taxed)	84.7%	45.6%	30.6%	89.8%	45.0%	4.4%	38.4%	18.9%	28.3%	30.6%	11.5%	22.9%	12.9%	6.3%

¹ Excludes amortization of intangibles expense incurred vis-à-vis the September 2001 reverse merger with Thermo Cardio Systems.

² Company possesses NOLs that we estimate will preclude tax expenses through the end of FY2003 (Dec). For comparative purposes, we estimate an effective tax rate of 39% for both historical and future periods.

³ We factor in the dilution from CoCo Accounting associated with the company's convertible offering, which carries 7M underlying shares. Also must add back related interest expense (estimate roughly \$400K per quarter)

³ Sold ITC business to Danaher. Our model denotes ITC as discontinued revenues beginning in Q2:10

Source: Canaccord Genuity estimates and company reports

Figure 3: Thoratec revenue model

**THORATEC CORP.
REVENUE BY PRODUCT**

(in \$ millions)

	2010					2011E					2011E	2012E	2013E
	2009	Mar	Jun	Sep	Dec	2010	Mar	Jun	Sep	DecE			
U.S. LVAD Business													
PVAD	219	43	38	37	38	156	35	48	35	32	150	125	100
IVAD	251	48	41	38	40	167	38	52	40	38	168	145	115
HeartMate VE/XVE	71	-	-	-	-	-	-	-	-	-	-	-	-
HeartMate II	1,536	571	538	530	535	2,174	604	653	590	610	2,457	2,825	2,997
HeartMate III	-	-	-	-	-	-	-	-	-	-	-	-	-
CentriMag	700	215	225	199	295	934	215	259	225	295	1,054	1,181	1,323
US VAD Units (ex-CentriMag)	2,077	662	617	605	613	2,497	677	753	665	680	2,775	3,095	3,212
ASPs (including ancillary revs per pump - CA estimates ancillary products add ~25-30% per pump)													
PVAD	\$ 59,250	\$ 73,000	\$ 72,000	\$ 63,000	\$ 68,800	\$ 69,200	\$ 72,500	\$ 63,000	\$ 74,000	\$ 63,000	\$ 68,125	\$ 68,000	\$ 67,500
IVAD	\$ 68,550	\$ 75,000	\$ 75,000	\$ 65,000	\$ 70,500	\$ 71,375	\$ 75,000	\$ 64,000	\$ 79,700	\$ 64,000	\$ 70,675	\$ 70,000	\$ 69,000
HeartMate XVE	\$ 90,250	-	-	-	-	-	-	-	-	-	-	-	-
HeartMate II	\$ 118,424	\$ 124,800	\$ 128,400	\$ 127,600	\$ 125,300	\$ 126,525	\$ 119,800	\$ 123,750	\$ 121,900	\$ 119,000	\$ 121,113	\$ 118,500	\$ 117,000
HeartMate III	-	-	-	-	-	-	-	-	-	-	-	-	-
CentriMag	\$ 17,875	\$ 17,000	\$ 20,300	\$ 18,500	\$ 19,400	\$ 18,800	\$ 20,550	\$ 20,500	\$ 25,000	\$ 25,000	\$ 22,763	\$ 25,000	\$ 25,000
Weighted Average ASP (US-ex-CentriMag)	\$105,194	\$117,824	\$121,378	\$119,717	\$118,222	\$119,255	\$114,840	\$115,753	\$116,841	\$113,291	\$115,195	\$114,188	\$113,741
Revenue (\$ mil)													
PVAD	\$ 12.9	\$ 3.1	\$ 2.7	\$ 2.3	\$ 2.6	\$ 10.8	\$ 2.5	\$ 3.0	\$ 2.6	\$ 2.0	\$ 10.2	\$ 8.5	\$ 6.8
