The 2018 American Cancer Society estimates that about 63,230 women will be diagnosed with endometrial, womb or uterine, cancer and 11,350 women will die from endometrial cancer (EC) (1). Worldwide, 320,000 new cases were recorded in 2012, whereby making EC the sixth most common cancer in women, and the 14th most common cancer overall (2). The incidence of EC continues to rise around the world due to its adverse, long-term cardiovascular risk factors like, obesity, hypertension, physical inactivity, hyperlipidemia, and diabetes (3). While most women are survivors of EC, they often succumb to a cardiovascular disease death within five years of EC diagnosis, not to the cancer (4).

EC survivors are the most physically inactive patients, compared to other cancer survivors (5). This is highly important because, increased physical activity is linked to many decreased cardiovascular risk factors; however, the specific frequency, length, bout duration, intensity, and volume of physical activity is inconclusive to impact of a cardiovascular risk profile (6). At large, physical inactivity is a worldwide problem. In 2016, only 22.5% of persons aged 18 years and over in the United States had met the current federal physical activity guidelines (age adjusted); however, the “met” goal of Healthy People 2020 was only set at 20% of the US population (7). In addition, the World Health Organization (WHO) ranked the highest prevalence of insufficient physical activity in the Eastern Mediterranean Region (31%) and the Region of the Americas (32%) (8).

In their article, Armbruster et al. (9) examined sleep patterns of EC survivors and the impact of a physical activity on their sleep quality. The authors reported improved sleep quality as measured by the Pittsburgh Sleep Quality Index (10) with a significant ($P=0.004$ and $P=0.050$) increase in the weekly total of moderate/vigorous physical activity, as reported by the Community Health Activities Model Program for Seniors (CHAMPS) questionnaire (11). While other outcomes were measured, the relation between sleep quality and physical activity, regardless of weight-loss, provides an important point for most EC patients—better quality of life. Armbruster et al. best point was that EC survivors suffer from sleep dysfunction, and the antidote (cure?) to sleep dysfunction should be a prescription for physical activity. However, the case for prescribing exercise as a medicine for treatment is not often used in a gynecologic oncologist toolkit.

According to Tuyan İlhan et al., most EC survivors have disturbance in sleep, and quality issues starting during the early days of their diagnosis (12). To improve EC sleep quality, quality of life, and cardiovascular risk factors, all EC patients should engage in a Survivorship Treatment plan, highlighting a specific prescription for the importance of exercise (13). Unfortunately, most healthcare providers and patients see exercise for the purposes of losing weight, and not for the myriad of other benefits which have a medicinal type of effect on the body (14). Furthermore, increased physical activity levels help to maintain a more positive mood, and increase quality of life, post-diagnosis (15). Some gynecologic oncologists may balk (scoff?) at the idea of
immediately engaging EC patients in an exercise program during the early interventions after an EC diagnosis; however, in a recent Cochran review, there is little to none, serious or life-threatening adverse effects when EC patients undergo a lifestyle exercise program (16).

Thus, there is a case for prescribing exercise as medicine. While there are some risks for engaging in physical activity, weighing those risks in EC survivors seems to tip the scales when it comes to the benefits of improved sleep quality, quality of life, and potentially lessen their cardiovascular risk factors, with recent, more novel approaches to lifestyle management, such as various electronic fitness devices, interactive gaming, and etc. EC women should be empowered and prescribed to exercise. Not only to decrease their risk of additional malignancies, but also other obesity-related diseases (17).

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Footnote
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