

Forward-Looking Statements

This presentation by TherapeuticsMD, Inc. (referred to as "we" and "our") may contain forward-looking statements. Forward-looking statements may include, but are not limited to, statements relating to our objectives, plans and strategies, as well as statements, other than historical facts, that address activities, events or developments that we intend, expect, project, believe or anticipate will or may occur in the future. These statements are often characterized by terminology such as "believe," "hope," "may," "anticipate," "should," "intend," "plan," "will," "expect," "estimate," "project," "positioned," "strategy" and similar expressions and are based on assumptions and assessments made in light of our managerial experience and perception of historical trends, current conditions, expected future developments and other factors we believe to be appropriate.

Forward-looking statements in this presentation are made as of the date of this presentation, and we undertake no duty to update or revise any such statements, whether as a result of new information, future events or otherwise. Forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties, many of which are outside of our control. Important factors that could cause actual results, developments and business decisions to differ materially from forward-looking statements are described in the sections titled "Risk Factors" in our filings with the Securities and Exchange Commission, including our most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, as well as Current Reports on Form 8-K, and include the following: our ability to resolve the deficiencies identified by the FDA in our new drug application for our TX-004HR product candidate and the time frame associated with such resolution; whether the FDA will agree with our proposal to resubmit an amended NDA for our TX-004HR product candidate; whether we will be able to prepare an amended NDA for our TX-004HR product candidate and, if prepared, whether the FDA will accept and approve the NDA; our ability to maintain or increase sales of our products; our ability to develop, protect and defend our intellectual property; our ability to develop and commercialize our hormone therapy drug candidates and obtain additional financing necessary therefor; whether we will be able to prepare an NDA for our TX-001HR product candidate and, if prepared, whether the FDA will accept and approve the NDA; the length, cost and uncertain results of our clinical trials; the potential of adverse side effects or other safety risks that could preclude the approval of our hormone therapy drug candidates; our reliance on third parties to conduct our clinical trials, research and development and manufacturing; the availability of reimbursement from government authorities and health insurance companies for our products; the impact of product liability and other lawsuits; the influence of extensive and costly government regulation; the volatility of the trading price of our common stock and the concentration of power in our stock ownership.

TX-004HR, TX-005HR, and TX-006HR are investigational drugs and are not approved by the FDA. This non-promotional presentation is intended for investor audiences only.

PDF copies of press releases and financial tables can be viewed and downloaded at our website: www.therapeuticsmd.com/pressreleases.aspx.

Therapeutics MD°

Therapeutics MD (TXMD)

Innovative women's health company exclusively focused on developing and commercializing products for women throughout their life cycles



Drug candidate portfolio is built on **SYMBODA™** technology for the solubilization of bio-identical female hormones

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Two Late Stage Women's Health Assets With Large Total Addressable Market Opportunities

TX-004HR Moderate to severe dyspareunia, a **Proposed Indication** symptom of VVA, due to menopause **Condition Description VVA due to Menopause Active Ingredients** Bio-Identical 17 β-Estradiol **Form** Vaginal softgel capsule Easy to use, negligible systemic exposure, **Key Value Proposition** designed to support long-term use **Affected US Population** 32 million women^{1,2} **US TAM Opportunity** >\$20B⁵ Complete Response Letter: May 5, 2017 **Status** Ongoing Review Meeting: Nov. 3, 2017

TX-001HR



Moderate to severe hot flashes due to menopause

Menopause

Bio-Identical 17 β-Estradiol + Bio-Identical Progesterone

Oral softgel capsule

Potential first and only bio-identical FDA-approved combination product

36 million women³

>\$25B^{4,5}

Positive Phase 3 topline data NDA submission expected 4Q17

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¹⁾ The North American Menopause Society. Management of symptomatic vulvovaginal atrophy: 2013 position statement of The North American Menopause Society. *Menopause*. 2013;20(9):888–902.

²⁾ Gass ML, Cochrane BB, Larson JC, et al. Patterns and predictors of sexual activity among women in the hormone therapy trials of the Women's Health Initiative. *Menopause*, 2011:18(11):1160–1171.

³⁾ Derived from U.S. Census data

⁴⁾ Based on pre-WHI annual scripts of FDA-approved HT products

⁵⁾ Based on market pricing of current FDA-approved HT products

Seasoned Management Team with a Proven Track Record of Commercial Execution



- Former U.S. Secretary of Health and Human Services (2001-2005)
- Holds multiple board memberships, including Centene and United Therapeutics
- 40-year public health career



- Former Chief Executive Officer and Chief Financial Officer of Shire PLC
- Former Vice President of Corporate Finance at AstraZeneca
- Holds multiple board memberships, including Chairman of Revance Therapeutics



- Former President and Chief Executive Officer of Boehringer Ingelheim (U.S.)
- Former EVP of Customer Marketing and Sales of U.S. Human Health at Merck
- Holds multiple board memberships, including Catalent



- Co-founded vitaMedMD in 2008
- Co-founded CareFusion (Sold to Cardinal Health in 2006)
- 22 years of experience in early stage healthcare company development



- Co-founded vitaMedMD in 2008
- 25 years of experience in healthcare/women's health
- Past OBGYN Department Chair - Boca Raton Regional Hospital
- Past ACOG Committee Member
- OBGYN trained University of Pennsylvania



- Former Clinical Lead of Women's Health at Pfizer
- 15+ years of experience developing women's health products
- Reproductive endocrinologist & infertility specialist

John Milligan President

- Co-founded CareFusion
- Held executive sales and operation management positions at McKesson, Cardinal and Omnicell
- 20+ years of operations experience



- Former CFO of American Wireless, Telegeography, and WEB Corp
- Participated in American Wireless/Arush Entertainment merger
- Former KPMG and PricewaterhouseCoopers accountant



- 20+ years of commercial and marketing experience
- SVP of the Pfizer Consumer Healthcare Wellness Organization
- Commercial lead for sales and marketing of the Pfizer Women's Health Division
- Head of Global Innovation at Weight Watchers International



