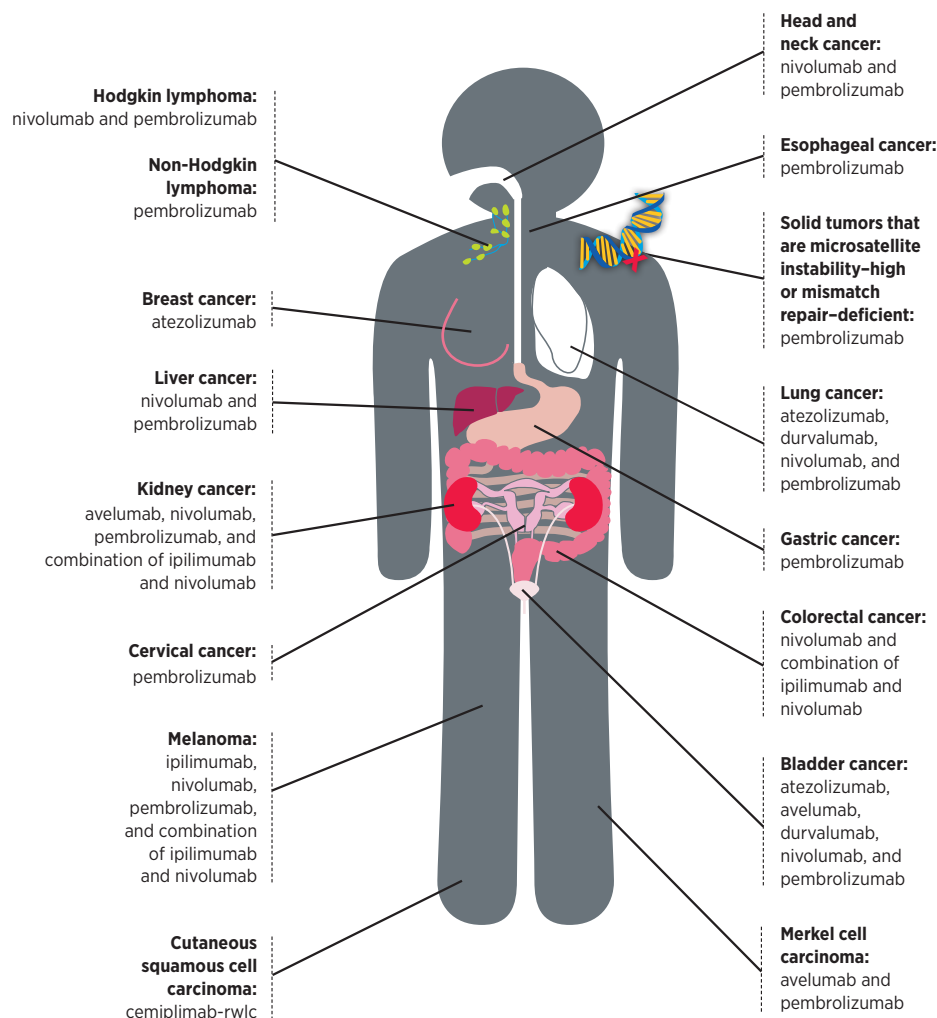


**FIGURE 15**

## GOING DEEP WITH CHECKPOINT INHIBITORS



Checkpoint inhibitors are cancer immunotherapeutics that work by releasing certain “brakes” on the surface of immune cells called T cells, which are naturally capable of destroying cancer cells. The first checkpoint inhibitor to be approved by the U.S. Food and Drug Administration (FDA) was ipilimumab (Yervoy), in March 2011, for metastatic melanoma. Three-and-a-half years passed before another checkpoint inhibitor was approved, pembrolizumab (Keytruda), also for metastatic melanoma. Since then, another five checkpoint inhibitors have been approved by the FDA, atezolizumab (Tecentriq), avelumab (Bavencio), cemiplimab-rwlc (Libtayo), durvalumab

(Imfinzi), and nivolumab (Opdivo). In addition, the FDA has expanded the number of cancer types for which there is at least one checkpoint inhibitor approved. The broad utility of these groundbreaking immunotherapeutics is highlighted by the fact that as of July 31, 2019, there was at least one checkpoint inhibitor approved for treating 15 types of cancer and for treating any type of solid tumor characterized by the presence of specific molecular characteristics. In addition, with all the checkpoint inhibitors approved for treating multiple types of cancer, there are several cancer types for which there is a deep selection of checkpoint inhibitors available as a treatment option.

Adapted from (7)