UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report: March 19, 2014
(*Date of earliest event reported*)

CELLECTAR BIOSCIENCES, INC.
(*Exact name of registrant as specified in its charter*)

Delaware	**333-119366**	**04-3321804**
(State or other jurisdiction of incorporation)	*(Commission File Number)*	*(IRS Employer Identification Number)*

3301 Agriculture Drive
Madison, WI 53716
(*Address of principal executive offices*)

(608) 441-8120
(*Registrant's telephone number, including area code*)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

ITEM 7.01 REGULATION FD DISCLOSURE

A copy of a slide presentation dated March 2014, which provides an overview of our products and which we are making publicly available on our website, is furnished as Exhibit 99.1 and is incorporated by reference in this Item.

On March 19, 2014, we issued a press release announcing that management will host a conference call on March 25, 2014 to discuss full year 2013 financial results and provide a quarterly update on development progress. The press release is furnished as Exhibit 99.2 and is incorporated by reference in this Item.

ITEM 9.01 FINANCIAL STATEMENTS AND EXHIBITS

(d) Exhibits

Number	Title
99.1	Cellectar Biosciences, Inc. Slide Presentation dated March 2014
99.2	Press Release dated March 19, 2014 entitled “Cellectar Biosciences to Host Conference Call on March 25th to Discuss Full Year 2013 Financial Results and Provide Quarterly Update on Development Progress”

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: March 19, 2014

CELLECTAR BIOSCIENCES, INC.

By: */s/ Joanne M. Protano*
Name: Joanne M. Protano
Title: Vice President and Chief Financial Officer

EXHIBIT INDEX

Number	Title
99.1	Cellectar Biosciences, Inc. Slide Presentation dated March 2014
99.2	Press Release dated March 19, 2014 entitled "Cellectar Biosciences to Host Conference Call on March 25th to Discuss Full Year 2013 Financial Results and Provide Quarterly Update on Development Progress"

Cellectar Biosciences

March 2014

FIND. TREAT. FOLLOW

Safe Harbor Statement

This slide presentation contains forward-looking statements. Such statements are valid only as of today, and we disclaim any obligation to update this information. These statements are only estimates and predictions and are subject to known and unknown risks and uncertainties that may cause actual future experience and results to differ materially from the statements made. These statements are based on our current beliefs and expectations as to such future outcomes. Drug discovery and development involve a high degree of risk. Factors that might cause such a material difference include, among others, uncertainties related to the ability to raise additional capital required to complete the development programs described herein, the ability to attract and retain partners for our technologies, the identification of lead compounds, the successful preclinical development thereof, the completion of clinical trials, the FDA review process and other government regulation, our pharmaceutical collaborators' ability to successfully develop and commercialize drug candidates, competition from other pharmaceutical companies, product pricing and third-party reimbursement. A complete description of risks and uncertainties related to our business is contained in our periodic reports filed with the Securities and Exchange Commission including our Form 10-K for the year ended December 31, 2013. These forward looking statements are made only as of the date hereof, and we disclaim any obligation to update any such forward looking statements .

CELLECTAR BIOSCIENCES

A New Name for a "New" Company

- Leveraging highly selective delivery and retention platform to develop novel agents to detect, treat and monitor a broad spectrum of cancers
  - Cellectar's Phospholipid Ether (PLE) Analog discoveries are based on extensive research by technology founders and independent academic research facilities
    - Over 25 candidates in several distinct classes studied
- New leadership
  - CEO and executive leadership changes
  - Restructured Board
- Refining development strategy
  - Focus on near-term, cost-sensitive platform validating opportunities
    - PET & optical Imaging followed by therapeutic opportunities
  - Prioritize partnership opportunities to advance pipeline while optimizing internal resources

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

Strategic Realignment

- Streamlined Board of Directors, adding new director and reducing overall size from 9 to 5 members
  - Stephen A. Hill, B.M. B.Ch., M.A., F.R.C.S., Chairman of the Board of Directors
  - Simon Pedder, Ph.D., CEO and Director
  - Jamey Weichert, Ph.D., Chief Scientific Officer, Technology Founder and Director
  - John Neis, Director, Partner, Venture Investors, Madison, WI
  - Paul L. Berns, Appointed Director in November 2013
    - CEO, Allos Therapeutics - acquired by Spectrum Pharmaceuticals, Inc. in 2012
    - CEO, Bone Care International, Inc. – acquired by Genzyme Corporation in 2005
    - VP and general manager of the Immunology, Oncology and Pain Therapeutics business unit of Abbott Laboratories
    - Serves as member of a number of Boards:
    - Jazz Pharmaceuticals, Inc.
    - Anacor Pharmaceuticals, Inc.
    - XenoPort, Inc.

