

Pivekimab sunirine in blastic plasmacytoid dendritic cell neoplasm: assessing spatial response and unraveling resistance mechanisms

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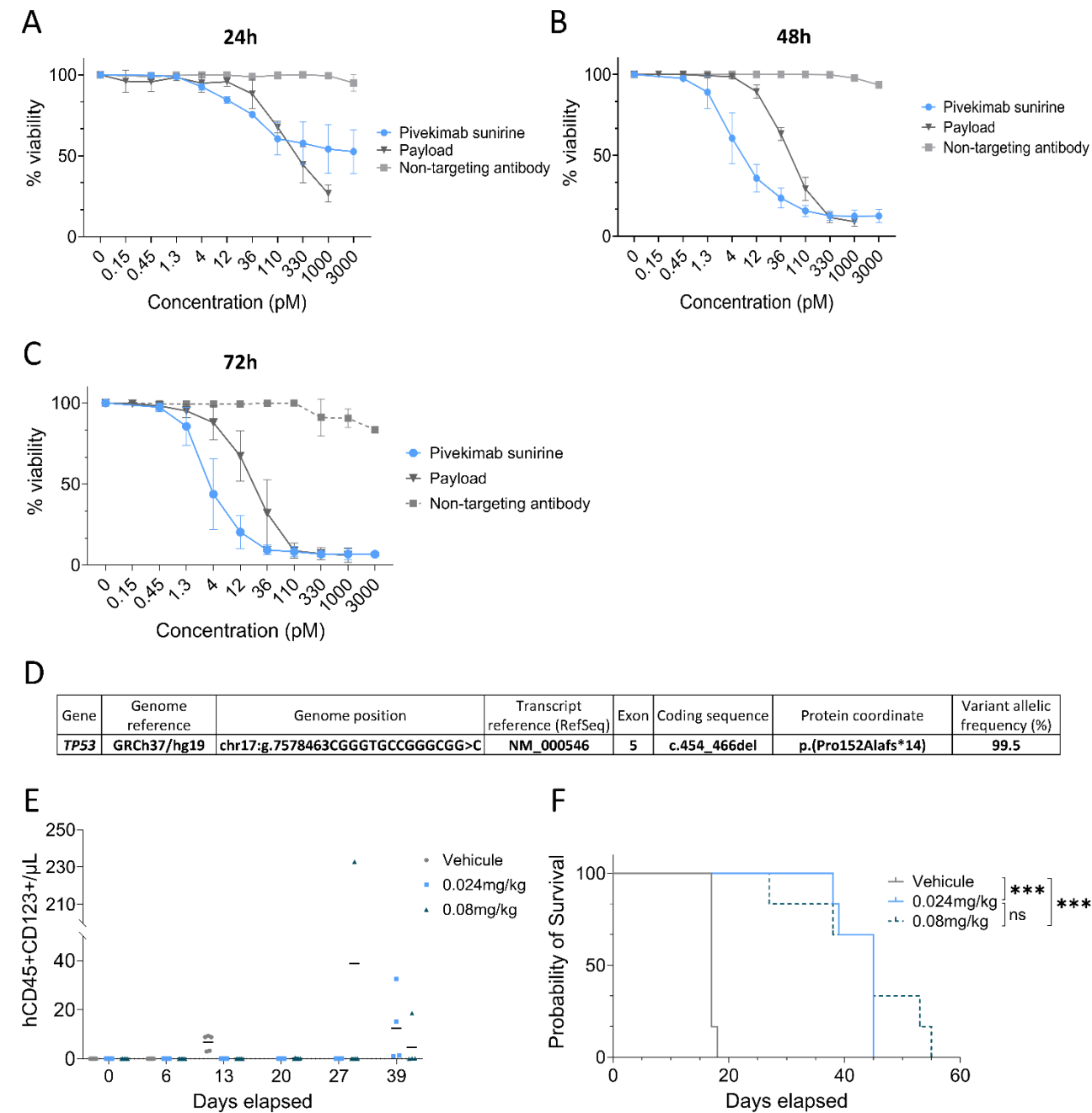
<https://doi.org/10.3324/haematol.2025.288663>

Received: July 10, 2025.
Accepted: January 26, 2026.
Early view: February 5, 2026.

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Supplementary Figure 1:



(A-B-C) GEN2.2 cell line was treated with or without PVEK at different concentration ranging (from 0.45 to 3000pM) for 24h, 48h and 72h and cytotoxicity was analyzed by FC (n=3).

