Disclaimer Regarding Forward-looking Statements

The statements made in this presentation material are forward-looking statements based on management’s assumptions and beliefs in light of information available up to the day of announcement, and involve both known and unknown risks and uncertainties.

Actual financial results may differ materially from those presented in this document, being dependent on a number of factors.

Information concerning pharmaceuticals (including compounds under development) contained within this material is not intended as advertising or medical advice.
Overview of Sepracor Inc.

- Fully integrated, research-based pharmaceutical company
- Current therapeutic focus: Respiratory & CNS
- Primary care and specialty marketing with drug discovery and development infrastructure
- R&D pipeline: early-, mid-, and late-stage assets
- Six products available in the U.S.
  - LUNESTA®, XOPENEX® Inhalation Solution, XOPENEX HFA® and BROVANA®
  - Ciclesonide franchise – includes OMNARIS® Nasal Spray and ALVESCO® HFA Inhalation Aerosol
- Royalty income from three major partnered products
  - ALLEGRA®, CLARINEX® and XYZAL®/XUSAL™
- Strong cash position
- 2008 total revenues of approximately $1.3 billion
Total Revenue Growth 2000 - 2008

CAGR 2000 – 2008: 40.5%

GAAP Net Income (Loss) 2000 - 2008

Prior periods have been adjusted to reflect the impact of the adoption on January 1, 2009 of FASB Staff Position No. APB 14-1, Accounting for Convertible Debt Instruments That May Be Settled in Cash upon Conversion (Including Partial Cash Settlement) (“FSP APB 14-1”), FSP Emerging Issues Task Force No. 03-6-1, Determining Whether Instruments Granted in Share-Based Payment Transactions are Participating Securities (“FSP EITF 14-1”), and certain other immaterial adjustments as described in the Form 8-K filed with the SEC on May 14, 2009.
Sepracor Employee Base

Approximately 2,100 Employees

- Sales: 1319
- Canadian Operations: 92
- General & Administrative: 236
- Research & Development: 252
- Commercial: 162
Sepracor’s Product Portfolio by Contribution

2008 Product Revenues: ~$1.3 B

- $77.0 M
- $57.3 M
- $74.2 M
- $441.0 M
- $600.3 M
- $11.1 M
- $16.8 M
- $14.6 M

Note: SPI revenues are for June to December 2008. ALVESCO revenues are for September to December 2008. OMNARIS revenues are for April to December 2008.
Corporate Priorities and Opportunities

Corporate / Commercial

- Drive strong product portfolio performance with continued focus on efficiencies, effectiveness and profitability
- Generate efficiencies from corporate restructuring to continue to achieve cost savings and build foundation for the future

Research & Development

- Successfully execute high-priority R&D initiatives to strengthen pipeline and enhance current franchises

Corporate Development & Licensing

- Aggressively pursue corporate development and licensing opportunities that enhance the portfolio and complement DSP’s strategic direction

Financial

- Deliver sustainable earnings momentum and enhanced shareholder value
Commercial: Overview of 2009 Priorities

Achieve Financial Targets
- Meet or exceed top- and bottom-line targets
- Launch new direct-to-consumer campaigns for LUNESTA® and OMNARIS® Nasal Spray

Focus on Profitability
- Realize efficiencies from new commercial model implemented early 2009
- Focus on contracting profitability
- Maintain profitability of XOPENEX® Inhalation Solution and LUNESTA

Expand the Portfolio
- ALVESCO® primary care physician launch
- Prepare for STEDESA™ launch

Maximize Capabilities
- Forecasting, incentives and targeting
- Build relationship management platform for all brands
- Commercial training and leadership development
Sepracor’s Commercial Model

Context
• Recent *trends and macroeconomic environment* impacting pharmaceutical market
• *Reach and frequency model with multiple sales forces* is losing momentum
• Gain operating leverage with *new model that supports current and future portfolio*
• Foundation of *changes began in 2008*

Description
• Commercial model *organized into two business units* (Primary Care and Specialty)
• Sales representatives have *territory brand ownership* with no mirrored territories and *high accountability*

