Rating
Buy

North America
United States

Health Care
Biotechnology

Company
Tesaro

Reuters	Bloomberg	Exchange	Ticker
TSRO.OQ	TSRO US	NMS	TSRO

Date
5 February 2013

Coverage Change

Price at 4 Feb 2013 (USD)	18.06
Price target	27.00
52-week range	19.40 - 11.25

Initiating at BUY: Best in class drugs & best in class management

We think rolapitant can be the dominant CINV drug & pipeline offers upside

Tesaro is developing what we believe to be a best in class chemo-induced nausea and vomiting (CINV) drug called rolapitant. We expect phase 3 data in 2H13 to hit its primary endpoint & see potential for upside if the company shows a benefit preventing nausea. We also see the Tesaro's PARP inhibitor, niraparib, offering upside in 2013 and beyond as it enters in phase 3. The street assigns little value to the pipeline. We rate shares BUY.

Key controversy: will rolapitant show a significant benefit on nausea.

Rolapitant is an NK-1 inhibitor in the same class as Merck's Emend. Some investors believe rolapitant must reduce nausea to be competitive. While we disagree, we also note that we think there is a greater chance of significantly reducing nausea in ph3 than the street expects. Despite rolapitant showing a benefit in Ph2, the street is skeptical this will translate in pivotal studies because Emend also reduced nausea in Ph2, but not Ph3. Emend may have shown a benefit in ph2 because of a CYP interaction exposing patients to higher levels of co-administered dex. Dex can prevent nausea. Rolapitant does not have a CYP interaction and therefore the nausea benefit in Ph 2 may be more reflective of Ph3. Significance on nausea would be upside and we see NPV under this scenario at $60/share

We think rolapitant can be successful without a nausea claim.

Rolapitant has a longer half-life, no cyp interaction, and a higher NK-1 binding affinity. We think these characteristics bode well for market uptake & clinical success. Our base case assumes no benefit on nausea in phase 3.

Management knows the CINV space, has executed before

Tesaro's management have experience in the CINV space, launching MGI Pharma's Aloxi (a 5HT3 inhibitor). Our analysis of the Aloxi launch, suggests this team has the know-how to gain share in the community oncology setting & will leverage their experience. Sales of Aloxi beat street expectations in first year of launch. Ultimately MGI was sold to EISAI in 2007.

PARP: our deep dive preps investors for phase 3 niraparib regulatory plan

Tesaro will disclose their regulatory plan shortly. We have done a deep dive on the space & are hosting a CC today at 10:30amET:1-800-309-8606 #94743802. There is significant leverage with PARPs: $500M in sales is ~$26 to our DCF

Valuation & risks

Our TP is derived by discounted cash flow analysis. Our model assumes peak rolapitant share of 30% & sales of $600M. We use a discount rate of 12.5% fair for a phase 3 biotech co we a 2% terminal value to account for pipeline (see p11). Downside risks: clinical failure, regulatory failure, competition (see p 12).

Forecasts And Ratios

Year End Dec 31	2011A	2012E	2013E
FY EPS (USD)	-31.90	-4.23	-2.61
Revenue (USDm)	0.0	0.0	0.0

Source: Deutsche Bank estimates, company data

[1] Includes the impact of FAS123R requiring the expensing of stock options.

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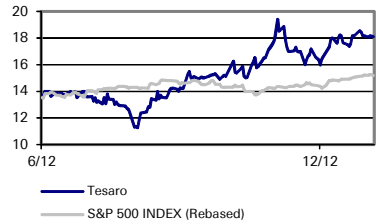
Price/price relative



Performance (%)	1m	3m	12m
Absolute	0.3	17.6	–
S&P 500 INDEX	2.0	5.8	11.2

Model updated:05 February 2013

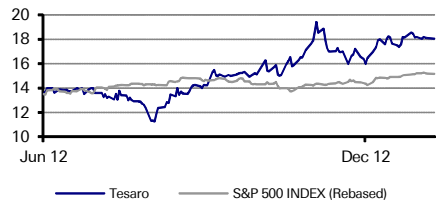
Running the numbers
North America
United States
Biotechnology

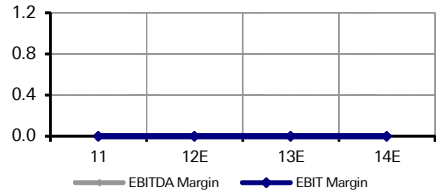
Tesaro
Reuters: TSRO.OQ Bloomberg: TSRO US

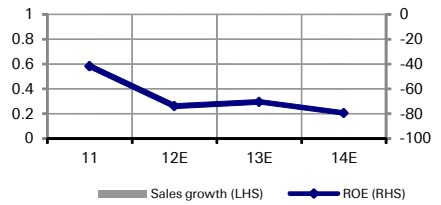
Buy

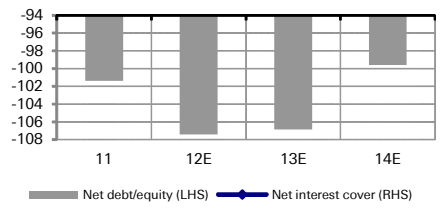
Price (4 Feb 13)	USD 18.06
Target Price	USD 27.00
52 Week range	USD 11.25 - 19.40
Market Cap (m)	USDm 248
	EURm 181

Company Profile
Developing.

Price Performance


Margin Trends


Growth & Profitability


Solvency


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Fiscal year end 31-Dec	2011	2012E	2013E	2014E
Financial Summary				
DB EPS (USD)	-31.90	-4.23	-2.61	-2.87
Reported EPS (USD)	-31.90	-4.23	-2.61	-2.87
DPS (USD)	0.00	0.00	0.00	0.00
BVPS (USD)	76.43	8.59	3.60	4.20
Valuation Metrics				
Price/Sales (x)	nm	nm	nm	nm
P/E (DB) (x)	nm	nm	nm	nm
P/E (Reported) (x)	nm	nm	nm	nm
P/BV (x)	0.0	2.1	5.0	4.3
FCF yield (%)	na	nm	nm	nm
Dividend yield (%)	na	0.0	0.0	0.0
EV/Sales	nm	nm	nm	nm
EV/EBITDA	nm	nm	nm	nm
EV/EBIT	nm	nm	nm	nm
Income Statement (USDm)				
Sales	0	0	0	0
EBITDA	-15	-58	-81	-107
EBIT	-15	-58	-81	-108
Pre-tax profit	-16	-58	-81	-107
Net income	-16	-58	-81	-107
Cash Flow (USDm)				
Cash flow from operations	-14	-56	-80	-104
Net Capex	0	0	-2	-10
Free cash flow	-14	-56	-82	-114
Equity raised/(bought back)	52	136	75	150
Dividends paid	0	0	0	0
Net inc/(dec) in borrowings	0	0	0	0
Other investing/financing cash flows	0	7	0	0
Net cash flow	38	87	-7	36
Change in working capital	*0*	*1*	*1*	*1*
Balance Sheet (USDm)				
Cash and cash equivalents	40	127	120	155
Property, plant & equipment	0	0	2	12
Goodwill	0	0	0	0
Other assets	3	3	7	12
Total assets	43	130	129	178
Debt	0	0	0	0
Other liabilities	4	12	17	22
Total liabilities	4	12	17	22
Total shareholders' equity	39	118	112	156
Net debt	*-40*	*-127*	*-120*	*-155*
Key Company Metrics				
Sales growth (%)	nm	nm	nm	nm
DB EPS growth (%)	na	86.8	38.3	-10.1
Payout ratio (%)	nm	nm	nm	nm
EBITDA Margin (%)	nm	nm	nm	nm
EBIT Margin (%)	nm	nm	nm	nm
ROE (%)	-41.7	-73.8	-70.5	-79.4
Net debt/equity (%)	-101.4	-107.4	-106.9	-99.6
Net interest cover (x)	nm	nm	nm	nm
DuPont Analysis				
EBIT margin (%)	nm	nm	nm	nm
x Asset turnover (x)	0.0	0.0	0.0	0.0
x Financial cost ratio (x)	1.1	1.0	1.0	1.0
x Tax and other effects (x)	1.0	1.0	1.0	1.0
= ROA (post tax) (%)	-38.2	-67.1	-62.6	-69.3
x Financial leverage (x)	1.1	1.1	1.1	1.1
= ROE (%)	-41.7	-73.8	-70.5	-79.4
annual growth (%)	*na*	*-76.7*	*4.5*	*-12.7*
x NTA/share (avg) (x)	76.4	5.7	3.7	3.6
= Reported EPS	-31.90	-4.23	-2.61	-2.87
annual growth (%)	*na*	*86.8*	*38.3*	*-10.1*

Source: Company data, Deutsche Bank estimates

Investment Thesis

Outlook

We rate Tesaro shares Buy because we believe their lead asset, rolapitant (an NK-1 antagonist), is clinically differentiated from the current therapy on market for chemotherapy induced nausea and vomiting (CINV). We believe management has material experience in executing launches & building sales forces in CINV. In our opinion, the CINV market is underpenetrated, with mgmt expertise and a differentiated drug the NK-1 market should grow. We estimate peak sales for rolapitant of $450M US and $150M ex-US. We believe if rolapitant can show a nausea benefit in Phase 3 that there is significant upside to our estimates. We view Tesaro's earlier stage assets, PARPs and ALK inhibitors, for treatment of cancer as upside. Clarity on the potential of the company's PARP inhibitor is expected in 2013.

Valuation

Our target price for Tesaro is based on our discounted cash flow analysis (DCF). In our DCF, we extend our estimates to 2025 and apply a 2% terminal growth rate as we do assign some value to future earlier stage assets. We derive our discount rate of 12.5% by applying a 2.1% premium to the company WACC of 10.4%. The WACC calculation is based on a 2-year weekly beta of 1.0 from Bloomberg, risk free rate of 2%, and equity risk premium of 8.4%.

Risks

Downside risks include: 1) Lack of efficacy with Ph3 asset rolapitant or earlier stage assets 2) Negative safety surprise with rolapitant or earlier assets 3) Inability to complete Phase 3 program for rolapitant 4) Core leadership management turnover 5) NK-1 market growth is less than expected 6) Greater than expected NK-1 competition for rolapitant.

Figure 1: DB-Bio: Conference call TODAY

CONFERENCE CALL ON TESARO PARP (niraparib), OVERVIEW OF PARP MARKET, and our high level thesis on Tesaro

Date: **Wed February 6, 2013**

Time: **10:30 AM EST**

Dial in details: US: **1-800-309-8606**

Intl: **1-706-679-0645**

Conference ID: **94743802**

Source: Deutsche Bank

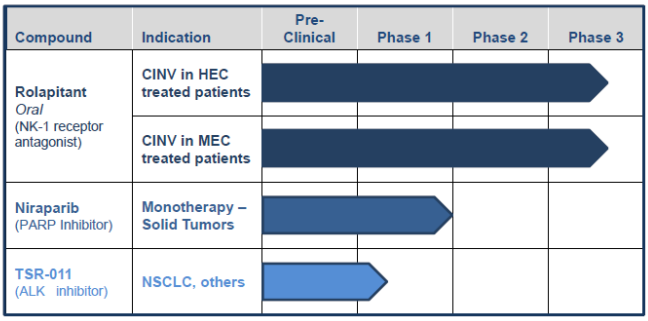
PM Summary

We see 50% upside as investors assign more credit to Rolapitant. Benefit on nausea & pipeline success is upside.

Tesaro is developing rolapitant for chemo-induced nausea and vomiting (CINV). Phase 3 data expected 2H13.

Rolapitant is an NK-1 antagonist and would compete with Merck's Emend, which has only penetrated 20% of the US market. The primary endpoint of the pivotal study is delayed response as defined by no emesis or use of rescue medication over the time period of 1-120days post chemotherapy. The company also has a PARP inhibitor, niraparib, that it is progressing into phase 3 in 2013 as well as an ALK inhibitor in phase 1.

Figure 2: Tesaro key assets in development



Source: Tesaro

We believe Rolapitant will be differentiated enough, even without a nausea claim, to take market share from Merck's Emend & grow the market.

Merck's Emend launched in 2003, but since has only take 20% share, despite guidelines suggesting use of NK-1 therapy with HEC & MEC cancer therapies. Not only do we think the company has expertise growing the NK-1 market, but we think rolapitant's profile is differentiated.

Figure 3: 5 Reasons why we think Rolapitant will be a commercial success

Reason	Explanation
1. Drug Differentiation	Rola has longer half life, No CYP interaction, Higher NK-1 binding affinity and a potential to prevent Nausea.
2.NCCN guidelines suggest a big market opportunity	NCCN guidelines recommend use of Nk-1 antagonist in both HEC and MEC chemo treatments. Overall market size is ~5M annual treatments in the US alone. EU market 20% bigger than US
3. Underpenetrated Market	Despite being on NCCN guidelines for CINV, Emend has ~20% market share in all eligible's.
4. Less aggressive competition	Competition (Merck and Co.) is not very aggressive in this space and not using contracting and discounting strategies.
5. Management has experience in CINV space	TESARO management has previously successfully launched Aloxi in same market. Aloxi gained 35% market share within 4 years of launch.

Source: Deutsche Bank and Company Reports

Figure 4: Rolapitant vs. Competition

Product/Candidate	Status	Company	Single dose IV	CYP DDI Interaction	Longer Half life	Potential to Prevent Nausea
Emend (Aprepitant)	Marketed	Merck & Co.	Yes	Yes	No	No
Rolapitant	Phase III	Tesaro	Yes	No	Yes	Yes
Netupitant	Phase III	Helsinn/Eisai	No	Yes	Unknown	Unknown

Source: Deutsche bank and Company Reports

Based on phase 2, we expect rolapitant will be successful in phase 3

The phase 3 trial is 90% powered to show a 15% benefit over control. The phase 2 trial showed a statistically significant benefit on overall complete response as well as delayed response. Therefore we expect phase 2 to be successful.

Figure 5: Rolapitant Phase II results on delayed CINV

ENDPOINTS	Rolapitant 200mg N = 90	Std. Therapy N = 91	p- Value
PRIMARY ENDPOINT			
Overall Complete Response	63%	47%	0.032
OTHER PRESPECIFIED ENDPOINTS			
Complete Response			
Acute Phase	88%	67%	0.001
Delayed Phase	64%	49%	0.045

Source: Deutsche Bank & Company Reports

Figure 6: DB take on Rolapitant phase III trial

End-point	DB - Take
Primary: Complete response in Delayed CINV	We expect success on primary endpoint as: 1. Phase II showed 15% benefit over control 2. Phase III is 90% powered to detect a 15% benefit 3. Rolapitant longer half life makes it more active during delayed phase
Secondary: Overall Complete response	We expect success on overall complete response as well since the delta between control arm and treatment arm was 21% with high stat-sig.
Secondary: No Significant Nausea	We see success likely as there is no change in DEX dose in phase III vs. phase II. However, we note that Nausea benefit is not necessary for approval.
Safety	NK-1 class is generally safe and no safety signals were seen in Rola phase II. Lack of drug drug interaction with CYP3A4 also makes Rolapitant safer.

Source: Deutsche Bank

Key investor controversy: will rolapitant show a benefit on nausea. We expect the trial does have a greater chance of hitting on this endpoint than what the street expects.

Rolapitant showed a 21% delta over control in phase II trial on Nausea endpoint and was statistically significant

However, investors remain skeptical this will translate in phase 3. As a reminder, Merck's Emend showed significant improvement in nausea in phase 2 but did not in phase 3.

Figure 7: Rolapitant Phase II results on Nausea

ENDPOINTS	Rolapitant 200mg N = 90	Std. Therapy N = 91	p- Value
No Nausea			
Overall	63%	42%	0.005
Acute Phase	87%	73%	0.029
Delayed Phase	64%	48%	0.026

Source: Company Reports

We think a greater read from phase 2 to phase 3 is warranted, as Merck's program used different doses of dex in phase 2 compared to phase 3 likely confounding the data.
In the Merck phase 2 study, a higher dose of dexamethasone was used. However, when it was discovered that Emend had a drug interaction, patients effectively got double the exposure to dex that they should have. Studies show higher dex can reduce nausea benefit. In phase 3, Emend did not show a statistical benefit on nausea. However, this may be because it used a LOWER dose of dex in this study.

Rolapitant does not have a drug interaction with CYP, therefore patients likely didn't have above average levels of dex. In our view this suggests phase 3 has a greater chance of showing significance on the nausea endpoint that the street assigns value to.

Figure 8: DEX dose was reduced in Emend phase III due to CYP interaction

	Day 1	Day 2-5
Emend Phase II	Dexamethasone 20mg	Dexamethasone 8mg QD Day 2-5
Emend Phase III	Dexamethasone 12mg	Dexamethasone 8mg QD Day 2-4

Source: Merck and Deutsche Bank

Management has done it before and we believe they can do what Merck could not do in this marketplace

What is unique about Tesaro: management has already proven themselves in the CINV space.
Both the CEO and CSO previously worked at MGI pharma, where they successfully launched the 5HT3 receptor agonist in the CINV space. The company beat street sales expectations within the first year of launch. Eventually the company was sold for ~$4B.

Figure 9: Management has previously worked at MGI and launched Aloxi successfully

Name	Current Position At Tesaro	Previous Experience
Lonnie Moulder	CEO and co-founder	- CEO at Abraxis Biosciences - **CEO at MGI Pharma** - Successfully launched Aloxi in CINV space
Mary Lynne Hedley, Ph.D.	President and co-founder	- Chief Sceintific Officer at Abraxis Biosciences - **Chief Sceintific Officer at MGI Pharma** - President & CEO at Zycos inc. which got acquired by MGI pharma

Source: Deutsche bank and company reports

Figure 10: Management has a history of selling companies

Target	Acquirer	Announcement date	Deal value	1-Day premium
MGI Pharma	EISAI Japan	12/10/2007	$3.9B	23%
Abraxis biosciences	Celgene	6/30/2010	$2.9B + CVR	17% (Excluding CVR)

Source: Deutsche bank & company reports

Figure 11: How MGI executed Aloxi launch?

How MGI executed Aloxi Launch?	**Drug Differentiation**	Promoted Aloxi on longer half-life benefit and benefit in delayed CINV to establish that Aloxi is better than other 5HT3s.
	Focused Marketing	Targeted community oncologists. 2/3rd of Chemo treatments are administered at community clinics
	Contracting	Entered in contracts with all leading oncology GPOs. Contracted with US oncology right after launch which served 15% of new cancer patients in the US at that time.
	Discounting	Entered in contracts with discounts at 25-45% of WAC price. Provided volume based discounts
	Sales-force	Launched Aloxi with a salesforce of ~100 field based sales reps.

Source: Company Reports

Figure 12: Aloxi Success story

	Parameter	**Initial Target**	**Actual realization**
What MGI achieved with Aloxi launch?	**Sales within first 12 months of launch**	$40-$55M	$100M+
	Sales in first Full-Year	$80-$90M	$159M
	Market share in 5HT3 class after 4 years of launch	25%	35%

Source: Company Reports

Figure 13: Comparison of Aloxi and Rolapitant market dynamics

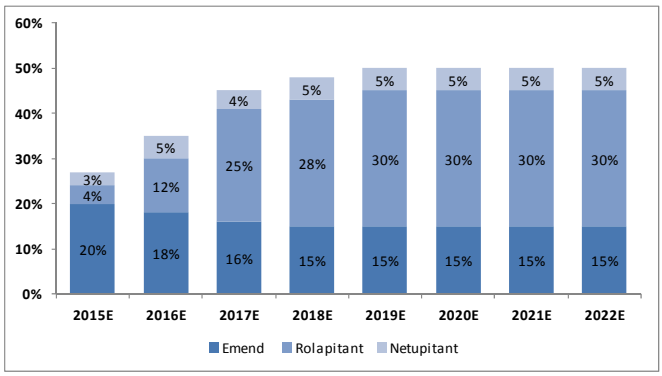
Item	**Aloxi (5HT3)**	**Rolapitant (NK1)**
Number of players at Launch	3 existing players	Only one player Emend
Market Penetration of competition	Fully Penetrated	Underpenetrated (Only 20% eligible patients are on NK-1)
Launch Year	2003	2015E
Years before Generic threat	3 years (Generic Zofran launched in Q4'06)	4 Years (IV Emend will lose patent in 2019)
Drug Differentiation vs. Existing players	**Yes.** Longer half life	**Yes.** 1) Longer half life 2) No drug drug interaction 3) Potential for Nausea Benefit
Market dynamics	Aggressive competitors. Use of contracting and discounting by competition	Emend is only competitor. Not using discounting and contracting strategies.
Pricing	Premium pricing. Launched at a ~60% premium due to longer half life	We assume at par pricing. Premium pricing likely if they show stat-sig benefit on nausea
Sales Strategy	Targeted community oncologists who administer ~2/3rd of chemo. Used contracting and discounting	We expect Rola sales strategy to be same as Aloxi
Size of sale team	~100+ field based reps in the US	~100 field based reps in the US and ~12 in office.

Source: Company Reports

We value TSRO at $27 in base case. We model Rolapitant getting peak market share of 30% in NK-1 eligible patients. We see peak US sales at ~$450M and EU at ~$150M

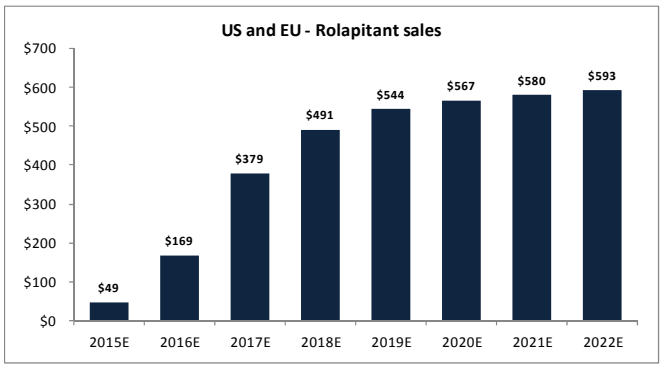
Our model assumes rolapitant does not show a significant benefit on nausea & is discounted to Merck's Emend.

