

# Investor Presentation

November 2018

# **Therapeutics** MD<sup>®</sup>

For Her. For Life.

TherapeuticsMD.com

# **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 may be 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 our current reports on Form 8-K, and include the following: our ability to maintain or increase sales of our products; our ability to develop and commercialize IMVEXXY<sup>TM</sup>, ANNOVERA<sup>TM</sup>, BIJUVA<sup>TM</sup> and our hormone therapy drug candidates and obtain additional financing necessary therefor; whether we will be able to comply with the covenants and conditions under our term loan agreement; the potential of adverse side effects or other safety risks that could adversely affect the commercialization of our current or future approved products or preclude the approval of our future drug candidates; the length, cost and uncertain results of future clinical trials; the ability of our licensees to commercialize and distribute our product and product candidates; our reliance on third parties to conduct our manufacturing, research and development and clinical trials; the availability of reimbursement from government authorities and health insurance companies for our products; the impact of product liability 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.

This non-promotional presentation is intended for investor audiences only.



### TherapeuticsMD, A Premier Women's Health Company



# **Seasoned Management Team with a Proven Track Record of Commercial Execution**



Chairman of the Board

- Former US 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 (US)
- Former EVP of Customer Marketing and Sales of US Human Health at Merck
- Holds multiple board memberships, including Catalent



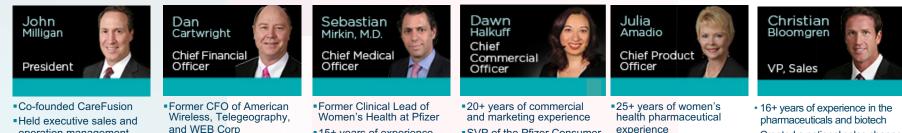
- 25 years of clinical and strategic healthcare experience
- Former Chief Medical Officer of CVS Health's Medicare and Government Services
- Former Vice President of Clinical Innovation at MEDCO Health Solutions



- 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



- · Created a national sales channel, led the Specialty Diagnostics business at ViaCell. Inc.
- · Product launch and sales management roles at Eli Lilly & Company and KV Pharmaceutical

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- operation management positions at McKesson, Cardinal, and Omnicell
- 20+ years of operations experience
- and WEB Corp
- Participated in American Wireless/Arush Entertainment merger
- Former KPMG and PricewaterhouseCoopers accountant
- 15+ years of experience developing women's health products
- Reproductive endocrinologist Commercial lead for & infertility specialist
- SVP of the Pfizer Consumer Healthcare Wellness Organization
- sales and marketing of the Pfizer Women's

Health Division

- Product development leader for J&J, Wyeth, Aventis, and others
- Worked on development of Prempro®, Premphase®, and Estalis®

# Responsible and Financially Disciplined Approach to Delivering Results

- TXMD has a 10 year history of delivering strong results in a financially efficient manner
- Three recent product approvals (IMVEXXY, BIJUVA and ANNOVERA)
- Remain well-financed, including our flexibility of having an additional \$125M through our term loan with MidCap Financial
  - \$75M on approval and first commercial sale of BIJUVA on or before May 31, 2019
  - Additional \$50M on hitting IMVEXXY and BIJUVA 12 month net revenue threshold on or before December 31, 2019
- The next phase of growth is expected to be through promotion and sales of IMVEXXY, BIJUVA and ANNOVERA

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# **Track Record of Execution**

#### Date Milestone/ Catalyst

- 3/14/13 First Registered Equity Offering
- 8/5/13 Commenced Phase 3 Replenish Trial of TX-001HR (BIJUVA)
- 9/29/14 Commenced Phase 3 Rejoice Trial of TX-004HR (IMVEXXY)
- 12/7/15 Positive Top-Line Results from Phase 3 Rejoice Trial of TX-004HR (IMVEXXY)
- 7/7/16 Submission of New Drug Application (NDA) for IMVEXXY
- 12/5/16 Positive Top-Line Results from Phase 3 Replenish Trial of TX-001HR (BIJUVA)
- 12/28/17 Submission of NDA for TX-001HR (BIJUVA)
- 5/29/18 Received FDA Approval of NDA for IMVEXXY
- 7/31/18 Acquired US Rights to ANNOVERA from the Population Council
- 7/31/18 Entered into Strategic Partnership with Knight Therapeutics for IMVEXXY and BIJUVA
- 8/6/18 Commenced US Commercial Launch of Imvexxy
- 8/10/18 Received FDA Approval of NDA for ANNOVERA
- 10/28/18 Received FDA approval of NDA for BIJUVA

#### **Three Approved Drugs in One Year**

Total of 241 global patent applications with 22 issued foreign patents and 20 issued U.S. patents for Imvexxy and BIJUVA

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# Women's Health Assets With Large Total Addressable Market Opportunities

	Annovera™ O	Bijuva	<b><sup>™</sup>Imvexxy</b> <sup>™</sup>	
Indication	Females of reproductive potential to prevent pregnancy	Moderate to severe vasomotor symptoms (VMS) due to menopause	Moderate to severe dyspareunia, a symptom of VVA, due to menopause	
Condition Description	Contraception	VMS due to Menopause	VVA due to Menopause	
Active Ingredients	Segesterone Acetate/ Ethinyl Estradiol	Bio-Identical 17 β-Estradiol + Bio-Identical Progesterone	Bio-Identical 17 β-Estradiol	
Form	Vaginal System	Oral softgel capsule	Vaginal softgel insert	
Key Value Proposition	First and only patient-controlled, procedure-free, long-acting, reversible birth control product	First and only FDA-approved bio- identical combination hormone therapy	Easy to use, lowest approved dose, designed to support patient adherence	
Affected US Population	43 million women <sup>1</sup>	36 million women <sup>3</sup>	32 million women <sup>5,6</sup>	
US TAM Opportunity	\$5B <sup>2</sup>	>\$25B <sup>4,7</sup>	>\$20B <sup>7</sup>	
Status	Approved August 10, 2018 Commercial Launch: As early as 4Q19,	Approved October 28, 2018	Approved May 29, 2018	

1) Contraceptive Use in the United States, Guttmacher, July 2018. IQVIA Patient Tracker.

2) QuintilesIMS MIDAS, QuintilesIMS Analysis, Company filings. Long acting reversible contraceptive market includes: Nexplanon/Implanon, Mirena family, Paragard and Liletta. Net sales as reported in company filings.

3) Derived from U.S. Census data on women in the age group who normally experience symptoms.

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

 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.

6) 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.

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

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# F Envery Market Stradiol Vaginal Inserts) 4 mcg ⋅ 10 mcg

Approved for the treatment of moderate-to-severe dyspareunia (vaginal pain associated with sexual activity), a symptom of vulvar and vaginal atrophy (VVA), due to menopause.

Vulvar and Vaginal Atrophy (VVA) Program

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# **IMVEXXY Key Timeline**

- 10 mcg national launch started on August 6, 2018
- 4 mcg commercially available on September 13, 2018
- Bio-Ignite went live August 10, 2018 with 12 pharmacies ordering IMVEXXY



# **IMVEXXY Launch Update**

- Total units since launch ~28,200 paid scripts<sup>\*</sup> dispensed to ~12,800 patients
- October total units of ~13,300 paid scripts\*
- Refills for October of ~8,100 paid scripts
- New RXs for October of ~5,200 paid scripts
- 58% month over month growth (Sept/Oct)
- Blended starter and maintenance average WAC Q3 ~\$230
- Blended starter and maintenance average WAC for October ~\$225
- 37% commercial unrestricted coverage<sup>\*\*</sup>
  - 11% adjudication rate
- Plan to release IMVEXXY units on a bi-weekly basis until databases are tracking
  - Units are paid prescriptions dispensed by a pharmacy

\*Units are based on IQVIA and copay redemption data based on utilization of our affordability programs. Cash pay or covered by insurance. \*\*MMIT

**\*Imvex** 

(estradiol vaginal inserts)

4 mcg • 10 mcg

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# **Market Growth Through Treatment Compliance**

- As of October 31, 2018
  - 2.2 IMVEXXY fills per patient in the first 4 months\*
  - Previous two dyspareunia product launches during the first year of launch averaged 1.7 fills per patient<sup>\*\*</sup>
  - IMVEXXY average refill rate ~74%
  - Last week of October, over ~2,000 new patients received an IMVEXXY prescription

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**▼Invexxy**™

(estradiol vaginal inserts)

4 mca • 10 mca

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\*Imvexxy fill data is based on IQVIA and copay redemption data.

**References:** 

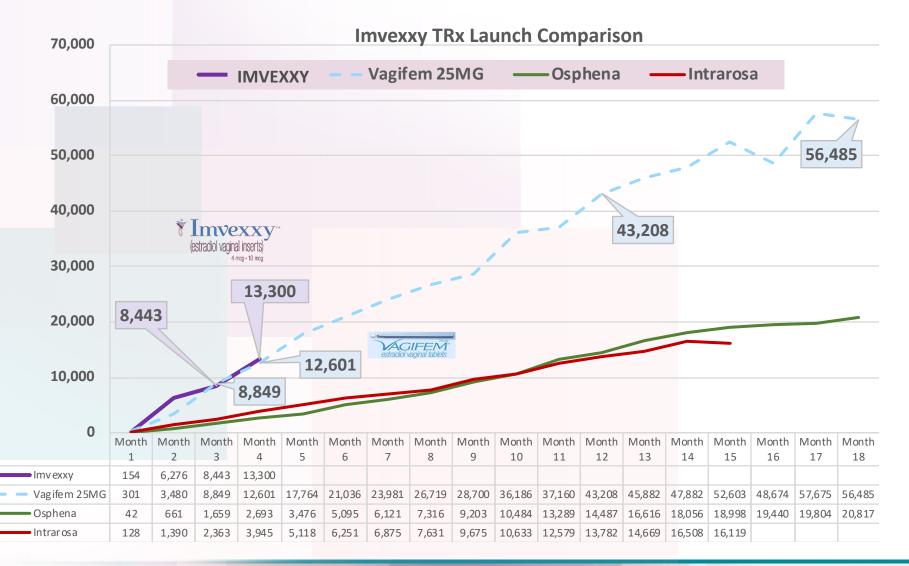
\*\*Previous two launches is based on Symphony total script data divided by the patient count data from IQVIA total patient tracker info from the 12 months of launch

# **Next Phase of Growth**

- Launched speaker programs across the US
- Adding additional sales reps to increase IMVEXXY market share and launch BIJUVA
- Launching IMVEXXY consumer marketing effort Q1 of 2019
- Increasing Bio-Ignite pharmacies with IMVEXXY
- Launch BIJUVA in the 2Q of 2019
- Launch ANNOVERA as early as the 4Q of 2019



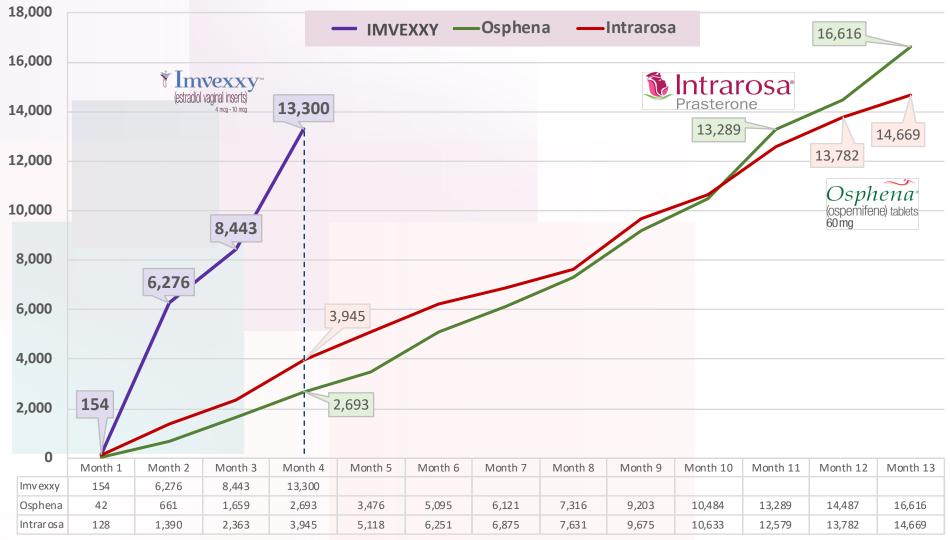
# **VVA TRx Launch Comparison**



References: Imvexxy is QVIA and copay redemption data. Osphena and Intrarosa is SHA PHAST data. Vagifem is from IQVIA.