Potential Benefits
• Fosters entrepreneurial spirit and *“fast-acting, high-performance”* culture
• Enables *decision-making at lower levels* in headquarters and field
• *Focus remains on important compliance issues*
Product Ownership With Optimized Resources

Sales Representatives will be Market Driven

- Product, Disease State and Market Experts
- 100% Product Ownership and Accountability
- Pay for Performance
- Experts In Territory Analytics and Planning

Primary Care Physician (PCP) Focus
- 94,000 Targets
- 755 Sales Representatives

Specialty Focus
- 43,000 Targets
- 295 Sales Representatives

Home Health Care & Specialty Focus
- 19,000 Targets
- 142 Sales Representatives

LUNESTA® / OMNARIS® Sales Representatives
XOPENEX® / ALVESCO® Sales Representatives
BROVANA® Sales Representatives
Improvement in Field Productivity Metrics

**Total Prescriptions (TRxs) / Representative**
- July - Sept 2008: 1,200
- July - Sept 2009: 1,800
- Improvement: +37%

**Net Sales / Representative**
- July - Sept 2008: $150,000
- July - Sept 2009: $200,000
- Improvement: +31%

**P1 Details / Representative**
- July - Sept 2008: 100
- July - Sept 2009: 125
- Improvement: +24%

**Improvement in Field Metrics**
- TRxs per representative up 37%
- P1 details per representative up 24%
- Net Sales per representative up 31%

Source: IMS IPS, IMS NPA, Sepracor internal
Therapeutic Overview

- 30-40% of adults have some symptoms of insomnia within a year
- 15% of adults have chronic insomnia
- Chronic insomnia is more prevalent with age and among women

U.S. Market Opportunity

- Insomnia market size: $4B+, 5% annual growth
- Highly competitive market with established generic options
- 1/3 of the volume prescription and 2/3 over-the-counter; 90% of the sales from prescription and 10% from over-the-counter

LUNESTA

- A non-narcotic sedative hypnotic indicated for sleep onset and sleep maintenance
- Activity on GABA-A receptor complex across α1, α2, and α3 receptor subtypes
Performance Update

- Qtr3 ’09 revenues of $127.3 M and YTD revenues of $418.9 M
- Overall insomnia market growth in single digits, driven principally by generic zolpidem

Promotional Priorities

- Promotional messages focus on the “Science of Sleep (GABA receptor activity differentiation)”, particularly versus zolpidem
- Targeted promotional spend with emphasis on margin improvement
- Continue online direct-to-consumer and relationship management programs designed to drive dialogue between patients and physicians about LUNESTA and improve compliance with prescription drug therapy

Data sources: IMS NSP Monthly, Sepracor internal. Audited promotion spending include DTC spending, detailing spending, and retail value of samples. Full Q3’09 Audited promotional spending is not available.

YTD denotes January through September 30, 2009
XOPENEX®: Overview of Market and Products

Therapeutic Overview
- Current asthma prevalence is 28 M people
- 71% of patients are diagnosed

U.S. Market Opportunity
- Current short-acting beta-agonist (SABA) market (moving average total Sept ‘09): $2.5B
- Annual Total Prescription growth rate: 4.4%
- Seasonal and competitive market with generic options
- 78% of patients are prescribed inhalers
- 26% of patients are prescribed nebulizers

XOPENEX Inhalation Solution and HFA Inhalation Aerosol
- A bronchodilator indicated for the treatment or prevention of acute bronchospasm in patients with reversible obstructive airway disease
- Only contains the therapeutically active (R)-isomer of albuterol

Performance Update

XOPENEX® Inhalation Solution
- Qtr3 ‘09 revenues of $86.1 M and YTD revenues of $294.2 M
- Increased contribution margins

XOPENEX HFA®
- Qtr3 ‘09 revenues of $22.8 M and YTD revenues of $57.7 M
- Increased contribution margins