CELLECTAR BIOSCIENCES

Strategic Realignment

- Aligning Resources with Strategic Priorities
  - Relocating Executives Offices and Centralizing Operations in Madison, WI
    - Responsibilities of former MA based VP, Clinical Development and VP, Research and Development being transitioned to existing WI-based employees
    - Transitioning finance function, including CFO responsibilities, to WI following year-end reporting
  - Prioritizing Investor Relations and Business Development efforts
    - New VP of IR & PR tasked with increasing awareness of Cellectar Biosciences
      - Articulate new strategy
      - Aggressively meet with new potential investors
      - Increase institutional ownership and sell-side coverage
    - Created new BD position
      - Build industry awareness of company and technologies
      - Explore non-dilutive partnership opportunities to offset R&D expense

CELLECTAR BIOSCIENCES

Cellectar At a Glance

- Proprietary cancer-targeting delivery platform with potential to image and treat a wide range of solid tumors
  - Tumor Imaging- More accurate for better patient management
  - Therapy- Better targeted delivery to cancer cells and cancer stem cells
  - Surgery- Intraoperative optical imaging for better outcomes
  - Substantial scale-up potential across many products / indications

- Data from Phase I/II and Phase II trials expected in next 12-18 months:
  - I-124-CLR1404: Phase II imaging trial in brain cancer
  - I-131-CLR1404: Phase Ib dose-escalation safety data
  - CLR1502: Phase I surgical imaging during lumpectomy

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

Near Universal Cancer Target Platform

- Phospholipid Ether (PLE) Analogs: Highly-Selective, Broad-Spectrum, Cancer Targeting Delivery Platform with Multi-Product Diagnostic and Therapeutic Applications
  - Targets lipid rafts, a structure over expressed by malignant cells and malignant stem cells
- Five Unique Attributes:
  - ✓ Selectively taken up by cancer cells AND cancer stem cells
  - ✓ Prolonged retention by cancer cells AND cancer stem cells
  - ✓ Broad spectrum of cancers - selectively retained by +50 xenograft, orthotopic, and transgenic solid cancer and cancer stem cell derived models examined to date
  - ✓ Imaging and therapeutic agents can be attached
  - ✓ Diapeutic: Imaging diagnostic is predictive of therapeutic deliver

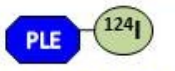
FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

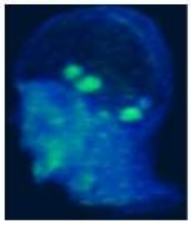
Near Universal Cancer-Targeting Platform

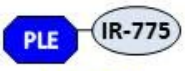
Proprietary Phospholipid Ether (PLE) Analog

Products in Development

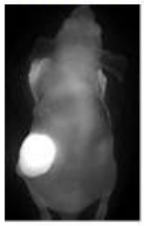


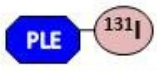
I-124-CLR1404



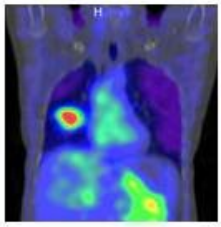


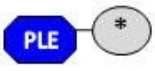
CLR1502





I-131-CLR1404





- **Other imaging and therapeutic payloads**

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

Near Universal Cancer Target Platform

- The New Paradigm in Cancer Therapy: Targeting Stem Cell-Based Relapse
- Cancer Stem Cells Associated with Most, If Not All, Major Cancer Types
  - Chemotherapy resistant
  - Affiliated with tumor regrowth and metastasis following chemo and radiation therapy
  - Glioma stem cells are also known to be up to 30% more radiation resistant relative to normal cancer cells
  - Tumor hypoxia stimulates cancer stem cell propagation, leading to increased resistance and metastatic potential