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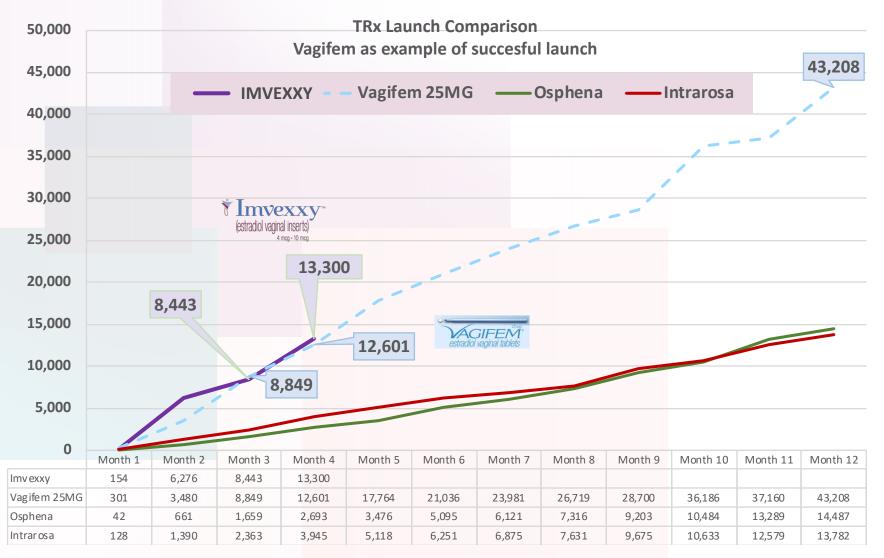
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# **IMVEXXY** Payer Update

#### TRx Payer Breakdown of FDA-Approved VVA Products<sup>1</sup>

# Medicaid Cash 5% 3% 5% Commercial 25% 67%

- As of November 8th, IMVEXXY achieved ~37% unrestricted commercial lives coverage (no step edits or PA)<sup>1</sup>
  - Expect unrestricted commercial lives coverage to peak at 60%+
  - TXMD will start to see the financial benefit of coverage and incremental increase in net revenue approximately 90 days following gaining commercial coverage
  - Goal to close last remaining large commercial payers contracts in 2018
  - We are near the end of the expected 6-month payer block
  - Anticipate strong commercial adjudication will start in Q1 of 2019
- Historically, the top 3 FDA-approved branded VVA products (Estrace, Premarin and Vagifem) top out at 70%+ commercial lives coverage
  - Historical trends show recent launch of Intrarosa getting to ~65% unrestricted commercial lives coverage 9 months after field launch<sup>3</sup>
- IMVEXXY currently stands at <1% of Medicare Part D lives coverage as expected with the next Medicare bid cycle for 2020
  - Earliest expected Medicare Part D lives coverage for IMVEXXY would be April 1st, 2019 if payers want to accelerate our 2020 offer

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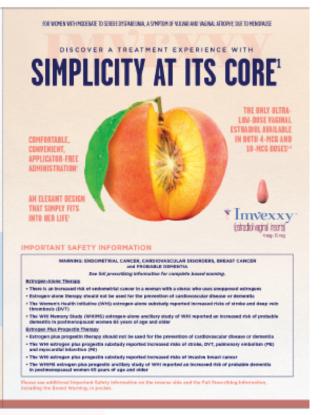
<sup>1</sup>Symphony <sup>2</sup>MMIT November 2018 <sup>3</sup>MMIT April 2018

# **IMVEXXY** is "Redefining Relief"

### Owning <u>clinical</u> attributes with the underpinning of a <u>highly effective patient experience</u>

#### **Key Clinical Attributes:**

1	New lowest approved dose	
2	Strong efficacy and safety data	
3	Improvement seen at week 12 (primary) and as early as 2 weeks (secondary)	
4	PK data where systemic hormone levels remain within normal postmenopausal range	
Key	Physical Attributes:	
5	Ease of use and absence of applicator	
6	Ability to be used any time of day	
7	A mess-free way to administer	
8	Dose packaging to optimize patient compliance and enhance provider and patient acceptance	



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# **Foundation Built for a Strong Launch**

#### **TXMD** Sales Force in OB/GYN Offices

- 81% of total NuvaRing prescribers within current 150 TXMD territories<sup>1</sup>
- 40% overlap with current prenatal vitamins business
- Sales force of 150
- Partnership with inVentiv, leading contract sales organization
- Operational and analytic systems

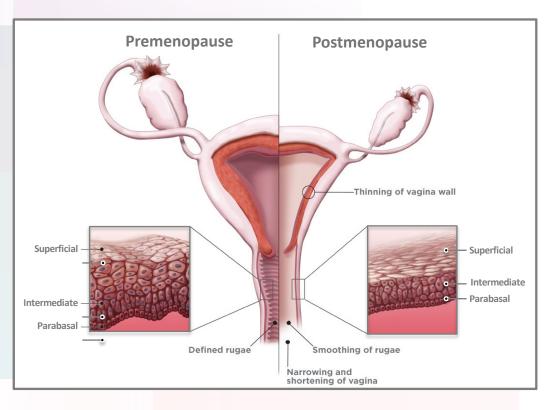






# **Vulvar and Vaginal Atrophy**

#### Involves changes to the histology and physiology of the vaginal tissue due to decreased <u>estrogen</u> levels<sup>1</sup>



Associated with these changes are decreased vaginal moisture and increased vaginal pH, which increase the risk of urogenital infection and dyspareunia.<sup>2</sup>

References: 1. Kingsberg SA et al. J Sex Med. 2013;10(7):1790-1799. 2. ACOG Practice Bulletin No. 141: management of menopausal symptoms. Obstet Gynecol. 2014;123(1):202-216.

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# **Current US VVA Market Overview**

32M with VVA symptoms (1 out of 2 menopausal women) in the United States<sup>1,2</sup>

# 50% (16M) seek treatment for VVA<sup>4</sup>

- 25% (8M) OTC products
- 18% (5.7M) past HT users
- 7% (2.3M) current HT users

Only 7% (2.3M) are current users of Rx hormone therapy<sup>3</sup> Only 7% of women (2.3M) with VVA symptoms, are currently being treated today with Rx hormone therapy (HT)<sup>3</sup>

- Long-term safety concerns<sup>5</sup>
- Efficacy<sup>5</sup>
- Messiness<sup>5</sup>
- Need for applicator<sup>5</sup>

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.
 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.
 Kingsberg SA, Krychman M, Graham S, Bernick B, Mirkin S. The Women's EMPOWER Survey: Identifying women's perceptions on vulvar and vaginal atrophy and its treatment. *J Sex Med*.2017;14:413-424; IMS Health Plan Claims (April 2008-Mar 2011).

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4) TherapeuticsMD "EMPOWER" Survey, 2016

5) 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

# Professional Societies and FDA Recommend the Lowest Effective Dose



#### American College of Obstetricians and Gynecologists (ACOG)<sup>1</sup>

"Low-dose and ultra-low systemic doses of estrogen may be associated with a better adverse effect profile than standard doses and may reduce vasomotor symptoms in some women."



#### North American Menopause Society (NAMS)<sup>2</sup>

"The lowest dose of HT should be used for the shortest duration needed to manage menopausal symptoms. Individualization is important in the decision to use HT and should incorporate the woman's personal risk factors and her quality-of-life priorities in this shared decision."



#### FDA<sup>3</sup>

"...this guidance encourages sponsors to develop the lowest doses and exposures for both estrogens and progestins for indications sought, even though specific relationships between dose, exposure, and risk of adverse events may not be known."

References: 1. ACOG Practice Bulletin No. 141: management of menopausal symptoms. *Obstet Gynecol*. 2014;123(1):202-216. 2. The North American Menopause Society. Clinical care recommendations chapter 8: prescription therapies. http://www.menopause.org/publications/clinical-care-recommendations/chapter-8-prescription-therapies. Accessed March 8, 2018. 3. Food and Drug Administration. Guidance for Industry – Estrogen and Estrogen/Progestin Drug Products to Treat Vasomotor Symptoms and Vulvar and Vaginal Atrophy Symptoms—Recommendations for Clinical Evaluation. https://www.fda.gov/downloads/drugs/guidancecomplianceregulatoryinformation/guidances/ ucm071643.pdf. Published January 2003. Accessed March 8, 2018.

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# **IMVEXXY Product Characteristics**

#### Safety

- Lowest approved vaginal estradiol dose (4 mcg)<sup>1</sup>
- Average systemic hormone levels that were within the normal postmenopausal range<sup>3\*</sup>
- Boxed warning, contraindications, and other warnings and precautions consistent with vaginal estrogen class

#### Efficacy

- Provides relief at 12 weeks and beginning as early as week 2 (secondary endpoint)<sup>2</sup>
- Discontinuation rates comparable to placebo<sup>2</sup>

#### **Patient Experience**

- Small, applicator-free softgel estradiol vaginal insert that dissolves completely<sup>1</sup>
- Any-time-of-day dosing<sup>1</sup>
- Bio-identical<sup>+</sup>
- During the REJOICE trial, 88% of surveyed women found the product easy to use, with 81-82% rating the ease of capsule insertion as "good" or "excellent"<sup>4</sup>



- The clinical relevance of systemic absorption rates for all vaginal estrogen therapies is not known. Systemic absorption may occur with IMVEXXY; the risks associated with systemic estrogen-alone therapy should be considered.<sup>1</sup>
- \* "Bio-identical" refers to estradiol and progesterone that are molecularly identical to the hormones produced naturally in the woman's body. There is no evidence that bio-identical hormones are safer or more effective than synthetic hormones.<sup>5</sup>

References: 1. IMVEXXY [package insert]. Boca Raton, FL: TherapeuticsMD, Inc; 2018. 2. Constantine GD et al. *Menopause*. 2017;24(4):409-416. 3. Archer DF et al. *Menopause*. 2017;24(5):510-516. 4. Kingsberg SA et al. *Menopause*. 2017;24(8):894-899. 5. Endocrine Society. Compounded bio-identical hormone therapy. September 2017. https://www.endocrine.org/advocacy/priorities-and-positions/bio-identical-hormones. Accessed October 3, 2018.



