Investor Presentation

August 11, 2020

Albert Friesen
Chair & CEO

Neil Owens
President & COO

James Kinley
CFO

Forward Looking Statement

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A Heart for Life: WE ARE MEDICURE

WE partner with healthcare providers to provide value

WE define value as:

- ❖ Life-changing medicines and technologies
- ❖ Cost effective products
- ❖ Meaningful clinical engagement

WE focus on the heart: commercialization of cardiovascular therapies for the U.S. market

- ✓ Urgent care intervention
- ✓ Preventative therapies
- ✓ Effective diagnostic technology

Medicure: Heart Minded Leadership

- **Dr. Albert Friesen, CEO & Board Chair**
  - Founded Medicure in 1997
  - Created and developed multiple companies, including ABI Biotechnology (now Apotex Fermentation), The Winnipeg Rh Institute and Genesys Venture Inc.

- **Dr. Neil Owens, President & COO**
  - Joined Medicure in 2014 in Medical Affairs, named as President in 2019
  - Responsible for the execution of strategic plans and oversight of operations

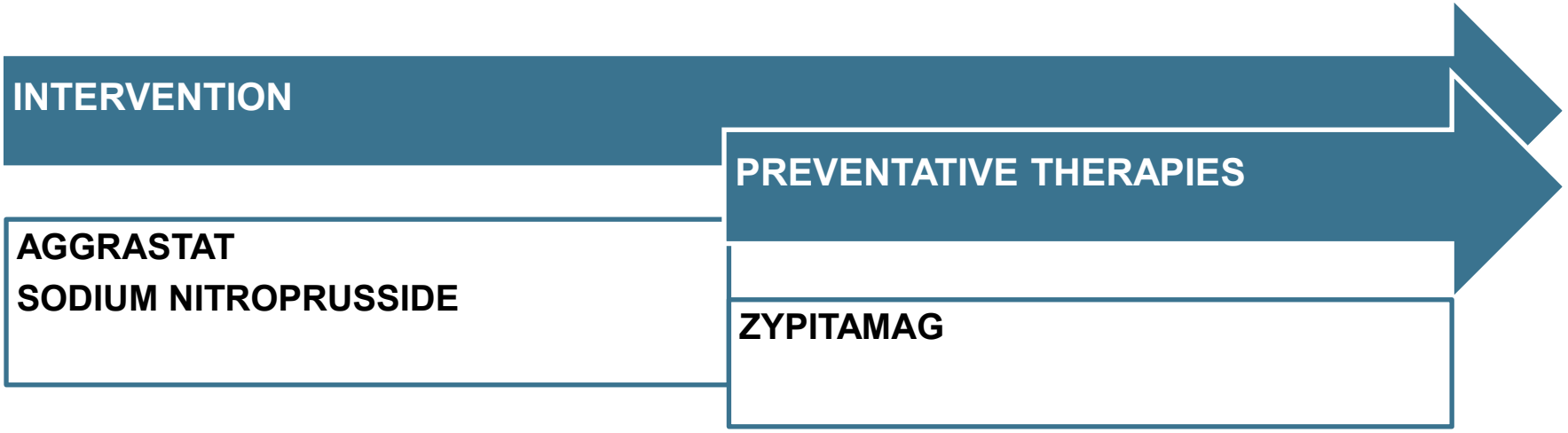
- **Mr. James Kinley (CPA, CA), CFO**
  - Joined Medicure in 2011
  - Extensive experience working with publicly traded entities

Medicure: Heart Minded Strategy

- **Curate a portfolio**
  - Core sustainable cash flow positive products
  - Build distribution & brand awareness of new products
  - Evolve the portfolio as product life cycle occurs
- **Manage the curated portfolio**
  - Sustain balance sheet strength
  - Maintain sufficient liquidity to be opportunistic
- **Secure IP for new cardiovascular therapies, medicines & technologies**

Medicure Investment Progression

Cardiovascular Products for the U.S. Market



Medicure Investment Highlights

Multiple Cardiovascular Products in the U.S. Market

✓ Branded
- ***Aggrastat®***
- ***Zypitamag™***

✓ Generic
- Sodium Nitroprusside
- 2 more ANDAs in pipeline

✓ Financial Strength & Flexibility
- Clean balance sheet – **no debt**

- Proven marketing success
  - ***Aggrastat* patient market share ~65%**

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 Oct 2013 for High Dose Bolus regimen
- *Patented until 2023*
- Introduction of new 15 mL vial format in 2016, in response to market demand

