



March 11, 2020

Key Metrics

ORMP - NASDAQ	\$3.35
Pricing Date	Mar 11 2020
Price Target	\$5.50
52-Week Range	\$6.05 - \$2.32
Shares Outstanding (mm)	23.1
Market Capitalization (mm)	\$77.4
3-Mo Average Daily Volume	151,312
Institutional Ownership	13%
Debt/Total Capital	NM
ROE	NM
Book Value/Share	\$2.50
Price/Book	1.3x
Dividend Yield	NM
LTM EBITDA Margin	NM

EPS FY: August

	2019A	Prior 2020E	Curr. 2020E	Prior 2021E	Curr. 2021E
1Q-Nov	(0.25)	--	(0.15)A	--	(0.15)E
2Q-Feb	(0.21)	--	(0.14)E	--	(0.15)E
3Q-May	(0.23)	--	(0.14)E	--	(0.15)E
4Q-Aug	(0.13)	--	(0.14)E	--	(0.15)E
FY	(0.82)	--	(0.58)E	--	(0.59)E
P/E	NM		NM		NM

Aug FY end. Quarters may not sum to annual on rounding and share count

Revenue (M)

	2019A	Prior 2020E	Curr. 2020E	Prior 2021E	Curr. 2021E
1Q-Nov	0.7	--	0.7A	--	0.0E
2Q-Feb	0.7	--	0.0E	--	0.0E
3Q-May	0.7	--	0.0E	--	0.0E
4Q-Aug	0.7	--	0.0E	--	0.0E
FY	2.7	--	0.7E	--	0.0E

Company Description:

Oramed Pharmaceuticals, Inc. is an clinical-stage biotechnology company that is developing orally formulated therapeutics, including an oral insulin. The company was founded in 2006 and has offices in New York and Jerusalem.

Oramed Pharmaceuticals, Inc.

Rating: Buy

On The Way To Being First Mover In Oral Insulin

Investment Highlights:

- Oramed is developing an oral insulin.** Oramed has advanced its oral insulin candidate, ORMD-0801, through phase 2b, for the treatment of type 2 diabetes mellitus. Utilizing encapsulation technology designed to deliver oral insulin successfully through the digestive system, we believe Oramed has found a way to provide insulin orally in a safe and efficacious manner. We expect Oramed to move into phase 3 trials in both type 1 and type 2 diabetes in 2H:20.
- Clinical progress.** In phase 2b, patients treated with ORMD-0801 demonstrated statistically meaningful HbA1c (%) lowering, including -0.54% with a 0.036 p-value in the first cohort, and -0.81% with a 0.028 p-value in the second (placebo-adjusted changes). Interestingly, higher efficacy appeared to be inverse of the dosed amount, meaning the lower doses (8mg vs 16mg or higher) taken less often (1x a day vs 2x or more), demonstrated greater HbA1c lowering, potentially related to saturation effects. We find the possibility of a less frequent dosing schedule enticing, given the likelihood of greater compliance.
- The promise of oral insulin.** The concept of oral insulin has been around for a long time, but no such therapy has yet been commercialized in the US, for numerous reasons including lack of efficacy in others' previous attempts. An oral insulin may offer multiple benefits, including: 1) potential for greater patient compliance, 2) a means to better control blood glucose levels perhaps in conjunction with an injectable regimen, and 3) greater mimicry of the pathway of endogenous insulin (e.g. uptake in the intestine, through the portal vein, to the liver), likely lessening the potential for hypoglycemia, hyperglycemia, and weight gain sometimes associated with systemically-delivered products. Our discussions with doctors and diabetes patients have indicated: 1) an appreciation for the technical challenges that have so far prevented an orally-delivered insulin from reaching market, and 2) a willingness to consider oral insulin as part of the treatment paradigm.
- Diabetes market.** We believe the insulin market in the U.S. constitutes a greater than \$10bn annual market, growing at an est. low-to-mid single digit CAGR. Our view is that Oramed's oral insulin might best function, at least initially, as an adjunct to existing treatment regimens (enhancing HbA1C control in T1DM patients, and perhaps delaying the need for an injectable regimen in newly-diagnosed T2DM patients). We think that even modest market share capture could result in economically attractive revenue run rates.
- Valuation.** Our PT on shares of Oramed is \$5.50. We value shares of Oramed using a discounted cash flow analysis. Our valuation assumes commercialization of oral insulin in 2024, with an initial estimated 50bps share of the ~\$10bn+ US insulin market, a 16% revenue CAGR through 2033, 2% terminal growth, and utilizes a 20% discount rate (vs a ~5% CAPM rate, for greater conservatism and to handicap PoS). Additional indications and the Chinese licensing agreement are treated as option value at this time. Risks include: 1) clinical development, 2) financial, 3) competition, 4) regulatory, and 5) reimbursement, among others. See Valuation Methodology and Risk Factors on page 26.

Summary

Oramed Pharmaceuticals, Inc. (ORMP) is a NASDAQ-traded clinical-stage biopharmaceutical company engaged in the development of orally-administered therapeutics for, among other indications, the treatment of diabetes. The company's lead therapeutic asset is oral insulin for the treatment of both type 1 ("T1DM") and type 2 diabetes ("T2DM").

The company recently completed phase 2 trials for its oral insulin in type 2 diabetes, and subsequent to the results of a dosing study in type 1 diabetes and dialogues with the FDA, we anticipate Oramed will begin pivotal phase 3 trials for T1DM and T2DM in 2H:20.

In addition to the insulin asset, the company is also developing an oral GLP-1 analog, an oral NASH therapeutic, and an oral leptin. We think the company's technology, which allows for the oral administration of a range of therapeutics which not previously available in an oral modality, could serve as a platform enabling the development of drugs in multiple categories.

Oramed has an estimated market capitalization of \$81mm, ~\$30mm of cash, and no debt for an estimated enterprise value of \$51mm. The company's headquarters are in New York, with offices and a research presence in Jerusalem, Israel.

Key points

- Oramed is developing oral insulin, with which we think it has potential to be first-to-market
- Phase 2 data demonstrating superior blood glucose lowering versus placebo, were compelling:
 - Phase 2b cohort A data (released November 12th, 2019) demonstrated efficacy in lowering A1c of -0.60% at 1x daily dosing with a 0.036 p-value (0.54% placebo-adjusted)
 - Phase 2b final cohort data (released Feb 26th, 2020) successfully met the primary endpoint, with 0.95% A1c reduction in patients treated once daily at 8mg, with a 0.028 p-value (0.81% placebo-adjusted)
- Upcoming pivotal phase 3 trial initiation (2H) for oral insulin in T1DM and T2DM, with anticipated NDA filing in 2023
- Potential for commercialization of oral insulin in a ~2024 timeframe
- NASH clinical study data expected in 1Q
- T1DM (oral insulin) dosing study results expected in 1Q
- Pipeline assets include GLP-1 (bioavailability study in T2DM expected in 2020), leptin (1Q clinical study completion expected), NASH, and a platform technology that could leverage the oral encapsulation technology (e.g. incorporating it in multiple therapeutic opportunities)
- China licensing agreement has been signed that could benefit Oramed both financially and by providing a degree of risk diversification
- The company is well-capitalized in our view, with ~\$30mm of cash and equivalents and no debt

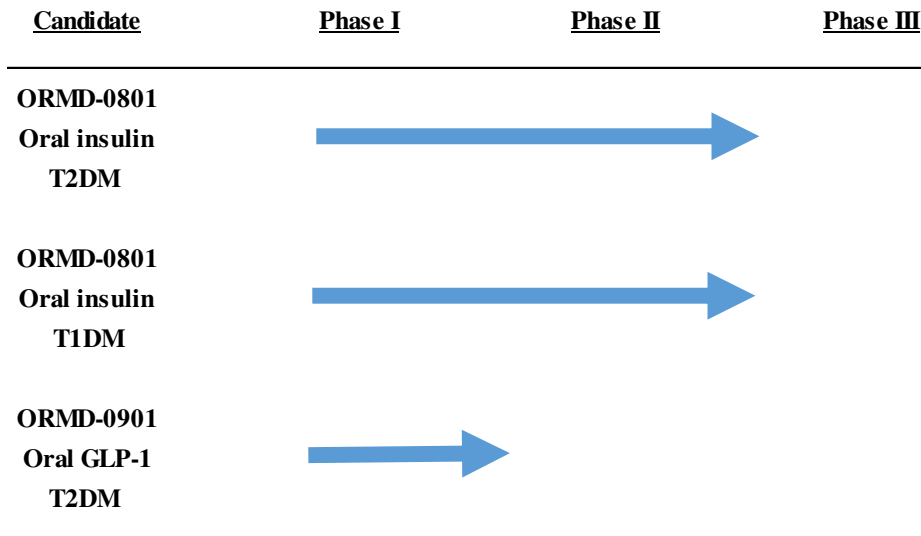
Risks

We've noted several risks to the investment case with Oramed, many of which are common to clinical-stage biotechnology companies, including: 1) development, 2) financial, 3) competition, 4) regulatory, and 5) reimbursement, among others.