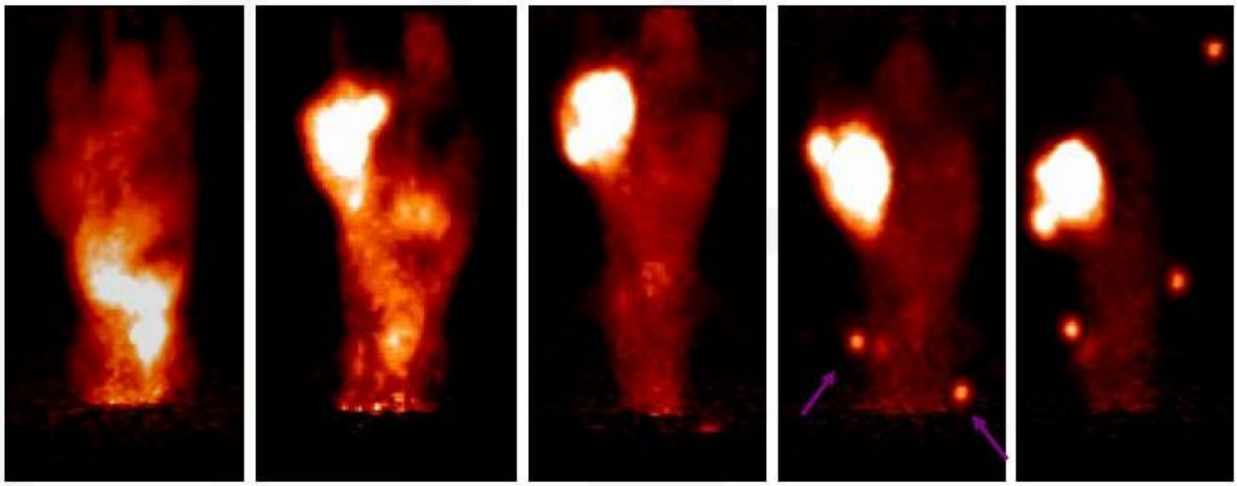
"Any new cancer treatment paradigm must address tumor heterogeneity including cancer stem cells" -Jeremy Rich and others

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

I-124-CLR1404 Tumor Time Course

Tumor uptake evident in about 9h



6h 24h 48h 72h 120h

µPET scans: Head down/tail up with flank tumor
Fiducial markers (arrows)

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

In-House Manufacturing Capabilities

- Our investment in manufacturing allows complete control through clinical trials
  - GMP manufacturing fully operational
  - Reliability for dosimetry dose demonstrated
  - Exceptionally high purity and radiochemical purity
  - CMC meets NDA standards
- Easy, fast and inexpensive distribution
  - Shipped as a patient ready product which only requires individual dose calibration; does NOT need extensive radiopharmacy formulation
  - Shipped fully stable at ambient temperature; does not need complicated and expensive logistics for shipping

CELLECTAR BIOSCIENCES

PLE + PET Imaging Isotope = ^{124}I-CLR1404

More Accurate Tumor Imaging for Better Patient Management

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

^{124}I-CLR1404: PLE + PET Imaging Isotope

- Small-molecule imaging agent for primary tumors and metastases
  - Proprietary PLE attached to I-124 PET imaging isotope
- Phase I/II trials underway at UW Carbone Cancer Center (investigator sponsored)
  - Lung Cancer (Traynor/Perlman)
  - Glioma/ Brain tumors or Mets (Hall)
  - Multiple Tumor Protocol (Liu)
    - Prostate (Wilding, Liu, Med Onc)
    - Pancreas (Weber)
    - Breast
    - Head and neck (Speer/Harari. Rad Onc)
    - Others-9 total
- Positive initial images in brain cancer and 6 other solid tumors
  - breast, lung, prostate, head & neck, colorectal and pancreatic

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

Initial Target: Brain Cancer Imaging

- Significant unmet clinical need
- MRI is unable to distinguish recurrent disease from pseudo-progression
  - MRI is current Standard of Care (SOC)
  - MRIs show post-treatment changes in ~50% of all patients
  - Nearly half of the time, this signal is non-malignant pseudo-progression
- Significant patient benefit derived from earlier and definitive diagnosis of tumor progression
  - Treat only when appropriate
  - Avoid unnecessary therapies and interventions
  - Detect progression earlier, minimize critical tissue infiltration

