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Abstract
Genitourinary cancer management has been affected by Coronavirus disease 2019 around the world. We present an expert opinion survey to define genitourinary cancer care changes during the Coronavirus disease 2019 pandemic. Practice changes were reported by 79.1% of responders and differed between countries. Consensus was noted in some areas, whereas other clinical scenarios remain controversial.

Background: The worldwide Coronavirus disease 2019 (COVID-19) public health pandemic has restructured clinical care of patients with cancer throughout the world. The specific changes in the management of genitourinary (GU) cancers in different cancer centers owing to COVID-19 are not known, and some clinical scenarios remain controversial. We conducted an opinion survey to determine what changes in cancer treatment strategies are occurring owing to the COVID-19 pandemic.

Materials and Methods: A 20-item online survey was sent on May 25, 2020 to 170 expert GU medical oncologists from Europe and North America. The survey solicited responses to changes in GU cancer management in the setting of the COVID-19 pandemic. Data was collected and managed via a secure REDCap Database.

Results: Surveys were completed by 78 (45.8%) of 170 GU oncologists between May 25, 2020 and June 25, 2020. Clinical practice changes owing to COVID-19 in at least one scenario were reported by 79.1% of responders, most pronounced in prostate cancer (71.8%) and least pronounced in urothelial cancer (23%). Preferences for change in management varied by country, with 78% (37/47) of United States oncologists indicating a change in their practice, 57% (4/7) of Canadian oncologists, and 79% (19/24) of European oncologists.

Conclusions: This study suggests international practice changes are occurring in GU cancer care during the COVID-19 pandemic. The variability in practice changes between countries may reflect differences in COVID-19 case load during the time point of data collection. These results, based on expert opinion during this rapidly changing crisis, may inform the oncologic community regarding the effects of COVID-19 on GU cancer care.
prioritizing treatments at a time of health care constraints and adjusting treatment strategies owing to a dearth of hospital resources.\textsuperscript{5,6} Another consideration in clinical decision-making is the change in the patient’s risk/benefit ratio for any given treatment; treatments providing only a small benefit may not be recommended during the pandemic.

These practice changes have not been standardized, as each center follows internal guidelines reflecting its regional affliction from COVID-19, the percentage of health care workers transferred to COVID-19 care, and the change in surgical capacity.

The specific effects of COVID-19 on the management of genitourinary cancers in different cancer centers are not well known. Recommendations published from Canada\textsuperscript{7} and Europe\textsuperscript{8,9} differ, and some clinical scenarios remain controversial. There is an urgent need to understand what real-world practice changes are occurring within the oncologic community, to share data and experience during this rapidly changing crisis, and to provide practical information to help guide decision-making.

We conducted a genitourinary medical oncology expert opinion survey to determine the current treatment management of genitourinary cancers during the COVID-19 pandemic.

Materials and Methods

A structured 20-item questionnaire was developed by the investigators (see Supplemental Material in the online version). The questionnaire consisted of 5 domains: prostate cancer (PC), urothelial cancer (UC), renal cell carcinoma (RCC), testicular cancer (TC), and general issues.

The survey link was sent on May 25, 2020 by email to a list of 170 genitourinary medical oncology experts. The list was compiled by investigators by reviewing first and last authors of key trials published in 2010 to 2020, practicing in academic centers in North America and Europe, with available email addresses. Demographic data collected included cancer center’s name and state of practice. All other personal information was de-identified. Study data were collected and managed using Research Electronic Data Capture (REDCap) electronic data capture tools hosted at Memorial Sloan Kettering Cancer Center (MSKCC).\textsuperscript{10,11} REDCap is a secure, web-based software platform designed to support data capture for research studies, providing (1) an intuitive interface for validated data capture; (2) audit trails for tracking data manipulation and export procedures; (3) automated export procedures for seamless data downloads to common statistical packages; and (4) procedures for data integration and interoperability with external sources. When multiple treatment options were provided, a comment stating there were no contraindications to any treatment option was included.

Results

Seventy-eight (45%) completed surveys were returned between May 25, 2020 and June 25, 2020 and were included in the analysis. Surveys were completed by medical oncologists practicing in the United States (US, \(n = 47\); from 18 states), Canada (\(n = 7\); from 2 provinces), and Europe (\(n = 24\); from 10 countries). Overall, 79.1% of oncologists stated they changed their practice compared with the pre-COVID management in at least 1 question. The proportion of responding oncologists reporting a management change varied by disease and by country of practice (Table 1).