IVAD	\$ 17.1	\$ 3.6	\$ 3.1	\$ 2.5	\$ 2.8	\$ 12.0	\$ 2.9	\$ 3.3	\$ 3.2	\$ 2.4	\$ 11.8	\$ 10.2	\$ 7.9
HeartMate XVE	\$ 6.4	-	-	-	-	-	-	-	-	-	-	-	-
HeartMate II	\$ 182.4	\$ 71.3	\$ 69.1	\$ 67.6	\$ 67.0	\$ 275.0	\$ 72.4	\$ 80.8	\$ 71.9	\$ 72.6	\$ 297.7	\$ 334.7	\$ 350.7
HeartMate III	-	-	-	-	-	-	-	-	-	-	-	-	-
CentriMag	\$ 12.6	\$ 3.7	\$ 4.6	\$ 3.7	\$ 5.7	\$ 17.6	\$ 4.4	\$ 5.3	\$ 5.6	\$ 7.4	\$ 22.7	\$ 29.5	\$ 33.1
Total US VAD Revenue	\$231.4	\$81.7	\$79.5	\$76.1	\$78.2	\$315.4	\$82.2	\$92.5	\$83.3	\$84.4	\$342.4	\$382.9	\$398.4
International LVAD Business													
Units - VADs (excluding CentriMag)	533	202	178	161	223	764	182	193	188	215	778	803	875
ASP - average (\$)	\$85,875	\$83,700	\$84,000	\$89,500	\$83,600	\$85,200	\$92,500	\$93,600	\$91,000	\$93,000	\$92,525	\$93,000	\$95,000
Total International VAD Revenue	\$45.8	\$16.9	\$15.0	\$14.4	\$18.6	\$64.9	\$16.8	\$18.1	\$17.1	\$20.0	\$72.0	\$74.7	\$83.1
HeartMate franchise (II & XVE)	\$41.0	\$14.9	\$13.5	\$13.0	\$16.9	\$58.2	\$14.9	\$16.8	\$15.6	\$18.8	\$66.1	\$70.9	\$79.8
THOR VAD franchise (PVAD/IVAD)	\$4.8	\$2.0	\$1.5	\$1.4	\$1.7	\$6.7	\$1.9	\$1.3	\$1.5	\$1.2	\$5.9	\$3.7	\$3.3
Levitronix revenue	-	-	-	-	-	-	-	-	\$1.6	\$1.8	\$3.4	\$7.2	\$8.3
Total International Revenue	\$45.8	\$16.9	\$15.0	\$14.4	\$18.6	\$64.9	\$16.8	\$18.1	\$18.7	\$21.8	\$75.4	\$81.9	\$91.4
Total VAD Units (WW - ex-CentriMag)													
Worldwide Blended ASP	\$101,250	\$109,846	\$113,009	\$113,366	\$108,986	\$111,277	\$110,107	\$111,234	\$111,145	\$108,417	\$110,231	\$109,823	\$109,728
Total VAD Revenue (Worldwide)	\$277.2	\$98.6	\$94.4	\$90.5	\$96.8	\$380.3	\$99.0	\$110.5	\$102.0	\$106.2	\$417.8	\$464.8	\$489.9
HeartMate franchise (II & XVE)	\$229.8	\$86.1	\$82.5	\$80.6	\$83.9	\$333.2	\$87.3	\$97.6	\$87.6	\$91.4	\$363.8	\$405.7	\$430.5
THOR VAD franchise (PVAD/IVAD)	\$34.8	\$8.8	\$7.3	\$6.2	\$7.2	\$29.5	\$7.3	\$7.6	\$7.2	\$5.6	\$27.8	\$22.4	\$18.0
Graft Business													
US	1.7	0.5	0.4	0.3	0.6	1.7	0.3	0.5	0.6	0.5	1.8	1.8	1.8
International	1.1	0.3	0.3	0.2	0.2	0.9	0.2	0.2	0.0	0.3	0.7	0.7	0.7
Total Graft Revenue	\$2.8	\$0.7	\$0.7	\$0.5	\$0.8	\$2.6	\$0.5	\$0.7	\$0.6	\$0.8	\$2.5	\$2.5	\$2.5
Total Revenue	\$279.9	\$99.3	\$95.1	\$91.0	\$97.6	\$382.9	\$99.5	\$111.2	\$102.6	\$107.0	\$420.3	\$467.3	\$492.4
Discontinued Business - ITC - Point of Care Diagnostics													
Total ITC Revenue	\$94.0	\$22.3	-	-	-	\$22.3	-	-	-	-	-	-	-
Total Revenue (including ITC)	\$373.9	\$121.6	\$95.1	\$91.0	\$97.6	\$405.3	\$99.5	\$111.2	\$102.6	\$107.0	\$420.3	\$467.3	\$492.4

