Investor Presentation

May 23, 2018

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Chair, President & CEO

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CFO

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A pharmaceutical company focused on the development and commercialization of therapeutics for the U.S. market.

Key Attributes:

- U.S. hospital sales force with cardio focus
- Proven success with growth of Aggrastat® franchise
- 2nd cardio drug, Zypitamag® launched Q2 2018
- Expanding portfolio through product development and acquisition
- Growing revenue and cash flow positive
- Strong balance sheet – No debt, presently over $70 million in cash and short-term investments

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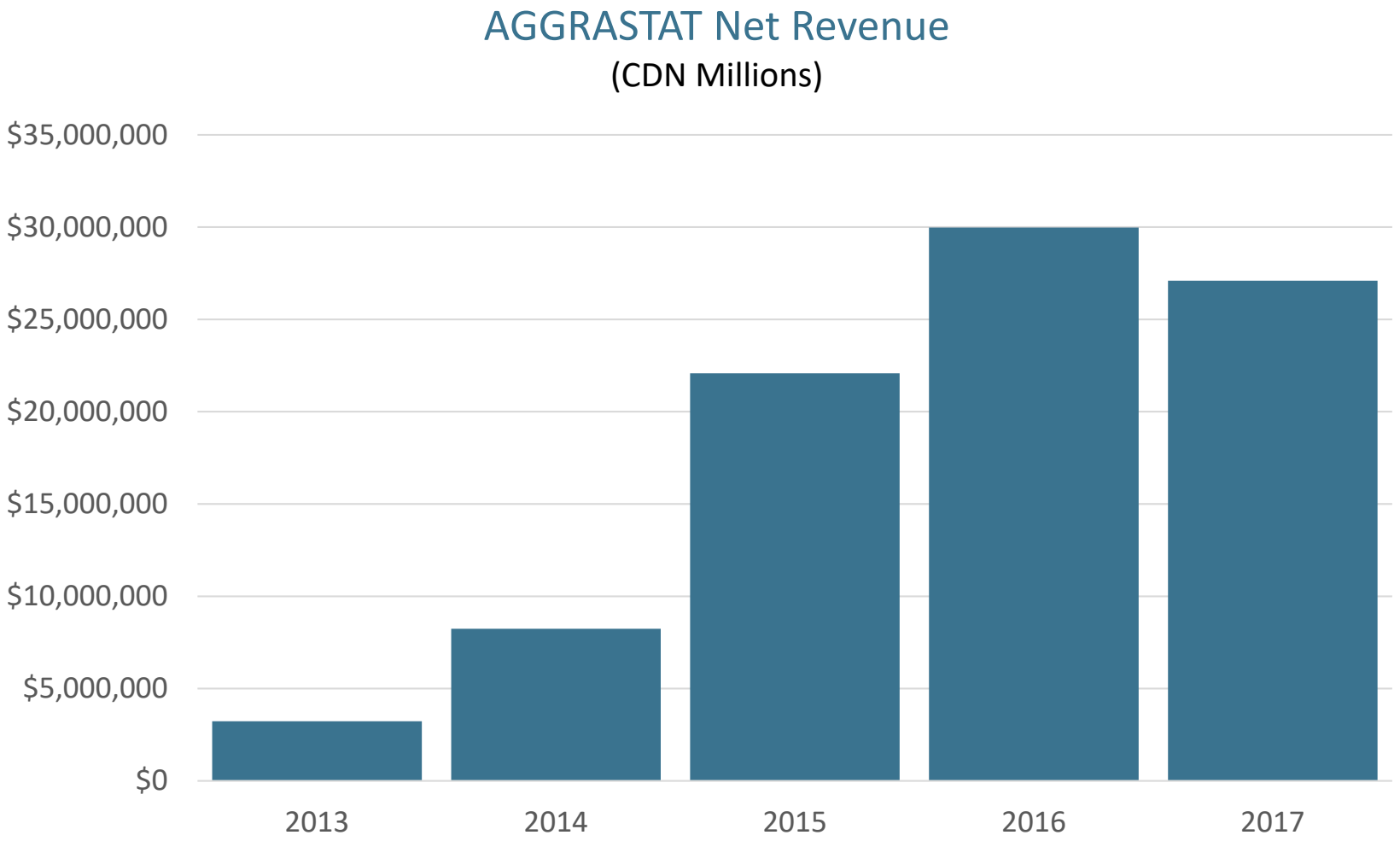
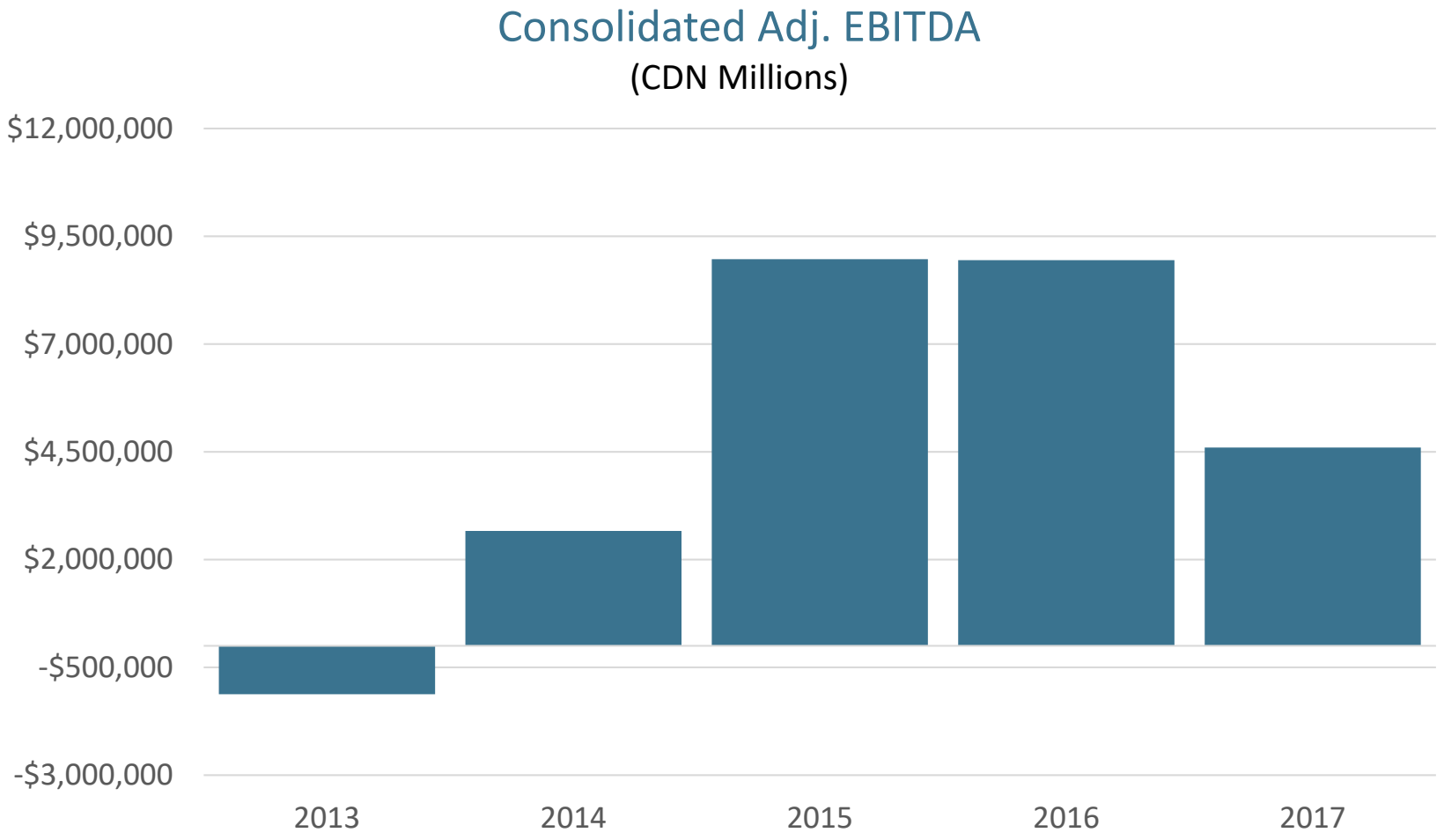
AGGRASTAT Net Revenue Growth

