Head and Neck Cancer Survivorship Care Guideline: American Society of Clinical Oncology Clinical Practice Guideline Endorsement of the American Cancer Society Guideline
Introduction

• The ASCO Expert Panel determined that the ACS HNC Survivorship Care Guideline, published in 2016, is clear, thorough, clinically practical, and helpful, despite the limited availability of high-quality evidence to support many of the recommendations.

• This guideline provides recommendations on the management of adults after head and neck cancer (HNC) treatment, focusing on surveillance and screening for recurrence or second primary cancers, assessment and management of long-term and late effects, health promotion, care coordination, and practice implications.
ASCO Endorsement Methodology

The ASCO Clinical Practice Guidelines Committee endorsement review process includes:
- a methodological review by ASCO guidelines staff
- a content review by an ad hoc expert panel
- final endorsement approval by ASCO CPGC.

The full ASCO Endorsement methodology supplement can be found at: www.asco.org/HNC-Survivorship-endorsement

ACS Guideline Methodology can be found at: https://www.cancer.org/health-care-professionals/american-cancer-society-survivorship-guidelines
Clinical Questions

The ACS Head and Neck Survivorship Care Guideline addressed the management of adults after HNC treatment, focusing on:

- Surveillance for HNC recurrence
- Screening for second primary cancers
- Assessment and management of physical and psychosocial long-term and late effects of HNC and treatment
- Health promotion
- Care coordination and practice implications

www.asco.org/HNC-Survivorship-endorsement
©American Society of Clinical Oncology 2017. All rights reserved.
Target Population and Audience

**Target Population**
Adult post-treatment head and neck cancer (HNC) survivors.

**Target Audience**
ASCO emphasizes the role of multispecialty, multidisciplinary care of HNC survivors that may include primary care clinicians, oncologists (medical, surgical, and radiation), otolaryngologists, dentists, speech therapists, physical therapists, dietitians, mental health professionals, and supportive care experts.
Summary of Recommendations

Surveillance for HNC recurrence

History and physical

Recommendation 1.1. It is recommended that primary care clinicians:

a) should receive guidance from the treating oncology team regarding the individualized follow up plan

b) should work with the treating oncology team to ensure that a detailed cancer-related history and physical examination be conducted every 1-3 months for the first year after primary treatment, every 2-6 months in the second year, every 4-8 months in years 3-5, and annually after 5 years

c) should confirm continued follow up with otolaryngologist or HNC specialist for HN-focused examination based on review of individualized plan with the treating team

ASCO qualifying statement: Follow-up of HNC survivors requires multispecialty, multidisciplinary, collaborative care, with significant involvement and guidance from the primary oncology treatment team. Early in the course of follow-up and as the HNC survivor transitions to primary care (timing determined individually), the primary care physician should be aware of symptoms of recurrence and late and long-term effects of treatment. The primary care physician may need to re-engage members of the HN care team accordingly.

www.asco.org/HNC-Survivorship-endorsement
©American Society of Clinical Oncology 2017. All rights reserved.
Summary of Recommendations

Surveillance education

Recommendation 1.2. It is recommended that primary care clinicians:

a) should receive guidance from the treating oncology team regarding signs and symptoms of local and distant recurrences

b) assure that HNC survivors receive this information from their treating team

c) should refer HNC survivors to an HNC specialist if signs and symptoms of local or distant recurrences are present

ASCO qualifying statement: Surveillance education should be led by the treating team and emphasize a collaborative care approach. HNC survivors and primary care clinicians should receive education and counseling about the signs and symptoms of local, regional, and distant recurrences from their treating team. Routine surveillance imaging is not recommended in the absence of signs or symptoms.
Summary of Recommendations

Screening and early detection of second primary cancers

Recommendation 2.1. It is recommended that primary care clinicians:

a) should perform routine age- and gender appropriate cancer screening of HNC survivors for other cancers as they would for patients in the general population by adhering to guidelines such as the ACS Early Detection Recommendations (cancer.org/professionals; LOE = 0) and the US Preventive Services Task Force.

b) should screen HNC survivors for lung cancer according to ASCO or National Comprehensive Cancer Network 14 recommendations for annual lung cancer screening with clinically indicated low dose computed tomography for high-risk patients based on smoking history (LOE = 2A).

c) should screen HNC survivors for another HN and esophageal cancer as they would for patients at increased risk (LOE = 0, IIA).