Figure 14: Rolapitant Market share



Source: Deutsche Bank

Figure 15: Rolapitant sales US and EU

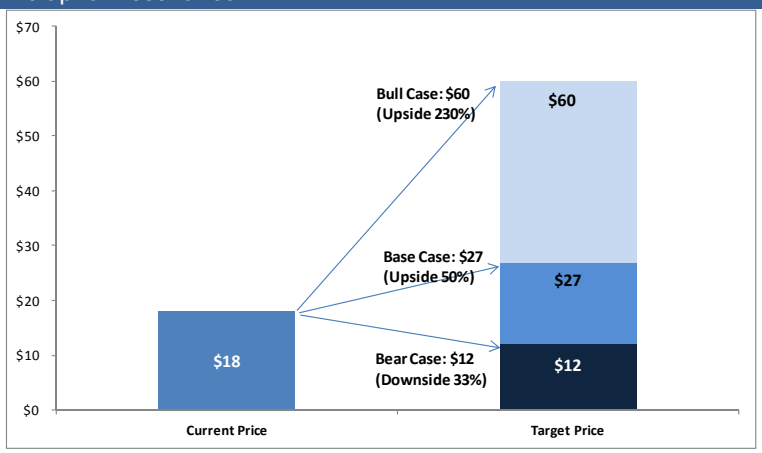


Source: Deutsche Bank

Bull case: We see TSRO value at $60/sh if Phase III hints on Nausea endpoint and Rolapitant gets 50% market share in all eligible.

Bear case: If market does not grow significantly and Rolapitant only gets 20% market share at peak, we see fair value at $12/sh

Figure 16: Rolapitant scenarios



Source: Company Reports

Sensitivities: Every 5% incremental market share in CINV space adds $8/sh to DCF. Every 10% premium pricing for Rolapitant over Emend adds $6/sh to DCF.

Figure 17: 5 reasons where we could be underestimating the Rolapitant potential

Item	Where could be upside?
Pricing	We are not assuming any price premium for Rolapitant
Discount	We are assuming Rola will be contracted at a 20% discount to Emend
Ramp-Curve	We are assuming it will take 5 years for Rola to achieve peak market share of 30%. Aloxi reached at 35% in 3.5 years in a relatively bigger market
R&D expenses	We are assuming R&D expenses to increase for PARP and ALK but we are not giving them any credit in the model.
Pipeline	At this point we are not including PARP and ALK.

Source: Deutsche Bank

Included in this report: our deep dive of PARP- this is UPSIDE to our model, data expected shortly. Tesaro will disclose shortly their regulatory strategy.

Parps offer considerable upside to our model, as the company would be able to leverage their sales force in the cancer space.

If niraparib sells $500M at peak, it would be $26 of upside to our DCF.

Valuation of Tesaro

Our $27 target price for Tesaro is based on our discounted cash flow analysis (DCF). In our DCF, we extend our estimates to 2025 and apply a 2% terminal growth rate as we do assign some value to future earlier stage assets. We derive our discount rate of 12.5% by applying a 2.1% premium to the company WACC of 10.4%. The WACC calculation is based on a 2-year weekly beta of 1.0 from Bloomberg, risk free rate of 2%, and equity risk premium of 8.4%.

Tesaro's lead asset is rolapitant (NK-1 antagonist) currently being developed for chemotherapy induced nausea & vomiting (CINV) and in Phase 3. We think that rolapitant will be approved in 2015. We believe that the launch of rolapitant will also grow the NK-1 market that is currently underpenetrated. We estimate that rolapitant can obtain peak sales of $450M in US and $150M ex-US. Additionally, we view Tesaro's earlier stage assets, PARPs and ALK inhibitors, for treatment of cancer as upside. Clarity on the potential of the company's PARP inhibitor is expected in 2013.

We base these conclusions on our detailed modeling of the CINV market, evaluation of current and pipeline assets in development in the CINV, PARPs, and ALKs. We also conducted detailed due diligence on clinical programs around all assets for Tesaro.

Figure 18: Our DCF valuation for Tesaro

TESARO Inc.

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Deutsche Bank

DCF	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
Pretax Income	**-$81**	**-$107**	**-$126**	**-$66**	**$99**	**$195**	**$242**	**$257**	**$271**	**$281**	**$291**	**$302**	**$314**
Tax rate	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*10%*	*35%*	*35%*	*35%*	*35%*	*35%*	*35%*
D&A	$0	$1	$3	$7	$12	$20	$22	$20	$20	$19	$19	$19	$19
Share based compensation	$0	$0	$0	$0	$0	$0	$1	$1	$1	$1	$1	$1	$1
Change in WC	$1	$1	-$6	-$20	-$37	-$21	-$10	-$4	-$2	-$2	-$2	-$2	-$2
CAPEX	-$2	-$10	-$15	-$26	-$39	-$25	-$17	-$18	-$18	-$18	-$19	-$19	-$20
Free cash flow	**-$82**	**-$114**	**-$143**	**-$104**	**$37**	**$170**	**$215**	**$167**	**$176**	**$182**	**$188**	**$195**	**$202**
Discount period	0	1	2	3	4	5	6	7	8	9	10	11	12
Discount factor	1.0	0.9	0.8	0.7	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.2
PV of FCF	**-$82**	**-$102**	**-$113**	**-$73**	**$23**	**$95**	**$106**	**$73**	**$68**	**$63**	**$58**	**$53**	**$49**

Discount rate	12.5%
Terminal growth rate	2%
PV of FCF	$218
TV	$476
NPV	$695
Cash	$177
$/Sh	**$27**
Shares Outstanding	32

Source: Deutsche Bank

Detailed risks

Downside risks to our valuation include the following:

- Lack of efficacy with Ph3 asset rolapitant in treatment of CINV
- Negative safety surprise with rolapitant during Ph 3 program
- Inability to complete Phase 3 program for rolapitant or material delays to the program. We are expecting data in 2H13. We expect a launch in 2015
- Turnover of senior management of Tesaro. We believe Tesaro management has rich experience in developing, launching, and building sales franchises in CINV
- NK-1 market growth is less than expected. The NK-1 current share is 17%, and we model significant expansion with rolapitant & new therapies on market
- Greater than expected NK-1 competition for rolapitant. Current therapy on market is Merck's Emend. Helsinn is also developing a combination asset in Phase 3
- Inability to develop earlier stage assets niraparib (PARP inhibitor) and TSR-011 (ALK inhibitor) due to efficacy or safety

CINV background

Despite the presence of chemo induced nausea drugs (CINV), doc checks indicate CINV is highly prevalent and new drugs are needed. Tesaro is a new potential best in class NK-1 inhibitor for CINV

Background: CINV is a common side effect of chemotherapy that occurs more frequently in certain types of chemotherapy

Management of CINV is necessary while treating patients with chemo drugs to make sure patients stay on the treatment. This side effect varies with different chemo agents used. According to risk of emesis (vomiting), chemo agents are dividend in four categories.

Figure 1: Categories of Chemo Agents

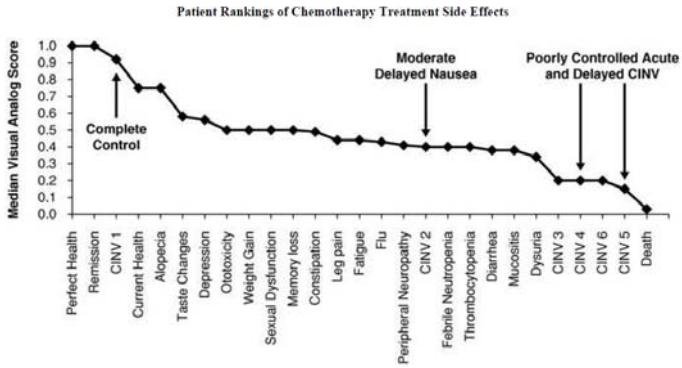
Category	Risk of Emesis
Highly Emetic Chemotherapy (HEC)	>90%
Moderately Emetic Chemotherapy (MEC)	>30-90%
Low Emetogenecity	10-30%
Minimally Emetic	<10%

Source: Deutsche Bank and Tesaro

Very severe forms of CINV are ranked very close to death. CINV is a very serious side effect of chemotherapy that makes life unbearable

This chart below shows that CINV is one of the LEAST favorable side effects from chemotherapy treatment. Poorly controlled acute & delayed CINV when patients consider side effects from chemotherapy ranks close to death. This analysis was based on patients with ovarian, primary peritoneal, or fallopian tube cancer received at least three cycles of platinum based chemotherapy.

Figure 19: Patient rankings of chemotherapy treatment side effects



Source: TESARO

NCCN guidelines indicate which chemotherapies have the highest risk of CINV

NCCN guidelines as of July 2011 state that antiemetic regimens should be chosen based on the drug with the highest emetic risk as well as patient specific factors. Below is a list of chemotherapy regimens which NCCN believe have the highest risk of CINV.

Figure 20: Chemotherapy treatments with highest risk for CINV

High (>90% risk of emesis)	Moderate (>30-90% risk of emesis)
Carmustine	Azacitidine
Cisplatin	Alemtuzumab
Cyclophosphamide >1500 mg/m2	Bendamustine
Dacarbazine	Carboplatin
Dactinomycin	Clofarabine
Mechlorethamine	Cyclophosphamide <1500 mg/m^2
Streptozotocin	Cytarabine >1000 mg/m^2
	Daunorubicin*
	Doxorubicin*
	Epirubicin*
	Idarubicin*
	Ifosfamide
	Irinotecan
	Oxaliplatin

*When combined with cyclophosphamide, they are not considered high risk

Source: NCCN Guidelines

Acute and delayed CINV are the key classifications for CINV, which is determined by the onset of CINV symptoms post chemotherapy

CINV is also classified in acute and delayed phases. The acute phase is defined as 0-24 hours post chemo administration and delayed phase is defined as over 24 -120 hours post chemo. It is important to protect patients for full 120 hours post chemo administration.

Figure 21: Various classifications of CINV

CINV Classification	Description
Acute	Occurs minutes to hours after chemotherapy
Delayed	Develops ≥24 hours after chemotherapy
Anticipatory	Typically occurs before chemotherapy after a negative past experience
Breakthrough	Occurs despite antiemetic treatment; requires rescue
Refractory	Occurs during subsequent treatment cycles

Source: Company Reports

5-HT3 drugs make up the backbone of treatment in acute CINV

Almost all HEC and MEC chemo treatments are administered with 5-HT3 drugs for CINV. 5-HT3 class is the mainstay of treatment if CINV. Based on analysis of IMS data conducted by Tesaro, 2011 CINV treatments with 5-HT3 drugs were ~6.6M. ~60% of these treatments were with HEC agents and ~24% with MEC agents. There are four 5-HT3 drugs predominantly used for the treatment of CINV namely Ondansetron (Zofran), Granisetron (Kyrtil), Dolasetron (Anzement) and Palonosetron (Aloxi).

Figure 22: 5-HT3 treatments for CINV

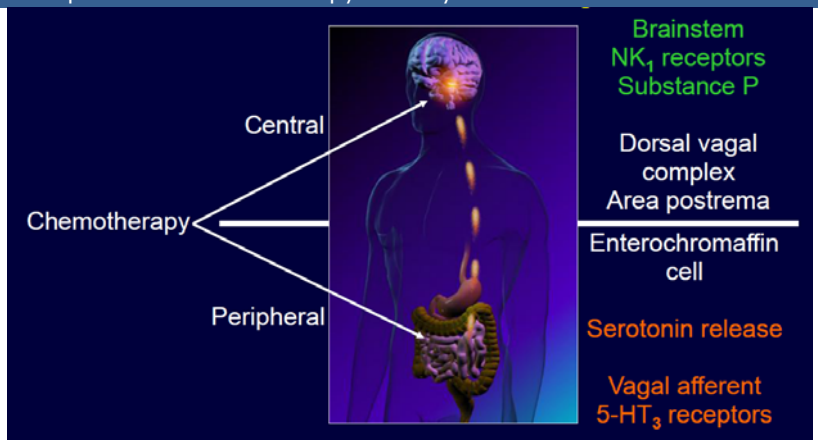
Drug class	Drug name	Trade name	Company	First or second gen	Formulations
5HT3	Dolasetron	Anzement	Aventis	First gen	Oral (FDA no longer recommends IV)
5HT3	Granisetron	Kyrtil	Roche	First gen	Oral, IV, Transdermal system
5HT3	Ondansetron	Zofran	GSK	First gen	Oral tablet, oral solution, injection
5HT3	Palonosetron	Aloxi	MGI/ EISAI	Second gen	Injection (oral not in US)

Source: Company Reports

While 5-HT3 treatments typically help in acute CINV, the benefit in delayed CINV is limited. For delayed CINV patients, this suggests there two different pathways (gut & brain) that are not suitable

Acute CINV is believed to be caused by chemo induced increases in serotonin release and activation of 5HT3 receptors on vagal afferent neurons in the gut. 5-HT3 receptor antagonists help control this and provide benefit in acute phase of CINV. Delayed CINV occurs after 24 hours of chemo treatment and it involves neurokinin substance P. This substance P binds to NK-1 receptors and activates them. This activation of NK-1 receptors causes delayed nausea and vomiting. Nk-1 receptors antagonist works by blocking the binding of substance P with NK-1 receptors.

Figure 23: Impacts from chemotherapy on body are 2 fold

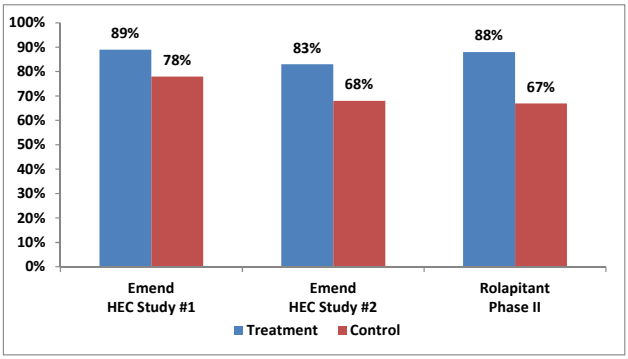


Source: FDA

Additionally, NK-1 receptors have been proven important throughout the entire 5 days (120 hours)

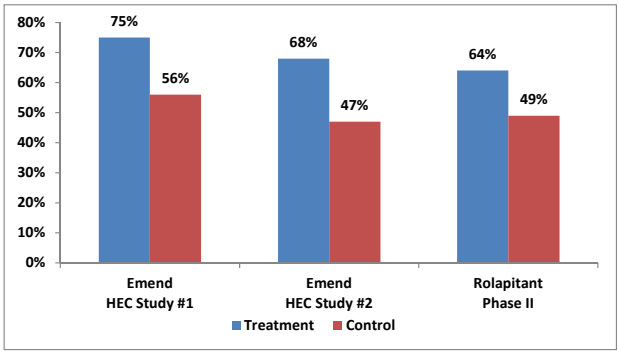
While 5HT-3 drugs are useful in acute episodes, it has been proven that NK-1 is an important throughout the entire 5 days. There is a supportive study by Merck which shows benefit in both phases. See Figure 24 & Figure 25

Figure 24: Complete response w/ NK1 in Acute phase



Source: Deutsche Bank

Figure 25: Complete response w/ NK1 in Delayed phase



Source: Deutsche Bank

Both GSK & Merck studies of NK-1 antagonists suggest that the drug has about 90% NK1 receptor occupancy. Our discussions with mgmt. suggest that Rolapiant also has more than 90% receptor occupancy coupled with higher biding affinity to NK-1 receptors.

We think rolapitant is clinically differentiated from Merck's Emend

Not every NK-1 antagonist was created equal. In this section, we discuss key similarities & differences in the development programs

The only NK-1 antagonist on market called Emend & made by Merck

Emend, made by Merck, is currently on market. There are currently two drugs in Phase 3.

Figure 26: NK-1 and NK-1 combos in development

Product/Prod candidate	Manufacturer	Development Phase
Emend (NK-1)	Merck	On market (oral & IV)
Rolapitant (NK-1)	**Tesaro**	**Phase 3**
Netupitant (NK-1) + palonosetron (5-HT3) combo	Helsinn/Eisai	Phase 3

Source: Company Reports

Rolapitant is a second generation Nk-1 Inhibitor acquired from Schering-Plough during Phase 2 development

Before Tesaro acquired rolapitant, Schering-Plough completed three Phase 2 clinical trials where rolapitant was evaluated for the prevention of CINV, PONV (post-operative nausea & vomiting), and chronic cough. Schering-Plough had studied the safety and tolerability of Rolapitant in more than 1000 healthy volunteers and patients on single and repeat doses.

So far, Tesaro's rolapitant has promise to look differentiated over Emend

As we discuss in this report, we believe that the key points of differentiation over Emend are no drug-drug interactions. From considering rolapitant Phase 2 studies, we believe that there is a reasonable chance for rolapitant to show benefit in Phase 3 on nausea. Netupitant and palonosetron (a 5HT-3, brand name Aloxi) is being studied in combination.

Figure 27: NK-1 inhibitors on market and in development

Product / Product Candidate	Status	Single Dose Oral	Single Dose IV	No CYP 3A4 DDI Potential	Potential to Prevent Nausea[2]
Rolapitant	**Phase 3 (oral)**	**+**	**+**	**+**	**+**
EMEND® (aprepitant Oral & fosaprepitant IV)[3]	Oral 3-Day; 2003 IV 150 mg; 2010	3-day oral	+	-	-
Netupitant - palonosetron combo[4]	Phase 3	+	-	-	Unknown

Source: Tesaro and Merck

We believe that rolapitant may has three key clinical advantages to current marketed drug Emend

- **Rolapitant has a superior drug-drug interaction profile to current product** – Emend is a inducer & inhibitor of a couple different pathways including CYP3A4 (that is key for many drugs). Rolapitant does not have the drug interaction on CYP3A4. This makes us feel that use of Rolapitant will reduce the complexity for the treating physicians. From speaking to mgmt, we believe the company will aggressively highlight this difference.
- **We believe that in Phase 3 that Rolapitant may show at least a numerical improvement in nausea.** Emend could not show stat sig benefit in Phase 3 though it did in Phase 2. We will discuss this potential important difference later in the report
- **Longer half-life:** Rolaptant demonstrated a half-life of 180 hours vs. 9-13 hours seen with emend. This suggests that Rolapitant will be active for entire period post chemo and will likely provide significant benefit.

Clinical advantage #1: Rolapitiant **does not** inhibit CYP3A4 whereas Emend & Netupitant BOTH inhibit & induce CYP3A4 which creates greater difficultly in dosing drugs in combo

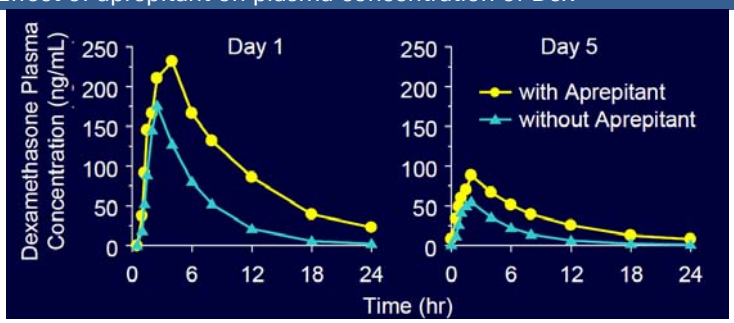
What is a CYP interaction & why is it bad?

CYP3A4 is a common metabolic pathway for drugs. Drugs can induce or inhibit the pathway. When multiple drugs inhibit the pathways, there can be interactions. This means the drug cannot dosed together as the interactions can increase or lower the drug exposures.

Rolapitant does not have a CYP3A4 drug-drug interaction whereas Emend does which affects exposure levels since CINV drugs are used in combination

Emend (aprepitant) is metabolized is a moderate CYP3A4 inhibitior. CYP3A4 is inhibited as early as 1 hour after the first day of dosing. From chart below, Emend increases the concentration Dex in the patient's bloodstream by roughly double. This would suggest that the Dex was be dosing two times higher than it should be.

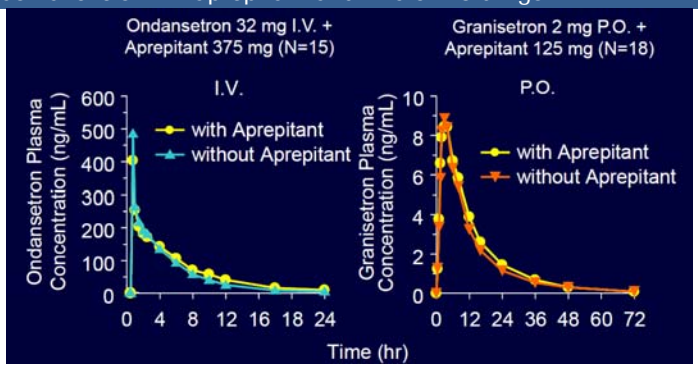
Figure 28: Effect of aprepitant on plasma concentration of Dex



Source: FDA

Aprepitant does not affect 5-HT3 antagonists. There was no dose adjustment needed which is supportive for efficacy.

