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## Introduction

The frequent absence of a survival benefit linked to a new medication, despite data suggesting there may be some utility to treatment, has made it difficult to interpret cancer clinical trials. New therapies may enhance surrogate endpoints like time to disease progression and progression-free survival, but they might not

These findings were in agreement with previously released indices that assessed the most crucial symptoms, as judged by oncology experts. By a multi-step approach, advanced cancer symptom indices reflecting the symptoms given the greatest importance by patients and doctors were developed and initially validated [15]. The creation of these symptom

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measure scores may emerge given that many healthcare practitioners and researchers may have employed the original FACT cancer-specific HRQOL measurements. This may be particularly significant for clinicians and researchers who seek to switch to utilising the more recent NCCN-FACT symptom indices after previously using the earlier FACT measures longitudinally. The NCCN-FACT symptom index scores cannot be derived directly from the original FACT measures due to the fact that the more recent NCCN-FACT scales contain items that were not initially included in their original FACT equivalent. However, if more than 50% of the NCCN-FACT items are completed, the scores obtained using the original FACT measures can be prorated to be comparable to the NCCNFACT measures using the following established formula: (number of items in NCCN-FACT measure) x (sum of NCCN-FACT item responses)/(number of NCCN-FACT items completed) [23]. We have given the following example involving the NCCN-FACT Ovarian Symptom Index-18 (NFOSI-18) [24] for use as a potential outcome measure in evaluating the effectiveness of chemotherapy for advanced ovarian cancer in order to demonstrate how the NCCN-FACT symptom indexes can be applied when assessing the efficacy of palliative treatment for advanced cancer.

### Analyze the results of advanced ovarian cancer treatment

With approximately three-fourths of women presenting with advanced stage (stage III-IV) illness, ovarian cancer is the second most frequent and deadliest gynecologic malignancy in the United States [25]. Increasing progression-free and overall survival rates as well as reducing the number of symptoms brought on by the illness and therapy have historically been the main objectives of ovarian cancer treatment. Nevertheless, recent studies looking at clinically significant patient-centered outcomes have become more and more interested in optimising HRQOL as a crucial end-point. Research has increasingly noticed the effect of disease and therapy on HRQOL as it has placed a larger emphasis on HRQOL. The balance between efficacy and safety, or benefit and damage, is frequently taken into account while choosing a course of therapy for ovarian cancer since certain clinical advantages may degrade HRQOL. In contrast, a therapeutic benefit may also enhance HRQOL, so elevating the therapeutic benefit above and above the clinical outcomes of response, disease-free survival, progression-free survival, and overall survival. As a result, ovarian cancer offers a pertinent backdrop for discussing how the NFOSI-18 is applied to assess treatment results in advanced ovarian cancer. The NFOSI-18 was created as a component of a broader cross-sectional research that created symptom indices for 11 various forms of advanced cancer (before reported). While treating advanced ovarian cancer, 51 women with the disease evaluated which symptoms were most crucial, and 10 gynecologic oncologists determined whether these symptoms were mostly caused by the disease or the therapy. An 18-item symptom index for advanced ovarian cancer was created by combining the patient-rated priority symptoms with previously reported clinician-rated priority symptoms. The NFOSI-18 showed strong initial reliability, with subscale reliability ranging from  $\alpha=0.55$  (Treatment side effects) to  $\alpha=0.64$  (Function and Well-Being) and whole scale internal consistency reliability (16 items with data) of  $\alpha=0.80$ . The NFOSI-18's preliminary validity was also strong; there were notable variations in scores between performance status groups as determined by the ECOG measure of performance status, and lower NFOSI-18 scores were linked to lower performance status. The differences in NFOSI-18 scores between ECOG performance status groups exceeded the range of 4 to 5 points discussed in previous research to establish standards for clinically meaningful differences in measures from the FACIT measurement system, even though more research is required to de-