ASCO qualifying statement: General guidelines for cancer screening should be followed for HNC survivors. While HNC survivors may be at an elevated risk, there is currently insufficient evidence to recommend routine screening of HNC survivors for esophageal cancer. However, HNC survivors should undergo appropriate risk-based evaluation for any signs or symptoms suggestive of esophageal cancer, another HN cancer, or other secondary malignancies. Lung cancer screening should be based on risk factor assessment (and may be recommended based on smoking history).1 Screening decisions may take into account comorbidities and life expectancy, but there is no evidence to support consideration of a history of HNC as an independent risk factor for lung cancer.

www.asco.org/HNC-Survivorship-endorsement
©American Society of Clinical Oncology 2017. All rights reserved.
Summary of Recommendations

Assessment and management of physical and psychosocial long-term and late effects of HNC and its treatment

Recommendation 3.1. It is recommended that primary care clinicians should take a history and physical examination to assess for long-term and late effects of HNC and its treatment at each follow-up visit (LOE = 0).

Spinal accessory nerve (SAN) palsy

Recommendation 3.2. It is recommended that primary care clinicians should refer HNC survivors with SAN palsy occurring postradical neck dissection to a rehabilitation specialist to improve range of motion and ability to perform daily tasks (LOE = IA).

www.asco.org/HNC-Survivorship-endorsement
©American Society of Clinical Oncology 2017. All rights reserved.
Summary of Recommendations

Cervical dystonia/muscle spasms/neuropathies

Recommendation 3.3. It is recommended that primary care clinicians:

a) should assess HNC survivors for cervical dystonia, which is characterized by painful dystonic spasms of the cervical muscles and can be caused by neck dissection, radiation, or both (LOE = 0)

b) should refer HNC survivors to a rehabilitation specialist for comprehensive neuromusculoskeletal management if cervical dystonia or neuropathy is found (LOE = 0)

c) should prescribe nervestabilizing agents, such as pregabalin, gabapentin, and duloxetine, or refer to a specialist for botulinum toxin type A injections into the affected muscles for pain management and spasm control as indicated (LOE = 0, IIA)
Summary of Recommendations

Shoulder dysfunction

Recommendation 3.4. It is recommended that primary care clinicians:

a) should conduct baseline assessment of HNC survivor shoulder function post-treatment for strength, range of motion, and impingement signs, and continue to assess as follow-up for ongoing complications or worsening condition (LOE = IIA)

b) should refer HNC survivors to a rehabilitation specialist for improvement to pain, disability, and range of motion where shoulder morbidity exists (LOE = IA).

Trismus

Recommendation 3.5. It is recommended that primary care clinicians:

a) should refer HNC survivors to rehabilitation specialists and dental professionals to prevent trismus and to treat trismus as soon as it is diagnosed (LOE = 0)

b) should prescribe nerve-stabilizing agents to combat pain and spasms, which may also ease physical therapy and stretching devices (LOE = IIA)
Summary of Recommendations

Dysphagia/aspiration/stricture

*Recommendation 3.6.* It is recommended that primary care clinicians:

a) should refer HNC survivors presenting with complaints of dysphagia, postprandial cough, unexplained weight loss, and/or pneumonia to an experienced speech-language pathologist for instrumental evaluation of swallowing function to assess and manage dysphagia and possible aspiration (LOE = IIA)

b) should recognize potential for psychosocial barriers to swallowing recovery and refer HNC survivors to an appropriate clinician if barriers are present (LOE = IIA)

c) should refer to a speech-language pathologist for videofluoroscopy as the first-line test for HNC survivors with suspected stricture due to the high degree of coexisting physiologic dysphagia (LOE = IIA)

d) should refer HNC survivors with stricture to a gastroenterologist or HN surgeon for esophageal dilation (LOE = IIA)

*ASCO qualifying statement: Patients should undergo appropriate evaluation for any sudden onset of signs or symptoms suggestive of a recurrence.*

www.asco.org/HNC-Survivorship-endorsement

©American Society of Clinical Oncology 2017. All rights reserved.
Summary of Recommendations

**Gastroesophageal reflux disease (GERD)**

*Recommendation 3.7.* It is recommended that primary care clinicians:

a) should monitor HNC survivors for developing or worsening GERD, as it prevents healing of irradiated tissues and is associated with increased risk of HNC recurrence or SPCs (LOE = IIA)

b) should counsel HNC survivors on an increased risk of esophageal cancer and the associated symptoms (LOE = IIA)

c) should recommend PPIs or antacids, sleeping with a wedge pillow or 3-inch blocks under the head of the bed, not eating or drinking fluids for 3 hours before bedtime, tobacco cessation, and avoidance of alcohol (LOE = IIA)

d) should refer HNC survivors to a gastroenterologist if GERD is suspected to obtain a baseline evaluation and if symptoms are not relieved by treatments listed in 3.7c (LOE = IIA).

