ILLUSTRATION

Gantt chart for updated OS and PFS after cancer targeted therapy

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Cancer is a life-threatening disease for human. Targeted therapy and immunotherapy have initiated the precise oncotherapy era, bringing enormous benefits to cancer patients recently. However, it remains a great challenge to clarify the overall therapeutic progress status of various cancers to a broad audience due to the multitude of professional information and rapid technical iteration in the field. To serve more scientists regarding the therapies and corresponding survival periods for various cancers, we present a comprehensive Gantt chart (Figure 1) for reference purpose.

The efficacy of important targeted drugs and immune checkpoint inhibitors (ICIs) in common solid tumors have been globally recognized and proved. The Gantt chart depicts the updated median overall survival (mOS) and median progression free survival (mPFS) in chronological order based on the length of mOS, while the corresponding therapy and clinical trial for each cancer is displayed on the right side of the chart. Accordingly, scientists can obtain one-stop information regarding the most advanced first line treatments of each type of cancer from the Gantt chart efficiently.

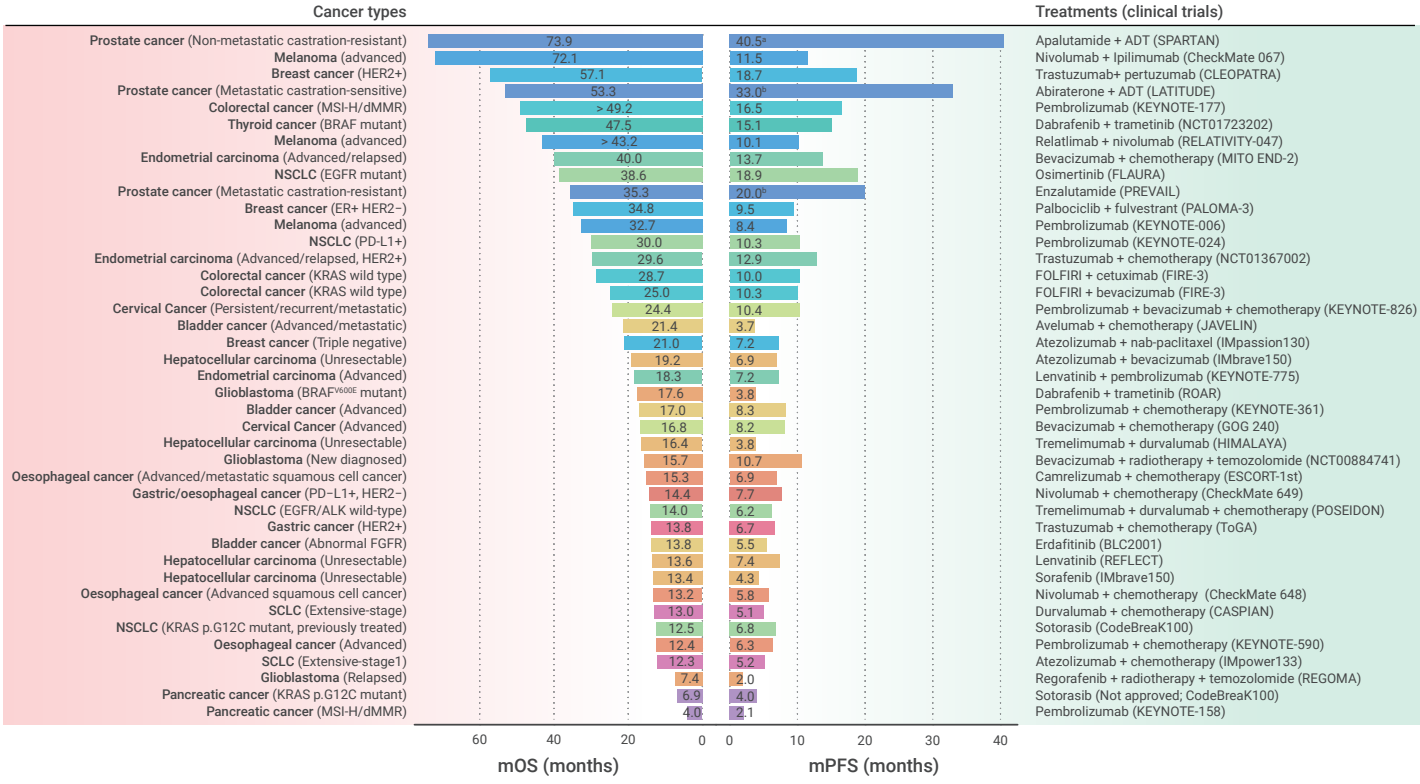

Figure 1. The Gantt chart for mOS and mPFS of cancers. Based on the precise oncogene typing, small molecule inhibitors and monoclonal antibodies selectively targeting EGFR (osimertinib, cetuximab), HER2 (trastuzumab), FGFR (erdafitinib), VEGF (bevacizumab), BRAF (dabrafenib), MEK (trametinib), CDK4/6 (palbociclib), ER (fulvestrant), AR (apalutamide, enzalutamide), CYP17A1 (abiraterone) or multi-target agents (lenvatinib, sorafenib, regorafenib) showed outstanding efficacies towards certain subtype of cancers. The mOS and mPFS of apalutamide reached 73.9 and 40.5 months in non-metastatic castration-resistant prostate cancer, respectively[1]. Equally notable is that RAS inhibitor sotorasib achieved a mOS of 12.5 months in pre-treated *KRAS*-mutant NSCLC[2], which overcomes the challenge of drug unavailability in patients with *KRAS*-mutant malignancies. The past decade witnessed a huge advancement of ICIs. In particular, the launch of agents targeting PD1 (nivolumab, pembrolizumab, camrelizumab), PD-L1 (avelumab, atezolizumab, durvalumab), CTLA-4 (Ipilimumab, tremelimumab), and LAG-3 (relatlimab) largely improved the prognosis of cancer patients through single treatment or combination with chemotherapy/targeted therapy. The mOS of pembrolizumab was over 49.2 months in MSI-H/dMMR colorectal cancer[3]. [a]Median prostate-specific antigen PFS; [b]Median radiographic PFS.

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DECLARATION OF INTERESTS

The authors declare no competing interests.