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

Please refer to **IMPORTANT SAFETY INFORMATION** on slide 25

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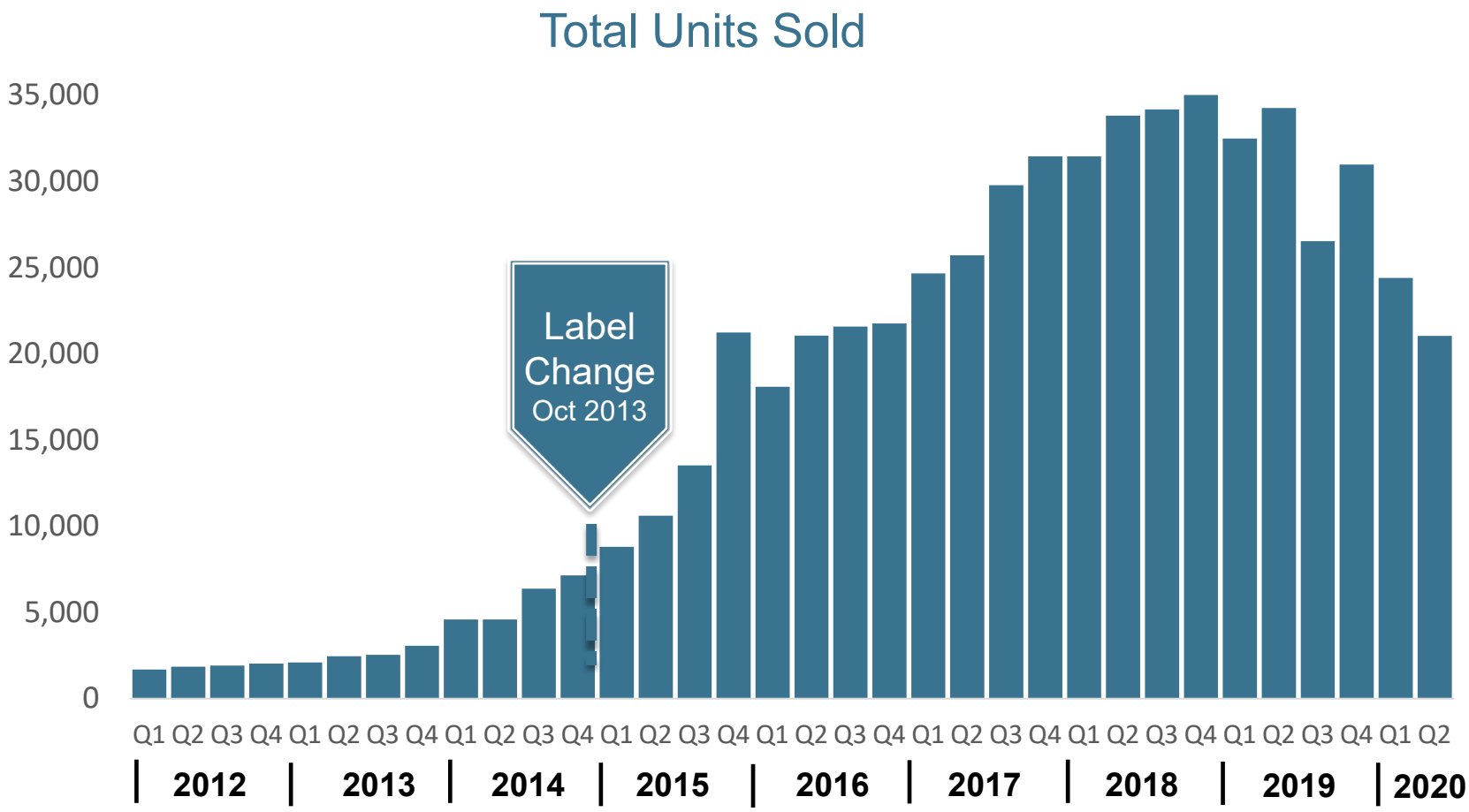
AGGRASTAT Hospital Demand