Figure 29: Plasma levels with aprepitant and two 5HT3 drugs

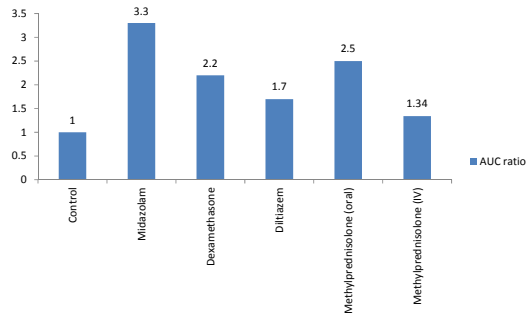


Source: Deutsche Bank

Beyond Dex, aprepitant has many other drug interactions. Rolapitant does not have the CYP3A4 interaction suggesting FEWER interactions

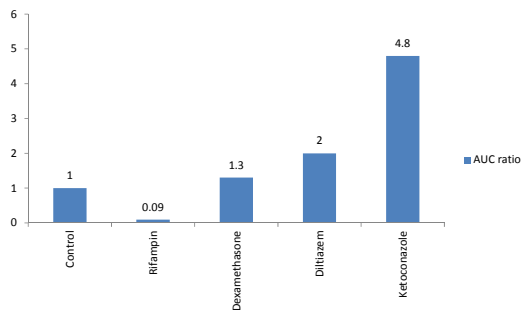
We think greater simplicity in drug-drug interactions is a key and underappreciated benefit of Rolapitant. Not only just doctors will perceive this benefit as high favorable, we think pharmacy benefit managers will also when considered Rolapitant's position on formularies relative to aprepitant.

Figure 30: Effect of aprepitant on CYP3A4 drugs



Source: FDA

Figure 31: Effect of other drugs on aprepitant



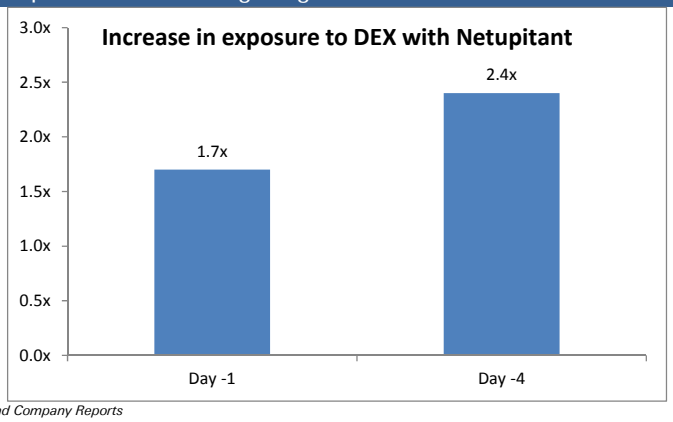
Source: FDA

Beyond the interactions show in the charts, aprepitant reduces anticoagulant warfarin levels (induction of CYP2C9). It also reduces the levels of birth control OC (ethinyl estradol 40% down) within two weeks of dosing.

Other NK-1 Phase 3, Netupitant, made by Helsinn also has similar drug interactions like Merck

In addition Netupitant also comes with CYP 3A4 interaction issue. In clinics co-administration of Neutapitant increased exposure to dexamethasone by 1.7 times on day-1 and 2.2 times on day 4. See Figure 32

Figure 32: Neutapitant CYP3A4 drug drug interaction



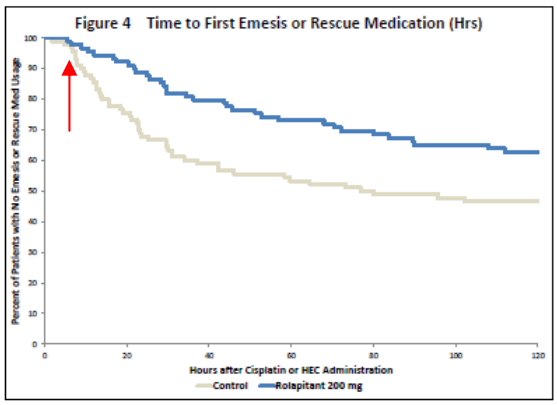
Source: Deutsche Bank and Company Reports

Clinical advantage #2: Rolapitant has faster activity & a longer duration of treatment

Rolapitant has rapid activity approximately within 3 hours of completing chemo showing fastest in class activity

This activity was faster than what was seen with Emend. Looking at the time to first event curves we note that in Rolapitant phase III study the separation of curves happened at <10 hours after chemo dose. According to Tesaro, Rolapitant becomes active within 3 hours of chemo.

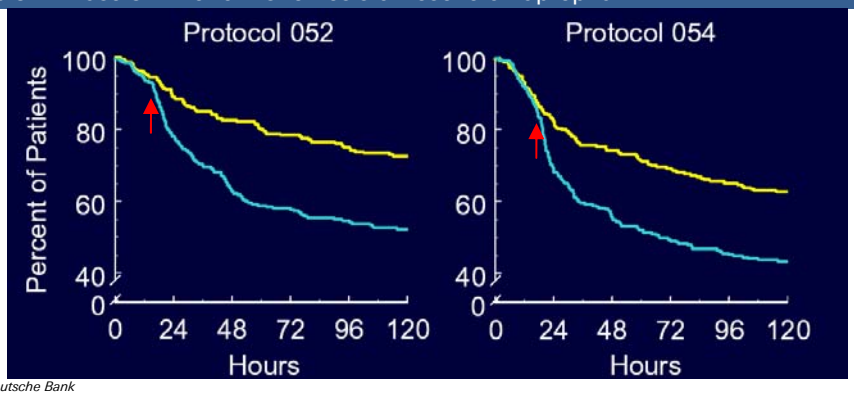
Figure 33: Time to first event on Rolapitant



Source: Tesaro

In comparison, this separation occurred after 10 hours for Emend in phase III studies. We note that this difference is clinically very important as it will reduce the frequency and intensity of CINV.

Figure 34: Phase 3 Time to first emesis or rescue on aprepitant



Source: Deutsche Bank

Rolapitant has a long duration of treatment roughly 15-20 times greater than Emend

Another advantage offered by Rolapitant is it has a longer half-life of 180 hours according to the Phase 2 poster. Rolapitant is rapidly absorbed and slowly cleared which leads to a treatment effect lasting for entire 120 hours post chemo treatment.

Figure 35: Comparison in half-life aprepitant vs rolapitant

	Half-Life
Emend (aprepitant)	9-13 hours
Rolapitant	180 hours

Source: Company Reports

We think that in comparing Phase 2 data sets across trials, efficacy favors Rolapitant. We think that this benefit may hold in Phase 3

Merck & Tesaro Phase 2 trials in CINV were fairly similar though we always caution that there are important cross-trial differences to consider

Rolapitant primary endpoint looks at complete response over 0-120 hours

Patients were given 10mg, 25mg, 100mg, and 200mg of a single oral dose of rolapitant. Patients recorded different episodes of emesis, severity of nausea, and use of rescue medications in a subject diary for days 1-6 of cycle 1.

The primary endpoint for the trial was complete response which is defined as no emesis & no use of rescue medications) for the OVERALL period studied (0-120 hours). The secondary endpoints looked at complete response during the acute phase & delayed phase.

Figure 36: CINV endpoints defined for trials

CINV endpoint	Defnition by Hours of no events
Acute Phase	0-24 hours
Delayed Phase	Over 24 hours- 120 hours
Complete Response	0-120 hours

Source: Tesaro

Here is full design below for rolapitant Phase 2 program

Figure 37: Phase 2 design for rolapitant for treatment of CINV

Design of Rolapitant Phase II program	
Program	Study in 454 cancer patients where one single oral dose is given to find Ph3 dose. Patients were naïve to chemotherapy
Design	Multicenter, randomized, double blind, placebo controlled clinical trial
Other drugs given in combo	5-HT3 receptor (ondansteron) antagonist & corticosteriod (dexamethasone)
Doses	10mg, 25mg, 100mg, 200mg given around 2 hours post first chemo day 1 cycle
Patient tracking	Recorded episodes of emesis, severity of nausea, and use of rescue meds in a subject diary from days 1-6 of cycle 1
Primary Endpoint	Complete Response (no emesis and no use of rescue medication) in overall (0-120 hours) phase of Cycle 1
Secondary Endpoint	Complete Response rates for the acute (0-24 hours) and delayed (>24 hours-120 hours) of CINV Adverse events, physical examinations, vital signs, electrocardiograms, safety lab values
Start & end Date	Oct 31 2006 -March 2008
Clinicaltrials.gov ref	NCT00394966

Source: Tesaro

In Phase II studies Rolapitant 200mg showed Emend like benefits on complete response but significance not shown by Emend in Phase 3

Phase 2 HEC data was presented at ASCO in 2012. In this study 63% of Rolapitant patients had stat sig improvement in control of CINV vs. 47% patients in control arm (Zofran + DEX) as measured by overall complete response. Rolapitant results were statistically significant in management of both Acute (0-24 hours) and delayed (24-120 hours) of CINV.

Figure 38:Comparison on efficacy endpoints between Merck & Emend

ENDPOINTS	Rolapitant 200mg N = 90	Std. Therapy N = 91	p- Value	Emend Phase III Study #1	Emend Phase III Study #2
				N=260	N=261
PRIMARY ENDPOINT					
Overall Complete Response	63%	47%	0.032	73%	63%
OTHER PRESPECIFIED ENDPOINTS					
Complete Response					
Acute Phase	88%	67%	0.001	89%	83%
Delayed Phase	64%	49%	0.045	75%	68%
No Nausea					
Overall	63%	42%	0.005	48%	49%
Acute Phase	87%	73%	0.029	NA	NA
Delayed Phase	64%	48%	0.026	51%	53%

Source: Company Reports

Rolipitant benefit over standard of care look similar to Emend pivotal studies

Emend phase III program comprised of two studies in HEC Chemo patients and 1 study in MEC Chemo patients. In Emend HEC study-052, 73% Emend patients benefited on primary end point of overall complete response vs. 52% on standard of care. In another HEC study-054 this benefit with Emend was 63% vs. 43% in control arm.

Figure 39: Emend Study 052 in HEC

ENDPOINTS	Emend N = 260	Std. Therapy N = 261	p- Value
PRIMARY ENDPOINT			
Overall Complete Response	73%	52%	<.001
OTHER PRESPECIFIED ENDPOINTS			
Complete Response			
Acute Phase	89%	78%	<.001
Delayed Phase	75%	56%	<.001
Complete Protection			
Overall	63%	49%	<.001
Acute Phase	85%	75%	Not Significant
Delayed Phase	66%	52%	<.001
No Emesis			
Overall	78%	55%	<.001
Acute Phase	90%	79%	.001
Delayed Phase	81%	59%	<.001
No Nausea			
Overall	48%	44%	Not Significant
Delayed Phase	51%	48%	Not Significant
No Significant Nausea			
Overall	73%	66%	Not Significant
Delayed Phase	75%	69%	Not Significant

Source: Merck and Co.

Figure 40: Emend Study 054 in HEC

ENDPOINTS	Emend N = 261	Std. Therapy N = 263	p- Value
PRIMARY ENDPOINT			
Overall Complete Response	63%	43%	<.001
OTHER PRESPECIFIED ENDPOINTS			
Complete Response			
Acute Phase	83%	68%	<.001
Delayed Phase	68%	47%	<.001
Complete Protection			
Overall	56%	42%	<.001
Acute Phase	80%	65%	<.001
Delayed Phase	61%	44%	<.001
No Emesis			
Overall	66%	44%	<.001
Acute Phase	84%	69%	<.001
Delayed Phase	72%	48%	<.001
No Nausea			
Overall	49%	39%	Not Significant
Delayed Phase	53%	40%	Not Significant
No Significant Nausea			
Overall	71%	64%	Not Significant
Delayed Phase	73%	65%	Not Significant

Source: Merck and Co.

In comparing safety between Phase 2 programs rolapitant with Emend phase III, we see similar safety profile

In Rolapitant Phase 2 trials, most treatment adverse events were mild or moderate. The most common SAEs were febrile neutropenia, neutropenia, vomiting, dehydration,

nausea and pneumonia. The SAEs were considered related to using chemo or underlying cancer and not rolapitant. No deaths occurred related to rolapitant.

Figure 1: Safety in Rolapitant Phase II study

Adverse Event[b]	No. (%) of Subjects[a]					
	Control (n=91)	Rolapitant 10 mg (n=91)	Rolapitant 25 mg (n=91)	Rolapitant 100 mg (n=91)	Rolapitant 200 mg (n=90)	Total (n=454)
Subjects Reporting Any AE	**8 (9)**	**15 (16)**	**14 (15)**	**22 (24)**	**12 (13)**	**71 (16)**
Constipation	0	2 (2)	4 (4)	6 (7)	1 (1)	13 (3)
Headache	2 (2)	4 (4)	3 (3)	2 (2)	0	11 (2)
Fatigue	2 (2)	1 (1)	0	3 (3)	4 (4)	10 (2)
Dizziness	0	3 (3)	1 (1)	4 (4)	1 (1)	9 (2)
Disturbance in attention	2 (2)	1 (1)	2 (2)	2 (2)	1 (1)	8 (2)
Nausea	0	3 (3)	2 (2)	2 (2)	1 (1)	8 (2)
Anorexia	0	2 (2)	0	1 (1)	2 (2)	5 (1)
Vomiting	1 (1)	1 (1)	3 (3)	0	0	5 (1)
Hiccups	1 (1)	0	0	2 (2)	1 (1)	4 (1)
Abdominal pain	0	0	0	3 (3)	0	3 (1)
Asthenia	0	0	0	2 (2)	1 (1)	3 (1)
Balance disorder	0	0	0	0	2 (2)	2 (<1)
Somnolence	0	0	0	0	2 (2)	2 (<1)

Source: Tesaro

Similarly, most common serious side effects with Emend in phase III studies were also Neutropenia, Dehydration, Febrile Neutropenia and pneumonia. These side effects are common with patients on chemotherapy. In conclusion, we do not see significant difference in the safety profiles of Emend and Rolapitant on the basis of evidence available so far.

Figure 1: Safety in Emend Phase III studies

Phase III: Cycle 1	Emend 125/80 (N=544)	Control (N=550)
Percent of Patients with:	**%**	**%**
Serious adverse experiences	**13.4**	**13.6**
Neutropenia	2.2	1.1
Dehydration	1.8	0.9
Febrile neutropenia	1.3	1.3
Respiratory insufficiency	0.9	0.2
Pulmonary embolism	0.7	0.5
Thrombocytopenia	0.7	0.2
Pneumonia	0.7	0.5
Cardiac arrest	0.4	0.7
Leukopenia	0.2	0.7

Source: Tesaro

However, we note that cross-trial comparisons on in CINV are very difficult due to variability in baseline characteristics (gender & alcoholic habits)

The amount of women & drinkers in the trial can create some variability in the outcome. From speaking to the company, gender is the greatest factor in determine nausea and vomiting. In addition, history of low alcohol consumption also increases the risk of delayed CINV.

Figure 41: Key patient risk factors for developing delayed CINV

Increased Risk
Female
Low Alcohol consumption (<1.5 oz per day)
History of motion sickness
History of nausea and vomiting during pregnancy
History of prior CINV
Extreme Anxiety
Decreased Risk
History of Chronic Alcoholism

Source: FDA

Among the two Emend phase III studies there was a lot of variability with ~43% patients with history of alcoholism in one HEC study while ~13-16% such patients in other study. Gender distribution was also different in those studies. See Figure 42

While alcohol intake data are not available for Rolapitant phase II, we can see the variability in gender distribution of Rolapitant studies vs. Emend studies. In Tesaro's Phase 2, the percent of women was 46% vs Emend Phase 3 studies 37% & 49%. Women have a greater risk for CINV and side effects such as nausea.

Figure 42: Variability on baseline characteristics on alcohol intake and gender

Item	HEC Phase III Study #1		HEC Phase III Study #2		Rolapitant Phase II	
Alcohol Intake	**Emend**	**Control**	**Emend**	**Control**	**Emend**	**Control**
No consumption	57%	57%	84%	87%	Not Available	
1-4 drinks/week	17%	18%	10%	7%		
>4 per week	23%	21%	7%	6%		
Missing Data	3%	5%	0%	0%		
Gender %	**Emend**	**Control**	**Emend**	**Control**	**Emend**	**Control**
Male	63%	63%	51%	52%	54%	53%
Female	37%	37%	49%	48%	46%	47%

Source: Company Reports and Merck

Our focus for Rolapitant Phase 3 is a nausea benefit. We believe rolapitant has a good chance of showing nausea benefit in Ph3

Phase 3 data readout for Rolapitant is expected 2H13 and will be a key catalyst for shares

We believe that benefits seen in Phase 2 can be replicated in Phase 3. Here is a summary of the key trial points

Figure 43: Our summarized opinion on rolapitant Phase 3 studies

End-point	DB - Take
Primary: Complete response in Delayed CINV	We expect success on primary endpoint as: 1. Phase II showed 15% benefit over control 2. Phase III is 90% powered to detect a 15% benefit 3. Rolapitant longer half life makes it more active during delayed phase
Secondary: Overall Complete response	We expect success on overall complete response as well since the delta between control arm and treatment arm was 21% with high stat-sig.
Secondary: No Significant Nausea	We see success likely as there is no change in DEX dose in phase III vs. phase II.
Safety	NK-1 class is generally safe and no safety signals were seen in Rola phase II. Lack of drug drug interaction with CYP3A4 also makes Rolapitant safer.

Source: Deutsche Bank

The company is conducting a phase III program in HEC and MEC. Data are expected to readout in 2H'13

There are two studies in the HEC (highest risk for emesis), and another study in the MEC (moderate risk for emesis). These studies look at the standard of care vs. standard of care with Rolapitant. The HEC studies have a 90% powering to detect a 15% delta over baseline response of 50%. The MEC study is 90% powered to show a 9% delta over 50% baseline responses. The standard of care in this study is 5HT-3 (granisetron) + Dexamethasone. The primary endpoint is complete response in the delayed phase (>24 hours – 120 hours). The secondary endpoints include complete response over acute phase (0-24 hours) and overall response (0-120 hours). The key secondary endpoint of focus will be "no significant nausea" and we will provide a detailed discussion later in this section.

Figure 1: Rolapitant Phase 3 study

Design of Rolapitant Phase III program	
Program	3 Studies with ~2400 patients: 2 in HEC (530 patient each and 1 in MEC (n=1350)
Design	Multicenter, randomized, double blind, placebo controlled clinical trial
Arms	1. Standard of Care + Rolapitant 2. Standard of Care
Primary Endpoint	Complete Response in Delayed Phase
Secondary Endpoint	- Complete response in ovarall and acute phases of CINV - Relevant measures of CINV including the incidence and intensity of nausea - Safety and Tolerability
Start Date	Feb'12
Results expected	2H'13

Source: Tesaro

There are 3 key differences in Phase 3 design vs. Phase 2 design for rolapitant. We don't believe that these differences will impact the efficacy outcome

We compare/contrast the design differences from Ph2 to Ph3, and we see very limited risk to any of the changes made. In speaking to the company, we understand that the Phase 3 was carefully designed and under the advice of the FDA. We discuss some of the changes made around standard of care, definition of primary endpoints, and a Phase 3 that also studies MEC patients (separately). As a reminder, rolapitant was not studied in MEC population in Phase 2.

Figure 44: Key differences compared from Phase 2 to Phase 3

	Phase 2 rolapitant study	Phase 3 rolapitant study
Study population	HEC	MEC & HEC
Primary endpoint	Overall Complete Response (0-120 hours)	Delayed Complete Response (>24 hours - 120 hours)
5-HT3 studied in combo	Ondansetron	Graniseteron

Source: Tesaro

#1: Rolapitant did not study MEC in Phase 2, but we note that most drugs (Emend & 5-HT3) worked in MEC& HEC

There is one Phase 3 that will be in MEC patients (moderate emesis). Tesaro did not study Rolapitant in Phase 2 in this population. We looked at other trials both Emend & 5-HT3 and the studies worked in both HEC & MEC. We note that mechanism of action of both MEC and HEC agents is similar while causing acute and delayed CINV. This is the reason why all 5-HT3 and NK-1 drugs work with both these agents. Given the similar mechanism of CINV we think since Rolapitant worked in HEC it is highly likely that it will work in MEC as well.

#2: Rolapitant Phase 3 primary endpoints (CR in delayed) differ from Phase 2 primary endpoint (overall CR). We do not think it will make any difference as Rolapitant phase II was successful on delayed CINV as well

The primary endpoint in Phase 3 is "complete response in the delayed phase" indicating a response in days 2-5. The primary endpoint in Phase 2 was overall complete response indicating a response in days 1-5 (the entire treatment period). Primary endpoints for the aprepitant Phase 3 study was also overall complete response. However, on the request of the FDA the company changed primary endpoint in phase III study to complete response in the delayed CINV. According to FDA since NK1 specifically provide benefit in delayed CINV, therefore, evidence in delayed CINV is

more important for this class of drugs. Notably endpoint in EASAI oral combo trial is also complete response in delayed CINV.

We do not think change in primary endpoint will have any effect on the outcome of the phase III program as Rolapitant showed stat-sig benefit on in delayed CINV as well in phase III study. See Figure 45

Figure 45: Benefit of Rolapitant in delayed and acute CINV

ENDPOINTS	Rolapitant 200mg N = 90	Std. Therapy N = 91	p- Value
PRIMARY ENDPOINT			
Overall Complete Response	63%	47%	0.032
OTHER PRESPECIFIED ENDPOINTS			
Complete Response			
Acute Phase	88%	67%	0.001
Delayed Phase	64%	49%	0.045

Source: Company Reports

#3: A different 5HT-3 drug is used in the Phase 3 vs. Phase 2 studies. We do not think it will create any significant difference

In Phase 2 studies for Rolapitant, Zofran was used. In Phase 3 studies for Rolapitant, Kytril is being used. Our discussions with the company suggest that this change was due to QTc related concerns with Zofran. When the company was finalizing study protocol, FDA put a black box warning on Zofran were asking GSK to do a QTc study. Tesaro changed the control arm in phase III studies fearing that Zofran could be pulled from markets. Therefore to avoid this risk the company opted for Kyrtil which is also a 5-HT3 antagonist. This change was signed off by the FDA. **Given that NCCN guidelines suggest that Zofran and Kyrtil can be used interchangeably, we do not think change of standard of care will affect the results of phase III study.**

Showing a nausea benefit is not important for approval, we do think the benefit could be upside our estimates

Why is this nausea benefit so important? It remains an unmet need as Emend (aprepitant) did not show significance on the "no significant nausea" endpoint

According to our checks, improvement of nausea symptoms remains a KEY UNMET need for this patient population. aprepitant did not show a benefit in its Phase 3 study.

