Purpose of the project: The purpose of this project was to describe the experience of treating veterans >/= 90 years of age with immune checkpoint inhibitors (ICI) for cancer.

Background:
- Immune checkpoint inhibitors (CTLA-4, PD1/PD-L1) have received broad FDA approval in most cancers, with pembrolizumab (anti-PD1 antibody) approved in any solid tumor with mismatch repair deficiency.
- As clinical use proliferates, data for their efficacy and safety in elderly populations, particularly nonagenarians, is sparse [1].
- Nonagenarians are commonly excluded from or underrepresented in clinical trials. This occurs despite the fact that the elderly embody the fastest growing portion of the population worldwide [2].
- The VA’s national reach and common medical record allows us to document the efficacy and safety of these novel agents in this underrepresented demographic.

Methods: We reviewed drug exposure in Nonagenarians who received ICI within the VA system nationwide between 2016-2017 using CAPRI. We identified 48 veterans and reviewed each patient’s treatment, duration of immunotherapy exposure, response, and toxicity to generate a global review on how those nonagenarians tolerated treatment.

Demographic data of study participants and all endpoints have been analyzed using descriptive statistics

Results: Baseline characteristics of these 48 veterans are outlined in table 1. The primary outcome measure is duration of therapy (Table 2) with a secondary outcome being adverse events (Figure 3). Charts were also reviewed to ascertain specific cancer diagnosis, which is outlined in table 2

Implications: These cases and data points illustrate that immunotherapy is being used in nonagenarians. With close monitoring of toxicities, nonagenarians with acceptable performance status can be treated with immunotherapy with their consent. Future aims will focus on the addition of more data points by expanding to include 2018.

References: