Morgan Stanley

MORGAN STANLEY RESEARCH
NORTH AMERICA

Morgan Stanley & Co. LLC

David Friedman, M.D.
David.Friedman@morganstanley.com
+1 212 761 4217

Matthew Harrison
Matthew.Harrison@morganstanley.com

Brienne Kugler
Brienne.Kugler@morganstanley.com
+1 212 761 6209

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Stock Rating
Overweight

Industry View
In-Line

Initiation

Versartis, Inc.

The Next Step in Growth Hormone; Init. OW, PT $79

Versartis is developing a long-acting growth hormone, which we believe may, if successful, take significant share in $3+bn growth hormone market.

Versartis, using the XTEN technology, is developing VRS-317, a long-acting (LA) growth hormone (GH) with possible weekly, semi-monthly, and/or monthly dosing. So far, the drug has been safe and effective at 3 mo in an ongoing Ph 2 pediatric GHD patient trial. We see a LA GH as valuable given non-compliance with the current standard care of daily GH shots is a common problem and leads to worse outcomes on avg. Our diligence suggests a LA GH could be disruptive to the $3+bn and growing GH mkt.

Ph 2 Data: We have seen 3 month data in ~60 pediatric GHD patients showing solid growth velocity changes at all three dosing frequencies vs. a set of age, height, and dose matched historical controls. This solid growth increase has come with a clean safety profile including no major injection site reactions. Also, IGF-1 levels, a mediator of GH activity, have had only three non-sustained excursions >2 SDS above average – a key regulatory level (discussed inside). We await 6 month growth data mid-year, and expect the solid trends to continue.

Ph 3 plans: We expect VSAR to a) continue targeting pediatric GHD patients in the sole Ph 3, b) use the EU daily GH dosing schedule of 0.03 mg/kg/wk as the control arm, c) test two arms of either different doses or different dosing frequencies, and d) treat patients for at least 12 mos. We expect Ph 2 (and eventually Ph 3) trials in some/all other GH use areas including adult GHD, Turner's syndrome, etc. to start in 2015/16.

Commercial: The $3+bn WW daily GH mkt is ~50% pediatric GHD. We currently expect that with approval, VRS-317 could capture ~45% of Pediatric GHD pts at peak (2025) as well as incremental off-label use. This generates peak WW VRS-317 sales of ~$1.3bn.

Risks: The biggest risk we see is competition, as our current estimates do not assume a large number of LA competitors on the market (see p. 15, Ex. 21 for a competitor discussion). In addition, we see a risk of a less common safety issue or tapering growth (neither of which we have any reason to expect) as key unknowns given the lack of long-duration dosing.

Key Ratios and Statistics

Reuters: VSAR.O Bloomberg: VSAR US
Biotechnology / United States of America

Price target	**$79.00**
Shr price, close (Apr 11, 2014)	$26.01
Mkt cap, curr (mm)	$630
52-Week Range	$36.30-23.51

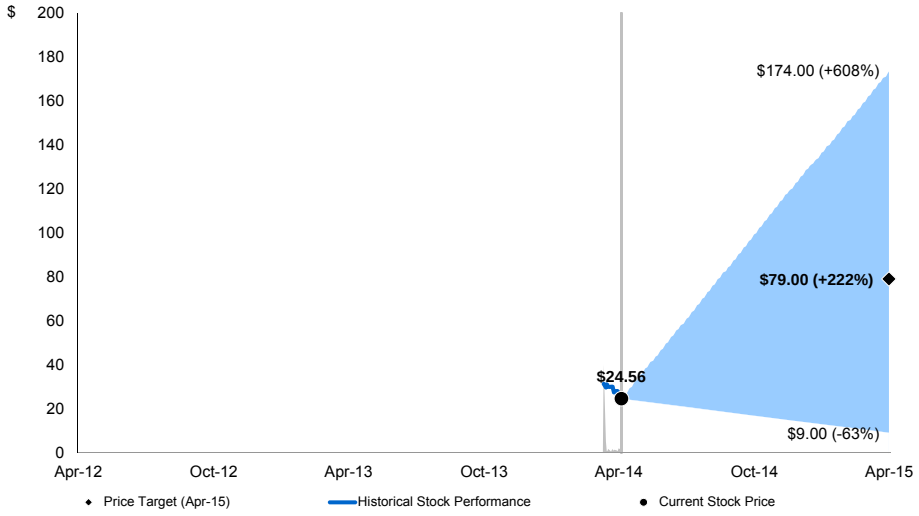
Fiscal Year ending	**12/13**	**12/14e**	**12/15e**	**12/16e**
ModelWare EPS ($)	**(3.57)**	**(2.48)**	**(3.04)**	**0.41**
P/E	**NM**	**NM**	**NM**	**63.0**
Consensus EPS ($)§	**-**	**-**	**-**	**-**
Div yld (%)	-	-	-	-

Unless otherwise noted, all metrics are based on Morgan Stanley ModelWare framework (please see explanation later in this note).
§ = Consensus data is provided by Thomson Reuters Estimates.
e = Morgan Stanley Research estimates

Pediatric Growth Hormone Deficiency (GHD)	Disease in which the body does not produce enough growth hormone; leads to children having lower height growth vs. similarly aged peers.
Adult Growth Hormone Deficiency (GHD)	Growth hormone deficient children who grow up or adults who acquire growth hormone deficiency in adulthood; patients often have a change in body composition.
Idiopathic Short Stature (ISS)	Short stature not associated with strict growth hormone deficiency.
Turner Syndrome	Patients have one of two X chromosomes missing or incomplete and have a myriad of symptoms.
XTEN	Technology developed at Amunix that extends a drug's half-life.
IGF-1	Protein that acts downstream of growth hormone and is a mediator of growth.
Height Velocity	Measure of growth trends in children that helps to determine yearly height growth and peak height.

Risk-Reward Snapshot: Versartis (VSAR, OW, PT $79)

VRS-317 Drives Risk Reward



Source: Morgan Stanley Research estimates, Thomson Reuters

Price Target $79	We derive our PT from a discounted cash flow analysis that uses a WACC of 12.5% and a 0% terminal growth rate. The main revenue driver in our model is the launch of VRS-317.	
Bull Case $174	**DCF**	**VRS-317 makes it to market and achieves majority share of the pediatric growth hormone deficient market. We model approval in other markets with decent share assumptions. We assume:** 1) ~$1.8bn WW peak (2025) sales for pediatric growth hormone deficiency. 2) VRS-317 share of the pediatric growth hormone market is ~80% in the US, <70% in the EU, and <70% in Japan at peak (2025). 3) ~$900mn WW peak (2025) sales for other markets. 4) VRS-317 share of other markets is 45% in the US, 40-45% in the EU, and ~40% in Japan at peak (2025).
Base Case $79	**DCF**	**VRS-317 makes it to market and achieves decent share of the pediatric growth hormone deficient market. We model some off-label use in other markets. We assume:** 1) ~$1.1bn WW peak (2025) sales for pediatric growth hormone deficiency. 2) VRS-317 share of the pediatric growth hormone market is ~45% in the US, ~45% in the EU, and ~45% in Japan at peak (2025). 3) ~$200mn WW peak (2025) sales for other markets. 4) VRS-317 share of other markets is <20% in the US, <5% in the EU, and ~1% in Japan at peak (2025).
Bear Case $9	**Cash Based Value**	**VRS-317 does not make it to market.** We expect the stock would trade at or modestly below cash in this scenario as the remaining pipeline, while interesting, is much earlier and hard to place concrete values on.

Investment Thesis

- We are OW Versartis as we believe VRS-317, a long-acting growth hormone, has the potential to take a significant share of the large, $3+bn growth hormone market.
- VRS-317 has shown solid 3 month height velocity data in growth hormone deficient children in a Ph 2a trial, and 3 month height velocities are thought to be predictive of 6-12 month height velocities.
- VRS-317 has a clean safety profile to date with 1) no lipoatrophy or nodule formation (common in other long-acting growth hormone attempts) and 2) minimal IGF-1 excursions >2 standard deviations and none >3 standard deviations (a regulatory/risk focus level).
- Physician diligence suggests long-acting growth hormone therapy is preferred over daily growth hormone therapy given potential improvements in compliance, convenience, and long-term growth outcomes.
- We see additional upside opportunities for VRS-317 in adult growth hormone deficiency, idiopathic short stature (ISS), Turner Syndrome, and other markets (we model some off-label use).

Risks to our price target
1) Full VRS-317 Ph 2 or Ph 3 data may look worse than expected, 2) VRS-317 may encounter a safety issue in clinical development, 3) VRS-317 may struggle commercially.

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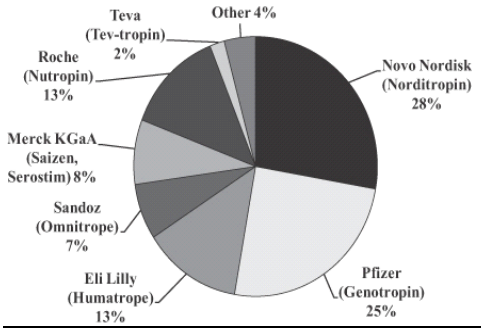
Investment Case

Summary & Conclusions

We are initiating coverage of Versartis (VSAR) with an Overweight rating and a $79 price target.
Versartis is a biotechnology company currently focused on the development of long-acting endocrine drugs. The lead program is a long-acting growth hormone, VRS-317, in Ph 2. **We expect clinical, regulatory, and commercial success for VRS-317, and model peak (2025) WW sales of ~$1.3bn in the currently $3+bn WW growth hormone (GH) market.** The majority of this revenue comes from the lead indication, pediatric growth hormone deficiency (GHD) with some incremental off-label use (primarily in the US) over time.

Patients that currently take GH, regardless of the indication, take one of the myriad of daily growth hormone products (Ex. 1) that use a once daily formulation.

Exhibit 1
Fragmented Daily Growth Hormone Market



Source: Company data

While these GH products differentiate themselves based on formulary coverage, pen/injector device, etc., they are all limited by the once daily dosing frequency. Chronic, once daily shots tend to be hard to comply and persist with over time, leading to sub-optimal outcomes (e.g. growth) in some patients. We and physicians we have spoken with view a more convenient dosing regimen as a clear step forward for patients.

Below we discuss:
1) the Ph 2 3 month pediatric growth hormone efficacy data,
2) the overall clean safety profile,
3) the relatively straightforward Ph 3 plans, and
4) the large commercial opportunity.

Versartis additionally has an undisclosed pre-clinical drug.

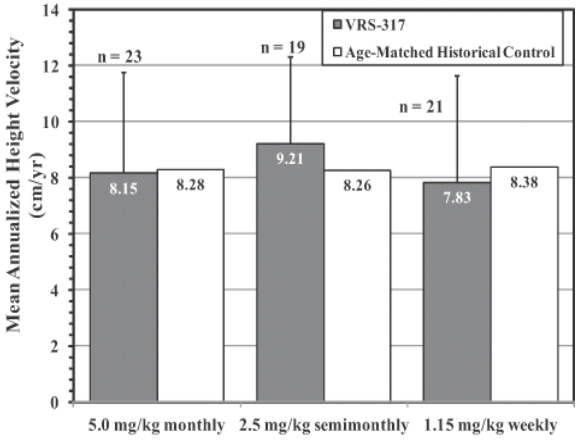
1) Ph 2 Data Shows Good Growth So Far

Pediatric growth hormone trials focus on two major efficacy endpoints: height velocity and insulin-like growth factor 1 (IGF-1).

Height velocity is the measure of growth trends in children, and determines your yearly height gains as well as peak height. Height velocity is impacted by key factors such as sex, age, and GH level. Our work and physician discussions suggests growth trends build on themselves, with early growth trends informing/predicting later growth trends.

IGF-1 is a protein that acts downstream of GH and is the actual mediator of growth. IGF-1, as the name implies, also has insulin like properties. Both velocity and IGF-1 levels need to be positively impacted to have successful growth hormone replacement, although there are some subtleties to the degree of desired IGF-1 increase (discussed in the safety section and further in the report).

Exhibit 2
VRS-317 Ph 2 3 Mo. Data Shows Good Growth Velocity at All Dosing Intervals



Source: Company data

VRS-317 efficacy is being tested in an ongoing 6 month Ph 2 study (patients may enroll in an extension study after) in ~60 GHD pediatric patients at a dose equivalent to 0.3 mg/kg/week of daily GH (see p. 8-9 for more discussion around dosing). So far, we have seen 3 month data (Ex. 2), which we believe a) will be predictive of 6 and 12 month data, and b) showed strong height velocity trends vs. a specific set of age, and height/baseline GH matched historical controls.

The controls used here are from a large, EU database that has been published broadly. A similar approach, using historical controls, was used for Nutropin Depot's prior approval. **Importantly, the efficacy was universally strong across all dosing frequencies, preserving the option for longer than weekly dosing.**

2) Safety Has Been Clean

Overall, through Ph 1 and 3 months in Ph 2, we see the safety profile of VRS-317 as quite clean. In general, there have been no serious adverse events, and most non-serious events have been relatively typical of growth hormone injections including musculoskeletal pain and brief injection site discomfort.

While there was some injection site erythema and one patient with a rash, there have been no major injection site reactions of concern. Prior attempts at long acting GH, especially employing depot technologies, had problems with lipoatrophy at the injection site. This has not been seen at all with VRS-317, nor would we expect it given that the drug does not sit under the skin as a depot.

A separate, and key regulatory and commercial focus point, are IGF-1 levels. In most GHD patients, IGF-1 levels are well below normal. During GH administration, IGF-1 levels rise. However, given that IGF-1 is a growth stimulator, there is a concern that over-aggressive IGF-1 expression would be a risk for adverse outcomes including tumor growth stimulation. The typical level of note for IGF-1 levels is 2 standard deviation score (SDS) above the expected average for the tested population, with 3 SDS a red flag.

A number of the marketed daily GH drugs have documented excursions above 2 SDS in their trials. In the 3 month VRS-317 data, there were three one-time excursions just above 2 SDS. We see these data points overall as not concerning, but will track this metric closely for both efficacy and safety.

3) Phase 3 Plan Relatively Straightforward

The company expects to start a single Ph 3 trial in 2015. We expect it will be ~160 or so patients, controlled with a daily GH arm, and will include two drug arms. The two drug arms are likely to be either the same dose at two different dosing frequencies, or two different doses using the same dosing frequency.

The labeled dosing for daily GH varies. Most dailies include the typically lower EU dose (~0.3 mg/kg/week), with some including the often higher US dose (~0.3-0.4 mg/kg/week). Physicians we have spoken with are comfortable titrating any of the daily GH drugs to the desired level (sometimes using IGF-1 as a guide), so we do not necessarily view a lower dose label for VRS-317 as an impediment to broad use.

Two key risks worth noting heading into Ph 3 include the current manufacturing status of the drug and the EU Pediatric Investigation Plan (PIP).

From a manufacturing perspective, the company recently switched manufacturers, with the new one being Boehringer Ingelheim (BI). The FDA placed the BI material on partial clinical hold with questions, as we understand it, relating to room temperature (25°C) stability. The company notes the drug is typically transported and stored at 5°C, and the BI material has shown enhanced purity and stability vs. the prior material. We expect this hold will be removed within the next few months, without any disruption to Ph 2 extension dosing or (in a worst case) Ph 3 start timelines.

The company recently was notified by the EMEA that their PIP was rejected. This PIP is either agreed upon or not by a specific subgroup within the EMEA, and is meant to guide the next steps of pediatric drug development. Our understanding is that this decision was based on a question of clinical relevance and safety of a long-acting growth hormone in light of daily GH availability.

However, while the PIP was rejected the company did receive a PIP waiver. We understand that with a waiver, the next step would be to discuss the Ph 3 design with a more clinically and scientifically focused group within the EMEA, including pediatric endocrinologists (the target prescriber). We expect that an agreement to move forward in kids will be the result of these follow-up meetings, which are supposed to occur this year. If agreed upon, the company does not need to go back and re-try for a PIP approval.

Seeing as the EMEA granted orphan designation for the drug, despite there being daily GH drugs on the market, we believe that at least part of the EMEA sees value in this product. Also, we note that given the clean safety profile, the solid efficacy to date, and the proven value of high compliance with GH drugs, there should be ways to negotiate a path forward. The worst case scenario would be no EU involvement in the pediatric GHD program, which at this point we see as very unlikely.

4) Commercial Opportunity is Broad and Large

The daily GH market is large, and we believe growing steadily through both price and volume. While the market is crowded with multiple competitors, including generics (Ex. 3), the pricing seems to be well maintained, with the company noting US pediatric GHD patient value of ~$23-25k/year. They also

note this per patient value is lower for a) US adult GHD patients, and b) all patients/indications in the EU. In Japan, the per patient value, despite lower doses, is well preserved - for pediatric patients the value/patient is higher than the US.

Exhibit 3

WW GH Mkt >$3bn Now, Pediatric GHD Dominates

2011 GH Mkt	US	EU	Japan	Total
Pediatric GHD	$500	$600	$500	**$1,600**
Adult GHD	$100	$200	$0	**$300**
ISS	$200	-	-	**$200**
Turner Syndrome	$100	$100	$100	**$300**
Other	$300	$200	$0	**$500**
Total	**$1,200**	**$1,100**	**$600**	**$2,900**

Source: Company Data, Morgan Stanley Research

In the US, share tends to be driven by a few factors, with formulary access the main driver. As in most crowded drug areas, formulary access is gained through contracting and rebates. In addition to access, factors such as pen design and patient support are relevant. Most physicians tend to view all the different daily options as essentially the same.

Our diligence suggests that a well-tolerated, safe, and competitively priced (to maximize formulary access) long acting drug, either weekly, semi-monthly, or monthly, would be viewed as a major advantage and attract both significant new patient share and patient switching. We currently assume VRS-317 drives significant switching and gains at peak almost half of new pediatric GHD patient share in the US and EU on their own and in Japan via a partner. We note that these share estimates could end up being too conservative with time, as the negative impacts of poor compliance have been well proven.

We also assume increasing off-label use in the US, and to a much smaller degree, the EU for other GH indications including adult GHD, Turner's syndrome, idiopathic short stature (ISS, a US only indication), and other indications. Starting in 2015, we assume Versartis will begin to pursue some or all of these additional GH indications – we have seen Ph 1 data in adults already.

Long acting GH competition is a key factor that we will be tracking. Nearly all potential competitors are weekly, which potentially leaves a dosing interval advantage for VRS-317 which so far has looked good with semi-monthly and monthly dosing. We will start to see Ph 2 pediatric data for a few weekly competitors this year, but view VRS-317 in the lead thus far. Our current model assumptions leave significant room for additional long acting competitors, though with limited data to date we are not sure how many, if any, will make it through. See Ex. 21 for a full run through of long acting competitors in development.

Exhibit 4

Catalyst Calendar

Drug	Type	Event	Expected Timing
VRS-317	Clinical Data	Ph 2 6 month data	2014
VRS-317	Product Advancement	Ph 3 initiation	1H15
VRS-317	Clinical Data	Ph 3 interim 6 month data	2H16
VRS-317	Clinical Data	Ph 3 full top-line 12 month data	1H17

Source: Company Data, Morgan Stanley Research

Valuation

Exhibit 5
DCF Drives Valuation

($ in mn)	2012	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Free Cash Flow	**(12)**	**(17)**	**(43)**	**(69)**	**10**	**(85)**	**(77)**	**42**	**264**	**298**	**388**	**481**	**552**	**622**	**641**	**646**	**648**	**648**	**518**	**415**	**332**
YoY growth	*27.0%*	46%	151.8%	61%	-114%	-973%	-10%	-155.2%	524.3%	12.8%	30.5%	24.0%	14.7%	12.6%	3.1%	0.8%	0.2%	0.0%	-20.0%	-20.0%	-20.0%
Net Cash Proxy for Dilution	$0.0	$0.0	-$13.2	-$14.2	-$15.1	-$15.9	-$16.5	-$16.8	-$16.9	-$16.8	-$16.4	-$15.7	-$14.7	-$13.5	-$13.5	-$13.5	-$13.5	-$13.5	-$13.5	-$13.5	-$13.5
Free Cash Flow for DCF	**-$11.7**	**-$17.1**	**-$56.3**	**-$83.4**	**-$5.4**	**-$101.2**	**-$93.1**	**$25.4**	**$247.0**	**$280.8**	**$372.0**	**$465.8**	**$537.4**	**$608.1**	**$627.7**	**$632.7**	**$634.0**	**$634.3**	**$504.7**	**$401.1**	**$318.2**
PV of Free Cash Flow			-56.3	-76.3	-4.4	-73.2	-59.9	14.5	125.5	126.8	149.3	166.2	170.4	171.4	157.3	140.9	125.5	111.6	79.0	55.8	39.3

Source: Company data, Morgan Stanley Research estimates

Exhibit 6
DCF Valuation Suggests Significant Upside

Valuation Date	**2014.25**
Discount Rate	*12.5%*
Terminal Growth Rate	0%
Terminal Value Year	2032
Sum of Discounted FCF ($mn)	**$1,377.7**
Discounted Terminal Value ($mn)	**$314.6**
Net Cash ($mn), post-$	**$210.6**
Equity Value ($mn), post-$	**$1,903**
Equity Value/Sh, post-$	**$79**
Shares Outstanding	24.2

Source: Company Data, Morgan Stanley Research estimates

$79 PT includes VRS-317 in pediatric growth hormone and off-label use in adult growth hormone deficiency, idiopathic short stature, Turner Syndrome, and other growth hormone indications.
We derive our PT from a discounted cash flow (DCF) analysis that uses a WACC of 12.5% and a terminal growth rate of 0% post 2032. We incorporate the cash cost of stock options.

Valuation Methodology: We use a DCF to value Versartis as well as most other companies under coverage. We believe a DCF best captures the longer term nature of drug development and commercialization. We do not feel that a multiples analysis accomplishes the same goal, as it only evaluates a company during a snapshot in time.

Discount Rate: We currently use a 12.5% discount rate for companies that have proven proof of concept in a formal, company-run Ph 2 trial for a key value driving drug. We believe that ongoing trial for VRS-317 meets these criteria.

Terminal Growth Rate: Our modeled cash flows extend to 2025. Beyond this, we grow cash flows at 25% of the prior years growth. We decline cash flows by 20% annually from 2030-2032 due to the ~2030 patent expiry for VRS-317

Revenue: The revenue driver in our model is VRS-317.

Economics: We model Versartis marketing VRS-317 themselves in the US and in the EU. In Japan, we expect that Versartis will partner VRS-317 with a mid-20s% royalty rate.

COGS: We model COGS of 10% at launches improving to 9% over time.

Operating Expenses:
R&D: We model R&D increasing through 2016 as Versartis studies VRS-317 in other indications.
SG&A: We model SG&A increasing significantly in 2017+ as Versartis builds out a US and ex-US sales force.

Financings: We model a ~$65mn raise in 2016.

Key Risks To Our Price Target Include: 1) Full VRS-317 Ph 2 or Ph 3 data may look worse than expected, 2) VRS-317 may encounter a safety issue in clinical development, 3) VRS-317 may struggle commercially.

Compelling Growth Hormone Opportunity for VRS-317

We believe VRS-317, a long-acting growth hormone given via weekly, semi-monthly, or monthly subcutaneous injections, has significant commercial potential in the $3+bn WW growth hormone market. The drug is currently in a Ph 2 trial for pediatric growth hormone deficiency.

The standard of care for all growth hormone (GH) treated pts is daily growth hormone injections. Daily injections are difficult for many patients to comply with, and low compliance may lead to poor height or other outcomes. **We believe that VRS-317 has the potential to improve pt convenience, compliance, and potentially long-term final height.**

Our $1.3bn peak (2025) WW sales estimate is primarily driven by penetration in the pediatric GH deficiency (GHD) market, which is the lead indication (Ex. 7). We also model incremental off-label use in other indications such as adult growth hormone deficiency (Ex. 8), Turner Syndrome, and idiopathic short stature (US only). Right now these other indications are sources of potential upside to our model, although the consistent activity of daily GH across these indications implies VRS-317 has good chances of success.

Exhibit 7
Pediatric Growth Hormone Deficiency Summary

Pediatric Growth Hormone Deficiency (GHD)	
Disease	Lower height growth vs. similarly aged peers
Causes	Mutation in cells responsible for producing human growth hormone, idiopathic insufficiency, etc
Epidemiology	~19,000-20,000 patients treated with daily GH in the US
Symptoms	Short stature, obesity in some patients, delayed/poor skeletal mineralization and muscle growth, high risk lipid profile
Diagnosis	Short stature for age; IGF-I levels; provocative growth hormone testing
Current Treatments	Daily subcutaneous injections of GH (recombinant)

Source: Company Data, Morgan Stanley Research

Exhibit 8
Adult Growth Hormone Deficiency Summary

Adult Growth Hormone Deficiency (GHD)	
Disease	GH deficient children who grow up or acquired GH deficiency in adulthood
Causes	If acquired, may be from pituitary or hypothalamic disease, pituitary tumor, radiation, trauma, etc.
Epidemiology	~14,000 adult patients treated with daily GH in the US
Symptoms	Body composition changes such as decreased lean mass and increased fat mass; skeletal abnormalities; cardiovascular issues; premature mortality
Diagnosis	IGF-I levels; provocative growth hormone testing
Current Treatments	Daily subcutaneous injections of GH (recombinant)

Source: Company Data, Morgan Stanley Research

Below, we address in more detail:
1) efficacy data which has looked solid at 3 months,
2) safety data, which has been mostly unremarkable,
3) The **phase 3 plan** in pediatric growth hormone deficiency and potentially other indications, and
4) the large WW commercial opportunity.

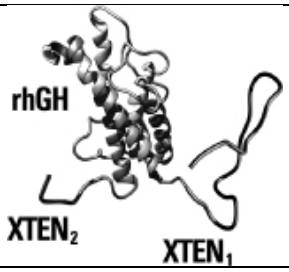
1) Efficacy at 3 Months Is On Track

This section describes
a) VRS-317's unique XTEN technology, which allows the long drug half-life,
b) the commonly evaluated trial endpoints in GH trials,
c) the Ph 2 data to date in pediatric GHD pts, and
d) Ph 1 adult GHD and Ph 1 pediatric GHD data.

a) XTEN Technology

Versartis employs a unique technology, XTEN, which was developed at Amunix (VSAR 1% royalty) and is designed to extend the drug's half-life (Ex. 9). XTEN is composed of sequences of hydrophilic amino acids that, in the case of VRS-317, are connected to the core growth hormone molecule. While daily growth hormone may have a half-life of between 2 and 4 hours, VRS-317 has a half-life of 131 hours in adults when dosed at 0.8 mg/kg (the highest dose tested in adults).

Exhibit 9
XTEN Technology



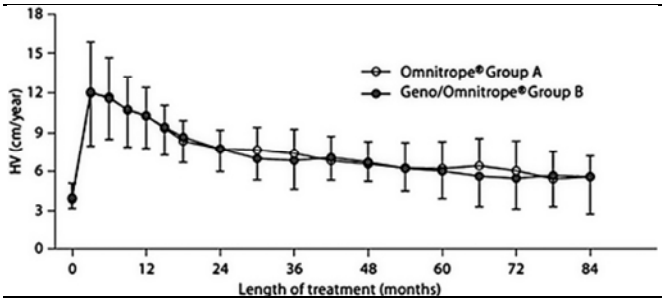
Source: Company Data, Morgan Stanley Research

Humans clear growth hormone in two ways – kidney excretion and receptor mediated clearance. The addition of XTEN1 increases the size of the drug and reduces the clearance via the kidney. XTEN2's function is to decrease receptor binding affinity in order for the drug to stay in the bloodstream longer. Multiple other companies have attempted to increase the GH size to reduce kidney clearance, typically via PEG-ylation, with the hope of weekly dosed (QW) drug. However, we see the at first counterintuitive reduced receptor binding affinity afforded VRS-317 via XTEN2 as a key differentiating factor that allows Versartis's drug to have extended exposure.

b) Pediatric Trial Endpoints
Height velocity and IGF-1 (insulin-like growth factor-1) are the two key endpoints to focus on in pediatric growth hormone trials, including pediatric GHD, Turner's Syndrome, etc. For height velocity, the typical primary/approvable endpoint, 12 months tends to be the approvable timeframe. IGF-1 levels also need to be positively impacted, which in most patients translates into good height velocity. In addition for IGF-1 there are some safety nuances we will discuss below.

Height velocity, a measure of growth trends, is the most important parameter for clinical efficacy in pediatric growth hormone deficiency. The goal of therapy is to increase the final adult height of patients, and height velocity helps predict that. Patients tend to have higher height velocity in the initial GH treatment year (the so called catch-up phase) and then it tends to moderate after that (Ex. 10).

Exhibit 10
Sample Growth Hormone Curves



Source: Company Data, Morgan Stanley Research

The approvable FDA endpoint for pediatric GHD is 12 month height velocity. Our diligence suggests that 12 month height velocity is predicted by earlier height velocity measurements, such as those at 3 and 6 months.

In the Ph 2 trial, Versartis is using age-matched historical controls from the KIGS database (Pfizer's database), which is based on typical European dosing, instead of a separate control arm. While active controlled data will be the gold standard in Ph 3, we are able to gain comfort in the use of historical controls for several reasons. 1) Nutropin Depot was FDA approved using matched historical controls in Ph 3, signaling the FDA's support of this type of analysis. 2) Growth hormone databases such as KIGS are large, thorough, and published in peer reviewed journals.

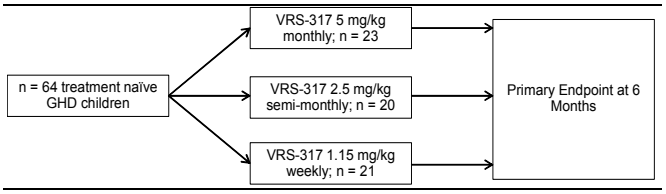
IGF-1 is an important mediator of growth and is stimulated downstream of GH. IGF-1 levels are low in patients with GHD. IGF-1 SDS (standard deviation score) looks at the IGF-1 for a patient vs. the mean for normal patients of the same age and gender as levels can be highly dependent on these variables. The goal of therapy in pediatric GHD patients is to increase IGF-1 levels to slightly higher than average, but to avoid exposure to significantly elevated IGF-1 levels (discussed in safety section). In Ph 2, Versartis is targeting an IGF-1 level of 0.5 SDS.

Endpoints for adult trials are different from pediatric trials as the goal of growth hormone therapy in adults is to restore normal body composition, not promote height growth. As a result, relevant endpoints for approval include 12 month changes in body composition such as a reduction in fat mass or an increase in lean body mass.

As body composition changes may not be evident in trials <12 months, IGF-1 levels can be used to determine interim targets for adults. The goal of treatment is to increase IGF-1 levels to within the normal range. Typically, 1.5 IGF-1 SDS is used as a benchmark, though some trials have used higher IGF-1 SDS which we believe is a less stringent method.

c) Ph 2a 3 Month Data
Versartis is running a 6 month trial in 64 treatment naïve growth hormone deficient children (Ex. 11). The study is testing three different dosing intervals for VRS-317 (weekly, semi-monthly, and monthly), all of which deliver the same monthly dose of VRS-317 and are intended to be equivalent to ~30 µg/kg/day of daily growth hormone. The trial is not actively controlled, but uses age-matched historical controls.

Exhibit 11
Ph 2a Trial Design



Source: Company Data, Morgan Stanley Research

Dosing: Versartis selected a VRS-317 dose that was equivalent to the ~30 µg/kg/day daily GH dose in order to allow for broad use across geographies. While some physicians in the US prescribe growth hormone at higher doses (up to ~43 µg/kg/day), EU physicians tend not to.

Exhibit 12
US Daily GH vs. EU Daily GH vs. VRS-317 Dosing

Typical US Dose	Typical EU Dose	Likely VRS-317 Ph 3 Dose	Equivalent VRS-317 Ph 3 Dose in Daily Dose
~30 - 43 µg/kg/day	~30 µg/kg/day	5 mg/kg once monthly, 2.5 mg/kg every other week, or 1.15mg/kg weekly	~30 µg/kg/day

Source: Company Data, Morgan Stanley Research

In addition to the dosing variety that is used clinically, daily growth hormones are labeled for a variety of dose ranges (Ex. 13).

Exhibit 13
US Labels for Daily GH Varies

Company	Drug	Daily Dose (mcg/kg/day) Low	High	Up to
Novo	Norditropin	24	34	
LLY	Humotrope	26	43	
PFE	Genotropin	23	34	
DNA	Nutropin			43
Sandoz	Omnitrope	23	34	

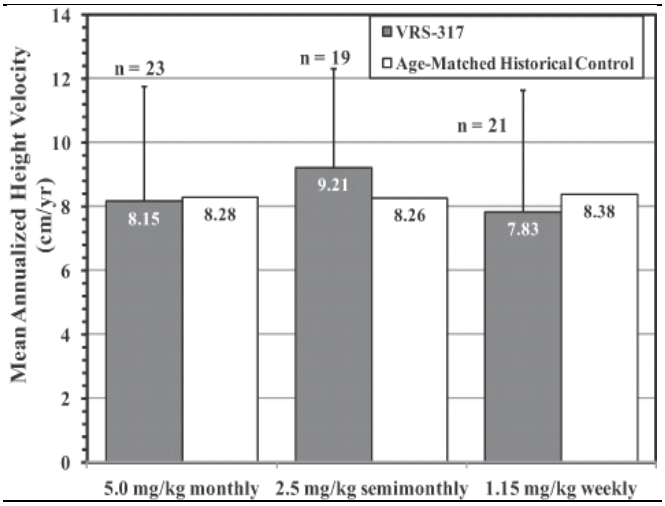
Source: Company Data, Morgan Stanley Research

In the end, the most important thing for VRS-317 dosing is that physicians and patients feel they are achieving their target growth rates without exceeding important IGF-1 thresholds or having excess safety problems.

3 Month Height Velocity Data: Three month data from the Ph 2a trial looks solid to us (Ex. 14). Three month mean annualized height velocity data is comparable to aged-matched historical controls who were dosed with similar levels of daily growth hormone. This is the key efficacy data that allows us to gain conviction in 6 and 12 month height velocity trial results.

Importantly, we note that all dosing frequencies showed good height velocity data. This preserves the company's optionality for dosing in the Ph 3 trial.

Exhibit 14
Ph 2 Trial in GHD Children



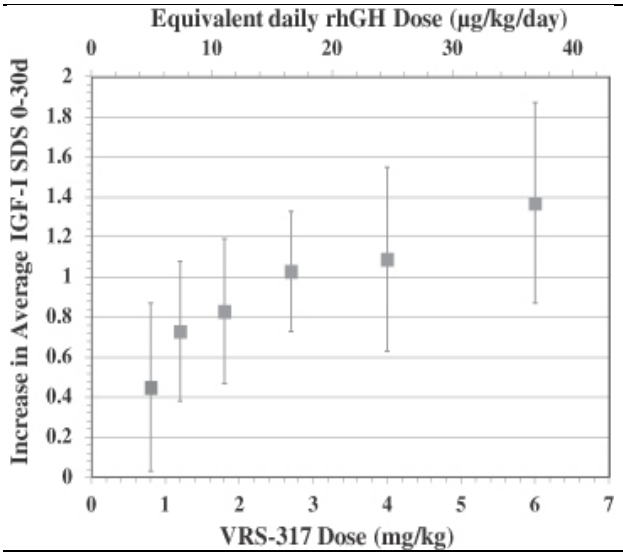
Source: Company Data, Morgan Stanley Research

IGF-1 Data: IGF-1 levels were increased in the Ph 2a trial, and the semi-monthly and monthly groups both had an average IGF-1 SDS change from day 1-30 of above 1. We see these results as indicative of positively trending IGF-1 efficacy data, and will look to see that the average IGF-1 level settles closer to Versartis' target of +0.5 SDS vs. normal with further dosing. Two months of dosing resulted in higher peak IGF-1 levels than one month of dosing, which leads us to believe that the IGF-1 effect (IGF-1 level increases that come with prolonged GH dosing) may be kicking in.

c) Ph 1 in GHD Children and Ph 1 in GHD adults
Prior to the Ph 2a trial, Versartis ran two separate single dose trials, one in adults and one in children.

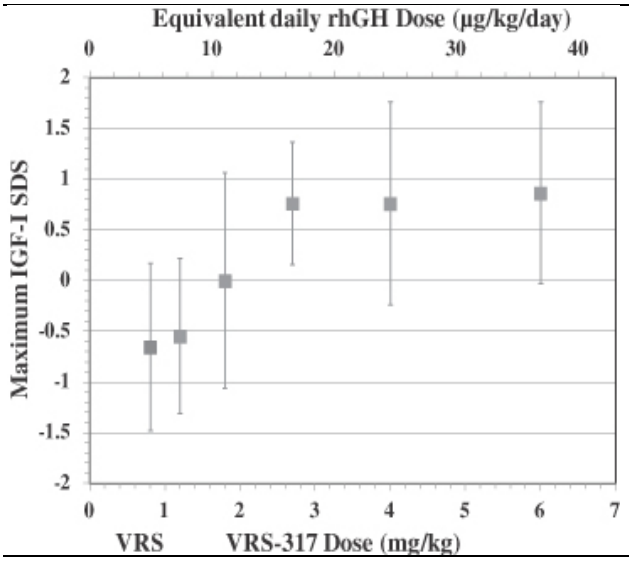
The Ph 1b trial tested VRS-317 at doses of 0.8 to 6 mg/kg in 48 GHD children. The trial achieved targeted and dose dependent IGF-1 responses (Ex. 15-16).

Exhibit 15
Ph 1b Trial in GHD Children



Source: Company Data, Morgan Stanley Research

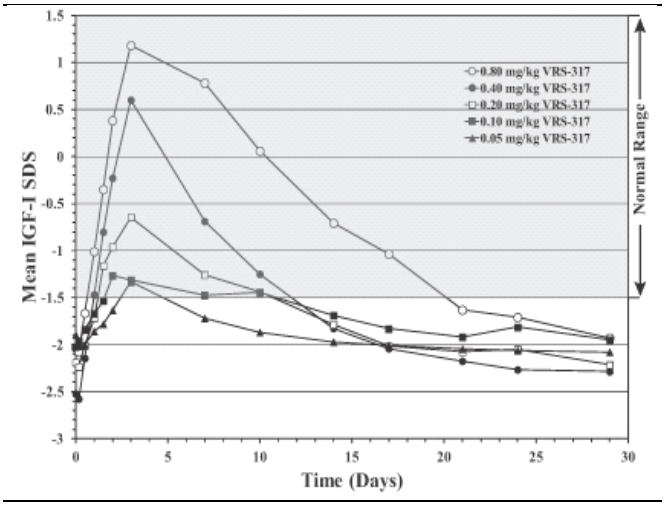
Exhibit 16
Ph 1b Trial in GHD Children



Source: Company Data, Morgan Stanley Research

A single dose of VRS-317 at levels from 0.05 – 0.8 mg/kg was tested in 50 adult GHD patients that were on stable doses of daily growth hormone and withdrawn from daily therapy until IGF-1 levels were below a pre-specified level. VRS-317 showed a dose dependent response with normalization of IGF-1 levels (IGF-1 SDS between -1.5 and 1.5) for ~3 weeks at the 0.8 mg/kg dose (Ex. 17).

Exhibit 17
Ph 1a Trial in Adult GHD Patients



Source: Company Data, Morgan Stanley Research

2) Safety OK So Far

VRS-317 overall has a clean safety profile. IGF-1 levels being too high, local injection reactions (lipoatrophy/nodules), and systemic reactions are the biggest safety foci for us when analyzing long-acting growth hormones, and VRS-317 looks clean so far.

a) Injection Site Reactions and Lipoatrophy/Nodules

Lipoatrophy is the localized loss of fat tissue and is one of the major safety findings that has limited development or market uptake of other long-acting growth hormone products. This is primarily an issue for Depot based drugs, where a pool of the hormone sits under the skin for an extended period of time.

For VRS-317, we would not expect lipoatrophy as the drug does not sit as a depot. There were no patients with lipoatrophy or nodules in the Ph 2a trial. Given that Nutropin depot had lipoatrophy rates of ~11% in Ph 3, and lipoatrophy started within the first couple of months on drug, we would expect to have seen lipoatrophy in the VRS-317 program so far if this was a significant safety issue for the drug.

~30-40% of patients had injection site discomfort, which typically lasted less than 30 minutes. We do not view injection site discomfort as a limitation for drug uptake as it appears to be transient and likely to occur only monthly, semi-monthly, or weekly depending on final VRS-317 dosing. Versartis plans to use a more concentrated formulation for Ph 3 (125 mg/mL vs. 50 mg/mL). This may mitigate some of the injection reactions as some patients in Ph 2 required two

injections, which may have increased injection site discomfort.

b) IGF-1 Levels
Physicians and regulatory authorities (especially in Europe) are concerned about IGF-1 levels that are too high. IGF-1 is a growth factor, and thus abnormally high levels pose a theoretical increased cancer risk due to overly stimulated growth. IGF-1 levels above 3 SDS are generally viewed as a "red flag" event, and physicians would ideally prefer to have sustained levels <2 SDS to leave some safety margin. IGF-1 levels above 2 SDS that are transient (i.e. are above 2 SDS on one visit but below 2 SDS on the next visit) are acceptable and seen in most daily GH labels.

In the Ph 2a trial, there were three transient cases of IGF-1 above 2 SDS (values of 2.01, 2.05, and 2.12), with the subsequent measures being below 2 SDS. There were no cases of IGF-1 above 3 SDS so far. We do not think these 3 excursions of IGF-1 >2 SDS are concerning as levels >2 SDS were not sustained.

c) Systemic Reactions and Antibodies
In the Ph 2a trial, one patient had a maculopopular, urticarial rash and dropped out of the trial (thus has limited follow-up). While we will be closely following VRS-317's safety profile to see if any other incidences of rash occur, we are comforted by the fact that a) this patient's rash was not viewed as a concerning type, and b) a work-up for atopy was pursued.

There have been some anti-drug antibodies noted so far, similar to other GH preparations. Importantly, a) the antibodies are to the GH portion, not the XTEN portion, b) the efficacy and safety have been similar with or without antibodies, and c) we understand the rates are not dissimilar from daily GH rates. The XTEN portion was designed to be non-immunogenic, and this seems to be holding true so far.

3) Path Forward Relatively Clear

Ph 2a Trial in GHD Children: Versartis plans to release 6 month VRS-317 data mid-year 2014. Patients in the Ph 2a trial may enroll in the extension trial (discussed below), and as a result we should get longer term data updates over time with dosing to at least 12 months. Given the positive height velocity data at 3 months and our diligence which suggests that 3 month height velocity data is indicative of 6 month and 12 month height velocity data, we are optimistic heading into these incremental data updates.

One interesting point to look out for in the 6 month data will be if repeat dosing helps to augment IGF-1 levels. We will be looking to see if VRS-317 meets the IGF-1 bar of 0.5 SDS that the company has targeted with repeat dosing.