### Prostate Cancer (PC)

In intermediate-risk localized PC, 42.9% of 63 oncologists have changed their clinical practice during the pandemic; 51.8% of them would delay treatment by 3 to 6 months, and 48.1% would start androgen deprivation therapy (ADT) and delay definitive treatment (surgery/radiotherapy) by 3 to 6 months, until the pandemic eases.

In high-risk localized PC, 33.9% of 62 oncologists indicated they would change management during COVID-19. Of these, most (95%) offered to start ADT with (30%) or without (65%) next-generation androgen receptor (AR)-targeted therapy and to delay definitive treatment (surgery/radiotherapy) by 3 to 6 months, until the pandemic eases.

In metastatic hormone-sensitive PC (mHSPC) with low-volume/burden disease starting first-line treatment, 92.2% of 64 oncologists did not change their practice during COVID-19, mostly (75%) recommending ADT in combination with next-generation AR-targeted therapy.

In mHSPC with high-volume/burden disease starting first-line treatment, 28.1% of 64 oncologists changed their practice with most (94.4%) switching from ADT plus docetaxel to ADT plus next-generation AR-targeted therapy. ADT plus docetaxel was still the preferred approach in 29.7% of mHSPC with high volume/burden disease.

In patients with metastatic castrate-resistant PC (mCRPC) who would ordinarily start chemotherapy treatment, 68.8% of 64 oncologists indicated preferring to delay chemotherapy in patients with high COVID-19 risk; 34.4% favored delaying chemotherapy and choosing an alternative treatment in all patients, and 28.1% preferred to start chemotherapy as planned.

### Table 1 Changes in Practice During COVID-19

#### A. Percentage of Oncologists That Had Any Change in Practice Based on Survey Questions, by Disease Type

|                | All (\(n = 78\)) | PC (\(n = 64\)) | UC (\(n = 64\)) | RCC (\(n = 61\)) | GCT (\(n = 69\)) |
|----------------|------------------|-----------------|-----------------|------------------|-----------------|
| Any change in practice, % | 79.1 | 71.8 | 23.0 | 40.0 | 52.3 |

#### B. Percentage of Oncologists That Had Any Change in Practice Based on Survey Questions, by Country of Practice

|                | All (\(n = 78\)) | US (\(n = 47\)) | US; NY (\(n = 10\)) | US; non-NY (\(n = 37\)) | Canada (\(n = 7\)) | Europe (\(n = 24\)) |
|----------------|------------------|-----------------|----------------------|--------------------------|------------------|------------------|
| Any change in practice, % | 79.1 | 79.5 | 100 | 73.5 | 66.6 | 81.8 |

Abbreviations: GCT = germ cell tumor; NY = New York; PC = prostate cancer; RCC = renal cell carcinoma; UC = urothelial cancer; US = United States.
In patients with mCRPC treated with bone-directed treatment (bisphosphonate/denosumab) and high COVID-19 risk, one-half (53.2%) of 64 oncologists would delay treatment by 3 to 6 months until the pandemic cases, whereas 40% would delay treatment in all patients.

**Urothelial Cancer (UC)**

In a cisplatin-eligible patient with muscle-invasive bladder cancer (MIBC), cT2-3N0M0, most oncologists (82.8%; 52/63) recommended 3 to 4 cycles of neoadjuvant chemotherapy (NAC) followed by radical cystectomy (RC); 10.9% preferred RC first, and considered adjuvant treatment according to pathology; and only 3.1% preferred bladder preservation with definitive chemoradiation. Only 9.5% stated that this is different than their pre-COVID management, which changed from NAC followed by RC to either 3 or instead of 4 cycles of NAC or to RC alone.

When starting cisplatin-based chemotherapy for muscle-invasive or metastatic UC, most oncologists (62.6%; 40/64) would prefer conventional dose chemotherapy; 17.2% would use primary granulocyte colony-stimulating factor (G-CSF) prophylaxis in all patients, 18.8% would use primary G-CSF prophylaxis only in the presence of risk factors for neutropenic fever or high COVID-19 risk (chronic lung disease, chronic heart disease, uncontrolled diabetes, etc), and 26.6% would not use primary G-CSF prophylaxis. Dose-dense chemotherapy regimens with primary G-CSF prophylaxis in eligible patients were the preferred management for 35.9% of oncologists.