### **IMVEXXY Product Characteristics Compare Favorably**<sup>1-9</sup>

Estrogens					Non-estrogens	
	Estrace <sup>®</sup> Cream (estradiol vaginal cream, USP, 0.01%) <sup>1</sup>	Premarin <sup>®</sup> (conjugated estrogens) Vaginal Cream <sup>2</sup>	Vagifem <sup>®</sup> (estradiol vaginal inserts)⁴	IMVEXXY (estradiol vaginal inserts) <sup>5,6</sup>	Intrarosa <sup>®</sup> (prasterone) vaginal inserts <sup>7</sup>	Osphena® (ospemifene) tablets, for oral use <sup>8</sup>
Product				Marine Statement (1997) Marine Statement (19	Come December 2010	Completioner Single insurance - mentioner
	🔅 Allergan	Pfizer	novo nordisk	TherapeuticsMD* For Her. For Life.	🛵 amag	
FDA approval	1984	1978	1999	2018	2016	2013
Indication(s)	Moderate to severe symptoms of vulvar and vaginal atrophy due to menopause	Moderate to severe dyspareunia, a symptom of vulvar and vaginal atrophy, due to menopause Atrophic vaginitis and kraurosis vulvae	Atrophic vaginitis due to menopause	Moderate to severe dyspareunia, a symptom of vulvar and vaginal atrophy, due to menopause	Moderate to severe dyspareunia, a symptom of vulvar and vaginal atrophy, due to menopause	Moderate to severe dyspareunia, a symptom of vulvar and vaginal atrophy, due to menopause
Method of administration	Vaginal cream	Vaginal cream	Vaginal insert	Vaginal insert	Vaginal insert	Oral tablet
Application	Reusable vaginal applicator- cream	Reusable vaginal applicator- cream	Disposable vaginal applicator- tablet	No applicator needed- softgel vaginal capsule	Disposable vaginal applicator- bullet insert	Oral daily tablet
Active ingredient	<mark>100 mcg</mark> estradiol	<mark>625 mcg/g</mark> conjugated equine estrogens	<mark>10 mcg</mark> estradiol	<mark>4 mcg or 10 mcg</mark> estradiol	6,500 mcg prasterone	60,000 mcg ospemifene
Average maintenance dose	100 mcg 2x/week	312.5 mcg 2x/week	10 mcg 2x/week	4 mcg or 10 mcg 2x/week	6,500 mcg daily	60,000 mcg daily
WAC package price (2018) <sup>9</sup>	<mark>\$314.87</mark> (42.5-g tube)	<mark>\$355.77</mark> (30-g tube)	<mark>\$170.16</mark> (8 tablets)	<mark>\$180.00</mark> (8 softgel capsules)	<mark>\$185.50</mark> (28 inserts)	<mark>\$611.39</mark> (90 tablets)
WAC 30-day supply (2018) <sup>9</sup>	\$104.96	\$118.59	\$170.16	\$180.00	\$198.75	\$203.80

There have been no head-to-head trials between IMVEXXY and any of the products listed above.

All trademarks are the property of their respective owners.

Abbreviations: WAC, wholesale acquisition cost.

References: 1. Estrace Vaginal Cream [package insert]. Irvine, CA: Allergan USA, Inc.; 2017. 2. Premarin Vaginal Cream [package insert]. Philadelphia, PA: Wyeth Pharmaceuticals Inc., a subsidiary of Pfizer Inc.; 2017. 3. Estring [package insert]. New York, NY: Pharmacia & Upjohn Company LLC, a subsidiary of Pfizer Inc.; 2017. 4. Vagifem [package insert] Plainsboro, NJ: Novo Nordisk Inc.; 2017. 5. IMVEXXY [package insert]. Bock Raton, FL: TherapeuticsMD, Inc; 2018. 6. Constantine GD et al. The REJOICE trial: a phase 3 randomized, controlled trial evaluating the safety and efficacy of a novel vaginal estradiol soft-gel capsule for symptomatic vulvar and vaginal atrophy. *Menopouse*. 2017;24(4):409-416. 7. Intrarosa [package insert]. Waltham, MA: AMAG Pharmaceuticals, Inc.; 2017. 8. Osphena [package insert]. Florham Park, NJ: Shionogi Inc.; 2015. 9. AnalySource. June 2018.

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# IMVEXXY Demonstrated Statistically Significant Improvement Across All Objective Co-Primary Endpoints<sup>1,2</sup>

	LS Mean Change From Baseline to Week 12 <sup>1-3</sup>			4 mcg <i>P</i> valueª	10 mcg <i>P</i> valueª
	IMVEXXY 4 mcg	IMVEXXY 10 mcg	Placebo		
Superficial cells	<b>18%</b> (n = 170)	<b>17%</b> (n = 171)	<b>6%</b> (n = 172)	<0.0001	<0.0001
Parabasal cells	- <b>41%</b> (n = 170)	- <b>44%</b> (n = 171)	- <b>7%</b> (n = 172)	<0.0001	<0.0001
Vaginal pH	<b>-1.3</b> (n = 170)	<b>-1.4</b> (n = 171)	<b>-0.3</b> (n = 174)	<0.0001	<0.0001

For the treatment of moderate to severe symptoms of VVA, FDA guidance recommends evaluating the mean change from baseline to Week 12 in for the following co-primary efficacy endpoints<sup>1</sup>:

- 1. The moderate to severe symptom that has been identified by the patient as being most bothersome to her,
- 2. Vaginal pH, and
- 3. Vaginal Maturation Index (parabasal and superficial cells).

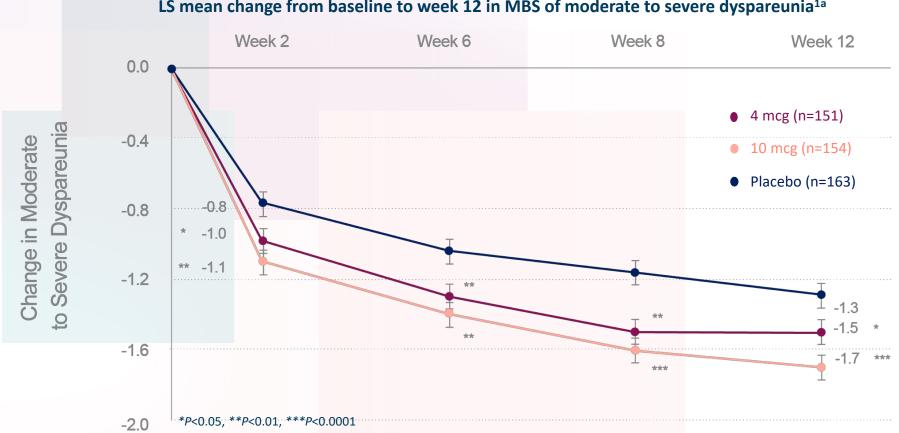
Please see full Prescribing information, including Boxed Warning on the risk of endometrial cancer, cardiovascular disorders, breast cancer and probable dementia. <sup>a</sup>MMRM *P*-value vs placebo.

Abbreviations: LS, least squares; MMRM, mixed model of repeated measures.

References: 1. IMVEXXY [package insert]. Boca Raton, FL: TherapeuticsMD, Inc; 2018. 2. Constantine GD et al. *Menopause*. 2017;24(4):409-416. 3. Data on file. TherapeuticsMD, Inc. <sup>4</sup>. Food and Drug Administration. Guidance for Industry – Estrogen and Estrogen/Progestin Drug Products to Treat Vasomotor Symptoms and Vulvar and Vaginal Atrophy Symptoms—Recommendations for Clinical Evaluation. https://www.fda.gov/downloads/drugs/guidancecomplianceregulatoryinformation/guidances/ ucm071643.pdf. Published January 2003. Accessed March 8, 2018.



### **IMVEXXY Improvement in Moderate to Severe Dyspareunia Demonstrated at Week 12 (primary endpoint) and Beginning As** early as week 2 (secondary endpoint)



LS mean change from baseline to week 12 in MBS of moderate to severe dyspareunia<sup>1a</sup>

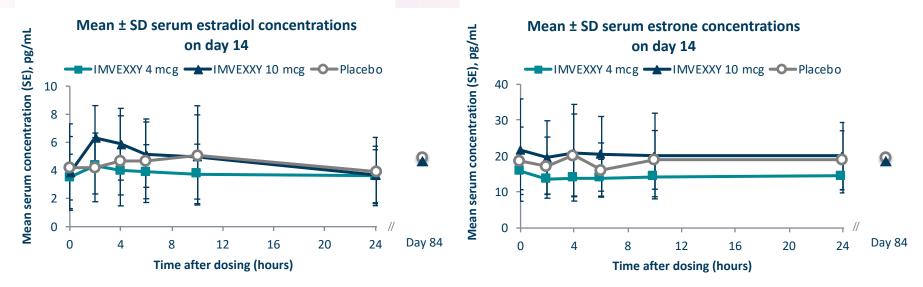
Please see full Prescribing information, including Boxed Warning on the risk of endometrial cancer, cardiovascular disorders, breast cancer and probable dementia. <sup>a</sup>P-value vs placebo based on MMRM analysis. Abbreviations: LS, least square; MBS, most bothersome symptom; MMRM, mixed model of repeated measures.

References: 1. Constantine GD et al. Menopause. 2017;24(4):409-416.



### IMVEXXY 4 and 10 mcg Resulted in Average Systemic Hormone Levels that were within the Normal Postmenopausal Range<sup>1,2</sup>

In a REJOICE substudy, 54 women received 1 IMVEXXY 4- or 10-mcg vaginal insert or placebo daily for 2 weeks followed by 1 insert twice weekly for 10 weeks with measurement of serum estradiol and estrone on days 1, 14, and 84.



Overall, there did not appear to be any estradiol accumulation with any doses of IMVEXXY as endogenous values were observed at day 84.

The clinical relevance of systemic absorption rates for all vaginal estrogen therapies is not known. Systemic absorption may occur with IMVEXXY; the risks associated with systemic estrogen-alone therapy should be considered.

References: 1. Test ID: EEST Estradiol, Serum. Mayo Clinic. https://www.mayomedicallaboratories.com/test-catalog/Clinical+and+Interpretive/81816. Accessed on July 12, 2018. 2. IMVEXXY [package insert]. Boca Raton, FL: TherapeuticsMD, Inc; 2018.