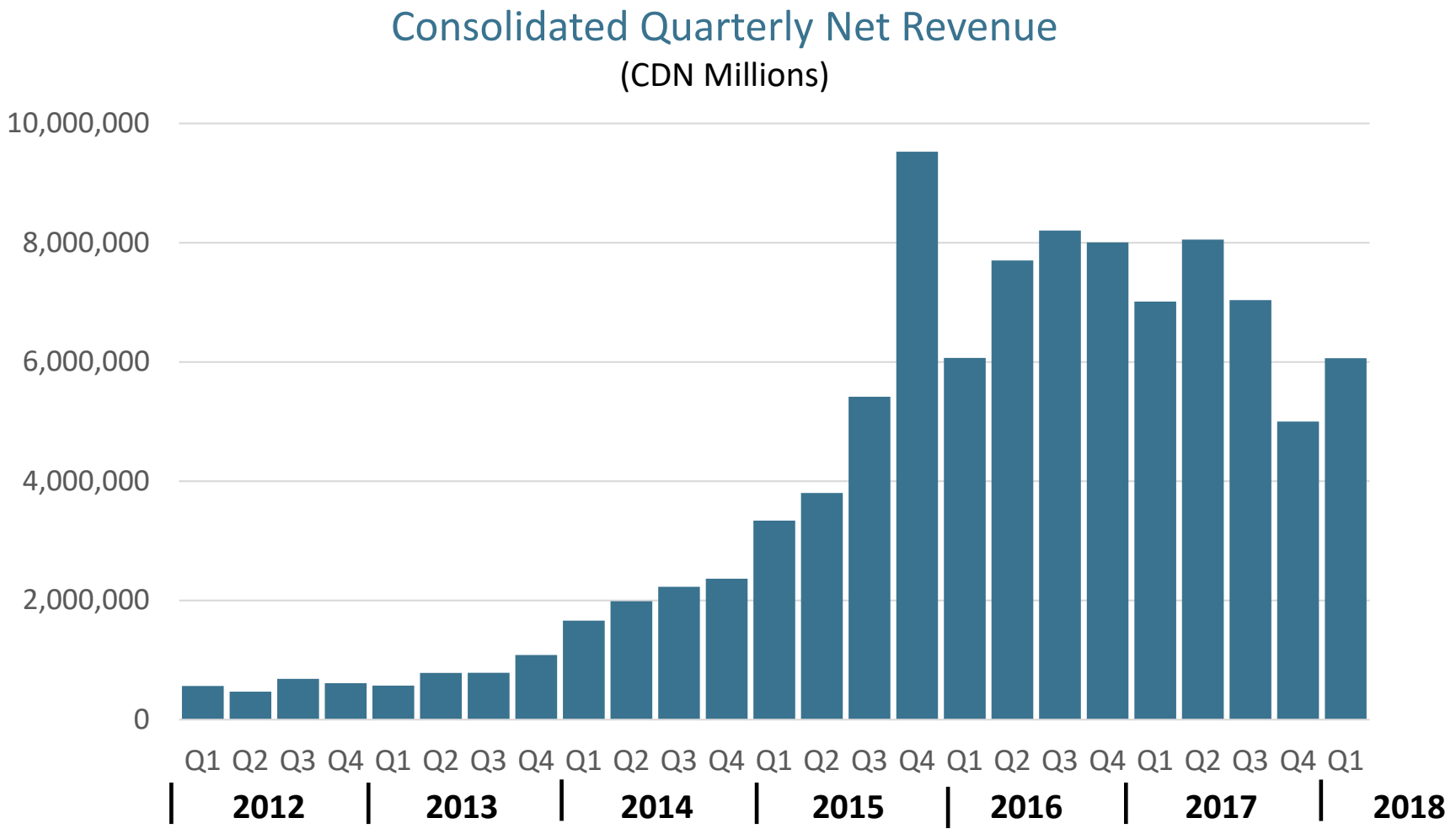


Adj. EBITDA* Growth

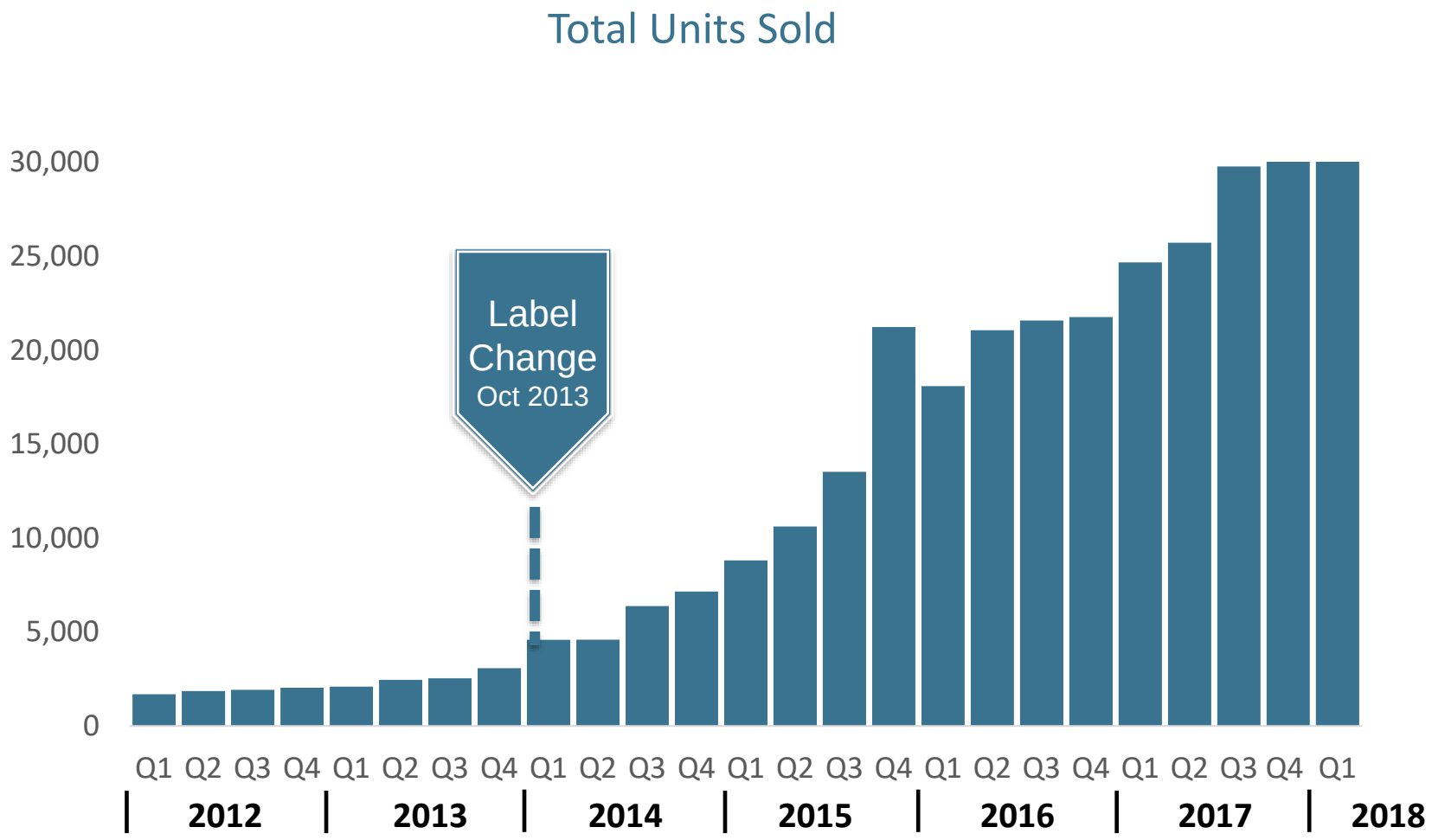


* The Company defines EBITDA as "earnings before interest, taxes, depreciation, amortization and other income or expense" and Adjusted EBITDA as "EBITDA adjusted for non-cash and one-time items". The terms "EBITDA" and "Adjusted EBITDA", as it relates to the results prepared using International Financial Reporting Standards ("IFRS"), do not have any standardized meaning according to IFRS. It is therefore unlikely to be comparable to similar measures presented by other companies.