Seventeen percent of oncologists indicated having changed their management during the pandemic, by either using prophylactic G-CSF routinely or switching from dose-dense chemotherapy to conventional dose chemotherapy.

**Renal Cell Cancer (RCC)**

In an asymptomatic patient with newly diagnosed metastatic RCC, with no imminent danger to any organ per imaging, most oncologists would prefer to delay treatment in patients with favorable risk (68.9%; 42/61); some would also delay treatment in patients with intermediate (19.7%; 12/61) or poor risk (4.9%; 3/61), and 24.6% (15/61) preferred to start systemic treatment, irrespective of International Metastatic RCC Database Consortium (IMDC) risk group. Of oncologists, 29.5% (18/61) offer surveillance in more patients compared with the pre-COVID era.

The preferred first-line treatment regimen for favorable-risk metastatic RCC is sunitinib or pazopanib (39.3%; 24/61), followed by axitinib plus pembrolizumab (36.1%; 22/61), cabozantinib (9.8%; 6/21), ipilimumab plus nivolumab (4.9%; 3/61), and axitinib plus avelumab (3.3%; 2/61). Of oncologists who chose single-agent tyrosine kinase inhibitor as their preferred first-line treatment during the COVID-19 pandemic, 13.1% (8/61) favored axitinib plus pembrolizumab prior to COVID-19.

The preferred first-line treatment regimen for poor- or intermediate-risk metastatic RCC was ipilimumab plus nivolumab (47.5%; 29/61), followed by axitinib plus pembrolizumab (27.9%; 17/61), sunitinib or pazopanib (9.8%; 6/61), and cabozantinib (8.2%; 5/61). Eighteen percent (11/61) of oncologists stated they have changed their management during the pandemic, preferring axitinib plus pembrolizumab or single-agent tyrosine kinase inhibitor over ipilimumab plus nivolumab.

**Testicular Cancer**

Most oncologists did not change their practice during the pandemic for stage I testicular cancer post-orchiectomy both in pure seminoma (97.1%; 67/69) and non-seminoma (92.4%; 61/66). The preferred approach was active surveillance in 84.3% (59/70) for stage I seminoma and in 65.7% (44/67) for stage I-B non-seminoma.

For patients with good risk germ-cell tumor (GCT) without contraindication to bleomycin, 78.6% (48/61) of oncologists did not change their management; 55.4% (36/65) would prefer bleomycin, etoposide and platinum (BEP) × 3 and 35.4% (23/65) etoposide and platinum (EP) × 4. Of the 21.3% that have changed their management, most (84.6%; 11/13) switched from BEP × 3 to EP × 4.

In a patient starting EP × 4 or BEP × 3, 50% (32/64) of oncologists would add primary G-CSF prophylaxis for all patients; 71.8% (23/32) indicated that this is a practice change compared with pre-COVID management.

For patients with intermediate-poor-risk GCT without contraindication to bleomycin, 73.3% (46/62) of oncologists did not change their management; 57.8% (37/64) would prefer BEP × 4 and 29.7% etoposide, ifosfamide, and cisplatin (VIP) × 4 (19/64). Of the 26.6% that have changed their management, most (87.5%, 14/16) switched from BEP × 4 to VIP × 4.

For patients with metastatic GCT starting second-line treatment, responses were divided between conventional-dose chemotherapy (25.4%; 16/63), high-dose chemotherapy (27.0%; 17/63), and the ongoing randomized clinical trial (TIGER) assessing high-dose versus conventional-dose chemotherapy (33.3%; 21/63) in the initial salvage setting. Only 11.4% (7/61) of oncologists have changed their management during the pandemic, offering conventional-dose chemotherapy instead of high-dose chemotherapy or a clinical trial.

**General Oncology Care**

In patients treated with checkpoint inhibitors for metastatic disease, 56.4% of 62 oncologists de-escalated treatment during COVID-19 in some scenarios, mostly in patients who have been on treatment for more than 6 to 12 months. De-escalating treatment was defined as longer intervals between treatments, dose interruptions, or discontinuing treatment. Three and one-half percent (27/62) would prefer to continue treatment as planned.