**ASCO qualifying statement:** GERD treatment may include lifestyle modification, H2 blockers, and/or PPIs. As HNC survivors are at risk for esophageal cancer and radiation-related esophageal toxicity, patients who do not respond to treatment should be referred to gastroenterology for additional evaluation.²

[www.asco.org/HNC-Surivorship-endorsement](http://www.asco.org/HNC-Surivorship-endorsement)  
©American Society of Clinical Oncology 2017. All rights reserved.
Summary of Recommendations

Lymphedema

Recommendation 3.8. It is recommended that primary care clinicians:

a) should assess HNC survivors for lymphedema using the NCI CTCAE v.4.03, or referral for endoscopic evaluation of mucosal edema of the oropharynx and larynx, tape measurements, sonography, or external photographs (LOE = IIA)

b) should refer HNC survivors to a rehabilitation specialist for treatment consisting of MLD and, if tolerated, compressive bandaging (LOE = IIA)

ASCO qualifying statement: A collaborative strategy should be developed between the primary care physician and HNC specialist to maintain surveillance for signs and symptoms suggestive of lymphedema.
Summary of Recommendations

Fatigue

Recommmendation 3.9. It is recommended that primary care clinicians:

a) should assess for fatigue and treat any causative factors for fatigue, including anemia, thyroid dysfunction, and cardiac dysfunction (LOE = 0)

b) should offer treatment or referral for factors that may impact fatigue (eg, mood disorders, sleep disturbance, pain, etc) for those who do not have an otherwise identifiable cause of fatigue (LOE = I)

c) should counsel HNC survivors to engage in regular physical activity and refer for CBT as appropriate (LOE = I)

ASCO qualifying statement: Clinicians should refer to the ASCO Screening, Assessment, and Management of Fatigue in Adult Survivors of Cancer guideline (www.asco.org/adaptations/fatigue) for more information on management of this important problem.
Summary of Recommendations

Altered or loss of taste

*Recommendation 3.10.* It is recommended that primary care clinicians should refer HNC survivors with altered or loss of taste to a registered dietitian for dietary counseling and assistance in additional seasoning of food, avoiding unpleasant food, and expanding dietary options (LOE = IIA)

Hearing loss, vertigo, vestibular neuropathy

*Recommendation 3.11.* It is recommended that primary care clinicians should refer HNC survivors to appropriate specialists (ie, *otolaryngologists*, audiologists) for loss of hearing, vertigo, or vestibular neuropathy related to treatment (LOE = IIA)
Summary of Recommendations

**Sleep disturbance/sleep apnea**

*Recommendation 3.12.* It is recommended that primary care clinicians:

a) should screen HNC survivors for sleep disturbance by asking HNC survivors and partners about snoring and symptoms of sleep apnea (LOE = 0)

b) should refer HNC survivors to a sleep specialist for a sleep study (polysomnogram) if sleep apnea is suspected (LOE = 0)

c) should manage sleep disturbance similar to patients in the general population (LOE = 0)

d) should recommend nasal decongestants, nasal strips, and sleeping in the propped-up position to reduce snoring and mouth-breathing; room cool-mist humidifiers can aid sleep as well by keeping the airway moist (LOE = 0)

e) should refer to a dental professional to test the fit of dentures to ensure proper fit and counsel HNC survivors to remove dentures at night to avoid irritation (LOE = 0)
Summary of Recommendations

**Speech/voice**

*Recommendation 3.13.* It is recommended that primary care clinicians:

a) should assess HNC survivors for speech disturbance (LOE = 0)

b) should *first* refer HNC survivors to an *otolaryngologist or HN specialist and then an* experienced speech-language pathologist if communication disorder exists (LOE = IA, IIA)

**Hypothyroidism**

*Recommendation 3.14.* It is recommended that primary care clinicians should evaluate HNC survivor thyroid function by measuring TSH every 6-12 months (LOE = III)

*ASCO qualifying statement: The need for, and frequency of, TSH measurement should be guided based on surgical and radiation therapy received.*

