XTL Biopharmaceuticals
(NASDAQ: XTLB) (TASE: XTL)

www.xtlbio.com

Josh Levine CEO
Forward Looking Statements

The following slides contain forward-looking statements, about XTL’s expectations, beliefs or intentions regarding, among other things, its product development efforts, business, financial condition, results of operations, strategies or prospects. Forward-looking statements can be identified by the use of forward-looking words such as "believe," "expect," "intend," "plan," "may," "should" or "anticipate" or their negatives or other variations of these words or other comparable words or by the fact that these statements do not relate strictly to historical or current matters. Forward-looking statements relate to anticipated or expected events, activities, trends or results as of the date they are made. Because forward looking statements relate to matters that have not yet occurred, these statements are inherently subject to risks and uncertainties that could cause XTL’s actual results to differ materially from any future results expressed or implied by the forward-looking statements. Many factors could cause XTL’s actual activities or results to differ materially from the activities and results anticipated in such forward-looking statements, including, but not limited to, the factors summarized in XTL’s filings with the SEC and in its periodic filings with the TASE. In addition, XTL operates in an industry sector where securities values are highly volatile and may be influenced by economic and other factors beyond its control. XTL does not undertake any obligation to publicly update these forward-looking statements, whether as a result of new information, future events or otherwise. Please see the risk factors associated with an investment in our ADSs or ordinary shares, which are included in our Annual Report on Form 20-F as filed with the U.S. Securities and Exchange Commission on April 28 2015.
Introduction: What is XTL?

- XTLbio is a clinical-stage biotech company focused on the development of pharmaceutical products for the treatment of unmet clinical needs in large markets.
- Our lead drug is a “world-class” clinical asset: hCDR1 for treatment of SLE (lupus).
- SLE is a significant unmet medical need; has shown high interest from Big Pharma.
  - GSK acquired HGS in 2012 primarily for its SLE drug Benlysta for $3 billion.
- There is no current effective solution on the market and weak competitive pipeline.
- hCDR1 is a novel compound with a unique mechanism of action.
- hCDR1 has clinical data on >400 patients.
  - Favorable safety profile and well tolerated by patients.
  - “Demonstrated efficacy in one and possibly more clinically meaningful endpoints” (Lupus Science & Medicine Journal – August 2015).
- We need to replicate the results achieved in a previous Phase 2b trial.
- We have reason to believe we can do even better.
Corporate Snapshot

- Headquarters: Raanana, Israel
- ADRs trading on the NASDAQ (XTLB) and Ordinary Shares on the Tel-Aviv Stock Exchange (XTL)
- Cash ≈ $4.8 million (as of 6/30/2015)
- In Q2 2015 raised $4 million from a large US healthcare fund and existing shareholders
- Research Coverage: HC Wainwright & Co and Arrowhead BID
- Capitalization:
  - 273,525,799 Shares Outstanding*
  - No debt or preferred
- Experienced Management Team
- World Class Clinical Advisory Board

* Each ADS represents 20 Ordinary Shares
Management Team

- **Josh Levine, CEO**
  CEO, Proteologics; Senior Director, Teva Pharmaceuticals (Innovative Ventures); Partner, Platinum Neurone Ventures; Corporate Finance Head, Patterson Travis; Attorney, WF&G

- **David Kestenbaum, CPA & MBA, CFO**
  CFO, ZenithSolar; Finance Director, Colbar Lifescience (division of J&J (NYSE:JNJ)); CFO, ZAG Industries (division of Stanleyworks (NYSE:SWK)); CFO, Lever Israel (division of Unilever (NYSE:UN)); Sr. Associate, PwC, New York

- **Monique Ben Am, MSc, Clinical Development Lead**
  VP Clinical Development, BioCancell; Director, Teva Pharmaceuticals Ltd.; VP Clinical, Topspin; Associate Director, Novartis (development of Gleevec™)
Clinical Advisory Board

- **Dr. Daniel Wallace, Cedars-Sinai Medical Center**
  - Largest lupus practice of its kind in the US; currently running >30 clinical trials
  - Served as Chairman of the Lupus Foundation of America, receiving the Lupus Foundation of America Award, Achievement Award of the Lupus Research Institute and others
    
    "I am privileged to join the team at XTL to help advance what I believe to be one of the most promising Lupus drug candidates in recent history. The data shown in earlier trials is encouraging and could potentially be a disruptive solution to a largely unmet medical need.”