- 25+ years of pharmaceutical marketing, sales, and operations experience
- Led commercialization of anti-estrogens/estradiol, breast cancer, and ovarian cancer drugs



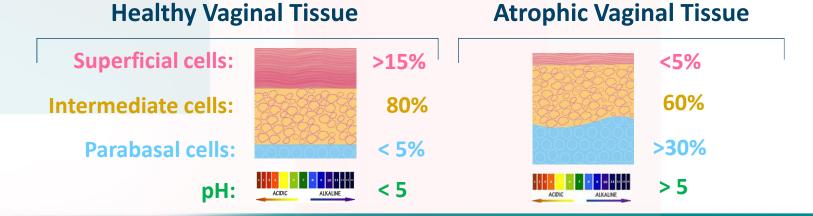
- 25+ years of women's health pharmaceutical experience
- Product development leader for J&J, Wyeth, Aventis, and others
- Worked on development of Prempro[®], Premphase[®], and Estalis[®]

Therapeutics MD®



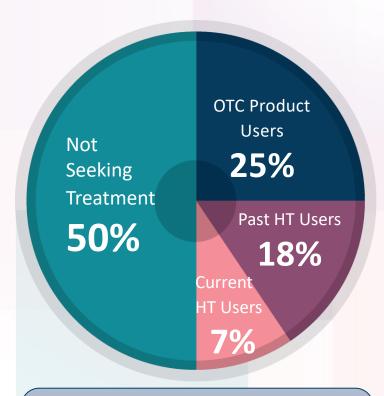
Vulvar and Vaginal Atrophy (VVA)

- Chronic and progressive condition characterized by thinning of vaginal tissue from decreased estrogen levels
- Diagnosed in approximately 50% of postmenopausal women¹
- Primary symptom = dyspareunia (painful intercourse)
- Secondary symptoms include: vaginal dryness, itching, irritation, bleeding with sexual activity, dysuria, urgency, frequency, recurrent UTIs, and incontinence
- Current treatments include: prescription creams, tablets, and rings in addition to over-the-counter lubricants



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Current US VVA Market Overview



>\$20B Branded Total US Market Opportunity⁵

32M Women with VVA Symptoms^{1,2}

~50%, or ~16M seek treatment for VVA⁴

- Only 7%, or ~2.3M women, are currently being treated today with Rx hormone therapy (HT)³
 - Long-term safety concerns⁶
 - Efficacy⁶
 - Messiness⁶
 - Need for applicator⁶
- 18%, or ~5.7M women, are past HT users and were unsatisfied/unsuccessful with past treatments⁴
- 25%, or ~8M women, are users of OTC products* such as lubricants that do not treat the underlying pathological cause of VVA nor halt or reverse symptoms⁴

~50%, or ~16M women do not seek treatment for VVA⁴

- Lack of awareness that VVA is a treatable condition
- Estrogen exposure concerns

4) TherapeuticsMD "EMPOWER" Survey, 2016

5) Based on current FDA-approved market pricing

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¹⁾ The North American Menopause Society. Management of symptomatic vulvovaginal atrophy: 2013 position statement of The North American Menopause Society. Menopause. 2013;20(9):888–902. 2) Gass ML, Cochrane BB, Larson JC, et al. Patterns and predictors of sexual activity among women in the hormone therapy trials of the Women's Health Initiative. Menopause. 2011;18(11):1160-1171.

³⁾ IMS Health Plan Claims (April 2008-Mar 2011)

⁶⁾ Wysocki, S et al, Management of Vaginal Atrophy: Implications from the REVIVE Survey. Clinical Medicine Insights: Reproductive Health 2014:8 23-30 doi:10.4137/CMRH.S1449 * Not treated with an FDA approved Rx product. OTC products do not effectively treat the underlying pathological causes of VVA and therefore do not halt or reverse the progression of this condition

Current FDA-Approved VVA Products

	Estrace Cream®	Premarin Cream®	Vagifem®	Estring®	Osphena®	Intrarosa®
Products	THE STATE OF THE S	Francis (2)	The second secon	Estring Veget treg	Osphenar Lizerine and displacement	INTRAROSA (prasterone)
	::: Allergan	Pfizer	novo nordisk	Pfizer	DUCHESNAY USA	ENDOCEUTICS amag
FDA Approval	1984	1978	1999	1996	2013	2016
TRx Dollars 2016 ¹	\$511,035,880	\$505,351,340	\$502,715,665ª	\$105,040,703	\$72,755,311	Approved 11/2016
Method of Admin	Vaginal Cream	Vaginal Cream	Vaginal Tablet	Ring	Oral Tablet	Vaginal Insert
Application	Reusable Vaginal Applicator	Reusable Vaginal Applicator	Vaginal Applicator	90-day Ring	Oral Daily SERM	Vaginal Applicator
Active Ingredient	100 mcg Estradiol	625 mcg/g Conjugated Equine Estrogens	10 mcg Estradiol	2,000 mcg Estradiol	60,000 mcg Ospemifene	6,500 mcg Prasterone
Average Maintenance Dose	100 mcg 2x/week	312.5 mcg 2x/week	10 mcg 2x/week	7.5 mcg daily	60,000 mcg daily	6,500 mcg daily
Onset of Action* Dyspareunia	Approval Without	Week 4+	Mark 9	Approval Without	Week 12	Week 6
Onset of Action* Dryness	On* Dryness Data Not Demonstrated		Week 8	Dyspareunia and Dryness Data	Approval Without Dryness Data	Week 12

Based on Product Prescribing Information Not Head-to-Head Comparative Studies

Vagifem [package label] http://www.novo-pi.com/vagifem.pdf

Premarin Vaginal Cream [package label] http://labeling.pfizer.com/showlabeling.aspx?id=132

Estrace Vaginal Cream [package label] http://pi.actavis.com/data_stream.asp?product_group=1880&p=pi&language=E

Osphena [package label] http://www.accessdata.fda.gov/drugsatfda_docs/label/2013/203505s000lbl.pdf Intrarosa [package label] http://www.accessdata.fda.gov/drugsatfda_docs/label/2016/208470s000lbl.pdf