### Patients Treated with IMVEXXY Reported Significant Improvement in Dyspareunia Beginning as Early as 2 Weeks of treatment

Product	Onset of action for moderate to severe dyspareunia (weeks)*
IMVEXXY (estradiol vaginal insert) <sup>1</sup>	2 (secondary endpoint)
Osphena <sup>®</sup> (ospemifene) <sup>2,3</sup>	4 (secondary endpoint)
Intrarosa <sup>®</sup> (prasterone) <sup>4</sup>	6
Vagifem <sup>®</sup> (estradiol vaginal inserts) <sup>5</sup>	8
Premarin <sup>®</sup> Vaginal Cream (conjugated estrogens) <sup>6</sup>	12
Estring®	
Estrace <sup>®</sup> Cream	

Onset of action is based on product labels. There have been no head-to-head studies between IMVEXXY and any of the products listed above. Estrace<sup>®</sup> Cream and Estring<sup>®</sup> received approval without dyspareunia data.

All trademarks are property of their respective owners. References:

\*As measured by first efficacy observation in separate clinical studies

1. Constantine GD et al. *Menopause*. 2017;24(4):409-416. 2. Bachman GA et al. *Menopause*. 2010;17(3):480-486. 3. Portman DJ et al. *Menopause*. 2013; 20(6):623-630. 4. Archer DF et al. *Menopause*. 2015;(9):950-963. 5. Chollet JA. *Patient Preference and Adherence*. 2011:5 571-574. 6. Premarin Vaginal Cream [package insert]. Philadelphia, PA: Wyeth Pharmaceuticals Inc., a subsidiary of Pfizer Inc.; 2017.

#### **Therapeutics** MD°

# Favorable Payer Dynamics: No Substitution Across Branded Products

#### **Case Study: Vagifem® Generics Launch**

#### Yuvafem<sup>®</sup> launch in October 2016

	VVA TRx Market Share (%) Oct 2015-Sept 2016	VVA TRx Market Share (%) Oct 2016-April 2018	Gains (Losses)
Vagifem	29.7%	5.4%	-24.3%
Generic Estradiol Tablets (including Yuvafem and others)	_	24.4%	24.4%
Total	29.7%	29.8%	0.1%

- Yuvafem continues to take market share from <u>only</u> Vagifem
- No substitution or cannibalization of other branded products

#### **Therapeutics** MD°

The leadership of TherapeuticsMD is committed to pricing our medicines in a responsible manner, reflecting the value of the innovation while staying at parity with or below our competitors

#### Tommy Thompson

Chairman of the Board

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





- 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

#### **Therapeutics** MD°



# Bijuva

(estradiol and progesterone) capsules 1.0 mg/100 mg

The first and only FDA-approved bioidentical hormone therapy combination of estradiol and progesterone in a single, oral softgel capsule for the treatment of moderate to severe vasomotor symptoms (commonly known as hot flashes or flushes) due to menopause in women with a uterus.

Bio-Identical Combination Estrogen + Progesterone (E+P) Program

> TherapeuticsMD<sup>®</sup> For Her. For Life.





1.0mg/100mg

### **Clinical Overview**

# Vasomotor Symptoms are the Most Common Symptoms Associated with Menopause<sup>1</sup>



Vasomotor symptoms are extreme thermoregulatory responses characterized by episodes of profuse heat accompanied by sweating and flushing<sup>2,3</sup>

- Also known as hot flashes or flushes
- Occur predominantly around the head, neck, chest, and upper back



Vasomotor symptoms are experienced by an estimated 80% of women during the menopausal transition<sup>3</sup>



Typically last 5-10 years, and can last longer for some women<sup>4</sup>

The majority of vasomotor symptoms are rated as moderate to severe

Vasomotor symptoms occur in as many as 74% of menopausal women and up to 88% of perimenopausal women<sup>1</sup>

#### References

**Therapeutics** MD<sup>®</sup> 1. Rapkin AJ. Am J Obstet Gynecol. 2007;196(2):97-106. 2. Deecher DC, Dorries K. Arch Womens Ment Health. 2007;10(6):247-257. 3. Thurston R Joffe H. Obstet Gynecol Clin North Am. 2011;38(3):489-501. 4. Freeman EW, Sammel MD, Sanders RJ. Menopause. 2014;21(9):924-932.

# Hormone Therapy is the Recommended Treatment for Vasomotor Symptoms

**Recommendations from the American College of Obstetricians and Gynecologists** (ACOG) and the North American Menopause Society (NAMS)<sup>1,2</sup>



References

1. American Congress of Obstetricians and Gynecologists. *Am Fam Physician*. 2014;90(5):338-340. 2. The NAMS 2017 Hormone Therapy Position Statement Advisory Panel. *Menopause*. 2017;24(7):728-753.

#### **Therapeutics** MD<sup>®</sup>

# Progesterone is Needed to Reduce the Risk of Endometrial Cancer Associated with Estrogen<sup>1</sup>

Chronic, unopposed endometrial exposure to estrogen increases the risk for endometrial hyperplasia or cancer<sup>1</sup>

Adding a progestogen\* to estrogen therapy in postmenopausal women has been shown to reduce the risk of endometrial hyperplasia, which may be a precursor to endometrial cancer.<sup>1</sup>

In a trial of 16,608 postmenopausal women between 1993 and 1998<sup>3</sup>

- Incidence of endometrial cancer was 56 per 100,000 person-years in women taking estrogen plus progesterone
- The incidence in women taking estrogen plus progesterone was 13 fewer cases per 100,000 person-years than observed with placebo

\*Progesterone is the natural form of progestogen. Synthetic progestogen is referred to as progestin, which includes MPA, norethindrone, and levonorgestrel.<sup>3</sup> MPA=medroxyprogesterone acetate.

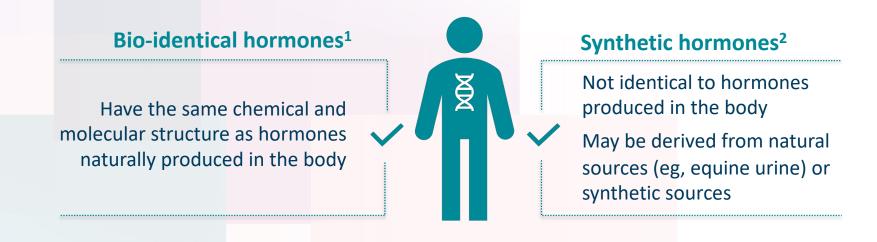
#### References

1. The NAMS 2017 Hormone Therapy Position Statement Advisory Panel. *Menopause*. 2017;24(7):728-753. 2. Panay N. *Hum Reprod Update*. 1997;3(2):159-171. 3. Stanczyk FZ et al. *Endocr Rev*. 2013;34(2):171-208.

For Her. For Life.

**Therapeutics** MD<sup>®</sup>

# Both Bio-identical and Synthetic Hormones are used to Treat Vasomotor Symptoms



#### Current evidence suggests that bio-identical hormones may be associated with lower safety risks than synthetic hormones

#### References

1. An Endocrine Society position statement. Endocrine Society website. https://www.endocrine.org/advocacy/priorities-and-positions/ bio-identical-hormones. Accessed October 13, 2018. 2. Holtorf K. *Postgrad Med*. 2009;121(1):73-85.

#### **Therapeutics** MD<sup>®</sup>

# Synthetic Progestins May be Associated with Higher Risks of Breast Cancer and Stroke<sup>1</sup>

In a observational study of 1555 postmenopausal women	OR for breast cancer risk with <b>E + synthetic P</b> : <b>1.72<sup>2</sup></b> OR for breast cancer risk with <b>E + natural P</b> : <b>0.80<sup>2</sup></b>
In a study of 54,548	RR for breast cancer with <b>E + synthetic P</b> : <b>1.4</b> <sup>3</sup>
postmenopausal women	RR for breast cancer with <b>E + natural P: 0.9</b> <sup>3</sup>

- Synthetic progestin and bio-identical versions of progesterone have different pharmacological effects on breast tissue<sup>1</sup>
- Synthetic progestin may significantly increase estrogen-stimulated breast cell activity and proliferation<sup>1</sup>
- Additionally, synthetic progestin may activate blood coagulation, which increases risk of venous thrombosis<sup>4,5</sup>

E=estrogen; OR=odds ratio; P=progesterone; RR=relative risk.

#### References

**1.** Holtorf K. *Postgrad Med.* 2009;121(1):73-85. **2.** Cordina-Duverger E et al. *PLoS One.* 2013;8(11):1-12. **3.** Fournier A et al. *Int J Cancer.* 2005;114(3):448-454. **4.** Canonico M et al. *Menopause.* 2010;17(6):1122-1127. **5.** Stanczyk FZ et al. *Endocr Rev.* 2013;34(2):171-208.

#### **Therapeutics** MD°

# BIJUVA is a Novel Combination of Bio-identical\* Estradiol and Progesterone<sup>1,2</sup>

BIJUVA is a combination product composed of both estradiol and progesterone active ingredients<sup>1</sup>



Bijuva<sup>™</sup> (estradiol and progesterone) capsules 1.0mg/100mg

References

The first combined prescription product of bioidentical estradiol and bio-identical progesterone evaluated for efficacy and safety<sup>1,3</sup>

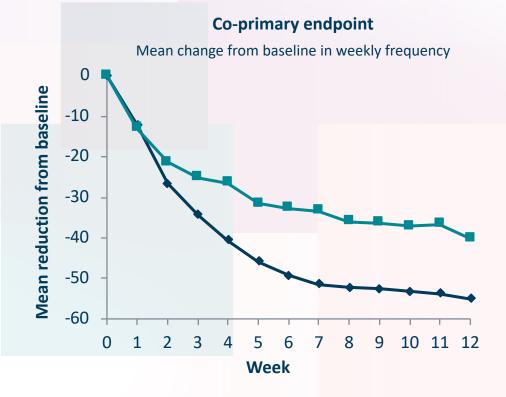
Supplied as a once-a-day single oral softgel capsule containing 1 mg estradiol/100 mg progesterone<sup>1</sup>

"Bio-identical" refers to estradiol and progesterone that are molecularly identical to the hormones produced naturally in the woman's body.

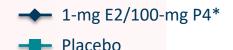
1. BIJUVA [package insert]. Boca Raton, FL: TherapeuticsMD, Inc; 2018. 2. Data on file, TherapeuticsMD. 3. Mirkin S et al. *Maturitas*. 2015;81(1):28-35.

**Therapeutics** MD°

### BIJUVA Demonstrated Statistically Significant Improvements in Frequency of Vasomotor Symptoms<sup>1,2</sup>



- Statistically significant reduction in number of moderate and severe vasomotor symptoms at Weeks 4 and 12 compared with placebo
- Mean change from baseline of -55.1 (1-mg E2/100-mg P4) vs -40.2 (placebo)



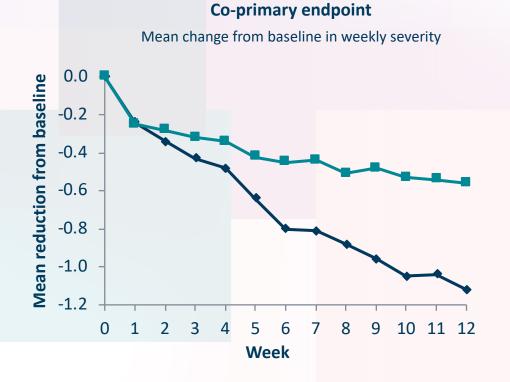
\*P<0.001 from Weeks 3-12 or 4-12.