Ph 3 Trial in GHD Children: A single, 12 month pivotal trial will likely be required for approval. The trial is likely to initiate in early 2015, with interim 6 month data by the end of 2016 and full top-line 12 month data in 1H17.

Versartis plans to enroll ~160 GHD children naïve to growth hormone therapy and to randomize the patients to two VRS-317 arms or daily GH. The VRS-317 arms will be either two different dosing intervals at the same total monthly dose or two different doses at the same dosing interval. Seeing as weekly, semi-monthly, and monthly dosing have all shown solid height velocity data so far, Versartis has options when it comes to choosing various dosing frequencies. The primary endpoint will be non-inferiority on 12 month mean height velocity, an endpoint we expect the drug to be successful with given 3 month data so far.

Two key risks worth noting heading into Ph 3 include the current manufacturing status of the drug and the EU Pediatric Investigation Plan (PIP).

From a manufacturing perspective, the company recently switched manufacturers, with the new one being Boehringer Ingelheim (BI). The FDA placed the BI material on partial clinical hold with questions, as we understand it, relating to room temperature (25°C) stability. The company notes the drug is typically transported and stored at 5°C, and the BI material has shown enhanced purity and stability vs the prior material. They expect this hold will be removed soon, without any disruption to Ph 2 extension dosing (see below) or Ph 3 start timelines.

The company recently was notified by the EMEA that their PIP was rejected. This PIP is either agreed upon or not by a specific subgroup within the EMEA, and is meant to guide the next steps of pediatric drug development. Our understanding is that this decision was based on a question of clinical relevance and safety of a long-acting growth hormone in light of daily GH availability.

However, while the PIP was rejected the company did receive a PIP waiver. We understand that with a waiver, the next step would be to discuss the Ph 3 design with a more clinically and scientifically focused group within the EMEA, including pediatric endocrinologists (the target prescriber). We expect that an agreement to move forward in kids will be the result of these follow-up meetings, which are supposed

to occur this year. If agreed upon, the company does not need to go back and re-try for a PIP approval.

Seeing as the EMEA granted orphan designation for the drug, despite there being daily GH drugs on the market, we believe that at least part of the EMEA sees value in this product. Also, we note that given the clean safety profile, the solid efficacy to date, and the proven value of high compliance with GH drugs, there should be ways to negotiate a path forward. The worst case scenario would be no EU involvement in the pediatric GHD program, which at this point we see as very unlikely.

Ph 2 and Ph 3 Extension Trial in GHD Children: Up to ~250 GHD children will be enrolled in an extension trial following the Ph 2 and Ph 3 trials. As the Ph 3 trial will have a daily growth hormone arm, Versartis will be able to collect data on patients that "switch" from daily growth hormone to VRS-317, which we see as important commercially. Patients in this trial may initially be maintained on the same dose from the Ph 2 or 3 trial, and then be switched to the dose/regimen that will be filed for approval.

Versartis is currently contracting for a pen device, which they expect to be available at the time of approval. The Ph 2 and main Ph 3 dosing will be done with a vial and syringe. The company plans to begin using the pen device in the extension trial. While device is one reason patients may prefer one growth hormone over another if choice is available, we see this as less of an issue with a long acting GH competing against daily GH. If multiple long-acting GHs are available, we see this becoming a larger point of differentiation. We do not expect pen development to progress until the drug manufacturing is fully up to scale and signed off by the FDA.

Japan Program: Versartis plans to initiate bridging and/or Ph 2/3 efficacy trials for Japanese approval. Management sees Japan as a unique and large opportunity. **The total growth hormone market in Japan is $600mn (mostly pediatric GHD),** with a cost per patient preserved at a price similar to the US price despite using less drug on average per patient. We expect Versartis to ultimately partner this drug for commercialization purposes, but perform some or all of the development in the near term as a) it will mirror the US/EU program in terms of pivotal trial, and b) a further de-risked asset should garner more attractive economics from a partner.

Ph 2/3 Trial in GHD Adults: A study in GHD adults may initiate post-Ph 2 data in GHD children. Based on the approvable endpoints for other drugs in adult GHD, the primary endpoint for trials in GHD adults is likely to be a change in body composition, such as a reduction in fat mass or an increase in lean body mass, at 12 months. We assume some incremental off-label use in this population in our model.

4) Commercial Opportunity is Large

The daily GH market is a large, $3+bn market. Versartis is initially planning to target the pediatric growth hormone deficiency segment (~50% of the total WW market). Our diligence has focused on pediatric GHD, including a) the current daily standard of care, b) the unmet need for long-acting therapies, c) the potential for other indications beyond pediatric GHD patients, and d) the competitive landscape.

a) Pediatric Growth Hormone Deficiency

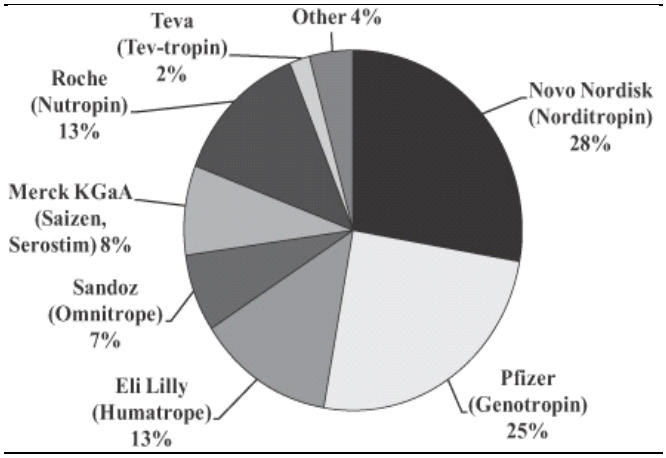
Children with pediatric GHD have lower height growth vs. similarly aged peers as a result of documented low growth hormone secretion (what differentiates GHD vs. ISS). Patients are often diagnosed via low IGF-1 levels and provocative growth hormone testing after short stature symptoms emerge. The disease may be idiopathic or may be caused by a mutation in cells responsible for producing human growth hormone. It manifests itself via short stature, obesity in some patients, delayed/poor skeletal mineralization and muscle growth, and a high-risk lipid profile. There are ~19-20k children treated with daily GH in the US.

b) Daily Growth Hormone – Standard of Care

Standard of care for GHD is daily injections of growth hormone. Children are often treated from around the time they are diagnosed (~ 8-9 years old on average) through puberty, at least. Starting treatment as early as possible allows for the best outcomes. Higher doses of GH are often required in puberty.

The market is fragmented with ~7 recombinant daily growth hormone drugs on the market (Ex. 18). The two largest players are Pfizer's Genotropin and Novo Nordisk's Norditropin, both of which have ~1/4 of the market each.

Exhibit 18
There Are 7+ Daily GH Drugs on the Market

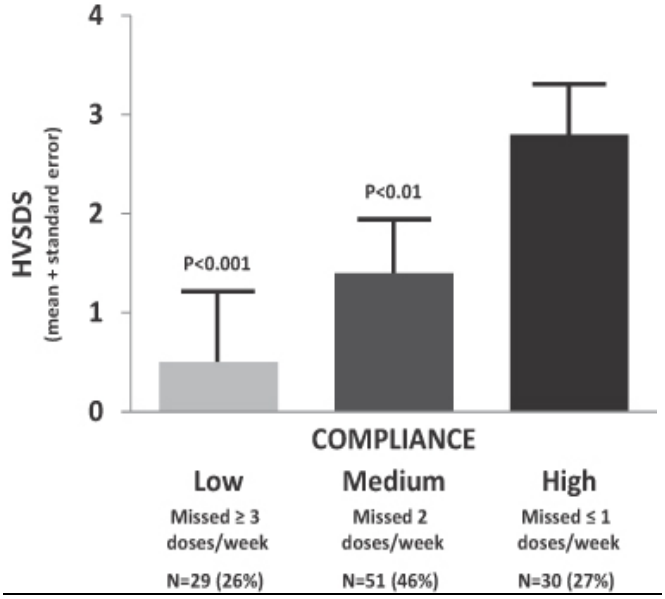


Source: Company Data, Morgan Stanley Research

Our diligence suggests that physicians mostly view daily growth hormone drugs as interchangeable. Differentiation that helps drive usage when choice is available may be due to pen device (advantage is that patients do not need to draw medicine from vial or see the needle entering the skin) and patient support. Often, however, payors dictate drug choice through formulary controls. While formulary placement is likely at least partially rebate driven, it is worth noting that the generic players in the mkt have a minority of share.

c) Unmet Need for Long-Acting Growth Hormones
Daily growth hormone is difficult to comply and persist with over time given the burden of daily injections and a lack of immediate life-threatening implications from non-compliance. These issues are particularly acute in children, who may resist daily injections. Compliance and persistence are two key drivers of sub-optimal outcomes, including decreased height velocity growth and decreased final height (Ex. 19).

Exhibit 19
Low Compliance Leads to Poor Height Velocity



Source: Company Data, Morgan Stanley Research

As long-acting products may potentially have improved compliance and/or persistence, they may lead to improved final height vs. daily therapies. Physicians consistently expressed a desire for long-acting growth hormone for these reasons, and we expect that switching from a daily to a long acting product may be a significant improvement for patients.

Given solid data across all doses tested in Ph 2a so far, VRS-317 may be able to be dosed weekly, semi-monthly, or monthly. All of these options would be significant improvements over the current burden of daily therapy. We view monthly therapy as most ideal scenario as this dosing frequency would have longer timelines between doses though either monthly or semi-monthly dosing would differentiate VRS-317 vs. other potential long-acting growth hormone products as most are tested with weekly dosing.

d) Potential Opportunity Beyond Pediatric GHD
The main markets beyond pediatric growth hormone deficiency include adult growth hormone deficiency, idiopathic short stature (ISS), Turner Syndrome, etc (Ex. 20). We model some off-label use in these markets (<20% in all geographies, much less ex-US), but do not assume that VRS-317 is approved broadly for other indications. We see these markets as a significant source of potential upside over time, and expect Versartis to run trials in some or all of them.

Exhibit 20
Major Markets for Other Indications

	US	EU	Japan	Total
Pediatric GHD	$500	$600	$500	$1,600
Adult GHD	$100	$200	$0	$300
ISS	$200	-	-	$200
Turner Syndrome	$100	$100	$100	$300
Other	$300	$200	$0	$500
Total	$1,200	$1,100	$600	$2,900

Source: Company Data, Morgan Stanley Research

Adult Growth Hormone Deficiency: This market is composed of GH deficient children who grow up or adults who acquire GH deficiency in adulthood. Patients may acquire GH deficiency from pituitary or hypothalamic disease, pituitary tumor, radiation, trauma, etc. The disease manifests via a change in body composition. Patients often have decreased lean mass, increased fat mass, skeletal abnormalities, cardiovascular issues, and may be at risk for premature mortality.