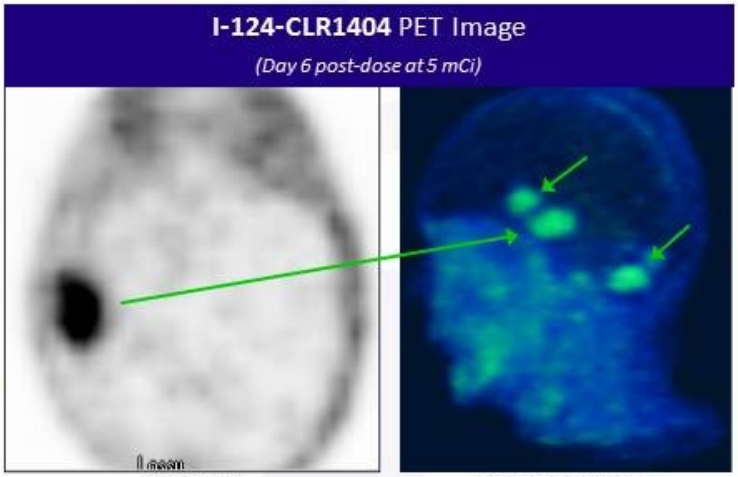
FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

Clearly Images Brain Metastases

I-124-CLR1404 PET scan identified 3 brain metastases in an asymptomatic NSCLC patient

- Treatment plan subsequently altered



The images provided above are for illustrative purposes only and may not be indicative of all results.

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

Phase II Imaging Trial in Glioma

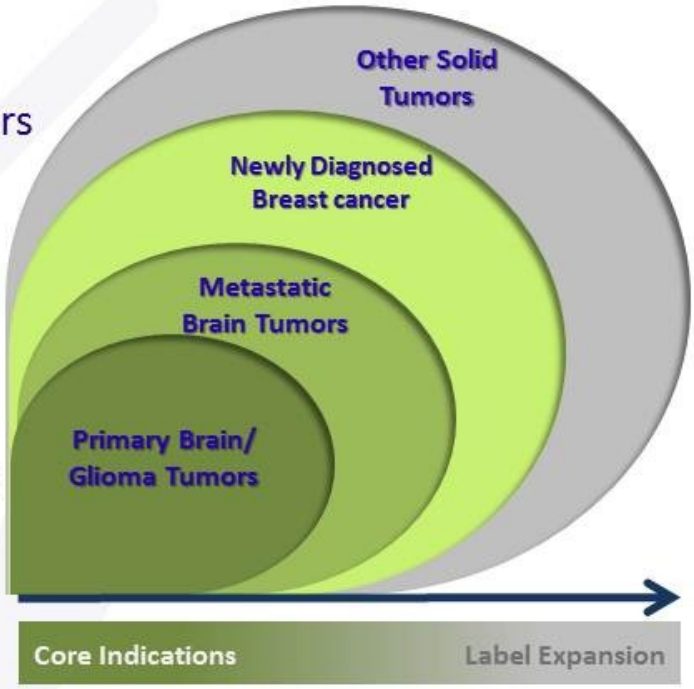
- Initiated Phase II trial March 2014
  - 10 NCI-designated centers enrolling ~36 patients
  - Newly diagnosed or recurrent glioma where SOC includes resection and/or biopsy
  - Compare performance of 124I-CLR1404 PET/CT to MRI with pathology confirmation
  - Approval based on more accurate determination of malignant vs. non-malignant tissue
- Trial Objectives
  - Demonstrate superior specificity over current SOC (MRI)
  - Confirm optimal dose and imaging time points for Phase III pivotal trial
  - **Initiated: Q1 2014**
  - **Data: Q4 2014**

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

Scalable Commercial Opportunity for I-124-CLR1404

- Establish efficacy in primary glioma
- Pursue additional solid tumors with initial positive images:
  - Prostate **~239k patients**
  - Breast **~235k patients**
  - Lung **~228k patients**
  - Colorectal **~102k patients**
  - Head & Neck **~54k patients**
  - Pancreatic **~45k patients**



FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

PLE + Radiotherapeutic= ^{131}I-CLR1404

Better targeted delivery to cancer cells and cancer stem cells

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

Better Targeting=Better Therapeutic Delivery

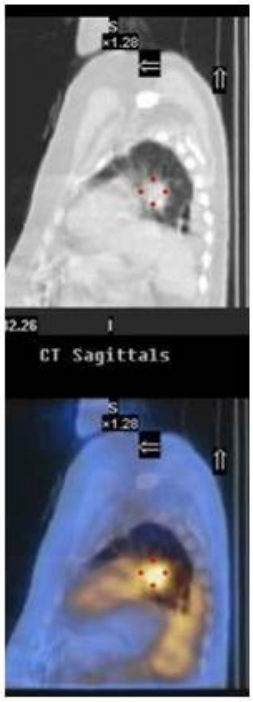
- Proprietary cancer-targeting delivery vehicle (PLE) attached to proven radiotherapeutic
  - Iodine-131, well-established as a cancer therapeutic – FDA familiarity
  - Preclinical single-dose data demonstrates remarkable in vivo efficacy coupled with excellent safety profile
- Phase Ib dose-escalation trial: Data Q1 14
  - 20-40-60 etc. (12.5 mCi/m2)
  - 3 dose cohorts completed (4th cohort ongoing)
- Demonstrated uptake and prolonged retention only in tumors not normal tissue

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

I-131-CLR1404: Phase Ia

- Results provided starting dose for MTD therapy trial
  - Eight patients enrolled; four cancer types
  - Zero drug attributable serious adverse events
  - Consistent biodistribution from patient to patient
  - Distribution and elimination as predicted from animal studies; minimal renal elimination increases safety profile
  - Strong visual evidence of tumor uptake



Clinical Trial Partner Sites	1st Completed Patient Cancer Type	2nd Completed Patient Cancer Type	3rd Completed Patient Cancer Type
Duke	Colorectal	Prostate	
Georgetown	Colorectal	Colorectal	Colorectal
City of Hope	Breast	Prostate	
Johns Hopkins	Esophageal		

The images provided above are for illustrative purposes only and may not be indicative of all results.

FIND. TREAT. FOLLOW

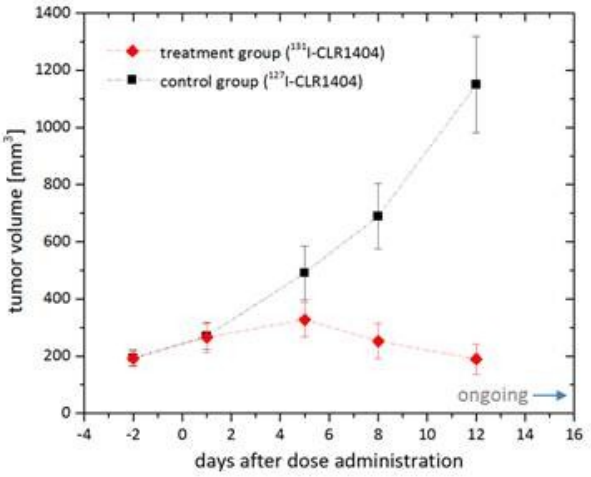
CELLECTAR BIOSCIENCES

Future Development Pathway is Attractive Partnering Opportunity

- **Anti-tumor/survival-prolonging activities demonstrated in more than a dozen models**
- **Multiple Myeloma as potential initial indication**
  - **Radiosensitivity**
  - **Uptake**
  - **Novel mechanism of action**
  - **Quantitative non-RECIST response criteria**
- **Clear Go/No Go criteria; low cost, fast path to approval**
- **Regulatory opportunities**
  - **Orphan drug designation**
  - **Accelerated approval**
  - **Breakthrough therapy and fast track designations**
- **Foundation for additional opportunities/expanded indications**

CELLECTAR BIOSCIENCES

Therapeutic response to a single dose of 100 μCi ^{131}I-CLR1404



Control group 12 days p.i.

Treatment group (100 μCi) 12 days p.i.

- Dose of ^{127}I-CLR1404 mass-equivalent to ^{131}I-CLR1404 dose
- Tumor volumes (mean ± SEM) show significant response 5 days after dosing of 100 mCi
- No visually apparent tox signs, tx group shows 5% weight loss & is slightly more docile (day 12)