- **Professor David Isenberg, University College London Hospitals**
  - Chair of the British Isles Assessment Group (BILAG).
  - President of the British Society for Rheumatology from 2004 – 2006
  - Chaired the Society’s Biologics Register Committee from 2006 – 2011
  - Received the 2010 Evelyn Hess Prize from the Lupus Foundation of America and the Rodger Demers Prize (Canada), in 2012.
    
    “I am happy to serve as a consultant for XTL’s Phase II trial testing for hcDR1 using the BILAG index because it has shown encouraging results when used during the previously conducted PRELUDE trial.”

- **Dr. Murray Urowitz, University of Toronto; Lupus Clinic at Toronto Western Hospital**
  - Established the University of Toronto Lupus Clinic and Lupus Databank Research Program.
  - Founding member/president of numerous lupus-related associations and the recipient of numerous awards for his contributions to lupus research.
    
    "The continued development of XTL’s hCDR1 has the medical community eagerly waiting to learn the efficacy of the drug in its planned Phase II trial.”
hCDR1 for the treatment of Lupus
Systemic “Lupus” Erythematosus (SLE) is a chronic, debilitating inflammatory autoimmune disease, resulting in rheumatologic, dermatological and end-organ manifestations.
Lupus: Market Overview

- **Prevalence**
  - 1.5 million patients in U.S. (5 million worldwide) varying across ethnicities/geographies
  - Vast majority are women / majority between ages of 15 and 45

- **Prognosis**
  - Dermatologic & musculoskeletal manifestation most common early on
  - End organs become involved as disease progresses
  - Most common causes of death
    - Renal failure, Cardiovascular disease, CNS disorders, Intercurrent infections
  - 10-year survival rate for ~90% of patients

- **Market expected to grow dramatically**

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1 Lupus Foundation of America
2 Decision Resources 2013
Lupus: Competitive Landscape

- **NO** completely effective treatments for lupus in the market:
  - Current treatments: corticosteroids, cytotoxic immune-suppressants (palliative care)
    - Problems with current treatments: non specific, severe side effects (hypertension, osteoporosis, bone marrow suppression, increased cancer risk, etc.)
  - Benlysta (HGS/GSK): approved by FDA 3/2011
    - Only approved drug against Lupus in the last 50+ years
    - Market penetration is slower than expected (2014 sales of $268M vs. expected blockbuster)
  - Weak pipeline: primarily B-cell inhibitors – like Benlysta
    - Recent Phase III failures
      - UCB/Lilly

Source: Global Markets Direct/H2 2015
hCDR1: Unique Mechanism of Action (MOA)

hCDR1 is a peptide that down-regulates the SLE-related autoimmune process; potential to be “first in class” and “best in class” drug

- Specific upstream immunomodulation through the generation of regulatory T cells
- Developed by Prof. Edna Mozes of the The Weizmann Institute of Science (Israel)
- >40 peer reviewed journal articles; >200 animal experiments
- IP: Minimum of data exclusivity (~7 years US/10 years EU) with plans to extend
- XTL obtained exclusive license from Yeda Research and Development Co. (1/2014)

MOA of hCDR1: Different than existing late stage pipeline
Clinical Trial History of hCDR1