what constitutes a clinically meaningful difference and change on the NFOSI-18. The Functional Assessment of Cancer Therapy-Ovarian (FACT-O) HRQOL assessment and the NFOSI-18 are extremely redundant. The 26-item FACT-O Trial Outcome Index was the most popular clinical trial endpoint in advanced ovarian cancer clinical trials prior to the development of the NFOSI-18 (TOI). It contrasts the item content of the FACT-O TOI with the NFOSI-18, which was created in response to the U.S. FDA PRO Guideline on content validity (built to be more inclusive of HRQOL considerations beyond the most important symptoms and concerns). The majority of the NFOSI-18 questions ( $n=14$ ) are also in the TOI, indicating that the published data on the TOI would offer reliable and pertinent evidence for the NFOSI-18's expected performance in upcoming trials. The NFOSI-18 therefore differs from the FACT-O in a number of ways, including its brevity, focus on symptom measurement for advanced ovarian cancer, and improved satisfaction with regulatory guidance. However, given the NFOSI-18's recent development, we must extrapolate much of its validity from its strikingly similar predecessor, the TOI.

### Clinical trial outcomes

In a recent prospective phase II randomised clinical study, women with platinum-sensitive recurrent ovarian cancer were randomly assigned to receive either docetaxel plus carboplatin or docetaxel alone, followed by carboplatin, with HRQOL being assessed as a secondary outcome. Overall survival did not vary, but the combination arm had substantially longer progression-free survival, greater neurotoxicity, and more neutropenia. The sequential therapy, however, had a much less effect on the results for HRQOL. Particularly, compared to the combination arm, the sequential arm had less of an effect on the FACT-O TOI during the duration of the experiment. From baseline to trial completion, the TOI in the combination arm reduced by 4.9 points, but it increased by 1.4 points in the sequential arm. The median time to TOI worsening did not differ across groups, albeit. The NFOSI-18 therefore differs from the FACT-O in a number of ways, including its brevity, focus on symptom measurement for advanced ovarian cancer, and improved satisfaction with regulatory guidance. However, given the NFOSI-18's recent development, we must extrapolate much of its validity from its strikingly similar predecessor, the TOI. Women with advanced ovarian cancer had a higher chance of survival while receiving intraperitoneal (IP) treatment. The FACT-O TOI was significantly lower in the IP group compared to the IV group before cycle four (10 point difference) and three to six weeks after treatment (7 point difference), despite a phase III randomised trial finding that intravenous (IV) paclitaxel plus IP cisplatin and paclitaxel significantly increased progression-free and overall survival when compared to IV-only paclitaxel and cisplatin. As compared to patients receiving IV therapy, patients receiving IP therapy reported considerably and clinically meaningfully more physical, functional, and ovarian cancer-specific issues both during and immediately after treatment. Notably, both groups reported improving TOI over time, with no differences between the IP arm and the IV arm at one year, with the exception of the IP group prior to cycle four. In particular, the TOI increased in the IV arm from 70.0 (baseline) to 83.2 (12 months) and in the IP arm from 64.5 (baseline) to 82.2 (12 months). These results emphasise the need to balance possible survival benefits of IP chemotherapy with its short-term HRQOL impairments in talks regarding treatment

A quest for new therapeutic agents, such as innovative biologic medicines, has been spurred by the limited number of curative therapy choices for women with advanced ovarian cancer, despite advancements in surgical and chemotherapeutic treatment regimens.

The selective oral epidermal growth factor receptor tyrosine kinase inhibitor ZD1839 was tested in two Phase I studies among patients with advanced ovarian cancer and other advanced solid tumours, and is one of the innovative biologic treatments being developed and investigated. ZD1839 works by obstructing signalling pathways that are crucial for the development of tumours. LoRusso et al. note that while this was not the case for other solid tumour types in the study, the median TOI for patients with advanced ovarian cancer decreased with time from baseline in both Phase I trials of ZD1839. The total TOI

Perspectives on the impact of ovarian cancer: women's views of quality of life.  
*Oncol Nursing Forum* 32:1143-1149.

18. Cull A, Howat S, Greimel E, Waldenstrom AC, Arraras J, et al. (2001)

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