Regarding emesis prevention with chemotherapy, although most (69.6%; 48/69) oncologists did not alter steroid dosing per standard practice during COVID-19, 17.4% (12/69) would reduce steroid dose in patients that did not experience nausea or vomiting on treatment, and 11.6% (8/69) would reduce the steroid dose upfront for new patients initiating chemotherapy during the pandemic.

For asymptomatic patients status post definitive therapy for local disease, most oncologists (78.2%; 54/69) would delay imaging by 2 to 3 months in some scenarios (31.9% in all patients, 29% in patients > 1 year post definitive therapy, and 13% in patients > 2 years post definitive therapy), and only 21.7% (15/69) preferred not to delay imaging.

**Discussion**

To our knowledge, we conducted the largest global survey to date among expert medical oncologists concerning the practice patterns of patients with genitourinary cancer during the COVID-19
pandemic. Practice changes during COVID-19 were noted by 79.1% of oncologists (Table 1). This was most pronounced in PC (71.8%) and least pronounced in UC (23%). In testicular cancer, 52.3% stated they changed their management, which represented mostly the increased use of primary growth factor prophylaxis. The proportion of responding oncologists reporting a management change varied by country, with 78% of US oncologists indicating at least 1 practice change (100% for oncologists practicing in New York).

Table 2 Published Genitourinary Oncology Recommendations During COVID-19

| Prostate cancer | Lalani et al<sup>7</sup> | Gillessen and Powles<sup>8</sup> | Fizazi et al<sup>9</sup> |
|-----------------|------------------------|-------------------------------|------------------------|
| **Localized disease** | | | |
| Intermediate risk | NA | NA | For RT, start ADT and delay RT by 3 months. Hypofractionated RT preferred. If surgery: delay by 4-6 months, no ADT prior. |
| High risk | NA | NA | Prefer ADT and delay local tx |
| **Metastatic disease** | | | |
| Prefer AR-targeted tx over chemo. Minimize steroid use. | Prefer AR-targeted tx over chemo. Minimize steroid use. | Prefer AR-targeted tx over chemo. Minimize steroid use. | |
| Can delay AR-targeted tx for up to 6 months after starting ADT. | NA | Can delay AR-targeted tx for up to 3 months after starting ADT. Defer RT for oligometastases. | |
| For bone-only mCRPC, prefer radium-223 over chemo if available. | Prefer no chem for pts with COVID risk. Delay bone-directed treatments. | | |
| For bone-only mCRPC, prefer radium-223 over chemo if available. | Prefer no chem for pts with COVID risk. Delay bone-directed treatments. | Delay chemo is possible. Minimize chemo cycles. | |

| Urothelial cancer | | | |
|-------------------|------------------------|------------------------|
| **Localized disease** (MIBC) | Consider radical cystectomy first, if surgery available. Prefer Gem/Cis over dose-dense regimen. Consider only 3 cycles of Gem/Cis. For chemoradiation, preferred weekly Cis or Gem as sensitizer | Consider radical cystectomy first, if surgery available. Prefer Gem/Cis over dose-dense regimen. Consider only 3 cycles of Gem/Cis. | Consider radical cystectomy first, if surgery available. Prefer Gem/Cis over dose-dense regimen, add G-CSF as primary prophylaxis. For chemoradiation, preferred MMC/5FU as sensitizer |
| **Metastatic disease** | | | |
| First line | No more than 6 cycles, consider stopping after 4. Consider delaying start of tx for small volume disease. | CPI for PD-L1—positive | Gem/Cis preferred over dose-dense regimen, with G-CSF prophylaxis. |
| Second line | Prefer CPI, consider delaying/longer intervals/treatment break. | NA | Prefer CPI, consider delaying/longer intervals/treatment break. |

| Renal cell cancer | | | |
|-------------------|------------------------|------------------------|
| **Metastatic disease** | | | |
| Good risk | Delay cytoreductive nephrectomy if possible. Prefer active surveillance if tx not acutely indicated. If starting tx TKI preferred. Potentially stop tx after 6 months. CPI - longer interval dosing. | Delay cytoreductive nephrectomy if possible. If starting tx TKI preferred. Potentially stop CPI or TKI after 1-2 years. | TKI preferred. |
| Intermediate/poor risk | Prefer CPI or CPI + TKI over CPI doublet. Longer intervals for CPI. Potentially stop tx after 6 months. | TKI preferred. Potentially stop CPI or TKI after 1-2 years. | Consider TKI instead of CPI doublet. For patients with poor prognosis and in poor general condition (PS 2), consider BSC. |

| Testicular cancer | | | |
|-------------------|------------------------|------------------------|
| **Localized disease** | Surveillance for stage 1 after orchectomy | Surveillance for stage 1 after orchectomy | Surveillance for stage 1 after orchectomy |
| **Metastatic disease** | | | |
| Good risk | Prefer BEP × 3 cycles over EP × 4 cycles. | NA | NA |
| Intermediate/poor risk | May prefer VIP × 4 over BEP × 4 | NA | NA |
| Salvaage treatment | NA | Prefer conventional dose over high dose regimen | NA |