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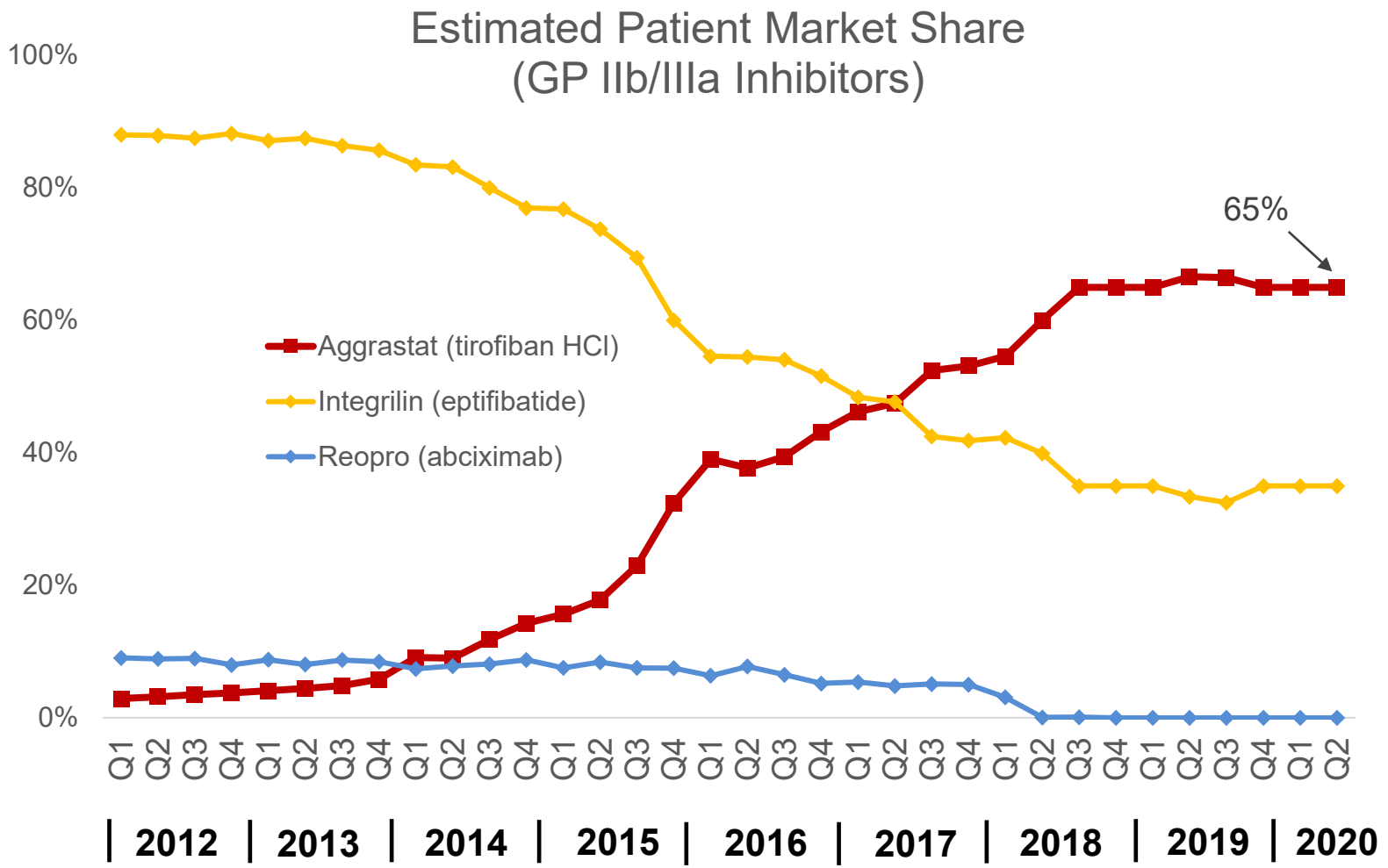
AGGRASTAT Patient Market Share