E2=estradiol; P4=progesterone.

#### References

1. BIJUVA [package insert]. Boca Raton, FL: TherapeuticsMD, Inc; 2018. 2. Data on file, TherapeuticsMD.

### BIJUVA Demonstrated Statistically Significant Improvements in Severity of Vasomotor Symptoms<sup>1,2</sup>



- Statistically significant reductions in severity of vasomotor symptoms at Weeks 4 and 12
- Mean change from baseline of -0.48 (1-mg E2/100-mg P4) vs -0.34 (placebo)



Placebo

\**P*=0.031 at Week 4 and *P*<0.001 at Week 12. E2=estradiol; P4=progesterone.

#### References

1. BIJUVA [package insert]. Boca Raton, FL: TherapeuticsMD, Inc; 2018. 2. Data on file, TherapeuticsMD.

### Secondary Efficacy Endpoints Support the Consistency of Effect with BIJUVA

	<i>P</i> values: Frequency reduction Weeks 1 through 12	<i>P</i> values: Severity reduction Weeks 1 through 12	
Week 4 vs placebo	<0.001	0.027	
Week 12 vs placebo	<0.001	<0.001	

- Statistically significant reductions from placebo in the number of mild, moderate, and severe vasomotor symptoms were observed by Week 4
- Statistically significant reductions from placebo in the severity of mild, moderate, and severe vasomotor symptoms were observed by Week 4
- At Week 12, significantly more subjects had ≥50% and ≥75% reductions in number of mild, moderate, and severe vasomotor symptoms\*

\*P<0.001 at Weeks 4 and 12 ( $\geq$ 50% and  $\geq$ 75%). E2=estradiol; P4=progesterone.

**Reference** Data on file, TherapeuticsMD.

### BIJUVA Met the Primary Safety Endpoint of a ≤1% Incidence Rate of Endometrial Hyperplasia Following 12 Months of Therapy<sup>1,2</sup>

The safety of estradiol and progesterone capsules was assessed in a 1-year Phase 3 trial of 1835 postmenopausal women

	1 mg E2/ 100 mg P4 (N=281)	Placebo (N=92)
Hyperplasia incidence rate (%)	1/281 (0.36)	0/92 (0.00)
One-sided upper 95% CL	1.97%	3.93%

- Endometrial biopsy assessments revealed 1 case of endometrial hyperplasia and no cases of endometrial cancer in women who received BIJUVA, which is less than the background incidence rate in postmenopausal women of less than 1%
- Cumulative amenorrhea was reported by
  - 56.1% of women who received the 1-mg E2/100-mg P4 dose
  - 78.9% who received placebo

CL=confidence limit; E2=estradiol; P4=progesterone.

#### References

1. BIJUVA [package insert]. Boca Raton, FL: TherapeuticsMD, Inc; 2018. 2. Data on file, TherapeuticsMD.

### Patient Reported Outcomes with BIJUVA: CGI, MENQOL, and MOS-Sleep (Secondary Endpoints)

#### **Clinical Global Impression (CGI)**

 Significantly more women rated their condition as very much or much improved with BIJUVA compared with placebo at Weeks 4 and 12

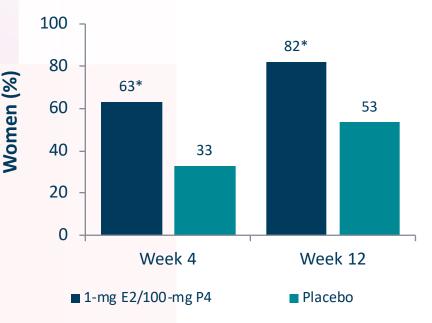
#### Menopause-Specific Quality of Life Questionnaire (MENQOL)

 Statistically significant improvements in total score were observed at Week 12, Month 6, and Month 12 compared with placebo

#### Medical Outcomes Study Sleep Scale (MOS-Sleep)

 Statistically significant improvements in total score were observed at Months 6 and 12 compared with placebo<sup>†</sup>

#### CGI Response: Clinically meaningful improvement



\*P<0.001 vs placebo.</li>
 <sup>†</sup>Mean change from baseline at Month 12 was not significant.

E2=estradiol; P4=progesterone.

**Reference** Data on file, TherapeuticsMD.

## **Adverse reactions reported with BIJUVA<sup>1,2</sup>**

# Treatment-emergent adverse reactions reported at a frequency of ≥3% and numerically more common in women receiving BIJUVA

Adverse reactions, n (%)	1-mg E2/100-mg P4 (N=415)	Placebo (N=151)
Breast tenderness	43 (10.4)	1 (0.7)
Headache	14 (3.4)	1 (0.7)
Vaginal bleeding	14 (3.4)	0 (0)
Vaginal discharge	14 (3.4)	1 (0.7)
Pelvic pain	13 (3.1)	0 (0)

# Treatment-emergent adverse reactions were those that would be expected with an estradiol and progesterone product

E2=estradiol; P4=progesterone

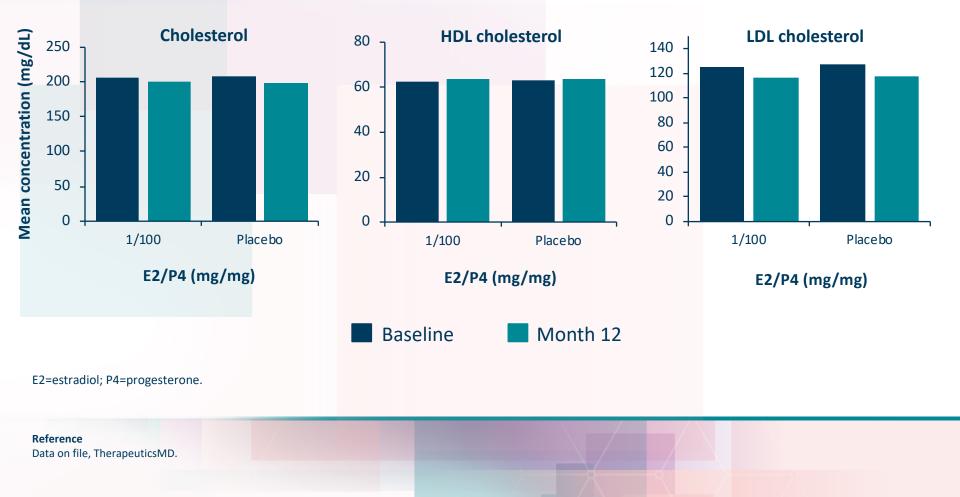
Please refer to BIJUVA Prescribing Information for complete safety information, including Boxed Warning.

#### References

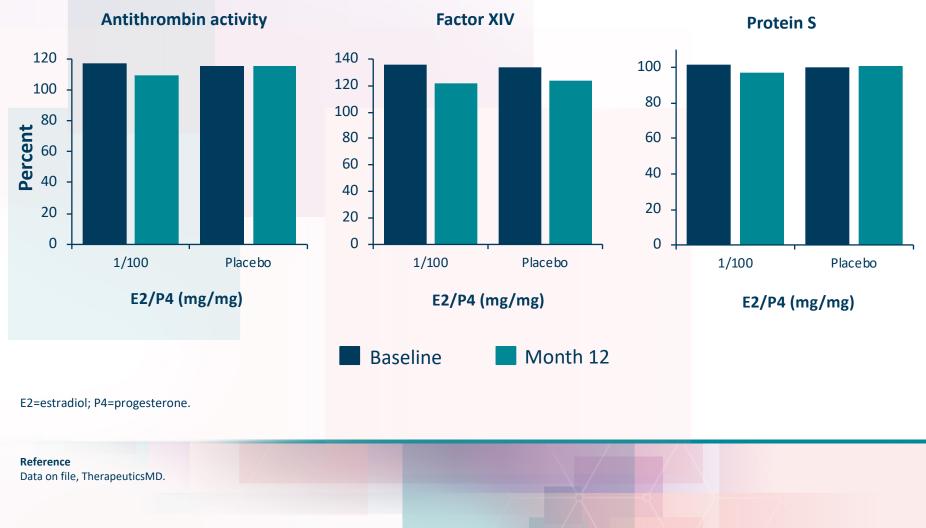
1. BIJUVA [package insert]. Boca Raton, FL: TherapeuticsMD, Inc; 2018. 2. Data on file, TherapeuticsMD.

# No Clinically Significant Changes in Cholesterol Levels were Observed

Few women had cholesterol increases (≥50 mg/dL or above normal levels) at 12 months with BIJUVA vs placebo



# No Clinically Significant Changes in Coagulation Parameters were Observed with BIJUVA







(estradiol and progesterone) capsules 1.0 mg/100 mg

### **Product Overview**





BIJUVA is indicated in a woman with a uterus for the treatment of moderate to severe vasomotor symptoms due to menopause

#### **Key Clinical Attributes**

- First and only bio-identical\* combination of estradiol to reduce moderate to severe hot flashes combined with progesterone to help reduce the risk to the endometrium
- Strong efficacy and safety data
- Favorable lipid, coagulation and metabolic profiles, compared to the profiles separately established for synthetic progestins and synthetic estrogens
- Low incidence of bleeding and somnolence
- The most common adverse reactions (≥3%) are breast tenderness (10.4%), headache (3.4%), vaginal bleeding (3.4%), vaginal discharge (3.4%), and pelvic pain (3.1%)

### **Key Physical Attributes**

- Once-a-day single oral softgel capsule
- One prescription, one copay

\*"Bio-identical" refers to estradiol and progesterone that are molecularly identical to the hormones produced naturally in the woman's body. There is no evidence that bio-identical hormones are safer or more effective than synthetic hormones.