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

PLE + Near-Infrared Fluorophore= CLR1502

Intraoperative Optical Imaging for Better Outcomes

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

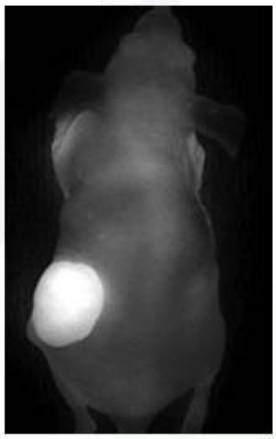
CLR1502: Improving Surgical Outcomes

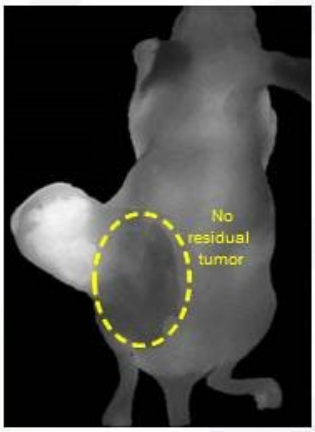
- Optical imaging agent for intraoperative tumor margin illumination
  - Proprietary cancer-targeting delivery vehicle (PLE) attached to near-infrared fluorophore
- More accurate visualization of tumor margins during surgery for more complete malignant tissue removal
  - Better patient management and outcomes from fewer repeat surgeries and reduced recurrence
  - Potential for meaningful healthcare savings

CELLECTAR BIOSCIENCES

Tumor Margin Illumination – Real Time Surgery

Optical Imaging *(800nm)*





Non-Invasive Tumor Imaging

Intraoperative Tumor Margin Illumination in Real Time

Fluobeam™
Fluoptics

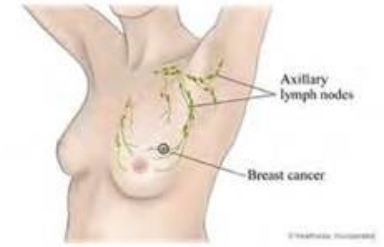
The images provided above are for illustrative purposes only and may not be indicative of all results.

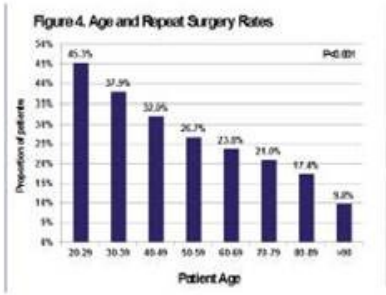
FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

Unmet Medical Need – Breast Cancer Surgery

- Lumpectomy- removal of tumor and nodal involvement while sparing functional tissue
  - Challenging for surgeons to identify margins during surgery
  - When post-surgery pathology indicates malignant tissue remains, surgery repeated
- One in four lumpectomies are repeated (U.S)
  - Impact on patients: risk, discomfort, inconvenience, anxiety
  - Significant healthcare cost: ~$22,000 inpatient3
  - Patient outcomes at risk: remaining malignant tissue could result in disease spread





Source: L. Wilkie, Factors Associated with Repeat Surgery After Initia Breast Conservation at Commission on Cancer Accredited Cancer Centers: A Report from the National Cancer Data (2012)

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

CLR1502 Phase I: Breast Cancer Surgery

- Seeking US IND H1 2014 and Trial Initiation H2 2014

- Trial design
  - Dose-ranging multi-site, ~20 patients undergoing lumpectomy
  - Compatible with standard of care (SOC) – only addition is CLR1502 administration and non-invasive optical imaging
  - Primary tumor and sentinel node resected according to SOC
  - Optical imaging used to assess CLR1502 illumination of any remaining tumor margin or nodal involvement
- Trial objective
  - Demonstrate superiority versus current SOC to identify and differentiate malignant and non-malignant tissue during surgery based on pathology readout

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

Summary Financial Outlook

- $2.4M cash at December 31, 2013
  - Closed additional $4.0 million placement of convertible notes and warrants February 6th, 2014
- Capitalization

Common Stock Outstanding	**57,397,997**
Warrants (exercisable; $0.50-$1.25)	31,282,459
Options	12,229,585
Convertible Debentures	
Shares ($0.50)	8,000,000
Warrants ($1.00)	8,000,000
Fully Diluted	**116,910,041**

CELLECTAR BIOSCIENCES

Opportunity Summary

- $Billion+ potential aggregate markets:I-124-CLR1404 and CLR1502
  - Proof-of-Concept data expected in 12-18 months
  - Opportunity for meaningful value transformation
- Therapeutic (I-131-CLR1404) represents additional potential upside
  - Compelling data package to support PII program in multiple myeloma
- Cancer-Targeting Platform offers multi-product opportunities
  - Tumor Imaging- More accurate for better patient management
  - Therapy- Better targeted delivery to cancer and cancer stem cells
  - Surgery- Intraoperative optical imaging for better outcomes
- Attractive Business Development Opportunities
  - Large number of cancer indications
    - Imaging/Surgery/Treatment

