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 2018; 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 release of top-line data in connection with its Phase 3 clinical trial of XIAFLEX for the treatment of cellulite; the timing of the Company’s release of top-line data in connection with its Phase 1 clinical trial of XIAFLEX for the treatment of uterine fibroids; whether treating uterine fibroids with XIAFLEX will achieve the advantages over major surgery identified by the Company; Endo’s interest in currently unlicensed indications, including capsular contracture of the breast, Dercum’s disease, knee arthrofibrosis, urethral strictures, hypertrophic scars and keloids; 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, 2017, its Quarterly Reports on Form 10-Q for the quarters ended March 31, 2018 and June 30, 2018 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 in 12 indications to date

Profitable biopharma company with lean corporate structure

Receives revenues from XIAFLEX® milestones, royalties on net sales, mark-up on COGS and sublicense income by partner Endo

Opportunity for minimally invasive non-surgical treatment CCH in several potential pipeline indications

BioSpecifics developing CCH for serious medical conditions, Phase 1 clinical trial in uterine fibroids fully enrolled with top-line data expected in 4Q18
# XIAFLEX® Pipeline

<table>
<thead>
<tr>
<th>Indication</th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Marketed</th>
<th>Program Status</th>
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<tr>
<td><strong>Approved Indications</strong></td>
<td></td>
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</tr>
<tr>
<td>Dupuytren's Contracture</td>
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<td></td>
<td></td>
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<tr>
<td>Peyronie’s Disease</td>
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<tr>
<td><strong>Additional CCH Indications</strong></td>
<td></td>
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</tr>
<tr>
<td>Cellulite</td>
<td>🍃endo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Top-line data expected in 4Q18</td>
</tr>
<tr>
<td>Adhesive Capsulitis</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Endo is currently opted-in</td>
</tr>
<tr>
<td>Human Lipoma</td>
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<td></td>
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<td></td>
<td>Endo is currently opted-in</td>
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<td>Canine Lipoma</td>
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<td>Endo is currently opted-in</td>
</tr>
<tr>
<td>Lateral Hip Fat</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Endo is currently opted-in</td>
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<tr>
<td>Plantar Fibromatosis</td>
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<td></td>
<td></td>
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<td></td>
<td>Endo is currently opted-in</td>
</tr>
<tr>
<td><strong>BioSpecifics Managed CCH Indications</strong></td>
<td></td>
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<tr>
<td>Uterine Fibroids</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Phase 1 trial fully enrolled; top-line data expected in 4Q18</td>
</tr>
</tbody>
</table>

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

- Second quarter 2018 total revenues continued to increase year-over-year
- Endo expects high teens range percentage growth for XIAFLEX revenue in 2018
- Sizable opportunity for growth
  - Of the patients diagnosed with Peyronie’s disease, 85-90% are untreated and for Dupuytren’s contracture 75-80% are untreated

**FUTURE GROWTH INITIATIVES:**

- 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
- 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
  - Peyronie’s Disease: longstanding educational and advertising campaign, “Ask About the Curve” and “Real Patients Share Their Stories”
  - Dupuytren’s Contracture: “Talk to The Hand” TV campaign

*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
▪ Affects between 3-9% of adult Caucasians

Pre-treatment:

Post-treatment:

Source: Endo International plc
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
- Incidence between 3-9% of population

**Pre-treatment:**

**Post-treatment:**

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

Source: Endo International plc
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
- Up to $34B in annual direct costs (surgery, hospital admissions, outpatient visits, medications)
- 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 to receive 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)

Positive Interim Results from Ongoing Phase 1 Trial for Uterine Fibroids

- BioSpecifics-sponsored clinical trial of CCH for the treatment of uterine fibroids now fully enrolled, top-line data expected in 4Q18
- Phase 1 initiated based on preclinical data published in May 2016 issue of *American Journal of Obstetrics & Gynecology* showed highly purified collagenase can reduce stiffness of human uterine fibroid tissue *ex-vivo*
- Interim data presented in March 2018 at the 65th Annual Scientific Meeting of the Society for Reproductive Investigation showing the safety and effectiveness of CCH injection method in 5 patients
  - Collagenase-treated tissue samples showed significant reduction of collagen content and disruption of tissue pattern, control tissue showed abundant and compact collagen content
  - Digestion of collagen did not extend beyond the capsule of any fibroid
  - No adverse events occurred
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
Overview of CCH Potential for Cellulite

OVERVIEW

▪ Contour abnormality of the skin resulting in dimpling
▪ Skin dimpling caused by tethering of fibrous septae with fat cell volume as secondary cause, occurring mainly on the buttocks, thighs and lower abdomen and arms
▪ Affects ~85-90% of post-pubertal females
▪ Currently no FDA approved pharmaceutical products to address fibrous septae underlying mechanism
▪ Total U.S. aesthetics market is $15 billion, total U.S. aesthetics injectables market is $3.5 billion

Cellulite Anatomy

Highly Statistically Significant Positive Results from Phase 2b Study

Source: Endo International plc
Phase 3 Clinical Trials for Cellulite Initiated in February 2018

- Completed enrollment in 2Q18; Top-line results expected in the fourth quarter of 2018
- Two ongoing identical Phase 3 RELEASE clinical trials of CCH for the treatment of cellulite
  - Multicenter, randomized, double-blind, placebo-controlled studies to evaluate the safety and efficacy of CCH in reducing the appearance of cellulite
  - Expected to enroll 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 both patient and physician on a Photonic Scale of Cellulite Severity
- Secondary endpoints – patient-reported assessments of satisfaction, composite improvements, changes in cellulite impact scale from baseline and changes in the global aesthetic improvement scale
- In April 2018, Endo presented Phase 2b results during the Hot Topic Symposium at the American Society for Aesthetic Plastic Surgery (ASAPS); demonstrated interest in aesthetic community for innovative injectable treatment for patients with cellulite