**Abbreviations:** ADT = androgen deprivation therapy; AR = androgen receptor; BEP = bleomycin, etoposide and platinum; BSC = best supportive care; chemo = chemotherapy; Cis = cisplatin; COVID-19 = Coronavirus disease 2019; CPI = checkpoint inhibitor; EP = etoposide and platinum; 5-FU = 5-fluorouracil; G-CSF = granulocyte colony-stimulating factor; Gem = gemcitabine; mCRPC = metastatic castrate-resistant prostate cancer; mHSPC = metastatic hormone-sensitive prostate cancer; MIBC = muscle-invasive bladder cancer; MMC = mitomycin C; NA = not applicable; PD-L1 = programmed death-ligand 1; PS = performance status; RT = radiotherapy; TKI = tyrosine kinase inhibitor; tx = treatment; VIP = etoposide, ifosfamide, and cisplatin.
York (NY) compared with 57% for oncologists practicing in Canada and 79% in Europe. This likely reflects differences in COVID-19 magnitude and resultant restrictions on management (eg, surgery) and available resources between countries during the time point of data collection.

This survey was conducted in May to June of 2020, when it was thought that the peak of the pandemic had passed for the hardest hit areas, such as NY, Spain, Italy, and other European countries. The number of new COVID-19 cases was also declining in Canada, which was less affected, but was still surging in the US (not including NY). One strategy commonly used as reflected in the survey was to delay certain interventions by a few months, until the pandemic cases. As the situation unfolds and the number of cases continues to increase worldwide, it is clear that this strategy is not sustainable over time.

There were several limitations in our study. Our response rate was 45%, consistent with responses in published oncology-related physician surveys, which vary between 31% and 61%. Although our findings may be affected by non-responder bias and recruitment methodology, we were able to collect responses capturing practices from various areas in the US, Canada, and Europe. This study did not include oncologists practicing in other parts of the world, including in South America, Australia, or Asia. Practice changes may have varied in different time points of the pandemic and between different health care systems depending on available resources, possibly representing “practical” rather than “ideal” management.

The American Society of Clinical Oncology has published general oncologic recommendations for cancer care regarding allocation of scarce resources during the COVID-19 pandemic. For the genitourinary medical oncology community, several recommendations have been published by Sommer and Powles, Fizazi and the GETUG group, and Canadian recommendations by Lalani et al (Summarized in Table 2).

In our survey, there were several changes in management during COVID-19 that were more in consensus: increased use of G-CSF for primary prophylaxis of chemotherapy-induced neutropenic fever; delaying bone-directed treatment (bisphosphonate/denosumab) in patients with mCRPC to reduce medical visits; delaying treatments when considered medically safe; and reducing the use of chemotherapy when there are other treatment alternatives.

One area of controversy surrounded the use of bleomycin in management of advanced testicular cancer. This is likely owing to the unknown effect of COVID-19 exposure in bleomycin-treated patients as well as potential confounding of bleomycin toxicity with COVID-19 symptoms and increasingly scarce resources (eg, pulmonary function testing) for monitoring bleomycin toxicity, leading to conflicting recommendations and management. On the one hand, bleomycin is known to potentially cause pneumonitis; on the other hand, alternative protocols for GCT use intensified chemotherapy protocols, with higher risk of neutropenia. Most institutions continued their usual practice when choosing between BEP × 3 versus EP × 4 in good-risk patients with GCT, with higher use of primary G-CSF prophylaxis, and between BEP × 4 versus VIP × 4 for intermediate-/poor-risk GCT. When practice changes were noted, they favored omitting bleomycin.