Figure 1: Results on Nausea endpoint from Emend phase III studies

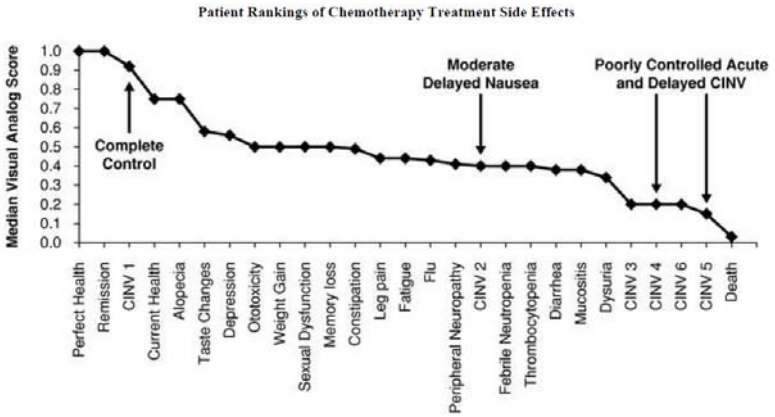
ENDPOINTS	Emend	Control	p- Value
Study I			
No Significant Nausea			
Overall	73%	66%	Not Significant
Delayed Phase	75%	69%	Not Significant
Study II			
No Significant Nausea			
Overall	71%	64%	Not Significant
Delayed Phase	73%	65%	Not Significant

Source: Deutsche Bank

Additionally, it is one the most unfavorable side effects associated with chemotherapy

This chart below shows that CINV is one of the LEAST favorable side effects from chemotherapy treatment.

Figure 46: Patient rankings of chemotherapy treatment side effects



Source: Tesaro

Nausea is measured on a visual analog scale that is determined by the patient, but the same scale was used in rolapitant

Rolapitant Ph2 studies use the same nausea endpoint, an analog scale, and same measure will be used in Phase 3. The same endpoint was used for aprepitant Phase 2 also. For both the Phase 2& 3 study, nausea was scored on a digital analog scale. Nausea was ranked from worst to none. Patients rate nausea on a 100-mm VAS (0 is last severe & 100 is most severe). **The range of 0-25 indicated no significant nausea**. From speaking the company, the FDA prefers the VAS scale over other endpoints and there is no concern about the appropriateness of the endpoint for the FDA.

Rolapitant and aprepitant both showed nausea benefit in Phase 2 studies. Aprepitant did not show the benefit in Phase 3

Figure 47: Nausea outcomes summarized from key NK-1 studies

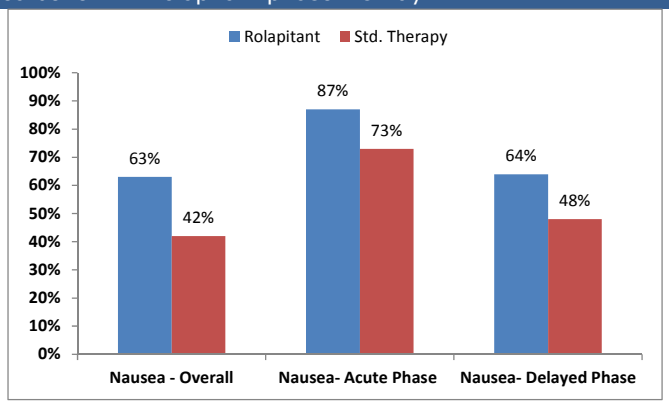
	Phase 2 studies on no nausea	Phase 3 studies on no nausea
Rolapitant	Benefit	Trial in progress
Aprepitant	Benefit	No benefit

Source: Company Reports

Rolapitant showed a benefit in Phase 2 on nausea

Rolapitant provides advantage over Emend as it does not have drug-drug interaction with CYP3A4 substrates such as dexamethasone. Therefore, the dose of dexamethasone used in Rolapitant phase III studies is same as the one used in phase II study (20mg on day 1 and 8mg day 2-4). This makes us believe that there are less chances of variability between phase II and phase III studies of Rolapitant and we see it is likely that Rolapitant will show Nausea benefit in phase III studies. We believe that Emend did not show a nausea in benefit in phase III which could have been due to the lower Dex dose used in Phase 3 vs. Phase 2.

Figure 1: Nausea benefit in Rolapitant phase II study

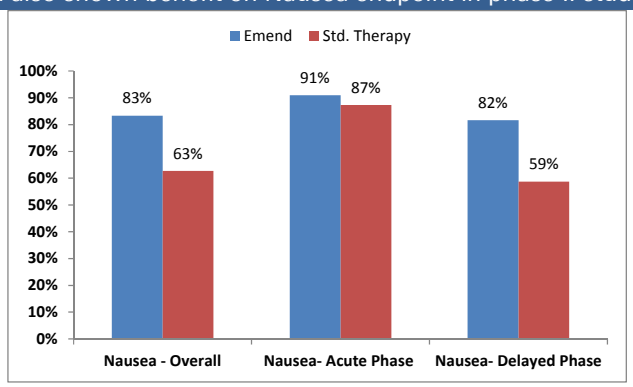


Source: Deutsche Bank

In the Phase 2 Emend study, Merck was also successful on the nausea endpoint

Emend also showed stat-sig benefit on nausea endpoint in its one phase II study. In this study overall no significant nausea (measured as VAS <25mm) was seen with 83% patients on Emend vs. 63% on standard therapy. Delayed nausea benefit was also seen in 82% emend patients vs. 59% in control arm.

Figure 1: Emend also shown benefit on Nausea endpoint in phase II study



Source: Merck

However, the nausea benefit for aprepitant was not replicated in Phase 3 for Emend

For both pivotal studies, Emend did not show a stat sig benefit on the nausea endpoint of "no significant nausea." It did show a numerical benefit relative to the standard of care. In this trial, the standard of care was Zofran + Oral DEX.

Figure 1: Results on Nausea endpoint from Emend phase III studies

ENDPOINTS	Emend	Control	p- Value
Study I			
No Significant Nausea			
Overall	73%	66%	Not Significant
Delayed Phase	75%	69%	Not Significant
Study II			
No Significant Nausea			
Overall	71%	64%	Not Significant
Delayed Phase	73%	65%	Not Significant

Source: Company Reports

Why no Emend nausea benefits in Phase 3? We think that the Dexamethasone dose reduction in Phase 3 for Emend is the likely reason behind lower nausea benefit in Phase 3 studies

In Merck's Phase 2 program, Dex was dosed at the current standard of care level. This resulted in two times the expected exposure since aprepitant is an inhibitor of the CYP3A4 path. Our doc checks suggest that the nausea benefit seen in the phase II studies could be due to higher exposure to dexamethasone due to drug-drug interaction effect. This increased dose of dexamethasone resulted in better nausea control but was associated with side effects such agitation, blood pressure and difficulty in sleeping.

To overcome this overexposure, dexamethasone dose was adjusted to 12mg on day 1 in phase III studies. Since no stat-sig nausea benefit was seen in phase III studies after dexamethasone dose reduction, we suspect phase II nausea benefit was due to higher

Figure 1: Reduction in Dexamethasone dose in phase III

	Day 1	Day 2-5
Emend Phase II	Dexamethasone 20mg	Dexamethasone 8mg QD Day 2-5
Emend Phase III	Dexamethasone 12mg	Dexamethasone 8mg QD Day 2-5

Source: Company Reports

We think that Phase 2 nausea benefit can be replicated in Phase 3

From speaking to the company, we agree that nausea is the key point of differentiation between the two drugs. **From our checks, we understand that is nausea can be almost as disruptive as emesis.** In phase II study, Rolapitant showed stat sig benefit on no significant nausea endpoint. We believe TSRO has a good chance of replicating these results in phase III study.

We note that Emend showed numerical benefit on nausea in phase III but not stat sig. If Rolapitant also shows numerical benefit on this endpoint we believe Rolapitant can still win ~50% of the market with 1) less complications due to no CYP3A4 interactions, 2) longer half-life, 3) rapid activity and 4) a better sales and marketing strategy. A stat sig benefit on nausea endpoint will make Rolapitant a dominant player in this space.

We think Tesaro has completed everything necessary to file upon completion of Phase 3 program

We expect filing to happen late 2013/early 2014 for oral rolapitant

Tesaro will have data from Rolapitant phase III studies in 2H'13 and we expect them to file in late 2013/early 2014 for Rolapitant. We note that Tesaro will have safety data in >2200 Rolapitant exposed patients which would be the basis of the filing.

We believe Rolapitant has enough safety data to be supportive of filing

Roalpitant has already been studied in more than 1000 healthy volunteers till phase II and we note that ~1200 patients (50% of all 2400) in Rolapitant phase III studies will have exposure to Rolapitant. Overall we calculate, TSRO will have patient exposure data in more than 2200 subjects over multiple cycles of Rolapitant. In our opinion this will create a good enough safety data dossier for the submission.

Figure 48: Rolapitant exposure for safety database

Exposure till Phase II	Exposure in >1000 healthy volunteers and Patients. Single and multiple doses
Phase III (HEC and MEC)	~1200 patients on Rolapitant
Overall Exposure	**>2200 patients on Rolapitant.**

Source: Company Reports

We note that GSK also tried to bring Nk1 to market but we think that there may have been a cardiac signal seen related to their NK-1 receptor which stopped development

GlaxosmithKline was in progress of developing a novel NK-1 antagonist in 2009. The copmay filed May 2008 in prevention of CINV and PONV (post operative nausea & vomiting). GSK pulled all marketing applications due to need for further safety data that would be required to support registration. The company stated that it would take considerable time to produce this data.

We believe QT prolongation with Casopitant in combination with CYP3A4 could be a reason behind GSK withdrawing the application. Rolapitant will unlikely have this issue due to no CYP interaction

We looked at Casopitant withdrawal assessment report published by EMA in 2009. While EMA discussions suggest that efficacy was good in HEC CINV studies, its use with MEC agents was not fully supported with results. In MEC study, EMA noted that casopitant was successful on primary endpoint of overall complete response because of benefits during delayed phase and there were no major benefits during acute phase. We believe this will not be an issue with Rolapitant as it has primary endpoint of complete response in delayed phase.

Another issue was with QTc prolongation when casopitant was coadministered with CYP3A4 substrates. We note that for casopitant studies, dexamethasone dose in CINV patients was also reduced to 12mg vs. 20mg standard similar to Emend. We note that Rolapitant does not have drug drug interaction issues with CYP3A4 and we think it is unlikely that Rolapitant will face similar issues.

We expect an IV formulation of rolapitant one year after oral, and the IV is key for maximum share

We believe Tesaro will come to market with an IV formulation around one year after the oral

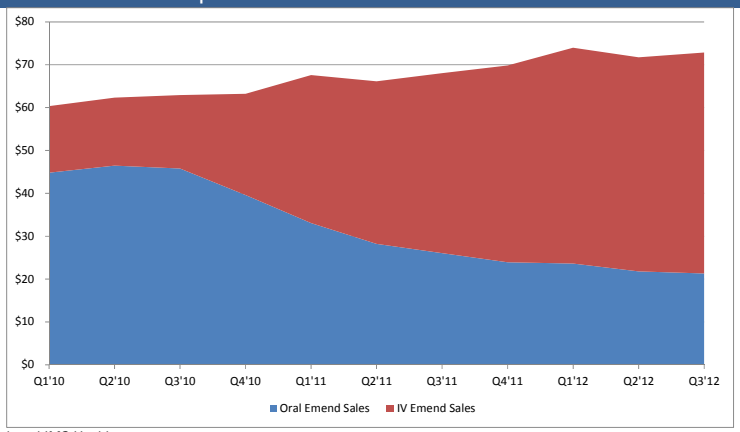
Background: Merck's Emend was approved in IV form in Jan 2008. However, approval of 150mg single dose IV caused a surge in demand

Merck initially got 115mg Emend IV dose approved on the basis of bioequivalence study and bridging safety data in 2008. However this dose still required oral 80mg dose on day 2 and day 3 hence sales remained subdued. Sales of IV surged post approval of single dose 150mg IV dose in 2010. Based on IMS data ~75%-80% of Emend sales are from IV emend.

We note the importance of IV formulation in CINV space. Tesaro will need to develop an IV formulation of rolapitant to maximize commercial success

CINV is characterized by heavy vomiting and nausea post administration of Chemo drugs. We note that in such a setting, an oral drug to reduce vomiting is less beneficial as patients would likely vomit the drug out even before it starts working. This is the reason ~75-80% of Emend sales in CINV are now in IV form. This ratio is similar for 5-HT3 drugs as well where 80% of the sales come from IV formulation. We also note that since the launch of Merck's IV formulation, the overall Emend sales have grown ~25%. Most of this growth was seen after launch of single dose 150mg IV dose in 2010. See

Figure 1: IV Emend now comprises ~75% of total Emend sales



Source: Deutsche Bank and IMS Health

Rolapitant IV launch will likely be 1 year after oral launch.

Rolapitant IV is one year behind oral and our discussions with the company indicate that approval of oral is the gating factor for IV. The company has an IV formulation in place. We expect to see bioequivalence data in 2H'13 which will be followed by a bridging safety study. TSRO will likely have clarity on the regulatory pathway by the

time they submit oral Rolapitant NDA. **The company is targeting to submit IV application immediately after the oral approval in late 2014/ early 2015.**

Figure 49: Timelines to IV launch

Projected timelines for Rolapitant IV filing

Milestone	Projected Date
Phase 3 oral Rolapitant data	2H13
Projected oral Rolapitant filing	Late 2013/Early 2014
Projected oral Rolapitant approval	Late 2014/Early 2015
Filing of IV Rolapitant package	Late 2014/Early 2015

Source: Deutsche Bank and Tesaro

Experience is the commercial secret sauce: Tesaro mgmt successfully launched another CINV drug at MGI Pharma

We believe that the knowledge & experience of Tesaro mgmt is a key intangible for commercial success of rolapitant.

Current Tesaro management team has previously worked with MGI-Pharma and executed a successful launch of Aloxi (another drug in CINV)

Our confidence regarding the company's ability to sell Rolapitant comes from the fact that current management team led by CEO Leon Moulder, Jr. has previously worked with MGI pharma and has executed a successful launch of Aloxi, a 5-HT3 antagonist.

Figure 50: Same core team, different place

	Tesaro	MGI Pharma
Core management team	Lonnie Moulder (CEO & co-founder) Mary Lynne Hedley, Ph.D. (President and co-founder	Lonnie Moulder (CEO) Mary Lynne Hedley, Ph.D. (Chief scientific officer)
Cancer drug type development	CINV drugs	CINV drugs
Specific CINV drugs	NK-1	5HT-3 (currently used as standard of care)

Source: Company Reports

Here are the key lessons that we learned from the MGI launch.

Figure 51: How management executed on a successful launch?

How MGI executed Aloxi Launch?	**Drug Differentiation**	Promoted Aloxi on longer half-life benefit and benefit in delayed CINV to establish that Aloxi is better than other 5HT3s.
	Focused Marketing	Targeted community oncologists. 2/3rd of Chemo treatments are administered at community clinics
	Contracting	Entered in contracts with all leading oncology GPOs. Contracted with US oncology right after launch which served 15% of new cancer patients in the US at that time.
	Discounting	Entered in contracts with discounts at 25-45% of WAC price. Provided volume based discounts
	Sales-force	Launched Aloxi with a salesforce of ~100 field based sales reps.

Source: Deutsche Bank

We also highlight the key milestones achieved in the early stages of the Aloxi launch

Figure 52: Key achievements from Aloxi launch

	Parameter	Initial Target	Actual realization
What MGI achieved with Aloxi launch?	**Sales within first 12 months of launch**	$40-$55M	$100M+
	Sales in first Full-Year	$80-$90M	$159M
	Market share in 5HT3 class after 4 years of launch	25%	35%

Source: Deutsche Bank

Despite being the last one launched among the four approved 5-HT3s, Aloxi sales exceeded expectations and it captured ~35% market share 4 years after launch. Aloxi was approved July 25, 2003. It was launched Sept 15 with agreements with lead oncology distributors and GPOs rapidly post launch

At MGI Pharma, current Tesaro mgmt took a differentiated drug in a crowded market, and focused on sales & contracting to take meaningful share

We believe there are 4 key things current Tesaro mgmt DID at FDA which drove the meaningful share uptake.

We believe that these items were 1) discounting 2) contracting 3) focus on the right target audience (community oncologists) 4) aggressively marketed the differentiation of their product

Figure 53: Key 5HT-3 drugs on market

Drug class	Drug name	Trade name	Developer	Formulations
5HT3	Dolasetron	Anzement	Sanofi	Oral (FDA no longer recommends IV)
5HT3	Granisetron	Kyrtil	Roche	Oral, IV, Transdermal system
5HT3	Ondansetron	Zofran	GSK	Oral tablet, oral solution, injection
5HT3	Palonosetron	Aloxi	Eisai/MGI Pharma	Injection (oral not in US)

Source: Deutsche Bank

We believe Rolapitant also has a potential to demonstrate similar to higher differentiation

As discussed earlier, Rolapitant also has a potential to be a differentiated product vs. Emend. Below are the important differences so far seen with Rolapitant which can become key differentiating factors if they hold true in phase III program:

- Nausea Benefit: Based on phase II results, we believe it is likely that Rolapitant will show benefit over standard of care on nausea end-point. Such a positive result will be a major differentiator for Rolapitant vs. Emend and will help Tesaro in making it a dominant player in CINV space.

- Longer half-life: Rolaptant demonstrated a half-life of 180 hours vs. 9-13 hours seen with emend. This suggests that Rolapitant will be active for entire period post chemo and will likely provide significant benefit.

- No drug-drug interaction with CYP3A4: Data suggests that Rolapitant does not alter pharmacokinetics of CYP3A4 substrates such as midazolam and

dexamethasone. This is not true with Emend which increases exposure of CYP3A4 substrates. CYP3A4 substrates such as dexamethasone are part of CINV management with 5HT-3s and concurrent use of Emend requires dexamethasone dose adjustment. This makes us feel that use of Rolapitant will reduce the complexity for the treating physicians.

We believe that these differentiating factors will be very important while marketing the drug in CINV space and establish the superiority of Rolapitant over Emend.

Aloxi is a slightly differentiated product vs. other first generation 5-HT3.

Aloxi demonstrated a better efficacy profile vs. Zofran and Anzemet in clinical trials with significantly better results in reduction on delayed CINV. Differences were not stat-sig in HEC studies. However, the benefit in delayed CINV was stat-sig in MEC studies. The benefit in delayed CINV comes from the fact that Aloxi has longer plasma half-life of ~37 hours which makes it active even after 24 hours post chemo. Other agents have plasma half-life of ~4-10 hours in comparison. This difference between Aloxi and other 5HT-3 drugs was the major selling point while promoting the drug.

Figure 1: Comparison of 5-HT3 drugs on market by half-life and binding affinity

Class	Drug Name	Trade Name	Half-life (Hours)	Binding Affinity (pKi)
5-HT3	Dolasetron	Anzemet	7.3	7.60
5-HT3	Granisetron	Kytril	9.0	8.91
5-HT3	Ondasetron	Zofran	4.0	8.39
5-HT3	Palosetron	Aloxi	40.0	10.45

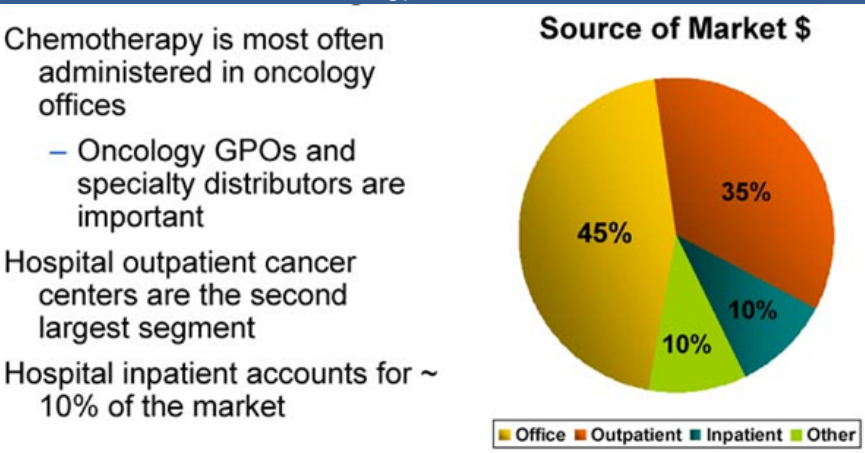
Source: Deutsche Bank and MGI Pharma

We believe that Tesaro will leverage the very successful Aloxi playbook for rolapitant. Here are the key points that MGI Pharma pursued

#1: Building an appropriately sized sales force with a concentrated focus on the right channels

Based on our discussion with the company, chemotherapy is often administered at oncology offices hence oncology GPOs and specialty distributors. Therefore prime focus of Aloxi launch was oncology GPOs.