Source: Endo International plc
CCH for 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
CCH for 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
## CCH for 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 |
Positive Top-Line Phase 2 Study Results
Single 0.58 mg Injection of CCH

- **Primary endpoint:** 81.3% reduction in visible surface area for CCH vs. 2.1% increase for placebo; 83.4% difference in favor of CCH (p<0.0001)
- 89.5% responder rate (showed a ≥50% decrease in lipoma visible surface area relative to baseline) vs. 0% for placebo (p<0.0001)
- 64.8% mean decrease in the length from baseline for CCH vs. 0.2% increase for placebo (p<0.0001)
- 62.5% mean decrease in visible surface area at 3 months vs. 0.4% increase for placebo (p<0.0001) and 26.8% decrease vs. 0.2% increase at 1 month
CCH for Lateral Hip Fat

Definition & Complications

- Similar prevalence to cellulite
- Fat accumulation is common among women 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
## Additional Promising Unlicensed Indications

<table>
<thead>
<tr>
<th>Indication</th>
<th>Description</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capsular Contracture, Breast</td>
<td>Post-surgical complication that can deform the breast and cause pain</td>
<td>~15% of breast augmentation / reconstructive surgery patients</td>
</tr>
<tr>
<td>Hypertrophic Scars &amp; Keloids</td>
<td>Scars that form on the skin at site of injury</td>
<td>~600,000 scar and ~400,000 keloid patients</td>
</tr>
<tr>
<td>Dercum’s Disease</td>
<td>Obesity and overly sensitive painful adipose tissue</td>
<td>Extremely rare condition</td>
</tr>
<tr>
<td></td>
<td>Extremely rare condition</td>
<td></td>
</tr>
<tr>
<td>Knee Arthrofibrosis</td>
<td>Adhesions that form post-implant that may affect range of motion</td>
<td>~100,000 patients per year in U.S.</td>
</tr>
<tr>
<td>Urethral Strictures</td>
<td>Narrowing of the urethra that may affect urine flow</td>
<td>1% male population</td>
</tr>
</tbody>
</table>

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><strong>&gt;$146.2M Received as of June 30, 2018</strong></td>
<td>$146.2M received in licensing, sublicensing, milestone, COGS, and royalty payments as of June 30, 2018</td>
</tr>
</tbody>
</table>
| **Future Payments Due to BioSpecifics from Endo**                         | - Low double digit royalties as % of net sales  
- Additional mark-up on COGS for U.S. and other countries in Endo territory  
- Modest milestones for additional indications and regulatory submissions and approval worldwide |
| **Endo Opt-In Rights**                                                   | Right to opt-in for all indications, following an opt-in payment and potential future milestone, royalty and COGS payments made to BioSpecifics |
| **Sublicense Income from Endo Partnerships**                             | - Endo partnered with Paladin Labs, Sobi, Actelion and Asahi Kasei for Dupuytren’s contracture and Peyronie’s disease  
- BioSpecifics entitled to specified % of potential milestones payments that Endo receives from its sublicensees |
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)

<table>
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<tr>
<th>For the six months ended</th>
<th>06/30/2018(1)</th>
<th>06/30/2017</th>
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<tbody>
<tr>
<td>Cash and equivalents, and investments</td>
<td>$73,709,882</td>
<td>$58,542,257</td>
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<tr>
<td>Income Statement</td>
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<tr>
<td>Revenues</td>
<td>$14,185,818</td>
<td>$14,226,135</td>
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<tr>
<td>Other income</td>
<td>588,360</td>
<td>268,733</td>
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<td>Costs and expenses</td>
<td>(4,461,868)</td>
<td>(5,333,512)</td>
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<td>Provision for income taxes</td>
<td>(2,033,039)</td>
<td>(3,192,512)</td>
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<tr>
<td>Net income</td>
<td>$ 8,279,271</td>
<td>$ 5,968,844</td>
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Earnings per share:

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<tr>
<td>Basic</td>
<td>$ 1.15</td>
<td>$ 0.83</td>
</tr>
<tr>
<td>Diluted</td>
<td>$ 1.13</td>
<td>$ 0.81</td>
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Shares used in computation of earnings per share:

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<td>Basic</td>
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<tr>
<td>Diluted</td>
<td>7,309,325</td>
<td>7,330,875</td>
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(1) As of January 1, 2018, the Company adopted the requirements of ASC 606 using the modified retrospective adoption method, and as a result, there is a lack of comparability of certain amounts to the prior periods presented.

7.3 million shares outstanding as of 06/30/18
BioSpecifics Corporate and Clinical Highlights

- BioSpecifics continues to be profitable on an ongoing basis
- BioSpecifics-sponsored Phase 1 uterine fibroids clinical trial fully enrolled, top-line data expected in 4Q 2018
- Top-line data from Endo-sponsored Phase 3 clinical trials in cellulite expected in 4Q 2018
- Endo is opted-in for additional indications, including adhesive capsulitis and plantar fibromatosis
- BioSpecifics continues to focus on developing CCH for the treatment of medically necessary conditions
Innovators in the development & commercialization of
INJECTABLE COLLAGENASE

August 2018