Source: Canaccord Genuity estimates and company reports

Figure 4: Thoratec revenue model, continued

REVENUE % OF TOTAL SALES													
	2009	2010				2010	2011E				2011E	2012E	2013E
		Mar	Jun	Sep	Dec		Mar	Jun	Sep	DecE			
VAD Sales													
US VAD Revenue	82.7%	82.3%	83.6%	83.7%	80.1%	82.4%	82.6%	83.2%	81.2%	78.9%	81.5%	81.9%	80.9%
OUS VAD Revenue	16.4%	17.0%	15.7%	15.8%	19.1%	17.0%	16.9%	16.2%	16.7%	16.7%	17.1%	16.0%	16.9%
Total VAD Revenue (Worldwide)	99.0%	99.3%	99.3%	99.5%	99.2%	99.3%	99.5%	99.4%	99.4%	99.3%	99.4%	99.5%	99.5%
Total Graft Revenue	1.0%	0.7%	0.7%	0.5%	0.8%	0.7%	0.5%	0.6%	0.6%	0.7%	0.6%	0.5%	0.5%
Total Revenue	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
REVENUE GROWTH (Y/Y)													
	2009	2010				2010	2011E				2011E	2012E	2013E
		Mar	Jun	Sep	Dec		Mar	Jun	Sep	DecE			
U.S. LVAD Business													
PVAD	-14.9%	-31.7%	-29.6%	-22.9%	-29.6%	-28.8%	-18.6%	26.3%	-5.4%	-15.8%	-3.8%	-16.7%	-20.0%
IVAD	-14.0%	-40.0%	-30.5%	-25.5%	-34.4%	-33.5%	-20.8%	26.8%	5.3%	-5.0%	0.6%	-13.7%	-20.7%
HeartMate VE/XVE	-79.5%												
HeartMate II	81.3%	60.8%	33.8%	42.5%	31.4%	41.5%	5.8%	21.4%	11.3%	14.0%	13.0%	15.0%	6.1%
HeartMate III													
Total VAD Units (US)	19.2%	24.7%	13.2%	26.8%	17.0%	20.2%	2.3%	22.1%	9.9%	10.9%	11.1%	11.5%	3.8%
ASPs (including ancillary revs per pump)													
PVAD	9.5%	40.4%	18.0%	3.3%	9.2%	16.8%	-0.7%	-12.5%	17.5%	-8.4%	-1.6%	-0.2%	-0.7%
IVAD	0.2%	21.0%	8.4%	-5.8%	-4.7%	4.1%	0.0%	-14.7%	22.6%	-9.2%	-1.0%	-1.0%	-1.4%
HeartMate XVE	-6.9%												
HeartMate II	7.0%	13.6%	15.4%	9.1%	-7.7%	6.8%	-4.0%	-3.6%	-4.5%	-5.0%	-4.3%	-2.2%	-1.3%
HeartMate III													
Weighted Average ASP (US)	13.7%	24.5%	20.7%	13.1%	-2.2%	13.4%	-2.5%	-4.6%	-2.4%	-4.2%	-3.4%	-0.9%	-0.4%
Revenue (\$ mil)													
PVAD	-7.3%	-4.2%	-16.9%	-20.4%	-23.2%	-16.1%	-19.2%	10.5%	11.1%	-22.9%	-6.0%	-16.4%	-20.6%
IVAD	-14.5%	-27.4%	-24.7%	-29.8%	-37.5%	-29.9%	-20.8%	8.2%	29.1%	-13.8%	-1.4%	-14.0%	-21.8%
HeartMate XVE	-80.8%												
HeartMate II	92.8%	82.7%	54.5%	55.5%	21.4%	50.7%	1.5%	17.0%	6.3%	8.3%	8.3%	12.4%	4.8%
HeartMate III													
Total US VAD Revenue	34.6%	53.7%	38.0%	42.8%	16.0%	36.3%	0.6%	16.4%	9.5%	8.0%	8.5%	11.8%	4.1%
International LVAD Business													
Units - VADs (all indications)	9.4%	57.8%	39.1%	25.0%	50.7%	43.4%	-9.9%	8.4%	16.8%	-3.6%	1.8%	3.2%	9.0%
ASP (\$)	0.7%	1.5%	-3.4%	2.9%	-3.9%	-0.8%	10.5%	11.4%	1.7%	11.2%	8.6%	0.5%	2.2%
Total International VAD Revenue	10.2%	60.1%	34.3%	28.6%	44.8%	41.8%	-0.4%	20.8%	18.7%	7.3%	10.9%	3.7%	11.3%
Levitronix revenue													
Total International Revenue	10.2%	60.1%	34.3%	28.6%	44.8%	41.8%	-0.4%	20.8%	29.8%	16.9%	16.2%	8.6%	11.7%
Total VAD Units (WW)	17.1%	31.1%	18.1%	26.5%	24.4%	25.0%	-0.6%	19.0%	11.4%	7.1%	9.0%	9.7%	4.9%
Worldwide Blended ASP	11.4%	19.1%	15.4%	11.3%	-3.9%	9.9%	0.2%	-1.6%	-2.0%	-0.5%	-0.9%	-0.4%	-0.1%
Total VAD Revenue (Worldwide)	29.8%	54.8%	37.4%	40.4%	20.6%	37.2%	0.4%	17.1%	12.7%	9.7%	9.8%	11.2%	5.4%
Total Graft Revenue	-21.1%	-23.9%	35.0%	-24.6%	6.8%	-5.2%	-28.6%	-0.7%	25.6%	1.3%	-3.1%	0.0%	0.0%
Total Revenue (cont ops)	29.0%	53.6%	37.4%	39.8%	20.5%	36.8%	0.2%	17.0%	12.8%	9.6%	9.8%	11.2%	5.4%