All trademarks are the property of their respective owners

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*Onset of Action = First efficacy observation

Symphony Health Solutions PHAST Data powered by IDV; Annual 2016
 a. 2016 Vagifem and Yuvafem (authorized generic of Vagifem)

Compliance and Fills Per Year Drives Top-Line Revenue

Current VVA Market

Vaginal Creams:

Reasons Women Stop

Vaginal Tablets:

Reasons Women Stop

Average: 1.5 Fills Per Year²





Premarin

Messiness¹

Reusable Applicator¹

Long-term Safety¹

Dose Preparation by User Required³

Average: 3.5 Fills Per Year²



Vagifem

Efficacy1

Applicator¹

Long-term Safety¹

Systemic Absorption¹

Product	TRx Dollars ⁴	Patient Count⁵	Patient Share⁵
Estrace	\$511,035,880	868,052	39%
Premarin	\$505,351,340	750,185	34%
Vagifem/Yuvafem	\$502,715,665	433,187	20%

Higher average fills per year enable Vagifem/Yuvafem to generate equal revenue as Premarin and Estrace with significantly less patients on therapy

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¹⁾ Wysocki, S et al, Management of Vaginal Atrophy: Implications from the REVIVE Survey. Clinical Medicine Insights: Reproductive Health 2014:8 23-30 doi:10.4137/CMRH.S14498 2) Total Rx/Patient Count

³⁾ The North American Menopause Society. Management of symptomatic vulvovaginal atrophy: 2013 position statement of The North American Menopause Society Menopause. 2013;20(9):888-902.

⁴⁾ Symphony Health Solutions PHAST Data powered by IDV; Annual 2016

⁵⁾ IMS SDI's Total Patient Tracker; Annual 2016

TX-004HR: Product Candidate Profile



- First vaginal estrogen (4 mcg and 10 mcg) with negligible systemic exposure
- Strong efficacy data on both dyspareunia and vaginal dryness with a 2-week onset of action
- Small, digitally inserted, rapidly dissolving softgel capsule without the need for an applicator
- Fraction of the dose (4 mcg, 10 mcg and 25 mcg) of many existing products (Premarin and Estrace)
- No patient education required for dose preparation or applicators
- Mechanism of action and dosing that is familiar and comfortable
- Proposed dose packaging to optimize compliance and convenience
- Strong patent estate with patent expirations starting 2032



Co-Primary and Key Secondary Efficacy Endpoints

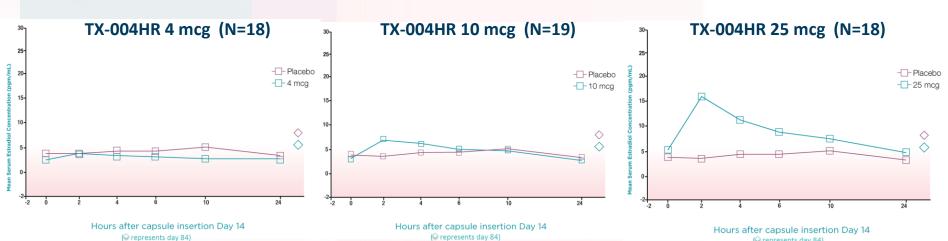


	4 mcg	10 mcg	25 mcg	
Superficial Cells	<0.0001	<0.0001	<0.0001	
Parabasal Cells	<0.0001	<0.0001	<0.0001	
Vaginal pH	<0.0001	<0.0001	<0.0001	
Severity of Dyspareunia	0.0149	<0.0001	<0.0001	
Severity of Vaginal Dryness	0.0014	<0.0001	<0.0001	

MMRM P-value vs placebo LS = Least Squares

(represents day 84)

<u>Arithmetic Mean Estradiol Serum Concentrations – Unadjusted</u>



	AUC ₀₋₂₄ (pg.h/mL)	C _{avg(0-24)} (pg/mL)		AUC ₀₋₂₄ (pg.h/mL)	C _{avg(0-24)} (pg/mL)		AUC ₀₋₂₄ (pg.h/mL)	C _{avg(0-24)} (pg/mL)
4 mcg	87.22 (42.77)	3.634 (1.78)	10 mcg	110.14 (54.57)	4.58 (2.27)	25 mcg	171.56 (80.13)	7.14 (3.33)
Placebo (pl)	104.16 (66.38)	4.34 (2.76)	Placebo (Pl)	104.16 (66.38)	4.34 (2.76)	Placebo (Pl)	104.16 (66.38)	4.34 (2.76)
P-value vs Pl	0.3829	0.3829	P-value vs Pl	0.7724	0.7724	P-value vs. Pl	0.0108	0.0108

TX-004HR New Drug Application (NDA) Background

Type of Filing

- 505(b)(2)
- Ability to reference non-clinical and clinical safety data for estrogen available in medical literature

FDA Guidance

- 12-week study required for estrogen alone products
 - "We recommend that studies be randomized, double-blinded and of 12-week duration"¹
- Lowest effective doses and exposures are prioritized
 - "Sponsors are encouraged to investigate dosing schedules and drug delivery systems that can achieve efficacy with lowest possible exposures"¹
- Established Precedent Recent Estrogen Alone FDA Approvals
 - Numerous estrogen alone products have been approved with 12-week endometrial safety data
 - Divigel, Evamist, Elestrin

TX-004HR has the lowest estrogen dose ever tested in an FDA-approved clinical trial

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1. 2003 FDA Draft Guidance for Industry Estrogen and Estrogen/Progestin Drug Products to Treat Vasomotor Symptoms and Vulvar and Vaginal Atrophy Symptoms – Recommendations for Clinical Evaluation http://www.fda.gov/ucm/groups/fdagov-public/@fdagov-drugs-gen/documents/document/ucm071643.pdf

TX-004HR Complete Response Letter (CRL)