Quarterly Net Revenue



AGGRASTAT® Hospital Demand



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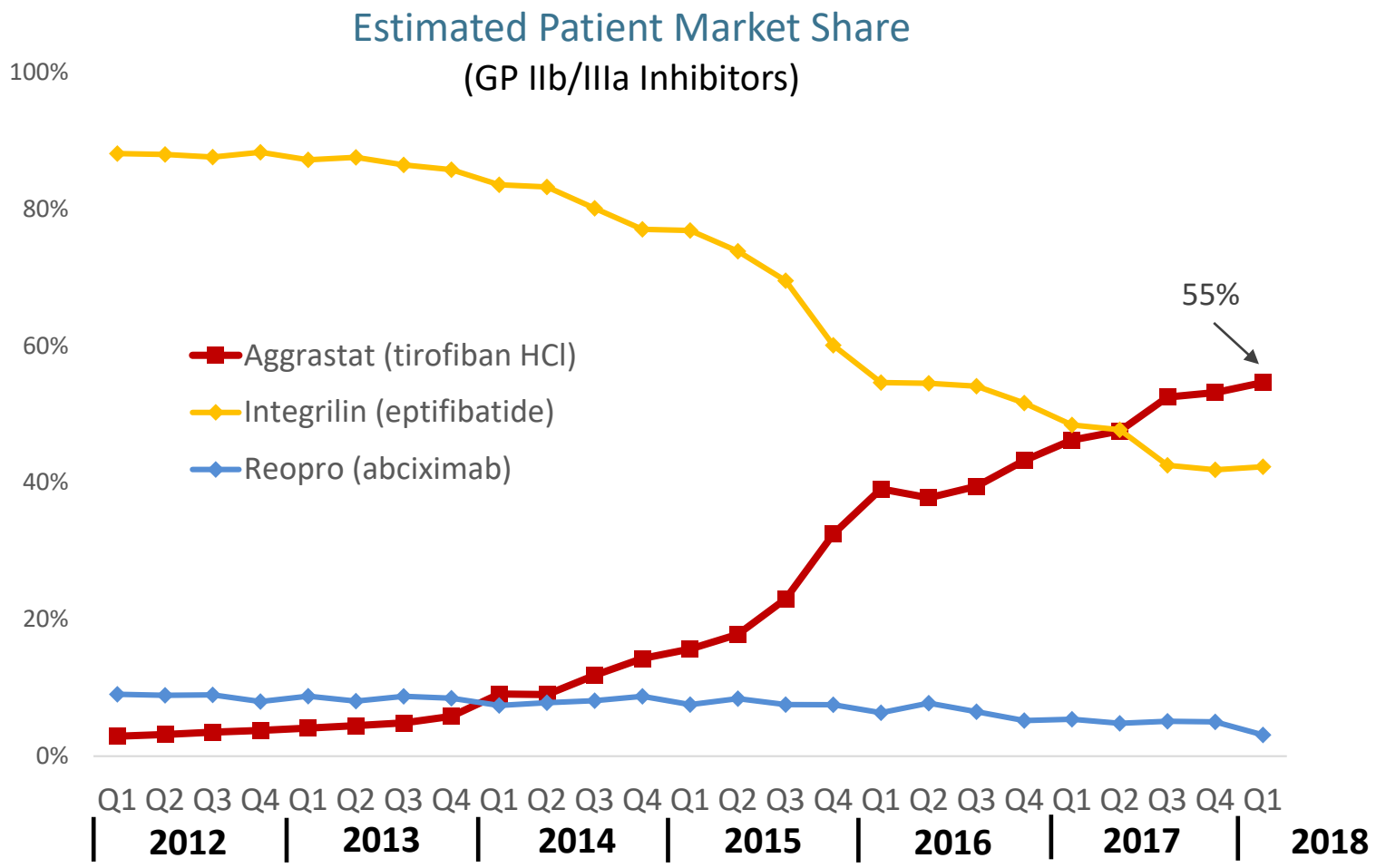
AGGRASTAT® Patient Market Share



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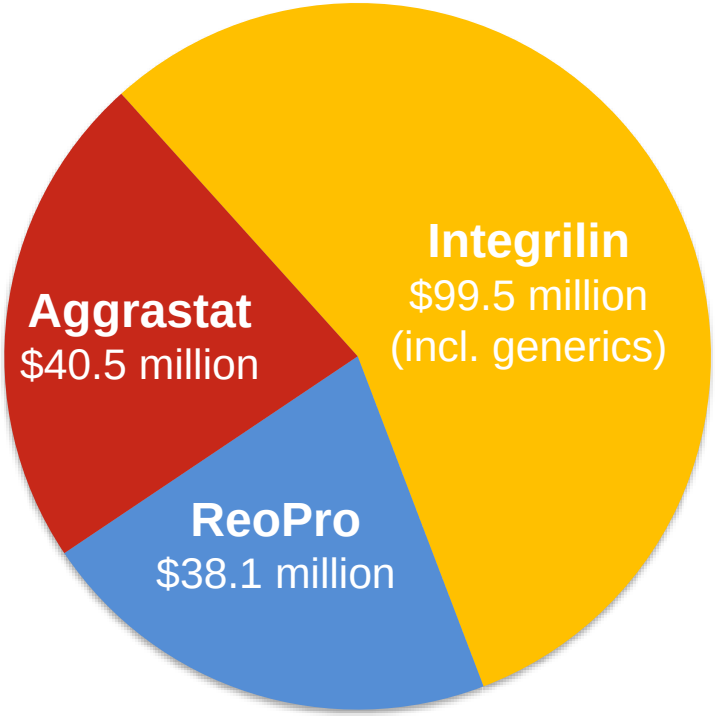
U.S. GP IIb/IIIa Inhibitor (GPI) Market

Aggrastat Market Positioning:

- Significant platelet inhibition profile
- Robust data in over 8,000 patients
- Class 1 guideline recommended[1,2]
- Numerous administration conveniences
- Lower per-patient acquisition costs