3-5 *Clinical examination of the thyroid is warranted in patients who have received HN radiation therapy, along with TSH measurement every 6-12 months. TSH testing is not recommended for those without surgically compromised thyroid gland or neck radiation.*

www.asco.org/HNC-Survivorship-endorsement

©American Society of Clinical Oncology 2017. All rights reserved.
Summary of Recommendations

Oral and dental surveillance

Recommendation 3.15. It is recommended that primary care clinicians:

a) should counsel HNC survivors to maintain close follow-up with the dental professional and reiterate that proper preventive care can help reduce caries and gingival disease (LOE = IA)

b) should counsel HNC survivors to avoid tobacco, alcohol (including mouthwash containing alcohol), spicy or abrasive foods, extreme temperature liquids, sugar-containing chewing gum or sugary soft drinks, and acidic or citric liquids (LOE = 0)

c) should refer HNC survivors to a dental professional specializing in the care of oncology patients (LOE = 0)

Caries

Recommendation 3.16. It is recommended that primary care clinicians:

a) should counsel HNC survivors to seek regular professional dental care for routine examination and cleaning and immediate attention to any intraoral changes that may occur (LOE = 0)

b) should counsel HNC survivors to minimize intake of sticky and/or sugar-containing food and drink to minimize risk of caries (LOE = 0)

c) should counsel HNC survivors on dental prophylaxis, including brushing with remineralizing toothpaste, the use of dental floss, and fluoride use (prescription 1.1% sodium fluoride toothpaste as a dentifrice or in customized delivery trays (LOE = IA, 0)
Summary of Recommendations

**Periodontitis**

*Recommendation 3.17.* It is recommended that primary care clinicians:

a) should refer HNC survivors to a dentist or periodontist for thorough evaluation (LOE = 0)

b) should counsel HNC survivors to seek regular treatment from and follow recommendations of a qualified dental professional and reinforce that proper examination of the gingival attachment is a normal part of ongoing dental care (LOE = 0)

**Xerostomia**

*Recommendation 3.18.* It is recommended that primary care clinicians:

a) should encourage use of alcohol-free *if an HNC survivor requires mouth rinses* (LOE = 0)

b) should counsel HNC survivors to consume a low sucrose diet and to avoid caffeine, spicy and highly acidic foods, and tobacco (LOE = 0)

c) should encourage HNC survivors to avoid dehydration by drinking fluoridated tap water, but explain that consumption of water will not eliminate xerostomia (LOE = 0)
Osteonecrosis

Recommendation 3.19. It is recommended that primary care clinicians:

a) should monitor HNC survivors for swelling of the jaw and/or jaw pain, as well as for the appearance of exposed mandibular bone, indicating possible osteonecrosis (LOE = 0)

b) should administer conservative treatment protocols, such as broad-spectrum antibiotics and daily saline or aqueous chlorhexidine gluconate irrigations, for early stage lesions. (LOE = 0)

b) should refer to an HN surgeon, oral surgeon, maxillofacial surgeon, oral oncologist, or dentist if osteonecrosis is suspected for consideration of hyperbaric oxygen therapy for early and intermediate lesions, for debridement of necrotic bone while undergoing conservative management, or for external mandible bony exposure through the skin (LOE = 0). It is possible that depending upon locale, other specialists may have expertise in osteonecrosis (i.e. HN surgeons or otolaryngologists)

ASCO qualifying statement: Primary care clinicians should monitor HNC survivors for swelling of the jaw and/or jaw pain, as well as for the appearance of exposed mandibular bone, indicating possible osteonecrosis and should expeditiously refer survivors to an otolaryngologist, oral surgeon dentist or other local expert if osteonecrosis is suspected.

www.asco.org/HNC-Survivorship-endorsement
©American Society of Clinical Oncology 2017. All rights reserved.
Summary of Recommendations

Oral infections/candidiasis

Recommendation 3.20. It is recommended that primary care clinicians:

a) should refer HNC survivors to a qualified dental professional for treatment and management of complicated oral conditions and infections (LOE = 0)

b) should consider systemic fluconazole and/or localized therapy of clotrimazole troches to treat oral fungal infections (LOE = 0)

Body and self-image

Recommendation 3.21. It is recommended that primary care clinicians:

a) should assess HNC survivors for body and self-image concerns (LOE = IIA)

b) should refer for psychosocial care as indicated (LOE = IA)

ASCO qualifying statement: Primary care clinicians should consider a preemptive consult with a behavioral health provider for any patient with disfigurement or disability after treatment.
Distress/depression/anxiety