Overview

Oramed is a clinical-stage biotechnology company which is developing an oral insulin and other therapeutics. Nadav Kidron currently serves as the company’s Chief Executive Officer and Miriam Kidron serves as the company’s Chief Scientific Officer.

Fig. 1. Pipeline

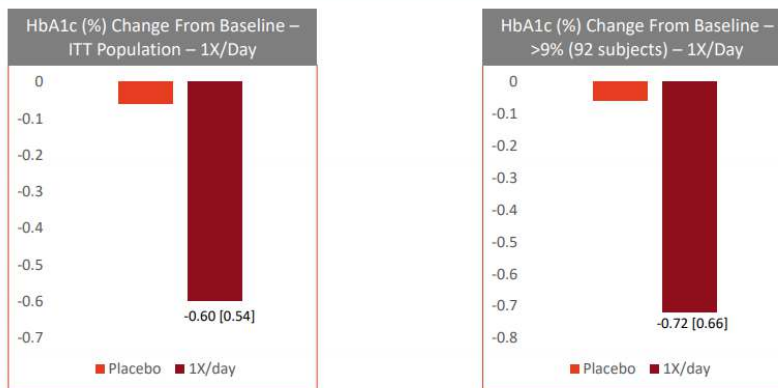


Source: Company filings

Key efficacy data has added a de-risking element, in our view (see below). Note, patients included in the phase 2b trial for oral insulin were on Metformin (a blood glucose lowering agent often used as a first-line approach in diabetes, according to doctors we interviewed). Additional glucose-lowering agents included: glibenclamide, glipizide, empagliflozin, pioglitazone, glimepiride, and dapagliflozin. Approximately 60%-70% of patients were on two or more glucose lowering drugs across the two phase 2b cohorts.

Fig. 2. Phase 2 efficacy data

Phase 2b: Primary Endpoint: ITT Population vs. >9% A1c



Source: Oramed

Oral insulin

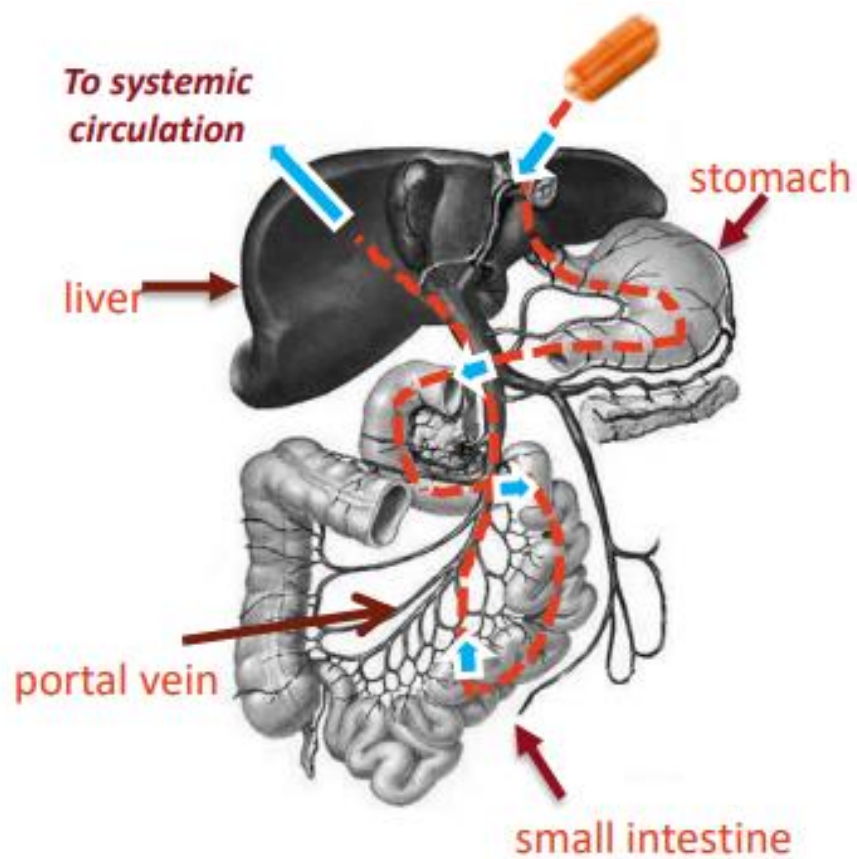
We believe Oramed is best-positioned to be the potential first-to-market with an oral insulin, given its unique technology, and the expansive clinical data it has generated to-date. An oral insulin may be able to offer a differentiated profile vs the existing insulin products that currently populate the market, discussed further below. As a reminder, insulin is a naturally occurring hormone used by the body to regulate glucose levels in the blood, and has long been available as a synthetic product via traditional delivery mechanism such as injection.

How might oral insulin fit into the marketplace? Our view is that prospective investors in Oramed do not need to make the judgement call, at this juncture, on the extent to which an oral insulin, if approved, would potentially displace traditional (injectable) insulins. Rather, we view oral insulin, at least initially, as an adjunct therapeutic, that could: 1) prolong the period of time during which T2DM patients could go before beginning a typical injectable or pump regimen, and 2) could be additive to the treatment paradigm in T1DM to better control blood glucose levels. In accordance with this view, our market share model (see ‘Modeling assumptions’) awards Oramed a highly conservative overall share of the U.S. insulin market, which, given the market’s sheer size (\$10bn+) is sufficient to provide a highly attractive forecasted sales ramp. We think that as ORMD-0801 further evolves in a prospective phase 3 trial, additional information will emerge – perhaps in accordance with the inclusion and dosing criteria – that will help elucidate the most reasonable expectations around future commercial uptake, usage patterns, and potential labeling.

The promise of an oral insulin. Oral insulin has long been an area of R&D interest, given the multiple potential risk/reward benefits. Among these benefits could include enhanced compliance and improved pharmacodynamics. An orally-administered treatment route could mitigate, in part, fear of pain associated with subcutaneous injections. This could be true even in instances where injectable modalities are only partially replaced. In addition, and perhaps of greater patient benefit, including in instances where an oral modality merely supplements an injectable regimen, the possibility for enhanced pharmacodynamics are intriguing. For example, according to research published by the Diabetes Technology Society, “oral insulin will reach circulation via the hepatic portal vein, similar to endogenous insulin, whereas subcutaneous injections primarily induce high systemic levels of insulin, bearing a greater risk of side effects such as hypoglycemia and weight gain.”¹⁷ Injectable insulin (introduced directly to the bloodstream) would only be expected to reach the liver in small amounts. Oral insulin, thanks to its pathway that mimics endogenous insulin (see Fig. 3.) could potentially result in better A1c control, reduced incidence of hypoglycemia and hyperglycemia, and improved weight management.⁴ We think many of these benefits are intuitive, given the re-creation of a more natural pathway for insulin through the system, and furthermore, we believe there could be additional benefits beyond A1c control, that could come from *insulinizing* the liver.

Enabling technology. Oramed has developed an oral encapsulation technology with which it has demonstrated success in developing insulin. This technology is predicated on 1) a pH shield (sensitive enteric coating which protects capsule contents before entering the small intestine, 2) protease protection via protease inhibitors, and 3) absorption enhancement, assisting the permeation of proteins and peptides across the intestinal membrane and into the bloodstream. In our view, this same technology may be leveraged by the company in an oral GLP-1 analog, oral leptin, and could serve as a platform for additional therapeutics and/or licensings.

Fig. 3. Insulin pathway in an oral-delivery modality



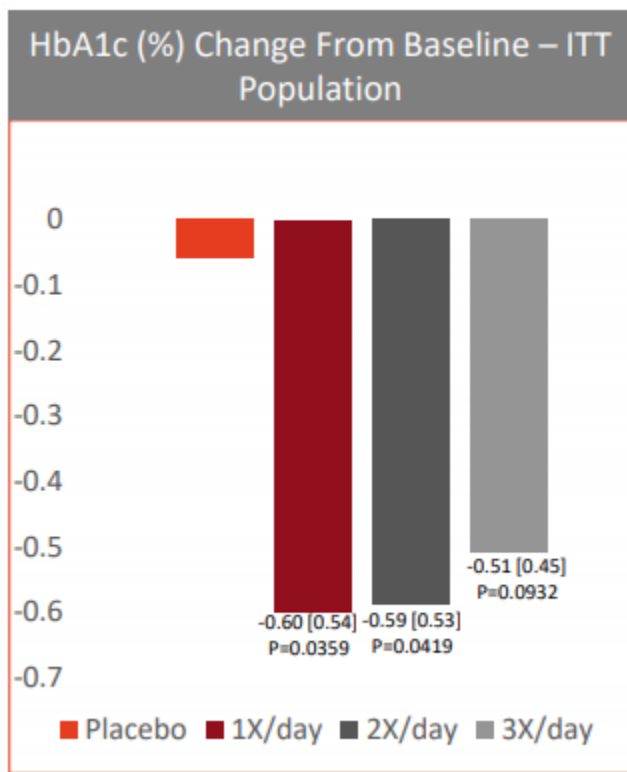
Source: Oramed

Clinical results

According to Oramed, ORMD-0801 has been tested in more than 650 subjects, comprising 6,000 human doses, and no drug-related serious adverse events (SAE) have been observed. Therefore, we believe the safety profile of Oramed’s oral insulin has been largely borne out as favorable.