Similar to pediatric GHD patients, adult GHD patients are treated with daily subcutaneous injections of growth hormone. However, patients are typically treated at lower doses than pediatric GHD patients as older patients require less growth hormone. Doses are titrated to optimize IGF-1 levels. This disease accounts for ~10% of WW GH sales.

Idiopathic Short Stature (ISS): This disease is classified as short stature not associated with definitive growth hormone deficiency. Patients are diagnosed by height >2 standard deviations below normal for age and low growth rates, with patients unlikely to attain normal final height if left untreated. **Daily growth hormone is only approved in the US for this indication (~15-20% of US sales), and patients tend not to be treated for this ex-US.** We see similar dynamics in this market as in the pediatric GHD market given that children may resist complying with the daily injection burden.

Turner Syndrome: Patients with Turner Syndrome have one of two X chromosomes missing or incomplete. Symptoms include short stature, webbed neck, lack of sexual development at puberty, cardiopulmonary disease, etc. Growth hormone is one therapy used by these patients (~10% of WW growth hormone sales) to improve final adult height.

Other: Other indications account for ~20% of WW growth hormone sales). Growth hormone is used for Prader-Willi syndrome, a genetic disorder with insatiable appetite that can lead to severe obesity; small for gestational age, children born smaller in size or weight than normal; and Noonan Syndrome, a genetic disorder with abnormal body development.

e) Competitive Landscape
There have been many attempts to develop long-acting growth hormones but many of these attempts have either failed or been removed from the market, due to either safety or efficacy issues. One product, Nutropin Depot, was FDA approved, but was ultimately removed from the market. We understand it was removed for a mixture of safety, efficacy, and manufacturing hurdles.

Prior attempts have mostly either focused on PEGylation and/or depot formulation. PEGylation involves attaching polyethylene glycol (PEG) to a molecule to a) increase drug size, which reduces renal clearance resulting in a longer half-life, and b) reduce the immune response. Depot drugs slowly release their active drug component over a long period of time.

The main safety issue that has hampered drug development has been lipoatrophy, the localized loss of fat tissue. In the Nutropin Depot Ph 3, this was seen in ~11% of patients. Skin nodules also occurred, which may gradually disappear as drug degrades and growth hormone is released. Some products have also struggled to achieve a weekly dosing profile with similar efficacy to daily growth hormone.

There are ~11 drugs in development we are aware of, though some have not advanced in clinical development recently. With little efficacy/safety data to comment on for most products, we see VRS-317 differentiated on both dosing (VRS-317 is potentially longer that once weekly dosing vs. competitors that are mostly weekly) and stage of development. Our model assumptions (see below) do not preclude other long-acting competitors from reaching the market. However, at this time we view VRS-317 as having a potential best in class long-acting profile.

Below, we briefly comment on key events for the drugs that are more advanced, with a more comprehensive table on the next page.

hGH-CTP / MOD-4023 (OPKO): In Ph 3 in adults and Ph 2 in children, with potential for Ph 2 data in 2014.

ACP-001 (Ascendis): 6 month Ph 2 data in children expected February 2015.

ARX201 (Ambrx): Company says will initiate Ph 3 in adults

and Ph 2 in pediatrics in 2014.

NN8640 (Novo Nordisk): Ph 3 in children is ongoing. A decision to pursue Ph 3 is likely to be made mid-14.

LB03002 (LG/Bioton): This drug is approved in the EU but is not marketed. It is approved and marketed in Korea. US status is unclear.

Exhibit 21

Competitive Landscape

Drug	Company	Mechanism	Tested Dosing	Phase of Development - Children	Phase of Development - Adults	Next Expected Update - Children	Next Expected Update - Adults
hGH-CTP / MOD-4023	OPKO (from Prolor acquisition)	CTP (C-terminal peptide)	Once weekly	Ph 2 ongoing	Ph 3 ongoing	Potential Ph 2 data 2014	Potential Ph 3 data 2015; File in 2015
ACP-001	Ascendis	Circulating PEG-Depot	Once weekly	Ph 2 ongoing	4 week Ph 2 completed (top-line data released in 2011)	Top-line Ph 2 data February 2015	n/a
LB03002 / Declage (Korea) / Somatropin Biopartners (EU)	LG in Korea; Biopartners / Bioton in the EU	Depot	Once weekly	Approved and marketed in Korea; Approved EU August 2013; US status is unclear		"Bioton is to sell this product in cooperation with an international pharmaceutical company"	
NN8640 / NNC0195-0092	Novo Nordisk	Chemically modified hGH	Once weekly	Single dose Ph 1 ongoing	Ph 1 multi-dose complete	Ph 1 data likely in 2014	Decide whether to progress into Ph 3 in mid-14
ARX201	Ambrx	PEG	Once weekly	n/a	Merck Serono returned rights following adult Ph 2 trial (top-line data released in 2008)	Initiate Ph 2 in 2014	Initiate Ph 3 in 2014
ALRN-5281	Aileron Therapeutics	Stapled peptide - Oral formulation	Once weekly	n/a	Ph 1 single dose in healthies completed in 2013	n/a	n/a
CP024	Critical Pharmaceuticals	Nasal formulation	Twice daily	n/a	Ph 1 in healthies completed in 2013	n/a	n/a
DA-3003	Dong-A Pharmaceutical	n/a	n/a	Preclinical study published in 2009 and no news since		n/a	n/a
PEG-hGH	GeneScience Pharmaceuticals	PEG	n/a	Ph 3 completed in 2011 in China; no news since (to the best of our knowledge)	n/a	n/a	n/a
LAPS-hGH / HM10560A	Hanmi Pharmaceutical Co	Non-glycosylated Fc	Every other week	n/a	Ph 2 ongoing in Korea and Europe	n/a	Ph 3 data
GX-H9	Handok / Genexine	hyFc (hybrid Fc)	Every other week or monthly	n/a	Ph 1 in healthies ongoing in Korea and Europe	n/a	Ph 1 data 2014; Initiate Ph 2 2H14

Source: Company Data, Morgan Stanley Research

f) We see ~$1.3bn WW market potential for VRS-317. We model peak (2025) WW VRS-317 sales of ~$1.3bn with ~$1.1bn to Versartis. Our assumptions include:
1) VRS-317 launches in the US in 2018, the EU in 2019, and Japan in 2019,
2) VRS-317 captures ~45% of the pediatric growth hormone market in the US, EU, and Japan,
3) VRS-317 has some off-label use in other indications, but does not achieve significant penetration (<20% in US, less ex-US),
4) Similar VRS-317 pricing to daily growth hormones, and
5) Versartis partners VRS-317 in the Japanese market with a 25% royalty.

Exhibit 22

Market Model for VRS-317

US MARKET ($mn)	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
Births	3,953,590	3,993,126	4,033,057	4,073,388	4,114,122	4,155,263	4,196,815	4,238,784	4,281,171	4,323,983	4,367,223	4,410,895	4,455,004
YoY Growth		1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
GHD MARKET													
Begin. Yr GHD Children	20,000	20,230	20,460	20,692	20,924	21,158	21,393	21,630	21,868	22,107	22,347	22,589	22,833
Incident GHD Children	1,130	1,141	1,152	1,164	1,175	1,187	1,199	1,211	1,223	1,235	1,248	1,260	1,273
% of births	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%	0.03%
Discontinuations	900	910	921	931	942	952	963	973	984	995	1,006	1,017	1,027
% of Begin Yr GHD Children	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
End of Yr GHD Children	20,230	20,460	20,692	20,924	21,158	21,393	21,630	21,868	22,107	22,347	22,589	22,833	23,079
YoY growth		1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%
VRS-317 PENETRATION													
Beginning yr pts						0	2,235	5,248	7,362	8,123	8,858	9,571	9,938
VRS317 new additions - incident patients						119	240	303	367	402	437	473	509
% of GH Deficient Patients						10%	20%	25%	30%	33%	35%	38%	40%
VRS317 new additions - SA switches						2,116	2,874	2,048	725	699	674	325	322
% of GH Deficient Patients						10%	15%	13%	5%	5%	5%	3%	3%
Total VRS317 new additions						2,235	3,114	2,351	1,092	1,101	1,111	798	832
Deaths/Discon						0	101	236	331	366	399	431	447
% of chronic VRS317 treated						5%	5%	5%	5%	5%	5%	5%	5%
End of Year Patients						2,235	5,248	7,362	8,123	8,858	9,571	9,938	10,322
End of Yr share (% GHD pts)						10%	24%	34%	37%	40%	42%	44%	45%
Cost per month						$2,500	$2,575	$2,652	$2,732	$2,814	$2,898	$2,985	$3,075
Price Increase YoY							3%	3%	3%	3%	3%	3%	3%
New pt duration of therapy (mo)						6	6	6	6	6	6	6	6
Existing pt duration of therapy (mo)						11	11	11	11	11	11	11	11
New pt revenue						34	48	37	18	19	19	14	15
Existing pt revenue						0	62	150	216	246	276	307	329
US VRS-317 Pediatric GHD Sales						**$34**	**$110**	**$187**	**$234**	**$264**	**$295**	**$321**	**$344**
US Pediatric GHD - new patient revenue						$18	$19	$19	$20	$21	$22	$23	$23
US Pediatric GHD - existing patient revenue						$569	$592	$617	$642	$669	$696	$725	$755
US Pediatric GHD Sales						**$587**	**$611**	**$636**	**$662**	**$690**	**$718**	**$748**	**$778**
YoY Growth							4%	4%	4%	4%	4%	4%	4%
US Adult GHD Sales						$117	$122	$127	$132	$138	$144	$150	$156
% of Pediatric GHD sales						20%	20%	20%	20%	20%	20%	20%	20%
VR-317 Share - Adult GHD	2						1%	4%	7%	10%	13%	15%	16%
US VRS-317 Adult GHD Sales							**$1**	**$5**	**$9**	**$14**	**$19**	**$22**	**$25**
US ISS Sales						$235	$244	$254	$265	$276	$287	$299	$311
% of Pediatric GHD sales						40%	40%	40%	40%	40%	40%	40%	40%
VR-317 Share - ISS	2						1%	5%	10%	12%	14%	16%	18%
US VRS-317 ISS Sales							**$2**	**$13**	**$26**	**$33**	**$40**	**$48**	**$56**
US Turner Sales						$117	$122	$127	$132	$138	$144	$150	$156
% of Pediatric GHD sales						20%	20%	20%	20%	20%	20%	20%	20%
VR-317 Share - Turner	2						1%	4%	7%	10%	13%	15%	16%
US VRS-317 Turner Sales							**$1**	**$5**	**$9**	**$14**	**$19**	**$22**	**$25**
US Other Sales						$352	$367	$382	$397	$414	$431	$449	$467
% of Pediatric GHD sales						60%	60%	60%	60%	60%	60%	60%	60%
VR-317 Share - Other	2						1%	4%	7%	10%	13%	15%	16%
US VRS-317 Other Sales							**$4**	**$15**	**$28**	**$41**	**$56**	**$65**	**$75**
TOTAL US VRS-317 SALES						**$34**	**$119**	**$225**	**$307**	**$366**	**$429**	**$478**	**$524**