Figure 1: MGI Pharma Aloxi launch strategy

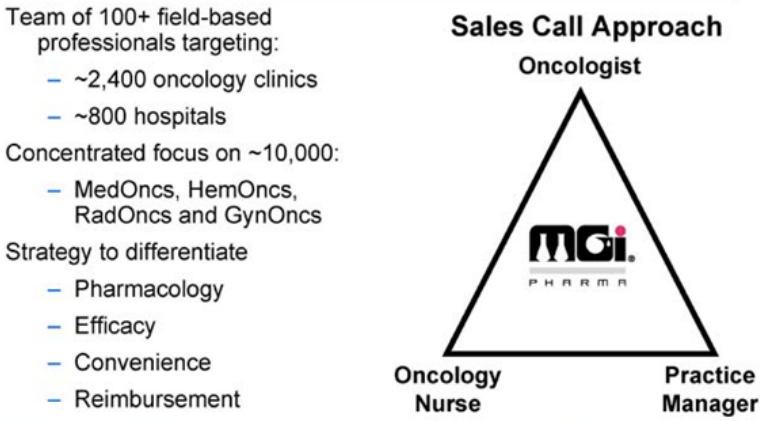


Source: Deutsche Bank and MGI Pharma

#2: A target sales approach calling the contacts in the decision making chain

MGI launched Aloxi with a team of ~100 field based professionals targeting 2400 oncology clinics and 800 hospitals in the US. The sales call approach was focused on the oncologist, oncology nurse, and practice manager. Mgmt worked to differentiate Aloxi on pharmacology, efficacy, reimbursement, and convenience.

Figure 1: MGI Pharma Aloxi launch strategy



Source: Deutsche Bank and MGI Pharma

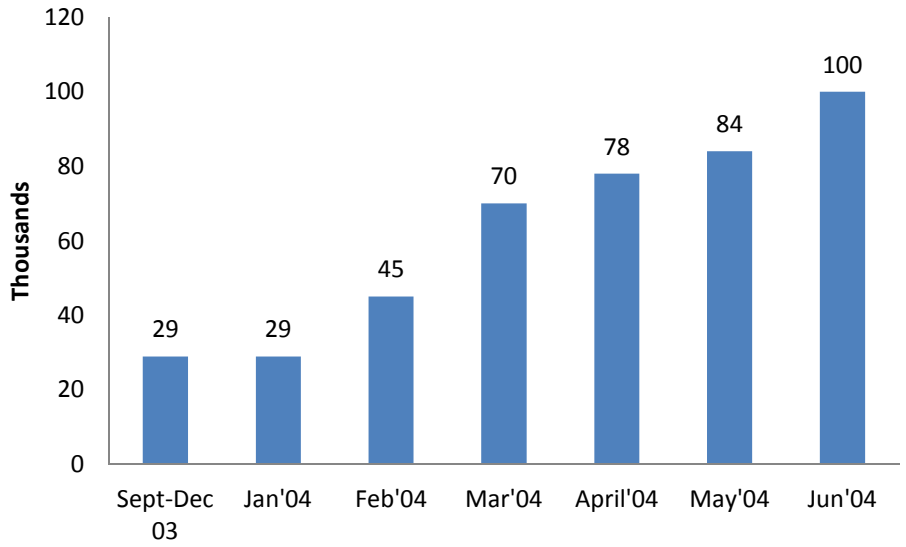
#3: Contract with the big oncology networks in like US Oncology to gain rapid access to many oncologists in both office and hospital setting

MGI used contracting and pricing strategies effectively to increase footing in CINV space. At MGI, current management used strategies such as contracting and price discounts to promote Aloxi. **Within few days of launch, the company entered in a contract with US oncology network and gained access of their 875 physicians treating 15% of all new cancer cases in the US.** Based on our understanding from industry experts, Merck does not use contracting and price discounts and is not very aggressive in CINV space. We believe focused marketing strategy as depicted with Aloxi could be pivotal for Rolapitant success upon launch.

The US oncology relationship dramatically grew monthly demand for Aloxi in the first full quarter of launch

Within 5 months of launch on 4Q03 call, end user demand data indicated that more than 29K buyers of Aloxi were pulled through distribution channels to oncology clinics, outpatient treatment centers, and hospitals. Data in Jan 2004 indicated that more than 29K buyers of Aloxi were pulled through by offices and hospitals which matches the total number distributed during the entire 4Q04. This chart clearly highlights the benefits of contracting with US Oncology when measuring buyer demand.

Figure 54: Absolute demand growth in buyers through the distribution channel



Source: MGI Pharma

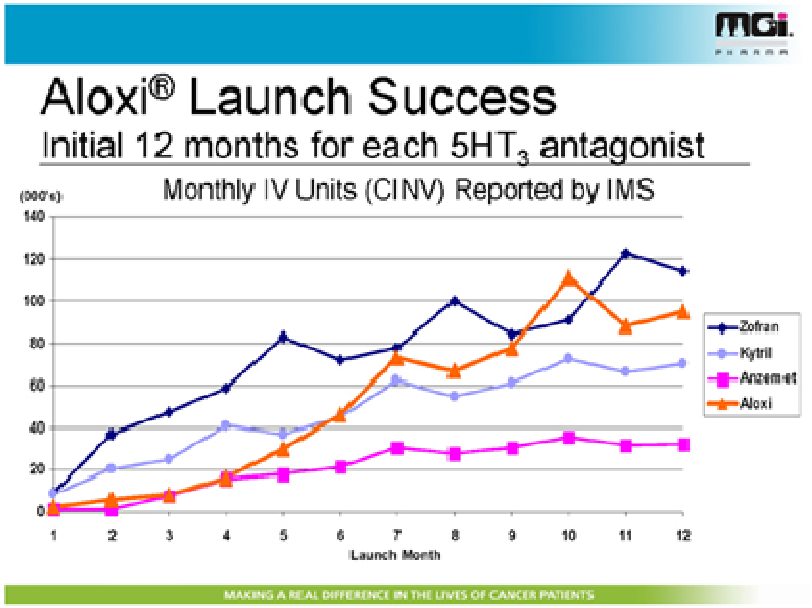
#4: Establish strategic & favorable volume pricing for leading oncology purchasers

They also entered in agreements with leading oncology GPOs and provided volume based discounts to increase the use of Aloxi. The net selling price per vial stood at $150-$200 vs. WAC price of ~$270 (a 25-45% discount).

The focused sales effort rapidly increased market share for Aloxi in an already relatively crowded 5HT-3 space.

From the 4Q03 call, after 6 months over 60K Aloxi doses had been delivered and more than doctors at more than 1500 treatment centers had clinical experience with Aloxi. At close to month 7 of the Aloxi launch, Aloxi had almost similar share to leader Zofran.

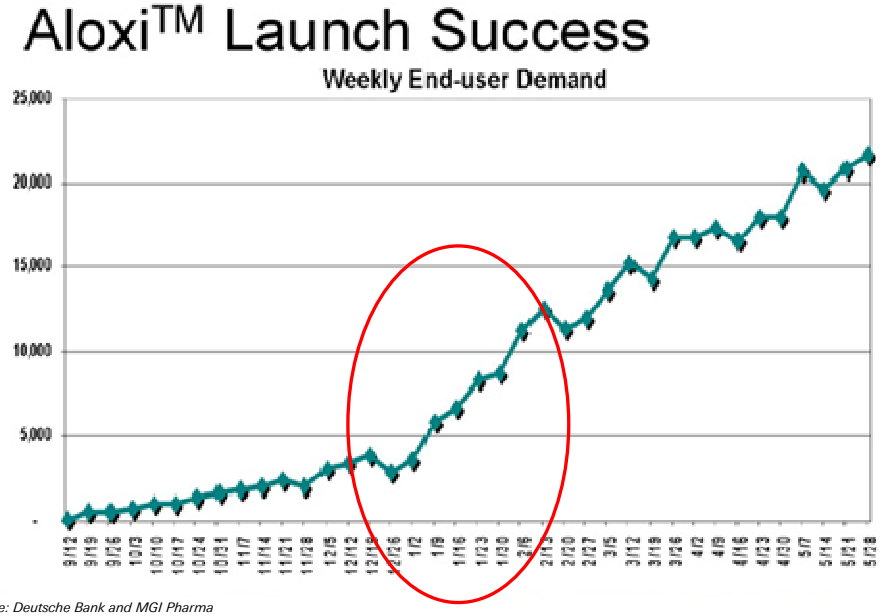
Figure 55: Aloxi IV units reported by IMS in first year of launch



Source: MGI Pharma/Eisai

Around three months after launch, weekly demand dramatically increased. Weekly demand close to tripled over this time period.

Figure 1: Weekly demand for Aloxi

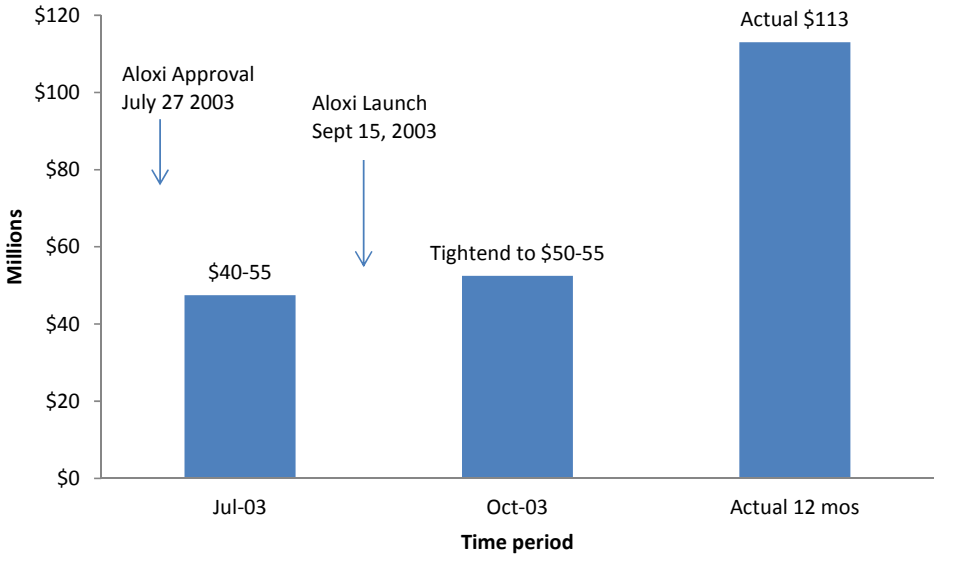


Source: Deutsche Bank and MGI Pharma

MGI delivered more what they guided consistently. Aloxi guidance was increased every quarter over the first year

At the end of 2004, the company had 10% exit-share in hospital setting and 30% exit-share in community clinic settings. Guidance for Aloxi sales in first 12 months of launch was $40-$55M before launch. The company crossed $100M mark with Aloxi in 12 months of launch.

Figure 56: Guidance for first 12 months before & at early launch stage

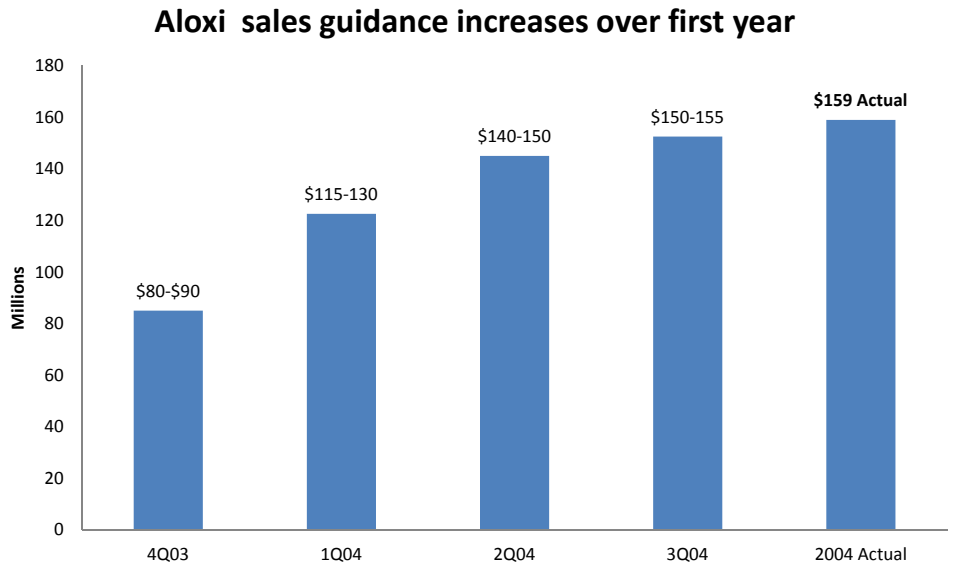


Source: MGI Pharma

Guidance for Aloxi sales in 2004 was $80-$90M. The company did significantly beat guidance with $159M in Aloxi sales in 2004. Over the

At launch the company targeted to achieve 25% market share in 4 years of launch. The company actually captured 35% market share in 4 years.

Figure 57: Aloxi sales guidance increase over first year



Source: MGI Pharma

We expect the company to leverage on Aloxi launch experience

As evident with Aloxi launch, we believe that the current management of Tesaro has good understanding of CINV space. We expect the company to leverage upon Aloxi experience and we believe it is likely that Rolapitant launch doing a repeat of Aloxi.

We think Rolapitant can be a $450M in US/$150M in EU opportunity

We believe Rolapitant can grow NK1 class market from ~20% in 2013 current to ~50% of eligible. We model peak sales at $450M in US and ~$150M in EU.

In 2011, 6.6M CINV treatments conducted with 5HT-3 class. We model ~74% of them were eligible for Nk-1

Tesaro projects that about 6.6M CINV treatments conducted in the US with 5HT-3 class in 2011 (this analysis was based on IMS Health that collected data from 475 cancer treatment centers). ~60% of them were HEC and 24% of them were with MEC chemo treatments. Per NCCN guidelines, all HEC treatments and some MEC treatments are eligible for concurrent treatment with NK1 antagonists. We model all HEC patients and ~60% MEC patients as eligible for NK-1 treatment. Overall we model ~74% of patients treated with 5-HT3 should also get treatment with Nk-1. The company puts this number at 70-80% of all 5HT-3 CINV treatments.

Our interactions with industry experts suggest that, EU CINV markets are ~20% bigger than that of US. WHO data suggests that number of new cases of all cancers in the EU is also higher at 3 million vs. ~1.7M in the US (source: American cancer society). Hence we assume, EU CINV markets ~20% bigger than US markets in our model.

Figure 58: US – Size of Nk-1 eligible patient market

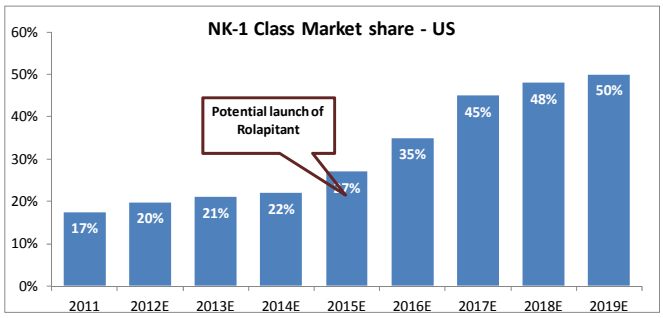
Item	Value	Source
# of cycles of 5-HT3 in CINV -US (000,000) -2012	6.7	Company data and DB calc
% HEC	60%	Company data
# of patients on HEC (000,000)	4.0	DB-Calc
% Patients on MEC	24%	Company data
# of patients on MEC (000,000)	1.6	DB-Calc
% HEC patients eligible for NK1	100%	NCCN guidelines
% MEC patients eligible for NK1	60%	NCCN guidelines and DB-assumptions
Potential Nk-1 cycles at 100% market share (000,000)	5.0	DB-Calc

Source: Deutsche Bank and Company Reports

We believe NK1 drugs have not penetrated CINV market fully. We see NK1 class peak market share at 50% from 20% current

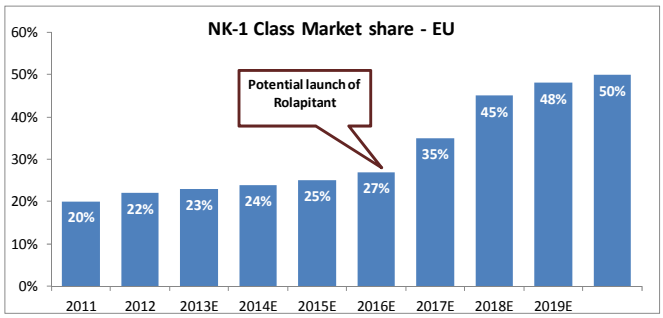
Despite being on NCCN guidelines, we note that Emend has only 20% market share in all eligible patients in CINV space. This is primarily because 1) Less use of contracting by Merck, 2) less aggressive sales and marketing efforts for Emend as emend is a relatively smaller product for Merck and 3) IV Emend (150mg single dose) is still relatively new and growing. We believe that Rolapitant could potentially grow the class market as 1) It will likely be a differentiated drug than Emend making use of NK1 more beneficial and 2) we expect the company to market and sell Rolapitant more aggressively. We believe with higher awareness and better sales strategy the NK1 share could grow from 20% in 2012 to ~50% in 2019. For EU as well, we model NK1 share growing from ~20% current to 50% at peak in 2020.

Figure 59: Nk-1 class penetration US



Source: Deutsche Bank

Figure 60: NK-1 class penetration EU



Source: Deutsche Bank

We model the CINV market to grow in line with population growth

We conservatively model that CINV treatment market will grow in-line with US population growth of ~1% annual. For EU we grow CINV markets by 0.2%, in line with the current population growth rate in the EU.

We model Rolapitant will be priced similar to Emend. However, we model higher 75% discounts

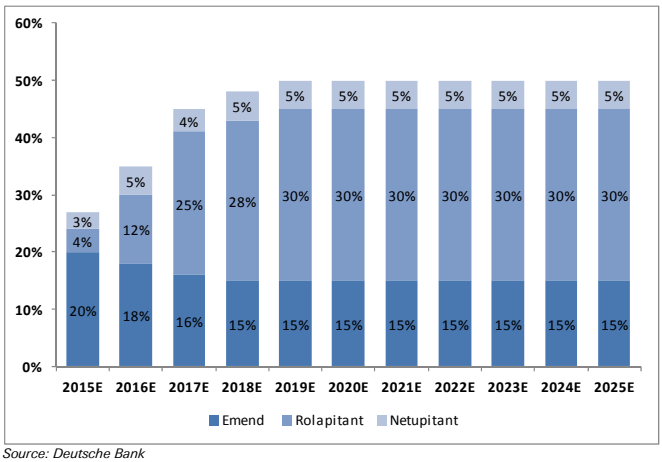
Emend is currently priced at ~$280-$285/cycle on average in the US and we expect this price to be ~$300/cycle by time Rolapitant gets approved. We model Rolapitant will be priced similar to Emend at ~$300/cycle upon launch. However, we believe that the company will be giving average 20% discounts to increase footprint and model net price at ~$240/cycle for Rolapitant. We model Rolapitant taking ~2% price increase every year in the US. Oral Emend has been taking 4-5% price increases every year since launch.

Emend is priced a lot lower ex-US and the net price is ~$100/cycle. We model Rolapitant EU price to be similar at $100/cycle in EU. We also model 20% discounts for Rolapitant in the EU.

We believe Rolapitant can capture 30% market share of the all eligible patients in the US and EU

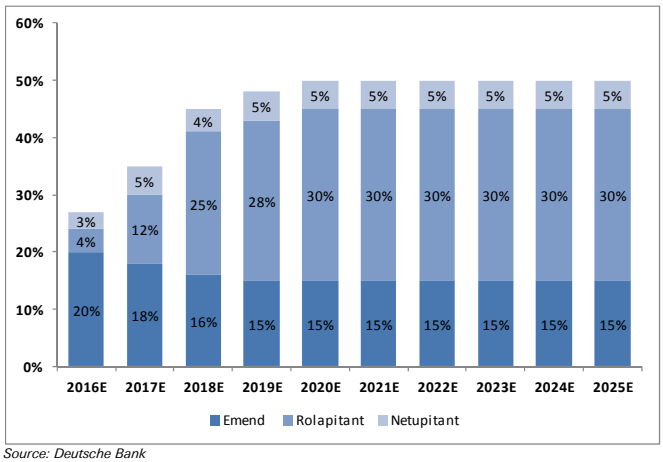
We believe current CINV market is underserved by current available drug Emend and we believe Rolapitant can show a differentiated profile in this space. **1) A differentiated drug with stat sig benefit on delayed complete response endpoint, 2) no drug-drug interaction with CYP3A4 and 3) numerical benefit on nausea endpoint coupled with 4) focused sales and marketing strategy will Rolapitant get majority market share in NK1 drugs.** We model Rolapitant to gain ~30% market share in all eligible patietns at peak in both the US and the EU. Stat-sig benefit on nausea endpoint will be upside to our estimates and in that case we estimate Rolapitant market share could go as high as 50% of all eligible.

Figure 61: Rolapitant Market share US



Source: Deutsche Bank

Figure 62: Rolapitant Market share EU



Source: Deutsche Bank

We model US oral Rolapitant launch in 2015 and EU in 2016. IV will be launched 1 year later

Tesaro will have phase III data for Rolapitant in 2H'13 which would lead them to late 2013/early 2014 filing. Assuming a standard review we expect FDA decision by late 2014/early 2015. We are modeling a 2015 launch for US and we expect EU launch in 2016. The company expects to submit IV application right after oral approval and we expect IV Rolapitant launch 1 year later in both geographies.

We model peak US sales at ~$450M and ex-US at $150M

Based on aforementioned assumptions we believe Rolapitant can generate peak sales in the US at $400M while the EU sales can be as big as $150M. While we assume that the company will be selling this drug in the US and EU on its own, for rest of the world we assume they will be out-licensing the rights.