2017 GPI Market = ~$180 Million USD

(WAC* Hospital Sales)



* WAC = Wholesale Acquisition Costs (no discounts/rebates)

1. Amsterdam EA et al. J Am Coll Cardiol 2014;64:2645-2687
2. Levine GN et al. J Am Coll Cardiol 2011; 58:e44-e122

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AGGRASTAT®

(tirofiban hydrochloride) Injection

Acute cardiovascular hospital product

- I.V. platelet inhibitor; binds to GP IIb/IIIa receptor
- Indicated for Acute Coronary Syndrome (ACS)
- 41% reduction in death and MI in high-risk patients[1]
- Launched by Merck in 1998
- U.S. rights acquired by Medicure in 2006
- Medicure obtained broader FDA approval in October 2013 for High Dose Bolus regimen
- Patented until 2023

1. PRISM-PLUS Study Investigators. N Engl J Med. 1998;338:1488-1497

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FDA Approval: Bolus Vial

Aggrastat is now available as a concentrated bolus vial

- Pre-mixed, single bolus delivery*
- Formulated for convenient IV push
- No pump programming needed
- Relatively neutral pH
- Does not require refrigeration

* Current 100 mL and 250 mL (both 50 mcg/mL) bag formats provide the infusion dose.

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Apicore Transaction Summary

July 2014	Acquired 5% interest in Apicore for lead role in structuring majority interest purchase and financing of Apicore. Also received option to acquire remaining shares at a fixed price for 3 years.
December 2016	Exercises option to acquire majority interest (60%) of Apicore for US$34.75M after obtaining CDN$60M of long-term debt
July 2017	Acquired additional 32% ownership for US$24.5M after Apicore repays US$9.8M loan from Medicure and advances additional funds to Medicure.
October 2017	Sale of Apicore business for expected net proceeds of US$105M*, including approximately US$55M received on closing.
November 2017	Repayment of long-term debt ($60M Crown debt and $1M MDC debt)
January 2018	Receipt of second tranche of funds from Apicore sale of approximately US$50M.

*Additional payments may be received over the next 18 months relating to holdback funds.

Product & Business Development

- Building a pharmaceutical portfolio focused on the U.S. cardiovascular market
- Leveraging our sales infrastructure
- 3 ANDAs in the pipeline for generic cardiovascular drugs
- Investing in reduced risk - high reward development projects (ANDAs) and acquisitions (Zypitamag)
- Maintaining focus on profitability

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Zypitamag™

(pitavastatin) tablets

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Zypitamag Overview

Branded cardiovascular: Drug for the treatment of patients with primary hyperlipidemia or mixed dyslipidemia.

Approved by FDA: 2017

Launched: May 1st 2018

License Term: On December 14, 2017, obtained an exclusive license from Zydus Cadila, a multinational pharmaceutical company to market and sell in the US for seven years with extensions available.

Zypitamag (pitavastatin)

Key Points

- Pitavastatin is **recommended** in the most recent ACC/AHA Statin Intensity Guidelines as a moderate intensity statin (2mg and 4mg).
- **Minimally processed by enzymes of the CYP450 family** - decreases the likelihood of CYP-mediated drug-drug interactions.
- **Statistical superiority to Pravachol (pravastatin) in LDL-C reduction**, in patients ≥65 years of age.
- **Comparable efficacy** at the 2mg and 4mg doses to commonly prescribed strengths of atorvastatin (10mg, 20mg) and simvastatin (20mg, 40mg).
- **Dosing simplicity** with easy to swallow 1 mg (lowest strength), 2 mg (moderate strength) or 4 mg (highest strength) tablets taken once daily **with or without food.**

Zypitamag (pitavastatin)

Key Points

- Wealth of post-market surveillance studies in **>33,000 patients** from diverse ethnicities and with co-morbid conditions.
- Lowering of LDL-C with non-significant increase in blood glucose level in comparison to Lipitor (atorvastatin**) in patients with T2DM**.
- Does not require dosage modifications based on patient **race**, unlike Crestor (rosuvastatin) and Zocor (simvastatin).
- Pitavastatin is **not associated with** headache, nausea, abdominal pain and occurrence of infections, side effects that are commonly experienced with other statins; such as Crestor (rosuvastatin), Lescol (fluvastatin), Mevacor (lovastatin), Pravachol (pravastatin), Zocor (simvastatin) and Lipitor (atorvastatin).