- NDA for TX-004HR received a CRL on May 5, 2017
- There was one approvability issue identified by the FDA:
 - Lack of long-term endometrial safety data beyond the 12 weeks studied in the Rejoice Trial
 - No cases of endometrial hyperplasia were observed in the Rejoice Trial at the end of week 12 for all doses studied and included in the NDA
- There were <u>no approvability issues</u> identified by the FDA related to:
 - Clinical efficacy studied in the Rejoice Trial
 - Chemistry, Manufacturing, and Controls (CMC)



TX-004HR Regulatory Update

- Type A Meeting with the FDA directors of the Division of Bone, Reproductive, and Urologic Products
 (DBURP) and the Office of Drug Evaluation III (ODE III) June 14, 2017
- Submitted additional endometrial safety information to the FDA July 5, 2017
 - Information on the "Uterine First Pass Effect"
 - Currently marketed estrogen products, when placed in the upper third of the vagina, can pass to the endometrium
 - TX-004HR was specifically designed to be placed in the lower third of the vagina, decreasing the likelihood of stimulating the endometrial tissue
 - Safety data from the Women's Health Initiative (WHI) Observational Study of long-term, realworld users of vaginal estrogens
- Received formal General Advice Letter August 3, 2017
 - Initial review of the additional endometrial safety information submitted completed by the FDA
 - The FDA requested that TXMD submit the additional endometrial safety information to the NDA for TX-004HR, including the WHI Observational Study, to aid in its comprehensive review of the medical literature regarding the use of vaginal estrogen products and the risk of endometrial hyperplasia or cancer
 - The FDA requested a November meeting with TXMD to discuss the outcome of its comprehensive review and the next steps for the NDA for TX-004HR



Potential CRL Resolution Pathways

- Submit the additional endometrial safety information to the NDA for TX-004HR on or before
 September 18, 2017
 - The safety data from the WHI Observational Study was published in the peer-reviewed medical journal, *Menopause*, on August 16, 2017
- Meeting set with the FDA November 3, 2017
 - The company expects to learn if the additional endometrial safety data submitted to the NDA for TX-004HR addresses the lack of long-term safety identified in the CRL

Resubmission Pathway

- Resubmit amended NDA
 - Establish new target action date
- If Class 1 Resubmission, approval decision within 60 days of resubmission
- If Class 2 Resubmission, approval decision within 180 days of resubmission
- 1Q18/2Q18 approval (if successful)
- Reserve the right to pursue the FDA's formal dispute resolution process if a reasonable resubmission timeline cannot be established



Women's Health Initiative Observational Study

- First ever study to evaluate the long-term safety of women using **only** U.S. FDA-approved vaginal estrogen products
 - 2,953 users of vaginal estrogen without progestin with an intact uterus
 - Median duration of use of 2-3 years and median duration of follow-up of 7.2 years, representing over 21,000 patient years of data
 - Risks of breast cancer, endometrial cancer, colorectal cancer, stroke, and pulmonary embolism/deep vein thrombosis were not statistically significant between vaginal estrogen users and nonusers
 - 11 total cases of endometrial cancer

Breast cancer, endometrial cancer, and cardiovascular events in participants who used vaginal estrogen in the Women's Health Initiative Observational Study

Carolyn J. Crandall, MD, MS,¹ Kathleen M. Hovey, MS,² Christopher A. Andrews, PhD,³ Rowan T. Chlebowski, MD, PhD,⁴ Marcia L. Stefanick, PhD,⁵ Dorothy S. Lane, MD, MPH,⁶ Jan Shifren, MD,⁷ Chu Chen, PhD,⁸ Andrew M. Kaunitz, MD,⁹ Jane A. Cauley, DrPH,¹⁰ and JoAnn E. Manson, MD, DrPH¹¹



Focus on Three Main Fundamental Levers to Drive TX-004HR Launch, If Approved

Drive Market Share

Targeted Market Expansion

Differentiate TX-004HR as new treatment option that redefines relief



Elevate importance of VVA by demonstrating true impact of disease







Build a differentiated national care model for successful diagnosis, treatment, and management of symptoms of VVA caused by menopause

Commercial Execution

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Efficacy, Safety, and Positive User Experience Redefines Relief

Perceived Shortcomings

TX-004HR Solution

Efficacy

- 1 in 4 women achieve limited relief¹
- Delayed onset of efficacy¹

■ Early efficacy observed at week 2

Efficacy for vaginal dryness

Safety/ Side Effects

- Hormone exposure concerns¹
- Messiness¹

- Negligible systemic exposure
- No messiness

Convenience

- Products difficult to use¹
- Inadequate instructions on use¹

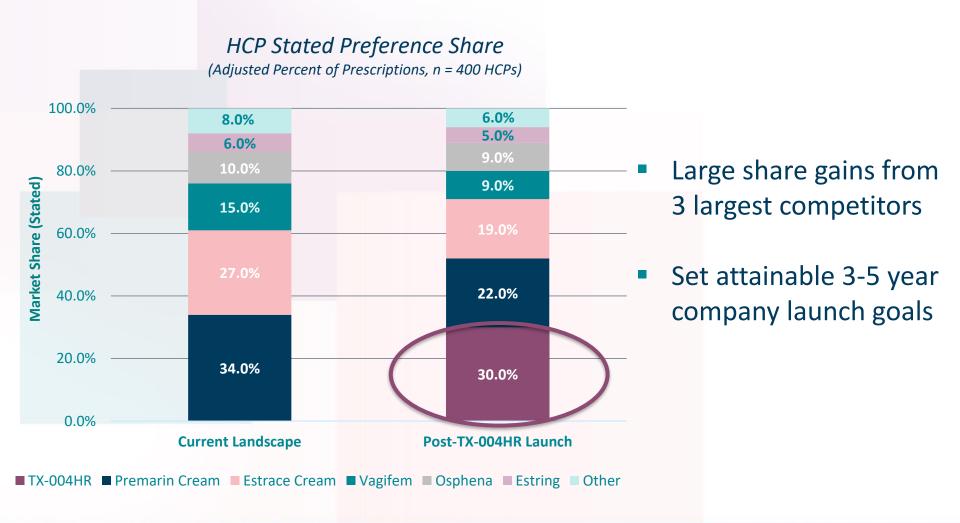
- No applicator; any time of day use
- Simple dose pack; easy instructions