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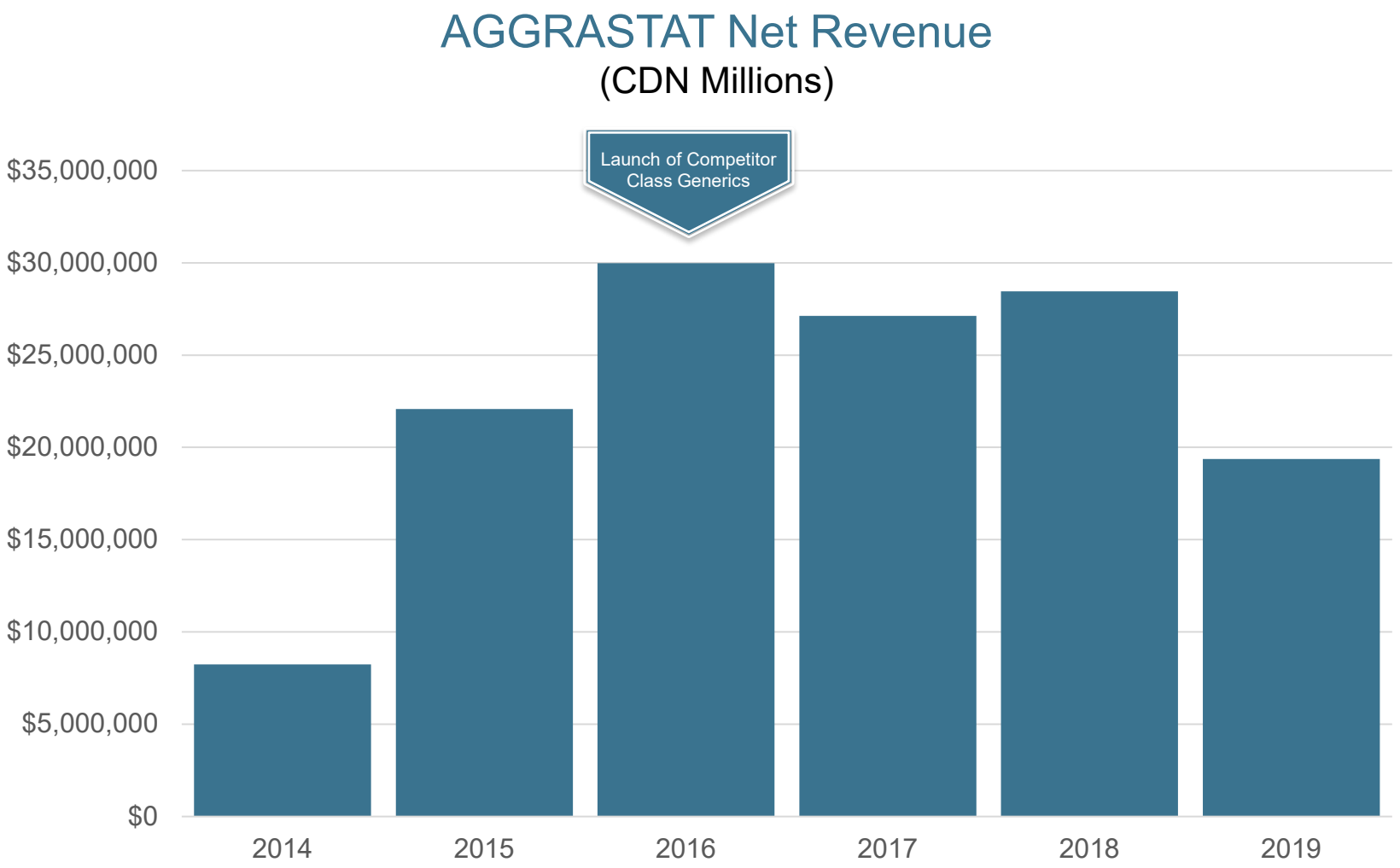
AGGRASTAT Net Revenue



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AGGRASTAT Strategic Focus

INVEST in the BRAND

- Focus on distinctive advantages and capitalize on new clinical data

VALUE PRICING

- Segmentation

OPTIMIZE DISTRIBUTION

- Expense management to extract maximum operating cash flow in a competitive market

Zypitamag™

(pitavastatin) tablets

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ZYPITAMAG (pitavastatin) Overview

Novel Statin: Lowers LDL-C & raises HDL-C, with some benefits over other statins

Positioning: Considered as a 3rd generation statin, metabolized differently from other statins; one branded competitor (Livalo)

Approved by FDA: 2017, via 505(b)(2) pathway

Launched: May 1, 2018, with exclusive U.S. marketing rights

Acquisition: On September 30, 2019, acquired NDA from Zydus Cadila

Please refer to **IMPORTANT SAFETY INFORMATION** on slide 26

ZYPITAMAG – Clinical Differentiation

Key Points

Recommended in the most recent ACC/AHA Statin Intensity Guidelines

Exchange for other statins because of myalgia (muscle pain) is **only 0.5%** vs 5-10% typically reported in RCTs*

Lower effect on blood glucose compared to Lipitor (atorvastatin**) in diabetic patients****