Zypitamag Launch – ACC March 2018

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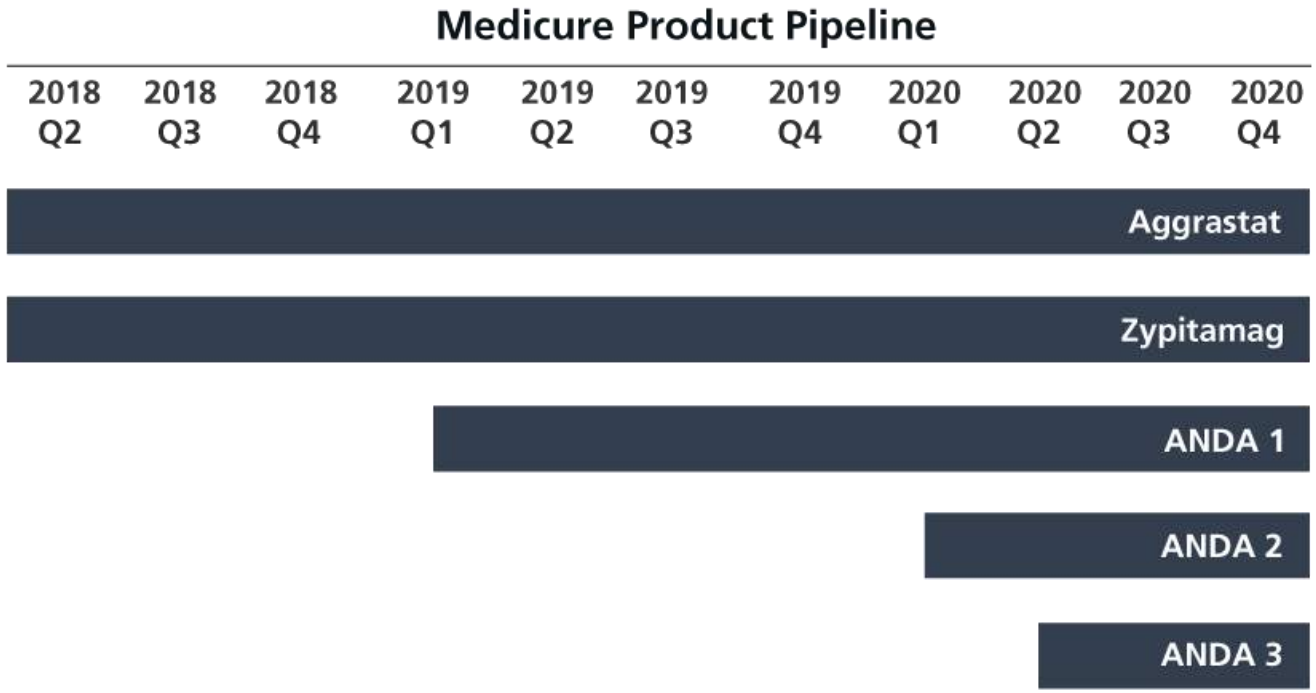
Product & Business Development

✓ 3 ANDAs in the pipeline for generic cardiovascular drugs

On Market



Key Financial Info – MPH: TSXV

- **Capital Structure as at May 22, 2018**

Basic Total	15,881,760
Fully Diluted Total	18,454,054
Share Price	**C$6.20**
Market Cap	**C$98.5M**

- **Recent Financial Highlights**
  - Q1 2018 Net Revenue $6.1 M
  - Q1 2018 Adj. EBITDA $874,000
  - 2017 Net Revenue * $27.1 M
  - 2017 Adj. EBITDA * $4.6 M
  - Current cash and short-term investments >$70 million with no debt

- **Focus**
  - Continue to grow Aggrastat brand
  - Growing Zypitamag sales
  - Continue diversification through product & business development

*Excludes results from Apicore business which was divested on October 2, 2017.

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Thank you

Contact a Product Specialist
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For More Information
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ww.aggrastat.com
www.zypitamag.com

Investor Relations
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Aggrastat Prescribing Information

Indication: AGGRASTAT is indicated to reduce the rate of thrombotic cardiovascular events (combined endpoint of death, myocardial infarction, or refractory ischemia/repeat cardiac procedure) in patients with non-ST elevation acute coronary syndrome (NSTE-ACS).

Dosage and Administration:

High-Dose Bolus Regimen:

Administer intravenously ***25 mcg/kg within 5 minutes and then 0.15 mcg/kg/min for up to 18 hours***. In patients with CrCl ≤60 mL/min, use the full bolus and halve the maintenance infusion.

