This presentation includes “forward-looking statements” within the meaning of, and made pursuant to the safe harbor provisions of, the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact, including statements regarding the Company’s strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, expected revenue growth, and the assumptions underlying or relating to such statements, are “forward-looking statements.” The forward-looking statements include statements concerning, among other things, the opportunity for minimally invasive non-surgical treatment XIAFLEX in several potential pipeline indications; the expected revenue growth for XIAFLEX in 2019; the Company’s ability to achieve its future growth initiatives with regard to Dupuytren’s Contracture; the expansion of the market for XIAFLEX for the treatment of Peyronie’s Disease and Dupuytren’s Contracture through future growth initiatives; the timing of Endo’s BLA submission and potential FDA approval in connection with and the potential commercial launch of XIAFLEX for the treatment of cellulite; whether treating uterine fibroids with XIAFLEX will achieve the advantages over major surgery identified by the Company and the timing of future clinical trials and the publication of results of clinical trials; Endo’s interest in currently unlicensed indications; whether XIAFLEX will be the only FDA approved nonsurgical therapy for adhesive capsulitis; the projected receipt of payments from Endo and sublicense income payments based on Endo’s partnerships; and the strength of the Company’s IP portfolio. In some cases, these statements can be identified by forward-looking words such as “expect,” “plan,” “anticipate,” “potential,” “estimate,” “can,” “will,” “continue,” the negative or plural of these words, and other similar expressions. These forward-looking statements are predictions based on our current expectations and our projections about future events and various assumptions. There can be no assurance that we will realize our expectations or that our beliefs will prove correct. There are a number of important factors that could cause BioSpecifics’ actual results to differ materially from those indicated by such forward-looking statements, including the timing of regulatory filings and action; the ability of Endo and its partners, Asahi Kasei Pharma Corporation, Actelion Ltd. and Swedish Orphan Biovitrum AB, to achieve their objectives for XIAFLEX in their applicable territories; the market for XIAFLEX in, and timing, initiation and outcome of clinical trials for, additional indications, which will determine the amount of milestone, royalty, mark-up on cost of goods sold, license and sublicense income that BioSpecifics may receive; the potential of XIAFLEX to be used in additional indications; Endo modifying its objectives or allocating resources other than to XIAFLEX; and other risk factors identified in BioSpecifics’ Annual Report on Form 10-K for the year ended December 31, 2018, its Quarterly Report on Form 10-Q for the quarter ended June 30, 2019 and its Current Reports on Form 8-K filed with the Securities and Exchange Commission. All forward-looking statements included in this Report are made as of the date hereof, are expressly qualified in their entirety by the cautionary statements included in this Report and, except as may be required by law, we assume no obligation to update these forward-looking statements.
Company Overview (NASDAQ: BSTC)

Originator of collagenase based-therapies
Positive clinical results for XIAFLEX (collagenase clostridium histolyticum or CCH) reported across multiple indications
Profitable biopharma company with lean corporate structure

Receives Revenues from XIAFLEX® royalties on net sales, mark-up on COGS, milestones and sublicense income from commercial indications under partnership with Endo

• Strong relationship with Endo for marketed indications (Peyronie’s Disease and Dupuytren’s Contracture) and additional indications in clinical development (cellulite)

Maximize the opportunity for CCH to be a minimally invasive non-surgical treatment option in several potential pipeline indications

Developers of CCH for serious medical conditions, positive results from BSTC-sponsored Phase 1 clinical trial in uterine fibroids presented at the 66th Annual Meeting of the Society for Reproductive Investigation in 1Q2019 with additional data to be presented at an upcoming medical meeting in 2Q2019
# XIAFLEX® Pipeline

## Approved Indications

<table>
<thead>
<tr>
<th>Indication</th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Marketed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dupuytren's Contracture</td>
<td>🍀end️</td>
<td>🍀end️</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peyronie’s Disease</td>
<td>🍀end️</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Additional CCH Indications

<table>
<thead>
<tr>
<th>Indication</th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Marketed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellulite</td>
<td>🍀end️</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adhesive Capsulitis</td>
<td>🍀end️</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Lipoma</td>
<td>🍀end️</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canine Lipoma</td>
<td>🍀end️</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lateral Hip Fat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plantar Fibromatosis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## BioSpecifics Managed CCH Indications

<table>
<thead>
<tr>
<th>Indication</th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Marketed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uterine Fibroids</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Endo International plc*
Marketed XIAFLEX® Indications: Dupuytren’s Contracture & Peyronie’s Disease
XIAFLEX Marketed Indications Future Growth Opportunities