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### **BIJUVA Large Substitutable Market**

	Column 1	Column 2	Column 3	
	FDA-Ap	proved		
BIJUVA Substitutable	Off Label Separate Bio-Identical E & P Pills	Combination Synthetic E+P <sup>1</sup>	Compounded Combination Bio-Identical E+P	
<u>Market</u>	SV2 WC	PREMPRO 0.825/5		
TRx US:	~3.8 million <sup>1</sup>	~3 million <sup>2</sup>	12 – 18 million <sup>3</sup>	
BIJUVA Potential Substitutable Market	\$760M-\$950M <sup>4</sup>	\$600M-\$750M <sup>4</sup>	\$2.4B-\$4.5B <sup>4</sup>	

1) Symphony Health Solutions PHAST Data powered by IDV; 12 months as of December 31 2017

2) Includes the following drugs: Activella®, FemHRT®, Angeliq®, Generic 17b + Progestins, Prempro®, Premphase®, Duavee®, Brisdelle®

3) Consensus estimate based on Symphony Health Solutions PHAST Data powered by IDV; 12 months as of December 31, 2017 and Fisher, J. QuintilesIMS, White Paper: A Profile of the US Compounding Pharmacy Market 4) Assume WAC pricing between \$200-250

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### **BIJUVA Fulfills the Unmet Need of a Combination Bio-Identical** Estrogen and Progesterone Hormone Therapy Option<sup>1</sup>

	BIJUVA <sup>1-3</sup>	Compounded E + P <sup>4,5</sup>	Prempro <sup>1,6</sup>	Generic separate E + P pills <sup>1,7-9</sup>
FDA approval for combination usage	~	x	~	x
Adverse event reporting	~	x	~	~
Bio-identical	~	✓	x	✓
No ability to take E without P	~	✓	✓	x
Peanut-free formulation	~	x	x	×

E=estrogen; P=progesterone.

#### References

4. Compounded bio-identical menopausal hormone therapy. The American College of Obstetricians and Gynecologists website. https://www.acog.org/Clinical-October 13, 2018. 5. Compounding and the FDA: questions and answers. US Food and Drug Administration website.

https://www.fda.gov/drugs/guidancecomplianceregulatoryinformation/pharmacycompounding /ucm339764.htm. Accessed October 15, 2018. 6. Prempro Prescribing Information. 7. Estradiol Prescribing Information. 8. Prometrium Prescribing Information. 9. Holtorf K. Postgrad Med. 2009;121(1):73-85.



# **BIJUVA Approval**

#### Post-Marketing Commitment

- To further develop and validate in-vitro dissolution to show manufacturing consistency between drug batches of how the drug is released from the capsule in an in-vitro setting for quality control assessments
  - Expect to submit the final report in December to enable Q2 launch

#### One dose approved by the FDA

- Given the safety and efficacy demonstrated of the higher dose of 1mg estradiol/100 mg progesterone
- Represents the lowest approved dose of bio-identical estradiol in combination with bio-identical progesterone
- Represents over a \$1 billion opportunity as the dose HCPs, compounding pharmacists and women prefer
- Label statement of a clinically meaningful reduction of 14 hot flashes per week occurring at week 5
  - Consistent with the data from other products on the market today
  - Same methodology of clinical meaningfulness that established the approval of other products used to treat vasomotor symptoms achieved at Week 4 and sustained through Week 12

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## **BIJUVA Advantages For Stakeholders**

#### Patients

- Satisfy demand for bio-identical hormone therapy with a product approved by FDA on safety and efficacy
- Reduce of out-of-pocket costs via insurance coverage
- Convenience of combined hormones in a single capsule
- Widely acceptable at pharmacies and not just compounding pharmacies

#### **Healthcare Providers**

- First and only FDA-approved bio-identical combination hormone therapy
- Clinically validated dose regimen
- Eliminate risks of compounded hormone therapy
- Meet patient demands and reduce patient out-of-pocket costs via insurance coverage
- Follow medical standards of care and society guidelines while reducing liability

#### **Pharmacies**

- Meet patient and physician demand for bio-identical hormone therapy
- Assuming third-party reimbursement, significantly improve net margin per script
- Lower certain legal and regulatory costs and risks

#### **FDA/Regulatory Bodies**

- Reduce need for and use of compounded hormone products
- Full enforcement of regulations regarding compounded hormones

### **Therapeutics** MD°

### **BIO-IGNITE<sup>™</sup>**

### **Compounding Pharmacy Partnership Strategy**

**BIO-IGNITE<sup>™</sup>** started as an outreach program to quantify the number of compounded bio-identical estradiol and progesterone prescriptions currently dispensed by the 3,000 high-volume compounding pharmacies, and qualify their interests in distributing our hormone product candidates, if approved.

#### WHAT IT HAS BECOME:

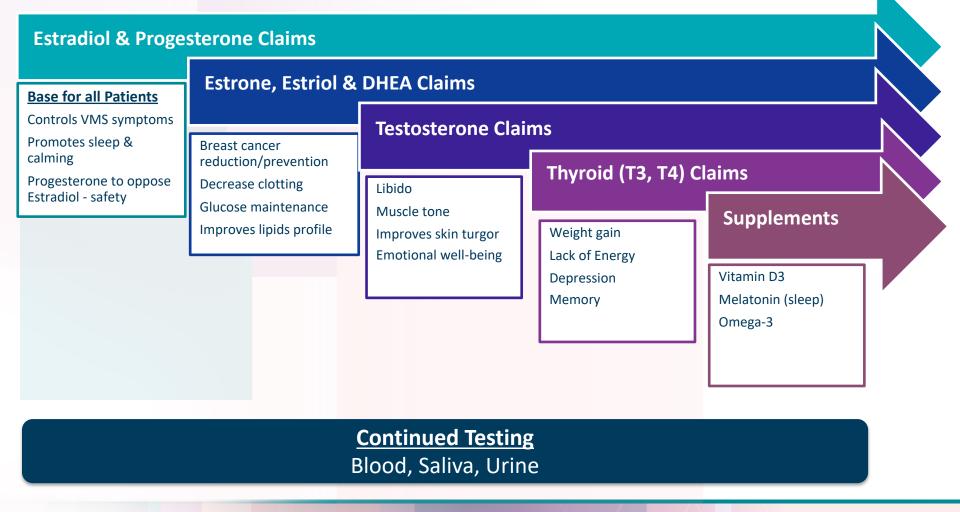
A four-phase strategic initiative to activate all current stakeholders involved in the BHRT community. Ensuring that BIJUVA has the best national access and uptake possible.





### **Bio-Identical Customization**

Customization of therapy at compounding pharmacies refers to addressing the overall patient condition including menopausal symptoms, adrenal function, libido, energy levels, thyroid function and nutrition, rather than through micro-dose changes in estrogen/progesterone amounts based on blood levels



### Therapeutics MD°

### **BIO-IGNITE Progress and Results**

### **Partnerships with Large Pharmacy Network and Individual Pharmacies**

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

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For Her. For Life.

\*Formerly known as Premier Value Pharmacy Compounding Network

### USP <800> Expenses Create Large Barriers for Compounders

USP <800> Requirements	Cost	Implementation Time	
<ul> <li>Segregated Clean Room:</li> <li>USP &lt;800&gt; Design</li> <li>Construction</li> </ul>	\$60,000 - \$200,000	1 year – 1.5 years	
Ventilation System	\$25,000 - \$50,000		
New Equipment for Hazardous Compounding	\$15,000 - \$50,000	-	
Total	\$100,000 - \$300,000	1 year – 1.5 years	

- High upfront capital expenditures required for compliance
- Long implementation time
- Increased ongoing operating expenses associated with capital expenditures

Estimates provided from Johnson's Compounding and Bird's Hill Pharmacy

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### **Economic Incentives Provide Catalyst to Switch to BIJUVA**

Economic Support TXMD Partnership for Patient Care				
	Insurance Coverage (before 2H14)	Present Day (2018)	Post USP <800> (Dec. 2019)	BIJUVA Est. Launch 2Q2019
<u>Revenue</u>				
Patient Co-Pay	\$50.00	\$50.00	\$50.00	\$50.00
Third-Party Reimbursement	\$115.00	-	-	\$200.00
Total Net Revenue	\$165.00	\$50.00	\$50.00	\$250.00 <sup>1</sup>
Costs of Good Sold	\$7.50	\$7.50	\$7.50	\$200.00 <sup>2</sup>
Gross Profit	\$157.50	\$42.50	\$42.50	\$50.00
Gross margin	95.5%	85.0%	85.0%	20.0%
Operating Expenses				
G&A	\$15.00	\$15.00	\$15. <mark>0</mark> 0	\$15.00
S&M	\$7.50	\$7.50	\$7.5 <mark>0</mark>	\$5.00
Additional Compounding Costs <sup>1</sup>	\$15.00	\$15.00	\$15.00	
Cost of USP <800> Requirements <sup>2</sup>	-	-	\$10.00	-
Total Operating Expenses	\$37.50	\$37.50	\$47.50	\$20.00
Pre-Tax Profit	\$120.00	\$5.00	\$(5.00)	\$30.00
Pre-Tax Profit	<b>\$120.00</b>	\$5.00	\$(5.00)	\$30.00

Includes additional labor, pharmacists, technicians, regulatory, and legal expenses. WAC expected to be \$200 to \$250.
 December 2019 Implementation; includes >\$150,000 capital expenditure as well as new identification requirements for receipt, storage, mixing, preparing, compounding, dispensing, and administration of hazardous drugs

### **Therapeutics** MD°

### Anovera<sup>TM</sup> (Segesterone Acetate/Ethinyl Estradiol Vaginal System)

Approved for use by females of reproductive potential to prevent pregnancy. (Limitation of use: Not adequately evaluated in females with a body mass index of >29 kg/m2).



# **Annovera - 1-Year Vaginal System**

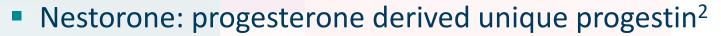
# First and only patient-controlled, procedure-free, long-acting, reversible birth control

- Annovera approved on August 10, 2018
  - Segesterone acetate component of Annovera classified as NCE with 5 year exclusivity
- Developed by the Population Council developer of multi-billion dollar long acting contraceptive products
  - ParaGard<sup>®</sup> and Mirena<sup>®</sup> IUDs; Norplant<sup>®</sup> and Jadelle<sup>®</sup> implants; and Progering<sup>®</sup>
- Benefits
  - Increase compliance over short acting products
  - Offer women a long-term birth control option without requiring a procedure for insertion and removal like IUDs or implants
  - Allow women who haven't had a child (nulliparous) or are not in a monogamous relationship - who are often counseled against IUDs due to the potential risk of infertility - access to long-term reversible birth control

 <sup>1</sup> Merkatz, Ruth B., Marlena Plagianos, Elena Hoskin, Michael Cooney, Paul C. Hewett, and Barbara S. Mensch. 2014. "Acceptability of the Nestorone®/ethinyl estradiol contraceptive vaginal ring: Development of a model; implications for introduction," *Contraception* 90(5): 514–521.
 <sup>2</sup> Narender Kumar, Samuel S. Koide, Yun-Yen Tsong, and Kalyan Sundaram. 2000. "Nestorone: a Progestin with a Unique Pharmacological Profile," Steroids 65: 629-636 Therapeutics MD<sup>®</sup>

### Annovera - 1-Year Vaginal System Segesterone Acetate [Nestorone®]/Ethinyl Estradiol

- The vaginal system is composed of a "squishy" silicone elastomer
  - 21/7 days repeated cyclical dosing regimen for one year (13 cycles)
  - 89% overall patient satisfaction in clinical trials<sup>1</sup>
- Average daily release over one year of use:
  - 0.15 mg/day segesterone acetate
  - 0.013 mg/day ethinyl estradiol



