Conclusions
Receiving more evening infusions of immune checkpoint inhibitors was independently associated with shorter overall survival among patients with advanced melanoma. This time-of-day effect was more pronounced among women, patients with brain metastases, and patients who received dual immune checkpoint inhibitors (ipilimumab + nivolumab). Patients with more evening infusions were also far more likely to have received at least one of the initial two infusions in the evening.

These findings are in line with a growing body of evidence that the adaptive immune response may be less robust when stimulated later in the day. While prospective studies of immunotherapy time-of-day infusions are warranted, effort toward scheduling infusions before mid-afternoon may be considered in the multidisciplinary management of advanced melanoma.