Promotional Priorities
- New “Asthma” Sales team gives additional focus to XOPENEX family
- Increased detailing to loyalists and pediatricians
- Continued focus on unique single isomer chemical structure
- Drive patient starts with XoPack sample pack

YTD denotes January through September 30, 2009
Therapeutic Overview
- ~ 12 M people are diagnosed with chronic obstructive pulmonary disease (COPD)
- Risk factors include smoking, pollution and existing lung impairment

U.S. Market Opportunity
- Large Total Prescription (TRx) market for COPD: 22 M TRxs (moving average total July ‘09)
- Untapped market opportunity: currently only 1 M patients are treated with nebulized therapy
- Only two long-acting beta-agonist (LABA) nebulized products available
- Significant market volume in Medicare and Home Health Care

BROVANA
- An inhalation solution bronchodilator indicated for the maintenance treatment of COPD
- Clinical benefits include rapid onset and sustained bronchodilation

Sources: IMS, CDC, NHLBI, Sepracor Internal
BROVANA® Volume Continues to Build

**BROVANA Performance**

- Q3 ‘09 revenues of $18.5 M and YTD revenues of $56.2 M
- Volume continues to build
- Unrestricted access at 93% of managed care lives
- Improved share of voice and awareness among targeted physicians
- Less restrictive Medicare coverage criteria for long-acting beta agonists became effective 12/1/09

**Promotional Priorities**

- Specialty Markets Business Unit provides greater focus for BROVANA
- Physician targeting focused on top prescribers

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Data source: IMS DDD COT Monthly. BROVANA units received in mL then converted into package units divided by 2. Q3 ‘09 Units were estimated using weekly DDD data.

YTD denotes January through September 30, 2009.
OMNARIS®: Overview of Market and Product

Therapeutic Overview
- Allergic Rhinitis (AR) affects 65 M people
- Most patients suffer from Perennial Allergic Rhinitis (PAR) or both PAR and Seasonal Allergic Rhinitis (SAR)
- Strong association between AR and other respiratory disorders

U.S. Market Opportunity
- Current intranasal steroid (INS) market (moving average total Sept ‘09): ~ $2B
- Annual Total Prescription growth rate: 1-3%
- Market is promotionally sensitive, which drives direct-to-consumer strategy

OMNARIS
- An inhaled nasal steroid indicated for treatment of nasal symptoms of SAR in patients ≥ 6 yrs and PAR in patients ≥12 yrs
- Prodrug activated after nasal administration that provides significant improvement in total nasal symptom score (TNSS), within 24-48 hours

Sources: IMS, Sepracor Internal
Performance Update

- Qtr3 '09 revenues of $7.3 M and YTD revenues of $22.3 M
- Total Prescription volume and share growth strong through spring allergy season
- Share growth during intranasal steroid low-season
- Patient awareness increasing through direct-to-consumer campaign

Promotional Priorities

- Continue to drive uptake with key specialists (e.g., allergists; ear, nose and throat specialists)
- Emphasis on consumer marketing as integral component of promotional strategy

Data source: IMS NPA Weekly. The INS Market is defined as the Inhaled Nasal Steroid Class (USC 28420).

YTD denotes January through September 30, 2009.
Therapeutic Overview
• Current asthma prevalence 28 M people
• 13 M people suffer from asthma attacks annually
• Therapy goals include reducing impairment by maintaining lung function

U.S. Market Opportunity
• Current inhaled corticosteroid market (ICS) (moving average total Sept ‘09): ~ $1.4B
• Annual Total Prescription growth rate: 6%
• Programs that educate prescribers and patients about the role of inflammation in chronic asthma can improve compliance with treatment guidelines

ALVESCO
• An inhaled corticosteroid indicated for maintenance treatment of asthma as prophylactic therapy in adult and adolescent patients ≥ 12 years old

ALVESCO® Volume Continues to Build

Performance Update

• Positive prescription share and volume growth during asthma “low” season

• Broader primary care launch began in Qtr1, positive impact to New Prescription trends

• Strong share growth among key specialists (e.g., allergists, pulmonologists)