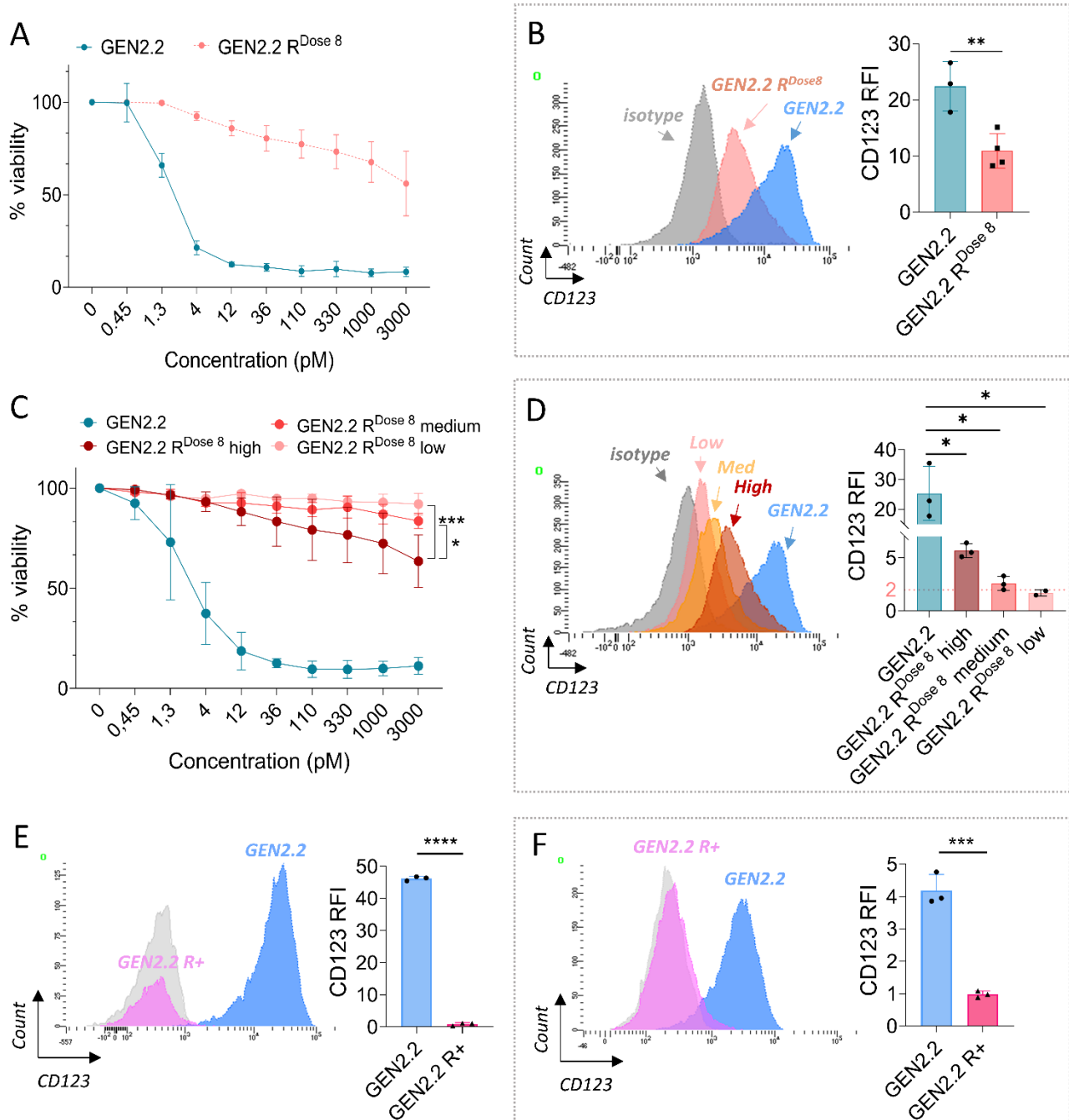
(D) Table displaying variant allelic frequency (%) of genes expressed by GEN2.2.

(E) Mean of CD45⁺/CD123⁺ cell counts in blood from mice injected with GEN2.2 during treatment with vehicle (grey) or PVEK (light blue: 0.024mg/kg; dark blue:0.08mg/kg).

(F) Mice were monitored daily until death, or euthanized if they showed signs of suffering in accordance with animal welfare guidelines. Kaplan-Meier survival curves for all groups were

generated starting from the day of GEN2.2 injection and using death of the animal as the terminal event. Comparison of survival between groups is shown, *** $p < 0.0002$. Overall survival analysis of mice revealed significant gain of survival for PVEK-treated mice compared with untreated mice ($n = 6$ mice per group).

Supplementary Figure 2:



- (A)** GEN2.2 and GEN2.2 R^{Dose 8} cell lines were treated with or without PVEK at different concentration ranging (from 0.45 to 3000pM) for 72 hours and cytotoxicity was analyzed by FC ($n = 3$).
- (B)** Evaluation of CD123 RFI by FC on GEN2.2 or GEN2.2 R^{Dose 8} cell lines ($n = 3$).
- (C)** GEN2.2 R^{Dose 8} was sorted into 3 fractions based on CD123 expression (low, medium and high expression of CD123). GEN2.2 and the 3 fractions sorted from GEN2.2 R^{Dose 8} (low, medium and

high) cell lines were treated with or without PVEK at different concentration ranging (from 0.45 to 3000pM) for 72 hours and cytotoxicity was analyzed by FC (n=3).

- (D)** Evaluation of CD123 RFI by FC on different GEN2.2 cell lines (GEN2.2, GEN2.2 R^{Dose8} low, medium and high) (n=3).
- (E)** Evaluation of CD123 RFI by FC on GEN2.2 and GEN2.2 R+ using 9F5 clone CD123 antibody (n=3) (p<0.0001).
- (F)** Evaluation of intracellular CD123 RFI by FC on GEN2.2 and GEN2.2 R+ using 6H6 clone CD123 antibody (n=3) (p=0.0004).