

From the Guest Editor: The Rapidly Changing Field of Cancer Treatment

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The theme of the 2017 winter edition of the *Ochsner Journal* is oncology. Cancer affects nearly everyone in some way and is the second leading cause of death in the United States.¹ While we have made significant strides in the awareness, diagnosis, and treatment of multiple cancers, we are still a long way from being able to cure many advanced cancers. There is, however, hope for many cancers as the field is rapidly changing.

Chemotherapy, once the mainstay of treatment for advanced cancer, is no longer the only treatment option. The recognition of driver mutations in cancers has spawned the development of multiple agents that inhibit pathways that allow cancers to proliferate and metastasize. For instance, in lung adenocarcinoma, nearly 75% of the driver pathways are known, and many have targeted therapies associated with the mutation.² We currently have 16 targeted therapies that treat specific mutations in lung cancer.³ Most of the therapies are oral, and many more are in development.

In addition to molecular targeted therapy, manipulating the immune system is now also an integral part of the way we care for our patients with cancer. The recognition that cancers can evade the immune system has led to the rise of immune checkpoint inhibitors. These agents allow the immune system to overcome mechanisms by which tumors can suppress the immune response and shift the balance back to immune protection.⁴ Multiple agents that use diverse mechanisms of action to improve the immune response are currently approved and are being studied in multiple hematologic and solid tumors.

This issue of the *Ochsner Journal* highlights 5 original research projects featuring colorectal cancer, pulmonary carcinoid tumors, breast cancer, and renal cell carcinoma. In addition, 8 review articles emphasizing the most up-to-date information in the field are included. Finally, an editorial describes the development of a phase I cancer research program.

Personalized medicine for cancer is here to stay and is rapidly evolving. The way we treat cancer in 2017 is much different than how we treated cancer only 5 years ago, and we hope that treatment will be much different 5 years from now. Patients will continue to live longer and have better quality of life because of these advances. With the continued development of improved therapies, we hope to change the way patients and physicians view advanced cancers.

REFERENCES

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