Lower likelihood for drug interactions with other medications (such as HIV-protease inhibitors)

*Kruger, K. et al. 2018 BJGP 68(671) **See Prescribing Information for warning on increases in Hb1Ac and fasting serum glucose levels

Please refer to **IMPORTANT SAFETY INFORMATION** on slide 26

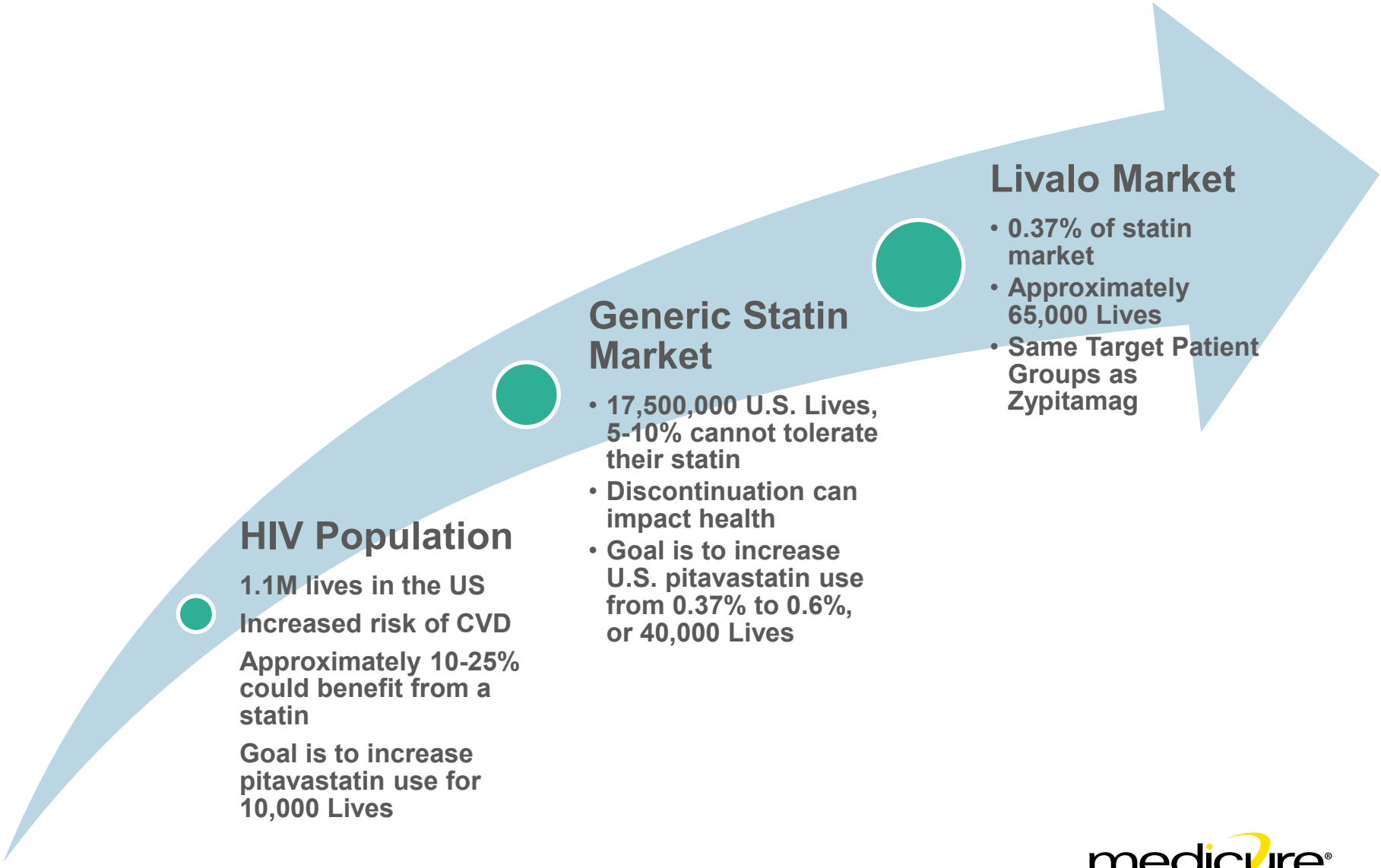
ZYPITAMAG – Patient Groups

Consult the Zypitamag Prescribing Information to understand the clinical and safety data for Zypitamag in these patient groups