Outside US and EU we model company will get ~20% economics

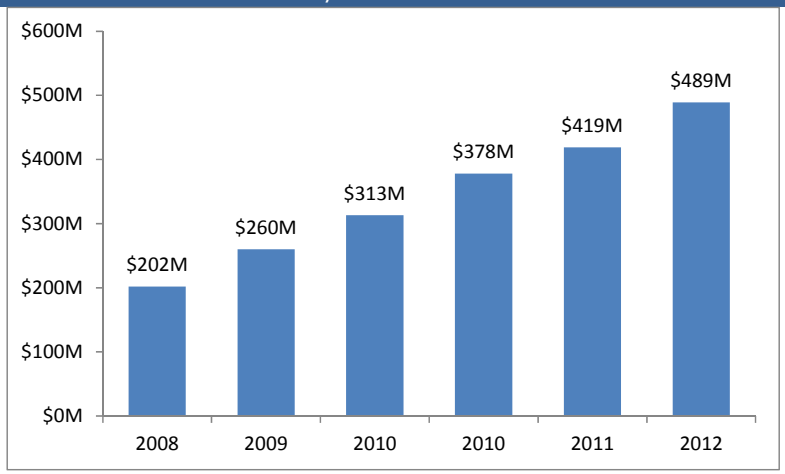
We assume the company getting ~20% economics of rest of the world territories. We assume conservative economics for Tesaro in rest of the world region as the company will have to share 50% of the Japanese royalties & milestones with OPKO heath. Tesaro has acquired Rolapitant from OPKO health.

We believe that Merck's Emend (at $489M in 2012) has only scratched the surface of at least a $1.4B market opportunity

Merck's Emend is the only Nk-1 receptor antagonist approved. 2012 global sales were $489M

Merck's Emend is the only NK-1 inhibitor approved for the treatment of CINV. Emend gained US approval in 2003 for treatment of CINV with HEC and MEC chemo agents. Emend sales were $419M in 2011 globally with US at $239M and ex-US at $180M. Emend 2012 US sales were $276M and ex-US were $213M. Emend sales are still growing and have more than doubled in last 5 years.

Figure 1: Merck Emend sales in last 5 years



Source: Deutsche Bank and Merck and Co.

Emend has low market share despite being on guidelines

NCCN guidelines support combination of treatment with 5-HT3, NK-1 receptors, and Dexamethasone. The combo approach of 5-HT3 & NK-1 provides double protection with different mechanisms. Nk-1 receptor antagonist in combination with 5-HT3 & Dex is part of treatment guidelines in HEC and MEC treatments. HEC and MEC treatments come with high risk of emesis. To help these patients further and more importantly for delayed CINV, NCCN guidelines recommend use of Nk-1 antagonist with 5-HT3. Nk-1's are recommended for all patients treated with HEC agents. Use of Nk-1 in MEC treatment is optional and physicians can use it wherever appropriate.

Figure 1: NCCN guidelines for CINV treatment

Type of Chemo Agent	NCCN guideline
HEC	5HT3 antagonist+ Dexamethasone + NK-1 Antagonist
MEC	5HT3 antagonist+ Dexamethasone + With or Without NK-1 Antagonist (for selected patients, where appropriate)

Source: Deutsche Bank and NCCN

Given these guidelines, Tesaro believes ~70-80% patients who are currently getting CINV treatment with 5-HT3s are eligible for Nk-1 inhibitor treatment.

We don't view Eisai's NK-1 as a competitive threat to rolapitant no matter how strong the Phase 3 looks

Eisai/Helsinn are developing a NK-1 +5HT-3 ORAL combo that is currently in Phase 3

Helsinn and Eisai moved into Phase 3 studying a combo of netupitant (300mg) & palonestron (Aloxi dosed .5mg). This will be an ORAL fixed dose combination for prevention of CINV. The Phase 3 program has been reviewed by FDA & EMA. It consists of three studies, around 2600 oncology patients either HEC or MEC. There are around 250 study sites in 18 countries. The status of phase III study on clinicaltrials.gov is complete as of Jan 31, 2013 and we expect to see the results soon.

Figure 63: Neutapitant CYP3A4 drug drug interaction

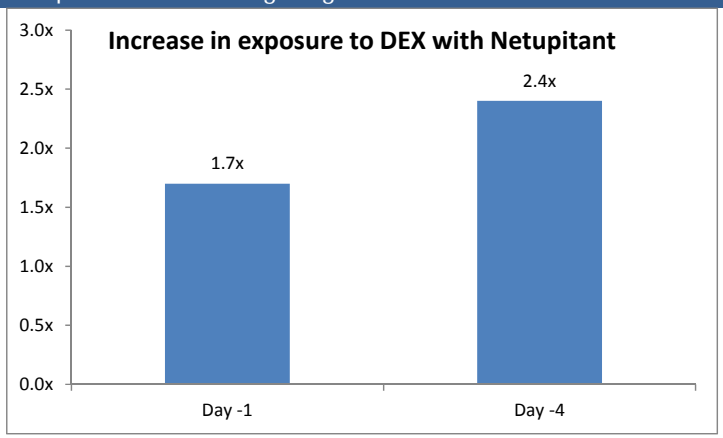
Design of Neutopitant Phase III	
Design	Multicenter, randomized, double blind, active controlled clinical trial
Arms	1. Netupitant and Palonosetron + DEX 2. Palonosetron + DEX
Primary Endpoint	Complete Response in Delayed Phase
Secondary Endpoint	- Complete response in ovarall and acute phases of CINV
Start Date	Apr'12
Status	Complete, Results expected

Source: Deutsche Bank and J Clin Oncol 30, 2012 (suppl; abstr e19532)

We understand that the netupitant has a CYP3A4 interaction. This may be a challenge to show a nausea benefit if a reduced Dex dose must be used

Netupitant also comes with CYP 3A4 interaction issue. In clinics co-administration of Neutapitant increased exposure to dexamethasone by 1.7 times on day-1 and 2.4 times on day 4. While we do not know what dose of DEX was used in netupitant phase III program, we expect an Emend like dose reduction. Concurrent use of Emend also increased DEX exposure 2.2 fold.

Figure 64: Neutapitant CYP3A4 drug drug interaction



Source: Deutsche Bank and J Clin Oncol 30, 2012 (suppl; abstr e19532)

We are less concerned because the market will be IV longer –term which we believe makes this combination less competitive

We see a lot of growth potential in Nk-1 space as we believe that the Emend launch was not maximized

The market dynamics were clearly more difficult for Aloxi when comparing the two launches

Figure 65: Comparison of Aloxi and Rolapitant market dynamics

Item	Aloxi (5HT3)	Rolapitant (NK1)
Number of players at Launch	3 existing players	Only one player Emend
Market Penetration of competition	Fully Penetrated	Underpenetrated (Only 20% eligible patients are on NK-1)
Launch Year	2003	2015E
Years before Generic threat	3 years (Generic Zofran launched in Q4'06)	4 Years (IV Emend will lose patent in 2019)
Drug Differentiation vs. Existing players	**Yes.** Longer half life	**Yes.** 1) Longer half life 2) No drug drug interaction 3) Potential for Nausea Benefit
Market dynamics	Aggressive competitors. Use of contracting and discounting by competition	Emend is only competitor. Not using discounting and contracting strategies.
Pricing	Premium pricing. Launched at a ~60% premium due to longer half life	We assume at par pricing. Premium pricing likely if they show stat-sig benefit on nausea
Sales Strategy	Targeted community oncologists who administer ~2/3rd of chemo. Used contracting and discounting	We expect Rola sales strategy to be same as Aloxi
Size of sale team	~100+ field based reps in the US	~100 field based reps in the US and ~12 in office.

Source: Company Reports

In speaking to industry experts, we believe that there are 6 reasons that suggest greater effort launching an NK-1 will lead to greater market share gains

In speaking to mgmt, we strongly believe that they will maximize every opportunity at launch for rolapitant. We believe that Merck pursued less aggressive sales & marketing tactics than Tesaro will because Emend is a very small product relative to the size of Merck.

1. Greater leverage of contracting and specialized distribution networks. Merck did not pursue

2. Greater education to doctors and patients of the cancer guidelines. Merck did not pursue according to our checks

3. Appropriate scale & focus of salesforce. We understand from speaking to experts that Merck converted about 60 urologists sales reps to oncology sales.

4. Focusing on community oncologists that are 66% of the CINV treating universe. Academics will not drive adoption

5. IV Emend is still relatively new and growing. Based on this, we believe there is a big potential for growth for Nk-1 inhibitors in the CINV space. Sales of Emend grew by ~15% in the US in 2012 primarily due to growth due to single dose 150mg IV. IV now comprises ~75% of Emend sales per IMS data.

6. Launch of new treatments (Rolapitant and Helsinn Healthcare & Eisai combo) is an opportunity in this space to increase awareness and market size

From speaking to industry experts, we understand that Merck converted urology reps into oncology reps for the Emend oral launch

We understand that Merck converted about 60 urology representatives into oncology representatives. We wonder if this strategy was less effective for two reasons 1) size of salesforce 2) salesforce did not have enough experience with oncologists. We have learned from prior cancer companies that urologists have different incentives than oncologists.

Tesaro will build a ~100-120 person salesforce to sell rolapitant

Mgmt believes that 100 field base reps is about the right size salesforce. This was similar to the size of the salesforce with MGI Pharma. Including the entire sales team beyond just sales reps, the company expects to build a salesforce of ~120. We expect a similar size salesforce in Europe. We project that this salesforce will cost about ~$30M in each geography @ $250K per rep.

We believe that the class OPP'Y is currently as big as $1.4B in the US alone

Based on a data analysis conducted by Tesaro, 2011 CINV treatments with 5-HT3 drugs were ~6.6M. For 2012 we estimate this number at 1% higher than 2011. ~60% of these treatments were with HEC agents and ~24% with MEC agents. Our channel checks suggest at least 70% of CINV treated patients are recommended to get Nk-1 as well per NCCN guideline. We calculate ~5M chemo cycles in 2012 in the US should also have got treated with NK-1. However, using the Emend US sales numbers of $276M in the US and ~$280/cycle net price, we calculate only 980K cycles of Nk-1 treatments in 2012 or ~20% of all eligible cycles**. We estimate that class market OPP'Y is as big as $1.4B in the US alone. See**

Figure 66: Neutapitant CYP3A4 drug drug interaction

Item	Value	Source
# of cycles of 5-HT3 in CINV -US (000,000) -2012	6.7	Company data and DB calc
% HEC	60%	Company data
# of patients on HEC (000,000)	4.0	DB-Calc
% Patients on MEC	24%	Company data
# of patients on MEC (000,000)	1.6	DB-Calc
Overall patients getting 5HT-3 eligible for NK-1	74%	Company puts this number at 70-80%
Potential Nk-1 cycles at 100% market share (000,000)	5.0	DB-Calc
Net price for Emend/Cycle	$280	Company data
Potential for Nk-1 in the US ($ mil) -2012	$1,389	DB-Calc
Emend US sales -2012 ($ mil)	$276	Merck reported sales
Emend market share	20%	DB-Calc

Source: Deutsche Bank and Tesaro and Merck

Tesaro said current US NK-1 market is approximately $270M represented by oral and IV formulations of Emend. Emend sales in the US were $276M in 2012.

We don't view Eisai and Helsinn's NK-1 as a competitive threat to rolapitant no matter how strong the Phase 3 looks

Eisai/Helsinn are developing a NK-1 +5HT-3 ORAL combo that is currently in Phase 3

Helsinn and Eisai moved into Phase 3 studying a combo of netupitant (300mg) & palonestron (Aloxi dosed .5mg). This will be an ORAL fixed dose combination for prevention of CINV. The Phase 3 program has been reviewed by FDA & EMA. It consists of three studies, around 2600 oncology patients either HEC or MEC. There are around 250 study sites in 18 countries. The status of phase III study on clinicaltrials.gov is complete as of Jan 31,2013 and we expect to see the results soon.

Figure 67: Neutapitant CYP3A4 drug drug interaction

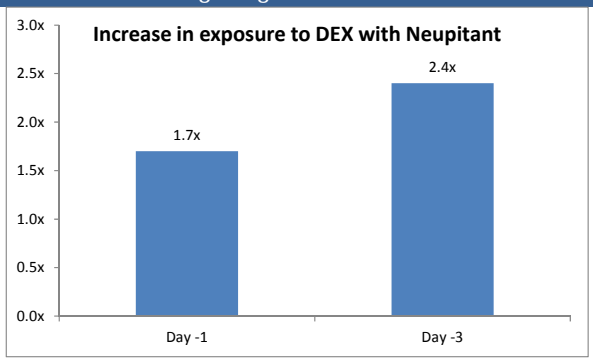
Design of Neutopitant Phase III	
Design	Multicenter, randomized, double blind, active controlled clinical trial
Arms	1. Netupitant and Palonosetron + DEX 2. Palonosetron + DEX
Primary Endpoint	Complete Response in Delayed Phase
Secondary Endpoint	- Complete response in ovarall and acute phases of CINV
Start Date	Apr'12
Status	Complete, Results expected

Source: Deutsche Bank and Company Reports

We understand that the netupitant has a CYP3A4 interaction. This may be a challenge to show a nausea benefit if a reduced Dex dose must be used

Netupitant also comes with CYP 3A4 interaction issue. In clinics co-administration of Neutapitant increased exposure to dexamethasone by 1.7 times on day-1 and 2.2 times on day 2. While we do not know

Figure 68: Neutapitant CYP3A4 drug drug interaction



Source: Deutsche Bank and Company Reports

We are less concerned because the market will be IV longer –term which we believe makes this combination less competitive

We don't think that there is significant risk to rolapitant sales from generics entering the market

Oral Emend goes generic in 2015 while the IV formulation goes generic in 2019

Figure 69: Comparison of Emend and IV patents

Formulation	Patent Year	Potential Threat
Emend Oral	2015	Not much as presently ~80% of the market is IV
Emend IV	2019	Potential threat but a differntiated Rolapitant would have grown by then. It can still grow just like Aloxi did.

Source: Merck

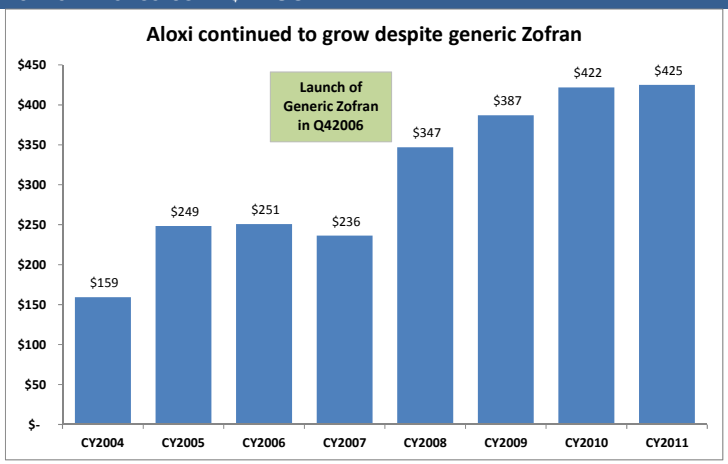
Currently, the Emend IV formulation has the dominate share. The percentage of Emend volume attributed to IV formulation grew to 80% in 2012

We believe that there could be two reasons for greater interest in IV. One reason is that the IV formulation is priced at 15% below the oral formulation in 2012. The other reason is that it may be more convenient to use an IV rather than pill in administration with other drugs.

Looking at the Aloxi case study, we learn that generic impact may only be temporary in CINV drugs lasting only as long as the arbitrage opportunity lasts

We take Aloxi Zofran as example. Both these drugs cater to CINV (chemo induced nausea and vomiting). Figure below suggest that when Zofran went generic in late 2006, Aloxi sales initially slowed, however continued to grow later as Aloxi was differentiated compared to Zofran. Our checks suggest that some docs switched temporarily to cheaper drug because they made more on money on the product as the ASP remained high for two quarters. After two quarters when the generic was reflected in the ASP, there was a spike in Aloxi use as docs switched back to the branded products as they made more money. This could be a likely scenario for Amgen's Xgeva under a worst case. Amgen also has LESS Medicare use (30%) for Xgeva making this type of an effect extreme

Figure 70: Aloxi annual sales in $M USD



Source: Deutsche Bank and Eisai Pharma

We value TSRO at $27 in the base case. We see peak US sales at $450M. EU at $150M

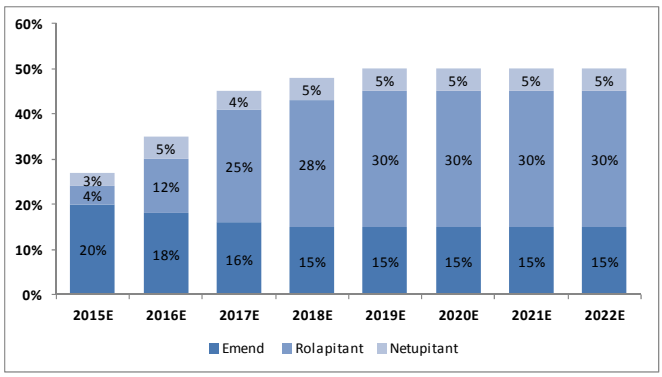
Base case: We value TSRO at $27/sh in base case. We assume NK-1 class grows to 50% of all eligible and Rolapitant gets 30% share in all eligible patients

Rolapitant can be leading NK-1 antagonist due to differentiated product profile and focused sales and marketing strategy

Our base case valuation is based on the assumption that Rolapitant will be numerically better than control in controlling nausea. We believe even without stat-sig nausea benefit Rolapitant will be a better drug than Emend as it has longer half-life, no CYP drug drug interaction and rapid onset of action. This differentiated product profile coupled with focused sales and marketing strategy would lead Rolapitant to capture majority market share in all Nk-1 eligible patients. We note that the management has proven experience in same market with the successful launch of Aloxi.

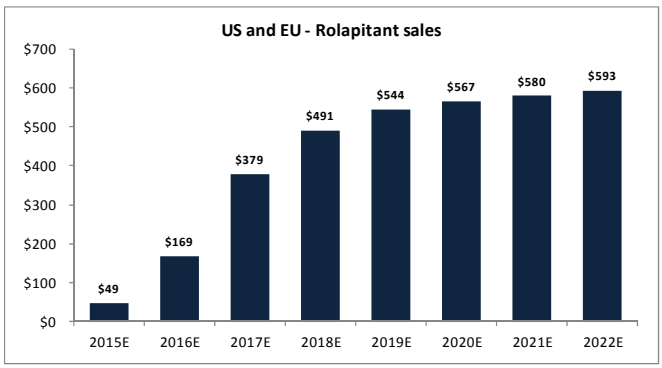
Under base case assumptions, We model peak sales at $450M in the US and $150M in EU in the base case. We assume Rolapitant pricing at par with Merck's Emend and assume that the company will be providing average 20% discounts.

Figure 71: Rolapitant Market share



Source: Deutsche Bank

Figure 72: Rolapitant sales US and EU



Source: Deutsche Bank

TSRO will pay low teen royalties to OPKO on the US and EU sales. We model peak gross margins at 84%

TSRO obtained Rolapitant rights from OPKO inc and will be required to pay tiered royalties from low teens to low twenties. Given the tiered structure of the payments, the company estimates that effective royalties will be in low teens. We model COGS starting in twenties to peak at 16% range.

Figure 73: Collaboration with OPKO on Rolapitant

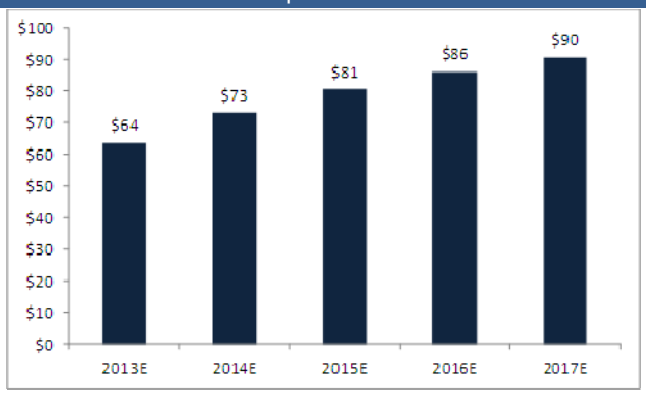
Rolapitant Collaboration	
Acquired from	OPKO Health in Dec 2010
Upfront payment	$6 million & 1.5M shares of Series O pfd stock (FV of stock $.6M)
Milestone payments	Up to $30M upon regulatory and initial commerical milestones
Sales milestone payments	Up to $85M upon different levels of annual sales
US & EU Royalty % to OPKO	"Low teens to Low twenties"
Royalty ex-US & Europe	"slightly above single digits"
Effective royalty rate	"Low teens"
Duration	Later between patent expiration & 12 yrs post commercial launch

Source: Company Reports

We assume R&D expenses increasing to account for PARP spend

We model R&D expenses going up as the company will keep spending on PARP. Currently, majority of R&D spend is on Rolapitant which would come down as pivotal studies will be over in late 2013. However we believe this decrease will be offset by higher spend on other pipeline products such as PARP and ALK. At this point we are not assigning any value to PARP and ALK pipeline

Figure 74: DB Estimates for TSRO R&D spend



Source: Deutsche Bank

We conservatively assume ~$100M SG&A expenses related to Rolapitant launch

According to management the company will likely launch Rolapitant with ~100 field based reps and 10-20 other sales people in the US. We calculate Sales expenses at ~$30M in the US assuming cost of ~$250K per rep. We include another $20M spend on marketing and G&A activities in the US. In total we believe the company will be spending ~$50M in the US for Rolapitant launch. For EU we assume a similar $50M spend on Rolapitant launch.

Bull case: We value TSRO at $60/sh in bull case.

In Bull case, we assume Rolapitant proves to be stat sig on nausea and grows Nk-1 class market to 65% of all eligible. In this scenario we model Rolapitant getting peak market share of 50% in all eligible. We model peak sales of $750M in the US and $240M ex-US. We see TSRO valuation at $60/sh in such a scenario.