Patients with cancer have been reported to be at increased risk of mortality from COVID-19, although it is still unclear if mortality is related to cancer type, cancer treatment, or if it is mainly driven by age, gender, and comorbidities. One recent study suggests that patients with PC receiving ADT have a significantly lower risk of COVID-19 infection compared with patients not on ADT. It was hypothesized that ADT may have a protective role by suppressing TMPRSS2 levels. Cancer treatment often entails intermittent or prolonged corticosteroid use, which is thought to lead to increased susceptibility to COVID-19 as a result of the immunosuppression. In contrast, a recent study suggests dexamethasone treatment improves outcomes in severe COVID-19 infections. Thirty percent of 69 oncologists stated they currently reduce steroid doses for emesis prevention, either upfront or in patients who previously did not experience treatment-related nausea or vomiting in prior cycles. In intermediate-/poor-risk metastatic RCC, 27.5% of 29 oncologists who would normally treat with ipilimumab plus nivolumab have currently changed to non-doublet checkpoint inhibitor, to prevent the need for high-dose steroid use for immune-related toxicity. For metastatic prostate cancer treatment during the pandemic, Sommer and Powles proposed that prolonged steroid treatment requires consideration. Fizazi and the GETUG group recommend avoiding corticosteroid use when possible with preference for enzalutamide for first-line mCRPC treatment. Only 3% of oncologists would change from abiraterone plus prednisone for metastatic PC to a different next-generation AR-targeted therapy, to avoid prolonged steroid use.

The ongoing COVID-19 pandemic changed how oncologists are delivering cancer care. The long-term effects of these treatment changes are yet to be determined, but cancer-specific mortality is expected to increase over the next several years owing to delays in diagnosis and treatment of early-stage disease. This survey describes delays and adjustments of cancer care that were being made in May to June 2020. Oncologists did not delay curative treatments for testicular cancer, MIBC, and high-risk PC, but were more lenient in intermediate-risk PC and in some metastatic settings. The long-term effect of these “de-escalation” strategies is hard to quantify. A recent study projected that a 4-week delay of intervention for MIBC is associated with increased mortality, whereas another study discussed genitourinary cancer scenarios in which a 3 to 6 month delay in intervention would be considered safe. Interruption of clinical trial accrual is also likely to have a negative impact on research advancement and patient access to new interventions. As COVID-19 continues to pose a health threat worldwide, providing access to management strategies of expert cancer centers during this rapidly changing crisis may help inform decision-making for the genitourinary oncologic community.

Clinical Practice Points
- The worldwide COVID-19 public health pandemic has restructured clinical care of patients with cancer throughout the world. The specific changes in the management of genitourinary cancers in different cancer centers owing to COVID-19 are not known, and some clinical scenarios remain controversial. We conducted an opinion survey for expert genitourinary medical oncologists from Europe and North America between May 25, 2020 and June 25, 2020 to determine what changes in cancer treatment strategies are occurring owing to the COVID-19
pandemic. Clinical practice changes owing to COVID-19 in at least 1 scenario were reported by 79.1% of responders, most pronounced in PC (71.8%) and least pronounced in UC (23%). Preferences for change in management varied by country, with 78% (37/47) of United States oncologists indicating a change in their practice, 57% (4/7) of Canadian oncologists, and 79% (19/24) for European oncologists.

- This study suggests international practice changes are occurring in genitourinary cancer care during the COVID-19 pandemic. The variability in practice changes between countries may reflect differences in COVID-19 case load during the time point of data collection. These results, based on expert opinion during this rapidly changing crisis, may inform the oncologic community regarding the effects of COVID-19 on genitourinary cancer care.

CRediT authorship contribution statement

Michal Sarfaty: Data curation, Formal analysis, Writing - original draft, Writing - review & editing, Visualization. Darren R. Feldman: Conceptualization, Methodology, Writing - review & editing. Michael J. Morris: Conceptualization, Methodology, Writing - review & editing. Robert J. Motzer: Conceptualization, Methodology, Writing - review & editing. Dana E. Rathkopf: Conceptualization, Methodology. Ashley M. Regazzi: Investigation, Methodology, Project administration. Gopa Iyer: Conceptualization, Methodology. Martin H. Voss: Conceptualization, Methodology. Dean F. Bajorin: Conceptualization, Supervision. Jonathan E. Rosenberg: Conceptualization, Methodology, Investigation, Writing - review & editing, Funding acquisition, Supervision.

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The authors have stated that they have no conflicts of interest.

Supplemental Data

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