Patients Choose TX-004HR

Rejoice Trial	4 mcg	10 mcg	25 mcg
Survey Results	(N=119)	(N=113)	(N=128)
TX-004HR preferred over	73.9%	67.3%	74.2%

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HCPs Estimate Giving TX-004HR 30% Market Share

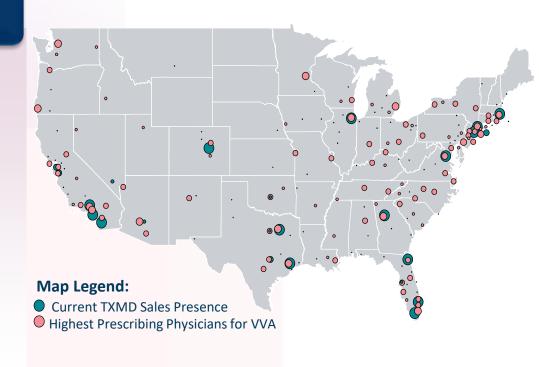


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Foundation Already Built for a Strong Launch

TXMD Sales Force Currently in OB/GYN Offices

- 40% overlap with current prenatal vitamins business
- Currently calling on VVA targets with disease awareness campaign
- Planned sales force of 100 in place prior to launch
- Partnership with inVentiv, leading contract sales organization
- Operational and analytic systems





Increasing Compliance Through National Care Model Represents TXMD Core Competency

Prenatal Vitamins Market

- Market Dynamics:
 - No Drug Claims
 - 9 month condition
- Industry Average Patient Compliance:
 - 2.5 fills per pregnancy
- TXMD Compliance with National Care Model:
 - 8 fills per pregnancy

VVA Market

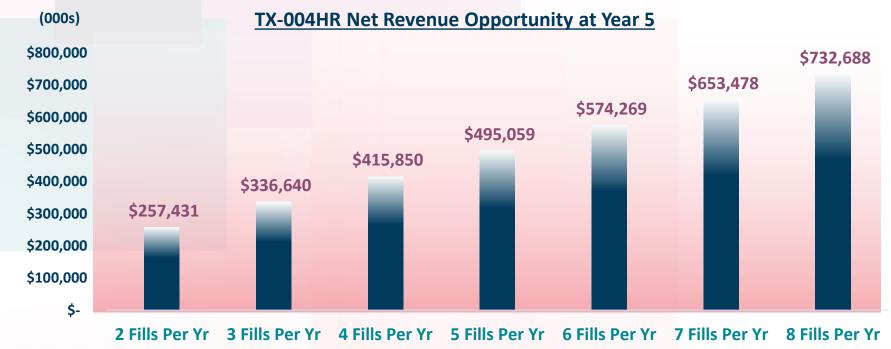
- Market Dynamics:
 - Clinical and physical product differentiation
 - Chronic, progressive condition
- Industry Average Patient Compliance:
 - Vaginal Creams: 1.5 fills per year
 - Vaginal Tablets: 3.5 fills per year
- Potential Compliance with National Care Model:
 - Greater than 4 fills per year



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Compliance and Fills Per Year Drives TX-004HR Net Revenue at Year 5 of Launch

Year 5 Assumptions		
Total VVA Patients on HT ¹	2,218,252	Zero market growth
TX-004HR Market Share	30%	8
TX-004HR Patients	665,000	
WAC of Loading Dose	\$ 382.86	Parity pricing - Vagifem
WAC of Maintenance Dose	\$ 170.16	
Average Rebate per Rx	30%	Zero price increases



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Payers are Continuing to Provide Choice

80% of Payers Prefer 2+ Products

VVA Category		Estrace Cream	Estring	Osphena	Premarin Cream	Vagifem
Payers	Lives	Univ. Status	Univ. Status	Univ. Status	Univ. Status	Univ. Status
Express Scripts PBM	28,411,137	Preferred	Covered	Covered	Preferred	Preferred
CVS Caremark RX	25,490,409	Preferred	Covered	Preferred	Preferred	Preferred
UnitedHealth Group, Inc.	15,606,808	Covered	Preferred	Covered	Covered	Preferred
Anthem, Inc.	14,307,637	Preferred	Preferred	Covered	Preferred	Covered
OptumRx	9,508,973	Covered	Covered	Covered	Preferred	Covered
Aetna, Inc.	9,265,194	Covered	Covered	Covered	Preferred	Covered
Department of Defense - TRICARE	7,004,961	Preferred	Preferred	Preferred	Preferred	Preferred
Kaiser Foundation Health Plans, Inc.	6,610,331	Preferred	Preferred	Not Covered	Preferred	Not Covered
CIGNA Health Plans, Inc.	6,375,734	Covered	Preferred	Covered	Preferred	Covered
Blue Cross Blue Shield Association Corporatio	5,442,846	Preferred	Covered	Covered	Preferred	Preferred
Health Care Service Corporation	5,135,711	Preferred	Covered	Covered	Covered	Preferred
Department of Veterans Affairs (VHA)	4,803,818	Covered	Covered	Covered	Preferred	Covered
Humana, Inc.	2,325,564	Covered	Covered	Not Covered	Covered	Covered
Blue Cross Blue Shield of Michigan	2,317,410	Covered	Preferred	Covered	Preferred	Preferred
Indian Health Service (IHS)	2,201,809	Covered	Covered	Covered	Preferred	Covered
Blue Shield of California	1,894,377	Preferred	Preferred	Covered	Preferred	Preferred
Prime Therapeutics	1,885,924	Preferred	Covered	Covered	Covered	Preferred
Blue Cross and Blue Shield of Florida, Inc.	1,861,938	Covered	Covered	Covered	Preferred	Preferred
Highmark, Inc.	1,781,021	Covered	Preferred	Covered	Preferred	Covered
CareFirst, Inc.	1,530,652	Preferred	Covered	Preferred	Preferred	Preferred