FIND. TREAT. FOLLOW

CELLECTAR BIOSCIENCES

Going Forward

- Meaningful development opportunities
  - Compelling near- and long-term opportunities
    - Near-term Data Points
      - I-124-CLR1404 Phase II Imaging Data in Glioma
      - I-131-CLR1404 Phase Ib Safety Data
      - CLR1502 Phase I Optical Imaging Data
    - Long-term: opportunity to expand development opportunities
- Explore Partnership Opportunities
  - Global/Regional licensing opportunities
  - Therapeutic partnership opportunities
  - Collaborations around PLE platform (payload players) and CLR1502 (equipment players) to build the body of evidence on platform

Cellectar Biosciences to Host Conference Call on March 25th to Discuss Full Year 2013 Financial Results and Provide Quarterly Update on Development Progress

MADISON, Wis., March 19, 2014, – Cellectar Biosciences, Inc. (OTCQX: CLRB), a biopharmaceutical company developing innovative agents for the detection and treatment of cancer, announced that management will host a conference call and live webcast to discuss full year 2013 financial results, provide an update on each of its development programs and discuss expectations for fiscal 2014 on Tuesday, March 25 at 5:00 PM ET.

Event Details:
Interested investors may participate in the conference call by dialing 855-465-0185 (domestic) or 484-756-4315 (international). A replay will be available for one week following the call by dialing 800-585-8367 for domestic participants or 404-537-3406 for international participants and entering conference ID 16061248 when prompted. Participants may also access both the live and archived webcast of the conference call on Cellectar's web site at www.cellectar.com.

To Ask Questions:
Following prepared remarks and time permitting, management will provide an opportunity for participants dialed into to the live teleconference to ask questions. Investors may also e-mail their questions to ir@cellectar. E-mail questions will be accepted until 9:00 AM ET on Tuesday, March 25, 2014.

About Cellectar Biosciences, Inc.

Cellectar Biosciences is developing agents to detect, treat and monitor a broad spectrum of cancers. Using a novel phospholipid ether analog (PLE) platform technology as a targeted delivery and retention vehicle, Cellectar's compounds are designed to be selectively taken up and retained in cancer cells including cancer stem cells. With the ability to attach both imaging and therapeutic agents to its proprietary delivery platform, Cellectar has developed a portfolio of product candidates engineered to leverage the unique characteristics of cancer cells to "find, treat and follow" malignancies in a highly selective way. I-124-CLR1404 is a small-molecule, broad-spectrum, cancer-targeted PET imaging agent currently being evaluated in a Phase II glioblastoma imaging trial. Additionally, multiple investigator sponsored Phase I/II clinical trials are ongoing across 11 solid tumor indications. I-131-CLR1404 is a small-molecule, broad-spectrum, cancer-targeted molecular radiotherapeutic that delivers cytotoxic radiation directly and selectively to cancer cells including cancer stem cells. Data from a Phase Ib dose-escalation trial of I-131-CLR1404 in patients with advanced solid tumors is anticipated in the first quarter of 2014. CLR1502 is a preclinical, cancer-targeted, non-radioactive optical imaging agent for intraoperative tumor margin illumination and non-invasive tumor imaging. For additional information please visit www.cellectar.com

INVESTOR CONTACT

Kate McNeil, Vice President of IR, PR & Corporate Communications
Cellectar Biosciences, Inc.
Phone: (347) 204-4226
Email: kmcneil@cellectar.com

This news release contains forward-looking statements. You can identify these statements by our use of words such as "may," "expect," "believe," "anticipate," "intend," "could," "estimate," "continue," "plans," or their negatives or cognates. These statements are only estimates and predictions and are subject to known and unknown risks and uncertainties that may cause actual future experience and results to differ materially from the statements made. These statements are based on our current beliefs and expectations as to such future outcomes. Drug discovery and development involve a high degree of risk. Factors that might cause such a material difference include, among others, uncertainties related to the ability to raise additional capital, uncertainties related to the ability to attract and retain partners for our technologies, the identification of lead compounds, the successful preclinical development thereof, the completion of clinical trials, the FDA review process and other government regulation, our pharmaceutical collaborators' ability to successfully develop and commercialize drug candidates, competition from other pharmaceutical companies, product pricing and third-party reimbursement. A complete description of risks and uncertainties related to our business is contained in our periodic reports filed with the Securities and Exchange Commission including our Form 10-K for the year ended December 31, 2013. These forward-looking statements are made only as of the date hereof, and we disclaim any obligation to update any such forward-looking statements.