Please visit **patient.zypitamag.com** for more information

Please refer to **IMPORTANT SAFETY INFORMATION** on slide 26

ZYPITAMAG – Market Growth Potential



Please refer to **IMPORTANT SAFETY INFORMATION** on slide 26

Sodium Nitroprusside Injection

Acute Cardiovascular Hospital Product

- Indicated for the immediate control of very high blood pressure
- Launched in Q3 2019

Please refer to **IMPORTANT SAFETY INFORMATION, including BOXED WARNING** on slide 27

Future Development Pipeline

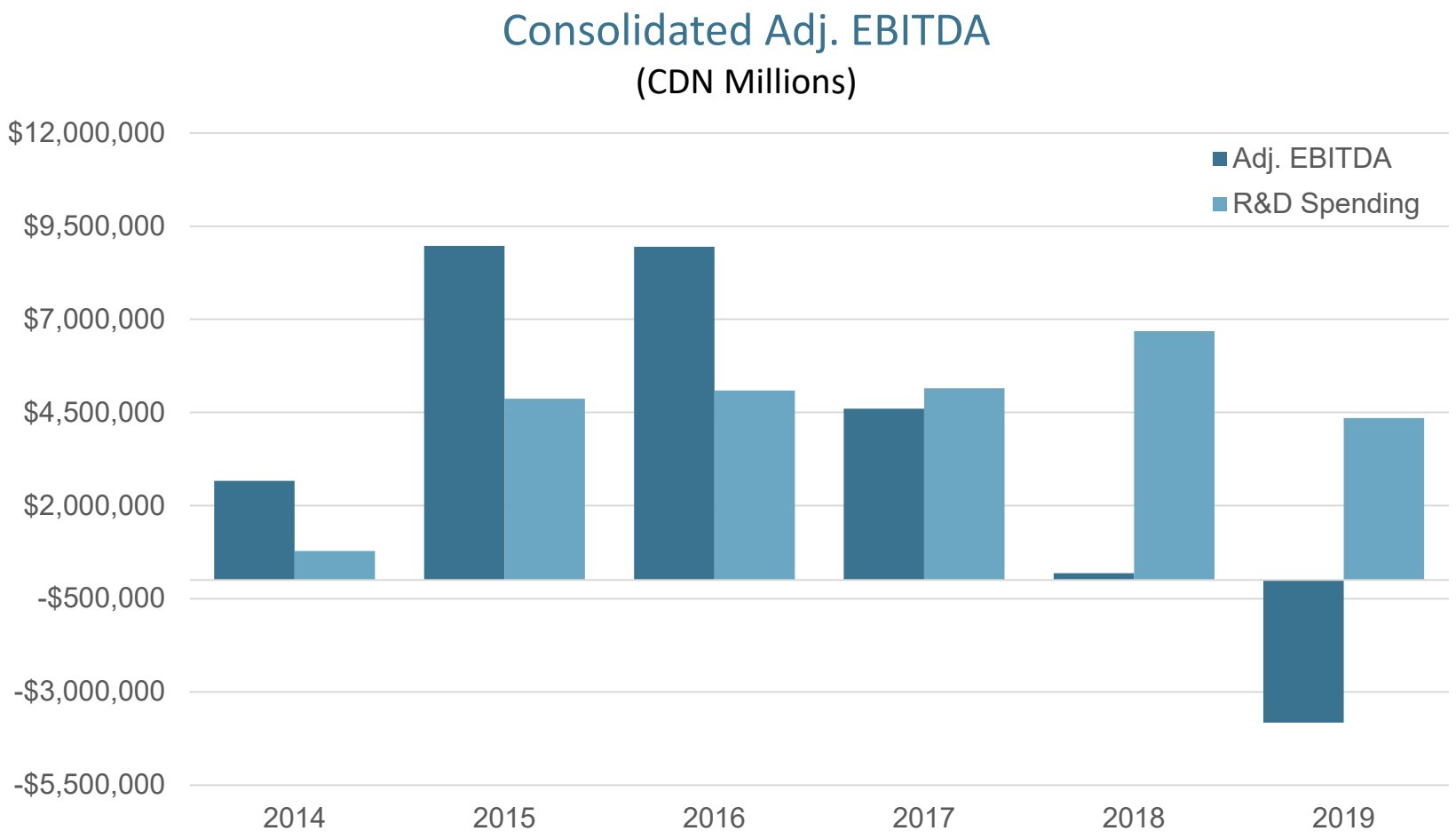
- **1 ANDA approved for Sodium Nitroprusside**
- **2 ANDAs in the pipeline for generic cardiovascular drugs**