Recommendation 3.22. It is recommended that primary care clinicians:

a) should assess HNC survivors for distress/depression and/or anxiety periodically (3 months post-treatment and at least annually), ideally using a validated screening tool (LOE = I)

b) should offer in-office counseling and/or pharmacotherapy and/or refer to appropriate psycho-oncology and mental health resources as clinically indicated if signs of distress, depression, or anxiety are present (LOE = I)

c) should refer HNC survivors to mental health specialists for specific QoL concerns, such as to social workers for issues like financial and employment challenges or to addiction specialists for substance abuse (LOE = I)

ASCO qualifying statement: Clinicians should refer to the ASCO Screening, Assessment, and Care of Anxiety and Depressive Symptoms in Adults With Cancer guideline (www.asco.org/adaptations/depression) for more information on management of this important problem.

Additional ASCO qualifying statement: The ASCO Panel recognized that other potential late and long-term effects not covered in the ACS guideline warrant further discussion, including carotid stenosis, visual toxicities and neurocognitive deficits. Close monitoring for these late effects should be considered for HNC survivors with prior head/neck radiation.

www.asco.org/HNC-Survivorship-endorsement
©American Society of Clinical Oncology 2017. All rights reserved.
Summary of Recommendations

Health promotion

Information

Recommendation 4.1. It is recommended that primary care clinicians:

a) should assess the information needs of the HNC survivor related to HNC and its treatment, side effects, other health concerns, and available support services (LOE = 0)
b) should provide or refer HNC survivors to appropriate resources to meet identified needs (LOE = 0)

ASCO qualifying statement: The primary care clinician and/or integrated behavioral health provider or case manager (if available) should work with the oncology team to coordinate receipt of services.

Healthy weight

Recommendation 4.2. It is recommended that primary care clinicians:

a) should counsel HNC survivors to achieve and maintain a healthy weight (LOE = III)
b) should counsel HNC survivors on nutrition strategies to maintain a healthy weight for those at risk for cachexia (LOE = 0)
c) should counsel HNC survivors if overweight or obese to limit consumption of high-calorie foods and beverages and increase physical activity to promote and maintain weight loss (LOE = IA)
Physical activity

Recommendation 4.3. It is recommended that primary care clinicians should counsel HNC survivors to engage in regular physical activity consistent with the ACS guideline, and specifically:

a) should avoid inactivity and return to normal daily activities as soon as possible after diagnosis (LOE = III)

b) should aim for at least 150 min of moderate or 75 min of vigorous aerobic exercise per week (LOE = I, IA)

c) should include strength training exercises at least 2 d/wk (LOE = IA)

Nutrition

Recommendation 4.4. It is recommended that primary care clinicians

a) should counsel HNC survivors to achieve a dietary pattern that is high in vegetables, fruits, and whole grains, low in saturated fats, sufficient in dietary fiber, and avoids alcohol consumption (LOE = IA, III)

b) should refer HNC survivors with nutrition-related challenges (eg, swallowing problems that impact nutrient intake) to a registered dietician or other specialist (LOE = 0)
Summary of Recommendations

Tobacco cessation

Recommendation 4.5. It is recommended that primary care clinicians should counsel HNC survivors to avoid tobacco products and offer or refer patients to cessation counseling and resources (LOE = I)

ASCO qualifying statement: While the long-term safety of e-cigarettes is largely unknown, primary care clinician should discourage the use in HNC survivors. 6

Personal oral health

Recommendation 4.6. It is recommended that primary care clinicians:

a) should counsel HNC survivors to maintain regular dental care, including frequent visits to dental professionals, early interventions for dental complications, and meticulous oral hygiene (LOE = 0)

b) should test fit dentures to ensure proper fit and counsel HNC survivors to remove them at night to avoid irritation (LOE = 0)

c) should counsel HNC survivors that nasal strips can reduce snoring and mouth-breathing and that room humidifiers and nasal saline sprays can aid sleep as well (LOE = 0)

d) should train HNC survivors to do at-home HN self-evaluations and be instructed to report any suspicions or concerns immediately (LOE = 0)

Additional ASCO qualifying statement: The ASCO Panel believes it is important for primary care clinicians to be made aware of resources available for both patients and clinicians to help with the understanding of HPV-related HNC.

www.asco.org/HNC-Survivorship-endorsement
©American Society of Clinical Oncology 2017. All rights reserved.
Care coordination and practice implications

Survivorship care plan

Recommendation 5.1. It is recommended that primary care clinicians should consult with the oncology team and obtain a treatment summary and survivorship care plan (LOE = 0, III)