Snapshot of XIAFLEX Opportunity

- Second quarter 2019 BSTC royalty revenues continued to increase year-over-year, 13% growth
- Endo expects mid-to-high teens percentage range growth for XIAFLEX revenue in 2019
- Sizable opportunity for growth
  - Diagnosis rate is around 2-3% for Peyronie’s disease and 3% for Dupuytren’s contracture
  - Overall treatment rate is only 14% for Peyronie’s disease and 30% for Dupuytren’s contracture
  - Of the patients diagnosed with Peyronie’s disease, 85-90% are untreated and for Dupuytren’s contracture 75-80% are untreated

Future Growth Initiatives

- Endo managing active campaigns to increase disease state awareness as well as diagnosis and treatment rates, including consumer activation via digital direct-to-consumer outreach, for Peyronie’s disease and Dupuytren’s contracture
  - Dupuytren’s contracture unbranded awareness campaign “Facts on Hand” in partnership Tim Herron, four-time PGA Tour winner campaign, and Damon Adamany, MD of the CORE Institute
  - Peyronie’s Disease longstanding educational and advertising campaign, “Ask About the Curve” with nationally recognized urologist and author, Aaaron Spitz, M.D. and “Real Patients Share Their Stories”

Source: Endo International plc
XIAFLEX® for Dupuytren’s Contracture

Definition & Key Complications

- Deforming condition of the hand in which one or more fingers contracts toward the palm
- Limits range of motion and impairs quality of life

Market Opportunity

- Affects between 3-9% of adult Caucasians
- Diagnosis rate of 3%; overall treatment rate of 30%

Pre-treatment:

Post-treatment:

• Mean percentage decrease of joint contracture of 70.5% ± 29.2% in collagenase treated cords
• Mean increase in range of motion significantly greater in collagenase treated cords (35.4° ± 17.8°)

Source: Endo International plc
XIAFLEX® for Peyronie’s Disease

Definition & Key Complications

- Inelastic collagen causing penile curvature; penis can bend at 90° angle during erection in severe cases
- Associated with increased pain, painful erections, palpable plaque, penile deformity and erectile dysfunction
- Potential loss of self-esteem and depression for patients and partners

Market Opportunity

- Incidence between 3-9% of population
- Diagnosis rate of 2-3%; overall treatment rate of 14%

Mean reduction in penile curvature deformity for XIAFLEX® subjects in IMPRESS I trial was 38°

Source: Endo International plc

Subject 1106-7852 from Phase 3 IMPRESS trial
CCH Pipeline Indications
## Overview of CCH for Uterine Fibroids

### Definition & Key Complications
- Benign tumors in the reproductive tract that contain large amounts of collagen
- Cause pelvic discomfort and pain, decreased fertility, pregnancy complications, increased rate of miscarriage, uterine bleeding, prolonged menstrual bleeding and frequent urination
- Leading cause of hysterectomies in the U.S.

### U.S. Market Opportunity
- ~250K hysterectomies and 30K myomectomies are performed annually to treat uterine fibroids
- High level of recurrence with current treatment options

### Phase 1 Trial Design
- Open-label dose escalation study of 15 female subjects treated prior to hysterectomy at the Department of Gynecology & Obstetrics at Johns Hopkins University
- 3 subjects injected with saline and 12 additional received CCH
- Primary Endpoint: Assess safety and tolerability of CCH following a one-time injection directly into uterine fibroids at 3 doses under transvaginal ultrasound guidance
- Secondary and Exploratory Endpoints: Symptoms of pain, bleeding quality of life throughout study; size, collagen-content and rate of apoptosis of CCH-treated fibroids, measures of tissue elasticity, relative stiffness using SWEI (Shear Wave Elasticity Imaging)

Potential Advantages of XIAFLEX® Injection vs. Major Surgery

- **Shorter, Easier Process**
  - 5-10 minutes vs. 2-4 hours for hysterectomy and myomectomy and 1-2 hours for uterine artery embolization
  - No intubation
  - Sedation vs. anesthesia for surgery

- **Limited Recovery Time**
  - “Lost work” costs of $4,500-$30,000 per patient
  - 4-6 weeks to regain normal activity for hysterectomy and myomectomy; 7-10 days for uterine artery embolization
Positive Results from Phase 1 Trial for Uterine Fibroids


- Data from 12 patients demonstrated:
  - Statistically significant reduction in collagen content (p<0.05) of CCH treated fibroids compared to control fibroids.
  - 39% (p<0.05) median reduction and 21% average reduction in density of collagen bundles in treated tissues vs control.
  - No increases in apoptosis in treated tissues vs control.
  - Favorable safety and tolerability consistent with CCH clinical trials to date, patients who reported pain at baseline demonstrated pain decreases within 24 to 48 hours, remaining low until last visit at 60 to 90 days.

