Identifying Challenges and Opportunities in Stage III NSCLC Treatment
Introduction
Stage III non-small cell lung cancer (NSCLC) affects over 430,000 patients each year and has historically been difficult to treat – even more so for the estimated 80% of Stage III NSCLC patients who do not undergo surgery to remove their tumors (also known as “unresected disease”).

These patients have faced a very poor prognosis in decades past, but fortunately advances in treatments like concurrent chemoradiation therapy (cCRT) have made it possible for more patients with unresectable Stage IIIA-C NSCLC to be treated with curative intent (the 5-year overall survival rate for cCRT has improved from 15% in 2010 to 32% in 2017). Despite this opportunity, awareness and adoption of curative-intent treatment remains low in both the medical and patient communities – for example, the National Cancer Database reported that in patients with Stage III NSCLC diagnosed in 2008-2017, approximately 50% of patients with Stage III NSCLC received cCRT.

Background
The first step to optimizing treatment outcomes in Stage III lung cancer is to understand what some of the challenges and barriers are preventing some patients from receiving guideline-based treatment. To gather these insights, AstraZeneca
conducted a survey among 284 healthcare providers – respondents included community-based primary care physicians (48%), followed by medical oncologists (13%), pulmonologists (12%), hospitalist (7%), emergency room physician (6%), oncologist (4%), radiation oncologist (3%), and 7% identifying as “other”. The survey asked respondents about patterns in diagnosing and treating these patients, the challenges associated with optimizing cCRT, and their perspectives on multidisciplinary care.

Guideline-Based Treatment in Curative Intent Setting Stage III NSCLC
Guideline-based treatment is cCRT administered with curative intent followed by consolidation immunotherapy for patients who do not progress following cCRT.

Among respondents, 81% agreed that this treatment path is the standard of care for unresectable Stage III NSCLC, and 60% said they would likely treat their Stage IIIC patients with this regimen. Yet, the survey findings suggest there is a gap between evidence-based science and clinical practice – 54% of respondents noted that 75-99% of their unresectable stage III NSCLC patients undergo cCRT, and only 33% noted that all of their patients undergo cCRT.

The majority of respondents (57%) reported that the main treatment objective for unresectable Stage III NSCLC is extending survival or curative intent (but patient unlikely to be cured) – yet most respondents (approximately 64%) said that in practice they do not treat with curative intent in this setting. Extending survival was the most common primary treatment goal (37% of respondents), curative intent was a primary treatment goal for 36% of respondents, and 20% of respondents do not believe that cure is a likely outcome. When narrowed down to oncologists’ responses only, 59% total respondents noted that their primary treatment goal is curative intent, although 26% of these respondents said cure is unlikely to be achieved and 33% of these respondents noted their primary goal is to extend survival. These findings illustrate a disconnect between guideline-based treatment and treatment objectives – therefore it is critical to understand why these gaps exist and how healthcare providers can address these throughout all stages of the treatment journey.

Lastly, only 48%, 41%, and 35% of respondents reported that unresectable Stage IIIA·B·C NSCLC patients, respectively, are able to receive cCRT.

Setting Patients Up for Success by Utilizing the Full MDT
Staging requires collaboration across all specialties involved in the management of Stage III lung cancer, in fact patients with unresectable NSCLC are more likely to receive guideline-based treatment when seen by a multidisciplinary care team (MDT) – including pulmonologists, oncology nurses, radiation oncologists and medical oncologists.7 Most (78%) of lung cancer specialists (ie, medical oncologists, pulmonologists, and radiation oncologists) reported using a multidisciplinary approach to diagnosis and treatment (Fig. 1), but many do not consult all members of the extended care team (ie psychosocial support, physicians assistants and nurses) and therefore aren’t leveraging these key personnel to their fullest potential (Fig. 2).

The survey asked oncologists, pulmonologists, and
radiologists about the role of the MDT in staging for patients with unresectable Stage III NSCLC, which has a distinct clinical profile from metastatic (Stage IV) disease and has different treatment goals. When patients with Stage III NSCLC are misdiagnosed or managed as Stage IV patients, they may receive only palliative care as opposed to a curative-intent approach to treatment. Respondents reaffirmed this importance of accurate staging as they reported that 65% of patients receive comprehensive staging (defined as pathological and invasive staging).

In addition, primary care physicians, hospitalists, and ER physicians were asked about which factors led them to select a treatment path for patients with suspected lung cancer. Twenty-three percent of respondents stated that multidisciplinary collaboration is a primary factor in deciding the treatment path forward, while 21% cited that the stage and severity of disease is also a primary factor. This suggests that there is an opportunity to educate primary care physicians in community care settings about prompt referrals and the critical role of the MDT in managing Stage III lung cancer.