Turning to efficacy, we are particularly interested in the fact that ORMD-0801 successfully met its endpoint in a phase 2b trial. In this trial, administration of ORMD-0801 resulted in a significant lowering of hemoglobin A1c (HbA1c). As a reminder, hemoglobin is a protein found in red blood cells. When blood sugar (glucose) builds-up, it binds to hemoglobin. An HbA1c (or “A1c”) test measures how much glucose is bound to hemoglobin. The A1c test can be useful in diagnosing both prediabetes (A1c of 5.7% to 6.5%) and diabetes (A1c levels over 6.5%). The goal for most diabetics is to keep their A1c levels below 7%.⁹

Fig. 4. Additional phase 2b efficacy data



Source: Oramed

Fig. 5. A1c (%) key thresholds



Source: ADA

The most recently reported data (Oramed's 2b final cohort) successfully met its primary endpoint. With a once daily 8mg dose, A1c reduction in treated patients was 0.95% (0.81% placebo adjusted), with a p-value of 0.028. The company has expressed that the positive phase 2 results support a move into a phase 3 trial. Interestingly, there was an inverse dosing effect contained in the results, such that the lower doses seem to have the highest efficacy. As such, the lower dose is likely to constitute the dosing in phase 3, we would imagine. Possible explanations for the dosing effect could include saturation, and is a phenomenon not without precedent, according to Oramed.⁹

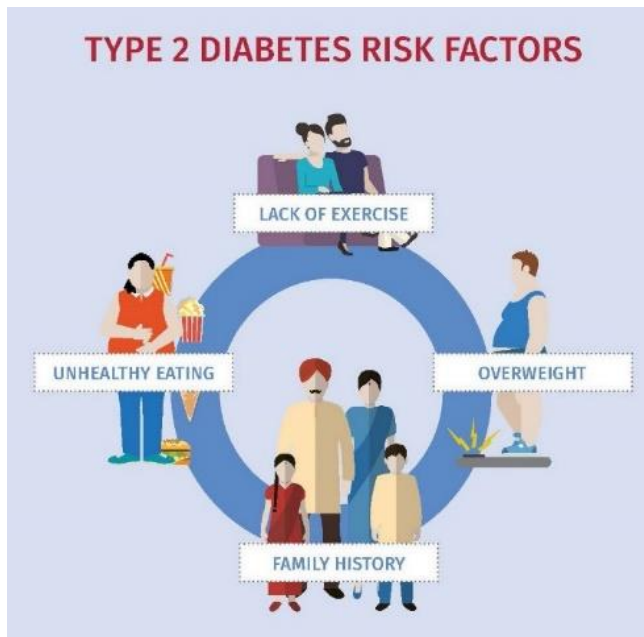
Diabetes

Diabetes is a metabolic disorder that is characterized by chronic hyperglycemia (elevated blood sugar), brought on by the lack of insulin production (type 1) or failure to properly utilize insulin (insulin resistance) that is produced by the body (type 2). Diabetes is a major disease category, with an estimated 34.2mm patients (10.5% of the population) in the U.S.⁵ Type 2 diabetes accounts for ~90% of all diabetes cases (over 30mm U.S. patients).⁸

Type 1 diabetes (“T1DM”; insulin dependent; juvenile onset) is estimated to impact 1.25mm Americans, with 40K new cases diagnosed annually.⁹ The disease is considered autoimmune in nature, begins at an early age, and results in the destruction of islet β cells by activated macrophages, CD4+, and CD8+ T-cells.^{6,7} In a non-disease state, when blood glucose levels are high, the β cells of the islet of Langerhans in the pancreas release insulin, a hormone that regulates the metabolism of glucose, by promoting its absorption into liver, fat, and skeletal muscle cells. Their destruction therefore disrupts the normal blood glucose homeostasis system. Onset of T1DM occurs in childhood, and counts both environmental and genetic factors as contributors.⁶

Type 2 diabetes (“T2DM”), by contrast, is characterized by “insufficient synthesis of insulin and its secretion, secondary to insulin resistance.” As mentioned, T2DM accounts for the vast majority of diabetes cases, and it typically occurs in an older (40+ years) population. T2DM can further be thought of as both obesity-related and non-obesity related, with the former consisting of obese patients developing resistance to endogenous insulin (due to alterations in cell receptors). Meanwhile, non-obese T2DM consists of some insulin resistance (at the post receptor level), in addition to the deficient production and release of insulin. Additional forms of diabetes, such as gestational diabetes and maturity onset diabetes of the young, while important from a patient care standpoint, will not be the focus of our investigation of the disease.⁶

Fig. 6. Risk factors for T2DM



Source: IDF

Fig. 7. A1c (%) levels

A1C AND BLOOD GLUCOSE NORMAL, ELEVATED AND SEVERELY ELEVATED LEVEL CHARTS		
SEVERELY ELEVATED Levels. Risk of serious complications such as Heart Attack, Stroke, Blindness, Kidney failure, Amputations etc.	A1C LEVELS	GLUCOSE LEVELS
	13	380
	12	345
	11	310
	10	275
ELEVATED and POORLY Controlled levels	9	240
	8	205
	* 7	170
NORMAL Levels	* 6	135
	5	100
	4	65

An A1C Diabetes test above **5.9** is considered Pre-Diabetic.

Under 7 is considered normal or "GOOD" if you already have Diabetes.

Stay under **5.9** to play safe to avoid Prediabetes and under **7** if you already have a Diabetic.

If you are in Elevated or Severely Elevated Levels above, or getting close to **5.9** Prediabetics level, it is extremely important that you **Lose weight, Exercise, and see a Doctor and Nutritionist!**

© TheDiabetesCouncil.com

Source: Diabetes Council

Fig. 8. Glucose homeostasis description

Regulation of Blood Glucose

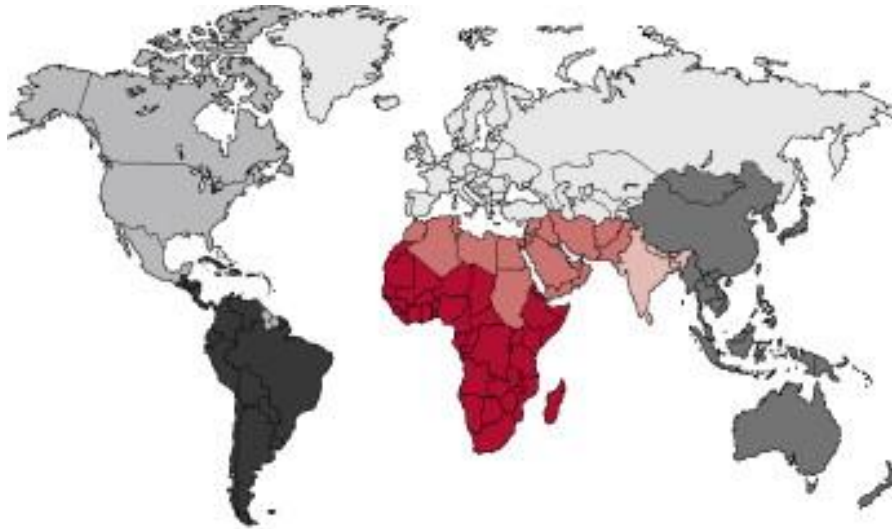
Regulation of the levels of glucose in the blood is based on a negative feedback loop and acts via the release of insulin and glucagon. When glucose levels in blood are high, the β cells of the islet of langerhans in the pancreas are triggered to release insulin, a 51-amino acid polypeptide that is composed of two chains (A and B) connected by disulphide bridges. Insulin is synthesised from pro-insulin by the pro-hormone convertases (PC1 and PC2), and exo-protease carboxypeptidase.³ The action of these enzymes generates insulin and C-peptide.³

Insulin binds to the tyrosine kinase insulin receptor which is made up of two α subunits (extracellular) and two β subunits (intramembrane) linked by disulfide bonds (Fig. 1). The binding of insulin to the β subunit of tyrosine kinase insulin receptor promotes autophosphorylation of the β subunit. Insulin signals the liver to convert the excess glucose to glycogen for storage; it also triggers other cells in the body (adipose/skeletal muscle cells) to take up more glucose by the translocation of glucose transporter (GLUT4) to the cell surface. This helps to bring the circulating glucose concentrations to normal levels (Fig. 2). When the glucose concentration in the blood is low, the α cells of the pancreas are stimulated to release glucagon. Glucagon signals the liver to convert stored glycogen into glucose which is released into the blood to achieve homeostasis.

In diabetes, there is an aberration either in the synthesis or secretion of insulin as seen in Type 1 diabetes mellitus (T1DM) and stenosis in the pancreatic duct, or the development of resistance to insulin or its subnormal production as in the case of Type 2 diabetes (T2DM) and certain secondary diabetes.

Source: Kaul et al.