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Menopause Overview

- Menopause represents the natural life-stage transition when women stop having periods as the production of Estrogen (E) and Progesterone (P) decreases
 - Average age of menopause 51 years¹
 - Women may spend, on average, more than one-third of their lives in a hypoestrogenic state
- May result in physical and emotional symptoms¹
 - Symptoms include vasomotor symptoms (hot flashes, night sweats), mood changes and vaginal dryness
 - Prolonged lack of estrogen can affect the bones, cardiovascular system, and increases risks for osteoporosis
- Long history of Estrogen (E) and Progesterone (P) use
 - Estrogen and progesterone have been used for over 50 years as treatment
 - Estrogen to reduce symptoms and other long-term conditions
 - Progesterone to prevent thickening of the uterine wall²
 - Increased risk for endometrial hyperplasia/endometrial cancer if estrogen unopposed²



TX-001HR Product Development Rationale

2002 Women's Health Initiative (WHI) study showed that synthetic hormones increased the risk of breast cancer, stroke, heart attack and blood clots (all FDA-approved combination hormonal products contain a synthetic Progestin and not a bio-identical Progesterone)



- Post WHI, women and healthcare providers shifted to Bio-Identical Hormone Therapy (BHRT) containing bio-identical estradiol and bio-identical progesterone as an alternative despite being unapproved drugs that are not covered by insurance
 - 90M+ scripts of synthetic hormone therapy prescribed annually before 2002, declining to ~10M in 2015¹
 - Today, patients have the choice between three second best therapies:
 - FDA-approved, synthetic combination hormones
 - FDA-approved, separate bio-identical hormone products
 - Unapproved, <u>compounded</u> bio-identical hormones that have not been proven safe and effective, or covered by insurance
- Compounding filled the need for BHRT



- 30M scripts (3M women) of Compounded Bio-identical Hormone Therapy (CBHRT) prescribed annually in the U.S. currently^{2,3}
- No FDA-approved BHRT combination product of estradiol + bio-identical progesterone
- TX-001HR would become the first and only FDA-approved bio-identical combination product to fill this unmet need



¹⁾ Symphony Health Solutions PHAST Data powered by IDV; Annual 2015

The reported number of annual custom compounded hormone therapy prescription of oral and transdermal estradiol and progesterones taken combined and in combination (26MM to 33MM)

³⁾ Pinkerton, J.V. 2015. Menopause, Vol.22, No.9, pp 0-11.

Medical Societies Discourage Prescribing of Compounded Bio-Identical Hormones

- ACOG and ASRM Committee Opinion states compounded hormones may pose additional risks compared to FDA-approved products¹
 - Lack of efficacy and safety data
 - Lack of Good Manufacturing Practices (GMP)
 - Variable purity
 - Variable content uniformity
 - Variable potency (under/over dose)
 - Lack of stability
 - Unopposed E / Ineffective P leads to increased risk of endometrial hyperplasia / cancer

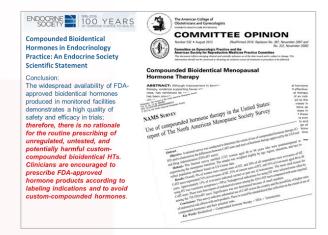






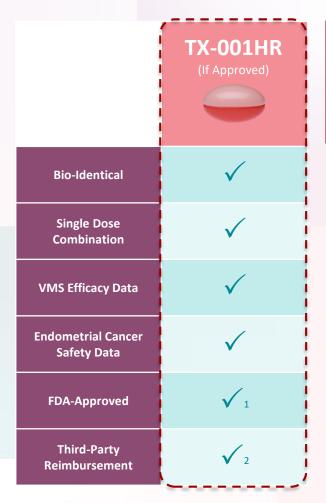








TX-001HR - Potential Best in Class Therapy



Potential first and only:

- 1) Bio-identical combination estradiol & progesterone
- 2) FDA-approved

Dosing and Delivery

Once-a-day single oral softgel capsule

Addresses Unmet Medical Need

- First and only combination of bio-identical estradiol and bio-identical progesterone product candidate
- Single combination dose option
- Positive Phase 3 Replenish Trial safety and efficacy results
- Potential FDA-approval with insurance coverage

Benefits to women, healthcare providers, and pharmacies

¹⁾ NDA to be submitted

²⁾ Reimbursement anticipated if FDA-approved

Replenish Trial Co-Primary Endpoints

Primary Efficacy Endpoints: M		uency and Sever 12, VMS-mITT Po	-	es Per Week Versu	s Placebo at
Estradiol/Progesterone	1 mg/100 mg (n = 141)	0.5 mg/100 mg (n = 149)	0.5 mg/50 mg (n = 147)	0.25 mg/50 mg (n = 154)	Placebo (n = 135)
		Frequency			
Week 4 P-value versus placebo	<0.001	0.013	0.141	0.001	-
Week 12 P-value versus placebo	<0.001	<0.001	0.002	<0.001	-
		Severity			
Week 4 P-value versus placebo	0.031	0.005	0.401	0.1	-
Week 12 P-value versus placebo	<0.001	<0.001	0.018	0.096	-
Primary Safety Endpoint: In	cidence of Consens	us Endometrial H	lyperplasia or M	lalignancy up to 1	2 months,
		rial Safety Popula	· · <u>-</u>	, ,	·
Endometrial Hyperplasia	0% (0/280)	0% (0/303)	0% (0/306)	0% (0/274)	0% (0/92)