**Figure 1.** Treatment Decision Makers for Unresectable Stage III NSCLC

<table>
<thead>
<tr>
<th>Decision Maker</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>MDT team</td>
<td>78%</td>
</tr>
<tr>
<td>Medical oncologist alone</td>
<td>17%</td>
</tr>
<tr>
<td>Surgeon alone</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
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</table>

**Question:** Who makes the treatment decisions for unresectable Stage III NSCLC?
**Base:** Qualified respondents (n = 88) who self-identified as Pulmonologist, Medical Oncologist, Radiation Oncologist and Oncologist;

1. **Others:** Oncologist + surgeon; Team approach; Depends on patient.
**Note:** Those who did not provide an answer are not reflected.
The survey did identify gaps in the multidisciplinary care model and addressing these gaps may be crucial to ensure that patients have as smooth of a treatment journey as possible. 78 percent of oncologist respondents indicated that the MDT makes treatment decisions, but only one in five (23%) said they consult the patient’s psychosocial support team (eg, social workers, care coordinators, and psychologists), and only 14% said they collaborate with physician assistants or nurse practitioners. When comparing responses from physicians based in an academic setting compared to community responses, respondents based in community settings were more likely to engage psychosocial support – 34% of community-based respondents noted that they collaborate with psychosocial support while just 18% of academia noted as such.

Engaging psychosocial support is an essential part to setting patients up for success – for example, having resources available to help patients plan for things like childcare and other medical appointment logistics can help alleviate any anxieties about the treatment process and may increase likelihood to adhere to treatment. This represents a missed opportunity and illustrates two major needs – one to ensure that HCPs are considering psychosocial workers in their decision set when recalling the MDT, and one for HCPs at the point of diagnosis to ensure that patients are consulting with the entire MDT.
Overcoming Barriers to Receiving cCRT

Respondents largely affirmed that cCRT followed by immunotherapy is the treatment path in eligible patients that they follow when diagnosing unresectable Stage III NSCLC (81%). However, 20% of respondents reported that less than 50% of their patients undergo cCRT in clinical practice.

The survey also explored issues around barriers to treatment. Respondents were asked to identify the percentage of patients who complete their courses of cCRT, as well as the reasons for not starting or not completing treatment. Respondents reported that, on average, 59%, 51%, and 41% of unresectable Stage IIIA·B·C NSCLC patients, respectively, are able to complete their course of therapy (Fig. 3). The most common reasons for patients not receiving cCRT are patients' performance status (71%) and patient refusal (52%) (Fig. 4); whereas the most common reasons why patients fail to complete cCRT are treatment-related adverse events (80%) and patient refusal (46%) (Fig. 5).

Figure 3. Completing cCRT Courses in Unresectable Stage 3 NSCLC

![Bar graph showing the percentage of patients who complete their course of cCRT for different sub-stages of unresectable Stage 3 NSCLC]

Question: For those patients who start cCRT, approximately what percentage are able to complete their course?

Stage IIIA, Stage IIIB, Stage IIIC

Base: Qualified respondents (n=263).

Note: Those who did not provide an answer are not reflected.
Nurses specifically play an essential role on the MDT and can help reduce some of these barriers to care. Nurses can educate patients about ways to manage the side effects of cCRT and help dispel misconceptions about treatment by openly discussing their treatment plans.11 Most side effects can be potentially managed through a variety of interventions and proactive management.12, 13, 14

**Rethinking Unresectable Stage III NSCLC**

Findings from this survey further demonstrate the need to raise awareness around the curative intent setting in unresectable Stage 3 NSCLC and show significant gaps among the non-oncology/pulmonology respondents in regards to the current treatment paradigm. Failure to consult the entire multidisciplinary care team when determining a patients’ treatment plan and

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**Figure 4. Reasons for Inability to Receive cCRT**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Patient performance status</td>
<td>71%</td>
</tr>
<tr>
<td>Patient refusal</td>
<td>52%</td>
</tr>
<tr>
<td>Cost / Logistics</td>
<td>37%</td>
</tr>
<tr>
<td>Fear of adverse events</td>
<td>14%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
</tr>
</tbody>
</table>

*Question: For those unable to receive cCRT, what are the most common reasons?*
*Base: Qualified respondents (n = 262).*
*¹Others: Decisions by the specialists; Extreme elderly; History of radiation; Patient’s preference; Unable to get specialist as we are a rural community.*
*Note: Those who did not provide an answer are not reflected.*

**Figure 5. Reasons for Inability to Complete Course**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adverse events</td>
<td>80%</td>
</tr>
<tr>
<td>Patient refusal</td>
<td>46%</td>
</tr>
<tr>
<td>Cost / Logistics</td>
<td>32%</td>
</tr>
<tr>
<td>Other</td>
<td>4%</td>
</tr>
</tbody>
</table>

*Question: For those unable to complete their course, what are the most common reasons?*
*Base: Qualified respondents (n = 256).*
*¹Others: Condition of the patient; Decisions by the specialist; Treatment side effects; Unable to get to specialists required; Worsening status.*
*Note: Those who did not provide an answer are not reflected.*
patients not receiving cCRT were both uncovered as key areas that can be restored through greater understanding of how to improve outcomes in unresectable Stage 3 NSCLC.

There has been meaningful progress in lung cancer research over the last several decades, sparking optimism around Stage III NSCLC. Bridging the gaps in the treatment journey that have been identified in this survey are a necessary first for patients and their care teams in potentially achieving better outcomes through collaborative, multidisciplinary approach to patient care that adheres to guideline-based Stage III NSCLC treatment.

For more information, please visit www.azioinpractice.com.

References