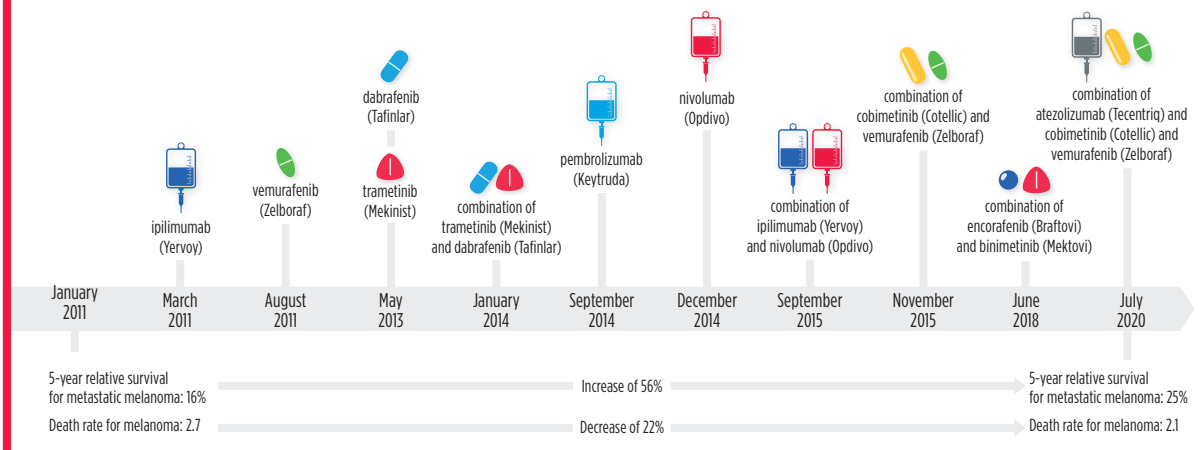
FIGURE 2 INCREASING INNOVATIVE TREATMENT OPTIONS FOR MELANOMA



Melanoma is the deadliest form of skin cancer. On January 1, 2011, only 16 percent of patients with metastatic disease survived 5 or more years after diagnosis. At that time, the standard of care for patients with metastatic melanoma was a cytotoxic chemotherapeutic called dacarbazine and/or an immune system stimulant called aldesleukin (Proleukin); however, neither treatment had shown a significant effect on overall survival in clinical trials. From January 1, 2011, to July 31, 2020, the U.S. Food and Drug Administration (FDA) approved four immunotherapeutics for use alone or in combination with either another immunotherapeutic or with molecularly targeted therapeutics in the treatment of patients with metastatic melanoma; these immunotherapeutics are atezolizumab (Tecentriq), ipilimumab (Yervoy), pembrolizumab (Keytruda), and nivolumab (Opdivo). In addition, the agency has approved six molecularly targeted therapeutics for use alone or in combination with either another molecularly targeted therapeutic or an immunotherapeutic for treating certain patients with metastatic melanoma; these therapeutics are vemurafenib (Zelboraf), dabrafenib (Tafinlar), trametinib (Mekinist), cobimetinib (Cotellic), encorafenib (Braftovi), and binimetinib (Mektovi). The March 2011 approval of ipilimumab came after the immunotherapeutic was shown to be the first treatment ever to extend survival for patients with this deadly disease. Together, these innovative new therapeutics have helped increase the 5-year relative survival rate for metastatic melanoma by 56 percent and decrease the death rate by 22 percent. Researchers believe these improvements will continue as it was recently reported that overall survival at five years for patients treated with a combination of ipilimumab and nivolumab was 52 percent. Note: This timeline focuses on systemic treatments for metastatic melanoma; other therapeutics have been approved for the prevention of disease recurrence or the treatment of localized lesions.

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