EU MARKET ($mn)	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
EU Pediatric GHD Sales						$704	$733	$763	$795	$828	$862	$897	$934
% of US Pediatric GHD Sales						120%	120%	120%	120%	120%	120%	120%	120%
VR-317 Share - Pediatric GHD	2						10%	25%	30%	35%	40%	43%	45%
EU VRS-317 Pediatric GHD Sales							**$73**	**$191**	**$238**	**$290**	**$345**	**$381**	**$420**
EU Adult GHD Sales						$235	$244	$254	$265	$276	$287	$299	$311
% of US Adult GHD Sales						200%	200%	200%	200%	200%	200%	200%	200%
VR-317 Share - Adult GHD	2						1%	2%	2%	3%	3%	4%	4%
EU VRS-317 Adult GHD Sales							**$2**	**$4**	**$5**	**$7**	**$9**	**$10**	**$12**
EU Turner Sales						$117	$122	$127	$132	$138	$144	$150	$156
% of US Turner Sales						100%	100%	100%	100%	100%	100%	100%	100%
VR-317 Share - Turner	2						1%	2%	2%	3%	3%	4%	4%
EU VRS-317 Turner Sales							**$1**	**$2**	**$3**	**$3**	**$4**	**$5**	**$6**
EU Other Sales						$235	$244	$254	$265	$276	$287	$299	$311
% of US Other Sales						67%	67%	67%	67%	67%	67%	67%	67%
VR-317 Share - Other	2						1%	2%	2%	3%	3%	4%	4%
EU VRS-317 Other Sales							**$2**	**$4**	**$5**	**$7**	**$9**	**$10**	**$12**
TOTAL EU VRS-317 SALES						**$0**	**$79**	**$200**	**$252**	**$307**	**$366**	**$407**	**$451**

JAPAN MARKET ($mn)	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
Japan Pediatric GHD Sales						$587	$611	$636	$662	$690	$718	$748	$778
% of US Pediatric GHD Sales						100%	100%	100%	100%	100%	100%	100%	100%
VR-317 Share - Pediatric GHD	2						10%	25%	30%	35%	40%	43%	45%
Japan VRS-317 Pediatric GHD Sales								**$159**	**$199**	**$241**	**$287**	**$318**	**$350**
Japan Turner Sales						$117	$122	$127	$132	$138	$144	$150	$156
% of US Turner Sales						100%	100%	100%	100%	100%	100%	100%	100%
VR-317 Share - Turner	2						1%	1%	1%	1%	1%	1%	1%
Japan VRS-317 Turner Sales							**$1**	**$1**	**$1**	**$1**	**$1**	**$1**	**$2**
TOTAL JAPAN VRS-317 SALES							**$1**	**$160**	**$200**	**$243**	**$289**	**$319**	**$352**
TOTAL JAPAN VRS-317 REVENUE							**$0**	**$40**	**$50**	**$61**	**$72**	**$80**	**$88**
Royalty Rate							25%	25%	25%	25%	25%	25%	25%
TOTAL WW VRS-317 SALES						**$34**	**$199**	**$586**	**$759**	**$916**	**$1,084**	**$1,204**	**$1,328**
TOTAL WW VRS-317 REVENUE						**$34**	**$198**	**$466**	**$609**	**$734**	**$867**	**$965**	**$1,064**

Source: Company Data, Morgan Stanley Research

Exhibit 23

Annual Income Statement

($ in millions except per-share data)	2011A	2012A	2013A	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
Sales															
US Sales					0	0	0	34	119	225	307	366	429	478	524
EU Sales					0	0	0	0	79	200	252	307	366	407	451
Japan Sales					0	0	0	0	1	160	200	243	289	319	352
WW Sales					0	0	0	34	199	586	759	916	1,084	1,204	1,328
Revenue to Versartis															
US Sales					0	0	0	34	119	225	307	366	429	478	524
EU Sales					0	0	0	0	79	200	252	307	366	407	451
Japan Royalty					0	0	0	0	0	40	50	61	72	80	88
WW Revenue to Versartis					0	0	0	34	198	466	609	734	867	965	1,064
Other		0	0	0	0	100	0	0	0	0	0	0	0	0	0
Total Revenues	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**100.0**	**0.0**	**33.5**	**198.2**	**465.7**	**608.7**	**734.0**	**867.3**	**965.0**	**1,063.9**
YoY Revenue Growth									491%	135%	31%	21%	18%	11%	10%
COGS			0	0	0	0	0	0	10	43	56	67	72	80	88
YoY Growth					-	-	-	-	-	330.0%	31.3%	20.5%	6.3%	11.3%	10.2%
% of US Revenue								0%	5%	10%	10%	10%	9%	9%	9%
R&D	6	11	14.7	32.0	50	50	30	15	15	15	15	15	15	15	15
YoY Growth		72.7%	35.5%	117.2%	56.3%	0.0%	-40.0%	-50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
% of Revenue				-	-	*50.0%*	-	*44.8%*	*7.6%*	*3.2%*	*2.5%*	*2.0%*	*1.7%*	*1.6%*	*1.4%*
SG&A	2	2	4.3	14.0	22	34	65	93	120	122	123	119	120	122	123
YoY Growth		7.7%	130.0%	222.8%	60.0%	50.0%	92.0%	44.1%	29.5%	1.7%	0.8%	-3.2%	0.9%	0.9%	0.9%
% of Revenue				-	-	*33.6%*	-	*277.3%*	*60.7%*	*26.3%*	*20.3%*	*16.3%*	*13.9%*	*12.6%*	*11.5%*
Total Operating Expenses	**8.0**	**12.8**	**19.1**	**46.0**	**72.4**	**83.6**	**94.5**	**108.0**	**145.3**	**180.0**	**194.3**	**201.7**	**207.0**	**216.2**	**225.5**
Operating Income (Loss)	(8.0)	(12.8)	(19)	(46)	(72)	16	(95)	(74)	53	286	414	532	660	749	838
Operating Margin	-	-	-	-	-	*16.4%*	-	*(222.1%)*	*26.7%*	*61.4%*	*68.1%*	*72.5%*	*76.1%*	*77.6%*	*78.8%*
Other Income (Expense) and Interest Inco	1.1	0.1	0.914	1.0	1.4	1.4	1.4	0.7	0.6	2.2	5.1	8.6	13.0	18.3	24.3
Interest Expense	(0.13)	(0.39)	(0.128)	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pretax Income (Loss)	**($7)**	**($13)**	**($18)**	**($45)**	**($71)**	**$18**	**($93)**	**($74)**	**$54**	**$288**	**$420**	**$541**	**$673**	**$767**	**$863**
Provision For Income Taxes	0	0	0	0	0	0	0	0	0	6	113	146	182	207	233
Effective Tax Rate	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*2.1%*	*27.0%*	*27.0%*	*27.0%*	*27.0%*	*27.0%*
Non-GAAP Net Income (Loss)	**($7)**	**($13)**	**($18)**	**($45)**	**($71)**	**$18**	**($93)**	**($74)**	**$54**	**$282**	**$306**	**$395**	**$492**	**$560**	**$630**
Stock Compensation Expense	$0	$0	$0	$2	$4	$6	$8	$10	$12	$14	$16	$18	$20	$22	$24
% of Operating Expenses	1.3%	1.1%	1.1%	4.3%	5.5%	7.2%	8.5%	9.3%	8.3%	7.8%	8.2%	8.9%	9.7%	10.2%	10.6%
Non-GAAP Net Income (incl. ESO)	**($7)**	**($13)**	**($18)**	**($47)**	**($75)**	**$12**	**($101)**	**($84)**	**$42**	**$268**	**$290**	**$377**	**$472**	**$538**	**$606**
GAAP Net Income (Loss)	**($7)**	**($13)**	**($18)**	**($85)**	**($75)**	**$12**	**($101)**	**($84)**	**$42**	**$268**	**$290**	**$377**	**$472**	**$538**	**$606**
EPS, Basic (Non-GAAP, Pre-ESO)	($7.26)	($9.87)	($3.53)	($2.38)	($2.88)	$0.68	($3.34)	($2.59)	$1.85	$9.54	$10.20	$12.95	$15.90	$17.88	$19.88
EPS, Diluted (Non-GAAP, Post-ESO)	($7.37)	($9.97)	($3.57)	($2.48)	($3.04)	$0.41	($3.63)	($2.94)	$1.33	$8.47	$9.07	$11.66	$14.46	$16.38	$18.33
EPS - Diluted (GAAP, Post- ESO)	**($7.37)**	**($9.97)**	**($3.57)**	**($4.49)**	**($3.04)**	**$0.41**	**($3.63)**	**($2.94)**	**$1.33**	**$8.47**	**$9.07**	**$11.66**	**$14.46**	**$16.38**	**$18.33**
Shares Outstanding - Basic	0.97	1.33	5.18	18.93	24.68	26.28	27.87	28.44	28.99	29.52	30.02	30.49	30.92	31.32	31.68
Shares Outstanding - Diluted	0.97	1.33	5.18	18.93	24.68	28.70	27.87	28.44	31.20	31.62	31.99	32.32	32.61	32.85	33.06

