Results of our Progesterone for Perimenopausal Hot Flushes/Night Sweats Trial

Good news—our study results are now freely available online: https://www.nature.com/articles/s41598-023-35826-w. Here's the Press release that will be official on June 26, 2023. *Please don't share it before then*.

The official message today is that **perimenopausal women** who are still menstruating and also struggling with night sweats should take menopausal hormone therapy (estrogen with or without a synthetic or natural progesterone [oral micronized Progesterone]). That is good advice for *menopausal women* who've been one year without a period and are over age 60. But for *perimenopausal women*, it is a recommendation to *take medicines that have not been tested in perimenopause to show that they are* effective *nor documented to be* safe.

I'm so happy that now perimenopausal women and their physicians can know Progesterone is proven to be both effective and safe for perimenopausal women with night sweats or troubles sleeping.

This study was hard to publish because, although the 189 of you are a lot of women in a single hot flush study, perimenopausal hot flushes/night sweats are very variable. We needed to study more women (likely over 250).

I know that by now many of you will be menopausal. However, you have helped all the women now, and in the future, who are struggling with *usually unpredictable* menstruation plus night sweats, sleep problems and perimenopausal disturbances of daily life. Please share the information that Progesterone is helpful.

We added to this paper three new outcomes since we last shared with you. I want you to understand and be able to tell others about them.

1. Depression is not increased by Progesterone

The advisors to this study believed that Progesterone might worsen the risk for depression that is more common during perimenopause. The made us add the Personal Health Questionnaire #9 (PHQ9) which we asked at the beginning. We decided to repeat this test at the end of the study—this allows us to say, within each of you, whether Progesterone or placebo decreased or increased depression. In general, women on placebo had a small increase in depression. Women on Progesterone had a small decrease. The end result was proof that Progesterone did not cause depression.

2. Menstrual flow did not noticeably change while taking Progesterone

We asked you some final questions about change in menstruation. Results showed that you didn't perceive any flow changes. (This is important because it says that the Progesterone dose of 300 mg at bedtime every day for three months was not sufficient to suppress your own

estrogen levels. Note that if this dose were given to premenopausal women, flow would decrease and for some would disappear.)

3. Perimenopausal Interference Questionnaire—improved on Progesterone

We invited you to put a vertical line between 0 and 100 on a line stretching from no interference to severe interference of *physical perimenopausal changes* with your daily life. On a second one we asked you to make the same judgement about interference of *emotional perimenopausal changes* with your daily life.

Results from the average of these two lines showed the Perimenopausal Life Interference was significantly decreased if you were taking Progesterone compared with taking placebo. Thus, other life-disturbing changes of perimenopause were significantly improved by Progesterone therapy, not just night sweats and sleep problems.

THANK YOU

On behalf of the whole team, we want to again and for the final time to thank you for your commitment and dedication. You have made possible this important information. It will soon be available to help perimenopausal women and those who care for them from around the world.

If you have questions, feel free to email me jerilynn.prior@ubc.ca