MITT = Modified intent to treat

P-value < 0.05 meets FDA guidance and supports evidence of efficacy

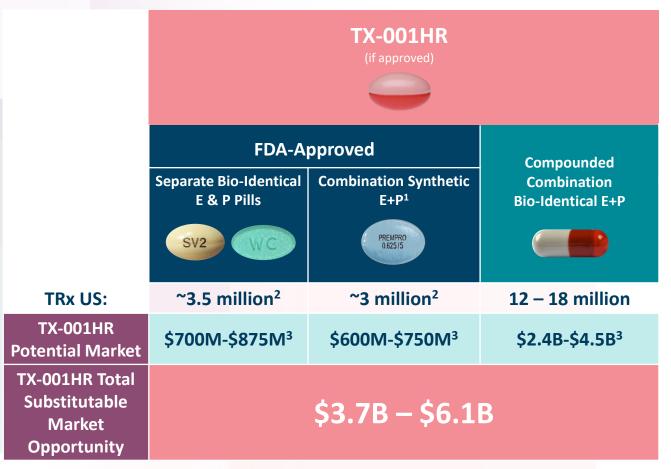
Primary Efficacy Analysis pre-specified with the FDA in the clinical protocol and Statistical Analysis Plan (SAP)

P-value < 0.05 meets FDA guidance and supports evidence of efficacy

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[‡]Per FDA, consensus hyperplasia refers to the concurrence of two of the three pathologists be accepted as the final diagnosis

Multi-Billion Dollar Total Substitutable Market Opportunity



If approved, TX-001HR can provide a single pill solution for women and physicians who:

- 1) Demand an FDA-approved bio-identical combination hormone product
- 2) Do not trust compounded hormones

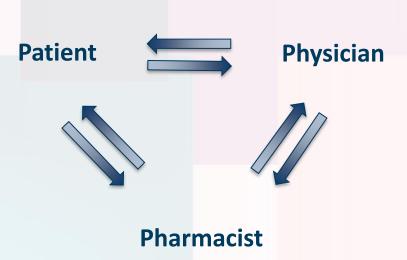
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¹⁾ Includes the following drugs: Activella®, FemHRT®, Angeliq®, Generic 17β + Progestins, Prempro®, Premphase®, Duavee®, Brisdelle® 2) Symphony Health Solutions PHAST Data powered by IDV; 12 months as of December 31 2015

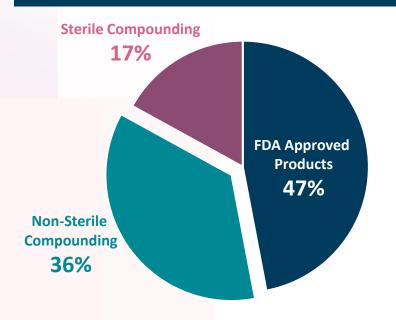
³⁾ Assume WAC pricing between \$200-250

Understanding the Compounding Pharmacy

Collaborative Relationship



Compounding Pharmacies % of Business (by Prescription Units)



N = 3,000-3,500 Compounding Focused Pharmacies^{1,2,3}

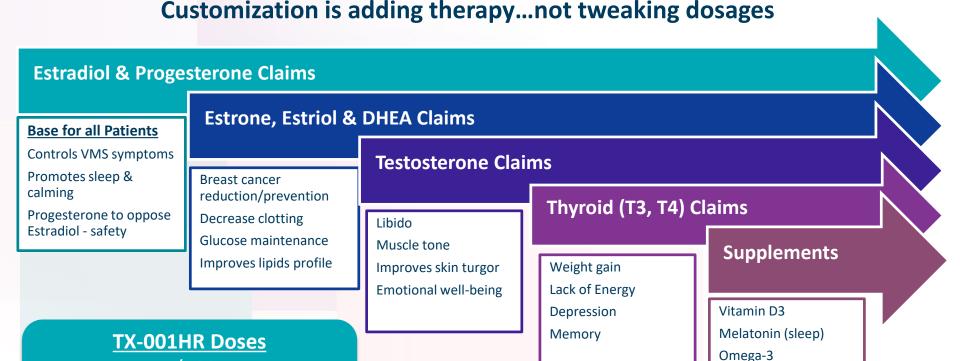


^{(1) 2013} National Community Pharmacists Association Digest: Financial Benchmarks (Sponsored by Cardinal Health)

⁽²⁾ NCPA Community Pharmacy Compounding Survey (November 2012)

⁽³⁾ NPI Database: using taxonomy codes

Compounding Pharmacy Menopausal Treatment Paradigm



Continued TestingBlood, Saliva, Urine

1 mg/100 mg

0.5 mg/100 mg

Covers >80% of Compounded E+P



BIO-IGNITETM

Compounding Pharmacy Partnership Strategy

BIO-IGNITETM is an outreach program to quantify the number of compounded bio-identical estradiol and progesterone prescriptions currently dispensed by the 3,000-3,500 high-volume compounding pharmacies, and qualify their interests in distributing our hormone product candidates, if approved.

Phase 1:

Understand and identify the high volume pharmacies and prescribers that have developed a specialty focus around women's menopausal health

Phase 2:

Work with these specialists to transition patients from unapproved compounded therapies to an FDA-approved treatment



BIO-IGNITETM Progress and Results

Partnerships with Large Pharmacy Network and Individual Pharmacies

Pharmacy Network and Combination # of Pharmacies **Individual Pharmacy Partners Bio-Identical E+P Scripts** Premier ~1,500,000 >300 Pharmacies Value **In Network** prescriptions annually >400 Pharmacies >500,000 **TXMD Outreach to** with Prescription **Individual Pharmacies** prescriptions annually **Data**

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Adverse Reimbursement and Regulatory Environments Continue to Erode Independent Pharmacy Margins



November 2013: Congress enacts Drug Quality and Security Act (DQSA), which prohibits compounding of essential copies of an FDA-approved drug except in limited circumstances such as drug shortage¹



June 3, 2014: ESI launches a "Compound Management Solution," creating a list of excluded ingredients that eliminated almost 95% of all compound claims²



July 2014: Optum initiates a comprehensive compound management program, including prior authorizations and step therapy for all compounded prescriptions³



July 2018: USP-800 implementation will set new identification requirements for receipt, storage, mixing, preparing, compounding, dispensing, and administration of hazardous drugs^{4,5}

- Considered "prohibitively expensive" requiring major pharmacy upgrades and renovations to be compliant
- Large fixed capital expenditure requirements, with some totaling
 >\$150,000 per pharmacy to implement