- Three clinical trials completed (by Teva): Phase Ia, Ib trials and a Phase II trial
  - Studies included over 400 patients
  - Demonstrated to be well tolerated by patients and to have a favorable safety profile
- Phase II (PRELUDE) trial
  - Did not meet primary endpoint (SLEDAI)
  - Did not enforce steroid withdrawal algorithm
  - Encouraging results in secondary clinical endpoint, the BILAG index (see below)
    - 0.5 mg weekly dose showed a substantial effect
- Opportunity for hCDR1
  - Teva returned hCDR1 to Yeda in 2009
  - Thereafter, in 2010, FDA published guidelines that BILAG should be used as the primary endpoint

hCDR1 has been tested in over 400 patients, has a favorable safety profile and has shown encouraging results on BILAG – an FDA recommended primary endpoint for lupus trials
BILAG Responder Analysis at LOV Compared to Baseline (Placebo vs. Edratide 0.5 mg)

Substantial effect \((p=0.03)\) even though steroid withdrawal not enforced (see below)
PRELUDE - Secondary Endpoint (Post Hoc)

BILAG Complete Responder Analysis (Placebo vs. Edratide 0.5 mg)

Subjects with BL Steroids <20 mg daily dosage
(n=137; p=0.007)

Subjects with no Steroids at Baseline
(n=29; p=0.05)

Clear trend toward even more substantial effect with reduced steroid use
PRELUDE – Trends in other Secondary Endpoints

Medicinal Flare Analysis (Post Hoc/ITT Cohort)  
p=0.04

SLE Responder Index* (Post Hoc/ITT Cohort)  
p=0.058

* Predefined: an increase of ≥ 5mg daily steroids compared to baseline
** Post Hoc: increase of ≥ 5mg daily steroids vs. lowest previous dose

* SRI in PRELUDE trial was composite measure of disease activity based on two validated indices: SELENA-SLEDAI and BILAG
PRELUDE: Recent Peer-Reviewed Article (8/15)

Safety and efficacy of hCDR1 (Edratide) in patients with active systemic lupus erythematosus: results of phase II study

Murray B Urowitz,¹ David A Isenberg,² Daniel J Wallace³

KEY MESSAGES

- Edratide demonstrated efficacy in one and possibly more clinically meaningful endpoints.
- Dose ranging studies demonstrated the 0.5 mg subcutaneous weekly was the most effective dose.
- There were no safety signals in this 26 week study.

New Trial (2b or 2/3): Improve Probability of Success

Proposed trial design is based on: (1) new FDA guidelines; (2) Benlysta trials; and (3) clinical data from PRELUDE - especially the 0.5 mg results in the secondary endpoints.

<table>
<thead>
<tr>
<th>PRELUDE Trial</th>
<th>Proposed Trial</th>
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<tbody>
<tr>
<td>Primary endpoint</td>
<td>SLEDAI only</td>
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<tr>
<td>Dose</td>
<td>0.5, 1, 2.5 mg</td>
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<tr>
<td>Steroid Use</td>
<td>Corticosteroids masking Steroid sparing not enforced</td>
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<td>Trial duration</td>
<td>26 week study</td>
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<td>Execution</td>
<td>Site discrepancies in disease matrices Suboptimal sample &amp; data handling</td>
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### hCDR1 Development Milestones

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<tr>
<th>Milestone</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
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<tbody>
<tr>
<td>Publish PRELUDE Study Results ✓</td>
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<tr>
<td>CMC – Drug Substance ✓</td>
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<td>Pre-IND Meeting</td>
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<td>CMC – Drug Product</td>
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<td>Trial Enrollment</td>
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<td>Interim Analysis</td>
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**Summary**

- **hCDR1** for SLE has the potential to be a “**first in class**” and “**best in class**” drug
  - **hCDR1** has a **unique mechanism of action**
- **SLE** is a significant unmet medical need; has shown **high interest from Big Pharma**
- There is **no current effective solution** on the market
- There is a **very weak competitive pipeline**
- **hCDR1** has **clinical data on >400 patients**
  - Favorable **safety profile** and well tolerated by patients
  - “**Demonstrated efficacy in one and possibly more clinically meaningful endpoints**” *(Lupus Science & Medicine Journal – August 2015)*
  - **Efficacy in FDA-recommended endpoint**
- We need to **replicate the results** achieved in the previous clinical trial
- We have reason to believe **we can do even better**
- We have the team to get it done
Thank You