Promotional Priorities

• PCP promotional focus on site-activated efficacy

• Patient programs including starter kits with co-pay reduction cards to encourage initial trial

• Continued use of other relationship management programs

Data source: IMS NPA Weekly. The ICS market is defined as Inhaled Bronchial Steroid (USC 28410), exclude Pulmicort Respules and Budesonide.
• **XOPENEX® Inhalation Solution*** – August 20, 2012**

• **XOPENEX HFA®** – last patent expires in 2024

• **LUNESTA®** – Qtr3 2014; assumes patent-term and pediatric extensions

• **BROVANA®** – last patent expires 2021

• **OMNARIS® Nasal Spray** – composition of matter patent expires in October 2017; last patent expires October 2020

• **ALVESCO® HFA** – composition of matter expires in October 2017; last patent expires May 2018

• **STEDESA™** – patent-term extension could take composition of matter patent to late 2018/early 2019; additional patent applications are pending

*Mylan (Dey) is currently selling a generic version of the XOPENEX Inhalation Solution concentrate formulation.

**Generic entry date per settlement.
Research and Development Update

R&D Priorities

• Successfully execute *high-priority R&D initiatives to strengthen pipeline and enhance current franchises*

Late-Stage Research and Development Assets

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STEDESA™ (eslicarbazepine acetate)</strong></td>
<td>for adjunctive treatment of epilepsy under FDA review</td>
</tr>
<tr>
<td><strong>OMNARIS® (ciclesonide) HFA</strong></td>
<td>for the treatment of allergic rhinitis in Phase III development</td>
</tr>
</tbody>
</table>
STEDESA™ Market Opportunity

Market

- Approx. 2.7 M people in U.S. with epilepsy
- U.S. epilepsy treatment mkt. est. $3.5 B

Target Profile

- Efficacy
  - Clear dose-response correlation
  - Marked, sustained seizure reduction
- Tolerability/Safety
  - Favorable tolerability and safety profiles
  - Relatively low risks regarding incidence of rash, weight gain or hyponatremia in study population
- Health Outcomes
  - Significant improvements in quality of life over one-year treatment period

Regulatory Milestones

- Submitted NDA to FDA on March 30, 2009
- FDA action date January 30, 2010

Ongoing Development Program

- U.S. Phase III adult monotherapy study initiated
- Pediatric and additional indication programs of Bipolar disorder and Neuropathic Pain are in planning stages

Anti-Epileptic Drugs* – Total Prescriptions (TRxs)

86 million Rxs in 2008 with a 7.5% CAGR ‘02-’08

Sources: IMS NPA and IMS Healthplan analysis, 2006-2007, n=73,399 projected to U.S. insured population, Sepracor Internal
Phase III Combined Analysis

- 3 Phase III studies with common design testing doses of 400 mg, 800 mg and 1200 mg once-daily throughout a 12-week maintenance period
- Randomized, double-blind, placebo-controlled trials
- 1,049 adult patients with refractory partial-onset seizures ≥4 seizures per 28 days on a stable regimen of 1 to 3 concomitant AEDs
- Multinational program: 125 sites in 23 countries

Results from One-Year Open-Label Extension Study

<table>
<thead>
<tr>
<th></th>
<th>BIA-2093-301</th>
<th>BIA-2093-302</th>
<th>BIA-2093-303</th>
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</thead>
<tbody>
<tr>
<td>Number of patients enrolled (Total 833)</td>
<td>314</td>
<td>325</td>
<td>194</td>
</tr>
<tr>
<td>Patients who completed 1 year (Total 612)</td>
<td>239</td>
<td>223</td>
<td>150</td>
</tr>
<tr>
<td>Retention Rate (73.5%)</td>
<td>76.1%</td>
<td>68.6%</td>
<td>78.5%</td>
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<tr>
<td>Median dose of ESL</td>
<td>800 mg</td>
<td>800 mg</td>
<td>800 mg</td>
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</table>
Eslicarbazepine Acetate Phase III Results