Fig. 9. Estimated number of people with diabetes, globally, in 2011 and 2030

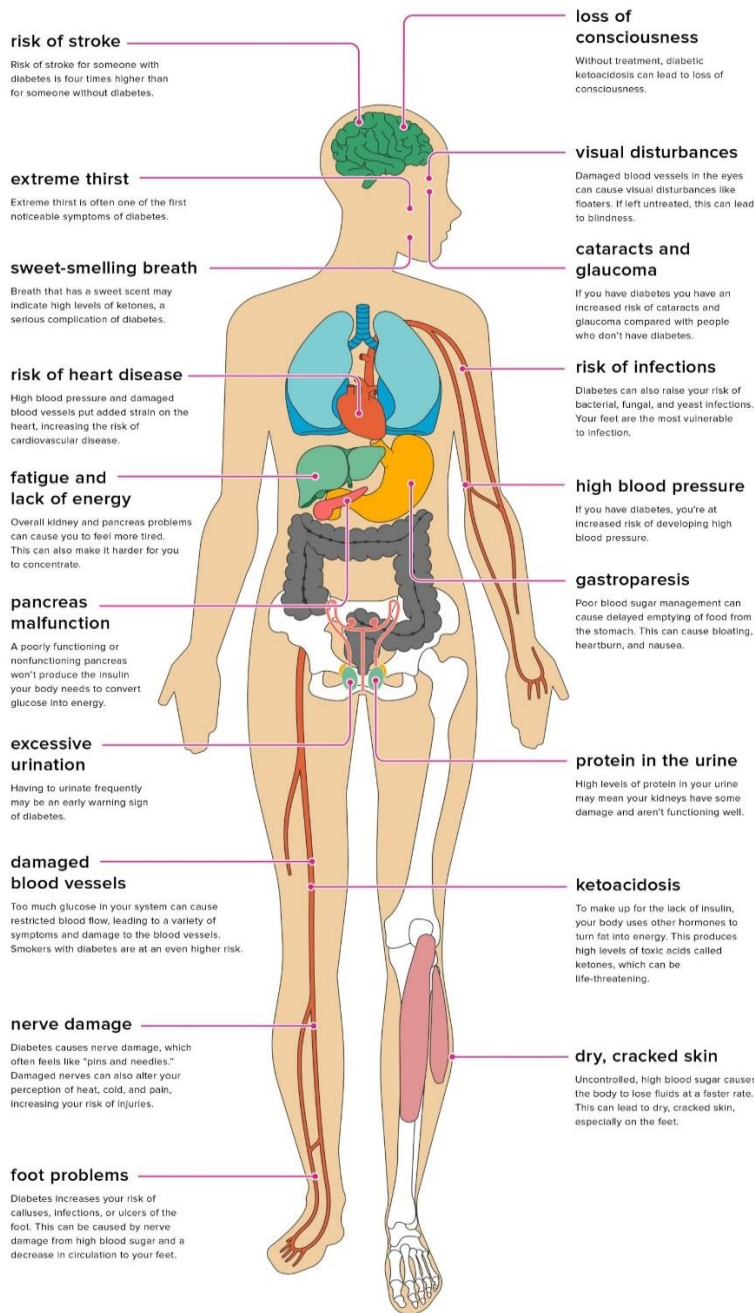


REGION	2011 Millions	2030 Millions	INCREASE %
■ Africa	14.7	28.0	90%
■ Middle East and North Africa	32.8	59.7	83%
■ South-East Asia	71.4	120.9	69%
■ South and Central America	25.1	39.9	59%
■ Western Pacific	131.9	187.9	42%
■ North America and Caribbean	37.7	51.2	36%
■ Europe	52.6	64.0	22%
World	366.2	551.8	51%

Source: IDF

The impact of diabetes on patients’ health and wellbeing can be manifold. Diabetes has been shown to increase the risk of heart disease, stroke, high blood pressure, and atherosclerosis. Additionally, damage to organs can ensue. Damage to the nerves (neuropathy), as well as to other organs such as diabetic retinopathy (retina disease), diabetic nephropathy (kidney disease), and many other complications. These complications that arise as a result of chronic uncontrolled blood glucose levels can develop slowly over long periods of time.

Fig. 10. Overview of potential diabetes related complications

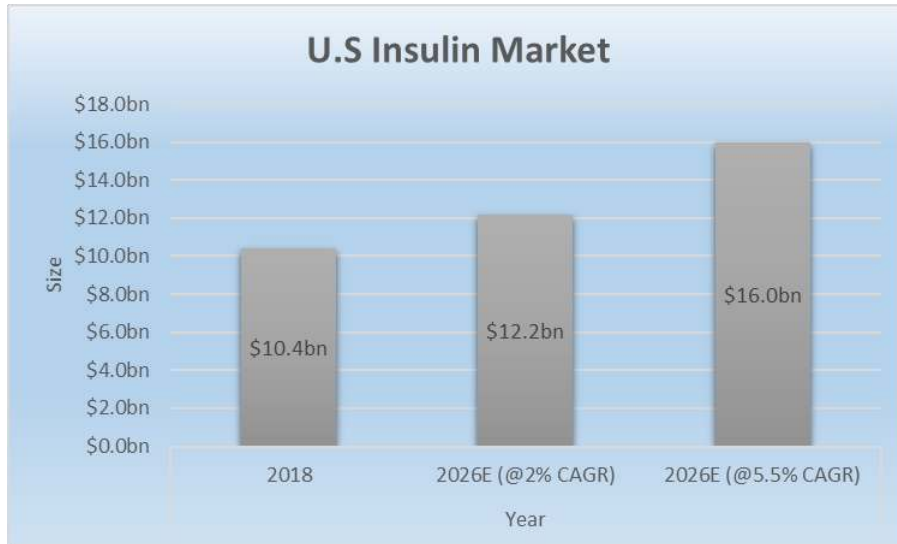


Source: Healthline

Insulin Market

Estimates place the U.S. insulin market at over \$10bn, with forecasts for growth in the low-to-mid-single digits.^{10,11}

Fig. 11. U.S. insulin market projections



Source: Fortune, Aegis Capital estimates

Insulin was discovered in 1922. Development of insulin goes back to the 1920's, when scientists began undertaking tests and recognizing the glucose-lowering impact of insulin. Eli Lilly began producing insulin from animal pancreas. In 1978, David Goeddel and colleagues at Genentech prepared the first recombinant DNA human insulin. Following an agreement to commercialize rDNA insulin, in 1982, Genentech and Eli Lilly commercialized the first insulin based on the technology, Humulin R (rapid) and Humulin N (intermediate-acting).¹²

Lispro, the first short-acting insulin analogue was approved in 1996. Additional basal insulin analogues include Glargine (approved in 2000) and detemir (approved in 2005). Over time, scientists have changed and improved recombinant insulin, including modifications of the site of amino acids, leading to adjustments in the pharmacokinetic profile, to, for example, achieve faster absorption, earlier peak of action, and shorter duration of action. The benefits of these improvements may include, for example, tighter glycemic control, lower risk of hypoglycemia, and closer mimicking of basal and prandial insulin secretion.¹²

Alternative systems of insulin delivery (besides needles) include pumps (introduced in the 1970's) and pens. The first pen was NovoPen, introduced in 1985, by Novo Nordisk. Evidence from many studies has accumulated over time indicating the advantages of pens over syringes, including accuracy, satisfaction, ease of use, compliance, and QoL.¹³

Inhaled insulins have, in the past, been a minor feature of the market, including Pfizer's (PFE; NR) Exubera (2006) and Sanofi and MannKind's (MNKD; NR) Afrezza (2014). Exubera was subsequently withdrawn from the market. The Sanofi/MannKind marketing agreement was withdrawn. Afrezza sales are minimal (for example, in the nine months through September 30th, 2019 sales were \$17.5mm). As such, it appears


that inhaled insulins have not had a large market impact. Part of the explanation for this minimal market acceptance may be explained by the inhaled insulins' safety profiles, which include a decline in pulmonary function and a slight increased incidence of lung cancer.^{14,15,16}

Fig. 12. Representative insulin price increases from '16 to '17

Figure 5
For six insulin products, average Medicare Part D spending per dosage unit increased by more than 10% between 2016 and 2017

Drug name	Manufacturer	Average spending per dosage unit		
		2016	2017	Change, 2016-2017
Afrezza	MannKind Corporation	\$2.91	\$3.54	21.6%
Novolog Mix 70-30 Flexpen	Novo Nordisk	\$31.52	\$35.05	11.2%
Novolog Flexpen	Novo Nordisk	\$31.74	\$35.23	11.0%
Novolog Mix 70-30	Novo Nordisk	\$25.63	\$28.43	10.9%
Novolog	Novo Nordisk	\$25.01	\$27.68	10.7%
Humulin R U-500	Eli Lilly	\$63.96	\$70.65	10.4%

SOURCE: 2017 data from the CMS Medicare Part D Drug Spending Dashboard.



Source: KFF

Diabetes treatment landscape

While the U.S. insulin market is currently sized in excess of an estimated \$10bn, there are no approved orally-delivered insulins. Therefore, we expect - based on our current forecast - that Oramed will be the sole therapeutic in the oral insulin category at the time of potential expected commercialization.

Major existing insulin brands in the market include Sanofi's (SAN-FR; NR) Lantus, Novo Nordisk's (NOVO.B-DK) Novolog and Levemir, and Eli Lilly's Humalog. Each of the companies have a major footprint in the diabetes space. For example, Novo Nordisk's 2019 Diabetes and Obesity Care related sales totaled \$102.8bn, about 84% of total sales.