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¹⁾http://www.fda.gov/Drugs/DrugSafety/DrugIntegrityandSupplyChainSecurity/DrugSupplyChainSecurityAct/ucm376829.htm

²⁾ http://www.iacprx.org/general/custom.asp?page=CCIns161314

³⁾ http://www.optum.com.br/content/optum/en/optumrx/pharmacy-insights/restoring-trust-compound-medications.html

⁴⁾ http://www.usp.org/sites/default/files/usp_pdf/EN/m7808.pdf

⁵⁾ https://www.ascp.com/sites/default/files/Joint%20USP%20letter%202015%20FINAL.pdf

Economic Incentives Provide Catalyst to Switch to TX-001HR

Independent Pharmacy Net Income Per Script with TX-001HR							
		Compounded E+P Post USP-800		X-001HR unch 2H18			
Revenue							
Patient Co-Pay		50.00		50.00			
Third-Party Reimbursement		-		200.00			
Total Net Revenue	\$	50.00	\$	250.00 ¹			
Costs of Good Sold		7.50		200.00^2			
Gross Profit	\$	42.50	\$	50.00			
Gross margin	8	5.0%		20.0%			
Operating Expenses							
G&A		15.00		15.00			
S&M		7.50		5.00			
Additional Compounding Costs ³		15.00		-			
Cost of USP-800 Requirements ⁴		10.00		-			
Total Operating Expenses	\$	47.50	\$	20.00			
Pre-Tax Profit	\$	(5.00)	\$	30.00			
Operating margin	-1	0.0%		12.0%			

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¹⁾ Assume AWP-18% Third-Party Reimbursement

²⁾ Assume \$250 WAC less 20% distribution discount

³⁾ Includes additional labor, pharmacists, technicians, regulatory, and legal expenses

⁴⁾ July 2018 Implementation; includes >\$150,000 capital expenditure as well as new identification requirements for receipt, storage, mixing, preparing, compounding, dispensing, and administration of hazardous drugs

PVPCN Distribution Agreement Rationale

Innovation

- Potential low-dose local estrogen therapy for VVA
- Potential first and only FDAapproved bio-identical combination of E+P
- Clinical validation of current treatment paradigm for menopausal symptoms

Regulatory Environment

- Drug Quality and Security Act
- Loss of Third-Party Reimbursement
- USP-800 Hazardous Drugs

TXMD and PVPCN

Commercial Opportunity

- 1.5 million annual compounded E+P prescriptions directly substitutable to TX-001HR
- Improved pharmacy economics
- Maintain and grow patient and physician relationships



Expect Robust Insurance Coverage For TX-001HR, If Approved, In-Line with Product Class

4,315 Commercial Plans	% Unrestricted Access of Commercial Plans	Not Covered
Estrace® (Oral)	96%	1%
Prempro®	94%	5%
CombiPatch®	93%	4%
Climara Pro®	92%	4%
FemHRT®	87%	6%
Duavee®	86%	5%
Vivelle-Dot®	84%	5%
Activella®	83%	8%
Prometrium®	83%	6%



TXMD: Financial Snapshot









Worldwide Patent Filings*

Strong IP Portfolio with 158 Patent Applications, including 82 international filings, and 17 issued U.S. patents

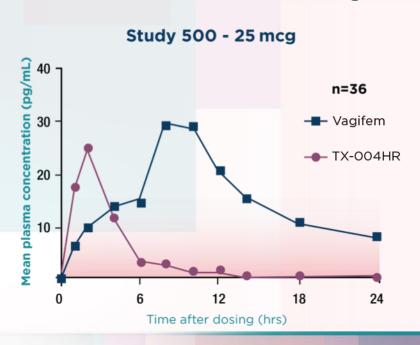


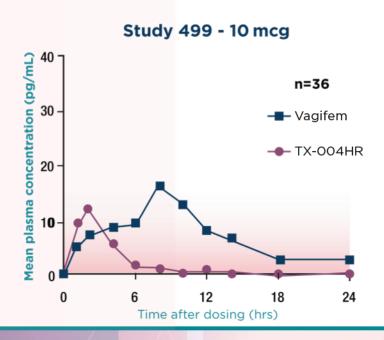


TX-004HR vs. Vagifem[®] Phase 1 Single Dose PK Studies

Key Findings

- Tmax ~2 hours with TX-004HR and ~8 hours with Vagifem
- Systemic absorption of estradiol AUC (0-24 hours) is 2- to 3-fold lower with TX-004HR relative to Vagifem





FDA-Approved Separate Bio-Identical E & P Substitutable Market Opportunity

Healthcare providers not comfortable with compounding will often prescribe two separate
 FDA-approved bio-identical products to treat menopausal symptoms









Product Use by Age	AGES 41-50	AGES 51-60	AGES 61-70	AGES 71+	TRx Totals
<u>Progesterone</u> *	528,325	1,326,618	1,060,666	678,775	3,594,384 ¹
<u>Estradiol</u>	2,677,210	5,494,846	2,826,636	1,083,726	12,082,418 ¹

^{*}Menopausal use of progesterone directly substitutable to TX-001HR

~3.5M Potential Prescriptions for TX-001HR (if approved)

Market Opportunity = \$700M-875M²

- This regimen carries <u>significant risk</u> of endometrial hyperplasia/cancer if the patient is noncompliant with regular progesterone use
 - Side effects of progesterone including nausea and somnolence can lead to a patient not taking the progesterone
 - Results in two separate co-pays for the patient

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¹⁾ Symphony Health Solutions PHAST Data powered by IDV; 12 months as of December 31 2015

²⁾ Assume WAC pricing between \$200-250

FDA-Approved Combination Synthetic E+P Substitutable Market Opportunity

FDA-Approved Combination Synthetic E+P Prescriptions by Age







AGES	AGES	AGES	AGES	AGES	Unknown	TRx
31-40	41-50	51-60	61-70	71+	Ages	Totals
52,575	372,968	1,712,852	759,634	151,821	68,672	3,118,522 ¹

~3M Potential Prescriptions for TX-001HR (if approved)

Market Opportunity = \$600M-750M²