Mean Relative (%) Reduction From Combined Analysis

<table>
<thead>
<tr>
<th>Dose Level</th>
<th>N</th>
<th>Mean Relative (%) Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placebo</td>
<td>286</td>
<td></td>
</tr>
<tr>
<td>400 mg</td>
<td>195</td>
<td></td>
</tr>
<tr>
<td>800 mg</td>
<td>282</td>
<td></td>
</tr>
<tr>
<td>1200 mg</td>
<td>272</td>
<td></td>
</tr>
</tbody>
</table>

Mean Quality of Life in Epilepsy Inventory-31 (QOLIE-31) After 1-Year Treatment or Discontinuation

- Overall QoL: Baseline vs. Last Assessment, p<0.0001
- Overall Score: Baseline vs. Last Assessment, p<0.0001

OMNARIS® HFA for Allergic Rhinitis

Opportunity
- Intranasal corticosteroid market approximately $2 B
- Approx. 20% of patients discontinue use of nasal medications due to tolerability issues
- Prior to chlorofluorocarbon (CFC) phase-out, intranasal steroid aerosols represented approx. 25% of Total Prescription volume

Target Profile
- Potential to be first available corticosteroid formulated in a hydrofluoroalkane (HFA) nasal aerosol
- Formulation designed for no run-off or dripping, which is a common problem with most aqueous formulations

Development Timeline
- Phase III SAR results complete
- Initiate Phase III PAR Qtr3 2009
- Potential NDA submission Qtr1 ‘11

Sources: IMS, Sepracor Internal
Study Design

- Evaluated safety and efficacy of 80 mcg and 160 mcg of ciclesonide vs. placebo in patients with seasonal allergic rhinitis (SAR)
- 707 adults and adolescents randomized over two weeks

Results

- **Primary efficacy endpoint:** change from baseline in patient-reported *AM and PM reflective total nasal symptom scores (TNSS)* over two weeks *(p<0.0001 for both doses)*

- **Key secondary endpoints:**
  - Change from baseline in patient-reported *AM and PM instantaneous TNSS* over two weeks *(p<0.0001 for both doses)*
  - Change from baseline in patient-reported *AM and PM reflective total ocular symptom scores* *(P<0.001 for both doses)*

- **Overall adverse events** for 80 mcg group and 160 mcg group comparable to placebo
CD&L Priorities
Aggressively pursue corporate development and licensing opportunities that enhance the portfolio and complement DSP’s strategic direction

Key Sepracor Partners

Out-licensed
- Eisai
- Lunesta (eszopiclone)
- UCPharma
- Xyzall
- Schering Plough
- Clarinex
- sanofi aventis

In-licensed
- NYCOMED
- Alvesco (ciclesonide) Nasal Spray, 50
- Bial
- STEDESA™
- Xopenex
- 3M

Note: 3M is a technology partner of Sepracor
Opportunities Assessed on a Non-Confidential and Detailed Basis: 281*

CDAs Executed/Detailed Evaluations of Confidential Data: 104

Due Diligences Conducted: 34

Terms Exchanged or Bid Provided: 23

Transactions Executed: 10

*Includes products and companies, both public and private.

Current Priorities

• Remain aggressive in pursuing licensing opportunities
• Support DSP’s overall CD&L efforts
• Target attractive opportunities in CNS and other areas to complement pipeline
• Continue to build reputation as partner of choice
Financial Update

Third Quarter 2009 Financial Results

January-September Year-to-Date 2009 Financial Highlights
2009 Continued Strong Non-GAAP Earnings Momentum

YTD denotes January through September 30, 2009
### Year-To-Date (YTD) Jan.-Sept. 30, 2009 Summary of Results (Non-GAAP)