On Market

Medicure Product and Business Development Pipeline

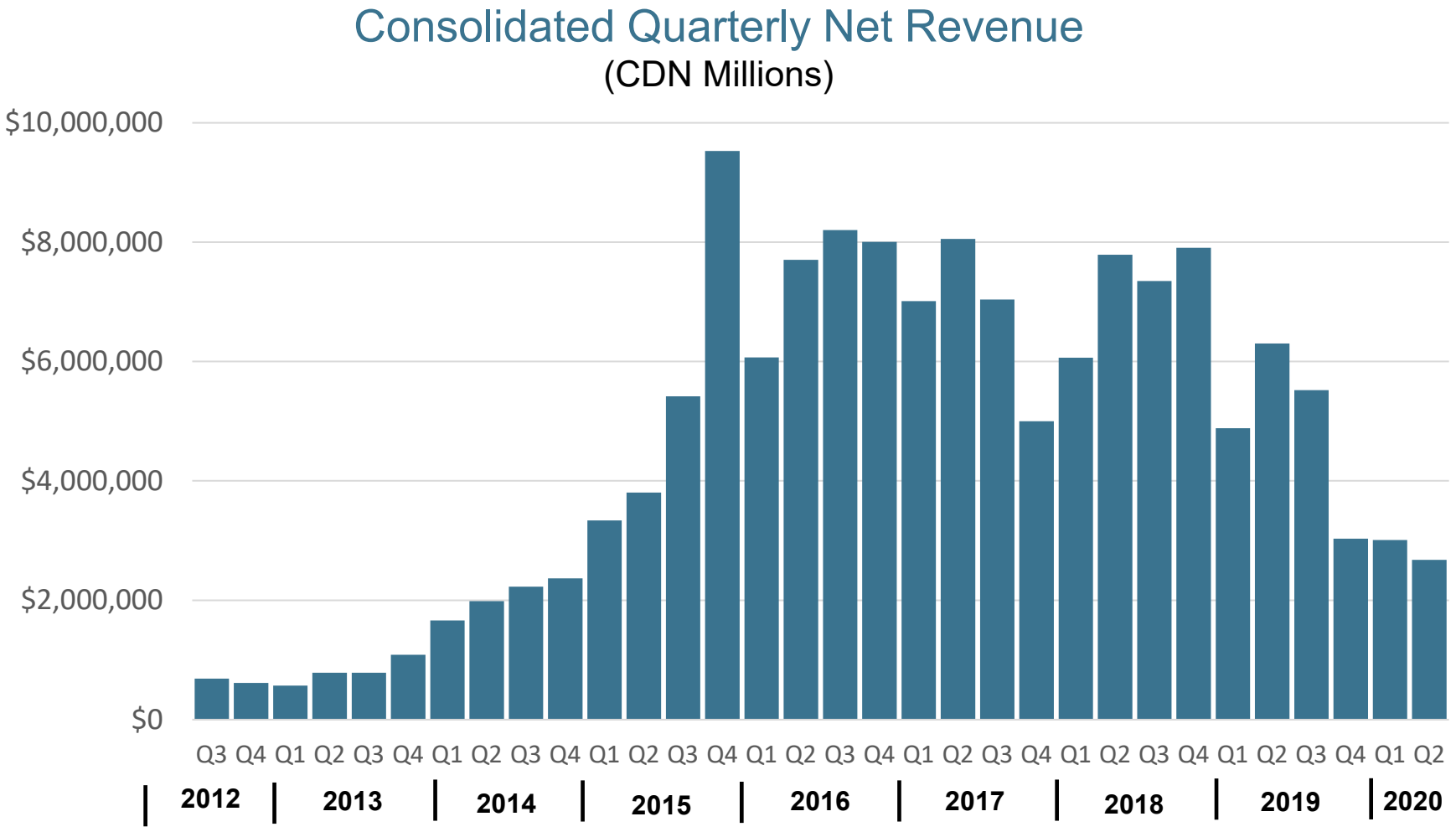
2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	2021 Q3	2021 Q4
AGGRASTAT							
ZYPITAMAG							
Sodium Nitroprusside (ANDA 1)							
				ANDA 2			