Future Development Plans:

- Additional data from the Phase 1 trial to be presented at an upcoming medical meeting in the second half of 2019.
- BioSpecifics intends to use the Phase 1 data to inform the development of future uterine fibroids clinical trials.
# Overview of CCH for Cellulite

| Definition & Key Complications | Contour abnormality of the skin resulting in dimpling  
|                              | Skin dimpling caused by tethering of fibrous septae composed of collagen with fat cell volume as secondary cause, occurring mainly on the buttocks, thighs and lower abdomen and arms |
| U.S. Market Opportunity        | Affects ~85-90% of post-pubertal females  
|                              | Currently no FDA approved pharmaceutical products to address fibrous septae primarily composed of collagen  
|                              | Total U.S. aesthetics market is $15 billion, total U.S. aesthetics injectables market is $3.5 billion |
| Phase 3 Trial Design           | Multicenter, randomized, double-blind, placebo-controlled studies to evaluate the safety and efficacy of CCH in reducing the appearance of cellulite  
|                              | Trials enrolled 840 women with moderate-to-severe cellulite (18+ years) Up to 3 treatment sessions of 0.84mg/session or placebo (12 injections per session) with each treatment session occurring 21 days apart in 2 treatment areas, the left and right buttocks  
|                              | Primary Endpoint: composite responder analysis demonstrating at least a 2-level composite improvement independently reported by patient and clinician on the photonumeric scales of cellulite severity  
|                              | Secondary Endpoints: investigator and patient assessments of cellulite appearance as measured by CR-PCSS (Clinician Reported- Photonumeric Cellulite Severity Scale) and PR-PCSS (Patient Reported-Photonumeric Cellulite Severity Scale) scores, SSRS (Subject Self Rating Scale) and the Subject-Global Aesthetic Improvement Scale. |
Positive Top-line Results from Phase 3 Clinical Trials for Cellulite

- Top-line results from RELEASE-1 and RELEASE-2 studies announced in November 2018 with additional results presented in May and June 2019; BLA submission expected in the second half of 2019, commercial launch in the second half of 2020.
- Study achieved the primary endpoint (RELEASE-1, p=0.006 & RELEASE-2, p=0.002) of composite responder analysis demonstrating at least a 2-level composite improvement independently reported by patient and clinician on the photonumeric scales of cellulite severity.
  - 8/8 key secondary endpoints were achieved for RELEASE-1
  - 7/8 key secondary endpoints were achieved for RELEASE-2
- CCH well tolerated in actively treated subjects with most AE’s mild to moderate and limited to local injection area.

**Highly Statistically Significant Positive Results from Phase 2b Study**

**Cellulite Anatomy**

Source: Endo International plc
Additional Promising Indications Licensed to Endo

In Order of Phase of Development
# Human Lipomas

<table>
<thead>
<tr>
<th>Definition</th>
<th>Encapsulated deposits of benign fat, often detected as bulges under the skin</th>
</tr>
</thead>
</table>
| Potential to be Only FDA-Approved Pharmaceutical Therapy | - No FDA-approved pharmaceutical therapies available  
- Offers an alternative to patients that may choose to avoid surgery, and avoid surgically-related complications (hematomas, sutures, restricted activity and general or local anesthesia) |
| U.S. Market Opportunity | - ~600,000 patients in the U.S. annually  
- 20% of patients have multiple lipomas |
| Phase 2 Trial Design | - Randomized, double-blind placebo-controlled study in 19 patients with ≥ 2 benign lipomas of similar size  
- Each patient acted as both treated and control group  
- Primary endpoint: reduction in visible surface area of target lipomas relative to placebo, by caliper, 6 months post injection |
Adhesive Capsulitis
Potential to be Only FDA Approved Nonsurgical Therapy

- Inflammation and thickening of shoulder capsule due to collagen
- Limits range of motion of shoulder
- Common available treatment options are often painful and can require anesthesia
- Long-term intensive physical therapy, corticosteroids, manipulation under anesthesia and/or arthroscopic release

Market Opportunity
- Affects 20 - 50 million people worldwide
- 300K cases diagnosed annually in the U.S.; 10% treated invasively
- Condition can last approximately 1 year to up to 3.5 years
- Estimated to occur in 20% of diabetics

Source: Endo International plc
Plantar Fibromatosis

Definition & Complications

- ~200,000 patients in the U.S.
- Pain and disability caused by the thickening of the feet's deep connective tissue
- Formation of nodules or cords along tendons of the foot
- Patients often have Dupuytren’s disease, Peyronie’s disease and adhesive capsulitis
- Current treatments include orthotics and anti-inflammatory drugs in the early stages of the disease, steroid injections and surgery in advanced cases