<table>
<thead>
<tr>
<th></th>
<th>YTD 2009</th>
<th>YTD 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$ Millions</td>
<td>% of Rev.</td>
</tr>
<tr>
<td>Revenue</td>
<td>927</td>
<td></td>
</tr>
<tr>
<td>Margin</td>
<td>843</td>
<td>91%</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>161</td>
<td>17%</td>
</tr>
<tr>
<td>SG&amp;A</td>
<td>435</td>
<td>47%</td>
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<tr>
<td>Net Income</td>
<td>246</td>
<td>27%</td>
</tr>
<tr>
<td>Diluted EPS</td>
<td>$2.16</td>
<td></td>
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<tr>
<td>Shares Outstanding</td>
<td>114 M</td>
<td></td>
</tr>
</tbody>
</table>
Strong Balance Sheet Improvement

$663 M

$73 M due 2008

$73 M

$76 M

$134 M

Gain = $8.2 M

$48 M

Gain = $4.3 M

$46 M

Gain = $4.3 M

$186 M

Gain = $0.8 M

$100 M

$-

Q3 08

Dec 08

Dec 08

Mar 09

May 09

May 09

Oct 09*

Nov 09*

End of Nov Debt

Debt (2008)

(2024)

(2024)

(2010)

(2024)

(2010)

Cash and short- and long-term investments were approximately $742 M at Sept. 30, 2009

* The remaining $186M of 2024 bonds and $100M of 2010 bonds are expected to be put back to the company in October and November respectively.
## 2009 Financial Guidance Summary – Non-GAAP*

<table>
<thead>
<tr>
<th>$ in millions except per share amounts</th>
<th>2008 Actual Results</th>
<th>Original 2009 Guidance</th>
<th>Revised 2009 Guidance (as of July 24, 2009)</th>
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</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$1,292</td>
<td>$1,150 - $1,250</td>
<td>$1,225 - $1,275</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>$237</td>
<td>$210</td>
<td>$210</td>
</tr>
<tr>
<td>SG&amp;A</td>
<td>$759</td>
<td>$600</td>
<td>$600</td>
</tr>
<tr>
<td>EPS (fully diluted)</td>
<td>$1.63</td>
<td>$2.10 - $2.70</td>
<td>$2.55 - $2.90</td>
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<tr>
<td>Shares Outstanding</td>
<td>116 M</td>
<td>116 M</td>
<td>114.5 M</td>
</tr>
<tr>
<td>Cash &amp; Equiv.</td>
<td>$766</td>
<td>$525 - $600</td>
<td>$550 - $600</td>
</tr>
<tr>
<td>Debt (par value)</td>
<td>$530</td>
<td>$148</td>
<td>$100</td>
</tr>
<tr>
<td>Cash Tax Rate</td>
<td>1.1%</td>
<td>2.5%</td>
<td>3.0%</td>
</tr>
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</table>

* A reconciliation of GAAP to non-GAAP guidance calculations is located in the company’s second quarter 2009 earnings press release dated July 24, 2009, which can be found on Sepracor’s web site in the “For Investors” section.
Delivering on Our 2009 Corporate Objectives

**Drive** *strong top-line product portfolio performance*
- Continued steady product performance

**Generate efficiencies from corporate restructuring**
- Achieving cost-savings from our new commercial model

**Advanced two high-priority R&D assets**
- Submitted STEDESA™ NDA to FDA for adjunctive treatment of epilepsy
- Successfully completed OMNARIS® HFA Phase III study in seasonal allergic rhinitis and initiated Phase III perennial allergic rhinitis study in September

**Aggressively pursue corporate development and licensing opportunities**
- Continuing to actively pursue opportunities in 2009, leveraging improved balance sheet

**Deliver sustainable earnings momentum and enhanced shareholder value**
- Delivering enhanced productivity and improved expense ratios
Establishes international platform

- Access to fully integrated U.S. and Canadian pharmaceutical platforms with a successful, experienced management team and talented employee base
- Extensive R&D organization with expertise in complementary therapeutic areas providing an enhanced pipeline of clinical candidates

Expands scale of pharmaceutical business

- Established, successful commercial network in the U.S. and Canada
- Significantly enhances sales capabilities

Reinforces product pipeline portfolio

Potential to accelerate penetration and maximize sales of lurasidone in the U.S.
Questions and Answers