Figure 75: DB Estimates for TSRO R&D spend

Rolapitant Sales	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
US	$61	$225	$387	$531	$615	$704	$726	$748
EU	$0	$24	$86	$143	$192	$216	$240	$241
Total Rolapitant	**$61**	**$249**	**$472**	**$674**	**$807**	**$920**	**$966**	**$989**

Source: Deutsche Banks

Bear case: We value TSRO at $12/sh in bear case.

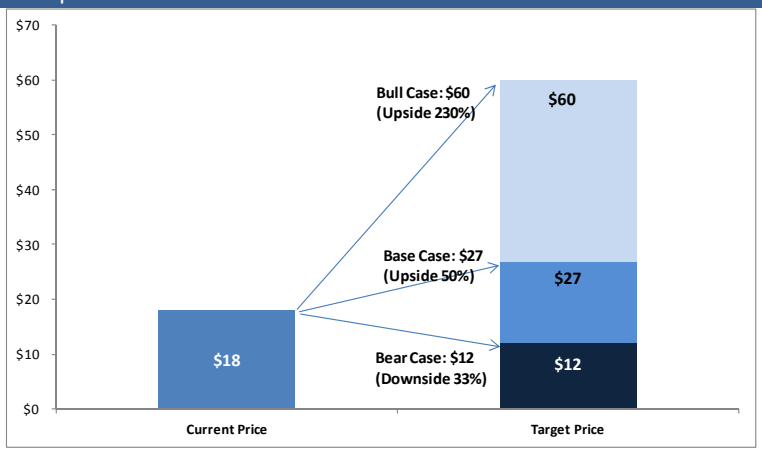
Our bear case scenario assumes that despite the launch of Rolapitant and company's efforts NK1 markets only grow to 40% from 20% current and Rolapitant only gets 20% share in this space. We model peak US sales at $300M and US at $100M and value Rolapitant at $12/sh in this case..

Figure 76: Bear case: Rolapitant sales

Rolapitant Sales	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
US	$36	$125	$232	$252	$274	$282	$290	$299
EU	$0	$14	$48	$86	$91	$96	$96	$96
Total Rolapitant	**$36**	**$139**	**$280**	**$338**	**$365**	**$378**	**$386**	**$395**

Source: Deutsche Banks

Figure 77: Rolapitant scenarios



Source: Company Reports

Our Key assumptions in scenario analysis

- We assume R&D constant for all the three scenarios
- We assume variable SG&A spend in different scenarios. We assume higher SG&A spend in bull case and lower SG&A spend in bear case
- We assume at par pricing for Rolapitant vs. Emend in all three scenarios. ~$300/cycle in US and $100/cycle in EU
- We assume that company will be giving average 20% discount on Rolapitant in all three scenarios.

Figure 78: Rolapitant US market model

Rolapitant US Market model	2011	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E
Annual CINV Treatments (000,000)	**6.6**	**6.7**	**6.7**	**6.8**	**6.9**	**6.9**	**7.0**	**7.1**	**7.1**	**7.2**	**7.3**
Growth		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
% Patients on HEC	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
# of patients on HEC (000,000)	3.96	4.00	4.04	4.08	4.12	4.16	4.20	4.25	4.29	4.33	4.37
% Patients on MEC	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
# of patients on HEC (000,000)	1.58	1.60	1.62	1.63	1.65	1.66	1.68	1.70	1.72	1.73	1.75
% HEC patients eligible for NK-1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
# of HEC patients Eligible for NK-1	3.96	4.00	4.04	4.08	4.12	4.16	4.20	4.25	4.29	4.33	4.37
% MEC Patients eligible for NK-1	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
# of MEC patients Eligible for NK-1	0.95	0.96	0.97	0.98	0.99	1.00	1.01	1.02	1.03	1.04	1.05
Total Nk-1 Eligible patients	4.91	4.96	5.01	5.06	5.11	5.16	5.21	5.26	5.32	5.37	5.42
as % of Total CINV patients	*74%*	*74%*	*74%*	*74%*	*74%*	*74%*	*74%*	*74%*	*74%*	*74%*	*74%*
NK-1 Class Market share	17%	20%	21%	22%	27%	35%	45%	48%	50%	50%	50%
Overall share in NK-1 Eligible											
Emend	17%	20%	21%	21%	20%	18%	16%	15%	15%	15%	15%
Rolapitant	0%	0%	0%	0%	4%	12%	25%	28%	30%	30%	30%
Others	0%	0%	0%	1%	3%	5%	4%	5%	5%	5%	5%
# of NK-1 Cycles per year											
Emend	856,374	981,982	1,051,911	1,062,430	1,021,956	928,958	833,998	789,692	797,589	805,565	813,620
Rolapitant	0	0	0	0	204,391	619,306	1,303,122	1,474,092	1,595,178	1,611,130	1,627,241
Cost per Cycle											
Emend (wt. avg price)	$279	$282	$286	$291	$297	$303	$309	$315	$322	$322	$322
Price growth %		1%	1%	2%	2%	2%	2%	2%	2%	0%	0%
Rolapitant					$297	$303	$309	$315	$322	$328	$335
Price growth %						2%	2%	2%	2%	2%	2%
Rolapitant Price vs. Emend					80%	80%	80%	80%	80%	80%	80%
Sales											
Rolapitant	$0	$0	$0	$0	$49	$150	$322	$372	$410	$423	$435
Growth						*209%*	*115%*	*15%*	*10%*	*3%*	*3%*

Source: Deutsche Bank

Figure 79: Rolapitant EU market model

Rolapitant EU Market model	2011	2012	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
Annual CINV Treatments (000,000)	**7.9**	**7.9**	**8.0**	**8.0**	**8.0**	**8.0**	**8.0**	**8.0**	**8.0**	**8.1**	**8.1**	**8.1**
Growth		0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
% Patients on HEC	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
# of patients on HEC (000,000)	4.75	4.76	4.77	4.78	4.79	4.80	4.81	4.82	4.83	4.84	4.85	4.86
% Patients on MEC	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%
# of patients on HEC (000,000)	1.90	1.90	1.91	1.91	1.92	1.92	1.92	1.93	1.93	1.94	1.94	1.94
% HEC patients eligible for NK-1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
# of HEC patients Eligible for NK-1	4.75	4.76	4.77	4.78	4.79	4.80	4.81	4.82	4.83	4.84	4.85	4.86
% MEC Patients eligible for NK-1	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
# of MEC patients Eligible for NK-1	1.14	1.14	1.15	1.15	1.15	1.15	1.15	1.16	1.16	1.16	1.16	1.17
Total Nk-1 Eligible patients	5.89	5.90	5.92	5.93	5.94	5.95	5.96	5.98	5.99	6.00	6.01	6.02
as % of Total CINV patients	*74%*	*74%*	*74%*	*74%*	*74%*	*74%*	*74%*	*74%*	*74%*	*74%*	*74%*	*74%*
NK-1 Class Market share	20%	22%	23%	24%	25%	27%	35%	45%	48%	50%	50%	50%
Overall share in NK-1 Eligible												
Emend	20%	22%	23%	23%	22%	20%	18%	16%	15%	15%	15%	15%
Rolapitant	0%	0%	0%	0%	0%	4%	12%	25%	28%	30%	30%	30%
Others	0%			1%	3%	3%	5%	4%	5%	5%	5%	5%
# of NK-1 Cycles per year												
Emend	1,178,496	1,269,417	1,331,117	1,363,418	1,306,748	1,190,328	1,073,438	956,075	898,113	899,910	901,709	903,513
Rolapitant	0	0	0	0	0	238,066	715,625	1,493,868	1,676,478	1,799,819	1,803,419	1,807,026
Cost per Cycle												
Emend Net Price	$100	$100	$100	$100	$100	$100	$100	$100	$100	$100	$100	$100
Price growth %		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Rolapitant					$100	$100	$100	$100	$100	$100	$100	$100
Price growth %						0%	0%	0%	0%	0%	0%	0%
Rolapitant Price vs. Emend						80%	80%	80%	80%	80%	80%	80%
Sales												
Rolapitant	$0	$0	$0	$0	$0	$19	$57	$120	$134	$144	$144	$145

Source: Deutsche Bank

The basic science behind PARP monotherpy

Parp enzymes are activated by DNA damage. Inhibitors or PARPS represent a targeted approach to treating certain cancers.

PARPs sense DNA damage & help fix breaks in DNA.

PARP enzymes bind directly to DNA & in simple terms help fix errors or breaks. PARPS play a role in many types of DNA repair including "base excision repair" (BER) & are primarily involved in fixing single stranded breaks. More recently, PARP has been shown to play a role in other types of DNA repair.

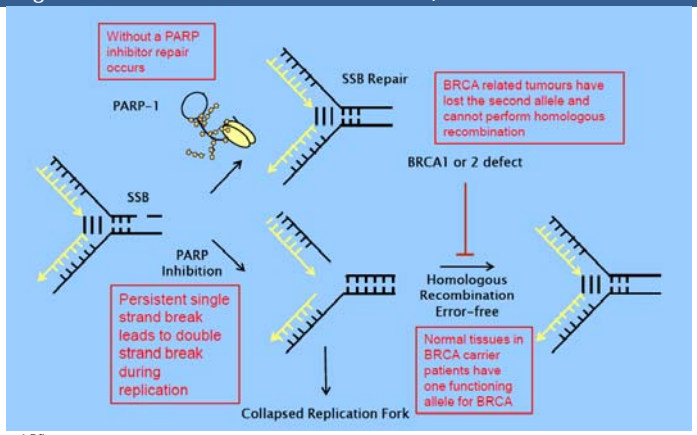
Early development of PARP inhibitors focused on developing them in combination with DNA damaging agents, but toxicity has limited their success in this setting.

Because certain chemotherapies/radiotherapies cause DNA damage it hypothesized & confirmed in early studies that adding PARP inhibitors can be synergistic to DNA damaging agents. However, clinical trials with these combinations have been associated with toxicity at PARP inhibitor doses where as a monotherapies safety is relatively clean. One of the earliest examples of this was a phase 2 study evaluating one of the first PARP inhibitors, AG-014699 (now owned by Clovis),with TMZ in melanoma. In this study, severe myelotoxicity observed, including 1 death and 3 hospitalizations. Efficacy was good (50% PR), but toxicity limited its ability to move forward in this setting. Many combination studies with PARP inhibitors are still going, but in our opinion monotherapy likely has the most utility.

In cells that are deficient in some DNA repair abilities, inhibiting PARP-1 leads to direct cell death.

It was eventually discovered that cancer cells may be more sensitive to PARP inhibition as compared to normal cells. If a single stranded DNA break isn't fixed before DNA replication, a double stranded break forms. Many cancer cells, such as those that are deficient in BRCA, can't fix DNA stranded breaks. If a cell can't fix a double stranded break in DNA, it undergoes cell death. As a result, inhibiting PARPS can directly lead to double stranded DNA breaks and in certain cancer cells, cell death. This makes PARP inhibition attractive in the cancer setting.

Figure 80: If single stranded breaks cannot be fixed, cells die: Mechanism behind PARP



Source: Deutsche Bank and Pfizer

Initial efficacy in the monotherapy setting has verified efficacy of PARP monotherapy in BRCA deficient cancer cells: this suggests application in breast & ovarian cancers.

In normal cells BRCA1 and BRCA2 genes make sure DNA is replicated accurately, preventing cancer (uncontrolled cell growth). Mutations in these genes have been linked to the development of hereditary breast and ovarian cancer. It is estimated that about 5-10% of breast cancers and 10-15% of ovarian cancers are caused by germline (inherited) mutations in BRCA1 or 2.

However, there are likely other mutations that affect DNA repair that could confer PARP sensitivity.

By far BRCA deficiency is one of the most well characterized mutations affecting DNA repair. There are a growing number of mutations, however, being identified in not just breast/ovarian cancer but other tumors as well. These mutations are often termed "BRCAness" mutations because the affects are similar. These mutations may be either hereditary or develop sporadically

Figure 81: Other cancers may be sensitive to PARPs. Science is ahead of the clinic

1. Cells that can't repair mutations in DNA, can become cancerous (divide uncontrollably)
2. Mutations that can cause a cells to be deficient in repairing DNA mutations (also known as deficient in "homologous recombination")can be transmitted either genetically (germaline) or develop over time (somatic)
3. **One example is the BRCA gene, but there are many others- and we are learning more about these every day.**

Source: Deutsche Bank

Making sense of Pharma failures w/PARPs & the read-across to success of current PARP inhibitors

Most big pharma players in PARP space have moved on

Figure 82: Summary of first generation PARP inhibitor & why we think they failed or unlikely to be competitive

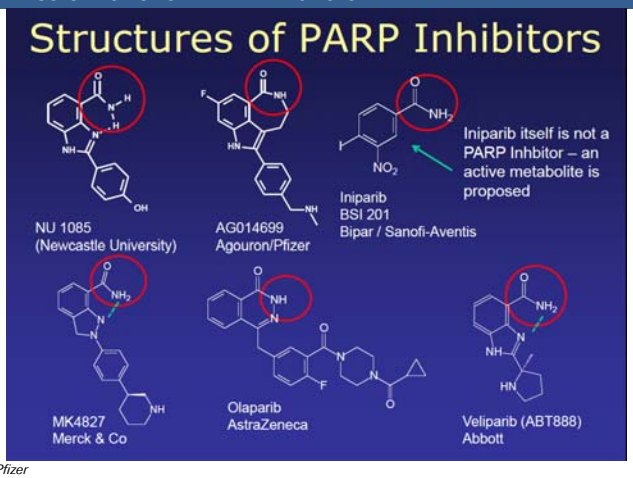
Company	Drug	Status	Bottom line (DB take)	Comments around regulatory path
Agouron/Pfizer	AG014699	halted development & sold to Clovis	wrong development path	Developed as combination-saw toxicities & decided to outlicense.
Bipar/Sanofi/Aventis	BSI 201/iniparib	failed in phase 3 triple negative breast cancer, halted development	not a real PARP inhibitor	was always different in structure, now known not to be a real PARP inhibitor
AstraZenica	olaparib	Despite success in phase 2 ovarian cancer platinum sensitive study in maintenance setting, halted development (at least in ovarian)..not sure of currents status	not a good formulation	Company says its because the ~doubling of PFS seen in phase 2 didn't lead to survival benefit. However- we believe it could be dosing schedule (~16 pills a day). New formulation with capsures didn't look promising
Abbott	Veliparib	Still in development by Abbott	weak PARP activity	Company is still developing in combination setting in breast cancer, but monotherapy data at ASCO 2012 suggest efficacy weaker vs. other PARP inhibitors still in development

Source: Deutsche Bank

In early 2011 Sanofi's iniparib failed in phase 3, making it difficult to enroll phase 2 studies & leading investors in the space to believe PARP inhibitors were a dead class. Later studies showed it didn't inhibit PARPs.

Iniparib failed in January 2011. One year later, research out of the Mayo clinic showed that this inhibitor acted differently compared to other well characterized PARP inhibitors in development, olaparib & velaparib. Initial assays to evaluate PARP activity included: (1) looking at its ability in vitro to kill cells, such as BRCA+ cells, that are deficient in homologous recombination (a form of DNA repair), (2) looking at the PARP enzyme activity (ability to form ADP-ribose), & (3) looking at its ability to kill cells deficient in homologous recombination when in combination with DNA damaging agents. This research found that while it can kill cells at high doses, it was not able to any of the three things noted above. The structure of iniparib was always known to be different from other parp inhibitors, but this research suggested it really wasn't a true parp inhibitor at all.

Figure 83: Structures of various PARP inhibitors

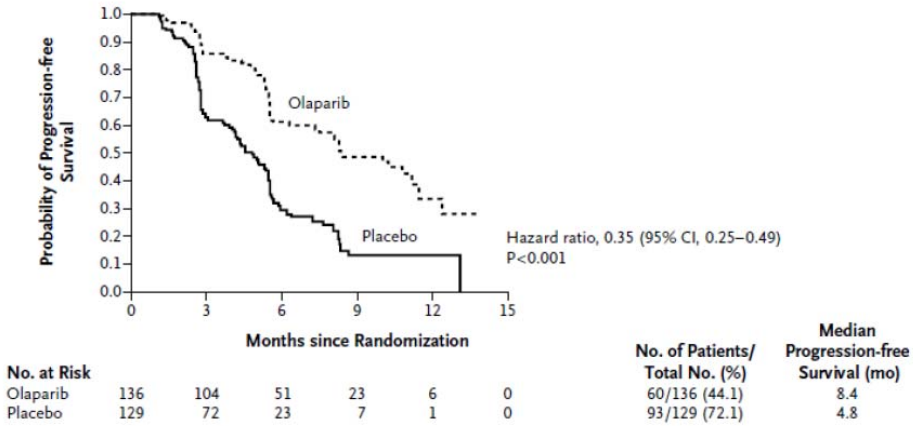


Source: Deutsche Bank and Pfizer

AstraZenica's olaparib had one of the most exciting data sets with PARPs, but stopped development in ovarian cancer at the end of 2011. The company cited lack of survival benefit, we believe it was likely formulation.

In a phase 2 study evaluating olaparib in the ovarian cancer maintenance setting, the drug improved progression free survival by 3.6 months. The trial enrolling 265 platinum-sensitive, relapsed, high-grade serous ovarian cancer patients who had received two or more platinum-based regimens and who had had a response (partial or complete) to their most recent platinum based regimen. The trial randomized 1:1 to placebo, with the active arm receiving 400mg BID of olaparib. Despite this success, the company halted development of olaparib in December 2011 in this setting. The company cited an interim analysis of this phase 2 that showed despite the benefit on PFS, the trial was unlikely to show a survival benefit. The company also noted that it was unsuccessful in its attempts to identify a tablet dose for phase 3.

Figure 84: Olaparib showed a 3.6 month benefit in PFS in ovarian cancer



Source: Clovis

While the olaparib phase 2 showed no overall survival benefit, it enrolled all comers. Data in BRCA deficient and known HR deficient patients likely would have shown survival-** this study provides some of the strongest support for PARPS inhibitors**

In this phase 2 study, only 22.8% of patients had a BRCA mutation. The hazard ration in this sub-population was ~0.10 compared to the overall population of 0.35. In our opinion, this suggests perhaps patients with known BRCA status drove the benefit.

Figure 85: Benefit likely would have been shown in the 22% of BRCA deficient patients

	Olaparib	Placebo
"N"	136	129
BRCA1 or BRCA2 mutations	22.8%	21.7%
Negative	13.2%	15.5%
Unknown	64.0%	62.8%
avg previous chemo regimens	3	3

Source: Deutsche Bank and Clovis

Despite announcing the company would not move forward in ovarian maintenance, the company has had data sets at ASCO and is developing a tablet formulation. So far, however, tablet formulation appears to have less bioavailability.

In the phase 2 ovarian study, olaparib was dosed at 400mg BID as a capsule, which required many pills a day. This dose was chosen after it was shown to be the best dose with the optimal side effect profile. Given pill burden, we believe company began developing a tablet formulation. However, data on the table so far suggests it has much less bioavailability vs. the capsule. Despite having an active compound in our opinion, we believe it is unlikely the company will move forward unless they find a better formulation.

Abbott's veliparib is likely has less clinical activity than other PARP inhibitors, we are still awaiting monotherapy data . Abbott is focusing on combination use with DNA damaging agents.

We have seen little monotherapy from Abbott's PARP inhibitor, veliparib. Our consultants suggest that this enzyme is likely less potent than other PARP inhibitors. According to some across trial comparisons and Biomarin, Velpairb is less potent across all PARP assays, including most importantly the ability to kill BRCA positive cells in vitro. Compared to Clovis' rucaparib and AstraZeneca's olaparib, the IC50 for cytotoxicity in BRCA-deficient cells is > 10,000nM for BRCA cytoxicity compared to 609nM and 259nM, respectively.

Figure 86: Abbott's drug, while still in development as a combo agent, likely isn't potent enough for single agent activity in BRCA deficient patients.

	PARP-1 Enzyme Inhibition[1] IC_{50} (nM)	Cellular PAR Synthesis[2] EC_{50} (nM)	Temozolomide Potentiation[3] GI_{50} (nM)	Capan-1 (*brca2-/-*) Cytotoxicity[4] IC_{50} (nM)
Veliparib (Abbott)	4.73	5.94	6203	>10,000
Rucaparib (Clovis)	1.98	4.69	144	609
Olaparib (AstraZeneca)	1.94	3.56	237	259
BMN-673	0.57	2.5	4	5

Source: Biomarin

The current PARP landscape: we think niraparib is competitive

Tesaro is developing Niraparib, a PARP inhibitor acquired from Merck

Figure 87: Tesaro's PARP inhibitor, niraparib, is farthest along in development

Company	Drug	Confirmed phase 3 indications	Phase	Comments around regulatory path
Abbott	Velaparib (ABT-888)	N/A	2	Ongoing phase 2b in BRACA+ breast cancer cited on calls (company is evaluating in lung cancer & brain mets)
Clovis	Rucaparib	serous platinum sensitive ovarian cancer (maintenance setting)	1/2	Initiating a phase 3 trial in 2H13 in platinum sensitive serous ovarian cancer (all comers). Will evaluate w/in this study: BRACA+, Braca"ness", all comers. Currently conducting a dose-ranging study
Biomarin	BMN-673	N/A	1/2	Will start a phase 3 study in 2H13 in at least one idication. Currently conduction a dose-ranging study
Tesaro	Niraparib	N/A	phase 2 complete	Will disclose regulatory path "shortly" after meeting w/KOLS & vetting regulatory paths/protocols. Path will be monotherapy.

Source: Deutsche Bank and company documents

We think Clovis & Biomarin are the two main competitors to Tesaro in this space. In this section, we will discuss how we think Tesaro stacks up to each of these two competitors. We note niraparib's competition is EARLY & difference in regulatory paths won't become clear until YE2013.