Communication with other providers

Recommendation 5.2. It is recommended that primary care clinicians:
   a) should maintain communication with the oncology team throughout diagnosis, treatment, and post-treatment care to ensure care is evidence-based and well-coordinated (LOE = 0)
   b) should refer HNC survivors to a dentist to provide diagnosis and treatment of dental caries, periodontal disease, and other intraoral conditions, including mucositis and oral infections, and communicate with the dentist on follow-up recommendations and patient education (LOE = 0)
   c) should maintain communication with specialists referred to for management of comorbidities, symptoms, and long-term and late effects (LOE = 0)

Inclusion of caregivers

Recommendation 5.3. It is recommended that primary care clinicians should encourage the inclusion of caregivers, spouses, or partners in usual HNC survivorship care and support (LOE = 0)
Reprint Permission

This is an endorsement of Cohen EE, LaMonte SJ, Erb NL, et al: American Cancer Society Head and Neck Cancer Survivorship Care Guideline. CA Cancer J Clin 66:203-239, 2016 by permission of John Wiley and Sons on behalf of the American Cancer Society.
Endorsement Recommendation

ASCO endorses the ACS HNC Survivorship Care Guideline, adding qualifying statements aimed at promoting team-based, multispecialty, multidisciplinary, collaborative head and neck survivorship care.
Additional Resources

More information, including a Data Supplement with a reprint of all (ORG) recommendations, a Methodology Supplement, slide sets, and clinical tools and resources, is available at www.asco.org/HNC-Survivorship-endorsement

Link to ACS guideline:

Patient information is available at www.cancer.net
References

# ASCO Endorsement Panel Members

<table>
<thead>
<tr>
<th>Member</th>
<th>Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larissa Nekhlyudov, MD, MPH, Co-Chair</td>
<td>Brigham &amp; Women’s Hospital, Harvard Medical School</td>
</tr>
<tr>
<td>Lillian L. Siu, MD, Co-Chair</td>
<td>Princess Margaret Cancer Centre</td>
</tr>
<tr>
<td>David Goldstein, MD</td>
<td>Princess Margaret Cancer Centre</td>
</tr>
<tr>
<td>J. Chris Nunnink, MD</td>
<td>University of Vermont</td>
</tr>
<tr>
<td>Jose I. Ruades Ninfea, MD</td>
<td>University of Vermont</td>
</tr>
<tr>
<td>Andrew L. Salner, MD</td>
<td>Hartford Hospital</td>
</tr>
<tr>
<td>Talya Salz, PhD</td>
<td>Memorial Sloan Kettering Cancer Center</td>
</tr>
<tr>
<td>Nancy B. Davis, MD, PGIN Representative</td>
<td>Aurora Cancer Care</td>
</tr>
<tr>
<td>Thomas Q. Garvey, MD, Patient Representative</td>
<td>Harvard Vanguard Medical Associates</td>
</tr>
</tbody>
</table>

[www.asco.org/HNC-Survivorship-endorsement](http://www.asco.org/HNC-Survivorship-endorsement)  
©American Society of Clinical Oncology 2017. All rights reserved.
Disclaimer

The Clinical Practice Guidelines and other guidance published herein are provided by the American Society of Clinical Oncology, Inc. (ASCO) to assist providers in clinical decision making. The information herein should not be relied upon as being complete or accurate, nor should it be considered as inclusive of all proper treatments or methods of care or as a statement of the standard of care. With the rapid development of scientific knowledge, new evidence may emerge between the time information is developed and when it is published or read. The information is not continually updated and may not reflect the most recent evidence. The information addresses only the topics specifically identified therein and is not applicable to other interventions, diseases, or stages of diseases. This information does not mandate any particular course of medical care. Further, the information is not intended to substitute for the independent professional judgment of the treating provider, as the information does not account for individual variation among patients. Recommendations reflect high, moderate, or low confidence that the recommendation reflects the net effect of a given course of action. The use of words like “must,” “must not,” “should,” and “should not” indicates that a course of action is recommended or not recommended for either most or many patients, but there is latitude for the treating physician to select other courses of action in individual cases. In all cases, the selected course of action should be considered by the treating provider in the context of treating the individual patient. Use of the information is voluntary. ASCO provides this information on an “as is” basis and makes no warranty, express or implied, regarding the information. ASCO specifically disclaims any warranties of merchantability or fitness for a particular use or purpose. ASCO assumes no responsibility for any injury or damage to persons or property arising out of or related to any use of this information, or for any errors or omissions.