- High progestational potency and anti-ovulatory activity
- No androgenic, estrogenic or glucocorticoid effects at contraceptive doses
- Strong safety and efficacy data
- High patient satisfaction and acceptability

 <sup>1</sup> Merkatz, Ruth B., Marlena Plagianos, Elena Hoskin, Michael Cooney, Paul C. Hewett, and Barbara S. Mensch. 2014. "Acceptability of the Nestorone®/ethinyl estradiol contraceptive vaginal ring: Development of a model; implications for introduction," *Contraception* 90(5): 514–521.
 <sup>2</sup> Narender Kumar, Samuel S. Koide, Yun-Yen Tsong, and Kalyan Sundaram. 2000. "Nestorone: a Progestin with a Unique Pharmacological Profile," Steroids

Narender Kumar, Samuel S. Koide, Yun-Yen Tsong, and Kalyan Sundaram. 2000. "Nestorone: a Progestin with a Unique Pharmacological Profile," Steroids 65: 629-636

Segesterone

Acetate/Ethinyl Estradiol

Segesterone Acetate

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# **Clinical Trial Experience**

### Efficacy & Safety<sup>1</sup>

- Based on two pivotal Phase 3 clinical trials with 2,308 women
  - Efficacy and safety consistent with other birth control pills, patches and hormonal rings

### Efficacy

- Highly efficacious in preventing pregnancy when used as directed (97.3%)
  - Primary Endpoint Pearl Index was 2.98 per 100 woman-years

### Safety

- Class labeling for combination hormonal contraceptives (CHCs)
- All CHCs carry the boxed warning about cigarette smoking and serious cardiovascular events, particularly for women over age 35
- The risk profile is consistent with other CHCs
- The most common adverse reactions include headache, nausea/vomiting, vulvovaginal mycotic infections, abdominal pain, dysmenorrhea, vaginal discharge, UTIs, among others
- The most common adverse reactions leading to discontinuation were:
  - Irregular bleeding (1.7%), headache (1.3%), vaginal discharge (1.3%), and nausea/vomiting (1.2%)

Please refer to ANNOVERA Prescribing Information for complete safety information, including Boxed Warning

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# **Phase 3 Acceptability Study**

**Demonstrated 1-Year Contraceptive Vaginal System High User Satisfaction** 

### **Acceptability Data**<sup>1</sup>

- Phase 3 acceptability study (n=905 subjects)
- Overall satisfaction 89% related to ease of use, side effects, expulsions/feeling the product, and physical effect during sexual activity
- High rates of adherence (94.3%) and continuation (78%)

Ease of inserting (N=905)	Ease of removing (N=905)	Ease of remembering insertion (N=905)	Ease of remembering removal (N=905)	No side effects reported on questionnaire (N=905)
90.8%	88.2%	87.6%	85.2%	81.8%
(n=823)	(n=798)	(n=793)	(n=771)	(n=740)

<sup>1</sup>Merkatz, Ruth B., Marlena Plagianos, Elena Hoskin, Michael Cooney, Paul C. Hewett, and Barbara S. Mensch. 2014. "Acceptability of the Nestorone®/ethinyl estradiol contraceptive vaginal ring: Development of a model; implications for introduction," *Contraception* 90(5): 514–521.

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# **Annovera Key Clinical Attributes**

### **Clinical Attributes**

- Only FDA approved long-acting reversible birth control that doesn't require a procedure or repeat doctor's visit
  - Empowers women to be in control of their fertility and menstruation
  - Annovera is the only user-directed single 12-month birth control product (used in repeated 4-week cycles for 13 cycles)
- Highly effective in preventing pregnancy when used as directed (97.3%)
- High patient satisfaction in clinical trials<sup>1</sup> (89% overall satisfaction)
- Low daily release of ethinyl estradiol (13 mcg)
- Only product with new novel progestin segesterone acetate<sup>2</sup>
  - No androgenic, estrogenic or glucocorticoid effects at contraceptive doses
- Favorable side effect profile including low rates of discontinuation related to irregular bleeding (1.7%)
- Safety profile generally consistent with other CHC products, including boxed warning

### **Physical Attributes**

- Softer and more pliable than NuvaRing
- Acceptable for women who haven't had a child (nulliparous) or are not in a monogamous relationship<sup>3</sup>
- "Vaginal System" the only product in a new class of contraception with potential for \$0 co-pay
- Cost and convenience (pharmacy and doc visits)
- Does not require refrigeration by HCP

<sup>1</sup> Merkatz, Ruth B., Marlena Plagianos, Elena Hoskin, Michael Cooney, Paul C. Hewett, and Barbara S. Mensch. 2014. "Acceptability of the Nestorone®/ethinyl estradiol contraceptive vaginal ring: Development of a model; implications for introduction," *Contraception* 90(5): 514–521.

<sup>2</sup> Narender Kumar, Samuel S. Koide, Yun-Yen Tsong, and Kalyan Sundaram. 2000. *"Nestorone: a Progestin with a Unique Pharmacological Profile,"* Steroids 65: 629-636

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<sup>3</sup> Lohr, et al. Use of intrauterine devices in nulliparous women. Contraception 95 (2017); 529-537

# **U.S. Prescription Contraceptive Market**

- One of the largest therapeutic categories by script count
- ~ > \$5B U.S. net sales<sup>1</sup>

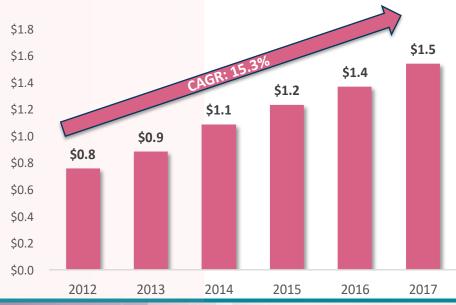
#### **Daily Oral Contraceptives**

 OC's continue to lose market share to longer acting solutions such as IUDs, Implants and Rings

#### Long Acting Reversible Contraceptives

 IUDs and Implants are experiencing significant growth as the market shifts towards long-acting solutions

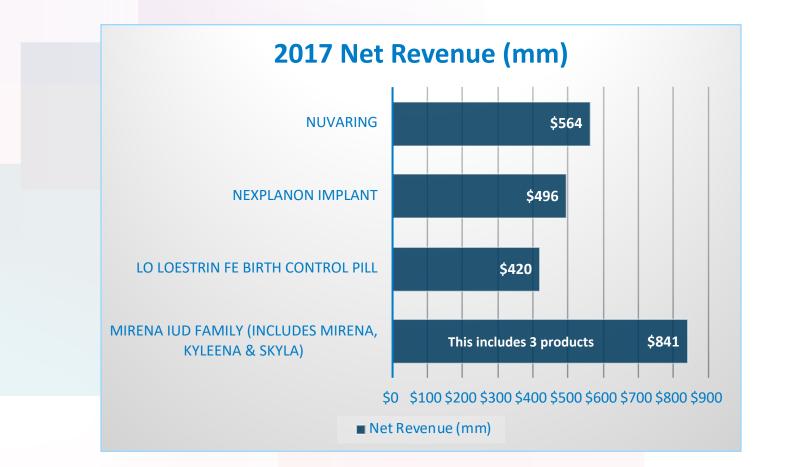




<sup>1</sup> IQVIA 2017, Company filings. Long acting reversible contraceptive market includes: Nexplanon/Implanon, Mirena family, Paragard and Liletta. Net sales as reported in company filings.

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# **Top Contraceptive Products Based on Revenue**



Company filings; Symphony Health Solutions PHAST Data powered by IDV. Net sales as reported in company filings.

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# **Large Established Ring Market**

#### Annovera compared to existing NuvaRing and potential NuvaRing generic

- 1-year duration (vs. 1 month)
- Soft, pliable, squishy (vs. semi-rigid ring body)
- 89% overall patient satisfaction in clinical trials<sup>1</sup>
- High rates of adherence (94.3%) and continuation (78%)<sup>1</sup>
- New/Lower hormones
  - New progestin segesterone acetate (vs. etonogestrel)
    - No androgenic, estrogenic or glucocorticoid effects at contraceptive doses<sup>2</sup>
  - 13 mcg ethinyl estradiol (vs. 15 mcg)
- No monthly hormonal burst that can occur with each new NuvaRing insertion
- No refrigeration required by HCP
- Low discontinuation rates<sup>3</sup>
  - Annovera: Irregular bleeding 1.7%, headache/migraine 1.3%, vaginal discharge/infections 1.3%, nausea/vomiting 1.2%
  - NuvaRing: Device-related events 2.7%, mood changes 1.7%, headache (including migraine) 1.5% and vaginal symptoms 1.2%
- Less expensive ~\$1,400 for Annovera vs. \$2,013 for NuvaRing based on annual WAC price
- "Vaginal System"- a new class of contraception with potential for \$0 co-pay
- NuvaRing no longer actively promoted
- <sup>1</sup> Merkatz, Ruth B., Marlena Plagianos, Elena Hoskin, Michael Cooney, Paul C. Hewett, and Barbara S. Mensch. 2014. "Acceptability of the Nestorone®/ethinyl estradiol contraceptive vaginal ring: Development of a model; implications for introduction," *Contraception* 90(5): 514–521.
- <sup>2</sup> Narender Kumar, Samuel S. Koide, Yun-Yen Tsong, and Kalyan Sundaram. 2000. *"Nestorone: a Progestin with a Unique Pharmacological Profile,"* Steroids 65: 629-636
- <sup>3</sup> Based on product Prescribing Information; not a head to head comparison

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# **Foundation Built for a Strong Launch**

### **TXMD** Sales Force in OB/GYN Offices

- 81% of total NuvaRing prescribers within current 150 TXMD territories<sup>1</sup>
- 40% overlap with current prenatal vitamins business
- Sales force of 150
- Partnership with inVentiv, leading contract sales organization
- Operational and analytic systems







# Unique Product Characteristics Should Lead to Good Payer Coverage

- Anticipate parity or discount pricing level ~\$1,400 annual WAC cost
  - 30% decrease to annual WAC of NuvaRing, reflects TXMD's responsible brand pricing
  - Allows for improved patient adherence and a potential decrease in unplanned pregnancies
  - Only one pharmacy fill fee per year (estimated savings of \$33 annually per patient)
  - No repeat office visit or procedure fees (several hundred dollars per patient)
  - Contains ethinyl estradiol and Nestorone<sup>®</sup>, a new and unique progestin
  - "Vaginal System"- a new class of contraception with potential for \$0 co-pay

The Affordable Care Act (ACA) mandates that private health plans provide coverage for one treatment per class of contraception used by women with no patient out-of-pocket costs

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### 1-Year Vaginal Contraceptive System Serves an Unmet Need in the U.S. Contraceptive Market