Adj. EBITDA* and R&D Spending



* 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 non-recurring 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



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Apicore Transaction Summary

1. July 2014 – Acquired 5% interest in Apicore with a 3 year option to purchase the remaining shares

2. December 2016 – Increased ownership to 60% with CDN $60 million loan

3. July 2017 – Increased ownership to 92% with Apicore funds

4. November 2017 – Sold Apicore business for in excess of CDN $140 million

Key Financial Info – MPH: TSXV

- **Capital Structure as of August 10, 2020**

Basic Total	10,662,313
Fully Diluted Total	12,938,221
Share Price	**C$1.01**
Market Cap	**C$10.8M**

- **Recent Financial Highlights**
  - Q2 2020 Net Revenue $2.7M
  - Q2 2020 Adj. EBITDA $263,000
  - 2019 Net Revenue $20.2M
  - 2019 Adj. EBITDA ($3.8M)
  - **Current cash $11.2M with no debt**
  - Completed substantial issuer bid in 2019 for $26M in cash

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Thank you

Contact a Product Specialist
1.800.509.0544

Investor Relations
ir@medicure.com 1.888.435.2220 (Ext. 228)

For More Information
www.medicure.com
www.aggrastathdb.com
www.zypitamag.com
www.medicure.com/reds

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Important Aggrastat Safety 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, give 25 mcg/kg within 5 minutes and then 0.075 mcg/kg/min for up to 18 hours

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

For additional information, refer to Full Prescribing Information

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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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Important Sodium Nitroprusside Safety Information

IMPORTANT SAFETY INFORMATION for Sodium Nitroprusside Injection

WARNING - EXCESSIVE HYPOTENSION; Sodium Nitroprusside can cause precipitous decreases in blood pressure. In patients not properly monitored, these decreases can lead to irreversible ischemic injuries or death. Use only with continuous blood pressure monitoring.

WARNING - CYANIDE TOXICITY: Except when used briefly or at low (<2 mcg/kg/min) infusion rates, sodium nitroprusside gives rise to important quantities of cyanide ions, which can reach toxic, potentially lethal levels. The usual dose rate is 0.5-10 mcg/kg/min, but infusion at the maximum dose rate should never last more than 10 minutes. If blood pressure has not been adequately controlled after 10 minutes of infusion at the maximum rate, administration should be terminated immediately.

CONTRAINDICATIONS: sodium nitroprusside should not be used

in the treatment of diseases with compensatory hypertension, where the primary hemodynamic lesion is aortic coarctation or arteriovenous shunting.

to produce hypotension during surgery in patients with known inadequate cerebral circulation or in moribund patients (A.S.A. Class 5E) coming to emergency surgery.

in patients with congenital (Leber's) optic atrophy or with tobacco amblyopia.

for the treatment of acute congestive heart failure associated with reduced peripheral vascular resistance.

PRECAUTIONS

Can cause increases in intracranial pressure. Use with extreme caution in patients whose intracranial pressure is already elevated.

Patients with hepatic dysfunction are more susceptible to cyanide toxicity.

If possible, correct pre-existing anemia and hypovolemia prior to administration when sodium nitroprusside is used for controlled hypotension during anesthesia. Use extreme caution in patients who are poor surgical risks (A.S.A. Class 4 and 4E).

The cyanide-level assay is technically difficult and cyanide levels in body fluids other than packed red blood cells are difficult to interpret. Cyanide toxicity will lead to lactic acidosis and venous hyperoxemia, but these findings may not be present until an hour or more after the cyanide capacity of the body's red-cell mass has been exhausted.

The hypotensive effect is augmented by that of most other hypotensive drugs including ganglionic blocking agents, negative inotropic agents, and inhaled anesthetics.

Use during pregnancy only when there is no appropriate alternative for a particular patient as cyanide toxicity may be fatal to the fetus.

No information about the presence of sodium nitroprusside in human milk, the effects on the breastfed infant, or the effects on milk production.

ADVERSE REACTIONS

Excessive hypotension, cyanide toxicity, methemoglobinemia, thiocyanate toxicity, bradycardia, electrocardiographic changes, tachycardia, rash, hypothyroidism, ileus, decreased platelet aggregation, flushing, increased intracranial pressure, venous streaking and irritation at the infusion site.

You are encouraged to report negative side effects of prescription drugs to the FDA. Call 1-800-FDA-1088 or Visit www.fda.gov/medwatch.

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