Contraindications: Known hypersensitivity to any component of AGGRASTAT; History of thrombocytopenia with prior exposure to AGGRASTAT; Active internal bleeding, or history of bleeding diathesis, major surgical procedure or severe physical trauma within previous month

Warnings and Precautions: AGGRASTAT can cause serious bleeding. If bleeding cannot be controlled discontinue AGGRASTAT; Thrombocytopenia: Discontinue AGGRASTAT and heparin

Adverse Reactions: Bleeding is the most commonly reported adverse reaction

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Important Zypitamag Safety Information

IMPORTANT SAFETY INFORMATION FOR ZYPITAMAG (pitavastatin)

INDICATIONS & USAGE

Drug therapy should be one component of multiple-risk-factor intervention in individuals who require modifications of their lipid profile. Lipid-altering agents should be used in addition to a diet restricted in saturated fat and cholesterol only when the response to diet and other nonpharmacological measures has been inadequate.

Primary Hyperlipidemia and Mixed Dyslipidemia: ZYPITAMAG is indicated as an adjunctive therapy to diet to reduce elevated total cholesterol (TC), low-density lipoprotein cholesterol (LDL-C), apolipoprotein B (Apo B), triglycerides (TG), and to increase HDL-C in adult patients with primary hyperlipidemia or mixed dyslipidemia. **Limitations of Use:** Doses of ZYPITAMAG greater than 4 mg once daily were associated with an increased risk for severe myopathy in premarketing clinical studies. Do not exceed 4 mg once daily dosing of ZYPITAMAG. The effect of ZYPITAMAG on cardiovascular morbidity and mortality has not been determined. ZYPITAMAG has not been studied in Fredrickson Type I, III, and V dyslipidemias.

CONTRAINDICATIONS: ZYPITAMAG is contraindicated in patients with a known hypersensitivity to product components, in patients with active liver disease (which may include unexplained persistent elevations in hepatic transaminase levels), in women who are pregnant or may become pregnant, in nursing mothers, or in co-administration with cyclosporine.

WARNINGS & PRECAUTIONS

Skeletal Muscle Effects: Cases of myopathy and rhabdomyolysis with acute renal failure secondary to myoglobinuria have been reported with HMG-CoA reductase inhibitors, including pitavastatin.

These risks can occur at any dose level, but increase in a dose-dependent manner, with advanced age (≥ 65 years), renal impairment, and inadequately treated hypothyroidism; administer with caution in these patients, or when used concomitantly with fibrates or lipid-modifying doses of niacin, or colchicine. Avoid concomitant administration with gemfibrozil.

Advise patients to promptly report unexplained and/or persistent muscle pain, tenderness, or weakness, particularly if accompanied by malaise or fever; discontinue ZYPITAMAG.

If muscle signs and symptoms persist after discontinuation, this may be a sign of immune-mediated necrotizing myopathy (IMNM), an autoimmune myopathy associated with statin use, requiring immediate medical attention. IMNM is characterized by proximal muscle weakness and elevated serum creatine kinase, which persist despite discontinuation of statin treatment; muscle biopsy showing necrotizing myopathy without significant inflammation; improvement with immunosuppressive agents.

ZYPITAMAG should be discontinued if markedly elevated creatine kinase levels occur or myopathy is diagnosed or suspected. ZYPITAMAG should also be temporarily withheld in any patient with an acute, serious condition suggestive of myopathy or predisposing to the development of renal failure secondary to rhabdomyolysis (e.g., sepsis, hypotension, dehydration, major surgery, trauma, severe metabolic, endocrine, and electrolyte disorders, or uncontrolled seizures).

Liver Enzyme Abnormalities:

Persistent elevation in hepatic transaminases can occur. Check liver enzymes before initiating therapy and if signs or symptoms of liver injury occur; advise patients to report fatigue, anorexia, right upper abdominal discomfort, dark urine or jaundice.

Fatal and non-fatal hepatic failure can occur. Interrupt ZYPITAMAG if serious liver injury with clinical symptoms and/or hyperbilirubinemia or jaundice occurs. If an alternate etiology is not found do not restart ZYPITAMAG.

Use ZYPITAMAG with caution in patients who consume substantial quantities of alcohol and/or have a history of chronic liver disease. Do not use ZYPITAMAG if patient has active liver disease, which may include unexplained persistent transaminase elevations.

Endocrine Function: Increases in HbA1c and fasting serum glucose levels have been reported.

COMMON ADVERSE REACTIONS: myalgia, back pain, diarrhea, constipation and pain in extremity (rate ≥ 2% in at least one marketed dose). This is not a complete list of all reported adverse events.

For additional information, refer to full Prescribing Information.

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