	Annovera™	NuvaRing®	IUD's	Oral Contraceptives
Duration of Action	<ul><li>✓</li><li>1 year (21/7 regimen)</li></ul>	× 1 month (21/ 7 regimen)	✓ 3-10 years	× Daily pill intake
Patient Control	✓ Removable at any time	✓ Removable at any time	× Procedure required	✓ Stop at any time
Nulliparous Women	√ Yes	√ Yes	× Not universally acceptable	√ Yes
Product Administration	✓ Patient administered pliable ring	✓ Patient administered Semi-rigid ring	× Physician in-office procedure	✓ Oral intake
Patient Convenience	✓ 1 doctor's visit, 1 pharmacy visit per year	× Monthly pharmacy visit	✗ Physician in-office procedure HCP stocking required	★ Daily pill presents compliance/adherence risks; potential increase in unplanned pregnancies
Healthcare Provider Convenience	✓ Filled at pharmacy; No refrigeration; No inventory or capital outlay	✓ Filled at pharmacy; Refrigeration required prior to being dispensed	► HCP required to hold inventory	✓ Filled at pharmacy
Cost	✓ \$1,400 WAC	× \$154.89/28 days, or 1 year cost of \$2013.57 (13 rings/year)	✓ \$909 WAC + insertion and removal costs (good for 5 years)	★ Lo Loestrin <sup>®</sup> Fe \$128.51/28 days, or 1 year cost of \$1,670.63 (13/year)
Contraceptive Class	Vaginal System	Vaginal Ring	IUD	Oral

89% overall patient satisfaction in clinical trials, 94% adherence rate, 78% continuation rate

✓ "Vaginal System"- potential for a new class of contraception with \$0 co-pay

Segesterone acetate component of Annovera classified as NCE with 5 year exclusivity

Chart comparisons for product characteristics only and are not intended to imply safety or efficacy comparisons

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# **Commercialization Strategy**

### **Launch Timing**

 Estimated to be commercially available as early as Q3'19 with commercial launch Q4'19

### **Attractive Market Segments for Annovera**

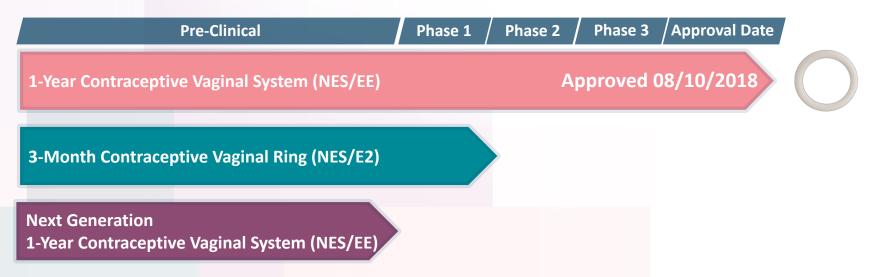
- NuvaRing users leveraging the physical and clinical strengths of Annovera
  - No additional sales representatives needed
  - 81% of total prescribers within current 150 TXMD territories<sup>1</sup>
- Women who want long-acting reversible contraception but don't want a procedure
- Providers who do not want to purchase and manage inventory of IUDs and implants
- Women who haven't had a child (nulliparous) or are not in a monogamous relationship and want long-term contraceptive options

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### TherapeuticsMD, A Premier Women's Health Company



# **Contraceptive Pipeline**



### Exclusive rights to negotiate co-development and marketing rights<sup>1</sup>

- 3 month ring using NES plus bio-identical Estradiol (E2) (Phase 2)
- 1 year contraceptive vaginal system (NES/EE) life cycle management

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# Committed to Become the Leading Women's Health Company

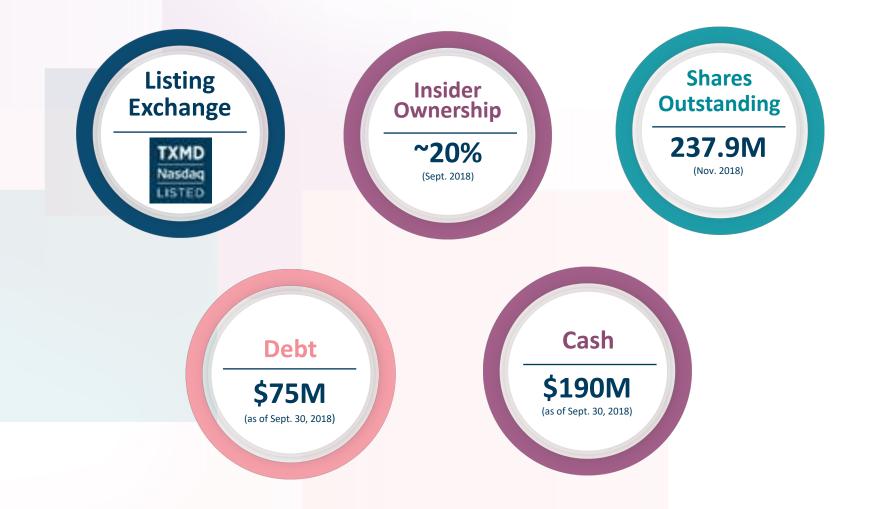
### Therapeutics MD<sup>®</sup>

# Significant Insider and Institutional Share Ownership

- Board of Directors and Executive Officers have long-term commitment to the company
  - Beneficially own approximately 20% of the company's shares\*
  - Three founding executives beneficially own approximately 17% of the company's shares
    - Includes vested options to acquire approximately 2.1 million shares of common stock that were originally issued on January 1, 2009 and expire on January 1, 2019
- Large institutional holder support
  - Large institutional holders many long-term beneficially own more than 55% of the company's outstanding shares

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# **TXMD: Financial Snapshot**



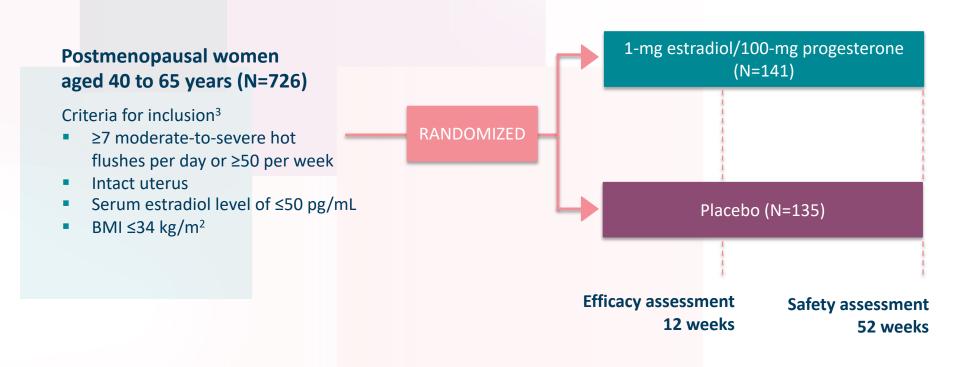
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# **BIJUVA Phase 3 trial design**

#### TXC12-05: a randomized, double-blind, placebo-controlled, multicenter study<sup>1,2</sup>



#### References

**1.** BIJUVA [package insert]. Boca Raton, FL: TherapeuticsMD, Inc; 2018. **2.** Data on file, TherapeuticsMD. **3.** US National Library of Medicine. A safety and efficacy study of the combination estradiol and progesterone to treat vasomotor symptoms (REPLENISH). https://clinicaltrials.gov/ct2/show/NCT01942668. Accessed November 1, 2018.

# Primary and Secondary Endpoints Assessed for BIJUVA

#### Primary endpoints<sup>1,2</sup>

Co-primary efficacy endpoints: Mean weekly reduction in frequency and severity of moderate to severe vasomotor symptoms with BIJUVA compared to placebo at Weeks 4 and 12
 Safety endpoint: ≤1% incidence rate of endometrial hyperplasia following 12 months of therapy

#### Secondary endpoints<sup>1,2</sup>

- Mean change in frequency and severity of moderate to severe vasomotor symptoms (and mild, moderate, and severe vasomotor symptoms) from baseline to each week up to Week 12 in an active treatment group compared with placebo
- Percentage of subjects with 50% and, separately, 75% reduction in frequency of moderate to severe vasomotor symptoms (and mild, moderate, and severe vasomotor symptoms) from baseline at each week up to Week 12 in an active treatment group compared with placebo
- CGI distribution (number and percentage of subjects) at Weeks 4, 8, and 12, with mean change in the frequency of moderate to severe vasomotor symptoms from baseline summarized within each CGI category at Weeks 4, 8, and 12
- Change from baseline in MENQOL evaluation parameters
- Change from baseline in MOS-Sleep evaluation parameters

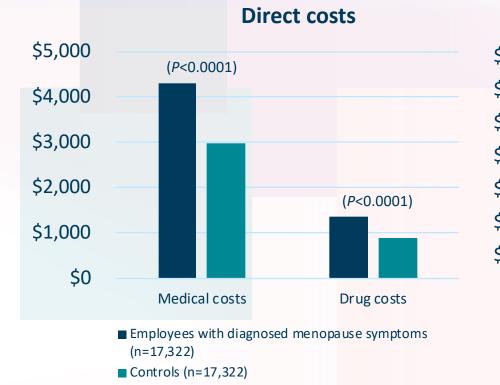
CGI=Clinical Global Impression; MENQOL=Menopause-specific Quality of Life Questionnaire, MOS-Sleep=Medical Outcomes Study-Sleep Scale.

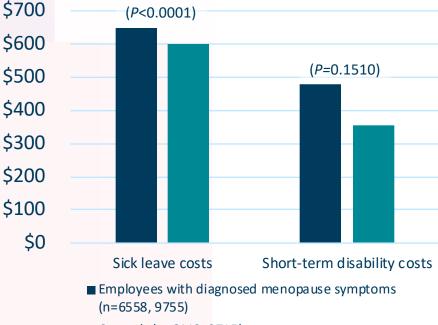
#### References

1. BIJUVA [package insert]. Boca Raton, FL: TherapeuticsMD, Inc; 2018. 2. Data on file, TherapeuticsMD.

### Women Diagnosed with Menopausal Symptoms incur Higher Costs than those without Diagnosed Symptoms

#### Adjusted annual health benefit costs





Indirect costs

Controls (n=6410, 9715)

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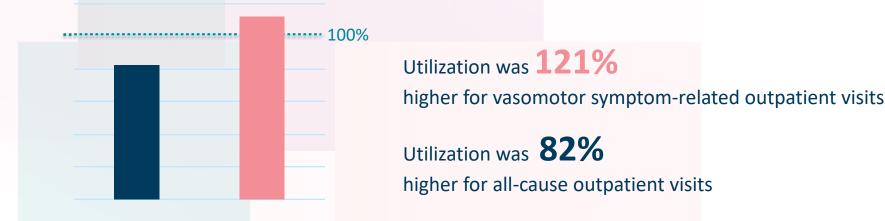
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#### Reference

Kleinman NL et al. J Occup Environ Med. 2013;55(4):465-470.

### In Addition, Untreated Vasomotor Symptoms are Associated with even Higher Healthcare Resource Utilization

Healthcare resource utilization for women with untreated vasomotor symptoms vs women without vasomotor symptoms (n=252,273)



Despite the significant impact of vasomotor symptoms, more than 70% of women remain untreated

Reference Sarrel P et al. *Menopause*. 2015;22(3):260-266.

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