The largest and most successful commercial insulins are multibillion-dollar franchises. Eli Lilly's Lantus franchise, for example, produced over \$4bn of sales in 2017.

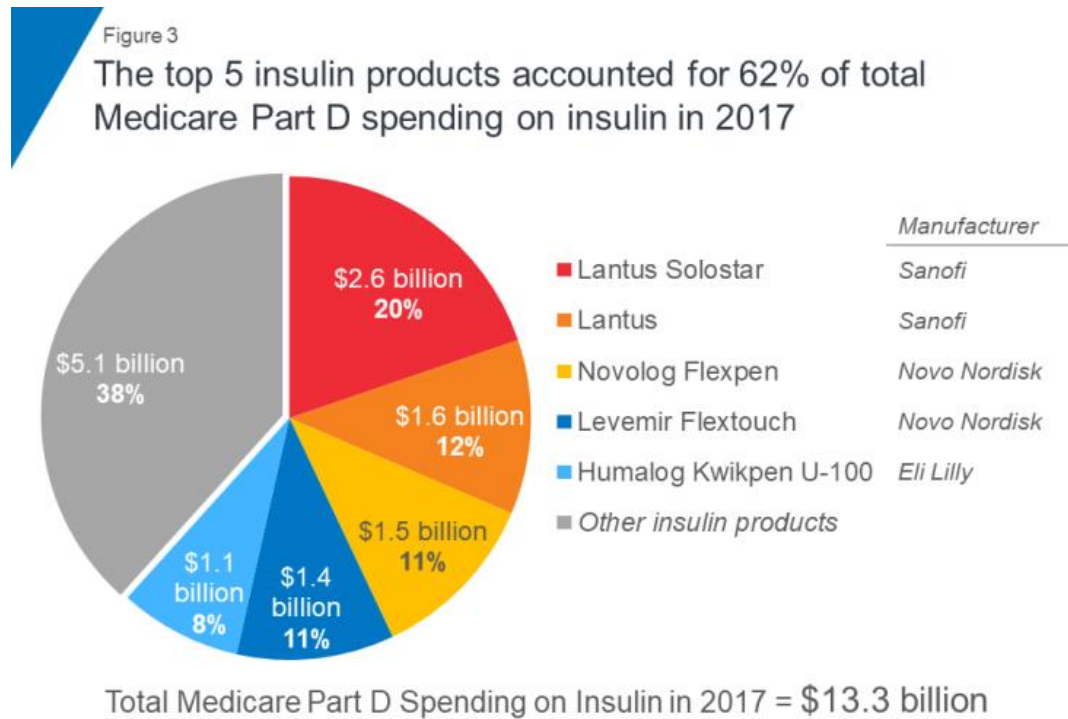
Fig. 13. Antidiabetic agents with therapeutic considerations

Intervention	HbA1c Reduction (%)	Effect on Weight	Effect on Lipids	Effect on Blood Pressure	Safety
Oral					
SFUs	0.9-2.5	Increased	Small improvements; mainly in TG	Poorly quantified	Increased risk of hypoglycemia
Metformin	1.1-3.0	Neutral or slightly decreased	Improved	Neutral	Contraindicated in patients with renal insufficiency
Glinides	0.4-0.6	Neutral (poorly quantified)	Poorly quantified	Poorly quantified	Caution in patients with hepatic or renal impairment (nateglinide)
TZDs	1.5-1.6	Increased	Improved HDL and TG	Small improvements	Fluid retention, CHF, bone fractures, potential increase in MI (rosiglitazone)
DPP-4 inhibitors	0.8	Neutral	Poorly quantified	Small improvements in non-diabetics	Long-term safety not established
α -Glucosidase inhibitors	0.5-1.0	Suggested decrease	Poorly quantified	Poorly quantified	Frequent flatulence
Parenteral					
Insulin	Up to 4.9	Increased	Improved	Neutral	Increased risk of hypoglycemia
GLP-1 receptor agonists	0.8-1.5	Decreased	Improved	Lowered	Nausea and vomiting; hypoglycemia with sulfonylureas; rare pancreatitis and renal dysfunction; thyroid C-cell tumors in rodents
Amylin analog	0.4-0.6	Slightly decreased	Small improvements	Small improvements	Contraindicated in patients with gastroparesis

BID, twice daily; CHF, congestive heart failure; DPP-4, dipeptidyl peptidase-4; GLP-1, glucagon like peptide-1; HbA1c, glycated hemoglobin; HDL, high-density lipoprotein; MI, myocardial infarction; SFUs, sulfonylureas; TG, triglyceride; TZDs, thiazolidinediones; US FDA, United States Food and Drug Administration.

Source: *Cardiovascular Diabetology*

Fig. 14. Commercial insulin landscape



NOTE: Total spending does not account for rebates; includes Medicare, plan, and beneficiary out-of-pocket payments.
SOURCE: KFF analysis of 2017 data from the CMS Medicare Part D Drug Spending Dashboard.



Management

Nadav Kidron is Chief Executive Officer, President, and Director of Oramed Pharmaceuticals. Mr. Kidron co-founded Entera Bio as a JV between Oramed and DNA Biomedical Solutions. He is a member of the IATI Board, and a lecturer on Israel's entrepreneurial culture. Mr. Kidron holds a bachelor's in law and an international master's business administration, both from Bar-Ilan University in Israel. Mr. Kidron is a fellow of the Merage Business Executive Leadership Program and a member of the Israeli Bar Association.

Miriam Kidron is Chief Scientific Officer and Director of Oramed Pharmaceuticals. Dr. Kidron co-founded Oramed in 2006. Dr. Kidron is a pharmacologist and biochemist, and earned her PhD in biochemistry from the Hebrew University of Jerusalem. Dr. Kidron has been a senior researcher in the Diabetes Unit at Hadassah-Hebrew University Medical Center in Jerusalem for nearly 20 years. Dr. Kidron earned the Bern Schlanger Award for her work. Dr. Kidron was formerly a visiting professor at the Medical School at the University of Toronto and is a member of the American, European, and Israeli Diabetes Associations.

Josh Hexter is Chief Operating and Business Officer of Oramed Pharmaceuticals. Previously, Mr. Hexter was Chief Business Officer BrainsWay (BWAY; NR). Mr. Hexter has also served as Executive Director of Corporate In-Licensing at BioLineRX (BLRX; NR), and has served as CEO of a VC-backed start-up. Mr. Hexter was Founder and CEO of Biosensor Systems Design. Mr. Hexter earned a bachelor's degree from the University of Wisconsin and a master's degree in management from Boston University.

Avi Gabay is Chief Financial Officer. He joined Oramed in 2019. Previously, Mr. Gabay was corporate controller at Orcam Technologies. Before that, Mr. Gabay provided economic services in the advisory department of KPMG Israel, and worked in the tax department of Gornitzky & Co., a law firm. Mr. Gabay has a bachelor's degree in law and accounting from Tel-Aviv University, is a CPA in Israel, and a member of the Israeli Bar Association.

Board of Directors

The members of the Board of Directors at Oramed include Kevin Rakin (Chairman), Leonard Sank, Aviad Friedman, Xiaoming Gao, Arie Mayer, PhD, Nadav Kidron, Esq., and Miriam Kidron, PhD.

Scientific Advisory Board

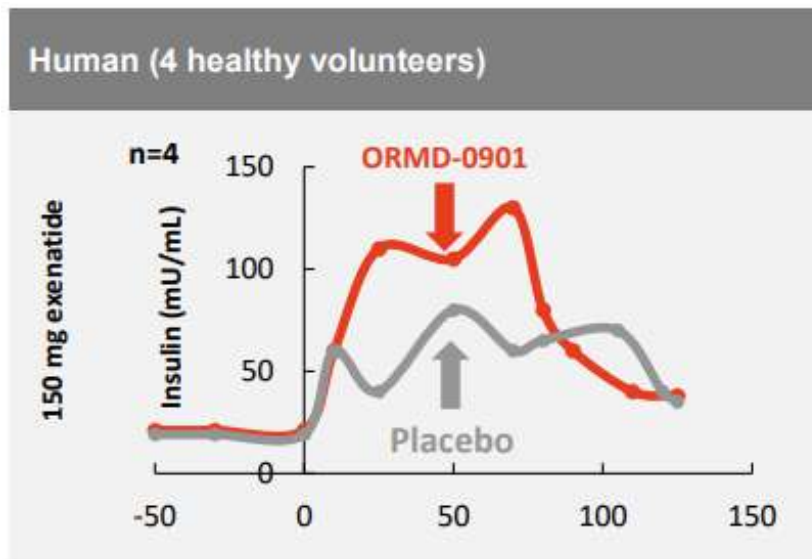
The members of The Scientific Advisory Board at Oramed include Roy Eldor, MD, PhD, Ele Ferrannini, MD, PhD, Avram Hershko, MD, PhD, Harold Jacob, MD, Alexander Fleming, MD, Julio Rosenstock, MD, and Jay Skyler, MD, MACP.

