

Corporate Profile- Se-cure Pharmaceuticals Ltd.

Se-cure Pharmaceuticals Ltd. is a research driven biotech company focused on the discovery and development of therapeutic solutions originating from botanical sources with an emphasis on safety of use.

Founded in 1997, Se-cure's competencies include target manipulated germination and proprietary agro-technologies used to engineer botanicals into tissue targeted therapeutics.

Se-cure develops unique botanical therapies that integrate the pharmaceutical world with the supplement world, balancing them both to create highly effective therapies that can be taken for the long-term, improving quality of life without incurring risks.

The API in our products are developed in-house, providing proprietary products with vast scientific support.

Se-cure has a state-of-the-art biotech-pharmaceutical manufacturing facility operating under rigorous quality control standards, producing standardized nutraceuticals.

We are dedicated to bringing forth unique botanical therapies that provide proven relief of symptoms while avoiding the risks of the conventional options.

Se-cure has 2 fully developed lines of products in the market the Femarelle® Line targeting women's health and Brizo® targeting men's urinary health.

The **Femarelle® Line**, declared in 2017 at the European Society of Gynecology as the 1st Line Treatment for the management of menopause, is a series of non-hormonal nutraceuticals with vast scientific backup. With 5 clinical studies, 10 pre-clinical studies, and 21 publications in leading scientific journals, DT56a has been shown to work through the same pathway as hormone therapy (HT), through estrogen receptors, having the same efficacy as HT, however due to its selective properties, without exposing women to its risks. The proprietary API in Femarelle®- DT56a- provides the driving mechanism that balances the woman's hormonal system, decreasing the bothersome symptoms associated with estrogen decline and protects women from the development of post-menopausal diseases and conditions.

The Femarelle® Line consists of 3 products targeting the different stages and symptoms of menopause based on the need and concerns of women.

- **Femarelle® Rejuvenate - targets women 40+** (pre-menopause) assist women with the primary stages of the hormonal imbalance affecting their skin, energy levels and mood.
- **Femarelle® Recharge - targets women 50+** focuses on the classic symptoms associated with menopause, such as hot flashes, night sweats, sleep disturbance and loss of libido.
- **Femarelle® Unstoppable - targets women 60+** (post menopause) focuses on healthy aging, providing new bone formation and prolonged bone health and provides vaginal and urinary health, increasing energy levels and improving women's overall well-being.

Femarelle® provides women and healthcare practitioners proven safe & effective options for long-term quality of life and healthy aging.

Brizo® targets men's urinary health. It provides men with a fast-acting solution to their bothersome urinary symptoms related to the enlargement of the prostate due to aging, providing relief throughout the day and especially at night. The proprietary API of Brizo®-SC012- decreases prostate size, relieving the pressure on the urethra from the first month of use, without exposing men to unnecessary risks, such as impotency.

Additional products in the pipeline-

- C106, a compound derived from the Aloe Barbarossa plant, was found effective in treating burns, immediately stopping the damage on the surrounding tissue, detaining the stasis.
- SC661, a compound that accelerates bone rejuvenation and significantly shortens the recovery period required in the dental implant process.

Competitive Advantage

The unique technology platform of Se-cure focuses on the characterization of complex compounds that enable to treat target tissues in different manners; the ability to create agonistic and antagonistic solutions is crucial to target different tissues in the body in a selective manner. Botanical Therapies allows the development of one complex compound as a multiple agent, having either agonistic or antagonistic properties depending on the target tissue.

Scientific Advisory Board Femarelle®

- **Dr. Andrea Genazzani**, MD PhD, President of the European Society of Gynecology & the Int'l. Society of Gynaecological Endocrinology (Italy)
- **Dr. Nick Panay**, MD, Consultant Gynaecologist, Queen Charlotte's & Chelsea Hospital, Chief editor 'Climacteric', Past President of the British Menopause Society, 2014-5 President Obstetrics & Gynaecology Section, Royal Society of Medicine (UK)
- **Dr. Lila Nachtigall**, MD, Prof. of OBGYN at NYU School of Medicine, Former president of the North American Menopause Society (US)
- **Dr. Fred Naftolin**, MD, PhD, Prof. of OBGYN, NYU School of Medicine, Former president of the North American Menopause Society (US)
- **Dr. Richard Nachtigall**, MD, Professor Clinical Medicine, NYU School of Medicine, active member of the board of directors of the Foundation for Better Health Care and the Women's Wellness Foundation (US)
- **Dr. Rafael Sanchez Borrego**, MD, OBGYN, President of the Spanish Menopause Society (Spain)