Source: Canaccord Genuity estimates and company reports

APPENDIX: IMPORTANT DISCLOSURES

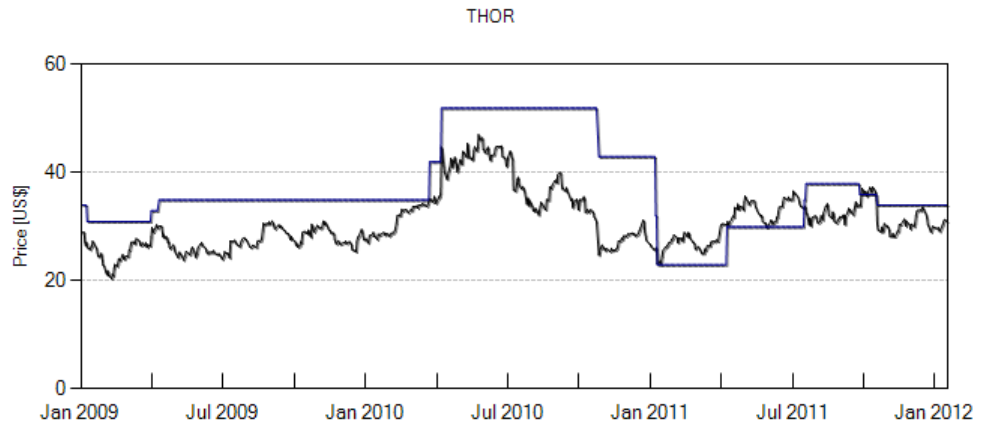
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Site Visit:

An analyst has visited the issuer's material operations in Pleasonton, California. No payment or reimbursement was received from the issuer for the related travel costs.

Price Chart:*



Date	Analyst	Rating	Target Price	Date	Analyst	Rating	Target Price
1) 02/06/2009	Mills	Buy	31.00	8) 01/28/2011	Mills	Hold	23.00
2) 04/28/2009	Mills	Buy	33.00	9) 04/26/2011	Mills	Hold	30.00
3) 05/08/2009	Mills	Buy	35.00	10) 08/02/2011	Mills	Hold	35.00
4) 04/15/2010	Mills	Buy	42.00	11) 08/04/2011	Mills	Hold	38.00
5) 04/30/2010	Mills	Buy	52.00	12) 10/11/2011	Mills	Hold	36.00
6) 11/17/2010	Mills	Buy	43.00	13) 11/02/2011	Mills	Hold	34.00
7) 01/26/2011	Mills	Buy	32.00				

*Price charts assume event 1 indicates initiation of coverage or the beginning of the measurement period.

Distribution of Ratings:

Global Stock Ratings
(as of 4 January 2012)

Rating	Coverage Universe		IB Clients	
	#	%	#	%
Buy	481	60.7%	36.2%	
Speculative Buy	92	11.6%	69.6%	
Hold	205	25.9%	21.0%	
Sell	14	1.8%	14.3%	
	792	100%		

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Company	Disclosure
Thoratec	5, 7
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