GLP-1

Glucagon-like peptide 1 (GLP-1) is a hormone produced by the L-cells of the ileum (third portion of the small intestine) and colon. It has numerous known physiological effects including effecting gut motility, inhibiting gastric acid secretion, inhibiting glucagon secretion, inducing satiety, inducing expansion of insulin-secreting β -cell mass in the pancreas, and augmenting glucose-stimulated insulin secretion. GLP-1 is released from the gut in response to nutrient ingestion (e.g. levels rise rapidly upon food ingestion).¹⁸

Oramed's ORMD-0901 (oral GLP-1 for TD2M) is designed to mimic the natural hormone (including associated safety profile), decrease blood glucose levels, preserve beta cell function, and promote weight loss. The existing mode of delivery for GLP-1 medications on the market is via injection only. At this time, we treat ORMD-0901 as option value in the Oramed pipeline.⁴

Fig. 15. Preservation of the biological activity of orally delivered exenatide



Source: Oramed

Leptin

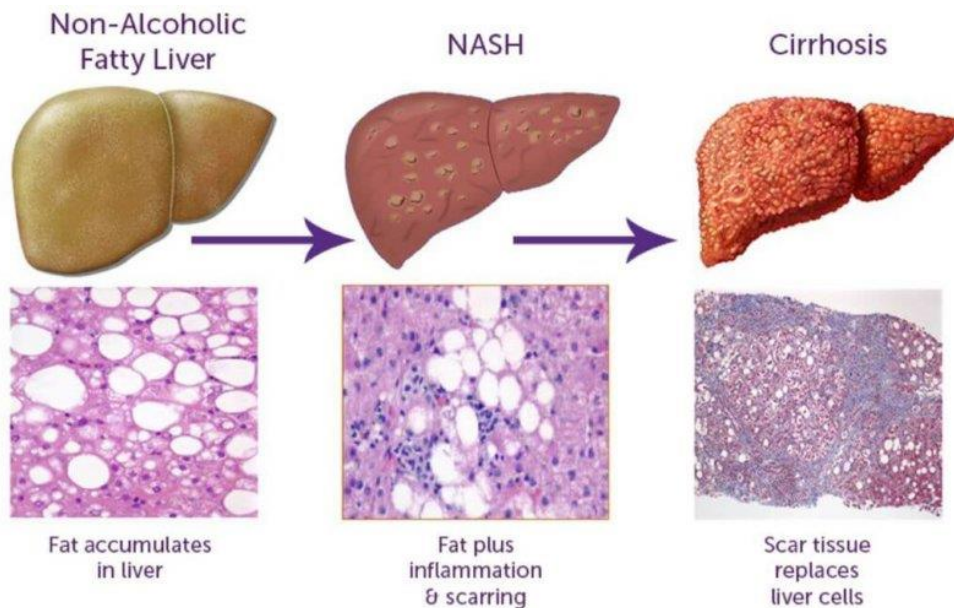
Leptin is a hormone, primarily released by adipose (fat) cells and enterocytes in the small intestine, that is used by regulate energy balance by inhibiting hunger (the feeling of hunger), by sending signals to the hypothalamus. Oramed has set Phase 1 ex-USA initiation and completion as a 2020 milestone. At this time, we treat oral Leptin as option value in the pipeline.^{4.2}

NASH

Nonalcoholic steatohepatitis (fatty liver disease) is a liver disease consisting of excessive fat in the liver, which can lead to fibrosis (formation of excess fibrous tissue), cirrhosis (late stage fibrosis/ scarring) and liver failure (loss of liver function that is life threatening). NASH has been characterized as a serious disease with potentially highly negative side effects that impacts an estimated 12% of the US population (~38mm people), but for which there is no approved therapies.

Currently, lifestyle modifications are recommended such as weight loss and vitamin supplementation. We believe NASH represents a massive unmet medical need. Oramed’s NASH study has approval from the Israel Ministry of Health (FPI study initiated and recruiting, with recruitment of the initial cohort complete). We think Oramed’s MOA (insulinizing the liver), could be an interesting approach, although as with the other option-value pipeline candidates, we await further information before making a determination about the ultimate potential of the program.^{4.1}

Fig. 16. NASH process



Source: Canadian Liver Foundation

China licensing arrangement

Oramed has licensed the exclusive rights to ORMD-0801 in China to Hefei Tianhui (“HT”). HT co-owns a GMP API insulin manufacturing facility, and is undertaking clinical trials of ORMD-0801.

The financial incentives related to the licensing arrangement include:

- A total of \$50mm in payments and royalties:
- \$12mm in restricted stock (at a premium)
- \$38mm of milestone payments
 - \$33mm received to-date
 - \$17mm expected within three years
 - Up to 10% royalties on net sales⁴

According to the International Diabetes Federation, in 2019 an estimated 116mm Chinese adults are living with diabetes, and over 65mm of the 116mm are undiagnosed. As in other markets, T2DM accounts for about 90% of the total diabetes population, we believe.⁸

At this point, we are taking what we consider to be a conservative approach to the consideration of the Chinese licensing arrangement, and treating the financial incentives as option value. With that said, we are actively monitoring the Chinese licensing arrangement, given our view that the milestones and royalties ahead have the potential to be material overall financial contributors to Oramed shareholders, over time.

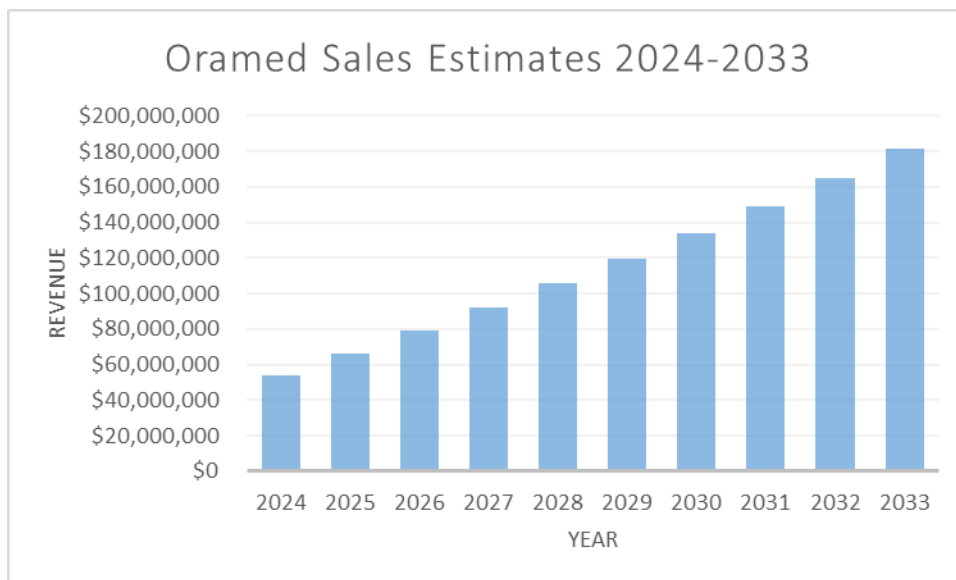
Modeling assumptions

We utilize a discounted cash flow analysis (see ‘Valuation’ section) to value shares of Oramed. We assume initial commercialization in 2024, with sales ramping through 2033 at a 16% CAGR. We estimate the insulin market (domestic) at ~\$10.8bn in 2024, growing 2%/year. We assume 50bps of market share in 2024, rising to 130bps in 2033. To the extent possible, we have attempted to err on the side of conservatism when considering model inputs.

Additionally, we utilize a 20% discount rate on future cash flows (far in excess of a CAPM-derived ~5%, for enhanced conservatism and to incorporate the probability of success), and terminal growth of 2%. We also assume that D&A, CAPEX, and NWC changes will not be material adjustments to net income to derive our simple FCF estimates.

At this time, indications outside oral insulin for diabetes are treated as option value, which could represent upside to our current estimates. This includes GLP-1, Leptin, NASH, China licensing milestones and royalties, other global opportunities, as well as any other indications or licensings which leverage Oramed’s oral encapsulation technology. Future potential ex US revenues are also considered option value at this time. Note that our modeling assumptions constitute estimates at one point in time, and are subject to risks and adjustments.

