

## Discussion

- A study by the American National Cancer Institute underlined that 50% of individuals with cancer who smoke before diagnosis continue smoking during treatment, and for patients who quit smoking, the relapse rate was very high.<sup>3</sup>
- Nicotine can promote lung cancer development by activating cell growth pathways, but also stimulates survival pathways, reducing efficacy of chemotherapeutic agents.<sup>4</sup> However, it is not a direct chemical carcinogen.<sup>5</sup>
- Tobacco smoke can cause cancer through the following mechanisms: exposure to carcinogens, DNA damage leading to mutations in critical genes, and metabolism to reactive intermediates.<sup>5</sup>
- Tobacco smoke can alter metabolism of erlotinib, irinotecan, bendamustine, benzodiazepines, inhaled corticosteroids, decrease post op wound healing, and increase all cause mortality.<sup>6,7</sup>
- The NCCN smoking cessation guidelines state that smoking cessation should be performed by a tobacco treatment specialist or dedicated staff member trained in smoking cessation motivational and behavioral strategies.<sup>6</sup>
- In a survey from International Association for the Study of Lung Cancer (IASLC), over 90% of physicians responded that current smoking affects outcomes and should be a standard part of clinical care. Only 30% reported themselves adequately trained to provide interventions. Barriers to providing a smoking cessation program were providers perceived ability to get patients to quit (58%), patient resistance to treatment (67%), lack of training or experience (48%), and lack of available resources (48%) and lack of time (45%).<sup>8</sup>
- Further studies such as the “Care to Quit” randomized control trials are needed to identify best practice smoking cessation protocols in oncology practices.<sup>9</sup>
- In practice settings empowered with expanded scope of practice for pharmacists, continuous abstinence of smoking at 6 months was over 50% higher than the standard of care.<sup>10</sup>
- Potential barriers to pharmacist interventions for smoking cessation involve limited time, discomfort with recommendation, reimbursement, and lack of training for healthcare professionals in this area.<sup>11</sup>

## Conclusion

- Comprehensive oncology smoking cessation recommendations lead to higher abstinence rates and greater compliance with recommendations.
- Although it is not proven, smoking cessation programs are aware of the importance of smoking cessation.
- Clinical and administrative support is needed to support the implementation of smoking cessation programs.

## References

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