It is very important to remember all of these compounds have yet to begin phase 3. They are in either phase 1 or phase2. Tesaro will likely begin their phase 3 program first and we expect the company to communicate to the street their regulatory plans following discussions with regulatory authorities as well as thought leaders soon. Clovis & Biomarin plan to initiate phase 3 studies in 2H13. Clovis is the only company that has vocalized their regulatory path. Biomarin has only stated they will announce the first indication for BMN-673 by YE2013. Abbott appears focused on combination strategies. As we mentioned earlier we believe this is likely because of potency.

While we can make comparisons between these products, the bottom line in our opinion is regulatory strategy matters most. We don't know how potency will translate in the clinic.

As seen in other spaces, such as the mTOR space, development strategy can be just as important as product differentiation. One of the challenges in comparing the three products is that we don't know yet if potency will translate into superior efficacy OR if these three playors will compete in the same space.

Niraparib's response rate appears competitive, Biomarin may be more potent but we don't know how this will translate in clinic.

Data in phase1 looks competitive: 36% response rate, 63% disease control rate

Merck had already completed monotherapy as well as some combination studies with niraparib. The company completed a phase 1 dose escalation study that enrolled 60 patients in the dose escalation portion (part A) and 20 patients in the extension portion (part B). Patients in the dose escalation portion had a variety of tumor types and backgrounds including ovarian, breast, prostate, sarcoma, melanoma, colorectal, and lung cancer. Part B of the study enrolled ovarian cancer patients. The average number of prior treatments was slightly higher than other PARP monotherapy studies we had looked at (4.4 and 4.6 prior treatments in part A and B, respectively). When comparing monotherapy data from other PARP inhibitors we found on average patients typically had 3 previous lines of therapy.

Figure 88: Latest released data from Phase 1 study with niraparib in BRCA+ patients

In BRCA+ ovarian cancer patients who had an efficacy assessment with niraparib:	
PR	37% (7/19)
SD	26% (5/19)
PR +SD *	63%
Avg prior therapies (in entire study across tumor types)	4.4
Median age	56

* if you include patients who didn't have an efficacy asessment 58% DCR, 37% PR

Source: Deutsche Bank and Tesaro

Efficacy based on data available suggests in our opinion niraparib is competitive with Clovis' rucaparib, Biomarin's BM-673 looks more potent

While we caution against comparing across trials, monotherapy data from most PARP inhibitors is available in some form in BRCA deficient ovarian and breast cancer patients. Niraparib's 37% response rate in their 20 ovarian BRCA deficient ovarian cancer patients compares well to olaparib's 41% in their phase 2 study. Phase 1 data with Clovis' rucaparib suggests a much lower response rate (5%). Biomarin's BMN-673 so far has a higher response rate of 66% at the lowest dose evaluated in phase 1.

Figure 89: Across trial comparison of response rates of PARP inhibitors in development

Drug	niraparib	rucaparib	olaparib	veliparib	BM-673
Company	Tesaro	Clovis	AstraZenica	Abbott	Biomarin
PR/CR (response)	37%	5% *	33-41% in ph2, 53% in ph1	?	66%**
CR/PR + SD (disease control rate)	63%	31%	60% in ph1	?	?

Note-these studies were in BRCA deficient patients of various cancer type & disease severity making across trial comparisons difficult

* with IV dose, Clovis is now using a pill form with 33% bioavailbity of the IV.

** interim data at lowest doses

Source: Deutsche Bank and ASCO

Making response rate conclusions difficult- only data on Clovis is with an IV version, efficacy with new pill may be very different.

The only monotherapy in BRCA deficient breast and ovarian cancer with rucaparib was presented at ASCO 2011. In this study, rucaparib was dosed IV formulation at 18mg/m2 5 days a week every 21 days. The 5% PR/CR rate in this study and 31% disease control rate may be very different to data with the new oral formulation. Data from the company's phase 1/2 dose escalation study is expected at ASCO 2013. The company's current oral formulation has 33% the bioavailability of the IV.

All datasets available suggest BMN-673 is more potent, but very little is really known. The 66% response rate is based on comments that 8/12 patients had a PR at the lowest dose in the phase 1/2 study. Response rates will likely be higher at greater doses.

Biomarin is currently conducting a phase 1/2 dose escalation study. Results will be presented at ASCO 2013, as well as potentially a few patients from the extension portion of the study. Early results conveyed by the company, not presented at a medical meeting, suggest a 66% response rate at the lowest dose evaluated in the study. At 100ug, the 8 out of 12 BRCA deficient ovarian cancer patients had a partial response. compound appears more potent in the clinic. Likely the compound will have even more responses at higher doses, but we do not know how to compare this drug to niraparib because we do not know (1) baseline characteristics of patients & (2) safety profile. Side effects. Also it is important to note that phase 1 studies can look different vs. phase 2 in this setting. In phase 1, olaparib showed a 53% response rate in BRCA deficient ovarian cancer patients. In phase2, the response rate was 41%.

As olaparib has had efficacy in the clinic, we are comforted that PK/PD comparisons in literature suggest niraparib likely has similar PARP enzyme activity.

Another study comparing across trial data sets, suggests niraparib's PARP inhibition ability might be comparable to olaparib but slightly less than rucaparib

At ASCO 2011, a comparison of rucaparib, formerly known as PF-01367338, to olaparib and niraparib (assessed by PK modeling or other analyses), suggests that olaparib might be similar to olaparib in the ability to inhibit PARP activity. **As Sanofi's olaparib had efficacy in BRCA deficient serous ovarian cancer patients, we believe this data point supports niraparib success.** However, it is important to note that now other aspects of PARP inhibitors are now thought to be important in efficacy in cancer.

Figure 90: Across trial analysis of PARP inhibition of Olaparib & Niraparib

	PF-01367338 vs olaparib		PF-01367338 vs niraparib	
	PF-01367338	Olaparib	PF-01367338	niraparib
Emax (%) *	92	70	92	65

* Maximum enzyme inhibition as assessed from PK/PD modeling or avg inhibition at doses levels where PARP inhibition in PBLS reached plateu.

Source: Deutsche Bank and ASCO 2011

According to Biomarin's, analysis of standard PARP assays, rucaparib might be slightly less potent in BRCA deficient patients. Biomarin stands out as most potent.

According to Biomarin's presentation at their analyst day, the IC50 of Clovis' rucaparib ability to kill BRCA deficient patients was 609nM as compared to Olaparib's 259nMol. According to this assay, Biomarin's potency is magnitudes higher than its competition, including niraparib. BMN-673 was also more potent in all other PARP inhibitor assays including PARP enzyme inhibition, a cellular PAR synthesis assay, as well as a TMZ potentiation assay.

Figure 91: Analysis by Biomarin suggests it is the most potent PARP

	PARP-1 Enzyme Inhibition[1] IC_{50} (nM)	Cellular PAR Synthesis[2] EC_{50} (nM)	Temozolomide Potentiation[3] GI_{50} (nM)	Capan-1 (*brca2-/-*) Cytotoxicity[4] IC_{50} (nM)
Veliparib (Abbott)	4.73	5.94	6203	>10,000
Rucaparib (Clovis)	1.98	4.69	144	609
Olaparib (AstraZeneca)	1.94	3.56	237	259
BMN-673	0.57	2.5	4	5

Source: Biomarin

Key unknown: PARP inhibitors were recently shown to directly kill directly. We don't not know

In 2012, it was discovered another potential mechanism of PARP inhibitor activity in cancer may impact efficacy in the clinic.

This study showed that PARP inhibitors may also trap PARP1 & PARP2 complex at the site damaged DNA. These complexes likely directly lead to cell death.
The previous understanding of how PARP inhibitors worked, was that PARPS led to the formation of double stranded breaks & these were lethal to cancer cells.

The study also compared various parps: Niraparib looked most potent, but comparisons to Clovis & Biomarin's PARP inhibitors won't shown in this study.
The study evaluated this type of activity in olaparib, veliparib, & niraparib. Niraparib appeared most effective in killing cells via this mechanism. However, we really don't know how the three PARP inhibitors in development as monotherapies compare.

How will the company's strategy compare to the competition?

The company plans to disclose its phase 3 strategy shortly following meetings with KOLs and FDA

We expect Tesaro will disclose its marketing strategy shortly.

The company has been communicating since last year that they expect to disclose its regulatory strategy for niraparib soon. Following completion of the phase 1/2 study, the company has taken time to speak to KOLS, discuss potential protocols, & vet the feasibility of various regulatory paths.

Figure 92: Possible market opportunities for niraparib

Possible indications for PARP inhibitors
BRACA+ ovarian cancer : monotherapy, maintenance, first-line, serous, platinum resistant, second line (most clear-cut- but may be competitive)
BRACA+ breast cancer (trials can take a long time, questionalbe regualtory path)
Ewings sarcoma (rare)
SCLC (good in vitro data here- but not much clinical validation yet-platinum sensitive is basis)
Pancreatic BRACA+ (rare)
Prostate BRACA+ (rare)

Source: Deutsche Bank

In our opinion, our best guess is the company will take a more focused approach, evaluating niraparib in BRCA deficient patient populations.

We know that the company is going to be evaluating niraparib as a monotherapy. The company has also noted its focus on making a study reasonable to conduct. Using the olaparib phase 2 for example, there does seem to be some risk to enrolling patients who are platinum sensitive as we really don't know what percentage will really be sensitive to PARPs. The data in BRCA deficient ovarian & breast cancer seems (in our opinion) to be much more straightforward & have less variability. Orphan populations such as SCLC (small cell lung cancer) & Ewings, while possible offering accelerated paths to development, really have very little proof of concept data at this time. Therefore, we think it is likely Tesaro will move forward in BRCA deficient breast and/or ovarian cancers.

We don't know what line of therapy niraparib will be evaluated in.

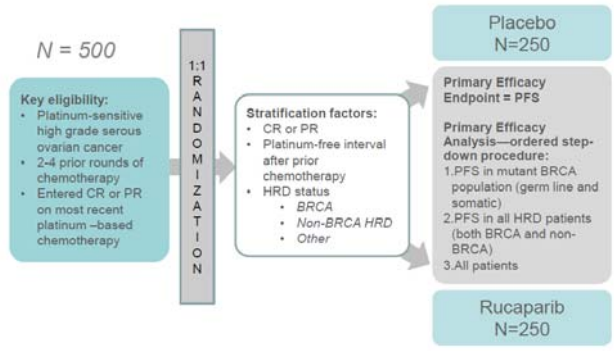
Technically the company could follow the Clovis path of developing their PARP inhibitor in the second-line maintenance setting. However, we really do not have a sense of if Tesaro will evaluate niraparib as a second-line treatment, second-line maintenance, or first-line maintenance treatment. We await clarity on their regulatory path. By far the most data on PARP inhibitors comes from the olaparib study, which did show a PFS benefit as a maintenance therapy in ovarian cancer.

Tesaro vs. Clovis: Clovis regulatory path could take longer than its competition in our view & we await greater clarity on efficacy in BRCA deficient patients as a monotherapy with their new formulation.

Clovis has announced their regulatory strategy: maintenance therapy in serous ovarian cancer (all comers).

Clovis has said they plan to initiate by year-end 2013 a phase 3 study in 500 platinum sensitive serous ovarian cancer patients. The trial will enroll all comers and will be randomized 1:1. Rucaparib will be evaluated as a maintenance therapy. The primary endpoint will be PFS.

Figure 93: Clovis proposed phase 3 study design



Source: Clovis

The phase 3 will not have a statistical analysis plan in place when it is initiated, will read out in 2016 as result.

At the point of initiation, the company will not have a statistical analysis plan. The company plans to at the end of the study analyze three buckets in sequence for statistical significance: (1) BRCA deficient, (2) homologous repair deficient (HRD), & (3) all comers. At minimum the company believes they will show a benefit in BRCA deficient patients as olaparib had a hazard ration of 0.1 in this population.

Figure 94: Clovis strategy: biomarker-informed phase 3 study.

Step	Timeline	Event
1)	ASCO 2013	Phase 1/2 trial going will determine dose.
2)	2H13	Phase 2 Biomarker study will begin to help determine "subsets" for statistical analysis plan (SAP)
3)	YE2013	Phase 3 study in serous platinum sensitive ovarian cancer (all comers) will initiate before phase 2 is complete
		Study will have 3 buckets: BRCA deficient, Homologous repair deficient (HRD), all comers.
		However, SAP wont be in place until HRD population is defined.
		Trial will be well powered to show a benefit at minimum in BRCA deficient patients based on phase 2 olaparib data.
4)	2015	SAP will be defined. HRD will be determined based on biomarker study.
5)	2016	Data read out. No interims will be allowed ahead of this time due to trial design.
6)	2017	Launch, at minimum in BRCA deficient platinum sensitive serous ovarian. Maximum all comers.

Source: Deutsche Bank and Clovis

Dose is still not known, however, data will be at ASCO 2013.

Dose ranging studies at ASCO will provide some clue to how to think about Clovis compared to its competition. We have seen no data with new formulation.

Figure 95: Clovis will present data from ongoing phase 1/2 monotherapy at ASCO2013

Design:	* Phase 1/2 monotherapy studies ongoing in US/UK. * According to clinicaltrials.gov, the study is recruiting 137 patients * Part 1 is enrolling solid tumors (more heterogenous population) * Part 2 is enrolling BRCA deficient Breast or Ovarian cancer * Evaluating QD and BID dosing.
Comments on study:	* Dose related PK observed to date
Comments on safety:	* Rucaparib very well-tolerated.
Timelines for data:	* Results at ASCO

Source: Deutsche Bank and Clovis

Our take: We think the Clovis strategy is smart given biomarker focus, especially if PARP inhibitors are effective in more than BRCA deficient patients

Unique to Clovis, is their collaboration with Foundation medicine to develop an assay that will detect BRCA deficiency in somatic & germline cases as well as will evaluate numerous suspected genes that alter homologous recombination (HR). Through the incorporation of biomarker analysis, the company could be one of the first to provide a tool & a show benefit beyond BRCA deficient patients.

However: there is risk HR deficiency bucket doesn't show significance.and design may make trial timelines longer letting competition come to market first.

There is always a competitive advantage of being first to market. One risk with the Clovis strategy is that it takes time. By enrolling all comers & putting an SAP in place after initiation the trial, the trial won't read out until 2016. If the company had only enrolled BRCA deficient patients, data read out might have been sooner. The company notes however, that both the FDA & EMA have signed off on this decision and want trials to go until completion.

Tesaro vs. Biomarin: Does potency matter more? Will the companies have different strategies?

As we have discussed, we know little about Biomarin except the company saw response at low levels. 1mg/day QD was selected to move forward.

According to the company, we will see all the phase 1 dose escalation data at ASCO, but not all the expansion data. This is because while the company has begun part 2 after identifying a dose, patients enrolled need appropriate follow up time to evaluate their response to '673.

Figure 96: Design of phase 1/2 program for BMN-673

Part 1 dose escalation, part 2 expansion	
Dose selected post part I:	1mg/day QD selected
N	85 (both dose escalation & expansion phase)
Populations:	BRCA carrier ovarian cancer
	BRCA carrier breast cancer
	Ewing's sarcoma
	SCLC
	BRCA carrier prostate or pancreatic cancer

Source: Deutsche Bank and Biomarin

Although the company has mentioned Ewing's and SCLC, to date we don't know if any of those patients were evaluated in dose-escalation portion of study.
The basis of efficacy of BMN-673 in these two populations stems from pre-clinical analysis in cell lines.

What will strategy be? Our guess is first ovarian cancer but we don't know setting & strategy. First phase 3 will start by year end, second next year.

Tesaro P&L

Tesaro income statement

Figure 97: P&L Statement

Income Statement	2011A	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E
Product Revenues												
Rolapitant												
Rolapitant -US					$49	$150	$322	$372	$410	$423	$435	$449
Rolapitant - EU					$0	$19	$57	$120	$134	$144	$144	$145
Total Rolapitant Sales					$49	$169	$379	$491	$544	$567	$580	$593
PARP Inhibitor												
PARP Inh -US												
PARP Inh - ex US												
PARP	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
ALK Inhibitor												
ALK Inh -US												
ALK Inh - ex US												
PARP	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Other Revenues												
Royalties on Ex US and ex EU Rola sales	$0	$0	$0	$0	$0	$3	$8	$16	$18	$19	$19	$19
Milestone	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Total Revenues	**$0**	**$0**	**$0**	**$0**	**$49**	**$172**	**$387**	**$507**	**$562**	**$586**	**$599**	**$612**
Expenses												
COGS	$0	$0	$0	$0	$12	$34	$68	$84	$87	$91	$87	$89
as % of product revenues					*25%*	*20%*	*18%*	*17%*	*16%*	*16%*	*15%*	*15%*
R&D expenses	$12	$45	$64	$73	$81	$86	$90	$93	$96	$99	$101	$101
as % of total revenues			*NA*	*NA*	*166%*	*50%*	*23%*	*18%*	*17%*	*17%*	*17%*	*16%*
growth		*279%*	*43%*	*15%*	*10%*	*7%*	*5%*	*3%*	*3%*	*3%*	*2%*	*0%*
SG&A	$3	$6	$7	$25	$74	$118	$129	$136	$140	$144	$147	$150
as % of total revenues		*#DIV/0!*	*NA*	*NA*	*151%*	*69%*	*33%*	*27%*	*25%*	*25%*	*25%*	*24%*
growth		*105%*	*15%*	*230%*	*200%*	*60%*	*10%*	*5%*	*3%*	*3%*	*2%*	*2%*
Other Operating Expenses	$1	$7	$10	$10	$10	$0	$0	$0	$0	$0	$0	$0
Operating Income	**-$15**	**-$58**	**-$81**	**-$108**	**-$128**	**-$66**	**$99**	**$195**	**$239**	**$252**	**$264**	**$273**
Operating Margin					*-263%*	*-38%*	*26%*	*38%*	*43%*	*43%*	*44%*	*45%*
Other income/expenses	-$1	$0	$0	$1	$2	$0	$1	$1	$3	$5	$6	$8
Pre-tax Income	**-$16**	**-$58**	**-$81**	**-$107**	**-$126**	**-$66**	**$99**	**$195**	**$242**	**$257**	**$271**	**$281**
Taxes	$0	$0	$0	$0	$0	$0	$0	$0	$23	$90	$95	$98
tax rate%	*0%*		*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*10%*	*35%*	*35%*	*35%*
Net Income	**-$16.4**	**-$58**	**-$81**	**-$107**	**-$126**	**-$66**	**$99**	**$195**	**$219**	**$167**	**$176**	**$183**
F.D. EPS	**-$31.90**	**-$4.23**	**-$2.61**	**-$2.87**	**-$3.40**	**-$1.64**	**$2.48**	**$4.87**	**$5.45**	**$4.16**	**$4.38**	**$4.55**
Basic Sharecount	0.5	14	31	37	37	40	40	40	40	40	40	40

Source: Deutsche Bank

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Appendix 1

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Company	Ticker	Recent price*	Disclosure
Tesaro	TSRO.OQ	18.06 (USD) 4 Feb 13	2

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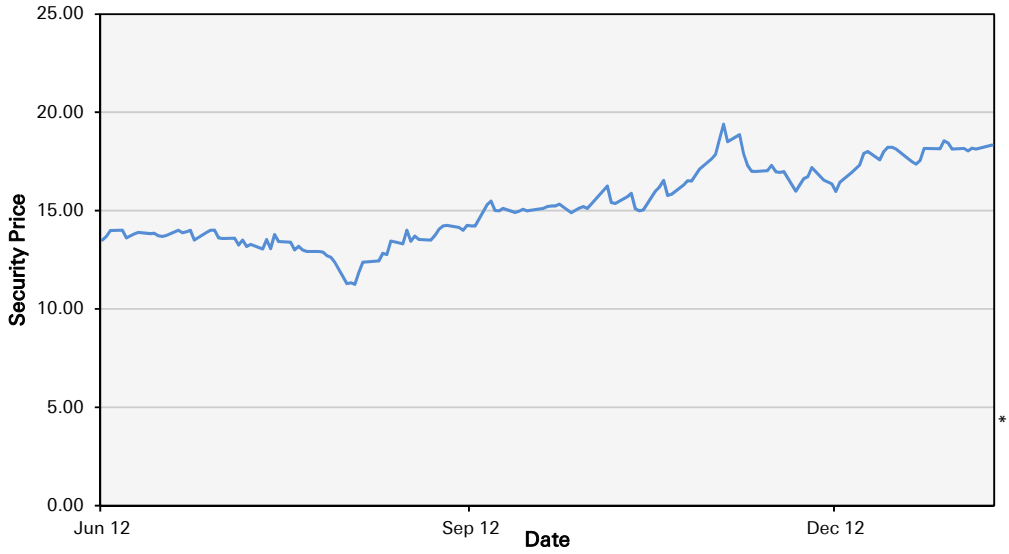
(as of 2/4/2013)



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Market Perform
Underperform
Not Rated
Suspended Rating

Current Recommendations

Buy
Hold
Sell
Not Rated
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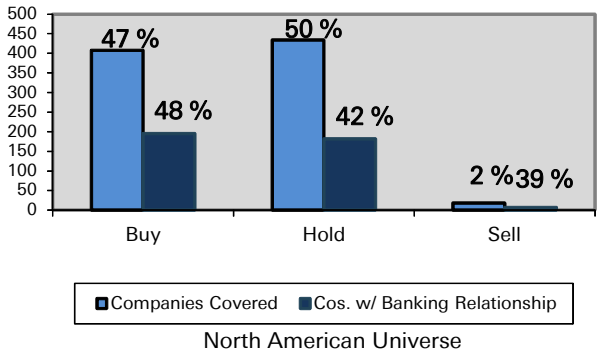

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