Fig. 17. Oramed sales estimates



Source: Aegis Capital estimates

Valuation

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Insulin market					10,824,321,600	11,040,808,032	11,261,624,193	11,486,856,676	11,716,593,810	11,950,925,686	12,189,944,200	12,433,743,084	12,682,417,946	12,936,066,305
ORMP share					0.50%	0.60%	0.70%	0.80%	0.90%	1.00%	1.10%	1.20%	1.30%	1.40%
Revenue					54,121,608	66,244,848	78,831,369	91,894,853	105,449,344	119,509,257	134,089,386	149,204,917	164,871,433	181,104,928
Growth						22%	19%	17%	15%	13%	12%	11%	11%	10%
COGS					10,824,322	11,924,073	12,613,019	13,784,228	15,817,402	17,926,389	20,113,408	22,380,738	24,730,715	27,165,739
Gross income					43,297,286	54,320,776	66,218,350	78,110,625	89,631,943	101,582,868	113,975,978	126,824,179	140,140,718	153,939,189
Gross margin					80%	82%	84%	85%	85%	85%	85%	85%	85%	85%
R&D	8,333,891	9,020,872	9,471,916	9,945,511	10,442,787	10,964,926	10,416,680	9,895,846	9,401,054	8,931,001	8,484,451	8,060,228	7,657,217	7,274,356
G&A	4,455,458	4,822,731	5,063,868	5,317,061	5,582,914	5,862,060	6,037,922	6,219,059	6,405,631	6,597,800	6,795,734	6,999,606	7,209,594	7,425,882
EBIT	(12,789,350)	(13,843,603)	(14,535,784)	(15,262,573)	27,271,585	37,493,789	49,763,748	61,995,720	73,825,258	86,054,067	98,695,793	111,764,345	125,273,907	139,238,951
Operating margin							63%	67%	70%	72%	74%	75%	76%	77%
Tax									3,691,263	12,908,110	20,726,117	23,470,512	26,307,520	29,240,180
Tax rate									5%	15%	21%	21%	21%	21%
Net income	(12,789,350)	(13,843,603)	(14,535,784)	(15,262,573)	27,271,585	37,493,789	49,763,748	61,995,720	70,133,995	73,145,957	77,969,677	88,293,832	98,966,386	109,998,771
D&A														
CAPEX														
Simple FCF	(12,789,350)	(13,843,603)	(14,535,784)	(15,262,573)	27,271,585	37,493,789	49,763,748	61,995,720	70,133,995	73,145,957	77,969,677	88,293,832	98,966,386	109,998,771
Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Discount rate	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Discount factor	1.2	1.4	1.7	2.1	2.5	3.0	3.6	4.3	5.2	6.2	7.4	8.9	10.7	12.8
Discounted FCF	(10,657,791)	(9,613,613)	(8,411,912)	(7,360,423)	10,959,838	12,556,594	13,888,149	14,418,223	13,592,438	11,813,480	10,493,782	9,902,741	9,249,782	8,567,427

Source: Aegis Capital estimates; company filings

Terminal value	
Interim value	\$79,398,715
Terminal value	\$47,596,814
Total value	\$126,995,529
Perp. growth	2%
Est. share value	\$5.51

Source: Aegis Capital estimates; company filings

Income statement

Oramed (ORMP)

Historical and forecasted income statement (\$mm)

	2018		2019				2020					2021				
	FY:18A	1QA	2QA	3QA	4QA	FY:19A	1QA	2QE	3QE	4QE	FY:20E	1QE	2QE	3QE	4QE	FY:21E
	8/31/2018	11/30/2018	2/28/2019	5/31/2019	8/31/2019	8/31/2019	11/30/2019	2/28/2020	5/31/2020	8/31/2020	8/31/2020	11/30/2020	2/28/2021	5/31/2021	8/31/2021	8/31/2021
Revenues	2.4	0.7	0.7	0.7	0.7	2.7	0.7				0.7					
<i>Growth</i>																
Cost of revenues	(0.1)	0.0	0.1			0.1										
Gross profit	2.5	0.6	0.6	0.7	0.7	2.6	0.7				0.7					
<i>Gross margin</i>																
Research and development	12.0	4.3	3.1	3.9	2.2	13.5	2.0	2.1	2.1	2.1	8.3	2.19	2.23	2.28	2.32	9.02
General and administrative	4.1	0.9	1.1	0.9	0.8	3.7	1.1	1.1	1.1	1.1	4.5	1.17	1.19	1.22	1.24	4.82
Operating gain (loss)	(13.5)	(4.6)	(3.6)	(4.1)	(2.3)	(14.6)	(2.4)	(3.2)	(3.2)	(3.3)	(12.1)	(3.4)	(3.4)	(3.5)	(3.6)	(13.8)
<i>Operating margin</i>																
Interest income	0.9	0.3	0.3	0.3	0.2	1.1	0.2	0.2	0.2	0.2	0.8	0.2	0.2	0.2	0.2	0.8
Interest expense	0.1	0.0	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Income (loss) from changes in fair value of investments		0.1	0.1	0.2	(0.4)		(0.3)	(0.3)	(0.3)	(0.3)	(1.2)	(0.3)	(0.3)	(0.3)	(0.3)	(1.2)
Income (loss) before tax	(12.7)	(4.3)	(3.4)	(4.1)	(2.3)	(14.1)	(2.5)	(3.3)	(3.3)	(3.4)	(12.6)	(3.5)	(3.5)	(3.6)	(3.7)	(14.3)
Tax			0.3			0.3										
Net gain (loss)	(12.7)	(4.3)	(3.7)	(4.1)	(2.3)	(14.4)	(2.54)	(3.28)	(3.34)	(3.41)	(12.57)	(3.47)	(3.54)	(3.61)	(3.68)	(14.30)
Unrealized income on available for sale securities	(0.3)															
Total other OCI	(0.3)															
Total comprehensive gain (loss)	(12.4)															
Diluted gain (loss) per share	(0.86)	(0.25)	(0.21)	(0.23)	(0.13)	(0.82)	(0.15)	(0.14)	(0.14)	(0.14)	(0.58)	(0.15)	(0.15)	(0.15)	(0.15)	(0.59)
<i>Diluted weighted average shares outstanding</i>	<i>14.88</i>	<i>17.45</i>	<i>17.45</i>	<i>17.46</i>	<i>17.46</i>	<i>17.45</i>	<i>17.47</i>	<i>23.00</i>	<i>23.28</i>	<i>23.56</i>	<i>21.83</i>	<i>23.84</i>	<i>24.12</i>	<i>24.40</i>	<i>24.68</i>	<i>24.26</i>

Source: Aegis Capital estimates; company filings

Balance sheet

Oramed (ORMP)

Historical and forecasted balance sheet (\$mm)

	2018		2019				2020				2021					
	FY:18A	1QA	2QA	3QA	4QA	FY:19A	1QA	2QE	3QE	4QE	FY:20E	1QE	2QE	3QE	4QE	FY:21E
	8/31/2018	11/30/2018	2/28/2019	5/31/2019	8/31/2019	8/31/2019	11/30/2019	2/28/2020	5/31/2020	8/31/2020	8/31/2020	11/30/2020	2/28/2021	5/31/2021	8/31/2021	8/31/2021
Current assets:																
Cash and cash equivalents	5.0	3.9	3.4	3.9	3.3	3.3	3.2	25.3	27.4	29.2	29.2	26.1	22.7	19.5	16.1	16.1
Short-term deposits	20.9	19.9	19.7	18.0	25.3	25.3	23.8	18.8	13.8	8.8	8.8	3.8	3.8	3.8	3.8	3.8
Marketable securities	4.6	5.1	5.5	4.2	3.7	3.7	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Prepaid expenses and other current assets	0.6	0.7	1.0	0.4	1.0	1.0	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Total current assets	31.0	29.7	29.6	26.6	33.3	33.3	30.7	47.9	45.0	41.7	41.7	33.7	30.3	27.1	23.7	23.7
Long-term assets:																
Long-term deposits	13.5	11.6	11.1	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Marketable securities	2.8	2.3	1.1	1.4	1.3	1.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Funded I/R/O employment rights upon retirement	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	0.0	0.0	0.0
Property and equipment	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	0.0	0.0	0.0
Operating lease right-of-use assets							0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total long-term assets	16.4	13.9	12.2	10.8	1.3	1.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Total assets	47.4	43.6	41.8	37.4	34.7	34.7	31.1	48.3	45.4	42.1	42.1	34.1	30.7	27.5	24.1	24.1
Current liabilities:																
Accounts payable and accrued expenses	2.1	3.0	2.3	2.5	2.5	2.5	1.8	2.4	2.6	2.5	2.5	2.6	2.5	2.6	2.6	2.6
Deferred revenues	2.4	1.1	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Payable to related parties	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Operating lease liabilities							0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total current liabilities	4.6	4.2	5.1	5.2	5.3	5.3	4.6	5.3	5.4	5.3	5.3	5.4	5.3	5.4	5.4	5.4
Long-term liabilities																
Contract liabilities		10.3	11.0	10.3												
Deferred revenues	11.4				9.7	9.7	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
Employee rights upon retirement	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	0.0	0.0	0.0
Provision for uncertain tax position	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	0.0	0.0	0.0
Operating lease liabilities							0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Other liabilities	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total long-term liabilities	11.7	10.6	11.4	10.7	10.0	10.0	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
Stockholders' equity																
Common stock	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Additional paid-in capital	99.4	99.7	99.9	100.2	100.3	100.3	100.6	120.4	120.7	121.0	121.0	121.2	121.5	121.8	122.1	122.1
Accumulated OCI	0.7															
Accumulated deficit	(69.2)	(71.1)	(74.8)	(78.8)	(81.1)	(81.1)	(83.6)	(86.93)	(90.27)	(93.67)	(93.67)	(97.15)	(100.69)	(104.30)	(107.97)	(107.97)
Total stockholders' equity	31.1	28.9	25.3	21.6	19.4	19.4	17.2	33.7	30.6	27.5	27.5	24.3	21.0	17.7	14.3	14.3
Total liabilities and stockholders' equity	47.4	43.6	41.8	37.4	34.7	34.7	31.1	48.3	45.4	42.1	42.1	39.1	35.7	32.5	29.1	29.1

Source: Aegis Capital estimates; company filings

Cash flow statement

Oramed (ORMP)