Additional information available at:

www.se-curepharma.com • www.femarelle.com • www.brizo-bph.com

Published Studies on Femarelle® (DT56a):

1. Yoles I. et al. Efficacy and Safety of Standard versus Low Dose of Femarelle (Tofupill) for the Treatment of Menopausal Symptoms; *J. of Clin Exper Obstet Gynecol* 2004;31(2):123-26
2. Labos G., Trakakis E. et al Efficacy and safety of DT56a (Femarelle) compared to hormone therapy in Greek postmenopausal women; *J Endocrinol. Invest.* 2013;36:521-526
3. Genazzani AR et al. Brain region responsiveness to DT56a (Femarelle) administration on allopregnanolone and opioid content in ovariectomized rats; *Menopause* 2009;16(5):1037-43
4. Genazzani A., Nachtigall L., Panay N. & Yoles I. Symposium: 2 Continents, 3 cultures, 4 countries, 2,000 women and Femarelle; *13th World Congress on Menopause*. Rome, Italy June 2011
5. Nachtigall M. et al. A Prospective Study of DT56a (Femarelle) for the Treatment of Postmenopausal Vaginal Atrophy; *Menopause* book of abstract of the NAMS 22nd Annual Meeting, Sept. 2011, p. 55
6. Yoles I. et al. Tofupill/Femarelle (DT56a) - a New Phyto-Selective Estrogen Receptor Modulator-like Substance for the Treatment of Postmenopausal Bone Loss; *Menopause* 2003;10(6):522-25
7. Somjen D, Yoles I. DT56a (Tofupill/Femarelle), selectively stimulates creatine kinase specific activity in skeletal tissues of rats but not in the uterus; *J. of Steroid Biochemistry & Molecular Biology* 2003; 86(1):93-98
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9. Somjen D., Katzburg S. Lieberherr M., Hendel D., Yoles I. DT56a Stimulates Gender-Specific Human Cultured Bone Cells In-Vitro; *J. of Steroid Biochemistry & Molecular Biology* 2006;98(1):90-96
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12. Yoles I., and Lilling G. Pharmacological Doses of the Natural phyto-SERM DT56a (Femarelle) Have no Effect on MCF-7 Breast Cancer Cell-Line; *European J. of Obstetrics & Gynecology & Reproductive Biology* 2006; 130(1):140-141
13. Oropeza M.V, Orozco S, Ponce H, Campos M.G. Tofupill lacks peripheral estrogen-like actions in the rat reproductive tract; *Reproductive Toxicology* 2005;20(2):261-66
14. Somjen D, Yoles I. DT56a (Femarelle): a Natural Selective Estrogen Receptor Modulator (SERM); *J. of Steroid Biochemistry & Molecular Biology* 2007;104:252-58
15. Somjen D. et al. DT56a (Femarelle); contrary to estradiol-17 β ; is effective in human derived female osteoblasts in hyperglycemic condition; *J Steroid Biochem Mol Biol.* 2011;123:25-29
16. Somjen D, Yoles I. DT56a stimulates creatine kinase specific activity in vascular tissues of rats; *J. of Endocrinological Investigation* 2003;26(10):966-971
17. Bedell S., Nachtigall M., Naftolin F. The pros and cons of plant estrogens for menopause; *J. Steroid Biochem. Mol. Biol.* 2014;139:225-236
18. Sánchez-Borrego R, Mendoza N, Llana P. A prospective study of DT56a (Femarelle®) for the treatment of menopause symptoms; *Climacteric.* 2015;18(6):813-6
19. Sánchez-Borrego R et al. Efficacy and safety of a phyto-SERM as an alternative to hormone therapy; *Climacteric.* 2015;18(3):350-7
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21. Somjen D. et al. Interaction between the effects of the selective estrogen modulator Femarelle and a vitamin D analog in human umbilical artery vascular smooth muscle cells. *J Steroid Biochem Mol Biol.* 2017;174:9-13