Source: Endo International plc
Lateral Hip Fat

Definition & Complications

- Similar prevalence to cellulite
- Fat accumulation is common among woman particularly as they age
- Often very difficult to improve its appearance through exercise and diet alone
- Patients frequently avoid exercise and are unable to restrict their caloric intake
- In some cases, cyrolipolysis and liposuction are performed to remove the unsightly fat deposits

Source: Endo International plc
## Endo Partnership for Development and Commercialization of XIAFLEX®

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\geq$178M Received as of June 30, 2019</td>
<td>- $178M received in licensing, sublicensing, milestone, COGS, and royalty payments as of June 30, 2019</td>
</tr>
<tr>
<td>Future Payments Due to BioSpecifics from Endo</td>
<td>- Low double digit royalties as % of net sales for currently approved indications*</td>
</tr>
<tr>
<td></td>
<td>- Additional mark-up on COGS for U.S. and other countries in Endo territory</td>
</tr>
<tr>
<td></td>
<td>- Modest milestones for additional indications and regulatory submissions and approval worldwide</td>
</tr>
<tr>
<td>Endo Opt-In Rights</td>
<td>- Right to opt-in for all indications, following an opt-in payment and potential future milestone, royalty and COGS payments made to BioSpecifics</td>
</tr>
<tr>
<td>Sublicense Income from Endo Partnerships</td>
<td>- Endo partnered with Paladin Labs, Sobi, Actelion and Asahi Kasei for Dupuytren’s contracture and Peyronie’s disease</td>
</tr>
<tr>
<td></td>
<td>- BioSpecifics entitled to specified % of potential milestones payments that Endo receives from its sublicensees</td>
</tr>
</tbody>
</table>

*It is company policy not to announce publicly royalty rates for potential future indications under development before commercialization. It is important to emphasize that in-licensing royalty rates vary from indication to indication and it should not be assumed that the in-licensing royalty rates for potential future indications will be the same as those for currently marketed indications.
Strong IP Portfolio

- **Dupuytren’s Contracture**
  - Biologic Exclusivity until 2022
  - Drug product composition patent until 2028

- **Peyronie’s Disease**
  - Orphan Drug protection in U.S. until 2020
  - Drug product composition patent until 2028

- **Uterine Fibroids**
  - Method of use patent until 2034

- **Patents and Patent Applications**
  - Owned, co-owned or controlled by BioSpecifics for injectable collagenase to treat Dupuytren’s contracture, Peyronie’s disease, removal of adipose tissue and frozen shoulder syndrome and others
  - Royalties through 2028
Consistently Profitable Annually
Financial Highlights

(unaudited)

For the six months ended

<table>
<thead>
<tr>
<th></th>
<th>06/30/2019</th>
<th>06/30/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash and equivalents, and investments</strong></td>
<td>$93,509,884</td>
<td>$73,709,882</td>
</tr>
<tr>
<td><strong>Income Statement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenues</td>
<td>$16,982,127</td>
<td>$14,940,183</td>
</tr>
<tr>
<td>Other income</td>
<td>966,580</td>
<td>588,360</td>
</tr>
<tr>
<td>Costs and expenses</td>
<td>(4,946,141)</td>
<td>(4,520,608)</td>
</tr>
<tr>
<td>Provision for income taxes</td>
<td>(2,159,511)</td>
<td>(2,181,400)</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>$10,843,055</td>
<td>$8,826,535</td>
</tr>
<tr>
<td><strong>Earnings per share:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td>$ 1.49</td>
<td>$ 1.23</td>
</tr>
<tr>
<td>Diluted</td>
<td>$ 1.48</td>
<td>$ 1.21</td>
</tr>
<tr>
<td><strong>Shares used in computation of earnings per share:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic</td>
<td>7,292,663</td>
<td>7,204,040</td>
</tr>
<tr>
<td>Diluted</td>
<td>7,344,008</td>
<td>7,309,325</td>
</tr>
</tbody>
</table>

7.3 million shares outstanding as of 06/30/19
BioSpecifics Corporate and Clinical Highlights

- BioSpecifics continues to be profitable on an ongoing basis
- BioSpecifics continues to focus on developing CCH for the treatment of medically necessary conditions
- Additional clinical data from BioSpecifics-sponsored Phase 1 uterine fibroids trial to be presented at an upcoming medical meeting in 2H2019
  - BioSpecifics is analyzing full Phase 1 data to guide design of a Phase 2 study
- Top-line data from Endo-sponsored Phase 3 clinical trials in cellulite announced in 1Q19 with additional data presented in 2Q2019
  - BLA submission expected in 2H2019, commercial launch expected in 2H2020
- Endo is opted-in for additional indications, including adhesive capsulitis and plantar fibromatosis
Innovators in the development & commercialization of

INJECTABLE COLLAGENASE

BioSpecifics Technologies Corp.

August 2019