Source: Company Data, Morgan Stanley Research

Exhibit 24

Balance Sheet

($ in millions)	2011A	2012A	2013A	2014E	2015E	2016E	2017E	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E
Assets															
Cash and Cash Equivalents	0.9	0.3	13.2	170.6	105.0	184.4	104.1	33.3	82.3	353.9	660.3	1,058.3	1,550.4	2,114.2	2,748.4
Restricted Cash	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Short-term Investments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Prepaid Expenses and Other Current Assets	1.5	1.6	1.0	2.4	3.7	4.3	4.8	5.5	7.5	9.2	10.0	10.3	10.6	11.1	11.6
Other Receivables	0.6	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-
Inventory	-	-	-	-	-	8.0	-	2.7	14.9	32.6	39.6	44.0	52.0	57.9	63.8
Total current assets	**3.0**	**2.1**	**14.3**	**173.0**	**108.8**	**196.7**	**109.0**	**41.6**	**104.7**	**395.8**	**709.9**	**1,112.7**	**1,613.2**	**2,183.3**	**2,823.9**
Property and Equipment, Net	0.0	0.0	0.0	0.4	0.8	1.3	1.6	1.9	2.3	2.9	3.4	3.7	3.9	4.1	4.2
Other Assets	0.1	0.1	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Total assets	**3.1**	**2.2**	**14.683**	**173.8**	**110.0**	**198.4**	**111.0**	**43.9**	**107.4**	**399.1**	**713.6**	**1,116.9**	**1,617.5**	**2,187.7**	**2,828.5**
Liabilities															
Accounts Payable	0.6	1.0	0.3	0.8	1.2	1.4	1.6	1.8	2.4	3.0	3.2	3.3	3.4	3.6	3.7
Accrued Liabilities	1.1	1.4	3.7	6.9	10.1	10.9	11.3	11.9	14.5	16.2	15.5	14.1	12.4	10.8	9.0
Convertible Notes Payable	-	4.5	-	-	-	-	-	-	-	-	-	-	-	-	-
Total current liabilities	**1.7**	**6.9**	**4.0**	**7.7**	**11.3**	**12.2**	**12.9**	**13.7**	**16.9**	**19.2**	**18.7**	**17.5**	**15.8**	**14.4**	**12.7**
Convertible preferred stock warrant liability	0.2	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Convertible preferred stock call option liability	0.3	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Liabilities	**2.2**	**7.3**	**4.478**	**8.2**	**11.8**	**12.7**	**13.4**	**14.2**	**17.4**	**19.7**	**19.2**	**17.9**	**16.3**	**14.9**	**13.2**
Shareholder's Equity															
Convertible Preferred Stock	22.7	29.6	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5	57.5
Common Stock (Plus APIC)	0.2	0.5	6.5	246.9	254.5	330.1	343.1	359.0	377.7	399.4	424.1	451.7	482.4	516.1	552.7
Accumulated Other Comprehensive Income	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Accumulated Deficit	(22.0)	(35.2)	(53.7)	(138.7)	(213.8)	(201.9)	(303.0)	(386.7)	(345.2)	(77.4)	212.8	589.7	1,061.3	1,599.3	2,205.1
Total Shareholder's Equity	**0.9**	**(5.095)**	**10.2**	**165.6**	**98.2**	**185.6**	**97.6**	**29.7**	**90.0**	**379.5**	**694.4**	**1,098.9**	**1,601.2**	**2,172.9**	**2,815.3**
Total Liabilities and Shareholder's Equity	**3.1**	**2.189**	**14.7**	**173.8**	**110.0**	**198.4**	**111.0**	**43.9**	**107.4**	**399.1**	**713.6**	**1,116.9**	**1,617.5**	**2,187.7**	**2,828.5**

Source: Company Data, Morgan Stanley Research

Exhibit 25

Cash Flow Statement

($ in millions)	2011A	2012A	2013E	2014E	2015E	2016E	2023E	2024E	2025E
CASH FLOWS FROM OPERATING ACTIVITIES									
Net Income (Loss)	(7.2)	(13.2)	(18.5)	(85.0)	(75.0)	11.8	471.6	538.0	605.8
Depreciation and Amortization	0.0	0.0	0.0	0.1	0.3	0.4	1.9	2.0	2.1
Loss on Sale of Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reserve for uncollectible receivables	0.0	0.0							
Stock Based Compensation Expense	0.1	0.1	0.2	2.0	4.0	6.0	20.0	22.0	24.0
Amortization of Debt Discount	0.1	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Non-Cash Interest Expense	0.0	0.1	0.0						
Non-Cash R&D Expense	0.0	0.0	0.0						
Remeasurement of convertible preferred stock call option liability	(1.0)	(0.1)	(1.0)						
Remeasurement of convertible preferred stock w arrantliability	(0.1)	0.0	0.0	38.0					
Change in assets and liabilities:									
Other Receivables	(0.6)	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Prepaid Expenses and Other Assets	(1.4)	(0.1)	0.3	(1.4)	(1.4)	(0.6)	(0.3)	(0.5)	(0.5)
Accounts Payable	0.2	0.4	(0.7)	0.4	0.4	0.2	0.1	0.2	0.2
Accrued Liabilities and Other Liabilities	0.6	0.3	2.3	3.2	3.2	0.7	(1.7)	(1.6)	(1.8)
Inventories	0.0	0.0	0.0	0.0	0.0	(8.0)	(8.0)	(5.9)	(5.9)
Net cash provided by (used in) operating activities	**(9.2)**	**(11.7)**	**(17.1)**	**(42.6)**	**(68.5)**	**10.6**	**483.5**	**554.3**	**623.9**
CASH FLOWS FROM INVESTING ACTIVITIES									
Purchases of Property and Equipment	(0.0)	0	(0)	(0)	(1)	(1)	(2.1)	(2.2)	(2.3)
Security Deposit for Facility Lease	(0.1)	0	0	0	0	0	0	0	0
Change in Restricted Cash	(0.0)	0	0	0	0	0	0	0	0
Purchases of Short-Term Investments	0.0	0.0	0	0	0	0	0	0	0
Proceeds from Sales of Short-Term Investments	0.0	0.0	0	0	0	0	0	0	0
Net cash used in investing activities	**(0.118)**	**0**	**(0)**	**(0)**	**(1)**	**(1)**	**(2)**	**(2)**	**(2)**
CASH FLOWS FROM FINANCING ACTIVITIES									
Proceeds from sale of option for Series A convertible preferred stock call option liability	9.6	0	0	0	0	0	0	0	0
Proceeds from Issuance of Convertible Preferred Stock	0.0	6	30	65	0	0	0	0	0
Proceeds from Issuance of Convertible Preferred Stock Warrants	0.0	1	0	0	0	0	0	0	0
Proceeds from Exercise of Common Stock Options	0.0	0	0	3	4	4	11	12	13
Proceeds from Issuance of Stock	0.0	0	0	132	0	65	0	0	0
Proceeds from Issuance of Convertible Notes Payable	0.0	5	0	0	0	0	0	0	0
Net cash provided by financing activities	**9.606**	**11.170**	**29.983**	**200.400**	**3.600**	**69.617**	**10.685**	**11.668**	**12.602**
Change in Cash and Cash Equivalents	0.300	(0.546)	12.9	157.3	(65.6)	79.4	492.2	563.8	634.2
Cash and Cash Equivalents at Beginning of Year	0.6	0.875	0.3	13.2	170.6	105.0	1,058.3	1,550.4	2,114.2
Cash and Cash Equivalents at End of Year **0.58**	**0.875**	**0.329**	**13.2**	**170.6**	**105.0**	**184.4**	**1,550.4**	**2,114.2**	**2,748.4**
Marketable Securities	**0.00**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Cash and Marketable Securities at End of Year	**0.875**	**0.329**	**13.2**	**170.6**	**105.0**	**184.4**	**1,550.4**	**2,114.2**	**2,748.4**

Source: Company Data, Morgan Stanley Research

Company Description

Versartis is a pharmaceutical company focused on endocrine disorders. Their lead drug, VRS-317, is a long-acting version of growth hormone. It is currently in development for pediatric growth hormone deficiency.

MORGAN STANLEY ModelWare	**Morgan Stanley ModelWare is a proprietary analytic framework that helps clients uncover value, adjusting for distortions and ambiguities created by local accounting regulations.** For example, ModelWare EPS adjusts for one-time events, capitalizes operating leases (where their use is significant), and converts inventory from LIFO costing to a FIFO basis. ModelWare also emphasizes the separation of operating performance of a company from its financing for a more complete view of how a company generates earnings.

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(as of March 31, 2014)

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	Coverage Universe		Investment Banking Clients (IBC)		
Stock Rating Category	Count	% of Total	Count	% of Total IBC	% of Rating Category
Overweight/Buy	**1035**	**35%**	**354**	**38%**	**34%**
Equal-weight/Hold	**1286**	**43%**	**446**	**48%**	**35%**
Not-Rated/Hold	**99**	**3%**	**24**	**3%**	**24%**
Underweight/Sell	**539**	**18%**	**105**	**11%**	**19%**
Total	**2,959**		**929**		

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months.

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Overweight (O). The stock's total return is expected to exceed the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.
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Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.
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The Americas
1585 Broadway
New York, NY 10036-8293
United States
Tel: +1 (1) 212 761 4000

Europe
20 Bank Street, Canary Wharf
London E14 4AD
United Kingdom
Tel: +44 (0) 20 7 425 8000

Japan
1-9-7 Otemachi, Chiyoda-ku
Tokyo 100-8104
Japan
Tel: +81 (0) 3 6836 5000

Asia/Pacific
1 Austin Road West
Kowloon
Hong Kong
Tel: +852 2848 5200

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Industry Coverage:Biotechnology

Company (Ticker)	Rating (as of)	Price* (04/14/2014)
David Friedman, M.D.		
Versartis, Inc. (VSAR.O)	O (04/15/2014)	$24.56
AMAG Pharmaceuticals, Inc. (AMAG.O)	E (11/21/2011)	$17.26
Akebia Therapeutics Inc (AKBA.O)	O (04/14/2014)	$21.14
Alexion Pharmaceuticals (ALXN.O)	O (09/07/2010)	$141.97
Alnylam Pharmaceuticals (ALNY.O)	E (01/14/2014)	$53.54
Auxilium Pharmaceuticals (AUXL.O)	U (03/06/2014)	$24.63
Chimerix Inc (CMRX.O)	O (05/06/2013)	$19.31
Cubist Pharmaceuticals Inc. (CBST.O)	O (11/13/2013)	$61.66
Idenix Pharmaceuticals, Inc. (IDIX.O)	E (03/18/2011)	$5.58
Incyte Corporation (INCY.O)	U (01/23/2013)	$44.32
InterMune (ITMN.O)	E (09/07/2010)	$27.01
Ironwood Pharmaceuticals, Inc. (IRWD.O)	E (04/24/2013)	$9.71
Lexicon Pharmaceuticals, Inc. (LXRX.O)	U (06/11/2013)	$1.55
NPS Pharmaceuticals (NPSP.O)	O (10/03/2012)	$23.5
Neurocrine Biosciences Inc (NBIX.O)	E (01/08/2014)	$13.03
Ophthotech Corp (OPHT.O)	O- (10/21/2013)	$31.84
Portola Pharmaceuticals Inc (PTLA.O)	O (06/17/2013)	$22.1
Relypsa, Inc. (RLYP.O)	O (12/10/2013)	$24.82
Synageva Biopharma Corp (GEVA.O)	O (04/20/2012)	$76.7
Tesaro Inc. (TSRO.O)	E (02/04/2014)	$25.17
Theravance Inc (THRX.O)	U (07/22/2013)	$27.19
Ultragenyx Pharmaceutical Inc (RARE.O)	O (02/25/2014)	$55.06
Vertex Pharmaceuticals (VRTX.O)	E (05/08/2012)	$62.44
XenoPort Inc (XNPT.O)	U (06/11/2013)	$4.18
Matthew Harrison		
Amgen Inc. (AMGN.O)	O (03/26/2014)	$113.32
Biogen Idec Inc. (BIIB.O)	O (03/26/2014)	$279.52
Celgene Corp (CELG.O)	E (03/26/2014)	$138.06
Gilead Sciences Inc. (GILD.O)	E (03/26/2014)	$66.79
Pharmacyclics Inc. (PCYC.O)	E (03/26/2014)	$88.99
Regeneron Pharmaceuticals Inc. (REGN.O)	E (03/26/2014)	$290.01