Historical and forecasted cash flow statement (\$mm)

	2018					2019					2020					2021				
	FY:18A	1QA	2QA	3QA	4QA	FY:19A	1QA	2QE	3QE	4QE	FY:20E	1QA	2QE	3QE	4QE	FY:21E				
	8/31/2018	11/30/2018	2/28/2019	5/31/2019	8/31/2019	8/31/2019	11/30/2019	2/28/2019	5/31/2019	8/31/2019	8/30/2020	11/30/2020	2/28/2020	5/31/2021	8/31/2021	8/30/2021				
Cash flows from operating activities:																				
Net gain (loss)	(12.7)	(4.3)	(3.7)	(4.1)	(2.3)	(14.4)	(2.5)	(3.3)	(3.3)	(3.4)	(12.6)	(3.5)	(3.5)	(3.6)	(3.7)	(14.3)				
Adjustments:																				
Depreciation	0.0	0.0	0.0		0.0	0.0														
Exchange differences and interest on deposit and held to maturity bonds	0.0	(0.1)	0.0	(0.1)	(0.0)	(0.2)	(0.1)				(0.1)									
Changes in fair value of investments		(0.1)	0.1	0.2	0.2	0.4	0.3				0.3									
Stock-based compensation	1.5	0.2	0.2	0.3	0.1	0.8	0.3	0.3	0.3	0.3	1.1	0.3	0.3	0.3	0.3	1.1				
Shares issued for services	0.1	0.0	0.0	0.0	0.0	0.1	0.0				0.0									
Changes in operating assets and liabilities:																				
Prepaid expenses and other current assets	(0.4)	(0.2)	(0.2)	0.6	(0.6)	(0.5)	0.4				0.4									
Accounts payable, accrued expenses and related parties	(0.6)	0.9	(0.6)	0.1	0.1	0.5	(0.71)	0.63	0.16	(0.14)	(0.06)	0.14	(0.14)	0.14	0.00	0.1				
Deferred revenue	(2.4)				0.3	0.3					0.0									
Contract liabilities		(0.7)	2.3	(0.7)	(1.0)		(0.7)				(0.7)									
Liability for employee rights upon retirement	0.0		0.0	0.0	0.0	0.0	(0.0)				(0.0)									
Other liabilities	(0.1)	(0.0)	0.0	(0.0)	(0.0)	(0.0)	(0.0)				0.0									
Total net cash used in operating activities	(14.7)	(4.1)	(1.9)	(3.7)	(3.3)	(12.9)	(3.0)	(2.4)	(2.9)	(3.3)	(11.5)	(3.1)	(3.4)	(3.2)	(3.4)	(13.0)				
Cash flows from investing activities																				
Purchase of short-term deposits	(7.1)		(2.7)	(0.3)	(22.1)	(25.0)	(3.0)													
Purchase of long-term deposits	(15.0)		(2.8)	(1.5)	0.0	(4.2)														
Purchase of held to maturity securities	(4.4)	(0.4)	0.0	(0.4)	(0.6)	(1.4)														
Proceeds from sale of short-term deposits		3.0	6.1	5.3	(14.3)		4.6	5.0	5.0	5.0	19.6									
Proceeds from maturity of short-term deposits	17.3				38.6	38.6														
Proceeds from maturity of held to maturity securities	2.3	0.4	0.8	1.0	1.1	3.3	1.2													
Funds in respect of employee rights upon retirement	(0.0)		(0.0)	0.0	(0.0)	(0.0)	0.0													
Purchase of property and equipment	(0.0)	(0.0)	0.0	(0.0)	(0.0)	(0.0)	(0.0)													
Total net cash provided by investing activities	(7.0)	3.0	1.5	4.2	2.6	11.3	2.8	5.0	5.0	5.0	17.8									
Cash flows from financing activities																				
Proceeds from issuance of common stock and warrants, net	21.7																			
Proceeds from issuance of common stock, net							0.0	19.5			19.5									
Proceeds from exercise of options							0.0				0.0									
Proceeds from exercise of warrants and options	1.0										0.0									
Total net cash provided by financing activities	22.7						0.0	19.5			19.5									
Effect of exchange rate changes on cash	0.0	0.0	0.0	(0.0)	0.0	0.0	0.0													
Change in cash and cash equivalents	1.0	(1.1)	(0.4)	0.5	(0.6)	(1.7)	(0.2)	22.2	2.1	1.7	25.8	(3.1)	(3.4)	(3.2)	(3.4)	(13.0)				
Cash and cash equivalents, beginning	4.0	5.0	3.9	3.4	3.9	5.0	3.3	3.2	25.3	27.4	3.3	29.2	26.1	22.7	19.5	29.2				
Cash and cash equivalents, end	5.0	3.9	3.4	3.9	3.3	3.3	3.2	25.3	27.4	29.2	29.2	26.1	22.7	19.5	16.1	16.1				

Source: Aegis Capital estimates; company filings

Mentioned

Company	Rating
Eli Lilly	NR
Genentech	NR
Novo Nordisk	NR
Pfizer	NR
Sanofi	NR
MannKind	NR
Entera Bio	NR
Brains Way	NR
BioLineRX	NR
Biosensor Systems	NR
Orcam Technologies	NR
KPMG	NR
Hefei Tianhui	NR

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11. Global News Wire ([link](#))
12. NCBI ([link](#))
13. NCBI ([link](#))
14. NCBI ([link](#))
15. Stat News ([link](#))
16. Global News Wire ([link](#))
17. Journal of Diabetes ([link](#))
18. Diabetes Journals ([link](#))

Required Disclosures

Price Target

Our price target on ORMP is \$5.50

Valuation Methodology

We value ORMP using a discounted cash flow analysis

Risk Factors

- Overview of risks. Risks include, but are not limited to, clinical, regulatory, competitive, reimbursement and financial risks.
- Development risk. Drugs in clinical development may not advance due to inadequate safety, efficacy, or patient tolerance.
- Regulatory risk. Regulatory agencies may decline to approve regulatory submissions in a timely manner, or may not approve a drug candidate at all.
- Dilution risk. The firm may require substantial funding to complete the clinical development of its candidates and establish commercial infrastructure, which could be dilutive to current shareholders.
- Competition risk. We expect competition for the company's drugs from several public and private companies developing pharmaceuticals.
- Reimbursement risk. Sales of the firm's drugs could depend upon reimbursement from private, as well as public, reimbursement agencies.
- Small company risk. Oramed is a small company. Small companies carry greater risk, in general, than large companies.
- Lack of cash flow. Companies with negative cash flow are riskier, in our opinion, than companies that produce positive cash from operations.
- Failure to earn cost of capital. Companies with a negative ROIC-WACC spread are by definition not earning their cost of capital which represents a significant risk.
- Other risks. There are many more risks that we may have overlooked. Investors should understand that these unknown risks and externalities, even if not explicitly stated, and which may or may not be known, are nevertheless real and are a risk.

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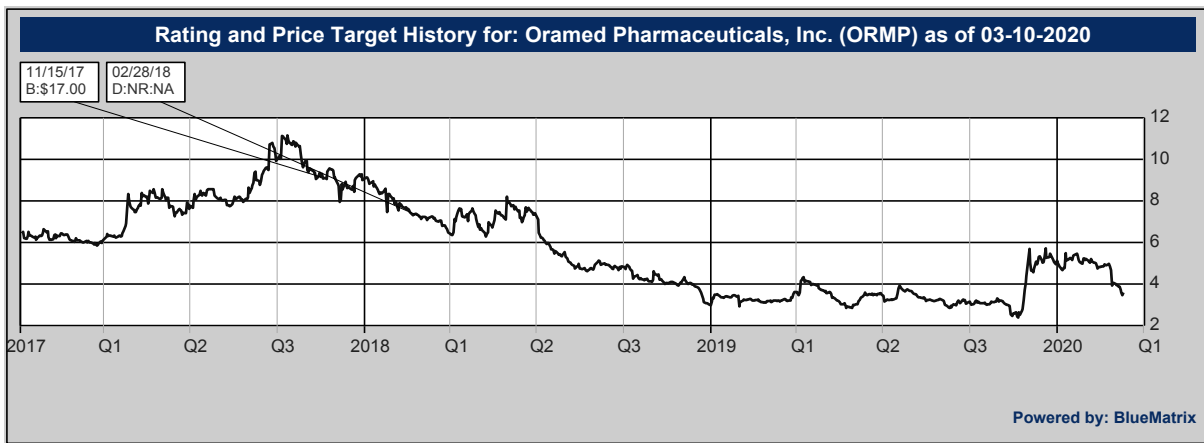
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Rating	Investment Banking Services/Past 12 Mos.	
	Percent	Percent
BUY [BUY]	92.45	40.82
HOLD [HOLD]	7.55	25.00
SELL [SELL]	0.00	0.00

Meaning of Ratings

- A) A Buy rating is assigned when we do not believe the stock price adequately reflects a company's prospects over 12-18 months.
- B) A Hold rating is assigned when we believe the stock price adequately reflects a company's prospects over 12-18 months.
- C) A Sell rating is assigned when we believe the stock price more than adequately reflects a company's prospects over 12-18 months.

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