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EDITORIAL COMMENT

In the study "Nonmuscle Invasive Bladder Cancer Influences Physical Health Related Quality of Life and Urinary Incontinence, Wayne G. Brisbane and colleagues examine patient-reported quality of life (QOL) and urinary incontinence outcomes associated with the diagnosis and management of non-muscle invasive bladder cancer. The study is based on SEER cancer registry data linked to patient-reported outcomes (PROs) data collected as part of the Medical Health Outcomes Survey (SEER-MHOS), which allowed the authors to not only evaluate patient-reported outcomes in a representative sample of bladder cancer patients managed with endoscopic and intravesical treatments, but also benchmark those outcomes to surveys taken from noncancer controls who participated in MHOS as part of their Medicare Advantage plan. Though changes in patient-reported QOL and urinary function were apparent in both groups, declines in PRO scores were more pronounced among NMIBC patients than in noncancer controls. For example, SF-36 physical component summary (PCS) scores decreased by 3.0 points among bladder cancer patients from before diagnosis to after treatment (assessments were performed at 2 year intervals according to MHOS assessment frames) but only 1.5 in the control group ($P = .01$). Similarly, problems with urinary incontinence were more commonly reported by patients than controls; 15.2% of NMIBC patient respondents endorsed new urinary incontinence compared to 11.2% of controls ($P = .09$), and 20.0% of patients reported increased severity of incontinence compared to 11.4% of controls ($P < .01$). Notably, significant deficits in physical health and QOL were driven primarily by low scores in high-risk NMIBC cases (high-grade Ta disease, CIS, and T1 disease), implicating a close association between frequent interventions, such as repeated cystoscopy, biopsy, resection and intravesical therapies, and poorer patient-reported outcomes. Although these results may not be surprising and likely confirm the observations of practicing urologists who often manage bladder cancer, they provide empirical evidence that quantifies the burdens associated with the diagnosis and treatment of NMIBC. Moreover, these data have several palpable implications in my opinion. First, they represent a step forward and knowledge gained; they pencil in previously undescribed details about patient-reported symptoms and QOL outcomes within the outlines of a relatively understudied area. Second, they underscore the importance of PROs and QOL assessments among bladder cancer patients managed with endoscopic and intravesical therapies, which is particularly relevant given the exploding number of clinical trials evaluating emerging NMIBC therapies that are currently underway.[1] Patient-report outcome and QOL measures should be compulsory components in these trials. Finally, they foreshadow a not-distant future in which PROs will enter routine clinical care. The salutary effects of using PRO measures to inform and guide clinical care have come into focus in recent years, and increasingly health systems are steering toward them.[2]

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AUTHOR REPLY

We would like to thank Scott M. Gilbert for [his] thoughtful examination of this manuscript. As outlined, a major finding of this work is that patients with high-risk nonmuscle invasive bladder cancer (NMIBC) as defined by the European Urological Association and American Urological Association [ref] had significantly worse patient reported outcomes compared to those with nonhigh-risk disease. The survey tools utilized for the Medicare Health Outcomes Survey (MHOS) are not cancer specific instruments, yet still demonstrated statistically and clinically significant decreases in physical and mental health-related quality of life.[1] As noted by Dr. Gilbert, there are multiple factors at work including treatment side effects and oncologic burden. Further work will be needed to delineate if there are adjustments in clinical practice that can decrease the treatment and disease related burden experienced by patients. While MHOS is able to demonstrate general trends, specific causes remain obscure and want of clarification. Investigation of such topics is a priority among funding organizations such as the Patient-Centered Outcomes research Institute (PCORI) and will require further exploration amidst the changing landscape of treatment options for high-risk NMIBC. We agree that patient reported outcomes will become a compulsory component of research and will increasingly be interwoven into clinical care. To make meaningful contributions survey questions will need to balance inclusivity with specific disease process-oriented questions. Next steps will likely include engaging patients and their advocates with disease specific questions to prioritize research and clinical objectives.[2]

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